

CONTENTS

FEATURED PRODUCT	2-7
APPLICATION GUIDE	8-72
FRONT WHEEL	74-85, 118-119
LIGHT TRUCK	86-89, 94-117
HEAVY TRUCK	90-93
REAR WHEEL	120-149
TOOLS	150-164
SOCKETS	165
CONVERSION CHART	166
INDEX	167-170
PRORYDE	171-173

FEATURED PRODUCT

FEATURED
PRODUCT

NEW

41-541

FRONT GREASEABLE CAMBER ADJUSTABLE LOWER BALL JOINT

These ball joints provide a fast, easy and adjustable solution to the problem of non-adjustable front suspensions found on many of today's most popular vehicles.

- Unique design allows fast and easy "on-vehicle" adjustment
- Future adjustments are easily made
- Adjustable offset design means fewer part numbers per application.
- Greaseable design

Patent no. 10,994,580

Honda Accord 2016-2022

Honda Civic 2016-2023

Honda CR-V 2WD/4WD/Touring 2017-2022

Adjustment Range: +1° (+.5° for CR-V)

Quantity: Each

Sides Adjusted: 1



NEW

41-8258

FRONT GREASEABLE CASTER/PINION ANGLE BOLT

- Must have for lifted vehicles
- Pro-Series Greaseable for long service life

Jeep Wrangler JL 2018 - 2022

Jeep Gladiator 2020-2022



Adjustment Range: ±3°

Quantity: Pair

Sides Adjusted: 2

NEW

41-8326

FRONT CAMBER/CASTER UPPER CONTROL ARMS

- Direct bolt-on fit
- Adjustable, replaces nonadjustable OE control arms
- OE style bushings
- Made of high strength aluminum
- Greaseable Design
- Includes Pinch Bolt

Audi

A4, RS4, S4, A5, S5, Q5 2009-2016

A7, S7 2012-2021

SQ5 2013-2019



41-8326-3

Pinch bolt also available separately

Adjustment Range: ±1.5°

Quantity: Pair

Sides Adjusted: 1

NEW

42-781

FRONT GREASEABLE CAMBER/CASTER CAM BOLT

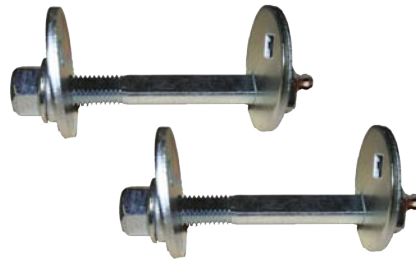
- Replaces factory non-adjustable system
- Greaseable to ensure anti-siezure longevity

Ford F150 SuperCrew® 4WD 2001-2003

Lincoln Navigator 2nd design 2WD/4WD 1998-2002

Ford F150/F250 2nd design 2WD/4WD 1997-2003

Lincoln Blackwood 2WD/4WD 2002-2003



42-781-4

Set of 4, adjusts both sides

Adjustment Range: ±2.5°

Quantity: Pair

Sides Adjusted: 1

NEW

44-796

FRONT CAMBER/CASTER CAM BOLT KIT

- Make accurate and easy adjustment to camber and caster.
- Allows for future adjustments.

Ford Expedition 2007-2017

Ford F-150 2004-2015

Lincoln Mark LT 2006-2008

Lincoln Navigator 2007-2017



Adjustment Range: Camber $\pm 2^\circ$

Quantity: Kit Caster $\pm 1.5^\circ$

Sides Adjusted: 2

NEW

44-839

FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- GM **Greaseable** replacement bolt kit with Quick Cams is a direct replacement and will restore the factor adjustment
- **Greaseable** allowing for ease of future adjustments
- On many models this kit will greatly improve accessibility for easy adjustments

Chevrolet 1500 2WD/4WD 2019-2022

GMC Sierra 1500 2WD/4WD 2019-2022



Adjustment Range: $\pm 1.5^\circ$

Quantity: Kit

Sides Adjusted: 2

NEW

44-862

FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- Keeps vehicles fully adjustable for camber and caster
- Allows fast and easy on-vehicle adjustments
- Works with OE cam guide
- **Greaseable** to ensure anti-sieze longevity

Infiniti QX56 2004-2013

Nissan Armada 2WD/4WD 2005-2015

Nissan Frontier 2WD/4WD 2005-2023

Nissan Titan 2WD/4WD 2004-2022



Adjustment Range: $\pm 2^\circ$

Quantity: Kit

Sides Adjusted: 2

NEW

44-869

FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- **Greaseable** replacement bolt kit is a direct replacement and will restore factory adjustment to rusted or seized cam bolts.
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Ford Ranger 2019-2022

Ford Bronco 2021



Adjustment Range: $\pm 1.5^\circ$

Quantity: Kit

Sides Adjusted: 2

FEATURED PRODUCT

FEATURED
PRODUCT

NEW

44-871L (LEFT SIDE)

44-871R (RIGHT SIDE)

REAR **GREASEABLE** CAMBER CAM BOLT KIT

- Allows Camber adjustment on factory non-adjustment suspension
- Precise easy controlled adjustment
- No modifications required
- **Greaseable** design alleviates bolt corrosion and allows for ease of future adjustments

Ford Explorer 2020-2022



Adjustment Range: $\pm 1^\circ$
Quantity: Kit
Sides Adjusted: 2

NEW

44-2512

FRONT ALIGNMENT REPLACEMENT GUIDE PIN

- Fast and easy replacement of damaged or broken guide pins

Chevrolet GMC 2WD/4WD 2011-2022

(upper control arm)

2500HD, 3500HD, 4500

Chevrolet Colorado/GMC Canyon 2WD/4WD

2015-2022 (lower control arm)



Quantity: 12

NEW

44-2617

FRONT **GREASEABLE** CAMBER/CASTER ADJUSTABLE BALL JOINT

- Unique Patent Pending design allows adjustment of both Camber and Caster on factory non-adjustable front suspensions
- On-Vehicle adjustments easily made
- Fits all model 150-350 Ford Transit Vans
- **Greaseable** Design

Ford Transit 150,250,350,350HD 2WD 2020-2022

Ford Transit 150,250,350HD 2WD 2015-2019

Patent no. 11,131,337



Recommended O/E Ball Joint remover tool 88-7313 (one time purchase) pg. 156



Adjustment Range: $+1^\circ$
Quantity: Each
Sides Adjusted: 1

NEW

44-2618

FRONT **GREASEABLE** LOWER CAMBER ADJUSTABLE BALL JOINT

- This Ball Joint provides Camber adjustment on OE non-adjustable suspensions
- The Unique Patent Pending cam system allows controlled adjustment for precise settings
- Controlled Adjustability
- Quick and easy on-vehicle adjustment
- **Greaseable** Design
- Maximize tire mileage

Ram Pro Master 2014-2022

Patent no. 11,254,176

Patent no. 10,994,580



Adjustment Range: $\pm 1^\circ$
Quantity: Each
Sides Adjusted: 1

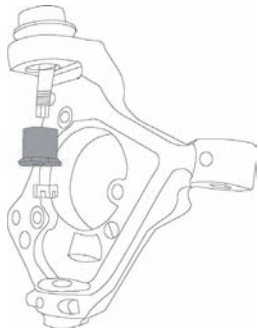
FRONT CAMBER ADJUSTMENT BUSHINGS

- Allows for adjustment where there is no OE adjustment available
- Designed with hex head for ease of adjustment
- Restores factory wheel alignment settings
- Manufactured to exceed OEM durability standards

NEW

44-6032 .5°
44-6034 1°

Jeep Wrangler JL 2018 - 2022
Jeep Gladiator 2020-2022



Quantity: Each
Sides Adjusted: 1

NEW

46-437

REAR GREASEABLE TOE BOLT

- **Greaseable** Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Chrysler Sebring 2007-2010

Chrysler 200 2011-2014

Dodge Journey 2009-2022

Dodge Avenger 2011-2014

Jeep Grand Cherokee 2014-2022

Jeep Compass 2017-2022



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

NEW

46-438

REAR GREASEABLE TOE BOLT

- **Greaseable** Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Dodge Durango 2016-2022

Jeep Grand Cherokee 2011-2022



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2



NEW

46-452

REAR GREASEABLE TOE BOLT

- **Greaseable** Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Acura MDX 2014-2019

Acura MDX Sport Hybrid 2017

Honda Ridgeling 2017-2022

Honda Pilot 2016-2022



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2



FEATURED PRODUCT

FEATURED
PRODUCT

NEW

46-457

REAR GREASEABLE TOE BOLT

- Greaseable Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- Greaseable feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Ford Fusion 2013-2020

Lincoln MKX 2016-2018

Ford Shelby GT350 Mustang 2016-2022

Ford Edge 2015-2022



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

NEW

46-458

REAR GREASEABLE CAMBER BOLT KIT

- Makes rear camber adjustments possible on the 2015-2018 Mustang
- Precise easy controlled adjustment
- No pry bar needed
- Fast on vehicle adjustment
- No drilling or modification required

Ford Mustang 2015-2022

Ford Shelby GT350 Mustang 2016-2022



Adjustment Range: $\pm 1.5^\circ$
Quantity: Kit
Sides Adjusted: 2

NEW

46-463

REAR GREASEABLE ADJUSTABLE TOE BOLT

- Replacement Toe Bolt kit is a direct replacement and will restore the factory adjustment
- Greaseable design alleviates bolt corrosion and allows for ease of future adjustments

Honda Civic 2001-2005

Honda Element 2003-2011



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

NEW

46-464

REAR GREASEABLE CAMBER BOLT

- Greaseable Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- Greaseable feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Chevrolet Traverse 2018-2022



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

NEW

46-465

REAR **GREASEABLE** ADJUSTABLE TOE BOLT

- **Greaseable** Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Chevrolet Traverse 2018-2022



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

NEW

46-466

REAR **GREASEABLE** CAMBER TOE BOLT

- **Greaseable** Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Ford Maverick 2020-2023

Ford Bronco Sport 2020-2023

Ford Escape 2020-2023



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

NEW

46-2240

REAR **GREASEABLE** ADJUSTABLE CAMBER ARM

- Turnbuckle design for easy on vehicle adjustment
- **Greaseable** Design
- Pro Series
- Replaces nonadjustable arm for rear camber
- Positive or negative adjustment

Honda Ridgeline 2006-2014



Adjustment Range: $\pm 2^\circ$
Quantity: Each
Sides Adjusted: 1

NEW

46-2245

REAR **GREASEABLE** ADJUSTABLE ARM

- **Greaseable** Design
- Will remain adjustable for the life of the vehicle
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely
- Makes the rear adjustable where it is not from the factory

Rav 4 2019-2022



Adjustment Range: -3° to $+6^\circ$
Quantity: Each
Sides Adjusted: 1

Ph: 800-828-0255

fax: 888-658-6822

www.Northstarmfg.com

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	T H R U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
ACURA															
Acura 2.2CL/2.3CL/3.0CL	1997 - 1999	X		Control Arm W/BJ Ball Joint	41-545 41-530	41-530	79 78	88-7800A	0.50 / 0.90 0.90	Shim	46-2160	Non Adj.	136		0.20 / -
Acura 3.2 CL	2001 - 2003	X		Ball Joint	41-532	41-532	78	88-1304 88-7800A	0.90 / 0.90	Rear Arm	46-2181	Fac Adj.	138		0.50 / -
Acura CSX	2006 - 2011	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	Rear Arm	46-2187	Fac Adj.	140		0.50 / -
Acura Integra / IntegraType R	1990 - 2001	X		Control Arm W/BJ Ball Joint	41-545 41-532	41-532	79 78	88-1304 88-7800A	0.50 / 0.90 0.90	Shim Rear Arm	46-2160 46-2182	Fac Adj.	136 139		0.20 / - 0.70
Acura EL	2001 - 2002	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	Rear Arm	46-2180	Fac Adj.	138		0.30 / -
Acura EL	2003 - 2005	X		Axis Cam	41-216	Non Adj.	75		0.30 / -	Rear Arm	46-2180	Fac Adj.	138		0.50 / -
Acura ILX	2013 - 2022	X		Axis Cam	41-216	Non Adj.	75		0.30 / -	Rear Arm	46-2187	46-434	140		0.50 / 0.30
Acura ILX Hybrid	2013 - 2015	X		Axis Cam	41-216	Non Adj.	75		0.30 / -	Rear Arm	46-2187	46-434	140		0.50 / 0.30
Acura Integra	1986 - 1989	X		-	Non Adj.	Non Adj.	-		- / -	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-343	0.60 / 0.60 0.60 / 0.60
Acura Legend	1986 - 1990	X		-	Non Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Acura Legend	1991 - 1995	X		Ball Joint	41-532	41-532	78	88-1304 88-7800A	0.90 / 0.90	Shim	46-2160	Fac Adj.	136		0.20 / -
Acura MDX 4WD	2001 - 2006	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	Rear Arm	46-2192	46-439	141		0.50 / 0.50
Acura MDX 4WD	2007 - 2013	X		Axis Cam	41-218	Non Adj.	75		0.30 / -	Rear Arm	46-2196	46-451	142		0.50 / 0.30
Acura MDX 4WD	2014 - 2019	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	46-452	-		- / 0.30
Acura MDX Sport Hybrid	2017	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	46-452	-		- / 0.30
Acura NSX	1991 - 2005	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
ACURA NSX	2017 - 2022	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Acura RDX 4WD	2007 - 2018	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Acura RDX	2019 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Acura 3.5RL	1996 - 2004	X		Control Arm W/BJ Ball Joint	41-545 41-532	41-532	79 78	88-1304 88-7800A	0.50 / 0.90 0.90	- Rear Arm Rear Arm	Non Adj. 46-2181 46-2237	- 46-2237	138 145		- / 0.50 0.50 0.50
Acura 3.5RL	2005 - 2012	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Acura RLX	2014 - 2019	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Acura RSX	2002	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	Rear Arm	46-2180	Fac Adj.	138		0.50 / -
Acura RSX MID Year 02	2002 - 2006	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	Rear Arm	46-2180	Fac Adj.	138		0.50 / -
Acura SLX 4WD	1996 - 1999	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Acura 2.5 TL	1995 - 1998	X		Control Arm W/BJ Ball Joint	41-545 41-530	41-530	79 78	88-7800A	0.50 / 0.90 0.90	Shim	46-2160	Fac Adj.	136		0.20 / -
Acura 3.2 TL	1996 - 1998	X		Ball Joint	41-532	41-532	78	88-1304 88-7800A	0.90 / 0.90	Shim	46-2160	Fac Adj.	136		0.20 / -
Acura 3.2 TL	1999 - 2003	X		Ball Joint	41-532	41-532	78	88-1304 88-7800A	0.90 / 0.90	Rear Arm Rear Arm Rear Arm	46-2190 46-2181 46-2237	46-2237 46-2190	141 138 145		0.70 / 0.50 0.50 / 0.70 0.50
Acura TL	2004 - 2008	X		Ball Joint	41-532	41-532	78	88-1304 88-7800A	0.90 / 0.90	Rear Arm	46-2195	Fac Adj. 46-2195	142		0.70 / - 0.70
Acura TL	2009 - 2014	X		Ball Joint	41-532	41-532	78	88-1304	0.90 / 0.90	Rear Arm	46-2184	Fac Adj. 46-2183 46-2234	139		0.30 / - 0.30 0.30

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

- Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.
See part number 46-2450A on page 141
- For models with either slotted or unslotted strut brackets.
- For models with slotted strut brackets only.
- For models without slotted strut brackets.
- For models WITH or WITHOUT ABS brakes and 10 1/2" rotors
- On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
- Adjustable cam replaces factory locking plate.
- For models without factory provided cam bolts
- For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O U G H A L T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Acura TLX AWD	2015 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2184	46-2183 46-2234	139		0.30 / 0.30 0.30
Acura TLX FWD	2015 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2184	46-2234	139		0.30 / 0.30
Acura TSX	2004 - 2008	X	Ball Joint	41-532	41-532	78	88-1304 88-7890A	0.90 / 0.90	Rear Arm	46-2195	Non Adj. 46-2195	142		0.70 / - 0.70
Acura TSX	2009 - 2014	X	Ball Joint	41-532	41-532	78	88-1304 88-7890A	0.90 / 0.90	Rear Arm	46-2184	Fac Adj. 46-2183	139		0.30 / - 0.30
Acura Vigor	1992 - 1994	X	Control Arm W/BJ Ball Joint	41-545 41-530	41-530	79 78	88-7800A	0.50 / 0.90 0.90	Shim	46-2160	Fac Adj.	136		0.20 / -
Acura ZDX	2010 - 2013	X	Axis Cam	41-218	Non Adj.	75		0.30 / -	Rear Arm	46-2196	46-451	142		0.50 / 0.30
ALFA ROMEO														
Alfa ROMEO 4C	2014 - 2020	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Alfa Romeo Giulia	2017 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Alfa Romeo Stelvio	2017 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
AUDI														
Audi 100/200 FWD	1989 - 1994	X	-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Audi 100/200 Quattro/S4	1989 - 1994	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi 100 series	1970 - 1977	X	-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136		0.60 / 0.60 0.60 / 0.60
Audi 4000 quattro	1984 - 1987	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi 5000 FWD	1978 - 1988	X	-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Audi 90 FWD	1988	X	-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Audi 5000 Quattro	1986 - 1988	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi 80	1988 - 1992	X	-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Audi 80/90 Quattro	1988 - 1995	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi A3	2006 - 2013	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi A3	2015 - 2021	X	-	Fac Adj.	Non Adj.	-		- / -	Cam Bolt	46-456	46-456	128		0.30 / 0.30
Audi A4, A4/ S4 Quattro	1996 - 2008	X	- Control Arm W/BJ	Non Adj. 41-8326- 3	Non Adj.	86		- / - 0.70	-	Non Adj.	Non Adj.	-		- / -
Audi A4, A4/ S4 Quattro (Sedan & Wagon)	2009 - 2016	X	Control Arm W/BJ Control Arm W/BJ	41-8326 41-8326- 3	41-8326	86 86		0.70 / 0.70 0.70	-	Non Adj.	Non Adj.	-		- / -
Audi A4, A4/ S4 Quattro (Sedan & Wagon)	2017 - 2022	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Audi A5, A5 Quattro, S5	2008	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Audi A5, A5 Quattro, S5	2009 - 2017	X	Control Arm W/BJ	41-8326	41-8326	86		0.70 / 0.70	-	Non Adj.	Non Adj.	-		- / -
Audi A5, A5 Quattro, S5	2018 - 2022	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Audi A6	1995 - 2011	X	-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Audi A6 Avant	1999 - 2011	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi A6 Allroad	2001 - 2011	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	T H R O U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Audi A6/S6	2012-2018	X		Control Arm W/BJ	41-8326	41-8326	86		0.70 / 0.70	Cam Bolt	46-456	46-456	128		0.30 / 0.30
Audi A6/S6	2019-2022	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi A6 Quattro	1995-1997	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi A6 Quattro	1998-2011	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi A7 Quattro, Audi S7	2012-2021	X		Control Arm W/BJ	41-8326	41-8326	86		0.70 / 0.70	-	Fac Adj.	Fac Adj.	-		- / -
Audi A8	1997-2000	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi A8 Quattro	1997-2014	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi Allroad Quattro	2001-2005	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi Cabriolet	1994-1998	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Audi	2019-2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi Fox	1975-1979	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Audi Q3 FWD/AWD	2015-2018	X		-	Non Adj.	Non Adj.	-		- / -	Cam Bolt	46-456	46-456	128		0.30 / 0.30
Audi Q5	2009-2017	X		Control Arm W/BJ	41-8326	41-8326	86		0.70 / 0.70	-	Fac Adj.	Fac Adj.	-		- / -
Audi Q5 Hybrid	2013-2016	X		Control Arm W/BJ	41-8326	41-8326	86		0.70 / 0.70	-	Non Adj.	Non Adj.	-		- / -
Audi Q5	2018-2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi Q7	2007-2019	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi Quattro	1983-1986	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi S4	2000-2019	X		- Control Arm W/BJ	Non Adj. 41-8326	Non Adj. 41-8326	- 86		- / - 0.70 / 0.70	-	Fac Adj.	Fac Adj.	-		- / -
Audi S6 Quattro	1995-2002	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi S8	2001-2003	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi S8	2007-2010	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi S8	2013-2018	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi SQ5	2014-2017	X		Control Arm W/BJ	41-8326	41-8326	86		0.70 / 0.70	-	Fac Adj.	Fac Adj.	-		- / -
Audi SQ5	2018-2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi TT	2000-2010	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Audi TT/ Quattro	2000-2006	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi TT	2008-2013	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Audi TT	2016-2020	X		-	Fac Adj.	Fac Adj.	-		- / -	Cam Bolt	46-456	46-456	128		0.30 / 0.30
Audi V8 Quattro	1990-1994	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW															
BMW 1 Series 118i,120i,125i,128i,130i,135i,135is	2007-2013	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2225	Non Adj.	142		- / -
BMW 2 Series 220i,228i,235i,230i	2014-2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 318i (incl. is,ti)	1984-1999	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
BMW 320i (incl. x Drive)	1977-2018	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -

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Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	A D J. M E T H O D	C A M B E R P A R T #	C A S T E R P A R T #	P R O P A G E N O.	S P E C I A L T O O L O R P R O D U C T	E S T. I N S T A L L H O U R S P E R W H E E L	A D J. M E T H O D	C A M B E R P A R T #	T O E P A R T #	P R O P A G E N O.	S P E C I A L T O O L O R P R O D U C T	E S T. I N S T A L L H O U R S P E R W H E E L
BMW 323 (incl. Ci,i,ti)	1997 - 2011	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 3 Series 325 (incl.Ci,e,i,xi,x,ts)	1984 - 2006	X	-	Non Adj.	Non Adj.	-		- / -			Non Adj.			-
BMW 3 Series (330i,325i,328i,335i,335xi,335d)	2006 - 2014	X	-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2225	Non Adj.	142		- / -
BMW 328i (incl. Ci,d,i,is,xi)	1996 - 2018	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 330	2001 - 2018	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 335	2007 - 2015	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 340	2016 - 2018	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 520i	2014 - 2016	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 524td	1985 - 1986	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 524td	1985 - 1986	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 525i	1989 - 2010	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 525xi	2006 - 2007	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 528e	1982 - 1988	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 528e	1982 - 1988	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 530i/530xi	1975 - 2019	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 530xi	2006 - 2007	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 550i	2006 - 2016	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 6 Series	1977 - 2018	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 7 series (E38)	1995 - 2001	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW 8 Series (incl. 840Ci/850Ci/850CSi/850i)	1991 - 1999	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW	2020 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW i3	2014 - 2019	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW i8	2014 - 2017	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW M1	1998 - 2002	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW E46/M3	1999 - 2011	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW M5, M5 Touring (E34)	1991 - 1993	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
BMW X1	2012 - 2019	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW X3	2004 - 2022	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW X4	2015 - 2022	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW X5	2000 - 2006	X	Axis Cam	41-216	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW X5	2007 - 2018	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW X5	2019 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW X6	2008 - 2019	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW X7	2019 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

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BMW Z1	1996 - 2002	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW Z3	1996 - 2002	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW Z4	2003 - 2016	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW Z8 (E52)	2000 - 2003	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BRISTOL															
Peugeot All	1945 - 2009	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BUICK															
Buick Allure	2005 - 2009	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-158 ² 41-214	46-2242	74 75		0.30 / 0.50 0.30
Buick Lacrosse (Non HiPer Strut)	2010 - 2019	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	- Dual Axis Cam bolt	Fac Adj. 46-427	Fac Adj. 46-428	- 124		- / - 0.30 / 0.30
Buick Lacrosse (with HiPer Strut)	2010 - 2019	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	- Dual Axis Cam bolt	Fac Adj. 46-427	Fac Adj. 46-428	- 124		- / - 0.30 / 0.30
Buick Allure w/o HiPer Strut	2010	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Buick Rear Wheel Drive	1971 - 1996	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Buick Cascada	2016 - 2020	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Buick Century FWD	1985 - 1996	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Buick Century FWD	1997 - 2005	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	74 75		- / - 0.30 0.30
Buick Park Ave/Electra/Ultra LaSabre FWD	1985 - 1996	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75		- / - 0.30 0.30	Magna Cam Shim Shim Magna Cam	41-160 ² 46-1300 ¹ 46-2400 ¹ 41-216	Fac Adj. 46-1300 ¹ 46-2400 ¹	74 133 136 75	88-050 88-1110 88-343	0.30 / - 0.60 / 0.60 0.60 / 0.60 0.30
Buick Enclave	2008 - 2017	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	- Cam Bolt Camber Kit	Fac Adj. 41-8257 46-421	Fac Adj. 41-8257	- 82 124	88-7996A	- / - 0.30 / 0.30 1.00
Buick Enclave	2018 - 2022	X		Axis Cam	Fac Adj. 41-212	Non Adj.	75		- / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Buick Encore	2013 - 2022	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Buick Envision w/o HiPer Strut	2016 - 2020	X		Axis Cam	41-212	Fac Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Buick Envision w/ HiPer Strut	2016 - 2023	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Buick LaCrosse	2005 - 2009	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-158 ² 41-214	46-2242	74 75		0.30 / 0.50 0.30
Buick LeSabre	1986 - 1999	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75		- / - 0.30 0.30	Magna Cam Shim Shim	41-160 ² 46-1300 ¹ 46-2400 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	74 133 136	88-050 88-1110 88-343	0.30 / - 0.60 / 0.60 0.60 / -
Buick LeSabre	2000 - 2005	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75		- / - 0.30 0.30	Shim	46-1900 SERIES	41-8246	130		0.80 / 0.60
Buick Lucerne	2006 - 2011	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75		- / - 0.30 0.30	- Shim Shim	Non Adj. 46-1300 ¹ 46-2400 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	- 133 136		- / - 0.60 / 0.60 0.60 / 0.60
Buick Park Ave/Ultra	1997 - 2005	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75		- / - 0.30 0.30	Shim Axis Cam	46-1900 SERIES 41-216	Fac Adj.	130 75		0.80 / - 0.30
Buick Rainier 2WD/4WD	2004 - 2007	X		Camber-Caster Tool	88-8929	88-8929	162		- / -	-	Non Adj.	Non Adj.	-		- / -
Buick Riviera/Reatta	1985 - 1993	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75		- / - 0.30 0.30	Shim	46-1600	Fac Adj.	134		0.60 / -

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REAR WHEEL ALIGNMENT

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Buick Regal	1988 - 1996	X		- Shim	Fac Adj. 45-7010 ⁴	Fac Adj.	117	88-060	- / - 0.50	Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	74 75	88-8923	0.30 / - 0.30
Buick Regal	1997 - 2004	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	74 75		- / - 0.30 0.30
Buick Regal (Non HiPer Strut)	2011 - 2017	X		- Axis Cam	41-212	Non Adj.	75		0.30 / -	- Dual Axis Cam bolt	Fac Adj. 46-427	Fac Adj. 46-428	- 124		- / - 0.30 / 0.30
Buick Regal	2018 - 2020	X		- Axis Cam	41-212	Non Adj.	75		0.30 / -	- Dual Axis Cam bolt	Fac Adj. 46-427	Fac Adj. 46-428	- 124		- / - 0.30 / 0.30
Buick Rendezvous	2002 - 2007	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	- Shim Shim	Fac Adj. 46-1300 ¹ 46-2400 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	- 133 136		- / - 0.60 / 0.60 0.60 / 0.60
Buick Riviera	1995 - 1999	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Buick Skyhawk	1985 - 1989	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	- Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Buick Skylark	1964 - 1979	X		-	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Buick Skylark	1980 - 1998	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	- Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Buick Somerset	1985 - 1987	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	- Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Buick Terraza FWD	2005 - 2007	X		- Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	- Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136		0.60 / 0.60 0.60 / 0.60
Buick Terraza AWD	2005 - 2007	X		- Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Buick Verano	2012 - 2017	X		- Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	75 74		0.30 / - 0.30	- Shim	46-7100	46-7100	143		- / -
CADILLAC															
Cadillac Allante	1987 - 1992	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75		- / - 0.30 0.30	- Shim	46-1600	Fac Adj.	134	88-050 88-1110 88-343	0.60 / -
Cadillac Allante	1993	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac ATS	2013 - 2019	X		- Cam Bolt	41-216	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Cadillac ATS-V	2016 - 2019	X		- Axis Cam	41-216	Fac Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac Brougham	1987 - 1992	X		-	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Cadillac Catera	1997 - 2001	X		- Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Cadillac Cimarron	1982 - 1988	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	- Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-343	0.60 / 0.60 0.60 / 0.60
Cadillac CT6	2016 - 2020	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac CTS	2003 - 2007	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac CTS (inc. CTS-V)	2003 - 2007	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac CTS (inc. CTS-V)	2008 - 2013	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac CTS Sedan	2014 - 2019	X		- Axis Cam	41-216	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac CTS Coupe/Wagon	2014 - 2015	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	H R O U S E S	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Cadillac CTS Sedan (Except CTS-V)	2014 - 2015	X		Axis Cam	41-216	Non Adj.	75		0.32 / -	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac DeVille	1985 - 1993	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	- 74 75		- / - 0.30 0.30	Magna Cam	41-160 ²	Fac Adj.	74		0.30 / -
Cadillac DeVille	1994 - 1999	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	- 74 75		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac DeVille	2000 - 2005	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	- 74 75		- / - 0.30 0.30	Shim	46-1900	Fac Adj.	130		0.80 / -
Cadillac DTS	2006 - 2011	X		Axis Cam Magna Cam	41-216 41-159 ²	Fac Adj.	75 74		0.30 / - 0.30	Shim Shim	46-1500 ¹ 46-2300 ¹	46-1500 ¹ 46-2300 ¹	133 136		0.60 / 0.60 0.60 / 0.60
Cadillac Eldorado	1967 - 1978		X	- Cam Bolt	Fac Adj. 41-8247	Fac Adj. 41-8247	- 81		- / - 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Cadillac Eldorado	1979 - 1985	X		- Cam Bolt	Fac Adj. 41-8247	Fac Adj. 41-8247	- 81		- / - 1.00 / 1.00	Shim Shim	46-1300 ¹ 46-2400 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	133 136	88-050 88-1110 88-343	0.60 / - 0.60 / 0.60 0.60
Cadillac Eldorado	1986 - 1992	X		Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	74 75		0.30 / - 0.30	Shim	46-1600	Fac Adj.	134		0.50 / -
Cadillac Eldorado	1993 - 2002	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	- 74 75		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac ELR	2014 - 2016	X		-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-7100 46-2300 ¹	46-7100 46-2300 ¹	143 136		- / - 0.60 / 0.60
Cadillac Escalade	1999 - 2000		X	- Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	Fac Adj. 41-8250 ⁵ 41-8272	- 81 85	88-7491	- / - 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Cadillac Escalade/EXT	2002 - 2006		X	- Bushing Cam Bolt Replacement Pins Quick Cam Greaseable Cam Bolt Ball Joint Control Arm W/BJ	Fac Adj. 44-2509 ⁵ 41-8251 44-2508 44-2506 41-8262 44-2499 44-2725	Fac Adj. 44-2509 ⁵ 41-8251 44-2508 44-2506 41-8262 44-2499 44-2725	- 110 81 110 109 83 109 113	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.90 / 0.90 0.80 / 0.80	-	Non Adj.	Non Adj.	-		- / -
Cadillac Escalade	2007 - 2022		X	- Bushing Cam Bolt Replacement Pins Quick Cam Greaseable Cam Bolt Control Arm W/BJ Control Arm W/BJ	Fac Adj. 44-2509 ⁵ 41-8251 44-2508 44-2506 41-8262 44-2726L 44- 44-2726R	Fac Adj. 44-2509 ⁵ 41-8251 44-2508 44-2506 41-8262 44-2726L 44- 2726R	- 110 81 110 109 83 112 112	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Cadillac Escalade	2021 - 2022		X	- Replacement Pins Greaseable Cam Bolt	Fac Adj. 44-2512 44-839	Fac Adj. 44-2512 44-839	- 111 104		- / - 0.30 / 0.30 0.50 / 0.50	Greaseable Cam Bolt	44-839	Fac Adj. 46-166	104		0.50 / - 0.30
Cadillac Fleetwood RWD	1975 - 1996		X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Cadillac Fleetwood FWD	1985 - 1993	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	- 74 75		- / - 0.30 0.30
Cadillac Seville	1980 - 1985	X		- Cam Bolt	Fac Adj. 41-8247	Fac Adj. 41-8247	- 81		- / - 1.00 / 1.00	Shim Shim	46-1300 ¹ 46-2400 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	133 136	88-050 88-1110 88-343	0.60 / - 0.60 / 0.60 0.60
Cadillac Seville	1986 - 1992	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	- 74 75		- / - 0.30 0.30	Shim	46-1600	Fac Adj.	134		0.50 / -
Cadillac Seville/STS	1993 - 1997	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	- 74 75		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -

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- For models with either slotted or unslotted strut brackets.
- For models with slotted strut brackets only.
- For models without slotted strut brackets.
- For models WITH or WITHOUT ABS brakes and 10 1/2" rotors
- On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	H R U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Cadillac Seville/STS	1998 - 2011	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	- 74 75		- / - 0.30 0.30	Shim	46-1900	Fac Adj.	130		0.80 / -
Cadillac SRX	2004 - 2009	X		-	Fac Adj.		-		-	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac SRX	2010 - 2016	X		Axis Cam Magna Cam	41-216 41-159 ²		75 74		0.30 0.30	Shim Shim	46-1200 SERIES ¹ 46-2300 ¹	46-1200 SERIES ¹ 46-2300 ¹	133 136		0.60 / 0.60 0.60 / 0.60
Cadillac XLR/XLR-v	2004 - 2009	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac XT4	2019 - 2022	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac XT5	2017 - 2022	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac XT6	2020 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Cadillac XTS (Non HiPer Strut)	2013 - 2019	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	Dual Axis Cam bolt	46-427	46-428	124		0.30 / 0.30
Cadillac XTS (w/ HiPer Strut)	2013 - 2019	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	Dual Axis Cam bolt	46-427	46-428	124		0.30 / 0.30
CHEVROLET															
Chevrolet Astro 2WD	1985 - 2005	X		Shim	CC	CC	113		- / -			Non Adj.			-
Chevrolet Astro 4WD	1990 - 2003	X		- Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	Fac Adj. 41-8250 ⁵ 41-8272	- 81 85	88-7491	- / - 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Avalanche 1500 2WD/4WD	2007 - 2013	X		- Bushing Cam Bolt Quick Cam Replacement Pins Greaseable Cam Bolt Control Arm W/BJ Control Arm W/BJ	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 41-8262 44-2726L 44-2726R	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 41-8262 44-2726L 44- 2726R	- 110 81 109 110 83 112 112	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Avalanche 1500 2WD/4WD	2002 - 2006	X		- Bushing Cam Bolt Camber Kit Camber Kit Greaseable Cam Bolt Ball Joint	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 41-8262 44-2499	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 41-8262 44-2499	- 110 81 109 110 83 109	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.50 / 0.50 0.30 / 0.30 0.50 / 0.50 0.90 / 0.90 0.80	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Avalanche 2500	2002 - 2006	X		- Bushing Cam Bolt Quick Cam Replacement Pins Ball Joint Control Arm W/BJ Greaseable Cam Bolt	Fac Adj. 44-2510 41-8251 44-2506 44-2508 44-2498 44-2730 41-8262	Fac Adj. 44-2510 41-8251 44-2506 44-2508 44-2498 44-2730 41-8262	- 110 81 109 110 109 114 83	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.90 / 0.90 0.90 / 0.90 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Aveo	2004 - 2011	X		Magna Cam Axis Cam	41-144 41-212	Non Adj.	74 75		0.30 / - 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	132 136		0.60 / 0.60 0.60 / 0.60
Chevrolet Aveo	2012 - 2014	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Shim	46-7100	46-7100	143		- / -
Chevrolet Bel Air 2WD	1975	X		- Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	Fac Adj. 41-8250 ⁵ 41-8272	- 81 85	88-7491	- / - 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Beretta/Corsica	1987 - 1995	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Chevrolet Beretta/Corsica	1996	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	A D J. M E T H O D	C A M B E R P A R T #	C A S T E R P A R T #	P R O P A G E N O.	S P E C I A L T O O L O R P R O D U C T	E S T. I N S T A L L H O U R S P E R W H E E L	A D J. M E T H O D	C A M B E R P A R T #	T O E P A R T #	P R O P A G E N O.	S P E C I A L T O O L O R P R O D U C T	E S T. I N S T A L L H O U R S P E R W H E E L
Chevrolet Biscayne	1958 - 1972	X	-	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Biscayne "B" Body	1971 - 1972	X	-	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Blazer Full Size 4WD	1970 - 1991	X					88-7090		-	Non Adj.	Non Adj.	-		- / -
Chevrolet Blazer Full Size 4WD	1987 - 1994	X	- Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	Fac Adj. 41-8250 ⁵ 41-8272	- 81 85	88-7491	- / - 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Chevrolet S10 Pickup Downsize 4WD	1983 - 2004	X	- Cam Bolt	Fac Adj. 41-8246	Fac Adj. 41-8246	- 81		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Blazer	2019 - 2022	X	Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Chevrolet Bolt EV	2017 - 2022	X	Cam Bolt	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet C Series Pickup 2WD	1975 - 1986	X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet C10/C20 Suburban 2WD	1972 - 1986	X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet C/K Series Pickup	1988 - 1999	X	Cam Bolt Greaseable Cam Bolt Bushing	41-8250 ⁵ 41-8272 44-2509 ⁵	41-8250 ⁵ 41-8272 44-2509 ⁵	81 85 110	88-7491	0.60 / 0.60 0.60 / 0.60 0.80 / 0.80	-	Non Adj.	Non Adj.	-		- / -
Chevrolet C Series Pickup 2WD	1992 - 1998	X	Cam Bolt Greaseable Cam Bolt	41-8250 ⁵ 41-8272	41-8250 ⁵ 41-8272	81 85	88-7491	0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Chevrolet C Series Pickup w/rear drum brakes 2WD	1995 - 2000	X	Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	Fac Adj. 41-8250 ⁵ 41-8272	- 81 85	88-7491	- / - 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Kodiak C4500 C5500 4WD	2003 - 2009	X	Bushing Bushing	44-6020 44-5037	44-6020 44-5037	117 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Kodiak C4500 C5500 2WD	2005 - 2009	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Camaro	1967 - 1981	X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Camaro	1982 - 1992	X	-	Fac Adj.	Fac Adj.	-	88-8923	- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Camaro	1993 - 2002	X	-	Fac Adj.	Fac Adj.	-	88-8925	- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Camaro	2010 - 2022	X	Axis Cam	41-216	Non Adj.	75		0.30 / -	- Cam Bolt	Fac Adj. 46-182	Fac Adj. 46-182	- 123		- / - 0.30 / 0.30
Chevrolet Caprice	1966 - 1996	X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Caprice	2011 - 2017	X	Axis Cam Magna Cam	41-214 41-157 ²	Fac Adj.	75 74		0.30 / - 0.30	Cam Bolt	46-182	46-182	123		0.30 / 0.30
Chevrolet Captiva	2008 - 2015	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Cam Nut	44-775	44-775	97		0.30 / 0.30
Chevrolet Captiva Sport	2012 - 2015	X	Axis Cam Magna Cam	41-214 41-158 ²		75 74		0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Cavalier	1982 - 1994	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Chevrolet Cavalier	1995 - 2005	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Chevrolet Celebrity	1982 - 1990	X	- Magna Cam Cam Bolt	Fac Adj. 41-160 ² 41-8245	Non Adj.	74 81		- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Chevrolet Chevelle	1964 - 1973	X	-	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Chevette	1976 - 1987	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Citation	1980 - 1985	X	- Magna Cam Cam Bolt	Fac Adj. 41-160 ² 41-8245	Non Adj.	74 81		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110	0.60 / 0.60 0.60 / 0.60

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4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	A D J. M E T H O D	C A M B E R P A R T #	C A S T E R P A R T #	P R O P A G E N O.	S P E C I A L T O O L O R P R O D U C T	E S T. I N S T A L L H O U R S P E R W H E E L	A D J. M E T H O D	C A M B E R P A R T #	T O E P A R T #	P R O P A G E N O.	S P E C I A L T O O L O R P R O D U C T	E S T. I N S T A L L H O U R S P E R W H E E L
Chevrolet City Express	2015 - 2019	X	Axis Cam Magna Cam	41-214 41-157 ²	Non Adj.	75 74		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Classic	2004 - 2005	X	Axis Cam	41-214	Non Adj.	75		0.30 / -	Axis Cam	41-212	Non Adj.	75		0.30 / -
Chevrolet Cobalt	2005 - 2010	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Shim	46-1520 ¹	46-1520 ¹	133		0.60 / 0.60
Chevrolet Colorado 2WD	2004 - 2012	X	- Cam Bolt Quick Cam Replacement Pins Greaseable Cam Bolt	Fac Adj. 41-8251 44-2507 44-2508 41-8262	Fac Adj. 41-8251 44-2507 44-2508 41-8262	- 81 109 110 83		- / - 0.50 / 0.50 0.30 / 0.30 0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Colorado 4WD	2004 - 2012	X	- Quick Cam Replacement Pins Cam Bolt Greaseable Cam Bolt	Fac Adj. 44-2507 44-2508 41-8251 41-8262	Fac Adj. 44-2507 44-2508 41-8251 41-8262	- 109 110 81 83		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Colorado	2015 - 2022	X	- Greaseable Cam Bolt Cam Bolt Replacement Pins	Fac Adj. 44-831 44-832 44-2512	Fac Adj. 44-831 44-832 44-2512	- 102 102 111		- / - 0.50 / 0.50 0.50 / 0.50 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Corvette	1963 - 1982	X	- Shim	Fac Adj. CC	CC	- 113		- / - -	- Cam Bolt	Fac Adj. 41-8243	Fac Adj. 46-6020 46-6030 46-6040	- 80		- / - 0.60 / 0.30 0.30
Chevrolet Corvette	1984 - 2014	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Chevrolet Corvette C5/C6/C7	1997 - 2019	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Chevrolet Corvette C8	2020 - 2023	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Chevrolet Cruze	2011 - 2019	X	Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	75 74		0.30 / - 0.30	Shim	46-7100	46-7100	143		- / -
Chevrolet El Camino	1959 - 1964	X	-	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet El Camino 2WD	1965 - 1987	X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Equinox	2005 - 2017	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Cam Nut	44-775	44-775	97		0.30 / 0.30
Chevrolet Equinox	2018 - 2022	X	Cam Bolt	41-212	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Chevrolet Express Van	1996 - 2002	X	- Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	Fac Adj. 41-8250 ⁵ 41-8272	- 81 85		- / - 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Express Van 2WD 1500/2500	2003 - 2022	X	- Quick Cam Cam Bolt Replacement Pins Bushing Greaseable Cam Bolt	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 41-8262	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 41-8262	- 109 81 110 110 83		- / - 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.80 / 0.80 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Express Van 4WD 1500/2500	2003 - 2022	X	- Quick Cam Cam Bolt Replacement Pins Bushing Greaseable Cam Bolt	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 41-8262	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 41-8262	- 109 81 110 110 83		- / - 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.80 / 0.80 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Express Van 2WD 1500	2003 - 2014	X	- Quick Cam Cam Bolt Replacement Pins Bushing Ball Joint Greaseable Cam Bolt Control Arm W/BJ	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 44-2499 41-8262 44-2725	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 44-2499 41-8262 44-2725	- 109 81 110 110 109 83 113		- / - 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.80 / 0.80 0.90 / 0.90 0.50 / 0.50 0.80 / 0.80	-	Non Adj.	Non Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.
Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.
See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A S L	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Chevrolet Express Van 4WD 1500	2003 - 2014	X	- Quick Cam Cam Bolt Replacement Pins Bushing Ball Joint Greaseable Cam Bolt Control Arm W/BJ	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 44-2499 41-8262 44-2725	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 44-2499 41-8262 44-2725	- 109 81 110 110 109 83 113	- - / - 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.80 / 0.80 0.90 / 0.90 0.50 / 0.50 0.80 / 0.80	-	Non Adj.	Non Adj.	-	-	- / -	
Chevrolet Express Van 2WD 2500 7300 lb. GVW only	2003 - 2005	X	- Quick Cam Cam Bolt Replacement Pins Bushing Ball Joint Greaseable Cam Bolt Control Arm W/BJ	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 44-2499 41-8262 44-2725	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 44-2499 41-8262 44-2725	- 109 81 110 110 109 83 113	- - / - 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.80 / 0.80 0.90 / 0.90 0.50 / 0.50 0.80 / 0.80	-	Non Adj.	Non Adj.	-	-	- / -	
Chevrolet Express Van 4WD 2500 7300 lb. GVW only	2003 - 2005	X	- Quick Cam Cam Bolt Replacement Pins Bushing Ball Joint Greaseable Cam Bolt Control Arm W/BJ	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 44-2499 41-8262 44-2725	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 44-2499 41-8262 44-2725	- 109 81 110 110 109 83 113	- - / - 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.80 / 0.80 0.90 / 0.90 0.50 / 0.50 0.80 / 0.80	-	Non Adj.	Non Adj.	-	-	- / -	
Chevrolet Express Van 4WD 3500/4500	2003 - 2022	X	- Quick Cam Replacement Pins Cam Bolt Bushing Greaseable Cam Bolt	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 41-8262	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 41-8262	- 109 110 81 110 83	- - / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.80 / 0.80 0.50 / 0.50	-	Non Adj.	Non Adj.	-	-	- / -	
Chevrolet Express Van 2WD 3500/4500	2003 - 2022	X	- Quick Cam Cam Bolt Replacement Pins Bushing Greaseable Cam Bolt	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 41-8262	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 41-8262	- 109 81 110 110 83	- - / - 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.80 / 0.80 0.50 / 0.50	-	Non Adj.	Non Adj.	-	-	- / -	
Chevrolet G10/G20 G30 Van	1975 - 1996	X	Shim	CC	CC	113	-	- / -	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet HHR	2006 - 2011	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75	-	0.30 / - 0.30	Shim	46-1520 ¹	46-1520 ¹	133	-	0.60 / 0.60
Chevrolet Impala	2000 - 2005	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75	-	0.30 / - 0.30	Magna Cam Axis Cam	41-158 ² 41-214	46-2242	74 75	-	0.30 / 0.50 0.30
Chevrolet Impala	2006 - 2013	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	74 75	-	- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	46-2242	74 75	-	- / 0.50 0.30 0.30
Chevrolet Impala	2014 - 2020	X	Axis Cam	41-212	Non Adj.	75	-	0.30 / -	- Dual Axis Cam bolt	Fac Adj. 46-427	Fac Adj. 46-428	- 124	-	- / - 0.30 / 0.30
Chevrolet Impala Limited	2014 - 2016	X	Axis Cam	41-214	Non Adj.	75	Limited	0.30 / -	Axis Cam	41-214	46-2242	75	-	0.30 / 0.50
Chevrolet K Series (Dana 60) 4WD	1961 - 1990	X	Camber Kit	44-910	Non Adj.	106	-	0.30 / -	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet K Series (except Dana 60) 4WD	1970 - 1986	X	-	-	-	-	88-7090	-	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet Suburban 4WD	1970 - 1986	X	-	-	-	-	88-7090	-	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet Suburban 4WD	1992 - 1999	X	Cam Bolt Greaseable Cam Bolt	41-8250 ⁵ 41-8272	41-8250 ⁵ 41-8272	81 85	88-7090 88-7491	0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet Silverado 4500/5500/6500 4WD	2019 - 2022	X	Bushing Bushing	44-6020 44-5037	44-6020 44-5037	117 116	-	1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet LLV Postal Vehicle 2WD	1987 - 1995	X	Shim	CC	CC	113	-	- / -	-	Non Adj.	Non Adj.	-	-	- / -

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See part number 46-2450A on page 141

2. For models with either slotted or unslotted strut brackets.

3. For models with slotted strut brackets only.

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	H R O T A S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Chevrolet Lumina	1990 - 1996	X		- Axis Cam	Fac Adj. 41-212	Non Adj.	75	88-060	- / - 0.30	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75	88-8923	- / - 0.30 0.30
Chevrolet Lumina	1997 - 2001	X		-	Fac Adj.	Non Adj.	-	88-060 88-1112	- / -	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	74 75	88-8923	- / - 0.30 0.30
Chevrolet Lumina APV	1990 - 1996	X		- Magna Cam Cam Bolt	Fac Adj. 41-160 ² 41-8245	Non Adj.	74 81		- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Chevrolet Malibu/MonteCarlo	1965 - 1983		X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Malibu	1997 - 2003	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-144 41-212	Fac Adj.	74 75		- / - 0.30 0.30
Chevrolet Malibu / Maxx	2004 - 2012	X		Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	75 74		0.30 / - 0.30	- Dual Axis Cam bolt	Fac Adj. 46-425	Fac Adj. 46-426	- 124		- / - 0.30 / 0.30
Chevrolet Malibu (Classic)	2004 - 2005	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	- Axis Cam	Fac Adj. 41-212	Fac Adj.	75		- / - 0.30
Chevrolet Malibu	2013 - 2022	X		Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	75 74		0.30 / - 0.30	- Dual Axis Cam bolt	Fac Adj. 46-427	Fac Adj. 46-428	- 124		- / - 0.30 / 0.30
Chevrolet Metro	1998 - 2001	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Chevrolet Monte Carlo	1970 - 1972	X		-	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Monte Carlo	1973 - 1977	X		-	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Monte Carlo	1978 - 1988	X		-	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Monte Carlo	1995 - 1999	X		- Shim	Fac Adj. 45-7010 ⁴	Fac Adj.	- 117	88-060 88-1112	- / - 0.50	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75		- / - 0.30 0.30
Chevrolet Monte Carlo	2000 - 2007	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	46-2242	74 75		- / 0.50 0.30 0.30
Chevrolet Nova	1969 - 1979		X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Nova FWD	1985 - 1988	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Shim Shim Magna Cam Axis Cam	46-1300 ¹ 46-2400 ¹ 41-147 ³ 41-212	Fac Adj. 46-1300 ¹ 46-2400 ¹	133 136 74 75	88-343	0.60 / - 0.60 / 0.60 0.30 / 0.60 0.30
Chevrolet Optra	2004 - 2010	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	Axis Cam	41-212	Fac Adj.	75		0.30 / -
Chevrolet P Series Van 2WD	1977 - 1999	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet P Series Van/I Beam Axle 2WD	1985 - 1999	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Prizm	1998 - 2002	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30 0.30	- Axis Cam	Fac Adj. 41-212	Fac Adj.	75		- / - 0.30
Chevrolet R Series Pickup 2WD	1987 - 1988	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Suburban 4WD	1987 - 1991	X						88-7090		-	Non Adj.	Non Adj.	-		- / -
Chevrolet S10 Blazer 2WD	1983 - 1994	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Silverado HD 2500 2WD/4WD	1999	X		- Bushings Ball Joint Control Arm W/BJ	Fac Adj. 44-2510 44-2498 44-2730	Fac Adj. 44-2510 44-2498 44-2730	- 110 109 114	88-7950A	- / - 0.80 / 0.80 0.90 / 0.90 0.90 / 0.90	-	Non Adj.	Non Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

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2. For models with either slotted or unslotted strut brackets.
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5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	A D J. M E T H O D	C A M B E R P A R T #	C A S T E R P A R T #	P R O P A G E N O.	S P E C I A L T O O L O R P R O D U C T	E S T. I N S T A L L H O U R S P E R W H E E L	A D J. M E T H O D	C A M B E R P A R T #	T O E P A R T #	P R O P A G E N O.	S P E C I A L T O O L O R P R O D U C T	E S T. I N S T A L L H O U R S P E R W H E E L
Chevrolet Silverado 1500 2WD/4WD	1999 - 2006	X	- Bushings Cam Bolt Replacement Pins Quick Cam Ball Joint Control Arm W/BJ Greaseable Cam Bolt	Fac Adj. 44-2509 ⁵ 41-8251 44-2508 44-2506 44-2499 44-2725 41-8262	Fac Adj. 44-2509 ⁵ 41-8251 44-2508 44-2506 44-2499 44-2725 41-8262	- 110 81 110 109 109 113 83	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.90 / 0.90 0.80 / 0.80 0.50 / 0.50	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet Silverado 1500 2WD/4WD	2007 - 2013	X	- Bushings Cam Bolt Replacement Pins Quick Cam Control Arm W/BJ Greaseable Cam Bolt Control Arm W/BJ	Fac Adj. 44-2509 ⁵ 41-8251 44-2508 44-2506 44-2726L 41-8262 44-2726R	Fac Adj. 44-2509 ⁵ 41-8251 44-2508 44-2506 44-2726L 41-8262 44-2726R	- 110 81 110 109 112 83 112	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.60 / 0.60 0.50 / 0.50 0.60 / 0.60	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet Silverado 1500 2WD/4WD (Forged Arm)	2014 - 2016	X	- Bushings Cam Bolt Replacement Pins Quick Cam Control Arm W/BJ Greaseable Cam Bolt Control Arm W/BJ	Fac Adj. 44-2509 ⁵ 41-8251 44-2508 44-2506 44-2726L 41-8262 44-2726R	Fac Adj. 44-2509 ⁵ 41-8251 44-2508 44-2506 44-2726L 41-8262 44-2726R	- 110 81 110 109 112 83 112	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.60 / 0.60 0.50 / 0.50 0.60 / 0.60	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet Silverado 1500 2WD/4WD (Aluminum Arm)	2014 - 2018	X	- Bushings Cam Bolt Replacement Pins Quick Cam Greaseable Cam Bolt Control Arm W/BJ Control Arm W/BJ	44-2509 ⁵ 41-8251 44-2508 44-2506 41-8262 44-2728L 44-2728R	44-2509 ⁵ 41-8251 44-2508 44-2506 41-8262 44-2728L 44-2728R	110 81 110 109 83 112 112	88-7950A	0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet Silverado 1500 (2WD/4WD)	2019 - 2022	X	Replacement Pins Greaseable Cam Bolt	44-2512 44-839	44-2512 44-839	111 104		0.30 / 0.30 0.50 / 0.50	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet Silverado HD 1500/2500/3500 2WD/4WD	1999 - 2010	X	- Bushings Cam Bolt Quick Cam Replacement Pins Ball Joint Control Arm W/BJ Greaseable Cam Bolt	Fac Adj. 44-2510 41-8251 44-2506 44-2508 44-2498 44-2730 41-8262	Fac Adj. 44-2510 41-8251 44-2506 44-2508 44-2498 44-2730 41-8262	- 110 81 109 110 109 114 83	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.90 / 0.90 0.90 / 0.90 0.50 / 0.50	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet Silverado HD 2500/3500 2WD/4WD	2011 - 2019	X	- Greaseable Cam Bolt Cam Bolt Replacement Pins Control Arm W/BJ	Fac Adj. 44-831 44-832 44-2512 44-2727	Fac Adj. 44-831 44-832 44-2512 44-2727	- 102 102 111 114		- / - 0.50 / 0.50 0.50 / 0.50 0.30 / 0.30 0.90 / 0.90	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet Silverado HD 2500/3500 2WD/4WD	2020 - 2022	X	- Replacement Pins Greaseable Cam Bolt Cam Bolt	Fac Adj. 44-2512 44-831 44-832	Fac Adj. 44-2512 44-831 44-832	- 111 102 102		- / - 0.30 / 0.30 0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-	-	- / -
Chevrolet Sonic	2012 - 2020	X	Axis Cam Magna Cam	41-214 41-157 ²		75 74		0.30 0.30	Shim	46-7100	46-7100	143		- / -
Chevrolet Spark	2012 - 2022	X	Axis Cam Magna Cam	41-212 41-147 ³		75 74		0.30 0.30	Shim	46-7100	46-7100	143		- / -
Chevrolet Spectrum	1985 - 1988	X	Magna Cam Wedge Kit Axis Cam	41-147 ³ 41-300 41-212	Non Adj.	74 76 75		0.30 / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

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- For models with either slotted or unslotted strut brackets.
- For models with slotted strut brackets only.
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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	H R O U S	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Chevrolet Sprint	1985 - 1988	X		- Magna Cam Wedge Kit	Fac Adj. 41-147 ³ 41-300	Non Adj.	- 74 76		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Chevrolet SS	2014 - 2017	X		Axis Cam Magna Cam	41-216 41-159 ²	Fac Adj.	75 74		0.30 / - 0.30	Cam Bolt	46-182	46-182	123		0.30 / 0.30
Chevrolet SSR AWD	2003 - 2006	X		Camber- Caster Tool	88-8929	88-8929	162		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Suburban 1500 2WD/4WD	2007 - 2020	X		- Bushings Cam Bolt Quick Cam Replacement Pins Greaseable Cam Bolt Control Arm W/BJ Control Arm W/BJ	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 41-8262 44-2726L 44-2726R	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 44-2726L 44-2726R	- 110 81 109 110 112 112	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Suburban 1500 2WD/4WD	2021 - 2022	X		- Replacement Pins Greaseable Cam Bolt	Fac Adj. 44-2512 44-839	Fac Adj. 44-2512 44-839	- 111 104		- / - 0.30 / 0.30 0.50 / 0.50	Greaseable Cam Bolt	44-839	46-166	104		0.50 / 0.30
Chevrolet Suburban 1500 2WD/4WD	1999 - 2006	X		- Bushings Cam Bolt Quick Cam Replacement Pins Ball Joint Control Arm W/BJ Greaseable Cam Bolt	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 44-2499 44-2725 41-8262	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 44-2499 44-2725 41-8262	- 110 81 109 110 109 113 83	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.90 / 0.90 0.80 / 0.80 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Suburban 2500HD 2WD/4WD	2000 - 2013	X		- Bushings Replacement Pins Cam Bolt Quick Cam Ball Joint Control Arm W/BJ Greaseable Cam Bolt	Fac Adj. 44-2510 44-2508 41-8251 44-2506 44-2498 44-2730 41-8262	Fac Adj. 44-2510 44-2508 41-8251 44-2506 44-2498 44-2730 41-8262	- 110 110 81 109 109 114 83		- / - 0.80 / 0.80 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.90 / 0.90 0.90 / 0.90 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Tahoe/Rear drum brakes 2WD	1995 - 2000	X		- Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	41-8250 ⁵ 41-8272	- 81 85		- / 0.90 0.90 / 0.90 0.90	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Tahoe 4WD	1995 - 2000	X		- Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	41-8250 ⁵ 41-8272	- 81 85	88-7491	- / - 0.60 / 0.60 41.00 / 41.00	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Tahoe 2WD/4WD	1999 - 2006	X		- Bushings Cam Bolt Quick Cam Replacement Pins Ball Joint Control Arm W/BJ Greaseable Cam Bolt	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 44-2499 44-2725 41-8262	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 44-2725 44-2499 41-8262	- 110 81 109 110 109 113 83	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.90 / 0.80 0.80 / 0.90 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Tahoe 2WD/4WD	2007 - 2014	X		- Bushings Cam Bolt Quick Cam Replacement Pins Greaseable Cam Bolt Control Arm W/BJ Control Arm W/BJ	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 41-8262 44-2726L 44-2726R	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 41-8262 44-2726L 44-2726R	- 110 81 109 110 83 112 112	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

APPLICATION GUIDE

MODEL	YEAR	T H R O T A L	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL			
Chevrolet Tahoe 2WD/4WD	2015 - 2022	X	- Bushings Cam Bolt Quick Cam Replacement Pins Greaseable Cam Bolt Control Arm W/BJ Control Arm W/BJ Control Arm W/BJ Control Arm W/BJ	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 41-8262 44-2726L 44-2726R 44-2728L 44-2728R	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 41-8262 44-2726L 2726R 44-2728L 44-2728R	- 110 81 109 110 83 112 112 112 112	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.60 / 0.60 0.60 / 0.60 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-	-	- / -			
			2021	X	Replacement Pins Greaseable Cam Bolt	Fac Adj. 44-2512 44-839	Fac Adj. 44-2512 44-839	- 111 104	-	- / - 0.30 / 0.30 0.50 / 0.50	Greaseable Cam Bolt	44-839	46-166	104	-	0.50 / 0.30	
			1989 - 2005	X	- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75	-	- / - 0.30 0.30	-	Non Adj.	Non Adj.	-	-	- / -	
			2002 - 2009	X	Camber- Caster Tool	88-8929	88-8929	162	88-8929	- / -	-	Non Adj.	Non Adj.	-	-	- / -	
			2009 - 2017	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75	-	- / - 0.30 0.30	- Cam Bolt Camber Kit	Fac Adj. 41-8257 46-421	41-8257	- 82 124	88-7996A	- / 0.30 0.30 1.00	
			2018 - 2022	X	Cam Bolt	41-212	Non Adj.	75	-	0.30 / -	-	Fac Adj.	Fac Adj.	-	-	- / -	
			2015 - 2022	X	Axis Cam Magna Cam	41-214 41-157 ²	Non Adj.	75 74	-	0.30 / - 0.30	-	Non Adj.	Non Adj.	-	-	- / -	
			2005 - 2009	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75	-	0.30 / - 0.30	- Shim Shim	Fac Adj. 46-1300 ¹ 46-2400 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	- 133 136	-	-	- / - 0.60 / 0.60 0.60 / 0.60
			1987 - 1991	X	-	-	-	-	88-7090	-	-	Non Adj.	Non Adj.	-	-	- / -	
			1997 - 2005	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	74 75	-	- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60	
2002 - 2005	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	74 75	-	- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-	-	- / -				
2011 - 2019	X	Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	75 74	-	0.30 / - 0.30	-	Non Adj.	Non Adj.	-	-	- / -				
CHRYSLER																	
Chrysler 200	2011 - 2014	X	Axis Cam	41-214	Non Adj.	75	-	0.30 / -	Shim Rear Arm	46-1500 SERIES ¹ 46-2176	46-437 46-1500 SERIES ¹	133 137	-	0.60 / 0.30 0.60 / 0.60			
Chrysler 200	2015 - 2017	X	-	Non Adj.	Non Adj.	-	-	- / -	Cam Bolt	46-453	46-454	127	-	0.30 / 0.30			
Chrysler 300C AWD	2005 - 2019	X	- Cam Bolt Control Arm W/BJ Control Arm W/BJ	Fac Adj. 41-8260 41-8329L 41-8329R	Fac Adj. 41-8260	- 82 89 89	-	- / - 0.90 / 0.90 0.90 0.90	Bushing	46-162	Fac Adj.	121	-	0.60 / -			
Chrysler 300C 2WD	2004 - 2008	X	- Ball Joint Cam Bolt Control Arm W/BJ Control Arm W/BJ	41-232 41-8259 41-8321L 41-8321R	41-232 41-8259 41-8321L 41-8321R	76 82 89 89	-	0.90 / 0.90 0.90 / 0.90 0.60 / 0.60 0.60 / 0.60	Bushing	46-162	Fac Adj.	121	-	0.60 / -			
Chrysler 300C 2WD	2009 - 2019	X	- Ball Joint Cam Bolt Control Arm W/BJ Control Arm W/BJ	41-232 41-8259 41-8322L 41-8322R	41-232 41-8259 41-8322L 41-8322R	76 82 89 89	-	0.90 / 0.90 0.90 / 0.90 0.60 / 0.60 0.60 / 0.60	Bushing	46-162	Fac Adj.	121	-	0.60 / -			
Chrysler 300M	1999 - 2004	X	- Magna Cam Axis Cam Front Tie Rod Toe Sleeve	Fac Adj. 41-160 ² 41-216 41-2001	Non Adj.	- 74 75 79	41-2001	- / - 0.30 0.30 0.30	-	Non Adj.	Fac Adj.	-	-	- / -			

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	T H R U S	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Chrysler Aspen	2007 - 2009	X		-	Fac Adj. 41-230	Fac Adj. 41-230	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Chrysler Cirrus	1995 - 2000	X		- Ball Joint	Fac Adj. 41-230	41-230	76	88-1304 88-7800A	- / 0.90 0.90	-	Fac Adj.	Fac Adj.	-		- / -
Chrysler Concorde LH Yorker	1993 - 1997	X		Magna Cam Axis Cam	41-160 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Chrysler Concorde	1998 - 2004	X		Magna Cam Axis Cam Front Tie Rod Toe Sleeve	Fac Adj. 41-160 ² 41-216 41-2001	Non Adj.	74 75 79	41-2001	- / - 0.30 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Chrysler Crossfire	2004 - 2008	X		- Cam Bolt	Fac Adj. 41-8265	Fac Adj. 41-8265	83		- / - 0.40 / 0.40	-	Fac Adj.	Fac Adj.	-		- / -
Chrysler Dynasty (Canada)	1991 - 1993	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler E Class/Exe Sedan	1983 - 1984	X		- Cam Bolt Axis Cam	Fac Adj. 41-8249 41-214	Non Adj.	81 75		- / - 0.30 0.60	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler Fifth Avenue	1983 - 1989	X		Camber Kit Camber Kit	41-157 ² 41-1570	Non Adj.	74 79		0.30 / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹		132 136		- -
Chrysler Fifth Avenue	1989	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler Imperial	1981 - 1983	X		-	Fac Adj. 41-8249	Fac Adj. 41-8249	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Chrysler Imperial	1990 - 1993	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler Intrepid	1998 - 2004	X		Magna Cam Axis Cam Front Tie Rod Toe Sleeve	Fac Adj. 41-160 ² 41-216 41-2001	Non Adj.	74 75 79	41-2001	- / - 0.30 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Chrysler Laser	1984 - 1986	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler LeBaron/GTS	1982 - 1995	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler New Yorker, LHS	1994 - 1997	X		Magna Cam Axis Cam	41-160 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Chrysler LHS	1994 - 1997	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Chrysler LHS	1999 - 2001	X		Magna Cam Axis Cam Front Tie Rod Toe Sleeve	Fac Adj. 41-160 ² 41-216 41-2001	Non Adj.	74 75 79	41-2001	- / - 0.30 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Chrysler New Yorker/Ex/Fifth Ave	1983 - 1993	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler Pacifica	2004 - 2008	X		Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	- Bushing	Non Adj. 46-162	Fac Adj.	- 121		- / - 0.60
Pacifica (Incl. Hybrid)	2017 - 2022	X		Cam Bolt	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Chrysler PT Cruiser	2001 - 2010	X		Magna Cam Axis Cam	Fac Adj. 41-157 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler Sebring Coupe	1995 - 2000	X		Ball Joint	41-550	41-550	78	88-1304 88-7800A	0.90 / 0.90	Shim	46-2170	Fac Adj.	136		0.30 / -
Chrysler Sebring Convertible	1996 - 2010	X		Ball Joint	41-230 41-229	41-230 41-229	76 76	88-1304 88-7800A	0.90 / - 0.90 / 0.90	-	Fac Adj.	46-437	-		- / 0.30
Chrysler Sebring Sedan	1996 - 2005	X		Ball Joint	41-230	41-230	76	88-1304	0.90 / 0.90	-	Non Adj.	Fac Adj.	-	88-7800A	- / -
Chrysler Sebring Coupe	2001 - 2010	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	Shim	46-2170	46-437	136		0.30 / 0.30
Chrysler Sebring Sedan & Conv	2007 - 2010	X		Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	- Rear Arm	Non Adj. 46-2175	46-437	- 137		- / 0.30 0.60

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FRONT WHEEL ALIGNMENT

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Chrysler TC by Maserati	1990-1991	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler Twn Country Wgn	1982-1988	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler Town/CtryVan FWD	1990-1995	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler Town/CtryVan AWD	1992-1995	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Chrysler Town/CtryVan FWD	1996-2016	X		- Magna Cam Axis Cam Cam Bolt	Fac Adj. 41-157 ² 41-214 41-8249	Non Adj.	74 75 81		- / - 0.30 0.30 0.30	Shim	46-1120 ¹	46-1120 ¹	132	88-343 88-4519	0.60 / 0.60
Chrysler Town/CtryVan AWD	1997-2014	X		- Magna Cam Axis Cam Cam Bolt	Fac Adj. 41-157 ² 41-214 41-8249	Non Adj.	74 75 81		- / - 0.30 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Chrysler Voyager Van	2000-2007	X		- Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Shim	46-1120 SERIES ¹	46-1120 ¹	132		0.60 / 0.60
DAEWOO															
Daewoo Lanos	1999-2002	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Daewoo Malteze	1999-2002	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Daewoo Leganza	1999-2002	X		- Axis Cam	41-212	Non Adj.	75		0.30 / -	Axis Cam	41-212	Non Adj.	75		0.30 / -
Daewoo Nubira	1999-2002	X		- Axis Cam	41-212	Non Adj.	75		0.30 / -	Axis Cam	41-212	Fac Adj.	75		0.30 / -
DAIHATSU															
Daihatsu Charade	1988-1992	X		- Magna Cam Wedge Kit Axis Cam	41-147 ³ 41-300 41-212	Non Adj.	74 76 75		0.30 / - 0.30 0.30	Magna Cam Wedge Kit Axis Cam	41-147 ³ 41-300 41-212	Fac Adj.	74 76 75		0.30 / - 0.30 0.30
Daihatsu Charade GTX	1992	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Daihatsu Rocky	1990-1992	X		- Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
DODGE															
Dodge 400	1982-1983	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Dodge 600	1983-1988	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Aries	1981-1989	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Avenger	1995-2000	X		- Ball Joint	41-550	41-550	78	88-1304 88-7800A	0.90 / 0.90	Shim	46-2170	Fac Adj.	136		0.30 / -
Dodge Avenger	2008-2010	X		- Axis Cam	41-214	Non Adj.	75		0.30 / -	- Rear Arm	Non Adj. 46-2175	Fac Adj.	137		- / - 0.60
Dodge Avenger	2011-2014	X		- Axis Cam	41-214	Non Adj.	75		0.30 / -	- Rear Arm	Non Adj. 46-2176	46-437	137		- / 0.30 0.60
Dodge B100/200/300/350 2WD	1979-1983	X		- Cam Bolt	Fac Adj. 41-8243	Fac Adj. 41-8243	80		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Dodge Caliber	2007-2012	X		- Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	- Rear Arm	Non Adj. 46-2178	Fac Adj. 46-2174	- 138		- / - 0.60 / 0.60
Dodge Caravan Van FWD	1984-1995	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Cavavan AWD	1990-1995	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge Caravan AWD	1996-2014	X		- Magna Cam Axis Cam Cam Bolt	41-157 ² 41-214 41-8249	Non Adj.	74 75 81		0.30 / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge Caravan Van FWD	1996-2019	X		- Magna Cam Axis Cam Cam Bolt	41-157 ² 41-214 41-8249	Non Adj.	74 75 81		0.30 / - 0.30 0.30	Shim	46-1120 ¹	46-1120 ¹	132	88-343	0.60 / 0.60
Dodge Challenger	1970-1974	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
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4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Dodge Challenger	1980 - 1983	X	-	Non Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge Challenger 2wd	2008	X	Ball Joint Cam Bolt Control Arm W/BJ Control Arm W/BJ	41-232 41-8259 41-8321L 41-8321R	41-232 41-8259 41-8321L 41-8321R	76 82 89 89		0.90 / 0.90 0.90 / 0.90 0.60 / 0.60 0.60 / 0.60	Bushing	46-162	Fac Adj.	121		0.60 / -
Dodge Challenger 2wd	2009 - 2022	X	Ball Joint Cam Bolt Control Arm W/BJ Control Arm W/BJ	41-232 41-8259 41-8322L 41-8322R	41-232 41-8259 41-8322L 41-8322R	76 82 89 89		0.90 / 0.90 0.90 / 0.90 0.60 / 0.60 0.60 / 0.60	Bushing	46-162	Fac Adj.	121		0.60 / -
Dodge Challenger AWD	2017 - 2022	X	Cam Bolt	41-8260	41-8260	82		0.90 / 0.90	Bushing	46-162	Fac Adj.	121		0.60 / -
Dodge Charger	1966 - 1972	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge Charger	1983 - 1987	X	Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Charger AWD	2006 - 2022	X	Cam Bolt Control Arm W/BJ Control Arm W/BJ	41-8260 41-8329L 41-8329R	41-8260 41-8329L 41-8329R	82 89 89		0.90 / 0.90 0.90 / 0.90 0.90 / 0.90	Bushing	46-162	Fac Adj.	121		0.60 / -
Dodge Charger 2WD	2006 - 2008	X	Ball Joint Cam Bolt Control Arm W/BJ Control Arm W/BJ	41-232 41-8259 41-8321L 41-8321R	41-232 41-8259 41-8321L 41-8321R	76 82 89 89		0.90 / 0.90 0.90 / 0.90 0.60 / 0.60 0.60 / 0.60	Bushing	46-162	Fac Adj.	121		0.60 / -
Dodge Charger 2WD	2009 - 2022	X	Ball Joint Cam Bolt Control Arm W/BJ Control Arm W/BJ	41-232 41-8259 41-8322L 41-8322R	41-232 41-8259 41-8322L 41-8322R	76 82 89 89		0.90 / 0.90 0.90 / 0.90 0.60 / 0.60 0.60 / 0.60	Bushing	46-162	Fac Adj.	121		0.60 / -
Dodge Colt / Vista	1979 - 1995	X	Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	74 76		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge Colt Wagon 2WD/4WD	1992 - 1995	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Dodge Conquest	1984 - 1986	X	-	Non Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Dodge Coronet (incl. Super Bee)	1966 - 1972	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge D300/D350/D400/D450 Truck	1975 - 1987	X	Camber Kit	41-8243	41-8243	80		0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Dodge Ram 50/D50/Arrow 2WD	1980 - 1993	X	-	Fac Adj.	CC	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge Dakota 2WD/4WD	1987 - 2004	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge Dakota 2WD/4WD	2005 - 2011	X	Greaseable Cam Bolt Cam Bolt	44-834 44-835	44-834 44-835	103 103		0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Dodge Dart	1965 - 1976	X	Cam Bolt	41-8243	41-8243	80		0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Dodge Dart	2013 - 2016	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Dodge Daytona	1984 - 1993	X	Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Durango 2WD/4WD	1998 - 2009	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge Durango	2011 - 2015	X	Ball Joint Camber Kit Control Arm W/BJ Control Arm W/BJ	Fac Adj. 44-2495 44-794 44-2720L 44-2720R	Fac Adj. 44-2495 44-795 44-2720L 44-2720R	- 108 99 111 111		- / - 0.90 / 0.90 0.30 / 0.30 0.90 / 0.90 0.90 / 0.90	-	Non Adj.	Fac Adj.	-		- / -
Dodge Durango	2016 - 2022	X	Cam Bolt Camber Kit	Fac Adj. 44-794	Fac Adj. 44-795	- 99		- / - 0.30 / 0.30	Cam Bolt	46-438	46-437	126		0.30 / 0.30
Dodge Dynasty	1988 - 1993	X	Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
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5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	R O T A T I O N	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Dodge Intrepid	1993 - 1997	X		Magna Cam Axis Cam	41-160 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Dodge Intrepid	1998 - 2004	X		Magna Cam Axis Cam Front Tie Rod Toe Sleeve	Fac Adj. 41-160 ² 41-216 41-2001	Non Adj.	- 74 75 79	41-2001	- / - 0.30 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Dodge Journey FWD/AWD	2009 - 2010	X		Axis Cam Magna Cam	41-214 41-157 ²	Non Adj.	75 74		0.30 / - 0.30	Rear Arm	46-2175	Fac Adj.	137		0.60 / -
Dodge Journey	2011 - 2022	X		Axis Cam Magna Cam	41-214 41-157 ²	Non Adj.	75 74		0.30 / - 0.30	Rear Arm	46-2176	46-437	137		0.60 / 0.30
Dodge Lancer	1985 - 1989	X		Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Magnum 2WD	2005 - 2008	X		Ball Joint Cam Bolt Control Arm WBJ Control Arm WBJ	41-232 41-8259 41-8321L 41-8321R	41-232 41-8321L 41-8321R 41-8259	76 82 89 89		0.90 / 0.90 0.90 / 0.60 0.60 / 0.60 0.60 / 0.90	Bushing	46-162	Fac Adj.	121		0.60 / -
Dodge Magnum AWD	2005 - 2008	X		Cam Bolt Control Arm WBJ Control Arm WBJ	41-8260 41-8329L 41-8329R	41-8260 41-8329L 41-8329R	82 89 89		0.90 / 0.90 0.90 / 0.90 0.90 / 0.90	Bushing	46-162	Fac Adj.	121		0.60 / -
Dodge Monaco	1990 - 1992	X		Wedge Kit	41-305	Non Adj.	76		0.30 / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Neon	1995 - 2005	X		Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Wedge Kit Axis Cam	41-300 41-212	Fac Adj.	76 75		0.30 / - 0.30
Dodge Nitro	2007 - 2012	X		Cam Bolt	41-8273	41-8273	85		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge Omni/024	1978 - 1990	X		-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Ram Raider 2WD	1987 - 1989	X		-	Fac Adj.	CC	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge Full size P/U ind. front suspension 2WD	1994 - 2001	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge 1500/2500 L.D. 4WD	1994 - 1999	X		Ball Joint	44-2492	Fac Adj. 44-2492 41-8256	107	88-7900A	0.90 / - 0.90 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge 1500/2500 L.D. 4WD	2000 - 2001	X		Ball Joint	44-2494	Fac Adj. 44-2494	108	88-7900A	0.90 / - 0.90	-	Non Adj.	Non Adj.	-		- / -
Dodge 1500 2WD/4WD	2002 - 2005	X		Camber Kit Greaseable Cam Bolt	44-792 44-866	44-792 44-866	99 105	88-8928	0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Dodge Ram 1500 2WD/4WD (5-lug) (Exc. Mega Cab)	2006 - 2010	X		Ball Joint Cam Bolt	44-2489 44-868	44-2489 44-868	106 105		0.90 / 0.90 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge Ram 1500 (Mega Cab) (8-lug) 2wd	2006 - 2008	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge Ram 1500 (Mega Cab) (8-lug) 4wd	2006 - 2008	X		Ball Joint	Non Adj. 44-2497	Fac Adj. 44-2497	- 108		- / - 0.90 / -	-	Non Adj.	Non Adj.	-		- / -
Dodge Full Size Van 2WD	1995 - 2003	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge 2500 HD/3500 solid frt axle 2WD	1994 - 2002	X		Bushing Bushing	44-5000 44-5032	44-5000 44-5032	109 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Dodge 2500 HD /3500 4WD	1994 - 1999	X		Bushing Bushing	44-5000 44-5032	44-5000 44-5032	109 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Dodge 2500 HD /3500 4WD	2000 - 2002	X		Ball Joint	44-2496	Fac Adj. 44-824	108		0.90 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge Truck 2500/3500 2WD	2003 - 2010	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge 2500/3500 P/U Old body style 4WD	2003	X		Ball Joint	44-2496	Fac Adj.	108		0.90 / -	-	Non Adj.	Non Adj.	-		- / -
Dodge 2500/3500 P/U NS 4WD	2003 - 2010	X		Ball Joint	44-2497	Fac Adj. 44-824	108		0.90 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge 2500 HD /3500 2wd/ w/o mono beam	2003 - 2010	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge Truck 2500/3500 2WD	2003 - 2010	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

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Dodge 2500/3500 2WD w/mono beam	2003 - 2010	X	Ball Joint	44-2497	Fac Adj. 44-824	108		0.90 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge 4500 / 5500	2008 - 2010	X	Ball Joint	44-2610	44-2610	112		1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Dodge Ramcharger 4WD	1974 - 1993	X					88-7090		-	Non Adj.	Non Adj.	-		- / -
Dodge Ramcharger 2WD	1977 - 1993	X	- Cam Bolt	Fac Adj. 41-8243	Fac Adj. 41-8243	80		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Dodge Rampage	1982 - 1984	X	-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Shadow	1987 - 1994	X	- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Spirit	1989 - 1995	X	- Cam Bolt	Fac Adj. 41-8249	Non Adj.	81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Sprinter 2500/3500	2003 - 2006	X	Shim Shim	42-4431 42-4434	Non Adj.	89 89		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge Sprinter 2500	2007 - 2009	X	Axis Cam Cam Bolt	41-214 41-8268	Non Adj.	75 84		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge Sprinter 2WD 3500	2007 - 2009	X	Axis Cam Cam Bolt	41-214 41-8268	Non Adj.	75 84		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge Stealth 4x2 & 4WD	1991 - 1996	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Dodge Stratus Sedan	1995 - 2006	X	- Ball Joint	Fac Adj. 41-230	41-230	76	88-1304 88-7800A	- / 0.90 0.90	-	Fac Adj.	Fac Adj.	-		- / -
Dodge Stratus Coupe	1995 - 2000	X	Ball Joint	41-550	41-550	78	88-1304	0.90 / 0.90	Shim	46-2170	Fac Adj.	136		0.30 / -
Dodge Stratus Coupe	2001 - 2005	X	Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	Shim	46-2170	Fac Adj.	136		0.30 / -
Dodge Viper RT/10Roadster	1992 - 1995	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Dodge Viper Roadster/GTS Coupe	1996 - 2017	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Dodge W100 thruW350 with 3500lb axle 4WD	1972 - 1993	X							-	Non Adj.	Non Adj.	-		- / -
Dodge Full size P/U ind. front suspension 2WD	1972 - 1993	X	Cam Bolt	41-8243	41-8243	80		0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Dodge W200-W350 w/3500 lb. axle 4WD	1975 - 1993	X					88-7090		-	Non Adj.	Non Adj.	-		- / -
EAGLE														
Eagle Medallion	1988 - 1989	X	Magna Cam Wedge Kit	41-160 ² 41-305	Non Adj.	74 76		0.30 / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Eagle Premier	1988 - 1992	X	Magna Cam Wedge Kit	41-160 ² 41-305	Non Adj.	74 76		0.30 / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Eagle Summit	1989 - 1992	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Eagle Summit	1993 - 1996	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Eagle Talon 2WD/4WD	1990 - 1994	X	Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	74 76		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Eagle Talon 2WD/4WD	1995 - 1998	X	Ball Joint	41-550	41-550	78	88-1304 88-7800A	0.90 / 0.90	Shim	46-2170	Fac Adj.	136		0.30 / -
Eagle Vision	1993 - 1997	X	Magna Cam Axis Cam	41-160 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Eagle Vista Wagon 2WD/4WD	1989 - 1991	X	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	74 76		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
FIAT														
Fiat 124 Spider	2017 - 2020	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Fiat 128 Coupe Hatch Wagon	1971 - 1979	X	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	74 76		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Fiat 131/Brava	1975 - 1981	X	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	74 76		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.

See part number 46-2450A on page 141

2. For models with either slotted or unslotted strut brackets.

3. For models with slotted strut brackets only.

4. For models without slotted strut brackets.

5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.

7. Adjustable cam replaces factory locking plate.

8. For models without factory provided cam bolts

9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	T H R O T S	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Fiat 500	2012 - 2017	X		Axis Cam	41-210	Non Adj.	75		0.30 / -	Shim Shim	46-7300 46-7300	46-7300 46-7300	143 148		0.60 / 0.60 0.60 / 0.60
Fiat 500	2018 - 2019	X		Magna Cam	41-210	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Fiat 500L	2014 - 2021	X		Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	75 74		0.30 / - 0.30	Shim Shim	46-7300 46-7300	46-7300 46-7300	143 148		0.60 / 0.60 0.60 / 0.60
Fiat 500x	2016 - 2022	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	Axis Cam	41-212		75		0.30
Fiat Strada	1979 - 1982	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	74 76		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Fiat X1/9	1974 - 1982	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	74 76		0.30 / - 0.30	Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	74 76		0.30 / - 0.30
FORD															
Ford Aerostar 2WD/4WD	1986 - 1997	X	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113	88-7414	- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Ford Aspire	1994 - 1997	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Ford Bronco 4WD	1969 - 1979	X		Bushing	44-5000	44-5000	109		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Bronco 4WD	1980 - 1996	X	X	Bushing Bushing	44-5000 44-5032	44-5000 44-5032	109 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford Bronco	2021	X		Camber Kit	44-869	44-869	106		0.80 / 0.80	-	Non Adj.	Non Adj.	-		- / -
Ford Bronco II 2WD	1984 - 1988	X								-	Non Adj.	Non Adj.	-		- / -
Ford Bronco II 4WD	1984 - 1989	X								-	Non Adj.	Non Adj.	-		- / -
Ford Bronco II 2WD	1989 - 1990	X	X	Bushing Bushing	42-950 44-5094	42-950 44-5094	88 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford Bronco II 4WD	1990	X	X	Bushing Bushing	42-950 44-5094	42-950 44-5094	88 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford Bronco Sport	2021 - 2022	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford C-Max	2013 - 2018	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	46-173	140		0.60 / 0.30
Ford Contour	1995 - 2000	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Ford Crown Victoria/LTD	1992 - 2002	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Crown Victoria	2003 - 2011	X	X	- Cam Bolt	Fac Adj. 46-143	Fac Adj.	- 121		- / - 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford E100/E150 2WD	1980 - 1991	X		-	Non Adj.		-		-	-	Non Adj.	Non Adj.	-		- / -
Ford E150, E250, E350, E450 2WD	1992 - 2022	X	X	Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094 42-970	88 116 88		1.00 / 1.00 1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford E250/E350 2WD	1980 - 1991	X		-	Non Adj.		-		-	-	Non Adj.	Non Adj.	-		- / -
Ford Ecosport	2018 - 2022	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Ford Edge	2007 - 2014	X		Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	75 74		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Ford Edge	2015 - 2022	X		Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	75 74		0.30 / - 0.30	-	Fac Adj.	46-457	-		- / 0.30
Ford Escape FWD	2001 - 2012	X		Magna Cam Wedge Kit Axis Cam	41-147 ³ 41-308 41-212	Fac Adj.	74 77 75		- / - 0.30 0.30	- Rear Arm	Non Adj. 46-2179	46-137	- 138		- / 0.30 0.90
Ford Escape 4WD	2001 - 2012	X		Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30	- Rear Arm	Non Adj. 46-2179	46-137	- 138		- / 0.30 -
Ford Escape FWD/AWD	2013 - 2019	X		-	Fac Adj.	Fac Adj.	-		- / -	Rear Arm	46-2188	46-173	140		0.60 / 0.30
Ford Escape FWD/AWD	2020 - 2022	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Ford Escort	1981 - 1985	X		-	Non Adj.	Non Adj.	-		- / -	Wedge Kit	46-201	Fac Adj.	120		0.40 / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.

See part number 46-2450A on page 141

2. For models with either slotted or unslotted strut brackets.

3. For models with slotted strut brackets only.

4. For models without slotted strut brackets.

5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.

7. Adjustable cam replaces factory locking plate.

8. For models without factory provided cam bolts

9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	T H R O U S H	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Ford Escort	1986 - 1990	X										Fac Adj.			-
Ford Escort	1991 - 1996	X		Magna Cam Axis Cam Wedge Kit	Fac Adj. 41-146 ² 41-212 41-312	Non Adj.	74 75 76		- / - 0.30 0.30 0.30	Magna Cam Axis Cam Wedge Kit	41-147 ³ 41-212 41-312	46-205	74 75 76		0.30 / 0.30 0.30 0.30
Ford Escort	1997 - 2002	X		Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Fac Adj.	74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj. 46-205	74 75		0.30 / - 0.30 / 0.30
Ford Escort ZX2	1998 - 2003	X		Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Fac Adj.	74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj. 46-205	74 75		0.30 / - 0.30 / 0.30
Ford Excursion 2WD	2000 - 2005	X		Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094 42-970	88 116 88		1.00 / 1.00 1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford Excursion 4WD	2000 - 2005	X		Bushing Bushing	44-5000 44-5032	44-5000 44-5032	109 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford EXP	1982 - 1985	X		-	Non Adj.	Non Adj.	-		- / -	Wedge Kit	46-201	Fac Adj.	120		0.40 / -
Ford EXP	1986 - 1988	X								Wedge Kit	46-201	Fac Adj.	120		0.40 / -
Ford Expedition 1sr design (cam only) 2WD/4WD	1997 - 1998	X		Camber Kit	42-777 ⁶	42-777 ⁶	87	88-7829	0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Expedition 2nd design (cam bolt) 2WD/4WD	1997 - 2002	X		Cam Bolt Cam Bolt Greaseable Cam Bolt	42-778 ⁷ 42-778-4 42-781	42-778 ⁷ 42-778-4 42-781	87 90 87		0.50 / 0.50 1.00 / 1.00 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Ford Expedition 2WD/4WD	2003 - 2006	X		Camber Kit	44-786 ⁸	44-786 ⁸	97		0.30 / 0.30	Cam Bolt	44-784	46-9813	97		0.50 / 0.50
Ford Expedition 2WD/4WD	2007 - 2017	X		Camber Kit Camber Kit Greaseable Cam Bolt	44-790 44-791 44-864	44-790 44-791 44-864	98 98 105		0.80 / 0.80 0.30 / 0.30 0.80 / 0.80	-	Fac Adj.	Fac Adj.	-		- / -
Ford Expedition	2018 - 2022	X		Camber Kit Camber Kit	44-789 44-791	44-789 44-791	98 98		0.80 / 0.80 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Explorer 2WD/4WD	1991 - 1994	X		Bushing Bushing	42-950 44-5094	42-950 44-5094	88 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford Explorer 2WD	1995 - 2001	X		Camber Kit Cam Bolt Greaseable Cam Bolt	44-767 44-768 44-836	44-767 44-836 44-768	95 95 103	88-7829	0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Explorer/Explorer Sport 4WD	1995 - 2001	X		Camber Kit Cam Bolt Greaseable Cam Bolt	44-767 44-768 44-836	44-767 44-768 44-836	95 95 103		0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Explorer 2WD/4WD	2002	X		Alignment Washers Camber Kit	44-769 44-771 ⁸	44-769 44-771 ⁸	96 96		0.30 / 0.30 0.30 / 0.30	Alignment Washers Camber Kit	44-769 44-773 ⁸	46-9812	96 96		0.30 / 0.50 0.30
Ford Explorer 2WD/4WD	2003 - 2005	X		Alignment Washers Camber Kit	44-769 44-771 ⁸	44-769 44-771 ⁸	96 96		0.30 / 0.30 0.30 / 0.30	Alignment Washers Camber Kit	44-769 44-773 ⁸	46-9811	96 96		0.30 / 0.50 0.30
Ford Explorer 2WD/4WD	2006 - 2010	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Ford Explorer 2WD/4WD	2011 - 2019	X		Axis Cam Magna Cam	Fac Adj. 41-216 41-159 ²	Non Adj.	75 74		- / - 0.30 0.30	Axis Cam	Fac Adj. 46-1709	Fac Adj.	135		- / - 0.30
Ford Explorer	2020 - 2022	X		Axis Cam	41-216	Non Adj.	75		0.03 / -	Camber Kit	44-871	Fac Adj.	-		0.30 / -
Ford Explorer Sport Trac 4WD/2WD	2001 - 2005	X		Camber Kit Cam Bolt Camber Kit Greaseable Cam Bolt	44-767 44-768 44-766 44-836	44-767 44-766 44-836	95 95 95 103		0.30 / 0.30 0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford F-100 4WD	1966 - 1974	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford F150 4WD	1975 - 1979	X						88-7090		-	Non Adj.	Non Adj.	-		- / -
Ford F150 4WD	1980 - 1996	X		Bushing Bushing	44-5000 44-5032	44-5000 44-5032	109 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F100/F150 2WD	1982 - 1986	X								-	Non Adj.	Non Adj.	-		- / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	R U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Ford F150 2WD	1987 - 1991	X		Bushing Bushing	42-950 44-5094	42-950 44-5094	88 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F150 2WD	1992 - 1996	X		Bushing Bushing	42-950 44-5094	42-950 44-5094	88 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F150/F250 1st design (cam only) 2WD/4WD	1997 - 1998	X		Camber Kit	42-777 ⁶	42-777 ⁶	87		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford F150/F250 2nd design (cam bolt) 2WD/4WD	1997 - 2003	X		Cam Bolt Cam Bolt Greaseable Cam Bolt	42-778 ⁷ 42-778-4 42-781	42-778 ⁷ 42-778-4 42-781	87 90 87		0.50 / 0.50 1.00 / 1.00 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Ford F150 Supercrew 4WD	2001 - 2003	X		Cam Bolt Cam Bolt Greaseable Cam Bolt	42-778 ⁷ 42-778-4 42-781	42-778 ⁷ 42-778-4 42-781	87 90 87		0.50 / 0.50 1.00 / 1.00 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Ford F150 2WD	2004 - 2008	X		Camber Kit Camber Kit Greaseable Cam Bolt	44-789 44-791 44-864	44-789 44-791 44-864	98 98 105		0.80 / 0.80 0.30 / 0.30 0.80 / 0.80	-	Non Adj.	Non Adj.	-		- / -
Ford F150 4WD	2004 - 2008	X		Camber Kit Camber Kit Greaseable Cam Bolt	44-789 44-791 44-864	44-789 44-791 44-864	98 98 105		0.80 / 0.80 0.30 / 0.30 0.80 / 0.80	-	Non Adj.	Non Adj.	-		- / -
Ford F150 2WD/4WD/SVT Raptor	2009 - 2020	X		Camber Kit Camber Kit Greaseable Cam Bolt	44-790 44-791 44-864	44-790 44-791 44-864	98 98 105		0.80 / 0.80 0.30 / 0.30 0.80 / 0.80	-	Non Adj.	Non Adj.	-		- / -
Ford F150 2WD/4WD/SVT Raptor	2021 - 2022	X		Camber Kit Camber Kit Greaseable Cam Bolt	44-789 44-791 44-864	44-789 44-791 44-864	98 98 105		0.80 / 0.80 0.30 / 0.30 0.80 / 0.80	-	Non Adj.	Non Adj.	-		- / -
Ford F250 (twin I-beam) 4WD	1980 - 1987	X		Bushing Bushing	44-5000 44-5032	44-5000 44-5032	109 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford/ 250 F350 w/ball joint suspension 4WD	1980 - 1997	X		Bushing Bushing	44-5000 44-5032	44-5000 44-5032	109 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford/ 250 4wd Twin I beam	1980 - 1997	X		Bushing Bushing	44-5000 44-5032	44-5000 44-5032	109 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F250/F350 2WD	1981 - 1986	X								-	Non Adj.	Non Adj.	-		- / -
Ford Truck F250/F350 2WD	1987 - 1991	X		Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094 42-970	88 116 88		1.00 / 1.00 1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F250/F350 2WD	1992 - 1998	X		Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094 42-970	88 116 88		1.00 / 1.00 1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F250 LD 1st design (cam only) 4WD	1997 - 1998	X		Camber Kit	42-777 ⁶	42-777 ⁶	87		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford F250, F350, F450, F550 Super Duty (TIB) 2WD	1997 - 2022	X		Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094 42-970	88 116 88		1.00 / 1.00 1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F250, F350, F450, F550 Super Duty (MOB) 2WD	1999 - 2004	X		Bushing Bushing	44-5000 44-5032	44-5000 44-5032	109 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F250, F350, F450, F550 Super Duty 4WD	1999 - 2004	X		Bushing Bushing	44-5000 44-5032	44-5000 44-5032	109 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F250/F350 Super Duty (MOB) 2WD	2005 - 2022	X		Bushing Bushing	44-6000 44-5036	44-6000 44-5036	117 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F250 Super Duty 4WD	2005 - 2022	X		Bushing Bushing	44-6000 44-5036	44-6000 44-5036	117 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F350 w/Dana 60 4WD	1975 - 1991	X		Camber Kit	44-910	Non Adj.	106		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Ford F350 Super Duty 4WD	2005 - 2022	X		Bushing Bushing	44-6000 44-5036	44-6000 44-5036	117 116		1.00 / 0.50 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F450/550 Super Duty 2WD/4WD (with 10 Lug Wheels)	2005 - 2022	X		Bushing Bushing	44-6020 44-5037	44-6020 44-5037	117 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford Fairmont	1978 - 1981	X		- Wedge Kit	Fac Adj. 41-310	Non Adj.	- 77	88-4511	- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Falcon	1960 - 1965	X		-	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Festiva	1988 - 1993	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	- 74 75		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Ford Fiesta	1978 - 1980	X	Magna Cam Wedge Kit	Fac Adj. 41-147 ³ 41-300	Non Adj.	74 76		- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Fiesta	2011 - 2019	X	Axis Cam	41-212 41-147 ³	Non Adj.	75 74		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Five Hundred AWD	2005 - 2007	X	-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Ford Five Hundred FWD	2005 - 2007	X	-	Fac Adj.	Fac Adj.	-		- / -	Camber Kit	46-135	Fac Adj.	120		0.75 / -
Ford Flex FWD/AWD	2009 - 2012	X	-	Fac Adj.	Non Adj.	-		- / -	- Axis Cam	Fac Adj. 46-1709	Non Adj.	- 135		- / - 0.30
Ford Flex FWD/AWD	2013 - 2020	X	Axis Cam	41-218	Non Adj.	75		0.30 / -	- Axis Cam	Fac Adj. 46-1709	46-2241	- 135		- / 0.30 0.30
Ford Focus (Incl. SVT)	2000 - 2011	X	Tower Plate	41-4611	Non Adj.	80	88-9416	0.60 / -	Shim Camber Kit Rear Arm	46-1700 SERIES 46-1705 46-2188	46-173	129 134 140		0.80 / 0.30 0.50 0.60
Ford Focus (Incl. ST/RS)	2012 - 2018	X	-	Non Adj.	Non Adj.	-	88-9416	- / -	Rear Arm	46-2188	46-173	140		0.60 / 0.30
Ford Freestar	2004 - 2007	X	Tower Plate	Fac Adj. 41-4609	Fac Adj.	80		- / - 0.90	-	Non Adj.	Non Adj.	-		- / -
Ford Freestyle FWD	2005 - 2007	X	-	Fac Adj.	Non Adj.	-		- / -	Camber Kit	46-135	Fac Adj.	120		0.75 / -
Ford Fusion	2006 - 2012	X	Ball Joint	41-236	41-236	76		0.90 / 0.90	Rear Arm	46-2231	Fac Adj.	144		0.50 / -
Ford Fusion Incl. Hybrid	2013 - 2020	X	Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	75 74		0.30 / - 0.30	Rear Arm	46-2227	46-457	143		0.50 / 0.30
Ford Granada	1975 - 1980	X	Cam Bolt	41-8243	Fac Adj.	80		0.60 / -	-	Non Adj.	Non Adj.	-		- / -
Ford Granada	1981 - 1982	X	Wedge Kit	Fac Adj. 41-310	Non Adj.	77	88-4511	- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Crown Victoria/LTD	1983 - 1986	X	Axis Cam	41-216	Fac Adj.	75	88-4511	0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Ford Maverick	1969 - 1977	X	-	Non Adj.	Non Adj.	-		- / -	Cam Bolt	41-8243	Non Adj.	80		0.60 / -
Ford Maverick	2022	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Ford Mustang	1979 - 1993	X	Wedge Kit Axis Cam	Fac Adj. 41-307 41-216	Non Adj.	77 75		- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Mustang 5.0	1990 - 1993	X	-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Mustang	1994 - 2004	X	Wedge Kit Axis Cam	Fac Adj. 41-307 41-216	Non Adj.	77 75	88-9414	- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Mustang Cobra	1999 - 2004	X	Axis Cam	41-216	Fac Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Ford Mustang	2005 - 2014	X	Wedge Kit Axis Cam	41-314 41-214	Fac Adj. 41-325 41-326	77 75		0.30 / - 0.30 / 0.50 0.50	-	Non Adj.	Non Adj.	-		- / -
Ford Mustang	2015 - 2022	X	Axis Cam	41-216	Fac Adj.	75		0.30 / -	Camber Kit	46-458	46-457	129		0.30 / 0.30
Ford Shelby GT350 Mustang	2016 - 2022	X	Axis Cam	41-216	Fac Adj.	75		0.30 / -	Camber Kit	46-458	46-457	129		0.30 / 0.30
MUSTANG MACH-E	2021	X	-	41-216	Non Adj.	75		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Ford Mustang Mach-E	2021 - 2022	X	Axis Cam	41-216	Non Adj.	75		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -
Police Interceptor Sedan	2013 - 2019	X	-	Non Adj.	Non Adj.	-		- / -	Axis Cam	46-1709	Fac Adj.	135		0.30 / -
Ford Explorer Police Interceptor Utility	2020 - 2022	X	Axis Cam Magna Cam	Fac Adj. 41-216 41-159 ²	Non Adj.	75 74		- / - 0.30 0.30	Camber Kit	44-871	Fac Adj.	-		0.30 / -
Ford Probe	1989 - 1997	X	Magna Cam Wedge Kit	Fac Adj. 41-146 ² 41-300	Fac Adj.	74 76		- / - 0.30 0.30	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	74 76		0.30 / - 0.30
Ford Ranchero	1964 - 1965	X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Ranchero	1966 - 1971	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.

See part number 46-2450A on page 141

2. For models with either slotted or unslotted strut brackets.

3. For models with slotted strut brackets only.

4. For models without slotted strut brackets.

5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.

7. Adjustable cam replaces factory locking plate.

8. For models without factory provided cam bolts

9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	R O T U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Ford Ranger 2WD	1983 - 1988	X								-	Non Adj.	Non Adj.	-		- / -
Ford Ranger 4WD	1983 - 1989	X								-	Non Adj.	Non Adj.	-		- / -
Ford Ranger 2WD	1989 - 1991	X		Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094 42-970	88 116 88		1.00 / 1.00 1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford Ranger 4WD	1990 - 1991	X		Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094 42-970	88 116 88		1.00 / 1.00 1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford Ranger 2WD/4WD	1992 - 1997	X		Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094 42-970	88 116 88		1.00 / 1.00 1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford Ranger 2WD/4WD	1998 - 2012	X		Camber Kit Cam Bolt Camber Kit Greaseable Cam Bolt	44-767 44-768 44-766 44-836	44-767 44-768 44-766 44-836	95 95 95 103		0.30 / 0.30 0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Ranger	2019 - 2022	X		Camber Kit	44-869	44-869	106		0.80 / 0.80	-	Non Adj.	Non Adj.	-		- / -
Ford Taurus Sedan	1986 - 1990	X		-	Fac Adj.	Fac Adj.	-	88-4520 88-9416	- / -	Bushing Cam Bolt	46-131 46-132	Fac Adj. 46-131 46-132	119 119	88-1302 88-9200	0.50 / - 0.40 / 0.50 0.40
Ford Taurus Wagon	1986 - 1990	X		-	Fac Adj.	Fac Adj.	-	88-4520 88-9416	- / -	Cam Bolt	46-136	Fac Adj.	120	88-1300 88-4511	0.80 / -
Ford Taurus Sedan	1991 - 1995	X		-	Fac Adj.	Fac Adj.	-	88-4520 88-9416	- / -	Bushing Cam Bolt	46-131 46-132	Fac Adj. 46-131 46-132	119 119	88-1302 88-9200	0.50 / - 0.40 / 0.50 0.40
Ford Taurus Wagon	1991 - 1995	X		-	Fac Adj.	Fac Adj.	-	88-4520 88-9416	- / -	Cam Bolt	46-136	Fac Adj.	120	88-1300 88-4511	0.80 / -
Ford Taurus Sedan	1996 - 2007	X		- Tower Plate	Fac Adj. 41-4607	Fac Adj.	80	88-7870C 88-9416	- / - 0.90	Cam Bolt Bushing	46-134 46-131	46-134 46-131	120 119		0.50 / 0.50 0.50 / 0.50
Ford Taurus Wagon	1996 - 2007	X		- Tower Plate	Fac Adj. 41-4607	Fac Adj.	80	88-9416	- / - 0.90	Cam Bolt	46-136	Fac Adj.	120		0.80 / -
Ford Taurus FWD	2008 - 2009	X		-	Fac Adj.	Fac Adj.	-		- / -	Camber Kit	46-135	Fac Adj.	120		0.75 / -
Ford Taurus Sedan	2010 - 2018	X		-	Fac Adj.	Fac Adj.	-		- / -	- Axis Cam	Fac Adj. 46-1709	46-2241	-	135	- / 0.30 0.30
Ford Taurus Sedan	2013 - 2019	X		Axis Cam	41-218	Fac Adj.	75		0.30 / -	- Axis Cam	Fac Adj. 46-1709	Fac Adj.	-	135	- / - 0.30
Ford Taurus X FWD	2008 - 2009	X		-	Fac Adj.	Fac Adj.	-		- / -	Camber Kit	46-135	Fac Adj.	120		0.75 / -
Ford Taurus X AWD	2008 - 2009	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Tempo	1984 - 1994	X								Wedge Kit	46-201		120		0.40
Ford Tempo	1985 - 1994	X								Wedge Kit	46-201	Fac Adj.	120	88-9200	0.40 / -
Ford Tempo AWD	1987 - 1992	X								Wedge Kit	46-201	Fac Adj.	120		0.40 / -
Ford Thunderbird	1964 - 1966	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Thunderbird	1980 - 1988	X		- Wedge Kit Axis Cam	Fac Adj. 41-310 41-216	Non Adj.	77 75	88-4511	- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Thunderbird	1989 - 1997	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Ford Thunderbird	2002 - 2005	X		- Cam Bolt	Fac Adj. 41-8244	Fac Adj. 41-8244	80		- / - 0.70 / 0.70	-	Non Adj.	Fac Adj.	-		- / -
Ford Torino	1968 - 1971	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Transit Connect	2010 - 2013	X		Tower Plate	41-4611	Non Adj.	80		0.60 / -	-	Non Adj.	Non Adj.	-		- / -
Transit Connect	2014 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Transit 150,250,350,350HD 2WD	2015 - 2019	X		Ball Joint	44-2617	Non Adj.	112	88-7313	1.00 / -	-	Non Adj.	Non Adj.	-		- / -
Ford Transit 150,250,350, 350HD 2WD	2020 - 2022	X		Ball Joint	44-2617	Non Adj.	112	88-7313	1.00 / -	-	Non Adj.	Non Adj.	-		- / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

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Ford Transit 150 AWD	2020 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Transit 250,350 AWD	2020 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Windstar	1995 - 2003	X		- Tower Plate	Fac Adj. 41-4609	Fac Adj.	80	88-4520 88-9416	- / - 0.90	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
FREIGHTLINER															
Freightliner Sprinter 2WD	2002 - 2006	X		Shim Shim	42-4431 42-4434	Non Adj.	89 89		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Freightliner 2500	2007 - 2018	X		Axis Cam Cam Bolt	41-214 41-8268	Non Adj.	75 84		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Freightliner 3500	2007 - 2018	X		Axis Cam Cam Bolt	41-214 41-8268	Non Adj.	75 84		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
GENESIS															
Genesis G70	2019 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	46-171	-		- / 0.30
Genesis G80	2017 - 2022	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	46-171	-		- / 0.30
Genesis G90	2017 - 2022	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	46-171	-		- / 0.30
GEO															
Geo Metro	1989 - 1997	X		Magna Cam Axis Cam Wedge Kit	41-147 ³ 41-212 41-312	Non Adj.	74 75 76		0.30 / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Geo Prizm	1989 - 1992	X		Magna Cam Axis Cam	41-149 41-215	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Geo Prizm	1993 - 1997	X		Magna Cam Axis Cam	41-149 41-215	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam Shim Shim	41-149 41-215 46-1300 ¹ 46-2400 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	74 75 133 136		0.30 / - 0.30 / 0.60 0.60 / 0.60 0.60
Geo Spectrum	1989	X		Magna Cam Wedge Kit Axis Cam	41-147 ³ 41-300 41-212	Non Adj.	74 76 75		0.30 / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.50 / 0.60 0.50 / 0.60
Geo Storm	1990 - 1993	X		Magna Cam Wedge Kit Axis Cam	41-147 ³ 41-300 41-212	Non Adj.	74 76 75		0.30 / - 0.30 0.30	Magna Cam Wedge Kit Axis Cam	41-147 ³ 41-300 41-212	Fac Adj.	74 76 75		0.30 / - 0.30 0.30
Geo Tracker 2WD/4WD	1989 - 1997	X		Magna Cam Wedge Kit Axis Cam	41-147 ³ 41-300 41-212	Non Adj.	74 76 75		0.30 / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
GMC															
GMC Acadia 2WD/4WD	2007 - 2016	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	- Cam Bolt Camber Kit	Fac Adj. 41-8257 46-421	41-8257	- 82 124	88-7996A	- / 0.30 0.30 1.00
GMC Acadia	2017 - 2022	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
GMC Acadia Limited	2017	X		Axis Cam	41-216	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
GMC Suburban 2WD	1972 - 1982	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
GMC C10/C20/C30/C1500	1966 - 1974	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
GMC C Series P/U 2WD	1979 - 1986	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
GMC C Series PU 2WD	1988 - 1991	X		Cam Bolt Greaseable Cam Bolt	41-8250 ⁵ 41-8272	41-8250 ⁵ 41-8272	81 85		0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
GMC C Series P/U 2WD	1992 - 1999	X		Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	Fac Adj. 41-8250 ⁵ 41-8272	- 81 85	88-7491	- / - 0.60 / 0.60 41.00 / 41.00	-	Non Adj.	Non Adj.	-		- / -
GMC Suburban 2WD	1983 - 1986	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
GMC 4WD Topkick C4500 C5500	2005 - 2009	X		Bushing Bushing	44-6020 44-5037	44-6020 44-5037	117 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
GMC 2WD Topkick C4500 C550	2005 - 2009	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -

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GMC 2WD Canyon	2004 - 2012	X		- Quick Cam Replacement Pins Cam Bolt Greaseable Cam Bolt	Fac Adj. 44-2507 44-2508 41-8251 41-8262	Fac Adj. 44-2507 44-2508 41-8251 41-8262	- 109 110 81 83		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC 4WD Canyon	2004 - 2012	X		- Quick Cam Replacement Pins Cam Bolt Greaseable Cam Bolt	Fac Adj. 44-2507 44-2508 41-8251 41-8262	Fac Adj. 44-2507 44-2508 41-8251 41-8262	- 109 110 81 83		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC Canyon	2015 - 2019	X		- Greaseable Cam Bolt Cam Bolt Replacement Pins	Fac Adj. 44-831 44-832 44-2512	Fac Adj. 44-831 44-832 44-2512	- 102 102 111		- / - 0.50 / 0.50 0.50 / 0.50 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
GMC Envoy 2WD/4WD	2002	X		- Cam Bolt	Fac Adj. 41-8246	Fac Adj. 41-8246	- 81		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
GMC 2WD/4WD Envoy	2003 - 2009	X		- Camber- Caster Tool	88-8929	88-8929	162	88-8929	- / -	-	Non Adj.	Non Adj.	-		- / -
GMC G Series Van 2WD	1979 - 1995	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
GMC Jimmy (Full Size) 4WD	1970 - 1991	X								-	Non Adj.	Non Adj.	-		- / -
GMC Jimmy (full size) 2WD	1974 - 1978	X		- Shim	Fac Adj. cc	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
GMC K Series P/U 4WD (Except Dana 60)	1970 - 1986	X						88-7090		-	Non Adj.	Non Adj.	-		- / -
GMC Suburban 4WD	1970 - 1991	X						88-7090		-	Non Adj.	Non Adj.	-		- / -
GMC V Series P/U 4WD	1987 - 1991	X						88-7090		-	Non Adj.	Non Adj.	-		- / -
GMC K Series P/U 4WD	1988 - 2000	X		- Cam Bolt Greaseable Cam Bolt	41-8250 ⁵ 41-8272	41-8250 ⁵ 41-8272	81 85	88-7491	0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
GMC K Series P/U (rear drum brakes) 4WD	1992 - 1999	X		- Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	Fac Adj. 41-8250 ⁵ 41-8272	- 81 85	88-7491	- / - 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
GMC R Series 2WD	1987 - 1991	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
GMC S15 P/U (downsize) 4WD	1982	X		- Cam Bolt	Fac Adj. 41-8247	Fac Adj. 41-8247	- 81		- / - 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
GMC S15 P/U/Sonoma (downsize) 4WD	1983 - 1990	X		- Cam Bolt	Fac Adj. 41-8246	Fac Adj. 41-8246	- 81		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
GMC S15/T15 Jimmy, Syclone, Typhoon 4WD	1983 - 1993	X		- Cam Bolt	Fac Adj. 41-8246	Fac Adj. 41-8246	- 81		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
GMC S15 Jimmy, Typhoon 2WD	1983 - 1993	X		- Shim	Fac Adj. cc	Fac Adj. cc	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
GMC Safari 2WD	1985 - 2005	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
GMC Safari 4WD	1990 - 2005	X		- Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	Fac Adj. 41-8250 ⁵ 41-8272	- 81 85	88-7491	- / - 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
GMC Savana 2WD	1996 - 2002	X		- Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	Fac Adj. 41-8250 ⁵ 41-8272	- 81 85	88-7491	- / - 0.60 / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
GMC 4WD Savana Van 1500	2003 - 2014	X		- Quick Cam Replacement Pins Cam Bolt Bushing Control Arm W/BJ Ball Joint Greaseable Cam Bolt	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 44-2725 44-2499 41-8262	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 44-2725 44-2499 41-8262	- 109 110 81 110 113 109 83		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.80 / 0.80 0.80 / 0.80 0.90 / 0.90 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors
6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	H O U R S	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
GMC 2WD Savana Van 1500	2003 - 2014	X		- Quick Cam Replacement Pins Cam Bolt Bushing Control Arm W/BJ Ball Joint Greaseable Cam Bolt	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 44-2725 44-2499 41-8262	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 44-2725 44-2499 41-8262	- 109 110 81 110 113 109 83		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.80 / 0.80 0.80 / 0.80 0.90 / 0.90 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC 4WD Savana Van 2500	2003 - 2022	X		- Quick Cam Replacement Pins Cam Bolt Bushing Greaseable Cam Bolt	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 41-8262	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 41-8262	- 109 110 81 110 83		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.80 / 0.80 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC 2WD Savana Van 2500	2003 - 2022	X		- Quick Cam Replacement Pins Cam Bolt Bushing Greaseable Cam Bolt	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 41-8262	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 41-8262	- 109 110 81 110 83		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.80 / 0.80 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC 4WD Savana Van 2500 7300 lb. GVW only	2003 - 2005	X		- Quick Cam Replacement Pins Cam Bolt Bushing Control Arm W/BJ Ball Joint Greaseable Cam Bolt	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 44-2725 44-2499 41-8262	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 44-2725 44-2499 41-8262	- 109 110 81 110 113 109 83		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.80 / 0.80 0.80 / 0.80 0.90 / 0.90 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC 2WD Savana Van 2500 7300 lb. GVW only	2003 - 2005	X		- Quick Cam Replacement Pins Cam Bolt Bushing Control Arm W/BJ Ball Joint Greaseable Cam Bolt	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 44-2725 44-2499 41-8262	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 44-2725 44-2499 41-8262	- 109 110 81 110 113 109 83		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.80 / 0.80 0.80 / 0.80 0.90 / 0.90 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC 2WD Savana Van	2003 - 2019	X		- Quick Cam Replacement Pins Cam Bolt Greaseable Cam Bolt	Fac Adj. 44-2506 44-2508 41-8251 41-8262	Fac Adj. 44-2506 44-2508 41-8251 41-8262	- 109 110 81 83		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC 4WD Savana Van	2003 - 2019	X		- Quick Cam Replacement Pins Cam Bolt Greaseable Cam Bolt	Fac Adj. 44-2506 44-2508 41-8251 41-8262	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 41-8262	- 109 110 81 83		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.50 / 0.80 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC Sierra HD 1500/2500/3500 2WD/4WD	2007 - 2010	X		- Bushing Replacement Pins Quick Cam Cam Bolt Ball Joint Greaseable Cam Bolt	Fac Adj. 44-2510 44-2508 44-2506 41-8251 44-2498 41-8262	Fac Adj. 44-2510 44-2508 44-2506 41-8251 44-2498 41-8262	- 110 110 109 81 109 83	88-7950A	- / - 0.80 / 0.80 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.90 / 0.90 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC Sierra 1500 2WD/4WD	1999 - 2006	X		- Bushing Quick Cam Cam Bolt Replacement Pins Ball Joint Control Arm W/BJ Greaseable Cam Bolt	Fac Adj. 44-2509 ⁵ 44-2506 41-8251 44-2508 44-2499 44-2725 41-8262	Fac Adj. 44-2509 ⁵ 44-2506 41-8251 44-2508 44-2499 44-2725 41-8262	- 110 109 81 110 109 113 83	88-7950A	- / - 0.80 / 0.80 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.90 / 0.90 0.80 / 0.80 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -

- Note:** Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.
- Note:** When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.
- Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
 - For models with either slotted or unslotted strut brackets.
 - For models with slotted strut brackets only.
 - For models without slotted strut brackets.
 - For models WITH or WITHOUT ABS brakes and 10 1/2" rotors
 - On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
 - Adjustable cam replaces factory locking plate.
 - For models without factory provided cam bolts
 - For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
GMC Sierra 1500 2WD/4WD	2007 - 2013	X	- Bushing Quick Cam Cam Bolt Replacement Pins Control Arm W/BJ Greaseable Cam Bolt Control Arm W/BJ	Fac Adj. 44-2509 ⁵ 44-2506 41-8251 44-2508 44-2726L 41-8262 44-2726R	Fac Adj. 44-2509 ⁵ 44-2506 41-8251 44-2508 44-2726L 41-8262 44-2726R	- 110 109 81 110 112 83 112	88-7950A	- / - 0.80 / 0.80 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.60 / 0.60 0.50 / 0.50 0.60 / 0.60	-	Non Adj.	Non Adj.	-	- / -	
GMC Sierra 1500 2WD/4WD (Steel Arm)	2014 - 2018	X	- Bushing Quick Cam Cam Bolt Replacement Pins Control Arm W/BJ Greaseable Cam Bolt Control Arm W/BJ	Fac Adj. 44-2509 ⁵ 44-2506 41-8251 44-2508 44-2726L 41-8262 44-2726R	Fac Adj. 44-2509 ⁵ 44-2506 41-8251 44-2508 44-2726L 41-8262 44-2726R	- 110 109 81 110 112 83 112	88-7950A	- / - 0.80 / 0.80 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.60 / 0.60 0.50 / 0.50 0.60 / 0.60	-	Non Adj.	Non Adj.	-	- / -	
GMC Sierra 1500 2WD/4WD (Aluminum Arm)	2014 - 2018	X	- Bushing Quick Cam Cam Bolt Replacement Pins Control Arm W/BJ Greaseable Cam Bolt Control Arm W/BJ	Fac Adj. 44-2509 ⁵ 44-2506 41-8251 44-2508 44-2728L 41-8262 44-2728R	Fac Adj. 44-2509 ⁵ 44-2506 41-8251 44-2508 44-2728L 41-8262 44-2728R	- 110 109 81 110 112 83 112	88-7950A	- / - 0.80 / 0.80 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.60 / 0.60 0.50 / 0.50 0.60 / 0.60	-	Non Adj.	Non Adj.	-	- / -	
GMC Sierra 1500 2WD/4WD	2019 - 2022	X	- Replacement Pins Greaseable Cam Bolt	Fac Adj. 44-2512 44-839	Fac Adj. 44-2512 44-839	- 111 104		- / - 0.30 / 0.30 0.50 / 0.50	-	Non Adj.	Non Adj.	-	- / -	
GMC Sierra HD 1500/2500/3500 2WD/4WD	1999 - 2010	X	- Bushing Cam Bolt Cam Bolt Replacement Pins Ball Joint Control Arm W/BJ Greaseable Cam Bolt	Fac Adj. 44-2510 41-8251 44-2506 44-2508 44-2498 44-2730 41-8262	Fac Adj. 44-2510 41-8251 44-2508 44-2506 44-2498 44-2730 41-8262	- 110 81 109 110 109 114 83		- / - 0.08 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.90 / 0.90 0.90 / 0.90 0.50 / 0.50						
GMC Sierra HD 2500/3500 2WD/4WD	2011 - 2022	X	- Greaseable Cam Bolt Camber Kit Replacement Pins Control Arm W/BJ	Fac Adj. 44-831 44-832 44-2512 44-2727	Fac Adj. 44-831 44-832 44-2727 44-2512	- 102 102 111 114		- / - 0.50 / 0.50 0.50 / 0.50 0.30 / 0.90 0.90 / 0.30	-	Non Adj.	Non Adj.	-	- / -	
GMC Terrain	2010 - 2017	X	Magna Cam Axis Cam	41-158 ² 41-214		74 75		0.30 0.30	Cam Nut	44-775	44-775	97		0.30 / 0.30
GMC Terrain	2018 - 2022	X	Cam Bolt	41-212	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
GMC 4 WD Truck Yukon/Denali (rear drum brake)	1992 - 2000	X	- Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	Fac Adj. 41-8250 ⁵ 41-8272	- 81 85	88-7491	- / - 0.60 / 0.60 41.00 / 41.00	-	Non Adj.	Non Adj.	-	- / -	
GMC Yukon/Denali 2WD/4WD	1999 - 2006	X	- Bushing Replacement Pins Cam Bolt Quick Cam Ball Joint Control Arm W/BJ Greaseable Cam Bolt	Fac Adj. 44-2509 ⁵ 44-2508 41-8251 44-2506 44-2499 44-2725 41-8262	Fac Adj. 44-2509 ⁵ 44-2508 41-8251 44-2506 44-2725 44-2499 41-8262	- 110 110 81 109 109 113 83	88-7950A	- / - 0.80 / 0.80 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.90 / 0.80 0.80 / 0.90 0.50 / 0.50	-	Non Adj.	Non Adj.	-	- / -	

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	H R O U S E S	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	
GMC Yukon/Denali 2WD/4WD	2007 - 2014	X		-	Fac Adj.	Fac Adj.	-		- / -							
				Bushing Replacement	44-2509 ⁵	44-2509 ⁵	110		0.80 / 0.80							
				Pins	44-2508	44-2508	110		0.30 / 0.30							
				Cam Bolt	41-8251	41-8251	81		0.50 / 0.50							
				Quick Cam	44-2506	44-2506	109	88-7950A	0.30 / 0.30							
				Greaseable	41-8262	41-8262	83		0.50 / 0.50							
				Cam Bolt	44-2726L	44-2726L	112		0.60 / 0.60							
				Control Arm W/BJ	44-2726R	44-2726R	112		0.60 / 0.60							
GMC Yukon/Denali 2WD/4WD	2015 - 2022	X		-	Fac Adj.	Fac Adj.	-		- / -							
				Bushing Replacement	44-2509 ⁵	44-2509 ⁵	110		0.80 / 0.80							
				Pins	44-2508	44-2508	110		0.30 / 0.30							
				Cam Bolt	41-8251	41-8251	81		0.50 / 0.50							
				Quick Cam	44-2506	44-2506	109	88-7950A	0.30 / 0.30							
				Greaseable	41-8262	41-8262	83		0.50 / 0.50							
				Cam Bolt	44-2726L	44-2726L	112		0.60 / 0.60							
				Control Arm W/BJ	44-2726R	44-2726R	112		0.60 / 0.60							
				Control Arm W/BJ	44-2728L	44-2728L	112		0.60 / 0.60							
				Control Arm W/BJ	44-2728R	44-2728R	112		0.60 / 0.60							
				GMC Yukon/Denali 2WD/4WD	2021	X		-	Fac Adj.	Fac Adj.	-		- / -	Greaseable	44-839	Fac Adj.
Replacement	44-2512	44-2512	111						0.30 / 0.30							
Pins	44-839	44-839	104						0.50 / 0.50							
GMC Yukon XL 1500 2WD/4WD	2000 - 2019	X		-	Fac Adj.	Fac Adj.	-		- / -							
				Bushing	44-2509 ⁵	44-2509 ⁵	110		0.80 / 0.80							
				Cam Bolt	41-8251	41-8251	81		0.50 / 0.50							
				Quick Cam	44-2506	44-2506	109	88-7950A	0.30 / 0.30							
				Replacement	44-2508	44-2508	110		0.30 / 0.30							
				Pins	41-8262	41-8262	83		0.50 / 0.50							
				Greaseable	44-2726L	44-2726L	112		0.60 / 0.60							
				Cam Bolt	44-2726R	44-2726R	112		0.60 / 0.60							
				Control Arm W/BJ												
				Control Arm W/BJ												
GMC Yukon XL 2500HD 2WD/4WD	2000 - 2013	X		-	Fac Adj.	Fac Adj.	-		- / -							
				Bushing	44-2510	44-2510	110		0.80 / 0.80							
				Replacement	44-2508	44-2508	110		0.30 / 0.30							
				Pins	41-8251	41-8251	81		0.50 / 0.50							
				Cam Bolt	44-2506	44-2506	109	88-7950A	0.30 / 0.30							
				Quick Cam	44-2498	44-2498	109		0.90 / 0.90							
				Ball Joint	44-2730	44-2730	114		0.90 / 0.90							
				Control Arm W/BJ	41-8262	41-8262	83		0.50 / 0.50							
				Greaseable												
				Cam Bolt												
HONDA																
Honda Accord	1986 - 1989	X		Ball Joint	Fac Adj.	Fac Adj.	-		- / -	Shim	46-2160	Fac Adj.	136		0.20 / -	
Honda Accord	1990 - 1997	X		Control Arm W/BJ	41-545	41-530	79	88-7800A	0.50 / 0.90	Shim	46-2160	Fac Adj.	136		0.20 / -	
Honda Accord	1998 - 2002	X		Ball Joint	41-532	41-532	78	88-1304 88-7800A	0.90 / 0.90	Rear Arm	46-2190	46-2190	141 138		0.70 / 0.70	
Honda Accord	2003 - 2007	X		Ball Joint	41-532	41-532	78	88-1304 88-7890A	0.90 / 0.90	Rear Arm	46-2195	46-2195	142 141		0.70 / 0.70	
Honda Accord	2008 - 2012	X		Ball Joint	41-532	41-532	78	88-1304 88-7890A	0.90 / 0.90	Rear Arm	46-2184	Fac Adj.	46-2183 46-2234	139		0.30 / -
Honda Accord	2013 - 2017	X		-	Fac Adj.	Fac Adj.	-	88-7890A	- / -	Rear Arm	46-2184	Fac Adj.	46-2183 46-2234	139	0.30 / -	
Honda Accord (Includes Hybrid)	2018 - 2022	X		Ball Joint	41-541	Non Adj.	78		0.60 / -	Rear Arm	46-2238	46-174	145		0.60 / 0.30	
Honda Accord Crosstour	2010 - 2015	X		Ball Joint	41-532	41-532	78	88-1304 88-7890A	0.90 / 0.90	Rear Arm	46-2184	Fac Adj.	46-2183 46-2234	139	0.30 / -	

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- For models with either slotted or unslotted strut brackets.
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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	T H R O U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Honda Civic	1980 - 1990	X		- Control Arm W/BJ	Non Adj. 41-545	Non Adj.	- 79		- / - 0.50	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-343	0.60 / 0.60 0.60 / 0.60
Honda Civic Wagon	1984 - 1987	X		-	Non Adj.	Non Adj.	-		- / -	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-343	0.60 / 0.60 0.60 / 0.60
Honda CRX	1984 - 1987	X		-	Non Adj.	Non Adj.	-		- / -	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-343	0.60 / 0.60 0.60 / 0.60
Honda Civic	1988 - 2000	X		Ball Joint	41-532	41-532	78	88-1304 88-7800A	0.90 / 0.90	Shim Rear Arm	46-2160 46-2182	Fac Adj.	136 139		0.20 / - 0.70
Honda Civic	2001 - 2002	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	Rear Arm	46-2180	46-463	138		0.50 / 0.30
Honda Civic Si	2002 - 2005	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	Rear Arm	46-2180	46-463	138		0.50 / 0.30
Honda Civic Hybrid	2003 - 2005	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	Rear Arm	46-2180	46-463	138		0.50 / 0.30
Honda Civic	2003 - 2005	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	Rear Arm	46-2180	46-463	138		0.50 / 0.30
Honda Civic / Civic Hybrid / Except Si	2006 - 2015	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Rear Arm	46-2187	46-434	140		0.50 / 0.30
Honda Civic Si	2012 - 2015	X		Axis Cam Magna Cam	41-216 41-160 ²	Non Adj.	75 74		0.30 / - 0.30	Rear Arm	46-2187	Fac Adj.	140		0.50 / -
Honda Civic (Except Si and Type R)	2016 - 2023	X		Ball Joint	41-541	Non Adj.	78		0.60 / -	Rear Arm	46-2238	46-174	145		0.60 / 0.30
Honda Civic del Sol	1993 - 1997	X		Control Arm W/BJ Ball Joint	41-545 41-532	41-532	79 78	88-1304 88-7800A	0.50 / 0.90 0.90	Shim Rear Arm	46-2160 46-2182	Fac Adj.	136 139		0.20 / - 0.70
Honda Clarity	2017 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Honda CR-V 4x2 and 4x4	1997 - 2001	X		Ball Joint	41-532	41-532	78	88-1304 88-7800A	0.90 / 0.90	Shim Rear Arm	46-2160 46-2182	Fac Adj.	136 139		0.20 / - 0.70
Honda CR-V	2002 - 2006	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	Rear Arm	46-2185	Fac Adj.	139		0.50 / -
Honda CR-V 2WD/4WD/Touring	2007 - 2016	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	Rear Arm	46-2186	46-434	140		0.60 / 0.30
Honda CR-V 2WD/4WD/Touring	2017 - 2022	X		Ball Joint	41-541	Non Adj.	78		0.60 / -	Rear Arm	46-2238	46-174	145		0.60 / 0.30
Honda CR-Z	2011 - 2016	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Honda CRX	1988 - 1991	X		Control Arm W/BJ Ball Joint	41-545 41-532	41-532	79 78	88-1304 88-7800A	0.50 / 0.90 0.90	Shim Rear Arm	46-2160 46-2182	Fac Adj.	136 139		0.20 / - 0.70
Honda Element	2003 - 2011	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	Rear Arm	46-2185	46-463	139		0.50 / 0.30
Honda Fit	2006 - 2008	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	Shim	46-1500 ¹	46-1500 ¹	133		0.60 / 0.60
Honda Fit	2009 - 2014	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Honda Fit (EV)	2013 - 2014	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	Rear Arm	46-2187	46-434	140		0.50 / 0.30
Honda Fit	2015 - 2020	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	Shim	46-1500 ¹	46-1500 ¹	133		0.60 / 0.60
Honda HR-V	2016 - 2022	X		Axis Cam	41-216	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Honda Insight	2001 - 2006	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Honda Insight	2010 - 2014	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Honda Insight	2019 - 2022	X		-	Fac Adj.	Fac Adj.	-		- / -	Rear Arm	46-2238	46-174	145		0.60 / -
Honda Odyssey	1995 - 1998	X		Control Arm W/BJ Ball Joint	41-545 41-530	41-530	79 78	88-7800A	0.50 / 0.90 0.90	-	Non Adj.	Fac Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O U G H	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Honda Odyssey	1999 - 2004	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	- 74 75		- / - 0.30 0.30	Rear Arm	46-2192	46-439	141		0.50 / 0.50
Honda Odyssey (Touring)	2005 - 2017	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	- 74 75		- / - 0.30 0.30	Rear Arm	46-2194	Fac Adj.	141		- / -
Honda Odyssey	2005 - 2017	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	- 74 75		- / - 0.30 0.30	Rear Arm	46-2191	Fac Adj.	141		0.60 / -
Honda Odyssey	2018 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Honda Passport 2WD/4WD	1994 - 2002	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Honda Passport 2WD/4WD	2019 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	46-452	-		- / 0.30
Honda Pilot	2003 - 2008	X	Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	75 74		0.30 / - 0.30	Rear Arm	46-2192	46-439	141		0.50 / 0.50
Honda Pilot FWD/AWD	2009 - 2015	X	Axis Cam	41-218	Non Adj.	75		0.30 / -	Rear Arm	46-2196	46-451	142		0.50 / 0.30
Honda Pilot	2016 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	46-452	-		- / 0.30
Honda Prelude	1979 - 1982	X	-	Non Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Honda Prelude	1983 - 1987	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Honda Prelude 2 W/S	1988 - 1991	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Honda Prelude 4 W/S	1988 - 1991	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Honda Prelude 2 W/S	1992 - 1996	X	Control Arm W/BJ Ball Joint	41-545 41-530	41-530	79 78		0.50 / 0.90 0.90	-	Non Adj.	Fac Adj.	-		- / -
Honda Prelude 4 W/S	1992 - 1995	X	Ball Joint	41-530	41-530	78	88-7800A	0.90 / 0.90	-	Fac Adj.	Fac Adj.	-	88-7800A	- / -
Honda Prelude except SH	1997 - 2001	X	Ball Joint	41-532	41-532	78	88-1304 88-7800A	0.90 / 0.90	-	Fac Adj.	Fac Adj.	-	88-7800A	- / -
Honda Prelude SH	1997 - 2001	X	Ball Joint	41-530	41-530	78	88-1304 88-7800A	0.90 / 0.90	-	Fac Adj.	Fac Adj.	-	88-7800A	- / -
Honda 4WD RidgeLine	2006 - 2014	X	Axis Cam	41-218	Non Adj.	75		0.30 / -	Rear Arm	46-2240	Fac Adj.	146		0.30 / -
Honda RidgeLine	2017 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	46-452	-		- / 0.30
Honda S2000/SH	2000 - 2009	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
HUMMER														
Hummer H1	2002 - 2006	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Hummer H2	2003 - 2009	X	- Bushings Cam Bolt Replacement Pins Quick Cam Ball Joint Control Arm W/BJ Greaseable Cam Bolt	Fac Adj. 44-2510 41-8251 44-2508 44-2506 44-2498 44-2730 41-8262	Fac Adj. 44-2510 41-8251 44-2498 44-2730 41-8262	- 110 81 110 109 109 114 83	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.90 0.30 / 0.90 0.90 / 0.50 0.90 / 0.30 0.50	-	Non Adj.	Non Adj.	-		- / -
Hummer H3	2006 - 2010	X	- Quick Cam Replacement Pins Cam Bolt Greaseable Cam Bolt	Fac Adj. 44-2507 44-2508 41-8251 41-8262	Fac Adj. 44-2507 44-2508 41-8251 41-8262	- 109 110 81 83		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -

- Note:** Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.
- Note:** When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.
- Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
 - For models with either slotted or unslotted strut brackets.
 - For models with slotted strut brackets only.
 - For models without slotted strut brackets.
 - For models WITH or WITHOUT ABS brakes and 10 1/2" rotors
 - On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Hummer H3T	2009 - 2010	X	Quick Cam Replacement Pins Cam Bolt Greaseable Cam Bolt	Fac Adj. 44-2507 44-2508 41-8251 41-8262	Fac Adj. 44-2507 44-2508 41-8251 41-8262	- 109 110 81 83		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
HYUNDAI														
Hyundai Accent	1995 - 2005	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Hyundai Accent	2006 - 2011	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Shim	46-1500 ¹	46-1500 ¹	133		0.60 / 0.60
Hyundai Accent	2012 - 2017	X	Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Hyundai Accent	2018 - 2022	X	Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Hyundai Azera (to 10/31/2006)	2006	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Hyundai Azera	2007 - 2011	X	Ball Joint	41-550	41-550	78	88-1304	0.90 / 0.90	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Azera (Includes Limited)	2012 - 2017	X	Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	75 74		0.30 / - 0.30	Cam Bolt	46-169	Fac Adj.	122		0.30 / -
Hyundai Elantra	1992 - 1996	X	Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	74 76		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Hyundai Elantra	1997 - 2006	X	Magna Cam Magna Cam Axis Cam	41-146 ² 41-147 ³ 41-212	Non Adj.	74 74 75		0.30 / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Hyundai Elantra	2007 - 2010	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Rear Arm	46-2189	46-2189	140		0.50 / 0.50
Hyundai Elantra Touring	2011 - 2012	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Rear Arm	46-2189	46-2189	140		0.50 / 0.50
Hyundai Elantra	2011 - 2022	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Hyundai Elantra GT / multi-Link rear susp	2013	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Rear Arm	46-2189	46-2189	140		0.50 / 0.50
Hyundai Elantra Coupe W/Beam Rear Susp	2013	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30						
Hyundai Entourage	2007 - 2009	X	Axis Cam Magna Cam	41-212 41-147 ³		75 74		0.30 0.30	Cam Bolt	46-1707		135		0.30
Hyundai Equus	2011 - 2013	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Hyundai Equus	2014 - 2016	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Hyundai Excel	1986 - 1994	X	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	74 76		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Hyundai Genesis Sedan	2009 - 2014	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Genesis Sedan	2015 - 2016	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Hyundia Genesis Coupe	2010 - 2016	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Genesis Sedan	2010 - 2016	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Ioniq	2017 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Hyundai Kona	2018 - 2022	X	Cam Bolt	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Hyundai Palisade FWD/AWD	2020 - 2022	X	Axis Cam	41-216	Non Adj.	75		0.30 / -	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Hyundai Pony	1983 - 1987	X	-	Non Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Hyundai Santa Fe AWD	2001 - 2006	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	- Cam Bolt	Fac Adj. 46-166	Fac Adj. 46-166	- 122		- / - 0.30 / 0.30
Hyundai Santa Fe AWD	2007 - 2012	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

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See part number 46-2450A on page 141

2. For models with either slotted or unslotted strut brackets.

3. For models with slotted strut brackets only.

4. For models without slotted strut brackets.

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	H R U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Hyundai Santa Fe AWD/FWD	2013 - 2014	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Hyundai Santa Fe AWD/FWD Sport	2013 - 2014	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Hyundai Santa Fe AWD/FWD	2015 - 2022	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Hyundai Santa Fe AWD/FWD Sport	2015 - 2022	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Hyundai Scoupe	1991 - 1995	X		Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Hyundai Sonata	1989 - 1994	X		Magna Cam Wedge Kit	41-147 ³ 41-305	Non Adj.	74 76		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Hyundai Sonata	1995 - 1998	X		Magna Cam Wedge Kit	41-147 ³ 41-305	Non Adj.	74 76		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Sonata	1999 - 2010	X		Ball Joint	41-550	41-550	78	88-1304 88-7800A	0.90 / 0.90	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Sonata (built after 5-2011)	2011 - 2019	X		Axis Cam Magna Cam	41-216 41-160 ²	Non Adj.	75 74		0.30 / - 0.30	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Hyundai Sonata (built before 5-2011)	2011	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Sonata Hybrid	2011 - 2015	X		Axis Cam	41-216	Non Adj.	75		0.30 / -	Cam Bolt	46-169	Non Adj.	122		0.30 / -
Hyundai Stellar	1985 - 1988	X		-	Non Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Hyundai Tiburon	1997 - 2001	X		Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Hyundai Tiburon	2003 - 2008	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Hyundai Tucson 4x4/4x2	2005 - 2009	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Axis Cam Magna Cam	41-214 41-158 ²	Fac Adj.	75 74		0.30 / - 0.30
Hyundai Tucson FWD	2010 - 2015	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Cam Bolt	46-169	Fac Adj.	122		0.30 / -
Hyundai Tucson AWD	2010 - 2018	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Hyundai Tucson FWD	2016 - 2023	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Hyundai Veloster	2012 - 2014	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Shim	46-1500 SERIES ¹	46-1500 SERIES ¹	133		0.60 / 0.60
Hyundai Veloster	2012 - 2021	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Hyundai Veracruz	2007 - 2012	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Hyundai XG300/XG350	2001 - 2005	X		Ball Joint	41-550	41-550	78	88-1304	0.90 / 0.90	-	Non Adj.	Fac Adj.	-		- / -
INFINITI															
Infiniti EX35	2008 - 2012	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Infiniti EX37	2013	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Infiniti FX35/FX45	2004 - 2011	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Infiniti G20	1991 - 1996	X		-	Non Adj.	Non Adj.	-		- / -	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Infiniti G20	1999 - 2002	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Infiniti G25	2011 - 2012	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2228	46-2228	143		0.50 / 0.50
Infiniti G35 Coupe/Sedan	2003 - 2007	X		-	Non Adj.	Non Adj.	-		- / -	Cam Bolt	Non Adj. 46-164	Non Adj. 46-164	121		- / - 0.30 / 0.30
Infiniti G35 Sedan	2007 - 2008	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm / Cam bolt	46-2228	Fac Adj. 46-141	143		0.30 / - 0.30
Infiniti G37 (except hardtop convertible)	2008 - 2013	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm / Cam bolt	46-2228	46-141 46-2228	143		0.50 / 0.30 0.50

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Infiniti I30	1996 - 2001	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Infiniti I35	2002 - 2004	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Infiniti J30	1993 - 1996	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Infiniti JX35	2013	X	Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Infiniti M30	1990 - 1992	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Infiniti M35/M45	2006 - 2010	X	-	Non Adj.	Non Adj.	-		- / -	Rear Arm / Cam bolt	46-2228	46-2228	143		0.30 / 0.30
Infiniti M35h	2012 - 2013	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Infiniti M37	2011 - 2013	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Infiniti M45	2003 - 2004	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Infiniti M56	2011 - 2013	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Infiniti Q40	2015	X	-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2228	46-2228	143		0.50 / 0.50
Infiniti Q45	1990 - 2006	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Infiniti Q50 Sedan	2014 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Infiniti Q60 Convertible	2014 - 2015	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Infiniti Q60	2017 - 2019	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Infiniti Q70	2014 - 2020	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Infiniti QX30	2017 - 2020	X	Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -
Infiniti QX4	1997 - 2003	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Infiniti QX50	2014 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Infiniti QX56	2004 - 2013	X	Cam Bolt Greaseable Cam Bolt	44-820 44-862	44-820 44-862	100 104		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Infiniti QX60	2014 - 2022	X	Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Infiniti QX70	2014 - 2017	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Infiniti QX80	2014 - 2022	X	Cam Bolt Greaseable Cam Bolt	44-820 44-862	44-820 44-862	100 104		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
INTERNATIONAL														
International Pickup 150, 200, 100, 1110, 1210	1972 - 1975	X					88-7090		-	Non Adj.	Non Adj.	-		- / -
International Scout	1961 - 1971	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
International Scout 11	1973 - 1980	X					88-7090		-	Non Adj.	Non Adj.	-		- / -
ISUZU														
Isuzu Amigo 2WD/4WD	1989 - 2000	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Ascender 2WD/4WD	2003 - 2008	X	Camber-Caster Tool	88-8929	88-8929	162		- / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Axiom 2WD	2002 - 2004	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Axiom 4WD	2002 - 2004	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Hombre 2WD	1996 - 2000	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Hombre 4WD	1996 - 2000	X	- Cam Bolt	Fac Adj. 41-8246	Fac Adj. 41-8246	- 81		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -

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Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors
6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Isuzu i35/i28 4WD	2006	X	- Quick Cam	Fac Adj. 44-2507	Fac Adj. 44-2507	- 109		- / - 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Isuzu i-290	2007 - 2008	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu i-370	2007 - 2008	X	Quick Cam	44-2507	44-2507	109		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Isuzu i-Mark FWD	1985 - 1989	X	Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	74 76		0.30 / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Isuzu Impulse	1983 - 1989	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Impulse	1990 - 1992	X	Magna Cam Wedge Kit Axis Cam	41-147 ³ 41-300 41-212	Non Adj.	74 76 75		0.30 / - 0.30 0.30	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	74 76		0.30 / - 0.30
Isuzu Oasis	1996 - 1999	X	Ball Joint	41-530	41-530	78	88-1304	0.90 / 0.90	Shim	46-2160	Fac Adj.	136		0.20 / -
Isuzu Pickup 2WD/4WD	1981 - 1995	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Rodeo 2WD/4WD	1991 - 2004	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Stylus	1991 - 1993	X	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	74 76		0.30 / - 0.30	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	74 76		0.30 / - 0.30
Isuzu Trooper II 4WD	1988 - 2002	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Trooper 4WD	1992 - 2002	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu VehiCross	1999 - 2001	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
JAGUAR														
Jaguar E-Pace	2018 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Jaguar F-Type	2014 - 2022	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Jaguar S Type	2000 - 2008	X	- Cam Bolt	Fac Adj. 41-8244	Fac Adj. 41-8244	- 80		- / - 0.70 / -	-	Non Adj.	Fac Adj.	-		- / -
Jaguar X Type	2002 - 2008	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Jaguar XE	2016 - 2021	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Jaguar XJ (351)	2010 - 2019	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Jaguar XJ Sedans	1995 - 1997	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Fac Adj.	Fac Adj.	-		- / -
Jaguar XJ6/XJ Sedan	1983 - 1994	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Fac Adj.	Non Adj.	-		- / -
Jaguar XJR Sedan	1998 - 2002	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Jaguar XJS	1983 - 1996	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Fac Adj.	Non Adj.	-		- / -
Jaguar XK8/XKR	1997 - 2014	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
JEEP														
Jeep Cherokee (full size)	1974 - 1983	X					88-7090		-	Non Adj.	Non Adj.	-		- / -
Jeep Cherokee, Wagoneer (downsize)	1984 - 1989	X	Ball Joint Shim	44-2490 44-240 SERIES	Fac Adj. 44-2490	107 98	88-7900A	0.90 / - 0.30 / 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Cherokee, Wagoneer (downsize)	1990 - 2001	X	Ball Joint	44-2490	Fac Adj. 44-2490 44-240 SERIES	107	88-7900A	0.90 / - 0.90 0.30	-	Non Adj.	Non Adj.	-		- / -
Jeep Cherokee	2014 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	Cam Bolt	46-453	46-454	127		0.30 / 0.30
Jeep CJ Models	1977 - 1986	X					88-7090		-	Non Adj.	Non Adj.	-		- / -
Jeep Comanche	1986 - 1989	X	Ball Joint	44-2490	Fac Adj. 44-2490	107	88-7900A	0.90 / - 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Comanche	1990 - 1992	X	Ball Joint	44-2490	Fac Adj. 44-2490	107	88-7900A	0.90 / - 0.90	-	Non Adj.	Non Adj.	-		- / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

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Jeep Commander	2006 - 2010	X	- Ball Joint	Fac Adj. 44-2493	44-2493	- 107		- / 0.90 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Commando	1966 - 1973	X							-	Non Adj.	Non Adj.	-		- / -
Jeep Compass MK	2007 - 2017	X	Axis Cam Magna Cam	41-214 41-158 ²	Fac Adj.	75 74		0.30 / - 0.30	- Rear Arm	Non Adj. 46-2178	Non Adj. 46-2174	- 138		- / - 0.60 / 0.60
Jeep Compass MP	2017 - 2022	X	Axis Cam Magna Cam	41-212 41-147 ³	Fac Adj.	75 74		0.30 / - 0.30	Axis Cam Magna Cam	41-212 41-147 ³	46-437	75 74		0.30 / 0.30 0.30
Jeep Gladiator	2020 - 2022	X	Bushing	44-6030	41-8258	117		0.30 / 0.30	- Pinion Angle Cams	Non Adj. 41-8257	Non Adj.	- 82		- / - 0.30
Jeep Grand Cherokee	1993 - 1998	X	Ball Joint	44-2490	41-8256 44-2490	107	88-7900A	0.90 / 0.30 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Grand Cherokee	1999 - 2004	X	Ball Joint	44-2491	Fac Adj. 44-2491	107	88-7900A	0.90 / - 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Grand Cherokee (Non SRT8)	2005 - 2010	X	- Ball Joint	Fac Adj. 44-2493	44-2493	- 107		- / 0.90 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Grand Cherokee	2011 - 2015	X	Ball Joint Control Arm W/BJ Control Arm W/BJ Camber Kit	44-2495 44-2720L 44-2720R 44-794	44-2495 44-2720L 44- 2720R 44-795	108 111 111 99		0.50 / 0.50 0.50 / 0.50 0.50 / 0.50 0.50 / 0.30	Cam Bolt	46-438	Non Adj.	126		0.30 / -
Jeep Grand Cherokee	2016 - 2022	X	Cam Bolt	44-794	44-795	99		0.30 / 0.30	Cam Bolt	46-438	46-437	126		0.30 / 0.30
Jeep Grand Wagoneer (SJ)	1984 - 1991	X							-	Non Adj.	Non Adj.	-		- / -
Jeep J10/J20 Pickup	1977 - 1988	X					88-7090		-	Non Adj.	Non Adj.	-		- / -
Jeep Jeepster	1966 - 1973	X							-	Non Adj.	Non Adj.	-		- / -
Jeep Liberty 2WD/4WD (KJ)	2002 - 2007	X	Cam Bolt	41-8273	41-8273	85		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Jeep Liberty 2WD/4WD (KK)	2008 - 2013	X	Cam Bolt	41-8273	41-8273	85		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Jeep Patriot	2007 - 2017	X	Axis Cam Magna Cam	41-214 41-158 ²	Fac Adj.	75 74		0.30 / - 0.30	- Rear Arm	Non Adj. 46-2178	46-2174	- 138		- / 0.60 0.60
Jeep Renegade (BU)	2015 - 2022	X	Axis Cam	41-212	Non Adj.	75		0.30 / -	Axis Cam	41-212	Non Adj.	75		0.30 / -
Jeep Scrambler	1982 - 1985	X					88-7090		-	Non Adj.	Non Adj.	-		- / -
Wagoneer (XJ) 4WD/ RWD	1984 - 1990	X	Ball Joint	44-2491	44-2491	107		0.90 / 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Wrangler YJ	1987 - 1995	X	Ball Joint	44-2490	44-2490	107	88-7900A	0.90 / 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Wrangler TJ	1997 - 2006	X	Ball Joint	44-2490	41-8256 44-2490	107	88-7900A	0.90 / 0.30 0.90	Cam Bolt	41-8255	Non Adj.	82		0.60 / -
Jeep Wrangler JK	2007 - 2018	X	Ball Joint Front Tie Rod Toe Sleeve	44-2490 44-2535	41-8257 44-2490	107 111	44-2535	0.90 / 0.30 0.30 / 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Wrangler JL	2018 - 2022	X	Bushing	44-6030	41-8258	117		1.00 / 0.30	- Pinion Angle Cams	Non Adj. 41-8257	Non Adj.	- 82		- / - 0.30
KIA														
Kia Amanti	2004 - 2009	X	Ball Joint	41-550	41-550	78	88-1304	0.90 / 0.90	-	Non Adj.	Fac Adj.	-		- / -
Kia Borrego	2009 - 2011	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Kia Cadenza	2014 - 2021	X	Cam Bolt	41-216	Fac Adj.	75		0.30 / -	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Kia Forte	2010 - 2022	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Shim Shim	46-2400 ¹ 46-1300 ¹	46-2400 ¹ 46-1300 ¹	136 133		0.60 / 0.60 0.60 / 0.60
Kia K900	2015	X	-	Non Adj.	Non Adj.	-		- / -	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Kia K900	2016 - 2021	X	-	Non Adj.	Non Adj.	-		- / -	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Kia Niro	2017 - 2022	X	Cam Bolt	41-214	Fac Adj.	75		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -

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Kia Optima	2001 - 2006		X	Ball Joint	41-550	41-550	78	88-1304 88-7800A	0.90 / 0.90	-	Non Adj.	Fac Adj.	-		- / -
Kia Optima	2007 - 2010		X	Axis Cam Magna Cam	41-214 41-158 ²		75 74	88-7800A	0.30 0.30	Rear Arm	46-2189	46-2189	140		0.50 / 0.50
Kia Optima (Built date before 7/1/2011)	2011 - 2012	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Kia Optima (Built date after 7/1/2011)	2012 - 2015	X		Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	75 74		0.30 / - 0.30	Cam Bolt	46-169	Fac Adj.	122		0.30 / -
Kia Optima	2016 - 2020	X		Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	75 74		0.30 / - 0.30	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Kia Optima Hybrid	2016 - 2020	X		Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	75 74		0.30 / - 0.30	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Kia Rio	2001 - 2011	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Shim Shim	46-1300 SERIES ¹ 46-2400 ¹	46-1300 SERIES ¹ 46-2400 ¹	133 136		0.60 / 0.60 0.60 / 0.60
Kia Rio	2012 - 2022	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Kia Rondo	2007 - 2010	X		Axis Cam Magna Cam	41-214 41-157 ²		75 74		0.30 0.30	Rear Arm	46-2189	46-2189	140		0.50 / 0.50
Kia Sedona	2002 - 2005	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	- 74 75		- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Kia Sedona	2006 - 2014	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Fac Adj.	- 74 75		- / - 0.30 0.30	Cam Bolt	46-1707	Non Adj.	135		0.30 / -
Kia Sedona	2015 - 2020	X		- Magna Cam Axis Cam	Fac Adj. 41-159 ² 41-216	Fac Adj.	- 74 75		- / - 0.30 0.30	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Kia Sephia	1994 - 2001	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Fac Adj.	- 74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Kia Sorento 2WD/4WD	2003 - 2009	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Kia Sorento 2WD/4WD	2011 - 2013	X		- Axis Cam Magna Cam	Fac Adj. 41-214 41-158 ²	Fac Adj.	- 75 74		- / - 0.30 0.30	Cam Bolt	46-169	46-169	122		0.30 / 0.30
Kia Sorento 2WD/4WD	2014 - 2015	X		- Axis Cam Magna Cam	Fac Adj. 41-214 41-158 ²	Fac Adj.	- 75 74		- / - 0.30 0.30	Cam Bolt	46-169	46-169	122		0.30 / 0.30
Kia Sorento 2WD/4WD	2016 - 2023	X		- Axis Cam Magna Cam	Fac Adj. 41-216 41-159 ²	Fac Adj.	- 75 74		- / - 0.30 0.30	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Kia Soul	2010 - 2022	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	- Shim	Non Adj. 46-1500 ¹	Non Adj. 46-1500 ¹	- 133		- / - 0.60 / 0.60
Kia Spectra	2000 - 2009	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Fac Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Kia Sportage	1995 - 2002	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Kia Sportage 2WD/4WD	2005 - 2010	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30
Kia Sportage 2WD	2011 - 2022	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Kia Sportage AWD	2011 - 2016	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Kia Sportage AWD	2017 - 2022	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	Cam Bolt	46-169	46-171	122		0.30 / 0.30
Kia Stinger	2018 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	Cam Bolt	46-171	46-171	122		0.30 / 0.30
Kia Telluride	2020 - 2022	X		Axis Cam	41-216	Non Adj.	75		0.30 / -	Cam Bolt	46-169	46-171	122		0.30 / 0.30
LADA															
Lada Canada All 4WDRWD	1983 - 1993	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.
 Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.
See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors
6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	R U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
LADA Canada All FWD Models	1983 - 1993	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
LAND ROVER															
Land Rover Defender/Discovery	1993 - 2004	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Land Rover Discovery Sport	2015 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Land Rover Freelander	2002 - 2006	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	74 75		0.30 / - 0.30
Land Rover LR2	2008 - 2015	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Land Rover LR3	2005 - 2009	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Land Rover LR4	2010 - 2016	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Land Rover Range Rover	1987 - 2002	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Land Rover Range Rover	2003 - 2013	X		-	41-216	Fac Adj.	75		- / -	-	Non Adj.	Fac Adj.	-		- / -
Land Rover Range Rover	2013 - 2022	X		-	Non Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Land Rover Range Rover Evoque	2012 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Land Rover Range Rover Sport	2006 - 2013	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Land Rover Range Rover Sport	2014 - 2019	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Non Adj.	-		- / -
LEXUS															
Lexus CT	2011 - 2017	X		Axis Cam	41-217	Non Adj.	75		0.30 / -	Shim	46-1500 ¹ 46-171	46-1500 ¹ 46-171	133		- / - 0.30
Lexus ES 250	1990 - 1991	X		Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	74 75		0.30 / - 0.30
Lexus ES 300	1992 - 2003	X		Magna Cam Axis Cam	41-151 41-217	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	74 75		0.30 / - 0.30
Lexus ES 300h	2019 - 2022	X		Magna Cam Axis Cam	41-151 41-217	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	46-455	-		- / 0.50
Lexus ES 330	2004 - 2006	X		Magna Cam Axis Cam	41-151 41-217	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	74 75		0.30 / - 0.30
Lexus ES 350	2007 - 2012	X		Magna Cam Axis Cam	41-151 41-217	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	74 75		0.30 / - 0.30
Lexus ES 350	2013 - 2018	X		Magna Cam Axis Cam	41-151 41-217	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-151 41-217	46-2239	74 75		0.30 / 0.50 0.30
Lexus ES 350	2019 - 2021	X		Magna Cam Axis Cam	41-151 41-217	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	46-455	-		- / 0.50
Lexus GS300	1993 - 1997	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Lexus GS300/GS400	1998 - 2006	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Lexus GS300/350/430	2006 - 2011	X		-	Fac Adj.	Non Adj.	-		- / -	Rear Arm	46-2226	Fac Adj.	143		0.50 / -
Lexus GS 350	2013 - 2019	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2232	Fac Adj.	144		0.50 / -
Lexus GS 430	2001 - 2007	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Lexus GS 350	2007 - 2011	X		-	Fac Adj.	Fac Adj.	-		- / -	Rear Arm	46-2226	Fac Adj.	143		0.50 / -
Lexus GX 460	2010 - 2014	X		Greaseable Cam Bolt	Fac Adj. 44-828	Fac Adj. 44-828	- 102		- / - 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Lexus GX 460	2015 - 2022	X		Greaseable Cam Bolt	44-828	44-828	102		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Lexus GX 470	2003 - 2009	X		Greaseable Cam Bolt	Fac Adj. 44-827	Fac Adj. 44-827	- 101		- / - 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Lexus HS250h	2010 - 2012	X		Axis Cam	41-217	Non Adj.	75		0.30 / -	-	Non Adj.	46-171	-		- / 0.30
Lexus IS F	2008 - 2014	X		-	Fac Adj.	Fac Adj.	-		- / -	Rear Arm	46-2226	Fac Adj.	143		0.50 / -

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Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141

2. For models with either slotted or unslotted strut brackets.

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4. For models without slotted strut brackets.

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	R U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Lexus 200t	2016-2017	X		-	Fac Adj.	Fac Adj.	-		- / -	Rear Arm	46-2232	Fac Adj.	144		0.50 / -
Lexus IS250	2006-2013	X		-	Fac Adj.	Non Adj.	-		- / -	Rear Arm	46-2226	Fac Adj.	143		0.50 / -
Lexus IS 250C	2010-2015	X		-	Fac Adj.	Fac Adj.	-		- / -	Rear Arm	46-2226	Fac Adj.	143		0.50 / -
Lexus IS250	2014-2015	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2232	Non Adj.	144		0.50 / -
Lexus IS 300	2001-2005	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Lexus IS 300 (AWD only)	2016-2019	X		-	Fac Adj.	Fac Adj.	-		- / -	Rear Arm	46-2232	Fac Adj.	144		0.50 / -
Lexus IS 300 (AWD/RWD)	2018-2019	X		-	Fac Adj.	Fac Adj.	-		- / -	Rear Arm	46-2232	Fac Adj.	144		0.50 / -
Lexus IS350	2006-2013	X		-	Fac Adj.	Fac Adj.	-		- / -	Rear Arm	46-2226	Fac Adj.	143		0.50 / -
Lexus IS350C	2010-2015	X		-	Fac Adj.	Fac Adj.	-		- / -	-	46-2226	Fac Adj.	143		0.50 / -
Lexus IS350	2014-2019	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2232	Fac Adj.	144		0.50 / -
Lexus LC500	2018-2020	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Lexus LS	1990-2000	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Lexus LS400	1995-2000	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Lexus LS 430	2001-2006	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Lexus LS	2001-2006	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Lexus LS 460 RWD/AWD	2007-2017	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Lexus LS500	2018-2020	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Lexus LX450	1996-1997		X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Lexus LX470	1998-2007		X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Lexus LX570	2008-2021	X		Greaseable Cam Bolt	44-838	Non Adj.	104		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Lexus NX	2015-2021	X		Axis Cam	41-217	Non Adj.	75		0.30 / -	Rear Arm Rear Arm	46-2236L 46-2236R	46-171	140 140		0.30 / 0.30 0.30
Lexus RC350	2015-2022	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2232	Fac Adj.	144		- / -
Lexus RX 350 2WD/4WD	1999-2009	X		- Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	74 75		0.30 / - 0.30
Lexus RX 350 2WD/4WD	2010-2022	X		- Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	- 74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Lexus SC 300/SC 400	1992-2000	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Lexus SC 430	2002-2010	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Lexus UX	2019-2022	X		Axis Cam	41-217	Non Adj.	75		0.30 / -	-	Non Adj.	46-455	-		- / 0.50
LINCOLN															
Lincoln Aviator	2003-2005	X		Alignment Washers Camber Kit	44-769 44-771 ⁸	44-769 44-771 ⁸	96 96		0.30 / 0.30 0.30 / -	Alignment Washers Camber Kit	44-769 44-773 ⁸	46-9811	96 96		0.30 / 0.50 0.30
Lincoln Aviator	2020-2022	X		Axis Cam	41-216	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Lincoln Blackwood P/U 2WD/4WD	2002-2003		X	Cam Bolt Cam Bolt Greaseable Cam Bolt	42-778 ⁷ 42-778-4 42-781	42-778 ⁷ 42-778-4 42-781	87 90 87		0.50 / 0.50 1.00 / 1.00 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Lincoln Continental	1982-1987		X	- Wedge Kit Axis Cam	Fac Adj. 41-310 41-216	Non Adj.	- 77 75	88-4511	- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

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Lincoln Continental	1988 - 1994	X		-	Fac Adj.	Fac Adj.	-	88-4520	- / -	Bushing Camber Kit	46-131 46-132	Fac Adj. 46-131 46-132	119 119	88-1302	0.50 / - 0.40 / 0.50 0.40
Lincoln Continental	1995 - 2002	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-	88-9066	- / -
Lincoln Continental	2017 - 2020	X		Axis Cam	41-216	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Lincoln Corsair	2020 - 2022	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Lincoln LS	2000 - 2006	X		- Cam Bolt	Fac Adj. 41-8244	Fac Adj. 41-8244	- 80		- / - 0.70 / -	-	Non Adj.	Fac Adj.	-		- / -
Lincoln Mark LT 2WD	2006 - 2008	X		Camber Kit Camber Kit Greaseable Cam Bolt	44-789 44-791 44-864	44-789 44-791 44-864	98 98 105		0.80 / 0.80 0.30 / 0.30 0.80 / 0.80	-	Non Adj.	Non Adj.	-		- / -
Lincoln Mark LT 4WD	2006 - 2008	X		Camber Kit Camber Kit Greaseable Cam Bolt	44-789 44-791 44-864	44-789 44-791 44-864	98 98 105		0.80 / 0.80 0.30 / 0.30 0.80 / 0.80	-	Non Adj.	Non Adj.	-		- / -
Lincoln Mark VII	1984 - 1992	X		- Wedge Kit	Fac Adj. 41-310	Non Adj.	- 77	88-4511	- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Lincoln Mark VIII	1993 - 1998	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Lincoln MKC	2015 - 2019	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Lincoln MKC	2015 - 2019	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Lincoln MKS	2009 - 2012	X		-	Fac Adj.	Non Adj.	-		- / -	- Axis Cam	Fac Adj. 46-1709	46-2241	- 135		- / 0.50 0.30
Lincoln MKS	2013 - 2016	X		- Axis Cam	Fac Adj. 41-218	Non Adj.	- 75		- / - 0.30	- Axis Cam	Fac Adj. 46-1709	Fac Adj.	- 135		- / - 0.30
Lincoln MKT	2010 - 2012	X		-	Fac Adj.	Non Adj.	-		- / -	- Axis Cam	Fac Adj. 46-1709		- 135		- 0.30
Lincoln MKT	2013 - 2019	X		- Axis Cam	Fac Adj. 41-218	Non Adj.	- 75		- / - 0.30	- Axis Cam	Fac Adj. 46-1709	46-2241	- 135		- / 0.30 0.30
Lincoln MKX	2007 - 2017	X		Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	75 74		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Lincoln MKX	2016 - 2018	X		Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	75 74		0.30 / - 0.30	-	Fac Adj.	46-457	-		- / 0.30
Lincoln Zephyr MKZ	2006 - 2012	X		Ball Joint	41-236	41-236	76		0.90 / 0.90	Rear Arm	46-2231	Fac Adj.	144		0.50 / -
Lincoln Zephyr MKZ	2013 - 2019	X		Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	75 74		0.30 / - 0.30	Rear Arm	46-2227	Fac Adj.	143		0.50 / -
Lincoln Nautilus	2019 - 2022	X		Axis Cam	41-216	Non Adj.	75		0.30 / -	-	Fac Adj.	46-457	-		- / 0.30
Lincoln Navigator 1st design 2WD/4WD	1998	X		Camber Kit	42-777 ⁶	42-777 ⁶	87		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Lincoln Navigator 2nd design 2WD/4WD	1998 - 2002	X		Cam Bolt Cam Bolt Greaseable Cam Bolt	42-778 ⁷ 42-778-4 42-781	42-778 ⁷ 42-778-4 42-781	87 90 87		0.50 / 0.50 1.00 / 1.00 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Lincoln Navigator 2WD/4WD	2003 - 2006	X		Camber Kit	44-786 ⁸	44-786 ⁸	97		0.30 / 0.30	Cam Bolt	44-784	46-9813	97		0.50 / 0.50
Lincoln Navigator 2WD/4WD	2007 - 2017	X		Camber Kit Camber Kit Greaseable Cam Bolt	44-790 44-791 44-864	44-790 44-791 44-864	98 98 105		0.80 / 0.80 0.30 / 0.30 0.80 / 0.80	-	Non Adj.	Non Adj.	-		- / -
Lincoln Navigator 2WD/4WD	2018 - 2022	X		Camber Kit Camber Kit	44-789 44-791	44-789 44-791	98 98		0.80 / 0.80 0.30 / 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Lincoln Town Car	1981 - 1990	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Lincoln Town Car	1991 - 2002	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Lincoln Town Car	2003 - 2011	X		- Cam Bolt	Fac Adj. 46-143	Fac Adj.	- 121		- / - 1.00	-	Fac Adj.	Fac Adj.	-		- / -
Lincoln Versailles	1977 - 1980	X		Cam Bolt	41-8243	Fac Adj.	80		0.60 / -	-	Non Adj.	Non Adj.	-		- / -

MAZDA

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	T H R O U G H	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Mazda 2	2011 - 2014	X		Axis Cam	41-212		75		0.30						
Mazda 3	2004 - 2013	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	46-168	140		0.60 / 0.30
Mazda 3 S, i	2010 - 2014	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	46-168	140		0.60 / 0.50
Mazda 3	2014 - 2018	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	46-168	-		- / 0.30
Mazda 323/Protege 2WD/4WD	1986 - 1995	X		- Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Non Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Mazda 5	2006 - 2017	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	46-168	140		0.60 / 0.30
Mazda 5	2006 - 2017	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	46-168	140		0.60 / 0.30
Mazda 6	2003 - 2008	X		Ball Joint	41-236	41-236	76		0.90 / 0.90	- Rear Arm	Non Adj. 46-2231	Non Adj.	- 144		- / - 0.50
Mazda 6	2009 - 2013	X		-	Non Adj.	Non Adj.	-		- / -	- Rear Arm	Non Adj. 46-2231	Non Adj.	- 144		- / - 0.50
Mazda 6	2014 - 2019	X		Axis Cam	41-216	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Mazda 626	1979 - 1982	X		- Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Fac Adj.	- 74 75		- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Mazda 626	1983 - 2002	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Fac Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Mazda 626 4WD	1988 - 1989	X		- Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Fac Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Mazda 929	1988 - 1991	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Mazda 929	1992 - 1995	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mazda B Series P/U 2WD	1972 - 1993	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Mazda B Series P/U 4WD	1972 - 1993	X		- Shim	Fac Adj. 45-351	Fac Adj. 45-351	- 118		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Mazda B Series P/U 2WD/4WD	1994 - 1997	X		Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094 42-970	88 116 88		1.00 / 1.00 1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Mazda B Series P/U 2WD/4WD	1998 - 2009	X		Camber Kit Camber Kit Greaseable Cam Bolt	44-767 44-768 44-836	44-767 44-768 44-836	95 95 103		0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Mazda CX-3	2016 - 2019	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Mazda CX-5	2013 - 2022	X		Axis Cam	41-216	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Mazda CX-7	2007 - 2012	X		- Axis Cam	Fac Adj. 41-214	Fac Adj.	- 75		- / - 0.30	-	Non Adj.	46-168	-		- / 0.50
Mazda CX-9	2007 - 2015	X		Axis Cam Magna Cam	41-214 41-157 ²		75 74		0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Mazda CX-9	2016 - 2022	X		Axis Cam	41-216	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Mazda GLC	1977 - 1983	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Mazda GLC	1981 - 1985	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Mazda MX-5 Miata (NA/NB)	1990 - 2005	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mazda Millenia	1995 - 2002	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mazda MPV 2WD	1989 - 2006	X		- Magna Cam Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-147 ³ 41-212	Fac Adj.	- 74 74 75		- / - 0.30 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	R O T A S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Mazda MPV 4WD	1989 - 2006	X		Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Fac Adj. 41-147 ³	74 75		- / - 0.30 / 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Mazda MPV	2000 - 2006	X		Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-147 ³ 41-212	Fac Adj.	74 74 75		- / - 0.30 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Mazda MX-3	1992 - 1996	X		Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Fac Adj.	74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Mazda MX-5 Miata (ND)	2016 - 2019	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mazda MX-5 Miata	2006 - 2015	X		Greaseable Cam Bolt	41-8267-2	41-8267-2	88		0.70 / 0.70	-	Fac Adj.	Fac Adj.	-		- / -
Mazda MX-6	1988 - 1997	X		Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Non Adj.	74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Mazda Navajo 2WD	1991 - 1994	X		Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094 42-970	88 116 88		1.00 / 1.00 1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Mazda Navajo 4WD	1991 - 1994	X		Bushing Bushing	42-950 44-5094	42-950 44-5094	88 116		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Mazda Protege	1990 - 2003	X		Magna Cam Axis Cam Wedge Kit Performance Kit	Fac Adj. 41-146 ² 41-212 41-300 41-1460	Fac Adj.	74 75 76 79		- / - 0.30 0.30 0.30 -	Magna Cam Axis Cam Wedge Kit	41-147 ³ 41-212 41-300	Fac Adj.	74 75 76		0.30 / - 0.30 0.30
Mazda Protege5	2002 - 2003	X		Axis Cam	41-212	Fac Adj.	75		0.30 / -	Axis Cam	41-212	Fac Adj.	75		0.30 / -
Mazda RX7	1979 - 1985	X		Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Fac Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Mazda RX7	1986 - 1991	X		Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Fac Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Mazda RX7	1993 - 1995	X		Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Fac Adj.	74 75		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Mazda RX-8	2004 - 2011	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mazda Tribute AWD/FWD	2001 - 2011	X		Magna Cam Axis Cam Wedge Kit	41-147 ³ 41-212 41-308	Fac Adj.	74 75 77		0.30 / - 0.30 0.30	Rear Arm	46-2179	Fac Adj.	138		- / -
MERCEDES-BENZ															
Mercedes-Benz B-Class (W245)	2006 - 2011	X		Axis Cam	41-214	Fac Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Mercedes-Benz B-Class (W246)	2013 - 2019	X		Axis Cam	41-214	Fac Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Mercedes-Benz C-Class W202 / S202 (RWD/AWD)	1994 - 2000	X		Cam Bolt	41-8265	41-8265	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz C-Class W203 4Matic (AWD)	2001 - 2007	X		Cam Bolt Axis Cam	41-8264 41-214	41-8264	83 75		0.40 / 0.40 0.30	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz C-Class W203 (RWD)	2001 - 2007	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz C-Class W204 4Matic (AWD)	2008 - 2018	X		Cam Bolt Axis Cam	41-8264 41-214	41-8264	83 75		0.40 / 0.40 0.30	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz C-Class W204 (RWD)	2008 - 2022	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CL-Class W203 (AWD/RWD)	2008 - 2013	X		Ball Joint	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CL-Class C215 (RWD)	2000 - 2006	X		Cam Bolt	41-8265	41-8265	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CL-Class C216	2007 - 2014	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CLA-Class	2014 - 2019	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CLK-Class (C208/A208)	1997 - 2003	X		Cam Bolt	41-8265	41-8265	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -

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REAR WHEEL ALIGNMENT

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Mercedes-Benz CLK-Class C208	1998 - 2002	X		Cam Bolt	41-8265	41-8265	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CLK-Class C209/A209 (RWD)	2003 - 2009	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CLK-Class W208 Cabriolet RWD	2003	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
CLK, SL (W208/C208 W209/C209)	1998 - 2013	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CLS-Class W219	2006 - 2011	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CLS-Class W218	2011 - 2018	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz E-Class (W212) (AWD/RWD)	2010 - 2018	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz E-Class S212 / W212	2010 - 2014	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz E-Class W211	2003 - 2009	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz E-Class W211 RWD	2003 - 2009	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz E-Class W211 4MATIC AWD	2003 - 2009	X		Cam Bolt	41-8265	41-8265	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz E-Class Sedan 4MATIC, Wagon 4MATIC (W212/S212)	2010 - 2018	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz GLK-Class X204	2010 - 2016	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz Metris (W447)	2016 - 2022	X		Cam Bolt Greaseable Cam Bolt	41-214 41-8268	Non Adj.	75 84		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz S-Class W220	2000 - 2006	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz S-Class W221	2007 - 2013	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz SL-Class R230	2003 - 2012	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz SL-Class R231 (Caster only)	2013 - 2022	X		Cam Bolt	Non Adj.	41-8264	-		- / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz SLK-Class R170 (RWD)	1997 - 2004	X		Cam Bolt	41-8265	41-8265	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz SLK-Class R172	2012 - 2016	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz SLK-Class R171	2005 - 2011	X		Cam Bolt	41-8264	41-8264	83		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz Sprinter	2004 - 2006	X		Shim	42-4431	Non Adj.	89		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Mercedes-Benz Sprinter 2500	2010 - 2018	X		Axis Cam Cam Bolt	41-214 41-8268	Non Adj.	75 84		0.30 / - 0.30	-	Non Adj.		-		-
Mercedes-Benz Sprinter 2500 RWD	2019 - 2022	X		Greaseable Cam Bolt	41-8268	Non Adj.	84		0.30 / -	-	Non Adj.		-		-
Mercedes-Benz Sprinter 2500 AWD	2019 - 2022	X		Greaseable Cam Bolt	46-457	Non Adj.	129		0.30 / -	-	Non Adj.		-		-
Mercedes-Benz Sprinter 3500	2010 - 2018	X		Axis Cam Cam Bolt	41-214 41-8268	Non Adj.	75 84		0.30 / - 0.30	-	Non Adj.		-		-
Mercedes-Benz Sprinter 3500 RWD	2019 - 2022	X		Greaseable Cam Bolt	41-8268	Non Adj.	84		0.30 / -	-	Non Adj.		-		-
Mercedes-Benz Sprinter 3500 AWD	2019 - 2022	X		Greaseable Cam Bolt	46-457	Non Adj.	129		0.30 / -	-	Non Adj.		-		-
MERCURY															
Mercury Capri	1980 - 1986	X		- Wedge Kit	Fac Adj. 41-310	Non Adj.	- 77		- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Mercury Capri	1991 - 1994	X		- Magna Cam Wedge Kit	Fac Adj. 41-147 ³ 41-300	Fac Adj.	- 74 76		- / - 0.30 0.30	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj. 46-205	74 76		0.30 / - 0.30 / 0.30
Mercury Comet	1960 - 1963	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Mercury Comet	1964 - 1965	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -

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Mercury Comet	1966 - 1977	X		Cam Bolt	41-8243	Fac Adj.	80		0.60 / -	-	Non Adj.	Non Adj.	-		- / -
Mercury Cougar	1967 - 1973	X		Cam Bolt	41-8243	Fac Adj.	80		0.60 / -	-	Non Adj.	Non Adj.	-		- / -
Mercury Cougar	1974 - 1979	X		Cam Bolt	41-8243	Fac Adj.	80		0.60 / -	-	Non Adj.	Non Adj.	-		- / -
Mercury Cougar	1980 - 1988	X		- Wedge Kit Axis Cam	Fac Adj. 41-310 41-216	Non Adj.	- 77 75	88-4511	- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Mercury Cougar	1989 - 1997	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mercury Cougar	1999 - 2002	X		-	Non Adj.	Non Adj.	-	88-9416	- / -	-	Non Adj.	Fac Adj.	-		- / -
Mercury Cyclone RWD	1964 - 1965	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Mercury Cyclone	1966 - 1971	X		Cam Bolt	41-8243	Fac Adj.	80		0.60 / -	-	Non Adj.	Non Adj.	-		- / -
Mercury Grand Marquis	1991 - 2002	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Mercury Grand Marquis	2003 - 2011	X		- Cam Bolt	Fac Adj. 46-143	Fac Adj.	- 121		- / - 1.00	-	Non Adj.	Non Adj.	-		- / -
Mercury LN7	1982 - 1983	X		-	Non Adj.	Non Adj.	-		- / -	Wedge Kit Axis Cam	46-201 41-212	Fac Adj.	120 75		0.40 / - 0.30
Mercury Lynx	1981 - 1985	X		-	Non Adj.	Non Adj.	-		- / -	Wedge Kit Axis Cam	46-201 41-212	Fac Adj.	120 75		0.40 / - 0.30
Mercury Lynx	1986 - 1987	X		-						Wedge Kit	46-201	Fac Adj.	120		0.40 / -
Mercury Marauder	2003 - 2004	X		- Cam Bolt	Fac Adj. 46-143	Fac Adj.	- 121		- / - 1.00	-	Non Adj.	Non Adj.	-		- / -
Mercury Mariner AWD/FWD	2005 - 2011	X		Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30	Rear Arm	46-2179	46-137	138		- / 0.30
Mercury Marquis	1983 - 1986	X		- Wedge Kit	Fac Adj. 41-310	Non Adj.	- 77		- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Mercury Milan	2006 - 2010	X		Ball Joint	41-236	41-236	76		0.90 / 0.90	Rear Arm	Non Adj. 46-2231	Fac Adj.	144		- / - 0.50
Mercury Monarch RWD	1975 - 1980	X		Cam Bolt	41-8243	Fac Adj.	80		0.60 / -	-	Non Adj.	Non Adj.	-		- / -
Mercury Montego RWD	1968 - 1971	X		Cam Bolt	41-8243	Fac Adj.	80		0.60 / -	-	Non Adj.	Non Adj.	-		- / -
Mercury Montego AWD	2005 - 2007	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Mercury Montego FWD	2005 - 2007	X		-	Fac Adj.	Fac Adj.	-		- / -	Camber Kit	46-135	Fac Adj.	120		0.75 / -
Mercury Monterrey	2004 - 2007	X		- Tower Plate	Fac Adj. 41-4609	Fac Adj.	- 80		- / - 0.90	-	Non Adj.	Non Adj.	-		- / -
Mercury Mountaineer 2WD/4WD	1997 - 2001	X		Camber Kit Cam Bolt Greaseable Cam Bolt	44-767 44-768 44-836	44-767 44-836 44-768	95 95 103		0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Mercury Mountaineer 2WD/4WD	2002	X		Alignment Washers Camber Kit	44-769 44-771 ⁸	44-769 44-771 ⁸	96 96		0.30 / 0.30 0.30 / 0.30	Alignment Washers Camber Kit	44-769 44-773 ⁸	46-9812	96 96		0.30 / 0.50 0.30
Mercury Mountaineer 2WD/4WD	2003 - 2005	X		Alignment Washers Camber Kit	44-769 44-771 ⁸	44-769 44-771 ⁸	96 96		0.30 / 0.30 0.30 / 0.30	Alignment Washers Camber Kit	44-769 44-773 ⁸	46-9811	96 96		0.30 / 0.50 0.30
Mercury Mountaineer 2WD/4WD	2006 - 2010	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Mercury Mystique	1995 - 2000	X		-	Non Adj.	Non Adj.	-	88-9416	- / -	-	Non Adj.	Fac Adj.	-		- / -
Mercury Sable Sedan	1986 - 1990	X		-	Fac Adj.	Fac Adj.	-	88-1302 88-9200 88-9416	- / -	Bushing Cam Bolt	46-131 46-132	Fac Adj. 46-131 46-132	119 119	88-9416	0.50 / - 0.40 / 0.50 0.40
Mercury Sable Wagon	1986 - 1990	X		-	Fac Adj.	Fac Adj.	-	88-9416	- / -	Cam Bolt	46-136	Fac Adj.	120	88-1300 88-4511 88-9416	0.80 / -
Mercury Sable Sedan	1991 - 1995	X		-	Fac Adj.	Fac Adj.	-	88-1302 88-9200 88-9416	- / -	Bushing Cam Bolt	46-131 46-132	Fac Adj. 46-131 46-132	119 119	88-9416	0.50 / - 0.40 / 0.50 0.40

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.

See part number 46-2450A on page 141

2. For models with either slotted or unslotted strut brackets.

3. For models with slotted strut brackets only.

4. For models without slotted strut brackets.

5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

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8. For models without factory provided cam bolts

9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	T H R O U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Mercury Sable Wagon	1991 - 1995	X		-	Fac Adj.	Fac Adj.	-	88-9416	- / -	Cam Bolt	46-136	Fac Adj.	120	88-1300 88-4511 88-9416	0.80 / -
Mercury Sable Sedan	1996 - 2005	X		- Tower Plate	Fac Adj. 41-4607	Fac Adj.	80	88-4520 88-7870C 88-9416	- / - 0.90	Bushing Cam Bolt	46-131 46-134	Fac Adj. 46-131 46-134	119 120	88-9200 88-9416	0.50 / - 0.50 / 0.50 0.50
Mercury Sable Wagon	1996 - 2005	X		- Tower Plate	Fac Adj. 41-4607	Fac Adj.	80	88-4520 88-9416	- / - 0.90	Cam Bolt	46-136	Fac Adj.	120	88-9066 88-9416	0.80 / -
Mercury Sable FWD	2008 - 2009	X		-	Fac Adj.	Fac Adj.	-		- / -	Camber Kit	46-135	Fac Adj.	120		0.75 / -
Mercury Topaz	1984 - 1994	X		-	Fac Adj.	Fac Adj.	-		- / -	Wedge Kit	46-201	Fac Adj.	120	88-9200	0.40 / -
Mercury Tracer	1987 - 1996	X		- Magna Cam Wedge Kit Performance Kit	Fac Adj. 41-147 ³ 41-300 41-1460	Fac Adj.	74 76 79		- / - 0.30 0.30 -	Magna Cam Wedge Kit Performance Kit	41-147 ³ 41-300 41-1470	Fac Adj. 46-205	74 76 79		0.30 / - 0.30 / 0.30 -
Mercury Tracer	1997 - 1998	X		-	Fac Adj.	Fac Adj.	-		- / -	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Mercury Villager	1993 - 2002	X		- Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Mercury Zephyr RWD	1978 - 1983	X		- Cam Bolt	41-216	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
MINI															
Mini Cooper Cooper S	2002 - 2014	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Mini Cooper Hardtop R50/R53 before 3/02	2002	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mini Cooper Hardtop R50/R53 after 3/02	2002 - 2006	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mini Cooper R52	2005 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mini Cooper Hardtop R57/R56/JCW	2007 - 2013	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mini Cooper Clubman R55	2008 - 2014	X		-	Non Adj.	Non Adj.	-		- / -	Cam Bolt	46-459	Fac Adj.	129		0.30 / -
Mini Cooper Conv. F57	2009 - 2015	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mini Coupe Incl. Roadster R58/R59	2012 - 2015	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mini Cooper (F56)	2014 - 2018	X		-	Non Adj.	Non Adj.	-		- / -	Cam Bolt	46-462	Fac Adj.	130		0.30 / -
Mini Cooper Clubman F54	2016 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mini Cooper Countryman F60	2011 - 2016	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mini Cooper Countryman F60	2017 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mini Cooper Paceman R61	2013 - 2016	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
MITSUBISHI															
Mitsubishi 3000GT	1991 - 1998	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mitsubishi 3000GT/3000AWD	1991 - 1999	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mitsubishi Cordia	1983 - 1988		X	- Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Diamante Sedan	1992 - 1996	X		- Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Mitsubishi Diamante Wagon	1993 - 1996		X	- Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Diamante	1997 - 2004	X		- Magna Cam Axis Cam Performance Kit	41-147 ³ 41-212 41-1470	Non Adj.	74 75 79		0.30 / - 0.30 -	Shim	46-2170	Fac Adj.	136		0.30 / -

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1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
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4. For models without slotted strut brackets.
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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	H R O U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Mitsubishi Eclipse AWD	1990 - 1994	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Mitsubishi Eclipse FWD	1990 - 1994	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75	88-7800A	0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30
Mitsubishi Eclipse AWD	1995 - 1999	X		Ball Joint	41-550	41-550	78	88-1304	0.90 / 0.90	Shim	46-2170	Fac Adj.	136		0.30 / -
Mitsubishi Eclipse FWD	1995 - 1999	X		Ball Joint	41-550	41-550	78	88-1304 88-7800A	0.90 / 0.90	Shim	46-2170	Fac Adj.	136		0.30 / -
Mitsubishi Eclipse/Eclipse Spyder	2000 - 2012	X		Magna Cam Axis Cam	Fac Adj. 41-159 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	Shim	46-2170	Fac Adj.	136		0.30 / -
Mitsubishi Eclipse Cross (FWD/AWD)	2018 - 2022	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -
Mitsubishi Endeavor	2004 - 2011	X		Cam Bolt	41-216	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Mitsubishi Expo/Expo LRV (All)	1992 - 1995	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Mitsubishi Galant FWD	1985 - 1993	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Galant AWD	1989 - 1993	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Mitsubishi Galant FWD	1994 - 1998	X		Ball Joint	41-550	41-550	78	88-7800A	0.90 / 0.90	-	Fac Adj.	Fac Adj.	-		- / -
Mitsubishi Galant	1999 - 2012	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	74 75	88-1304	0.30 / - 0.30	Shim	46-2170	Fac Adj.	136		0.30 / -
Mitsubishi i-MiEV	2012 - 2017	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Lancer	2002 - 2007	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Mitsubishi Lancer Evolution	2002 - 2015	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Mitsubishi Lancer	2008 - 2017	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	- Rear Arm	Fac Adj. 46-2178	Fac Adj.	- 138		- / - 0.60
Mighty Max RWD/4WD	1986 - 1996	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Mirage	1985 - 1992	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Mirage	1993 - 2002	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Mitsubishi Mirage (Incl. G4)	2014 - 2023	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Montero/Montero Sport 4WD	1983 - 2001	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Pickup 2WD/4WD	1985 - 1996	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Montero 2WD	1997 - 2001	X		- Shim	Fac Adj. CC	Non Adj.	- 113		- / - -	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Montero 4WD	2002 - 2008	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mitsubishi Outlander	2003 - 2022	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	- Rear Arm	Non Adj. 46-2178	Fac Adj.	- 138		- / - 0.60
Mitsubishi Precis	1988 - 1993	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Raider	2006 - 2009	X		Greaseable Cam Bolt Cam Bolt	44-834 44-835	Non Adj.	103 103		0.50 / - 0.50	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi RVR	2011 - 2019	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	Rear Arm	46-2178	Fac Adj.	138		0.60 / -
Mitsubishi Sigma	1989 - 1990	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Starion	1983 - 1989	X		-	Non Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Mitsubishi Tredia	1983 - 1988	X		Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -

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REAR WHEEL ALIGNMENT

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Mitsubishi Van/Wagon	1987 - 1990	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
NISSAN															
Nissan (S110)	1980 - 1983	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Nissan (B12)	1984 - 1988	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Nissan 200SX	1995 - 1998	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan 240SX	1989 - 1998	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Nissan 240Z	1970 - 1973	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan 260Z	1974	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan 280Z	1975 - 1978	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan 280ZX	1979 - 1983	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan 300ZX	1984 - 1989	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan 300ZX	1990 - 1996	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Nissan 310	1979 - 1982	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan 350Z	2003 - 2009	X		-	Non Adj.	Non Adj.	-		- / -	- Cam Bolt	Fac Adj. 46-164	Fac Adj. 46-164	- 121		- / - 0.30 / 0.30
Nissan 370Z	2009 - 2021	X		-	Non Adj.	Non Adj.	-		- / -	- Rear Arm / Cam bolt	Fac Adj. 46-2228	Fac Adj. 46-141 46-2228	- 143		- / - 0.50 / 0.30 0.50
Nissan 510	1978 - 1981	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan 810	1977 - 1981	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan Altima	1993 - 2001	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Nissan Altima	2002 - 2006	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Cam Bolt	46-164	46-164	121		0.30 / 0.30
Nissan Altima Sedan	2007 - 2012	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	- Rear Arm Cam Bolt	Fac Adj. 46-2199 46-164	Fac Adj. 46-2199 46-164	- 142 121		- / - 0.50 / 0.50 0.30 / 0.30
Nissan Altima Coupe	2007 - 2013	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	- Rear Arm Cam Bolt	Fac Adj. 46-2199 46-164	Fac Adj. 46-2199 46-164	- 142 121		- / - 0.50 / 0.50 0.30 / 0.30
Nissan Altima	2013 - 2022	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Rear Arm	46-2235	Fac Adj.	145		0.50 / -
Nissan Armada 2WD/4WD	2005 - 2015	X		Cam Bolt Greaseable Cam Bolt	44-820 44-862	44-820 44-862	100 104		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Armada	2017 - 2021	X		Camber Kit	44-820	44-820	100		0.30 / 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Nissan Axxes	1990 - 1995	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -
Nissan B110	1970 - 1973	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Nissan B210	1973 - 1978	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan Cube	2009 - 2014	X		Axis Cam Magna Cam	41-214 41-158 ²		75 74		0.30 0.30	Shim	46-1500 ¹	46-1500 ¹	133		0.60 / 0.60
Nissan Frontier 2WD/4WD	1998 - 2004	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan Frontier 2WD/4WD	2005 - 2023	X		Cam Bolt Greaseable Cam Bolt	44-820 44-862	44-820 44-862	100 104		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan GT-R	2009 - 2020	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -

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2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

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7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Nissan Juke	2011 - 2017	X	Axis Cam Magna Cam	41-214 41-158 ²		75 74		0.30 0.30	Shim Shim	46-1300 SERIES ¹ 46-2400 ¹	46-1300 SERIES ¹ 46-2400 ¹	133 136		0.60 / 0.60 0.60 / 0.60
Nissan Kicks	2017 - 2022	X	Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Nissan Leaf	2011 - 2022	X	Axis Cam	41-214	Non Adj.	75		0.30 / -	Shim	46-1120 ¹	46-1120 ¹	132		0.60 / 0.60
Nissan Maxima	1982 - 1984	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan Maxima Sedan/Wagon	1985 - 1994	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Nissan Maxima	1995 - 2003	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Rear Arm	Non Adj.	Non Adj.	-		- / -
Nissan Maxima	2004 - 2014	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Cam Bolt	46-164	46-164	121		0.30 / 0.30
Nissan Maxima	2016 - 2022	X	-	41-214	Non Adj.	75		0.30 / -	Rear Arm	46-2235	Fac Adj.	145		0.50 / -
Nissan Murano	2003 - 2022	X	Axis Cam Camber Kit	41-214 41-157 ²	Non Adj.	75 74		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Nissan NV 1500	2012 - 2019	X	Cam Bolt	41-8269	Fac Adj.	84		0.50 / -	-	Non Adj.	Non Adj.	-		- / -
Nissan NV 200	2013 - 2021	X	Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Nissan NV 2500	2012 - 2019	X	Cam Bolt	41-8269	Fac Adj.	84		0.50 / -	-	Non Adj.	Non Adj.	-		- / -
Nissan NV 3500	2012 - 2019	X	Cam Bolt	41-8269	Fac Adj.	84		0.50 / -	-	Non Adj.	Non Adj.	-		- / -
Nissan NX Coupe	1991 - 1993	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Nissan Pathfinder 2WD/4WD	1987 - 1995	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Nissan Pathfinder 2WD/4WD	1996 - 2004	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Pathfinder 2WD/ 4WD	2005 - 2012	X	Cam Bolt Greaseable Cam Bolt	44-820 44-862	44-820 44-862	100 104		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Pathfinder 2WD/ 4WD	2013 - 2023	X	Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Nissan Pickup 2WD/4WD	1995 - 2000	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Nissan Pulsar	1983	X	Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	74 76		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Pulsar NX	1983 - 1986	X	- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	- 74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Nissan Pulsar NX	1987 - 1990	X	- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Nissan Quest	1993 - 2002	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Nissan Quest	2004 - 2014	X	Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Nissan Rogue	2008 - 2013	X	Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -
Nissan Rogue	2014 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Nissan Rouge Select	2014 - 2015	X	Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -
Nissan Rogue Sport	2017 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Nissan Sentra	1982 - 1986	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Sentra	1987 - 1994	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

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1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.

See part number 46-2450A on page 141

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3. For models with slotted strut brackets only.

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Nissan Sentra	1995 - 2006	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Sentra (with out ABS)	2007 - 2012	X	Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Shim	46-1120A	46-1120A	127		0.60 / 0.60
Nissan Sentra (with ABS)	2007 - 2012	X	Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Sentra	2013 - 2019	X	Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Shim	46-1500 ¹	46-1500 ¹	133		0.60 / 0.60
Nissan Stanza	1982 - 1992	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Nissan Stanza Wagon AWD	1986 - 1988	X	- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	- 74 75		- / - 0.30 0.30	Wedge Kit	41-305	Fac Adj.	76		0.30 / -
Nissan Titan 2WD/4WD	2004 - 2015	X	Cam Bolt Greaseable Cam Bolt	44-820 44-862	44-820 44-862	100 104		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Titan 2WD/4WD	2017 - 2022	X	Cam Bolt Greaseable Cam Bolt	44-820 44-862	44-820 44-862	100 104		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Titan XD 2WD/4WD	2016 - 2022	X	Cam Bolt	41-8269	41-8269	84		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Titan XD 2WD/4WD Extended Cab From 10-17	2017 - 2018	X	Cam Bolt	41-8269	41-8269	84		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Titan XD 2WD/4WD Extended Cab To 10-17	2017 - 2018	X	Cam Bolt Greaseable Cam Bolt	44-820 44-862	44-820 44-862	100 104		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Van/XE/GXE	1987 - 1988	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan Versa	2007 - 2011	X	Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Shim	46-1500 SERIES ¹	46-1500 SERIES ¹	133		0.60 / 0.60
Nissan Versa (Incl. Note)	2012 - 2022	X	Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Shim	46-2100 ¹	46-2100 ¹	136		0.60 / 0.60
Nissan Xterra	2000 - 2004	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan Xterra	2005 - 2015	X	Cam Bolt Greaseable Cam Bolt	44-820 44-862	44-820 44-862	100 104		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
OLDSMOBILE														
Oldsmobile 442	1964 - 1971	X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile 98	1977 - 1984	X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile 98	1985 - 1996	X	Axis Cam	41-216	Fac Adj.	75		0.30 / -	Axis Cam	41-216	Fac Adj.	75		0.30 / -
Oldsmobile Achieva	1992 - 1995	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Oldsmobile Achieva	1996 - 1998	X	- Magna Cam Axis Cam	Fac Adj. 41-159 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-343	0.60 / 0.60 0.60 / 0.60
Oldsmobile Alero	1999 - 2004	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-144 41-212	Fac Adj.	74 75		0.30 / - 0.30
Oldsmobile Aurora	1995 - 1999	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75		- / - 0.30 0.30	- Shim	Non Adj. 46-1500 SERIES ¹	Fac Adj. 46-1500 SERIES ¹	- 133		- / - 0.60 / 0.60
Oldsmobile Aurora	2001 - 2003	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	Shim	46-1900	Fac Adj.	130		0.80 / -
Oldsmobile Bravada AWD	1991 - 2001	X	- Cam Bolt	Fac Adj. 41-8246	Fac Adj.	- 81		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile Bravada 2WD/4WD	2002 - 2004	X	Camber-Caster Tool	88-8929	88-8929	162		- / -	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile Calais	1985 - 1987	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60

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Oldsmobile All RWD	1975 - 1992	X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile Cutlass/ Supreme	1964 - 1972	X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile Cutlass/ Supreme	1973 - 1977	X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile Cutlass/ Supreme	1977 - 1988	X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile Cutlass	1997 - 1999	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-144 41-212	Fac Adj.	74 75		0.30 / - 0.30
Oldsmobile Cutlass Calais	1985 - 1991	X	Axis Cam	41-216	Non Adj.	75		0.30 / -	Shim	46-2300 ¹	46-2300 ¹	136		- / -
Oldsmobile Cutlass Ciera/Cruiser	1982 - 1996	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	- 74 75		- / - 0.60 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Oldsmobile Cutlass Supreme	1988 - 1997	X	- Shim	Fac Adj. 45-7010 ⁴	Non Adj.	- 117	88-060	- / - 0.50	Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	74 75	88-8923	0.30 / - 0.30
Oldsmobile Delta 88 Royale FWD	1986 - 1991	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Shim Shim	41-160 ² 46-1300 ¹ 46-2400 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	74 133 136	88-050 88-1110 88-343	0.30 / - 0.60 / 0.60 0.60 / 0.60
Oldsmobile Firenza	1982 - 1988	X	Cam Bolt	41-8245	Non Adj.	81	88-4511	0.40 / -	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Oldsmobile Firenza	1984 - 1988	X	Magna Cam Axis Cam	41-160 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Oldsmobile Intrigue	1998 - 2002	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	- 74 75		- / - 0.30 0.30
Oldsmobile Eighty-Eight/LSS	1996 - 1999	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Shim Shim	41-160 ² 46-1300 ¹ 46-2400 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	74 133 136	88-050 88-1110 88-343	0.30 / - 0.60 / 0.60 0.60 / 0.60
Oldsmobile Omega	1975 - 1979	X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile Omega	1980 - 1984	X	Cam Bolt	41-8245	Non Adj.	81		0.30 / -	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Oldsmobile Regency	1997 - 1998	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	- 74 75		- / - 0.30 0.30	- Magna Cam Shim Shim	Fac Adj. 41-160 ² 46-1300 ¹ 46-2400 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	74 133 136	88-050 88-1110 88-343	- / - 0.30 / - 0.60 / - 0.60
Oldsmobile Silhouette	1990 - 1996	X	Magna Cam Axis Cam	41-160 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Oldsmobile Silhouette	1997 - 2004	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Oldsmobile Silhouette AWD	2002 - 2004	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Oldsmobile Toronado	1966 - 1978	X	- Cam Bolt	Fac Adj. 41-8247	Fac Adj.	- 81		1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile Toronado	1979 - 1985	X	- Cam Bolt	Fac Adj. 41-8247	Fac Adj.	- 81		- / - 1.00 / 1.00	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Oldsmobile Toronado/Trofeo	1986 - 1992	X	Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	74 75		0.30 / - 0.30	Shim	46-1600	Fac Adj.	134		0.60 / -
PLYMOUTH														
Plymouth Acclaim	1989 - 1995	X	- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60

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REAR WHEEL ALIGNMENT

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Plymouth Barracuda	1970 - 1974	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Plymouth Belvedere	1965 - 1970	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Plymouth Breeze	1996 - 2000	X		Ball Joint	41-230	41-230	76	88-1304	0.90 / 0.90	-	Fac Adj.	Fac Adj.	-		- / -
Plymouth Caravelle	1985 - 1988	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Champ	1979 - 1982	X		Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Plymouth Colt	1984 - 1991	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Plymouth Colt	1992 - 1994	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Plymouth Conquest	1984 - 1986	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Plymouth Duster	1973 - 1976	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Plymouth Grand Fury	1972 - 1989	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Plymouth GTX	1967 - 1971	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Plymouth Horizon/TC3	1978 - 1990	X		-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Laser 2WD	1990 - 1994	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Plymouth Laser AWD	1992 - 1994	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Plymouth Neon	1995 - 2001	X		Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	- Wedge Kit	Fac Adj. 41-300	Fac Adj.	- 76		- / - 0.30
Plymouth Prowler	1997 - 2001	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Plymouth Reliant	1981 - 1989	X		-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Reliant	1984 - 1989	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Roadrunner	1968 - 1972	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Plymouth Sapporo	1980 - 1983	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Plymouth Satellite	1965 - 1972	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Plymouth Scamp	1983	X		-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Sundance	1987 - 1994	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 81		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Trailduster 2WD	1977 - 1981	X		- Cam Bolt	Fac Adj. 41-8243	Fac Adj.	- 80		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Plymouth Trailduster 4WD	1977 - 1981	X						88-7090		-	Non Adj.	Non Adj.	-		- / -
Plymouth Turismo	1983 - 1985	X		-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Turismo	1983 - 1987	X		Magna Cam Axis Cam Cam Bolt	41-157 ² 41-214 41-8249	Non Adj.	74 75 81		0.30 / - 0.30 0.30	Shim	46-2100 ¹	46-2100 ¹	136	88-343	- / -
Plymouth Valiant	1973 - 1976	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Plymouth Voyager FWD	1984 - 1995	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 81		- / - 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Voyager AWD	1991 - 1995	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 81		- / - 0.30	-	Non Adj.	Non Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.
See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	R O T A B L E	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Plymouth Voyager AWD	1996 - 2000	X		Magna Cam Axis Cam	Fac Adj. 41-157 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Plymouth Voyager FWD	1996 - 2000	X		Magna Cam Axis Cam	Fac Adj. 41-157 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	Shim	46-1120 ¹	46-1120 ¹	132	88-343 88-4519	0.60 / 0.60
PONTIAC															
Pontiac 6000	1982 - 1991	X		- Cam Bolt	Fac Adj. 41-8245	Non Adj.	- 81		- / - 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Pontiac 6000 STE AWD	1986 - 1991	X		- Cam Bolt	Fac Adj. 41-8245	Non Adj.	- 81		- / - 0.30	- Cam Bolt	Fac Adj. 41-8245	Fac Adj.	- 81		- / - 0.30
Pontiac Astre	1975 - 1977		X	- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Aztek FWD	2001 - 2005	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136	88-343	0.60 / 0.60 0.60 / 0.60
Pontiac Aztek AWD	2001 - 2005	X		Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Pontiac Bonneville	1970 - 1976	X		- Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Bonneville	1977 - 1981	X		- Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Bonneville	1982 - 1986	X		- Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Bonneville	1987 - 1999	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75		- / - 0.30 0.30	Magna Cam Shim	41-160 ² 46-1300 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	74 133	88-050 88-1110 88-343	0.30 / - 0.60 / 0.60 0.60
Pontiac Bonneville	2000 - 2005	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	74 75		- / - 0.30 0.30	Shim	46-1900	Fac Adj.	130		0.80 / -
Pontiac Catalina	1965 - 1981	X		- Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Fiero	1984 - 1988	X		- Fac Adj.	Fac Adj.	-	-		- / -	Cam Bolt	41-8245	Fac Adj.	81		0.30 / -
Pontiac Firebird	1967 - 1981	X		- Shim	Fac Adj. CC	Fac Adj. CC	- 113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Firebird F-Body	1982 - 1992	X		- Fac Adj.	Fac Adj.	-	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Firebird	1993 - 2002	X		- Fac Adj.	Fac Adj.	-	88-8925		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Firefly (Canada)	1989 - 2000	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac G3 Wave	2009	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	Shim	46-2100 ¹	46-2100 ¹	136		- / -
Pontiac G5	2007 - 2010	X		Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	75 74		0.30 / - 0.30	- Shim	Fac Adj. 46-1520 SERIES ¹	Fac Adj. 46-1520 SERIES ¹	- 133		- / - 0.60 / 0.60
Pontiac G6	2005 - 2010	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	- Shim Dual Axis Cam bolt	Fac Adj. 46-1520A 46-425	Fac Adj. 46-1520A 46-426	- 128 124		- / - 0.60 / 0.60 0.30 / 0.30
Pontiac G8	2008 - 2009	X		Axis Cam Magna Cam	41-214 41-158 ²	Fac Adj.	75 74		0.30 / - 0.30	- Cam Bolt	Fac Adj. 46-182	Fac Adj. 46-182	- 123		- / - 0.30 / 0.30
Pontiac Grand Am	1973 - 1975	X		- Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Grand Am	1978 - 1980	X		- Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Grand Am	1985 - 1995	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75	88-4511	- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Pontiac Trans Am	1993 - 2002	X		- Fac Adj.	Fac Adj.	-	88-8925		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Grand Am	1996 - 1998	X		Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.

See part number 46-2450A on page 141

2. For models with either slotted or unslotted strut brackets.

3. For models with slotted strut brackets only.

4. For models without slotted strut brackets.

5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.

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9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	H R O U S	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Pontiac Grand Am	1999-2003	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-144 41-212	Fac Adj.	- 74 75		- / - 0.30 0.30
Pontiac Grand Am	2004-2005	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		0.30 / - - 0.30	- Magna Cam Axis Cam	Fac Adj. 41-144 41-212	Fac Adj.	- 74 75		- / - 0.30 0.30
Pontiac Grand Prix	1965-1972	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Grand Prix	1973-1977	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Grand Prix	1978-1987	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Grand Prix	1988-1996	X		- Shim	Fac Adj. 45-7010 ⁴	Non Adj.	- 117	88-060	- / - 0.50	Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	74 75	88-8923	0.30 / - 0.30
Pontiac Grand Prix	1997-2008	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	- 74 75		- / - 0.30 0.30
Pontiac GTO	1964-1972	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac GTO	2004-2006	X		Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Pontiac Sunbird/J2000	1982-1994	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	- 74 75		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Pontiac LeMans	1978-1981	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac LeMans	1988-1993	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Montana	1999-2009	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	- Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136		- / - 0.60 / 0.60 0.60 / 0.60
Pontiac Montana AWD	2002-2009	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Pontiac Phoenix	1980-1984	X		Cam Bolt	41-8245	Non Adj.	81		0.30 / -	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Pontiac Safari SW	1987-1989	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Solstice	2006-2009	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Pontiac Sunburst	1985-1988	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	74 76		0.30 / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Pontiac Sunfire	1995-2005	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Pontiac T1000	1981-1987	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Tempest	1964-1970	X		Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Tempest (Canada)	1988-1991	X		Magna Cam Axis Cam	41-160 ² 41-216	Non Adj.	74 75		0.30 / - 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136	88-343	0.60 / 0.60 0.60 / 0.60
Pontiac Torrent	2006-2009	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	Cam Nut	44-775	44-775	97		0.30 / 0.30
Pontiac Trans Am	1990-1992	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Trans Sport	1990-1996	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	- 74 75		- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Pontiac Trans Sport	1997-1999	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60

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REAR WHEEL ALIGNMENT

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Pontiac Vibe	2003 - 2010	X	- Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	74 75		- / - 0.30 0.30	Shim	46-1500 ¹	46-1500 ¹	133		0.60 / 0.60
PORSCHE														
Porsche Boxster (718)	2017 - 2022	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Porsche Cayman (718)	2017 - 2022	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Porsche 911	1965 - 2014	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Porsche 924	1977 - 1988	X	Magna Cam Wedge Kit Axis Cam	41-147 ³ 41-300 41-212	Non Adj.	74 76 75		0.30 / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Porsche 928	1978 - 1995	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Porsche 944	1983 - 1991	X	Magna Cam Wedge Kit Axis Cam	41-147 ³ 41-300 41-212	Fac Adj.	74 76 75		0.30 / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Porsche 968	1992 - 1995	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Porsche Boxster (986)	1997 - 2004	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Porsche Boxster (987/981)	2005 - 2016	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Porsche Cayenne	2003 - 2022	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Cayman (987/981) RWD	2006 - 2016	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Porsche Macan	2015 - 2022	X	-	Fac Adj.	Non Adj.	-		- / -	Cam Bolt	46-456	46-456	128		0.30 / 0.30
Porsche Panamera	2010 - 2017	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
RAM														
Dodge Ram 1500 2WD/4WD (5-lug) (Exc. Mega Cab)	2011 - 2019	X	Ball Joint Cam Bolt	44-2489 44-868	44-2489 44-868	106 105		0.90 / 0.90 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge Ram 1500 (Mega Cab) (8-lug)	2011 - 2018	X	-	Fac Adj.	Fac Adj.	-		- / -						
Dodge Ram 1500 2WD/4WD	2019 - 2022	X	Cam Bolt	44-868	44-868	105		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge Truck 2500 2WD (incl. HD)	2011 - 2013	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge 2500/3500 P/U NS 4WD	2011 - 2013	X	Ball Joint	44-2497	44-824 44-2497	108		0.90 / 0.30 0.90	-	Non Adj.	Non Adj.	-		- / -
Dodge 2500 P/U NS 4WD	2014 - 2022	X	Ball Joint Front Tie Rod Toe Sleeve	44-2497 44-2540	44-823 44-825 44-2497	108 111	44-2540 44-2542	0.90 / 0.30 0.30 / 0.30 0.90	-	Non Adj.	Non Adj.	-		- / -
Dodge 2500 2wd	2014 - 2019	X	Front Tie Rod Toe Sleeve	Fac Adj. 44-2540	Fac Adj.	- 111	44-2540 44-2542	- / - 0.30						
Dodge 2500/3500 P/U NS 4WD	2011 - 2012	X	Ball Joint	44-2497	Fac Adj. 44-2497	108		0.90 / - 0.90	-	Non Adj.	Non Adj.	-		- / -
Dodge Truck 3500 2WD	2011 - 2012	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge 3500 2wd / mono beam	2011 - 2012	X	Ball Joint	44-2497	Fac Adj. 44-2497	108		0.90 / - 0.90	-	Non Adj.	Non Adj.	-		- / -
Dodge 3500 P/U NS 4WD	2013 - 2022	X	Ball Joint Front Tie Rod Toe Sleeve Front Tie Rod Toe Sleeve	44-2497 44-2540 44-2542	44-823 44-825 44-2497	108 111 111	44-2540 44-2542	0.90 / 0.30 0.30 / 0.30 0.30 / 0.90	-	Non Adj.	Non Adj.	-		- / -
Dodge 3500 2wd	2013 - 2022	X	Front Tie Rod Toe Sleeve Front Tie Rod Toe Sleeve	Fac Adj. 44-2540 44-2542	44-823 44-825	- 111 111	44-2540 44-2542	- / 0.30 0.30 / 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge 3500 2wd / mono beam	2013 - 2022	X	Ball Joint Front Tie Rod Toe Sleeve Front Tie Rod Toe Sleeve	44-2497 44-2540 44-2542	44-823 44-825 44-2497	108 111 111	44-2540 44-2542	0.90 / 0.30 0.30 / 0.30 0.30 / 0.90	-	Non Adj.	Non Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.

See part number 46-2450A on page 141

2. For models with either slotted or unslotted strut brackets.

3. For models with slotted strut brackets only.

4. For models without slotted strut brackets.

5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.

7. Adjustable cam replaces factory locking plate.

8. For models without factory provided cam bolts

9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	A D J. M E T H O D	C A M B E R P A R T #	C A S T E R P A R T #	P R O P A G E N O.	S P E C I A L T O O L O R P R O D U C T	E S T. I N S T A L L H O U R S P E R W H E E L	A D J. M E T H O D	C A M B E R P A R T #	T O E P A R T #	P R O P A G E N O.	S P E C I A L T O O L O R P R O D U C T	E S T. I N S T A L L H O U R S P E R W H E E L
Dodge 4500 / 5500 2wd	2011 - 2018	X	Ball Joint	44-2610	44-2610	112		1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Dodge 4500 / 5500 4wd	2011 - 2018	X	Ball Joint	44-2610	44-2610	112		1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Dodge 4500 / 5500 2wd	2019 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge 4500 / 5500 4wd	2019 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Ram C/V Tradesman AWD	2012 - 2015	X	Magna Cam Axis Cam Cam Bolt	41-157 ² 41-214 41-8249	Non Adj.	74 75 81		0.30 / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Ram C/V Tradesman FWD	2012 - 2015	X	Magna Cam Axis Cam Cam Bolt	41-157 ² 41-214 41-8249	Non Adj.	74 75 81		0.30 / - 0.30 0.30	Shim	46-1120 ¹	46-1120 ¹	132	88-343	0.60 / 0.60
Ram Promaster	2014	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Ram Pro Master 1500	2014 - 2022	X	Ball Joint	44-2618	Non Adj.	-		0.60 / -	-	Non Adj.	Non Adj.	-		- / -
Ram Pro Master 2500	2014 - 2022	X	Ball Joint	44-2618	Non Adj.	-		0.60 / -	-	Non Adj.	Non Adj.	-		- / -
Ram Pro Master 3500	2014 - 2022	X	Ball Joint	44-2618	Non Adj.	-		0.60 / -	-	Non Adj.	Non Adj.	-		- / -
Ram Promaster City	2015 - 2019	X	Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
RENAULT														
Renault AMC Alliance	1983 - 1986	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Renault Alliance	1983 - 1987	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Renault Encore	1984 - 1986	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
SAAB														
Saab 9-2X	2005 - 2006	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Axis Cam Magna Cam	41-214 41-158 ²	Fac Adj.	75 74		0.30 / - 0.30
Saab 9-3	1999 - 2011	X	Axis Cam	41-212	Non Adj.	75		0.30 / -	Dual Axis Cam bolt	46-425	Non Adj. 46-426	124		0.30 / - 0.30
Saab 9-3X	2010 - 2011	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Saab 9-4X	2011	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Saab 9-5 Sedan/Wagon	1999 - 2009	X	Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Saab 9-5	2010 - 2011	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Saab 9-7x	2005 - 2009	X	Camber-Caster Tool	88-8929	88-8929	162		- / -	-	Non Adj.	Non Adj.	-		- / -
Saab 900	1979 - 1993	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Saab 900	1994 - 1998	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Saab 900 Convertible	1994	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Saab 9000	1986 - 1998	X	Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	74 76		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Saab 99	1980	X	Shim	CC	CC	113		- / -	-	Non Adj.	Non Adj.	-		- / -
SATURN														
Saturn Astra	2008 - 2009	X	Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	75 74		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Saturn Aura	2007 - 2009	X	Axis Cam	41-212	Non Adj.	75		0.30 / -	Shim Dual Axis Cam bolt	Fac Adj. 46-1200A 46-425	Fac Adj. 46-1200A 46-426	- 127 124		- / - - / - 0.30 / 0.30
Saturn Ion	2004 - 2007	X	- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75		- / - 0.30 0.30	Shim	46-1520 ¹	46-1520 ¹	133		0.60 / 0.60
Saturn L Series	2000 - 2005	X	- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	133 136		0.60 / 0.60 0.60 / 0.60

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

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2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O U G H	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Saturn GM EV-1	1997 - 2001	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Saturn Outlook	2007 - 2010	X	Magna Cam	Fac Adj. 41-160 ² Axis Cam 41-216	Non Adj.	74 75		- / - 0.30 0.30	- Camber Kit Cam Bolt	Fac Adj. 46-421 41-8257	41-8257	124 82	88-7996A	- / 0.30 1.00 0.30
Saturn Relay AWD	2005 - 2007	X	Magna Cam	41-158 ² Axis Cam 41-214	Non Adj.	74 75		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Saturn Relay FWD	2005 - 2007	X	Magna Cam	41-158 ² Axis Cam 41-214	Non Adj.	74 75		0.30 / - 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	133 136		0.60 / 0.60 0.60 / 0.60
Saturn Sky	2007 - 2010	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Saturn SL	1991 - 1998	X	Magna Cam	41-158 ² Axis Cam 41-214	Fac Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj. 46-406	74 75		0.30 / - 0.30 / 0.60
Saturn S Series	1991 - 2002	X	Magna Cam	Fac Adj. 41-158 ² Axis Cam 41-214	Fac Adj.	74 75		- / - 0.30 0.30	Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	46-406	74 75		- / 0.60 0.30 0.30
Saturn Vue	2002 - 2006	X	Magna Cam	Fac Adj. 41-157 ² Axis Cam 41-214	Non Adj.	74 75		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Saturn Vue	2007 - 2009	X	Magna Cam	Fac Adj. 41-157 ² Axis Cam 41-214	Non Adj.	74 75		- / - 0.30 0.30	Cam Nut	44-775	44-775	97		0.30 / 0.30
SCION														
Scion FR-S	2013 - 2016	X	Axis Cam	41-214 Magna Cam 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	-	Fac Adj.	46-2177	-		- / 0.50
Scion iA	2016	X	Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Scion iM	2016	X	Axis Cam	41-217	Non Adj.	75		0.30 / -	-	Non Adj.	46-171	-		- / 0.30
Scion iQ	2012 - 2014	X	Axis Cam	41-212 Magna Cam 41-147 ³	Non Adj.	75 74		0.30 / - 0.30	Shim	46-1500 SERIES ¹	46-1500 SERIES ¹	133		0.60 / 0.60
Scion tC	2005 - 2010	X	Magna Cam	41-151 Cam Bolt 41-217	Non Adj.	74 75		0.30 / - 0.30	Shim	46-1500 SERIES ¹	46-1500 ¹	133		0.60 / 0.60
Scion tC	2011 - 2016	X	Cam Bolt	41-217	Fac Adj.	75		0.30 / -	Shim	46-1500 ¹	46-171 46-1500 ¹	133		0.60 / 0.30 0.60
Scion xA	2004 - 2006	X	Magna Cam	41-158 ² Axis Cam 41-214	Non Adj.	74 75		0.30 / - 0.30	Shim	46-1500 ¹	46-1500 ¹	133		0.60 / 0.60
Scion xB	2004 - 2006	X	Magna Cam	41-158 ² Axis Cam 41-214	Non Adj.	74 75		0.30 / - 0.30	Shim	46-1500 SERIES ¹	46-1500 SERIES ¹	133		0.60 / 0.60
Scion xB	2008 - 2014	X	Axis Cam	41-217	Non Adj.	75		0.30 / -	Shim	46-1500 SERIES ¹	46-1500 SERIES ¹	133		0.60 / 0.60
Scion xD	2008 - 2014	X	Axis Cam	41-215 Magna Cam 41-149	Non Adj.	75 74		0.30 / - 0.30	Shim	46-1500 SERIES ¹	46-1500 SERIES ¹	133		0.60 / 0.60
SMART														
Smart Fortwo Gas Engine	2016 - 2019	X	Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Smart Fortwo	2005 - 2015	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Smart Fortwo Electric Drive	2016	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
STERLING														
Sterling Blower	1987 - 1991	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Sterling Bullet 45/55	2008	X	Ball Joint	44-2610	Non Adj.	112		1.00 / -	-	Non Adj.	Non Adj.	-		- / -
SUBARU														
Subaru B9 Tribeca, Tribeca	2006 - 2010	X	Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	46-431	-		- / 0.30
Subaru Baja	2003 - 2006	X	Magna Cam	Fac Adj. 41-158 ² Axis Cam 41-214	Non Adj.	74 75		- / - 0.30 0.30	Rear Arm	46-2233	Non Adj. 46-431	144		0.30 / - 0.30
Subaru BRZ	2013 - 2022	X	Magna Cam	Fac Adj. 41-158 ² Axis Cam 41-214	Fac Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj. 46-2177	-		- / - 0.50
Subaru Crosstrek (Incl. Hybrid)	2016 - 2022	X	Axis Cam	41-214 Magna Cam 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	-	Fac Adj.	46-2177	-		- / 0.60

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	T H R O U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Subaru Forester	1998-2007	X		- Axis Cam	Fac Adj. 41-214	Non Adj.	- 75		- / - 0.30	Axis Cam Magna Cam	41-214 41-158 ²	Fac Adj.	75 74		0.30 / - 0.30
Subaru Forester	2003-2008	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	Axis Cam Magna Cam	41-214 41-158 ²	46-461	75 74		0.30 / 0.30 0.30
Subaru Forester	2009-2022	X		- Axis Cam Magna Cam	Fac Adj. 41-214 41-158 ²	Non Adj.	- 75 74		- / - 0.30 0.30	-	Non Adj.	Fac Adj. 46-2177	-		- / - 0.50
Subaru Impreza FWD/AWD	1993-2001	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30
Subaru WRX	2002-2007	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-158 ² 41-214		74 75		0.30 0.30
Subaru Impreza	2002-2007	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Axis Cam Magna Cam	41-214 41-158 ²	46-461	75 74		0.30 / 0.30 0.30
Subaru Impreza FWD/AWD	2008-2022	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	- 74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj. 46-2177	-		- / - 0.50
Subaru Justy	1987-1994	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Subaru Legacy 2WD/4WD	1990-1999	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	74 75		0.30 / - 0.30
Subaru Legacy	2000-2009	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	Rear Arm	46-2233	46-431	144		0.30 / 0.30
Subaru Legacy	2010-2022	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	-	Non Adj.	46-2177	-		- / 0.50
Subaru Loyale FWD/AWD	1990-1994	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Subaru Outback	2000-2009	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	Rear Arm	46-2233	46-431	144		0.30 / 0.30
Subaru Outback	2010-2022	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	-	Non Adj.	46-2177	-		- / 0.50
Subaru SVX	1992-1997	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	74 75		0.30 / - 0.30
Subaru Tribeca	2011-2014	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Subaru WRX Incl. STI	2015-2022	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	- 74 75		- / - 0.30 0.30	-	Non Adj.	Non Adj. 46-2177	-		- / - 0.50
Subaru XT	1985-1991	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Subaru XV Crosstrek (Incl. Hybrid)	2013-2015	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Fac Adj.	46-2177	-		- / 0.50
SUZUKI															
Suzuki Aerio	2002-2007	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	Axis Cam	41-212	Fac Adj.	75		0.30 / -
Suzuki Equator	2009-2012		X	Cam Bolt Greaseable Cam Bolt	44-820 44-862	44-820 44-862	100 104		0.30 / 0.30 0.30 / 0.30	Cam Nut	44-775	Non Adj. 44-775	97		0.30 / - 0.30
Suzuki Esteem	1995-2002	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Suzuki Forenza Incl. Wagon	2004-2008	X		Axis Cam	41-212	Fac Adj.	75		0.30 / -	Axis Cam	41-212		75		0.30
Suzuki Forsa	1985-1988	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Suzuki Grand Vitara 2WD / 4WD	1999-2014		X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	Axis Cam	41-212	Non Adj.	75		0.30 / -
Suzuki Kizashi	2011-2012	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Suzuki Reno	2005-2008	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	Axis Cam	41-212	Fac Adj.	75		0.30 / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	R O T A S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Suzuki Samurai 2WD	1985 - 1995	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Suzuki Sidekick 2WD	1989 - 1998	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Suzuki Swift	1989 - 2001	X		Magna Cam Wedge Kit Axis Cam	41-147 ³ 41-300 41-212	Non Adj.	74 76 75		0.30 / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Suzuki SX4	2007 - 2014	X		Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	75 74		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Suzuki Verona	2004 - 2006	X		Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Suzuki Vitara 2WD	1999 - 2004	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Suzuki X-90 2WD	1996 - 1998	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Suzuki XL-7	2002 - 2006	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Suzuki XL-7	2007 - 2009	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	- Cam Nut	Fac Adj. 44-775	Fac Adj. 44-775	- 97		- / - 0.30 / 0.30
TESLA															
Tesla 3	2017 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Tesla Model S	2012 - 2022	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Tesla Model X	2014 - 2022	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
TOYOTA															
Toyota 4 Runner 2WD/4WD	1984 - 1995	X		- Shim	Fac Adj. CC	Fac Adj.	- 113		- / - -	-	Non Adj.	Non Adj.	-		- / -
Toyota 4 Runner 2WD/4WD	1996 - 2002	X		Greaseable Cam Bolt	Fac Adj. 44-826	Fac Adj. 44-826	- 101		- / - 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota 4 Runner 2WD/4WD	2003 - 2009	X		Greaseable Cam Bolt	Fac Adj. 44-827	Fac Adj. 44-827	- 101		- / - 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota 4Runner 2WD/4WD	2010 - 2014	X		Greaseable Cam Bolt	44-828	44-828	102		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota 4Runner 2WD/4WD	2015 - 2022	X		Greaseable Cam Bolt	44-828	44-828	102		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota 86	2017 - 2019	X		Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Toyota Avalon	1995 - 2012	X		Magna Cam Axis Cam	41-151 41-217	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam Shim Shim	41-149 41-215 46-1300 SERIES ¹ 46-2400 ¹	Fac Adj. 46-1300 SERIES ¹ 133 136	74 75 133 136	88-343	0.30 / - 0.30 / 0.60 0.60 / 0.60 0.60
Toyota Avalon/ Hybrid	2013 - 2018	X		Magna Cam Axis Cam	41-151 41-217	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-151 41-217	46-455 46-2239	74 75	88-343	0.30 / 0.50 0.30 / 0.50
Toyota Avalon/ Hybrid	2019 - 2022	X		Magna Cam Axis Cam	41-151 41-217	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota C-HR	2018 - 2022	X		Cam Bolt	41-217	Non Adj.	75		0.30 / -	-	Non Adj.	46-455	-		- / 0.50
Toyota Camry	1983 - 1987	X		Magna Cam Axis Cam	41-147 ³ 41-212	45-6001 45-6002	74 75		0.30 / 0.20 0.30 / 0.20	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	74 76		0.30 / - 0.30
Toyota Camry	1988 - 1991	X		Magna Cam Wedge Kit Axis Cam	41-151 41-305 41-217	45-6001 45-6002	74 76 75		0.30 / 0.20 0.30 / 0.20 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	74 75		0.30 / - 0.30
Toyota Camry Alltrac	1988 - 1991	X		Magna Cam Axis Cam	41-151 41-217	Fac Adj. 45-6001 45-6002	74 75		0.30 / - 0.30 / 0.20 0.20	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	74 75		0.30 / - 0.30
Toyota Camry Inc. Hybrid	1992 - 2011	X		Axis Cam	41-217	Non Adj.	75		0.30 / -	Axis Cam	41-215	Fac Adj.	75		0.30 / -
Toyota Camry/ Hybrid	2012 - 2017	X		Axis Cam	41-217		75		0.30	Axis Cam	41-217	46-2239	75		0.30 / 0.50
Toyota Camry	2018 - 2022	X		Axis Cam	41-217	Non Adj.	75		0.50 / -	-	Non Adj.	46-455	-		- / 0.50

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.

See part number 46-2450A on page 141

2. For models with either slotted or unslotted strut brackets.

3. For models with slotted strut brackets only.

4. For models without slotted strut brackets.

5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.

7. Adjustable cam replaces factory locking plate.

8. For models without factory provided cam bolts

9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	T H R O U S	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Toyota Camry Hybrid	2018-2022	X		Axis Cam	41-217	Non Adj.	75		0.50 / -	-	Non Adj.	46-455	-		- / 0.50
Toyota Celica FWD	1986-1989	X		Magna Cam Wedge Kit	41-149 41-301	Non Adj.	74 76		0.30 / - 0.30	Magna Cam Wedge Kit	41-149 41-301	Fac Adj.	74 76		0.30 / - 0.30
Toyota Celica Alltrac	1988-1989	X		Magna Cam Axis Cam	41-149 41-215	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Toyota Celica	1990-1993	X		Magna Cam Wedge Kit	Fac Adj. 41-149 41-305	Non Adj.	- 74 76		- / - 0.30 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	74 75		0.30 / - 0.30
Toyota Celica Alltrac	1990-1993	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Toyota Celica/ST/GT/GT-S	1994-2005	X		Magna Cam Axis Cam	41-149 41-215	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	74 75		0.30 / - 0.30
Toyota Celica GT/GT-S	2000-2005	X		Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Non Adj.	74 75		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Toyota Corolla	1975-1987	X		-	Non Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Corolla FWD	1984-1987	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	74 76		0.30 / - 0.30	Magna Cam Wedge Kit Shim Shim	41-147 ³ 41-300 46-1300 ¹ 46-2400 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	74 76 133 136	88-343	0.30 / - 0.30 / 0.60 0.60 / 0.60 0.60
Toyota Corolla FX-16/FX	1987-1988	X		Magna Cam Wedge Kit	Fac Adj. 41-147 ³ 41-300	Non Adj.	- 74 76		- / - 0.30 0.30	Magna Cam Wedge Kit Shim Shim	41-147 ³ 41-300 46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	74 76 133 136	88-343	0.30 / 0.60 0.30 / 0.60 0.60 0.60
Toyota Corolla Alltrac	1988-1992	X		Magna Cam Wedge Kit	41-149 41-305	Non Adj.	74 76		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Corolla FWD	1988-1992	X		Magna Cam Wedge Kit	41-149 41-305	Non Adj.	74 76		0.30 / - 0.30	Magna Cam Wedge Kit Shim Shim	41-147 ³ 41-300 46-1300 ¹ 46-2400 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	74 76 133 136	88-343	0.30 / - 0.30 / 0.60 0.60 / 0.60 0.60
Toyota Corolla	1993-2002	X		Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Non Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30
Toyota Corolla	2003-2008	X		Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Non Adj.	- 74 75		- / - 0.30 0.30	Shim	46-1500 ¹	46-1500 ¹	133		0.60 / 0.60
Toyota Corolla with Beam Type Rear Suspension	2009-2019	X		Axis Cam	41-217	Non Adj.	75		0.30 / -	Shim	46-1500 ¹	46-1500 ¹	133		0.60 / 0.60
Toyota Corolla With Multi link Rear Suspension	2019-2022	X		Axis Cam	41-217	Non Adj.	75		0.30 / -	-	Non Adj.	46-455	-		- / 0.50
Toyota Corolla iM	2017-2018	X		Axis Cam	41-217	Non Adj.	75		0.30 / -	-	Non Adj.	46-171	-		- / 0.30
Toyota Cressida	1978-1981	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Cressida	1983-1984	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Cressida Wagon	1983-1988	X		-	Non Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Cressida	1985-1988	X		-	Non Adj.	45-6001 45-6002	-		- / 0.20 0.20	-	Non Adj.	Fac Adj.	-		- / -
Toyota Cressida	1989-1992	X		-	Non Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Toyota Echo	2000-2005	X		Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Non Adj.	- 74 75		- / - 0.30 0.30	Shim	46-1500 SERIES ¹	Non Adj. 46-1500 SERIES ¹	133		0.60 / - 0.60
Toyota FJ Cruiser	2007-2009	X		Greaseable Cam Bolt	Fac Adj. 44-827	Fac Adj.	- 101		- / - 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota FJ Cruiser	2010-2014	X		Greaseable Cam Bolt	Fac Adj. 44-828	Fac Adj.	- 102		- / - 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Highlander 2WD/4WD	2001-2007	X		Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Fac Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	74 75		0.30 / - 0.30
Toyota Highlander FWD/AWD	2008-2013	X		Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Fac Adj.	- 74 75		- / - 0.30 0.30	Magna Cam Axis Cam	41-151 41-217	Fac Adj.	74 75		0.30 / - 0.30

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances. See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Toyota Highlander FWD/AWD	2014 - 2022	X	Axis Cam	41-217	Non Adj.	75		0.30 / -	-	Non Adj.	41-8257	-		- / 0.30
Toyota Land Cruiser	2008 - 2021	X	Cam Bolt	44-838	44-838	104		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Matrix AWD	2003 - 2013	X	- Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	74 75		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Toyota Matrix FWD	2003 - 2013	X	- Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	74 75		- / - 0.30 0.30	Shim	46-1500 ¹	46-1500 ¹	133		0.60 / 0.60
Toyota MR-2	1985 - 1989	X	- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Fac Adj.	74 75		- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Fac Adj.	74 75		- / - 0.30 0.30
Toyota MR-2	1991 - 1995	X	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	74 75		0.30 / - 0.30
Toyota MR2 Spyder	2000 - 2006	X	Magna Cam Axis Cam	41-149 41-215	Non Adj.	74 75		0.30 / - 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	74 75		0.30 / - 0.30
Toyota Paseo	1992 - 1998	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Pickup 4WD	1969 - 1995	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Pickup/cab and chassis 2WD	1973 - 1995	X	- Shim	Fac Adj. CC	Fac Adj.	113		- / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Previa 2WD/4WD	1991 - 1997	X	Magna Cam Wedge Kit Axis Cam	41-151 41-305 41-217	Non Adj.	74 76 75		0.30 / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Prius	2001 - 2009	X	- Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Non Adj.	74 75		- / - 0.30 0.30	Shim	46-1500 ¹	46-1500 ¹	133		0.60 / 0.60
Toyota Prius	2010 - 2015	X	Axis Cam Magna Cam	41-217 41-151	Non Adj.	75 74		0.30 / - 0.30	Shim	46-1500 SERIES ¹	46-1500 SERIES ¹	133		0.60 / 0.60
Toyota Prius	2016 - 2022	X	Axis Cam Magna Cam	41-217 41-151	Non Adj.	75 74		0.30 / - 0.30	Shim	Non Adj.	46-455	-		- / 0.50
Toyota Prius C	2012 - 2016	X	Magna Cam Axis Cam	41-149 41-215	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Prius V	2012 - 2017	X	Axis Cam Magna Cam	41-217 41-151	Non Adj.	75 74		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota RAV-4 2WD/4WD	1996 - 2000	X	- Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Non Adj.	74 75		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Toyota RAV-4 2WD/4WD	2001 - 2005	X	- Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Non Adj.	74 75		- / - 0.30 0.30	- Greaseable Cam Bolt	Fac Adj. 46-432	Fac Adj. 46-432	125		- / - 0.30 / 0.30
Toyota RAV-4 2WD/4WD	2006 - 2010	X	- Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	74 75		- / - 0.30 0.30	- Rear Arm Rear Arm	Fac Adj. 46-2236L 46-2236R	Fac Adj. 46-2229	140 140		- / - 0.30 / 0.50 0.30
Toyota RAV-4 2WD/4WD	2011 - 2018	X	- Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	74 75		- / - 0.30 0.30	- Rear Arm Rear Arm	Fac Adj. 46-2236L 46-2236R	46-171	140 140		- / 0.30 0.30 0.30
Toyota Rav4 Hybrid	2016 - 2018	X	Cam Bolt Magna Cam	41-217 41-151	Fac Adj.	75 74		0.30 / - -	Rear Arm Rear Arm	46-2236L 46-2236R	46-171	140 140		0.60 / 0.30 0.60
Toyota RAV-4 2WD/4WD	2019 - 2022	X	works with 14mm bolt works with 15mm bolt works with 16mm bolt works with 17mm bolt	41-214 41-215 41-216 41-217	Non Adj.	75 75 75 75		0.30 / - 0.30 0.30 0.30	-	Non Adj.	46-455	-		- / 0.50
Toyota Sequoia 2WD/4WD	2001 - 2007	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Sequoia 2WD/4WD	2008 - 2022	X	Greaseable Cam Bolt	44-838	44-838	104		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Sienna FWD	1998 - 2010	X	Magna Cam Axis Cam	41-151 41-217	Non Adj.	74 75		0.30 / - 0.30	Shim	46-1120 ¹	46-1120 ¹	132		0.60 / 0.60
Toyota Sienna AWD	2004 - 2010	X	Magna Cam Axis Cam	41-151 41-217	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Sienna FWD/AWD	2011 - 2020	X	Magna Cam Axis Cam	41-151 41-217	Non Adj.	74 75		0.30 / - 0.30	Shim	46-1120 ¹	46-1120 ¹	132		0.60 / 0.60
Toyota Sienna FWD/AWD	2021 - 2022	X	Axis Cam	41-217	Non Adj.	75		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	T H R U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Toyota Starlet	1981 - 1984	X		-	Non Adj.	45-6001 45-6002	-		- / 0.20 0.20	-	Non Adj.	Non Adj.	-		- / -
Toyota Supra	1987 - 1998	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Toyota T100 2WD	1993 - 1998	X		- Shim	Fac Adj. CC	Fac Adj. CC	113		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Toyota T100 4WD	1993 - 1998	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Tacoma 2WD/4WD	1995 - 2004	X		Shim Greaseable Cam Bolt	CC 44-826	Fac Adj. 44-826	113 101		- / - 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Tacoma 2WD/4WD	2005 - 2015	X		Greaseable Cam Bolt	44-827	44-827	101		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Tacoma 2WD/4WD	2016 - 2022	X		Greaseable Cam Bolt	44-828	44-828	102		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Tercel FWD	1983 - 1986	X		- Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Fac Adj.	74 75		- / - 0.30 0.30	Magna Cam Ball Joint	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - -
Toyota Tercel 4wd	1983 - 1986	X		- Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Fac Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Toyota Tercel FWD	1987 - 1999	X		Magna Cam Axis Cam	41-149 41-215	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Tercel Wagon FWD	1987 - 1988	X		Magna Cam Axis Cam	41-149 41-215	Non Adj.	74 75		0.30 / - 0.30	Axis Cam Magna Cam	41-212 41-147 ³	Fac Adj.	75 74		0.30 / - 0.30
Toyota Tercel Wagon 4wd	1987 - 1988	X		Magna Cam Axis Cam	41-149 41-215	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Tundra 2WD/4WD	2000 - 2006	X		Greaseable Cam Bolt	44-829	44-829	-		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Tundra 2WD/4WD	2007 - 2022	X		Greaseable Cam Bolt	44-838	44-838	104		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Van 2WD/4WD	1984 - 1989	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Venza	2009 - 2015	X		Axis Cam Magna Cam	41-217 41-151	Non Adj.	75 74		0.30 / - 0.30	Axis Cam Magna Cam	41-217 41-151	Fac Adj.	75 74		0.30 / - 0.30
Toyota Yaris	2007 - 2018	X		Axis Cam Magna Cam	41-215 41-149	Non Adj.	75 74		0.30 / - 0.30	Shim	46-1500 ¹	46-1500 ¹	133		0.60 / 0.60
Toyota Yaris	2019 - 2022	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Yaris IA	2017 - 2019	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
VOLKSWAGEN															
Volkswagen Atlas	2018 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	Cam Bolt	46-456	46-456	128		0.30 / -
Volkswagen Beetle	1998 - 2010	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Volkswagen Beetle (w/ beam type rear suspension)	2011 - 2019	X		-	Non Adj.	Non Adj.	-		- / -	Cam Bolt	46-456	46-456	128		0.30 / 0.30
Volkswagen Cabrio	1995 - 2002	X		Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Volkswagen Cabriolet	1985 - 1993	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen CC	2009 - 2017	X		-	Non Adj.	Non Adj.	-		- / -	Cam Bolt	46-456	46-456	128		0.30 / 0.30
Volkswagen Corrado	1990 - 1995	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen Dasher	1974 - 1981	X		-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen Eros	2007 - 2016	X		-	Non Adj.	Non Adj.	-		- / -	Cam Bolt	46-456	46-456	128		0.30 / 0.30
Volkswagen Eurovan	1992 - 2009	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Volkswagen Fox	1987 - 1993	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen GLI	2010	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.
See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T H R O T A L	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Volkswagen Golf & GTI	1985 - 1998	X	- Magna Cam Axis Cam Performance Kit	Fac Adj. 41-147 ³ 41-212 41-1450	Non Adj.	74 75 79	- - -	- / - 0.30 0.30 -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen Golf	1985 - 1998	X	Axis Cam	41-212	Non Adj.	75	-	0.30 / -	-	Non Adj.	Non Adj.	-	-	- / -
Volkswagen Golf & GTI	1999 - 2006	X	-	Fac Adj.	Non Adj.	-	-	- / -	-	Non Adj.	Fac Adj.	-	-	- / -
Volkswagen Golf (Incl. Multi Link Suspension)	1999 - 2012	X	-	Non Adj.	Non Adj.	-	-	- / -	-	Non Adj.	Non Adj.	-	-	- / -
Volkswagen Golf & GTI	2007 - 2012	X	-	Fac Adj.	Non Adj.	-	-	- / -	-	Non Adj.	Fac Adj.	-	-	- / -
Volkswagen Golf & GTI	2013 - 2014	X	-	Fac Adj.	Non Adj.	-	-	- / -	-	Non Adj.	Fac Adj.	-	-	- / -
Volkswagen Golf Sportswagon	2015 - 2019	X	-	Non Adj.	Non Adj.	-	-	- / -	Cam Bolt	46-456	46-456	128	-	0.30 / 0.30
VW GTI	2006 - 2009	X	-	Non Adj.	Non Adj.	-	-	- / -	-	Non Adj.	Non Adj.	-	-	- / -
Volkswagen GTI	2010 - 2014	X	-	Non Adj.	-	-	-	-	Cam Bolt	46-456	46-456	128	-	0.30 / 0.30
VW GTI	2015 - 2019	X	-	Non Adj.	Non Adj.	-	-	- / -	-	Non Adj.	Non Adj.	-	-	- / -
Volkswagen Jetta	1980 - 1999	X	- Magna Cam Axis Cam Performance Kit	Fac Adj. 41-147 ³ 41-212 41-1450	Non Adj.	74 75 79	- - -	- / - 0.30 0.30 -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen Jetta A4	1999 - 2010	X	-	Fac Adj.	Non Adj.	-	-	- / -	-	Non Adj.	Fac Adj.	-	-	- / -
Volkswagen Jetta (A5 & A6) w/ Multi-Link Rear Susp.	2005 - 2019	X	-	Non Adj.	Non Adj.	-	-	- / -	-	Non Adj.	Non Adj.	-	-	- / -
VW Jetta Hybrid	2013 - 2016	X	-	-	-	-	-	-	Cam Bolt	46-456	46-456	128	-	0.30 / 0.30
Volkswagen Passat	1990 - 1997	X	- Magna Cam Axis Cam Performance Kit	Fac Adj. 41-147 ³ 41-212 41-1450	Non Adj.	74 75 79	- - -	- / - 0.30 0.30 -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen Passat	1998 - 2005	X	-	Non Adj.	Non Adj.	-	-	- / -	Shim	46-1500 ¹	Fac Adj. 46-1500 ¹	133	-	0.60 / - 0.60
Volkswagen Passat	2006 - 2010	X	-	Fac Adj.	Fac Adj.	-	-	- / -	-	Non Adj.	Non Adj.	-	-	- / -
Volkswagen Passat	2011 - 2022	X	-	Fac Adj.	Fac Adj.	-	-	- / -	Cam Bolt	46-456	46-456	128	-	0.30 / 0.30
Volkswagen Phaeton	2004 - 2006	X	-	Non Adj.	Non Adj.	-	-	- / -	-	Fac Adj.	Fac Adj.	-	-	- / -
Volkswagen Quantum	1982 - 1988	X	- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75	- -	- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen Rabbit	1975 - 2009	X	- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75	- -	- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen Rabbit Pickup	1980 - 1983	X	-	Fac Adj.	Non Adj.	-	-	- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	132 136	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen Routan	2009 - 2014	X	Axis Cam Magna Cam Cam Bolt	41-214 41-157 ² 41-8249	Non Adj.	75 74 81	-	0.30 / - 0.30 0.30	Shim	46-1120A	46-1120A	127	-	0.60 / 0.60
Volkswagen Scirocco	1975 - 1988	X	- Magna Cam Wedge Kit	Fac Adj. 41-147 ³ 41-300	Non Adj.	74 76	- -	- / - 0.30 0.30	Shim	46-1000 SERIES ¹	46-1000 ¹ 46-2100 ¹	132	88-343	0.60 / 0.60 0.60
Volkswagen Scirocco	1975 - 1989	X	-	Non Adj.	Non Adj.	-	-	- / -	-	Fac Adj.	Fac Adj.	-	-	- / -
Volkswagen Tiguan	2009 - 2019	X	-	Non Adj.	Non Adj.	-	-	- / -	Cam Bolt	46-456	46-456	128	-	0.30 / 0.30
Volkswagen 4WD Touareg	2004 - 2014	X	-	Fac Adj.	Fac Adj.	-	-	- / -	-	Fac Adj.	Fac Adj.	-	-	- / -
Volkswagen Eurovan/Vanagon	1980 - 1991	X	-	Fac Adj.	Fac Adj.	-	-	- / -	-	Non Adj.	Fac Adj.	-	-	- / -

VOLVO

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.

See part number 46-2450A on page 141

2. For models with either slotted or unslotted strut brackets.

3. For models with slotted strut brackets only.

4. For models without slotted strut brackets.

5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.

7. Adjustable cam replaces factory locking plate.

8. For models without factory provided cam bolts

9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	T H R O U S T	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Volvo 240	1990 - 1993	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Volvo 740	1985 - 1992	X		-	Non Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Volvo 760	1983 - 1990	X		-	Non Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Volvo 850 FWD/AWD	1993 - 2002	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Volvo 940/960 w/Rear Multilink	1991 - 1994	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Volvo 940/960 w/o Multilink	1991 - 1995	X		-	Non Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Volvo 940/960 W/Mink Susp	1995	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Volvo C30	2008 - 2013	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	140		0.60 / -
Volvo C30	2008 - 2013	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	140		0.60 / -
Volvo C70	1998 - 2005	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Volvo C70	2006 - 2013	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	140		0.60 / -
Volvo C70	2006 - 2013	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	140		0.60 / -
Volvo S40/V40	2000 - 2004	X		- Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	74 75		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Volvo S40	2005 - 2011	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	140		0.60 / -
Volvo S40	2005 - 2011	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	140		0.60 / -
Volvo S60/AWD	2001 - 2007	X		- Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Volvo S60 W/Sport	2008 - 2009	X		- Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Volvo S60	2011 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Volvo S70	1998 - 2000	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Volvo S80	1999 - 2006	X		- Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Volvo S90	1997 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Volvo S90/V90	1998	X		- Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	74 75		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Volvo V50	2005 - 2011	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	140		0.60 / -
Volvo V50	2005 - 2011	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	140		0.60 / -
Volvo V60	2013 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Volvo V70	1998 - 2000	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Volvo V70	2001 - 2007	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	74 75		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Volvo V70	2008 - 2010	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Volvo V90	1997 - 1998	X		- Axis Cam	41-212	Non Adj.	75		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Volvo XC60	2010 - 2022	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Volvo XC70	2003 - 2007	X		- Axis Cam	41-214	Non Adj.	75		0.30 / -	-	Fac Adj.	Non Adj.	-		- / -
Volvo XC70	2008 - 2016	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Non Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

1. Caution: When installing rear shim on disc brake applications, if caliper does not move with rotor, binding may occur. If equipped with ABS check for proper clearances.
See part number 46-2450A on page 141
2. For models with either slotted or unslotted strut brackets.
3. For models with slotted strut brackets only.
4. For models without slotted strut brackets.
5. For models WITH or WITHOUT ABS brakes and 10 1/2" rotors

6. On 1987-91 GM models, aftermarket cams are required for camber/caster adjustment. On 1992 and newer models, cam bolts are factory installed.
7. Adjustable cam replaces factory locking plate.
8. For models without factory provided cam bolts
9. For truck models with rear camber

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O R O T A L	ADJ. METHOD	CAMBER PART #	CASTER PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL	ADJ. METHOD	CAMBER PART #	TOE PART #	PRO PAGE NO.	SPECIAL TOOL OR PRODUCT	EST. INSTALL HOURS PER WHEEL
Volvo XC90	2003 - 2014	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	75 74		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Volvo XC90	2016 - 2022	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
YUGO														
Yugo GV/GVL/GVS/GVX	1986 - 1992	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Yugo GV/GVL/GVS/GVX	1986 - 1992	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.

Note: When both "Factory Adjustable" and a product number appear in the same application, the factory provided adjustment is usually difficult to do and/or gives a limited amount of change.

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See part number 46-2450A on page 141
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8. For models without factory provided cam bolts
9. For truck models with rear camber

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CAMBER ADJUSTING “MAGNA CAM” BOLT KITS

The fast and easy alternative to adjust camber on vehicles utilizing standard 2-bolt (upper and lower) strut-to-knuckle mounting bolt design. This unique design incorporates an offset internal sleeve working in conjunction with a full-size, high-strength OE-diameter bolt (with matching internal offset), which allows camber to be increased or decreased by a simple turn of the bolt. Magna Cam allows the technician to accurately adjust camber with weight of vehicle on front wheels.

Adjustment Range: ±1.75°

Quantity: Pair

Sides Adjusted: 2



12mm 12.9 High-Strength Bolts

41-144 Aveo, Alero, Cutlass, Grand Am

41-146 Ford, Hyundai, Mazda

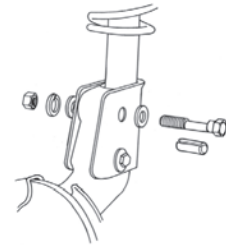
41-147 Chevrolet, Dodge, Ford, Hyundai, Isuzu, Mazda, Mercury, Mitsubishi, Nissan, Plymouth, Pontiac, Porsche, Saab, Subaru, Toyota, Volkswagen

15mm 10.9 High-Strength Bolts

41-149 Lexus, Toyota w/15mm strut mount bolts

17mm 10.9 High-Strength Bolts

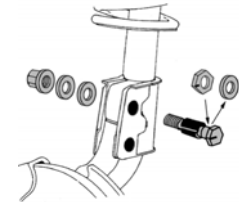
41-151 Lexus, Toyota



14mm 12.9 High-Strength Bolts

41-157 Chrysler, Dodge, Plymouth vans and mid-size vehicles

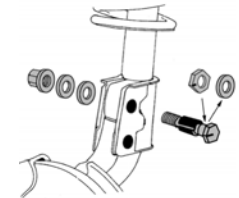
41-158 Buick, Chevrolet, Infiniti, Oldsmobile, Pontiac, Saturn, Subaru, Volvo



16mm 10.9 High-Strength Bolts

41-159

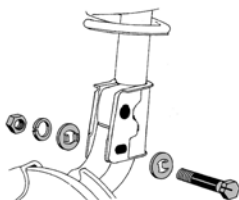
Chrysler, Mitsubishi, Honda, Acura



16mm 10.9 High-Strength Bolts

41-160 With adapter for slotted struts

Buick, Cadillac, Chevrolet, Chrysler, Dodge, Oldsmobile, Pontiac



41-140A

MAGNA CAM BOLT ASSORTMENT

Consists 2 each of the following :

41-147,41-149, 41-151, 41-157, 41-158, 41-160

AXIS^{CAM}

Camber Adjusting Cam Bolt System

- Makes non-adjustable vehicles fully adjustable for camber
- Unique design allows fast and easy “on-vehicle” adjustments
- Works with OE bolt system. No cutting, drilling or modifications of any kind
- Makes vehicle permanently adjustable for camber
- Bolt head marked + and - for easy orientation
- All sizes made from grade 12.9 high-strength steel



*Just 6 part numbers fit all vehicles with strut-to-knuckle mounting bolts



Part Number	Make/Model	Size
41-210	Fiat 500	10mm
41-212	Chevrolet, Ford, Saab, Toyota, Nissan Volvo, Cadillac, Hyundai, Isuzu	12mm
41-214	Acura, Dodge, Honda, Saturn, Toyota Infinity, Plymouth, Mitsubishi, Chrysler 200	14mm
41-215	Goe, Lexus, Toyota	15mm
41-216	Acura, Buick, Chevrolet, Honda, Lincoln, Mercury, Ford, Dodge, Pontiac	16mm <small>With adapter for slotted struts</small>
41-217	Lexus, Toyota	17mm
41-218	Acura, Honda	18mm



Adjustment Range: ±1.75°
Quantity: Pair
Sides Adjusted: 2

FRONT
WHEEL

See Application Guide, pages 8-72, for specific models and years

41-210A

AXIS CAM BOLT ASSORTMENT

Consists of the following :

41-212, 41-214 Quantity of 4

41-215, 41-217, 41-216 Quantity of 2



CAMBER/CASTER ADJUSTABLE BALL JOINTS

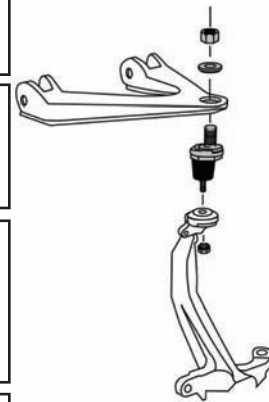


These ball joints provide a fast, easy and adjustable solution to the problem of non-adjustable front suspensions found on many of today's most popular vehicles.

- Unique design allows fast and easy "on-vehicle" adjustment
- Future adjustments are easily made
- Adjustable offset design means fewer part numbers per application.

See page 152 for adjusting wrench **#88-1304**

Part Number	Make/Model	Range
41-229 <i>Upper</i>	<i>Chrysler Cirrus and Sebring Convertible 1995-2010 2w/d</i>	$\pm 5^\circ$
41-230 <i>Upper</i>	<i>Dodge Stratus 1995-2006 Plymouth Breeze 1996-2000 Chrysler Sebring 1996-2010</i>	$\pm 1^\circ$
41-232 <i>Lower</i>	<i>Dodge Magnum 2WD 2005-2014 Dodge Charger 2WD 2009-2016 Dodge Challenger 2WD 2008-2016 Chrysler 300C 2WD 2004-2016</i>	$\pm 75^\circ$
41-236 <i>Upper</i>	<i>Ford Fusion 2006 -2012 Mazda 6 Sedan 2003-2014 Lincoln Zephyr/MKZ 2006-2012 Mercury Milan 2006-2010</i>	$\pm 1^\circ$



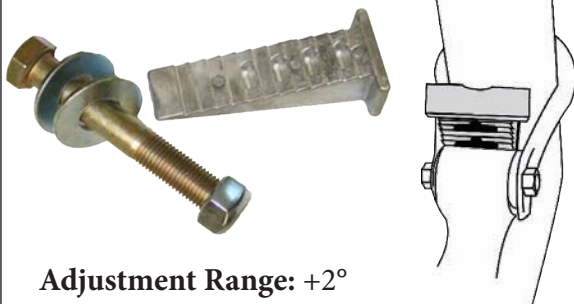
Quantity: Each Sides Adjusted: 1

FRONT WHEEL

41-300

FRONT CAMBER ADJUSTING WEDGE KIT

These kits are a real time-saver when additional camber is needed on vehicles with two bolt strut flange mounting.



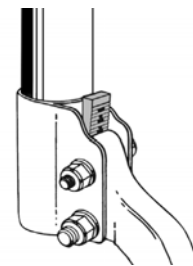
Adjustment Range: +2°
Quantity: Pair
Sides Adjusted: 2

41-301

Vehicles with 14mm strut-to-knuckle mounting bolts

41-305

Vehicles with 16mm strut-to-knuckle mounting bolts



41-312

Vehicles with 12mm strut-to-knuckle mounting bolts

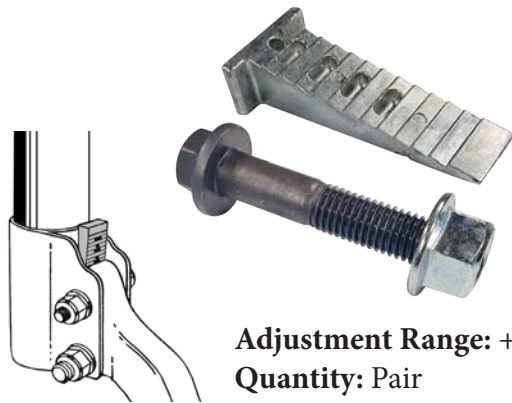
Adjustment Range: +2°
Quantity: Pair
Sides Adjusted: 2



41-307

**FORD MUSTANG FRONT CAMBER ADJUSTING WEDGE KIT
1979-2004**

There are many instances where the factory camber adjustment does not give enough positive camber change. This kit can be used by itself or with the factory adjustment.

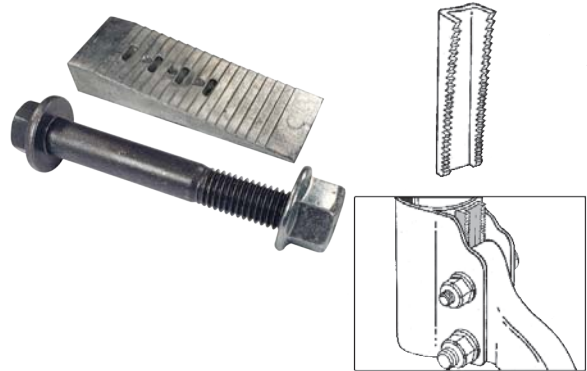


Adjustment Range: +1.5°
Quantity: Pair
Sides Adjusted: 2

41-308

FORD ESCAPE FRONT CAMBER ADJUSTING WEDGE KIT

Ford Escape 2001-2012
Mazda Tribute 2001-2011



Adjustment Range: +1.5°
Quantity: Pair
Sides Adjusted: 2

41-310

FORD/LINCOLN FRONT CAMBER ADJUSTING WEDGE KIT

Ford Fairmont 1978-1981
Ford Granada 1981-1982
Ford Thunderbird 1980-1988
Lincoln Continental 1982-1987
Lincoln Mark VII 1984-1992



Adjustment Range: +2°
Quantity: Pair
Sides Adjusted: 2

41-314

MUSTANG FRONT CAMBER ADJUSTING WEDGE KIT

FORD MUSTANG
2005-2014



Adjustment Range: +1.5°
Quantity: Kit
Sides Adjusted: 2

FRONT
WHEEL

41-325

FRONT CASTER ADJUSTING CAM BOLT

Ford Mustang 2005-2014

- Allows caster adjustment for non-adjustable OEM design
- No modification necessary
- Quick and easy replacement of OE bolts



Adjustment Range: $\pm 5^\circ$ Caster
Quantity: Pair
Sides Adjusted: 2

41-326

FRONT CAMBER/CASTER ADJUSTING CAM BOLT KIT

Ford Mustang 2005-2014

- Allows camber and/or caster adjustment for non-adjustable OEM design
- Quick and easy replacement of OE bolts
- Combination of two 41-325 cam bolts and two 14mm "Axis-Cam" cam bolts



Adjustment Range: $\pm 1.5^\circ$ Camber, $\pm 5^\circ$ Caster
Quantity: Kit
Sides Adjusted: 2

FRONT
WHEEL

FRONT CAMBER/CASTER ADJUSTABLE UPPER BALL JOINT

These ball joints provide a fast, easy and adjustable solution to the problem of non-adjustable front suspensions found on many of today's most popular vehicles.

- Unique design allows fast and easy "on-vehicle" adjustment
- Future adjustments are easily made
- Adjustable offset design means fewer part numbers per application.
- Greaseable Design

See page 152 for adjusting wrench **#88-1304**

41-530

Honda/Acura Many Models, See application guide, pages 8-72 for specific vehicles

41-532

Mitsubishi Eclipse (FWD,AWD), Galant, Chrysler Sebring Coupe, Hyundai Sonata, Dodge Avenger (FWD,AWD), Eagle Talon (FWD,AWD)

41-550



Adjustment Range: $\pm 1^\circ$
Quantity: Each
Sides Adjusted: 1

NEW

41-541

FRONT GREASEABLE CAMBER ADJUSTABLE LOWER BALL JOINT

These ball joints provide a fast, easy and adjustable solution to the problem of non-adjustable front suspensions found on many of today's most popular vehicles.

- Unique design allows fast and easy "on-vehicle" adjustment
- Future adjustments are easily made
- Adjustable offset design means fewer part numbers per application.
- Greaseable design

Patent no. 10,994,580



Honda Accord 2018-2022

Honda Civic 2016-2023

Honda CR-V 2WD/4WD/Touring 2017-2022

Adjustment Range: $+1^\circ$ ($+0.5^\circ$ for CR-V)
Quantity: Each
Sides Adjusted: 1

41-545

FRONT ADJUSTABLE CAMBER CONTROL ARM MOUNTS WITH RUBBER BUSHING

<i>Acura:</i>	<i>Honda:</i>
<i>Integra</i> 1990-2001	<i>Accord</i> 1990-1997
<i>Vigor</i> 1992-1994	<i>Civic</i> 1980-1990
<i>CL</i> 1997-1999	<i>CRX</i> 1988-1991
<i>RL</i> 1996-2008	<i>Del Sol</i> 1993-1997
<i>TL</i> 1995-1998	<i>Prelude</i> 1992-1996
	<i>Odyssey</i> 1995-1998



Adjustment Range: +1.75°
Quantity: Pair
Sides Adjusted: 1

MAGNA CAM DOUBLE ECCENTRIC BOLT McPHEARSON STRUT SUSPENSION

The perfect solution for lowered vehicles with extreme camber correction needs.

Fast: Simply replace **BOTH** strut mounting bolts with Magna Cams and adjust

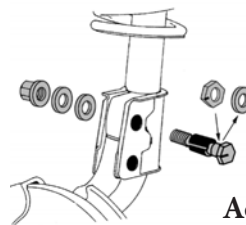
Easy: No cutting, drilling or modifications of any kind

Economical: Easy installation saves time and money

Accurate: Camber can be adjusted to exact specifications (while weight is on front wheels) with the turn of a wrench

Versatile: Fits either right or left side, front or rear of vehicles

41-1450	12mm	41-1510	17mm
41-1460	12mm	41-1570	14mm
41-1470	12mm	41-1580	14mm
41-1490	15mm	41-1590	16mm



Adjustment Range: ±2.5°
Quantity: Kit
Sides Adjusted: 2

XTRARANGE

41-2001

**FRONT "LH" MODEL REPLACEMENT SLEEVE
 DODGE/CHRYSLER 1998-2004**

This adjustable sleeve is designed to replace the knurled adjusting sleeve, and can be adjusted with a hex wrench. The sleeve is recommended when the existing sleeve has been damaged or if the tie rod end is being replaced, so adjustments can be made more easily.



Quantity: Each
Sides Adjusted: 1

FRONT
WHEEL

41-4607

**FRONT CAMBER
ADJUSTABLE
CORRECTION KIT**

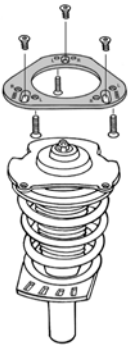
Taurus/Sable 1996-2006

41-4609

*Ford Windstar 1995-2003
Ford Freestar 2004-2007
Mercury Monterey 2004-2007*



US Patent # 6,257,601



This kit allows accurate adjustments in .25° increments, installs in just minutes, is adjustable for future alignments, helps restore original ride height, and can be used on either side of vehicle.

Adjustment Range: +1°
Quantity: Kit
Sides Adjusted: 2

41-4611

**FRONT CAMBER
ADJUSTABLE
CORRECTION KIT**

*Ford Focus 2000-2011
Ford Transit Connect 2010-2014*

US Patent # 6,257,601



- Accurate adjustment in .25° increments — no guesswork
- Installs in minutes
- Adjustable for future alignments

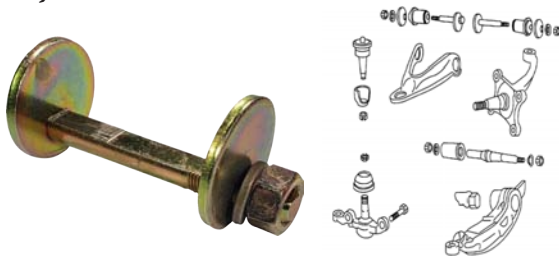
Adjustment Range: +1°
Quantity: Kit
Sides Adjusted: 2

41-8243

FRONT CAMBER ADJUSTING CAM BOLT

CHRYSLER/FORD

*Chevrolet Corvette 1963-1982
Dodge B100/200/300/500 1979-1983
Dodge Dart 1965-1976
Dodge Ramcharger 1977-1993
Ford Granada 1975-1980
Lincoln Versailles 1977-1980
Plymouth Trailduster 1977-1981*

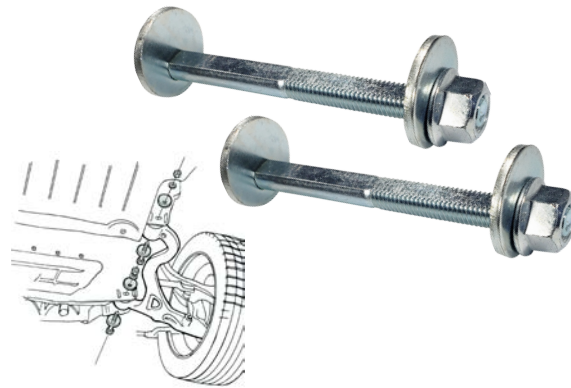


Adjustment Range: ±2.5°
Quantity: Pair
Sides Adjusted: 1

41-8244

FRONT CAMBER ADJUSTING CAM BOLT KIT

*Ford Thunderbird 2002-2005
Jaguar S 2000-2008
Lincoln LS 2000-2006*



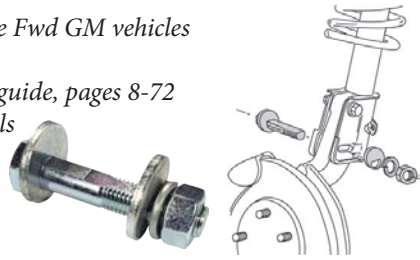
Adjustment Range: ±1.5° Camber ±2° Caster
Quantity: Kit
Sides Adjusted: 2

41-8245

**FRONT CAMBER
ADJUSTING CAM BOLT**

Mid-size Buick, Chevrolet, Oldsmobile, Pontiac

*Various mid size Fwd GM vehicles
1980's - 1990's
See application guide, pages 8-72
for specific models
and years*



41-8246

**FRONT CAMBER
ADJUSTING CAM BOLT**

*GM S-10 and S-15 Pickup, Jimmy and Blazer
1983-2004*



Sides Adjusted: 1

41-8247

**FRONT CAMBER
ADJUSTING CAM BOLT**

Riviera, Toronado, Eldorado and Seville

E body Fwd models



**Adjustment Range: $\pm 2.25^\circ$
Quantity: Pair
Sides Adjusted: 2**

41-8249

**FRONT CAMBER
ADJUSTING CAM BOLT**

*Dodge Caravan 1984-2016
Chrysler Town and Country 1990-2014
Various Chrysler models 1984 and Newer fwd
(except 1978-1990 Omni and Horizon)*

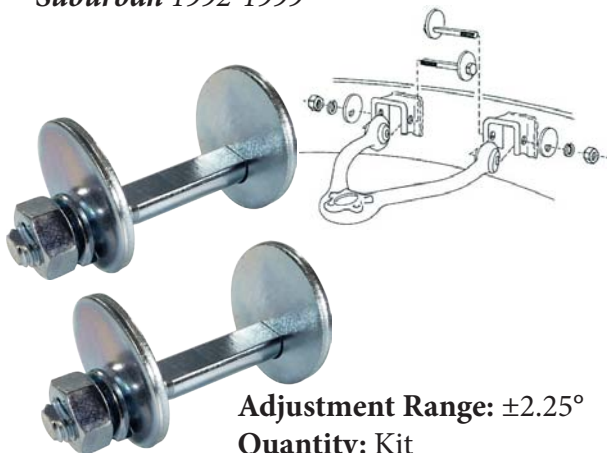


**Adjustment Range: $\pm 2.25^\circ$
Quantity: Pair
Sides Adjusted: 2**

41-8250

**FRONT CAMBER/CASTER CAM
BOLT KIT**

*Chevrolet and GMC 1/2,3/4, 1 ton
4WD and 2WD Pick-Ups 1988-2000
Suburban 1992-1999*



**Adjustment Range: $\pm 2.25^\circ$
Quantity: Kit
Sides Adjusted: 2**

Available in GREASEABLE 41-8272

41-8251

**FRONT CAMBER/CASTER CAM
BOLT KIT**

GM replacement bolt kit with Quick Cams is a direct replacement and will restore the factory adjustment. On many models this kit will greatly improve accessibility for easy adjustment.

*Chevrolet Tahoe 1999-2016
Chevrolet Express Van 2003-2022
Chevrolet Silverado 1999-2016
Chevrolet Suburban 1500 1999-2016
GMC Sierra 1999-2017
Youkon XL 2WD 1999-2017
Hummer H2 2003-2009*



**Adjustment Range: $\pm 1.5^\circ$
Quantity: Kit
Sides Adjusted: 2**

Available in GREASEABLE 41-8262

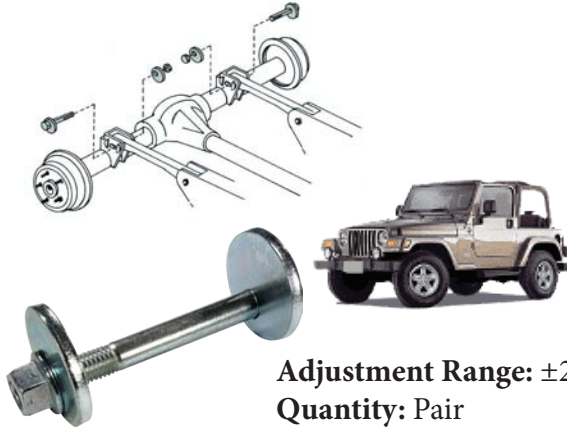
FRONT
WHEEL

41-8255

REAR DIFFERENTIAL CAM BOLT

- Accurately adjusts and maintains proper drive line angle
- Required for vehicles where lift kits have been installed

Jeep Wrangler TJ 1997-2006



Adjustment Range: $\pm 2^\circ$
Quantity: Pair
Sides Adjusted: 2

41-8256

FRONT CASTER/PINION CAM BOLT

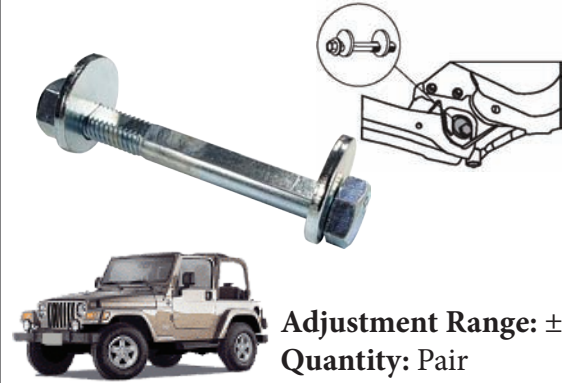
Makes vehicle fully adjustable for caster and pinion angle.

Jeep:

Wrangler TJs 1997-2006

Grand Cherokee 1993-1998

Ram Trucks (36mm cams) 1994-1998



Adjustment Range: $\pm 3^\circ$
Quantity: Pair
Sides Adjusted: 2

41-8257

REAR PINION AND FRONT CASTER AND PINION ANGLE CAM BOLT

Jeep Wrangler JK 2007-2018

Buick Enclave 2008-2017

Chevrolet Traverse 2009-2017

GMC Acadia 2wd/4wd 2007-2016

Saturn Outlook 2007-2010



41-8258

GREASEABLE CASTER/PINION ANGLE BOLT

- Must have for lifted vehicles
- Pro-Series Greaseable for long service life

Jeep Wrangler JL 2018-2022

Jeep Gladiator 2020-2022



Adjustment Range: $\pm 3^\circ$
Quantity: Pair
Sides Adjusted: 2

41-8259

FRONT CAMBER/CASTER CAM BOLT

Replaces original OE inner bolt on lower control arm.

Chrysler 300C 2004-2019 (RWD)

Dodge Challenger 2008-2022 (RWD)

Dodge Charger 2006-2022 (RWD)



41-8260

Chrysler 300C 2005-2019 (AWD)

Dodge Charger 2006-2022 (AWD)

Dodge Magnum 2005-2008 (AWD)

Dodge Challenger 2017-2022 (AWD)



Adjustment Range: $\pm .3^\circ$
Quantity: Each
Sides Adjusted: 1

Also Available: **41-8259-2 & 41-8260-2** Set of 2, adjusts both sides

FRONT
WHEEL

41-8262

FRONT GREASEABLE CAMBER/CASTER CAM BOLT KIT

- GM Greaseable replacement bolt kit with Quick Cams is a direct replacement and will restore the factory adjustment.
- On many models this kit will greatly improve accessibility for easy adjustment
- Greaseable allowing for ease of future adjustment

Chevrolet Tahoe 2000-2020
Chevrolet Express Van 2003-2022
Chevrolet Silverado 1500 1999-2016
Chevrolet Silverado 2500/3500 1999-2010
Chevrolet Suburban 1500 2000-2016
GMC Envoy 2003-2009
GMC Sierra 1500 1999-2016
GMC Sierra 2500/3500 1999-2010
Youkon XL 2WD 2000-2016
Hummer H2 2003-2009



Adjustment Range: $\pm 1.5^\circ$
Quantity: Kit
Sides Adjusted: 2

41-8264

FRONT CAMBER/CASTER CAM BOLT

- Makes non adjustable vehicles adjustable
- Replaces original OE inner bolt on lower control arm
- Sold per pair (Bolt & hardware for both sides of vehicle)

Mercedes
C-Class W204 2008-2022
CL-Class C216 2007-2014
CLK-Class C209 2003-2009
CLS-Class C218 2011-2018
E-Class W211 2003-2009
GLK-Class X204 2010-2016
S-Class W220 2000-2006
SLK-Class R172 2012-2016



Adjustment Range: $\pm 0.3^\circ$
Quantity: Pair
Sides Adjusted: Both sides adjusted either for Camber or Caster. To Adjust both Camber and Caster, two kits need to be ordered for both sides.

41-8265

FRONT CAMBER/CASTER CAM BOLT

- Makes non adjustable vehicles adjustable
- Replaces original OE inner bolt on lower control arm
- Sold per pair (Bolt & hardware for both sides of vehicle)

Mercedes
C-Class W202/S202 1994-2000
CL-Class C215 2000-2006
CLK-Class C208 1998-2002
CLK-Class AZ08 Cabriolet 2003
SLK-Class R170 1997-2004



Adjustment Range: $\pm 0.3^\circ$
Quantity: Pair
Sides Adjusted: Both sides adjusted either for Camber or Caster. To Adjust both Camber and Caster, two kits need to be ordered for both sides.

FRONT WHEEL

41-8267

FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- Provides camber and caster on vehicles with frozen OE bolts
- Included is one camber bolt and one caster bolt
- **Greaseable** Design

Mazda Miata MX5 2006-2015



Adjustment Range: $\pm 1.0^\circ$

Quantity: Kit

Sides Adjusted: 2

41-8268

FRONT **GREASEABLE** CAMBER CAM BOLT

- **Greaseable** replacement bolt kit is a direct replacement and will restore the factory adjustment
- **Greaseable** allowing for ease of future adjustment and will prevent corrosion and rust
- Will remain adjustable for the life of the vehicle

Dodge Sprinter 2500 2007-2009

Freightliner 2500,3500 2007-2018

Mercedes-Benz 2500 Sprinter 2010-2018

Mercedes-Benz 3500 Sprinter 2010-2018

Mercedes-Benz 2500 Sprinter RWD 2019-2022

Mercedes-Benz 3500 Sprinter RWD 2019-2022



Adjustment Range: $\pm 3^\circ$

Quantity: Pair

Sides Adjusted: 2

41-8269

FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- **Greaseable** replacement bolt kit is a direct replacement and will restore the factory adjustment
- **Greaseable** allowing for ease of future adjustment and will prevent corrosion and rust
- Will remain adjustable for the life of the vehicle

Nissan NV Van 2012-2021

Nissan Titan 2WD/4WD 2017-2022

Nissan Titan XD 2016-2022



Adjustment Range: $\pm 1.5^\circ$

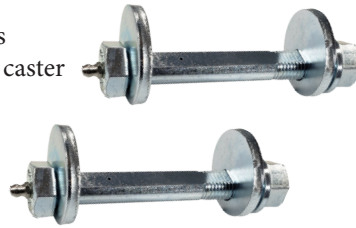
Quantity: Kit

Sides Adjusted: 2

41-8272

FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- **Greaseable** design alleviates bolt corrosion and allows for ease of future adjustments
- Works with OEM Cam Guide
- Allows for fast and easy on-vehicle adjustments
- Makes vehicles fully adjustable for camber and caster



Cadillac Escalade 1999-2000
Chevrolet Astro 4WD 1990-2003
Chevrolet Tahoe 4WD 1995-2000
GMC Safari 4WD 1990-2005

Adjustment Range: $\pm 2.25^\circ$
 Quantity: Kit
 Sides Adjusted: 2

41-8273

FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- **Greaseable** Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely



Dodge Nitro 2007-2012
Jeep Liberty 2002-2013

Adjustment Range: $\pm 1.5^\circ$
 Quantity: Kit
 Sides Adjusted: 2

41-8321L (LEFT SIDE)

41-8321R (RIGHT SIDE)

FRONT UPPER CONTROL ARM WITH ADJUSTABLE CAMBER/CASTER BALL JOINTS

- Quick and easy replacement of OE control arm
- **Greaseable** ball joint design for extended durability
- Adjustable ball joint allows for continuous future adjustments
- OE style Control Arm



Chrysler 300C 2004-2008
Dodge Challenger 2008
Dodge Charger 2006-2008
Dodge Magnum 2005-2008
 2 W/D ONLY

Adjustment Range: $\pm 3^\circ$ Camber, $\pm 1.5^\circ$ Caster
 Quantity: Each
 Sides Adjusted: 1

FRONT
WHEEL

41-8322L (LEFT SIDE)

41-8322R (RIGHT SIDE)

FRONT UPPER CONTROL ARM WITH ADJUSTABLE CAMBER/CASTER BALL JOINTS

- Quick and easy replacement of OE control arm
- **Greaseable** ball joint design for extended durability
- Adjustable ball joint allows for continuous future adjustments
- OE style Control Arm

Chrysler 300 2wd 2009-2019
Dodge Challenger 2wd 2009-2022
Dodge Charger 2wd 2009-2022



Adjustment Range: $\pm 3^\circ$ Camber, $\pm 1.5^\circ$ Caster
Quantity: Each
Sides Adjusted: 1

NEW

41-8326 FRONT CAMBER/CASTER UPPER CONTROL ARMS

- Direct bolt-on fit
- Adjustable, replaces nonadjustable OE control arms
- OE style bushings
- Made of high strength aluminum
- **Greaseable** Design
- Includes Pinch Bolt

Audi
A4, RS4, S4, A5, S5, Q5 2009-2016
A7, S7 2012-2021
SQ5 2013-2019



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 1

Pinch bolt also available separately **41-8326-3**

41-8329L (LEFT SIDE)

41-8329R (RIGHT SIDE)

FRONT UPPER CONTROL ARM WITH ADJUSTABLE CAMBER/CASTER BALL JOINTS

- Quick and easy replacement of OE control arm
- Greaseable ball joint design for extended durability
- Adjustable ball joint allows for continuous future adjustments
- OE style Control Arm

Chrysler 300 AWD 2005-2019
Dodge Charger AWD 2006-2022

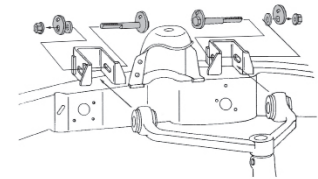


Adjustment Range: $\pm 3^\circ$ Camber, $\pm 1.5^\circ$ Caster
Quantity: Each
Sides Adjusted: 1

42-777 FRONT CAMBER/CASTER ADJUSTING QUICK-CAMS

Quick-Cams allow adjustment of CAMBER/CASTER in just minutes. Works with OE bolts, cutting installation time by 75% when compared to cam bolt kits! Quick adjustment feature allows fast, easy and exact settings

Ford F150 SuperCrew® 4WD 1997-1998
Expedition 1997-1998
Lincoln Navigator 1997-1998
Ford F150/F250 2WD/4WD 1997-1998

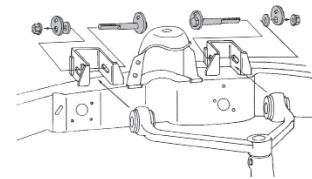
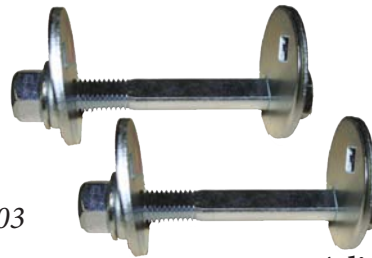


Adjustment Range: ±2.5°
Quantity: Pair
Sides Adjusted: 1

42-778 FRONT CAMBER/CASTER CAM BOLT

Replaces factory non-adjustable system

Ford F150 SuperCrew® 4WD 1997-2003
Expedition 1997-2002
Lincoln Navigator 1997-2002
Ford F150/F250 2WD/4WD 1997-2003
Lincoln Blackwood 2WD/4WD 2002-2003



Also available: **42-778-4** Set of 4, adjusts both sides

Available in GREASEABLE 42-781

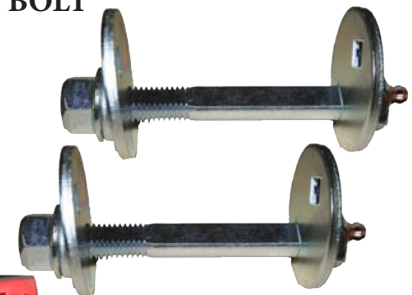
Adjustment Range: ±2.5°
Quantity: Pair
Sides Adjusted: 1

NEW

42-781 FRONT GREASEABLE CAMBER/CASTER CAM BOLT

- Replaces factory non-adjustable system
- **Greaseable** to ensure anti-siezure longevity

Ford F150 SuperCrew® 4WD 2001-2003
Lincoln Navigator 2nd design 2WD/4WD 1998-2002
Ford F150/F250 2nd design 2WD/4WD 1997-2003
Lincoln Blackwood 2WD/4WD 2002-2003



Also available: **42-781-4** Set of 4, adjusts both sides

Adjustment Range: ±2.5°
Quantity: Pair
Sides Adjusted: 1

LIGHT TRUCK

42-950 Series FRONT CAMBER/CASTER ADJUSTMENT BUSHINGS

Adjust Camber/Caster or a combination of both with these easy-to-install “Hex-Head” bushings

NOTE: Not intended for use on E250/350 models with modified chassis/suspension

- Ford Bronco II 2WD* 1989-1990
- Ford Bronco II 4WD* 1990
- Ford E150/E250 2WD* 1992-2015
- Ford E350/E450 2WD* 1992-2022
- Ford Excursion 2WD* 2000-2005
- Ford Explorer 2WD/4WD* 1991-1994
- Ford F150 2WD* 1987-1996
- Ford F250/F350 2WD* 1987-1998
- Ford F250/F350/F450/F550 Super Duty (TIB) 2WD* 1997-2022
- Ford Ranger 2WD* 1989-1991
- Ford Ranger 2WD/4WD* 1990-1997
- Mazda B Series P/U 2WD/4WD* 1994-1997
- Mazda Navajo 2WD/4WD* 1991-1994

Adjustment Range:

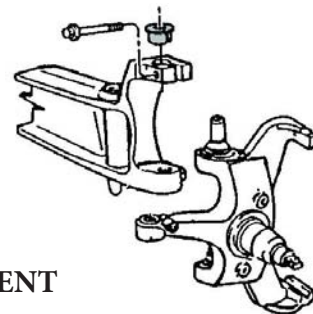
	2WD	4WD
42-949	0°	0°
42-951	.25°	.25°
42-952	.5°	3/8°
42-953	.75°	.5°
42-954	1°	.75°
42-955	1.25°	7/8°
42-956	1.5°	1.0°
42-957	1.75°	1.25°
42-958	2°	1.5°
42-959	2.25°	1.75°
42-960	2.5°	2°



XTRARANGE For positive change only on 2WD applications. On 4WD applications, be sure to check for clearance when installed in negative position

42-961	2.75°	2.25°
42-962	3°	2.5°
42-963	3.25°	2.75°
42-964	3.5°	3°

Package Quantity: 1 per package
Sides Adjusted: 1



42-950A

CAMBER/CASTER ADJUSTMENT BUSHING ASSORTMENT

Contains 2 each size bushing **42-949** through **42-960**

LIGHT TRUCK

“SUPERLOK” CAMBER/CASTER ALIGNMENT BUSHING RETENTION SYSTEM

Adjustment Range

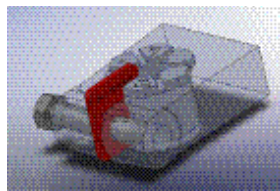
- 42-970 0°
- 42-972 1/2°
- 42-974 1°
- 42-976 1.5°
- 42-978 2°
- 42-980 2.5°
- 42-982 3°

New alignment bushing with indexing slots and locking plate to prevent movement or loss of unsecured “pinchbolt” alignment bushing on **modified commercial chassis and recreational/commercial applications**

US Patent # 8,075,005BI



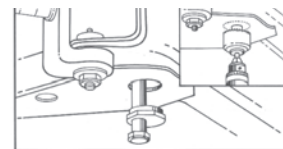
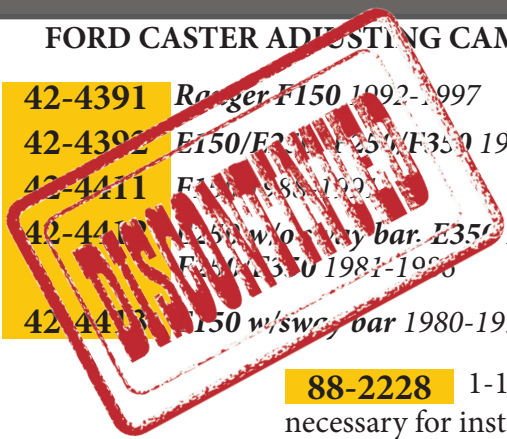
Ford E150/E250/E350/E450 2WD 1992-2019



Package Quantity: 1 per package
Sides Adjusted: 1

FORD CASTER ADJUSTING CAMS

- 42-4391 *Ranger F150 1992-1997*
- 42-4392 *E150/E250/E350/E450 1992-1997*
- 42-4411 *F150 1988-1992*
- 42-4412 *E250 w/o sway bar E350 1980-1991*
- 42-4413 *F150 1981-1989*
- 42-4413 *F150 w/sway bar 1980-1991*



88-2228 1-1/4” drill bit is necessary for installation

Adjustment Range: ±4°
Quantity: Pair
Sides Adjusted: 2

HEAVY TRUCK

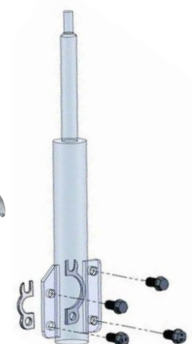
42-4431

FRONT SPRINTER VAN CAMBER SHIM KIT

Makes non-adjustable vehicles fully adjustable for camber

42-4434

- Dodge Sprinter 2003-2006*
- Freightliner Sprinter 2002-2006*
- Mercedes-Benz Sprinter 2004-2006*



Adjustment Range: +1°(42-4431),+2°(42-4434)
Quantity: Kit
Sides Adjusted: 1

43-320A HEAVY TRUCK TANDEM SHIM ASSORTMENT

Freightliner, IHC, Kenworth, Peterbilt, Volvo White and Hendrickson Walking Beam

Assortment includes 6 each size of all H.D. Tandem shim
2 each size Kenworth spacers
Heavy-duty metal storage case



TANDEM ALIGNMENT SHIMS

- 43-408 1/32"
- 43-409 1/16"
- 43-410 1/8"



Wilson Tandem Shim for Hydrins Suspension
12 pieces per package

TANDEM ALIGNMENT SHIMS

- 43-411 1/32"
- 43-412 1/16"
- 43-413 1/8"



Peterbilt air leaf adjustment shim
12 pieces per package

TANDEM ALIGNMENT SHIMS

- 43-415 1/32"
- 43-416 1/16"
- 43-417 1/8"



Freightliner single slot adjustment shim: 1990 and newer
12 pieces per package

FREIGHTLINER DOUBLE SLOT ADJUSTMENT SHIMS

- 43-421 1/32"
- 43-422 1/16"
- 43-423 1/8"



12 pieces per package

FREIGHTLINER AIR GLIDE ADJUSTMENT SHIMS

- 43-425 1/32"
- 43-426 1/16"
- 43-427 1/8"



12 pieces per package

VOLVO/WHITE ADJUSTMENT SHIMS

- 43-431 1/32"
- 43-432 1/16"
- 43-433 1/8"



12 pieces per package

HEAVY TRUCK

IHC TORQUE ARM ADJUSTMENT SHIM

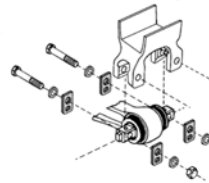
- 43-441 1/32"
- 43-442 1/16"
- 43-443 1/8"



12 pieces per package

HENDRICKSON ADJUSTABLE WALKING BEAM SHIM KIT

43-447



Includes (2) 5-Piece kits.
Each kit contains 2 of 1/8", 1 of 1/16", 2 of 1-32"

- 43-548 1/32"
- 43-549 1/16"
- 43-550 1/8"
- 43-551 1/4"
- 43-552 1/2"
- 43-553 3/4"
- 43-554 1"

TANDEM ALIGNMENT SHIMS

Kenworth air glide 8-Bagger adjustment spacers



6 pieces per package

FREIGHTLINER TORQUE ARM SHIMS

- 43-621 1/32"
- 43-622 1/16"
- 43-623 1/8"



12 pieces per package

PETERBILT/KENWORTH TANDEM AXLE SHIMS

- 43-641 1/32"
- 43-642 1/16"
- 43-643 1/8"



12 pieces per package

PETERBILT/KENWORTH LOW AIR SHIMS

- 43-645 1/32"
- 43-646 1/16"
- 43-647 1/8"



12 pieces per package

INTERNATIONAL TORQUE ARM SHIMS

- 43-651 1/32"
- 43-652 1/16"
- 43-653 1/8"



12 pieces per package

HEAVY TRUCK

HENDRICKSON (HTB) TORQUE ARM SHIM

- 43-661** 1/32" *International and*
- 43-662** 1/16" *Spartan HTB-400*
- 43-663** 1/8" *Suspension:*
For 2007 and up



12 pieces per package

HENDRICKSON (HTB) TRACK BOX SHIM KIT

- 43-674** *International and*
Spartan HTB-400
Suspension:
For 2007 and up

Package of 5 shims
Including:
Thickness Qty
1/32" 2
1/16" 1
1/8" 2



43-680A

HENDRICKSON (HTB) TRACK BOX SHIM STARTER KIT

Kit services 6 or more Axles, 3 or more trucks.

Includes all of the following shims (shown below)

International and Spartan
HTB-400 Suspension:
For 2007 and up

	Thickness	Qty
43-661	1/32"	12 pieces
43-662	1/16"	12 pieces
43-663	1/8"	12 pieces
43-674	n/a	6 kits



HEAVY TRUCK

VANHOOL SHIM LOWER CONTROL ARM & BOGEL AXLE

- 43-701** 1/32"
- 43-702** 1/16"
- 43-703** 1/8"



Slot length: .95"
Slot width: .63"

12 pieces per package

VANHOOL SHIM UPPER CONTROL ARM & BOGEL AXLE

- 43-707** 1/32"
- 43-708** 1/16"
- 43-709** 1/8"



Slot length: 1"
Slot width: .75"

12 pieces per package

PREVOST CASTER SHIMS

- 43-711** 1/32"
- 43-712** 1/16"
- 43-713** 1/8"

Slot length: 4.125"
Slot width: 1.25"



12 pieces per package

**PREVOST H & XL SERIES
STEER AXLES CASTER SHIMS**

- 43-715** 1/32"
- 43-716** 1/16"
- 43-717** 1/8"

Slot length: 1.25"
Slot width: .823"



12 pieces per package

**PREVOST H & XL SERIES DRIVE AXLE THRUST
LINE SHIM & BOGEY AXLE SCRUB ANGLE SHIM**

- 43-721** 1/32"
- 43-722** 1/16"
- 43-723** 1/8"

Slot length: 4.5"
Slot width: 1.06"

12 pieces per package



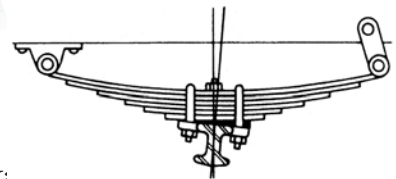
43-950 Series "UNI-WEDGE" 3-IN-1 HEAVY-DUTY ZINC ALLOY CASTER WEDGE

Unique "Break-off" feature allows shim to cover spring width of 3", 3-1/2" and 4"

- 43-951** .5°
- 43-952** 1°
- 43-953** 1.5°
- 43-954** 2°
- 43-955** 2.5°
- 43-956** 3°
- 43-957** 3.5°
- 43-958** 4°



Length 5-3/4"



6 pieces per pack

HEAVY TRUCK

MANGANESE BRONZE TRUCK
CASTER WEDGES

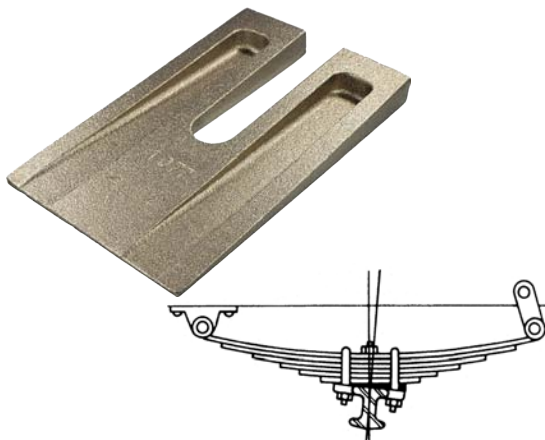
- 6 per package
- Will not break or compress
- Extremely accurate
- Clearly stamped for easy identification
- End-to-end fully 1/16" thicker than competitive products

Width 2 1/2" Length 5"

43-1040	.5°
43-1041	1°
43-1042	1.5°
43-1043	2°
43-1044	2.5°
43-1045	3°
43-1046	3.5°
43-1047	4°

Width 3" Length 6"

43-1050	.5°
43-1051	1°
43-1052	1.5°
43-1053	2°
43-1054	2.5°
43-1055	3°
43-1056	3.5°
43-1057	4°



Width 3 1/2" Length 6 1/4"

43-1060	.5°
43-1061	1°
43-1062	1.5°
43-1063	2°
43-1064	2.5°
43-1065	3°
43-1066	3.5°
43-1067	4°

Width 4" Length 6 1/2"

43-1070	.5°
43-1071	1°
43-1072	1.5°
43-1073	2°
43-1074	2.5°
43-1075	3°
43-1076	3.5°
43-1077	4°

ZINC DIE CAST TRUCK CASTER WEDGE

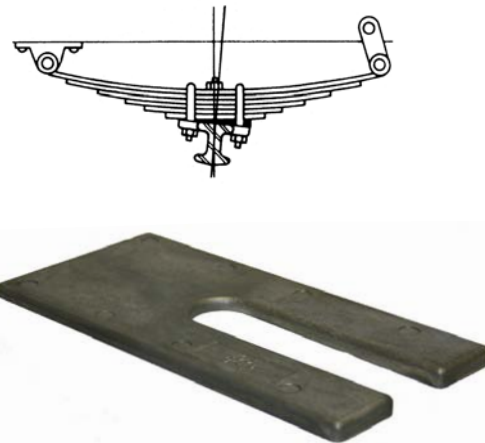
- Accurate and Economical
- 6 per package

Width 3" Length 6"

43-2050	.5°
43-2051	1°
43-2052	1.5°
43-2053	2°
43-2054	2.5°
43-2055	3°
43-2056	3.5°
43-2057	4°

Width 3 1/2" Length 6 1/4"

43-2060	.5°
43-2061	1°
43-2062	1.5°
43-2063	2°
43-2064	2.5°
43-2065	3°
43-2066	3.5°
43-2067	4°



Width 4" Length 6 1/2"

43-2070	.5°
41-2071	1°
43-2072	1.5°
43-2073	2°
43-2074	2.5°
43-2075	3°
43-2076	3.5°
43-2077	4°

LIGHT
TRUCK

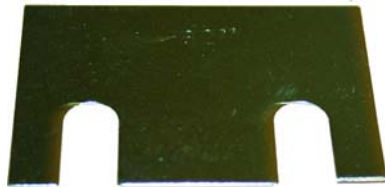
44-240 Series

CASTER SHIMS

Provides positive caster changes on early model downsize Jeeps. Installed between lower control arm and frame bracket.

Jeep Cherokee 1984-2001
Jeep comanche 1986-1994

- 44-240** 1/32"
- 44-241** 1/16"
- 44-242** 1/8"



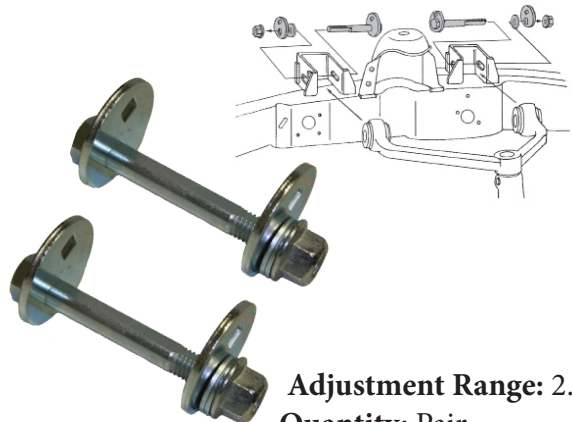
Quantity: 6 Per Package

44-766

FRONT CAMBER/CASTER CAM BOLT

For certain models where the **44-768** cam diameter is too large (varies by manufacturing facility).

Ford Explorer Sport Trac 4WD 2001-2005
Ford Ranger 2WD/4WD 1998-2012



Adjustment Range: 2.5°
Quantity: Pair
Sides Adjusted: 1

44-767

FRONT CAMBER/CASTER "QUICK CAMS"

Allows adjustment of camber/caster in just minutes. Works with OE bolts - cutting installation time by 75% when compared to cam bolt kits! Quick adjustment feature allows fast, easy and exact settings.



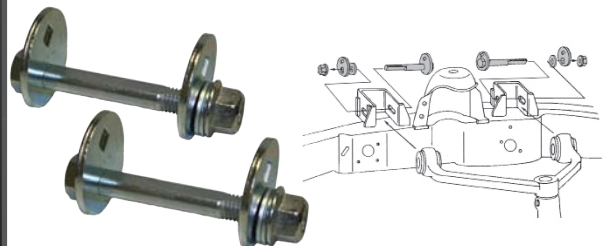
Ford Explorer 2WD 1995-2001
Ford Explorer Sport Trac 4WD 2001-2005
Ford Explorer/Explorer Sport 4WD 1995-2001
Ford Ranger 2WD/4WD 1998-2012
Mazda B Series P/U 2WD/4WD 1998-2009
Mercury Mountaineer 2WD/4WD 1997-2001

Adjustment Range: 2.5°
Quantity: Pair
Sides Adjusted: 1

44-768

FRONT CAMBER/CASTER CAM BOLT

Ford Explorer Sport Trac 4WD 2001-2005
Ford Explorer/Explorer Sport 4WD 1995-2001
Ford Explorer 2WD 1995-2001
Ford Ranger 2WD/4WD 1998-2012
Mazda B Series P/U 2WD/4WD 1998-2009
Mercury Mountaineer 2WD/4WD 1997-2001



Also available : **44-768-4**
 Set of 4, adjusts both sides

Adjustment Range: ±3.25°
Quantity: Pair
Sides Adjusted: 1

Available in GREASEABLE 44-836

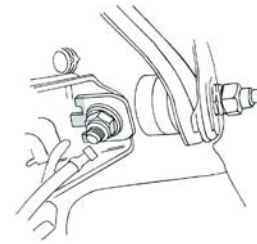
LIGHT TRUCK

44-769 FRONT AND REAR CAMBER/CASTER ALIGNMENT WASHERS

This heavy-duty washer is designed to replace the factory locking plate to allow easy camber/caster adjustments.

Ford Explorer 2WD/4WD 2002-2005
Lincoln Aviator 2003-2005
Mercury Mountaineer 2WD/4WD 2002-2005

Also available :
44-769-24 Set of 24



Adjustment Range: Front Camber $\pm 0.75^\circ$
 Front Caster $\pm 1.25^\circ$
 Rear Camber $\pm 0.5^\circ$

Quantity: Kit

44-771 FRONT CAMBER/CASTER ADJUSTMENT CAM KIT

This product replaces the OE upper control arm alignment washers and will allow full adjustment of camber and caster

Ford Explorer 2WD/4WD 2002-2005
Lincoln Aviator 2003-2005
Mercury Mountaineer 2WD/4WD 2002-2005



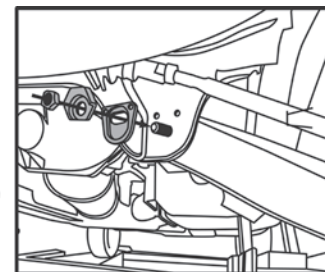
Adjustment Range: Camber $\pm 0.75^\circ$
 Caster $\pm 1.25^\circ$

Quantity: Kit
Sides Adjusted: 2

44-773 REAR CAMBER ADJUSTMENT CAM KIT

This kit replaces the OE washers on the lower control arm and allows full adjustment of camber.

Ford Explorer 2WD/4WD 2002-2005
Lincoln Aviator 2003-2005
Mercury Mountaineer 2WD/4WD 2002-2005



Adjustment Range: $\pm 0.5^\circ$

Quantity: Kit
Sides Adjusted: 2

44-775 REAR CAMBER/TOE ADJUSTMENT CAM NUT

- Makes non-adjustable vehicles fully adjustable for rear toe
- Unique design allows fast and easy “on-vehicle” replacement
- This kit can be used to adjust either the camber or toe

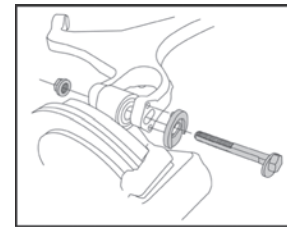
Chevrolet Equinox 2005-2017
Pontiac Torrent 2006-2009
Saturn Vue 2007-2009
Suzuki XL7 2007-2009
GMC Terrain 2010-2014
Chevrolet Captiva 2008-2015



Adjustment Range: $\pm 1^\circ$
Quantity: Pair
Sides Adjusted: 2

44-784 REAR CAMBER CAM BOLT

Ford Expedition 2WD/4WD 2003-2006
Lincoln Navigator 2WD/4WD 2003-2006

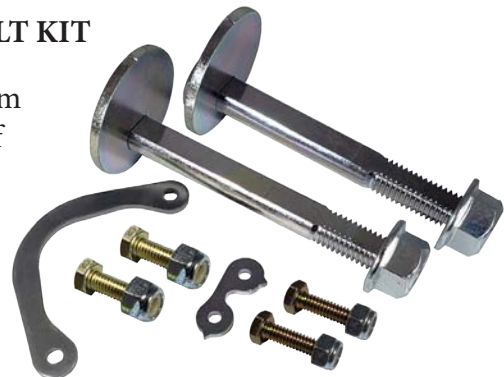
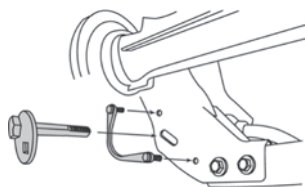


Adjustment Range: $\pm 2.75^\circ$
Quantity: Pair
Sides Adjusted: 2

44-786 FRONT CAMBER/CASTER CAM BOLT KIT

This kit provides both large and small guides with a cam bolt assembly to make accurate and easy adjustment of camber and caster.

Ford Expedition 2WD/4WD 2003-2006
Lincoln Navigator 2WD/4WD 2003-2006



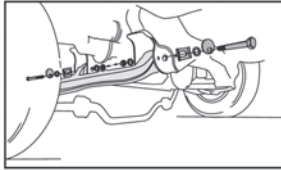
Adjustment Range: Camber $\pm 2^\circ$
Quantity: Kit Caster $\pm 1.5^\circ$
Sides Adjusted: 2

LIGHT
TRUCK

44-789 FRONT CAMBER/CASTER CAM BOLT KIT

This kit provides steel guides with cam bolt assemblies to make accurate and easy change of camber and caster. Allows for future adjustments.

- Ford F150 2WD/4WD 2004-2008*
- Ford Expedition 2018-2022*
- Lincoln Mark LT 2WD/4WD 2006-2008*



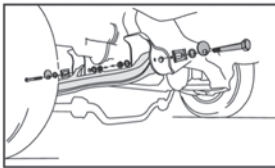
Adjustment Range: Camber $\pm 2^\circ$
Quantity: Kit Caster $\pm 1.5^\circ$
Sides Adjusted: 2

Available in GREASEABLE 44-864

44-790 FRONT CAMBER/CASTER CAM BOLT KIT

Make accurate and easy adjustment to camber and caster. allows for future adjustments.

- Ford Expedition 2WD/4WD 2007-2017*
- Ford F150 2WD/4WD 2009-2020*
- Lincoln Navigator 2WD/4WD 2007-2017*



Adjustment Range: Camber $\pm 2^\circ$
Quantity: Kit Caster $\pm 1.5^\circ$
Sides Adjusted: 2

44-791 FRONT CAMBER/CASTER ADJUSTMENT CAM KIT

This kit provides a steel guide with cam assemblies to make 1° camber and caster adjustment.

- Ford Expedition 2WD/4WD 2007-2022*
- Ford F150 2WD/4WD 2009-2022*
- Lincoln Navigator 2WD/4WD 2007-2022*
- Lincoln Mark LT 2006-2008*



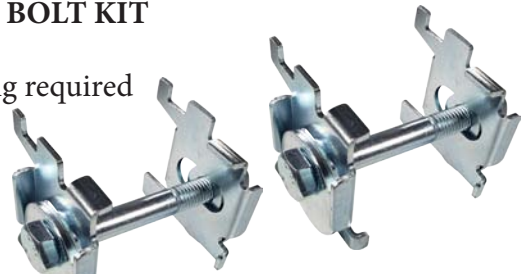
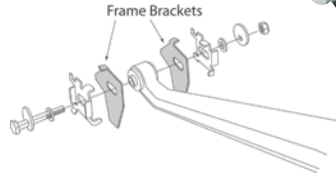
Adjustment Range: Camber $\pm 1^\circ$
Quantity: Kit Caster $\pm 1.5^\circ$
Sides Adjusted: 2

LIGHT TRUCK

44-792 FRONT CAMBER/CASTER CAM BOLT KIT

- Fast bolt-on-installation - no drilling or modifying required
- Precise, easily-controlled adjustments
- Allows future adjustments

Dodge Ram 1500 2WD/4WD 2002-2005



Adjustment Range: Camber $\pm 0.75^\circ$

Quantity: Kit Caster $\pm 1.25^\circ$

Sides Adjusted: 2

Available in GREASEABLE 44-866

44-794 FRONT CAMBER CAM AND GUIDE KIT

Designed to provide adjustment where no OE adjustment is available

Dodge Durango 2011-2022
Jeep Grand Cherokee 2011-2022



Adjustment Range: $\pm 1.5^\circ$

Quantity: Kit

Sides Adjusted: 2

44-795 FRONT CASTER CAM NUT

Designed to provide adjustment where no OE adjustment is available

Dodge Durango 2011-2022
Jeep Grand Cherokee 2011-2022



Adjustment Range: $\pm 1^\circ$

Quantity: Pair

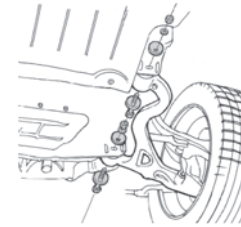
Sides Adjusted: 2

LIGHT TRUCK

44-820 FRONT CAMBER/CASTER CAM BOLT KIT

Makes vehicle fully adjustable for camber and caster. Works with OE cam guide.

- Nissan Armada 2WD/4WD 2005-2021*
- Nissan Frontier 2WD/4WD 2005-2021*
- Nissan Titan 2WD/4WD 2004-2015*
- Suzuki Equator 2009-2011*



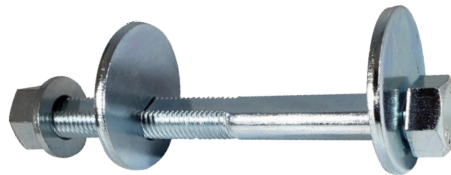
Adjustment Range: camber/caster $\pm 2^\circ$
Quantity: Kit
Sides Adjusted: 2

Available in GREASEABLE 44-862

44-823 FRONT CASTER/PINION ANGLE CAM BOLT

Provides caster and pinion angle adjustments on vehicles with frozen OE bolts

- Dodge Ram HD 2wd 2011-2013*
- Dodge Ram 2500 4wd 2014-2022*
- Dodge Ram 3500 2wd 2013-2022*
- Dodge Ram 3500 4wd 2013-2022*



Adjustment Range: Caster/Pinion Angle $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

Available in GREASEABLE 44-825

44-824 FRONT CASTER/PINION ANGLE CAM BOLT

- Provides caster and pinion angle adjustments for 2500/3500 Dodge trucks with no adjustment from factory or OEM frozen or corroded bolts

Dodge 2500/3500 4X4 pickups 2000-2013



Adjustment Range: Caster $\pm 1^\circ - 1.5^\circ$
Quantity: Pair Pinion angle $\pm 1^\circ - 1.5^\circ$
Sides Adjusted: 2

44-825 FRONT GREASEABLE CASTER/PINION ANGLE CAM BOLT

- Provides caster and pinion angle adjustments on vehicles with frozen OE bolts
- **Greaseable** allowing for ease of future adjustments

Dodge Ram HD 2wd 2011-2013
Dodge Ram 2500 4wd 2014-2022
Dodge Ram 3500 2wd 2013-2022
Dodge Ram 3500 4wd 2013-2022



Adjustment Range: Caster/Pinion Angle $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

44-826 FRONT GREASEABLE CAMBER/CASTER CAM BOLT

- Provides caster and pinion angle adjustments on vehicles with frozen OE bolts
- **Greaseable** allowing for ease of future adjustments

Toyota Tacoma 1995-2004
Toyota 4-Runner 1996-2002



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

44-827 FRONT GREASEABLE CAMBER/CASTER CAM BOLT

- Provides caster and pinion angle adjustments on vehicles with frozen OE bolts
- **Greaseable** allowing for ease of future adjustments

Toyota Tacoma 2005-2015
Toyota 4-Runner 2003-2009
Toyota FJ Cruiser 2007-2009
Lexus GX 2003-2009



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

44-828 FRONT GREASEABLE CAMBER/CASTER CAM BOLT

- Provides caster and pinion angle adjustments on vehicles with frozen OE bolts
- **Greaseable** allowing for ease of future adjustments

Toyota 4-Runner 2010-2014
Toyota FJ Cruiser 2010-2014
Lexus GX 2010-2014



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

44-831 FRONT GREASEABLE CAMBER/CASTER CAM BOLT KIT

- GM **Greaseable** replacement bolt kit with Quick Cams is a direct replacement and will restore the factory adjustment.
- On many models this kit will greatly improve accessibility for easy Adjustment
- **Greaseable** allowing for ease of future adjustment

Chevrolet Silverado 2500HD/3500 2011-2022
GMC Sierra 2500HD 2011-2022
GMC Canyon 2015-2019
Chevrolet Colorado 2015-2022



Adjustment Range: $\pm 1.5^\circ$
Quantity: Kit
Sides Adjusted: 2

44-832 FRONT CAMBER/CASTER CAM BOLT KIT

- GM replacement bolt kit with Quick Cams is a direct replacement and will restore the factory adjustment.
- On many models this kit will greatly improve accessibility for easy Adjustment

Chevrolet Silverado 2500HD/3500 2011-20212
GMC Canyon 2015-2019
GMC Sierra 2500HD 2011-2022
Chevrolet Colorado 2015-2022



Adjustment Range: $\pm 1.5^\circ$
Quantity: Kit
Sides Adjusted: 2

Available in GREASEABLE 44-831

44-834 FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- Provides camber and caster adjustments on vehicles with frozen OE bolts
- **Greaseable** allowing for ease of future adjustment

Dodge Dakota 2005-2011



Adjustment Range: $\pm 2^\circ$
Quantity: Kit
Sides Adjusted: 2

44-835 FRONT CAMBER/CASTER CAM BOLT KIT

- Provides camber and caster adjustments on vehicles with frozen OE bolts

Dodge Dakota 2005-2011



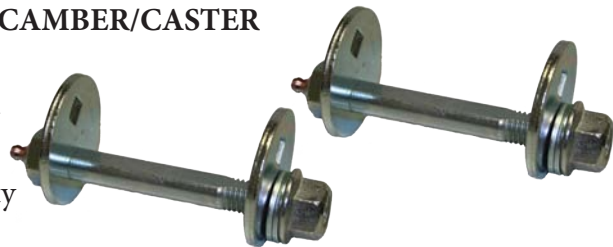
Adjustment Range: $\pm 2^\circ$
Quantity: Kit
Sides Adjusted: 2

Available in **GREASEABLE 44-834**

44-836 FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT

- Makes vehicles fully adjustable for camber and caster
- Grease insert ensures anti-seizure longevity
- **Greaseable** allowing for ease of future adjustment

Ford Explored 2WD 1995-2001
Ford Ranger 2WD/4WD 1998-2012
Mercury Mountaineer 2WD/4WD 1997-2001



Adjustment Range: $\pm 3.25^\circ$
Quantity: Pair
Sides Adjusted: 1

44-836-4 Set of 4, adjusts both sides

LIGHT TRUCK

44-838 FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- Provides caster and pinion angle adjustments on vehicles with frozen OEM bolts
- **Greaseable** allowing for ease of future adjustments

Lexus LX570 2008-2021
Toyota Tundra 2WD/4WD 2007-2022
Toyota Sequoia 2WD/4WD 2008-2022
Toyota Land Cruiser 2007-2021



Adjustment Range: $\pm 1.5^\circ$
Quantity: Kit
Sides Adjusted: 2

NEW

44-839 FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- GM **Greaseable** replacement bolt kit with Quick Cams is a direct replacement and will restore the factor adjustment
- **Greaseable** allowing for ease of future adjustments
- On many models this kit will greatly improve accessibility for easy adjustments

Chevrolet 1500 2WD/4WD 2019-2022
GMC Sierra 1500 2WD/4WD 2019-2022



Adjustment Range: $\pm 1.5^\circ$
Quantity: Kit
Sides Adjusted: 2

LIGHT TRUCK

NEW

44-862 FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- Makes vehicles fully adjustable for camber and caster
- Allows fast and easy on-vehicle adjustments
- Works with OE cam guide
- **Greaseable** to ensure anti-sieze longevity

Infiniti QX56 2004-2013
Nissan Armada 2WD/4WD 2005-2015
Nissan Frontier 2WD/4WD 2005-2023
Nissan Titan 2WD/4WD 2004-2022

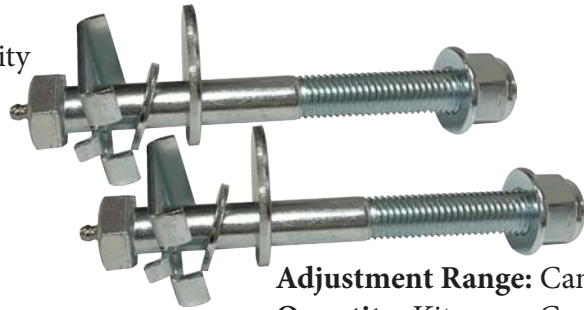


Adjustment Range: $\pm 2^\circ$
Quantity: Kit
Sides Adjusted: 2

44-864 FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- This kit provides steel guides with cam bolt assemblies to make accurate and easy change of camber and caster
- Grease insert ensures anti-sieze longevity

Ford F150 2WD/4WD 2004-2008
Lincoln Mark LT 2WD/4WD 2006-2008

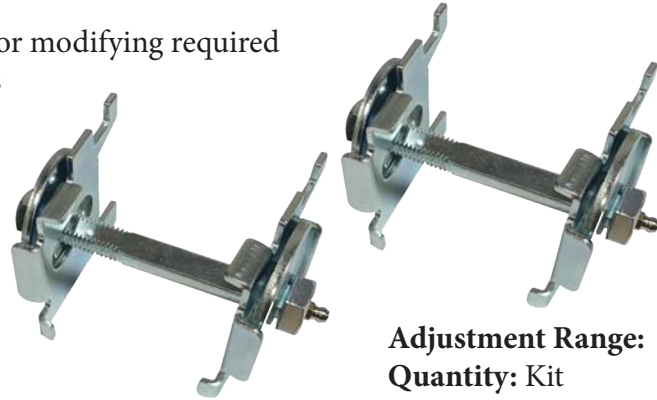


Adjustment Range: Camber $\pm 2^\circ$
Quantity: Kit Caster $\pm 1.5^\circ$
Sides Adjusted: 2

44-866 FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- Fast bolt-on installation, no drilling or modifying required
- Precise easily controlled adjustments
- Allows for future adjustments
- **Greaseable** Design

Dodge 1500 2WD/4WD 2002-2005



Adjustment Range: $\pm 1^\circ$
Quantity: Kit
Sides Adjusted: 2

44-868 FRONT **GREASEABLE** CAMBER/CASTER CAM BOLT KIT

- **Greaseable** replacement bolt kit is a direct replacement and will restore factory adjustment to rusted or seized cam bolts
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely
- 4 pack for both front wheels

Ram 1500 2WD/4WD 2006-2022



Adjustment Range: $\pm 2^\circ$
Quantity: Kit
Sides Adjusted: 2

LIGHT
TRUCK

NEW

44-869

FRONT GREASEABLE CAMBER/CASTER CAM BOLT KIT

- **Greaseable** replacement bolt kit is a direct replacement and will restore
- Factory adjustment to rusted or seized cam bolts.
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Ford Ranger 2019-2022

Ford Bronco 2021



Adjustment Range: ±1.5°
Quantity: Kit
Sides Adjusted: 2

LIGHT TRUCK

NEW

44-871L (LEFT SIDE)

44-871R (RIGHT SIDE)

REAR GREASEABLE CAMBER CAM BOLT KIT

- Allows Camber adjustment on factory non-adjustment suspension
- Precise easy controlled adjustment
- No modifications required
- **Greaseable** design alleviates bolt corrosion and allows for ease of future adjustments

Ford Explorer 2020-2022



Adjustment Range: ±1°
Quantity: Kit
Sides Adjusted: 2

44-910

LOWER CAMBER ADJUSTING ECCENTRIC KIT

Easily adjusts 1 ton 4X4's with Dana model 60 closed king pin axles

Chevrolet K Series 1961-1990

Ford F350 1975-1991



Adjustment Range: ±3°
Quantity: Kit
Sides Adjusted: 1

44-2489

FRONT UPPER ADJUSTABLE CAMBER/CASTER BALL JOINT

- Designed to fit into factory upper control arm - no need to replace entire O/E control arm assembly.
- **Greaseable** Design

Dodge 1500 4x4 and 4x2 2006-2019

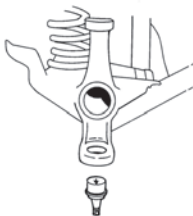


Adjustment Range: ±3°
Quantity: Each
Sides Adjusted: 1

44-2490

**FRONT LOWER CAMBER/CASTER
ADJUSTABLE BALL JOINT**

Jeep Cherokee/Wagoneer(downsize)1984-2001
Jeep Comanche 1986-1992
Jeep Grand Cherokee 1993-1998
Jeep Wrangler TJ 1996-2006
Jeep Wrangler JK 2007-2018

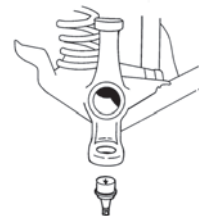


Adjustment Range: $\pm 1.75^\circ$
Quantity: Each
Sides Adjusted: 1

44-2491

**FRONT LOWER CAMBER/CASTER
ADJUSTABLE BALL JOINT**

Jeep Grand Cherokee 1999-2004

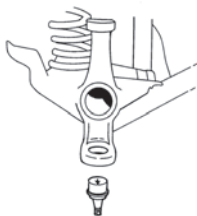


Adjustment Range: $\pm 1.75^\circ$
Quantity: Each
Sides Adjusted: 1

44-2492

**FRONT LOWER CAMBER/CASTER
ADJUSTABLE BALL JOINT**

*Chevrolet and GMC 1/2 and 3/4 ton
4WD Pickups, blazer, Jimmy, and
Suburban 1987-1991*
*Dodge 1/2, 3/4 and 1 ton 4WD Pickups
and Ram Charger 1994-1999*
*Ford 1/2, 3/4 and 1 ton 4WD Pickups
and Bronco through 1979*
Jeep Trucks through 1983



Adjustment Range: $\pm 1.75^\circ$
Quantity: Each
Sides Adjusted: 1

44-2493

**FRONT UPPER CAMBER/CASTER
ADJUSTABLE BALL JOINT**

Jeep Commander 2006-2010
Jeep Grand Cherokee 2005-2010



Adjustment Range: $\pm 1^\circ$
Quantity: Each
Sides Adjusted: 1

LIGHT
TRUCK

44-2494

**FRONT LOWER CAMBER/CASTER
ADJUSTABLE BALL JOINT**

This adjustable lower ball joint allows easy adjustment of camber/caster with a simple turn of the ball stud.

Dodge Ram 1500 2000-2001



Adjustment Range: $\pm 1^\circ$
Quantity: Each
Sides Adjusted: 1

44-2495

**FRONT UPPER CAMBER/CASTER
ADJUSTABLE BALL JOINT**

Designed to fit into factory upper control arm - no need to replace entire OE control arm assembly.

Jeep Grand Cherokee 2011-2015

Dodge Durango 2011-2015



Adjustment Range: $\pm 1^\circ$
Quantity: Each
Sides Adjusted: 1

44-2496

**FRONT UPPER CAMBER
ADJUSTABLE BALL JOINT**

- Change camber with a simple turn of the ball stud!
- **Greaseable** Design

Dodge Ram 2500/3500 4WD 2000-2002

*Dodge Ram 2500-3500 4WD 2003
(Old Body Style)*



Adjustment Range: $\pm 1^\circ$
Quantity: Each
Sides Adjusted: 1

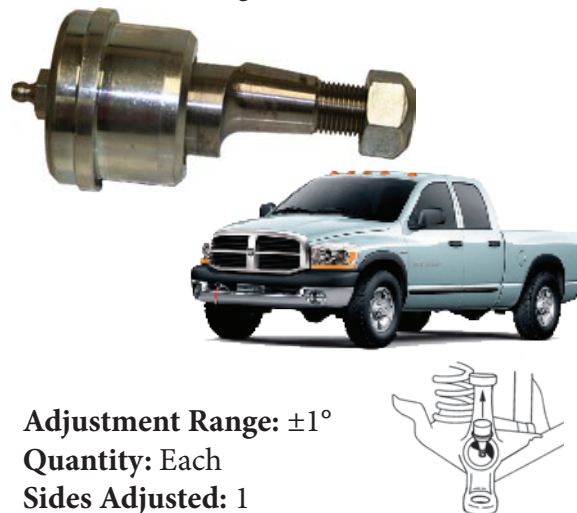
44-2497

**FRONT UPPER CAMBER
ADJUSTABLE BALL JOINT**

Dodge Ram 2500/3500 2WD/4WD 2003-2022

Dodge Ram 2500/3500 2WD/4WD 2003-2022

- **Greaseable** Design



Adjustment Range: $\pm 1^\circ$
Quantity: Each
Sides Adjusted: 1

LIGHT
TRUCK

44-2498

FRONT UPPER CAMBER/CASTER
ADJUSTABLE BALL JOINT

- Designed to fit into factory upper control arm. No need to replace entire OE control arm assembly.
- **Greaseable** Design

GM Pickups and SUVs 2500/3500 1999-2013
GM 1500 HD Pickups 2001-2010



Adjustment Range: $\pm 3^\circ$
Quantity: Each
Sides Adjusted: 1

44-2499

FRONT UPPER CAMBER/CASTER
ADJUSTABLE BALL JOINT

- Allows for front positive or negative adjustments
- **Greaseable** Design

Chevrolet Silverado 1500 1999-2006
GMC Sierra 1999-2006
Gm Express Van 2003-2014
GMC Savana Van 2500 2003-2014



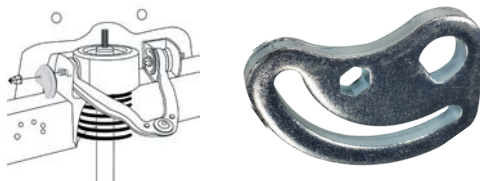
Adjustment Range: $\pm 3^\circ$
Quantity: Each
Sides Adjusted: 1

44-2506

FRONT CAMBER/CASTER QUICK
CAM KIT

Replace OE non-adjustable cam with quickCam, featuring easy-to-access allen wrench slot.

Chevrolet Suburban 2WD/4WD 1999-2020
Chevrolet Tahoe 2WD/4WD 1999-2020
GMC Yukon 2WD/4WD 2000-2019
Chevrolet Express Van 2WD 2003-2022
Chevrolet Express Van 4WD 2003-2022
Chevrolet Silverado HD
1500/2500/3500 2WD/4WD 1999-2013
GMC 2WD Savana Van 2003-2022



Adjustment Range: $\pm 1.5^\circ$
Quantity: Kit
Sides Adjusted: 2

44-2507

FRONT CAMBER/CASTER QUICK
CAM KIT

Great for adjustments where space is limited

Chevrolet Colorado 4WD 2004-2012
GMC Canyon 4WD 2004-2012
Hummer H3 2006-2010
Isuzu I35/I28 4WD 2006



Adjustment Range: $\pm 1.5^\circ$
Quantity: Kit
Sides Adjusted: 2

44-2508 FRONT ALIGNMENT REPLACEMENT CAM GUIDE PIN

Fast and easy replacement of damaged or broken OE guide pins.

- Chevrolet Suburban 2WD/4WD 1999-2020*
- Chevrolet Tahoe 2WD/4WD 1999-2020*
- GMC Yukon 2WD/4WD 2000-2019*
- Chevrolet Express Van 2WD 2003-2022*
- Chevrolet Express Van 4WD 2003-2022*
- Chevrolet Silverado/GMC Sierra 1500/2500/3500 2WD/4WD 1999-2010*
- GMC 2WD Savanda Van 2003-2022*
- Chevrolet Silverado/GMC Sierra 2500/3500 2000-2013*



Quantity: 12

44-2509 UPPER CONTROL ARM OFFSET CAMBER BUSHINGS

1/2 Ton Models - Forged Arm

- Cadillac Escalade/EXT 4WD 2002-2006*
- Chevrolet Tahoe 2WD/4WD 1999-2020*
- Chevrolet Avalanche 1500 2WD/4WD 2002-2013*
- Chevrolet Express Van 2WD/4WD 2003-2022*
- Chevrolet Silverado 1500 2WD/4WD 1999-2016*
- Chevrolet Suburban 1500 2WD/4WD 2000-2020*
- GMC 2WD Savana Van 2003-2022*
- GMC Sierra 1500 2WD/4WD 1999-2018*
- GMC Yukon XL 1500 2WD 2000-2019*
- GMC Yukon/Denali 2WD/4WD 2000-2020*

- OE style design - does not affect ride or handling
- Simple installation with use of special bushing adapter set **88-7950A**
- Only effective means of reclaiming lost camber



Adjustment Range: ±1°

Quantity: Kit

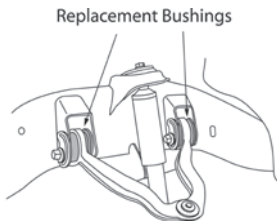
Sides Adjusted: 2

44-2510 UPPER CONTROL ARM OFFSET CAMBER BUSHINGS

- OE style design - does not affect ride or handling
- Simple installation with use of special bushing adapter set **88-7950A**
- Only effective means of reclaiming lost camber

3/4 and 1Ton Models - Forged Arm

- Chevrolet Avalanche 2500 HD 2002-2006*
- Chevrolet Silverado HD 1999-2010*
- Chevrolet Silverado HD 2500 1999*
- Chevrolet Suburban 2500 HD 2WD/4WD 2000-2013*
- GMC Sierra HD 2007-2010*
- GMC Yukon XL 2500 HD 2WD/4WD 2000-2013*



Replacement Bushings



Adjustment Range: ±1°

Quantity: Kit

Sides Adjusted: 2

NEW

44-2512

FRONT ALIGNMENT REPLACEMENT GUIDE PIN

- Fast and easy replacement of damaged or broken guide pins



*Chevrolet GMC 2WD/4WD 2011-2022 (upper control arm)
2500HD,3500HD, 4500*

Chevrolet Colorado/GMC Canyon 2WD/4WD 2015-2022 (lower control arm)

Quantity: 12

FRONT TIE ROD ADJUSTING SLEEVE

- Replaces the OE round adjusting sleeve with a hex shaped sleeve
- Prevents tools from slipping when adjusting
- Product recommended for when existing sleeve is damaged or during tie rod end replacement

44-2535

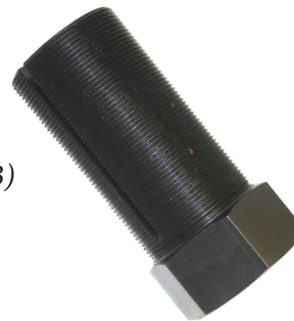
Jeep Wrangler JK 2007-2018



44-2540

Ram 2500 2014

Ram 3500 2013-2014 (Build date before 11/4/13)



44-2542

Ram 2500 2014-2022

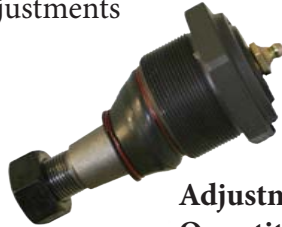
Ram 3500 2013-2022 (Build date After 11/4/13)

Quantity: 1 per vehicle

44-2610 FRONT UPPER CAMBER/CASTER ADJUSTABLE BALL JOINT

- Quick and easy replacement of a non-adjustable OEM ball joints
- Greasable design for extended durability
- Allows for continuous future adjustments
- **Greaseable** Design

*Dodge Truck 4500/5500
2WD/4WD 2008-2018*



Adjustment Range: Camber/Caster 2WD $\pm 1^\circ$
Quantity: Each Camber 4WD $\pm 1^\circ$
Sides Adjusted: 1

NEW

44-2617 FRONT GREASEABLE CAMBER/CASTER ADJUSTABLE BALL JOINT

- Unique Patent Pending design allows adjustment of both Camber and Caster on factory non-adjustable front suspensions
- On-Vehicle adjustments easily made
- Fits all model 150-350 Ford Transit Vans
- **Greaseable** Design

*Ford Transit 150,250,350,350HD 2WD 2020-2022
Ford Transit 150,250,350HD 2WD 2015-2019*

Recommended O/E Ball
Joint remover tool 88-7313
(one time purchase) pg. 156



Patent no. 11,131,337



Boot removed
to show offset



Adjustment Range: $+1^\circ$
Quantity: Each
Sides Adjusted: 1

NEW

44-2618 FRONT GREASEABLE LOWER CAMBER ADJUSTABLE BALL JOINT

- This Ball Joint provides Camber adjustment on OE non-adjustable suspensions
- The Unique Patent Pending cam system allows controlled adjustment for precise settings
- Controlled Adjustability
- Quick and easy on-vehicle adjustment
- **Greaseable** Design
- Maximize tire mileage

Ram Pro Master 2014-2022



Patent no. 11,254,176
Patent no. 10,994,580



Adjustment Range: $\pm 1^\circ$
Quantity: Each
Sides Adjusted: 1

44-2720L (LEFT SIDE)

44-2720R (RIGHT SIDE)

FRONT UPPER CAMBER/CASTER CONTROL ARM WITH ADJUSTABLE BALL JOINT

- Quick and easy replacement of OE control arm
- Adjustable ball joint allows for continuous future adjustments
- OE style Control Arm
- **Greaseable** ball joint design for extended durability



Dodge Durango 2011-2015
Jeep Grand Cherokee 2011-2015



Adjustment Range: $\pm 1^\circ$
Quantity: Each
Sides Adjusted: 1

44-2725

FRONT UPPER CAMBER/CASTER CONTROL ARM WITH ADJUSTABLE BALL JOINT

- Quick and easy replacement of OE control arm
- **Greaseable** ball joint design for extended durability
- Adjustable ball joint allows for continuous future adjustments
- OE style control arm
- Fits both left and right side of vehicle

Chevrolet 1500 Pickups/SUVs LD 2WD/4WD 1999-2006
GMC 1500 Pickups/SUVs LD 2WD/4WD 1999-2006
GM Express vans 2003-2014



Adjustment Range: $\pm 3^\circ$ Camber,
Quantity: Each $\pm 1.5^\circ$ Caster
Sides Adjusted: 1

44-2726L (LEFT SIDE)

44-2726R (RIGHT SIDE)

FRONT UPPER CONTROL ARM WITH ADJUSTABLE CAMBER/CASTER BALL JOINT

- Quick and easy replacement of OE control arm
- **Greaseable** ball joint design for extended durability
- Adjustable ball joint allows for continuous future adjustments
- OE style control arm

Chevrolet 1500 Pickups/SUVs LD 2WD/4WD 2007-2020
GMC 1500 Pickups/SUVs LD 2WD/4WD 2007-2020



Adjustment Range: $\pm 3^\circ$ Camber,
Quantity: Each $\pm 1.5^\circ$ Caster
Sides Adjusted: 1

LIGHT
TRUCK

44-2727 FRONT UPPER CONTROL ARM WITH ADJUSTABLE BALL JOINT

- Quick and easy replacement of OE control arm
- **Greaseable** ball joint design for extended durability
- Adjustable ball joint allows for continuous future adjustments
- OE style control arm
- Fits both Left and Right sides of vehicle

Chevrolet Silverado 2500HD/3500 2011-2019
GMC Sierra 2500HD/3500 2011-2019



Adjustment Range: $\pm 3^\circ$ Camber,
Quantity: Each $\pm 1.5^\circ$ Caster
Sides Adjusted: 1

44-2728L (LEFT SIDE)**44-2728R (RIGHT SIDE)****FRONT UPPER ALUMINUM CONTROL ARM WITH ADJUSTABLE CAMBER/CASTER BALL JOINT**

- Quick and easy replacement of OE control arm
- **Greaseable** ball joint design for extended durability
- Adjustable ball joint allows for continuous future adjustments
- OE style control arm

Chevrolet/GMC 1500 Z71 off road with stock aluminum arms 2015-2020



Adjustment Range: $\pm 3^\circ$ Camber,
Quantity: Each $\pm 1.5^\circ$ Caster
Sides Adjusted: 1

44-2730 FRONT UPPER CONTROL ARM WITH ADJUSTABLE CAMBER/CASTER BALL JOINT

- Quick and easy replacement of OE control arm
- **GREASEABLE** ball joint design for extended durability
- Adjustable ball joint allows for continuous future adjustments
- OE style control arm
- Fits both Left and Right sides of vehicle

Chevrolet 1500 HD Pickups 2WD/4WD 1999-2010
Chevrolet 2500/3500 Pickups/SUVs 2WD/4WD 1999-2010
GMC 1500 HD Pickups 2WD/4WD 2001-2010
GMC 2500/3500 Pickups/SUVs 2WD/4WD 1999-2010



Adjustment Range: $\pm 3^\circ$ Camber, $\pm 1.5^\circ$ Caster
Quantity: Each
Sides Adjusted: 1

44-5000 Series

FRONT CAMBER/CASTER ADJUSTMENT BUSHINGS

Adjust Camber/Caster or a combination of both from 0° to 2.75° either positive or negative with these easy-to-adjust “Multi-slot” bushings.



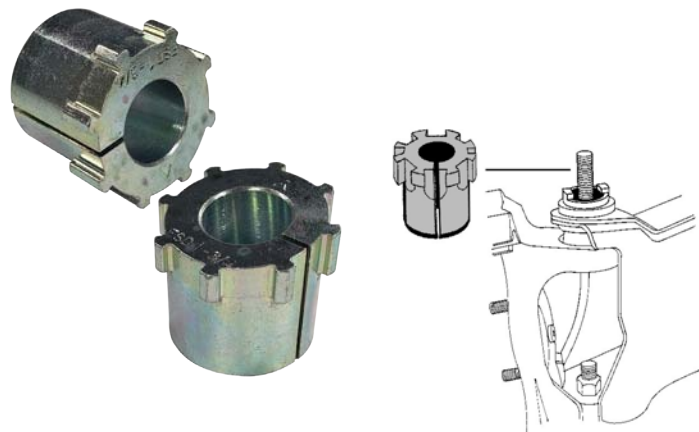
44-4099	0°	<i>Ford F150/F250 4X4 1980-1996</i>
44-5001	.25°	<i>Ford F350 4X4 1992-2002</i>
44-5002	.5°	<i>Ford Super Duty 1998-2004</i>
44-5003	.75°	<i>Ford Excursion 4WD 2000-2004</i>
44-5004	1°	<i>Dodge Ram 2500/3500 2WD 1994-1999</i>
44-5005	1.25°	<i>Dodge Ram 2500/3500 4WD 1994-2002</i>
44-5006	1.5°	
44-5007	1.75°	
44-5008	2°	

1 Per Package

44-5000A

XTRARANGE

44-5009	2.25°
44-5010	2.5°
44-5011	2.75°



Contains 2 each size bushing **44-4099** through **44-5008**

LIGHT TRUCK

FRONT ADJUSTABLE LIGHT TRUCK CAMBER/CASTER BUSHINGS

- New DUAL AXIS design for up to 25% Greater Range of Adjustment. Bushing can be set to True Zero
- “Technician Friendly” feature makes on-the-vehicle adjustments a snap!
- Universal adjustable design allows all Camber/Caster or combination adjustments with one part number

This fully adjustable design featured on the following



44-5032



Ford F150 4x4 1980-1996
Ford F250 4x4 1980-1997
Ford F350/F550 Super Duty 4x4 1992-2004
Dodge Ram 2500/3500 4x4 1994-1999
Dodge Ram 2500/3500 4x2 1994-2002

Adjustment Range: $\pm 3.2^\circ$
Quantity: Each
Sides Adjusted: 1



ADJUSTABLE

Patent No. US 7,331,589 B2

44-5036



Ford F250/F350 4x4 2005-2022

Adjustment Range: $\pm 2.5^\circ$
Quantity: Each
Sides Adjusted: 1



ADJUSTABLE

Patent No. US 7,331,589 B2

44-5037



Ford F450/F550 4x4/4x2 2005-2022
Chevrolet Kodiak 2005-2009
GMC TopKick 2005-2009

Adjustment Range: $\pm 2.5^\circ$
Quantity: Each
Sides Adjusted: 1



ADJUSTABLE

Patent No. US 7,331,589 B2

44-5094



Ford Explorer 4x4/4x2 1991-1994
Ford Ranger 4x4/4x2 1989-1997
Ford F150/F250/F350 4x2 1987-1996
Ford Econoline Van 1992-2022
Ford Excursion 4x2 2000-2005
Ford F250,F350,F450,F550 Super Duty 4x2 1997-2022
Mazda Navajo 4x4/4x2 1991-1994
Mazda Pickup 4x4/4x2 1994-1999

Adjustment Range: $\pm 4^\circ$
Quantity: Each
Sides Adjusted: 1



ADJUSTABLE

Patent No. US 7,331,589 B2

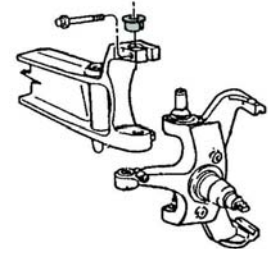
LIGHT TRUCK

44-6000 Series FRONT CAMBER/CASTER ADJUSTMENT BUSHINGS

- 44-6001 0°
- 44-6002 .25°
- 44-6003 .5°
- 44-6004 .75°
- 44-6005 1°
- 44-6006 1.25°
- 44-6007 1.5°
- 44-6008 1.75°
- 44-6009 2°
- 44-6010 2.25°
- 44-6011 2.5°

- Adjusts Camber/Caster or a combination of both from $\pm 25^\circ$ to $\pm 2^\circ$
- Adjusts Camber from $+2.25^\circ$ to $+2.5^\circ$
- Allows for adjustment where there s no OE adjustment available

Ford F250/F350 4x4 2005-2022



1 Per Package

44-6000A Assortment -2 Each Size

44-6020 Series FRONT CAMBER/CASTER ADJUSTMENT BUSHINGS

- 44-6021 0°
- 44-6022 .25°
- 44-6023 .5°
- 44-6024 .75°
- 44-6025 1°
- 44-6026 1.25°
- 44-6027 1.5°
- 44-6028 1.75°
- 44-6029 2°

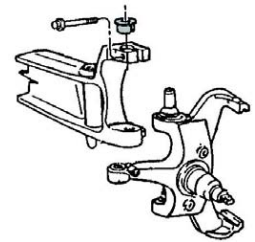
- Adjusts Camber/Caster or a combination of both from $\pm 25^\circ$ to $\pm 2^\circ$

Ford F450/F550 4x4/4x2 2005-2022

Chevrolet Kodiak 4x4 2003-2009

Chevrolet 4500/5500/6500 2019-2022

GMC TopKick 4/4 2005-2009



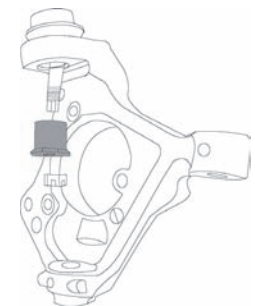
44-6020A Assortment -2 Each Size

FRONT CAMBER ADJUSTMENT BUSHINGS

- Allows for adjustment where there is no OE adjustment available
- Designed with hex head foe ease of adjustment
- Restores factory wheel alignment settings
- Manufactured to exceed OEM durability standards

NEW

- 44-6032 .5°
- 44-6034 1°



Jeep Wrangler JL 2018 - 2022

Jeep Gladiator 2020-2022

Quantity: Each
Sides Adjusted: 1

LIGHT
TRUCK

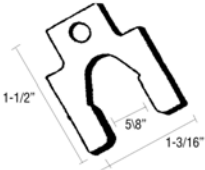
45-100

US

US SERIES CAMBER/CASTER SHIM

- 45-101 1/64"
- 45-102 1/32"
- 45-103 1/16"
- 45-104 1/8"

Universal shim covers a range of bolt sizes up to 5/8" diameter



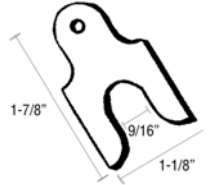
100 pieces per package

45-200

BOC

BOC SERIES CAMBER/CASTER SHIM

- 45-201 1/64" Buick
- 45-202 1/32" Cadillac
- 45-203 1/16" Oldsmobile
- 45-204 1/8"



100 pieces per package

45-300

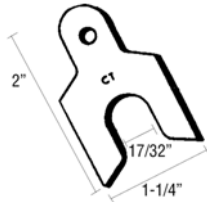
CT

CT SERIES CAMBER/CASTER SHIM

DISCONTINUED

- 45-302 1/32"
- 45-303 1/16"
- 45-304 1/8"

Chevrolet 1/2 ton Truck
GMC 1/2 ton Truck
Ford passenger cars



100 pieces per package

45-351

UPDATED

CAMBER/CASTER PASSENGER AND LIGHT TRUCK SHIM ASSORTMENT



350 Pieces

45-500

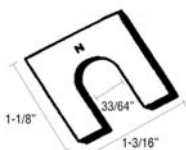
N

N SERIES CAMBER/CASTER SHIM

DISCONTINUED

- 45-502 1/32"
- 45-503 1/16"
- 45-504 1/8"

Late model RWD
General Motors



100 pieces per package

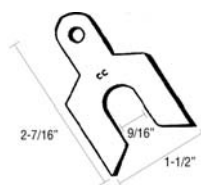
45-600

CC

CC SERIES CAMBER/CASTER SHIM

- 45-602 1/32"
- 45-603 1/16"
- 45-604 1/8"

Chevrolet 3/4 and 1 ton Truck
GMC 3/4 and 1 ton Truck



100 pieces per package

FRONT WHEEL

CASTER ADJUSTMENT SPACERS

For Toyota models with stabilizer bushings at lower control arm

45-6001 1/16"



45-6002 1/8"



12 Per Box

CASTER ADJUSTMENT SPACERS

45-6005 1/16"

- Acura CL Series* 1996-1999
- Acura TL Series* 1996-2003
- Accura Vigor* 1992-2007
- Honda Accord* 1990-2007
- Honda Odyssey* 1990-2007
- Isuzu Oasis* 1996-1999

45-6006 1/8"



Quantity: 12

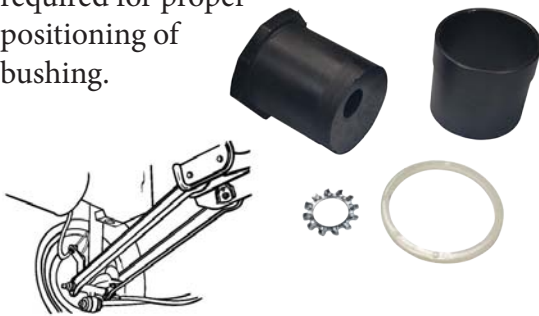
FRONT WHEEL

46-131

REAR CAMBER/TOE BUSHING

- Ford Taurus Sedan* 1986-2007
- Lincoln Continental* 1988-1994
- Mercury Sable Sedan* 1986-2005

Tool No **88-1302** is required for proper positioning of bushing.

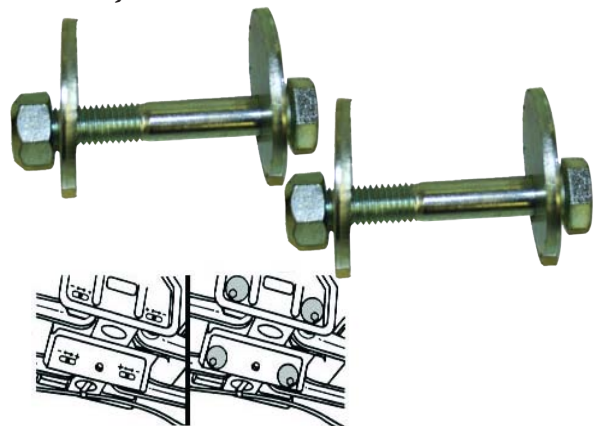


Adjustment Range: Camber 2°
Quantity: Pair Toe 1.5° (3/4")
Sides Adjusted: 2

46-132

REAR CAMBER CAM BOLT

- Lincoln Continental* 1988-1994
- Ford Taurus Sedan* 1986-1995
- Mercury Sable Sedan* 1986-1995

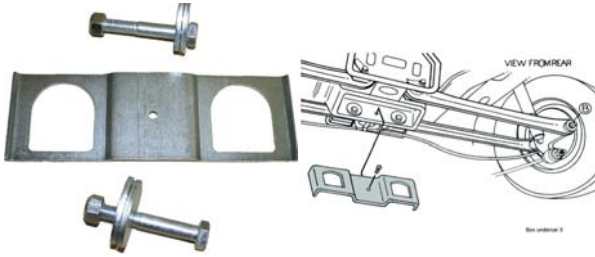


Adjustment Range: 2.25°
Quantity: Pair
Sides Adjusted: 2

46-134

REAR CAMBER/TOE KIT

- Easy adjustment of rear camber on factory non-adjustable vehicles
- Provides rear toe adjustment when factory adjusters are frozen
- Retains original ride and handling characteristics



Ford Taurus Sedan 1996-2006
Mercury Sable Sedan 1996-2005

Adjustment Range: Camber/Toe 2° (3/4")
Quantity: Kit
Sides Adjusted: 2

46-135

REAR CAMBER CAM BOLT KIT

- Designed to provide camber adjustment where no factory adjustment is available
- Quick and easy installation

Ford Freestyle 4x2 2005-2007
Taurus X 2009-2009
Taurus 4x2 2009-2009
Ford Five Hundred 4x2 2005-2007



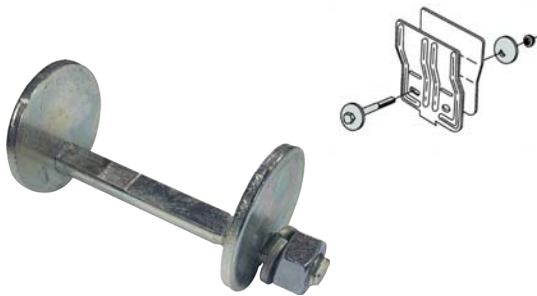
Adjustment Range: +1.5°
Quantity: Kit
Sides Adjusted: 2

46-136

REAR CAMBER CAM BOLT

- Allows accurate camber adjustment to correct rear tire wear problems.
- Quick and easy installation

Ford Taurus Wagon 1986-2006
Mercury Sable Wagon 1986-2005



Adjustment Range: 2.5°
Quantity: Pair
Sides Adjusted: 2

46-137

REAR GREASEABLE TOE BOLT

- Provides toe adjustment for vehicles with frozen OE toe bolts
- Quick and easy installation



Ford Escape 4WD 2001-2012
Ford Escape FWD 2001-2012
Mercury Mariner AWD FWD 2005-2011

Adjustment Range: ±2°
Quantity: Pair
Sides Adjusted: 2

REAR
WHEEL

46-141

REAR CAMBER/TOE CAM BOLT KIT

Provides camber and toe adjustment on vehicles with frozen OE bolts, or where additional change is needed.

Infiniti G37 2008-2013
Infiniti G35 2007-2008
Nissan 370 Z 2009-2021



Adjustment Range: $\pm 3^\circ$
Quantity: Kit
Sides Adjusted: 2



46-143

FRONT CAMBER CAM BOLT KIT

- Provides camber adjustments to correct sagging suspension.
- Designed to provide additional adjustment beyond that available from OE.
- Extends adjustment by elongating hole

Mercury Grand Marquis 2003-2011
Ford Crown Victoria 2003-2011
Lincoln Town Car 2003-2011



Adjustment Range: $\pm 2.5^\circ$
Quantity: Kit
Sides Adjusted: 2

46-162

REAR CAMBER BUSHINGS

- Allows for rear positive or negative adjustments
- Designed to provide adjustment where no OE adjustment is available.

Chrysler 300 2005-2019
Dodge Magnum 2005-2008
Dodge Charger 2006-2022
Chrysler Pacifica 2004-2008



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

46-164

REAR CAMBER/TOE CAM BOLT KIT

Provides camber and toe adjustment on vehicles with frozen OE bolts, or where additional change is needed.

Infiniti G35 Coupe 2003-2006
Infiniti G35 Sedan 2003-2006
Nissan Altima 2007-2013
Nissan 350Z 2003-2008



Adjustment Range: $\pm 2^\circ$
Quantity: Kit
Sides Adjusted: 2

REAR
WHEEL

46-166

REAR CAMBER/TOE CAM BOLT KIT

Provides toe adjustment on vehicles with frozen OE bolts or where additional change is needed

Hyundai Santa Fe 2001-2006

Cadillac Escalade 2021-2022



Adjustment Range: Camber $\pm 2^\circ$ Toe $\pm 1.5^\circ$

Quantity: Kit

Sides Adjusted: 2

46-168

REAR GREASEABLE TOE BOLT

- Direct replacement Greaseable Rear Toe bolt
- Pro Series Greaseable line
- Restore factory adjustment and insure ease of future adjustment
- Greaseable design keeps bolts from seizing up due to rust and corrosion

Mazda 3 2004-2018

Mazda 3 S I 2010-2014

Mazda 5 2006-2017

Mazda CX-7 2007-2012



Adjustment Range: $\pm 1.5^\circ$

Quantity: Pair

Sides Adjusted: 2

46-169

REAR GREASEABLE TOE BOLT

- Greaseable replacement toe cam bolt kit is a direct replacement and will restore the factory adjustment
- Greaseable design alleviates bolt corrosion and allows for ease of future adjustments

Kia Sorento 2011-2023

Kia Sedona 2015-2020

Hyundai Santa Fe AWD/FWD 2013-2022

Hyundai Santa Hybrid 2011-2015



Adjustment Range: $\pm 1.5^\circ$

Quantity: Pair

Sides Adjusted: 2

46-171

REAR GREASEABLE CAM BOLT

- Greaseable replacement cam bolt kit is a direct replacement and will restore the factory adjustment
- Greaseable design alleviates bolt corrosion and allows for ease of future adjustments

Kia Sedona 2015-2020

Kia Sportage 2011-2022

Kia Sorento 2WD/4WD 2016-2023

Kia Cadenza 2014-2021

Hyundai Santa Fe Sport AWD 2013-2022

Lexus CT 2011-2017



Adjustment Range: $\pm 1.5^\circ$

Quantity: Pair

Sides Adjusted: 2

46-173

REAR GREASEABLE TOE BOLT

- Greaseable replacement Toe Bolt kit is a direct replacement and will restore the factory adjustment
- Greaseable design alleviates bolt corrosion and allows for ease of future adjustments

Ford Focus 2013-2018
Ford C-Max 2013-2018
Ford Escape AWD/FWD 2013-2019



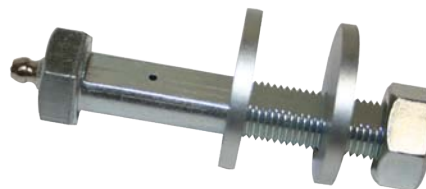
Adjustment Range: ±1.5°
Quantity: Pair
Sides Adjusted: 2

46-174

REAR GREASEABLE TOE BOLT

- Greaseable replacement Toe Bolt kit is a direct replacement and will restore the factory adjustment
- Greaseable design alleviates bolt corrosion and allows for ease of future adjustments

Honda Accord 2018-2022
Honda Civic (Except Si and Type R) 2016-2023
Honda CR-V 2WD/4WD/Touring 2017-2022
Honda Insight 2019-2022



Adjustment Range: ±1.5°
Quantity: Pair
Sides Adjusted: 2

46-182

REAR CAMBER/TOE CAM BOLT

- Allows for additional camber and toe change from what OE bolts provide
- No modification necessary
- Quick and easy replacement of OE bolts

Chevrolet SS 2014-2017
Chevrolet Camaro 2010-2022
Chevrolet Caprice 2012-2017
Pontiac G8 2008-2009



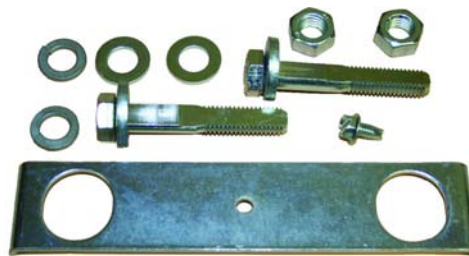
Adjustment Range: Camber ±1°
Quantity: Pair Toe ±2°
Sides Adjusted: 2

46-406

REAR TOE ADJUSTMENT KIT

Unique external cam plate design easily attaches to vehicle, allowing a full range of positive or negative rear toe adjustment.

Saturn All Models 1991-1998
Saturn S Series 1991-2002



Adjustment Range: 2° (1")
Quantity: Kit
Sides Adjusted: 2

REAR WHEEL

46-421

REAR LINK INBOARD SEALED FLEX JOINT REPLACEMENT BUSHING WITH CAMBER CAM BOLTS

- These sealed flex joint bushings replace commonly corroded and seized OEM bushings
- Replacement camber adjusting cam bolts also provided.
- Exact OEM replacement

Buick Enclave 2008-2017
Chevrolet Traverse 2008-2017
GMC Acadia 2007-2016
Saturn Outlook 2007-2010



Tools Available:
 88-7996A
 SEE PAGE 154

Adjustment Range: Camber $\pm 1.5^\circ$
Quantity: Kit
Sides Adjusted: 2

AX² DUAL AXIS REAR CAMBER CAM BOLT SYSTEM

- Extends factory adjustments
- Simple to install
- Replaces factory rear cam bolt system
- Allows for future adjustment
- Made of 12.9 high strength steel

US Patent # 9,233,589

	Make/Model	Toe or Camber
46-425	<i>Chevrolet Malibu</i> 2004-2012 <i>Pontiac G6</i> 2005-2010 <i>Saab 9-3</i> 2003-2011	Camber
46-426	<i>Saturn Aura</i> 2007-2009	Toe
46-427	<i>Buick Lacrosse (Non Hyper Strut)</i> 2010-2019 <i>Buick Regal(Non Hyper Strut)</i> 2018-2020 <i>Saab 9-5</i> 2010-2012	Camber
46-428	<i>Chevrolet Malibu</i> 2013-2022 <i>Cadillac XTS (Non Hyper Strut)</i> 2012-2019 <i>Chevrolet Impala</i> 2013-2020	Toe



Adjustment Range: $\pm 2^\circ$
Quantity: Pair
Sides Adjusted: 2

REAR WHEEL

46-431 REAR **GREASEABLE** TOE CAM BOLT

- **Greaseable** replacement toe cam bolt kit is a direct replacement and will restore the factory adjustment
- **Greaseable** design alleviates bolt corrosion and allows for ease of future adjustments

Subaru Legacy 2000-2009

Subaru Outback 2000-2009

Subaru Baja 2003-2006

Subaru Tribeca 2006-2010



Adjustment Range: $\pm 1.5^\circ$

Quantity: Pair

Sides Adjusted: 2

46-432 REAR **GREASEABLE** CAMBER TOE BOLT

- Provides camber and toe adjustments on vehicles with frozen OE bolts, or where additional change is needed
- **Greaseable** replacement toe cam bolt kit is a direct replacement and will restore the factory adjustment

Toyota Rav 4 2001-2005



Adjustment Range: $\pm 1.75^\circ$

Quantity: Pair

Sides Adjusted: 2

46-434 REAR **GREASEABLE** TOE BOLT

- **Greaseable** replacement toe cam bolt kit is a direct replacement and will restore the factory adjustment
- **Greaseable** design alleviates bolt corrosion and allows for ease of future adjus

Acura ILX 2013-2022

Acura ILX Hybrid 2013-2015

Honda Civic LX 2006-2017

Honda Civic CR-V 2WD/4WD/Touring 2007-2016

Honda Fit(EV) 2013-2014



Adjustment Range: $\pm 1.5^\circ$

Quantity: Pair

Sides Adjusted: 2

NEW

46-437 REAR GREASEABLE TOE BOLT

- Greaseable Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- Greaseable feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Chrysler 200 2011-2014
Chrysler Sebring 2007-2010
Dodge Avenger 2011-2014
Dodge Journey 2011-2022
Jeep Grand Cherokee 2016-2022
Jeep Compass 2017-2022



Adjustment Range: ±1.5°
Quantity: Pair
Sides Adjusted: 2

NEW

46-438 REAR GREASEABLE TOE BOLT

- Greaseable Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- Greaseable feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Dodge Durango 2016-2022
Jeep Grand Cherokee 2011-2022



Adjustment Range: ±1.5°
Quantity: Pair
Sides Adjusted: 2

46-439 REAR GREASEABLE TOE BOLT

- Greaseable Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- Greaseable feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Acura MDX 2001-2006
Honda Odyssey 1999-2004
Honda Pilot 2003-2008



Adjustment Range: ±1.5°
Quantity: Pair
Sides Adjusted: 2

REAR
WHEEL

46-451 REAR GREASEABLE TOE BOLT

- Greaseable Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- Greaseable feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely



Acura ZDX 2010-2013
Acura MDX 2007-2013
Honda Pilot 2009-2015



Adjustment Range: $\pm 1.5^{\circ}$
Quantity: Pair
Sides Adjusted: 2

NEW**46-452 REAR GREASEABLE TOE BOLT**

- Greaseable Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- Greaseable feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely



Acura MDX 2014-2019
Acura MDX Sport Hybrid 2017
Honda Ridgeline 2017-2022
Honda Pilot 2016-2022



Adjustment Range: $\pm 1.5^{\circ}$
Quantity: Pair
Sides Adjusted: 2

46-453 REAR GREASEABLE CAMBER BOLT

- Greaseable Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- Greaseable feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely



Chrysler 200 2015-2017
Jeep Cherokee 2014-2022



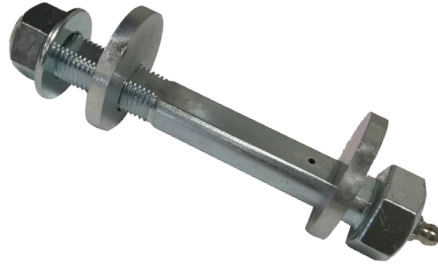
Adjustment Range: $\pm 1.5^{\circ}$
Quantity: Pair
Sides Adjusted: 2

**REAR
WHEEL**

46-454 REAR GREASEABLE TOE BOLT

- **Greaseable** Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Chrysler 200 2015-2017
Jeep Cherokee 2014-2022



Adjustment Range: $\pm 1.5^{\circ}$
Quantity: Pair
Sides Adjusted: 2

46-455 REAR GREASEABLE TOE BOLT

- **Greaseable** Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Toyota Prius 2016-2022
Toyota C-HR 2018-2022
Toyota Avalon 2013-2018
Toyota Camry Hybrid 2018-2022



Adjustment Range: $\pm 1.5^{\circ}$
Quantity: Pair
Sides Adjusted: 2

46-456 REAR GREASEABLE CAMBER TOE BOLT

- **Greaseable** Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Volkswagen Golf Sportwagon 2015-2019
Volkswagen GTI 2010-2014
Volkswagen Beetle Coupe 2011-2019
Porsche Macan 2015-2022
Audi A6/S6 2012-2018



Adjustment Range: $\pm 1.5^{\circ}$
Quantity: Pair
Sides Adjusted: 2

NEW**46-457 REAR GREASEABLE TOE BOLT**

- Greaseable Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- Greaseable feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Ford Fusion 2013-2020
Lincoln MKX 2016-2018
Ford Shelby GT350 Mustang 2016-2022
Ford Edge 2015-2022



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

NEW**46-458 REAR GREASEABLE CAMBER KIT**

- Makes rear camber adjustments possible on the 2015-2018 Mustang
- Precise easy controlled adjustment
- No pry bar needed
- Fast on vehicle adjustment
- No drilling or modification required

Ford Mustang 2015-2022
Ford Shelby GT350 Mustang 2016-2022



Adjustment Range: $\pm 1.5^\circ$
Quantity: Kit
Sides Adjusted: 2

46-459 REAR GREASEABLE CAMBER BOLT

- Greaseable design keeps bolts lubricated to ensure that future adjustments can be achieved
- Direct replacement will restore factory adjustment to rusted or seized cam bolts
- Will remain adjustable for the life of the vehicle

Mini Cooper R55 2008-2014



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

REAR
WHEEL

46-461 REAR GREASEABLE TOE BOLT

- Greaseable Design
- Replacement Toe Bolt kit is a direct replacement and will restore the factory adjustment
- Greaseable design alleviates bolt corrosion and allows for ease of future adjustments

Subaru Impreza 2002-2007
Subaru Forester 2003-2008



Adjustment Range: $\pm 2^\circ$
Quantity: Pair
Sides Adjusted: 2

46-462 REAR GREASEABLE CAMBER BOLT

- Greaseable design keeps bolts lubricated to ensure that future adjustments can be achieved
- Direct replacement will restore factory adjustment to rusted or seized cam bolts
- Will remain adjustable for the life of the vehicle

Mini Cooper F56 2014-2018



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

46-463 REAR GREASEABLE ADJUSTABLE TOE BOLT

- Replacement Toe Bolt kit is a direct replacement and will restore the factory adjustment
- Greaseable design alleviates bolt corrosion and allows for ease of future adjustments

Honda Civic 2001-2005
Honda Element 2003-2011



Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

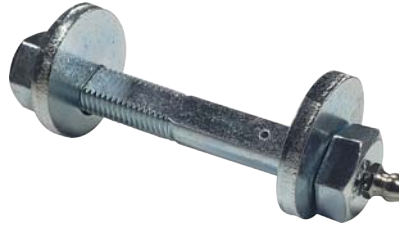
NEW

NEW**46-464 REAR GREASEABLE CAMBER BOLT**

- **Greaseable** Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Chevrolet Traverse 2018-2022**Adjustment Range:** $\pm 1.5^\circ$ **Quantity:** Pair**Sides Adjusted:** 2**NEW****46-465 REAR GREASEABLE ADJUSTABLE TOE BOLT**

- **Greaseable** Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

Chevrolet Traverse 2018-2022**Adjustment Range:** $\pm 1.5^\circ$ **Quantity:** Pair**Sides Adjusted:** 2**NEW****46-466 REAR GREASEABLE CAMBER TOE BOLT**

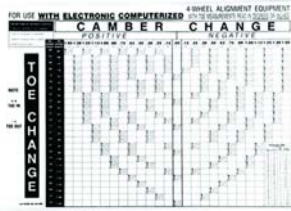
- **Greaseable** Design
- Will remain adjustable for the life of the vehicle
- Direct replacement and will restore factory adjustment to rusted or seized cam bolts
- **Greaseable** feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely

*Ford Maverick 2020-2023**Ford Bronco Sport 2020-2023**Ford Escape 2020-2023***Adjustment Range:** $\pm 1.5^\circ$ **Quantity:** Pair**Sides Adjusted:** 2**REAR
WHEEL**

46-1030

COATED INDEXING WALL CHART

For proper indexing of rear shim to achieve exact positioning



46-1035

PAINT STICK

For marking shim tabs to be removed for proper mounting

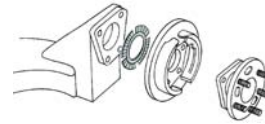


46-1000 Series

REAR FULL CONTACT CAMBER/TOE SHIM (BLUE)

- Audi 80
- Audi 90
- Chevrolet Spectrum
- Chrysler Dynasty
- Chrysler E Class

- 46-1001** .25°
- 46-1002** .5°
- 46-1003** .75°
- 46-1004** 1°
- 46-1005** 1.25°
- 46-1006** 1.5°
- 46-1000A** Assortment - 2 each size

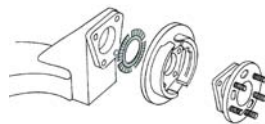
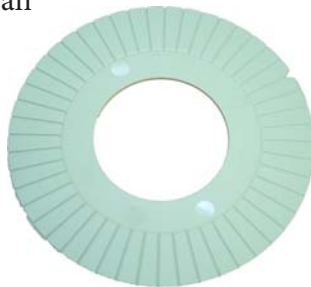


46-1100 Series

REAR FULL CONTACT CAMBER/TOE SHIM (WHITE)

- Audi 100/200
- Audi 5000
- Chevrolet Aveo
- Chrysler Town/City Van
- Dodge Caravan

- 46-1101** .25°
- 46-1102** .5°
- 46-1103** .75°
- 46-1104** 1°
- 46-1105** 1.25°
- 46-1106** 1.5°
- 46-1100A** Assortment - 2 each size

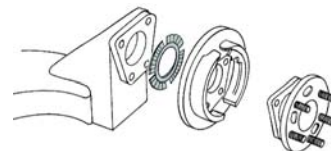


46-1120 Series

REAR FULL CONTACT CAMBER/TOE SHIM (GREEN)

- Chrysler Town&Country Van
- Chrysler Voyager Van
- Dodge Caravan
- Nissan Leaf

- 46-1121** .25°
- 46-1122** .5°
- 46-1123** .75°
- 46-1124** 1°
- 46-1120A** Assortment - 2 each size



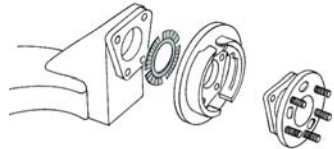
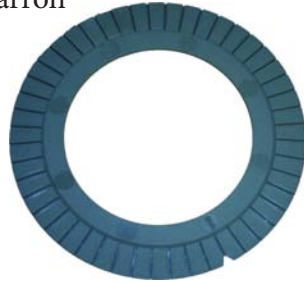
REAR WHEEL

46-1200 Series

**REAR FULL CONTACT
CAMBER/TOE SHIM (GREY)**

- Acura Integra
- Buick Skyhawk
- Buick Somerset
- Cadillac Cimarron

- 46-1201** .25°
- 45-1202** .5°
- 46-1203** .75°
- 46-1204** 1°
- 46-1205** 1.25°
- 46-1206** 1.5°
- 46-1200A** Assortment - 2 each size

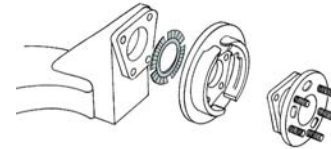
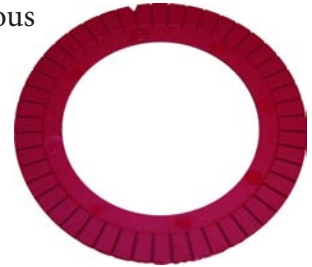


46-1300 Series

**REAR FULL CONTACT
CAMBER/TOE SHIM (BURGUNDY)**

- Buick Century
- Buick LeSabre
- Buick Lucerne
- Buick Rendezvous

- 46-1301** .25°
- 45-1302** .5°
- 46-1303** .75°
- 46-1304** 1°
- 46-1305** 1.25°
- 46-1306** 1.5°
- 46-1300A** Assortment - 2 each size

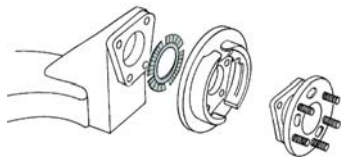


46-1500 Series

**REAR FULL CONTACT
CAMBER/TOE SHIM (BLACK)**

- Chrysler 200
- Honda Fit
- Hyundai Accent
- Kia Soul

- 46-1501** .25°
- 46-1502** .5°
- 46-1503** .75°
- 46-1504** 1°
- 46-1500A** Assortment - 2 each size

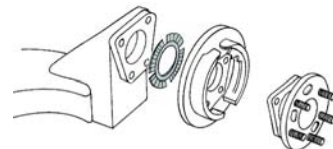
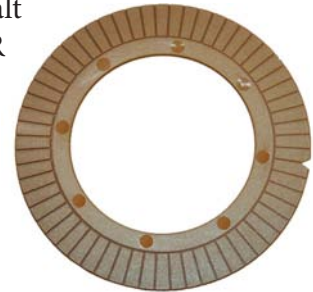


46-1520 Series

**REAR FULL CONTACT
CAMBER/TOE SHIM (BROWN)**

- Chevrolet Cobalt
- Chevrolet HHR
- Pontiac G5
- Pontiac G6

- 46-1521** .25°
- 46-1522** .5°
- 46-1523** .75°
- 46-1524** 1°
- 46-1520A** Assortment - 2 each size



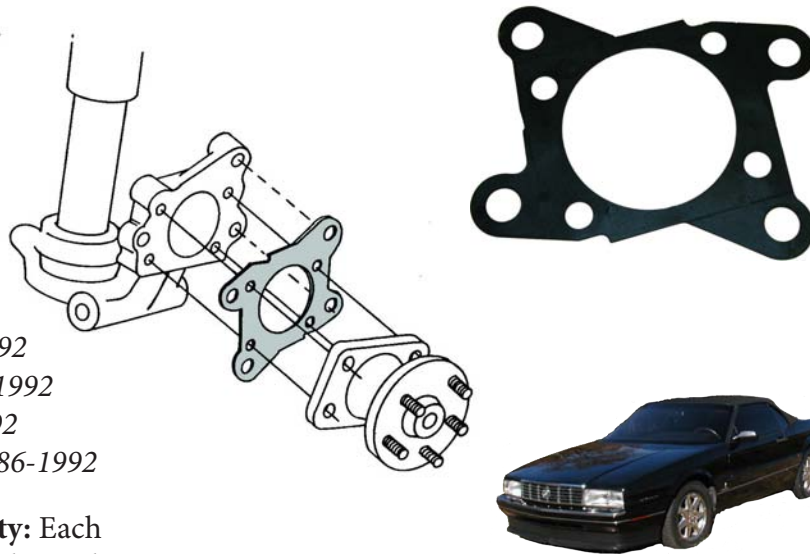
REAR
WHEEL

46-1600 Series**GM E & K BODY REAR CAMBER SHIM**

Allows for either positive or negative camber adjustment, while keeping the caliper in exact alignment with the rotor.

46-1601 .25°**46-1602** .5°**46-1603** .75°**46-1604** 1°*Buick Riviera* 1985-1993*Cadillac Allante* 1987-1992*Cadillac Eldorado* 1986-1992*Cadillac Seville* 1986-1992*Oldsmobile Toronado* 1986-1992

Quantity: Each
Sides Adjusted: 1

**46-1700****REAR CAMBER SHIM KIT***Ford Focus* 2000-2011

- Easy installation
- Changes camber $\pm .5^\circ$ or 1° , depending on shim selected
- Suitable for ABS-equipped vehicles
- Full support of rear hub/wheel
- Works in conjunction with factory toe adjuster to accurately set rear angles to desired readings

46-1702 .5°**46-1704** 1°

Kit contains 2 of each size and necessary hardware for installation

46-1705**AXIS^{CAM}****REAR CAMBER ADJUSTMENT BOLT SYSTEM**

This kit replaces the outer bolt of the upper rear control arm and provides $\pm 1^\circ$ of camber adjustment. Perfect for lowered vehicles or standard alignments.

Ford Focus 2000-2011

Adjustment Range: Camber $\pm 1^\circ$

Quantity: Pair**Sides Adjusted:** 2

46-1707

REAR CAMBER AXIS CAM BOLT

This kit replaces knuckle bolt on the lower rear control arm to make camber fully adjustable

Hyundai Entourage 2007-2009
Kia Sedona 2006-2014



Adjustment Range: ±.75°
Quantity: Pair
Sides Adjusted: 2

46-1709

REAR CAMBER AXIS CAM BOLT

This kit replaces the outer bolt of the upper rear control arm and provides ±.75° of camber adjustment. Perfect for lowered vehicles or standard alignments.

Ford Explorer 2WD/4WD 2011-2019
FORD Flex FWD/AWD 2009-2020
Ford Taurus Sedan 2010-2019
Lincoln MKS 2009-2016
Lincoln MKT 2010-2019



Adjustment Range: ±.75°
Quantity: Pair
Sides Adjusted: 2

46-1900 REAR GM CAMBER REAR FULL CONTACT SHIM

- Allows for camber adjustment where no OE adjustment is available
- Will not interfere with ABS brake system

- 46-1901** .25°
- 46-1902** .5°
- 46-1903** .75°
- 46-1904** 1°
- 46-1900A** Assortment - 2 each size



Buick LeSabre 2000-2005
Buick Park Avenue 1997-2005
Cadillac Deville 2000-2005
Cadillac Seville/STS 1998-2011
Oldsmobile Aurora 2001-2003
Pontiac Bonneville 2000-2005

46-2002A

SYSTEM 2000 MASTER UNIVERSAL REAR SHIM ASSORTMENT

PART	QTY	DESC
46-2100	6	Blue Shim
46-2200	6	White Shim
46-2300	6	Grey Shim
46-2400	6	Burgundy Shim
88-343	1	Tab Cutting Tool
46-1035	1	Paint Stick
46-2000AB	Assortment Above, Plus Wall Board	



REAR WHEEL

SYSTEM 2000 **UNIVERSAL** REAR FULL CONTACT/TOE SHIM

EXACT FIT System 2000's four part numbers provide a precision fit for all application. No modification of outer perimeter is required, as is the case with other shim designs. A perfect alignment with full spindle support.

SIMPLICITY Just set the System 2000 shim on the template, dial in the predetermined numbers from the chart, and create the exact shim angle needed to precisely align the vehicle. Break out tabs as shown and install.

46-2100 Blue

Audi, Chrysler, Dodge, Eagle, Geo, Isuzu, Plymouth, Pontiac, Volkswagen

**46-2300 Grey**

Acura, Buick, Cadillac, Chevrolet, Geo, Oldsmobile, Pontiac, Toyota

**46-2200 White**

Audi, Plymouth, Chrysler, Dodge, Honda, Mercury

**46-2400 Burgundy**

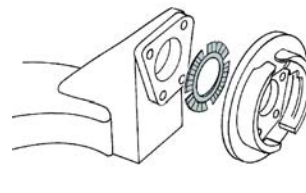
Buick, Cadillac, Chevrolet, Oldsmobile, Pontiac, Toyota



Adjustment Range: 0° to 1.5°

Quantity: Each

Sides Adjusted: 1

**46-2160****REAR XTRA RANGE CAMBER SHIM KIT**

Acura 2.2CL, 2.3CL, 3.0CL 1997-1999

Acura Integra 1990-2001

Acura Legend 1991-1995

Honda Accord 1986-1989

Honda Civic 1992-2000

Isuzu Oasis 1996-1999

2 each 1/16" shim = .20° possible change

2 each 1/8" shim = .40° possible change

2 each Extended bolt



Adjustment Range: Up To 1.25°

Quantity: Kit

Sides Adjusted: 1

46-2170**REAR XTRA RANGE CAMBER SHIM KIT**

Chrysler Sebring Coupe 1995-2000

Chrysler Sebring Coupe 2001-2010

Dodge Avenger 1995-2000

Dodge Stratus Coupe 1995-2000

Dodge Stratus Coupe 2001-2005

4 each 1/16" shim = .20° possible change

4 each 1/8" shim = .40° possible change

4 each Extended bolts



Adjustment Range: Up To +1.25°

Quantity: Kit

Sides Adjusted: 1

46-2174

REAR TOE ARM WITH ADJUSTABLE CAM BOLT KIT

- Allows for rear positive or negative camber adjustment where no OE adjustments are available
- Hexed turnbuckle design for fast and easy adjustments
- Includes OE style bushings

Jeep Patriot 2007-2017
Dodge Caliber 2007-2012
Jeep Compass 2007-2017



Adjustment Range: $\pm 1.5^\circ$
Quantity: Each
Sides Adjusted: 1

46-2175

REAR GREASEABLE CAMBER ARM

- Allows for rear positive or negative camber adjustment where no OE adjustments are available
- Hexed turnbuckle design for fast and easy adjustments
- Includes OE style bushings

Chrysler Sebring 2007-2010
Dodge Journey 2009-2010
Dodge Avenger 2008-2010



Adjustment Range: $+2.5^\circ$
Quantity: Each
Sides Adjusted: 1

46-2176

REAR GREASEABLE CAMBER ARM

- Allows for rear positive or negative camber adjustment where no OE adjustments are available
- Hexed turnbuckle design for fast and easy adjustments
- Includes OE style bushings

Chrysler 200 2011-2014
Dodge Avenger 2011-2014
Dodge Journey 2011-2022



Adjustment Range: $\pm 4^\circ$
Quantity: Each
Sides Adjusted: 1

46-2177

REAR GREASEABLE TOE ARM

- Allows for positive or negative rear toe adjustment where no OE adjustments are available.
- **GREASEABLE** Design

Subaru Crosstrek 2013-2022
Subaru Impreza 2008-2022
Subaru Forester 2009-2022
Subaru Legacy 2010-2012
Subaru Outback 2010-2022
Scion FR-s 2013-2016
Subaru WRX 2015-2022



Adjustment Range: $\pm 3^\circ$
Quantity: Each
Sides Adjusted: 1



REAR WHEEL

46-2178

REAR CAMBER ARM

- Comes with durable OE-style bushings
- Makes non-adjustable vehicles fully adjustable for rear camber
- Unique design allows fast and easy "on-vehicle" replacement

Dodge Caliber 2007-2012

Jeep Compass 2007-20217

Jeep Patriot 2007-2017

Mitsubishi Outlander 2003-2022



Adjustment Range: $\pm 2^\circ$

Quantity: Each

Sides Adjusted: 1

46-2179

REAR **GREASEABLE** CAMBER ARM

Allows for positive or negative rear camber and/or toe adjustment where no OE adjustments are available.

- **Greaseable** design to extend tie rod life
- Hex turnbuckle design for fast and easy adjustments
- Includes OE style bushing

Ford Escape FWD/AWD 2001-2012

Mazda Tribute FWD/AWD 2009-2012

Mercury Mariner FWD/AWD 2005-2011



Adjustment Range: $\pm 2^\circ$

Quantity: Each

Sides Adjusted: 1



46-2180

REAR CAMBER ARM

- Ideal for lowered vehicles
- Includes OEM-style rubber bushings for a quiet ride
- Replaces non-adjustable OEM suspension arms

Acura RSX 2002-2006

Honda Civic 2001-2005

Honda Civic SI 2002-2005



Adjustment Range: -4° to $+6^\circ$

Quantity: Each

Sides Adjusted: 1

46-2181

REAR **GREASEABLE** CAMBER ARM

- Quick and easy replacement of non-adjustable OEM arm
- Turnbuckle design allows accurate controlled adjustments
- Allows for continuous future adjustments
- **Greaseable** Design

Acura 3.2CL 1997-1999

Acura 3.2TL 1999-2003

Acura 3.5RL 1996-2004

Honda Accord 1998-2002



Adjustment Range: -2° to $+4^\circ$

Quantity: Each

Sides Adjusted: 1

46-2182

REAR GREASEABLE CAMBER ARM

- Quick and easy replacement of non-adjustable OEM arm
- Turnbuckle design allows accurate controlled adjustments
- Allows for continuous future adjustments

Honda Civic and CRX 1988-2000

Honda CRX 1988-1992

Honda Del Sol 1992-1997

Honda CRV 1997-2001



Adjustment Range: -2° to +5°
Quantity: Each
Sides Adjusted: 1

46-2183

REAR TOE ARM

- Replacement for damaged or frozen OE toe arm
- Provides adjustment beyond the OE adjustment
- Works with 46-2184 adjustable camber arm

Acure TLX(AWD) 2015-2021

Acura TL, TSX 2009-2014

Honda Accord 2008-2017

Honda Crosstour 2010-2015



Adjustment Range: ±1°
Quantity: Each
Sides Adjusted: 1

46-2184

REAR GREASEABLE CAMBER ARM

Allows for positive or negative rear camber adjustment where no OE adjustments are available.

Acure TLX(AWD) 2015-20201

Acura TL, TSX 2009-2014

Honda Accord 2008-2017



Adjustment Range: ±1°
Quantity: Each
Sides Adjusted: 1

46-2185

REAR CAMBER LINK

Allows for positive or negative camber adjustment where no OE adjustments are available.

Honda CRV 2002-2006

Honda Element 2003-2011



Adjustment Range: -2° to +4°
Quantity: Each
Sides Adjusted: 1

REAR WHEEL

46-2186

REAR CAMBER ARM

Allows for positive or negative camber adjustment where no OE adjustments are available.

Honda CRV 2007-2016



Adjustment Range: -2° to +4°

Quantity: Each

Sides Adjusted: 1

46-2187

REAR ALUMINUM CAMBER ARM

Allows for positive or negative camber adjustment where no OE adjustments are available.

Acura CSX 2006-2011

Acura ILX 2013-2022

Honda Civic 2006-2015

Honda Civic Hybrid 2006-2015



Adjustment Range: -4° to ±3°

Quantity: Each

Sides Adjusted: 1

46-2188

REAR CAMBER ARM

This kit allows for rear camber adjustment with fast and easy on-vehicle replacement.

Ford Escape 2013-2019

Ford C-Max 2013-2018

Ford Focus 2000-2018

Lincoln MKC 2015-2017

Mazda 3 2004-2014

Mazda 5 2006-2017

Volvo C30 2008-2013

Volvo S40 2005-2011

Volvo V50 2005-2011



Adjustment Range: -1.5° to +5°

Quantity: Each

Sides Adjusted: 1

46-2189

REAR CAMBER/TOE ARM AND CAM BOLT KIT

Allows for rear camber and toe adjustments where no OE adjustments are available.

Kia Optima 2007-2008

Kia Rondo 2007-2010

Hyundai Elantra 2007-2010

Hyundai Elantra Touring 2011-2012



Adjustment Range: Camber ±2°, Toe ±2°

Quantity: Kit

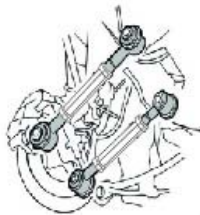
Sides Adjusted: 1

46-2190

REAR CAMBER ARMS

- Ideal for lowered or performance vehicles!
- With OEM-style rubber bushings for a quiet ride
- Replaces non-adjustable OEM suspension arms

Honda Accord 1998-2002
Acura 3.2 TL 1999-2003



Adjustment Range: -1.5° to +3°
Quantity: Pair
Sides Adjusted: 1

46-2191

REAR GREASEABLE CAMBER ARM

- Allows for positive or negative rear camber and/or toe adjustment where no OE adjustments are available.
- **Greaseable** design for longer life

Honda Odyssey 2005-2017



Adjustment Range: -2° to +4°
Quantity: Each
Sides Adjusted: 1

46-2192

REAR GREASEABLE CAMBER ARM

- This arm allows for positive or negative rear camber adjustments
- **Greaseable** design for longer life

Honda Accord 2003-2007
Honda Odyssey 1999-2004
Honda Pilot 2003-2008
Acura MDX 2001-2006
Acura TSX 2004-2008



Adjustment Range: -2° to +4°
Quantity: Each
Sides Adjusted: 1

46-2194

REAR GREASEABLE CAMBER ARM

- Quick and easy replacement of non-adjustable OEM arm
- Turn Buckle design allows accurate controlled adjustments
- Allows for continuous future adjustments
- **Greaseable** Design

Honda Odyssey Touring Elite 2005-2017



Adjustment Range: -2° to +4°
Quantity: Each
Sides Adjusted: 1

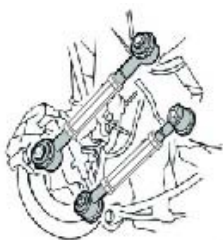
REAR WHEEL

46-2195

REAR CAMBER ARMS

- Allows fast and easy “on vehicle” adjustment
- Works with factory camber adjustment

Honda Accord 2003-2007
Acura 3.2 TL 2004-2008
Acura TSX 2004-2008



Adjustment Range: -1.5° to +3°
Quantity: Pair
Sides Adjusted: 1

46-2196

REAR **GREASEABLE** CAMBER ARM

- This arm allows for positive or negative rear camber adjustments
- **Greaseable** design for longer life

Acura ZDX 2010-2013
Acura MDX 2007-2013
Honda Pilot 2009-2015



Adjustment Range: -2° to +4°
Quantity: Each
Sides Adjusted: 1

46-2199

REAR CAMBER/TOE ARM AND CAMBOLT KIT

Allows for positive or negative rear camber and/or toe adjustment where no OE adjustments are available.

Infiniti Q50 Sedan 2014-2020
Infiniti Q60 2017-2019
Infiniti Q70 2014-2019
Nissan Altima 2007-2012
Nissan Maxima 2004-2014



Adjustment Range: Camber $\pm 3^\circ$, Toe $\pm 2^\circ$
Quantity: Kit
Sides Adjusted: 1

46-2225

REAR **GREASEABLE** CAMBER ARM

- Quick and easy replacement of non-adjustable OEM arm
- Turnbuckle allows for accurate controlled camber adjustments
- Allows for continuous future adjustments
- **Greaseable** Design

BMW 1 Series 118i,120i,125i,128i,130i,135i,135is 2007-2013
BMW 3 Series 330i,325i,328i,335i,335xi,335d 2006-2014



Adjustment Range: $\pm 3^\circ$
Quantity: Each
Sides Adjusted: 1

46-2226

REAR **GREASEABLE** CAMBER ARM

- Quick and easy replacement of non-adjustable OEM arm
- Turnbuckle design allows accurate controlled adjustments
- Allows for continuous future adjustments
- **Greaseable** design for longer life

Lexus GS300/350 2006-2011

Lexus IS250/350 2006-2013

Lexus IS 250C 2010-2015



Adjustment Range: $\pm 1.5^\circ$
Quantity: Each
Sides Adjusted: 1

46-2227

REAR CAMBER ARM

- Quick and easy replacement of non-adjustable OEM arm
- Turnbuckle design allows accurate controlled adjustments
- Allows for continuous future adjustments
- OEM style bushings



Ford Fusion 2013-2020

Lincoln MXZ 2013-2019



Adjustment Range: $\pm 2^\circ$
Quantity: Each
Sides Adjusted: 1

46-2228

REAR CAMBER/TOE ARM AND CAM BOLT KIT

Allows for positive or negative rear camber and / or toe adjustment where no OE adjustments are available



Infiniti G25 2011-2012

Infiniti G37 Coupe Active steer 2008-2013

Infiniti G37 Sedan 2009-2013

Infiniti M35/M45 2006-2010

Infiniti Q40 2015



Adjustment Range: Camber $\pm 3^\circ$ Toe $\pm 2^\circ$
Quantity: Kit
Sides Adjusted: 1

46-2229

REAR **GREASEABLE** TOE ARM

- This kit allows for rear toe adjustment where no OE adjustments are available
- Turnbuckle design allows accurate controlled adjustments
- **Greaseable** design extends life of product

Toyota Rav 4 2006-2010

Toyota Vanguard 2007-2010 (Asia)



Adjustment Range: $\pm 3^\circ$
Quantity: Each
Sides Adjusted: 1

46-2231

REAR CAMBER ARM

- Quick and easy replacement of non-adjustable OEM arm
- Turnbuckle design allows accurate controlled adjustments
- Allows for continuous future adjustments
- OEM style bushings

Ford Fusion 2006-2012

Lincoln Zephyr MKZ 2006-2012

Mazda 6 2003-2013

Mercury Milan 2006-2010



Adjustment Range: $\pm 2^\circ$

Quantity: Each

Sides Adjusted: 1

46-2232

REAR UPPER CAMBER ARM

- Easy replacement of OE arm
- Allows for rear positive or negative camber adjustment where no OE adjustments are available
- Hexed turnbuckle design for fast and easy adjustments

Lexus 200T 2016-2017

Lexus GS 350 2013-2019

Lexus IS 300 (AWD/RWD) 2016-2019

Lexus IS 250 2014-2015

Lexus IS 350 2014-2019

Lexus RC 350 2015-2022



Adjustment Range: $\pm 3^\circ$

Quantity: Each

Sides Adjusted: 1

46-2233

REAR **GREASEABLE** CAMBER ARM

- Turn buckle design
- **Greaseable** to allow for easy future adjustments
- Allows for positive or negative adjustments
- Precise controlled adjustment
- No drilling or modification required

Subaru Outback 2000-2009

Subaru Legacy 2000-2009



Adjustment Range: $\pm 2^\circ$

Quantity: Each

Sides Adjusted: 1

46-2234

REAR WHEEL SETBACK LATERAL ARM

- Replacement for OE rear Lateral Link when Damaged
- Works with 46-2183 Adjustable Toe Arm
- Works with 46-2184 Adjustable Camber Arm
- Regains "SET BACK" changes after installation of 46-2183 and 46-2184 Camber and Toe arms.

Acura TLX (AWD) 2015-2021

Acura TL, TSX 2009-2014

Honda Accord 2008-2017

Honda Crosstour 2010-2015



Adjustment Range: $\pm 1^\circ$

Quantity: Each

Sides Adjusted: 1

46-2235

REAR **GREASEABLE** CAMBER ARM

- Factory arm is not adjustable
- Fully adjustable for camber change
- Turn buckle design for easy adjustments
- **Greaseable** to allow for easy future adjustments
- Allows for positive or negative adjustments

Nissan Altima 2013-2022
Nissan Maxima 2016-2022



Adjustment Range: $\pm 2.5^\circ$
 Quantity: Each
 Sides Adjusted: 1

46-2236L (LEFT SIDE)

46-2236R (RIGHT SIDE)

REAR **GREASEABLE** CAMBER ARM

- Allows for rear positive or negative camber adjustment where no OE adjustments are available

Toyota Rav 4 2006-2021
Toyota Rav 4 Hybrid 2016-2018
Lexus NX 2015-2020



Adjustment Range: $\pm 3^\circ$
 Quantity: Each
 Sides Adjusted: 1

46-2237

REAR **GREASEABLE** TOE ARM AND CAM BOLT KIT

- Allow for rear toe adjustments where no OE adjustment are available
- **Greaseable** bolt for long service life and easier future adjustments
- Positive or negative 2° toe adjustments
- **Greaseable** turnbuckle will not seize overtime to ensure long service life and adjustability

Acura RL 1996-2004
Honda Accord 2003-2007
Acura CL 1997-1999
Acura TL 1999-2003



Adjustment Range: $\pm 2^\circ$
 Quantity: Kit
 Sides Adjusted: 1

46-2238

REAR **GREASEABLE** CAMBER ARM

- Allows for positive or negative camber adjustment where no OE adjustment is available
- Pro Series **Greaseable** line
- **Greaseable** design prevents corrosion and allows for future adjustments to be done with ease

Honda Civic 2016-2023
Honda CRV 2017-2022
Honda Insight 2019-2022



Adjustment Range: -3° to $+6^\circ$
 Quantity: Each
 Sides Adjusted: 1

REAR
WHEEL

46-2239

REAR GREASEABLE TOE ARM

- Adjustable rear toe arm
- Greaseable for long service life
- Will not seize like OE arm
- Very popular application

Toyota Camry/Hybrid 2012-2017
Toyota Avalon/Hybrid 2013-2018



Adjustment Range: $\pm 2.5^\circ$
Quantity: Each
Sides Adjusted: 1

NEW

46-2240

REAR GREASEABLE ADJUSTABLE CAMBER ARM

- Turnbuckle design for easy on vehicle adjustment
- Greaseable Design
- Pro Series
- Replaces nonadjustable arm for rear camber
- Positive or negative adjustment

Honda Ridgeline 2006-2014



Adjustment Range: $\pm 2^\circ$
Quantity: Each
Sides Adjusted: 1

46-2241

REAR GREASEABLE TOE ARM

- Turn buckle design
- Greaseable to allow for easy future adjustments
- Allows for positive or negative adjustments
- Precise controlled adjustment
- No drilling or modification required

Lincoln MKS 2009-2012
Lincoln MKT 2013-2019
Ford Flex 2013-2020
Ford Taurus 2010-2018



Adjustment Range: $\pm 2.5^\circ$
Quantity: Each
Sides Adjusted: 1

46-2242

REAR GREASEABLE TOE ARM

- Turn buckle design
- Greaseable to allow for easy future adjustments
- Allows for positive or negative adjustments
- Precise controlled adjustment
- No drilling or modification required

Buick Lacrosse/Allure 2005-2009
Chevrolet Impala/Monte Carlo 2000-2005



Adjustment Range: $\pm 1.75^\circ$
Quantity: Each
Sides Adjusted: 1

NEW

46-2245 REAR GREASEABLE ADJUSTABLE ARM

- Greaseable Design
- Will remain adjustable for the life of the vehicle
- Greaseable feature keeps bolts lubricated to ensure that future adjustments can be achieved and parts will move freely
- Makes the rear adjustable where it is not from the factory

Rav 4 2019-2022



Adjustment Range: -3° to +6°
Quantity: Each
Sides Adjusted: 1

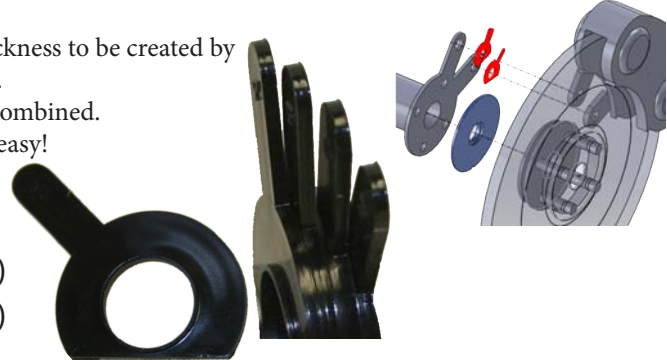
46-2450A REAR DISC BRAKE CALIPER SPACER - ASSORTMENT

When installing rear camber/toe shims, many rear disc brake systems require the caliper to be shimmed to match the angle of the rotor. In most instances, this angle can be achieved by using Northstar Manufacturing's new "Stackable/Interlocking" caliper spacers.

- Unique snap-together design allows required thickness to be created by interlocking as many or as few spacers as needed.
- Two different thicknesses available - and can be combined.
- Special "finger tab" makes installation quick and easy!
- 24 per assortment (12 of each size)

Individual sizes available separately

- 46-2454** .04 Thickness (pkg of 12)
- 46-2456** .06 Thickness (pkg of 12)



REAR CAMBER/TOE STEEL HALF SHIMS

These close-tolerance half shims are the ideal low cost alternative to full contact dual angle rear shims when only one angle needs correction.

- Most economical to use
- Accurately adjusts camber or toe
- Stackable
- Available in four thicknesses .010", .020", .030"
- 12 per package

46-4000



Part	Camber	Toe
46-4010	1/4°	1/16"
46-4015	3/8°	3/32"
46-4020	1/2°	1/8"
46-4030	3/4°	3/16"

46-2000



Part	Camber	Toe
46-2010	1/4°	1/16"
46-2015	3/8°	3/32"
46-2020	1/2°	1/8"
46-2030	3/4°	3/16"

46-5000



Part	Camber	Toe
46-5010	1/4°	1/16"
46-5015	3/8°	3/32"
46-5020	1/2°	1/8"
46-5030	3/4°	3/16"

REAR WHEEL

REAR SUSPENSION SHIM

- 46-6020 1/32"
- 46-6030 1/16"
- 46-6040 1/8"



Corvette 1963-1982

REAR CAMBER/TOE SHIM PACK

Thickness Qty

- 46-7110 .010" 12
- 46-7115 .015" 12
- 46-7120 .020" 12
- 46-7130 .030" 12



Chevrolet Cruze 2011-2019
 Chevrolet Spark 2012-2022
 Chevrolet Aveo 2012-2014
 Chevrolet Sonic 2012-2020
 Buick Verano 2012-2017

SHIM PACK ASSORTMENT

46-7100A

Assortment contains 12 of each size



REAR WHEEL

46-7300 Series

REAR CAMBER/TOE STEEL HALF SHIM

- Accurately adjust camber and or toe angles
- Stackable
- Available in 4 thicknesses:

Thickness Qty

- 46-7310 .010" 12
- 46-7315 .015" 12
- 46-7320 .020" 12
- 46-7330 .030" 12



Fiat 500 2012-2017
 Fiat 500L 2012-2021



Problem: Non-**GREASEABLE** OE tie rod ends prematurely wear and fail
Solution: Northstar Manufacturing's rear replacement links have a **GREASEABLE** tie rod end to help extend overall life.

46-9811

COMPLETE REAR SUSPENSION LINK ASSEMBLY WITH 17MM SOCKET STUD

Built 3/4/02 or After *Ford Explorer 2WD/4WD 2003-2005*
Lincoln Aviator 2WD/4WD 2003-2005
Mercury Mountaineer 2WD/4WD 2003-2005



46-9812

COMPLETE REAR SUSPENSION LINK ASSEMBLY WITH 15MM SOCKET STUD

Built Before 3/4/02 *Ford Explorer 2WD/4WD 2002*
Mercury Mountaineer 2WD/4WD 2002



46-9813

COMPLETE REAR SUSPENSION LINK ASSEMBLY

Ford Expedition 2WD/4WD 2006-2006
Lincoln Navigator 2WD/4WD 2003-2006



REAR
WHEEL

3/8" DRIVE TORX BIT FOR GM VEHICLES

These tools are designed to line up holes in engine cradle with locating holes in frame. Set contains two of each size.

88-050

3/8" drive Torx bit is necessary for removal of rear axle bearing assemblies on most 1988 and newer GM vehicles.

88-060

1/2" drive Torx bit is necessary for removal of front caliper mounting bolts on 1988 and newer GM W body cars.

88-343

MICRO SHEAR REAR SHIM TAB CUTTER



This cutter tool is designed to easily remove the tabs from out rear-wheel full contact/dual angle shims. Removes only those you need removed. Works equally well on both the original design or the system 2000 universal design.

88-569

FRONT WHEEL DRIVE AXLE REMOVING TOOL

- Universal design allows axle removal on FWD vehicles.
- Offset leg design clears hub housing.
- Multi-fit base plate will fit either four or five lug design.



88-882

WHEEL WEIGHT HAMMER



This passenger car wheel weight installation tool is the industry standard. Plastic-coated handles provide a better grip.

88-890

WHEEL PROTECTOR WHEEL WEIGHT PLIERS



"Soft-Head" design allows installation and removal of coated weights without damage to wheel or wheel weight coating.

88-928

PEDAL DEPRESSOR



This unit produces constant pressure on the pedal. The adjustable steel plate extends the length of the bar.

88-938

STEERING WHEEL HOLDER

This unit securely centers the steering wheel during alignments. The covered hooks and base prevent damage to the steering wheel or seat covers.



88-1101

LUG NUT COVER TOOL



Removes and installs chrome lug nut covers from both heavy-duty and medium-duty truck wheels

- Non-mar coating will not scratch chrome
- Fits both round and hex covers
- Made in USA

88-1103

WHEEL WEIGHT HAMMER



Used for the installation of coated passenger car wheel weights. This hammer features a unique "soft-head" acetate hammer face. The cast steel head has an enamel finish, and the rear-mounted hardened steel "Clip Claw" horn quickly removes old weights. The horns are replaceable. An essential tool for coated wheel weights.

- 88-1103-1 replacement soft head
- 88-1103-2 replacement hook

BOLT/NUT REMOVING TOOL

Removes even the most stubborn bolts with ease. This tool is designed to work in conjunction with a zip gun (to provide vibration) while being turned with an open-end or box wrench.



Size Works especially well on

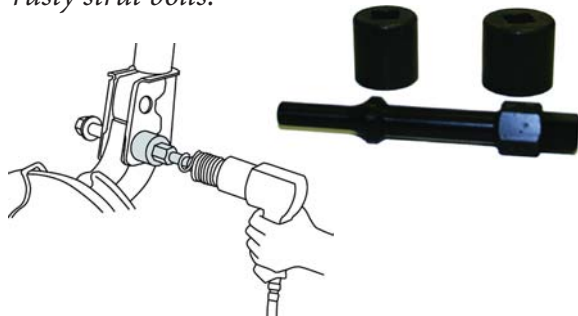
- 88-1110 3/8" GM hub & bearing assembly T50 torx mounting bolts

- 88-1112 1/2" GM brake caliper T60 torx mounting bolts

88-1114

STRUT BOLT REMOVER DRIVER SET

Ideal for removing rusty strut bolts!



88-1302

TAURUS/SABLE SEDAN REAR TOE/CAMBER ADJUSTING TOOL



This specially-designed tool easily adjusts aftermarket offset bushing for accurate adjustment of camber/toe

Ford Taurus, Mercury Sable sedan 1986-2002

88-1304

HONDA/ACURA/MITSUBISHI
ADJUSTABLE BALL JOINT
ADJUSTING WRENCH



This 1-5/8" open-end wrench makes adjusting the import ball joint a snap!

Works with 41-229 through 41-550 ball joints

88-1637

VALVE STEM INSTALLATION TOOL



- Made of rugged non-marring polymer
- Handles any length valve in any size rim

88-2400

LUG NUT REMOVER SET

A simple, effective method for removing wheel lug nuts when the key is not available. Also removes damaged lug nuts. Tapered left-hand threads grip tapered or straight lug nuts. Two sizes fit most nuts. Also works on hex nuts. Use with 1/2" drive impact tool.



88-2401 Lug nut remover-small

88-2402 Lug nut remover-Large

88-4014-10

BRAKE LATHE PREMIUM
CARBIDE CUTTING INSERTS

AMMCO 3000,
4000, 4100,
6900, 7000,
7700 MODEL
LATHES



- 10 cutting tips and mounting screws per package
- 6 cutting surfaces per tip

88-4036

DRUM SILENCER BAND

This silencer is made of natural rubber and is secured by a buckle so it will fit all sizes of passenger car drums.



88-4039

SILENCER BAND-SMALL

88-4040

SILENCER BAND-LARGE



88-4030

UNIVERSAL SILENCER
FOR VENTED ROTOR

This silencer band is made of natural rubber with lead weight inserts attached to deaden vibration and chatter. Fits any size vertical rotor.



88-4041

BRAKE ROTOR CHATTER SILENCER

This silencer snaps on in seconds. The two metal "antennas" are positioned behind the cutters to hold the tool where chatter starts.



**GRINDING PADS FOR PRO-FINISHER
NON-DIRECTIONAL ROTOR FINISHING
TOOL**

25 pieces per package

- 88-4080** 80 grit
- 88-4120** 120 grit
- 88-4150** 150 grit



88-4087-10

**BRAKE LATHE PREMIUM
CARBIDE CUTTER**



ALL FMC LATHES

- 10 cutting tips and mounting screws per package
- 6 cutting surfaces per tip

88-4096-10

**BRAKE LATHE PREMIUM
CARBIDE CUTTER INSEERTS**



ALL ACCUTURN DISC/DRUM

- 10 cutting tips and mounting screws per package
- 6 cutting surfaces per tip

ROTARY FILE



These high-quality rotary files are great time-savers when elongating lower strut mount holes to install alignment kits. May be used with 1/4" or 3/8" electric or air drill. Dozens of other uses.

- 88-4510** 1/4" **88-4511** 3/8"
- 88-4512** 5/8" **88-4513** Set

**TAURUS/SABLE SPOT WELD
CUTTERS WITH ARBOR**



For use with air tool in cutting spot welds holding OE alignment sleeves on top of strut towers found on Ford F-Series/Mercury Sable vehicles.

Size	Cutter only	Cutter only
1/2"	88-4520	88-4521
3/8"	88-4520	88-4522

88-6084

PITMAN ARM ADJUSTING TOOL

- Fits 1-7/16" diameter adjusting sleeves
- Permits 360° rotation of pitman arm to shim where suspension is knobby
- 1/2" square holes for ratchet or breaker bar
- For use on 3/4-ton trucks, including Ford Super Duty



88-6274

TIRE ROD ADJUSTING TOOL

- Fits 1-13/16" diameter adjusting sleeves
- Permits 360° rotation of Pitman arm even where space is limited
- 1/2" square drive for ratchet or breaker bar
- For use on 3/4" and 1-ton trucks, including Ford Super Duty



88-6275

TIRE ROD ADJUSTING TOOL SET

Allows use of 1/2" drive ratchet or breaker bar for maximum leverage.

- 88-6084** 1-7/16"
- 88-6274** 1-13/16"
- 88-7095** 3/4"
- 88-7096** 1"
- 88-7097** 1-1/8"



88-6496

PITMAN ARM PULLER

- Labor intensive removal of steering sector not necessary
- Compact design allows easy access to the pitman arm
- Works on most domestic SUVs and pickups



88-7023

TIE ROD TOOL



Unique four-position feature lets you locate tool to grip sleeve properly even when access is limited. Permits 360° rotation of tie rod sleeve. Universal design fits most passenger car models, as well as light trucks

88-7090 1/2" DRIVE BALL JOINT SPANNER WRENCH

- Designed for removal and installation of ball joint adjusting sleeves on 1/2"-3/4", and 1-ton Dana open yoke front axles used on Ford, GM, Chrysler, IHC and Jeep 4WD vehicles
- Permits easy torquing with 1" socket for proper upper ball joint preload
- Also for use with the 44-2460 and 44-2480 series bushings.



TIE ROD ADJUSTING TOOL SET

Unique design allows use of 1/2" drive ratchet or breaker bar for maximum leverage.



- 88-7095** 3/4" for compact vehicles
- 88-7096** 1" for standard vehicles
- 88-7097** 1-1/8" for light trucks

88-7098

FORD SUPER DUTY TIE ROD TOOL



- Accurately machined to fit the large toe-adjusting sleeve and steer-ahead sleeve
- Wide jaw fits into split in sleeve for positive grip without slippage or tearing
- Long lever arm helps break loose stubborn, rusted sleeves
- Full 360° rotation

88-7099

TIE ROD ADJUSTING TOOL



Features 360° sleeve rotation without removing tool from tie rod, and has an eight-position feature for proper tool location.

88-7100A

1994-1997 CHRYSLER LH MODEL TOE ADJUSTING TOOL SET

This set contains:

88-7101 TIE ROD SOCKET

Special offset socket allows easy access to sleeve nuts and breaks loose even the most stubborn tie rod sleeve jam nuts.

88-7102 TIE ROD END STABILIZER

This holding tool prevents the tie rod end from “cocking” during adjustment, ensuring correct toe setting.

88-7103 TIE ROD END SLEEVE ADJUSTING WRENCH

This specially designed adjusting tool has the proper angle and length to easily reach and turn tie rod sleeves for adjustment.



88-7200A

1998 TO 2005 CHRYSLER LH MODEL TOE ADJUSTING TOOL SET

This set contains:

88-7201 TIE ROD END SLEEVE ADJUSTING TOOL

This specially designed tool has a hardened tab to fit into the slot of the tie rod sleeve and an inside diameter machined to match the sleeve.

88-7102 TIE ROD END STABILIZER

This holding tool prevents the tie rod end from “cocking” during adjustment, ensuring correct toe setting.

88-7203 TIE ROD SLEEVE OUTER WRENCH

This special wrench is designed to fit over the adjusting tool to loosen and turn the tie rod sleeve to the proper toe setting.



88-7205

TIE ROD STABILIZER SET

This tool set is designed to center tie rod ends in their sockets when setting toe. This will help in obtaining a straight steering wheel, insuring proper steering performance and maximum tire life.



88-7249

BALL JOINT TOOL SET



The tools in this set will press in or out most sizes of press-fit ball joints. The C-frame press can also be used alone to remove and replace universal joints.

88-7301

POSITIVE LOCK UNIVERSAL INNER TIE ROD SOCKET

Allows fast and easy replacement of inner tie rod end without removing the rack and pinion.



Fits domestic and foreign vehicles with inner tie rods up to 42mm outer diameter.

Adjusts to fit all styles of inner tie rods (round, square, flat or hex) without slipping!

88-7313 FORD TRANSIT SLIDE HAMMER BALL JOINT REMOVAL TOOL

- Tool used with slide hammer (not included) to safely and easily remove pressed in ball joints
- This cost effective Tool is a must have for any technician in the field to save time and easily remove most pressed in ball joints
- Forged design for years of service
- Designed for removal of the Ford Transit ball joints and works in an any application with similar ball joint design



88-7425 GM & FORD MINI VAN ALIGNMENT WRENCH SET

88-7414 13/16" 1995 and newer Ford Aeorostar vans

88-7534 22mm 1990 and newer 2WD GM Astro/Safari vans and newer AWD

88-7536 3/4" 1973-1987 GM 2WD pickups and 1985 and newer Canadian-built astro

88-7537 18mm 1985 and newer US-built Astro vans



88-7491 GM UPPER CONTROL ARM KNOCK OUT TOOL



- Required to remove factory frame knock-outs
- Won't damage alignment bracket, as can happen when you use a pry bar to remove the knock-out plug

Chevrolet and GMC trucks, and Chevrolet Astro and GMC Safari vans 1988-2000



88-7704**ADAPTERS FOR FOUR WHEEL DRIVE**

This kit is used to remove and install upper and lower ball joints on 1987 to 1992 1/2, 4 and 3/4-ton vehicles fitted with Dana 44 front axles (found on Ford, Dodge, GM, International and Jeep vehicles).

**88-7800A**
**1998-2011 HONDA
1995-2000 CHRYSLER
SEBRING UPPER BALL
JOINT ADAPTER SET**

Set contains one each of:

- 88-7801** Honda ball joint installation cup
- 88-7802** Honda ball joint installation ram
- 88-7803** Chrysler ball joint installation cup
- 88-7804** Chrysler ball joint installation ram



Also works with **88-7850A**

88-7813
**IMPORT VEHICLE TWO-IN-ONE TIE
ROD ADJUSTING WRENCH**


- This special open-ended wrench has extended length for easy access.
- 21mm opening on the end and 22mm opening on the other.

88-7822-1
**DODGE/FORD TRUCK TORSION BAR
TOOL ADAPTER**

This unique bracket is used on the vehicle cross member to provide a safe, secure anchor point while using the **88-8000** GM Torsion Bar Tool (sold separately). This bracket works on all full size Ford & Dodge light duty trucks with torsion bar suspension - a "must have" tool for any shop replacing torsion bar keys.

**88-7829****FORD TRUCK CAMBER/CASTER WRENCH**

Specially designed wrench makes camber/caster adjustments on Ford's new adjusting cams much easier. Wrench is bent for specific fit on the adjusting bold and nut. 21mm, 12-point design and 1/2" square drive.

Ford Explorer 4x4 1995-2002

F150 4x4 and 4x2 1997 and 2003

Expedition and Lincoln Navigator 4x4 and 4x2 1997 and 2002

















GMC Savana and GM Express 1997 and up

88-7850A UNIVERSAL BALL JOINT/U-JOINT PRESS SET

- Fits most press-fit ball joint applications (passenger cars as well as 2WD and 4WD light trucks)
- Powerful screw-type press, together with the special adapters, will easily remove and install even the most difficult ball joints
- By itself, the C frame press is designed to easily remove and install universal joints

This tool set is a must for every alignment shop!

Set contains one of each part

88-7901		Removal tube
88-7902		Installation tube
88-7903		Removal plug
88-7904		Universal installation adapter
88-7905		Snap-on adapter stem
88-7906		OTC tool adapter stem
88-7907		Installing adapter
88-7908		Removing adapter
88-7909		Receiving tube (3" OD x 2-3/4" ID)
88-7910		Receiving tube (2-1/2" OD x 2-3/4" ID)
88-7911		Receiving tube (2" OD x 1-3/4" ID)
88-7912		Forcing screw
88-7913		5/8" steel ball
88-7914		O ring
88-7915		Plug
88-7916		C Frame

88-7860A

HONDA REAR ADAPTER SET

Designed for easy removal of OE bushings and installation of offset camber bushings. Works with all types of ball joint presses.



Set contains one each of:

88-7861	88-7862
88-7863	88-7864

88-7870C

1996-2005 TAURUS/SABLE BALL JOINT ADAPTER SET (UPDATER 4-PIECE SET)

Unique design easily removes and installs even the most stubborn ball joints.



Set contains one each of:

88-7871	88-7872
88-7873	88-7874

88-7880A

LATE MODEL CHRYSLER/DODGE BALL JOINT ADAPTER SET

Fits most popular "C" clamp style ball joint service tools



Set contains one each of:

88-7881	88-7882
88-7883	88-7884

Works with 41-232 Chrysler 300 and Dodge Charger/Challenger ball joint through 2016

88-7890A

HONDA ACCORD BALL JOINT ADAPTER SET



Set contains one each of:

88-7891	88-7892	88-7902
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Acura TSX 2004-2011
Honda Accord Coupe Sedan 2003-2012

88-7900A

LIGHT TRUCK BALL JOINT PRESS ADAPTER SET

Works with all popular screw type ball joint presses and makes easy work of ball joint removal and installation on all late model 2WD and 4WD using Dana 44 front axles

GMC and Chevrolet 1997-1991
Ford through 1979
Dodge 1994-1999
Jeep through 1983



88-7901	88-7902	88-7903
88-7904	88-7905	88-7906

This set is included in the [88-7850A](#)

88-7950A

GM TRUCK BUSHING INSTALLATION/REMOVAL ADAPTER SET

This adapter set is designed to easily remove OE control arm bushings and install offset camber bushings

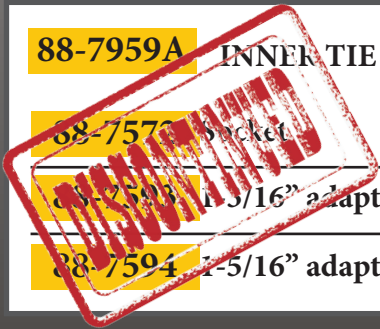
Set contains one each of:

88-7951	88-7952
88-7953	88-7954



GMC and Chevrolet 1/2- and 3/4-ton 4WD/2WD
and Hummer H2 1999-2016

88-7959A INNER TIE ROD REMOVAL SET



88-7570 socket

88-7593 1-5/16" adapter

88-7594 1-5/16" adapter

Older Ford and Chrysler vehicles

with socket for Ford FWD with rack and pinion power steering with new-style tie rods

with socket for Ford RWD and most Chrysler vehicles with rack and pinion and new-style tie rods



88-7996A BUSHING REMOVAL AND INSTALLATION TOOL

Buick Regal 2008-2016
Chevrolet Traverse 2008-2016
GMC Acadia 2007-2016
Saturn Outlook 2007-2016

This tool is designed to be used in conjunction with the 46-421 Rear Link Flex Joint Bushing. Allow fast and easy removal and installation of the bushing.



TOOLS

88-8000A UNIVERSAL TORSION BAR UNLOADING TOOL SET

- including new 2011 GM 8-lug models!

Safety loads, unloads 5-lug, 6-lug GM, Dodge and Ford torsion bars for key replacement



88-8350 GM "J" BODY TOE ADJUSTMENT WRENCH

This specially designed 19mm toe wrench allows easy access and adjustment on all 1982 and newer GM J body cars



88-8923

GM "W" BODY REAR TOE ADJUSTING TOOL



Allows wasy adjustment of factory rear toe system.



Buick Regal 1990-2002
Chevrolet Lumina 1990-2002
Oldsmobile Cutlass Supreme 1990-2002
Pontiac Grand Prix 1990-2002

88-8925

CAMARO/FIREBIRD TOOL 1993-2002



Heavy-duty design allows both camber and caster adjustment with weight on vehicle. Designed for accurate, one-time adjustment.



88-8927

CAMBER/CASTER ADJUSTING TOOL FORD LIGHT TRUCK

- Makes difficult-to-adjust vehicles fully adjustable for camber/caster
- Unique design allows fast and easy "on-vehicle" adjustments
- Works with OE bolt system, eliminating the need for expensive aftermarket cam bolts



Ford F150 2WD/4WD 2004-2011
Expedition/Navigator 2007-2011

88-8928

CAMBER/CASTER ADJUSTING TOOL DODGE RAM



This innovative tool allows for live adjustment of camber/caster on 4x4 and 4x2 vehicles. It offers fast, easy hook up, and the jaws allow for smooth, controlled adjustments.

Dodge Ram 1500 2002-2005

88-8929

CAMBER/CASTER ADJUSTING TOOL
SET GM TRAILBLAZER/ENVOY

- Makes difficult-to-adjust vehicles fully adjustable for camber and caster
- Design allows fast and easy, smooth and accurate one-time adjustment
- Allows adjustment of camber and caster with no need of pry bar

Chevrolet Trailblazer 2002-2009
GMC Envoy 2003-2009

88-9065

REAR TOE ADJUSTER
TAURUS/SABLE WAGON

Use with 1/2" drive for OE toe adjusters on all 1986-1995 Ford Taurus and Mercury Sable station wagons.



88-9066

REAR TOE ADJUSTING TOOL FORD



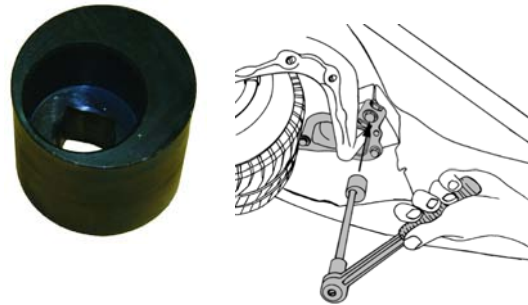
This special tool is designed to fit the larger 2-1/2" star-shaped toe adjusting cam found on the rear of late-model Ford products. It provides the leverage needed to easily make accurate rear toe adjustments.



Ford Taurus 1996-2004
Mercury Sable station wagon 1996-2004
Lincoln Continental 1995-2002

88-9180

REAR TOE ADJUSTING TOOL BMW



BMW 3 Series 2001-2006
Series E36 1992 and newer
All models with sport suspension except 318Ti and Z3 1995 and newer

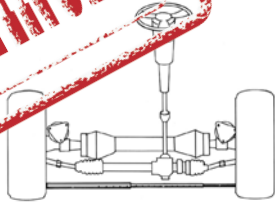


88-9188

WHEEL SPREADER



- Accurately spreads and holds the vehicle's front wheels.
- A must for Mercedes.
- Easy and safe to use.
- The spreader saves time and assures a more accurate reading.
- Extension 42" minimum, 71" maximum



88-9200

REAR TOE ADJUSTER FORD/MERCURY



For adjustment of rear toe bushings

Taurus/Sable 1996-2007

Tempo/Topaz sedans 1996-2007

88-9414

CAMBER TOOL LATE MODEL MUSTANG



Allows for controlled adjustment of camber. Reversible on either side of vehicle.



88-9416 STRUT REMOVAL TOOL FOR FORD FWD VEHICLES

- This innovative new strut removal tool features a lever and fulcrum design for fast and easy removal of even the most stubborn struts. The design of this strut removal tool incorporates a long lever arm working against the strut's lower spring plate with a fulcrum pushing the knuckle down, creating maximum leverage to free the bottom of the strut from the knuckle.
- Cuts strut removal time by 50% or more.
- Comes complete with instructions and instructional videotape showing tool use as well as time-saving tips for strut re-assembly.

88-9416-1 Lever arm

88-9416-2 Fulcrum

88-9416-3 Short collar

88-9416-4 Slotted collar

88-9416-5 Holding pin

Taurus, Sable (F&R) 1986-2007

Contour/Mystique (F&R) & Windstar van (F) 1995-2000

Cougar (F&R) 1999-2002



*Based on actual test results at our test facility, when compared to factory flat rate times

TOOLS

88-9480

MAGNETIC CAMBER CHANGE GAUGE

This portable, accurate magnetic gauge attaches firmly to spindles or rotors and is the perfect tool to measure camber change when doing strut work or when truck alignment bushings or other camber kits are installed. Dial back to reset to Zero.



AUTOMOTIVE SEPARATORS

Part	Application	Specifications
88-25050	Fits most tie rod ends	1-1/8" opening
88-25030	Fits most ball joints	15/16" opening
88-25010	Fits most pitman arms	21/32" opening



For loosening and removal of tie rod ends, balljoints and pitman arms.
All tools 11-7/8" overall length.

88-35824

2" COARSE-TYPE"R" SURFACE PREP PAD

Our high-performance surface prep products are manufactured from a tight non-woven fiber web with a woven backing, and are impregnated with a specially processed mineral grain. They are ideal for deburring, blending coarse abrasive scratches; and removing rust, corrosion, oxides, paint, adhesives and gaskets.



2" Gold Type R Coarse Gift - 50 per package

88-58122

22MM CONTROL ARM ALIGNMENT WRENCH



Older GM and Chrysler RWD passenger cars

TORQUE SOCKETS

These impact driven sockets assure proper torquing of lug nuts **They also:**

- Stops tightening when proper torque is achieved
- Eliminate broken and stripped studs
- Eliminate warped or distorted rotors, wheels and brake parts
- Eliminate customer complaints concerning improperly torqued lug nuts
- Are manufactured for the finest spring steel using an exclusive Swedish process



88-6040 10 PIECE TORQUE SOCKET SET

Covers over 90% of most popular passenger car and light truck applications!

Contains one each of the following

88-6010	88-6011	88-6010	88-6013	88-6014
88-6016	88-6017	88-6016	88-6019	88-6025

88-6005 5 PIECE TORQUE STICK EXTENSION KIT

1/2" drive torque stick extension kit for foreign and domestic cars and light trucks - used with 1/2" impact wrench and thin wall socket.

- Eliminates wheel damage with torquing wheel nuts with tight tolerances
- Prevents over-torquing wheel nuts
- Prevents brake pulsation
- Prevents distortion of wheels, drums and rotor

Contains one each of the following

88-6027	88-6028
88-6029	88-6030
88-6031	

INDIVIDUAL SOCKETS AND STICKS AVAILABLE

88-6010	17mm	Green	55 ft/lbs	88-6021	1"	Purple	140 ft/lbs
88-6011	17mm	Red	80 ft/lbs	88-6022	Discontinued		170 ft/lbs
88-6012	19mm-3/4"	Yellow	65 ft/lbs	88-6023	1-1/16"	Tan	140 ft/lbs
88-6013	19mm-3/4"	Blue	80 ft/lbs	88-6023	22mm-7/8"	Lt. Blue	100 ft/lbs
88-6014	19mm-3/4"	Grey	100 ft/lbs	88-6025	24mm-15/16"	Lt. Green	140 ft/lbs
88-6015	21mm	Black	60 ft/lbs	88-6026	22mm	Charcoal	150 ft/lbs
88-6016	21mm	LT. Brown	80 ft/lbs	88-6027	1/2" Drive	Yellow	65 ft/lbs
88-6017	13/16"	Brown	100ft/lbs	88-6028	1/2" Drive	Blue	80 ft/lbs
88-6018	22mm-7/8"	White	120 ft/lbs	88-6029	1/2" Drive	Gray	100 ft/lbs
88-6019	22mm-7/8"	Turquoise	40 ft/lbs	88-6030	1/2" Drive	White	120 ft/lbs
88-6020	discontinued		170 ft/lbs	88-6031	1/2" Drive	Aqua	140 ft/lbs

THIN WALL DESIGN 1/2" DRIVE FLIP IMPACT SOCKETS

88-1510	Extra thin wall SAE 3/4" x 13/16"	6 pt deep length
88-1511	Extra thin wall 19mm x 21mm	6 pt deep length
88-1512	Regular think wall SAE 3/4" x 13/16"	6pt deep length
88-1513	Regular thin wall 19mm x 21mm	6pt deep length



SOCKETS

Ph: 800-828-0255

fax: 888-658-6822

www.Northstarmfg.com

NORTHSTAR
MANUFACTURING COMPANY, INC.

165

CONVERSION CHART

INCHES		DEGREES		METRIC	MINUTES OF A DEGREE
1/32"	0.031	1/16°	0.0625	0.8	3.75'
1/16"	0.063	1/8°	0.1250	1.6	7.50'
3/32"	0.094	3/16°	0.1875	2.4	11.25'
1/8"	0.125	1/4°	0.2500	3.2	15.00'
5/32"	0.156	5/16°	0.3125	4.0	18.75'
3/16"	0.188	3/8°	0.3750	4.8	22.50'
7/32"	0.218	7/16°	0.4375	5.6	26.25'
1/4"	0.25	1/2°	0.5000	6.4	30.00'
9/32"	0.281	9/16°	0.5625	7.1	33.75'
5/16"	0.312	5/8°	0.6250	7.9	37.50'
11/32"	0.343	11/16°	0.6875	8.7	41.25'
3/8"	0.375	3/4°	0.7500	9.5	45.00'
13/32"	0.406	13/16°	0.8125	10.3	48.75'
7/16"	0.437	7/8°	0.8750	11.1	52.50'
15/32"	0.468	15/16°	0.9375	11.9	56.25'
1/2"	0.500	1°	1.0000	12.7	60.00'
17/32"	0.531	1-1/16°	1.0625	13.5	1° 3.75'
9/16"	0.562	1-1/8°	1.1250	14.3	1° 7.50'
19/32"	0.593	1-3/16°	1.1875	15.1	1° 11.25'
5/8"	0.625	1-1/4°	1.2500	15.9	1° 15.00'
21/32"	0.656	1-5/16°	1.3125	16.7	1° 18.75'
11/16"	0.687	1-3/8°	1.3750	17.5	1° 22.50'
23/32"	0.718	1-7/16°	1.4375	18.3	1° 26.25'
3/4"	0.750	1-1/2°	1.5000	19.0	1° 30.00'

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
41-144	74	41-1580	79	42-956	88	43-552	91
41-146	74	41-1590	79	42-957	88	43-553	91
41-147	74	41-2001	79	42-958	88	43-554	91
41-149	74	41-4607	80	42-959	88	43-621	91
41-151	74	41-4609	80	42-960	88	43-622	91
41-157	74	41-4611	80	42-961	88	43-623	91
41-158	74	41-8243	80	43-962	88	43-641	91
41-159	74	41-8244	80	42-963	88	43-642	91
41-160	74	41-8245	81	42-964	88	43-643	91
41-140A	74	41-8246	81	42-950A	88	43-645	91
41-210	75	41-8247	81	42-970	89	43-646	91
41-212	75	41-8249	81	42-972	89	43-647	91
41-214	75	41-8250	81	42-974	89	43-651	91
41-215	75	41-8251	81	42-976	89	43-652	91
41-216	75	41-8255	82	42-978	89	43-653	91
41-217	75	41-8256	82	42-980	89	43-661	92
41-218	75	41-8257	82	42-982	89	43-662	92
41-210A	75	41-8258	82	42-4431	89	43-663	92
41-229	76	41-8259	82	42-4434	89	43-674	92
41-230	76	41-8260	82	43-320A	90	43-680A	92
41-232	76	41-8262	83	43-411	90	43-661	92
41-236	76	41-8264	83	43-412	90	43-662	92
41-300	76	41-8265	83	43-413	90	43-663	92
41-301	76	41-8267	84	43-415	90	43-674	92
41-305	76	41-8268	84	43-416	90	43-701	92
41-312	76	41-8269	84	43-417	90	43-702	92
41-307	77	41-8272	85	43-421	90	43-703	92
41-308	77	41-8273	85	43-422	90	43-707	92
41-310	77	81-8321 L/R	85	43-423	90	43-708	92
41-314	77	41-8322 L/R	86	43-425	90	43-709	92
41-325	78	41-8326	86	43-426	90	43-711	93
41-326	78	41-8326-3	86	43-427	90	43-712	93
41-530	78	41-8329 L/R	86	43-431	90	43-713	93
41-532	78	42-777	87	43-432	90	43-715	93
41-541	78	42-778	87	43-433	90	43-716	93
41-545	79	42-781	87	43-441	91	43-717	93
41-550	78	42-950 Series	88	43-442	91	43-721	93
41-1450	79	42-949	88	43-443	91	43-722	93
41-1460	79	42-951	88	43-447	91	43-723	93
41-1470	79	42-952	88	43-548	91	43-950 Series	93
41-1490	79	42-953	88	43-549	91	43-951	93
41-1510	79	42-954	88	43-550	91	43-952	93
41-1570	79	42-955	88	43-551	91	43-953	93

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
43-954	93	43-2056	94	44-831	102	44-4099	115
43-955	93	43-2057	94	44-832	102	44-5001	115
43-956	93	43-2060	94	44-834	103	44-5002	115
43-957	93	43-2061	94	44-835	103	44-5003	115
43-958	93	43-2062	94	44-836	103	44-5004	115
43-1040	94	43-2063	94	44-838	104	44-5005	115
43-1041	94	43-2064	94	44-839	104	44-5006	115
43-1042	94	43-2065	94	44-862	104	44-5007	115
43-1043	94	43-2066	94	44-864	105	44-5008	115
43-1044	94	43-2067	94	44-866	105	44-5000A	115
43-1045	94	43-2070	94	44-868	105	44-5009	115
43-1046	94	43-2071	94	44-869	106	44-5010	115
43-1047	94	43-2072	94	44-871 L/R	106	44-5011	115
43-1050	94	43-2073	94	44-910	106	44-5032	116
43-1051	94	43-2074	94	44-2489	106	44-5036	116
43-1052	94	43-2075	94	44-2490	107	44-5037	116
43-1053	94	43-2076	94	44-2491	107	44-5094	116
43-1054	94	43-2077	94	44-2492	107	44-6000 Series	117
43-1055	94	44-240	95	44-2493	107	44-6001	117
43-1056	94	44-241	95	44-2494	108	44-6002	117
43-1057	94	44-242	95	44-2495	108	44-6003	117
43-1060	94	44-766	95	44-2496	108	44-6004	117
43-1061	94	44-767	95	44-2497	108	44-6005	117
43-1062	94	44-768	95	44-2498	109	44-6006	117
43-1063	94	44-769	96	44-2499	109	44-6007	117
43-1064	94	44-771	96	44-2506	109	44-6008	117
43-1065	94	44-773	96	44-2507	109	44-6009	117
43-1066	94	44-775	97	44-2508	110	44-6010	117
43-1067	94	44-784	97	44-2509	110	44-6011	117
43-1070	94	44-786	97	44-2510	110	44-6000A	117
43-1071	94	44-789	98	44-2512	111	44-6020 Series	117
43-1072	94	44-790	98	44-2535	111	44-6021	117
43-1073	94	44-791	98	44-2540	111	44-6022	117
43-1074	94	44-792	99	44-2542	111	44-6023	117
43-1075	94	44-794	99	44-2610	112	44-6024	117
43-1076	94	44-795	99	44-2617	112	44-6025	117
43-1077	94	44-820	100	44-1618	112	44-6026	117
43-2050	94	44-823	100	44-2720 L/R	113	44-6027	117
43-2051	94	44-824	100	44-2725	113	44-6028	117
43-2052	94	44-825	101	44-2726 L/R	113	44-6029	117
43-2053	94	44-826	101	44-2727	114	44-6020A	117
43-2054	94	44-827	101	44-2728 L/R	114	44-6032	117
43-2055	94	44-828	102	44-2730	114	44-6034	117

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
45-100 Series	118	46-171	122	46-1102	132	46-1707	135
45-101	118	46-173	123	46-1103	132	46-1709	135
45-102	118	46-174	123	46-1104	132	46-1900	135
45-103	118	46-182	123	46-1105	132	46-1901	135
45-104	118	46-406	123	46-1106	132	46-1902	135
45-200 Series	118	46-421	124	46-1120 Series	132	46-1904	135
45-201	118	46-425	124	46-1121	132	46-1900A	135
45-202	118	46-426	124	46-1122	132	46-2002A	135
45-203	118	46-427	124	46-1123	132	46-2100	136
45-204	118	46-428	124	46-1124	132	46-2200	136
45-300 Series	118	46-431	125	46-1200 Series	133	46-2300	136
45-301	118	46-432	125	46-1201	133	46-2400	136
45-302	118	46-434	125	46-1202	133	46-2160	136
45-303	118	46-437	126	46-1203	133	46-2170	136
45-304	118	46-438	126	46-1204	133	46-2174	137
45-351	118	46-439	126	46-1205	133	46-2175	137
45-500 Series	118	46-451	127	46-1206	133	46-2176	137
45-501	118	46-452	127	46-1300 Series	133	46-2177	137
45-502	118	46-453	127	46-1301	133	46-2178	138
45-503	118	46-454	128	46-1302	133	46-2179	138
45-504	118	46-455	128	46-1303	133	46-2180	138
45-600 Series	118	46-456	128	46-1304	133	46-2181	138
45-601	118	46-457	129	46-1305	133	46-2182	139
45-602	118	46-458	129	46-1306	133	46-2183	139
45-603	118	46-459	129	46-1500 Series	133	46-2184	139
45-604	118	46-461	130	46-1501	133	46-2185	139
45-6001	119	46-462	130	46-1502	133	46-2186	140
46-6002	119	46-463	130	46-1503	133	46-2187	140
45-6005	119	46-464	131	46-1504	133	46-2188	140
45-6006	119	46-465	131	46-1520 Series	133	46-2189	140
46-131	119	46-466	131	46-1521	133	46-2190	141
46-132	119	46-1000 Series	132	46-1522	133	46-2191	141
46-134	120	46-1001	132	46-1523	133	46-2192	141
46-135	120	46-1002	132	46-1524	133	46-2194	141
46-136	120	46-1003	132	46-1600 Series	134	46-2195	142
46-137	120	46-1004	132	46-1601	134	46-2196	142
46-141	121	46-1005	132	46-1602	134	46-2199	142
46-143	121	46-1006	132	46-1603	134	46-2225	142
46-162	121	46-1000A	132	46-1604	134	46-2226	143
46-164	121	46-1030	132	46-1700	134	46-2227	143
46-166	122	46-1035	132	46-1702	134	46-2228	143
46-168	122	46-1100 Series	132	46-1704	134	46-2229	143
46-169	122	46-1101	132	46-1705	134	46-2231	144

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
46-2232	144	46-9811	149	88-7023	154	88-7913	158
46-2233	144	46-9812	149	88-7090	154	88-7914	158
46-2234	144	46-9813	149	88-7095	154	88-7915	158
46-2235	145	88-050	150	88-7096	154	88-7916	158
46-2236 L/R	145	88-060	150	88-7097	154	88-7860A	159
46-2237	145	88-343	150	88-7098	155	88-7870C	159
46-2238	145	88-882	150	88-7099	155	88-7880A	159
46-2239	146	88-890	150	88-7100 A	155	88-7890A	159
46-2240	146	88-928	150	88-7101	155	88-7900A	160
46-2241	146	88-938	151	88-7102	155	88-7950A	160
46-2242	146	88-1101	151	88-7103	155	88-7959A	160
46-2245	147	88-1103	151	88-7200 A	155	88-7996A	160
46-2450A	147	88-1110	151	88-7201	155	88-8000A	160
46-2454	147	88-1112	151	88-7203	155	88-8350	160
46-2456	147	88-1114	151	88-7205	156	88-8923	161
46-2000 Series	147	88-1302	151	88-7249	156	88-8925	161
46-2010	147	88-1304	152	88-7301	156	88-8927	161
46-2015	147	88-1637	152	88-7425	156	88-8928	161
46-2020	147	88-2400	152	88-7414	156	88-8929	162
46-2030	147	88-2401	152	88-7534	156	88-9065	162
46-4000 Series	147	88-2402	152	88-7536	156	88-9066	162
46-4010	147	88-4014-10	152	88-7537	156	88-9180	162
46-4015	147	88-4030	152	88-7491	156	88-9200	163
46-4020	147	88-4036	152	88-7800A	157	88-9416	163
46-4030	147	88-4039	152	88-7801	157	88-9480	164
46-5000 Series	147	88-4040	152	88-7802	157	88-25050	164
46-5010	147	88-4041	152	88-7803	157	88-25030	164
46-5015	147	88-4080	153	88-7804	157	88-25010	164
46-5020	147	88-4120	153	88-7822-1	157	88-35824	164
46-5030	147	88-4150	153	88-7829	157		
46-6020	148	88-4087-10	153	88-7850A	158		
46-6030	148	88-4096-10	153	88-7901	158		
46-6040	148	88-4510	153	88-7902	158		
46-7100A	148	88-4511	153	88-7903	158		
46-7110	148	88-4512	153	88-7904	158		
46-7115	148	88-4513	153	88-7905	158		
46-7120	148	88-4519	153	88-7906	158		
46-7130	148	88-4520	153	88-7907	158		
46-7300 Series	148	88-4521	153	88-7908	158		
46-7310	148	88-4522	153	88-7909	158		
46-7315	148	88-6274	154	88-7910	158		
46-7320	148	88-6275	154	88-7911	158		
46-7330	148	88-6496	154	88-7912	158		

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TIRE/WHEEL : UP TO 34"



GM SILVERADO/SIERRA
2500 & 3500
4WD
2011 - NEWER
P/N : 64-1404G



GM SILVERADO/SIERRA 1500
2WD/4WD
2019
P/N : 75-1060G
FRONT LIFT RANGE : 0.875" - 2.5"
TIRE/WHEEL : UP TO 33"



H.D. 8-LUG
2WD/4WD
2011 - NEWER
P/N : 64-1400G
FRONT LIFT RANGE : OEM" - 2.25"
TIRE/WHEEL : UP TO 33"



GM L.D. 1500
2WD/4WD
2014 - NEWER
(W/O JL4 SUSP.)
P/N : 74-1500G
FRONT LIFT RANGE : 2.25" - 3.0"
TIRE/WHEEL : UP TO 32"



RAM 1500
4WD
2006 - NEWER
P/N : 74-2000D
FRONT LIFT RANGE : 2.0" - 3.0"
TIRE/WHEEL : UP TO 35"



RAM POWER WAGON
4WD
2015 - 2019
P/N : 74-2560R
FRONT LIFT RANGE : 1.5" - 2.5"
TIRE/WHEEL : UP TO 35"



F150/NAVIGATOR/MARK LD
2WD/4WD
2004 - NEWER
P/N : 74-3000F
FRONT LIFT RANGE : 2.0" - 3.0"
TIRE/WHEEL : UP TO 35"



F150/NAVIGATOR
2WD/4WD
2004 - NEWER
RAPTOR (2017-2018)
P/N : 74-3200F
FRONT LIFT RANGE : 1.5" - 2.25"
TIRE/WHEEL RAPTOR: UP TO 35"
TIRE/WHEEL F150/NAVIGATOR: UP TO 32"



L.D. 6-LUG
2WD/4WD
2007 - NEWER
(INCL. W/JL4 SUSP.)
P/N : 75-1050G
FRONT LIFT RANGE : 0.875" - 2.5"
TIRE/WHEEL : UP TO 32"



GM L.D. 6-LUG ECONOMY KIT
2WD/4WD
2007 - NEWER
(INCL. JL4 SUSP.)
P/N : 75-1055G
FRONT LIFT RANGE : 0.875" - 1.75"
TIRE/WHEEL : UP TO 32"



L.D. 6-LUG
2WD/4WD
2007-2013
(W/O JL4 SUSP.)
P/N : 74-1000G
FRONT LIFT RANGE : 2.0" - 3.0"
TIRE/WHEEL : UP TO 32"



F250/F350/F450/F550
SUPER DUTY
4WD
P/N : 71-3500F
FRONT LIFT RANGE : 2.0", 2.5"
TIRE/WHEEL : UP TO 37"



MODEL	YEAR
F250/F350	2005-NEWER
F450/F550	2008-2015

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PRORYDE QUICK-REFERENCE APPLICATION GUIDE									
Make/Model	Year	FRONT LIFT/LEVELING KIT				REAR LIFT KIT			Max. Tire Diameter
		2WD/4WD	Susp. Type	Front Kit Part No.	Front Lift Range	Susp. Type	Rear Kit Part No.	Rear Lift Range	
CADILLAC, CHEVROLET, GMC									
Avalanche 1500 (6-Lug)	2002-06	4WD	Torsion	64-1000G	Up to 3.0"	Coil	56-1100G*	1.0", 1.5", 2.0"	33"
Avalanche 1500 (6-Lug)	2007-13	2WD/4WD	Strut	75-1055G* 75-1050G* 74-1500G (3)	0.75" to 2.0" 0.75" to 3.0" 2.0" to 3.0"	Coil	56-1100G*	1.0", 1.5", 2.0"	32"
Avalanche 2500 (8-Lug)	2002-10	2WD/4WD	Torsion	64-1200G	Up to 2.5"	Leaf	52-1200G*	1.0", 1.5", 2.0"	33"
Blazer (GMT400)	1992-94	4WD	Torsion	64-1000G	Up to 3.0"	Leaf	52-1200G*	1.0", 1.5", 2.0"	33"
Colorado/Canyon (Exc. ZR2/AT4)	2015-22	2WD/4WD	Strut	74-1150G (7)	1.5" to 2.25"	Leaf	52-1150G*	1.0", 1.5", 2.0"	32.2"
Escalade/EXT/ESV (GMT400)	1999-00	4WD	Torsion	64-1000G	Up to 3.0"	Leaf	52-1200G*	1.0", 1.5", 2.0"	33"
Escalade/EXT/ESV (6-Lug)	2002-06	4WD	Torsion	64-1000G	Up to 3.0"	Coil	56-1100G*	1.0", 1.5", 2.0"	33"
Escalade/EXT/ESV (6-Lug)	2007-20	2WD/4WD	Strut	75-1055G* (6) 75-1050G* (6)	0.75" to 2.0" 0.75" to 3.0"	Coil	56-1100G* (4)	1.0", 1.5", 2.0"	32"
K-Series L.D. 1500 (GMT400)	1988-98	4WD	Torsion	64-1000G	Up to 3.0"	Leaf	52-1200G*	1.0", 1.5", 2.0"	33"
Sierra/Silverado L.D. 1500 (6-Lug)	1999-06	2WD				Leaf	52-1600G*	1.0", 1.5", 2.0"	OE
Sierra/Silverado L.D. 1500 (6-Lug)	1999-06	4WD	Torsion	64-1000G	Up to 3.0"	Leaf	52-1000G*	1.0", 1.5", 2.0"	33"
Sierra/Silverado L.D. 1500 (6-Lug)	2007-13	2WD/4WD	Strut	75-1055G* 75-1050G* 74-1500G (3)	0.75" to 2.0" 0.75" to 3.0" 2.0" to 3.0"	Leaf	52-1500G*(4WD) 52-1600G*(2WD)	1.0", 1.5", 2.0" 1.0", 1.5", 2.0"	32"
Sierra/Silverado L.D. 1500 (6-Lug) (K2XX Classic Only)	2014-19	2WD/4WD	Strut	75-1055G* 75-1050G* 74-1500G (3)	0.75" to 2.0" 0.75" to 3.0" 2.25" to 3.0"	Leaf	52-1500G*(4WD) 52-1600G*(2WD)	1.0", 1.5", 2.0" 1.0", 1.5", 2.0"	32"
Sierra/Silverado L.D. 1500 (6-Lug) (T1XX New Body Exc. AT4/Trail Boss)	2019-22	2WD/4WD	Strut	75-1055G* 75-1060G* 74-1650G (3)	0.75" to 2.0" 0.75" to 3.0" 1.5" to 2.25"	Leaf	52-1600G*	1.0", 1.5", 2.0"	33"
Silverado Trail Boss & Sierra AT4 (T1XX)	2019-22	2WD/4WD	Strut	75-1065G*	0.5" to 1.0"	Leaf			34"
Sierra/Silv. H.D. 1500/2500/13500 (8-Lug)	1999-10	2WD/4WD	Torsion	64-1200G	Up to 2.5"	Leaf	52-1200G*(4WD) 52-1600G*(2)(2WD)	1.0", 1.5", 2.0" 1.0", 1.5", 2.0"	33"
Sierra/Silverado 2500/3500 (8-Lug)	2011-19	2WD/4WD	Torsion	64-1400G	Up to 2.25"	Leaf	52-1400G* (2)	1.0", 1.5", 2.0"	33"
Sierra/Silverado 2500/3500 (8-Lug)	2020-22	2WD/4WD	Torsion	64-1450G	Up to 2.25"	Leaf	52-1400G* (2)	1.0", 1.5", 2.0"	33"
Suburban/Yukon XL 1500 (GMT400)	1992-99	4WD	Torsion	64-1000G	Up to 3.0"	Leaf	52-1200G*	1.0", 1.5", 2.0"	33"
Suburban/Yukon XL 1500 (6-Lug)	2000-06	4WD	Torsion	64-1000G	Up to 3.0"	Coil	56-1100G*	1.0", 1.5", 2.0"	33"
Suburban/Yukon XL 1500 (6-Lug)	2007-13	2WD/4WD	Strut	75-1055G* 75-1050G* 74-1500G (3)	0.75" to 2.0" 0.75" to 3.0" 2.0" to 3.0"	Coil	56-1100G* (4)	1.0", 1.5", 2.0"	32"
Suburban/Yukon XL 1500 (6-Lug)	2014-20	2WD/4WD	Strut	75-1055G* 75-1050G* 74-1500G (3)	0.75" to 2.0" 0.75" to 3.0" 2.25" to 3.0"	Coil	56-1100G* (4)	1.0", 1.5", 2.0"	32"
Suburban/Yukon XL 2500 (8-Lug)	2000-14	2WD/4WD	Torsion	64-1200G	Up to 2.5"	Leaf	52-1200G*	1.0", 1.5", 2.0"	33"
Tahoe/Yukon (GMT400)	1995-99	4WD	Torsion	64-1000G	Up to 3.0"	Leaf	52-1200G*	1.0", 1.5", 2.0"	33"
Tahoe/Yukon (6 Lug)	2000-06	4WD	Torsion	64-1000G	Up to 3.0"	Coil	56-1100G*	1.0", 1.5", 2.0"	33"
Tahoe/Yukon (6-Lug)	2007-13	2WD/4WD	Strut	75-1055G* 75-1050G* 74-1500G (3)	0.75" to 2.0" 0.75" to 3.0" 2.0" to 3.0"	Coil	56-1100G* (4)	1.0", 1.5", 2.0"	32"
Tahoe/Yukon (6-Lug)	2014-20	2WD/4WD	Strut	75-1055G* 75-1050G* 74-1500G (3)	0.75" to 2.0" 0.75" to 3.0" 2.25" to 3.0"	Coil	56-1100G* (4)	1.0", 1.5", 2.0"	32"
Trailblazer/Envoy/Bravada	2002-09	2WD/4WD				Coil	56-1100G*	1.0", 1.5", 2.0"	OE
DODGE, RAM									
Dakota	2005-11	2WD/4WD	Strut	74-2200R	1.5" to 2.25"				32"
Ram 1500 2WD	2002-05	2WD				Leaf	52-2000D*	1.0", 1.5", 2.0"	OE
Ram 1500 2WD	2006-08	2WD				Leaf	52-2000D*	1.0", 1.5", 2.0"	34"
Ram 1500 2WD	2009-22	2WD				Coil	56-2100D* (4)	1.0", 1.5", 2.0"	33"
Ram 1500 4WD	1994-01	4WD	Coil	71-2500D*	1.5", 1.75", 2.0"				35"
Ram 1500 4WD	2002-05	4WD	Torsion	64-2000D	Up to 2.25"	Leaf	52-2000D*	1.0", 1.5", 2.0"	35"
Ram 1500 4WD	2006-08	4WD	Strut	74-2000D	2.0" to 3.0"	Leaf	52-2000D*	1.0", 1.5", 2.0"	35"
Ram 1500 4WD (Classic Only)	2009-19	4WD	Strut	74-2000D (6)	2.0" to 3.0"	Coil	56-2100D* (4)	1.0", 1.5", 2.0"	35"
Ram 1500 4WD(5th Gen. Exc. TRX)	2019-22	4WD	Strut	74-2200R (6)	1.5" to 2.25"	Coil	56-2100D* (4)	1.0", 1.5", 2.0"	34"
Ram H.D. 2500/3500 (8-Lug) 2WD	2003-12	2WD				Leaf	52-2500D* (2)	1.0", 1.5", 2.0"	OE
Ram H.D. 2500/3500 (8-Lug)	1994-02	4WD	Coil	71-2500D*	1.5", 1.75", 2.0"				35"
Ram H.D. 2500 (8-Lug)	2003-13	4WD	Coil	71-2500D*	1.5", 1.75", 2.0"	Leaf	52-2500D* (2)	1.0", 1.5", 2.0"	35"

*Progressive Lift Kit: Adjusted PRIOR to installation

(2) For use ONLY on SRW, non-dually & non-camper applications

(3) Use 75-Series kit on vehicles equipped with JL4 Magnaride electronic front suspension identified by a wire connecting to each front strut assembly

(4) Not for use with OEM Rear Air Suspension

(5) Not for use on TRD Pro w/Bilstein Struts

(6) W/O Front Air Suspension

(7) Exc. Trail Boss/AT4 & Dealer Installed Level Kit

Items in **RED** are updates and/or TBA (To Be Announced)

EXACTLY THE WAY YOU WANT IT.™

Adjustable Rear Lift Kits (and replacement parts)						
Part No.	Description	Unit of Measure	Install Hrs/Kit**	Lift Range	MSRP/MAP	JOBBER
51-910	3-in-1 Blocks w/o U-bolts 5.0" x 2.375" - Tapered	Pair	1.1	1.0", 1.5", 2.0"	\$99.00	\$59.95
51-950	3-in-1 Blocks w/o U-bolts 5.5" x 3.0" - Tapered	Pair	1.1	1.0", 1.5", 2.0"	\$119.00	\$89.95
51-960	3-in-1 Blocks w/o U-bolts 5.25" x 2.75" - No Taper	Pair	1.1	1.0", 1.5", 2.0"	\$119.00	\$89.95
52-1000G*	GM LD 3-in-1 Block Kit w/U bolts - Tapered	Kit	1.1	1.0", 1.5", 2.0"	\$169.00	\$126.95
52-1150G*	Colorado/Canyon 3-in-1 Block Kit w/U-bolts - Tapered	Kit	1.1	1.0", 1.5", 2.0"	\$134.00	\$99.95
52-1200G*	GM LD & HD 3-in-1 Block Kit w/U-bolts - Tapered	Kit	1.1	1.0", 1.5", 2.0"	\$134.00	\$99.95
52-1400G*	GH HD 3-in-1 Block Kit w/U-bolts - Tapered	Kit	1.1	1.0", 1.5", 2.0"	\$169.00	\$126.95
52-1500G*	GM LD 3-in-1 Block Kit w/U-bolts - Tapered	Kit	1.1	1.0", 1.5", 2.0"	\$169.00	\$126.95
52-1600G*	GM LD 3-in-1 Block Kit w/U-bolts - No Taper	Kit	1.1	1.0", 1.5", 2.0"	\$169.00	\$126.95
52-2000D*	Ram LD 3-in-1 Block Kit w/U-bolts - Tapered	Kit	1.1	1.0", 1.5", 2.0"	\$134.00	\$99.95
52-2500D*	Ram HD 3-in-1 Block Kit w/U-bolts - Tapered	Kit	1.1	1.0", 1.5", 2.0"	\$169.00	\$126.95
52-3000F*	Ford F150 4WD 3-in-1 Block Kit w/U-bolts - Tapered	Kit	1.1	1.0", 1.5", 2.0"***	\$169.00	\$126.95
N 52-3150F*	Ford Ranger 3-in-1 Block Kit w/U-bolts - Tapered	Kit	1.1	1.0", 1.5", 2.0"	\$139.00	\$99.95
52-3501F*	Ford F350 4WD 3-in-1 Block Kit w/U-bolts - Late	Kit	1.5	1.0", 1.5", 2.0"	\$169.00	\$126.95
52-3502F*	Ford F250/F350 4WD 3-in-1 Block Kit w/U-bolts - Early	Kit	1.5	1.0", 1.5", 2.0"	\$169.00	\$126.95
52-3503F*	Ford F250 4WD 3-in-1 Block Kit w/U-bolts - Late	Kit	1.5	1.0", 1.5", 2.0"	\$169.00	\$126.95
52-4000N*	Nissan Titan 3-in-1 Block Kit w/U-bolts - Tapered	Kit	1.1	1.0", 1.5", 2.0"	\$134.00	\$99.95
52-4200N*	Nissan Titan 3-in-1 Block Kit w/U-bolts - Tapered	Kit	1.1	1.0", 1.5", 2.0"	\$169.00	\$126.95
52-5000T*	Toyota 3-in-1 Block Kit w/U-bolts - Tapered	Kit	1.1	1.0", 1.5", 2.0"	\$134.00	\$99.95
56-1100G*	GM SUV/SUT 3-in-1 Coil Spacer Kit	Kit	1.1	1.0", 1.5", 2.0"	\$134.00	\$99.95
56-2100D*	Ram 1500 3-in-1 Coil Spring Spacer Kit - 2WD/4WD	Kit	1.1	1.0", 1.5", 2.0"	\$134.00	\$99.95
56-2600R*	Superseded by p/n 58-2650R	Kit (1)	1.2	1.0", 1.5", 2.0"	\$229.00	\$169.95
56-7100J*	Jeep JK Adjustable Rear Lift Kit	Kit (1)	1.5	1.0", 1.5", 2.0"	\$229.00	\$169.95
57-4000N*	Nissan/Suzuki Adjustable Rear Lift Kit	Kit	1.5	0.5", 1.0", 1.5"	\$134.00	\$99.95
N 58-2650R	RAM 2500 Adjustable Rear Lift Kit	Kit	1.2	1.0" to 2.0"	\$229.00	\$169.95
*Progressive Lift Kit: Adjusted Prior to installation						
ProRYDE Tools						
Part No.	Description	Unit of Measure			MSRP/MAP	JOBBER
88-7822-1	Ford/Dodge Adapter (works with 88-8000)	1		n/a	\$29.95	\$21.95
88-8000	GM Torsion Bar Loading/Unloading Tool w/o adapter	1		n/a	\$119.95	\$89.95
88-8000A	Universal Torsion Bar Loading/Unloading Tool Set	Set		n/a	\$139.95	\$104.95
ProRYDE Logo Gear						
Part No.	Description	Unit of Measure			MSRP/MAP	JOBBER
34-120	ProRYDE Logo Beanie Cap - Urban Camo	Each		n/a	\$22.50	\$16.99
34-123	ProRYDE Logo T-Shirt Gray (S,M,L,XL,XXL,XXXL)	Each		n/a	\$15.95	\$11.99
34-125	ProRYDE Premium Mesh-Back Ball Cap	Each		n/a	\$22.50	\$16.99
34-127	ProRYDE Logo Old School Flat Bill Cap	Each		n/a	\$19.95	\$14.95
34-128	DISCONTINUED					
34-130	ProRYDE Premium Hoodie - Black/Gray (S,M,L,XL,XXL,XXXL)	Each		n/a	\$45.50	\$33.95
34-131	ProRYDE Logo 2 x 2 Hitch Cover	Each		n/a	\$9.95	\$6.99
ProRYDE Point-of-Purchase Materials						
Part No.	Description	Unit of Measure			MSRP/MAP	JOBBER
54-A-FRAME	P.O.P. A-Frame Display w/25 tri-fold Brochures	1		n/a	\$112.95	\$84.99
54-CM2018	ProRYDE Counter or Window Graphic - 14" x 18"	1		n/a	\$11.95	\$8.99
54-D1047A	P.O.P. Merchandising Display w/Header Card	1		n/a	\$185.95	\$139.99
54-POP-25	P.O.P. Counter Display w/25 tri-fold Brochures	25		n/a	\$16.95	\$12.95
54-PSB-2	P.O.P. ProRYDE VERTICAL Shop Banner - 24" x 48"	1		n/a	\$39.95	\$29.99
54-POSTER	ProRYDE Poster - 36" x 24" LIFT IT. LEVEL IT. TUNE IT.	1		n/a	\$19.95	\$14.95

N = New Product ****** = Varying by model

Items in **RED** are updates and/or TBA (To Be Announced)

(1) Includes SHOCK EXTENDERS to ensure factory quality ride and use of your OEM shocks.

** R & R time using published estimated labor rate plus factor for any additional parts.

The RETAIL MAP (Minimum Advertised Price) for all ProRYDE products is the MSRP/MAP.

This ProRYDE MAP policy does NOT dictate actual resale prices. Contact ProRYDE, LLC or your ProRYDE distributor for details on Terms & Conditions of Sale.

IMPORTANT: Discuss tire/wheel size options with an experienced dealer, as individual vehicles may vary. ProRYDE, LLC assumes no responsibility for errors or incorrect information in this price list. It is the responsibility of the installer to verify proper installation and fit of ProRYDE, LLC products. Read ALL information & warnings contained with ProRYDE, LLC products PRIOR to installation. ProRYDE, LLC is NOT responsible for wear or damage to any original or aftermarket parts affected by the installation of their products.