

CONTENTS

FEATURED PRODUCT	2-11
APPLICATION GUIDE	13-64
FRONT WHEEL	66-77, 105-106
LIGHT TRUCK	78-80, 86-104
HEAVY TRUCK	81-85
REAR WHEEL	107-128
TOOLS	129-146
SOCKETS	147-150
CONVERSION CHART	151
INDEX	152-157
PRORYDE	159-160

FEATURED PRODUCT

FEATURED
PRODUCT

NEW

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 side of vehicle)



Mercedes

C-Class W204 2008-2014
CL-Class C216 2007-2014
CLK-Class C209 2003-2009
CLS-Class C218 2012-2014
E-Class W211 2003-2008
GLK-Class X204 2010-2015
S-Class W220 2000-20006
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.

NEW

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 side of vehicle)

Mercedes

C-Class W202/S202 1994-2000
CL-Class C215 2000-2006
CLK-Class C208 1998-2002
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.

NEW

41-8267

GREASEABLE FRONT CAM BOLT KIT

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

Mazda Miata MX5 2006-2015



Adjustment Range: $\pm 1.0^\circ$

Quantity: Kit

Sides Adjusted: 2

NEW

41-8322L (LEFT SIDE)

41-8322R (RIGHT SIDE)

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 2009-2016

Dodge Challenger 2WD 2009-2016

Dodge Charger 2WD 2009-2016



Adjustment Range: $\pm 3^\circ$ Camber, $\pm 1.5^\circ$ Caster

Quantity: Each

Sides Adjusted: 1



FEATURED PRODUCT

FEATURED
PRODUCT

NEW

41-8326

ADJUSTABLE CAMBER/CASTER UPPER CONTROL ARM

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



Audi

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



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

NEW

41-8329L (LEFT SIDE)

41-8329R (RIGHT SIDE)

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 -2016
Dodge Charger AWD 2006-2016



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

NEW

44-823

FRONT CASTER/PINION ANGLE CAM BOLT KIT

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

Dodge 2500 HD 2wd 2011-2013
Dodge 2500 P/U NS 4wd 2014-2016
Dodge 3500 2wd 2013-2016
Dodge 3500 2wd / mono beam 2013-2016
Dodge 3500 P/U NS 4wd 2013-2016



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

NEW

44-832

FRONT REPLACEMENT 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 kits unique design will greatly improve accessibility for easy Adjustment

Chevrolet Silverado 2500HD/3500 2011-2016
GMC Sierra 2500HD 2011-2016
Chevrolet Colorado 2015-2016
GMC Canyon 2015-2016



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

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NEW

44-835

FRONT 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

NEW

44-2512

FRONT ALIGNMENT GUIDE PIN

- Fast and easy replacement of damaged or broken guide pins

*Chevrolet/GMC 2WD/4WD 2011-2016 (upper control arm)
2500HD, 3500HD, 4500*

Chevrolet Colorado/GMC Canyon 2WD/4WD 2015-2016 (lower control arm)



Quantity: 12

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

NEW

44-2535

Jeep Wrangler JK 2007-2016



NEW

44-2540

Ram 2500 2014

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



NEW

44-2542

Ram 2500 2014-2016

Ram 3500 2013-2016 (Build date after 11/4/13)



Quantity: 1 per vehicle

FEATURED PRODUCT

FEATURED
PRODUCT

NEW

44-2720L (LEFT SIDE)

44-2720R (RIGHT SIDE)

UPPER CONTROL ARM WITH ADJUSTABLE CAMBER/CASTER BALL JOINT

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

Dodge Durango 2011-2016
Jeep Grand Cherokee 2011-2015



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

NEW

44-2725

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 side of vehicle



Chevrolet 1500 Pickups/SUVs LD 2WD/4WD 1999-2006
GMC 1500 Pickups/SUVs LD 2WD/4WD 1999-2006

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

NEW

44-2726L (LEFT SIDE)

44-2726R (RIGHT SIDE)

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 2007-2016
GMC 1500 Pickups/SUVs LD 2WD/4WD 2007-2016



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

NEW

44-2727

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 2011-2016
GMC Sierra 2500HD/3500 2011-2016



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

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FEATURED PRODUCT

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NEW

44-2728L (LEFT SIDE)

44-2728R (RIGHT SIDE)

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 2015-2016



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

NEW

44-2730

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 2001-2010
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,
Quantity: Each $\pm 1.5^\circ$ Caster
Sides Adjusted: 1

NEW

46-164

ADJUSTABLE 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 2003-2007
Infiniti G35 Sedan 2003-2006
Nissan Altima 2007-2012
Nissan Altima 350Z 2003-2009



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

NEW

46-166

ADJUSTABLE 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



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

FEATURED PRODUCT

FEATURED
PRODUCT

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
NEW 46-425	<i>Chevrolet Malibu 2004-2012</i> <i>Pontiac G6 2005-2010</i> <i>Saab 9-3 2003-2011</i> <i>Saturn Aura 2007-2009</i>	Camber
NEW 46-426		Toe
NEW 46-427	<i>Buick Lacrosse (Non Hyper Strut) 2010-2016</i> <i>Buick Regal(Non Hyper Strut) 2008-2016</i> <i>Saab 9-5 2010-2012</i> <i>Chevrolet Malibu 2012-2016</i> <i>Cadillac XTS (Non Hyper Strut) 2012-2016</i> <i>Chevrolet Impala 2013-2016</i>	Camber
NEW 46-428		Toe



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

NEW 46-431

GREASEABLE REPLACEMENT REAR TOE CAM BOLT KIT

- **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
Outback 2000-2009
Baja 2003-2006
Tribeca 2006-2010



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

NEW 46-432

GREASEABLE REAR CAM BOLT KIT

- **GREASEABLE** camber and toe adjustments on vehicles with frozen OE bolts, or where additional change is needed

Toyota Rav 4 2001-2005



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

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NEW

46-1707

REAR CAMBER AXIS CAM BOLT KIT

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

Hyundai Entourage 2007-2009
Kia Sedona 2006-2016



Adjustment Range: $\pm 75^\circ$
Quantity: Pair
Sides Adjusted: 2

NEW

46-2183

ADJUSTABLE REAR TOE ARM

- Replacement for damaged or frozen OE toe arm
- Provides adjustment beyond the OE adjustment
- Works with 46-2184 adjustable camber arm

Acura TL, TSX 2009-2014
Honda Accord 2008-2014
Honda Crosstour 2010-2011



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

NEW

46-2228

ADJUSTABLE 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 G37 Coupe Active steer 2008-2014
Infiniti G37 Sedan 2008-2014
Infiniti M35/M45 2006-2010



Adjustment Range: Camber $\pm 3^\circ$ Toe $\pm 2^\circ$
Quantity: Each
Sides Adjusted: 1

NEW

46-2229

GREASEABLE ADJUSTABLE REAR 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 2006-2012
Toyota Vanguard 2007-2012 (Asia)



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

FEATURED PRODUCT

FEATURED
PRODUCT

NEW

46-2231

ADJUSTABLE 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 2006-2011



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

NEW

46-2232

ADJUSTABLE UPPER REAR 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 IS 2014-2016
Lexus GS 2013-2016
Lexus RC 2015-2016



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

NEW

46-2234

ADJUSTABLE REAR LATERAL LINK

- 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 TL, TSX 2009-2014
Honda Accord 2008-2016
Honda Crosstour 2010-2016



Adjustment Range: $\pm 1"$ Wheel Setback
Quantity: Each
Sides Adjusted: 1

NEW

46-2236L (LEFT SIDE)

46-2236R (RIGHT SIDE)



GREASEABLE ADJUSTABLE REAR CAMBER ARM

- Allows for rear positive or negative camber adjustment where no OE adjustments are available



Toyota Rav 4 2006-2016

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

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PRO SERIES

“Professional Products for Professional Installers”



FRONT AND REAR GREASEABLE CAM BOLT ADJUSTABLE KITS



- Frozen Cam Bolts are a thing of the past with the NEW Pro Series cam bolts
- Tested stronger than original equipment!
- GM Greaseable replacement bolt kit with Quick Cams are a direct Replacement and will restore the factory adjustment.
- Greaseable allowing for ease of future adjustments
- Provides caster and pinion angle adjustments on vehicles with frozen OE bolts
- Replaces factory non-adjustable system on many models
- On many models this kit will greatly improve accessibility for easy Adjustment
- Works with OE cam guide
- Fast bolt-on-installation - no drilling or modifying required
- Tech friendly design
- Be a Pro, with Pro Series!

41-8262 FRONT CAMBER/CASTER

Chevrolet Tahoe 2000-2016
Chevrolet Express Van 2003-2016
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

41-8267 FRONT CAMBER/CASTER

Mazda Miata MX5 2006-2015

Adjustment Range: $\pm 1.0^\circ$
 Quantity: Kit
 Sides Adjusted: 2

41-8272 FRONT CAMBER/CASTER

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

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



PRO SERIES

GREASEABLE



FEATURED
PRODUCT

42-781 FRONT CAMBER/CASTER

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

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

44-825 FRONT CASTER/PINION ANGLE

Dodge Ram HD 2wd 2011-2013
Dodge Ram 2500 4wd 2014-2016
Dodge Ram 3500 2wd 2013-2016
Dodge Ram 3500 4wd 2013-2016

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

44-826 FRONT CAMBER/CASTER

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

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

44-827 FRONT CAMBER/CASTER

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: Kit
Sides Adjusted: 2

44-828 FRONT CAMBER/CASTER

Toyota 4-Runner 2010-2016
Toyota FJ Cruiser 2010-2016
Lexus GX 2010-2016

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

44-831 FRONT CAMBER/CASTER

Chevrolet Silverado 2500HD/3500 2011-2016
GMC Sierra 2500HD 2011-2016

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

44-834 FRONT CAMBER/CASTER

Dodge Dakota 2005-2011

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

44-836 FRONT CAMBER/CASTER

Ford Explorer Sport Trac 4WD 2001-2005
Ford Explorer/Explorer Sport 4WD 1995-2001
Ford Explorer 2WD 1995-2001
Ford Ranger 2WD/4WD 1998-2011
Mazda B Series P/U 2WD/4WD 1998-2009

Mercury Mountaineer 2WD/4WD 1997-2001

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

44-862 FRONT CAMBER/CASTER

Nissan Armada 2WD/4WD 2005-2016
Nissan Frontier 2WD/4WD 2005-2016
Nissan Pathfinder 4WD 2005-2016
Nissan Titan 2WD/4WD 2004-2016
Suzuki Equator 2009-2011

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

44-864 FRONT CAMBER/CASTER

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 CAMBER/CASTER

Dodge Ram 1500 2WD/4WD 2002-2005

Adjustment Range: Camber $\pm 0.75^\circ$
Quantity: Kit Caster $\pm 1.25^\circ$
Sides Adjusted: 2

46-431 REAR TOE

Subaru
Legacy 2000-2009
Outback 2000-2009
Baja 2003-2006
Tribeca 2006-2010

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

46-432 REAR CAMBER/TOE

Toyota Rav 4 2001-2005

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

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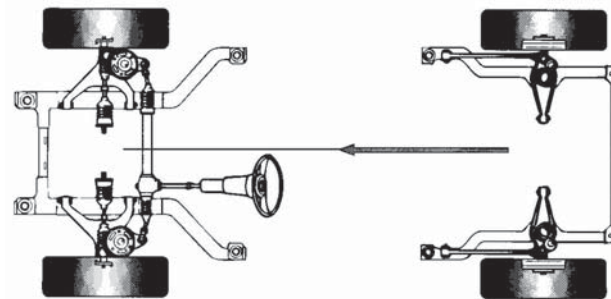
Well over one half of all cars on the road today, and approximately 85% of all new vehicles, require all four wheels to be aligned for proper handling, maximum tire wear and safety.

FOUR WHEEL "TOTAL" ALIGNMENT

This refers to setting the alignment angles on all four wheels so they are positioned straight ahead and parallel, and the vehicle's steering wheel is centered.

WHAT IS DONE:

1. Angle readings are taken on all four wheels
2. Rear wheels are set to specification.
(Rear thrust line corresponds to vehicle center line).
3. Steering wheel is centered
4. Front wheels are referenced to the rear thrust line and set to specifications



RESULT:

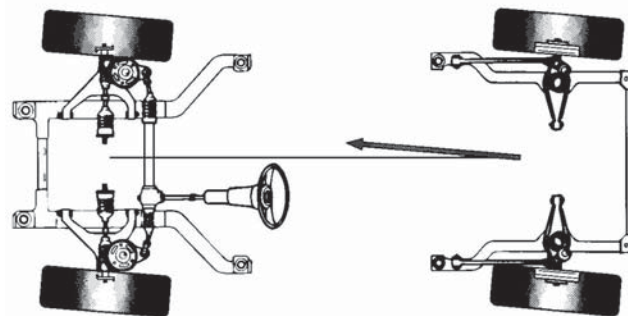
All four wheels are positioned straight ahead and parallel, and the steering wheel is centered.

FOUR WHEEL "THRUSTLINE" ALIGNMENT

This refers to aligning the front wheels to the "Rear Thrust Line" or driving direction of the Rear Wheels. This is done by taking angle readings on both front and rear wheels and referencing the front wheels to the driving direction of the rear wheels - thrust line. (See illustration below). The steering wheel is centered and the front wheels are then set to specifications.

WHAT IS DONE:

1. Angle readings are taken on all four wheels.
2. The steering wheel is centered
3. Front wheels are referenced to the rear thrust line and set to specifications.



RESULT:

All four wheels are parallel and the steering wheel is centered. (Angles have been exaggerated to demonstrate condition)

PRODUCT APPLICATION QUICK TABLE

This portion of the catalog has been designed to aid you in the proper selection of Alignment Products and Tools for both Front and Rear applications on most Domestic and Imported Passenger Cars and Light Trucks.

How to use the Product Application Quick Table, pages 13-63

Below is an example of the application section

FRONT WHEEL ALIGNMENT									REAR WHEEL ALIGNMENT					
MODEL	YEAR	T 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
ACURA														
Acura 2.2CL/2.3CL/3.0CL	1997 - 1999	X	Ball Joint Ball Joint Control Arm W/WBJ	41-530 41-529 41-545	41-530 41-529	70 70 71	88-7800A	0.90 / 0.90 0.90 / - 0.50	Shim Rear Arm	46-2160 46-2181	Fac Adj.	117 120		0.20 / - 0.50
Acura 3.2 CL	2001 - 2003	X	Ball Joint	41-532	Fac Adj.	70	88-7800A	0.90 / -	-	Non Adj.	Fac Adj.	-		- / -
Acura CSX	2006 - 2011	X	Axis Cam	41-214	Non Adj.	67		0.30 / -	Rear Arm	46-2187	Fac Adj.	121		0.50 / -

In Example 1 above you are looking up both **Front** and **Rear** Alignment Products for some Buick vehicles. First, you are given information as to whether you should recommend a **4 wheel total** or **4 wheel thrust** alignment procedure. Next, you are given the **adjustment method**

The next column lists the actual part number for **front camber** correction, **front caster** correction, or **both**. In this case, there is a factory adjustment method, which is very difficult, or you have a choice of two aftermarket adjustment kits. The following column shows the **product page number**, which directs you to the page in this catalog giving information about the listed product, including the degree of change possible and a picture of each part number.

The next column is for a recommended installation tool, if one is needed.

The last column lists the **estimated installation time**, in hours, for that product. **NOTE:** All estimated installation times are for one side of the vehicle.

Continuing across the page to **rear alignment** you follow the same procedure, **except** you will be dealing with camber and tow. Again you have a choice of products. Notice that the same part often works for both front and rear applications.

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
ACURA															
Acura 2.2CL/2.3CL/3.0CL	1997 - 1999	X		Ball Joint Ball Joint Control Arm W/BJ	41-530 41-529 41-545	41-530 41-529	70 70 71	88-7800A	0.90 / 0.90 0.90 / - 0.50	Shim Rear Arm	46-2160 46-2181	Fac Adj.	117 120		0.20 / - 0.50
Acura 3.2 CL	2001 - 2003	X		Ball Joint	41-532	Fac Adj.	70	88-7800A	0.90 / -	-	Non Adj.	Fac Adj.	-		- / -
Acura CSX	2006 - 2011	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	Rear Arm	46-2187	Fac Adj.	121		0.50 / -
Acura EL	2001 - 2002	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	Rear Arm	46-2180	Fac Adj.	119		0.30 / -
Acura EL	2003 - 2005	X		Axis Cam	41-216	Non Adj.	67		0.30 / -	Rear Arm	46-2180	Fac Adj.	119		0.50 / -
Acura ILX	2013 - 2017	X		Axis Cam	41-216	Non Adj.	67		0.03 / -	Rear Arm	46-2187	Fac Adj.	121		0.50 / -
Acura Integra	1986 - 1989	X		-	Non Adj.	Non Adj.	-		- / -	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	88-343	0.60 / 0.60 0.60 / 0.60
Acura Integra / IntegraType R	1990 - 2001	X		Ball Joint Control Arm W/BJ	41-532 41-545	41-532	70 71	88-7800A	0.90 / 0.90 0.50	Shim Rear Arm	46-2160 46-2182	Fac Adj.	117 120		0.20 / - 0.70
Acura Legend	1986 - 1990	X		-	Non Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Acura Legend	1991 - 1995	X		Ball Joint	41-532	41-532	70	88-7800A	0.90 / 0.90	Shim	46-2160	Fac Adj.	117		0.20 / -
Acura MDX 4WD	2001 - 2006	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	66 67		0.30 / - 0.30	Rear Arm	46-2192	Fac Adj.	122		0.50 / -
Acura MDX 4WD	2007 - 2013	X		Axis Cam	41-218	Non Adj.	-		0.30 / -	Rear Arm	46-2196	Fac Adj.	123		0.50 / -
Acura MDX 4WD	2014 - 2017	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Acura NSX	1991 - 2005	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Acura RDX 4WD	2007 - 2017	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Acura 3.5RL	1996 - 2008	X		Ball Joint Control Arm W/BJ	41-532 41-545	41-532	70 71	88-7800A	0.90 / 0.90 0.50	- Rear Arm	Non Adj. 46-2181	Fac Adj.	- 120		- / - 0.50
Acura 3.5RL	2005 - 2012	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Acura RLX	2014 - 2016	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Acura RSX	2002	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	Rear Arm	46-2180	Fac Adj.	119		0.50 / -
Acura RSX MID Year 02	2002 - 2006	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	66 67		0.30 / - 0.30	Rear Arm	46-2180	Fac Adj.	119		0.50 / -
Acura SLX 4WD	1996 - 1999	X		- Shim	Fac Adj. CC	Fac Adj. CC	- -		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Acura 2.5 TL	1995 - 1998	X		Ball Joint Control Arm W/BJ	41-530 41-545	Fac Adj. 41-530	70 71	88-7800A	0.90 / - 0.50 / 0.90	Shim	46-2160	Fac Adj.	117		0.20 / -
Acura 3.5TL	1996 - 2001	X		Ball Joint	41-532	41-532	70	88-7800A	0.90 / 0.90	Rear Arm	46-2195	Fac Adj. 46-2195	123		0.70 / - 0.70
Acura 3.2 TL	1997 - 1998	X		Ball Joint	41-532	Fac Adj. 41-532	70	88-7800A	0.90 / - 0.90	Shim	46-2160	Fac Adj.	117		0.20 / -
Acura 3.2 TL	1999 - 2003	X		Ball Joint	41-532	Fac Adj. 41-532	70	88-7800A	0.90 / - 0.90	Ball Joint	46-2190	Fac Adj.	122		0.70 / -
Acura 3.2 TL	2004 - 2008	X		Ball Joint	41-532	Fac Adj. 41-532	70	88-7800A	0.90 / - 0.90	Rear Arm Rear Arm	46-2195 46-2181	Fac Adj. 46-2195	123 120		0.70 / - 0.50 / 0.70

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 106
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.
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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
Acura 3.2 TL	2009 - 2014	X		Ball Joint	41-532	Fac Adj. 41-532	70		0.90 / - 0.90	Rear Arm	46-2184	Fac Adj. 46-2183 46-2234	120		0.30 / - 0.30 0.30
Acura TSX	2004 - 2008	X		Ball Joint	41-532	41-532	70	88-7890A	0.90 / -	Rear Arm Rear Arm	46-2195 46-2192	Non Adj. 46-2195	123 122		0.70 / - 0.50 / 0.70
Acura TSX	2009 - 2014	X		Ball Joint	41-532	41-532	70	88-7890A	0.90 / 0.90	Rear Arm	46-2184	Fac Adj. 46-2183	120		0.30 / - 0.30
Acura Vigor	1992 - 1994	X		Ball Joint Control Arm W/BJ	41-530 41-545	41-530	70 71	88-7800A	0.90 / 0.90 0.50	Shim	46-2160	Fac Adj.	117		0.20 / -
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	113 117	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 5000 FWD	1978 - 1988	X		-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	113 117	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	112 117	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	112 117	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 A4, A4/ S4 Quattro	1996 - 2008	X		- Control Arm W/BJ	Non Adj. 41-8326-3	Non Adj.	- 77		- / - 0.70	-	Non Adj.	Non Adj.	-		- / -
Audi A4, A4/ S4 Quattro	2009 - 2017	X		Control Arm W/BJ Control Arm W/BJ	41-8326 41-8326-3	41-8326	77 77		0.70 / 0.70 0.70	-	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 - 2016	X		Control Arm W/BJ	41-8326	41-8326	77		0.70 / 0.70	-	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.	-		- / -
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, S7	2012 - 2015	X		Control Arm W/BJ	41-8326	41-8326	77		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.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Audi Q5	2009 - 2017	X		- Control Arm W/BJ	Non Adj. 41-8326	Non Adj. 41-8326	- 77		- / - 0.70 / 0.70	-	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 106
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 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
Audi	2007 - 2015	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi S4	2000 - 2016	X	- Control Arm W/BJ	Non Adj. 41-8326	Non Adj. 41-8326	77		- / - 0.70 / 0.70	-	Fac Adj.	Fac Adj.	-		- / -
Audi S6 Quattro	1995 - 2002	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi SQ5	2014 - 2017	X	- Control Arm W/BJ	41-8326	41-8326	77		0.70 / 0.70	-	Fac Adj.	Fac Adj.	-		- / -
Audi TT	2000 - 2010	X	-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Audi TT/ Quattro	2000 - 2002	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Audi V8 Quattro	1990 - 1994	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW														
BMW 3 Series (E36) M Coupe/ Roadster	1999 - 2004	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 3 Series (E46)	2001 - 2006	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-	88-9180	- / -
BMW 5 series (E28, E34)	1989 - 1995	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
BMW 5 series (E39)	2001 - 2009	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW 7 series (E38)	1995 - 2001	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW 8 series (E31)	1993 - 1997	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 X5 (E53)	2000 - 2004	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
BMW Z1	1996 - 2002	X	-	Non 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 Lacrosse	2005 - 2009	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	66 67		0.30 / - 0.30
Buick Lacrosse (Non Hyper Strut)	2010 - 2017	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Dual Axis Cam bolt	Fac Adj. 46-427	Fac Adj. 46-428	-		- / - 0.30 / 0.30
Buick Rear Wheel Drive	1971 - 1996	X	- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Buick Century FWD	1985 - 1996	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	66 67		- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117	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.

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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 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
Buick Century FWD	1997 - 2005	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	66 67	-	- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	66 67	-	- / - 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.	66 67	-	- / - 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	66 114 117	88-050 88-1110 88-343	0.30 / - 0.60 / 0.60 0.60 / 0.60
Buick Enclave	2008 - 2017	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	66 67	-	- / - 0.30 0.30	- Cam Bolt Camber Kit	Fac Adj. 41-8257 46-421	Fac Adj.	75 111	88-7996A	- / - 0.30 1.00
Buick Encore	2013 - 2017	X	- Axis Cam	41-214		67	-	0.30						
Buick LeSabre	1986 - 1999	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67	-	- / - 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	66 114 117	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.	66 67	-	- / - 0.30 0.30	Shim	46-1900	Fac Adj.	112		0.80 / -
Buick Lucerne	2006 - 2011	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67	-	- / - 0.30 0.30	Shim	Non Adj. 46-1300 SERIES ¹	Fac Adj. 46-1300 SERIES ¹	- 114		- / - - / -
Buick Park Ave/Ultra	1997 - 2005	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67	-	- / - 0.30 0.30	Shim	46-1900	Fac Adj.	112		0.80 / -
Buick Rainier 2WD/4WD	2004 - 2007	X	- Camber-Caster Tool	88-8929	88-8929	143	-	- / -	-	Non Adj.	Non Adj.	-		- / -
Buick Riviera/Reatta	1985 - 1993	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67	-	- / - 0.30 0.30	Shim	46-1600	Fac Adj.	115		0.60 / -
Buick Regal	1988 - 1996	X	- Shim	Fac Adj. 45-7010 ⁴	Fac Adj.	- 102	88-060	- / - 0.50	Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	66 67	88-8923	0.30 / - 0.30
Buick Regal	1997 - 2004	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	66 67	-	- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	66 67		- / - 0.30 0.30
Buick Regal (Non Hyper Strut)	2011 - 2017	X	- Axis Cam	41-212	Non Adj.	67	-	0.30 / -	- Dual Axis Cam bolt	Fac Adj. 46-427	Fac Adj. 46-428	- -		- / - 0.30 / 0.30
Buick Rendezvous	2002 - 2007	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	66 67	-	- / - 0.30 0.30	- Shim	Fac Adj. 46-1300 SERIES ¹	Fac Adj. 46-1300 SERIES ¹	- 114		- / - - / -
Buick Riviera	1995 - 1999	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67	-	- / - 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.	66 67	-	- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Buick Skylark	1980 - 1998	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	66 67	-	- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Buick Somerset	1986 - 1987	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	66 67	-	- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	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.	66 67	-	0.30 / - 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117		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.	66 67	-	0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Buick Verano	2012 - 2017	X	- Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	67 66	-	0.30 / - 0.30	Shim	46-7100	46-7100	123		- / -
CADILLAC														
Cadillac Allante	1987 - 1992	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67	-	- / - 0.30 0.30	Shim	46-1600	Fac Adj.	115	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.	66 67	-	- / - 0.30 0.30	-	Fac 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.
- 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 106
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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
Cadillac Catera	1997 - 2001	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		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.	66 67		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	88-343	0.60 / 0.60 0.60 / 0.60
Cadillac CTS	2003 - 2014	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac DeVille	1985 - 1993	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67		- / - 0.30 0.30	Magna Cam	41-160 ²	Fac Adj.	66		0.30 / -
Cadillac DeVille	1994 - 1999	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67		- / - 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.	66 67		- / - 0.30 0.30	Shim	46-1900	Fac Adj.	112		0.80 / -
Cadillac DTS	2006 - 2011	X		Axis Cam Magna Cam	41-216 41-159 ²	Fac Adj.	67 66		0.30 / - 0.30	Shim	46-1500 ¹	46-1500 ¹	114		0.60 / 0.60
Cadillac Eldorado	1967 - 1978	X		Cam Bolt	Fac Adj. 41-8247	Fac Adj. 41-8247	-		- / - 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Cadillac Eldorado	1979 - 1985	X		Cam Bolt	Fac Adj. 41-8247	Fac Adj. 41-8247	73		- / - 1.00 / 1.00	Shim Shim	46-1300 ¹ 46-2400 ¹	Fac Adj.	114 117	88-050 88-1110 88-343	0.60 / - 0.60
Cadillac Eldorado	1986 - 1992	X		Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	66 67		0.30 / - 0.30	Shim	46-1600	Fac Adj.	115		0.50 / -
Cadillac Eldorado	1993 - 2002	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac ELR	2014 - 2016	X		-	Fac Adj.	Non Adj.	-		- / -	Shim	46-7100	46-7100	123		- / -
Cadillac Escalade	1999 - 2000	X		Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	Fac Adj. 41-8250 ⁵ 41-8272	74 10	88-7491	- / - 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Cadillac Escalade/EXT	2002 - 2006	X		Bushing Camber Kit Replacement Pins Quick Cam 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	97 74 97 96 75 96 99	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.50 / 0.50 0.80 / 0.80 0.08 / 0.80	-	Non Adj.	Non Adj.	-		- / -
Cadillac Escalade/EXT	2007 - 2017	X		Bushing Camber Kit Replacement Pins Quick Cam 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 44-2726R	Fac Adj. 44-2509 ⁵ 41-8251 44-2508 44-2506 41-8262 44-2726L 44-2726R	97 74 97 96 75 96 96	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.50 / 0.50 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
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.	66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	66 67		- / - 0.30 0.30
Cadillac Seville	1980 - 1985	X		Cam Bolt	Fac Adj. 41-8247	Fac Adj. 41-8247	73		- / - 1.00 / 1.00	Shim Shim	46-1300 ¹ 46-2400 ¹	Fac Adj.	114 117	88-050 88-1110 88-343	0.60 / - 0.60
Cadillac Seville	1986 - 1992	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67		- / - 0.30 0.30	Shim	46-1600	Fac Adj.	115		0.50 / -
Cadillac Seville/STS	1993 - 1997	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Cadillac Seville/STS	1998 - 2011	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67		- / - 0.30 0.30	Shim	46-1900	Fac Adj.	112		0.80 / -
Cadillac SRX	2004 - 2009	X		-	Fac Adj.	-	-		-	-	Fac 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.
- 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 106
 - 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.
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 - 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
Cadillac SRX	2010 - 2016	X	Axis Cam Magna Cam	41-216 41-159 ²		67 66		0.30 0.30	Shim Shim	46-1200 SERIES ¹ 46-2300 ¹	46-1200 SERIES ¹ 46-2300 ¹	113 117		- / - - / -
CHEVROLET														
Chevrolet Astro 2WD	1985 - 2005	X	Shim	CC	CC	-		- / -			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	- 74 10	88-7491	- / - 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Avalanche 1500 2WD/4WD	2007 - 2013	X	- Bushing Camber Kit Quick Cam Replacement Pins 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	- 97 74 96 97 75 96 96	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						
Chevrolet Avalanche 1500 2WD/4WD	2002 - 2006	X	- Bushing Camber Kit Camber Kit Camber Kit Cam Bolt	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 41-8262	Fac Adj. 44-2509 ⁵ 41-8251 44-2506 44-2508 41-8262	- 97 74 96 97 75	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.50 / 0.50 0.30 / 0.30 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Avalanche 2500	2002 - 2006	X	- Bushing Camber Kit Quick Cam Replacement Pins Ball Joint Control Arm W/BJ 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	- 97 74 96 97 96 101 75	88-7950A	- / - 0.80 / 0.80 0.60 / 0.60 0.30 / 0.30 0.30 / 0.30 0.90 / 0.90 0.60 / 0.60 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Aveo	2004 - 2011	X	Magna Cam Axis Cam	41-144 41-212	Non Adj.	66 67		0.30 / - 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	113 117		0.60 / 0.60 0.60 / 0.60
Chevy Aveo	2012 - 2014	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Shim	46-7100	46-7100	123		- / -
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	- 74 10	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.	66 67		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	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.	66 67		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
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	- 74 10	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	- 73		- / - 0.40 / 0.40	-	Non Adj.	Non Adj.	-		- / -
Chevrolet C Series Pickup 2WD	1975 - 1986	X	Shim	CC	CC	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet C10/C20 Suburban 2WD	1972 - 1986	X	Shim	CC	CC	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet C/K Series Pickup	1988 - 1999	X	Cam Bolt Greaseable Cam Bolt	41-8250 ⁵ 41-8272	41-8250 ⁵ 41-8272	74 10	88-7491	0.60 / 0.60 0.60 / 0.60	-	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	74 10	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	- 74 10	88-7491	- / - 0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Kodiak C4500 C5500 2WD	2005 - 2009	X		Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -

APPLICATION
GUIDE

Note: Front toe is always adjustable; when front adjusters are called for, they are primarily for the adjustment of camber.
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- 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	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
Chevrolet Kodiak C4500 C5500 4WD	2005 - 2009		X	Bushing Bushing	44-6020 44-5037	44-6020 44-5037	104 103		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Camaro	1967 - 1981		X	Shim	CC	CC	-		- / -	-	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 - 2015		X	Axis Cam	41-216	Non Adj.	67		- / -	- Cam Bolt	Fac Adj. 46-182	Fac Adj. 46-182	- 110		- / - 0.30 / 0.30
Chevrolet Caprice	1966 - 1996		X	Shim	CC	CC	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Caprice	2011 - 2017		X	Axis Cam Magna Cam	41-214 41-157 ²	Fac Adj.	67 66		0.30 / - 0.30	Cam Bolt	46-182	46-182	110		0.30 / 0.30
Chevrolet Captiva	2008 - 2015		X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	Camber Kit	44-775	44-775	88		0.30 / 0.30
Chevrolet Captiva Sport	2012 - 2015		X	Axis Cam Magna Cam	41-214 41-158 ²		67 66		0.30 0.30						
Chevrolet Cavalier	1982 - 1994		X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	- 66 67		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	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.	- 66 67		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	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.	- 66 73		- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Chevrolet Citation	1980 - 1983		X	- Magna Cam Cam Bolt	Fac Adj. 41-160 ² 41-8245	Non Adj.	- 66 73		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	88-050 88-1110	0.60 / 0.60 0.60 / 0.60
Chevrolet City Express	2015 - 2017		X	Axis Cam Magna Cam	41-214 41-157 ²	Non Adj.	67 66		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Cobalt	2005 - 2010		X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Shim	46-1520 ¹	46-1520 ¹	114		0.60 / 0.60
Chevrolet Colorado 2WD	2004 - 2012		X	- Cam Bolt Cam Bolt 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	- 74 96 97 75		- / - 0.50 / 0.50 0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Colorado 4WD	2004 - 2012		X	- Quick Cam Replacement Pins Cam Bolt Cam Bolt	Fac Adj. 44-2507 44-2508 41-8251 41-8262	Fac Adj. 44-2507 44-2508 41-8251 41-8262	- 96 97 74 75		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 - / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Colorado	2015 - 2017		X	- Cam Bolt Cam Bolt Replacement Pins	Fac Adj. 44-831 44-832 44-2512	Fac Adj. 44-831 44-832 44-2512	- 92 92 98		- / - 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	-		- / - -	- Cam Bolt	Fac Adj. 41-8243	Fac Adj. 46-6020 46-6030	- 73		- / - 0.60 / 0.30 0.30
Chevrolet Corvette	1984 - 2014		X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Chevy Cruze	2011 - 2017		X	Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	67 66		0.30 / - 0.30	Shim	46-7100	46-7100	123		- / -
Chevrolet El Camino 2WD	1965 - 1987		X	Shim	CC	CC	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Equinox	2005 - 2017		X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	-	44-775	44-775	88		0.30 / 0.30

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 3. For models with slotted strut brackets only.
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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

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Express Van	1996 - 2002	X			- Cam Bolt Greaseable Cam Bolt	Fac Adj. 41-8250 ⁵ 41-8272	Fac Adj. 41-8250 ⁵ 41-8272	- 74 10		- / - 0.60 / 0.60 0.60 / 0.60						
Chevrolet Express Van 1500,2500,3500,4500 2WD	2003 - 2017	X			- Quick Cam Camber Kit Replacement Pins Bushing Ball Joint Cam Bolt	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 44-2498 41-8262	Fac Adj. 44-2506 41-8251 44-2508 44-2509 ⁵ 44-2498 41-8262	- 96 74 97 97 96 75		- / - 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.80 / 0.80 0.90 / 0.90 0.50 / 0.50		Non Adj.	Non Adj.			- / -
Chevrolet Express Van,1500,2500,3500 4WD	2003 - 2017	X			- Quick Cam Replacement Pins Camber Kit Bushing Ball Joint Cam Bolt	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 44-2498 41-8262	Fac Adj. 44-2506 44-2508 41-8251 44-2509 ⁵ 44-2498 41-8262	- 96 97 74 97 96 75		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.80 / 0.80 0.90 / 0.90 0.50 / 0.50		Non Adj.	Non Adj.			- / -
Chevrolet HHR	2006 - 2011	X			Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Shim	46-1520 ⁴	46-1520 ¹	114		0.60 / 0.60
Chevrolet Impala	1958 - 1996	X			Shim	CC	CC	-		- / -		Non Adj.	Non Adj.			- / -
Chevrolet Impala	2000 - 2013	X			Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	66 67		- / - 0.30 0.30	Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	66 67		- / - 0.30 0.30
Chevrolet Impala	2014 - 2017	X			Axis Cam	41-212	Non Adj.	67		0.30 / -	Dual Axis Cam bolt	Fac Adj. 46-427	Fac Adj. 46-428	-		- / - 0.30 / 0.30
Chevrolet Impala Limited	2014 - 2016	X			Axis Cam	41-214	Non Adj.	67		0.30 / -	Axis Cam	41-214	Fac Adj.	67		0.30 / -
Chevrolet K Series (Dana 60) 4WD	1961 - 1990	X			Camber Kit	44-910	Non Adj.	93		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	74 10	88-7090 88-7491	0.60 / 0.60 0.60 / 0.60		Non Adj.	Non Adj.			- / -
Chevrolet LLV Postal Vehicle 2WD	1987 - 1995	X			Shim	CC	CC	-		- / -		Non Adj.	Non Adj.			- / -
Chevrolet Lumina	1990 - 1996	X			Magna Cam	Fac Adj. 41-212	Non Adj.	67	88-060	- / - 0.30	Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67	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.	66 67	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.	66 73		- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Chevrolet Malibu/MonteCarlo	1965 - 1983	X			Shim	CC	CC	-		- / -		Non Adj.	Non Adj.			- / -
Chevrolet Malibu	1997 - 2003	X			Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	66 67		- / - 0.30 0.30	Magna Cam Axis Cam	Fac Adj. 41-144 41-212	Fac Adj.	66 67		- / - 0.30 0.30
Chevrolet Malibu / Maxx	2004 - 2012	X			Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	67 66		0.30 / - -	Dual Axis Cam bolt	Fac Adj. 46-425	Fac Adj. 46-426	111		- / - 0.30 / 0.30
Chevrolet Malibu (Classic)	2004 - 2005	X			Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - -	Cam Bolt	Fac Adj. 41-212	Fac Adj.	67		- / - 0.30
Chevrolet Malibu	2013 - 2017	X			Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	67 66		0.30 / - -	Dual Axis Cam bolt	Fac Adj. 46-427	Fac Adj. 46-428	-		- / - 0.30 / 0.30
Chevrolet Metro	1998 - 2001	X			Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30		Non Adj.	Fac Adj.	-		- / -
Chevrolet Monte Carlo	1995 - 1999	X			Shim	Fac Adj. 45-7010 ⁴	Fac Adj.	- 102	88-060 88-1112	- / - 0.50	Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67		- / - 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 106
- 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
Chevrolet Monte Carlo	2000	X		-	Fac Adj.	-	-	-	- / -	-	Fac Adj.	-	-	-	- / -
	2007			Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67			0.30 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	66 67	
Chevrolet Nova	1969 - 1979	X		Shim	CC	CC	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Nova FWD	1985 - 1988	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		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	114 117 66 67	88-343	0.60 / - 0.60 / 0.60 0.30 / 0.60 0.30
Chevrolet P Series Van 2WD	1977 - 1999	X		Shim	CC	CC	-		- / -	-	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	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30 0.30	- Axis Cam	Fac Adj. 41-212	Fac Adj.	- 67		- / - 0.30
Chevrolet R Series Pickup 2WD	1987 - 1988	X		Shim	CC	CC	-		- / -	-	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	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Silverado HD 2500/2WD/4WD	1999	X		- Bushing Ball Joint Control Arm W/BJ	Fac Adj. 44-2510 44-2498 44-2730	Fac Adj. 44-2510 44-2498 44-2730	- 97 96 101	88-7950A	- / - 0.80 / 0.80 0.90 / 0.90 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Silverado 1500 2WD/4WD	1999 - 2006	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
				Bushing Camber Kit Replacement Pins Quick Cam Ball Joint Control Arm W/BJ Cam Bolt	44-2509 ⁵ 41-8251 44-2508 44-2506 44-2499 44-2725 41-8262	44-2509 ⁵ 41-8251 44-2508 44-2506 44-2499 44-2725 41-8262	97 74 97 96 96 99 75	88-7950A	0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.09 / 0.90 0.60 / 0.60 0.50 / 0.50						
Chevrolet Silverado 1500 2WD/4WD	2007 - 2013	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
				Bushing Camber Kit Replacement Pins Quick Cam Control Arm W/BJ Cam Bolt Control Arm W/BJ	44-2509 ⁵ 41-8251 44-2508 44-2506 44-2726L 41-8262 44-2726R	44-2509 ⁵ 41-8251 44-2508 44-2506 44-2726L 41-8262 44-2726R	97 74 97 96 96 75 96	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 60.00 / 0.60						
Chevrolet Silverado 1500 2WD/4WD (Z71)	2014 - 2016	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
				Bushing Camber Kit Replacement Pins Quick Cam 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	97 74 97 96 75 6 6	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						
Chevrolet Silverado 1500 2WD/4WD (with out Z71)	2014 - 2017	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
				Bushing Camber Kit Replacement Pins Quick Cam Control Arm W/BJ Cam Bolt Control Arm W/BJ	44-2509 ⁵ 41-8251 44-2508 44-2506 44-2726L 41-8262 44-2726R	44-2509 ⁵ 41-8251 44-2508 44-2506 44-2726L 41-8262 44-2726R	97 74 97 96 96 75 96	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 60.00 / 0.60						
Chevrolet Silverado HD 1500/2500/3500 2WD/4WD	1999 - 2010	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
				Bushing Camber Kit Quick Cam Replacement Pins Ball Joint Control Arm W/BJ Cam Bolt	44-2510 41-8251 44-2506 44-2508 44-2498 44-2730 41-8262	44-2510 41-8251 44-2506 44-2508 44-2498 44-2730 41-8262	97 74 96 97 96 101 75	88-7950A	0.80 / 0.80 0.60 / 0.60 0.30 / 0.30 0.30 / 0.30 0.90 / 0.90 0.60 / 0.60 0.50 / 0.50						
Chevrolet Silverado HD 2500/3500 2WD/4WD	2011 - 2016	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
				Camber Kit Camber Kit Replacement Pins Control Arm W/BJ	44-831 44-832 44-2512 44-2727	44-831 44-832 44-2512 44-2727	92 92 98 100		0.50 / 0.50 0.50 / 0.50 0.30 / 0.30 - / -						
Chevy Sonic	2012 - 2017	X		Axis Cam Magna Cam	41-214 41-157 ²		67 66		0.30 0.30	Shim	46-7100	46-7100	123		- / -
Chevy Spark	2012 - 2017	X		Axis Cam Magna Cam	41-212 41-147 ³		67 66		0.30 0.30	Caster Kit	46-7100	46-7100	123		- / -

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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.

- 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 106
- 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	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 Spectrum	1985 - 1988	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		0.30 / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Chevrolet Sprint	1985 - 1988	X		Magna Cam Wedge Kit	Fac Adj. 41-147 ³ 41-300	Non Adj.	- 66 68		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Chevrolet SS	2014 - 2017	X		Axis Cam Magna Cam	41-216 41-159 ²	Fac Adj.	67 66		0.30 / - 0.30	Cam Bolt	46-182		110		0.30
Chevrolet SSR AWD	2003 - 2006	X		Camber-Caster Tool	88-8929	88-8929	143		- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Suburban 1500 2WD/4WD	2007 - 2017	X		- Bushing Camber Kit Quick Cam Replacement Pins 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	- 97 74 96 97 75 96	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	1999 - 2006	X		- Bushing Camber Kit 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	- 97 74 96 97 96 99 75	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.30 0.30 / 0.30 0.80 / 0.80 0.80 / 0.80 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Suburban 2500HD 2WD	2000 - 2013	X		- Bushing Replacement Pins Camber Kit Quick Cam Ball Joint Control Arm W/BJ 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	- 97 97 74 96 96 101 75		- / - 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 Suburban 2500HD 4WD	2000 - 2013	X		- Bushing Replacement Pins Camber Kit Quick Cam Ball Joint Control Arm W/BJ 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	- 97 97 74 96 96 101 75		- / - 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	Fac Adj. 41-8250 ⁵ 41-8272	- 74 10		- / 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	Fac Adj. 41-8250 ⁵ 41-8272	- 74 10	88-7491	- / - 0.60 / 0.60 41.00 / 41.00	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Tahoe 2WD/4WD	1999 - 2006	X		- Bushing Camber Kit Quick Cam Replacement Pins Ball Joint Control Arm W/BJ 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 41-8262	- 97 74 96 97 96 99 75	88-7950A	- / - 0.80 / 0.80 0.60 / 0.30 0.30 / 0.30 0.30 / 0.30 0.80 / 0.80 0.80 / 0.80 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Tahoe 2WD/4WD	2007 - 2017	X		- Bushing Camber Kit Quick Cam Replacement Pins 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	- 97 74 96 97 75 96	88-7950A	- / - 0.80 / 0.80 0.60 / 0.30 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 Tracker 2WD/4WD	1989 - 2005	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Trail Blazer 2WD/4WD	2002 - 2009	X		Camber-Caster Tool	88-8929	88-8929	143	88-8929	- / -	-	Non Adj.	Non Adj.	-		- / -
Chevrolet Traverse	2009 - 2017	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	66 67		- / - 0.30 0.30	Cam Bolt Camber Kit	Fac Adj. 41-8257 46-421	Non Adj.	- 75 111	88-7996A	- / - 0.30 1.00
Chevrolet Trax	2015 - 2017	X		Axis Cam Magna Cam	41-214 41-157 ²	Non Adj.	67 66		0.30 / - 0.30	-	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 106
 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
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CHEVROLET

CHRYSLER

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	R O T O 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
Chevrolet Uplander FWD/AWD	2005 - 2009	X			Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	- Shim Shim	Fac Adj. 46-1300 SERIES ¹ 46-2400 ¹	Fac Adj. 46-1300 SERIES ¹ 46-2400 ¹	- 114 117		- / - 0.60 / 0.60 0.60 / 0.60
Chevrolet V Series P/U 4WD	1987 - 1991	X							88-7090	-		Non Adj.	Non Adj.	-		- / -
Chevrolet Venture Van	1997 - 2005	X			Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	66 67		- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Chevrolet Venture AWD	2002 - 2005	X			Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	66 67		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Chevrolet Volt	2011 - 2017	X			Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	67 66		0.30 / - 0.30						
CHRYSLER																
Chrysler 200	2011 - 2017	X			Axis Cam	41-214	Non Adj.	67		0.30 / -	Shim Rear Arm	46-1500 SERIES ¹ 46-2176	Fac Adj. 46-1500 SERIES ¹	114 118		0.60 / - - / 0.60
Chrysler 200	2015 - 2017	X			-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Chrysler 300C AWD	2005 - 2016	X			- Cam Bolt Control Arm W/B/J Control Arm W/B/J	Fac Adj. 41-8260 41-8329L 41-8329R	Fac Adj. 41-8260	75 73 73		- / - 0.90 / 0.90 0.90 0.90	-	46-162	Fac Adj.	109		0.60 / -
Chrysler 300C 2WD	2004 - 2008	X			Ball Joint Camber Kit Control Arm W/B/J Control Arm W/B/J	41-232 41-8259 41-8321L 41-8321R	41-232 41-8259 41-8321L 41-8321R	68 75 72 72		0.90 / 0.90 0.90 / 0.90 0.60 / 0.60 0.60 / 0.60	Bushing	46-162	Fac Adj.	109		0.60 / -
Chrysler 300C 2WD	2009 - 2016	X			Ball Joint Camber Kit Control Arm W/B/J Control Arm W/B/J	41-232 41-8259 41-8322L 41-8322R	41-232 41-8259 41-8322L 41-8322R	68 75 72 72		0.90 / 0.90 0.90 / 0.90 0.60 / 0.60 0.60 / 0.60	Bushing	46-162	Fac Adj.	109		0.60 / -
Chrysler 300M/LHS	1994 - 2004	X			Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	66 67	41-2001	- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Chrysler Cirrus	1995 - 2000	X			Ball Joint	Fac Adj. 41-230	41-230	68	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.	66 67		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Chrysler Concorde	1998 - 2004	X			Magna Cam Axis Cam	41-160 ² 41-216	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Chrysler Crossfire	2004 - 2008	X			Cam Bolt	Fac Adj. 41-8265	Fac Adj. 41-8265	- 76		- / - 0.40 / 0.40	-	Fac Adj.	Fac Adj.	-		- / -
Chrysler Dynasty (Canada)	1991 - 1993	X			Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler E Class/Exe Sedan	1983 - 1984	X			Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler Fifth Avenue	1989	X			Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler Imperial	1990 - 1993	X			Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler Laser	1984 - 1986	X			Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler LeBaron/GTS	1982 - 1995	X			Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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.	66 67		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.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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.	66 67		0.30 / - 0.30	- Bushing	Non Adj. 46-162	Fac Adj.	- 109		- / - 0.60

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- For models with slotted strut brackets only.
- For models without slotted strut brackets.
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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

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Chrysler PT Cruiser	2001 - 2010	X		Magna Cam Axis Cam	Fac Adj. 41-157 ² 41-214	Non Adj.	66 67		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Chrysler Sebring Coupe	1995 - 2000	X		Ball Joint	41-550	41-550	70	88-7800A	0.90 / 0.90	Shim	46-2170	Fac Adj.	118		0.30 / -
Chrysler Sebring Convertible	1996 - 2010	X		Ball Joint Ball Joint	41-230 41-229	41-230 41-229	68 68	88-7800A	0.90 / - 0.90 / 0.90	-	Fac Adj.	Fac Adj.	-		- / -
Chrysler Sebring Sedan	1996 - 2005	X		Ball Joint	41-230	41-230	68		0.90 / 0.90	-	Non Adj.	Fac Adj.	-	88-7800A	- / -
Chrysler Sebring Coupe	2001 - 2010	X		Magna Cam Axis Cam	41-159 ³ 41-216	Non Adj.	66 67		0.30 / - 0.30	Shim	46-2170	Fac Adj.	118		0.30 / -
Chrysler Sebring Sedan & Conv	2007 - 2010	X		Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	66 67		0.30 / - -	Rear Arm	Non Adj. 46-2175	Fac Adj.	- 118		- / - -
Chrysler TC by Maserati	1990 - 1991	X		Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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.	- 73		- / - 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	113 117	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.	- 73		- / - 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.	66 67 73		- / - 0.30 0.30 0.30	Shim	46-1120 ¹	46-1120 ¹	113	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.	66 67 73		- / - 0.30 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Chrysler Voyager Van	2000 - 2008	X		Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	Shim	46-1120 SERIES ¹	Non Adj.	113		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		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Daewoo Nubira	1999 - 2002	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
DAIHATSU															
Daihatsu Charade	1988 - 1992	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		0.30 / - 0.30	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	66 68		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	-		- / -	-	Non Adj.	Non Adj.	-		- / -
DODGE															
Dodge 400	1982 - 1983	X		Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Dodge 600	1983 - 1988	X		Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Aries	1981 - 1989	X		Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Avenger	1995 - 2000	X		Ball Joint	41-550	41-550	70	88-7800A	0.90 / 0.90	Shim	46-2170	Fac Adj.	118		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 106
 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 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
Dodge Avenger	2008 - 2010	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	- Rear Arm	Non Adj. 46-2175	Fac Adj.	- 118		- / -
Dodge Avenger	2011 - 2014	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	- Rear Arm	Non Adj. 46-2176	Fac Adj.	- 118		- / -
Dodge B100/200/300/350 2WD	1979 - 1983	X		- Cam Bolt	Fac Adj. 41-8243	Fac Adj. 41-8243	- 73		- / - 0.40 / 0.40	-	Non Adj.	Non Adj.	-		- / -
Dodge Caliber	2007 - 2012	X		Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	- Rear Arm	Non Adj. 46-2178	Fac Adj. 46-2174	- 119		- / - 0.60 / -
Dodge Caravan Van FWD	1984 - 1995	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	113 117	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Cavavan AWD	1990 - 1995	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 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.	66 67 73		0.30 / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge Caravan Van FWD	1996 - 2017	X		Magna Cam Axis Cam Cam Bolt	41-157 ² 41-214 41-8249	Non Adj.	66 67 73		0.30 / - 0.30 0.30	Shim	46-1120 ¹	46-1120 ¹	113	88-343	0.60 / 0.60
Dodge Challenger 2wd	2008	X		Ball Joint Camber Kit Control Arm W/BJ Control Arm W/BJ	41-232 41-8259 41-8321L 41-8321R	41-232 41-8259 41-8321L 41-8321R	68 75 72 72		0.90 / 0.90 0.90 / 0.90 0.60 / 0.60 0.60 / 0.60	Bushing	46-162	Fac Adj.	109		0.60 / -
Dodge Challenger 4wd	2008 - 2016	X		Camber Kit	41-8260	41-8260	75		0.90 / 0.90	Bushing	46-162	Fac Adj.	109		0.60 / -
Dodge Challenger 2wd	2009 - 2016	X		Ball Joint Camber Kit Control Arm W/BJ Control Arm W/BJ	41-232 41-8259 41-8322L 41-8322R	41-232 41-8259 41-8322L 41-8322R	68 75 72 72		0.90 / 0.90 0.90 / 0.90 0.60 / 0.60 0.60 / 0.60	Bushing	46-162	Fac Adj.	109		0.60 / -
Dodge Charger	1983 - 1987	X		- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Charger AWD	2006 - 2016	X		Camber Kit Control Arm W/BJ Control Arm W/BJ	41-8260 41-8329L 41-8329R	41-8260	75 73 73		0.90 / 0.90 0.90 0.90	Bushing	46-162	Fac Adj.	109		0.60 / -
Dodge Charger 2WD	2006 - 2008	X		Ball Joint Camber Kit Control Arm W/BJ Control Arm W/BJ	41-232 41-8259 41-8321L 41-8321R	41-232 41-8259 41-8321L 41-8321R	68 75 72 72		0.90 / 0.90 0.90 / 0.90 0.60 / 0.60 0.60 / 0.60	Bushing	46-162	Fac Adj.	109		0.60 / -
Dodge Charger 2WD	2009 - 2016	X		Ball Joint Camber Kit Control Arm W/BJ Control Arm W/BJ	41-232 41-8259 41-8322L 41-8322R	41-232 41-8259 41-8322L 41-8322R	68 75 72 72		0.90 / 0.90 0.90 / 0.90 0.60 / 0.60 0.60 / 0.60	Bushing	46-162	Fac Adj.	109		0.60 / -
Dodge Colt / Vista	1979 - 1995	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		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.	66 67		0.30 / - 0.30	-	Non Adj.	Fac 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		Camber Kit Cam Bolt	44-834 44-835	44-834 44-835	92 92		0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Dodge Dart	1965 - 1976	X		Cam Bolt	41-8243	41-8243	73		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.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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 - 2017	X		- Ball Joint	Fac Adj. 44-2495	Fac Adj. 44-2495	- 95		- / - 0.90 / 0.90	-	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 106
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 H R U S 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
Dodge Dynasty	1988 - 1993	X	Camber Kit Control Arm W/BJ	44-794 44-2720	44-795 44-2720	89 95		- / - - / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
			- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30						
Dodge Intrepid	1993 - 1997	X	Magna Cam Axis Cam	41-160 ² 41-216	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Dodge Intrepid	1998 - 2004	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	- 66 67	41-2001	- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Dodge Journey	2009 - 2010	X	Axis Cam Magna Cam	41-214 41-157 ²	Non Adj.	67 66		0.30 / - 0.30	Rear Arm	46-2175	Fac Adj.	118		- / -
Dodge Journey	2011 - 2017	X	Axis Cam Magna Cam	41-214 41-157 ²	Non Adj.	67 66		0.30 / - 0.30	Rear Arm	46-2176	Fac Adj.	118		- / -
Dodge Lancer	1985 - 1989	X	- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Magnum 2WD	2005 - 2008	X	Ball Joint Camber Kit Ball Joint Control Arm W/BJ	41-232 41-8259 41-8321L 41-8321R	41-232 41-8321L 41-8321R	68 75 72 72		0.90 / 0.90 0.90 / 0.60 0.60 / 0.60 0.60	Camber Kit	46-162	Fac Adj.	109		0.60 / -
Dodge Magnum 4WD	2005 - 2008	X	Cam Bolt	41-8260	41-8260	75		0.90 / 0.90	Bushing	46-162	Fac Adj.	109		0.60 / -
Dodge Monaco	1990 - 1992	X	Wedge Kit	41-305	Non Adj.	68		0.30 / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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.	66 67		0.30 / - 0.30	Wedge Kit Axis Cam	41-300 41-212	Fac Adj.	68 67		0.30 / - 0.30
Dodge Omni/024	1978 - 1990	X	-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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 - 2002	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	94	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	95	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	89 11	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	44-2489	44-2489	93		0.90 / 0.90	-	Non Adj.	Non Adj.	-		- / -
Dodge Ram 1500 (Mega Cab) (8-lug) 2wd	2006 - 2008	X	-	Fac Adj.	Fac Adj.	-		- / -						
Dodge Ram 1500 (Mega Cab) (8-lug) 4wd	2006 - 2008	X	- Ball Joint	Non Adj. 44-2497	Fac Adj. 44-2497	- 95		- / - 0.90 / -						
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	101 102		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	101 102		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	95		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 - 2005	X	Ball Joint	44-2496	Fac Adj.	95		0.90 / -	-	Non Adj.	Non 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	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 2500/3500 P/U NS 4WD	2003 - 2010	X		Ball Joint	44-2497	Fac Adj. 44-824	95		0.90 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge 2500 HD /3500 2wd/mono beam	2003 - 2010	X		Ball Joint	Fac Adj. 44-2497	Fac Adj.	- 95		- / - 0.90						
Dodge Truck 2500/3500 2WD	2003 - 2010	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Dodge 4500 / 5500	2008 - 2010	X		Ball Joint	44-2610	44-2610	99		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	- 73		- / - 0.40 / 0.40	-	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	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Shadow	1987 - 1994	X		Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Spirit	1989 - 1995	X		Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Dodge Sprinter	2003 - 2006	X		Shim Shim	42-4431 42-4434	Non Adj.	80 80		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Dodge Sprinter	2007 - 2009	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Dodge Sprinter 2WD 3500	2007 - 2009	X		Axis Cam	41-216	Non Adj.	67		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Dodge Stealth 4x2 & AWD	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	- 68	88-7800A	- / 0.90 0.90	-	Fac Adj.	Fac Adj.	-		- / -
Dodge Stratus Coupe	1995 - 2000	X		Ball Joint	Fac Adj. 41-550	41-550	- 70		- / - 0.90 0.90	Shim	46-2170	Fac Adj.	118		0.30 / -
Dodge Stratus Coupe	2001 - 2005	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	66 67		0.30 / - 0.30	Shim	46-2170	Fac Adj.	118		0.30 / -
Dodge Viper RT/10 Roadster	1992 - 1995	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Dodge Viper Roadster/GTS Coupe	1996 - 2006	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Dodge W100 thru W350 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	73		0.40 / 0.40	-	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.	66 68		0.30 / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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.	66 68		0.30 / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Eagle Summit	1993 - 1996	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		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.

- 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 106
- 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	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
Eagle Talon 2WD/4WD	1990 - 1994	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Eagle Talon 2WD/4WD	1995 - 1998	X		Ball Joint	41-550	41-550	70	88-7800A	0.90 / 0.90	Shim	46-2170	Fac Adj.	118		0.30 / -
Eagle Vision	1993 - 1997	X		Magna Cam Axis Cam	41-160 ² 41-216	Non Adj.	66 67		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.	66 68		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
FIAT															
Fiat 128 Coupe Hatch Wagon	1971 - 1979	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	66 68		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.	66 68		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Fiat 500/ 500L	2012 - 2017	X		Axis Cam Magna Cam Axis Cam	41-212 41-147 ³ 41-210	Non Adj.	67 66 67		0.30 / - 0.30 0.30	Shim Shim	46-7300 46-7300	46-7300 46-7300	123 127		0.60 / 0.60 0.60 / 0.60
Fiat Strada	1979 - 1982	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	66 68		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.	66 68		0.30 / - 0.30	Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		0.30 / - 0.30
FORD															
Ford Aerostar 2WD/4WD	1986 - 1997	X		- Shim	Fac Adj. CC	Fac Adj. CC	-	88-7414	- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Ford Aspire	1994 - 1997	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	66 67		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Ford Bronco 4WD	1980 - 1996	X		Bushing Bushing	44-5000 44-5032	44-5000 44-5032	101 102	88-501	1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford Bronco II 2WD	1984 - 1988	X		Bushing	42-100	44-9412	74		1.00 / 1.50	-	Non Adj.	Non Adj.	-		- / -
Ford Bronco II 4WD	1984 - 1989	X		Bushing	44-600	44-600	86	88-501	1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford Bronco II 2WD	1989 - 1990	X		Bushing Bushing	42-950 44-5094	42-950 44-5094	79 103	88-501	1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford Bronco II 4WD	1990	X		Bushing Bushing	42-950 44-5094	42-950 44-5094	79 103		1.00 / 0.80 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
C-Max	2013 - 2017	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	121		0.50 / -
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		- Cam Bolt	Fac Adj. 46-143	Fac Adj.	- 109		- / - 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford E100/E150 2WD	1980 - 1991	X		-	Non Adj.	42-4413	-		- / 1.50	-	Non Adj.	Non Adj.	-		- / -
Ford E150, E250, E350, E450 2WD	1992 - 2017	X		Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094 42-970	79 103 80		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.	42-4412	-		- / 1.50	-	Non Adj.	Non Adj.	-		- / -
Ford Edge	2007 - 2017	X		Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	67 66		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Ford Escape FWD	2001 - 2012	X		Magna Cam Cam Bolt Axis Cam	41-147 ³ 41-308 41-212	Fac Adj.	66 69 67		- / - - -	- Rear Arm	Non Adj. 46-2179	Fac Adj.	- 119		- / - -

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- 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 106
 - 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 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 Escape 4WD	2001 - 2012	X	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30	- Rear Arm	Non Adj. 46-2179	Non Adj.	- 119		- / - -
Ford Escape FWD/AWD	2013 - 2017	X	-	Non Adj.	Fac Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	121		0.90 / -
Ford Escort	1981 - 1985	X	-	Non Adj.	Non Adj.	-		- / -	Wedge Kit	46-201	Fac Adj.	110		0.40 / -
Ford Escort	1986 - 1990	X	Tower Plate	41-4601	41-4601	72	88-4602	0.50 / 0.50			Fac Adj.			-
Ford Escort	1991 - 1996	X	- Magna Cam Axis Cam Wedge Kit	Fac Adj. 41-146 ² 41-212 41-312	Non Adj.	66 67 68		- / - 0.30 0.30 0.30	Magna Cam Axis Cam Caster Spacer	41-147 ³ 41-212 41-312	46-205	66 67 68		0.30 / 0.30 0.40 0.30
Ford Escort	1997 - 2002	X	- Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Fac Adj.	66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj. 46-205	66 67		0.30 / - 0.30 / 0.40
Ford Escort ZX2	1998 - 2003	X	- Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Fac Adj.	66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj. 46-205	66 67		0.30 / - 0.30 / 0.40
Ford Excursion 2WD	2000 - 2005	X	Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094	79 103 80		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	101 102		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.	110		0.40 / -
Ford EXP	1986 - 1988	X	Tower Plate	41-4601	41-4601	72	88-4602	0.50 / 0.50	Wedge Kit	46-201	Fac Adj.	110		0.40 / -
Ford Expedition 1st design (cam only) 2WD/4WD	1997 - 1998	X	Camber Kit	42-777 ⁶	42-777 ⁶	78	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	78 74 11		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	88		0.30 / 0.30	Cam Bolt	44-784	46-9813	88		0.50 / 0.50
Ford Expedition 2WD/4WD	2007 - 2017	X	Camber Kit Camber Kit	44-790 44-791	44-790 44-791	89 89		0.30 / 0.30 0.30 / 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Ford Explorer 2WD/4WD	1991 - 1994	X	Bushing Bushing	42-950 44-5094	42-950 44-5094	79 103		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 44-768 44-836	86 87 11	88-7829	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	86 87 11		0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Explorer 2WD/4WD	2002	X	Alignment Washers Washers Camber Kit	44-769 44-771 ⁸	44-769 44-771 ⁸	87 87	88-8926	0.30 / 0.30 0.30 / 0.30	Alignment Washers Washers Camber Kit	44-769 44-773 ⁸	46-9812	87 87		0.20 / - 0.20
Ford Explorer 2WD/4WD	2003 - 2005	X	Alignment Washers Washers Camber Kit	44-769 44-771 ⁸	44-769 44-771 ⁸	87 87	88-8926	0.30 / 0.30 0.30 / 0.30	Alignment Washers Washers Camber Kit	44-769 44-773 ⁸	46-9811	87 87		0.20 / - 0.20
Ford Explorer 2WD/4WD	2006 - 2010	X	-	Fac Adj.	Fac Adj.	-	88-8926	- / -	Alignment Washers	44-769	Fac Adj.	87		0.20 / -
Ford Explorer 2WD/4WD	2011 - 2017	X	- Axis Cam Magna Cam	Fac Adj. 41-216 41-159 ²	Non Adj.	67 66		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Ford Explorer Sport Trac 4WD	2001 - 2005	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	86 87 86 11		0.30 / 0.30 0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford F150 4WD	1975 - 1979	X			44-9412		88-7090	1.50	-	Non Adj.	Non Adj.	-		- / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

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Ford F150 4WD	1980 - 1996	X	Bushing Bushing	44-5000 44-5032	44-5000 44-5032	101 102	88-501	1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F100/F150 2WD	1982 - 1986	X	Bushing	42-100	44-9412 42-4411	74		1.00 / 1.50 1.50	-	Non Adj.	Non Adj.	-		- / -
Ford F150 2WD	1987 - 1991	X	Bushing Bushing	42-950 44-5094	42-950 44-5094 44-9413	79 103		1.00 / 1.00 1.00 / 1.00 1.50	-	Non Adj.	Non Adj.	-		- / -
Ford F150 2WD	1992 - 1996	X	Bushing Bushing	42-950 44-5094	42-950 44-5094 44-9413	79 103		1.00 / 1.00 0.50 / 1.00 1.50	-	Non Adj.	Non Adj.	-		- / -
Ford F150/F250 1st design (cam only) 2WD/4WD	1997 - 1998	X	Camber Kit	42-777 ⁸	42-777 ⁸	78		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	78 74 11		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	78 74 11		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	88 89 11		0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	-	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	88 89 11		0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford F150 2WD/4WD/SVT Raptor	2009 - 2017	X	Camber Kit Camber Kit	44-790 44-791	44-790 44-791	89 89		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford F250 (twin I-beam) 4WD	1980 - 1987	X	Bushing Bushing	44-5000 44-5032	44-5000 44-5032	101 102	88-501	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	101 102	88-501	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	101 102	88-501	1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F250/F350 2WD	1981 - 1986	X	Bushing	42-100	42-4412	74		1.00 / 1.50	-	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 44-5094	79 103 80		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 44-5094	79 103 80		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 ⁸	42-777 ⁸	78		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford F250, F350, F450, F550 Super Duty (TIB) 2WD	1997 - 2017	X	Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094 44-5094	79 103 80		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	101 102		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	101 102	88-501	1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F250/F350 Super Duty (MOB) 2WD	2005 - 2017	X	Bushing Bushing	44-6000 44-5036	44-6000 44-5036	103 102		1.00 / 1.00 1.00 / -	-	Non Adj.	Non Adj.	-		- / -
Ford F250 Super Duty 4WD	2005 - 2017	X	Bushing Bushing	44-6000 44-5036	44-6000 44-5036	103 102		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.	93		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Ford F350 Super Duty 4WD	2005 - 2017	X	Bushing Bushing	44-6000 44-5036	44-6000 44-5036	103 102		1.00 / 0.50 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Ford F450/550 Super Duty 2WD/4WD	2005 - 2015	X	Bushing Bushing	44-6020 44-5037	44-6020 44-5037	104 103		1.00 / 0.50 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

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Ford Fairmont	1978 - 1981		X	- Wedge Kit	Fac Adj. 41-310	Non Adj.	- 69	88-4511	- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Festiva	1988 - 1993	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	- 66 67		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Ford Fiesta	1978 - 1980		X	- Magna Cam Wedge Kit	Fac Adj. 41-147 ³ 41-300	Non Adj.	- 66 68		- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Fiesta	2011 - 2016	X		Axis Cam -	41-212 41-147 ³	Non Adj.	67 66		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Five Hundred FWD/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.	108		0.75 / -
FORD Flex FWD/AWD	2009 - 2014	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Ford Focus	2000 - 2011	X		Tower Plate	41-4611	Non Adj.	72	88-9416	0.60 / -	Shim Camber Kit Rear Arm	46-1700 SERIES 46-1705 46-2188	Fac Adj.	111 115 121		0.80 / - 0.50 0.50
Ford Focus	2012 - 2016	X		-	Non Adj.	Non Adj.	-	88-9416	- / -	Rear Arm	46-2188	Fac Adj.	121		0.50 / -
Ford Freestar	2004 - 2007	X		- Tower Plate	Fac Adj. 41-4609	Fac Adj.	- 72		- / - 0.60	-	Non Adj.	Non Adj.	-		- / -
Ford Freestyle FWD	2005 - 2007	X		-	Fac Adj.	Non Adj.	-		- / -	Camber Kit	46-135	Fac Adj.	108		0.75 / -
Ford Fusion	2006 - 2012	X		Ball Joint	41-236	41-236	68		0.90 / 0.90	Rear Arm	46-2231	Fac Adj.	124		0.50 / -
Ford Fusion	2013 - 2017	X		Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	67 66		0.30 / - 0.30	Rear Arm	46-2227	Fac Adj.	124		0.50 / -
Ford Granada	1975 - 1980		X	Cam Bolt	41-8243	Fac Adj.	73		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Ford Granada	1981 - 1982		X	- Wedge Kit	Fac Adj. 41-310	Non Adj.	- 69	88-4511	- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Crown Victoria/LTD	1983 - 1986		X	-	Fac Adj.	Fac Adj.	-	88-4511	- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Mustang	1979 - 1993		X	- Wedge Kit	Fac Adj. 41-307	Non Adj.	- 69		- / - 0.03	-	Non Adj.	Non Adj.	-		- / -
Ford Mustang 5.0	1990 - 1993		X	-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Mustang 5.0	1994 - 1998		X	-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Ford Mustang	1994 - 2004		X	- Wedge Kit	Fac Adj. 41-307	Non Adj.	- 69	88-9414	- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Mustang Cobra	1999 - 2004		X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Ford Mustang	2005 - 2014		X	Wedge Kit Axis Cam	41-314 41-214	Fac Adj. 41-325 41-326	69 67		0.30 / - 0.30 / 0.50 0.50	-	Non Adj.	Non Adj.	-		- / -
Ford Probe	1989 - 1997		X	- Magna Cam Wedge Kit	Fac Adj. 41-146 ² 41-300	Fac Adj.	- 66 68		- / - 0.30 0.30	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	66 68		0.30 / - 0.30
Ford Ranger 2WD	1983 - 1988		X	Bushing	42-100	44-9412	74		1.00 / 1.50	-	Non Adj.	Non Adj.	-		- / -
Ford Ranger 4WD	1983 - 1989		X	Bushing	44-600	44-600	86	88-501	1.00 / 1.00	-	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 106
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 O R	U S 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
Ford Ranger 2WD	1989 - 1991	X			Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094	79 103 80		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	79 103 80		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	79 103 80		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	86 87 86 11		0.30 / 0.30 0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Ford Taurus Sedan	1986 - 1990	X			- Tower Plate	Fac Adj. 41-4603	Fac Adj. 41-4603	- 72	88-4520 88-9416	- / - 0.50 / 0.60	Bushing -	46-131 46-132	Fac Adj. 46-131 46-132	107 107	88-1302 88-9200	0.50 / - 0.40 / 0.50 0.40
Ford Taurus Wagon	1986 - 1990	X			- Tower Plate	Fac Adj. 41-4603	Fac Adj. 41-4603	- 72	88-4520 88-9416	- / - 0.50 / 0.50	Cam Bolt	46-136	Fac Adj. 46-133	108	88-1300 88-4511	0.80 / - 0.50
Ford Taurus Sedan	1991 - 1995	X			- Tower Plate	Fac Adj. 41-4605	Fac Adj. 41-4605	- 72	88-4520 88-9416	- / - 0.50 / 0.50	Bushing Cam Bolt	46-131 46-132	Fac Adj. 46-131	107 107	88-1302 88-9200	0.50 / - 0.40 / 0.50
Ford Taurus Wagon	1991 - 1995	X			- Tower Plate	Fac Adj. 41-4605	Fac Adj. 41-4605	- 72	88-4520 88-9416	- / - 0.50 / 0.50	Cam Bolt	46-136	Fac Adj. 46-133	108	88-1300 88-4511	0.80 / - 0.50
Ford Taurus Sedan	1996 - 2006	X			- Tower Plate	Fac Adj. 41-4607	Fac Adj. 41-4607	- 72	88-7870C 88-9416	- / - 0.90	Cam Bolt Bushing	46-134 46-131	46-134 46-131	108 107		0.40 / 0.50 0.40 / 0.40
Ford Taurus Wagon	1996 - 2006	X			- Tower Plate	Fac Adj. 41-4607	Fac Adj. 41-4607	- 72	88-9416	- / - 0.90 / 0.50	Cam Bolt	46-136	Fac Adj.	108		0.80 / -
Ford Taurus FWD	2008 - 2010	X			-	Fac Adj.	Fac Adj.	-		- / -	Camber Kit	46-135	Fac Adj.	108		0.75 / -
Ford Taurus Sedan	2011 - 2016	X			-	Fac Adj.	Fac Adj.	-		- / -	- Axis Cam	Fac Adj. 46-1709	Fac Adj.	-		- / - 0.30
Ford Taurus X AWD	2008 - 2009	X									-	Non Adj.	-			-
Taurus X FWD	2008 - 2009	X			-	Fac Adj.	Fac Adj.	-		- / -	Camber Kit	46-135	Fac Adj.	108		0.75 / -
Ford Tempo	1984 - 1994	X			Tower Plate	41-4601	41-4601	72	88-4602	0.50 / 0.50	Wedge Kit	46-201		110		0.40
Ford Tempo	1985 - 1994	X			Tower Plate	41-4601	41-4601	72	88-4602	0.50 / 0.50	Wedge Kit	46-201	Fac Adj.	110	88-9200	0.40 / -
Ford Tempo AWD	1987 - 1992	X			Tower Plate	41-4601	41-4601	72	88-4602	0.50 / 0.50	Wedge Kit	46-201	Fac Adj.	110		0.40 / -
Ford Thunderbird	1980 - 1988	X			- Wedge Kit	Fac Adj. 41-310	Non Adj.	69	88-4511	- / - 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	73		- / - 0.70 / 0.70	-	Non Adj.	Fac Adj.	-		- / -
Ford Transit Connect	2010 - 2014	X			Tower Plate	41-4611	Non Adj.	72		0.60 / -	-	Non Adj.	Non Adj.	-		- / -
Ford Windstar	1995 - 2003	X			- Tower Plate	Fac Adj. 41-4609	Fac Adj.	72	88-4520 88-9416	- / - 0.90	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	113 117	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.	80 80		- / - -	-	Non Adj.	Non Adj.	-		- / -
Freightliner 2500	2007 - 2014	X			Axis Cam	41-214	Non Adj.	67		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Freightliner 3500	2007 - 2014	X			Axis Cam	41-216	Non Adj.	67		0.30 / -	-	Non Adj.	Non Adj.	-		- / -

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- 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 106
- For models with either slotted or unslotted strut brackets.
- For models with slotted strut brackets only.
- For models without slotted strut brackets.
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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
GEO															
Geo Metro	1989 - 1997	X		Magna Cam Axis Cam Wedge Kit	41-147 ³ 41-212 41-312	Non Adj.	66 67 68		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.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Geo Prizm	1993 - 1997	X		Magna Cam Axis Cam	41-149 41-215	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam Shim	41-149 41-215 46-1300 SERIES ¹	Fac Adj. 46-1300 SERIES ¹	66 67 114		0.30 / - 0.30 / - -
Geo Spectrum	1989	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		0.30 / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.50 / 0.60 0.50 / 0.60
Geo Storm	1990 - 1993	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		0.30 / - 0.30	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	66 68		0.30 / - 0.30
Geo Tracker 2WD/4WD	1989 - 1997	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
GMC															
GMC Acadia 2WD/4WD	2007 - 2014	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	- 66 67		- / - 0.30 0.30	- Cam Bolt Camber Kit	Fac Adj. 41-8257 46-421	Fac Adj.	- 75 111	88-7996A	- / - 0.30 1.00
GMC Suburban 2WD	1972 - 1982	X		- Shim	Fac Adj. CC	Fac Adj. CC	- -		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
GMC C Series P/U 2WD	1979 - 1986	X		- Shim	Fac Adj. CC	Fac Adj. CC	- -		- / - - / -	-	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	74 10		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	- 74 10	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	- -		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
GMC 2WD Topkick C4500 C550	2005 - 2009	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
GMC 4WD Topkick C4500 C5500	2005 - 2009	X		Bushing Bushing	44-6020 44-5037	44-6020 44-5037	104 103		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
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	- 96 97 74 75		- / - 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	- 96 97 74 75		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC Canyon	2015 - 2017	X		Cam Bolt Cam Bolt Replacement Pins	Fac Adj. 44-831 44-832 44-2512	Fac Adj. 44-831 44-832 44-2512	- 92 92 98		- / - 0.50 / 0.50 0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC Envoy 2WD/4WD	2002	X		- Cam Bolt	Fac Adj. 41-8246	Fac Adj. 41-8246	- 73		- / - 0.60 / -	-	Non Adj.	Non Adj.	-		- / -
GMC 2WD/4WD Envoy	2003 - 2009	X		Camber-Caster Tool	88-8929	88-8929	143	88-8929	- / -	-	Non Adj.	Non Adj.	-		- / -
GMC G Series Van 2WD	1979 - 1995	X		- Shim	Fac Adj. CC	Fac Adj. CC	- -		- / - - / -	-	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	- -		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
GMC K Series P/U 4WD (Except Dana 60)	1970 - 1986	X						88-7090		-	Non Adj.	Non Adj.	-		- / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

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GMC Suburban 4WD	1970 - 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	74 10	88-7491	0.60 / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
GMC V Series P/U 4WD	1987 - 1991	X					88-7090		-	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	- 74 10	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	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
GMC S15 P/U (downsize) 4WD	1982	X	- Cam Bolt	Fac Adj. 41-8247	Fac Adj. 41-8247	-		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
GMC S15 P/U/Sonoma (downsize) 4WD	1983 - 1990	X	- Cam Bolt	Fac Adj. 41-8246	Fac Adj. 41-8246	-		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
GMC S15/T15 Jimmy, Sycamore, Typhoon 4WD	1983 - 1993	X	- Cam Bolt	Fac Adj. 41-8246	Fac Adj. 41-8246	-		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
GMC S15 Jimmy, Typhoon 2WD	1983 - 1993	X	- Shim	Fac Adj. cc	Fac Adj. cc	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
GMC Safari 2WD	1985 - 2005	X	- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	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	74 10	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	74 10	88-7491	- / - 0.60 / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
GMC 2WD Savana Van	2003 - 2017	X	- Quick Cam Replacement Pins Camber Kit Bushing Control Arm W/BJ Ball Joint 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	96 97 74 99 96 96 75		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.80 / 0.80 0.60 / 0.60 0.90 / 0.90 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC 4WD Savana Van	2003 - 2017	X	- Quick Cam Replacement Pins Camber Kit Bushing Control Arm W/BJ Ball Joint 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	96 97 74 99 96 96 75		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.80 / 0.80 0.60 / 0.60 0.90 / 0.90 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC Sierra HD 1500/2500/3500 2WD/4WD	2007 - 2010	X	- Bushing Replacement Pins Quick Cam Camber Kit Ball Joint 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	97 97 96 74 96 75	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 Camber Kit Replacement Pins Ball Joint Control Arm W/BJ 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	97 96 74 97 96 99 75	88-7950A	- / - 0.80 / 0.80 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.90 / 0.90 0.60 / 0.60 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
GMC Sierra 1500 2WD/4WD	2007 - 2013	X	- Bushing Quick Cam Camber Kit Replacement Pins Control Arm W/BJ Cam Bolt	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	97 96 74 97 96 75 96	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 (with out Z71)	2014 - 2017	X	- Bushing Quick Cam Camber Kit Replacement Pins Control Arm W/BJ	Fac Adj. 44-2509 ⁵ 44-2506 41-8251 44-2508 44-2726L	Fac Adj. 44-2509 ⁵ 44-2506 41-8251 44-2508 44-2726L	97 96 74 97 96	88-7950A	- / - 0.80 / 0.80 0.30 / 0.30 0.50 / 0.50 0.30 / 0.30 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -

APPLICATION GUIDE

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	TOTAL	THRU	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 HD 1500/2500/3500 2WD/4WD	1999 - 2010	X		Cam Bolt	41-8262	41-8262	75		0.50 / 0.50						
				Control Arm W/BJ	44-2726R	44-2726R	96		0.60 / 0.60						
				-	Fac Adj.	Fac Adj.	-		- / -						
				Bushing	44-2510	44-2510	97		0.08 / -						
				Cam Bolt	41-8251	41-8251	74		0.60 / -						
				Cam Bolt	44-2506	44-2508	96		0.30 / -						
				Replacement Pins	44-2508	44-2506	97		0.30 / -						
				Ball Joint	44-2498	44-2498	96		0.90 / 0.90						
Control Arm W/BJ	44-2730	44-2730	101		0.60 / 0.60										
Cam Bolt	41-8262	41-8262	75		0.50 / 0.50										
GMC Sierra HD 2500/3500 2WD/4WD	2011 - 2016	X		-	Fac Adj.	Fac Adj.	-		- / -						
				Camber Kit	44-831	44-831	92		0.50 / 0.50						
				Camber Kit	44-832	44-832	92		0.50 / 0.50						
				Replacement Pins	44-2512	44-2727	98		0.30 / 0.90						
Control Arm W/BJ	44-2727	44-2512	100		0.90 / 0.30										
GMC Terrain	2010 - 2014	X		Magna Cam Axis Cam	41-158 ² 41-214		66 67		0.30 0.30	-	44-775	44-775	88		0.30 / 0.30
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	- 10	88-7491	- / - 0.60 / 0.60 41.00 / 41.00	-	Non Adj.	Non Adj.	-		- / -
GMC Yukon/Denali 2WD/4WD	1999 - 2006	X		-	Fac Adj.	Fac Adj.	-		- / -						
				Bushing	44-2509 ⁹	44-2509 ⁹	97		0.80 / 0.80						
				Replacement Pins	44-2508	44-2508	97		0.30 / 0.30						
				Camber Kit	41-8251	41-8251	74		0.50 / 0.50						
				Quick Cam	44-2506	44-2506	96		0.30 / 0.30						
				Ball Joint	44-2499	44-2725	96		0.80 / 0.80						
				Control Arm W/BJ	44-2725	44-2499	99		0.80 / 0.80						
				Cam Bolt	41-8262	41-8262	75		0.50 / 0.50						
GMC Yukon/Denali 2WD/4WD	2007 - 2017	X		-	Fac Adj.	Fac Adj.	-		- / -						
				Bushing	44-2509 ⁹	44-2509 ⁹	97		0.80 / 0.80						
				Replacement Pins	44-2508	44-2508	97		0.30 / 0.30						
				Camber Kit	41-8251	41-8251	74		0.50 / 0.50						
				Quick Cam	44-2506	44-2506	96		0.30 / 0.30						
				Cam Bolt	41-8262	41-8262	75		0.50 / 0.50						
				Control Arm W/BJ	44-2726L	44-2726L	96		0.60 / 0.60						
				Control Arm W/BJ	44-2726R	44-2726R	96		0.60 / 0.60						
GMC Yukon XL 1500 2WD/4WD	2000 - 2017	X		-	Fac Adj.	Fac Adj.	-		- / -						
				Bushing	44-2509 ⁹	44-2509 ⁹	97		0.80 / 0.80						
				Cam Bolt	41-8251	41-8251	74		0.50 / 0.50						
				Quick Cam	44-2506	44-2506	96		0.30 / 0.30						
				Replacement Pins	44-2508	44-2508	97		0.30 / 0.30						
				Cam Bolt	41-8262	41-8262	75		0.50 / 0.50						
				Control Arm W/BJ	44-2726L	44-2726L	96		0.60 / 0.60						
				Control Arm W/BJ	44-2726R	44-2726R	96		0.60 / 0.60						
GMC Yukon XL 2500HD 2WD/4WD	2000 - 2013	X		-	Fac Adj.	Fac Adj.	-		- / -						
				Bushing	44-2510	44-2510	97		0.80 / 0.80						
				Replacement Pins	44-2508	44-2508	97		0.30 / 0.30						
				Camber Kit	41-8251	41-8251	74		0.50 / 0.50						
				Quick Cam	44-2506	44-2506	96		0.30 / 0.30						
				Ball Joint	44-2498	44-2498	96		0.90 / 0.90						
				Control Arm W/BJ	44-2730	44-2730	101		0.90 / 0.90						
				Cam Bolt	41-8262	41-8262	75		0.50 / 0.50						
HONDA															
Honda Accord	1986 - 1989	X				Fac Adj.			-	Shim	46-2160	Fac Adj.	117		0.50 / -
Honda Accord	1990 - 1997	X		Ball Joint Control Arm W/BJ	41-530 41-545	Fac Adj. 41-530	70 71	88-7800A	0.90 / - 0.50 / 0.90	Shim	46-2160	Fac Adj.	117		0.20 / -
Honda Accord	1998 - 2002	X		Ball Joint	41-532	Fac Adj. 41-532	70	88-7800A	0.90 / - 0.90	Rear Arm Rear Arm	46-2190 46-2181	Fac Adj.	122 120		0.70 / - 0.05
Honda Accord	2003 - 2007	X		Ball Joint	41-532	Fac Adj. 41-532	70	88-7890A	0.90 / - -	Rear Arm Rear Arm	46-2195 46-2192	46-2195	123 122		0.70 / 0.70 0.50
Honda Accord	2008 - 2012	X		Ball Joint	41-532	Fac Adj.	70	88-7890A	0.90 / -	Rear Arm	46-2184	Fac Adj. 46-2183 46-2234	120		0.30 / - 0.30 0.30
Honda Accord	2013 - 2017	X		-	Fac Adj.	Fac Adj.	-	88-7890A	- / -	Rear Arm	46-2184	Fac Adj. 46-2183 46-2234	120		0.30 / - 0.30 0.30
Honda Accord Crosstour	2010 - 2011	X		Ball Joint	41-532	Fac Adj.	70	88-7890A	0.90 / -	Rear Arm	46-2184	Fac Adj. 46-2183 46-2234	120		0.30 / - 0.30 0.30
Honda Civic	1980 - 1990	X		-	Non Adj. 41-545	Non Adj.	-		- / - 0.50	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	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	113 117	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.

- 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 106
- 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 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
Honda CRX	1984 - 1987	X		-	Non Adj.	Non Adj.	-		- / -	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	88-343	0.60 / 0.60 0.60 / 0.60
Honda Civic	1992 - 2000	X		Ball Joint	41-532	41-532	70	88-7800A	0.90 / 0.90	Shim Rear Arm	46-2160 46-2182	Fac Adj.	117 120		0.20 / - 0.07
Honda Civic	2001 - 2002	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	Rear Arm	46-2180	Fac Adj.	119		0.50 / -
Honda Civic SI	2002 - 2005	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	66 67		0.30 / - 0.30	Rear Arm	46-2180	Fac Adj.	119		0.50 / -
Honda Civic Hybrid	2003 - 2005	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	Rear Arm	46-2180	Fac Adj.	119		0.50 / -
Honda Civic	2003 - 2005	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	66 67		0.30 / - 0.30	Rear Arm	46-2180	Fac Adj.	119		0.50 / -
Honda Civic / Civic Hybrid	2006 - 2014	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	Rear Arm	46-2187	Fac Adj.	121		0.50 / -
Honda Civic / Civic Hybrid / SI	2012 - 2014	X		Axis Cam Magna Cam	41-216 41-160 ²	Non Adj.	67 66		0.30 / - 0.30	Rear Arm	46-2187	Fac Adj.	121		0.50 / -
Honda Civic del Sol	1993 - 1997	X		Ball Joint Control Arm W/BJ	41-532 41-545	41-532	70 71	88-7800A	0.90 / 0.90 0.50	Shim Rear Arm	46-2160 46-2182	Fac Adj.	117 120		0.20 / - 0.70
Honda CR-V 4x2 and 4x4	1997 - 2001	X		Ball Joint	41-532	41-532	70	88-7800A	0.90 / 0.90	Shim Rear Arm	46-2160 46-2182	Fac Adj.	117 120		0.20 / - 0.70
Honda CR-V	2002 - 2006	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	66 67		0.30 / - 0.30	Rear Arm	46-2185	Fac Adj.	121		0.50 / -
Honda CR-V 2WD/4WD	2007 - 2016	X		Camber Kit Axis Cam	41-159 ² 41-216	Non Adj.	66 67		- / - -	Rear Arm	46-2186	Fac Adj.	121		- / -
Honda CR-Z	2011 - 2016	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Honda CRX	1988 - 1991	X		Ball Joint Control Arm W/BJ	41-532 41-545	41-532	70 71	88-7800A	0.90 / 0.90 0.50	Shim Rear Arm	46-2160 46-2182	Fac Adj.	117 120		0.20 / - 0.70
Honda Element	2003 - 2011	X		Magna Cam Axis Cam	41-159 ² 41-216	Non Adj.	66 67		0.30 / - 0.30	Rear Arm	46-2185	Non Adj.	121		0.50 / -
Honda Fit	2006 - 2008	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	Shim	46-1500 ¹	46-1500 ¹	114		0.60 / 0.60
Honda Fit	2009 - 2017	X		Axis Cam	41-214	Non Adj.	67		0.30 / -						
Honda Insight	2001 - 2014	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 66 67		- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Honda Insight	2010 - 2014	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Honda Odyssey	1995 - 1998	X		Ball Joint Control Arm W/BJ	41-530 41-545	41-530	70 71	88-7800A	0.90 / 0.90 0.50	-	Non Adj.	Fac Adj.	-		- / -
Honda Odyssey	1999 - 2004	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	- 66 67		- / - 0.30 0.30	Rear Arm	46-2192	Fac Adj.	122		0.50 / -
Honda Odyssey	2005 - 2016	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	- 66 67		- / - 0.30 0.30	Rear Arm	46-2191	Fac Adj.	122		- / -
Honda Odyssey (Touring)	2005 - 2016	X		- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	- 66 67		- / - 0.30 0.30	Rear Arm	46-2194	Fac Adj.	122		- / -
Honda Passport 2WD/4WD	1994 - 2002	X		- Shim	Fac Adj. CC	Fac Adj. CC	- -		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Honda Pilot	2003 - 2008	X		Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	67 66		0.30 / - 0.30	Rear Arm	46-2192	Fac Adj.	122		0.50 / -
Honda Pilot	2009 - 2015	X		Axis Cam	41-218	Non Adj.	-		0.30 / -	Rear Arm	46-2196	Fac Adj.	123		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 106
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 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 Pilot	2016 - 2017	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac 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		Ball Joint Control Arm W/BJ	41-530 41-545	Fac Adj. 41-530	70 71		0.90 / 0.90 0.50 / -	Ball Joint	41-530	Fac Adj.	70		0.90 / -
Honda Prelude 4 W/S	1992 - 1995	X		Ball Joint	41-530	Fac Adj. 41-530	70	88-7800A	0.90 / - 0.90	Ball Joint	41-530	Fac Adj.	70	88-7800A	0.90 / -
Honda Prelude except SH	1997 - 2001	X		Ball Joint	41-532	Fac Adj. 41-532	70	88-7800A	0.90 / - 0.90	Ball Joint	41-530	Fac Adj.	70	88-7800A	0.90 / -
Honda Prelude SH	1997 - 2001	X		Ball Joint	41-530	Fac Adj. 41-530	70	88-7800A	0.90 / - 0.90	Ball Joint	41-530	Fac Adj.	70	88-7800A	0.90 / -
Honda 4WD RidgeLine	2006 - 2014	X		Axis Cam	41-217	Non Adj.	67		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -
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		-	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	- 97 74 97 96 96 101 75	88-7950A	- / - 0.80 / 0.80 0.50 / 0.50 0.30 / 0.90 0.30 / 0.90 0.90 / 0.50 0.90 0.50	-	Non Adj.	Non Adj.	-		- / -
Hummer H3	2006 - 2010	X		Quick Cam Replacement Pins Cam Bolt	44-2507 44-2508 41-8251 41-8262	Fac Adj. 44-2507 44-2508 41-8251 41-8262	96 97 74 75		- / - 0.30 / 0.30 0.30 / 0.30 0.50 / 0.50 0.50 / 0.50	-	Non Adj.	Non Adj.	-		- / -
Hummer H3T	2009 - 2010	X		Quick Cam Replacement Pins Cam Bolt	44-2507 44-2508 41-8251 41-8262	Fac Adj. 44-2507 44-2508 41-8251 41-8262	96 97 74 75		- / - 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.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Hyundai Accent	2006 - 2014	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Shim	46-1500 ¹	46-1500 ¹	114		0.60 / 0.60
Hyundai Azera	2007 - 2011	X		Ball Joint	41-550	Non Adj. 41-550	70		0.90 / - 0.90	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Azera	2012 - 2014	X		Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	67 66		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Elantra	1992 - 1996	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		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. 66 67	66 67		0.30 / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Hyundai Elantra	2007 - 2010	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	Rear Arm	46-2189	46-2189	122		0.50 / 0.50
Hyundai Elantra Turing	2011 - 2012	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	Rear Arm	46-2189	46-2189	122		0.50 / 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.
- 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 106
 - 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 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 Elantra	2011 - 2017	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		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.	67 66		0.30 / - 0.30	Rear Arm	46-2189	46-2189	122		0.50 / 0.50
Hyundai Elantra Coupe W/Beam Rear Susp	2013	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30						
Entourage	2007 - 2009	X	Axis Cam Magna Cam	41-212 41-147 ³		67 66		0.30 0.30	Cam Bolt	46-1707		116		0.30
Hyundai Excel	1986 - 1994	X	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	66 68		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Hyundai Genesis Sedan 2wd / Awd	2009 - 2014	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Genesis Coupe	2010 - 2013	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Santa Fe AWD	2001 - 2006	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	- Cam Bolt	Fac Adj. 46-166	Fac Adj. 46-166	- 109		- / - 0.30 / 0.30
Hyundai Santa Fe AWD	2007 - 2012	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Santa Fe AWD/FWD	2013 - 2017	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Hyundai Scoupe	1991 - 1995	X	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Hyundai Sonata	1989 - 1994	X	Magna Cam Wedge Kit	41-147 ³ 41-305	Non Adj.	66 68		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Hyundai Sonata	1995 - 1998	X	Magna Cam Wedge Kit	41-147 ³ 41-305	Non Adj.	66 68		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Sonata	1999 - 2010	X	Ball Joint	41-550	41-550	70	88-7800A	0.90 / 0.90	-	Non Adj.	Fac Adj.	-		- / -
Hyundai Sonata (built after 5-2011)	2011 - 2016	X	Axis Cam Magna Cam	41-216 41-160 ²	Non Adj.	67 66		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Sonata (built before 5-2011)	2011	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Hyundai Tiburon	1997 - 2001	X	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Hyundai Tiburon	2003 - 2008	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Hyundai Tuscon 4x4/4x2	2005 - 2014	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	Axis Cam Magna Cam	41-214 41-158 ²	Fac Adj.	67 66		0.30 / - 0.30
Hyundai Veloster	2012 - 2014	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	Shim	46-1500 SERIES ¹	46-1500 SERIES ¹	114		- / -
Hyundai XG300/XG350	2001 - 2005	X	Ball Joint	41-550	41-550	70		0.90 / 0.90	-	Non Adj.	Fac Adj.	-		- / -
INFINITI														
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.	66 67		0.30 / - 0.30
Infiniti G20	1999 - 2002	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
G25	2011 - 2012	X	-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2228	46-2228	124		0.50 / 0.50
Infiniti G35	2007 - 2008	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj. 46-141	-		- / - 0.30

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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	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
Infiniti G37	2008 - 2014	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2228	46-141 46-2228	124		0.50 / 0.30 0.50
Infiniti I30	1996 - 2001		X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Infiniti I35	2002 - 2004		X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Infiniti J30	1993 - 1996		X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Infiniti M30	1990 - 1992		X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
M35 / M45	2006 - 2010		X	-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2228	46-2228	124		0.50 / 0.50
Infiniti M45	2003 - 2004		X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Infiniti Q45	1990 - 2006		X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Infiniti QX4	1997 - 2003		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	90 11		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Infiniti QX80	2014 - 2017		X	Cam Bolt Greaseable Cam Bolt	44-820 44-862	44-820 44-862	90 11		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
INTERNATIONAL															
International Pickup	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	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Ascender 2WD/4WD	2003 - 2008		X	Camber-Caster Tool	88-8929	88-8929	143		- / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Axiom 2WD	2002 - 2004		X	- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Axiom 4WD	2002 - 2004		X	- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Hombre 2WD	1996 - 2000		X	- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Hombre 4WD	1996 - 2000		X	- Cam Bolt	Fac Adj. 41-8246	Fac Adj. 41-8246	73		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Isuzu I35/I28 4WD	2006		X	- Quick Cam	Fac Adj. 44-2507	Fac Adj. 44-2507	96		- / - 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.	66 68		0.30 / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Isuzu Impulse	1990 - 1992		X	Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		0.30 / - 0.30	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	66 68		0.30 / - 0.30
Isuzu Oasis	1996 - 1999		X	Ball Joint	41-530	41-530	70		0.90 / 0.90	Shim	46-2160	Fac Adj.	117		0.20 / -
Isuzu Pickup 2WD/4WD	1981 - 1995		X	- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non 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
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 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
Isuzu Rodeo 2WD/4WD	1991 - 2004	X		- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Stylus	1991 - 1993	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj. CC	66 68		0.30 / - 0.30	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj. CC	66 68		0.30 / - 0.30
Isuzu Trooper II 4WD	1988 - 2002	X		- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu Trooper 4WD	1992 - 2002	X		- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Isuzu VehiCross	1999 - 2001	X		- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
JAGUAR															
Jaguar S Type	2000 - 2008	X		- Cam Bolt	Fac Adj. 41-8244	Fac Adj. 41-8244	- 73		- / - 0.70 / -	-	Non Adj.	Fac Adj.	-		- / -
Jaguar X Type	2002 - 2008	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Jaguar XJ Sedans	1995 - 1997	X		- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Fac Adj.	Fac Adj.	-		- / -
Jaguar XJ6/XJ Sedan	1983 - 1994	X		- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	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	-		- / - - / -	-	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 Bushing	44-2490 44-2480	Fac Adj. 44-2490	94 89	88-7900A	0.90 / - 0.80 / 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Cherokee, Wagoneer (downsize)	1990 - 2001	X		Ball Joint	44-2490	Fac Adj. 44-2490	94	88-7900A	0.90 / - 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep CJ Models	1977 - 1986	X						88-7090		-	Non Adj.	Non Adj.	-		- / -
Jeep Comanche	1986 - 1989	X		Ball Joint Bushing	44-2490 44-2480	Fac Adj. 44-2490	94 89	88-7900A	0.90 / - 0.80 / 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Comanche	1990 - 1992	X		Ball Joint	44-2490	Fac Adj. 44-2490	94	88-7900A	0.90 / - 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Commander	2006 - 2010	X		- Ball Joint	Fac Adj. 44-2493	44-2493	- 94		- / 0.90 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Compass	2007 - 2017	X		Axis Cam Magna Cam	41-214 41-158 ²	Fac Adj. 44-2490	67 66		0.30 / - 0.30	- Rear Arm Rear Arm	Non Adj. 46-2174 46-2178	Non Adj.	118 119		- / - - 0.60
Jeep Grand Cherokee	1993 - 1998	X		Ball Joint	44-2490	41-8256 44-2490	94	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	94	88-7900A	0.90 / - 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Grand Cherokee	2005 - 2010	X		- Ball Joint	Fac Adj. 44-2493	44-2493	- 94		- / 0.90 0.90	-	Non Adj.	Non Adj.	-		- / -
Jeep Grand Cherokee	2011 - 2017	X		- Ball Joint Camber Kit Control Arm W/BJ	Fac Adj. 44-2495 44-794 44-2720	44-2495 44-795 44-2720	- 95 89 95		- / 0.90 0.90 / - - / -	-	Non Adj.	Non Adj.	-		- / -
Jeep J10/J20 Pickup	1977 - 1988	X						88-7090		-	Non Adj.	Non Adj.	-		- / -

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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
Jeep Liberty 2WD/4WD	2002 - 2013	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Jeep Patriot	2007 - 2017	X		Axis Cam Magna Cam	41-214 41-158 ²	Fac Adj.	67 66		0.30 / - 0.30	- Rear Arm	Non Adj. 46-2178	46-2174	119		- / - 0.60
Jeep Scrambler	1982 - 1985	X						88-7090		-	Non Adj.	Non Adj.	-		- / -
Jeep Wrangler	1987 - 1988	X		Ball Joint Bushing	44-2490 44-2480	44-2490	94 89	88-7900A	0.90 / 0.90 0.80	-	Non Adj.	Non Adj.	-		- / -
Jeep Wrangler TJ	1997 - 2006	X		Ball Joint Cam Bolt	44-2490 41-8255	41-8256 44-2490	94 74	88-7900A	0.90 / 0.30 0.60 / 0.90	Cam Bolt	41-8255	Non Adj.	74		0.60 / -
Jeep Wrangler JK	2007 - 2016	X		Ball Joint	44-2490	41-8257	94	44-2535	0.90 / 0.30	-	Non Adj.	Non Adj.	-		- / -
KIA															
Kia Amanti	2004 - 2009	X		Ball Joint	41-550	Fac Adj. 41-550	70		0.90 / - 0.90	-	Non Adj.	Fac Adj.	-		- / -
Kia Forte	2010 - 2017	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	- Shim	46-2400 ¹ 46-1300 SERIES ¹	46-2400 ¹ 46-1300 SERIES ¹	117 114		0.60 / 0.60 0.60 / 0.60
Kia Optima	2001 - 2006	X		Ball Joint	41-550	Non Adj. 41-550	70	88-7800A	0.90 / - 0.90	-	Non Adj.	Fac Adj.	-		- / -
Kia Optima	2007 - 2008	X		Axis Cam Magna Cam	41-214 41-158 ²		67 66	88-7800A	0.30 0.30	Rear Arm	46-2189	46-2189	122		0.50 / 0.50
Kia Optima	2009 - 2010	X		Axis Cam Magna Cam	41-214 41-158 ²		67 66	88-7800A	0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Kia Optima (Built date before 7/1/2011)	2011 - 2012	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Kia Optima (Built date after 7/1/2011)	2012 - 2016	X		Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	67 66		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Kia Rio	2001 - 2011	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Shim Shim	46-1300 SERIES ¹ 46-2400 ¹	46-1300 SERIES ¹ 46-2400 ¹	114 117		0.60 / 0.60 0.60 / 0.60
Kia Rio	2012 - 2014	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Kia Rondo	2007 - 2010	X		Axis Cam Magna Cam	41-214 41-157 ²		67 66		0.30 0.30	Rear Arm	46-2189	46-2189	122		0.50 / 0.50
Kia Sedona	2002 - 2005	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	- 66 67		- / - 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.	- 66 67		- / - 0.30 0.30	Cam Bolt	46-1707	Non Adj.	116		0.30 / -
Kia Sedona	2015 - 2017	X		- Magna Cam Axis Cam	Fac Adj. 41-159 ² 41-216	Fac Adj.	- 66 67		- / - 0.30 0.30	Axis Cam	46-1707	Non Adj.	116		0.30 / -
Kia Sephia	1994 - 2001	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Fac Adj.	- 66 67		- / - 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 - 2017	X		- Axis Cam	Fac Adj. 41-214	Fac Adj.	- 67		- / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Kia Soul	2010 - 2014	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	- Shim	Non Adj. 46-1500 SERIES ¹	Non Adj. 46-1500 SERIES ¹	- 114		- / - 0.60 / 0.60
Kia Spectra	2000 - 2009	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Fac Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Kia Sportage 2WD/4WD	2005 - 2010	X		Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

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Kia Sportage 2WD/4WD	2011 - 2017		X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	-	Fac Adj.	Non Adj.	-		- / -
LADA															
LADA Canada All 4WDRWD	1983 - 1993		X	- Shim	Fac Adj. CC	Fac Adj. CC	- -		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
LADA Canada All FWD Models	1983 - 1993		X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
LAND ROVER															
Rover Defender/Discovery	1993 - 2004		X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Land Rover Freelander	2002 - 2006		X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	66 67		0.30 / - 0.30
Range Rover	1987 - 2002		X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Range Rover	2003 - 2014		X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
LEXUS															
Lexus ES 250	1990 - 1991		X	Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	66 67		0.30 / - 0.30
Lexus ES 300	1992 - 2003		X	Magna Cam Axis Cam	41-151 41-217	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	66 67		0.30 / - 0.30
Lexus ES 330	2004 - 2006		X	Magna Cam Axis Cam	41-151 41-217	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	66 67		0.30 / - 0.30
Lexus ES 350	2007 - 2012		X	Magna Cam Axis Cam	41-151 41-217	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	66 67		0.30 / - 0.30
Lexus ES 350	2013 - 2016		X	Magna Cam Axis Cam	41-151 41-217	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-151 41-217	Fac Adj.	66 67		0.30 / - 0.30
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	2006 - 2011		X	-	Fac Adj.	Non Adj.	-		- / -	Rear Arm	46-2226	Fac Adj.	123		0.50 / -
GS350	2013 - 2016		X	-						Rear Arm	46-2232		125		0.50
Lexus GS 430	2001 - 2007		X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Lexus GX	2010 - 2014		X	- Cam Bolt	Fac Adj. 44-828	Fac Adj. 44-828	- 91		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Lexus GX	2003 - 2009		X	- Cam Bolt	Fac Adj. 44-827	Fac Adj. 44-827	- 91		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Lexus HS250h	2010 - 2012		X	Axis Cam	41-217	Non Adj.	67		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -
Lexus IS250/350	2006 - 2013		X	-	Fac Adj.	Non Adj.	-		- / -	Rear Arm	46-2226	Fac Adj.	123		0.50 / -
IS250	2014 - 2015		X	-						Rear Arm	46-2232		125		0.50
Lexus IS 300	2001 - 2005		X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
IS350	2014 - 2016		X	-						Rear Arm	46-2232	Fac Adj.	125		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.
- 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 106
 - 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	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
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 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 NX	2015 - 2017	X		Axis Cam	41-217	Non Adj.	67		0.30 / -	Rear Arm Rear Arm	46-2236L 46-2236R	Fac Adj.	9 9		0.50 / - 0.50
RC350	2015 - 2017	X								Rear Arm	46-2232		125		-
Lexus RX 350 2WD/4WD	1999 - 2009	X		- Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	66 67		0.30 / - 0.30
Lexus RX 350 2WD/4WD	2010 - 2017	X		- Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	66 67		- / - 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.	-		- / -
LINCOLN															
Lincoln Aviator	2003 - 2005	X		Alignment Washers Camber Kit	44-769 44-771 ⁸	44-769 44-771 ⁸	87 87	88-8926	0.30 / 0.30 0.30 / -	Alignment Washers Camber Kit	44-769 44-773 ⁸	46-9811	87 87		0.30 / - 0.30
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	78 74 11		0.30 / 0.30 1.00 / 1.00 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Lincoln Continental	1982 - 1987		X	- Wedge Kit	Fac Adj. 41-310	Non Adj.	69	88-4511	- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Lincoln Continental	1988 - 1994		X	-	Fac Adj.	Fac Adj.	-	88-4520	- / -	Bushing Camber Kit	46-131 46-132	Fac Adj. 46-131 46-132	107 107	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 LS	2000 - 2006		X	- Cam Bolt	Fac Adj. 41-8244	Fac Adj. 41-8244	73		- / - 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	88 89 11		0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	-	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	88 89 11		0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Lincoln Mark VII	1984 - 1992		X	- Wedge Kit	Fac Adj. 41-310	Non Adj.	69	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 - 2017		X	-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	121		0.50 / -
Lincoln MKX	2007 - 2014		X	Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	67 66		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Lincoln Zephyr MKZ	2006 - 2012		X	Ball Joint	41-236	41-236	68		0.90 / 0.90	-	Non Adj.	Fac Adj.	-		- / -
Lincoln Zephyr MKZ	2013 - 2017		X	Axis Cam Magna Cam	41-216 41-159 ²	Non Adj.	67 66		0.30 / - 3.00	Rear Arm	46-2227	Fac Adj.	124		0.50 / -
Lincoln Navigator 1st design 2WD/4WD	1998		X	Camber Kit	42-777 ⁶	42-777 ⁶	78		0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -

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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 106
2. 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	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
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	78 74 11		0.30 / 0.50 1.00 / 1.00 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Lincoln Navigator 2WD/4WD	2003 - 2006	X		Camber Kit	44-786 ⁸	44-786 ⁸	88		0.30 / 0.30	Cam Bolt	44-784	46-9813	88		0.50 / 0.50
Lincoln Navigator 2WD/4WD	2007 - 2017	X		Camber Kit Camber Kit	44-790 44-791	44-790 44-791	89 89		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Lincoln Town Car	1981 - 1990	X		- Shim	Fac Adj. CC	Fac Adj. CC	- -		- / - - / -	-	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.	- 109		- / - 1.00	-	Fac Adj.	Fac Adj.	-		- / -
Lincoln Versailles	1977 - 1980	X		Cam Bolt	41-8243	Fac Adj.	73		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
MAZDA															
Mazda 3	2004 - 2014	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	121		0.30 / -
Mazda 323/Protege 2WD/4WD	1986 - 1995	X		- Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Non Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Mazda 5	2006 - 2015	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Non Adj.	121		0.50 / -
Mazda 6	2003 - 2014	X		Ball Joint	41-236	41-236	68		0.90 / 0.90	-	Non Adj.	Non Adj.	-		- / -
Mazda 626	1979 - 1982	X		- Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Fac Adj.	- 66 67		- / - 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.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Mazda 626 4WD	1988 - 1989	X		- Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Fac Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		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	- -		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Mazda B Series P/U 4WD	1972 - 1993	X		- Shim	Fac Adj. 45-351	Fac Adj. 45-351	- 105		- / - - / -	-	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	79 103 80		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	86 87 11		0.30 / 0.30 0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Mazda CX-7	2007 - 2011	X		- Axis Cam	Fac Adj. 41-214	Fac Adj.	- 67		- / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Mazda CX-9	2007 - 2014	X		Axis Cam Magna Cam	41-214 41-157 ²		67 66		0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Mazda GLC	1981 - 1985	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Mazda Millenia	1995 - 2002	X		-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mazda MPV 2WD	1989 - 2006	X		- Magna Cam	Fac Adj. 41-146 ²	Fac Adj.	- 66		- / - 0.30	-	Non Adj.	Non Adj.	-		- / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

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Mazda MPV 4WD	1989 - 2006	X	Magna Cam Axis Cam	41-147 ³ 41-212		66 67		0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
			-	Fac Adj. 41-146 ² 41-212	Fac Adj. 41-147 ³	-	- / - 0.30 / 0.30 0.30							
Mazda MPV	2000 - 2006	X	Magna Cam Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-147 ³ 41-212	Fac Adj.	- 66 66 67		- / - 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.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Mazda MX-5 Miata	2006 - 2015	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mazda MX-6	1988 - 1997	X	Magna Cam Axis Cam	Fac Adj. 41-146 ² 41-212	Non Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Mazda Navajo 2WD	1991 - 1994	X	Bushing Bushing Bushing	42-950 44-5094 42-970	42-950 44-5094	79 103 80		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	79 103		1.00 / 1.00 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Mazda Protege	1990 - 2003	X	-	Fac Adj. 41-146 ² 41-212	Fac Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam Wedge Kit	41-147 ³ 41-212 41-300	Fac Adj.	66 67 68		0.30 / - 0.30 0.30
			Magna Cam Axis Cam Wedge Kit Performance Kit	41-300 41-1460	68 71	-								
			-	Fac Adj. 41-147 ³ 41-212	Fac Adj.	- 66 67		- / - 0.30 0.30						
			-	Fac Adj. 41-146 ² 41-212	Fac Adj.	- 66 67		- / - 0.30 0.30						
Mazda RX7	1979 - 1985	X	Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Fac Adj.	- 66 67		- / - 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.	- 66 67		- / - 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.	- 66 67		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-	- / -	
Mazda Tribute AWD/FWD	2001 - 2011	X	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30	Rear Arm	46-2179	Fac Adj.	119		- / -
MERCEDES-BENZ														
Mercedes-Benz C- Class W202 / S202	1994 - 2000	X	Cam Bolt	41-8265	41-8265	76		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz C- Class W203 4Matic	2001 - 2007	X	Cam Bolt Axis Cam	41-8264 41-214	41-8264	75 67		0.40 / 0.40 0.30	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz C- Class W203	2001 - 2007	X	Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz C- Class W204 4Matic	2008 - 2014	X	Cam Bolt Axis Cam	41-8264 41-214	41-8264	75 67		0.40 / 0.40 0.30	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz C- Class W204	2008 - 2014	X	Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz C- Class (4MATIC only)	2010 - 2014	X	Axis Cam	41-214	Fac Adj.	67		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -
CL-Class (CL203)	2008 - 2013	X	Ball Joint	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CL- Class C215	2000 - 2006	X	Cam Bolt	41-8265	41-8265	76		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CL- Class C216	2007 - 2014	X	Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CLK -Class C208	1998 - 2002	X	Cam Bolt	41-8265	41-8265	76		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CLK -Class A208 Cabriolet	2003	X	Cam Bolt	41-8265	41-8265	76		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -

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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
Mercedes-Benz CLK -Class C209	2003 - 2009	X		Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CLK -Class C209 Cabriolet	2003	X		Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
CLK, SL (C208, C209)	1998 - 2013	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CLS -Class C219	2006 - 2011	X		Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz CLS -Class C218	2012 - 2014	X		Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz E- Class	2010 - 2014	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz E- Class S212 / W212	2010 - 2014	X		Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz E- Class W211	2003 - 2008	X		Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz E- Class S211	2003 - 2009	X		Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz E- Class Sedan 4MATIC, Wagon 4MATIC	2010 - 2014	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz GLK -Class X204	2010 - 2015	X		Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz S- Class W220	2000 - 2006	X		Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz S- Class W221	2007 - 2013	X		Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz SL- Class R230	2003 - 2012	X		Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz SL- Class R231 (Caster only)	2013 - 2014	X		-	Non Adj.	41-8264	-		- / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz SLK -Class R170	1997 - 2004	X		Cam Bolt	41-8265	41-8265	76		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz SLK -Class R172	2012 - 2016	X		Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz SLK -Class R171	2005 - 2011	X		Cam Bolt	41-8264	41-8264	75		0.40 / 0.40	-	Non Adj.	Fac Adj.	-		- / -
Mercedes-Benz Sprinter	2004 - 2008	X		Shim	42-4431	Non Adj.	80		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Mercedes-Benz Sprinter 2500	2010 - 2014	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	-	Non Adj.		-		-
Mercedes-Benz Sprinter 3500	2010 - 2014	X		Axis Cam	41-216	Non Adj.	67		0.30 / -	-	Non Adj.		-		-
MERCURY															
Mercury Capri	1980 - 1986	X		- Wedge Kit	Fac Adj. 41-310	Non Adj.	- 69		- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Mercury Capri	1991 - 1994	X		- Magna Cam Wedge Kit	Fac Adj. 41-147 ³ 41-300	Fac Adj.	- 66 68		- / - 0.30 0.30	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj. 46-205	66 68		0.30 / - 0.30 / 0.30
Mercury Cougar	1980 - 1988	X		- Wedge Kit	Fac Adj. 41-310	Non Adj.	- 69	88-4511	- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Mercury Cougar	1989 - 1997	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.
- 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 106
 - 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 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 Cougar	1999 - 2002	X	-	Non Adj.	Non Adj.	-	88-9416	- / -	-	Non Adj.	Fac 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.	- 109	-	- / - 0.30	-	Non Adj.	Non Adj.	-	-	- / -
Mercury LN7	1982 - 1983	X	-	Non Adj.	Non Adj.	-	-	- / -	Wedge Kit	46-201	Fac Adj.	110	-	0.40 / -
Mercury Lynx	1981 - 1985	X	-	Non Adj.	Non Adj.	-	-	- / -	Wedge Kit	46-201	Fac Adj.	110	-	0.40 / -
Mercury Lynx	1986 - 1987	X	Tower Plate	41-4601	41-4601	72	88-4602	0.50 / 0.50	Wedge Kit	46-201	Fac Adj.	110	-	0.40 / -
Mercury Marauder	2003 - 2004	X	- Cam Bolt	Fac Adj. 46-143	Fac Adj.	- 109	-	- / - 1.00	-	Non Adj.	Non Adj.	-	-	- / -
Mercury Mariner AWD/FWD	2005 - 2011	X	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67	-	0.30 / - 0.30	Rear Arm	46-2179	Fac Adj.	119	-	- / -
Mercury Marquis	1983 - 1986	X	- Wedge Kit	Fac Adj. 41-310	Non Adj.	- 69	-	- / - 0.30	-	Non Adj.	Non Adj.	-	-	- / -
Mercury Milan	2006 - 2010	X	Ball Joint	41-236	41-236	68	-	0.90 / 0.90	-	Non Adj.	Fac Adj.	-	-	- / -
Mercury Montego FWD/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.	108	-	0.75 / -
Mercury Monterrey	2004 - 2007	X	- Tower Plate	Fac Adj. 41-4609	Fac Adj.	- 72	-	- / - 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	86 87 11	-	0.30 / 0.30 0.30 / 0.30 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	113 117	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	87 87	88-8926	0.30 / 0.30 0.30 / 0.30	Alignment Washers Camber Kit	44-769 44-773 ⁸	46-9812	87 87	-	0.30 / - 0.30
Mercury Mountaineer 2WD/4WD	2003 - 2005	X	Alignment Washers Camber Kit	44-769 44-771 ⁸	44-769 44-771 ⁸	87 87	88-8926	0.30 / 0.30 0.30 / 0.30	Alignment Washers Camber Kit	44-769 44-773 ⁸	46-9811	87 87	-	0.30 / - 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	- Tower Plate	Fac Adj. 41-4603	Fac Adj. 41-4603	- 72	88-1302 88-9200 88-9416	- / - 0.50 / 0.50	Bushing Cam Bolt	46-131 46-132	Fac Adj. 46-131	107 107	88-9416	0.50 / - 0.30 / 0.50
Mercury Sable Wagon	1986 - 1990	X	- Tower Plate	Fac Adj. 41-4603	Fac Adj. 41-4603	- 72	88-9416	- / - 0.50 / 0.50	Cam Bolt	46-136	Fac Adj. 46-133	108	88-1300 88-4511 88-9416	0.80 / - 0.50
Mercury Sable Sedan	1991 - 1995	X	- Tower Plate	Fac Adj. 41-4605	Fac Adj. 41-4605	- 72	88-1302 88-9200 88-9416	- / - 0.50 / 0.50	Bushing Cam Bolt	46-131 46-132	Fac Adj. 46-131	107 107	88-9416	0.50 / - 0.30 / 0.50
Mercury Sable Wagon	1991 - 1995	X	- Tower Plate	Fac Adj. 41-4605	Fac Adj. 41-4605	- 72	88-9416	- / - 0.50 / 0.50	Cam Bolt	46-136	Fac Adj. 46-133	108	88-1300 88-4511 88-9416	0.80 / - 0.50
Mercury Sable Sedan	1996 - 2005	X	- Tower Plate	Fac Adj. 41-4607	Fac Adj.	- 72	88-4520 88-7870C 88-9416	- / - 0.90	Bushing Cam Bolt	46-131 46-134	Fac Adj. 46-131 46-134	107 108	88-9200 88-9416	0.50 / - 0.50 / 0.50 0.40
Mercury Sable Wagon	1996 - 2005	X	- Tower Plate	Fac Adj. 41-4607	Fac Adj.	- 72	88-4520 88-9416	- / - 0.90	Cam Bolt	46-136	Fac Adj.	108	88-9066 88-9416	0.80 / -

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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 106
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 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
Mercury Sable FWD	2008 - 2009	X	-	Fac Adj.	Fac Adj.	-		- / -	Camber Kit	46-135	Fac Adj.	108		0.75 / -
Mercury Topaz	1984 - 1994	X	- Tower Plate	Fac Adj. 41-4601	Fac Adj. 41-4601	- 72	88-4602	- / - 0.50 / 0.50	Wedge Kit	46-201	Fac Adj.	110	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.	66 68 71		- / - 0.30 0.30 -	Magna Cam Wedge Kit Performance Kit	41-147 ³ 41-300 41-1470	Fac Adj. 46-205	66 68 71		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.	66 67		0.30 / - 0.30
Mercury Villager	1993 - 2002	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	113 117	88-343	0.60 / 0.60 0.60 / 0.60
MINI														
Mini Cooper Cooper S	2002 - 2014	X	-	Non Adj.	Non Adj.	-		- / -	-	Non 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.	66 67		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.	66 67		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.	66 67		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.	66 67 71		0.30 / - 0.30 -	Shim	46-2170	Fac Adj.	118		0.30 / -
Mitsubishi Eclipse AWD	1990 - 1994	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Mitsubishi Eclipse FWD	1990 - 1994	X	Magna Cam Wedge Kit	41-147 ³ 41-212	Non Adj.	66 67	88-7800A	0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30
Mitsubishi Eclipse AWD	1995 - 1999	X	Ball Joint	41-550	Non Adj. 41-550	70		0.90 / - 0.90	Shim	46-2170	Fac Adj.	118		0.30 / -
Mitsubishi Eclipse FWD	1995 - 1999	X	Ball Joint	41-550	41-550	70	88-7800A	0.90 / 0.90	Shim	46-2170	Fac Adj.	118		0.30 / -
Mitsubishi Eclipse/Eclipse Spyder	2000 - 2012	X	- Magna Cam Axis Cam	Fac Adj. 41-159 ² 41-216	Non Adj.	66 67		- / - 0.30 0.30	Shim	46-2170	Fac Adj.	118		0.30 / -
Mitsubishi Expo/Expo LRV (All)	1992 - 1995	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		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.	66 67		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.	66 67		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Mitsubishi Galant FWD	1994 - 1998	X	Ball Joint	41-550	41-550	70	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.	66 67		0.30 / - 0.30	Shim	46-2170	Fac Adj.	118		0.30 / -
Mitsubishi Lancer	2002 - 2014	X	Axis Cam	41-214	Non Adj.	67		0.30 / -	- Rear Arm	Fac Adj. 46-2178	Fac Adj.	- 119		- / - -
Mitsubishi Mirage	1985 - 1992	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non 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
Mitsubishi Mirage	1993 - 2002	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Mitsubishi Montero/Montero Sport 4WD	1983 - 2001		X	- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Pickup 2WD/4WD	1985 - 1996		X	- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Montero 2WD	1997 - 2001		X	- Shim	Fac Adj. CC	Non Adj.	-		- / - -	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Montero 4WD	2002 - 2008	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Mitsubishi Outlander	2003 - 2014	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	- Rear Arm	Non Adj. 46-2178	Fac Adj.	119		- / - 0.60
Mitsubishi Precis	1988 - 1993		X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Sigma	1989 - 1990		X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Tredia	1983 - 1988		X	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Mitsubishi Van/Wagon	1987 - 1990		X	-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
NISSAN															
Nissan 200SX	1995 - 1998		X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan 240SX	1989 - 1998		X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Nissan 300ZX	1990 - 1996		X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Nissan 350Z	2003 - 2009		X	-	Non Adj.	Non Adj.	-		- / -	- Rear Arm Cam Bolt	Fac Adj. 46-2199 46-164	Fac Adj. 46-164 46-2199	123 109		- / - 0.50 / 0.30 0.30 / 0.50
Nissan 370Z	2009 - 2017		X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj. 46-141	-		- / - 0.30
Nissan Altima	1993 - 2001		X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Nissan Altima	2002 - 2006		X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Nissan Altima	2007 - 2012		X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	- Rear Arm Ball Joint	Fac Adj. 46-2199 46-164	Fac Adj. 46-2199 46-164	123 109		- / - 0.50 / 0.50 0.30 / 0.30
Nissan Altima	2013 - 2017		X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Nissan Armada 2WD/4WD	2005 - 2015		X	Camber Kit Greaseable Cam Bolt	44-820 44-862	44-820 44-862	90 11		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Cube	2010 - 2014		X	Axis Cam Magna Cam	41-214 41-158 ²		67 66		0.30 0.30	Shim	46-1500 SERIES ¹	46-1500 SERIES ¹	114		0.60 / 0.60
Nissan Frontier 2WD/4WD	1998 - 2004		X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan Frontier 2WD/4WD	2005 - 2017		X	Camber Kit Greaseable Cam Bolt	44-820 44-862	44-820 44-862	90 11		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Juke	2011 - 2017		X	Axis Cam Magna Cam	41-214 41-158 ²		67 66		0.30 0.30	Shim Shim	46-1300 SERIES ¹ 46-2400 ¹	46-1300 SERIES ¹ 46-2400 ¹	114 117		0.60 / 0.60 0.60 / 0.60
Nissan Leaf	2011 - 2017		X	Axis Cam	41-214	Non Adj.	67		0.30 / -	Shim	46-1120 SERIES ¹	46-1120 SERIES ¹	113		0.60 / 0.60

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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
Nissan Maxima Sedan/Wagon	1985 - 1994	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Nissan Maxima	1995 - 2003	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		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.	66 67		0.30 / - 0.30	Rear Arm	46-2199	46-2199	123		0.50 / 0.50
Nissan Murano	2003 - 2017	X		Axis Cam Camber Kit	41-214 41-157 ²	Non Adj.	67 66		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Nissan NX Coupe	1991 - 1993	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Nissan Pathfinder 2WD/4WD	1987 - 1995	X		- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Nissan Pathfinder 2WD/4WD	1996 - 2004	X		Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Pathfinder 2WD/4WD	2005 - 2012	X		Camber Kit Greaseable Cam Bolt	44-820 44-862	44-820 44-862	90 11		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Pathfinder 2WD/4WD	2013 - 2017	X		Camber Kit	41-214	Non Adj.	67		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Nissan Pickup 2WD/4WD	1995 - 2000	X		- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Nissan Pulsar	1983	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		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.	66 67		- / - 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.	66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Nissan Quest	1993 - 2002	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	113 117	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.	66 67		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Nissan Rogue	2008 - 2014	X		Axis Cam	41-214	Non Adj.	67		0.30 / -	-	Non Adj.	Fac Adj.	-		- / -
Nissan Sentra	1982 - 1986	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Sentra	1987 - 1994	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Nissan Sentra	1995 - 2006	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		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.	66 67		0.30 / - 0.30	Shim	46-1120A	46-1120A	109		0.60 / 0.60
Nissan Sentra (with ABS)	2007 - 2012	X		Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Sentra	2013 - 2014	X		Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	66 67		0.30 / - 0.30						
Nissan Stanza	1982 - 1992	X		Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		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.	66 67		- / - 0.30 0.30	Wedge Kit	41-305	Fac Adj.	68		0.30 / -
Nissan Titan 2WD/4WD	2004 - 2015	X		Camber Kit Greaseable Cam Bolt	44-820 44-862	44-820 44-862	90 11		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Nissan Titan 2WD/4WD	2017	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.

- 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 106
- 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 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
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.	66 67		0.30 / 0.30	Shim	46-1500 SERIES ¹	46-1500 SERIES ¹	114		0.60 / 0.60
Nissan Versa	2012 - 2017	X		Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	66 67		0.30 / 0.30	Shim Shim	46-1000 SERIES ¹ 46-2100 ¹	46-1000 SERIES ¹ 46-2100 ¹	112 117		0.60 / 0.60 0.60 / 0.60
Nissan Xterra 2WD	2000 - 2005		X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Nissan Xtreea	2005 - 2015	X		Cam Bolt Greaseable Cam Bolt	44-820 44-862	44-820 44-862	90 11		0.30 / 0.30 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
OLDSMOBILE															
Oldsmobile Achieva	1992 - 1995	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	66 67		- / 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	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. 41-158 ² 41-214	Non Adj.	66 67		- / 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	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.	66 67		0.30 / 0.30	Magna Cam Axis Cam	41-144 41-212	Fac Adj.	66 67		0.30 / 0.30
Oldsmobile Aurora	1995 - 1999	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67		- / 0.30 0.30	- Shim	Non Adj. 46-1500 SERIES ¹	Fac Adj. 46-1500 SERIES ¹	- 114		- / 0.60 0.60 / 0.60
Oldsmobile Aurora	2001 - 2003	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	66 67		- / 0.30 0.30	Shim	46-1900	Fac Adj.	112		0.80 / -
Oldsmobile Bravada AWD	1991 - 2001	X		Cam Bolt	Fac Adj. 41-8246	Fac Adj. 41-8246	- 73		- / 0.60 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile Bravada 2WD/4WD	2002 - 2004	X		Camber-Caster Tool	88-8929	88-8929	143		- / -	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile Calais	1985 - 1987	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	66 67		- / 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Oldsmobile All RWD	1975 - 1992	X		Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile Cutlass	1997 - 1999	X		Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	66 67		- / 0.30 0.30	Magna Cam Axis Cam	41-144 41-212	Fac Adj.	66 67		0.30 / 0.30
Oldsmobile Cutlass Ciera/Cruiser	1986 - 1996	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	66 67		- / 0.60 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117	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.	- 102	88-060	- / 0.50	Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	66 67	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.	66 67		- / 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	66 114 117	88-050 88-1110 88-343	0.30 / 0.60 0.60 / 0.60 0.60 / 0.60
Oldsmobile Firenza	1982 - 1983	X		Cam Bolt	41-8245	Non Adj.	73	88-4511	0.40 / -	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	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.	66 67		0.30 / 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	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.	66 67		- / 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	66 67		- / 0.30 0.30
Oldsmobile Eighty-Eight/LSS	1996 - 1999	X		Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67		- / 0.30 0.30	Magna Cam Shim Shim	41-160 ² 46-1300 ¹ 46-2400 ¹	Fac Adj.	66 114 117	88-050 88-1110 88-343	0.30 / 0.60 0.60 0.60
Oldsmobile Omega	1980 - 1984	X		Cam Bolt	41-8245	Non Adj.	73		0.30 / -	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	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 106
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

OLDSMOBILE

PLYMOUTH

FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O 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
Oldsmobile Regency	1997 - 1998	X	- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	- 66 67		- / - 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	- 66 114 117	88-050 88-1110 88-343	- / - 0.30 / 0.60 0.60 / - 0.60
Oldsmobile Silhouette	1990 - 1996	X	Magna Cam Axis Cam	41-160 ² 41-216	Non Adj.	66 67		0.30 / - 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117	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.	- 66 67		- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117	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.	- 66 67		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Oldsmobile Toronado	1966 - 1978	X	- Cam Bolt	Fac Adj. 41-8247	Fac Adj. 41-8247	- 73		- / - 1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Oldsmobile Toronado	1979 - 1985	X	- Cam Bolt	Fac Adj. 41-8247	Fac Adj. 41-8247	- 73		- / - 1.00 / 1.00	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117	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.	66 67		0.30 / - 0.30	Shim	46-1600	Fac Adj.	115		0.60 / -
PLYMOUTH														
Plymouth Acclaim	1989 - 1995	X	- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Breeze	1996 - 2000	X	Ball Joint	41-230	41-230	68		0.90 / 0.90	-	Fac Adj.	Fac Adj.	-		- / -
Plymouth Caravelle	1985 - 1988	X	- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Plymouth Colt	1984 - 1991	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Plymouth Colt	1992 - 1994	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	-	Fac Adj.	Fac 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	112 117	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.	66 67		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.	66 67		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Plymouth Neon	1995 - 2001	X	Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	- Wedge Kit	Fac Adj. 41-300	Fac Adj.	- 68		- / - 0.30
Plymouth Prowler	1997 - 2001	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Plymouth Reliant	1981 - 1983	X	-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Reliant	1984 - 1989	X	- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Scamp	1983	X	-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Sundance	1987 - 1994	X	- Cam Bolt	Fac Adj. 41-8249	Non Adj.	- 73		- / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Trailduster 2WD	1977 - 1981	X	- Cam Bolt	Fac Adj. 41-8243	Fac Adj. 41-8243	- 73		- / - 0.60 / 0.60	-	Non Adj.	Non Adj.	-		- / -
Plymouth Trailduster 4WD	1977 - 1981	X					88-7090		-	Non Adj.	Non Adj.	-		- / -

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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O T A L	R O T O 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
Plymouth Turismo	1983 - 1985	X			-	Fac Adj.	Non Adj.	-		- / -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Voyager FWD	1984 - 1995	X			- Cam Bolt	Fac Adj. 41-8249	Non Adj.	73		- / - 0.30	Shim Shim	46-1100 ¹ 46-2200 ¹	46-1100 ¹ 46-2200 ¹	113 117	88-343	0.60 / 0.60 0.60 / 0.60
Plymouth Voyager AWD	1991 - 1995	X			- Cam Bolt	Fac Adj. 41-8249	Non Adj.	73		- / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Plymouth Voyager AWD	1996 - 2000	X			- Magna Cam Axis Cam	Fac Adj. 41-157 ² 41-214	Non Adj.	66 67		- / - 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.	66 67		- / - 0.30 0.30	Shim	46-1120 ¹	46-1120 ¹	113	88-343 88-4519	0.60 / 0.60
PONTIAC																
Pontiac 6000	1982 - 1991	X			- Cam Bolt	Fac Adj. 41-8245	Non Adj.	73		- / - 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117	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.	73		- / - 0.30	- Cam Bolt	Fac Adj. 41-8245	Fac Adj.	73		- / - 0.30
Pontiac Astre	1975 - 1977	X			- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Aztek	2001 - 2005	X			- Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117	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.	66 67		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Pontiac Bonneville	1987 - 1999	X			- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Fac Adj.	66 67		- / - 0.30 0.30	Magna Cam Shim	41-160 ² 46-1300 ¹	Fac Adj. 46-1300 ¹ 46-2400 ¹	66 114	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.	66 67		- / - 0.30 0.30	Shim	46-1900	Fac Adj.	112		0.80 / -
Pontiac Fiero	1984 - 1988	X			-	Fac Adj.	Fac Adj.	-		- / -	Cam Bolt	41-8245	Fac Adj.	73		0.30 / -
Pontiac Firebird	1967 - 1981	X			- Shim	Fac Adj. CC	Fac Adj. CC	-		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Pontiac Firebird	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			-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Pontiac G5	2007 - 2010	X			- Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	67 66		0.30 / - 0.30	- Shim	Fac Adj. 46-1520 SERIES ¹	Fac Adj. 46-1520 SERIES ¹	114		- / - 0.60 / 0.60
Pontiac G6	2005 - 2010	X			- Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	- Shim Dual Axis Cam bolt	Fac Adj. 46-1520A 46-425	Fac Adj. 46-1520A 46-426	110 111		- / - 0.60 / 0.60 0.30 / 0.30
Pontiac G8	2008 - 2009	X			- Axis Cam Magna Cam	41-214 41-158 ²	Fac Adj.	67 66		0.30 / - 0.30	- Cam Bolt	Fac Adj. 46-182	Fac Adj. 46-182	110		- / - 0.30 / 0.30
Pontiac Grand Am	1985 - 1995	X			- Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	66 67	88-4511	- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	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.	66 67		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Pontiac Grand Am	1999 - 2003	X			- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	66 67		- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-144 41-212	Fac Adj.	66 67		- / - 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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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
Pontiac Grand Am	2004 - 2005	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 66 67		0.30 / - - 0.30	- Magna Cam Axis Cam	Fac Adj. 41-144 41-212	Fac Adj.	- 66 67		- / - 0.30 0.30
Pontiac Grand Prix	1988 - 1996	X		- Shim	Fac Adj. 45-7010 ⁴	Non Adj.	- 102	88-060	- / - 0.50	Magna Cam Axis Cam	41-160 ² 41-216	Fac Adj.	66 67	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.	- 66 67		- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	- 66 67		- / - 0.30 0.30
Pontiac GTO	2004 - 2006	X		Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	66 67		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.	- 66 67		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
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.	- 66 67		- / - 0.30 0.30	- Shim	Fac Adj. 46-1300 SERIES ¹	Fac Adj. SERIES ¹	- 114		- / - 0.60 / 0.60
Pontiac Montana AWD	2002 - 2009	X		- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 66 67		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Pontiac Phoenix	1980 - 1984	X		Cam Bolt	41-8245	Non Adj.	73		0.30 / -	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Pontiac Sunburst	1985 - 1988	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		0.30 / - 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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.	- 66 67		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Pontiac Tempest (Canada)	1988 - 1991	X		Magna Cam Axis Cam	41-160 ² 41-216	Non Adj.	66 67		0.30 / - 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	46-1200 ¹ 46-2300 ¹	113 117	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.	66 67		0.30 / - 0.30	-	44-775	44-775	88		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.	- 66 67		- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117	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.	- 66 67		- / - 0.30 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117	88-050 88-1110 88-343	0.60 / 0.60 0.60 / 0.60
Pontiac Vibe	2003 - 2010	X		- Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	- 66 67		- / - 0.30 0.30	Shim	46-1500 ¹	46-1500 ¹	114		0.60 / -
PORSCHE															
Porsche 911	1965 - 2014	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Porsche	1977 - 1988	X		Axis Cam	41-212	Fac Adj.	67		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Porsche 924	1977 - 1988	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Porsche 928	1978 - 1995	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Porsche	1983 - 1991	X		Axis Cam	41-212	Fac Adj.	67		0.30 / -	-	Fac Adj.	Fac Adj.	-		- / -
Porsche 944	1983 - 1991	X		Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	66 68		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Porsche 968	1992 - 1995	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -

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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
Porsche Boxster	1997 - 2011	X	-	Fac Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
RAM														
Dodge Ram 1500 (Mega Cab) (8-lug) 2wd	2011 - 2017	X	-	Fac Adj.	Fac Adj.	-		- / -						
Dodge Ram 1500 (Mega Cab) (8-lug) 4wd	2011 - 2017	X	-	Non Adj.	Fac Adj.	-		- / -						
Dodge Ram 1500 2WD/4WD (5-lug) (Exc. Mega Cab)	2011 - 2017	X	Ball Joint	44-2489	44-2489	93		0.90 / 0.90	-	Non Adj.	Non Adj.	-		- / -
Dodge 2500/3500 P/U NS 4WD	2011 - 2013	X	Ball Joint	44-2497	44-824 44-2497	95		0.90 / 0.30 0.90	-	Non Adj.	Non Adj.	-		- / -
Dodge Truck 2500 2WD	2011 - 2013	X	-	Fac Adj.	Fac Adj.	-		- / -						
Dodge 2500 HD 2wd	2011 - 2013	X	-	Fac Adj.	44-823 44-825	-		- / 0.30 0.30						
Dodge 2500 P/U NS 4WD	2014 - 2017	X	Ball Joint	44-2497	44-823 44-825 44-2497	95	44-2540 44-2542	0.90 / 0.30 0.30 0.90	-	Non Adj.	Non Adj.	-		- / -
Dodge 2500 2wd	2014 - 2017	X	-	Fac Adj.	Fac Adj.	-	44-2540 44-2542	- / -						
Dodge 2500/3500 P/U NS 4WD	2011 - 2012	X	Ball Joint	44-2497	Fac Adj. 44-2497	95		0.90 / - 0.90						
Dodge 3500 2wd / mono beam	2011 - 2012	X	Ball Joint	44-2497	Fac Adj. 44-2497	95		0.90 / - 0.90						
Dodge Truck 3500 2WD	2011 - 2012	X	-	Fac Adj.	Fac Adj.	-		- / -						
Dodge 3500 P/U NS 4WD	2013 - 2016	X	Ball Joint	44-2497	44-823 44-825 44-2497	95	44-2540 44-2542	0.90 / 0.30 0.30 0.90	-	Non Adj.	Non Adj.	-		- / -
Dodge 3500 2wd	2013 - 2017	X	-	Fac Adj.	44-823 44-825	-	44-2540 44-2542	- / 0.30 0.30						
Dodge 3500 2wd / mono beam	2013 - 2017	X	Ball Joint	44-2497	44-823 44-825 44-2497	95	44-2540 44-2542	0.90 / 0.30 0.30 0.90	-	Non Adj.	Non Adj.	-		- / -
Dodge 4500 / 5500 2wd	2011 - 2016	X	Ball Joint	44-2610	44-2610	99		1.00 / 1.00	-	Non Adj.	Non Adj.	-		- / -
Dodge 4500 / 5500 4wd	2011 - 2016	X	Ball Joint	44-2610	Non Adj.	99		1.00 / -	-	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.	66 67 73		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.	66 67 73		0.30 / - 0.30 0.30	Shim	46-1120 ¹	46-1120 ¹	113	88-343	0.60 / 0.60
RENAULT														
AMC Alliance	1983 - 1986	X	Magna Cam Axis Cam	Fac Adj. 41-160 ² 41-216	Non Adj.	66 67		- / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Renault Alliance	1983 - 1987	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Renault Encore	1984 - 1986	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		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.	67 66		0.30 / - 0.30	Axis Cam Axis Cam	41-214 41-158 ²	Fac Adj.	67 66		0.30 / - 0.30
Saab 9-3	1999 - 2011	X	Axis Cam	41-212	Non Adj.	67		0.30 / -	Dual Axis Cam bolt	46-425	Non Adj. 46-426	111		0.30 / - 0.30

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Saab 9-5 Sedan/Wagon	1999 - 2009	X	Axis Cam	41-212	Non Adj.	67		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Saab 9-7x	2005 - 2009	X	Camber-Caster Tool	88-8929	88-8929	143		- / -	-	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.	66 68		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
SATURN														
Saturn Astra	2008 - 2009	X	Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	67 66		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Saturn Aura	2007 - 2009	X	Axis Cam	41-212	Non Adj.	67		0.30 / -	- Shim Dual Axis Cam bolt	Fac Adj. 46-1200A 46-425	Fac Adj. 46-1200A 46-426	- 109 111		- / - - / - 0.30 / 0.30
Saturn Ion	2004 - 2007	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 0.30	Shim	46-1520 ¹	46-1520 ¹	114		0.06 / 0.06
Saturn L Series	2000 - 2005	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		- / - 0.30 0.30	Shim Shim	46-1200 ¹ 46-2300 ¹	Fac Adj.	113 117		0.60 / - 0.60
Saturn GM EV-1	1997 - 2001	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Saturn Outlook	2007 - 2010	X	Magna Cam Axis Cam	41-160 ² 41-216	Non Adj.	66 67		- / - 0.30 0.30	- Camber Kit Cam Bolt	Fac Adj. 46-421 41-8257	Fac Adj.	111 75	88-7996A	- / - 1.00 0.30
Saturn Relay AWD	2005 - 2007	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Saturn Relay FWD	2005 - 2007	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	Shim Shim	46-1300 ¹ 46-2400 ¹	46-1300 ¹ 46-2400 ¹	114 117		0.60 / 0.60 0.60 / 0.60
Saturn All Models	1991 - 1998	X	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj. 46-406	66 67		0.30 / - 0.30 / 0.60
Saturn S Series	1991 - 2002	X	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	66 67		- / - 0.30 0.30	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	46-406	66 67		- / - 0.30 0.30
Saturn Vue	2002 - 2006	X	Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	66 67		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Saturn Vue	2007 - 2009	X	Magna Cam Axis Cam	41-157 ² 41-214	Non Adj.	66 67		- / - 0.30 0.30	-	44-775	44-775	88		0.30 / 0.30
SCION														
Scion FR-S	2013 - 2016	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	-	Fac Adj.	46-2177	-		- / -
Scion iQ	2012 - 2014	X	Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	67 66		0.30 / - 0.30	Shim	46-1500 SERIES ⁵	46-1500 SERIES ⁵	114		0.60 / 0.60
Scion tC	2005 - 2014	X	Magna Cam Cam Bolt	41-151 41-217	Non Adj.	66 67		0.30 / - 0.30	Shim	46-1500 SERIES ⁵	Fac Adj.	114		0.60 / -
Scion xA	2004 - 2006	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	Shim	46-1500 ¹	46-1500 ¹	114		0.60 / -
Scion xB	2004 - 2006	X	Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	Shim	46-1500 SERIES ⁵	46-1500 SERIES ⁵	114		0.60 / -
Scion xB	2008 - 2014	X	Axis Cam	41-217	Non Adj.	67		0.30 / -	Shim	46-1500 SERIES ⁵	46-1500 SERIES ⁵	114		0.60 / -

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Scion xD	2008 - 2014	X	Axis Cam Magna Cam	41-215 41-149	Non Adj.	67 66		0.30 / - 0.30	Shim	46-1500 SERIES ¹	46-1500 SERIES ¹	114		0.60 / 0.60
STERLING														
Sterling All Models	1987 - 1991	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
SUBARU														
Subaru B9 Tribeca, Tribeca	2006 - 2010	X	Axis Cam	41-214	Non Adj.	67		0.30 / -	-	Non Adj.	46-431	-		- / 0.30
Subaru Baja	2003 - 2006	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 66 67		- / - 0.30 0.30	Axis Cam	41-214	Non Adj. 46-431	67		0.30 / - 0.30
Subaru Impreza FWD/AWD	2008 - 2017	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj. 46-2177	66 67		0.30 / - 0.30 / -
Subaru Forester	1998 - 2007	X	-	Fac Adj. 41-214	Non Adj.	- 67		- / - -	-	Non Adj.	Fac Adj.	-		- / -
Subaru Forester	2009 - 2017	X	-	Fac Adj. 41-214	Non Adj.	- 67		- / - -	-	Non Adj.	Fac Adj. 46-2177	-		- / - -
Subaru Impreza FWD/AWD	1993 - 2007	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	66 67		0.30 / - 0.30
Subaru WRX	2002 - 2007	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	66 67		0.30 / - 0.30
Subaru Justy	1987 - 1994	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Subaru Legacy 2WD/AWD	1990 - 1999	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	66 67		0.30 / - 0.30
Subaru Legacy	2000 - 2009	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	-	Non Adj.	Non Adj. 46-431	-		- / - 0.30
Subaru Legacy	2010 - 2017	X	Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	-	Non Adj.	46-2177	-		- / -
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.	- 66 67		- / - 0.30 0.30	-	Non Adj.	Fac Adj. 46-431	-		- / - 0.30
Subaru Outback	2010 - 2017	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 66 67		- / - 0.30 0.30	-	Non Adj.	46-2177	-		- / -
Subaru SVX	1992 - 1997	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Non Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	66 67		0.30 / - 0.30
Subaru Tribeca	2011 - 2014	X	Axis Cam	41-214	Non Adj.	67		0.30 / -	-	Non Adj.	Non Adj.	-		- / -
Subaru WRX	2015 - 2017	X	- Magna Cam Axis Cam	Fac Adj. 41-158 ² 41-214	Fac Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-158 ² 41-214	Fac Adj.	66 67		0.30 / - 0.30
Subaru XT	1985 - 1991	X	-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Fac Adj.	-		- / -
Subaru XV Crosstrek	2013 - 2015	X	Axis Cam Magna Cam	41-215 41-149	Non Adj.	67 66		0.50 / - 0.50	-	Fac Adj.	46-2177	-		- / -
SUZUKI														
Suzuki Aerio	2002 - 2007	X	-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Suzuki Equator	2009 - 2012	X	Camber Kit Greaseable Cam Bolt	44-820 44-862	44-820 44-862	90 11		0.30 / 0.30 0.30 / 0.30	Cam Bolt	44-775	Non Adj.	88		0.30 / -
Suzuki Esteem	1995 - 2002	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		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 106
- 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
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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O R 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
Suzuki Grand Vitara 2WD / 4WD	1999 - 2014		X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	Axis Cam	41-212	Non Adj.	67		0.30 / -
Suzuki Samurai 2WD	1985 - 1995		X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		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.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Suzuki Swift	1989 - 2001		X	Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Suzuki SX4	2007 - 2014		X	Axis Cam Magna Cam	41-212 41-147 ³	Non Adj.	67 66		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.	66 67		- / - 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.	66 67		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.	66 67		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.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Suzuki XL-7	2007 - 2009		X	Axis Cam	41-214	Non Adj.	67		0.30 / -	-	Fac Adj. 44-775	Fac Adj. 44-775	88		- / - 0.30 / 0.30
TOYOTA															
Toyota 4 Runner 2WD/4WD	1984 - 1989		X	- Shim	Fac Adj. CC	Fac Adj.	-		- / - -	-	Non Adj.	Non Adj.	-		- / -
Toyota 4 Runner 2WD/4WD	1996 - 2002		X	- Cam Bolt	Fac Adj. 44-826	Fac Adj. 44-826	91		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Toyota 4 Runner 2WD/4WD	2003 - 2009		X	- Cam Bolt	Fac Adj. 44-827	Fac Adj. 44-827	91		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Toyota 4Runner	2010 - 2014		X	-	Fac Adj.		-		-						
Toyota 4Runner 2WD/4WD	2010 - 2014		X	Shim Cam Bolt	CC 44-828	Fac Adj. 44-828	91		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Avalon	1995 - 2012		X	Magna Cam Axis Cam	41-151 41-217	Non Adj.	66 67		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 46-2400 ¹	66 67 114 117	88-343	0.30 / - 0.30 / 0.60 0.60 / 0.60 0.60
Toyota Avalon	2013 - 2016		X	Magna Cam Axis Cam	41-151 41-217	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-151 41-217	Fac Adj.	66 67	88-343	0.30 / - 0.30
Toyota Camry	1983 - 1987		X	Magna Cam Axis Cam	41-147 ³ 41-212	45-6001 45-6002	66 67		0.30 / 0.20 0.30 / 0.20	Magna Cam Wedge Kit	41-147 ³ 41-300	Fac Adj.	66 68		0.30 / - 0.30
Toyota Camry	1987 - 1991		X	Magna Cam Wedge Kit	41-151 41-305	45-6001 45-6002	66 68		0.30 / 0.20 0.30 / 0.20	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	66 67		0.30 / - 0.30
Toyota Camry Alltrac	1988 - 1991		X	Magna Cam Axis Cam	41-151 41-217	Fac Adj. 45-6001 45-6002	66 67		0.30 / - 0.30 / 0.20 0.20	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	66 67		0.30 / - 0.30
Toyota Camry/Solara	1992 - 2017		X	Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	66 67		0.30 / - 0.30
Toyota Celica FWD	1986 - 1989		X	Magna Cam Wedge Kit	41-149 41-301	Non Adj.	66 68		0.30 / - 0.30	Magna Cam Wedge Kit	41-149 41-301	Fac Adj.	66 68		0.30 / - 0.30
Toyota Celica Alltrac	1988 - 1989		X	Magna Cam Axis Cam	41-149 41-215	Non Adj.	66 67		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.	66 68		- / - 0.30 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	66 67		0.30 / - 0.30
Toyota Celica Alltrac	1990 - 1993		X	-	Non Adj.	Non Adj.	-		- / -	-	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.

- 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 106
- 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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- For models without factory provided cam bolts
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FRONT WHEEL ALIGNMENT

REAR WHEEL ALIGNMENT

MODEL	YEAR	T O 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 Celica/ST/GT/GT-S	1994 - 2005	X	Magna Cam Axis Cam	41-149 41-215	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	66 67		0.30 / - 0.30
Toyota Celica GT/GT-S	2000 - 2005	X	Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Non Adj.	66 67		- / - 0.30 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Toyota Corolla FWD	1984 - 1987	X	Magna Cam Wedge Kit	41-147 ³ 41-300	Non Adj.	66 68		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	66 68 114 117	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.	- 66 68		- / - 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	66 68 114 117	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.	66 68		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Corolla FWD	1988 - 1992	X	Magna Cam Wedge Kit	41-149 41-305	Non Adj.	66 68		0.30 / - 0.30	Magna Cam Wedge Kit Shim Shim	41-147 ³ 41-300 46-1300 ¹ 46-2400 ¹	Fac Adj.	66 68 114 117	88-343	0.30 / - 0.30 0.60 0.60
Toyota Corolla	1993 - 2002	X	Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Non Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30
Toyota Corolla	2003 - 2008	X	Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Non Adj.	66 67		- / - 0.30 0.30	Shim	46-1500 ¹	46-1500 ¹	114		0.60 / -
Toyota Corolla	2009 - 2017	X	Magna Cam Axis Cam	Fac Adj. 41-159 ² 41-216	Non Adj.	- 66 67		- / - 0.30 0.30	Shim	46-1500 ¹	46-1500 ¹	114		0.60 / -
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.	66 67		- / - 0.30 0.30	Shim	46-1500 SERIES ¹	Non Adj. 46-1500 SERIES ¹	114		0.60 / - 0.60
Toyota FJ Cruiser	2007 - 2009	X	Cam Bolt	Fac Adj. 44-827	Fac Adj. 44-827	- 91		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Toyota FJ Cruiser	2010 - 2014	X	Cam Bolt	Fac Adj. 44-828	Fac Adj. 44-828	- 91		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Highlander 2WD/4WD	2001 - 2011	X	Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Fac Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	66 67		0.30 / - 0.30
Toyota Highlander 2WD/4WD	2008 - 2017	X	Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Fac Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	41-151 41-217	Fac Adj.	66 67		0.30 / - 0.30
Toyota Land Cruiser	1979 - 2014	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Matrix AWD	2003 - 2013	X	Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	66 67		- / - 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.	66 67		- / - 0.30 0.30	Shim	46-1500 ¹	46-1500 ¹	114		0.60 / -
Toyota MR-2	1985 - 1989	X	Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Fac Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Fac Adj.	- 66 67		- / - 0.30 0.30
Toyota MR-2	1991 - 1995	X	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	66 67		0.30 / - 0.30
Toyota MR2 Spyder	2000 - 2006	X	Magna Cam Axis Cam	41-149 41-215	Non Adj.	66 67		0.30 / - 0.30	Magna Cam Axis Cam	41-149 41-215	Fac Adj.	66 67		0.30 / - 0.30
Toyota Paseo	1992 - 1998	X	Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		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.	-		- / - -	-	Non Adj.	Non Adj.	-		- / -

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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 H R O U G H A L 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 Previa 2WD/4WD	1991 - 1997	X	Magna Cam Wedge Kit Axis Cam	41-151 41-305 41-217	Non Adj.	66 68 67		0.30 / - 0.30 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Prius	2005 - 2009	X	- Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Non Adj.	66 67		- / - 0.30 0.30	Shim	46-1500 ¹	46-1500 ¹	114		0.60 / 0.60
Toyota Prius	2010 - 2017	X	Axis Cam Magna Cam	41-217 41-151	Non Adj.	67 66		0.30 / - 0.30	Shim	46-1500 SERIES ¹	46-1500 SERIES ¹	114		0.60 / 0.60
Toyota Prius	2016 - 2017	X	Axis Cam Magna Cam	41-217 41-151	Non Adj.	67 66		0.30 / - 0.30	Shim	Non Adj.	Fac Adj.	-		- / -
Toyota Prius	2012 - 2015	X	Magna Cam	41-149	Non Adj.	66		0.30 / -	Shim	46-1500 SERIES ¹	46-1500 SERIES ¹	114		0.60 / 0.60
Toyota RAV-4 2WD/4WD	1996 - 2004	X	- Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Non Adj.	66 67		- / - 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.	66 67		- / - 0.30 0.30	- Greaseable Cam Bolt	Fac Adj. 46-432	Fac Adj. 46-432	- 112		- / - 0.30 / 0.30
Toyota RAV-4 2WD/4WD	2006 - 2012	X	- Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	66 67		- / - 0.30 0.30	- Rear Arm Rear Arm	Fac Adj. 46-2236L 46-2236R	Fac Adj. 46-2229	- 9 9		- / - 0.30 / 0.50 0.30
Toyota RAV-4 2WD/4WD / EV	2013 - 2016	X	- Magna Cam Axis Cam	Fac Adj. 41-151 41-217	Non Adj.	66 67		- / - 0.30 0.30	- Rear Arm Rear Arm	Fac Adj. 46-2236L 46-2236R	Fac Adj. 46-2229	- 9 9		- / - 0.30 / 0.50 0.30
Toyota Sequoia 2WD/4WD	2001 - 2007	X	- Cam Bolt	Fac Adj. 44-826	Fac Adj. 44-826	- 91		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Sequoia 2WD/4WD	2008 - 2014	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Sienna 2WD	1998 - 2014	X	Magna Cam Axis Cam	41-151 41-217	Non Adj.	66 67		0.30 / - 0.30	Shim	46-1120 ¹	46-1120 ¹	113		0.60 / -
Toyota Sienna 4WD	1998 - 2014	X	Magna Cam Axis Cam	41-151 41-217	Non Adj.	66 67		0.30 / - 0.30	Shim	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	- -		- / - - / -	-	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 Cam Bolt	CC 44-826	Fac Adj. 44-826	- 91		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Tacoma 2WD/4WD	2005 - 2014	X	Shim Cam Bolt	CC 44-827	Fac Adj. 44-827	- 91		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Tercel FWD	1983 - 1986	X	- Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Fac Adj.	- 66 67		- / - 0.30 0.30	Magna Cam Ball Joint	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - -
Toyota Tercel 4wd	1983 - 1986	X	- Magna Cam Axis Cam	Fac Adj. 41-149 41-215	Fac Adj.	- 66 67		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Toyota Tercel FWD	1987 - 1999	X	Magna Cam Axis Cam	41-149 41-215	Non Adj.	66 67		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.	66 67		0.30 / - 0.30	Axis Cam Magna Cam	41-212 41-147 ³	Fac Adj.	67 66		0.30 / - 0.30
Toyota Tercel Wagon 4wd	1987 - 1988	X	Magna Cam Axis Cam	41-149 41-215	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Tundra 2WD/4WD	2000 - 2006	X	- Cam Bolt	Fac Adj. 44-826	Fac Adj. 44-826	- 91		- / - - / -	-	Non Adj.	Non Adj.	-		- / -
Toyota Tundra 2WD/4WD	2007 - 2016	X	- Greaseable Cam Bolt	Fac Adj. 44-838	Fac Adj. 44-838	- -		- / - 0.30 / 0.30	-	Non Adj.	Non Adj.	-		- / -
Toyota Van 2WD/4WD	1984 - 1989	X	-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non 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
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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 Venza	2009 - 2015	X		Axis Cam Magna Cam	41-217 41-151	Non Adj.	67 66		0.30 / - 0.30	Axis Cam Magna Cam	41-217 41-151	Fac Adj.	67 66		0.30 / - 0.30
Toyota Yaris	2007 - 2017	X		Axis Cam Magna Cam	41-215 41-149	Non Adj.	67 66		0.30 / - 0.30	Shim	46-1500 ¹	46-1500 ¹	114		0.60 / 0.60
VOLKSWAGEN															
Volkswagen Beetle	1998 - 2010	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Volkswagen Cabriolet	1985 - 1993	X		Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	66 67		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen Corrado	1990 - 1995	X		Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	66 67		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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	112 117	88-343	0.60 / 0.60 0.60 / 0.60
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.	66 67		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen Golf & GTI	1985 - 1998	X		Magna Cam Axis Cam Performance Kit	Fac Adj. 41-147 ³ 41-212 41-1450	Non Adj.	66 67 71		- / - 0.30 0.30 -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen Golf & GTI	1999 - 2006	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac 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 Jetta	1980 - 1999	X		Magna Cam Axis Cam Performance Kit	Fac Adj. 41-147 ³ 41-212 41-1450	Non Adj.	66 67 71		- / - 0.30 0.30 -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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 Passat	1990 - 1997	X		Magna Cam Axis Cam Performance Kit	Fac Adj. 41-147 ³ 41-212 41-1450	Non Adj.	66 67 71		- / - 0.30 0.30 -	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen Passat	1998 - 2005	X		- Control Arm W/BJ	Fac Adj. 41-8326- 3	Fac Adj.	77		- / - 0.70	Shim Caliper Shim	46-1500 SERIES ¹ 46-2450A	Fac Adj. 46-1500 SERIES ¹ 46-2450A	114 126		- / - - / - -
Volkswagen Passat	2006 - 2010	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Volkswagen Passat	2011 - 2017	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Volkswagen Quantum	1982 - 1988	X		Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	66 67		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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.	66 67		- / - 0.30 0.30	Shim Shim	46-1000 ¹ 46-2100 ¹	46-1000 ¹ 46-2100 ¹	112 117	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	112 117	88-343	0.60 / 0.60 0.60 / 0.60
Volkswagen Routan	2009 - 2014	X		Axis Cam Magna Cam Ball Joint	41-214 41-157 ² 41-8249	Non Adj.	67 66 73		0.30 / - 0.30 -	-	Non Adj.	Non Adj.	-		- / -
Volkswagen Scirocco	1975 - 1988	X		Magna Cam Wedge Kit	Fac Adj. 41-147 ³ 41-300	Non Adj.	66 68		- / - 0.30 0.30	Shim	46-1000 SERIES ¹	46-1000 ¹ 46-2100 ¹	112	88-343	0.60 / 0.60 0.60
Volkswagen 4WD Touareg	2004 - 2014	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.

- 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 106
- 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 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
Volkswagen Eurovan/Vanagon	1980 - 1991	X		-	Fac Adj.	Fac Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
VOLVO															
Volvo 850 FWD/AWD	1993 - 2002	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	66 67		- / - 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.	121		0.50 / -
Volvo C70	1998 - 2005	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	66 67		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Volvo C70	2006 - 2013	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	121		0.50 / -
Volvo S40/V40	2000 - 2004	X		- Magna Cam Axis Cam	41-147 ³ 41-212	Non Adj.	66 67		0.30 / - 0.30	-	Fac Adj.	Fac Adj.	-		- / -
Volvo S40	2005 - 2011	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	121		0.50 / -
Volvo S60/AWD	2001 - 2009	X		-	Fac Adj.	Non Adj.	-		- / -	-	Non Adj.	Non Adj.	-		- / -
Volvo S70	1998 - 2000	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	66 67		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Volvo S80	1999 - 2010		X	- Magna Cam Axis Cam	41-158 ² 41-214	Non Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Non Adj.	-		- / -
Volvo S90/V90	1998	X		- Magna Cam Axis Cam	41-147 ³ 41-212	Fac Adj.	66 67		0.30 / - 0.30	-	Non Adj.	Fac Adj.	-		- / -
Volvo V50	2005 - 2011	X		-	Non Adj.	Non Adj.	-		- / -	Rear Arm	46-2188	Fac Adj.	121		0.50 / -
Volvo V70	1998 - 2000	X		- Magna Cam Axis Cam	Fac Adj. 41-147 ³ 41-212	Non Adj.	66 67		- / - 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.	66 67		- / - 0.30 0.30	-	Non Adj.	Fac Adj.	-		- / -
Volvo V70	2008 - 2010	X		-	Non Adj.	Non Adj.	-		- / -	-	Non Adj.	Fac Adj.	-		- / -
Volvo XC70	2003 - 2007	X		- Axis Cam	41-214	Non Adj.	67		0.50 / -	-	Fac Adj.	Non Adj.	-		- / -
Volvo XC70	2008 - 2016	X		-	Non Adj.	Non Adj.	-		- / -	-	Fac Adj.	Non Adj.	-		- / -
Volvo XC90	2003 - 2014	X		- Axis Cam Magna Cam	41-214 41-158 ²	Non Adj.	67 66		0.30 / - 0.30	-	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.
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 106
 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

YES. PATENTED RIDE HEIGHT ADJUSTABLE LIFT & LEVELING KITS



PATENTED ON-VEHICLE ADJUSTABLE
FRONT LIFT LEVELING KITS



PATENTED PROGRESSIVE ADJUSTABLE
FRONT LIFT LEVELING KITS



PATENTED TORSION KEY
FRONT LIFT LEVELING KITS



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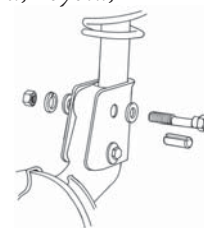
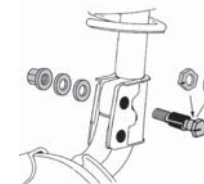
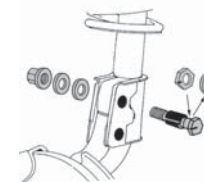
Application Guide see pages 159-160

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NORTHSTAR[®]
MANUFACTURING COMPANY, INC.

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: $\pm 1.75^\circ$ **Quantity:** Pair**Sides Adjusted:** 2FRONT
WHEEL**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 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 <small>With adapter for slotted struts</small>	16mm
41-217	Lexus, Toyota	17mm
NEW 41-218	Acura, Honda	18mm

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

See Application Guide, pages 13-64, 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



FRONT
WHEEL

CAMBER/CASTER ADJUSTABLE BALL JOINTS

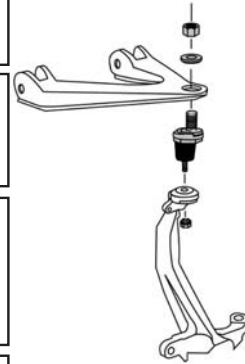


These ball joints provide a fast, easy and adjustable solution to the problem of non-adjustable front suspensions found on many of today's most popular vehicles.

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

See page 131 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>	±.5°
41-230 <i>Upper</i>	<i>Dodge Stratus 1995-2006 Plymouth Breeze 1996-2000 Chrysler Sebring 1996-2010</i>	±1°
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>	±.75°
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>	±1°

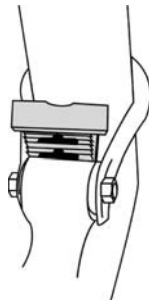


Quantity: 1
Sides Adjusted: 1

41-300

DOMESTIC/IMPORT CAR CAMBER 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

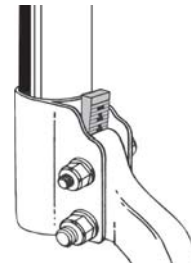
41-301

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

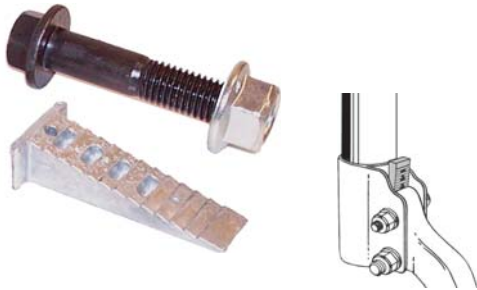
Adjustment Range: +2°
Quantity: Pair
Sides Adjusted: 2

41-307

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.



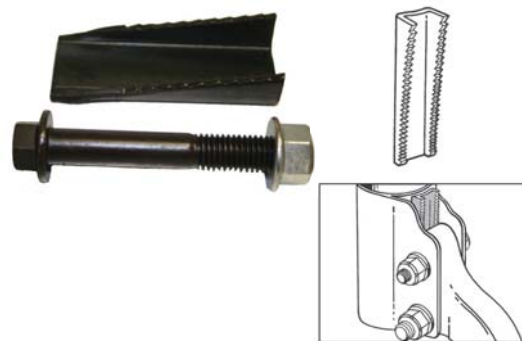
Adjustment Range: +1.5°
Quantity: Pair
Sides Adjusted: 2

41-314

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

FRONT
WHEEL

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

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NORTHSTAR[®]
MANUFACTURING COMPANY, INC.

41-325

41-550

FRONT WHEEL

41-325

CASTER ADJUSTING CAM BOLT KIT *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

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: Pair
Sides Adjusted: 2

CAMBER/CASTER ADJUSTABLE UPPER BALL JOINT

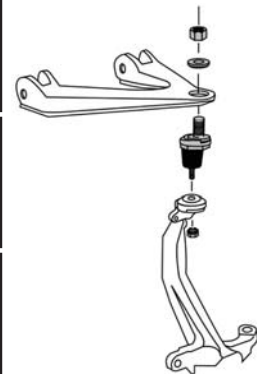
These ball joints provide a fast, easy and adjustable solution to the problem of non-adjustable front suspensions found on many of today's most popular vehicles.

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



See page 131 for adjusting wrench **#88-1304**

Part Number	Make/Model	Range
41-520 41-530	<i>Honda/Acura Many Models, See application guide, pages 13-64 for specific vehicles</i>	$\pm 5^\circ$
41-530 41-532	<i>Honda/Acura Many Models, See application guide, pages 13-64 for specific vehicles</i>	$\pm 1.0^\circ$
41-550	<i>Mitsubishi Eclipse (FWD,AWD), Galant, Chrysler Sebring Coupe, Hyundai Sonata, Dodge Avenger (FWD,AWD), Eagle Talon (FWD,AWD)</i>	$\pm 1.0^\circ$



Quantity: 1 **Sides Adjusted:** 1

41-545

ADJUSTABLE CAMBER FRONT CONTROL ARM MOUNTS WITH RUBBER BUSHING

Acura:

Integra 1990-2001
Vigor 1992-1994
CL 1997-1999
RL 1996-2008
TL 1995-1998

Honda:

Accord 1990-1997
Civic 1988-1995
CRX 1988-1991
Del Sol 1993-1997
Prelude 1992-1996
Odyssey 1995-1998



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

MAGNA CAM DOUBLE ECCENTRIC BOLT McPHEARSON STRUT SUSPENSION

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

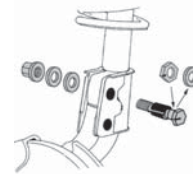
Fast: Simply replace **BOTH** strut mounting bolts with Magna Cams and adjust

Easy: No cutting, drilling or modifications of any kind

Economical: Easy installtion 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: 4
Sides Adjusted: 2

XTRARANGE

41-2001

**“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

41-4601

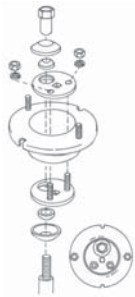
41-4611

FRONT WHEEL

41-4601

ADJUSTABLE CAMBER/CASTER CORRECTION KIT

Ford Escort 1986-1990
Ford EXP 1986-1988
Ford Tempo 1984-1994
Ford Tempo AWD 1987-1992
Mercury Lynx 1986-1987
Mercury Topaz 1984-1994



This kit features fully rotatable discs that are housed in a specially designed upper mounted strut plate. Rotation of these discs allows controlled adjustment of a wide range of caster, camber or combination.

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

ADJUSTABLE FRONT CAMBER/CASTER CORRECTION KIT

41-4603

Taurus/Sable up to 1990

41-4605

Taurus/Sable 1991 to 1995

US Patent # 4,946,188



Adjustment Range: +1.25°
Quantity: Pair
Sides Adjusted: 2

41-4607

ADJUSTABLE FRONT CAMBER CORRECTION KIT

Taurus/Sable 1996-2005

41-4609

Ford Windstar 1995-2003
Ford Freestar 2004-2007
Mercury Mountaineer 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: Pair
Sides Adjusted: 2

41-4611

ADJUSTABLE FRONT CAMBER 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

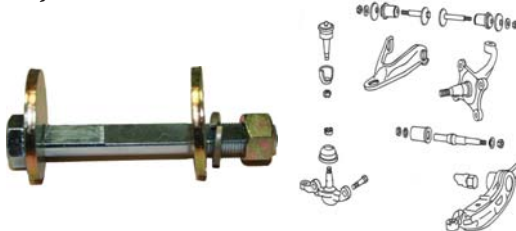
Adjustment Range: +1°
Quantity: Pair
Sides Adjusted: 2

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



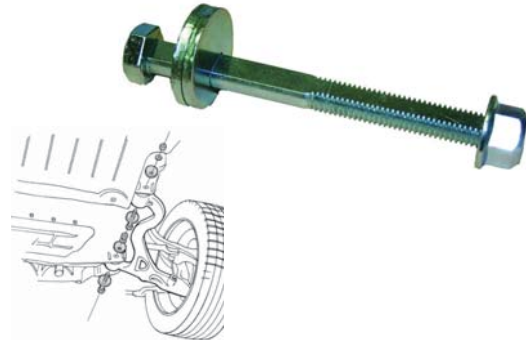
Adjustment Range: $\pm 2.5^\circ$
Quantity: Pair
Sides Adjusted: 2

41-8244

FRONT CAMBER ADJUSTING CAM BOLT

LINCOLN/JAGUAR

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



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

FRONT WHEEL

41-8245

FRONT CAMBER ADJUSTING CAM BOLT

Mid-size Buick, Chevrolet, Oldsmobile, Pontiac

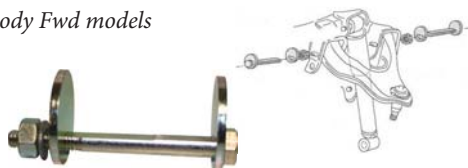
Various mid size Fwd GM vehicles
 1980's - 1990's
 See application guide, pages 13-64 for specific models and years



41-8247

Riviera, Toronado, Eldorado and Seville

E body Fwd models



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

41-8246

FRONT CAMBER ADJUSTING CAM BOLT

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



41-8249

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

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 1992-2000



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

Available in GREASEABLE 41-8272

FRONT WHEEL

41-8256

41-8251

FRONT REPLACEMENT CAM BOLT WITH QUICK CAMS

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 2000-2016
Chevrolet Express Van 2003-2016
Chevrolet Silverado 1999-2016
Chevrolet Suburban 1500 2000-2016
GMC Envoy 2003-2009
GMC Sierra 1999-2016
Youkon XL 2WD 2000-2016
Hummer H2 2003-2009*

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



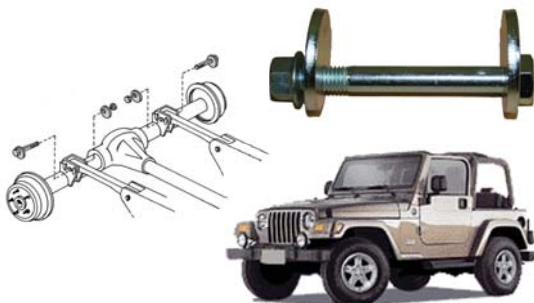
Available in GREASEABLE 41-8262

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 KIT

Makes vehicle fully adjustable for caster and pinion angle.

Jeep:

*Wrangler TJs 1997-2006
Grand Cherokee 1993-1998
Ram Trucks (36mm cams) 1994-1998*



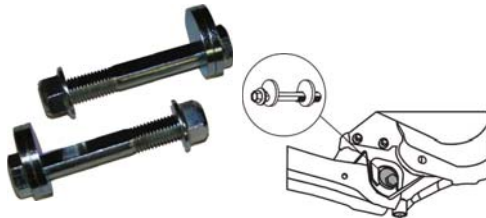
Adjustment Range: $\pm 3^\circ$
Quantity: Pair
Sides Adjusted: 2

41-8257

41-8257

REAR PINION AND FRONT CASTER AND PINION ANGLE ADJUSTER

Jeep Wrangler JK 2007-2016
Buick Enclave 2008-2016
Chevrolet Traverse 2009-2016
GMC Acadia 2wd/4wd 2007-2014
Saturn Outlook 2007-2010



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



41-8264

41-8259

FRONT CAMBER/CASTER ADJUSTING BOLT

Replaces original OE inner bolt on lower control arm.
Chrysler 300C 2004-2016 (RWD)
Dodge Challenger 2008-2016 (RWD)
Dodge Charger 2006-2016 (RWD)

41-8260

Chrysler 300C 2004-2016 (AWD)
Dodge Charger 2009-2015 (AWD)
Dodge Magnum 2005-2008 (AWD)
Dodge Challenger 2008-2016 (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

NEW

41-8262

GREASEABLE FRONT REPLACEMENT CAM BOLT WITH QUICK CAMS

- 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 2000-2016
Chevrolet Express Van 2003-2016
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

NEW

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 side of vehicle)

Mercedes
C-Class W204 2008-2014
CL-Class C216 2007-2014
CLK-Class C209 2003-2009
CLS-Class C218 2012-2014
E-Class W211 2003-2008
GLK-Class X204 2010-2015
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.

Ph: 800-828-0255
 fax: 888-658-6822
 www.Northstarmfg.com



41-8265

41-8321R

NEW

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 side of vehicle)



Mercedes
C-Class W202/S202 1994-2000
CL-Class C215 2000-2006
CLK-Class C208 1998-2002
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

NEW

41-8267 GREASEABLE FRONT 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**



Mazda Miata MX5 2006-2015



Adjustment Range: $\pm 1.0^\circ$
Quantity: 4
Sides Adjusted: 2

41-8321L (LEFT SIDE)

41-8321R (RIGHT SIDE)

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 2005-2008
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

41-8322L

41-8326

NEW

41-8322L (LEFT SIDE)

41-8322R (RIGHT SIDE)

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 2009-2016
Dodge Challenger 2wd 2009-2016
Dodge Charger 2wd 2009-2016

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

NEW

41-8326

ADJUSTABLE CAMBER/CASTER UPPER CONTROL ARM

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



Audi
A4, RS4, S4, A5, S5, Q5 2009 and up
A7, S7 2012 and up
SQ5 2013 and up

Pinch bolt also available separately

41-8326-3

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

NEW

41-8329L (LEFT SIDE)

41-8329R (RIGHT SIDE)

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 2005-2016
Dodge Charger AWD 2005-2016

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

Ph: 800-828-0255

fax: 888-658-6822

www.Northstarmfg.com

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 MANUFACTURING COMPANY, INC.

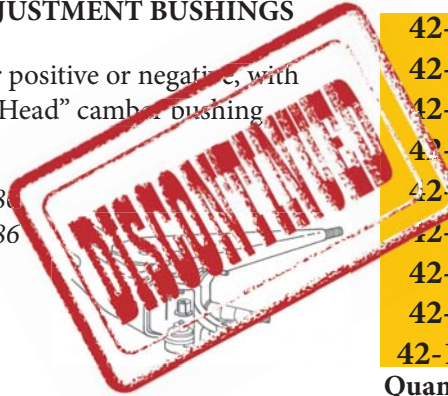


FRONT
WHEEL

FORD CAMBER ADJUSTMENT BUSHINGS

Adjust camber either positive or negative, with easy-to-adjust "Hex-Head" camber bushing

- Bronco II* 1984-1988
- F100/F150* 1982-1986
- F250/F350* 1981-1986
- Ranger* 1983-1988
- 2WD Models**



Adjustment Range:

- 42-101** .25°
- 42-102** .5°
- 42-103** .75°
- 42-104** 1°
- 42-105** 1.25°
- 42-106** 1.5°
- 42-107** 1.75°
- 42-108** 2°
- 42-100A** Assortment - 2 each size



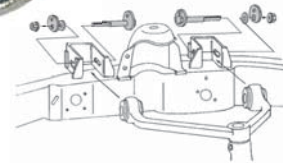
Quantity: Each
Sides Adjusted: 1

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



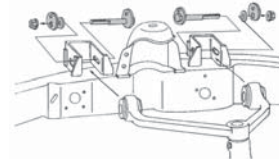
Adjustment Range: ±2.5°
Quantity: Pair
Sides Adjusted: 1

42-778

FRONT CAMBER/CASTER CAM BOLT KIT

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

LIGHT TRUCK

42-950 Series 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/E350/E450 2WD 1992-2016*
- Ford Excursion 2WD 2000-2005*
- Ford Explorer 2WD/4WD 1991-1994*
- Ford F150 2WD 1987-1996*
- Ford F250/F350 2WD 1992-1998*
- Ford F250/F350/F450/F550 Super Duty (TIB) 2WD 1997-2016*
- Ford Ranger 2WD 1989-1991*
- Ford Ranger 2WD/4WD 1992-1997*
- Ford Truck F250/F350 2WD 1987-1991*
- 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°

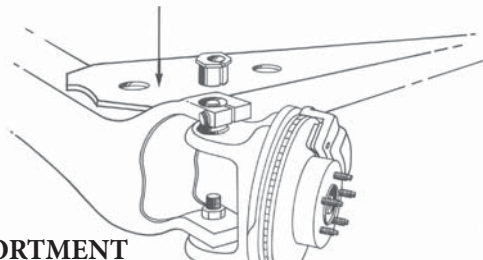


XTRARANGE For positive change only on 2WD applications. On 4WD applications, be sure to check for clearance when installed in negative position

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

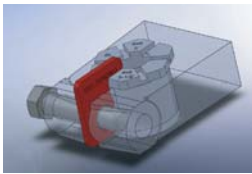
- 42-970 0°
- 42-972 1/2°
- 42-974 1°
- 42-976 1.5°
- 42-978 2°
- 42-980 2.5°
- 42-982 3°

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 1992-2016

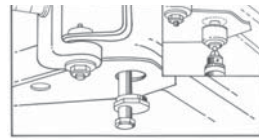


Package Quantity: 1 per package
Sides Adjusted: 1

LIGHT TRUCK

FORD CASTER ADJUSTING CAMS

- 42-4391 *Ranger F150 1992-1997*
- 42-4392 *E150/E250, F250/F350 1992-1997*
- 42-4411 *F150 1990*
- 42-4412 *E250 w/o sway bar, E350 1990-1991
F250/F350 1981-1986*
- 42-4413 *E150 w/sway bar 1980-1991*



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

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

42-4431 FRONT SPRINTER VAN CAMBER SHIM KIT
Makes non-adjustable vehicles fully adjustable for camber

42-4434

- Dodge Sprinter 2002-2006*
- Freightliner Sprinter 2002-2006*
- Mercedes-Benz Sprinter 2004-2008*



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

43-320

43-433

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

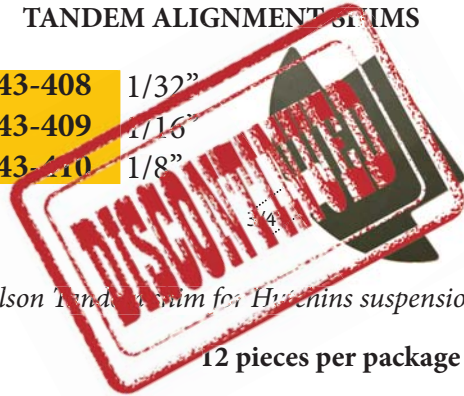


TANDEM ALIGNMENT SHIMS

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

Wilson Tandem Shim for Hendrickson suspension

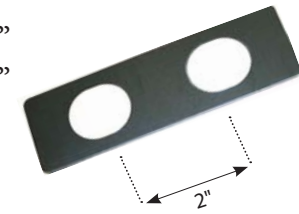
12 pieces per package



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

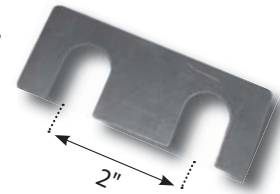
13/16"

12 pieces per package



FREIGHTLINER DOUBLE SLOT ADJUSTMENT SHIMS

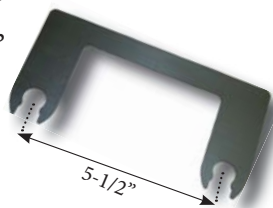
- 43-421 1/32"
- 43-422 1/16"
- 43-423 1/8"



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"



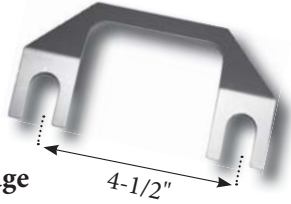
12 pieces per package

HEAVY TRUCK

43-441

IHC TORQUE ARM ADJUSTMENT SHIM

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

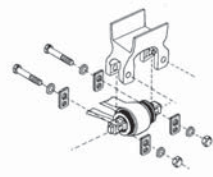


12 pieces per package

43-653

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"

TANDEM ALIGNMENT SHIMS

Kenworth air glide 8-Bagger adjustment spacers

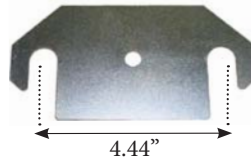
- 43-551 1/4"
- 43-552 1/2"
- 43-553 3/4"
- 43-554 1"



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

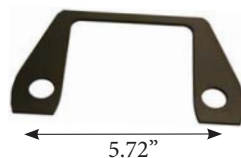
- 43-641 1/32"
- 43-642 1/16"
- 43-643 1/8"



12 pieces per package

PETERBILT/KENWORTH LOW AIR SHIMS

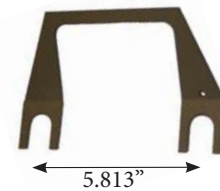
- 43-645 1/32"
- 43-646 1/16"
- 43-647 1/8"



12 pieces per package

INTERNATIONAL TORQUE ARM SHIMS

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

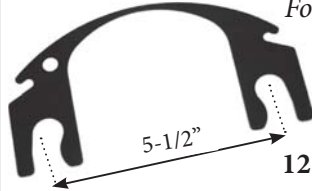


12 pieces per package

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.

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

Includes all of the following shims(shown below)

	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

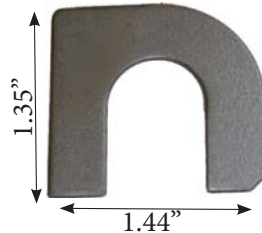


HEAVY TRUCK

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"

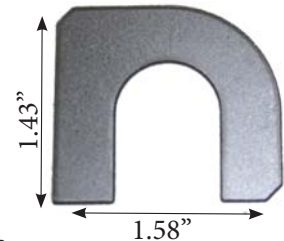


12 pieces per package

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

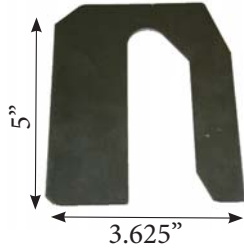
43-711

43-958

PREVOST CASTER SHIMS

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

Slot length: 4.125"
Slot width: 1.25"

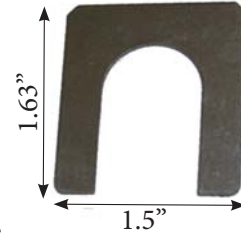


12 pieces per package

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"



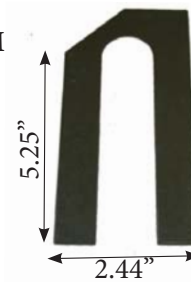
12 pieces per package

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



HEAVY TRUCK

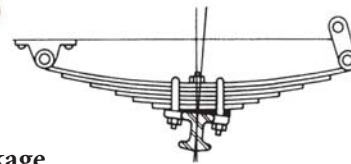
43-950 Series "UNI-WEDGE" 3-IN-1 HEAVY-DUTY ZINC ALLOY CASTER WEDGE

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 package

**MANGANESE BRONZE TRUCK
CASTER WEDGES**

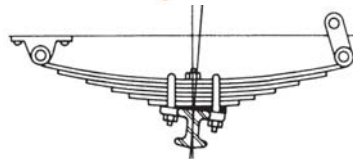
- 6 per package
- Will not break or compress
- Extremely accurate
- Clearly stamped for easy identification
- End-to-end fully 1/16" thicker than competitive products

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

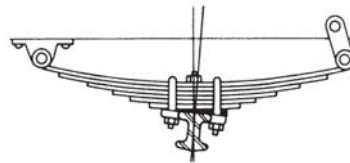
- Accurate and Economical
- 6 per package

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°

HEAVY
TRUCK

44-240

44-240 Series

CASTER SHIMS

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

Jeep Cherokee 1984-1999
Jeep comanche 1986-1994

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



Quantity: 6 Per Package

LIGHT
TRUCK

44-767

44-600 Series

CAMBER/CASTER ADJUSTMENT BUSHINGS

4WD Ford Ranger Through 1989
Bronco II Through 1989

44-599	0°
44-601	0.25°
44-602	0.5°
44-603	0.75°
44-604	1°
44-605	1.25°
44-606	1.5°
44-607	1.75°
44-608	2°
44-600A	Assortment 2 each size

Adjustment Range: See above

Quantity: Each

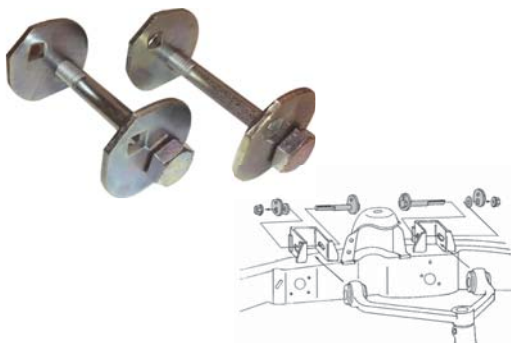
Sides Adjusted: 1

44-766

FRONT CAMBER/CASTER BOLT KIT

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

Ford Explored Sport Trac 4WD 2001-2005
Ford Ranger 2WD/4WD 1998-2011



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 Explored 2WD 1995-2001
Ford Explorer Sport Trac 4WD 2001-2005
Ford Explorer/Explorer Sport 4WD 1995-2001
Ford Ranger 2WD/4WD 1998-2011
Mazda B Series P/U 2WD/4WD 1998-2009
Mercury Mountaineer 2WD/4WD 1997-2001

Adjustment Range: 2.5°

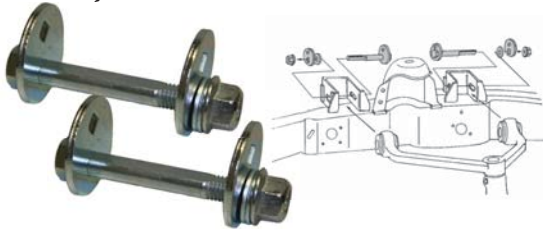
Quantity: Pair

Sides Adjusted: 1

44-768

FRONT CAMBER/CASTER CAM BOLT KIT

Ford Explorer Sport Trac 4WD 2001-2005
Ford Explorer/Explorer Sport 4WD 1995-2001
Ford Explorer 2WD 1995-2001
Ford Ranger 2WD/4WD 1998-2011
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: $\pm 3.25^\circ$

Quantity: Pair

Sides Adjusted: 1

Available in GREASEABLE 44-836

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 $\pm .75^\circ$
 Front Caster $\pm 1.25^\circ$

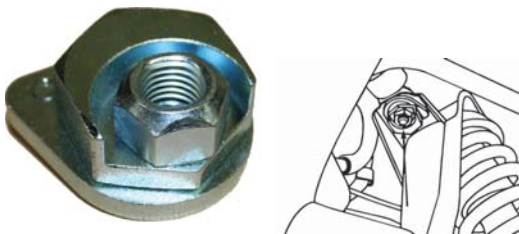
Quantity: 4 Rear Camber $\pm .5^\circ$

44-771

FRONT CAMBER/CASTER 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 $\pm .75^\circ$

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

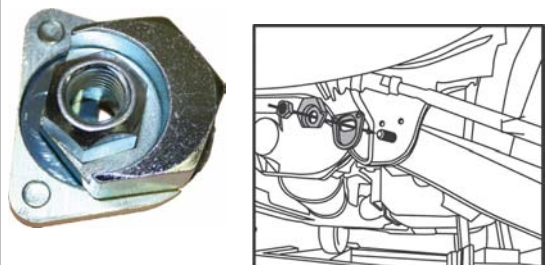
Sides Adjusted: 2

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: $\pm .5^\circ$

Quantity: Set

Sides Adjusted: 2

LIGHT
TRUCK

LIGHT TRUCK

44-775

REAR CAMBER/TOE 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 2005-2016
Pontiac Torrent 2006-2009
Saturn Vue 2007-2009
Suzuki XL7 2007-2009
GMC Terrain 2010-2014
Chevrolet Captiva 2008-2015

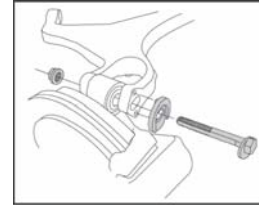


Adjustment Range: $\pm 1^\circ$
Quantity: Pair
Sides Adjusted: 2

44-784

REAR CAMBER CAM BOLT KIT

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



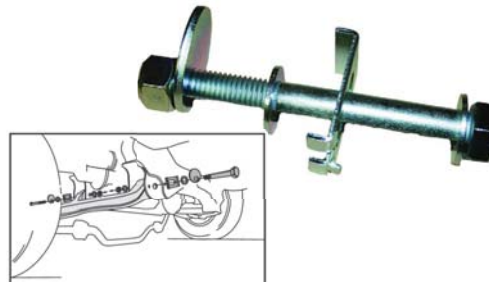
Adjustment Range: Camber $\pm 2^\circ$
Quantity: Set Caster $\pm 1.5^\circ$
Sides Adjusted: 2

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
Lincoln Mark LT 2WD/4WD 2006-2008



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

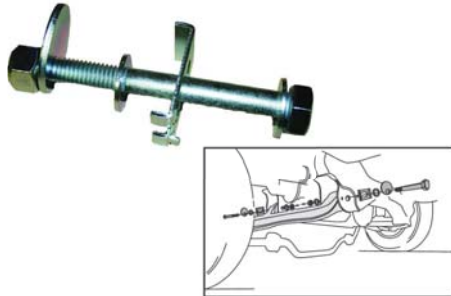
Available in GREASEABLE 44-864

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 2007-2016*
- Ford F150 2WD/4WD 2009-2016*
- Lincoln Navigator 2WD/4WD 2006-2016*



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

44-791

FRONT CAMBER/CASTER ADJUSTMENT KIT

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

- Ford Expedition 2WD/4WD 2007-2016*
- Ford F150 2WD/4WD 2009-2016*
- Lincoln Navigator 2WD/4WD 2006-2016*
- Lincoln Mark LT 2006-2008*

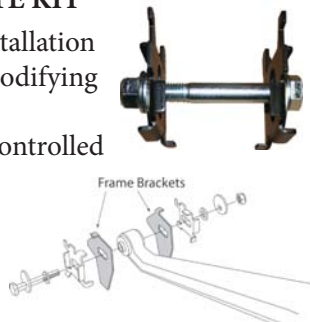


Adjustment Range: Camber $\pm 1^\circ$
Quantity: Kit Caster $\pm 1.5^\circ$
Sides Adjusted: 2

44-792

FRONT CAMBER/CASTER CAM BOLT AND PLATE 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 $\pm .75^\circ$
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 2011-2016*
- Jeep Grand Cherokee 2011-2015*



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

LIGHT TRUCK

44-795

44-795

FRONT CASTER CAM NUT KIT

Designed to provide adjustment where no OE adjustment is available

Dodge Durango 2011-2016
Jeep Grand Cherokee 2011-2015



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

LIGHT
TRUCK

44-824

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 2005-2016
Nissan Frontier 2WD/4WD 2005-2016
Nissan Pathfinder 4WD 2005-2016
Nissan Titan 2WD/4WD 2004-2016
Suzuki Equator 2009-2011



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

Available in GREASEABLE 44-862

NEW

44-823

FRONT CASTER/PINION ANGLE CAM BOLT KIT

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

Dodge Ram HD 2wd 2011-2013
Dodge Ram 2500 4wd 2014-2016
Dodge Ram 3500 2wd 2013-2016
Dodge Ram 3500 4wd 2013-2016



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 KIT

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°
Quantity: Kit Pinion angle $\pm 1^\circ$ - 1.5°
Sides Adjusted: 2

44-825

FRONT GREASEABLE CASTER/PINION ANGLE CAM BOLT KIT

- 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 2014-2016
Dodge Ram 3500 2wd 2013-2016
Dodge Ram 3500 4wd 2013-2016



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

44-826

FRONT GREASEABLE CAMBER/CASTER CAM BOLT KIT

- 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: Kit
Sides Adjusted: 2

LIGHT TRUCK

44-827

FRONT GREASEABLE CAMBER/CASTER CAM BOLT KIT

- 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: Kit
Sides Adjusted: 2

44-828

FRONT GREASEABLE CAMBER/CASTER CAM BOLT KIT

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

Toyota 4-Runner 2010-2016
Toyota FJ Cruiser 2010-2016
Lexus GX 2010-2016



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

44-831

44-835

44-831

FRONT REPLACEMENT **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 2011-2016
GMC Sierra 2500HD 2011-2016



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

NEW

44-832

FRONT REPLACEMENT 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 2011-2016
GMC Sierra 2500HD 2011-2016



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

Available in **GREASEABLE 44-831**

LIGHT TRUCK

44-834

FRONT REPLACEMENT **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

NEW

44-835

FRONT REPLACEMENT 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

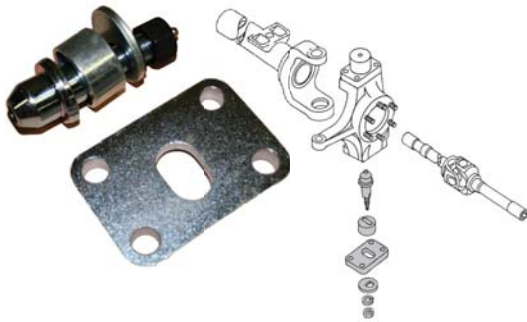
Available in **GREASEABLE 44-834**

44-910

44-910 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: $\pm 3^\circ$
Quantity: Each

44-2489

44-2460 FRONT CAMBER/CASTER ADJUSTMENT BUSHING

GM, DODGE, JEEP (through 1993)
FORD (through 1979)

44-2461	2.5°
44-2462	3.5°
44-2463	4.5°
44-2464	5.5°
44-2465	1.25°
44-2466	1.5°
44-2469-6*	(6 pieces) Low Profile Castle Nut

*Necessary in some higher degree applications for proper clearance

Adjustment Range: see above
Quantity: Each
Sides Adjusted: 1

44-2480 JEEP CAMBER ADJUSTING BUSHING

1984-1989

The positive locking feature of this improved design allows safe, trouble-free installation.

44-2481	2.5°
44-2482	3.5°
44-2483	4.5°
44-2484	5.5°
44-2485	1.25°
44-2486	1.5°

Adjustment Range: see above
Quantity: Each
Sides Adjusted: 1

44-2489 ADJUSTABLE UPPER CAMBER/CASTER BALL JOINT

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

Dodge 1500 4x4 and 4x2 2006-2016



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



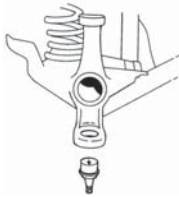
LIGHT TRUCK

44-2490

44-2490

ADJUSTABLE LOWER CAMBER/CASTER 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 2007-2016



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

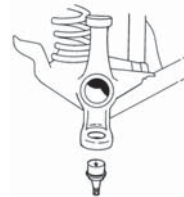
LIGHT
TRUCK

44-2493

44-2491

ADJUSTABLE LOWER CAMBER/CASTER BALL JOINT

Jeep Grand Cherokee 1999-2004



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

44-2492

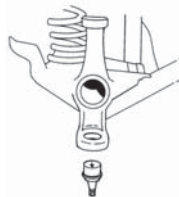
ADJUSTABLE LOWER CAMBER/CASTER BALL JOINT

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

ADJUSTABLE UPPER CAMBER/CASTER BALL JOINT

Jeep Commander 2006-2010

Jeep Grand Cherokee 2005-2010



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

44-2494

44-2494

ADJUSTABLE LOWER CAMBER/CASTER 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

44-2497

44-2495

ADJUSTABLE UPPER CAMBER/CASTER 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 2011-2016



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

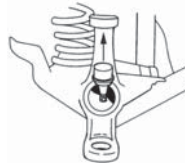
44-2496

ADJUSTABLE UPPER CAMBER BALL JOINT

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

Dodge Ram 2500/3500 4WD 2000-2002

Dodge Ram 2500-3500 4WD 2003-2005
(old body style)



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



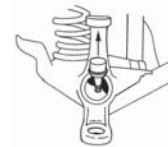
44-2497

ADJUSTABLE UPPER CAMBER BALL JOINT

Dodge Ram 2500/3500 4wd 2003-2016

Dodge Ram 2500/3500 2wd 2003-2010

- **GREASEABLE**



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

LIGHT
TRUCK

44-2498

44-2498

ADJUSTABLE UPPER CAMBER/CASTER BALL JOINT

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



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



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

LIGHT
TRUCK

44-2507

44-2499

ADJUSTABLE UPPER CAMBER/CASTER BALL JOINT

- Allows for front positive or negative adjustments
- **GREASEABLE**

Chevrolet Silverado 1500 1999-2006
GMC Sierra 1999-2006
Gm Express Van 2003-2016



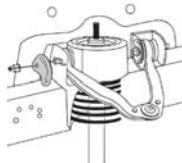
Adjustment Range: $\pm 3^\circ$
Quantity: Each
Sides Adjusted: 1

44-2506

FRONT CAMBER/CASTER QUICK CAM

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

Chevrolet Suburban 2WD/4WD 2000-2016
Chevrolet Tahoe 2WD/4WD 2000-2016
GMC Yukon 2WD/4WD 2000-2016
Chevrolet Express Van 2WD 2000-2016
Chevrolet Express VAN 4WD 2003-2016
Chevrolet Silverado HD
1500/2500/3500 2WD/4WD 2003-2016
GMC 2WD Savana Van 2001-2016



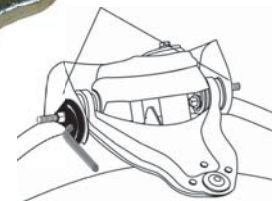
Adjustment Range: $\pm 1.5^\circ$
Quantity: Pair
Sides Adjusted: 2

44-2507

FRONT CAMBER/CASTER QUICK CAM

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: 4
Sides Adjusted: 2

44-2508 FRONT ALIGNMENT CAM GUIDE PIN

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

- Chevrolet Suburban 2WD/4WD 2000-2016*
- Chevrolet Tahoe 2WD/4WD 2000-2016*
- GMC Yukon 2WD/4WD 2000-2016*
- Chevrolet Express Van 2WD 2000-2016*
- Chevrolet Express Van 4WD 2003-2016*
- Chevrolet Silverado/GMC Sierra 1500/2500/3500 2WD/4WD 1999-2016*
- GMC 2WD Savana Van 2001-2016*
- Chevrolet Silverado/GMC Sierra 2500/3500 1999-2013*



Quantity: 12

44-2509 UPPER CONTROL ARM OFFSET CAMBER BUSHINGS

1/2 Ton Models - Forged Arm

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

- 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: $\pm 1^\circ$

Quantity: Kit

Sides Adjusted: 2

LIGHT TRUCK

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 2007-2013*
- Chevrolet Silverado HD 2001-2011*
- Chevrolet Silverado HD 2500 1999-2010*
- Chevrolet Suburban 2500 HD 2WD/4WD 2000-2010*
- GMC Sierra HD 2007-2010*
- GMC Yukon XL 2500 HD 2WD/4WD 2000-2010*



Adjustment Range: $\pm 1^\circ$

Quantity: Kit

Sides Adjusted: 2

44-2512

44-2542

NEW

44-2512

FRONT ALIGNMENT GUIDE PIN

- Fast and easy replacement of damaged or broken guide pins

*Chevrolet GMC 2WD/4WD 2011-2016 (upper control arm)
2500HD, 3500HD, 4500*

Chevrolet Colorado/GMC Canyon 2WD/4WD 2015-2016 (lower control arm)



Quantity: 12

LIGHT TRUCK

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

NEW

44-2535

Jeep Wrangler JK 2007-2016



NEW

44-2540

Ram 2500 2014

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



NEW

44-2542

Ram 2500 2014-2016

Ram 3500 2013-2016 (Build date After 11/4/13)

Quantity: 1 per vehicle

44-2610

44-2725

44-2610 ADJUSTABLE UPPER CAMBER/CASTER BALL JOINT

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



*Dodge Truck 4500/5500
2WD/4WD 2008-2016*



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

NEW

**44-2720L (LEFT SIDE) UPPER CONTROL ARM WITH
44-2720R (RIGHT SIDE) ADJUSTABLE CAMBER/CASTER
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 2011-2016
Jeep Grand Cherokee 2011-2015*



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

LIGHT
TRUCK

NEW

**44-2725 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 side of vehicle



*Chevrolet 1500 Pickups/SUVs LD 2WD/4WD 1999-2006
GMC 1500 Pickups/SUVs LD 2WD/4WD 1999-2006
GM Express vans 2003-2016*

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

Ph: 800-828-0255
fax: 888-658-6822
www.Northstarmfg.com



44-2726

44-2728

NEW

44-2726L (LEFT SIDE)

**UPPER CONTROL ARM WITH ADJUSTABLE CAMBER/
CASTER BALL JOINT**

44-2726R (RIGHT SIDE)

- 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 2007-2016
GMC 1500 Pickups/SUVs LD 2WD/4WD 2007-2016



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

NEW

44-2727

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 2011-2016
GMC Sierra 2500HD/3500 2011-2016



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

**LIGHT
TRUCK**

NEW

44-2728L (LEFT SIDE)

**UPPER ALUMINUM CONTROL ARM WITH
ADJUSTABLE CAMBER/CASTER BALL JOINT**

44-2728R (RIGHT SIDE)

- 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 2015-2016*



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

44-2730

44-5011

NEW

44-2730

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 2001-2010
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

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°
- 44-5001** .25°
- 44-5002** .5°
- 44-5003** .75°
- 44-5004** 1°
- 44-5005** 1.25°
- 44-5006** 1.5°
- 44-5007** 1.75°
- 44-5008** 2°

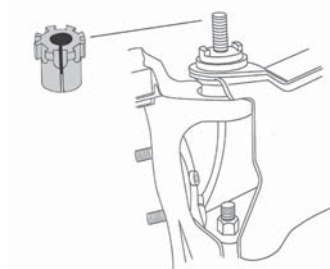
1 Per Package

44-5000A

XTRARANGE

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

Ford F150/F250 4X4 1980-1996
Ford F350 4X4 1992-2002
Ford Super Duty 1998-2004
Ford Excursion 4WD 2000-2004
Dodge Ram 2500/3500 2WD 1994-1999
Dodge Ram 2500/3500 4WD 1994-2002



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

LIGHT TRUCK

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 fax: 888-658-6822
 www.Northstarmfg.com

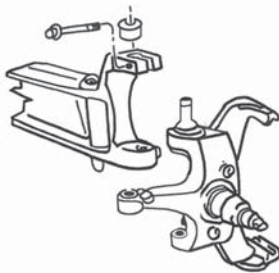


44-5032

44-5036

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

44-5036

44-5037

44-5094

LIGHT TRUCK

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 2005-2016

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



ADJUSTABLE

Patent No. US 7,331,589 B2

44-5037

44-6011

44-5037



Ford F450/F550 4x4/4x2 2005-2016
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 1990-1994
Ford Ranger 4x4/4x2 1990-1997
Ford F150/F250/F350 4x2 1987-1996
Ford Econoline Van 1992-2011
Ford Excursion 4x2 2000-2005
Ford F250, F350, F450, F550
Super Duty 4x2 1997-2016
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

CAMBER/CASTER ADJUSTMENT BUSHINGS

- 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

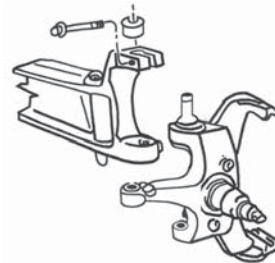
Ford F250/F350 4x4 2005-2016

- 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°

44-6000A Assortment -2 Each Size



1 Per Package



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44-6020

44-9413

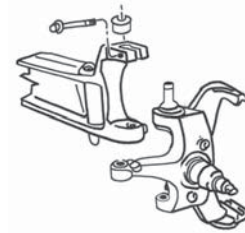
44-6020 Series

CAMBER/CASTER ADJUSTMENT BUSHINGS

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

- 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°
- 44-6020A Assortment -2 Each Size

Ford F450/F550 4x4/4x2 2005-2016
Chevrolet Kodiak 4x4 2005-2009
GMC TopKick 4/4 2005-2009



LIGHT TRUCK

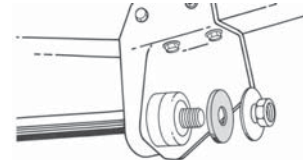
44-9410

RADIUS ARM BUSHING STABILIZER



Eliminates vehicle wandering by firming up stock rubber radius arm or strut rod bushing.

Quantity: Pair
Sides Adjusted: 2



44-9412

CASTER ADJUSTMENT BUSHINGS

- Ford Bronco II 2WD 1983-1990*
- Ford Ranger 1983-1997*
- Ford F100/F150 1981-1996*
- Ford Bronco 1980-1996*
- Ford F250 1980-1996*
- Ford Bronco II 1984-1990*
- Ford Explorer 1991-1994*
- Mazda Navajo 2WD/4WD 1991-1994*

Eliminates vehicle wandering by firming up stock rubber radius arm or strut rod bushing. Allows caster adjustment at rear of radius arm



Quantity: Set
Sides Adjusted: 2

44-9413

- Ford Ranger/Explorer 2WD/4WD 1987-Newer*
- Ford Ranger/Explorer with Twin I-Beam suspensions through 1997*

45-100

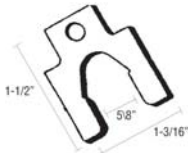
45-604

45-100

US

US SERIES CAMBER/CASTER SHIM

- 45-101** 1/64" Universal shim covers a range of bolt sizes up to 5/8" diameter
- 45-102** 1/32"
- 45-103** 1/16"
- 45-104** 1/8"



100 pieces per package

45-200

BOC

US SERIES CAMBER/CASTER SHIM

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



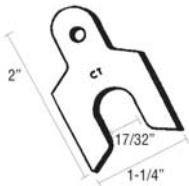
100 pieces per package

45-300

CT

X SERIES CAMBER/CASTER SHIM

- 45-301** 1/64" Chevrolet 1/2 ton Truck
- 45-302** 1/32" GMC 1/2 ton Truck
- 45-303** 1/16" Ford passenger cars
- 45-304** 1/8"



100 pieces per package

45-351

UPDATED

CAMBER/CASTER PASSENGER AND LIGHT TRUCK SHIM ASSORTMENT

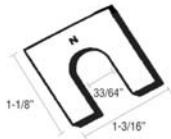


350 Pieces

45-500

N SERIES CAMBER/CASTER SHIM

- 45-501** 1/64" Late model RWD
- 45-502** 1/32" General Motors
- 45-503** 1/16"
- 45-504** 1/8"

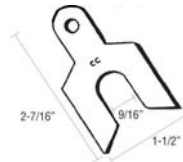


100 pieces per package

45-600

CC SERIES CAMBER/CASTER SHIM

- 45-601** 1/64" Chevrolet 3/4 and 1 ton Truck
- 45-602** 1/32"
- 45-603** 1/16" GMC 3/4 and 1 ton Truck
- 45-604** 1/8"



100 pieces per package

FRONT WHEEL

45-6001

45-7019

FRONT
WHEEL

45-6001 1/16"

CASTER ADJUSTMENT SPACERS

For Toyota models with stabilizer bushings at lower control arm

45-6002 1/8"



12 Per Box

45-6005 1/16"

CASTER ADJUSTMENT SPACERS

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

45-7010

FRONT CAMBER SHIM SERIES

For W body vehicles with 10.5 rotors with or without ABS brake systems.

45-7013 1/64"

45-7015 1/32"

45-7017 1/16"

45-7019 1/8"

Buick Regal 1988-1996
Chevrolet Lumina 1990-2001
Chevrolet Monte Carlo 1995-1999
Pontiac Grand Prix 1988-1996
Oldsmobile Cutlss Supreme 1988-1997



Contains 1 shim and mounting hardware. **45-7013** requires no hardware

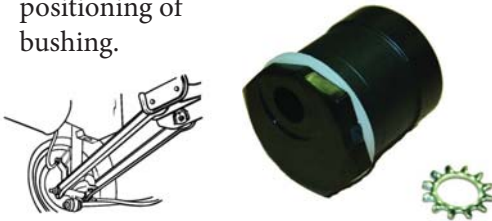
45-7010A ASSORTMENT (2 each side)

Quantity: Each
 Sides Adjusted: 1

46-131

REAR CAMBER/TOE BUSHING

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



Ford Taurus Sedan 1986-2004
Lincoln Continental 1988-1994
Mercury Sable Sedan 1986-2005

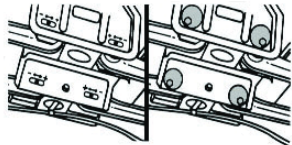
Adjustment Range: Camber 2°
Quantity: Pair Toe 1.5° (3/4")
Sides Adjusted: 2

46-132

REAR CAMBER ADJUSTING CAM BOLT

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

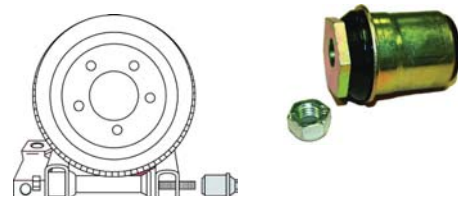
Adjustment Range: 2.25°
Quantity: Pair
Sides Adjusted: 2



46-133

REAR TOE ADJUSTING KIT

Adjustable rear toe bushing kit with eccentric adjusting cam replaces the "frozen" factory toe units on Taurus and Sable station wagons. This kit is easy to install and does not require "frozen" spindle bolt to be removed.



Ford Taurus Wagon 1986-1995
Mercury Sable Wagon 1986-1995

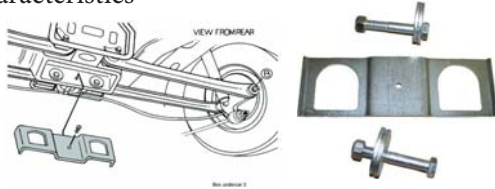
Adjustment Range: Toe 1.5°(3/4")
Quantity: Kit
Sides Adjusted: 2

46-134

46-134

ADJUSTABLE 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 1996-2004
Mercury Sable Sedan 1996-2005

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

46-141

46-135

ADJUSTABLE REAR CAMBER CAM BOLT

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

Ford Freestyle 4x2 2005-2008
Taurus X 2009-2010
Taurus 4x2 2009-2010
Ford Five Hundred 4x2 2005-2008



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

46-136

ADJUSTING REAR CAMBER CAM BOLT

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

Ford Taurus Wagon 1986-2004
Mercury Sable Wagon 1986-2005



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

46-141

ADJUSTABLE REAR CAMBER/TOE CAM BOLT

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

Infiniti G37 2008-2013
Infiniti G35 2006-2008
Nissan 370 Z 2009-2016



Adjustment Range: ±3°
Quantity: Kit
Sides Adjusted: 2

REAR
WHEEL

46-143

ADJUSTABLE 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: 1

46-162

ADJUSTABLE REAR CAMBER BUSHINGS

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

Chrysler 300 2005-2016
Dodge Magnum 2005-2008
Dodge Charger 2006-2015
Chrysler Pacifica 2004-2008



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

NEW

46-164

ADJUSTABLE REAR CAMBER/TOE CAM

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

Infiniti G35 Coupe 2003-2007
Infiniti G35 Sedan 2003-2006
Nissan Altima 2007-2015
Nissan Altima 350Z 2003-2008
Nissan Maxima 2004-2014



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

NEW

46-166

ADJUSTABLE REAR CAMBER/TOE CAM

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

Hyundai Santa Fe 2001-2006



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

REAR WHEEL

46-182

ADJUSTABLE 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 2014-2015
Chevrolet Camaro 2010-2016
Chevrolet Caprice 2012-2016
Pontiac G8 2008-2009



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

46-201

FRONT CAMBER ADJUSTMENT WEDGE KIT

Also allows adjustment on future alignments.

Ford Escort 1981-1996
Ford EXP 1982-1988
Ford Tempo 1984-1994
Ford Tempo AWD 1987-1992
Mercury LN7 1982-1983
Mercury Lynx 1981-1994



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

46-205

REAR TOE ADJUSTMENT BUSHING KIT

Designed to replace factory non-adjustable bushing on left rear stabilizer arm. Factory provides toe adjustment on right rear only.

Ford Escort 1991-2002
Mercury Capri 1991-1994
Mercury Tracer 1987-1995



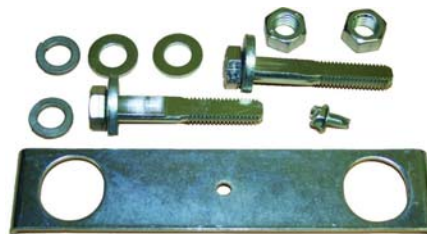
Adjustment Range: 2° (1")
Quantity: Kit
Sides Adjusted: 1

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: Each
Sides Adjusted: 1

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

Tools Available:
88-7996A
SEE PAGE 139



Buick Enclave 2008-2016
Chevrolet Traverse 2008-2016
GMC Acadia 2007-2014
Saturn Outlook 2007-2010



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

NEW

46-425

Chevrolet Malibu 2004-2012
Pontiac G6 2005-2010
Saab 9-3 2003-2011
Saturn Aura 2007-2009

Toe or Camber

Camber

NEW

46-426

Toe

NEW

46-427

Buick Lacrosse (Non Hyper Strut) 2010-2016
Buick Regal(Non Hyper Strut) 2008-2016
Saab 9-5 2010-2012

Camber

NEW

46-428

Chevrolet Malibu 2012-2016
Cadillac XTS (Non Hyper Strut) 2012-2016
Chevrolet Impala 2013-2016

Toe



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

REAR WHEEL

46-431

NEW

46-431

GREASEABLE REPLACEMENT REAR TOE CAM BOLT KIT

- **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
 Outback 2000-2009
 Baja 2003-2006
 Tribeca 2006-2010



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

46-1000

NEW

46-432 REAR CAMBER TOW KIT

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

46-916

GM REAR SPINDLE (HUB AND BEARING) REPLACEMENT SOCKET HEAD CAP SCREWS

Quantity: 16



These high-strength socket head cap screws are 5 mm longer than the torx bolt they replace. Ideal for rear shim installation.

REAR WHEEL

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°

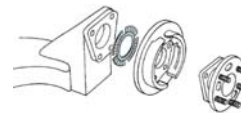
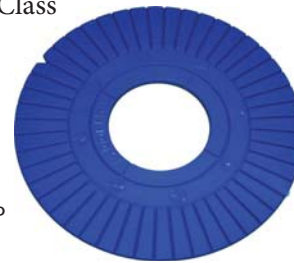
46-1003 .75°

46-1004 1°

46-1005 1.25°

46-1006 1.5°

46-1000A Assortment - 2 each size

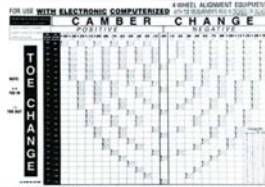


46-1030

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

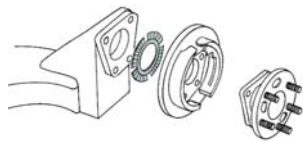


46-1120 Series

REAR FULL CONTACT CAMBER/TOE SHIM (GREEN)

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

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



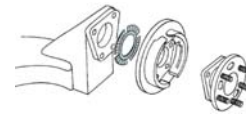
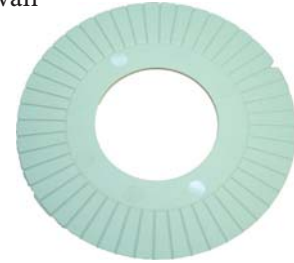
46-1206

46-1100 Series

REAR FULL CONTACT CAMBER/TOE SHIM (WHITE)

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

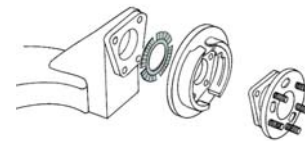
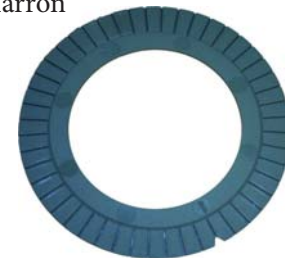


46-1200 Series

REAR FULL CONTACT CAMBER/TOE SHIM (GREY)

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

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



REAR
WHEEL

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46-1301

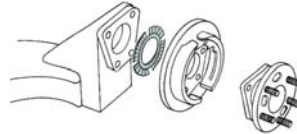
46-1520

46-1300 Series

REAR FULL CONTACT CAMBER/TOE SHIM (BURGUNDY)

- 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

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

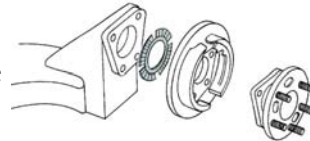


46-1500 Series

REAR FULL CONTACT CAMBER/TOE SHIM (BLACK)

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

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



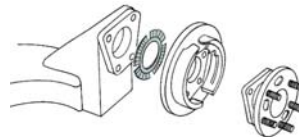
REAR
WHEEL

46-1520 Series

REAR FULL CONTACT CAMBER/TOE SHIM (BROWN)

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

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



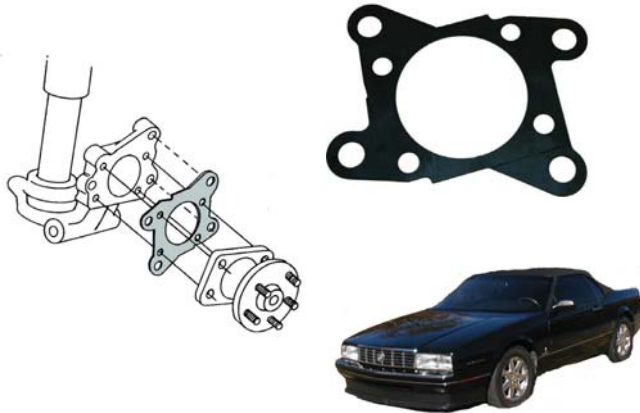
46-1600 Series**GM E & K BODY REAR CAMBER SHIM**

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}****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

REAR
WHEEL

46-1707

NEW

46-1707

REAR CAMBER AXIS CAM BOLT KIT

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

Hyundai Entourage 2007-2009

Kia Sedona 2006-2016



Adjustment Range: $\pm 75^\circ$
Quantity: Pair
Sides Adjusted: 2

46-2000

NEW

46-1709

REAR CAMBER AXIS CAM BOLT KIT

This kit replaces the outer bolt of the upper rear control arm and provides $\pm 75^\circ$ of camber adjustment. Perfect for lowered vehicles or standard alignments.

Ford Taurus 2010-2016



Adjustment Range: $\pm 75^\circ$
Quantity: Pair
Sides Adjusted: 2

**REAR
WHEEL**

46-1900 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 1998-2010

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	Burgandy Shim
88-343	1	Tab Cutting Tool
46-1035	1	Paint Stick
46-2000AB	Assortment Above, Plus Wall Board	



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 Gray

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



46-2200 White

Audi, Plymouth, Chrysler, Dodge, Honda, Mercury



46-2400 Burgandy

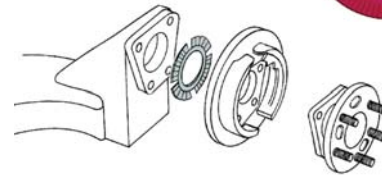
Buick, Cadillac, Chevrolet, Oldsmobile, Pontiac, Toyota



Adjustment Range: 0° to 1.5°

Quantity: Each

Sides Adjusted: 1



46-1050

SYSTEM 2000 INDEXING SLIDE CHART

Use this plastic slide chart to display shim indexing numbers by simply pulling slide until desired changes show in toe and camber windows.



46-2160

XTRA RANGE REAR CAMBER SHIM KIT

- Acura 2.2CL, 2.3CL, 3.0CL 1997-2003*
- 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: Each

Sides Adjusted: 1

REAR WHEEL

46-2170

XTRA RANGE REAR 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:** Each**Sides Adjusted:** 1

46-2174

ADJUSTABLE REAR TOE
ARM WITH CAM BOLT

- 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 2007-2016*Dodge Caliber* 2007-2012*Jeep Compass* 2007-2016**Adjustment Range:** ±1.5°**Quantity:** Each**Sides Adjusted:** 1

46-2175

ADJUSTABLE REAR 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°**Quantity:** Each**Sides Adjusted:** 1

46-2176

ADJUSTABLE REAR 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 2011-2016*Dodge Avenger* 2011-2014*Dodge Journey* 2011-2016**Adjustment Range:** ±4°**Quantity:** Each**Sides Adjusted:** 1

46-2177

ADJUSTABLE REAR **GREASEABLE** TOE ARM

• Allows for positive or negative rear toe adjustment where no OE adjustments are available.

• **GREASEABLE**

- Subaru Impreza* 2008-2016
- Subaru Forester* 2009-2016
- Subaru Legacy* 2010-2016
- Subaru Outback* 2010-2016
- Scion FR-s* 2013-2016



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



46-2178

ADJUSTABLE 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* 2007-2016
- Jeep Patriot* 2007-2016



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

46-2179

ADJUSTABLE 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

ADJUSTABLE 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: -2° to $+3^\circ$
 Quantity: Each
 Sides Adjusted: 1

REAR WHEEL

46-2181

46-2181

ADJUSTABLE 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**

Acura 3.2CL 1998-2004
Acura 3.2TL 1999-2003
Acura 3.5RL 1996-2008
Honda Accord 1998-2002



Adjustment Range: -2° to +4°
Quantity: Each
Sides Adjusted: 1

46-2184

46-2182

ADJUSTABLE REAR 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
Acura Integra 1990-2001



Adjustment Range: -2° to +5°
Quantity: Each
Sides Adjusted: 1

NEW

46-2183

ADJUSTABLE REAR TOE ARM

- Replacement for damaged or frozen OE toe arm
- Provides adjustment beyond the OE adjustment
- Works with 46-2184 adjustable camber arm

Acura TL, TSX 2009-2016
Honda Accord 2008-2016
Honda Crosstour 2010-2016



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

46-2184

ADJUSTABLE REAR CAMBER ARM

Allows for positive or negative rear camber adjustment where no OE adjustments are available.

Honda Accord 2008-2016
Acura TL, TSX 2009-2014



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

**REAR
WHEEL**

46-2185

46-2185

ADJUSTABLE REAR CAMBER LINK

Allows for positive or negative camber adjustment where no OE adjustments are available.

Honda CRV 2001-2006
Honda Element 2003-2011



Adjustment Range: -2° to +3°
Quantity: Each
Sides Adjusted: 1

46-2188

46-2186

ADJUSTABLE REAR CAMBER ARM

Allows for positive or negative camber adjustment where no OE adjustments are available.

Honda CRV 2007-2016



Adjustment Range: -2° to +3°
Quantity: Each
Sides Adjusted: 1

46-2187

ADJUSTABLE ALUMINUM REAR CAMBER ARM

Allows for positive or negative camber adjustment where no OE adjustments are available.

Acura CSX 2006-2011
Acura ILX 2013-2016
Honda Civic 2006-2016
Honda Civic Hybrid 2006-2016



Adjustment Range: -4° to +2°
Quantity: Each
Sides Adjusted: 1

46-2188

ADJUSTABLE REAR CAMBER ARM

This kit allows for rear camber adjustment with fast and easy on-vehicle replacement.

Ford Escape 2013-2016
Ford C-Max 2013-2016
Ford Focus 2000-2016
Lincoln MKC 2015-2016
Mazda 3 2004-2014
Mazda 5 2006-2014
Volvo C30 2008-2013
Volvo S40 2005-2011
Volvo V50 2005-2011



Adjustment Range: -1.5° to +3°
Quantity: Each
Sides Adjusted: 1

REAR
WHEEL

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46-2189

46-2189

ADJUSTABLE 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 $\pm 2^\circ$, Toe $\pm 2^\circ$
Quantity: Kit
Sides Adjusted: 1

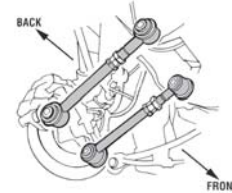
46-2194

46-2190

ADJUSTABLE 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 $+3^\circ$
Quantity: Pair
Sides Adjusted: 1

46-2191

ADJUSTABLE 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 2005-2016



Adjustment Range: -2° to $+4^\circ$
Quantity: Each
Sides Adjusted: 1

46-2192

ADJUSTABLE 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



46-2194

- Quick and easy replacement of non-adjustable OEM arm
- Turn Buckle design allows accurate controlled adjustments
- Allows for continuous future adjustments
- **GREASEABLE**

Honda Odyssey Touring Elite 2005-2016



Adjustment Range: -2° to $+4^\circ$
Quantity: Each
Sides Adjusted: 1

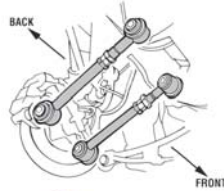
REAR
WHEEL

46-2195

ADJUSTABLE 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 3.5 TL 1996-2008
Acura TSX 2004-2008
Acura 3.5 RL 2003-2004



Adjustment Range: -1.5° to +3°
Quantity: Pair
Sides Adjusted: 1

46-2196

ADJUSTABLE REAR GREASEABLE CAMBER ARM

- Allows for rear camber adjustments where no OE adjustments are available
- **GREASEABLE** design for longer life

Acura MDX 2007-2013
Honda Pilot 2009-2015



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

46-2199

ADJUSTABLE 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 G35 2003-2008
Nissan Altima 2007-2015
Nissan Maxima 2004-2014
Nissan 350Z 2003-2008



Adjustment Range: Camber ±3°, Toe ±2°
Quantity: Kit
Sides Adjusted: 1

46-2226

ADJUSTABLE 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



Adjustment Range: ±1.5°
Quantity: Each
Sides Adjusted: 1

REAR WHEEL

46-2227

ADJUSTABLE 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 2013-2016
Lincoln MXZ 2013-2016



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

NEW

46-2228

ADJUSTABLE 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 G25 2011-2012
Infiniti G37 Coupe Active steer 2008-2013
Infiniti G37 Sedan 2009-2013
Infiniti M35/M45 2006-2010



Adjustment Range: Camber $\pm 3^\circ$ Toe $\pm 2^\circ$
Quantity: Each
Sides Adjusted: 1

NEW

46-2229

ADJUSTABLE 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 2006-2012
Toyota Vanguard 2007-2012 (Asia)



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

NEW

46-2231

ADJUSTABLE 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



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

REAR WHEEL

46-2232

46-2236R

NEW

46-2232

ADJUSTABLE UPPER REAR 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 IS 2014-2016
Lexus GS 2013-2016
Lexus RC 2015-2016



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

NEW

46-2234

ADJUSTABLE REAR LATERAL LINK

- 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 TL, TSX 2009 and up
Honda Accord 2008 and up
Honda Crosstour 2010-2012



Adjustment Range: $\pm 1"$ Wheel Setback
Quantity: Each
Sides Adjusted: 1

NEW

46-2236L (LEFT SIDE)

GREASEABLE ADJUSTABLE REAR CAMBER ARM

46-2236R (RIGHT SIDE)

- Allows for rear positive or negative camber adjustment where no OE adjustments are available

Toyota Rav 4 2006-2016



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

REAR WHEEL

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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)

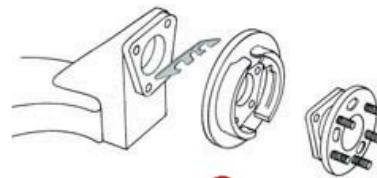
46-2456 .06 Thickness (pkg of 12)



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



46-2000	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"

46-3000	Part	Camber	Toe
	46-3015	3/8°	3/32"
	46-3020	1/2°	1/8"
	46-3030	3/4°	3/16"



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"

46-5000	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

46-6020

46-7330

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 2011-2016
Chevrolet Spark 2011-2016
Chevrolet Aveo 2012-2014
Chevrolet Sonic 2014-2016
Buick Verano 2012-2016



SHIM PACK ASSORTMENT

46-7100A

Assortment contains 12 of each size



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 2012-2016
Fiat 500L 2012-2016



REAR WHEEL

46-9811

46-9813

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 2002-2005

Lincoln Aviator 2WD/4WD 2003-2005

Mercury Mountaineer 2WD/4WD 2002-2005



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 2003-2007



REAR
WHEEL

88-050

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 hub and bearing assemblies on most 1980 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.

88-572

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.

88-441

DELUXE "BAND-IT CV BOOT CLAMP INSTALLER



Designed to work with the low profile Band-It clamps used to hold CV boots on all FWD Vehicles.

88-501

UNIVERSAL LIGHT TRUCK BUSHING REMOVAL TOOL

Easily removes both OE and aftermarket bushings without damage to locking ears. Fits all sizes Ford X4 & X2 through 2004 F-Series, as well as 1983-1997 Ranger & Bronco II 4x4 models & Econoline vans.

88-501A puller body

88-501I concave puller stem

88-569

FRONT WHEEL DRIVE AXLE REMOVING TOOL

- Universal design allows axle removal on FWD vehicles
- Offset leg designed clears hub housing
- Multi-fit base plate will fit either four or five lug design



88-572

FORD FRONT WHEEL AXLE INSTALLATION TOOL



This tool easily pulls FWD axles through tapered splines of hub on Tempo/Topaz, Escort/Lynx and EXP vehicles.

TOOLS

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129

88-856

OETIKER CLAMP PINCERS

Designed for easy installation and removal of the popular Oetiker CV clamps found on most of today's FWD vehicles.

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

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

88-1304

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

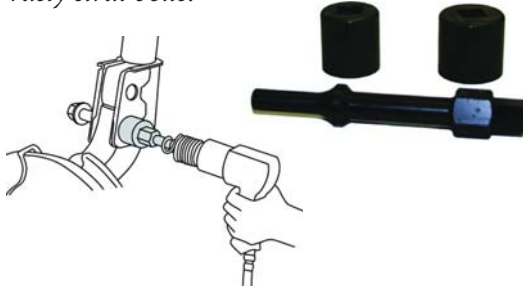
88-1110 3/8" GM hub & bearing assembly
T50 torx mounting bolts

88-1112 1/2" GM brake caliper T60 torx
mounting bolts

88-1114

STRUT BOLT REMOVER DRIVER SET

*Ideal for removing
rusty strut bolts!*



88-1300

BUSHING DRIVER FOR 46-133 TOE KIT



This specially designed tool is necessary for the installation of rear tow adjustment bushing **46-133** on Taurus and Sable station wagons.

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

TOOLS

Ph: 800-828-0255
fax: 888-658-6822
www.Northstarmfg.com

NORTHSTAR[®]
MANUFACTURING COMPANY, INC.

131

88-1637

88-1637

VALVE STEM INSTALLATION TOOL



- Made of rugged non-marring polymer
- Handles any length valve in any size rim

88-4030

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

88-2500 WHEEL & HUBCAP LOCK REMOVING KIT

Set contains one each of:

- 88-2502** 28408 GM hubcap locks
- 88-2503** 28409 GM spline hubcap locks
- 88-2504** 28401 Ford & Chrysler hubcap locks
- 88-2505** 28405 Standard wheel locks, large GM wheel locks
- 88-2506** 28403 Corvette, GM N and F body wheel locks
- 88-2507** 28406 Lug nut remover punch
- 88-2508** 28402 Stripped 18mm lug nuts, GM wheel cover locks
- 88-2509** 28404 Oversize wheel locks
- 88-2510** 28407 Large diameter Chrysler locks

Easily removes and replaces most GM, Chrysler or Ford hubcap locks. Also works on most import and aftermarket designs.



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.



88-4030

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.



TOOLS

88-4039

88-4039

SILENCER BAND-SMALL

88-4040

SILENCER BAND-LARGE



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.



88-4522

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 plates on top of strut towers found on Ford Taurus/Mercury Sable vehicles.

Size	Cutter w/arbor	Cutter only
1/2"	88-4519	88-4521
3/8"	88-4520	88-4522

TOOLS

Ph: 800-828-0255
fax: 888-658-6822
www.Northstarmfg.com



133

88-4602

88-4602

2-1/4" MODIFIED HOLE SAW & INSERT GUIDE



This hole saw is used for installation of the 41-4601 Upper Camber/Caster Strut Plates

88-6290

88-6084

PITMAN ARM ADJUSTING TOOL

- Fits 1-7/16" 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 - 1 ton trucks, including Ford Super Duty



88-6100

ENGINE CRADLE ALIGNMENT SET



These tools are designed to line up holes in engine cradle with locating holes in frame

Set contains two of each size

88-6101 3/8" small pin

88-6102 5/8" medium pin

88-6103 3/4" large pin



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"



88-6290

4WD FRONT HUB PULLER

Needed to remove front hub assembly when wheel bearing or brake rotor service is required.

GM trucks, Trail, Suburban and Yukon 1988-2005
Dodge Ram trucks 1994-2005
Ford 1/2-ton trucks and Expedition 1997-2005
Ford 3/4 and 1-ton trucks and Excursion 1998-2005
Jeep Cherokee 1985-2005



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



88-7034

DISC BRAKE SPREADER

This tool fits between the two new pads being installed, then expands to retract the piston. This leaves both hands free to start the caliper over the rotor. After it's started, the spreader is removed and you slide the caliper over the rotor the rest of the way. Same as Ford #D79L-2196-A

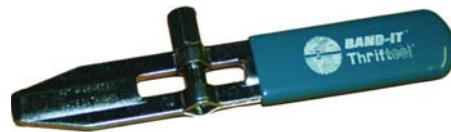
- *Cuts installation time dramatically!*
- *Works on all standard and four-piston caliper disc brakes*



88-7085

ECONOMY CV BOOT BANDING TOOL

This tool works on all FWD vehicles. Designed to work with the low-profile boot bands.



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

TOOLS

88-7098

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

88-7203

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!

88-7425 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



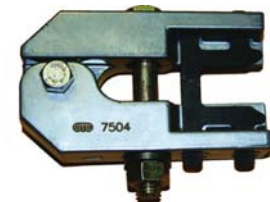
- Required to remove factory frame knock-outs
- Won't damage alignment bracket, as can happen when you use a pry bar to remove the knock-out plug

Chevrolet and GMC trucks, and Chevrolet Astro and GMC Safari vans 1988-2000



88-7504 INNER TIE ROD CRIMPING TOOL

This handy tool works on all GM and Chrysler vehicles with Saginaw steering gears. It allows the technician to crimp the new tie rod housing onto the rack to keep it from coming loose.



TOOLS

88-7704

88-7704

ADAPTERS FOR FOUR WHEEL DRIVE

This kit is used to remove and install upper and lower ball joints on 1967 to 1992 1/2- and 3/4-ton vehicles fitted with Dana 44 front axles (found on Ford, Dodge, GM, International and Jeep vehicles).



88-7829

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

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

88-7902A

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

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

88-7996A

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

88-7572	Socket	Older Ford and Chrysler vehicles
88-7593	1-3/16" adapter	with socket for Ford FWD with rack and pinion power steering with new-style tie rods
88-7594	1-5/16" adapter	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

Ph: 800-828-0255
fax: 888-658-6822
www.Northstarmfg.com



88-8000A

88-8000A UNIVERSAL TORSION BAR UNLOADING TOOL SET

Safety loads, unloads 5-lug, 6-lug GM, Dodge and Ford torsion bars for key replacement

- including new 2011 GM 8-lug models!



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



88-8925

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

88-8924

GM "W" BODY REAR AUXILIARY SPRING CLAMP



A must for the removal and installation of struts on the rear of GM "W" body vehicles.

- Hold auxiliary spring compressed while suspension is raised.
- Also a must for installation of aftermarket offset cam bolts for adjusting rear camber.

Buick Regal 1998-1996
Oldsmobile Cutlass Supreme 1988-1996
Pontiac Grand Prix 1988-1996
Chevrolet Lumina Sedan 1988-2001
Chevrolet Monte Carlo 1995-1999

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.



TOOLS

88-8926**CAMBER/CASTER ADJUSTING TOOL
FORD EXPLORER**

This tool allows you to slide the upper control arm in a positive or negative direction when adjusting camber/caster while maintaining live alignment reading

*For models with new design suspension
2002-2005*

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

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.



88-9188

88-9066

REAR TOE ADJUSTING TOOL FORD



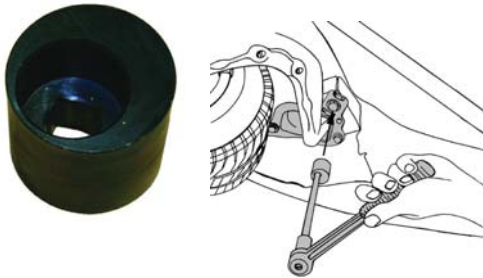
This special tool is designed to fit the larger 2-1/2" star-shaped toe adjusting cam found on the rear of late-modle Ford products. It provides the leverage needed to easily make accurate rear toe adjustments.



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

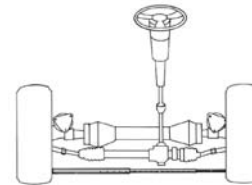


88-9188

WHEEL SPREADER



- Accurately spreads and holds the vehicle's front wheels.
- A must for Mercedes
- Easy and Effective
- The spreader saves time and assures a more accurate reading
- Extension 42" minimum, 71" maximum



TOOLS

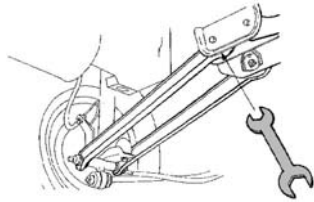
88-9200

88-9200

REAR TOE ADJUSTER FORD/MERCURY



For adjustment of rear toe bushings

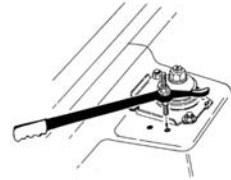


Taurus/Sable 1996-2007
Tempo/Topaz sedans 1996-2007

88-9416

88-9414

CAMBER TOOL LATE MODEL MUSTANG



Allows for controlled adjustment of camber.
Reversible to fit 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.

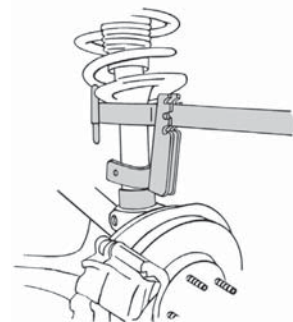
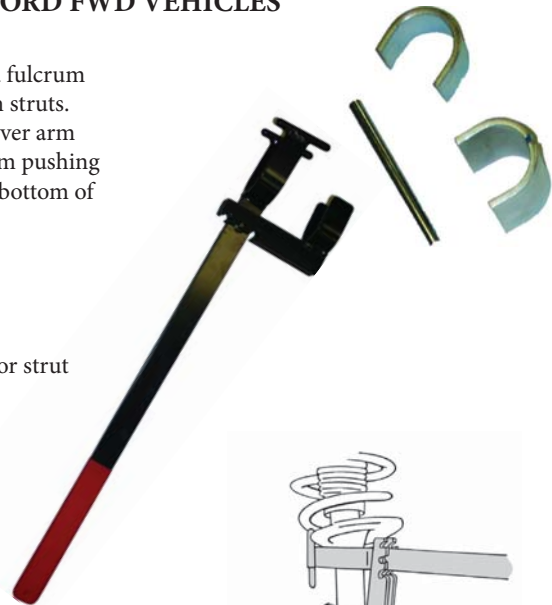
Cuts strut removal time by 60% or more!

Comes complete with instructions and instructional videotape showing tool in 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

Ph: 800-828-0255
fax: 888-658-6822
www.Northstarmfg.com



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.



88-25044

UNIVERSAL TIE ROD PULLER

This tool features a 2-1/4" reach and a 2-1/2" spread for easy removal of even the most stubborn tie rod ends. The tool also works well for removal and installation of various aftermarket bushings.



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

TOOLS

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

½" drive torque stick extension kit for foreign and domestic cars and light trucks - used with ½" 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	½" Drive	Yellow	65 ft/lbs
88-6017	13/16"	Brown	100ft/lbs	88-6028	½" Drive	Blue	80 ft/lbs
88-6018	22mm-7/8"	White	120 ft/lbs	88-6029	½" Drive	Gray	100 ft/lbs
88-6019	22mm-7/8"	Turquoise	140 ft/lbs	88-6030	½" Drive	White	120 ft/lbs
88-6020	discontinued		170 ft/lbs	88-6031	½" 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

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NORTHSTAR[®]
 MANUFACTURING COMPANY, INC.

88-1312 SET

13 PIECE 1/2" DRIVE SOCKET SET
STANDARD LENGTH - SAE SIZES



88-2014R	7/16"	88-2016R	1/2"	88-2018R	9/16"	88-2020R	5/8"
88-2022R	11/16"	88-2024R	3/4"	88-2026R	13/16"	88-2028R	7/8"
88-2030R	15/16"	88-2032R	1"	88-2034R	1-1/16"	88-2036R	1-1/8"
88-2040R	1-1/4"	88-206TR	metal tray				

88-1412M SET

14 PIECE 1/2" DRIVE METRIC SOCKET SET
STANDARD LENGTH - METRIC SIZES



88-2010M	10mm	88-2011M	11mm	88-2012M	12mm	88-2013M	13mm
88-2014M	14mm	88-2015M	15mm	88-2016M	16mm	88-2017M	17mm
88-2018M	18mm	88-2019M	19mm	88-2021M	21mm	88-2022M	22mm
88-2026M	26mm	88-2027M	27mm	88-207TR	metal tray		

88-1312D SET

13 PIECE 1/2" DRIVE SOCKET SET DEEP
LENGTH - SAE SIZES



88-2014D	7/16"	88-2016D	1/2"	88-2018D	9/16"	88-2020D	5/8"
88-2022D	11/16"	88-2024D	3/4"	88-2026D	13/16"	88-2028D	7/8"
88-2030D	15/16"	88-2032D	1"	88-2034D	1-1/16"	88-2036D	1-1/8"
88-2040D	1-1/4"	88-325CS	metal tray				

88-1412MD SET

14 PIECE 1/2" DRIVE METRIC SOCKET
SET DEEP LENGTH - METRIC SIZES



88-2010MD	10mm	88-2011MD	11mm	88-2012MD	12mm	88-2013MD	13mm
88-2014MD	14mm	88-2015MD	15mm	88-2016MD	16mm	88-2017MD	17mm
88-2018MD	18mm	88-2019MD	19mm	88-2021MD	21mm	88-2022MD	22mm
88-2026MD	26mm	88-2027MD	27mm	88-325CS	metal tray		

SOCKETS

88-1500DW SET

12 PIECE 1/2" DRIVE EXTRA-THIN WALL DEEP IMPACT SOCKET SET FOR WHEEL NUTS

- The extra-thin wall design allows easy access to recessed wheel nuts where space is limited
- Due to the extra-thin wall design, they should only be used on wheel nuts where limited torque is applied
- For use only with 1/2" drive tools
- DO NOT USE with reducing adapters



88-2024DT	3/4"	88-2026DT	13/16"
88-2028DT	7/8"	88-2032DT	1"
88-2034DT	1-1/16"	88-2146DT	3/4" & 13/16"
88-2017MDT	17mm	88-2019MDT	19mm
88-2021MDT	21mm	88-2022MDT	22mm
88-2023MDT	23mm	88-2192DT	19mm & 21mm
88-2192DW-C	molded case		

88-2000M SET

4 PIECE 1/2" DRIVE EXTRA-THIN WALL DEEP WHEEL NUT IMPACT SOCKETS

- Should be used only on passenger and light-truck wheel nuts
- For use only with 1/2" drive tool
- DO NOT USE with reducing adapters



88-2017MDT	17mm	88-2019MDT	19mm
88-2021MDT	21mm	88-2022MDT	22mm

1/2" DRIVE EXTRA-DEEP SPINDLE NUT SOCKET

These sockets are designed to remove the spindle axle nuts on FWD vehicles that require extra torque - 3.5" deep

88-2732MD	32mm	88-2734MD	34mm
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SOCKETS

Bring order to your workbench and work faster and better. Trays come in SAE and Metric sizes for 1/2", 3/8" and 1/4" drives. Best selling 3/8" drive SAE and Metric trays hold sockets from 1/4" to 1" or from 6mm to 20mm. Trays are molded of rugged ABS plastic to shrug off gas, oil, bumps and hard knocks. Three SAE sizes in red and three Metric sizes in gray. Butterfly-type slot on bottom for pegboard display.



RED SOCKETS TRAYS ARE STANDARD SIZE

88-2080 1/2" Drive, Regular and Deep Well 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8 & 1-1/4"

88-2081 3/8" Drive, Regular and Deep Well 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16 & 1"

88-2082 1/4" Drive, Regular and Deep Well 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 & 5/8"

GRAY SOCKETS TRAYS ARE METRIC SIZE

88-2083 1/2" Drive, Regular and Deep Well 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 & 27mm

88-2084 3/8" Drive, Regular and Deep Well 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 & 20mm

88-2085 1/4" Drive, Regular and Deep Well 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14 & 15mm

- Post bases are beefed-up to hold sockets more securely
- Post height on 1/2" drive trays reduced to fit most tool chests
- Sizes are marked on posts for instant identification
- Tough ABS plastic resists gas, oil and abuse
- Edge tangs for easy handling
- 3/8" drive SAE tray features 15/16" posts for regular and deepwell sockets



88-2090 FRACTIONAL SIZE WRENCH RACK

Orange ABS plastic rack holds these fractional sizes: 1, 15/16, 7/8, 13/16, 3/4, 11/16, 5/8, 9/16, 1/2, 7/16, 3/8, 5/16 & 1/4"

88-2091 METRIC SIZE WRENCH RACK

Black ABS plastic rack holds these metric sizes: 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18 & 19mm



Use our wrench racks to keep box-and open-end wrenches ready for instant access, arranged by size with easy-to-read, white grease-resistant ink. The fractional and metric sizes feature a triangular, size-by-side shape to take up minimum drawer space. Racks also have a molded carry handle, pegboard slots and are oil, grease and solvent resistant.

88-2093

HEX/TORX TRAY

New Hex/Torx Tray helps automotive technicians instantly find the socket or bit they need. Tray holds SAE hex socket sizes 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16 & 3/8", Metric sizes 4, 5, 6, 7, 8, 9 & 10mm; and Torx bit sizes 27, 30, 40, 45, 47, 50, 55 & 60



Tray is molded of tough ABS plastic to resist oil, grease and solvents. Sizes for each of the SAE, Metric and Torx sockets are pad printed in an oil and grease resistant black ink. Special end tangs on the 9-3/16" x 3-1/4" tray provide a finger hold for picking up tray in tight tool boxes.

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'

INDEX

Part Number	Page	Part Number	Page	Part Number	Page
41-144	66	41-1510	71	42-100A	78
41-146	66	41-1570	71	42-777	78
41-147	66	41-1580	71	42-778	78
41-149	66	41-1590	71	42-781	11
41-151	66	41-2001	71	42-950 Series	79
41-157	66	41-4601	72	42-949	79
41-158	66	41-4603	72	42-951	79
41-159	66	41-4605	72	42-952	79
41-160	66	41-4607	72	42-953	79
41-140A	66	41-4609	72	42-954	79
41-210	67	41-4611	72	42-955	79
41-212	67	41-8243	73	42-956	79
41-214	67	41-8244	73	42-957	79
41-215	67	41-8245	73	42-958	79
41-216	67	41-8246	73	42-959	79
41-217	67	41-8247	73	42-960	79
41-218	67	41-8249	73	42-961	79
41-210A	67	41-8250	74	43-962	79
41-229	68	41-8251	74	42-963	79
41-230	68	41-8255	74	42-964	79
41-232	68	41-8256	74	42-950A	79
41-236	68	41-8257	75	42-970	80
41-300	68	41-8259	75	42-972	80
41-301	68	41-8260	75	42-974	80
41-305	68	41-8262	75	42-976	80
41-312	68	41-8264	75	42-978	80
41-307	69	41-8265	76	42-980	80
41-308	69	41-8267	76	42-982	80
41-310	69	41-8272	10	42-4391	80
41-314	69	41-8321 L/R	76	42-4392	80
41-325	70	41-8322 L/R	77	42-4411	80
41-326	70	41-8326	77	42-4412	80
41-529	70	41-8326-3	77	42-4413	80
41-530	70	41-8329	77	42-4431	80
41-531	70	42-101	78	42-4434	80
41-532	70	42-102	78	43-320A	81
41-545	71	42-103	78	43-408	81
41-550	70	42-104	78	43-409	81
41-1450	71	42-105	78	43-410	81
41-1460	71	42-106	78	43-411	81
41-1470	71	42-107	78	43-412	81
41-1490	71	42-108	78	43-413	81

INDEX

Part Number	Page	Part Number	Page	Part Number	Page
43-415	81	43-663	83	43-1060	85
43-416	81	43-674	83	43-1061	85
43-417	81	43-701	83	43-1062	85
43-421	81	43-702	83	43-1063	85
43-422	81	43-703	83	43-1064	85
43-423	81	43-707	83	43-1065	85
43-425	81	43-708	83	43-1066	85
43-426	81	43-709	83	43-1067	85
43-427	81	43-711	84	43-1070	85
43-431	81	43-712	84	43-1071	85
43-432	81	43-713	84	43-1072	85
43-433	81	43-715	84	43-1073	85
43-441	82	43-716	84	43-1074	85
43-442	82	43-717	84	43-1075	85
43-443	82	43-721	84	43-1076	85
43-447	82	43-722	84	43-1077	85
43-548	82	43-723	84	43-2050	85
43-549	82	43-950 Series	84	43-2051	85
43-550	82	43-951	84	43-2052	85
43-551	82	43-952	84	43-2053	85
43-552	82	43-953	84	43-2054	85
43-553	82	43-954	84	43-2055	85
43-554	82	43-955	84	43-2056	85
43-621	82	43-956	84	43-2057	85
43-622	82	43-957	84	43-2060	85
43-623	82	43-958	84	43-2061	85
43-641	82	43-1040	85	43-2062	85
43-642	82	43-1041	85	43-2063	85
43-643	82	43-1042	85	43-2064	85
43-645	82	43-1043	85	43-2065	85
43-646	82	43-1044	85	43-2066	85
43-647	82	43-1045	85	43-2067	85
43-651	82	43-1046	85	43-2070	85
43-652	82	43-1047	85	43-2071	85
43-653	82	43-1050	85	43-2072	85
43-661	83	43-1051	85	43-2073	85
43-662	83	43-1052	85	43-2074	85
43-663	83	43-1053	85	43-2075	85
43-674	83	43-1054	85	43-2076	85
43-680A	83	43-1055	85	43-2077	85
43-661	83	43-1056	85	44-240	86
43-662	83	43-1057	85	44-241	86

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INDEX

Part Number	Page	Part Number	Page	Part Number	Page
44-242	86	44-910	93	44-5000 Series	101
44-600 Series	86	44-2460	93	44-4099	101
44-599	86	44-2461	93	44-5001	101
44-601	86	44-2462	93	44-5002	101
44-602	86	44-2463	93	44-5003	101
44-603	86	44-2464	93	44-5004	101
44-604	86	44-2465	93	44-5005	101
44-605	86	44-2466	93	44-5006	101
44-606	86	44-2469	93	44-5007	101
44-607	86	44-2480	93	44-5008	101
44-608	86	44-2481	93	44-5000A	101
44-600A	86	44-2482	93	44-5009	101
44-766	86	44-2483	93	44-5010	101
44-767	86	44-2485	93	44-5011	101
44-768	87	44-2486	93	44-5032	102
44-769	87	44-2489	93	44-5036	102
44-771	87	44-2490	94	44-5037	103
44-773	87	44-2491	94	44-5094	103
44-775	88	44-2492	94	44-6000 Series	103
44-784	88	44-2493	94	44-6001	103
44-786	88	44-2494	95	44-6002	103
44-789	88	44-2495	95	44-6003	103
44-790	89	44-2496	95	44-6004	103
44-791	89	44-2497	95	44-6005	103
44-792	89	44-2498	96	44-6006	103
44-794	89	44-2499	96	44-6007	103
44-795	90	44-2506	96	44-6008	103
44-820	90	44-2507	96	44-6009	103
44-823	90	44-2508	97	44-6010	103
44-824	90	44-2509	97	44-6011	103
44-825	91	44-2510	97	44-6000A	103
44-826	91	44-2512	98	44-6020 Series	104
44-827	91	44-2535	98	44-6021	104
44-828	91	44-2540	98	44-6022	104
44-831	92	44-2542	98	44-6023	104
44-832	92	44-2610	99	44-6024	104
44-834	92	44-2720 L/R	99	44-6025	104
44-835	92	44-2725	99	44-6026	104
44-836	11	44-2726 L/R	100	44-6027	104
44-862	11	44-2727	100	44-6028	104
44-864	11	44-2728	100	44-6029	104
44-866	11	44-2730	101	44-6020A	104

INDEX

Part Number	Page	Part Number	Page	Part Number	Page
44-9410	104	46-134	108	46-1124	113
44-9412	104	46-135	108	46-1200 Series	113
44-9413	104	46-136	108	46-1201	113
45-100 Series	105	46-141	108	46-1202	113
45-101	105	46-143	109	46-1203	113
45-102	105	46-162	109	46-1204	113
45-103	105	46-164	109	46-1205	113
45-104	105	46-166	109	46-1206	113
45-200 Series	105	46-182	110	46-1300 Series	114
45-201	105	46-201	110	46-1301	114
45-202	105	46-205	110	46-1302	114
45-203	105	46-406	110	46-1303	114
45-204	105	46-421	111	46-1304	114
45-300 Series	105	46-425	111	46-1305	114
45-301	105	46-426	111	46-1306	114
45-302	105	46-427	111	46-1500 Series	114
45-303	105	46-428	111	46-1501	114
45-304	105	46-431	112	46-1502	114
45-351	105	46-432	112	46-1503	114
45-500 Series	105	46-916	112	46-1504	114
45-501	105	46-1000 Series	112	46-1520 Series	114
45-502	105	46-1001	112	46-1521	114
45-503	105	46-1002	112	46-1522	114
45-504	105	46-1003	112	46-1523	114
45-600 Series	105	46-1004	112	46-1524	114
45-601	105	46-1005	112	46-1600 Series	115
45-602	105	46-1006	112	46-1601	115
45-603	105	46-1007	112	46-1602	115
45-604	105	46-1000A	112	46-1603	115
45-6001	106	46-1030	113	46-1604	115
46-6002	106	46-1035	113	46-1700	115
45-6005	106	46-1100 Series	113	46-1702	115
45-6006	106	46-1101	113	46-1704	115
45-7010	106	46-1102	113	46-1705	115
45-7013	106	46-1103	113	46-1707	116
45-7015	106	46-1104	113	46-1709	116
45-7017	106	46-1105	113	46-1900	116
45-7019	106	46-1106	113	46-1901	116
45-7010A	106	46-1120 Series	113	46-1902	116
46-131	107	46-1121	113	46-1904	116
46-132	107	46-1122	113	46-1900A	116
46-133	107	46-1123	113	46-2002A	116

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INDEX

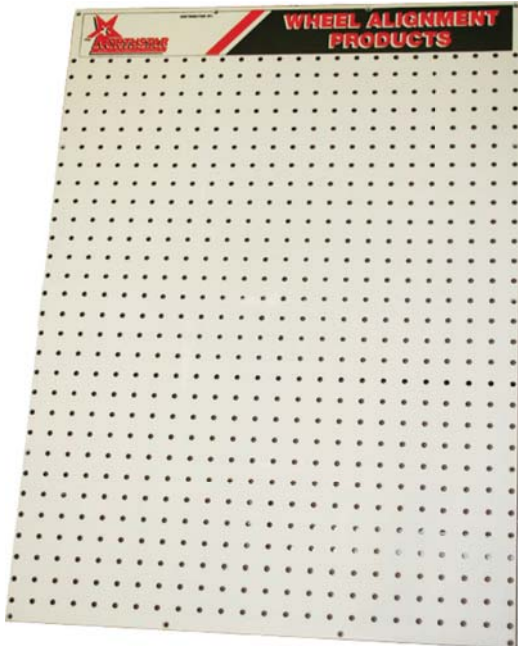
Part Number	Page	Part Number	Page	Part Number	Page
46-2100	116	46-2450A	126	88-856	130
46-2200	116	46-2454	126	88-882	130
46-2300	116	46-2456	126	88-890	130
46-2400	116	46-2000 Series	126	88-928	130
46-2100	117	46-2010	126	88-938	130
46-2200	117	46-2015	126	88-1101	130
46-2300	117	46-2020	126	88-1103	131
46-2400	117	46-2030	126	88-1110	131
46-1050	117	46-3000 Series	126	88-1112	131
46-2160	117	46-4000 Series	126	88-1114	131
46-2170	118	46-4010	126	88-1300	131
46-2174	118	46-4015	126	88-1302	131
46-2175	118	46-4020	126	88-1304	131
46-2176	118	46-4030	126	88-1637	132
46-2177	119	46-5000 Series	126	88-2400	132
46-2178	119	46-5010	126	88-2401	132
46-2179	119	46-5015	126	88-2402	132
46-2180	119	46-5020	126	88-2500 Series	132
46-2181	120	46-5030	126	88-2502	132
46-2182	120	46-2020	127	88-2503	132
46-2183	120	46-6030	127	88-2504	132
46-2184	120	46-6040	127	88-2505	132
46-2185	121	46-7100A	127	88-2506	132
46-2186	121	46-7110	127	88-2507	132
46-2187	121	46-7115	127	88-2508	132
46-2188	121	46-7120	127	88-2509	132
46-2189	122	46-7130	127	88-2510	132
46-2190	122	46-7300 Series	127	88-4014-10	132
46-2191	122	46-7310	127	88-4030	132
46-2192	122	46-7315	127	88-4036	132
46-2194	122	46-7320	127	88-4039	133
46-2195	123	46-7330	127	88-4040	133
46-2196	123	46-9811	128	88-4041	133
46-2199	123	46-9812	128	88-4080	133
46-2226	123	46-9813	128	88-4120	133
46-2227	124	88-050	129	88-4150	133
46-2228	124	88-060	129	88-4087-10	133
46-2229	124	88-343	129	88-4096-10	133
46-2231	124	88-441	129	88-4510	133
46-2232	125	88-501	129	88-4511	133
46-2234	125	88-569	129	88-4512	133
46-2236	125	88-572	129	88-4513	133

INDEX

Part Number	Page	Part Number	Page	Part Number	Page
88-4519	133	88-7801	138	88-9066	144
88-4520	133	88-7802	138	88-9180	144
88-4521	133	88-7803	138	88-9188	144
88-4522	133	88-7804	138	88-9200	145
88-4602	134	88-7813	138	88-9414	145
88-6084	134	88-7822-1	138	88-9416	145
88-6100	134	88-7829	138	88-9480	146
88-6101	134	88-7850A	138	88-25044	146
88-6102	134	88-7901	138	88-25050	146
88-6103	134	88-7902	138	88-25030	146
88-6274	134	88-7903	138	88-25010	146
88-6275	134	88-7904	138	88-35824	146
88-6290	134	88-7905	138	88-58122	146
88-6496	135	88-7906	138		
88-7023	135	88-7907	138		
88-7034	135	88-7908	138		
88-7085	135	88-7909	138		
88-7090	135	88-7910	138		
88-7095	135	88-7911	138		
88-7096	135	88-7912	138		
88-7097	135	88-7913	138		
88-7098	136	88-7914	138		
88-7099	136	88-7915	138		
88-7100 A	136	88-7916	138		
88-7101	136	88-7860A	140		
88-7102	136	88-7870C	140		
88-7103	136	88-7880A	140		
88-7200 A	136	88-7890A	140		
88-7201	136	88-7900A	141		
88-7203	136	88-7950A	141		
88-7205	137	88-7959A	141		
88-7249	137	88-7996A	141		
88-7301	137	88-8000A	142		
88-7425	137	88-8350	142		
88-7414	137	88-8923	142		
88-7534	137	88-8924	142		
88-7536	137	88-8925	142		
88-7537	137	88-8926	143		
88-7491	137	88-8927	143		
88-7504	137	88-8928	143		
88-7704	138	88-8929	143		
88-7800A	138	88-9065	144		

ASSORTMENTS

Build a Custom Wheel Alignment Assortment



Using a product mix that is applicable to your alignment sales needs, you can now build a board assortment by choosing your most popular part numbers with custom quantities of each. This allows for a more accurate inventory and prevents over- or under-stocking part numbers.

*The board is 24" x 28" and comes with 20 peg hooks
(more hooks available upon request)*



Call Northstar Today!

Call 1-800-828-0255 today to speak to a sales representative, who will help you craft an assortment that meets your needs.



PRORYDE QUICK-REFERENCE APPLICATION GUIDE										
Make/Model	Year	2WD/4WD	FRONT LIFT/LEVELING KIT				REAR LIFT KIT			
			Susp.	LIFTmachine	Duck Head	Front Lift	Susp.	SuperBLOK	Rear Lift	Max. Tire
			Type	Kit No.	Kit No.	Range	Type	Kit No.	Range	Diameter
CADILLAC, CHEVROLET, GMC										
Avalanche 1500 (6-Lug)	2002-06	2WD/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	74-1000G (3)		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"
Colorado/Canyon	2015-17	2WD/4WD	Strut	74-1150G		1.5" to 2.25"	Leaf	52-1150G*	1.0", 1.5", 2.0"	32.2"
Escalade/EXT/ESV (6-Lug)	1999-00	2WD/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	2WD/4WD	Torsion		64-1000G	Up to 3.0"	Coil	56-1100G*	1.0", 1.5", 2.0"	33"
Escalade/EXT/ESV (6-Lug)	2007-17	2WD/4WD	Strut	75-1050G* 75-1055G*		0.75" to 2.5" 0.875" to 1.75"	Coil	56-1100G* (4)	1.0", 1.5", 2.0"	32"
K-Series L.D. 1500 (6-Lug)	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	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	74-1000G (3)		2.0" to 3.0"	Leaf	52-1000G*	1.75", 2.25", 2.75"	32"
Sierra/Silverado L.D.1500 (6-Lug)	2014-17	2WD/4WD	Strut	75-1050G* 75-1055G*		0.75" to 2.5" 0.875" to 1.75"	Leaf	52-1000G*	1.75", 2.25", 2.75"	32"
Sierra/Silv. H.D. 1500/2500 (8-Lug)	1999-10	2WD/4WD	Torsion		64-1200G	Up to 2.5"	Leaf	52-1200G* (2)	1.0", 1.5", 2.0"	33"
Sierra/Silverado 3500 (8-Lug)	2001-10	2WD/4WD	Torsion		64-1200G	Up to 2.5"	Leaf	52-1200G* (2)	1.0", 1.5", 2.0"	33"
Sierra/Silverado 2500/3500 (8-Lug)	2011-17	2WD/4WD	Torsion		64-1400G	Up to 2.25"	Leaf	52-1400G*	1.0", 1.5", 2.0"	33"
Suburban/Yukon XL 1500 (6-Lug)	1992-99	2WD/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	2WD/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	74-1000G (3)		2.0" to 3.0"	Coil	56-1100G* (4)	1.0", 1.5", 2.0"	32"
Suburban/Yukon XL 1500 (6-Lug)	2014-17	2WD/4WD	Strut	75-1050G* 75-1055G*		0.75" to 2.5" 0.875" to 1.75"	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 (6-Lug)	1996-06	2WD/4WD	Torsion		64-1000G	Up to 3.0"	Coil	56-1100G*	1.0", 1.5", 2.0"	33"
Tahoe/Yukon (6-Lug) (3)	2007-13	2WD/4WD	Strut	74-1000G (3)		2.0" to 3.0"	Coil	56-1100G* (4)	1.0", 1.5", 2.0"	32"
Tahoe/Yukon 1500 (6-Lug)	2014-17	2WD/4WD	Strut	75-1050G* 75-1055G*		0.75" to 2.5" 0.875" to 1.75"	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										
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	2009-15	2WD					Coil	56-2100D*	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 (w/o front air susp.)	2009-17	4WD	Strut	74-2000D		2.0" to 3.0"	Coil	56-2100D*	1.0", 1.5", 2.0"	35"
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"
Ram H.D. 2500 (8-Lug)	2014-17	2WD					Coil	56-2600R*	1.0", 1.5", 2.0"	OE
Ram H.D. 2500 (8-Lug)	2014-17	4WD	Coil	74-2550R		1.5" to 2.5"	Coil	56-2600R*	1.0", 1.5", 2.0"	35"
Ram H.D. 3500 (8-Lug)	2003-12	4WD	Coil	71-2500D*		1.5", 1.75", 2.0"	Leaf	52-2500D* (2)	1.0", 1.5", 2.0"	35"
Ram H.D. 3500 (8-Lug)	2013-17	4WD	Coil	74-2550R		1.5" to 2.5"				35"
Ram H.D. 4500/5500	2008-14	4WD	Coil	71-2500D*		1.5", 1.75", 2.0"				OE
Ram Mega Cab (8-Lug)	2006-13	4WD	Coil	71-2500D*		1.5", 1.75", 2.0"	Leaf	52-2500D* (2)	1.0", 1.5", 2.0"	35"
Ram Mega Cab (8-Lug)	2014-17	4WD	Coil	74-2550R		1.5" to 2.5"				

PRORYDE

PRORYDE QUICK-REFERENCE APPLICATION GUIDE										
Make/Model	Year	2WD/4WD	FRONT LIFT/LEVELING KIT				REAR LIFT KIT			Max. Tire Diameter
			Susp.	LIFTmachine	Duck Head	Front Lift	Susp.	SuperBLOK	Rear Lift	
			Type	Kit No.	Kit No.	Range	Type	Kit No.	Range	
FORD, LINCOLN										
Expedition	1997-02	4WD	Torsion		64-3000F	Up to 2.5"				33"
Expedition w/o air ride	2003-16	2WD/4WD	Strut	74-3000F		2.0" to 3.0"				35"
F150/F250 L.D. Incl. Heritage	1997-04	4WD	Torsion		64-3000F	Up to 2.5"				33"
F150 2WD	2004-17	2WD	Strut	74-3200F 74-3000F		1.5" to 2.25" 2.0" to 3.0"				33"
F150 4WD	2004-08	4WD	Strut	74-3200F 74-3000F		1.5" to 2.25" 2.0" to 3.0"	Leaf	52-3000F*	1.0", 1.5", 2.0"	35"
F150 4WD	2009-17	4WD	Strut	74-3200F 74-3000F		1.5" to 2.25" 2.0" to 3.0"	Leaf	52-3000F*	1.75", 2.25", 2.75"	32"
F250/F350 Super Duty 4WD	1999-04	4WD	Leaf				Leaf	52-3502F* (2)	1.0", 1.5", 2.0"	OE
F250/F350 Super Duty 4WD	2005-10	4WD	Coil	71-3500F*		2.0", 2.5"	Leaf	52-3502F* (2)	1.0", 1.5", 2.0"	37"
F250 Super Duty 4WD	2011-17	4WD	Coil	71-3500F*		2.0", 2.5"	Leaf	52-3503F* (2)	1.0", 1.5", 2.0"	37"
F350 Super Duty 4WD	2011-17	4WD	Coil	71-3500F*		2.0", 2.5"	Leaf	52-3501F* (2)	1.0", 1.5", 2.0"	37"
F450/F550 Super Duty 4WD	2008-15	4WD	Coil	71-3500F*		2.0", 2.5"				35"
Raptor	2010-15	4WD	Strut	74-3250F		1.5" to 2.25"	Leaf	52-3000F*	5", 1.0", 1.5"	35"
Lincoln Navigator	1998-02	4WD	Torsion		64-3000F	Up to 2.5"				33"
Lincoln Navigator	2003-06	2WD/4WD	Strut	74-3200F 74-3000F		1.5" to 2.25" 2.0" to 3.0"				35"
Lincoln Navigator	2007-11	2WD/4WD	Strut	74-3200F 74-3000F		1.5" to 2.25" 2.0" to 3.0"				35"
Lincoln Mark LT 2WD	2005-08	2WD	Strut	74-3200F 74-3000F		1.5" to 2.25" 2.0" to 3.0"				33"
Lincoln Mark LT	2005-08	4WD	Strut	74-3200F 74-3000F		1.5" to 2.25" 2.0" to 3.0"	Leaf	52-3000F*	1.0", 1.5", 2.0"	35"
HUMMER										
Hummer H2 (8-Lug)	2003-10	4WD	Torsion		64-1200G	Up to 2.5"	Leaf	52-1200G*	1.0", 1.5", 2.0"	37"
							Coil	56-1100G*	1.0", 1.5", 2.0"	37"
INFINITI, NISSAN										
Infiniti QX56	2004-07	2WD/4WD	Strut	74-4000N		1.5" to 2.75"				33"
Nissan Armada	2004-13	2WD/4WD	Strut	74-4000N		1.5" to 2.75"				33"
Nissan Titan	2004-07	2WD/4WD	Strut	74-4000N		1.5" to 2.75"	Leaf	52-4000N*	1.0", 1.5", 2.0"	33"
Nissan Titan	2008-15	2WD/4WD	Strut	74-4000N		1.5" to 2.0"	Leaf	52-4000N*	1.0", 1.5", 2.0"	33"
JEEP										
JK Wrangler	2007-17	4WD	Coil	71-7000J*		1.5", 2.0", 2.5", 3.0"	Coil	56-7100J*	1.0", 1.5", 2.0"	35"
TOYOTA										
4Runner	2003-09	2WD/4WD	Strut	71-5500T*		1.5", 2.0", 2.5"				32"
4Runner Exc. TRD Pro	2010-17	2WD/4WD	Strut	71-5500T*(5)		2.0", 2.5", 3.0"				32.5"
FJ Cruiser	2007-14	2WD/4WD	Strut	71-5500T*		1.5", 2.0", 2.5"				32"
Sequoia	2008-16	2WD/4WD	Strut	74-5000T		2.0" to 3.5"				33"
Tacoma/PreRunner Exc. TRD Pro	2005-16	2WD/4WD	Strut	71-5500T*(5)		1.5", 2.2", 2.75"	Leaf	52-5000T*	1.0", 1.5", 2.0"	32.5"
Tundra Exc. TRD Pro	2007-17	2WD/4WD	Strut	74-5000T (5)		2.0" to 3.5"	Leaf	52-5000T*	1.0", 1.5", 2.0"	33"
*Progressive Lift Kit: Adjusted PRIOR to installation										
(2) For use ONLY on SRW, non-dually & non-camper applications										
(3) Use kit #75-1050G on vehicles equipped with JL4 electronic front suspension										
(4) Not for use with OEM Rear Air Suspension										
(5) Not for use on TRD Pro w/Bilstein Struts										
Items in RED are updates and/or TBA (To Be Announced)										