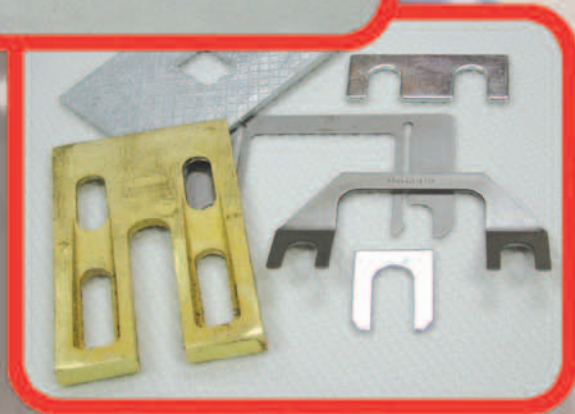




Alignment Parts and Tools



HEAVY DUTY & FLEET TRUCKS

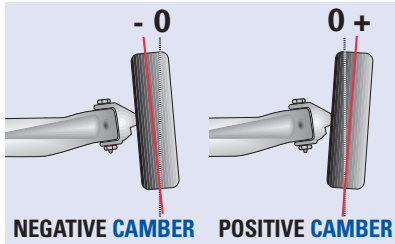


**Specialty
Products
Company®**

TABLE OF CONTENTS

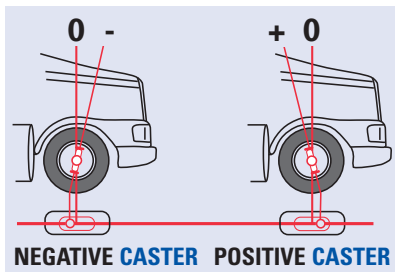
Alignment Angles	Below	Heavy Duty Truck Tools	5
Heavy Duty Assortment	1	Fleet Truck Tools	8
Heavy Duty Truck Shims & Parts	1	Fleet Truck Parts	10
Truck Gauges	4	Index	Inside Back Cover

ALIGNMENT ANGLES



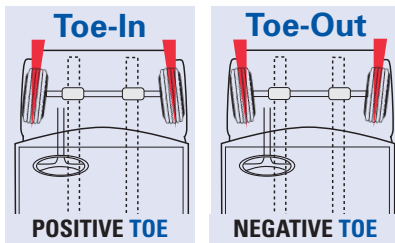
CAMBER

Definition: The inward (-) or outward (+) tilt of the top of the tire.
Purpose: Camber helps to properly load the wheel bearings, and to maintain a straight ahead path. If the tire leans too far inward (-) or outward (+), not only may it accelerate wheel bearing wear, but can also wear the tire on the side to which it is leaning.
Adjustment: Most I-Beams are corrected by replacing the axle. Some shops bend or “correct” the axle angle*. Independent suspensions are usually shimmed.



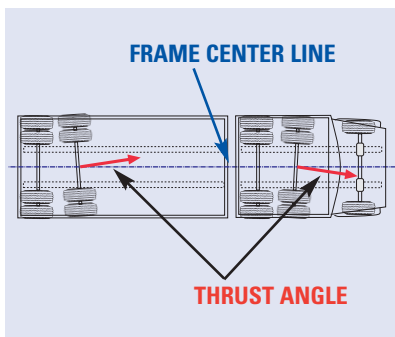
CASTER

Definition: The forward (-) or backward (+) tilt of the kingpin or steering axis.
Purpose: Proper Caster helps the steering to return to center and assists the vehicle in maintaining a straight ahead path while providing stability.
Adjustment: Most I-Beams are tilted with a wedge, usually using the same wedge angle on each side, thus increasing (+) or decreasing (-) the total Caster for the axle. Sometimes different wedge angles are used side to side*. Some shops twist or “correct” the axle angle*. Some suspensions use parallel adjustable torque arms.



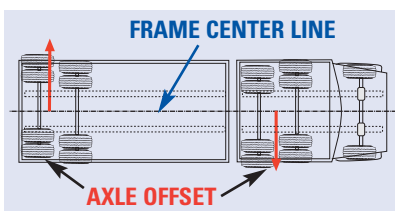
TOE

Definition: The difference between the leading edges of the front of the tires and the trailing edges of the rear of the tires on the same axle. Tires too close together at the front (+) or too far apart at the front (-) may lead to tire wear.
Purpose: Proper Toe setting aids in directional stability and proper tire wear. If the toe is too negative, the vehicle may have a wander or pull condition.
Adjustment: Total toe is adjusted with one or two turn-buckle style tie rods.



THRUST ANGLE (One or multiple rear axles)

Generally the rear axles need to be perpendicular to the centerline of the frame, and parallel to each other.
Definition: Simply put, Thrust Angle is the average direction an axle points away from the centerline of the frame, (+ is to the right and - is to the left).
Purpose: Thrust angle will always determine the vehicle direction of travel. Therefore in line with the Vehicle Centerline is generally preferred, but never pointed to the right side.
Adjustment: Normally Thrust is adjusted with either a shim or a torque rod with a threaded sleeve. Occasionally an eccentric sleeve is installed at an end bushing.



AXLE OFFSET

Definition: The position of an axle relative to the frame rails, side to side. It should be positioned equally under the frame.
Purpose: When an axle becomes offset to the frame, it can accelerate suspension and drive line wear, affect the axle torque and may lead to a handling condition.
Adjustment: When adjustable, rear axles typically are adjusted with shims.

***CAUTION:** Always consult vehicle manufacturer and manufacturer of correction equipment for procedure and appropriateness for the vehicle that is being worked on.



HEAVY DUTY ASSORTMENT



36000 Tandem Alignment Set A great starter set!

These alignment angle shims are now available in a heavy-duty metal box to help you organize all of your shims. Packaged with a large variety of shims (listed below) and an organization chart inside the lid to make reordering and organization of shims quick and easy.



PARTS
HEAVY DUTY TRUCK

Part No.	Application	Qty
35001	Kenworth Airglide space 1/32"	6
35002	Kenworth Airglide space 1/16"	6
35003	Kenworth Airglide space 1/8"	6
35004	Kenworth Airglide space 1/4"	6
35005	Kenworth Airglide space 1/2"	6
35006	Kenworth Airglide space 3/4"	6
35007	Kenworth Airglide space 1"	6
35010	Peterbilt Air Leaf Shim 1/32"	2
35011	Peterbilt Air Leaf Shim 1/16"	4
35012	Peterbilt Air Leaf Shim 1/8"	6
35020	Freightliner FAS I Air Ride 1/32"	2
35021	Freightliner FAS I Air Ride 1/16"	4
35022	Freightliner FAS I Air Ride 1/8"	6
35030	Volvo/White 4-Spring Susp 1/32"	2
35031	Volvo/White 4-Spring Susp 1/16"	4

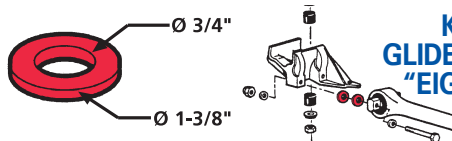
Part No.	Application	Qty
35033	Volvo/White 4-Spring Susp 1/8"	6
35040	Navistar IHC Torque Arm 1/32"	2
35041	Navistar IHC Torque Arm 1/16"	4
35042	Navistar IHC Torque Arm 1/8"	6
35060	Freightliner Airliner Susp 1/32"	2
35061	Freightliner Airliner Susp 1/16"	4
35062	Freightliner Airliner Susp 1/32"	6
35070	Freightliner Air Glide Susp 1/32"	2
35071	Freightliner Air Glide Susp 1/16"	4
35072	Freightliner Air Glide Susp 1/8"	6
36010	Peter/KW Flex-Air Torque Arm 1/32"	2
36011	Peter/KW Flex-Air Torque Arm 1/16"	4
36012	Peter/KW Flex-Air Torque Arm 1/8"	2



HEAVY DUTY TRUCK PARTS

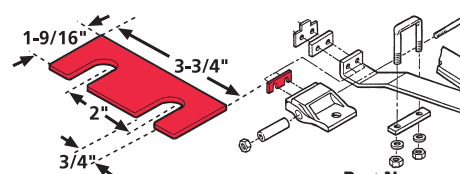
Tandem Truck Shims

These over-the-road heavy duty adjusters are a fast and accurate means to align front or rear axles of most popular tandem trailers and trucks. You, the alignment technician, now have reliable means to complete total heavy duty truck alignments.



KENWORTH AIR GLIDE SPACERS FOR "EIGHT BAGGERS"

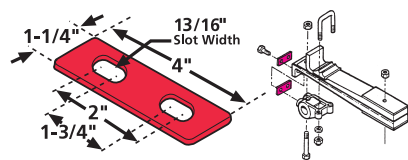
Part No.	Thickness	Qty	Part No.	Thickness	Qty
35001	1/32"	6	35005	1/2"	6
35002	1/16"	6	35006	3/4"	6
35003	1/8"	6	35007	1"	6
35004	1/4"	6			



FREIGHTLINER ADJUSTING SHIM

These shims adjust thrust angle & toe by placing it between the spring hanger and the spring.

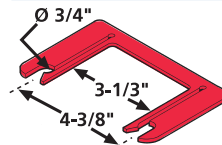
Part No.	Thickness	Qty
35020	1/32"	6
35021	1/16"	6
35022	1/8"	6



PETERBILT AIR LEAF ADJUSTING SHIM

These shims adjust thrust angle and toe by placing the shim between the spring hanger and the spring.

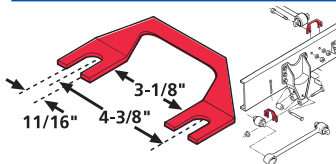
Part No.	Thickness	Qty
35010	1/32"	6
35011	1/16"	6
35012	1/8"	6



VOLVO/WHITE TANDEM SHIM

These shims adjust thrust angle & toe by placing it between the spring hanger and the spring.

Part No.	Thickness	Qty
35030	1/32"	6
35031	1/16"	6
35032	1/8"	6



I.H.C./NAVISTAR TORQUE ARM SHIM

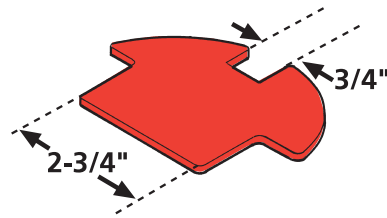
Will change thrust and toe when installed between the torque arm and the spring hanger. On Navistar they will also center the axle with the frame rails when used on the lateral link.

Part No.	Thickness	Qty
35040	1/32"	6
35041	1/16"	6
35042	1/8"	6



Tandem Truck Shims (cont.)

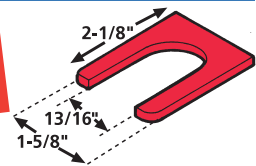
WILSON TANDEM SHIM FOR HUTCHINS SUSPENSION



Part No.	Thickness	Qty
35050	1/32"	6
35051	1/16"	6
35052	1/8"	6

SINGLE SLOT TANDEM TRUCK SHIMS

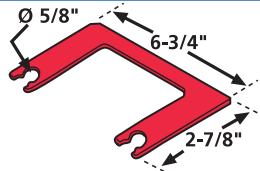
USE FOR FREIGHTLINER "AIRLINER" K77936 SUSPENSION



These universal shims are installed at the ends of torque rods to change toe and/or thrust angles on **Freightliner, Hendrickson** and **Navistar** heavy duty tandem trucks and trailers.

Part No.	Thickness	Qty
35060	1/32"	6
35061	1/16"	6
35062	1/8"	6

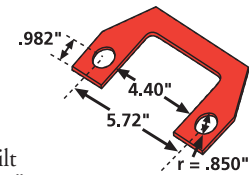
FREIGHTLINER SHIMS FOR AIR GLIDE SUSPENSION



These shims adjust thrust angle and toe by placing the shim between the spring hanger and the spring.

Part No.	Thickness	Qty
35070	1/32"	6
35071	1/16"	6
35072	1/8"	6

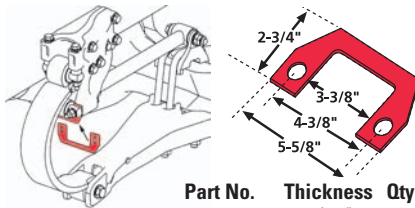
PETERBILT & KENWORTH THRUST ANGLE SHIMS



These shims are for the new Peterbilt and Kenworth "Low Air Suspensions".

Part No.	Thickness	Qty
36001	1/32"	6
36002	1/16"	6
36003	1/8"	6

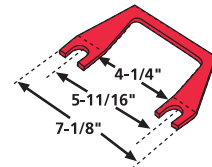
PETERBILT / KENWORTH FLEX AIR SUSPENSION SHIMS



These shims adjust thrust angle and toe by shimming the torque arms.

Part No.	Thickness	Qty
36010	1/32"	6
36011	1/16"	6
36012	1/8"	6

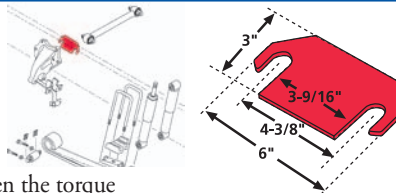
NAVISTAR SHIM FOR "CORPORATE" 6x4 AIR SUSPENSION



When used on the lateral link these shims will center the axle with the frame rails. Also will adjust thrust angle and toe by placing the shim between the spring hanger and the spring.

Part No.	Thickness	Qty
36020	1/32"	6
36021	1/16"	6
36022	1/8"	6

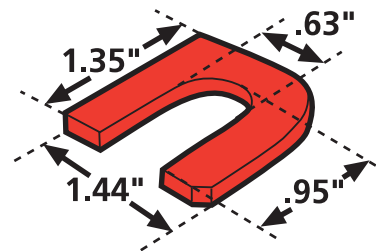
FREIGHTLINER SHIMS FOR FAS II SUSPENSIONS



Will change thrust and toe when installed between the torque arm and the spring hanger. They will also center the axle with the frame rails when used on the lateral link.

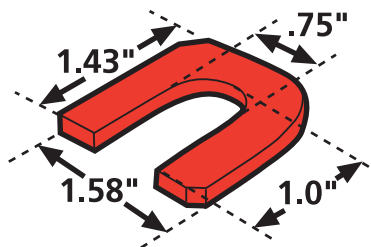
Part No.	Thickness	Qty
36031	1/16"	6
36032	1/8"	6

VANHOOL LOWER CONTROL ARM & BOGEY AXLE SHIM



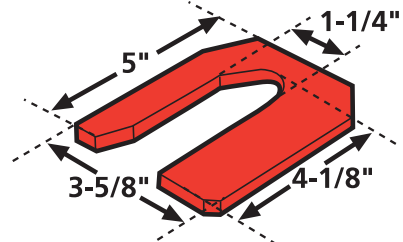
Part No.	Thickness	Qty
36040	1/32"	6
36041	1/16"	6
36042	1/8"	6

VANHOOL UPPER CONTROL ARM & DRIVE AXLE SHIM



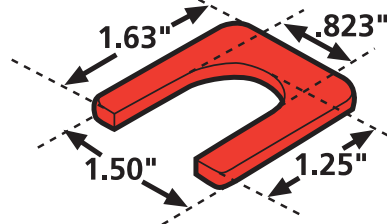
Part No.	Thickness	Qty
36050	1/32"	6
36051	1/16"	6
36052	1/8"	6

PREVOST CASTER SHIM



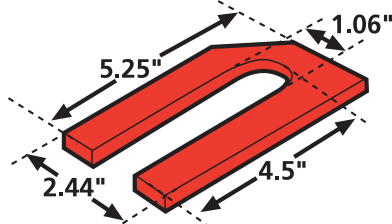
Part No.	Thickness	Qty
36060	1/32"	6
36061	1/16"	6
36062	1/8"	6

PREVOST CASTER SHIM



Part No.	Thickness	Qty
36070	1/32"	6
36071	1/16"	6
36072	1/8"	6

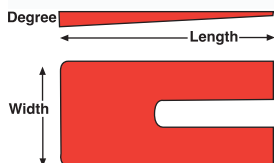
PREVOST X & XL SHIM



Part No.	Thickness	Qty
36090	1/32"	6
36091	1/16"	6
36092	1/8"	6



HEAVY DUTY TRUCK PARTS



Truck Axle Shims

Note: Ordering one Part Number supplies six shims in a box. When placing order spring pad length and width is needed.



PARTS
HEAVY DUTY TRUCK

MANGANESE BRONZE PART NO.	ALUMINUM ALLOY PART NO.	WIDTH	DEGREE	LENGTH	QTY/BOX	MANGANESE BRONZE PART NO.	ALUMINUM ALLOY PART NO.	WIDTH	DEGREE	LENGTH	QTY/BOX
T10405	AL10405	2-1/2"	1/2°	5"	6	T10605	AL10605	3-1/2"	1/2°	6-1/4"	6
T1041	AL1041	2-1/2"	1°	5"	6	T1061	AL1061	3-1/2"	1°	6-1/4"	6
T1042	AL1042	2-1/2"	1-1/2°	5"	6	T1062	AL1062	3-1/2"	1-1/2°	6-1/4"	6
T1043	AL1043	2-1/2"	2°	5"	6	T1063	AL1063	3-1/2"	2°	6-1/4"	6
T1044	AL1044	2-1/2"	2-1/2°	5"	6	T1064	AL1064	3-1/2"	2-1/2°	6-1/4"	6
T1045	AL1045	2-1/2"	3°	5"	6	T1065	AL1065	3-1/2"	3°	6-1/4"	6
T1046	AL1046	2-1/2"	3-1/2°	5"	6	T1066	AL1066	3-1/2"	3-1/2°	6-1/4"	6
T1047	AL1047	2-1/2"	4°	5"	6	T1067	AL1067	3-1/2"	4°	6-1/4"	6
T10505	AL10505	3"	1/2°	6"	6	T10705	AL10705	4"	1/2°	6-1/2"	6
T1051	AL1051	3"	1°	6"	6	T1071	AL1071	4"	1°	6-1/2"	6
T1052	AL1052	3"	1-1/2°	6"	6	T1072	AL1072	4"	1-1/2°	6-1/2"	6
T1053	AL1053	3"	2°	6"	6	T1073	AL1073	4"	2°	6-1/2"	6
T1054	AL1054	3"	2-1/2°	6"	6	T1074	AL1074	4"	2-1/2°	6-1/2"	6
T1055	AL1055	3"	3°	6"	6	T1075	AL1075	4"	3°	6-1/2"	6
T1056	AL1056	3"	3-1/2°	6"	6	T1076	AL1076	4"	3-1/2°	6-1/2"	6
T1057	AL1057	3"	4°	6"	6	T1077	AL1077	4"	4°	6-1/2"	6
						T1078	AL1078	4"	5°	6-1/2"	6

TRUCK AXLE SHIMS (HD ZINC ALLOY)

APPLICATIONS: Any solid axle 2WD or 4WD vehicle.

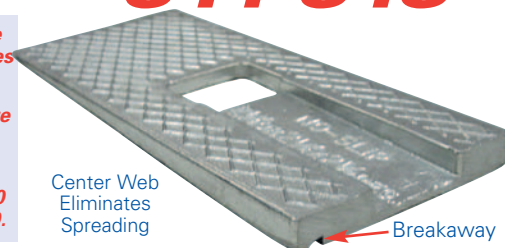
Part No.	Width	Degree Taper	Qty/Box	Wt/Box
841	2-1/4"- 2-1/2"	1/2°	6	1-1/2 lb.
842	2-1/4"- 2-1/2"	1°	6	1-1/2 lb.
843	2-1/4"- 2-1/2"	1-1/2°	6	2 lb.
844	2-1/4"- 2-1/2"	2°	6	2-1/4 lb.
845	2-1/4"- 2-1/2"	2-1/2°	6	2-3/4 lb.
846	2-1/4"- 2-1/2"	3°	6	2-3/4 lb.
847	2-1/4"- 2-1/2"	3-1/2°	6	3-1/4 lb.
848	2-1/4"- 2-1/2"	4°	6	3-1/4 lb.

Note: Ordering one Part Number supplies six shims in a box.

All sizes of shims are 6" in length.

For 1-3/4" to 2" Widths see page 10 for Shims 801 - 810.

841-848



UNI-WEDGE SHIMS (HD ZINC ALLOY)

Twice the coverage - half the inventory. Changes caster positive or negative from 1/2° to 4°.

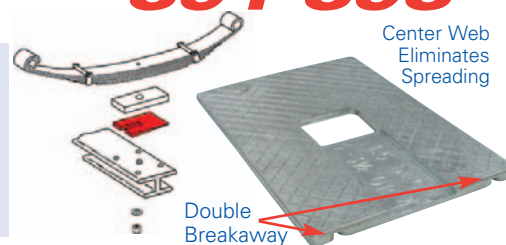
APPLICATIONS: Any solid axle 2WD or 4WD vehicle.

Part No.	Width	Degree Taper	Qty/Box	Part No.	Width	Degree Taper	Qty/Box
891	3"- 3-1/2"- 4"	1/2°	6	895	3"- 3-1/2"- 4"	2-1/2°	6
892	3"- 3-1/2"- 4"	1°	6	896	3"- 3-1/2"- 4"	3°	6
893	3"- 3-1/2"- 4"	1-1/2°	6	897	3"- 3-1/2"- 4"	3-1/2°	6
894	3"- 3-1/2"- 4"	2°	6	898	3"- 3-1/2"- 4"	4°	6

Note: Ordering one Part Number supplies six shims in a box.

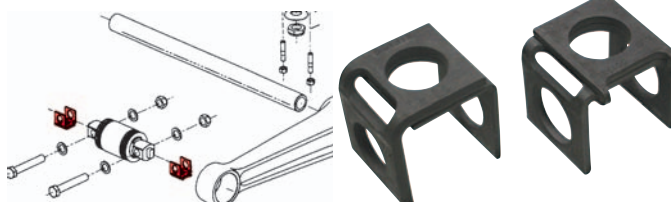
All sizes of shims are 6" in length.

891-898



HENDRICKSON WALKING BEAM SHIMS

These are the OE style shims recommended by Hendrickson. The 36080 offers three adjustments at 0, 3/16" and 3/8". The 36085 gives you four different adjustments of 0, 1/8", 1/4" and 3/8". Each part number includes 2 to a package.



36080 36085

Heavy Duty Parts and Tools Available on our Website - Go to www.spcalignment.com to our Heavy Duty Section in Traditional Applications





91040

Perfect to add to your PMs - check your alignment in just 5 minutes!!!!

FASTRAX™ CAMBER / CASTER GAUGE

This great tool is a must for your garage or shop. Portable alignment checks can be done quickly and easily with the FasTrax™ Adjustable Camber/Caster Gauge.

- Includes gauge and wheel mount (fits most wheels from 21" to 26").
- Includes extra length toe arms, heavy duty tape measure and no lip adapters.
- Displays Camber $\pm 4^\circ$ / Caster -4° to $+12^\circ$.
- Saves time and tires.
- Accurate, rugged and easy-to-use

TOOLS
TRUCK GAUGES



• **The most expensive cost of operating a fleet today is fuel and rubber**

• **By adding 5 minutes to your PMs you can protect your steer tires**

from premature wear and increase fuel mileage

• **For less than the price of one steer tire you can **SAVE THOUSANDS OF DOLLARS PER YEAR!****



8113



- Time/money saving device.
- Return a strut to its original camber after repair or replacement.
- Measure amount of camber *change* movement before reinstalling alignment heads during camber kit installation.
- Check the amount of camber *change* before reinstalling tire and wheel assemblies on trucks with alignment bushings.

MAGNETIC ADJUSTABLE CAMBER GAUGE

Inexpensive, portable and very accurate this gauge is housed in a durable, non-magnetic casing with a magnetic head that attaches firmly to rotors or spindles. It has a simple leveling adjustment of $\pm 3^\circ$.

64225



Alignment equipment manufacturers are using frame angle input with their software for completing Caster specifications.

ANGLE GAUGE

This angle gauge is an easy, accurate way for measuring frame and drive shaft angles. An ideal tool to ensure the drive line angle is still within specification for raised and lowered vehicles.



HEAVY DUTY TRUCK TOOLS

STEEL WHEEL RIM STRAIGHTENING TOOL

For quick and easy removal of indentations on wheel flanges and rims of most vehicles. Allows proper tire seating, giving greater tire protection and durability. This tool is powder coated for added durability.



8130

CHROME LUG NUT COVER TOOL

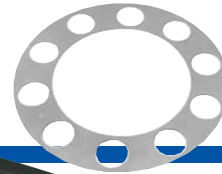
No-Mar coated jaws allow harmless removal and installation of chrome nut covers on light truck, motor home, and over-the-road truck lug nuts.



83788

NO MAR RIM GUARD

Protects from scratching chrome, aluminum, and painted truck wheels when removing lug nuts.



84238

TRUCK WHEEL WEIGHT TOOL

Special grip hammer and pliers for removal and installation of truck wheel weights.



83125

TOOLS
HEAVY DUTY TRUCK

Heavy Duty Turntables

STAINLESS STEEL

Specially constructed turntables utilizing stainless steel. These turntables are perfect for use where rust & corrosion are a problem. May be used on the floor or in racks and pits. Can be ordered with optional pointer. Sold in pairs.

Dimensions: 18" X 18" X 2.5"
Weight Rated: All O-T-R Heavy Duty Trucks
Range: 360° Rotation
Unit weight: 98 lbs each
#88760 W/O Pointer
#88765 With Pointer



ALUMINUM

These Heavy Duty Aluminum Turntables are 65% lighter vs. comparable steel turntables that can weigh 110 lbs each. They make it possible to move you heavy duty alignment system from bay to bay or even site to site. Can be ordered with optional pointer (shown). Sold in pairs.

Dimensions: 18" X 18" X 2.5"
Weight Rated: All O-T-R Heavy Duty Trucks
Range: 360° Rotation
Unit weight: 32 lbs each
#88740 W/O Pointer
#88745 With Pointer



65% Lighter

MILD STEEL

These heavy duty turntables are perfect for normal usage. They come equipped with secure locking pins that are easy to use. For floor, racks or pits. Can be ordered with optional pointer. Sold in pairs.

Dimensions: 18" X 18" X 2.5"
Weight Rated: All O-T-R Heavy Duty Trucks
Range: 360° Rotation
Unit weight: 98 lbs each
#88720 W/O Pointer
#88725 With Pointer



HEAVY DUTY TURNABLES (PAIR)

Full floating with enclosed ball bearings. Large, easy to read dial is quickly adjusted to zero. Pins are easy to remove and lock plates securely. Maybe be used as portable floor units or on racks and pits. Sold in pairs.

Dimensions: 15" x 20" x 2"

Unit Weight: 53 lbs each

Weight Limit: 10,000 lbs/wheel

Range: 100°



WA 1100

TRUCK FRONT SLIP PLATE SET (PR)

This slip plate set is used in conjunction with the WA515 (see page 7) toe gauge. Made of steel, these slip plates allow the tire to move freely while the technician sets the toe. Sold in pairs.

Dimensions: 16" x 24" x 3/8" high



WA 1841



Truck Tandem Alignment Systems

WA 1988



STEEL WHEELS

This is a simple method for tracking the rear dual tandems on trucks and tractors. It includes the WA1896 "U" Bolt Extensions, a pair of Lo Profile Extension Bars (WA1877) and a pair of WA1888 Tandem Trailer Trackers. With this system the technician can easily check the A and D distances along with the B and C distances (diagram right) to see if the tandems are tracking correctly.

WA 1990



ALUMINUM WHEELS

The WA1990 is a simple method for tracking the rear dual tandems on trucks and tractors. It includes the WA1896 "U" Bolt Extensions, a pair of Lo Profile Extension Bars (WA1877) and WA1890 Tandem Trailer Tracker Set for Aluminum Wheels. With this system the technician can easily check the A and D distances along with the B and C distances (diagram right) to see if the tandems are tracking correctly.

TOOLS
HEAVY DUTY TRUCK

WA 1877



LO PROFILE EXTENDER BARS

The WA1877 Lo Profile Extender Bar is designed to lower the measuring point of the tandems from the hub so that measuring the tracing of low profile trailers, such as car carriers and moving vans can easily be done. Can be used with either the WA1888 or the WA1890. Sold in pairs.

WA 1888

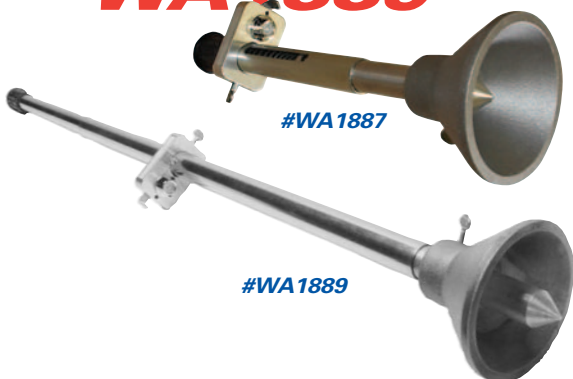


TANDEM AXLE CALIPER

These sets are used to aid in measuring the tracking of tandem axles in relationship to the kingpin suspensions and the front and rear axles on the tandem. Spring loaded and adjustable they establish a measuring point from the center of the wheel. To be used with WA1889 and WA1891. Sold in pairs.

Fits steel wheels up to 22-1/2".

WA 1887 WA 1889



WA 1887

KINGPIN EXTENSION - LO PROFILE

This kingpin extension is for low profile trailer and car carriers. For simple and fast, accurate measurements from the kingpin center to the trailer tandems (to be used with WA1888 or WA1890 and WA1891).

Height 13-1/4"

3" Spring Motion

WA 1889

TRAILER KINGPIN EXTENSION

The trailer kingpin extension makes simple, fast, accurate measurements from the kingpin center to the trailer tandems. It is adjustable in length and has a spring-loaded cone that assures accurate holding to the kingpin (to be used with WA1888 or WA1890 and WA1891).

Maximum Height 48" 6 Adjustments in 2" Increments 3" Spring Motion



TANDEM TRACKER SET FOR ALUMINUM WHEELS

This trailer tandem tracker set *for aluminum wheels, up to 28"*, is used to aid in measuring the tracking of the tandem axles in relationship to the kingpin extension and the front and rear axles on the tandem. They fit on the outside of the wheels so will not damage aluminum wheels and you don't need to remove the hub covers. Can also be used on steel wheels. Sold in pairs.



WA 1890

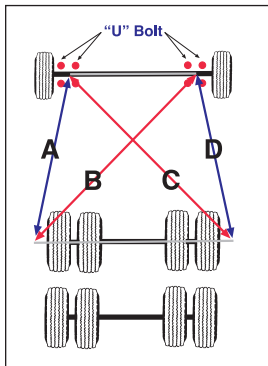
TANDEM AXLE CALIPER

This light weight aluminum caliper is used to check the spacing between the axles of tractors or trailers for alignment and tracking. It has an easy to read scale in both metric and inches, with a range of 72". To be used with WA1887, WA1888 or WA190 and WA1889.



WA 1891

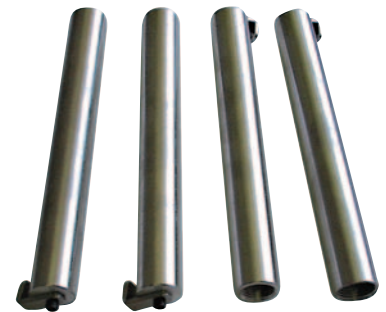
TOOLS
HEAVY DUTY TRUCK



"U" BOLT EXTENSIONS (4)

This extension set is used to measure the tandem axles on tractors in relationship to the front spring "U" bolts. The extenders establish a measuring point on the front axles so you can make accurate measurements to the rear axle. Measurements "A" and "D" should be equal as well as measurements "B" and "C" if the vehicle is tracking correctly on the front axle. Includes 4 extenders - 2 with 3/4" threads and 2 with 7/8" threads. Use with WA1877 or WA1889 and WA1888 or WA1890.

WA 1896



TIRE MATING SQUARE

This tool checks for variance in dual tire mating. Right and left tires should not vary more than 1/2" in diameter. Compare tires by placing the long arm against the side wall and the short arm against the tread.

Dimensions: Long Arm - 48" Short Arm - 26"



WA 1844

WA515 HEAVY DUTY & O-T-R TOE BAR SET

WA515 includes 10 in. extra-high stands, two standard 11 in. pointers, two long 17 in. pointers, an 8 ft. bar and WA516 scribe.

WA517 TOE BAR SET FOR LIGHT TRUCKS

Includes everything in the #WA515 Toe Bar Set (2 - 11" stands, 2 - 17" stands, 8 ft. bar, WA516 Scribe) plus an additional pair of 5 in. stands.

WA515 WA517



We have all the alignment tools you need - check out our 2006 - 2007 Sourcebook. To get your copy, just call our customer service department at **800-525-6505** and ask for part number 06.

Specialty Products Company - your one stop source for all your alignment tool needs.

SELSON AIR JACKS



Air Jacks

SAFE, FAST AND EASY TO OPERATE

Two simple push button valves — green to raise and red to lower — operate these jacks. These valves allow the jacks to remain inflated, even when the air supply has been disconnected. A single air line can be used for jacks and other air tools. Selson air jacks are unlike hydraulic jacks which require fine machining tolerances to maintain an effective seal against high hydraulic pressures. Selson air jacks have only a few moving parts (a telescopic stabilizer, and a stroke limiting device inside the airspring) to keep maintenance low. A safety valve on the control manifold helps protect against over inflation. Airsprings are made with two plies of neoprene rubber which is oil and ozone resistant and extremely durable. The 2.2 ton range of Selson air jacks is ideal for under car service, tire service, wheel alignment and body shops that demand quick, reliable, and very portable jacks.

CAUTION: These jacks are designed for raising and lowering loads ONLY. Never perform any service under a vehicle while supported on a jack. ALWAYS SUPPORT VEHICLES WITH JACK STANDS. Do not overload jacks or jack stands.



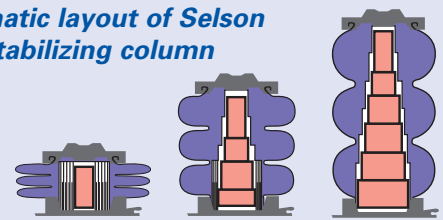
8268
9.9 TON



8268 9.9 TON JACK

Lift capacity:	19,800 lbs.	Working pressure:	85 P.S.I.
Minimum height:	7.3"	Unit weight:	137 lbs
Maximum height:	19.2"		

Diagrammatic layout of Selson Air Jack stabilizing column



FLEET TRUCK TOOLS



83820



APPLICATIONS

Ford 2WD/4WD:
2004 & Up F150,
2002 & Up Expedition
Lincoln 2WD/4WD:
2006 & Up Mark LT,
2003 & Up Navigator

FORD TRUCK CAM ADJUSTING WRENCH

This wrench is specifically designed to adjust the 86240 Camber/Caster Kit (page 12) and the 86640 Camber/Caster Kit (for newer Expeditions and Navigators - see our Sourcebook for more info). This steel wrench is plated for durability.

7198, 7199



7198 - 1-7/16" opening for adjusting the center link sleeve on Ford Super Duty Trucks

7199 - 1-13/16" opening to adjust the drag link sleeve on Ford Super Duty Trucks

See our Sourcebook for complete tool sets

FORD SUPER DUTY TOOLS

These are the tools needed to adjust toe on the new Ford Super Duty pickups. With 1/2" drives.

41150



APPLICATIONS

Ford: Twin I-Beam with upper and lower ball joints.

Replacement parts available:

4412 - "V" Insert **4413** - "U" Insert

4414 - Forcing screw tip

CAUTION: Not for use with impact wrenches (air tools).

FORD 4WD SLEEVE PULLER

This puller will remove most seized and rusted bushings and will easily pull most aftermarket and O.E. bushings on Ford 4WDs. This tool is designed to work on many different angled bushings. It comes with two horseshoe adapters to pull most aftermarket bushings with removable retaining rings as well as OEM bushings.



2WD/4WD BALL JOINT PRESS

Remove and replace universal joints without “brute force” methods that can cause costly damage. Now you can take on 4WD ball joint service in addition to servicing most cars. A forcing screw-powered press, used with proper adapters, easily removes and installs all press-fit ball joints (inc. GM plastic pin C.V. type joints). Comes in a durable plastic case.



7250

MASTER BALL JOINT ADAPTER SET

Expand the service capability of your ball joint press with this Master Ball Joint Adapter set. This complete kit includes the adapters and receiving tubes needed to work on GM, Ford and Dodge two and four wheel drive trucks, vans and SUVs. Kit also includes a live center forcing screw for heavy duty applications.



41110

DODGE TRUCK PRESS SLEEVES

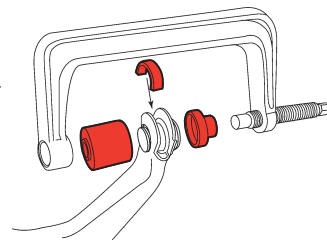
These sleeves are designed to match the angle of the yoke on the axle housing to insure proper installation. For Dodge & Jeep Offset Ball Joints, page 11. #23580 is for #23510, 23520, 23530, 23540. #23780 is for part numbers 23710, 23720, 23730, 23810, 23820, 23830, 23840.



23580
23780

GM BUSHING PRESS SLEEVES

These adapter sleeves are designed to be used with the 7250 Ball Joint Press (above). They are designed specifically for easy removal of the stock bushing and installation of the 86310 and 86330 Offset Upper Control Arm Bushings (page 12) used on 1999 and newer GM light trucks.



79500

PARTS
FLEET TRUCK

GM CONTROL ARM PUNCH

A necessary tool for removing the alignment inserts on the upper control arm alignment brackets without damaging the bracket. The center punch is for the older GM vehicles and the offset punch is for GM's newer models.

APPLICATIONS

Chevrolet/GM:

1989 - 98 2WD/4WD C & K Series 1/2, 3/4, 1 ton trucks

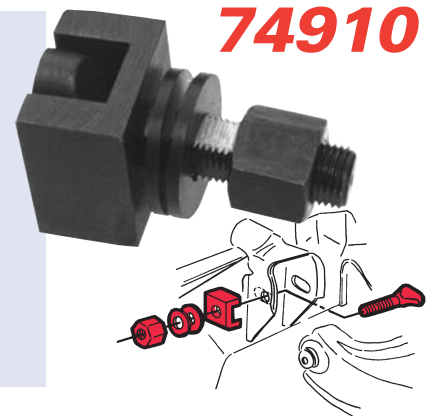
1991 & Up AWD Astro Vans and AWD Safari Vans.

1992 - 99 4WD V10, V20, V1500, V2500, Tahoe, Suburban

1996 - 02 2WD G10, G20, G30

1996 - 99 2WD R10, R20, R30, Tahoe

1999 - 01 Cadillac Escalade



74910

PITMAN ARM PULLER

Designed to handle the toughest job, the 7311 is adjustable and has special forged jaws shaped to fit the job. Positive grip allows this tool to do many other pulling jobs.

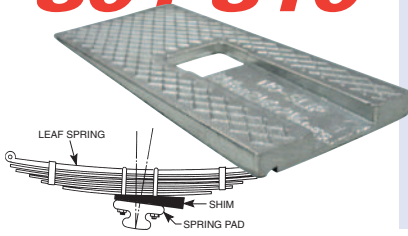
CAUTION: Not for use with impact wrenches (air tools).



7311



801-810



Adjustment range:
Caster $\pm .50^\circ$ to $\pm 6.00^\circ$

Time .5 hr/side - 6 shims/box

APPLICATIONS

Vehicles with 1-3/4" to 2" wide leaf springs

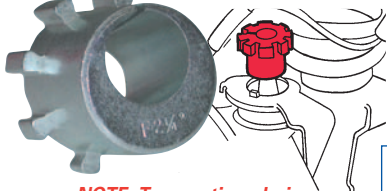
NOTE: Shims are 4-3/8" long.
Larger shims available - pg 3

ZINC TRUCK AXLE SHIMS

These popular heavy-duty axle shims are for vehicles with 1-3/4" to 2" wide leaf springs. **Six shims per box.**

Part No.	Width	Degree Taper	Part No.	Width	Degree Taper
801	1-3/4 to 2"	1/2°	806	1-3/4 to 2"	3°
802	1-3/4 to 2"	1°	807	1-3/4 to 2"	3-1/2°
803	1-3/4 to 2"	1-1/2°	808	1-3/4 to 2"	4°
804	1-3/4 to 2"	2°	809	1-3/4 to 2"	5°
805	1-3/4 to 2"	2-1/2°	810	1-3/4 to 2"	6°

23100 Series



NOTE: To save time during alignment, use the 23109 zero sleeve to determine initial readings.

Front Adjustment range:
Camber/Caster $\pm .25^\circ$ to $\pm 2.75^\circ$

Time 5 hr/side - 1 sleeve/wheel

APPLICATIONS

Ford 4WD: 1980 - 88 F250, F350, 1980 - 03 E250, E350, E450, full size Bronco with ball joints
1980 - 96 F150, F250 (L/D)

FORD 4WD CAMBER/CASTER SLEEVE SETS (9)

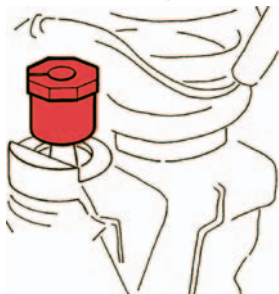
Change camber, caster or both at the same time with these sleeves. In a set or individual sleeves.

23100 Series Set

Set 23100 contains 1 each: 23101, 23102, 23103, 23104, 23105, 23106, 23107, 23108, 23109

Part No.	Change	Part No.	Change	Part No.	Change	Part No.	Change
23101	.25° (1/4°)	23104	1.00° (1°)	23107	1.75° (1-3/4°)	23111	2.25° (2-1/4°)
23102	.50° (1/2°)	23105	1.25° (1-1/4°)	23108	2.00° (2°)	23112	2.50° (2-1/2°)
23103	.75° (3/4°)	23106	1.50° (1-1/2°)	23109	0.00° (0°)	23113	2.75° (2-3/4°)

23130 Series



Front Adjustment range:
Cam/Cas $\pm .25^\circ$ to $\pm 2.00^\circ$

Time .5 hr/side - 1 sleeve/wheel

APPLICATIONS

Ford 4WD: 1997 - 98 F250 (H/D), 1999 - 04 F250, F350, F450, F550 Super Duty 4WD, 2000 - 04 Excursion, 1992 - 98 F350 Crew Cab
Ford 2WD: 1999 - 02 F450, F550 Super Duty
Dodge 4WD: 1994 - 99 BR2500, BR3500
Dodge 2WD: 1994 - 02 BR3500 w/Mono Beam

CAM./CAS. SLEEVE SET (9)

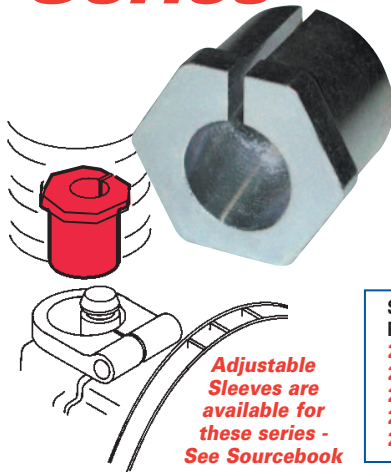
These sleeves for Dodge and Ford trucks change camber, caster or both at the same time. Remove the upper ball joint stud nut and break taper free between the stud and sleeve. Calculate the change and install correct sleeve. Individually or in a set.

23130 Series Set

Set 23100 contains 1 each: 23131, 23132, 23133, 23134, 23135, 23136, 23137, 23138, 23139

Part No.	Total Change	Part No.	Total Change
23131	.25° (1/4°)	23135	1.25° (1-1/4°)
23132	.50° (1/2°)	23136	1.50° (1-1/2°)
23133	.75° (3/4°)	23137	1.75° (1-3/4°)
23134	1.00° (1°)	23138	2.00° (2°)
		23139	0.00° (0°)

23180 Series



Adjustable Sleeves are available for these series - See Sourcebook

Front Adjustment range:
Cam/Cas $\pm .25^\circ$ to $\pm 3.50^\circ$

Time .5 hr/side - 1 sleeve/wheel

APPLICATIONS

Ford 2WD: 1987 - 96 F150, F250 (L/D), 1987 & Up F350, 2000 - 04 Excursion, 1989 - 90 Bronco II, 1992 & Up E150, E250, E350, E450
1991 - 94 Explorer, 1989 - 97 Ranger, 1999 & Up F250, F350 Super Duty
Mazda 2WD: 1991 - 97 Navajo, Pickup
Ford 4WD: 1991 - 94 Explorer, 1990 - 97 Ranger
Mazda 4WD: 1991 - 97 Navajo, Pickup

FORD/MAZDA 2 & 4WD CAM./CAS. SLEEVE SET (9)

These popular sleeves are widely used to adjust caster and/or camber on many 2/4WD trucks. Note: Sleeves adjust to a smaller degree on Ford 4WD light trucks. Individual sleeves or in a set.

23180 Series Set

Set 23180 contains 1 each: 23181, 23182, 23183, 23184, 23185, 23186, 23187, 23188, 23199

To save time during alignment, use the 23199 zero sleeve to determine initial readings.

Series Part No.	2WD Adj. Change	4WD Adj. Change	Series Part No.	2WD Adj. Change	4WD Adj. Change	Series Part No.	2WD Adj. Change	4WD Adj. Change
23181	.25° (1/4°)	.20°	23186	1.50° (1-1/2°)	1.10°	23191	2.75° (2-3/4°)	2.00°
23182	.50° (1/2°)	.40°	23187	1.75° (1-3/4°)	1.25°	23192	3.00° (3°)	2.25°
23183	.75° (3/4°)	.60°	23188	2.00° (2°)	1.40°	23193	3.25° (3-1/4°)	2.50°
23184	1.00° (1°)	.75°	23189	2.25° (2-1/4°)	1.60°	23194	3.50° (3-1/2°)	2.75°
23185	1.25° (1-1/4°)	.90°	23190	2.50° (2-1/2°)	1.80°	23199	0.00° (0°)	0.00°



FORD H/D SLEEVES

Ford changed their axle design in 2005 on their Heavy Duty trucks. These sleeves correct camber/caster these popular Super Duty trucks.

23220 4WD 2005-Up F250, F350 Super Duty

Part No.	Total Change	Part No.	Total Change
23221	.25° (1/4°)	23227	1.75° (1-3/4°)
23222	.50° (1/2°)	23228	2.00° (2°)
23223	.75° (3/4°)	23229	0° (0°)
23224	1.00° (1°)	23211	2.25° (2-1/4°)
23225	1.25° (1-1/4°)	23212	2.50° (2-1/2°)
23226	1.50° (1-1/2°)		

23230 4WD 2005-Up F450, F550 Super Duty

Part No.	Total Change	Part No.	Total Change
23231	.25° (1/4°)	23236	1.50° (1-1/2°)
23232	.50° (1/2°)	23237	1.75° (1-3/4°)
23233	.75° (3/4°)	23238	2.00° (2°)
23234	1.00° (1°)	23239	0° (0°)
23235	1.25° (1-1/4°)		

23220

Front Adjustment range:
Cam/Cas $\pm .25^\circ$ to $\pm 2.25^\circ$

Time .5 hr/side - 1 sleeve/wheel

APPLICATIONS

Ford 4WD:
2005-Up F250, F350 Super Duty

23230

Front Adjustment range:
Cam/Cas $\pm .25^\circ$ to $\pm 2.00^\circ$

Time .5 hr/side - 1 sleeve/wheel

APPLICATIONS

Ford 4WD:
2005-Up F450, F550 Super Duty

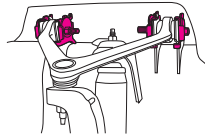
Use the 23229 or 23239 zero sleeve to determine initial readings.



23220 23230 Series

DR1500 2/4WD CAMBER/CASTER KIT (2)

These heavy duty bolts and brackets replace the upper control arm mounting bolts giving you both camber and caster adjustments. Kit includes 2 cam & bolt sets to cover one side of the vehicle.



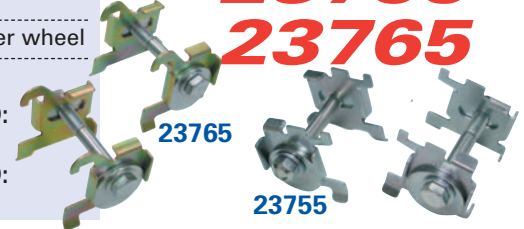
Front Adjustment range:
Cam/Cas $\pm 1.0^\circ$

Time .3 hr/side - 1 kit per wheel

APPLICATIONS

23755 - Dodge 4WD:
2002 - 05 DR1500

23765 - Dodge 2WD:
2002 - 05 DR1500



23755 23765

These offset ball joints provide for independent wheel caster and/or camber changes up to 2 degrees on some models. Replace the upper ball joint with the offset ball joint to bring the vehicle back into spec. Use installation sleeve set 23780 in conjunction with ball joint press 7250 (See page 9) for quick removal and installation of the ball joints.

*** Note: 23800 is an OEM Replacement Ball Joint with no change in camber.**



23510 Cam/Cas $\pm .50^\circ$ 23520 Cam/Cas $\pm 1.00^\circ$
23530 Cam/Cas $\pm 1.50^\circ$ 23540 Cam/Cas $\pm 2.00^\circ$

Installation time: 1.0 hr/side Required: 1 per wheel

APPLICATIONS

Jeep 2WD/4WD: 1984 - 01 Cherokee, Comanche
1987 & Up Wrangler, 1990 - 96 Renegade,
1984 - 96 downsize Wagoneer, 1993 - 04 Grand Cherokee
Dodge 4WD: 1994 - 01 BR1500 & BR2500 (L/D) Pickups

23710 Cam/Cas $\pm .50^\circ$ 23720 Cam/Cas $\pm 1.00^\circ$
23730 Cam/Cas $\pm 1.50^\circ$

Installation time: 1.0 hr/side Required: 1 per wheel

APPLICATIONS

Dodge 4WD: 2000 - 02 BR2500, BR3500

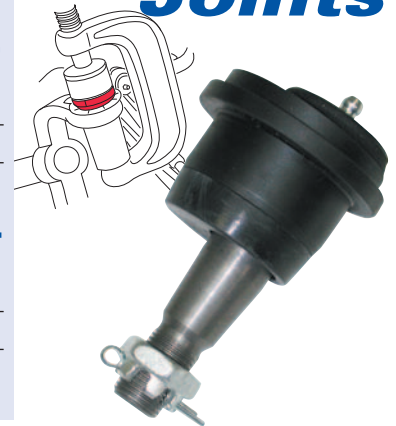
23800* Cam/Cas 0.0° 23810 Cam/Cas $\pm .50^\circ$
23820 Cam/Cas $\pm 1.00^\circ$ 23830 Cam/Cas $\pm 1.50^\circ$

Installation time: 1.0 hr/side Required: 1 per wheel

APPLICATIONS

Dodge 4WD: 2003 & Up DR2500, DR3500

Dodge Offset Ball Joints



PARTS
FLEET TRUCK

F150 2/4WD CAM/CAS KIT

This kit replaces the original lower control arm bolt. After installing the new bolt cam and adjusting plate you will be able to adjust camber and caster for the life of the vehicle. To make adjustments use wrench #83820 on page 8.

Front Adjustment range:
Cam: $\pm 1.0^\circ$ Cas: $\pm 1.50^\circ$

Time .4 hr/side - 1 kit per wheel

APPLICATIONS

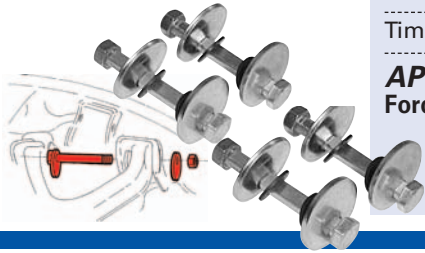
Ford 2WD & 4WD:
2004 & Up F150



86240



87385



Front Adjustment range:
Camber/Caster $\pm 2.00^\circ$
Time .4 hr/side - 1 kit per axle

APPLICATIONS
Ford 2WD & 4WD:
1997 - 03 F150, F250 (L/D),
1997 - 02 Expedition,
2004 & Up F150 Heritage

F150/250 (L/D) 2/4WD CAMBER/CASTER KIT (4)

Use this kit to change caster and/or camber on these vehicles. Simply replace the existing upper control arm mounting bolts with these cam bolts for caster/camber changes up to 2.0° .

86330 86380



Front Adjustment range: Camber -1.00° or $+1.00^\circ$
Installation time: .8 hr/side Required: 1 kit per wheel

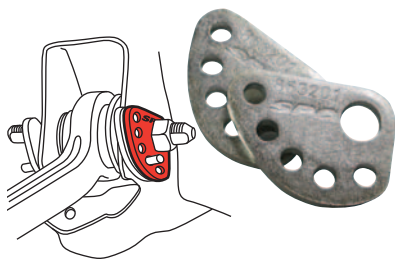
86330 APPLICATIONS
Chevrolet/GMC 4WD: 1999 & Up K2500 & K3500
Standard & Heavy Duty
Chevrolet/GMC 2WD: 1999 & Up C2500 & C3500
Standard & Heavy Duty

86380 APPLICATIONS
Chevrolet/GMC 4WD: 2002 & Up Avalanche, 1999 & Up
K1500, 2000 & Up Suburban, 2000 & Up Tahoe/Yukon
Chevrolet/GMC 2WD: 2002 & Up Avalanche, 1999 & Up
C1500, 2000 & Up Suburban, 2000 & Up Tahoe/Yukon

GMC FRONT CAMBER BUSHINGS

Replace the upper OE bushings with these offset control arm bushings to get -1.0° or $+1.0^\circ$ of camber change. OE style rubber maintains the original ride characteristics. To install use bushing press sleeves #79500 on page 9.

86320



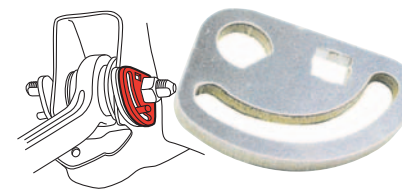
Locks in OEMA adjustment.
Installation time: .3 hr/side Required: 1 kit per wheel

APPLICATIONS
Chevrolet/GMC 4WD: 2002 & Up Avalanche, 1999 & Up
K1500, 1999 & Up K2500 & K3500 Standard & Heavy Duty,
2000 & Up Suburban, 2000 & Up Tahoe/Yukon
Chevrolet/GMC 2WD: 2002 & Up Avalanche, 1999 & Up
C1500, 1999 & Up C2500 & C3500 Standard & Heavy Duty,
2000 & Up Suburban, 2000 & Up Tahoe/Yukon

ALIGNMENT CAM LOCK PLATE - GMC

This lock plate is designed to keep the front alignment angles in position by replacing the existing slotted cam.

86370



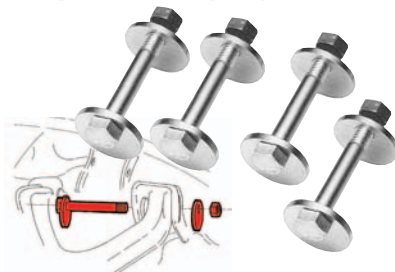
Front Adjustment range:
Camber/Caster $\pm 1.50^\circ$
Time .3 hr/side - 1 kit per wheel

APPLICATIONS
Chevrolet/GMC 2WD & 4WD:
2003 & Up Express & Savana -
1500, 2500, 3500

CHEVROLET/GMC VAN ALIGNMENT CAM PLATES

Designed to be easily adjusted with a $3/8$ " drive breaker bar, this cam makes these previously difficult to align vans a snap. Simply replace the OE cam on the forward with this cam and you will be able to dial in camber and caster.

87400



Front Adjustment range:
Camber/Caster $\pm 2.00^\circ$
Time .4 hr/side - 1 kit per axle

APPLICATIONS
GM 2WD & 4WD:
1988 - 99 C&K
1500, 2500, 3500
1990 & Up Safari
AWD Van
Chevrolet:
1990 & Up Astro
AWD Van

GM 2WD AND 4WD CAMBER/CASTER KIT (4)

These heavy duty cam and bolt assemblies replace the upper control arm mounting bolts. Remove the O.E. cams and bolts and replace with this kit, rotating it to provide camber and/or caster adjustment. It may be necessary to remove O.E. slugs and elongate the bolt holes with #74910 punch (See page 9).

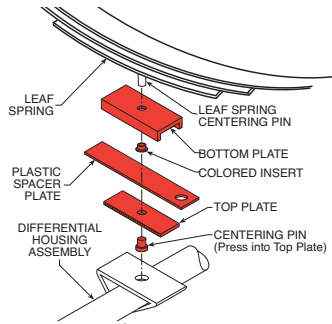




FLEET TRUCK PARTS

THRUST ALIGNMENT PLATE

Our patented thrust alignment plate will allow for corrections of setback and thrust angle on most vehicles with rear leaf springs. Installation is made by loosening the U-bolts holding the leaf spring to the axle, installing the alignment plate between the axle and leaf spring and re-tightening the U-bolts. Widths are available in 2-3/8", 3", and 4" and each kit comes with multiple parts to provide coverage of most vehicles with rear leaf springs, including all early model light duty trucks.



Time .5 hr/side - 1 plate per axle

63020 - 2-3/8" Width

APPLICATIONS

Vehicles with 2-3/8" wide to 2-3/4" wide leaf springs inc. 60mm, 65mm and 70mm leaf springs of import trucks.

63030 - 3" Width

APPLICATIONS

Vehicles with 3", 3-1/2" and 3-5/8" wide leaf springs including 80mm, 90mm, and 100mm wide leaf springs.

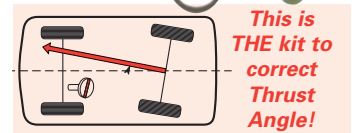
63040 - 4" Width

APPLICATIONS

Vehicles with 4" - 5" leaf springs.

NOTE: Allow extra time for rusted bolts. New, longer U-Bolts may be required.

63020
63030
63040



Can't find it here? Need a part for a 2003 Ford Explorer? Check out our **Total Wheel Alignment Sourcebook**.

We have alignment solutions for most light duty trucks, along with tools and accessories to make the job easier.

To get your copy, just call our customer service department at **800-525-6505** and ask for part number 06.

Specialty Products Company - your one stop source for all your alignment needs.

INDEX

NUMERIC INDEX

801 Series 10	35060 Series 2	86370 12
841 Series 3	35070 Series 2	86380 12
891 Series 3	36000 1	87400 12
7198 8	36001 Series 2	88720 5
7199 8	36010 Series 2	88725 5
7250 9	36020 Series 2	88740 5
7311 9	36030 Series 2	88745 5
8113 4	36040 Series 2	88760 5
8130 5	36050 Series 2	88765 5
8268 8	36060 Series 2	91000, 91010,
23100 Series 10	36070 Series 2	91020, 91030 4
23130 Series 10	36080 3	91100 4
23180 Series 10	36085 3	AL Series Shims 3
23220 Series 11	36090 Series 2	T Series Shims 3
23230 Series 11	41110 9	WA515 7
23510 Series 11	41150 8	WA517 7
23580 9	63020 Series 2	WA1100 5
23710 Series 11	Inside Back Cover	WA1841 5
23755 11	64225 4	WA1844 7
23765 11	74910 9	WA1877 6
23780 9	79500 9	WA1887 6
23800 Series 11	83125 5	WA1888 6
27385 12	83620 12	WA1889 6
35000 Series 1	83788 5	WA1890 7
35010 Series 1	83820 8	WA1891 7
35020 Series 1	84238 5	WA1896 7
35030 Series 1	86240 11	WA1988 6
35040 Series 1	86330 12	WA1990 6
35050 Series 2		

ALPHABETIC INDEX

Alum. Alloy Truck Axle Shim 3	Magnetic Adj. Camber Gauge 4
Angle Gauge 4	Manganese Truck Axle Shim 3
Axle Shims - Zinc 10	Navistar Shim 2
Ball Joint Adapter Set 9	No Mar Rim Guard 5
Ball Joint Press 9	Peterbilt Thrust Shims 2
Chrome Lug Nut Cover Tool 5	Peterbilt Air Leaf Shims 1
Dodge Ball Joints 11	Peterbilt Flex Air Shims 2
Dodge Dr1500 Kits 11	Pitman Arm Puller 9
Dodge Truck Press Sleeves 9	Prevost Caster Shim 2
FasTrax™ Gauge 4	Prevost X & XI Shim 2
FasTrax™ Toe adapter Kit 4	Selson Air Jack 8
Ford 4wd Sleeve Puller 8	Single Slot Tandem Shims 2
Ford F150/F250 Kits 11	Slip Plates 5
Ford Super Duty Toe Tools 8	Steel Wheel Rim Tool 5
Ford Cam Adj. Wrench 8	Tandem Alignment Set 1
Ford Truck Sleeves 10 & 11	Tandem Alignment Systems 6
Freightliner Adjusting Shim 1	Tandem Axle Caliper 6 & 7
Freightliner Shims 2	Thrust Plate Inside Back Cover
Freightliner Shims For Fas II 2	Tire Mating Square 7
GM Bushing Press Sleeves 9	Toe Bars 7
GM Camber/Caster Kit 12	Tracker Set 7
GM Control Arm Punch 9	Truck Axle Shims 3
GMC Van Alignment Plate 12	Truck Wheel Weight Tool 5
GMC Cam Lock Plate 12	Turntables 5
GMC Front Cam. Bushings 12	U Bolt Extensions 7
Hendrickson Walking Shims 3	Uni-Wedge Shims 3
I.H.C. Torque Arm Shim 1	Vanhoool Lower Arm Shim 2
Kenworth Air Glide Spacers 1	Vanhoool Upper Arm Shim 2
Kenworth Flex Air Shims 2	Volvo/White Tandem Shim 1
Kenworth Thrust Shims 2	Wilson Tandem Shim 2
Kingpin Extension 6	

Your Pro Alignment Team

Pioneering the alignment parts business in 1971, Specialty Products has lead the industry for over 30 years. Preferred by professional installers for its quality, service and innovation, Specialty Products is the industry's first choice in alignment parts and tools.

Technical Training

Specialty Products features two types of Heavy Duty Training. Our evening seminars are great for an introduction to this market and the two-day course is perfect for in-depth coverage of this specialized field.

Some of the items covered include:

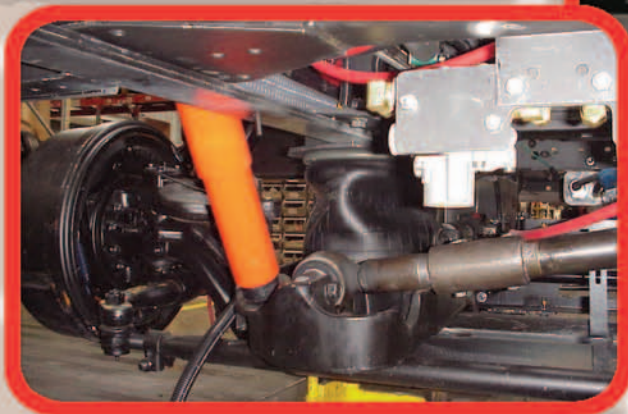
- Measuring and adjusting alignment angles
- Understanding tread wear patterns
- Evaluating ride height
- How to correctly inspect the vehicle
- Using wedges and other aftermarket alignment correction parts

For more information contact your local distributor or call Specialty Products.



DEMAND THE BEST!

- Proven Quality
- Complete Line
- Preferred Brand
- Technical Training and Support
- Unsurpassed Service
- Field Sales Support
- New Product Development



Heavy Duty & Fleet Trucks

AAIA®
ΔΔG

aia
Canada

ASE
SAE

An ISO/TS 16949 Company

Distributed by:



Specialty
Products
Company®

800-525-6505

4045 Specialty Place • Longmont, Co 80504
303-772-2103 • Fax: 303-772-1918

www.spcalignment.com

SPC Part No. 20076 • ©2007 Niwot Corp. dba Specialty Products Co.®