

FOR RANCHO SUSPENSION SYSTEM **RS6590**: DODGE DAKOTA

READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION



IMPORTANT NOTES!

A. Before installing this system, have the vehicle's alignment and frame checked at a state approved facility. The alignment must be within factory specifications and the frame of the vehicle must be sound (no cracks, damage or corrosion).

B. Do Not install a body lift kit with Rancho's suspension system or interchange parts from another manufacturer. Use the appropriate Rancho shock absorbers. Contact your local Rancho representative for the correct application.

C. Compare the contents of this system with the parts list in these instructions. If any parts are missing, including fasteners, contact the Rancho Technical Department at 1-800-5SHOCKS. Each hardware kit in this system contains fasteners of high strength and specific size. Do not substitute a fastener

of lesser strength or mix one hardware kit with another.

D. Apply THREAD LOCKING COMPOUND to all bolts during installation. One drop on the exposed threads of each bolt before installing the nut is sufficient to provide an adequate bond. CAUTION: Thread locking compound may irritate sensitive skin. Read warning label on container before use.

E. Install all nuts and bolts with a flat washer. When both SAE (small OD) and USS (large OD) washers are used in a fastener assembly, place the USS washer against the slotted hole and the SAE washer against the round hole.

F. Unless otherwise specified, tighten all bolts to the standard torque specifications listed at the end of the Note's section. Do not use an impact wrench to tighten any of these bolts. They tend to over tighten

smaller bolts and under tighten larger bolts. USE A TORQUE WRENCH!!!

G. Do not chrome, cadmium, or zinc plate any of the components in this system. If you wish to change the appearance of components, enamel paint can be applied over the original coating.

H. This suspension system is a "bolt on assembly". Do not weld any of these components to the vehicle. If any component breaks or bends, contact your local Rancho dealer or Rancho for replacement parts.

I. Some of the service procedures require the use of special tools designed for specific procedures. The following tools and supplies are recommended for proper installation of this system. 

- ☐ Dakota Service Manual
- ☐ Tie Rod Remover C-3894-A
- ☐ Die Grinder
- ☐ Drill motor
- ☐ Assorted Drills: 1/8" through 5/8"
- ☐ Torque Wrench (250 FT-LB capacity)
- ☐ 1/2" Drive Ratchet and Sockets
- ☐ Assorted Combination Wrenches
- ☐ Assorted Hex-Key Wrenches
- ☐ Heavy Duty Jack Stands
- ☐ Wheel Chocks (wooden blocks)
- ☐ Hydraulic Floor Jack
- ☐ Center punch
- ☐ File
- ☐ Large "C" Clamps and Bench Vise
- ☐ Hacksaw
- ☐ Hammer
- ☐ Wire Brush (to clean bracket mounting surfaces)
- ☐ Silicone Spray Lubricant
- ☐ Tape Measure
- ☐ Brake Fluid (DOT 3)

☐ **Safety Glasses**--Wear safety glasses at all times

J. It is extremely important to replace torsion bars, CV flanges, and front drive shaft/pinion relationships as original. Be sure to mark left/right, front/rear, and indexing of mating parts before disassembly. A paint marker or light colored nail polish is handy for this.

K. Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature failure of the bushing and maintain ride comfort.

L. The required installation time for this system is approximately 12 hours. Check off the box () at the beginning of each step when you finish it. Then when you stop during the installation, it will be easier to find where you need to continue from.

M. Important information for the end user is contained in the consumer information pack. If you are installing this system for someone else, display the information pack by hanging it from the rear view mirror.

N. Thank you for purchasing the best suspension system available. For the best installed system, follow these instructions. If you do not have the tools or are unsure of your abilities, have this system installed by a certified technician. RANCHO SUSPENSION IS NOT RESPONSIBLE FOR DAMAGE OR FAILURE RESULTING FROM AN IMPROPER OR MODIFIED INSTALLATION...

STANDARD BOLT TORQUE SPECIFICATIONS						
INCH SYSTEM			METRIC SYSTEM			
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 9.8	Class 10.9	Class 12.9
5/16	15 FT-LB	20 FT-LB	M6	5 FT-LB	9 FT-LB	12 FT-LB
3/8	30 FT-LB	35 FT-LB	M8	18 FT-LB	23 FT-LB	27 FT-LB
7/16	45 FT-LB	60 FT-LB	M10	32 FT-LB	45 FT-LB	50 FT-LB
1/2	65 FT-LB	90 FT-LB	M12	55 FT-LB	75 FT-LB	90 FT-LB
9/16	95 FT-LB	130 FT-LB	M14	85 FT-LB	120 FT-LB	145 FT-LB
5/8	135 FT-LB	175 FT-LB	M16	130 FT-LB	165 FT-LB	210 FT-LB
3/4	185 FT-LB	280 FT-LB	M18	170 FT-LB	240 FT-LB	290 FT-LB
BOLT IDENTIFICATION						
1/2-13x1.75 HHCS D T L X G = Grade Marking (bolt strength) D = Nominal Diameter (inches) T = Thread Pitch (threads per inch)			M12-1.25x50 HHCS D T L X P = Property Class (bolt strength) D = Nominal Diameter (millimeters) T = Thread Pitch (thread width, mm)			

PARTS LIST

P/N	DESCRIPTION	QTY.	P/N	DESCRIPTION	QTY.
1412	Front Bump/Droop Stop	4	860165	Right Axle Hardware Kit	1
1417	Rear Bump Stop	2		M14-2.0x40 HHCS	1
15140	Riser Block	2		M14-2.0 Stover Nut	1
170087	Brake Hose, Right	1		SAE Washer	2
170088	Brake Hose, Left	1		M10-1.5x40 HHCS	2
176088	Rear End Link	2		10mm Washer	2
176105	Relay Rod	1	880166	Axle Spacer Hardware Kit	1
176106	Differential, Front Drop Bracket	1		7/16-14x1.75 HHCS	12
176107	Differential, Rear Drop Bracket	1		7/16 Lock Washer	12
176108	Right Axle, Front Drop Bracket	1	860167	Subframe Hardware Kit	1
176109	Right Axle, Rear Drop Bracket	1	176116	Spacer	2
176110	Axle Spacer	2		M12-1.75x110 HHCS	2
176111	LCA Subframe, Front	1		M12-1.75x120 HHCS	2
176112	LCA Rear Drop Bracket, Right	1		M14-2.0x30 HHCS	2
176113	LCA Rear Drop Bracket, Left	1		M14-2.0 Top Lock Nut	4
176114	UCA Drop Bracket, Right	1		M12-1.75 Stover Nut	4
176115	UCA Drop Bracket, Left	1		12mm Washer	6
176118	LCA Rear Drop Brkt, Right Aft	1		SAE Washer	8
176119	LCA Rear Drop Brkt, Left Aft	1	860168	LCA Drop Brkt Hardware Kit	2
176120	Rear Bump Stop Drop Bracket	2	176117	Spacer	1
176121	Torsion Bar Drop Bracket, Left	1		M14-2.0x120 HHCS	1
176122	Torsion Bar Drop Bracket, Right	1		7/16-14x1.5 HHCS	2
740016	5/8-18x3.18x9.15 U-bolt	4		M14-2.0 Top Lock Nut	1
8103	U-bolt Hardware Kit	1		7/16-14 Stover Nut	2
	5/8-16 Nut	8		5/16-24 Nyloc Nut	2
	5/8 Washer	8		7/16 SAE Washer	4
860010	Block Pin Kit	1		5/16 SAE Washer	2
	9/16x1.10 Pin	2		SAE Washer	2
860086	Brake Hose Gasket Kit	1	860169	UCA Drop Brkt Hardware Kit	2
	Copper Gasket	4		Heavy Duty Washer	4
860155	Rear End Link Hardware Kit	1		1/2-13x1.25 HHCS	1
420088	Sleeve	4		M14-2.0x40 HHCS	4
545	Bushing	4		M14-2.0 Top Lock Nut	2
	7/16-20x2.5 HHCS	4		1/2 SAE Washer	1
	7/16-20 Stover Nut	4		SAE Washer	2
	7/16 SAE Washer	4	860170	TB Drop Bracket Hardware Kit	1
	7/16 USS Washer	6		Torsion Bar Adjuster Bolt	2
860162	Cotter Pin Kit	1		7/16-20x2.5 HHCS	2
	Cotter Pin	2		3/8-16x1.25 HHCS	2
860163	Differential Hardware Kit	2		7/16-20 Stover Nut	2
	M12-1.75x65 HHCS	2		3/8-16 Stover Nut	2
	M12-1.75 Stover Nut	4		7/16 SAE Washer	2
	12mm Washer	8		7/16 USS Washer	4
	M12-1.75x70 HHCS	2		3/8 SAE Washer	4
860164	Differential Hardware Kit, Rear	1	860171	Bump Stop Hardware Kit	1
	M10-1.50x70 HHCS	1		3/8-16x1.25 HHCS	2
	7/16-14x1.25 HHCS	2		3/8-16 Stover Nut	2
	7/16-14 Stover Nut	2		5/16-24 Nyloc Nut	8
	7/16 SAE Washer	4		3/8 SAE Washer	4
	7/16 USS Washer	2		5/16 SAE Washer	8
	10mm Washer	1	88090	Instructions	1
			94140	Consumer Information Pack	1

FRONT SUSPENSION

VEHICLE PREPARATION & TORSION BAR REMOVAL

- 1) ☒ Park the vehicle on a level surface. Set the parking brake and chock rear wheels. Measure and record the distance from the center of each wheel to the top of the fender opening. See illustration 1.

LF: _____ RF: _____

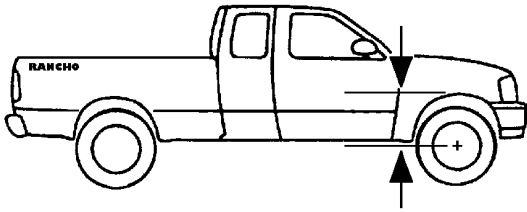


Illustration 1

- 2) ☒ Raise the front of the vehicle and support the frame with jack stands. Remove the front wheels and set them aside.
- 3) ☒ Mark torsion bars as either driver side front or passenger side front. Make alignment marks on the lower control arms, the torsion bars, and the torsion bar anchors (for installation reference).
- 4) ☒ Turn adjustment bolt counterclockwise to release spring load. Remove the adjustment bolt from the swivel. See illustration 2.

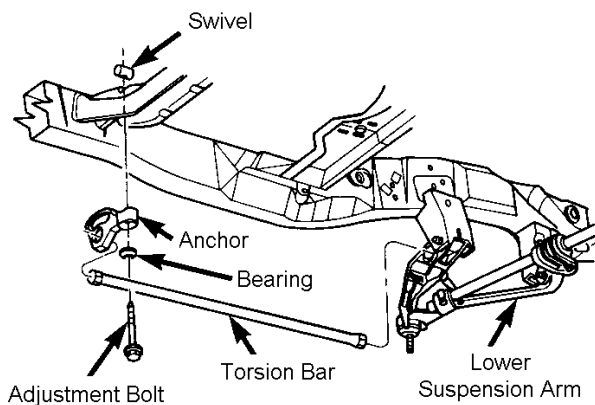


Illustration 2

- 5) ☒ Remove the anchor from the torsion bar. Slide the torsion bar out of the lower control arm pocket.

- 6) ☒ Repeat steps 4 and 5 for other side.

SHOCK ABSORBER & SWAY BAR REMOVAL

- 1) ☒ Remove the upper shock absorber nut, retainer and grommet.
- 2) ☒ Remove the lower bolt and remove the shock absorber.
- 3) ☒ Repeat steps 1 and 2 for the other side.
- 4) ☒ If equipped, remove the skid plate.
- 5) ☒ Remove the sway bar retainer bolts from the lower suspension arms and remove the retainers. See illustration 3.

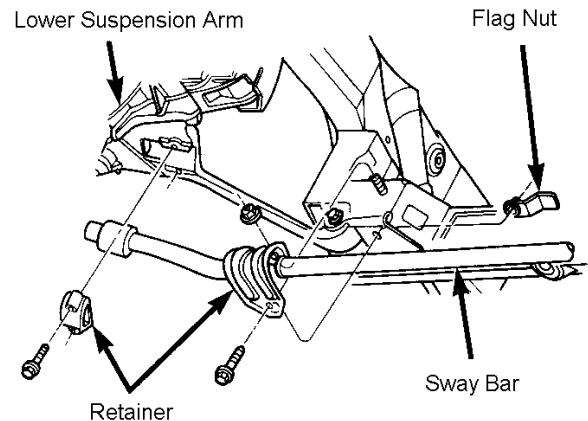


Illustration 3

- 6) ☒ Remove the sway bar retainer nuts and bolts from the crossmember. Remove the sway bar assembly.

UPPER & LOWER CONTROL ARM REMOVAL

NOTE: The upper and lower control arms are removed, along with the steering knuckle and axle shaft, as a complete assembly. It is not necessary to separate the components from each other.

- 1) ☒ Remove the cotter pin and nut from the outer tie rod end (illustration 4). Separate the tie rod end from the steering knuckle with the proper tool. Do Not use a pickle fork.

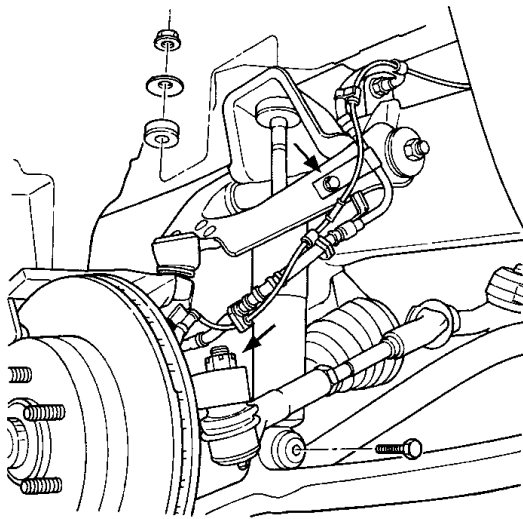


illustration 4

- 2) ☒ Remove the rubber bump stop from the frame bracket. See illustration 6.
- 3) ☒ Remove the bolt holding the brake hose to the upper control arm (illustration 4). If necessary, remove the ABS sensor from the steering knuckle. Save special bolt for reuse.
- 4) ☒ Remove the brake caliper and secure it up and out of the way.
- 5) ☒ Mark the inner CV flange and the axle flange for installation reference. Remove the bolts holding the CV driveshaft to the axle flange.
- 6) ☒ Support the lower control arm with a floor jack.
- 7) ☒ Remove the lower control arm pivot bolts and the upper control arm pivot bar bolts. See illustrations 5 and 6. Slide the control arm assembly away from the vehicle.

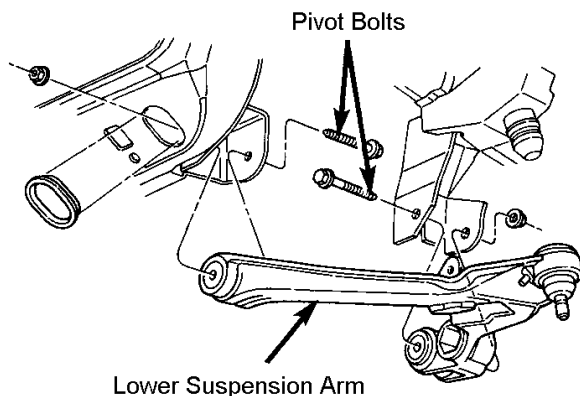


Illustration 5

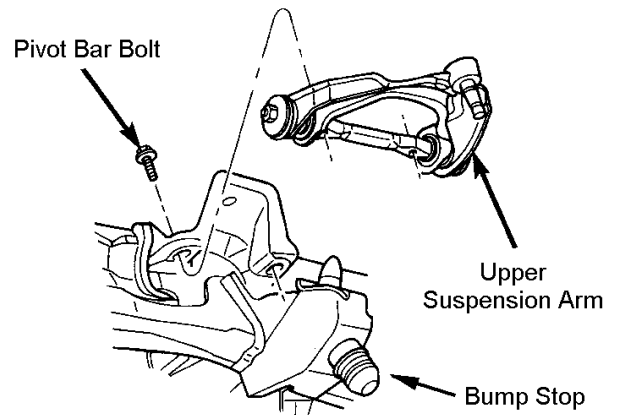


Illustration 6

- 8) ☒ Repeat steps 1 through 7 for the other side.

BUMP STOP FRAME BRACKET MODIFICATION

- 1) ☒ Cut off the bump stop frame bracket with a die grinder at the locations shown in illustration 7. Do Not cut into the frame or lower control arm bracket.



Illustration 7

- 2) ☒ Grind down any bracket material left, to within a 1/4" of the frame. Remove all sharp edges.
- 3) ☒ Paint the exposed metal surfaces with a good quality enamel paint (semi-gloss black).
- 4) ☒ Repeat steps 1 through 3 for the other side.

RELAY ROD REPLACEMENT

- 1) ☒ Mark the tie rod ends for installation reference. Separate the inner tie rod ends from the relay rod. Remove both tie rod assemblies.

- 2) ☒ Remove the cotter pins and nuts from the pitman arm and idler arm.
- 3) ☒ Separate the idler arm and pitman arm from the relay rod with Puller C-3894-A.. Remove the relay rod.
- 4) ☒ Attach new relay rod 176105 to the idler arm and pitman arm with the original nuts. Tighten the nuts to 65 ft. lbs. Install new cotter pins.
- 5) ☒ Thread the inner tie rod ends into the Rancho relay rod. Tighten the ends to 50 ft. lbs.

DIFFERENTIAL & FRONT AXLE DROP BRACKET INSTALLATION

- 1) ☒ Support the front differential and axle assembly with a floor jack.
- 2) ☒ Remove the bolts holding the differential to the left side transmission and engine mount brackets.
- 3) ☒ Remove the bolts holding the right axle tube to the right side transmission and engine mount brackets. Lower the front differential approximately 5 inches.

NOTE: When attaching the front differential and axle drop brackets, do not tighten the mounting hardware until the axle assembly is completely installed. Also, use caution when threading bolts into the aluminum housing to avoid cross threading.

- 4) ☒ Attach drop bracket 176106 to left engine mount bracket with the 12mm hardware from kit 860163 (use shorter length bolts from kit). See illustration 8.



Illustration 8

- 5) ☒ Insert drop bracket 176108 into right engine mount bracket with offset towards rear. Attach drop bracket with the 12mm hardware from kit 860163. See illustration 8.
- 6) ☒ Attach drop bracket 176107 to the outside of the left transmission bracket with the 7/16" hardware from kit 860164.
- 7) ☒ Attach drop bracket 176109 to the inside of the right transmission bracket with the 14mm hardware from kit 860165.
- 8) ☒ Raise the front axle assembly. Loosely attach the differential and right axle to drop brackets 176106 and 176108 with the remaining 14mm hardware from kit 861063. See illustration 9.



Illustration 9

- 9) ☒ Attach the rear of the differential to drop bracket 176107 with the original bolt and the 10mm bolt and washer from kit 860164.
- 10) ☒ Attach the right axle to drop bracket 176109 with the 10mm bolts and washers from kit 860165.
- 11) ☒ Tighten all mounting hardware to specifications.

UPPER & LOWER CONTROL ARM DROP BRACKET INSTALLATION

NOTE: The Rancho lower control arm drop brackets attach to the outside of the vehicle's lower control arm frame brackets. To aid in the installation and alignment of the drop brackets, grind flat (even with the side edge) the turned out lips on the frame brackets.

1) ☒ Place left drop bracket 176113 against the back of the driver side lower control arm rear bracket. Place aft bracket 176119 inside the rear bracket. Loosely attach the Rancho brackets to the back of the lower control arm bracket with the 7/16 hardware from kit 860168. See illustration 10.

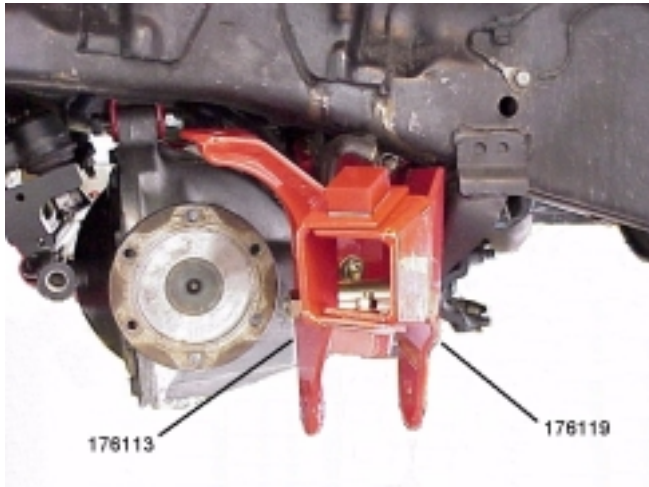


Illustration 10

2) ☒ Insert spacer 176117 and loosely attach the two brackets together with the 14mm hardware from kit 860168. See illustration 10.

3) ☒ Loosely attach the droop stop and bump stop to the bracket assembly as shown in illustration 10. Use the 5/16" hardware from kit 860168.

4) ☒ Attach left upper control arm drop bracket 176115 to the vehicle's frame bracket and bracket 176113 as shown in illustration 11. Use the hardware from kit 860169. Push the bracket against the frame and tighten the upper bolts to 165 ft. lbs.

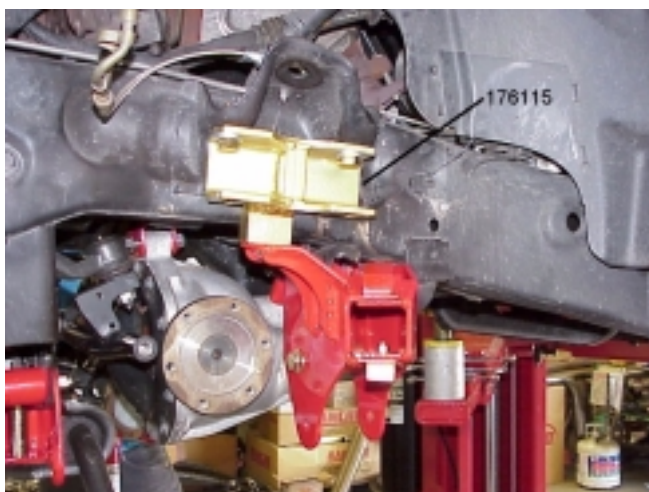


Illustration 11

5) ☒ Repeat steps 1 through 5 to install the right drop brackets 176112, 176114, and 176118 on the passenger side

SUBFRAME & SWAY BAR INSTALLATION

1) ☒ Insert subframe 176111 into the lower control arm front brackets as shown in illustration 12. If necessary, enlarge the slotted holes in the subframe to fit the sway bar retainer studs on the frame.

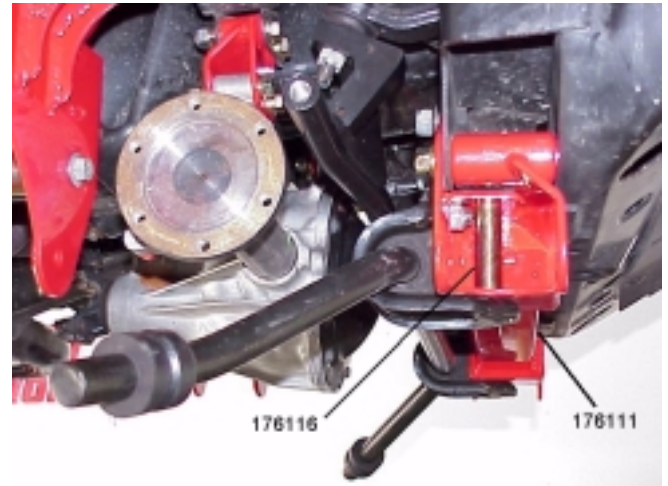


Illustration 12

2) ☒ Attach the subframe to the frame brackets with the 12mm hardware from kit 860167. Tighten the bolts and nuts to 80 ft. lbs. Install the 14mm nuts from kit 860167 onto the original sway bar studs. Tighten the nuts to 140 ft. lbs.

3) ☒ Insert spacers 176116 into the subframe as shown in illustration 12. Loosely attach the sway bar assembly to the subframe with the 12mm hardware from kit 860167.

4) ☒ Loosely attach the top of the sway bar retainer to the subframe with the 14mm hardware from kit 860167. Use three washers for each bolt assembly (two against the head of the bolt).

NOTE: The vehicle must be at normal ride height when tightening the sway bar mounting bolts.

UPPER & LOWER CONTROL ARM INSTALLATION

1) ☒ Support the control arm, steering knuckle, and axle assembly with a floor jack. Slide the assembly back under the vehicle.

2) ☑ Raise and insert the lower control arm into the front subframe and rear drop bracket. Attach the front pivot with the original 12mm hardware. Attach the rear pivot with the original 14mm hardware. Snug down bolts only, do not tighten.

3) ☑ Attach the upper control arm to drop bracket 176115 or 176114 with the 14mm hardware from kit 860169. Center the control arm in the slots and temporarily tighten the nuts and bolts to 100 ft. lbs.

4) ☑ Tighten all the mounting bolts for the lower control arm rear drop brackets. Tighten the droop stop nut and bump stop nut.

5) ☑ Insert axle spacer 176117 between the axle flange and the CV flange. Align reference marks and install bolts with lock washers from kit 860166. See illustration 13. Tighten the flange bolts to 65 ft. lbs.

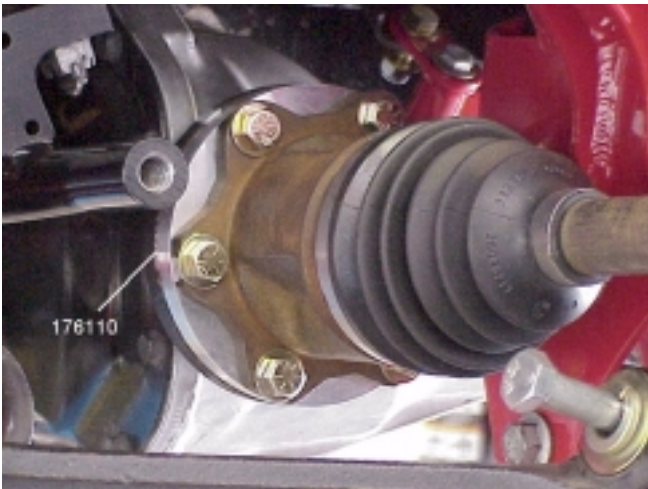


Illustration 13

6) ☑ Repeat steps 1 through 5 for the other side.

BRAKE HOSE REPLACEMENT

1) ☑ If necessary, separate the ABS sensor wire from the brake hose.

2) ☑ Remove the brake hose from the brake line at the frame bracket. Plug the line to prevent the master cylinder from draining completely.

3) ☑ Remove the brake hose from the caliper. Cover hole in caliper to prevent contamination.

4) ☑ Install caliper over rotor and attach to steering knuckle. Be sure ends of brake shoes are seated on slide surfaces. Tighten caliper slide pins to 22 ft. lbs.

5) ☑ Attach new brake hose 170087 (right) or 170088 (left) to the caliper with the new gaskets from kit 860086. See illustration 14. Tighten securely.

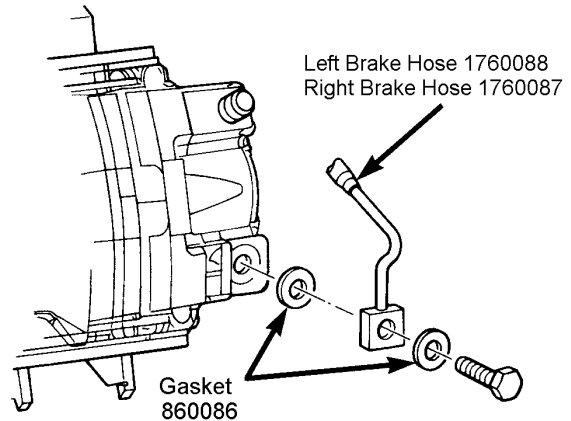


Illustration 14

6) ☑ Route the new brake hose between the control arms and attach it to the brake line at frame bracket. Tighten securely. Attach hose to upper control arm with the original bolt. See illustration 15.



Illustration 15

7) ☑ If applicable, attach the ABS sensor wire to the new brake hose. Attach the wheel speed sensor to the hub/bearing with the ORIGINAL bolt.

8) ☑ Repeat steps 1 through 7 for the other side. Fill master cylinder with approved brake fluid and bleed the front brakes.

TORSION BAR & DROP BRACKET INSTALLATION

1) ☑ Cut out the drop bracket installation templates from the page insert.

- 2) ☒ Place the straight edges of the template against the welded tab on the crossmember. See illustration 16. Mark and center punch the 3/8" mounting hole location.



Illustration 16

- 3) ☒ Drill a 3/8" hole through the crossmember at the marked location.
- 4) ☒ Align reference marks and install the correct torsion bar into the lower control arm. Install the anchor on the torsion bar in its original position.
- 5) ☒ Place drop bracket 176121 (left) or 176122 (right) inside the crossmember. Attach the bracket to the crossmember with the hardware from kit 860170. See illustration 16. Lightly coat the top of the anchor with grease, and position the anchor against the new drop bracket.
- 6) ☒ Attach the anchor to the crossmember with new adjustment bolt (from kit 860170) and the original bearing & swivel. Turn the adjustment bolt clockwise until the bolt extends 1 1/2" above the swivel (preliminary height adjustment). See illustration 16.
- 7) ☒ Repeat steps 2 through 6 for the other side.

FINAL ASSEMBLY

- 1) ☒ Install New Rancho shock absorbers.
- 2) ☒ Install front wheels and lower vehicle to the ground. Tighten the lug nuts to 85--110 ft. lbs.
- 3) ☒ Rotate the sway bar up against the lower control arms. Install the retainers and bolts to the lower control arm. Check the alignment of the sway

bar to ensure spacing is equal on both sides. Adjust if necessary. Tighten the control arm retainer bolts to 25 ft. lbs.

- 4) ☒ Tighten the sway bar to frame retainer nuts to 140 ft. lbs. Tighten the frame retainer bolts to 80 ft. lbs. Refer back to illustration 12.

- 5) ☒ Tighten the lower Control arm front pivot bolts to 80 ft. lbs. and the rear pivot bolts to 140 ft. lbs.

REAR SUSPENSION

RISER BLOCK INSTALLATION

- 1) ☒ Chock the front wheels. Raise the rear of the vehicle and support the frame with jack stands. Remove the rear wheels.
- 2) ☒ Support the rear axle with a floor jack. Remove the rear shock absorbers. Do Not reuse original shocks.
- 3) ☒ Remove the sway bar end links.
- 4) ☒ Loosen (do not remove) the leaf spring U-bolt nuts on both sides of the vehicle.
- 5) ☒ Remove the U-bolts on one side of the vehicle and carefully lower the rear axle about 6 inches. Do Not allow the axle to hang by any hoses or wires.
- 6) ☒ Insert a pin from kit 860010 into riser block 15140. Place the riser block assembly on the axle pad as shown in illustration 17.

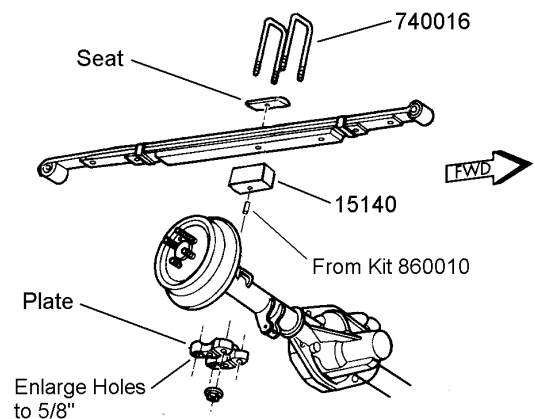


illustration 17

- 7) ☒ Raise the axle until the riser block contacts the bottom of the spring. Make sure center pin aligns with hole in block.
- 8) ☒ Enlarge the holes in the original U-bolt plate to 5/8". See Illustration 17.
- 9) ☒ Place new Rancho U-bolts (740016) over the spring, riser block, and axle.
- 10) ☒ Attach the axle to the leaf spring with the modified plate and the 5/8" hardware from kit 8103. Snug down nuts only. Do not tighten.
- 11) ☒ Repeat steps 5 through 10 for the other side.

BUMP STOP INSTALLATION

- 1) ☒ Remove the bump stops located on the frame rails above the axle.
- 2) ☒ Attach bump stop bracket 176120 to the frame as shown in illustration 18. Use the 3/8" hardware from kit 860171. Tighten to specifications.



Illustration 18

- 3) ☒ Attach bump stop 15140 to bracket 176120 with the 5/16" hardware from kit 860171. Tighten to specifications.
- 4) ☒ Repeat steps 2 and 3 for the other side.

END LINK INSTALLATION

- 1) ☒ Apply silicon lubricant (or a mild solution of soap and water) to a bushing from kit 860155. Press the bushing into a new Rancho end link 176088. See illustration 19.

- 2) ☒ Apply silicon lubricant to a sleeve from kit 860155. Press the sleeve into the previously installed bushing.

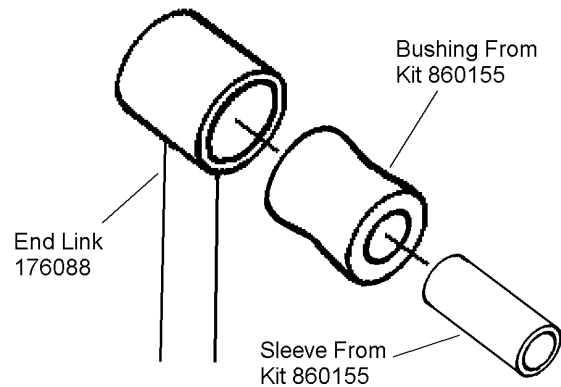


Illustration 19

- 3) ☒ Repeat steps 1 and 2 to install the rest of the bushings and sleeves.
- 4) ☒ Attach the new end links to the frame and sway bar with the hardware from kit 860155. See illustration 20. If necessary, enlarge the holes in the frame and sway bar to fit the 7/16" bolts. Do not tighten.

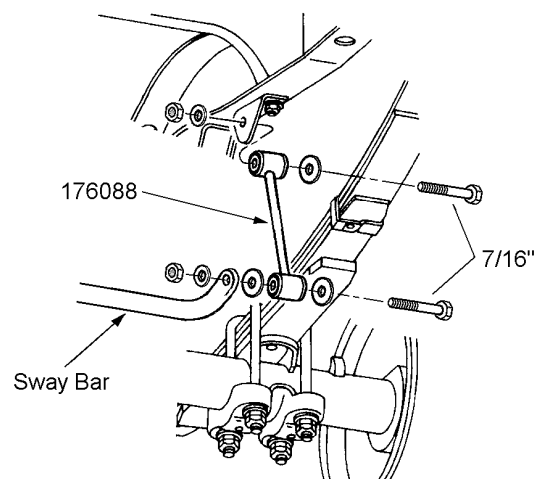


Illustration 20

- 5) ☒ Install new Rancho rear shocks.
- 6) ☒ Install rear wheels and lower vehicle to ground. Tighten lug nuts to 85--110 ft. lbs.
- 7) ☒ Tighten the U-bolt nuts to 110 ft. lbs.

8) ☒ Tighten the sway bar mounting bolts to 40 ft. lbs.

3) ☒ Readjust headlamps. Have vehicle aligned at a certified alignment facility.

FINAL CHECKS & ADJUSTMENTS

1) ☒ Jounce suspension and move vehicle to normalize ride height. Adjust torsion bars so that the front spindle to fender height is three inches more than the original measurement. Refer back to illustration 1.

NOTE: The front spindle to fender measurement should be equal on both sides.

2) ☒ Turn the front wheels completely left then right. Verify adequate tire, wheel and brake hose clearance. Inspect steering and suspension for tightness and proper operation.

General Alignment Specifications

Caster (degrees)	3 1/2°
Camber (degrees)	0°
Sum Toe In (degrees)	.15°

WARNING: This vehicle has been modified to enhance off-road performance, and it will handle differently than a factory equipped passenger car or truck, both on and off-road. Extreme care must be used to prevent loss of control or vehicle rollover during abrupt maneuvers. Failure to drive this vehicle safely may result in serious injury or death to the driver and passengers. ALWAYS WEAR your seat belts, REDUCE your speed, and AVOID sharp turns and other abrupt maneuvers.

RANCHO INDUSTRIES USA LIMITED WARRANTY

ABOUT OUR WARRANTY

Rancho Industries USA, warrants the listed products for the listed time period and/or mileage to the original retail purchaser against defect and wear-out when used on passenger cars and light trucks under normal operating conditions. The warranty does not apply to Rancho products which have been improperly applied or installed. The consumer will be responsible for removing from the vehicle and returning any defective item(s), transportation costs prepaid, to the dealer from which it was purchased or a Rancho Authorized Installer, and for reinstallation of the part upon return. A copy of the sales receipt is required for all warranty adjustments. Rancho Industries will, without charge, repair or replace at its option, defective products or component part(s).

In the case that the customer is unable to return to the original place of purchase or an Authorized Installer, the consumer may contact Rancho Industries at 1-800-574-6257 to obtain a Return Authorization Number prior to shipping. The consumer will be responsible for removing from the vehicle and returning any defective item(s), transportation cost pre-paid, to the following address: 1 International Drive, Monroe MI. 48161. A copy of the sales receipt is required for any warranty adjustments. Rancho Industries will, without charge, repair or replace at its option, defective products or component part(s). Such item(s) will be returned with transportation costs prepaid within the United States from Rancho Industries. The customer will be responsible for reinstallation.

Exclusions from this warranty are sales outside of the United States, the finish, any condition(s) caused by abnormal use or service, and product-specific limitations, if any, listed below.

THE LOSS OF USE OF THE PRODUCT, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS OR CONSEQUENTIAL DAMAGES ARE NOT COVERED. RANCHO INDUSTRIES RESERVES THE RIGHT TO CHANGE THE DESIGN OF ANY PRODUCT WITHOUT ASSUMING ANY OBLIGATION TO MODIFY ANY PRODUCT PREVIOUSLY MANUFACTURED.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, WHICH EXTEND BEYOND THIS WARRANTY PERIOD. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE FACE HEREOF. SELLER DISCLAIMS IMPLIED WARRANTY OF MERCHANTABILITY.

THIS WARRANTY SHALL NOT APPLY TO ANY RANCHO PRODUCT WHICH HAS BEEN MODIFIED, CUSTOMIZED OR IMPROPERLY INSTALLED. WARRANTY DOES NOT APPLY TO ANY RANCHO COMPONENTS USED FOR RACING PURPOSES, OR RACE TYPE ACTIVITIES. WARRANTY DOES NOT APPLY TO ANY RANCHO INDUSTRIES RACING PRODUCTS.

The product, time periods and/or mileage under this warranty are as follows:

RS1000 / RS5000 / RS5600 / RS9000

LIMITED LIFETIME WARRANTY

Limited lifetime warranty on these Rancho shock absorbers. Rancho Industries warrants each new shock against factory defects in material and workmanship (except for finish, including the shock boot) for as long as the original retail purchaser owns the vehicle on which the units were originally installed.

AIR RANCHO / RC9000 REMOTE CONTROL

LIMITED 2 YEAR, 24,000 MILE WARRANTY

Limited 2 year, 24,000 mile warranty on these Rancho products. Rancho Industries warrants each new RS4000, Air Rancho shock and RC9000 Remote Control System against factory defects in material and workmanship (except for finish, including shock boot) for the first to occur of 2 years or 24,000 miles after the date of purchase.

SUSPENSION COMPONENTS LIMITED LIFETIME WARRANTY

Limited lifetime warranty on all of Rancho's suspension products. Rancho Industries warrants each new Suspension Component against factory defects in material and workmanship (except finish) for as long as the original retail purchaser owns the vehicle on which the products were originally installed.

POWERFLOW EXHAUST LIMITED LIFETIME WARRANTY

Limited lifetime warranty on all of Rancho's PowerFlow exhaust products. Rancho Industries warrants each of its exhaust products against factory defects in material and workmanship (except finish) for as long as the original retail purchaser owns the vehicle on which the products were originally installed. THIS LIMITED WARRANTY DOES NOT COVER THE FOLLOWING:

- Exhaust system parts that rust or are blown-out by faulty engine conditions
- Any component that has been modified, customized, or improperly installed
- Any part that is obsolete and is no longer available or supplied by Rancho

RIGHTS RESERVED

Rancho Industries reserves the right to make changes in design, material and specifications or to make product changes as deemed necessary without prior notice. Obligations or liabilities will not be assumed with respect to similar products previously advertised.

WARRANTY DOES NOT APPLY TO ANY RANCHO COMPONENTS USED FOR RACING PURPOSES, OR RACING TYPE ACTIVITIES. WARRANTY DOES NOT APPLY TO ANY RANCHO INDUSTRIES RACING PRODUCTS.

PRINTING ERRORS

Every effort has been made to avoid printing errors in our literature. However, if there are any specification or application errors, we must disclaim responsibility.

TEMPLATES

For
Torsion Bar Drop Brackets

