INSTALLATION INSTRUCTION 88148

Rev E

For Rancho Suspension Systems **RS6548, RS6549 & RS6550**: GM 2500HD, 2500, and 1500HD Trucks

READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION

IMPORTANT NOTES!

WARNING: This suspension system will enhance the off-road performance of your vehicle. It will handle differently, both on and off-road, from a factory equipped passenger car or truck. 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.

A. Before installing this system, have the vehicle's alignment and frame checked by a certified technician. 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 this suspension system or interchange Rancho components with parts from another manufacturer. Use the appropriate Rancho shock absorbers.

C. Do not powdercoat or plate any of the components in this system. To change the appearance of components, automotive paint can be applied over the original coating.

D. Each hardware kit in this system contains fasteners of high strength and specific size. Do not mix hardware kits or substitute a fastener of lesser strength. See bolt identification table on page 2.

E. Compare the contents of this system with the parts list in these instructions. If any parts are missing, contact the Rancho Technical Department at 1-734-384-7804.

F. 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.

G. Apply a drop of thread locking compound to all bolts during installation. CAUTION: Thread locking compound may irritate sensitive skin. Read warning label on container before use.

H. Unless otherwise specified, tighten all nuts and bolts to the standard torque specifications shown in the table below. USE A TORQUE WRENCH for accurate measurements.

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: ☑

- ☐ Chevrolet Service Manual
- ☐ Torsion Bar Unloading Tool J36202
- ☐ Universal Steering Linkage Puller J24319
- ☐ Ball Joint Separator J43631
- ☐ Prevailing Torque Nuts (for steering linkage & front wheel drive shaft)
- ☐ Welder
- ☐ Die Grinder
- ☐ Drill motor
- ☐ Assorted Drills: 1/8" through 1"
- ☐ Torque Wrench (250 FT-LB capacity)
- ☐ 1/2" Drive Ratchet and Sockets
- ☐ Assorted Combination Wrenches
- ☐ Heavy Duty Jack Stands
- ☐ Wheel Chocks (wooden blocks)
- ☐ Hydraulic Floor Jack
- ☐ Center punch
- ☐ File
- ☐ Large "C" Clamps
- ☐ Reciprocating Saw (to modify frame and differential)
- ☐ Hammer
- ☐ Wire Brush (to clean bracket mounting surfaces)
- ☐ Black Enamel Paint
- ☐ Silicone Spray Lubricant
- ☐ Tape Measure
- ☐ 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. Although designed for 4wd vehicles, some Rancho suspension systems will fit 2wd applications. Refer to the application catalog or contact Rancho Technical Support at 1-734-384-7804. If you are installing this system on a 2wd vehicle some of the steps in these instructions may not be applicable (4wd only).

M. When attaching box plate 176219, welding is required. Prior to any welding, disconnect vehicle's ground cable from battery.

N. The required installation time for this system is approximately 6 to 7 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.

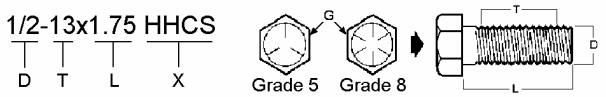
O. This suspension system was developed using the following tire & wheel combination: 285/75 R16 tire, 16 x 8 wheel with 4.5 inches of wheel backspacing. Before installing any other combination, consult your local tire and wheel specialist.

P. Important information for the end user is contained in the consumer/installer information pack. If you are installing this system for someone else, place the information pack on the driver's seat. Please include the installation instructions when you finish.

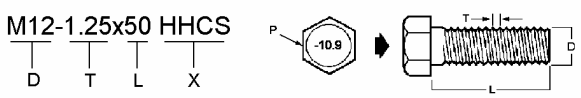
Q. Thank you for purchasing the best suspension system available. For the best-installed system, follow these instructions. If you do not have the tools or are unsure of your abilities, have this system installed by a certified technician. RANCHO SUSPENSION IS NOT RESPONSIBLE FOR DAMAGE OR FAILURE RESULTING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

STANDARD BOLT TORQUE & IDENTIFICATION

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	165FT-LB	210 FT-LB
3/4	185 FT-LB	280 FT-LB	M18	170 FT-LB	240FT-LB	290 FT-LB



G = Grade Marking (bolt strength)
D = Nominal Diameter (inches)
T = Thread Pitch (threads per inch)
L = Length (inches)
X = Description (hex head cap screw)



P = Property Class (bolt strength)
D = Nominal Diameter (millimeters)
T = Thread Pitch (thread width, mm)
L = Length (millimeters)
X = Description (hex head cap screw)

PARTS LIST

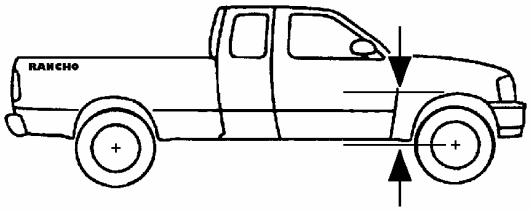
P/N	DESCRIPTION	QTY.
15050	Riser Block	2
176138	Aft Brace Bracket	2
176214	Knuckle, Left (RS6548 & RS6550)	1
176215	Knuckle, Right (RS6548 & RS6550)	1
176216	Knuckle, Left (RS6549 only)	1
176217	Knuckle, Right (RS6549 only)	1
176218	Subframe	1
176219	Box Plate (4wd only)	1
176220	Differential Support Bracket (4wd only)	1
176221	R. Axle Tube Drop Bracket (4wd only)	1
176222	Subframe Aft Brace	2
176223	Carrier Bearing Spacer	1
176224	T Bar Drop Bracket (RS6548 only)	2
176225	Rear Bump Stop Spacer	2
176228	T Bar Drop Bracket (RS6549 & RS6550)	2
176326	Axle Spacer (4wd only)	2
740014	9/16-18 x 2.57 x 12.5 U-bolt	4
860152	U-bolt Hardware Kit	1
	9/16-18 Nyloc Nut	8
	9/16 Washer	8
860175	R. Axle Tube Hardware Kit (4wd only)	1
	9/16-12 x 1.75 HHCS	2
	9/16-12 Stover Nut	2
	9/16 SAE Washer	2
	9/16 USS Washer	2
860179	Frt. Differential Hardware Kit (4wd only)	1
	M10-1.50x60 HHCS	5
	7/16-14 x 3.0 HHCS	1
	7/16-14 Stover Nut	1
	Washer	5
	7/16 SAE Washer	2
860180	End Link Hardware Kit	1
420044	.75x.156x9.5 Sleeve	2
	Retainer	8
	3/8-16 x 14.0 HHCS	2
	3/8-16 Nyloc Nut	2
860433	Subframe Hardware Kit	1
420041	.75x.095x2.19 Sleeve	1
520041	Bushing	2
	5/8-18 x 4.5 HHCS	2
	5/8-18 x 5.5 HHCS	2
	5/8-18 Stover Nut	4
	5/8 SAE Washer	8
	Thread Lock	2

P/N	DESCRIPTION	QTY.
860434	Aft Brace Hardware Kit	1
420042	.75 x .095 x 2.73 Sleeve	4
448	Sleeve	2
520041	Bushing	8
	1/2-13 x 2.5 HHCS	2
	1/2-13 x 4.00 HHCS	4
	1/2-13 Stover Nut	6
	1/2 SAE Washer	12
860435	Skidplate Hardware Kit	1
603545	.625 x .375 x .5 Sleeve	1
	3/8-16 x 1.0 HHTS	2
	3/8-16 x 1.0 HHCS	1
	3/8-16 x 1.75 HHCS	1
	3/8-16 Stover Nut	2
	3/8 USS Washer	2
	3/8 SAE Washer	2
	3/8-16 x 2.50 HHCS	1
860436	Axle Spacer Hardware Kit (4wd only)	1
	M10-1.50 x 60 HHCS	12
	Lock Washer	12
860437	T Bar Crossmember Hardware Kit	1
420043	.75x.095 x 1.50 Sleeve	2
552	Bushing	4
	3/8-16 x 1.25 HHCS	8
	3/8-16 Stover Nut	8
	3/8 SAE Washer	16
860438	Brake Hose Bracket Hardware Kit	1
	M6-1.0 x 10 HHTS	2
860439	Riser Block Pin Kit	1
	.625 x 1.81 Pin	2
860440	Rear Bump Stop Hardware Kit	1
	3/8-16 x 1.25 HHCS	4
	3/8-16 Stover Nut	4
	3/8 SAE Washer	8
	M8-1.25 x 10 HHCS	1
860441	Carrier Bearing Hardware Kit	1
	3/8-16 x 1.25 HHCS	2
	3/8-16 Stover Nut	2
	3/8 SAE Washer	2
	3/8 USS Washer	2
94180	Information Pack	1
780281	Rancho Decal	1
88148	Installation Instruction	1
94119	Consumer/Warranty information	1
94177	Warning Sticker	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.



LR _____ LF _____

RR _____ RF _____

Illustration #1

2) ☐ Raise the front of the vehicle and support the frame with jackstands. Remove the front wheels and set them aside.

3) ☐ Mark the torsion bars left and right. Make alignment marks on the torsion bars, the lower control arms, and the adjustment arms.

4) ☐ Install the GM torsion bar unloading tool (J 36202) and increase the tension on the torsion bar. Remove the adjusting bolt and nut. Relieve the tension on the torsion bar and remove the tool.

5) ☐ Slide the torsion bar forward and remove the adjustment arm. See illustration #2.

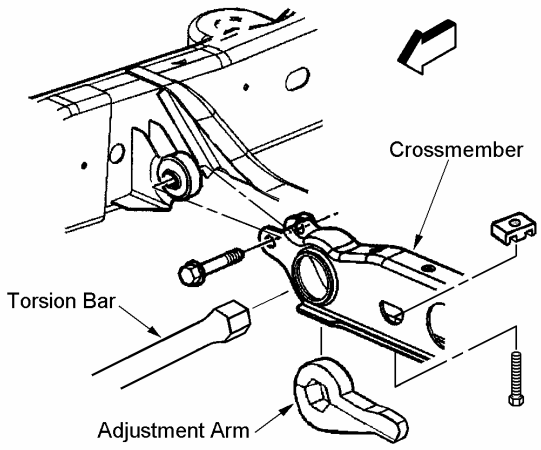


Illustration #2

6) ☐ Repeat steps 4 and 5 for the other side.

7) ☐ Remove the 2 bolts holding the torsion bar crossmember to the frame rail brackets. See illustration #2. Remove the crossmember.

8) ☐ Remove the torsion bars from the lower control arms.

WHEEL DRIVE SHAFT (HALF-SHAFT) REMOVAL

1) ☐ Remove the front shock absorbers. Remove the front bump stops.

2) ☐ Remove the sway bar end links. See illustration #3.

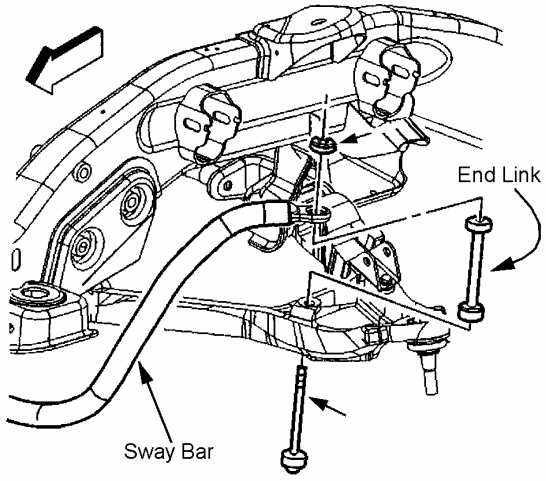


Illustration #3

3) ☐ (4wd only) Mark the differential output flange and the axle flange for installation reference.

4) ☐ (4wd only) Remove the cap, nut and washer from the hub. Remove the six bolts from the inboard flange. See illustration #4.

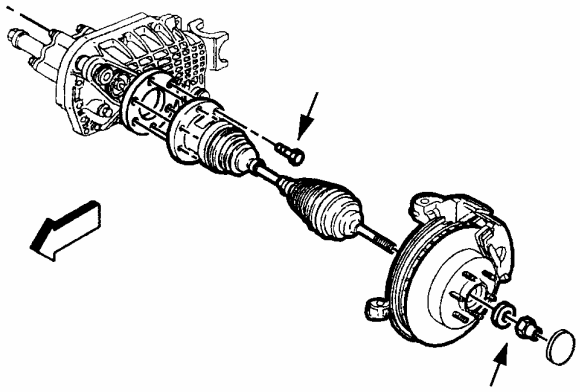


Illustration #4

5) ☐ (4wd only) Pull the half-shaft out of the hub and through the lower control arm opening. Be careful not to damage the drive shaft boots.

6) ☐ (4wd only) Repeat steps 3 through 5 for the other side.

STEERING KNUCKLE & LOWER CONTROL ARM REMOVAL

1) ☐ Loosen the brake hose bracket on the brake hose (top of steering knuckle) by prying the bracket open with pliers. Remove the bolt and brake hose bracket from the steering knuckle.

2) ☐ Remove the brake caliper and its mounting bracket as an assembly. Hang the caliper assembly with wire or a tie wrap.

3) ☐ Label the brake rotor left or right. Remove the brake rotor.

4) ☐ Remove the prevailing torque nut from the outer tie rod stud. Disconnect the tie rod end from the steering knuckle with a universal puller.

5) ☐ If applicable, disconnect the ABS connector and separate the cable from the upper control arm and the steering knuckle.

6) ☐ Remove the nuts at the upper and lower ball joints. Disconnect the ball joints from the steering knuckle using separating tool J43631. Remove the steering knuckle and hub assembly.

7) ☐ Remove the hub and bearing assembly mounting bolts. See illustration #5. Remove the hub and bearing assembly. Remove the splash shield and carefully remove the o-ring.

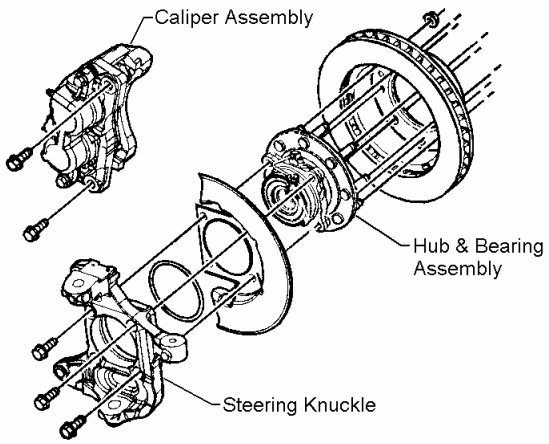


Illustration #5

8) ☐ Remove the lower control arm pivot bolts. See illustration #6. Remove the lower control arm.

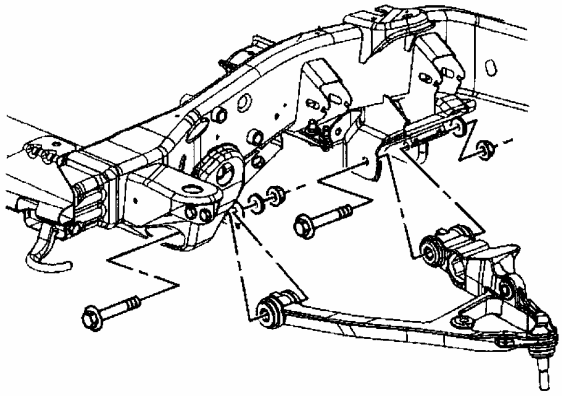


Illustration #6

9) ☐ Repeat steps 1 through 8 for the other side.

FRONT DIFFERENTIAL REMOVAL (4WD ONLY)

1) ☐ If applicable, remove the front differential skid plate and rear support bracket.

2) ☐ Reference mark the front drive shaft U-joint to the differential yoke. Remove the bolts and retainers from the yoke and slide the shaft rearward to disengage. Tape the bearing cap assemblies and secure the shaft out of the way.

3) ☐ Disconnect the electrical connector and the vent hose from the differential assembly.

4) ☐ Remove the right axle tube nuts and the differential lower mounting bolt. See illustration #7.

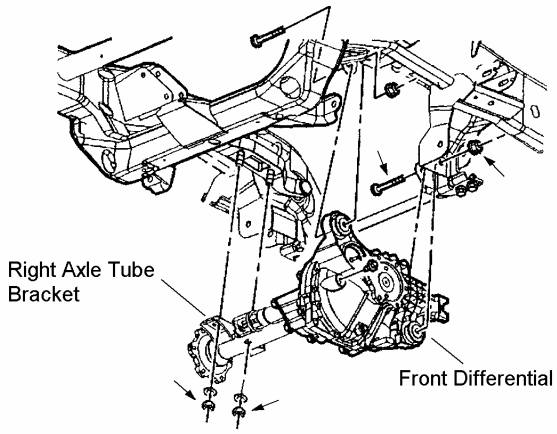


Illustration #7

5) ☐ Support the front differential assembly with a floor jack. Remove the upper mounting nut and bolt.

6) ☐ Remove the differential assembly from the vehicle.

7) ☐ Cut off the differential lower frame mount from the rear frame bracket of the driver side lower control arm. See illustration #8.

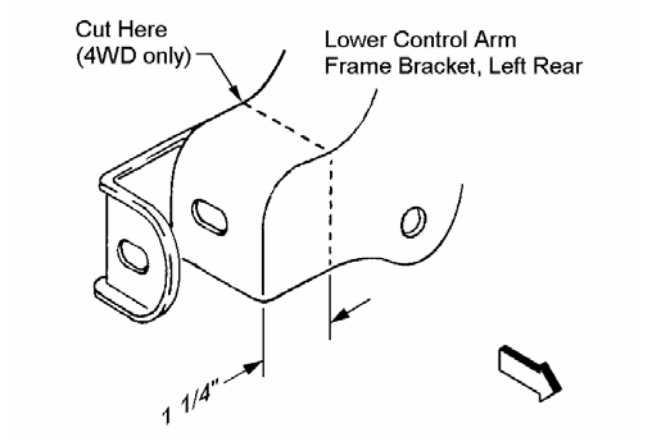


Illustration #8

8) ☐ Weld box plate 176219 to inside of lower control arm frame bracket as shown in illustration #9.

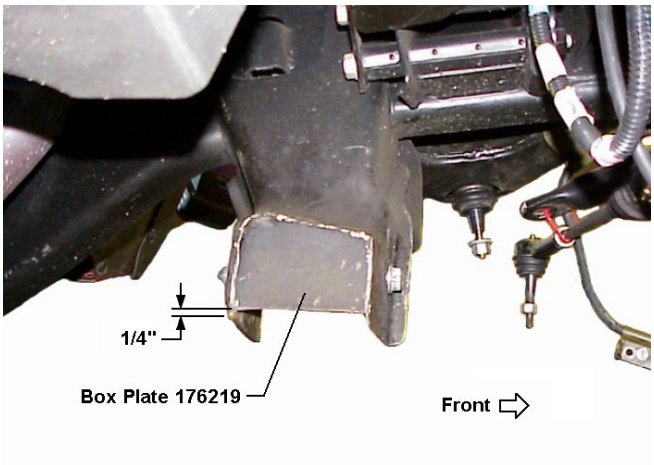


Illustration #9

NOTE: Box plate 176219 does not have a protective coating and may develop surface rust. Remove rust before welding plate to lower control arm frame bracket. After installation, coat the plate and bracket with enamel paint or undercoating.

FRONT DIFFERENTIAL & SUBFRAME INSTALLATION

1) ☐ (4wd only) Cut off the upper mount (1/4" from the case) from the front differential. See illustration #10.

***CAUTION*:** When modifying the front differential, do not cut into the case itself.

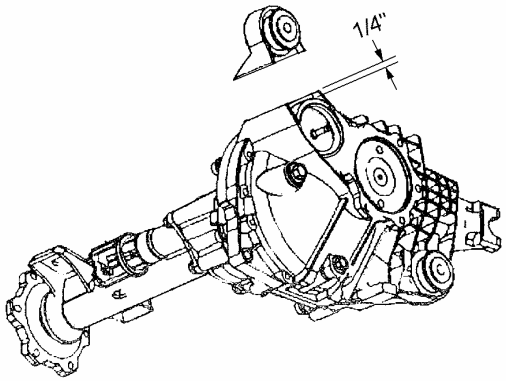


Illustration #10

2) ☐ (4wd only) Install two bushings (520041) into differential support bracket 176220. Apply silicon lubricant and press sleeve 420041 through the installed bushings. See illustration #11.

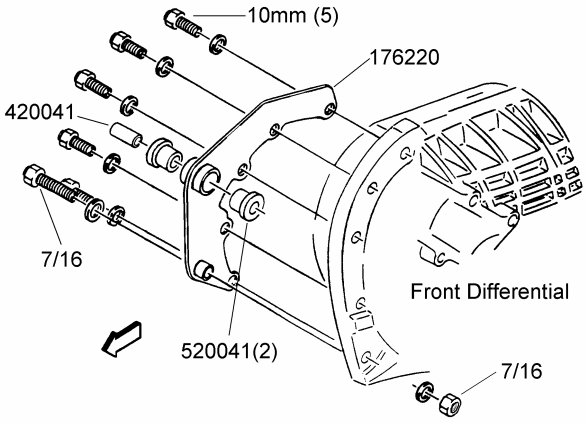


Illustration #11

NOTE: (4wd only) On some vehicles, grinding off a boss on the differential case is necessary to install differential support bracket 176220. See illustration #12. Only remove enough of the boss material to install the bracket.

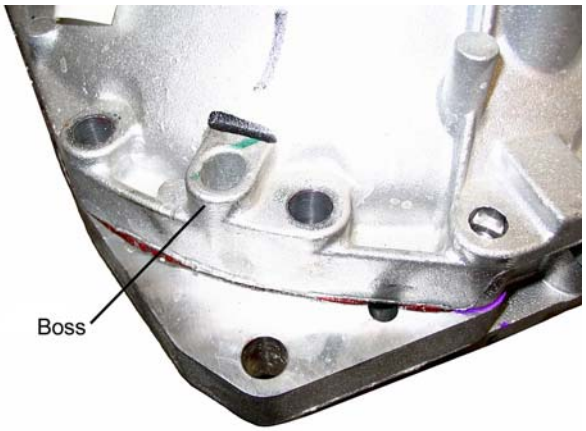


Illustration #12

3) ☐ (4wd only) Remove the 5 case bolts from the front of the differential. Refer to illustration #11.

NOTE: After removing the bolts, oil may seep from the case. Do not stop installation at this point.

4) ☐ (4wd only) Attach bracket assembly 176220 to the front differential with the hardware from kit 860179. Refer to illustration #11. Tighten the bolts to 35 ft lbs.

5) ☐ (4wd only) Loosely attach drop bracket 176221 (as shown in illustration #13) to the front differential axle tube with the 9/16" hardware from kit 860175.

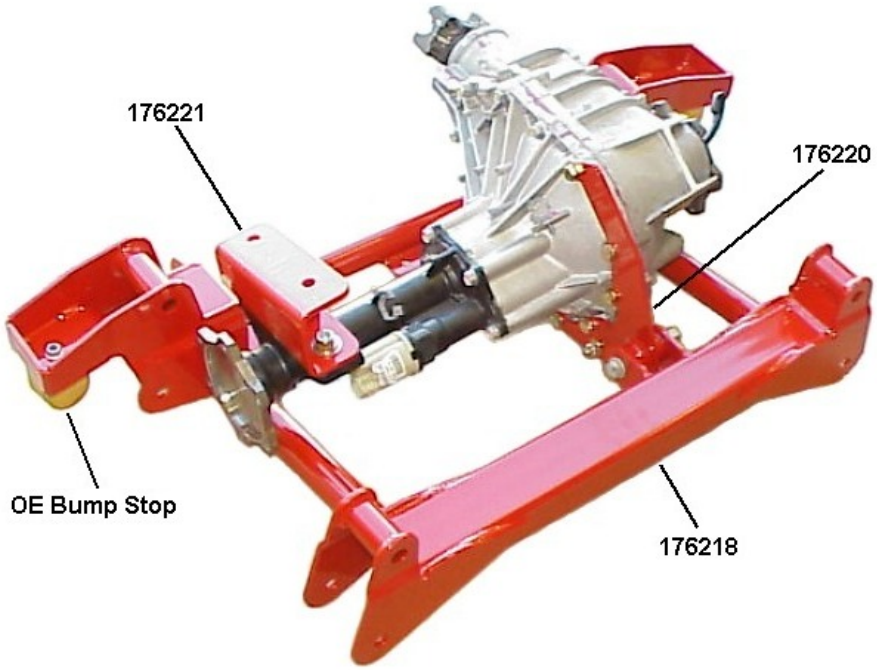


Illustration #13

6) ☐ (4wd only) Attach the front differential assembly to the subframe (176218) with the original hardware. Tighten the nuts and bolts to 75 ft. lbs

7) ☐ Attach the OE bump stops to the subframe with the original hardware.

8) ☐ (4wd only) Using a piece of thick plywood (1/2" minimum), support the subframe and differential assembly with a floor jack.

9) ☐ Raise the subframe up into the lower control arm frame brackets. Attach the subframe to the brackets with the original hardware. Tighten the subframe to bracket bolts to 107 ft. lbs.

10) ☐ (4wd only) Attach the right axle tube bracket 176221 to the frame bracket with the original hardware. Tighten all bracket mounting nuts and bolts to 75 ft. lb.

NOTE: Verify that the left side of the front differential does not contact the rear frame bracket of the lower control arm. **FAILURE TO PROVIDE CLEARANCE COULD CAUSE DAMAGE TO THE DIFFERENTIAL AND AXLE ASSEMBLY.**

11) ☐ (4wd only) Reconnect the vent hose and electrical connector. Align marks and reconnect the front drive shaft to the differential.

STEERING KNUCKLE & HALFSHAFT INSTALLATION

1) ☐ Loosely attach the left lower control arm to the subframe with the 5/8" hardware from kit 860433.

2) ☐ Connect left steering knuckle 176214 or 176216 to the lower and upper control arm ball joints. Tighten the nut on the lower ball joint stud to 74 ft. lbs., and the nut on the upper ball joint stud to 37 ft. lbs.

3) ☐ Lubricate the original o-ring with wheel bearing grease. Install the o-ring and splash shield. See illustration #14. Be sure to align the ABS cable between the splash shield and steering knuckle.

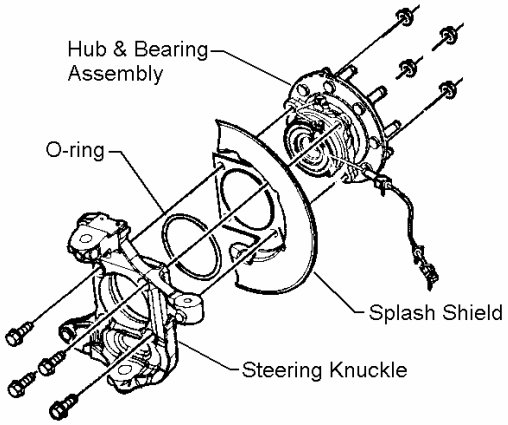


Illustration #14

NOTE: Replace o-ring if worn or damaged.

4) ☐ Apply thread lock to original bolts and attach the hub and bearing assembly to the left steering knuckle. Refer to illustration #14. Tighten the mounting bolts to 133 ft. lbs.

5) ☐ Loosen the tie rod end jam nut and thread the tie rod end inward 2.5 complete turns. Retighten the jam nut and attach the tie rod end to the new knuckle. Tighten the new prevailing torque nut to 33 ft. lbs.

6) ☐ (4wd only) Insert the wheel drive shaft (halfshaft) into the knuckle hub. Install the shaft washer and a new hub nut.

NOTE: Do not lubricate the wheel drive shaft splines or the knuckle hub with grease.

7) ☐ (4wd only) Place axle spacer 176326 against the differential flange. Place the axle flange against the spacer. Align the flange marks and attach the axle to the differential with the hardware from kit 860436. Be sure to apply thread lock to the bolts. Tighten the flange bolts to 58 ft. lbs.

8) ☐ Install the brake rotor. Reattach the front caliper with the original mounting bolts. Be sure to clean the bolt threads and apply thread lock. Tighten the caliper mounting bolts to 129 ft. lbs.

9) ☐ (4wd only) Place a drift or large screwdriver through the caliper to prevent the drive axle from turning. See illustration #15.

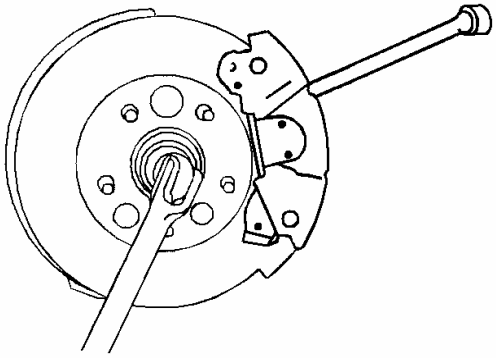


Illustration #15

10) ☐ (4wd only) Tighten the axle hub nut to 155 ft. lbs. Remove the drift from the rotor.

11) ☐ Reposition the brake hose clamp and place it over the two mounting holes on the back of the steering knuckle. Insert the tab into one hole and attach the clamp with the new self-tapping screw from hardware kit 860438.

12) ☐ If applicable, reconnect the ABS cable. Attach the ABS cable to the knuckle and upper control arm as shown in illustration #16.

Illustration #16

13) ☐ Repeat steps 1 through 11 for the other side.

14) ☐ Attach the sway bar to the lower control arm with the new end link assemblies (from kit 860180) and the original bushings. See illustration #17. Insert the 3/8" x 14" bolt from the top.

15) ☐ Install new Rancho shock absorbers.

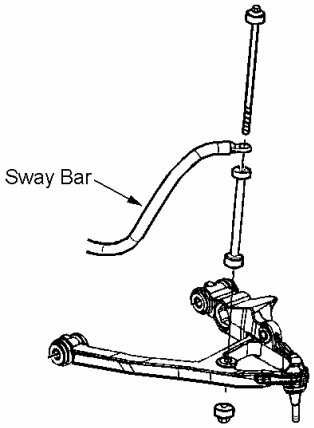


Illustration #17

DIFFERENTIAL SKID PLATE INSTALLATION (OEM)

NOTE: Your vehicle may have a plastic or aluminum OE skid plate. Follow the instructions for the type of skid plate you are installing.

1) ☐ Cut off the left side corners of the plastic skid plate and drill a new 3/8" hole. See illustration #18.

2) ☐ Place skid plate (plastic or aluminum) against the subframe below the front differential. Attach the rear of the plastic skid plate to the subframe with the sleeve and 3/8" hardware from kit 860435. Attach the rear of the aluminum skid plate using one 3/8" x 2.5" bolt and the left side OE bushing of the skid plate. See illustrations #18 and #19.

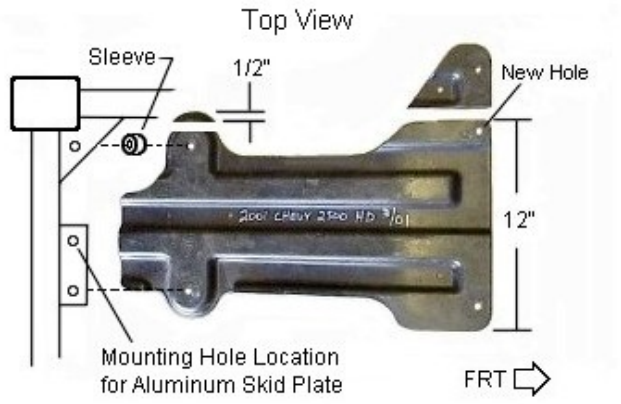


Illustration #18

3) ☐ Using the skid plate as a template, drill two 5/16" holes through the bottom of the subframe crossmember.

4) ☐ Attach the front of the skid plate to the subframe with the self-tapping screws from kit 860435.

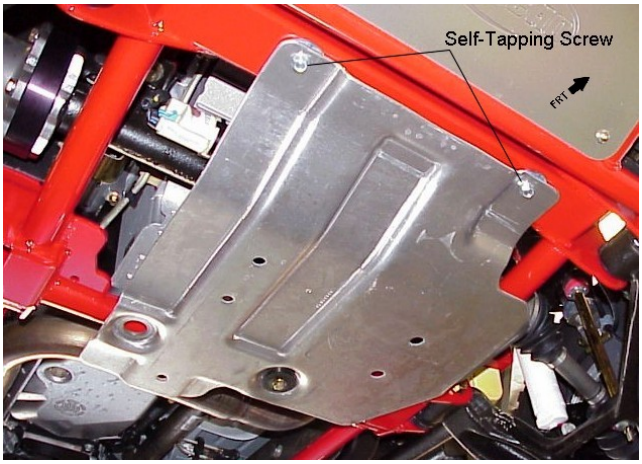


Illustration #19

AFT BRACE ASSEMBLY & INSTALLATION

1) ☐ Lubricate two bushings (520041) and one sleeve (420042), from kit 860434, with a silicon spray. Press the bushings and sleeve into aft brace 176222 as shown in illustration 20.

2) ☐ Repeat step 1 to install the rest of the bushings and sleeves.

3) ☐ Using the hardware from kit 860434, loosely attach the angled end of each aft brace to the rear of the subframe (176218).

NOTE: The angled end of the aft brace should direct the aft brace straight back.

4) ☐ Attach aft brace brackets (176138) to aft braces. See figure #20.

5) ☐ Rotate aft brace assemblies up and secure the brackets to the transmission crossmember with c-clamps. Remove the aft braces and mark the mounting hole locations on the bottom of the crossmember.

6) ☐ Remove the brackets and drill a 1/2" hole through both sides of the crossmember at each location.

7) ☐ Remove the OE crossmember bracket from the outside of the frame rail. Using a magnet or retrieving tool, insert spacer 448 into the crossmember and align with holes. Attach bracket 176138 to the crossmember with the hardware from kit 860434. See illustration #20. Reinstall crossmember bracket

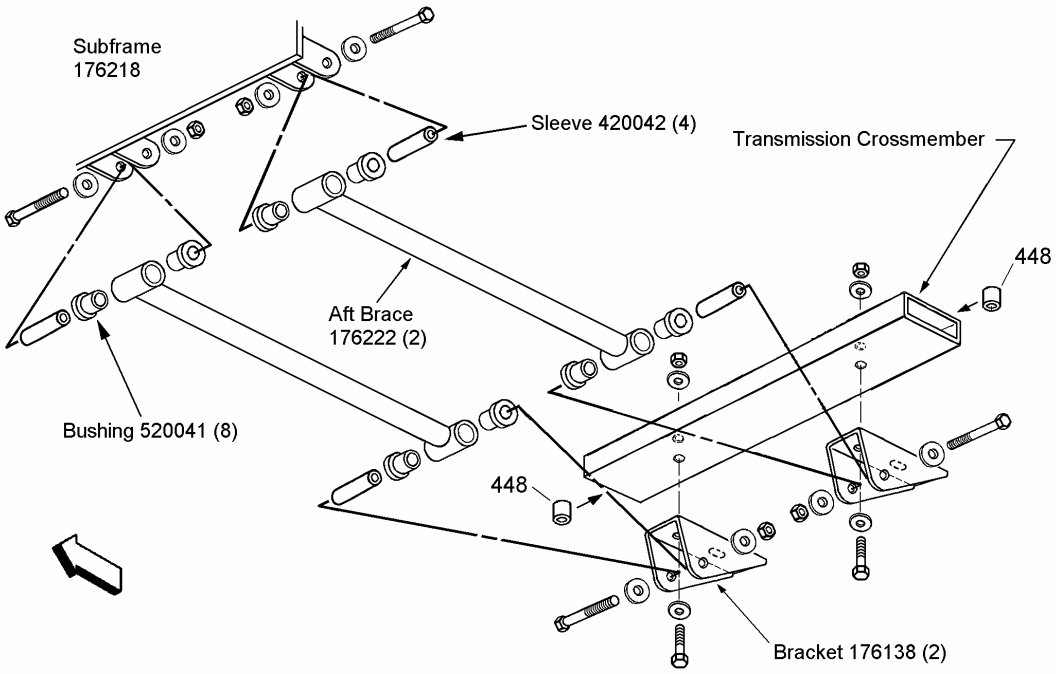


Illustration #20

8) ☐ Repeat the previous two steps for the other side.

9) ☐ Tighten the aft brace and bracket mounting bolts to 65 ft. lbs.

TORSION BAR & DROP BRACKET INSTALLATION

1) ☐ Insert two bushings and a sleeve from kit 860437 into each torsion bar drop bracket.

2) ☐ Place torsion bar drop bracket 176224 or 176228 against the frame rail directly below the crossmember bracket. Use a plumb bob or straight edge to verify its location. Secure the bracket to the frame with a C-clamp. See illustration #21.

NOTE: If correctly located, two large holes in bracket 176224 will align with two rivets in the frame.

3) ☐ Mark and center punch the 2 smaller holes on the bottom of the frame and the 2 smaller holes on the outside of the frame.

4) ☐ Drill a 3/8" hole at each of the marked locations. Remove the bracket

CAUTION: Inspect the inside of the frame rail before drilling. Move any components that might become damaged.

5) ☐ Repeat steps 2 through 4 for the other side.

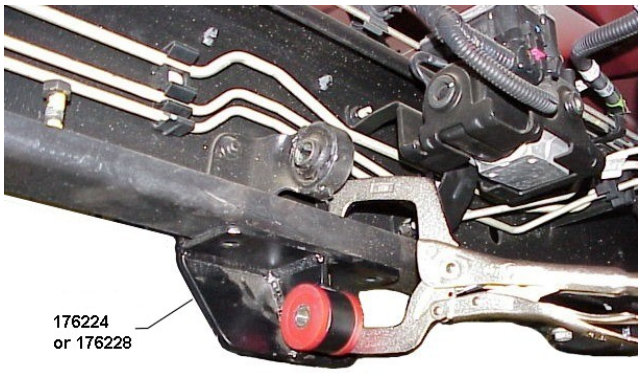


Illustration #21

6) ☐ Align marks and insert the left and right torsion bars into their respective lower control arms. Carefully slide the bars forward. Do not allow the torsion bars to contact the front axle boots.

7) ☐ Attach the torsion bar drop brackets to the crossmember with the original bolts.

8) ☐ Attach the crossmember assembly to the frame rails with the 3/8" hardware from kit 860437. Tighten all nuts and bolts to 35 ft. lbs.

9) ☐ Slide a torsion bar rearward through the crossmember while holding the adjustment arm in proper position. Verify that the reference mark on the adjustment arm matches the mark on the end of the torsion bar.

10) ☐ Install the torsion bar unloading tool and increase the tension on the torsion bar.

11) ☐ Reinstall the retaining plate and adjusting bolt. Thread the adjusting bolt in until 1.5 inches of threads are exposed below the retaining plate. Remove the unloading tool.

12) ☐ Repeat steps 9 through 11 for other side.

13) ☐ Install front wheels and lower vehicle to ground. Tighten the lug nuts to 140 ft. lbs.

14) ☐ Tighten the lower control arm pivot bolts to 107 ft. lbs.

REAR SUSPENSION

CARRIER BEARING SPACER INSTALLATION (FOR TWO-PIECE DRIVE SHAFT ONLY)

1) ☐ Support the two-piece drive shaft at the carrier bearing. Remove the bearing support nuts. See illustration #22.

2) ☐ Lower the drive shaft and place spacer 176223 on top of the carrier bearing. Attach the spacer to the bearing with the original nuts.

3) ☐ Raise the drive shaft and attach the spacer to the support bracket with the hardware from kit 860441. Tighten bearing and spacer hardware to 30 ft. lbs.

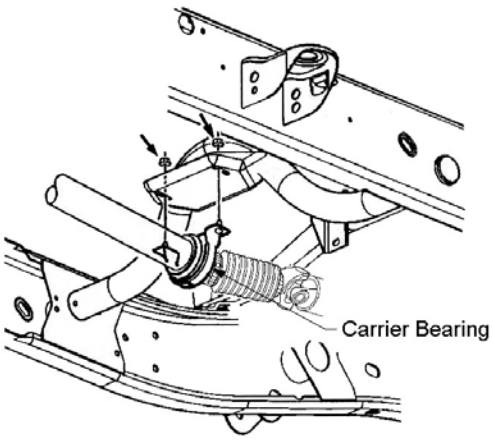


Illustration #22

RISER BLOCK INSTALLATION

1) ☐ Chock front wheels. Raise the rear of the vehicle and support the frame with jack stands. Remove the rear wheels.

2) ☐ Support the rear axle assembly with a floor jack. Remove both rear shock absorbers. Do not reuse OEM shock absorbers.

3) ☐ With the axle still being supported, remove the anchor plate, U-bolts, and spacer. See illustration #23.

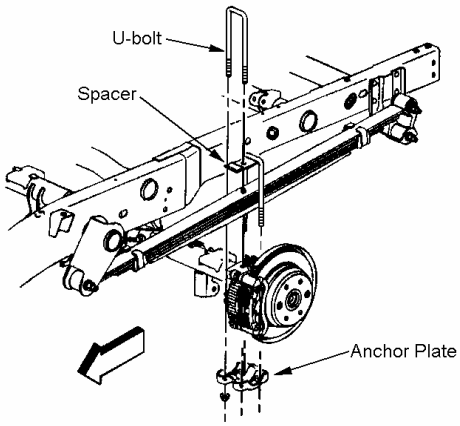


Illustration #23

4) ☐ Carefully lower the rear axle and if applicable, remove the original riser block. Do not allow the axle to hang by any hoses or cables.

5) ☐ Insert a block pin from kit 860439 into the hole in the axle pad. Place the new riser block (15050) on the axle pad with the taller end of the block in the rear. See illustration #24.

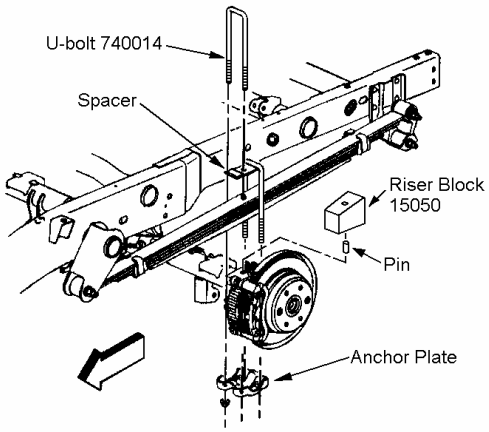


Illustration #24

6) ☐ Raise the axle assembly until the riser block contacts the helper spring. Be sure to align the hole in the block with the head of the center bolt.

7) ☐ Reinstall the U-bolt spacer on top of the leaf spring. Attach the spring to the axle with the NEW U-bolts (740014), original anchor plate, and hardware from kit 860152. Snug the nuts down but do not tighten.

8) ☐ Repeat steps 3 through 7 for the other side.

9) ☐ Cross tighten the U-bolt nuts evenly to 89 ft. lbs.

10) ☐ Replace the bolt holding the parking brake cable to the lower shock bracket with the 8mm bolt from kit 860440. See illustration #25.

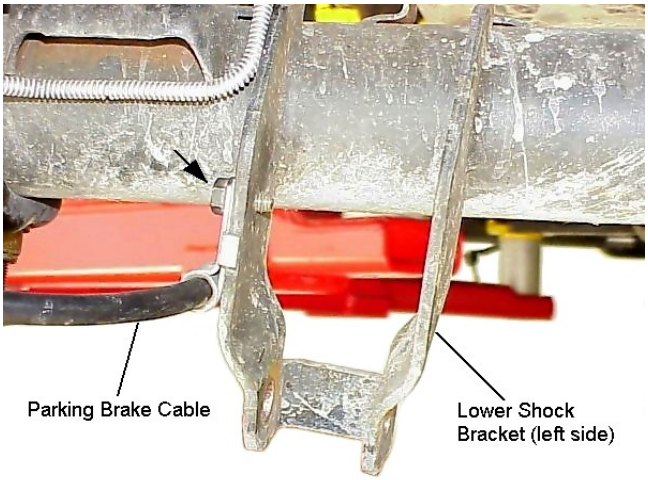


Illustration #25

11) ☐ Bend the parking brake cable guide (attached to the frame above the rear axle) forward to relieve tension on the cable.

12) ☐ Install new Rancho shock absorbers.

BUMP STOP SPACER INSTALLATION

1) ☐ Remove the nuts holding the bump stop to the frame rail above the rear axle. Remove the bump stop.

2) ☐ Attach bump stop spacer 176225 to the frame rail with the hardware from kit 860440.

3) ☐ Attach the bump stop to the installed spacer with the original hardware. See illustration #26.

4) ☐ Repeat steps 1 through 4 for the other side.

5) ☐ Install rear wheels and lower vehicle to ground. Tighten lug nuts to 140 ft. lbs.

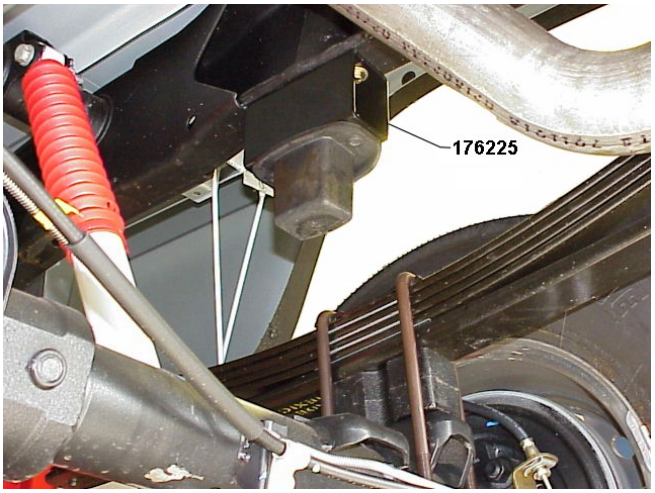


Illustration #26

FINAL CHECKS & ADJUSTMENTS

1) ☐ Jounce suspension and move the vehicle to normalize ride height. Verify that the front spindle to fender height is 25.5" (27.5" for 2500HD) and that both sides are equal. If necessary, reinstall GM tool J 36202 and adjust the tension on the torsion bars to correct the height.

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.

3) ☐ With the suspension at maximum extension (full droop), inspect and rotate all axles and drive shafts. Check for binding and proper slip yoke insertion. The slip yoke must be inserted a minimum of one inch into the transfer case and/or transmission.

4) ☐ Ensure that the vehicle brake system operates correctly. If new brake hoses were installed, verify that each hose allows for full suspension movement.

5) ☐ Readjust headlamps. Have vehicle aligned at a certified facility.

Recommended Alignment Specifications
Caster (degrees): 4.5° ! 1.0°
Camber (degrees): 0° - .3°
Sum Toe In (degrees): .1° ! .2°

Please retain this publication for future reference. See Important Note P.