



PRO COMP SUSPENSION

Suspension Systems that Work!

BOM: Box 2 57047B Lift Kits

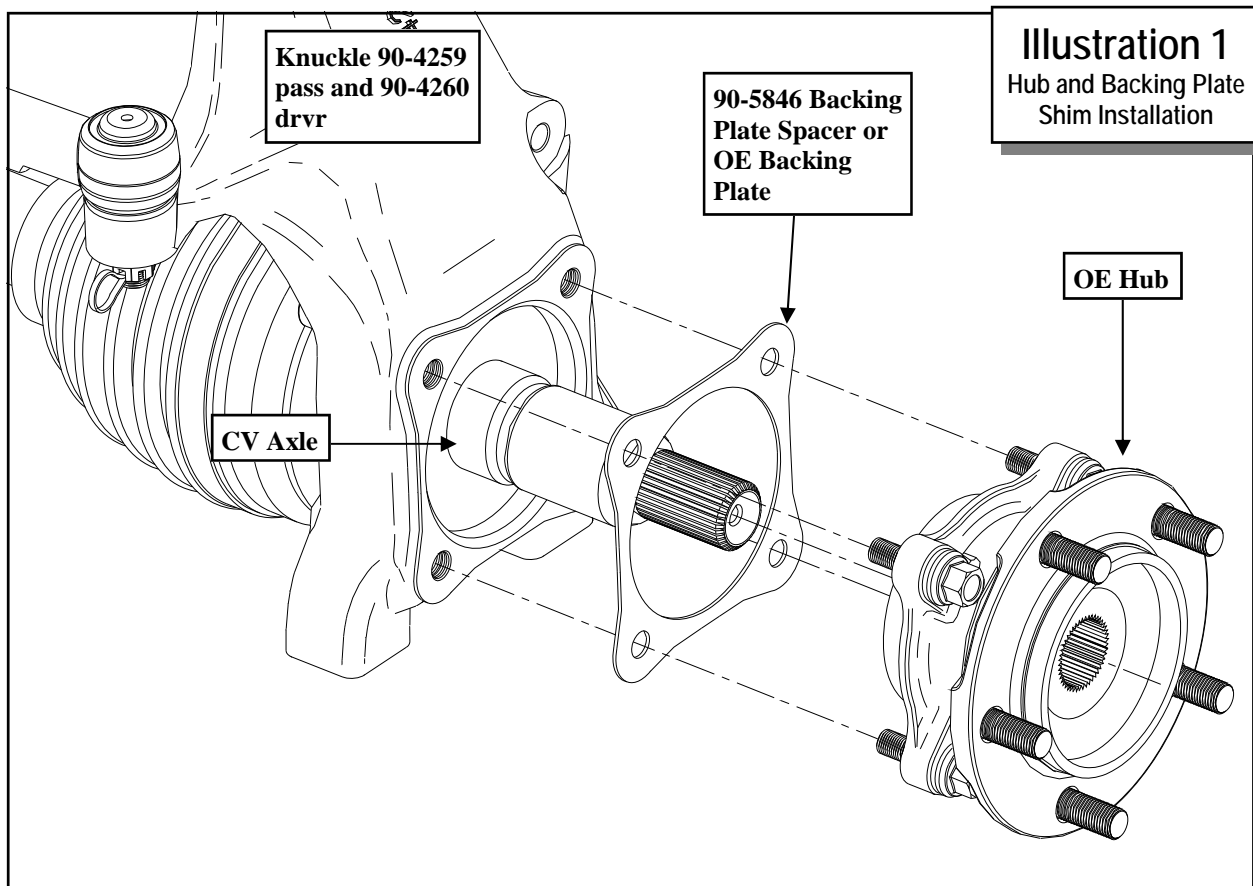
90-4259	KNUCKLE: Pass	1
90-4260	KNUCKLE: Drvr	1
90-4229	TIE ROD	2
90-5846	BACKING PLATE SHIM	2

NOTE: For 2WD installation skip all steps referencing CV axles.

Knuckle and Tie Rod Installation Instructions:

Knuckle:

1. Ensure that your work space is of adequate size and the work surface is level. Place the vehicle in park. Place your floor jack under the front cross member and raise vehicle. Place jack stands under the frame rails behind the front wheel wells and lower the frame onto the stands. Remove the jack and place the vehicle back in gear, set the emergency brake, and place blocks both in front of and behind the rear wheels. Remove the front wheels.
2. Work on one side of the vehicle at a time.
3. Using the appropriate tool, remove the outer tie rod end nut. Separate using the appropriate tool.
4. Unclip and unbolt the ABS line from the back of the knuckle. Unbolt the anti-lock brake sensor from the hub. Unbolt the upper brake line bracket from the knuckle.
5. Remove the brake caliper from the rotor and secure them clear from the work area. **DO NOT** let the caliper hang by the brake line or damage may result.
6. Remove the front rotor from the front hub.
7. Remove the dust cap from the hub. Remove the cotter pin and retaining nut from the center of the bearing hub.
8. Unbolt the (4) bolts holding the hub flange to the knuckle and remove the hub. Save the hub for reinstallation.
NOTE: You will not be able to remove the bolts from the hub assembly after the hub is removed from the knuckle.
9. Support the knuckle and remove the upper ball joint nut from the knuckle. Separate using the appropriate tool.
10. Remove the (2) bolts from the lower ball joint bracket.
11. Remove the knuckle from control arm assembly.
12. Transfer rear dust seal out of the old knuckles onto the new Pro Comp knuckles (90-4260 drvr and 90-4259 pass) .
13. Support the lower A-arms and position the new knuckle (90-4260 drvr and 90-4259 pass) in place. Slide the CV axle through the knuckle from the rear and attach the knuckle to the upper ball joint.



Torque to **67** ft./lbs. Be sure to install a new cotter pin.

14. Secure the knuckle to the lower ball joint bracket using the (2) **18mm-2.5 X 70mm 10.9** mounting bolts. Apply thread locking compound to the bolts. Torque the bolts to **230** ft./lbs.
15. On both sides of the vehicle, install the OE hub and backing plate shim (**90-5846**) onto the CV axles and into new Pro Comp knuckles. **IMPORTANT!: The backing plate shims or OE backing plates MUST be installed behind the hub. Failure to do so could prohibit the proper function of the magnetic pickup in the hub.** Tighten all the OE hardware carefully. Be sure to follow the factory assembly procedures and torque the (4) wheel hub mounting bolts to **75-85** ft./lbs.
NOTE: Be sure to transfer the O-ring with the hub assembly.

16. Attach the previously removed OE retain-

ing nut to the end of the CV shaft.

Torque to **275** ft./lbs. Be sure to install a new cotter pin and reattach the dust cap.

17. Install the front rotors on to the front hubs.
18. Reinstall the brake calipers to the new knuckle using the previously removed OE bolts. Torque to **75-85** ft./lbs.
NOTE: It may be necessary to carefully pull down the factory metal lines to provide an adequate amount of slack. DO NOT kink the lines.
19. Bolt the anti-lock brake wiring sensor to the hub. Reroute the ABS line and secure the line to the threaded hole on the back of the new knuckle using the supplied Adel clamp and OE ABS wire retaining bolt.
20. Repeat steps 3 through 19 on the remaining side of the vehicle.

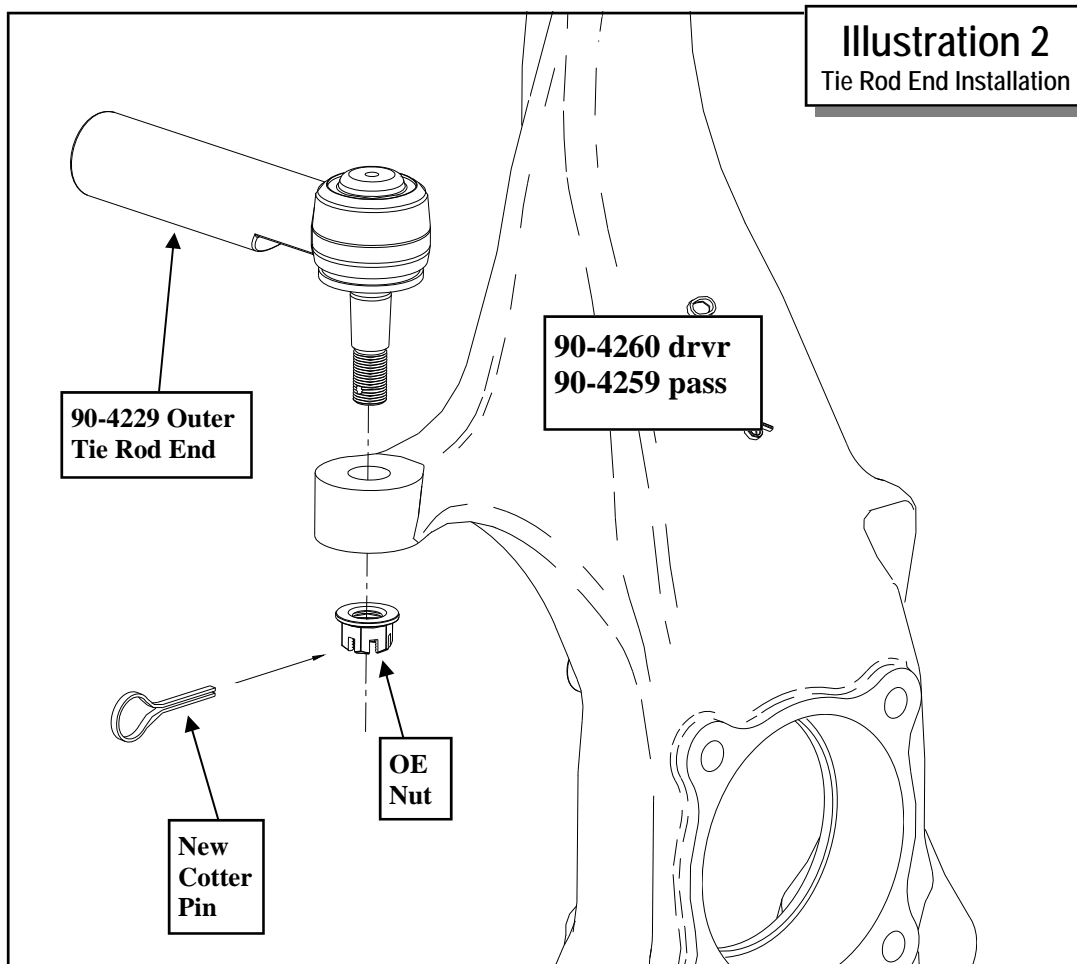
Tie Rods:

1. Loosen the jam nuts and remove the **OE** outer tie rod ends. Be sure to hold the outer tie rod end with a wrench to avoid hyper extending the tie rod joint.
2. Thread the new outer tie rods (**90-4229**) on until it is in its original location on the steering rack shaft with the stud facing down.
3. Insert from the top and secure the tie rod end to the knuckle and torque to **67** ft./lbs. Be sure to install new cotter pins.
4. Reinstall the wheels and lower the vehicle to the ground. Torque the lug nuts according to the wheel manufacturers recommendations.
5. Center the steering wheel and lock it in place. Set the toe by adjusting the tie rod ends properly.

IMPORTANT!: *If the steering wheel is not centered properly it will trigger the anti-lock brake and traction control warning lights.*

6. Lock the outer tie rod ends by tightening the **OE** jam nuts.
7. Recheck all hardware for proper installation and torque at this time.

IMPORTANT! BE SURE TO BRING THE VEHICLE IMMEDIATELY TO A REPUTABLE ALIGNMENT SHOP TO BE ALIGNED!



Revisions:

4.22.11

90-4260 was noted as pass and is now noted as drvvr.

90-4259 was noted as drvvr and is now noted as pass.

Use this only as a guide for hardware without a called out torque specification in the instruction manual.

Bolt Torque and ID						
Decimal System			Metric System			
All Torques in Ft. Lbs. Maximums						
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 9.8	Class 10.9	Class 12.9
5/16	15	20	M6	5	9	12
3/8	30	45	M8	18	23	27
7/16	45	60	M10	32	45	50
1/2	65	90	M12	55	75	90
9/16	95	130	M14	85	120	145
5/8	135	175	M16	130	165	210
3/4	185	280	M18	170	240	290

1/2-13x1.75 HHCS Grade 5 Grade 8
(No. of Marks + 2)

D T L X

G = Grade (Bolt Strength)
D = Nominal Diameter (Inches)
T = Thread Count (Threads per Inch)
L = Length (Inches)
X = Description (Hex Head Cap Screw)

M12-1.25x50 HHCS

D T L X

P = Property Class (Bolt Strength)
D = Nominal Diameter (Millimeters)
T = Thread Pitch (Thread Width, mm)
L = Length (Millimeters)
X = Description (Hex Head Cap Screw)