

LONG TRAVEL KIT KIT P/N 2877312



POLARIS
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Application

Polaris MY09-13 RZR 800

Before you begin, read these instructions and check to be sure all parts and tools are accounted for. Please retain these installation instructions for future reference and parts ordering information.

To see a colored version of these instructions go to the Kit Instruction Lookup screen under Service and Warranty on the dealer web site.

This kit includes:

Qty	Part Description	Part No.	Qty	Part Description	Part No.
2	Weld Control Arm, Upper	1018188-293	6	Screw-HXFI-M10x1 .25x95	7519043
1	Weld Control Arm, Lower, LH	1018217-293	2	Screw-HXFI-M10x1 .25x23	7519086
1	Weld Control Arm, Lower, RH	1018218-293	4	Screw-HXFI-M10x1 .25x27	7519087
1	Weld-Brkt, Sway Bar, RH	1016489-458	3	Nut-5/16 Nyloc-Y	7542324
1	Weld-Rear Brace, Suspension	1016583-458.	4	Nut-5/16 HX FLG NL-Y	7542343
2	Asm-Halfshaft, Front	1332637	2	Nut-M10x1.25-HX-Lock-Y	7547177
2	Asm-Halfshaft, Rear	1332883	18	Nut-M10x1.25-FLG, Nyloc	7547333
2	Asm-Linkage, Stabilizer	1542601	4	Nut-M8x1.25C10, HX Nyl,	7547405
1	Asm-Gear Box, Steering	1823443	14	Washer-3/8 FW SAE STL	7556153
1	Asm-Upper Control Arm, LH	1823641	2	Rivet-Pop 5/32	7621323
1	Asm-Upper Control Arm, RH	1823642	2	Pin-3/32x1-Cotter-Y	7661203
1	Asm-Lower Control Arm, LH	1823643	4	Bolt-Banjo, 10 mmx1	1910499
1	Asm-Lower Control Arm, RH	1823644	1	Bolt-Double Banjo, M10x1.25	1911194
1	Line-Brake, FR, LT, INT	1911445	11	Seal-Stat-O-3/8	5413212
1	Line-Brake, FL, LT, INT	1911446	4	Strap-Panduit, 14"	7080761
1	Line-Brake, RR, LT, INT	1911449	1	Bolt-5/16-18x3/4-Hx/Cp-NY	7512325
1	Line-Brake, RL, LT, INT	1911448	8	Bolt-M10x1.55x55 Hx Hd FLG	7518474
2	Tube, Pivot, 107.26 mm	5136101	1	Screw-M10x1.50x35 HX/FL	7518644
4	Bushing Pivot, Wear	5136102	4	Bolt-M10x1.5x20 Hx Hd FLG	7518700
2	Brkt-Upper Steering	5257028	12	Nut-M10x1.5, HXFLG, Nylon	7547313
4	Bushing-Control Arm	5437229	1	Nut-NY INS, M10x1.5 Hex, Zinc	7547385
4	Screw-M8x1 .25x60 Hx-FI	7516733	4	Pin-Cotter 1/8x1/2-Y	7661404
4	Bolt-M10x1 .25x45, HxFL	7518595	1	Tube-Stabilizer, Rear	5336851-458
1	Screw-5/16-18x3.75	7518895	2	Tube-Pivot	5136101
2	Screw-HXFI-M10x1 .25x16	7519042	4	Fitting-Zerk	7080510
4	Pivot Tube	5137104	2	Shaft -Pivot	5137594
			4	Bushing-Upper Steering	5438903
			1	Instructions	9922255

You will need to supply:

Torque Wrenches
Vehicle Lift
Anti-seize Compound

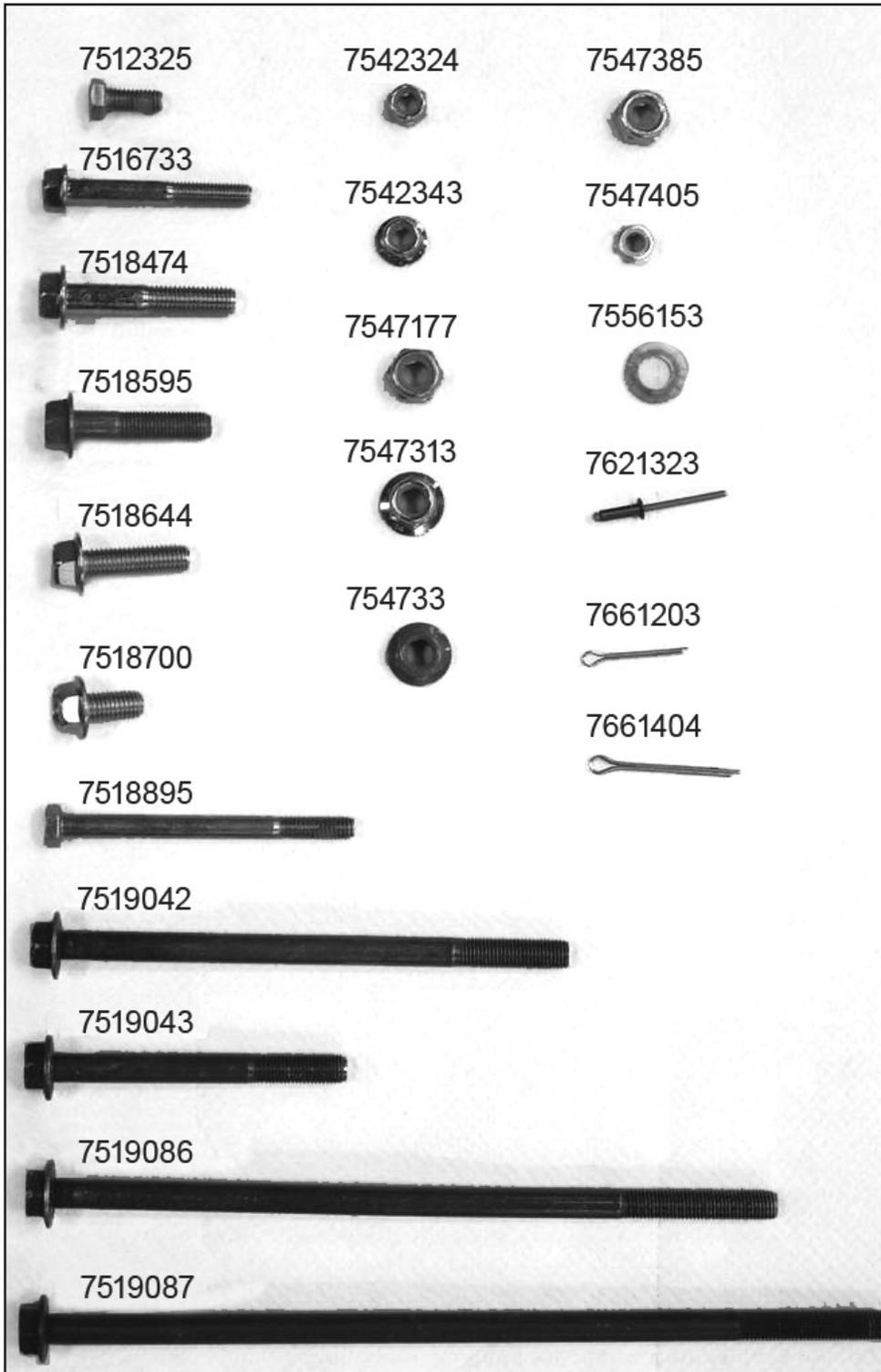
Standard Hand Tools,
Brake Bleeding Hardware and/or Assistant to Bleed Brakes.

IMPORTANT: For your safety, and to ensure a satisfactory installation, perform all installation steps correctly in the sequence as shown on the attached instructions.

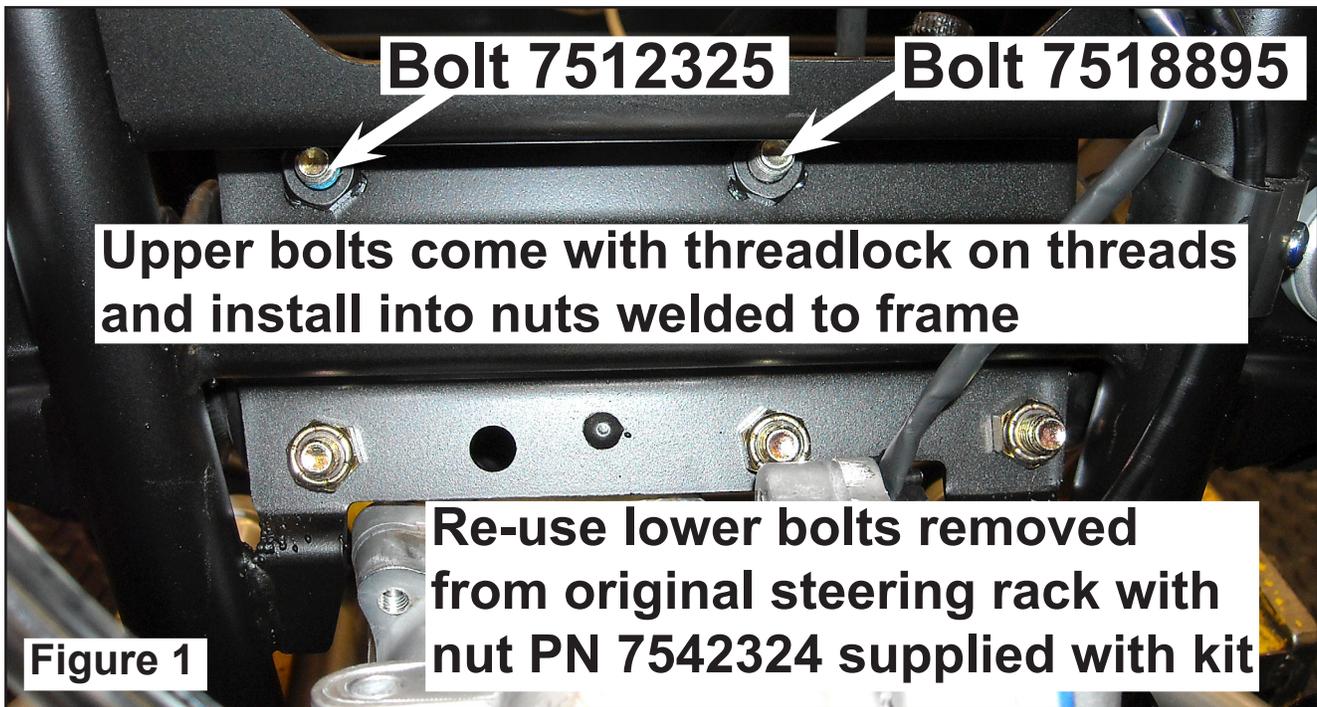
NOTE: Torque specifications needed for this kit are shown on final page. (Page 13).

INSTALLATION INSTRUCTIONS

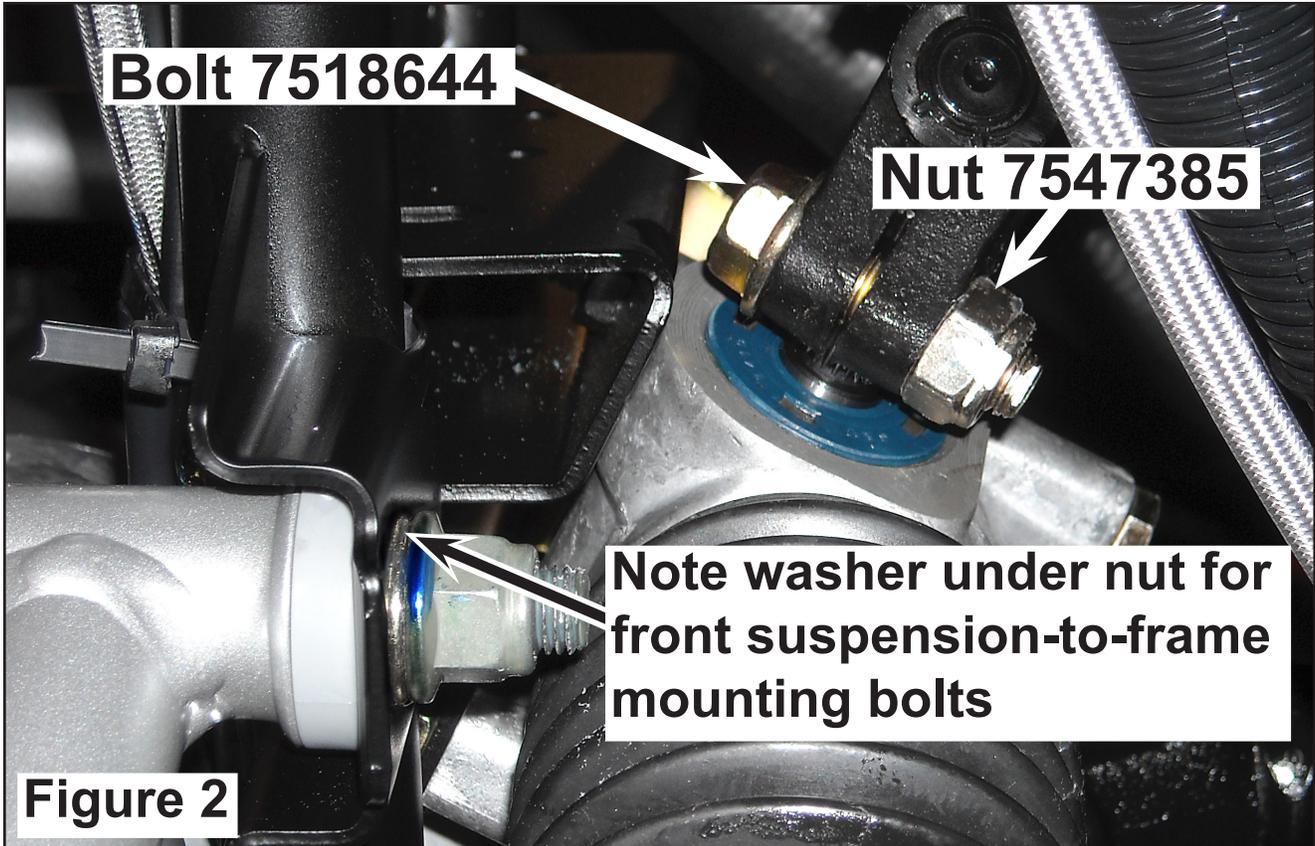
1. Lay out and count all hardware from kit. Verify that all other parts noted in the parts list above have been included with the kit.



2. Lift and support the front of the machine.
3. Remove the front fascia and retain all fasteners for reinstallation. Remove the hood and under hood storage bucket.
4. Remove the front tires, front shocks, upper and lower control arms, half shafts, steering rack and sway bar. Retain the bolts, brake calipers, hubs and bearing carriers for reassembly. Remove all eight bolts that support the sway bar and sway bar mounting bracket. Remove the sway bar and bushings. The sway bar will not be replaced so reinstall the brackets without the sway bar or bushings at this time using the original fasteners.
5. Once all parts are removed, clean all mounting areas to get rid of any grease or dirt.
6. Start the installation with the steering rack. Install upper two mounting bolts but do not tighten until all five bolts have been installed. The two bolts securing the top of the rack to the frame have thread locking compound and new bolts are supplied with this kit. **DO NOT RE-USE THE ORIGINAL BOLTS.** Install the previously removed standard bolts (with no thread locking compound) with new locking nuts supplied in the kit to secure the lower section of the steering rack to the frame. Figure 1. Tighten fasteners to recommended torque, see torque specifications drawings, page 13.

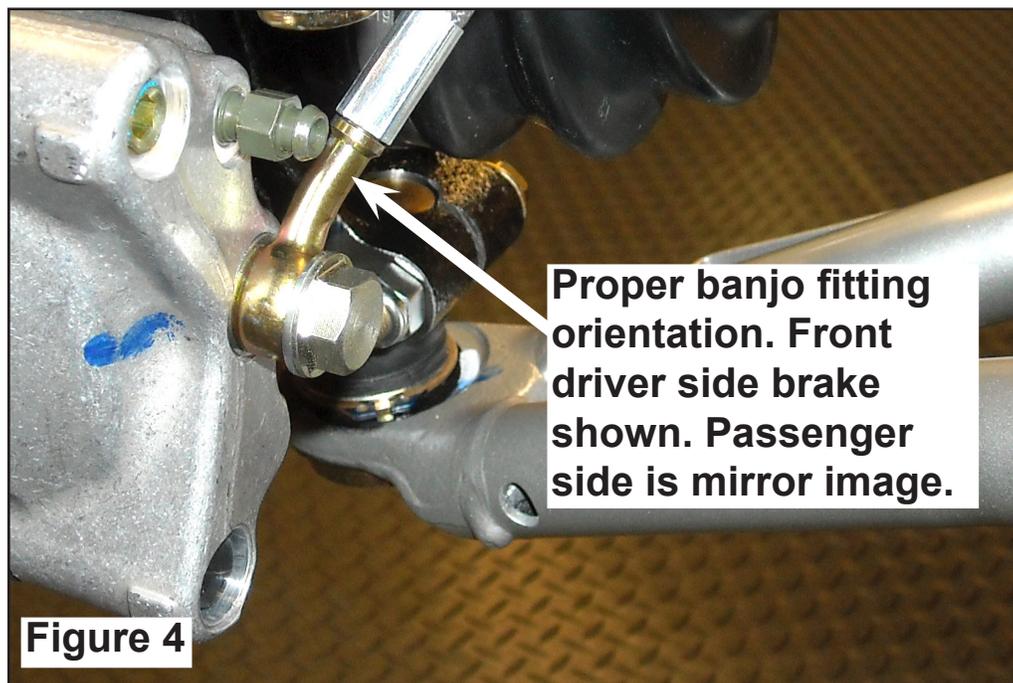
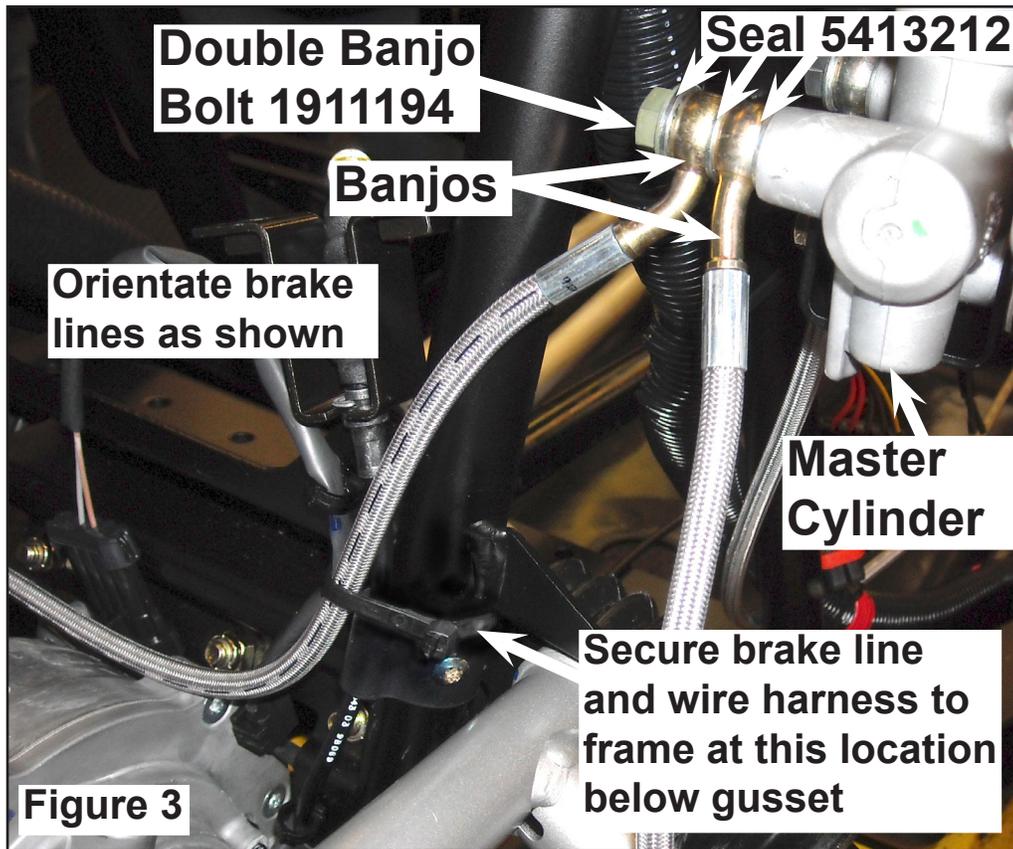


7. Install the steering shaft onto the steering rack and install with new bolt and nut supplied in the kit. While several nuts in the kit will fit this bolt, this joint uses the thinner nut. Verify the correct nut is used before tightening. Figure 2. Torque steering shaft fasteners to specification (see torque specification drawings, page 13).
8. Install the upper and lower control arms to the frame using the new bolts, washers and nuts provided. Install one washer under each nut but not under the bolt head. Figure 2. Torque all control arm mounting fasteners to specifications shown on torque specifications drawings, page 13.

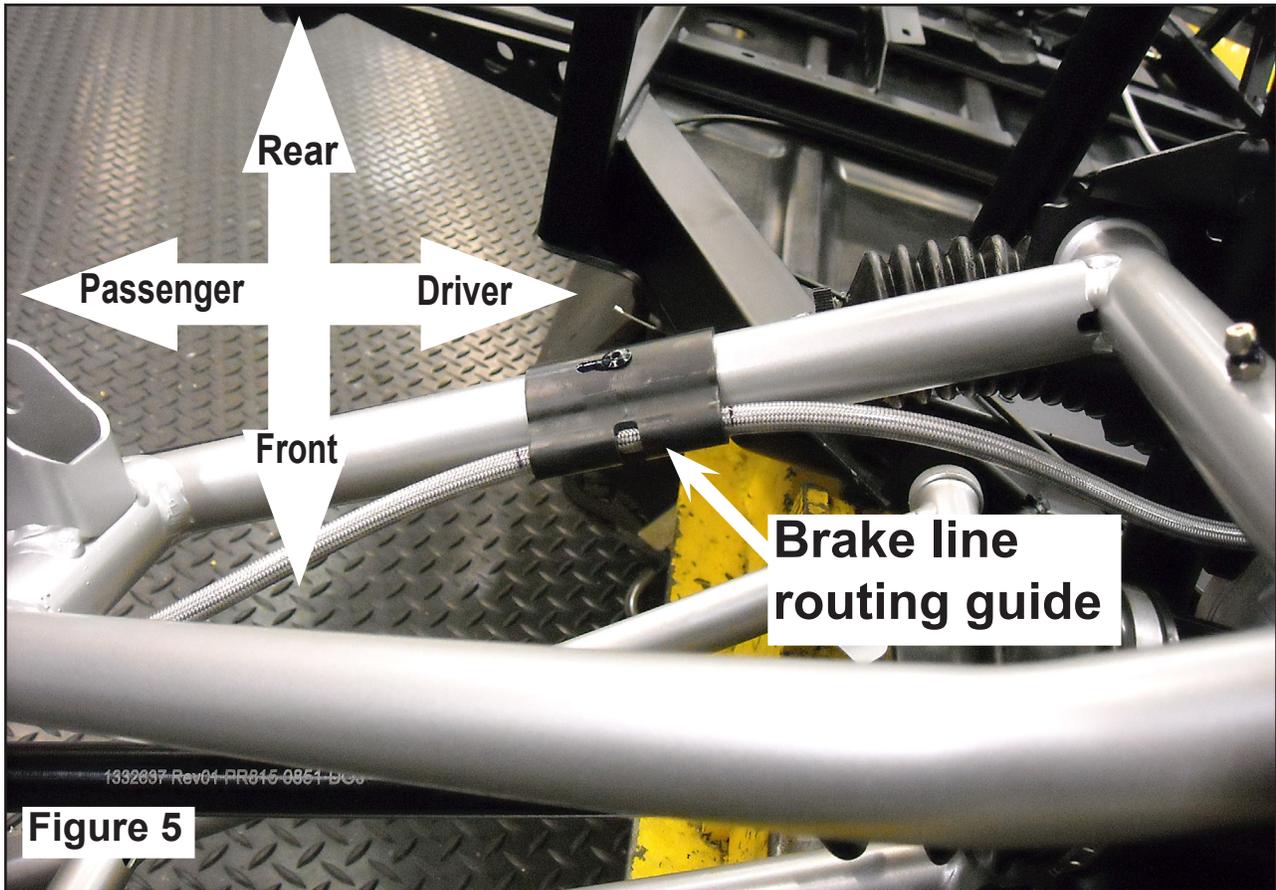


9. Identify the front axle shafts by the Part Number 1332637 engraved toward the center of the shaft. Apply anti-seize compound to the splines on both ends of the half shafts prior to installation. Install the new half shafts into the front drive unit. Verify that they are fully seated by pulling lightly at the base of the joint closest to the front drive unit. If the half shaft is fully seated, it will not easily come out of the front drive.
10. Install the bearing carriers previously removed using the new bolts and nuts, making sure to insert end of half shaft through bearing carrier before tightening bolts. Torque pinch bolts on bearing carrier per specification. Fasten the tie rod end to the bearing carrier with the rod end on the bottom of the steering arm of the bearing carrier using the bolt previously removed with a new nut and cotter pin. Torque the tie rod end bolt and nut to specification (see torque specification drawings, page 13).
11. Tighten axles to hubs using the existing nuts and bellville washers. Torque to specification (see torque specification drawings, page 13). Use the provided new cotter pins to lock the castle nuts.
12. Before starting to disassemble the brake lines, make note of the orientation of each fitting. Be sure that each fitting is located properly at installation of the new lines. Remove both front brake lines from the master cylinder and calipers. Be sure to protect all surfaces from leaking brake fluid.
13. Install the brake calipers to the bearing carriers with original hardware. Torque to brake calipers to specification (see torque specification drawings, page 13).

14. Referring to routing and fitting orientation photos, install new brake lines with new seal washers and bolts. Front brake lines attached to master cylinder together use longer banjo bolt, one seal washer between the banjos, and one seal washer on each side of the assembly. All other brake line fittings in this kit use two washers for each banjo fitting, with one on each side of the fitting. Do not bleed brakes at this time. Bleed all brake lines after installing rear suspension and rear brake lines. Figures 3 and 4.

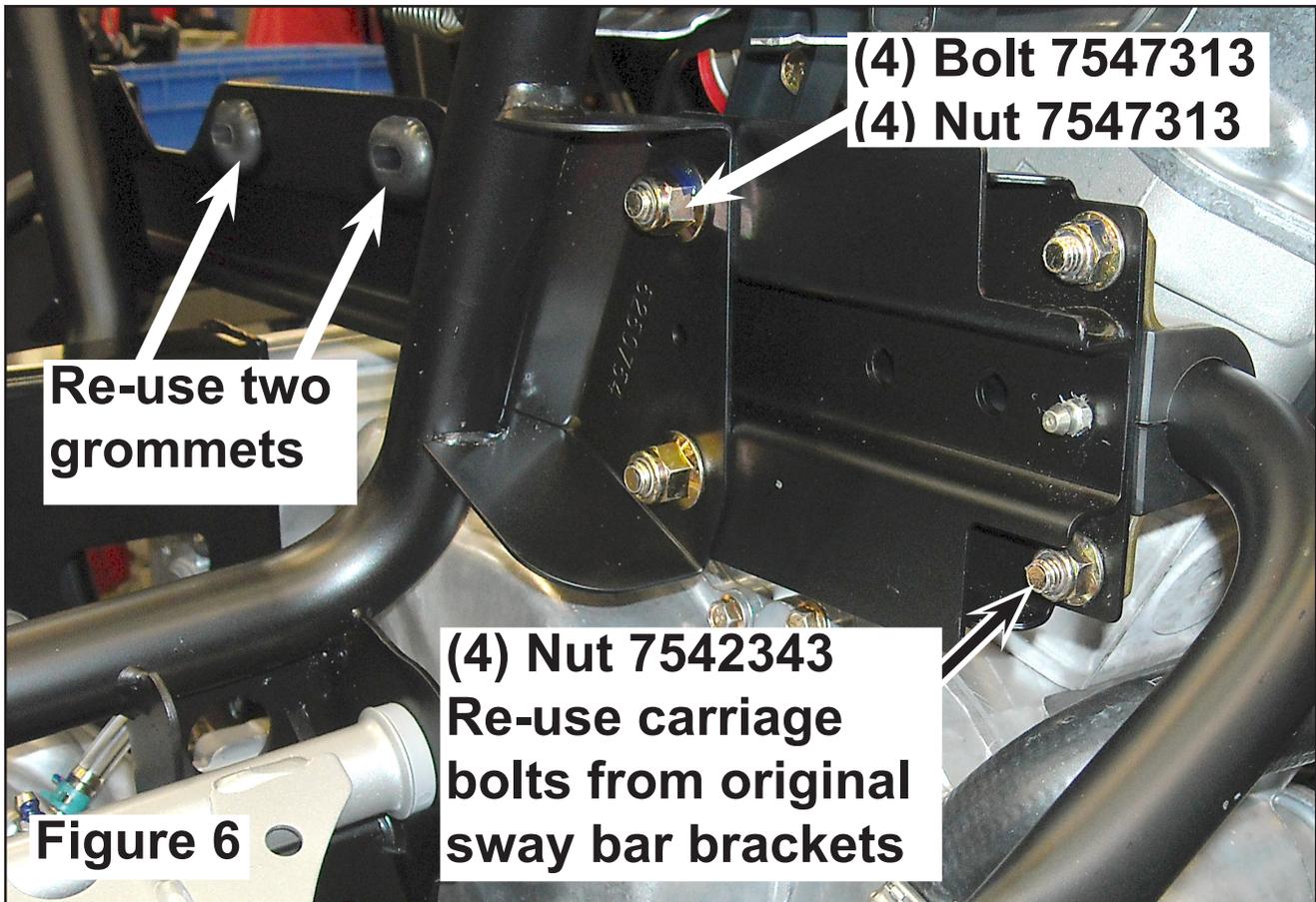


15. Drill off rivets holding plastic brake line routing clips on control arms previously removed from vehicle, being careful not to damage plastic clips. Reinstall clips on new control arms using included rivets. Figure 5. Remove plastic CV shields from control arms previously removed. Reinstall on new control arms with original hardware and torque per specification (see torque specification drawings, page 13).
16. Install front shock assemblies with the new bolts and nuts provided in this kit. Refer to shock kit for specific installation instructions.
17. Reinstall front bucket and fascia (refer to **Service Manual**).
18. Reinstall the front tires and torque to specification. Lower the front of the machine back to the ground.

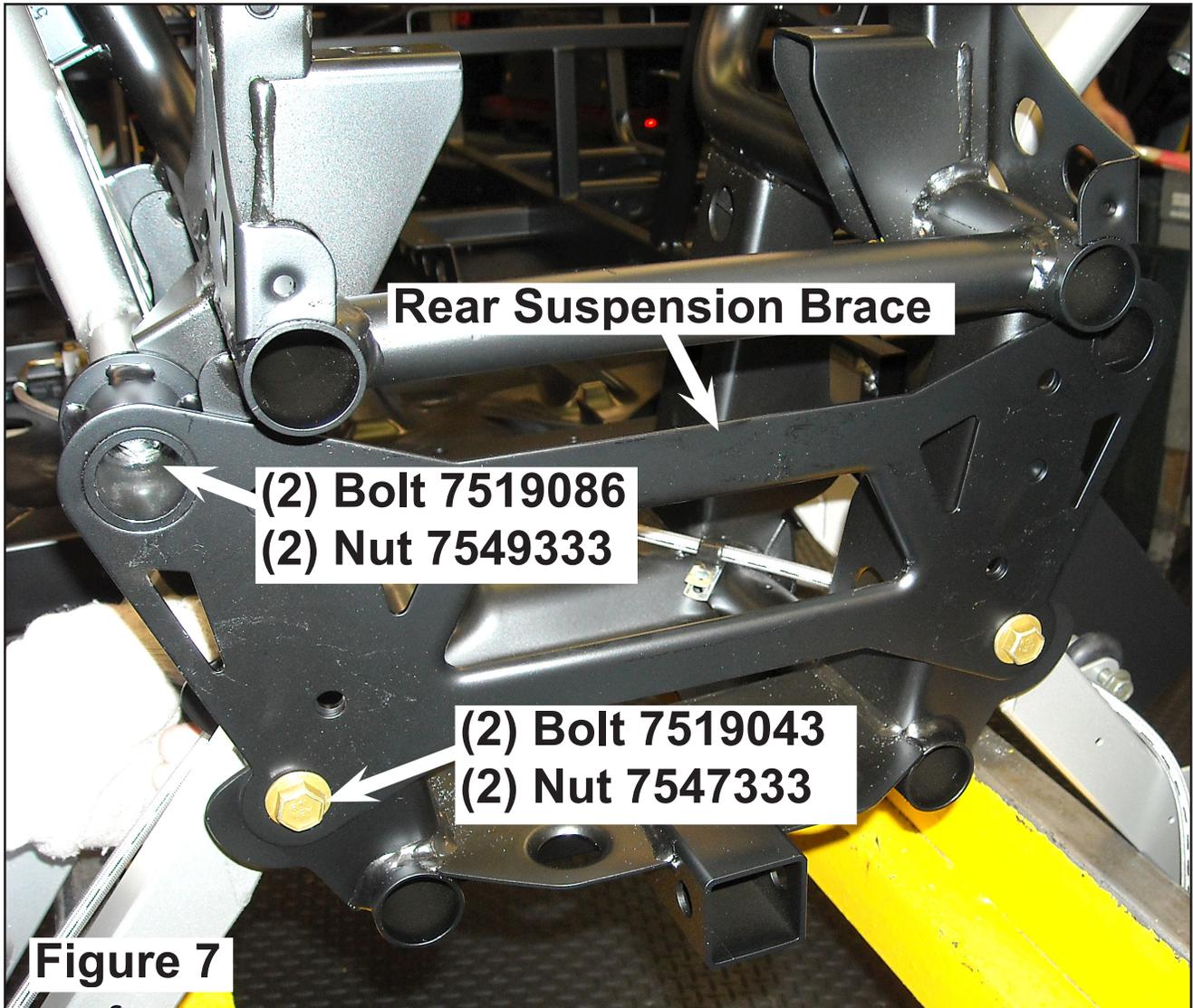


Rear Suspension

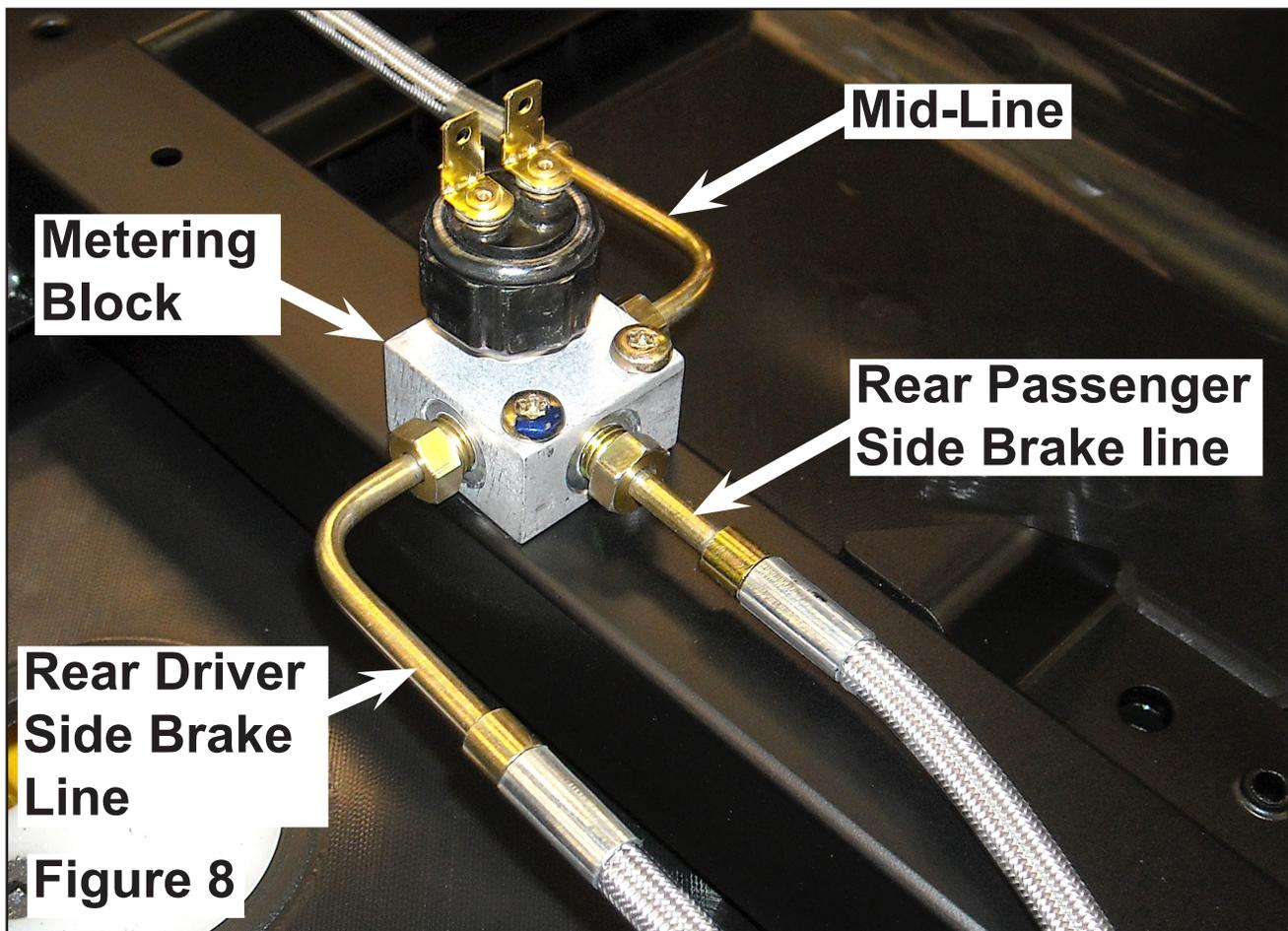
1. Lift and support the rear of the machine.
2. Remove the rear tires, shocks, upper and lower control arms, half shafts and sway bar assembly. Retain fasteners for installation. Some fasteners will not be reused.
3. Once all parts are removed, clean all mounting areas to get rid of any grease or dirt.
4. Remove the exhaust support grommets from the removed sway bar mounting bracket and reinstall them on the new sway bar mounting bracket.
5. Mount the new sway bar mounting bracket to the frame tabs with the new fasteners. Mount the sway bar to the bracket using the original bracket bolts, new nuts, new bushing brackets and new bushings included in this kit. Figure 6.

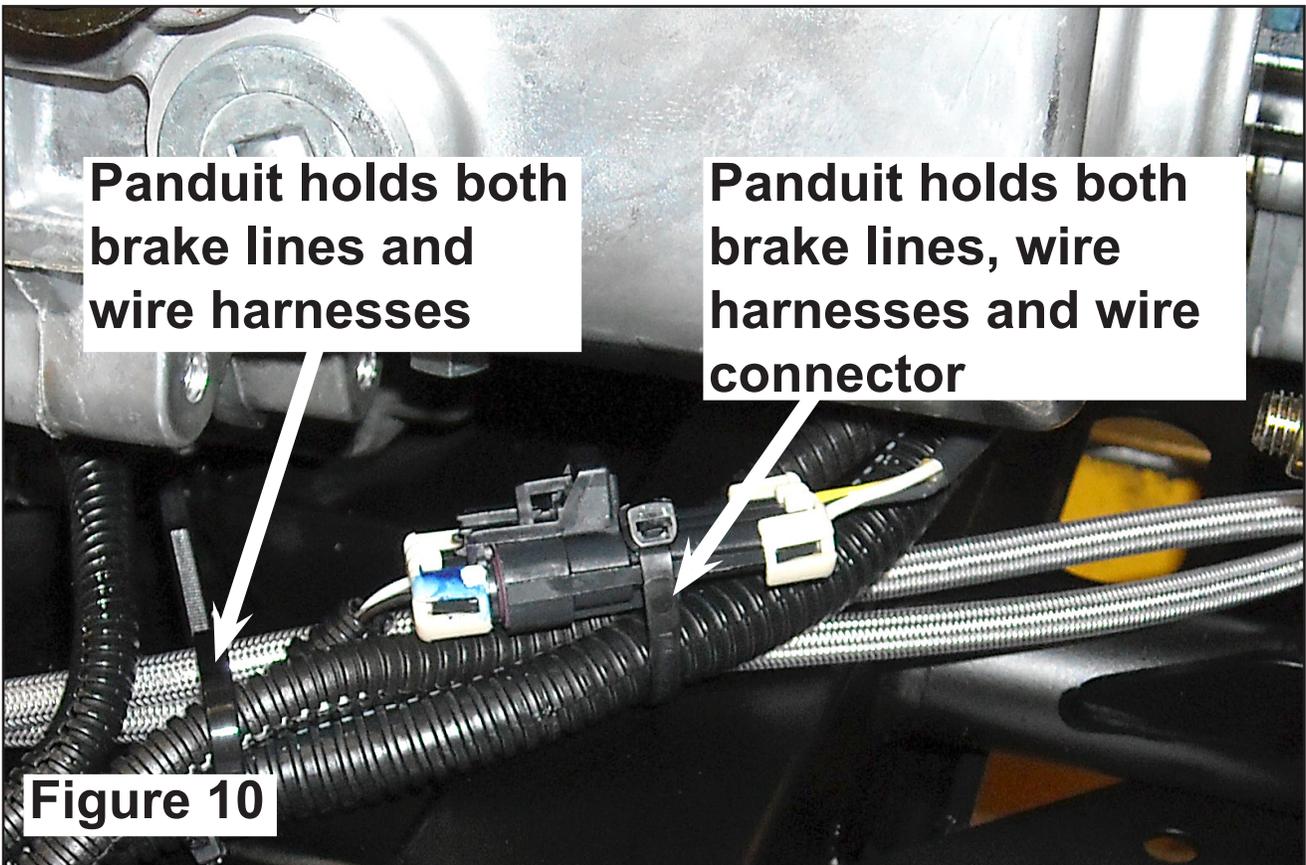
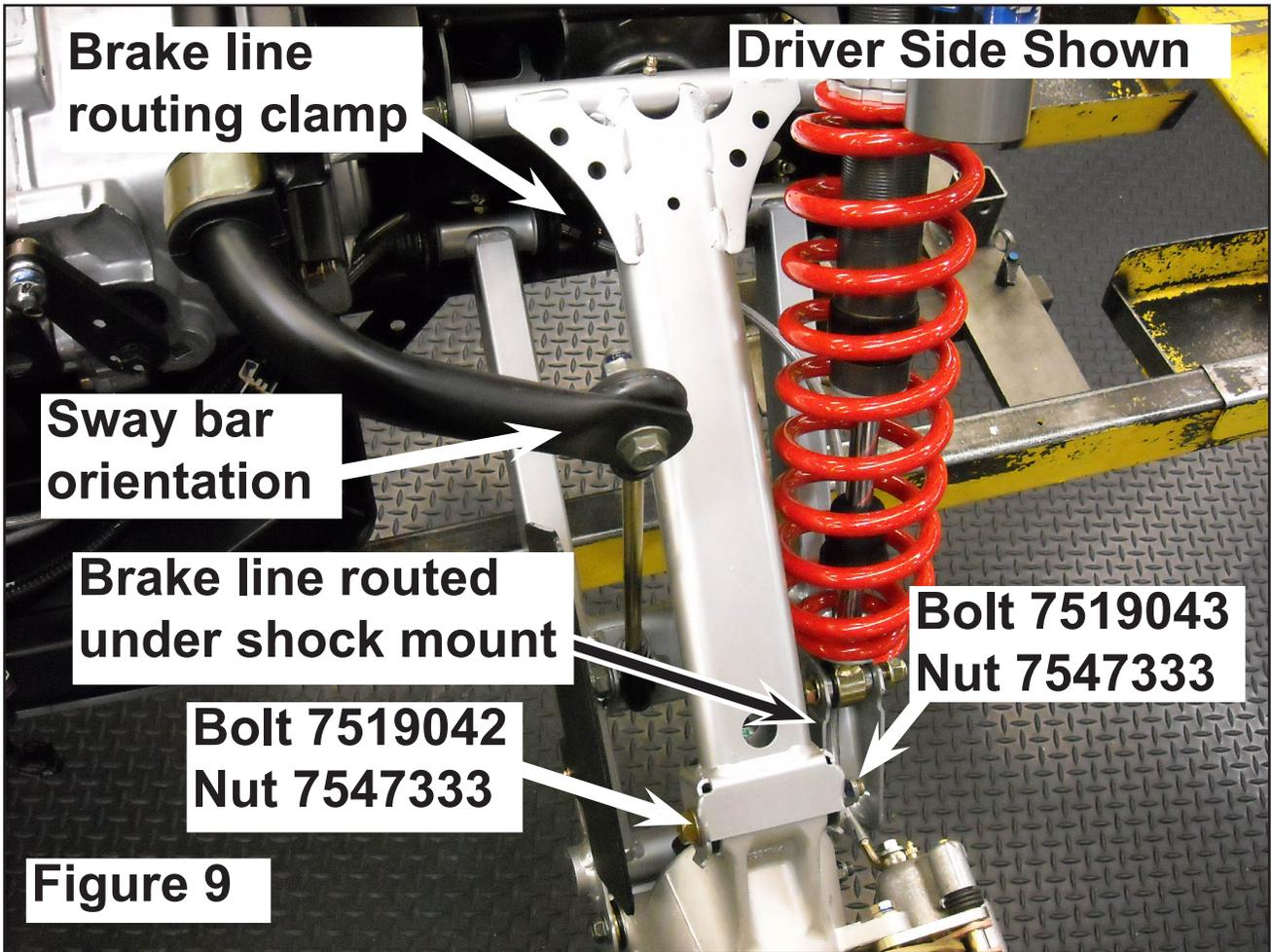


6. Place the new rear suspension brace on the back of the machine just above the receiver hitch. Install the upper and lower control arms by installing the bolts from the rear of the machine; through the rear suspension brace, through the frame tabs and into the control arms. Place one washer on each bolt under the nut (Refer to Figure 2, page 5). Install the front bolt on the rear lower control arm (Figure 7) and torque all bolts to specification (see torque specification drawings, page 13).



7. Apply anti-seize compound to the splines on the outside end of the axle. **DO NOT APPLY ANTI-SEIZE TO THE SPLINES THAT ENGAGE IN THE REAR AXLE CARRIER.** Install the new half shafts into the rear drive unit. Be careful to not damage the rear drive housing seals during installation. Verify that the half shafts are fully seated in the rear drive housing.
8. Install the bearing carriers previously removed using the new bolts and nuts, making sure to insert end of half shaft through bearing carrier before tightening bolts. Torque bolts on bearing carrier per specification (see torque specification drawings, page 13).
9. Install the wheel hubs previously removed using the existing nuts and washers. Torque to specification (see torque specification drawings, page 13). Use the provided new cotter pins to lock the castle nuts.
10. Note orientation of rear brake lines at metering block and brake line routing on chassis. Remove the rear brake lines from the metering block located under the outer clutch cover on the driver side on the frame rail. Locate the clips holding the lines to the frame in various locations and remove as well. Protect the frame and surrounding area from escaping brake fluid. Note orientation of rear brake lines at brake caliper and line routing through the shock mount. Remove the brake line from the brake caliper. Reference Figures 8-12 for brake line routing.





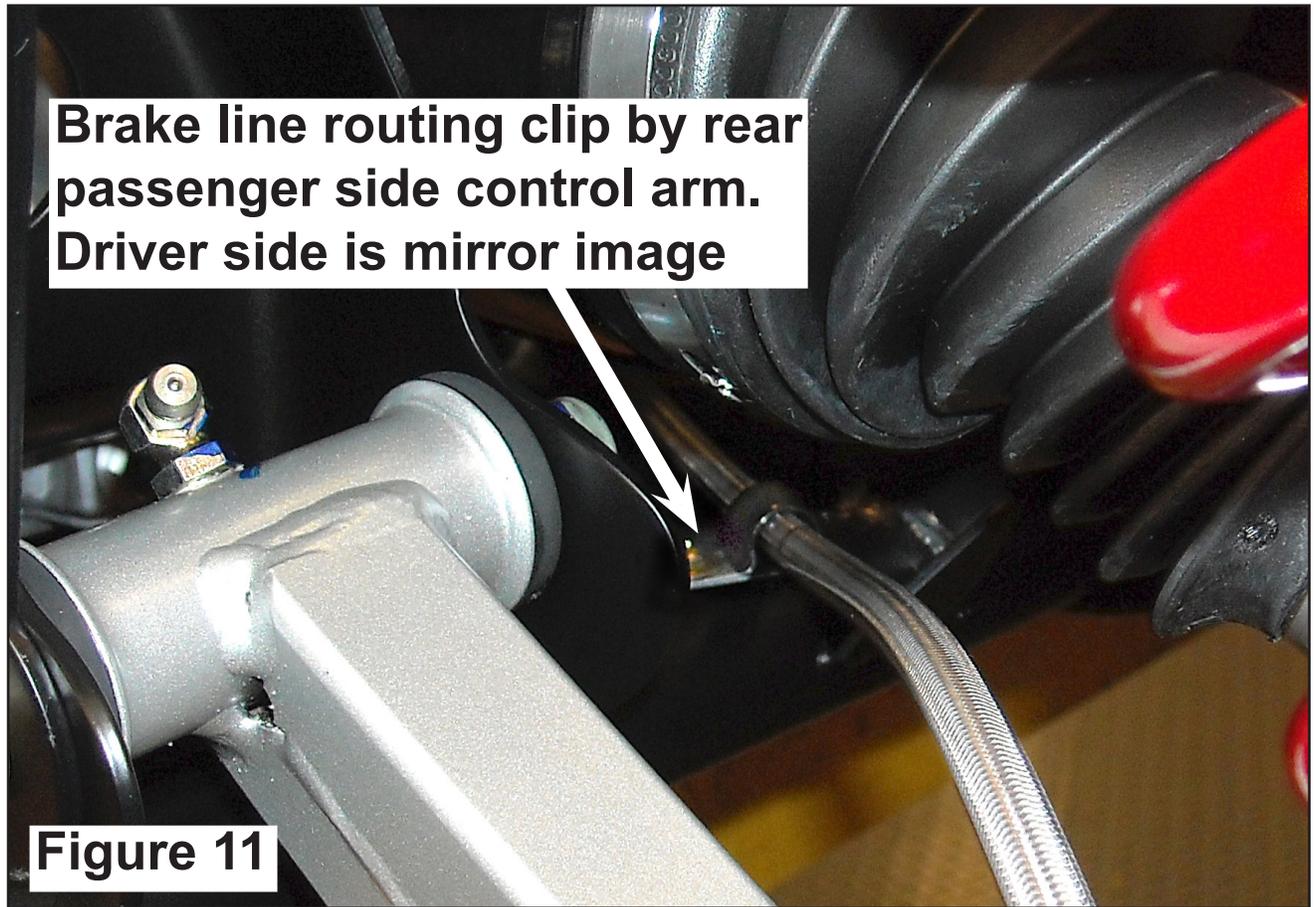


Figure 11

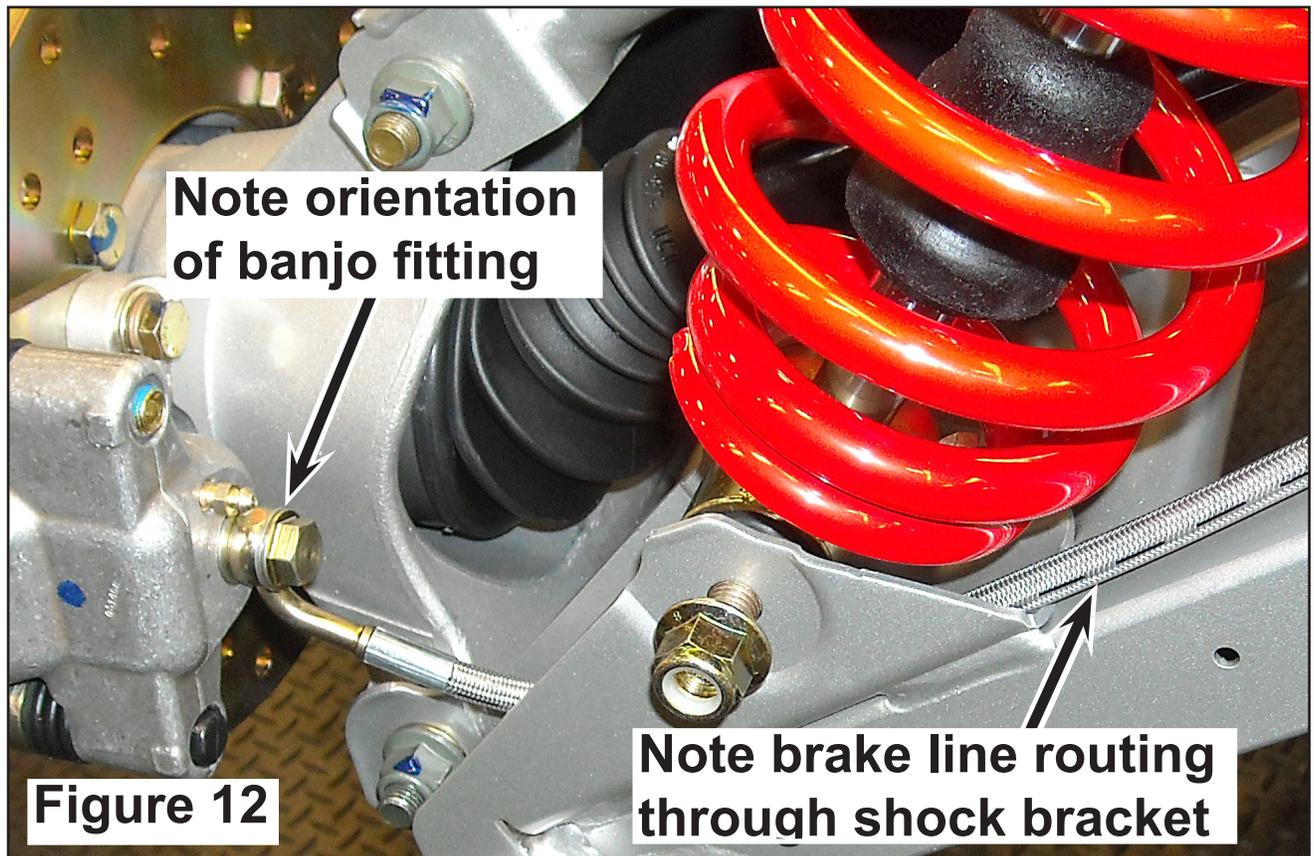


Figure 12

11. Route the new brake line in the same location as the old line was removed, securing to the frame with the original clips and screws. Fasten the lines to the metering block and tighten to specification. Fasten the other end to the respective caliper and tighten to specification. Be sure the ends of the brake lines are oriented the same as the original lines on the caliper. Secure brake lines with original mounting clips and install panduits in locations where brake lines were originally secured to wire harness.
12. Install the brake calipers to the bearing carriers with original fasteners removed earlier and torque to specification (see torque specification drawings, page 13).
13. Install rear shock assemblies with the new bolts and nuts provided in this kit. Refer to Shock Kit instructions for shock installation. Torque shock mounting bolts to specification (see torque specification drawings, page 13).
14. Install sway bar links to control arms and sway bar using included hardware. Refer to Figure 9 for hardware orientation. Torque to specification (see torque specification drawings, page 13).
15. Bleed all brake lines following the procedure in the dealer **Service Manual**.
16. Remove plastic CV shields from control arms previously removed. Reinstall on new control arms with original hardware and torque per specification (see torque specification drawings, page 13).
17. Install the rear tires using the lug nuts removed earlier. Torque to specification (see torque specification drawings, page 13).
18. Set the toe alignment as described in the dealer **Service Manual** for the RZR-S.
19. Test drive the machine at low speeds and verify that brakes, driveline and suspension components are functioning correctly.
20. Verify that no brake fluid is weeping from any of the brake line fittings. Re-torque suspension and wheel fasteners.

