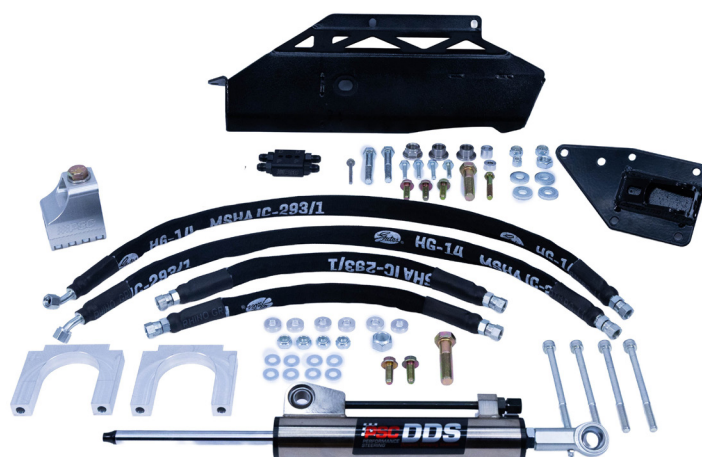




Dynamic Damping Stabilizer Axle Kit - OEM Rubicon D44 with Synergy Tie-Rod (1.75")

Jeep JL/JT (2018-2026)

Part Number: CAK691-DDS-OE-S



Installation Guide



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General Installation Information

What Comes In The Kit

- **HK3018** JL/JT Hose Kit with Metal Cloak Tierod Kit
- **MB610SK** Jeep JL/JT D44 DDS Axle Mount with Synergy 1.75" Tie-Rod
- **SC3202** DDS Cylinder
- **SCRK12** Rod End Kit
- **TRCLA1.75** Tie Rod Clamp - 1.75" Double Shear Billet Aluminum

Tools Needed

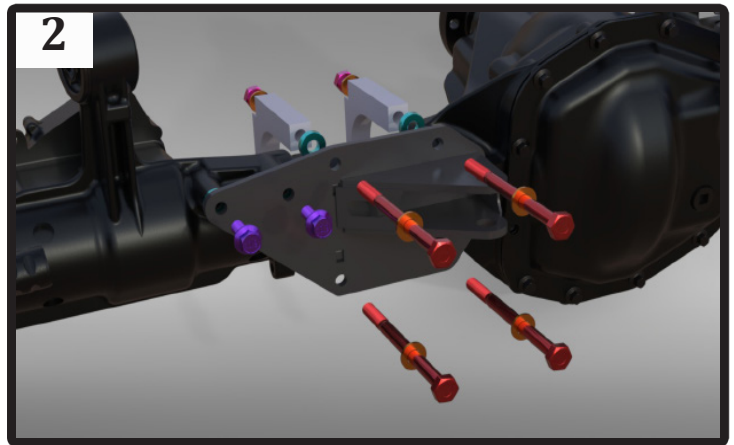
- One (1) 3/8" Ratchet
- One (1) Metric/SAE Socket Set
- One (1) Metric/SAE Wrench Set
- Torque Wrench

Estimated Install Time: 4Hrs

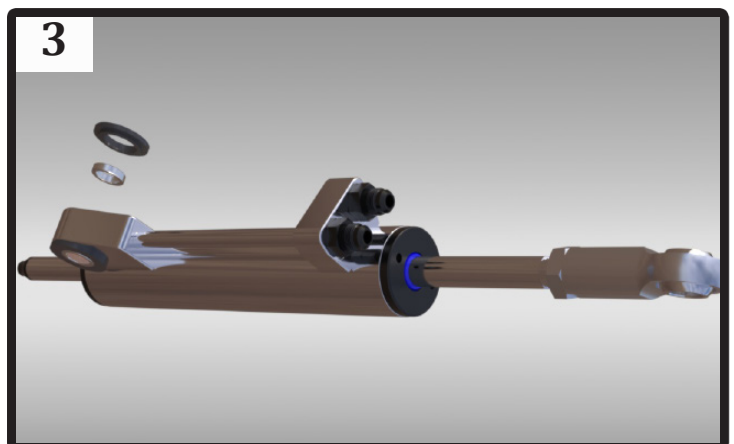
STEP 1: Remove and discard steering damper from the tie rod and axle mount. Remove and discard the 3 bolts holding the axle mount on. Remove and discard the bolts(4) holding the axle disconnect skid plate in place. Remove the highlighted bolt(1) from the diff cover.



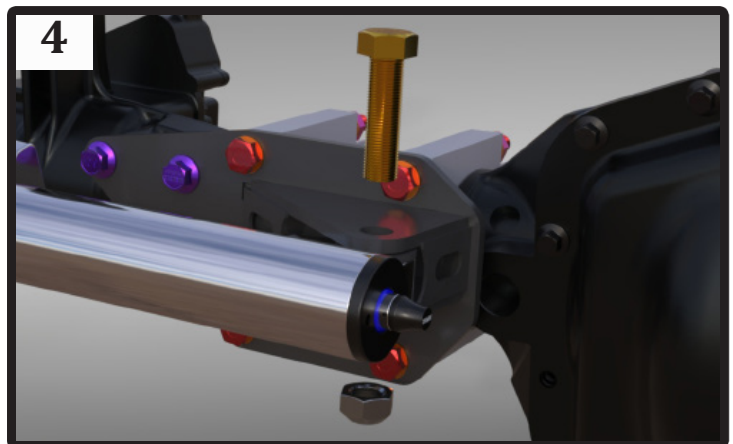
STEP 2: Install the DDS axle mount (16.610) Start with the **M10-1.5x25mm** Bolts. When installing clamps, be sure to include the **6 spacers (15.137)** between the mount and aluminum clamps and axle. **M10-1.5x130mm** with **M10 nylock nuts** and **M10 flat washers**.



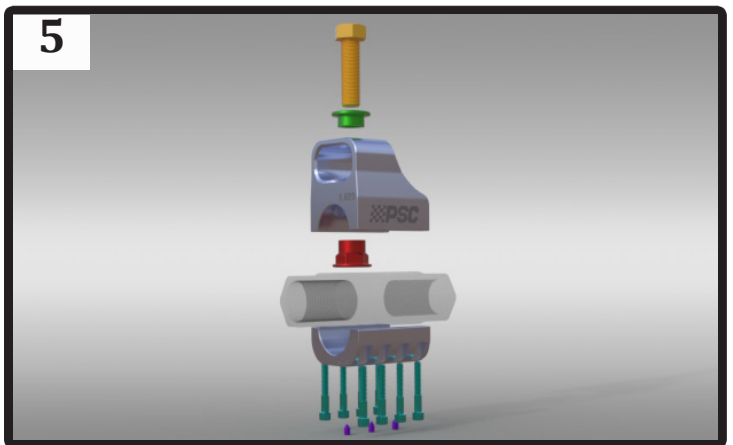
STEP 3: Assemble the SC3202 Cylinder now. Thread the supplied 5/8 jam nut and rod end onto the shaft. Insert spacers and anti-wobble bushing onto the cylinder as shown.



STEP 4: Install the Cylinder with spacers and anti-wobble bushings into the axle mount. Use the 5/8-18x2.25 Bolt and 5/8-18 nut to secure the cylinder.



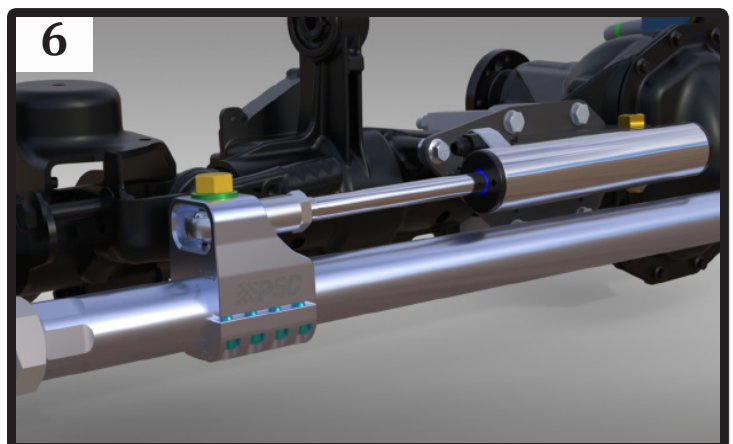
STEP 5: Install the tie rod clamp, starting with the machined **5/8 hex nut** into the bottom of the top clamp. Then secure the two clamps together as shown using eight **1/4-20x1.5 screws**. Do not tighten the three **1/4-20x.313** set screws yet.



NOTE: Orientation of clamp.

STEP 6: Turn the steering all the way to the right. Extend the cylinder completely and install the rod end into the tie rod clamp using the **spacer** and 5/8 bolt.

Note: Tie rod in rendering is for reference only and may not match your specific tie rod.



STEP 7: Adjust the clamp so that it clears the track bar mount when turning right. Cycle the steering to be sure there are no other clearance issues. Once finalized, tighten the remaining 3 1/4-20 set screws.

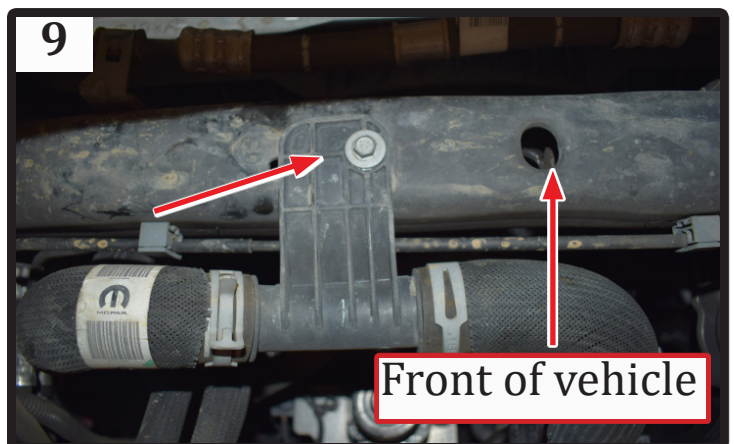


STEP 8: Check clearances and clamp placement to limit how much the cylinder 'swings'. The less movement (forward and back) the better.

Note: Photos are for hose routing only, not to be used to determine clamp placement.



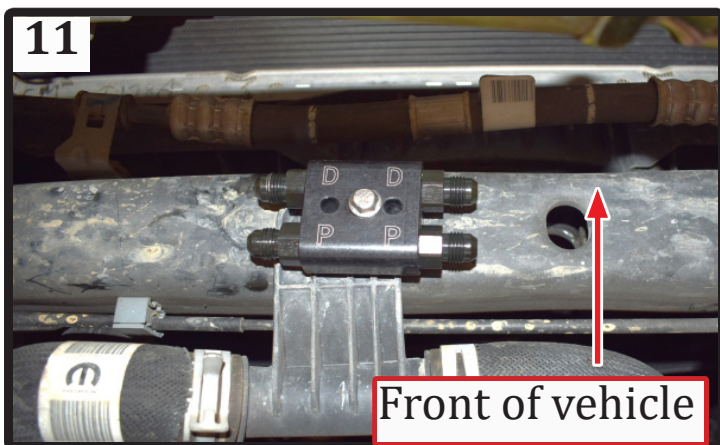
STEP 9: remove and discard the bolt found on the lower radiator hose



STEP 10: On the bench install the fittings to the MBK100. NOTE: the O-ring side of the fitting is installed to the block.



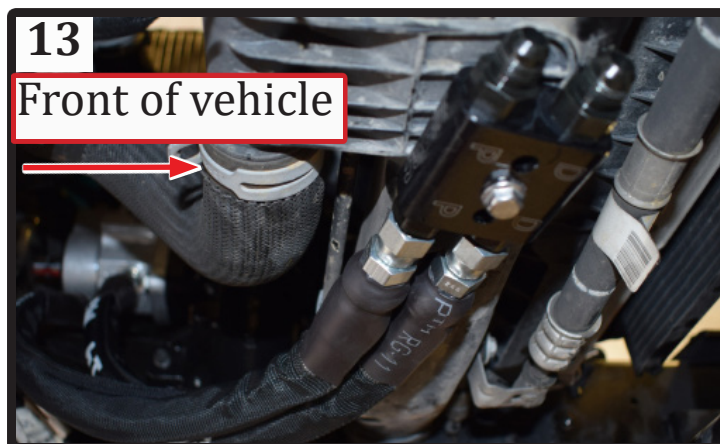
STEP 11: Install the MBK100 using the supplied 6m-1.0 x 50 to the lower radiator hose mount. NOTE: position the MBK100 with the D side towards the front of the vehicle.



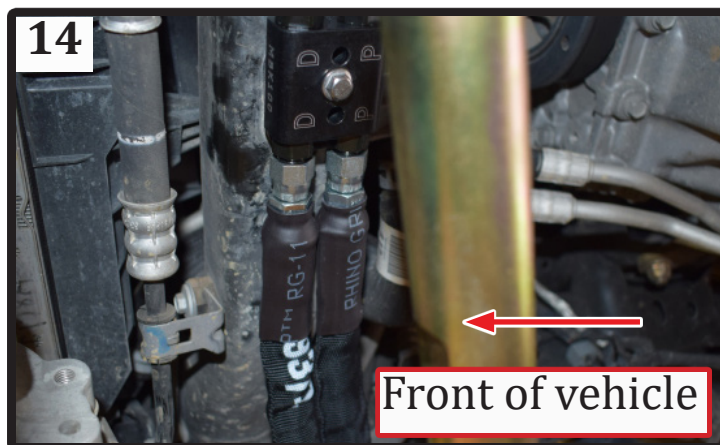
STEP 12: Install the manifold to gearbox line: HA-H3002MG-D. The Driver side line connects to 'D' on the manifold and 'D' on the gearbox. (Both being towards the front of the Jeep.)



STEP 13: The Passenger side line (HA-H3002MG-P) will run beside the Driver side line and connect to 'P' on the gearbox and manifold.



STEP 14: Install the remaining hoses onto the manifold. HA-H3000MC-D and H3000MC-P. The longer hose will be for Passenger side.



STEP 15: The Passenger Hose will route to the 'top' port of the cylinder.



STEP 16: Route hoses together and make sure there is spot for the hoses to be pinched or abraided.



STEP 17: Torque all hardware.

M6 - 10 ft lbs

M8 - 24 ft lbs

M10 - 48 ft lbs

M12 - 85 ft lbs

1/4" - 110 in lbs

5/8" - 130 ft lbs.



STEP 18: Check and tighten all lines. Proceed to bleeding the system.

Note: Some pictures are rendered (by a real person), some are taken on a display stand and some are taken on the vehicle.



Bleeding Procedure

With the kit installed, the last step is adding PSC 715 or PSC TRU BLUE™ power steering fluid and bleeding the system of all air. This part takes patience and diligence to do it properly—but it's critical to purge all the air out of the system to prevent damage to the pump.

Step 1: With the engine off, jack up the front of the vehicle and put jack stands under the front axle. This makes the bleeding process easier.

Step 2: Add PSC fluid to the reservoir until it's about 1" to 1-1/2" from the top or with an OEM reservoir keep the level between min and max. **NOTE:** With a PSC reservoir make sure the filter submerged in fluid at all times.

Step 3: Turn the steering wheel lock to lock (all the way right and all the way left) to pull more fluid through the system. Add fluid as necessary and repeat until at least two quarts have gone into the system.

Step 4: Put the cap on the reservoir and start the engine for about 30 seconds—but **do not turn the steering wheel yet.**

NOTE: The fluid level in the reservoir will drop and get aerated. Letting a few minutes pass between startups will allow air bubbles to work their way out of the system. Refill the reservoir and repeat this process a couple of times.

Step 5: Start the engine and turn the steering wheel completely right and then left 10-15 times. Shut the engine off and let the vehicle sit for 10 minutes. Check and add fluid as necessary. Repeat this process 3-4 times.

At this point the fluid level should move about one inch up or down when cycling the steering, and no bubbles should be visible in the reservoir.



Bleeding Procedure Cont

Step 6: Lower the vehicle to the ground and repeat the process above one more time. Check the fluid level again.

Step 7: Take the vehicle for a test drive. Listen for pump noise-that's a sign of fluid aeration. If you hear it, shut the vehicle off to let the bubbles dissipate.

If noise keeps coming back, double check the low-pressure lines and make sure all fittings are tight. Top off the fluid and drive the vehicle again. Let the system cool down once you believe it's properly bled.

Step 8: Remove the reservoir cap and have someone start the vehicle while you watch the fluid level.

- If the level drops on startup, there's still air in the system.
- If it stays steady, you'll be good.

NOTE: Getting all the air out of the system can take some time. If the pump is whining, you are aerating the fluid which is not good for the pump. If you're running your vehicle for an extended time and your pump has not stopped whining, it needs to be addressed as soon as possible. Sometimes this can be as simple as letting the vehicle sit to get the last of the air out. Always make sure the fluid level is good and there are no leaks.

Scan to Order PSC715, Tru Blue or PSC729 flushing fluid



PSC 715



PSC Tru Blue



PSC 729



CONTACT US

Need help?

Need a new part?

Have a question or concern about an install?

Phone: (817) 270-0102 Mon-Fri 9 AM-5 PM CT

Email: support@pscmotorsports.com

www.pscsteering.com