

SANDCRAFT MOTORSPORTS STEERING RACK STABILIZER PRO R INSTALLATION INSTRUCTIONS

TOOL LIST

- 15,16,18,21MM SOCKET
- 15,18,2,42 MM WRENCH
- 12 POINT 1/2" WRENCH
- T40 TORX 5/16
- PIN PUNCH

- M16 X1.5 THREAD CHASER
- PIPE WRENCH
- SCISSORS/KNIFE
- SAFETY WIRE
- TORQUE WRENCH
- HAMMER
- LUG WRENCH
- SAFETY STRAP
- FLOOR JACK
- JACK STANDS

- 1. Remove the skid plate to access the vehicle frame for jack stands. Note the locations of the longer bolts for re assembly.
- 2. Raise the vehicle and remove the front wheels. Support the vehicle using jack stands on the frame rails. Limit straps (if applicable) can remain connected.
- 3. Remove the 21mm nut from the bottom of the outer tie rod and shock the tie rod loose and carefully move it out of the way (repeat the following steps on both sides).
- 4. Remove 2X 8mm brake hose retainer bolts.
- 5. Remove upper and lower 16mm caliper retainer bolts.
- 6. Remove the upper ball joint pinch bolt. Remove the caliper/rotor assembly unit. Use zip ties or wire to hold the assembly together and rest the assembly on top of the upper control arm. Now loosen the upper control arm at the pinch bolt and use a safety strap to lift and secure the upper tie rod and rotor/ caliper assembly out of the way.
- 7. Disconnect the inner tie rod boot inner and outer clamps and slide the boot outward to access the inner tie rod joint.

- Loosen the inner tie rod joint using a pipe wrench. Note – do not use the pipe wrench to install the SANDCRAFT inner tie rod end.
- 9. Remove the upper control arm inner nut and bolt. The driver side hardware is accessible by removing the small access plate under the gas pedal.
- 10. Remove 2X 15mm vertical nut and bolts from the control arm gusset. Loosen the plastic brake line retainer clip and release the brake line. Remove the control arm gusset from the vehicle. You will not be re installing this part.
- 11. Remove 4X T40 fascia screws and remove the front bumper fascia.
- 12. Remove 2X plastic fascia pop rivets connecting the grille to the front bumper.
- 13. Remove 4X 15mm bumper bolts and remove the front bumper.
- 14. Remove the upper control arm front mounting bolt, this will loosen the upper control arm to allow space for the SANDCRAFT Stabilizer body installation. Be sure the brake rotor/caliper assembly is secured to the upper control arm.



- 15. Disconnect the 4WD actuator electrical connector.
- 16. Remove the 4WD actuator using a 1 1/8" wrench. Make sure the actuator spring remains inside the differential. You will lose some oil, set a paper towel beneath the differential to catch it. Plug the differential opening with a paper towel to reduce spillage.
- 17. Remove the roll pin from the driveline at the front differential. If you can't access the roll pin, you may need to lift the rear wheels off the ground and rotate them until the roll pin is accessible. With the roll pin removed, slip the driveline back and off of the differential to make room for installation of the SAND-CRAFT stabilizer body.
- 18. Unbox your SANDCRAFT Steering Rack Stabilizer and disassemble the components. The 4X hex nuts holding the two parts of the SRS body should be installed using red threadlocker.
- 19. Use a 24 & 1 1/16" to remove the tie rod inners from the tie rod outers. Retain the left hand jamb nut for use on the new SAND-CRAFT tie rod inner.
- 20. The factory tie rod boot will be reused in installation but requires trimming. Trim the factory bellows on the 9th high rib from the large end. Discard the small end. Attach the large end of the trimmed bellows to the SANDCRAFT ears, secure with safety wire. Do this for both sides.
- 21. Slide the drag link rod out of the SAND-CRAFT SRS body and insert it up and over the differential with the logo facing forward

in the same location the control arm gusset was removed from.

- 22. Loosely install 2X vertical bolts (supplied with your kit) into the stabilizer to hold it in place. Do not tighten at this point. Re insert the drag link rod into the body.
- 23. Use a M16 x 1.5 thread chaser to clean out the old threadlocker from the inner tie rod ends in the steering rack.
- 24. Install the SANDCRAFT inner tie rod end into the steering rack using red threadlocker. Tighten to 89 ft-lbs. Do not use a pipe wrench, or any other tool that might scratch the surface. Only tighten using the flat sides cut into the tie rod end body.
- 25. Slide the bellows/ear assembly over the tie rod with the ear side out, draw the ear to the drag link rod and loosely install the supplied 12 point bolt to hold it in place. Do not tighten at this point. Secure the inner bellows connection with safety wire.
- 26. Slide the supplied outer bellows boot on and secure both sides with safety wire.
- 27. Insert the upper control arm back into the factory position and re install all factory hardware following factory torque spec.
- 28. Tighten 2X vertical stabilizer body bolts. Thes are metal locking nuts, tighten them until the stop, do not overtighten.
- 29. Torque 2X 12 point ½" bolts to the tie rod drag links to 22 ft-lbs.
- 30. Re install the driveshaft to the differential and re install the roll pin.



- 31. Re install the 4WD actuator ensure the actuator spring is installed correctly. Follow manufacturer torque spec. Re connect the actuator electrical.
- 32. Fully thread the factory tie rod outer to the SANDCRAFT inner re use the factory jamb nut.
- 33. Re install the upper tie rod into the knuckle and re install the rotor/caliper assembly.
- 34. Re install the upper ball joint pinch bolt.
- 35. Re install the brake hose hanger bracket and hardware.
- 36. Re install the caliper hanger hardware using blue threadlocker.

- 37. Re install the outer tie rod end to the knuckle.
- 38. Re install the front bumper, grill support rivets and the front bumper fascia.
- 39. Safely lift the front of the vehicle off the jack stands and re install the front wheels.
- 40. Safely lower the vehicle and re install the skid plate.

Notes: Check and adjust your alignment at this point, always check your jamb nuts. The SAND-CRAFT Steering Rack Stabilizer might feel tight at first but will wear in during normal use.

PLEASE CONTACT US AT (480)-539-4438 OR SANDCRAFT@SANDCRAFTMOTORSPORTS.COM IF YOU HAVE ANY QUESTIONS.





SANDCRAFT MOTORSPORTS LOWER BALL JOINT PRO R INSTALLATION INSTRUCTIONS