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MODERATE - Installation requires metric tools and possibly cutting and drilling. The ability to closely follow instructions is imperative. If your mechanical experience is limited to simple jobs like changing oil and rotating tires, a Moderate installation will likely prove challenging.

**PART NO. 70803** 

**ESTIMATED INSTALLATION TIME** - Installation times are for a professional installer. Times may vary based on the skill level of the installer.

ESTIMATED INSTALL TIME - 1.5 hrs

SLP Adjustable Torque Arm

PACKING LIST				
Item #	<u>Check</u>	Quantity	Part Number	<u>Description</u>
1		1	700011205	Adjustor
2		1	700099643	Bushing, Polyurethane
3		2	700687792	Rod Ends
4		2	940570900	Jam Nuts
5		1	700024797P	Torque Arm, Basic
6		1	700425796P	Mounting Assy
7		1	700366495	Angle Gauge
8		2	940079896	Bolt, 5/8-18 x 2.25" Grade 8
9		2	940080100	Bolt, Hex Head, M14 x 8" Grade 10.9
9		2	940079795	Nut, Nylock, 5/8
10		1	020814619	Zip tie, Black
11		1	*****	Installation Instructions

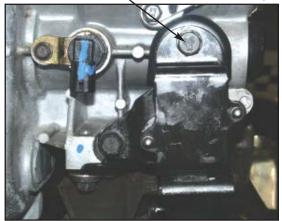
Warning: SLP recommends allowing the vehicle to cool (not running) for five hours before beginning the installation. Exhaust components can be extremely HOT and could cause severe burns if it is not allowed to cool. SLP also recommends wearing safety glasses for the complete installation. Refer to GM service manuals for further pictures or specifications.

#### **INSTALLATION INSTRUCTIONS**

- 1. A vehicle lift is needed for proper installation of this part.
- 2. Before beginning installation, measure the pinion angle on your stock vehicle so that you have a starting point when adjusting the pinion angle later. To measure the stock pinion angle, use the supplied magnetic angle meter. The easiest way to measure pinion angle is to support the car on its wheels or axle NOT on the body or chassis. This is important because the pinion angle will change as the rear axle moves up and down (it moves when you jack the car up by the chassis or body). By jacking or supporting the vehicle on the wheels or axle, you can be sure the axle is in ride position. Note, the vehicle must remain in the same supported position for the entire installation so the correct pinion angle can be set after installing SLP's torque arm. Once the vehicle is secure, remove the driveshaft from the vehicle. Next, place the magnetic angle meter on the pinion nut, so it can be read (meter face and pointer needle side) from the side of the vehicle. The reading should be between 0 and 25 degrees, depending on the grade of the ground and position of the vehicle. Record this stock pinion angle.
- 3. Remove magnetic pinion angle meter.
- 4. Support the driver-side rear axle with a suitable jack stand.
- Remove both large bolts that attach the stock torque arm to the rear axle housing.

- 6. Remove the top bolt on the stock clamshell transmission mount so that the stock torque arm can slide out. Reference photo 1. Remove the torque arm from the vehicle. If equipped, remove the rubber vent hose from the torque arm, leave it on vehicle (it will get zip tied to the new torque arm)
- 7. Remove the remaining two nuts and bolt from the clamshell mount to remove the entire unit from the rear of the transmission. Reference arrows photos 1&2 below.

### TOP BOLT ON STOCK TRANSMISSION MOUNT (TO REMOVE STOCK TORQUE ARM)



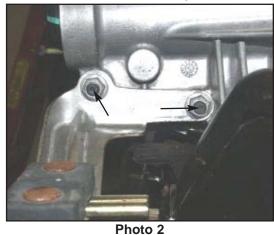
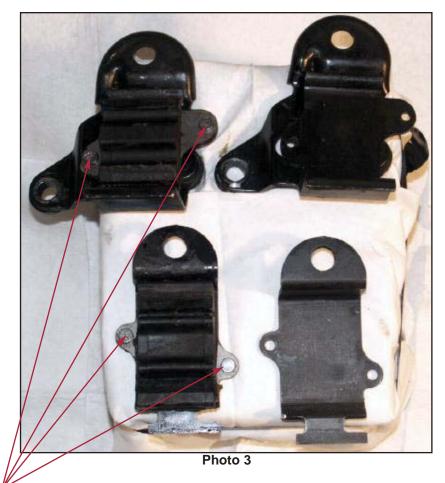


Photo 1

- 8. Place both halves of the factory clamshell on a bench with the rubber sides facing upward.
- 9. Drill or grind out the four rivets that hold the rubber bonded to metal pieces.
- 10. Remove both rubber bonded to metal pieces from the clamshell. Reference photo 3 for location of rivets.



DRILL OUT 4 RIVETS TO REMOVE STOCK RUBBER BUSHINGS

11. Next, install the clamshell back onto the vehicle using the two nuts and bolts removed earlier and insert the SLP bushing. Reference photo 4 below for orientation of SLP bushing in clamshell.



NOTE: On automatic transmssions, trimming of raised edge will be necessary for a better fit into bracket.

Photo 4

- 12. Leave the top bolt loose so that the SLP Torque Arm can slide easily into the bushing.
- 13. Next, position the SLP rear bracket over the rear axle and tighten the 2 nuts and bolts to 97 ft-lbs.
- 14. Next, slide the torque arm into the front poly bushing and slide the rod ends into the SLP rear bracket. Use the 2 washers provided on both the upper and lower rod ends to take up any space between the rear bracket and the rod ends. (Grease the poly bushing first). Make sure the rubber vent tube is out of the way, if equipped.
- 15. The rear axle will need to be positioned with a jack so that the rod ends can slide into the rear mounting assy.
- 16. Insert the two 5/8 X 2" hex head bolts through the rear mounting assy and rod ends. Reference photo 5.



Photo 5

- 17. Tighten the nylock nut and 5/8" bolt to 90 ft-lbs.
- 18. Next, tighten down the top bolt on the clamshell to 20 ft-lbs.
- 19. Next, set the pinion angle using the following method described below.
  - 1. Set the magnetic angle meter in the center of the on the rear axle pinion nut (same position you had it when you measure the stock pinion angle)
  - 2. Using a wrench, turn the "adjustor" either way to achieve your desired angle (the stock pinion angle is a good starting point). When changing pinion angles both jam nuts MUST to be loose. When adjustment is complete, both jam nuts MUST be tightened. Using the supplied zip tie, fasten the rubber vent tube to the new torque arm, if equipped.
  - 3. Install the driveshaft and tighen the u-joint strap bolts.
  - 4. Double check all connections, bolts, etc.

## **CAUTION**

## IMPROPER ADJUSTMENT OF PINION ANGLE MAY CAUSE INJURY OR DAMAGE. SLP PERFORMANCE PARTS IS NOT RESPONSIBLE FOR ANY DAMAGES OR INJURIES.

# To improve traction, the pinion angle can be adjusted as shown:

