



Visit our online store @ www.moserengineering.com

102 Performance Dr. Portland, IN. 47371

Ph. 260.726.6689 / Fax. 260.726.4159

Moser Engineering Rear-End Housing Instructions

WARNING

This Housing may contain foreign materials that were used in the manufacturing process. It should be thoroughly cleaned before being assembled. Failure to do so may cause damage to the carrier assembly.

Your Housing should include the following depending on the type of unassembled housing you ordered:

9" & M9 Fabricated Housings– Center Section Studs, T-Bolts & Nuts, Breather and Axle Seals.

12 Bolt - T-Bolts & Nuts, Breather, Pinion Seal and Axle Seals.

Moser (Dana) 60 - T-Bolts & Nuts, Axle Seals.

8 3/4 & MO875 Fabricated Housings - Center Section Studs, T-Bolts & Nuts, Axle Seals.

Venting: Your New Moser Housing needs to be vented to prevent seal failure from pressure caused by heat and for proper operation. A hole has been provided for a vent breather unless otherwise requested. The breather vent came with your new housing unless it is a Mopar application. After installing the fitting run a rubber or plastic line from the fitting to a suitable location on the frame allowing enough line for suspension travel. Make sure it is up and out of the way of any wind that could create a siphoning effect at speed. (if you have a Mopar application you can reuse the old fittings to maintain OEM fitment).

Inner Housing Axle Seals: You have been supplied Axle Seals that install into the housing end from the outside and are driven into the housing end using a seal driver with the spring of the seal facing inward towards the gear. Be sure to make certain the seals are fully seated before sliding the axles into the housing to prevent damage to the seals themselves. If you damage them during install you can usually get these locally or from Moser Engineering.

Application specific: (1982-2002 Camaro & Firebird):

- If you have a 9" Ford bolt-in for an F-body it may be necessary to grind one of the ribs on the case for clearance of the torque arm bracket. The necessary grinding will not affect the strength of your rear in any way.
- If you are using an aftermarket torque arm instead of the stock one then you will need to get longer Torque arm bolts to ensure you have enough thread engagement and will not come loose. If the aftermarket torque arm is thicker you will definitely need longer bolts by at least the added thickness of your torque arm. The thread is 1/2"x3. We also strongly suggest using a high quality Threadlocker on the bolts when installing.
- Your new housing has larger 3" diameter tubes for added strength so if you are trying to reuse your stock sway bar mounts you will need to get new muffler style clamps. Adapt your old ones using the new clamps for the 3" tube or purchase aftermarket sway bar adapters.
- In many applications you will need a conversion style u-joint to adapt the stock driveshaft to the new pinion yoke. You also need to check the length because with changing the rear you may have to shorten the existing driveshaft to work with your new rear.
- If you purchased a 12 bolt with a Moser Performance Cover for your application it may be interfere with your Panhard bar. If it does, simply grind the head of the load bolt for clearance.
- Your new bolt-in housing does not have tabs on it for attaching the brake lines. You can weld tabs on depending on the brakes you choose to use or you can use the common nylon/plastic line clamps available from Moser or most after market suppliers.

Gear Lube Quantities:

It really depends on the width of the housing but typically a 9" will require up to 3-4 qts and all other housings that Moser Manufactures will be around 3 qts. If you are circle/ road course tracking the vehicle you may require a bit more if not using inner tube seals.

See Reverse Side For Brake Installation Instructions

Moser Engineering Inc. disclaims warranty of any kind, including but not limited to an expressed or implied warranty of quality or fitness for any purpose. No warranty of any kind, expressed or implied, as to the quality or suitability of this product for any use, is hereby made by Moser Engineering. The buyer assumes all risk and liability resulting from the use of the goods. Seller neither assumes nor authorizes any person to assume for seller any other liability in connection with the sale or use of the goods sold, and there are no oral agreements or warranties collateral to or effecting the disclaimer or warranty. Included in said disclaimer is service of or remanufacturing performed by Moser Engineering on any product.

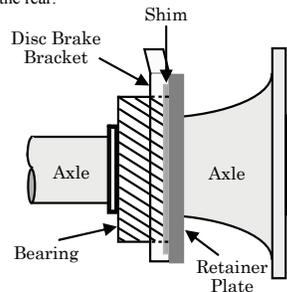
TM

Installation Instructions for 1982-1992 Factory Camaro/Firebird Disc Brakes on Moser Engineering 9" Ford Bolt-In Housing

Please read instructions thoroughly before assembly.
See Figure A for the order of assembly.

- Step 1) Counterbore the housing side (side opposite the wheel) of the larger hole in the caliper mount plates to 3.150" and a depth of .110".
- Or Alternate
- Step 1) Machine the large hole in caliper mount plates to 3.150" (good fit on the OD of the bearing). If you use this step, you will need to fabricate a 1/8" thick shim with about the same OD as the bearing. This should be made from tubing.
- Step 2) Slide the axle through the caliper mount plate. Install this assembly into the housing. Make sure the bearing is fully seated in the housing end. The bearing should extend outward from the housing end approximately 1/8".
- Step 3) Hold the caliper mount plate firmly against the housing end and use the bearing to locate or center the caliper mount. Use the Ford end as a pattern and transfer mark or punch the Ford pattern on the GM caliper mount plate.
- Step 4) Using a 13/32" drill bit, drill the caliper mount plates to the new pattern.
- Step 5) The brakes are now ready to attach. If you used Alternate Step 1, you will need to use the shim on the wheel side of the bearing along with the retainer plate to hold the axle in the rear.

Figure A:
Order of Assembly



Installation Instructions for 1993 – 2003 Factory Camaro & Firebird Disc Brakes on Moser Engineering Bolt-In Housing with #7900FM housing ends

Your new housing has been assembled using Flush Mount housing ends so there is no machining necessary to install on your factory brakes. The wheel bearings, press rings, and two 1/8" shims have been sent loose so you can finish the assembly.

NOTE: You will only use the 1/8" shims with the 1993-1997 disc brakes. If you are using the 1998-2003 brakes, you will not use the shims.

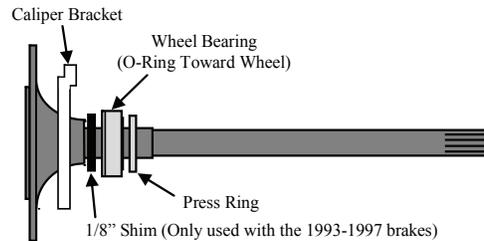
Please read instructions thoroughly before assembly.
See Figure B for the order of assembly.

- Step 1) Slide the caliper mount plate onto the axle shaft. Be sure it is on the correct direction.
- Step 2) If needed, slide the 1/8" shim onto the axle and then slide the wheel bearing and then the press ring onto the shaft. Make sure the o-ring on the bearing goes toward the wheel.
- Step 3) Using a press, install the bearing and the press ring on the axle.

Once you have finished installing the wheel bearings and press rings, the axles are ready to slide into the housing. The axle should slide all the way in so that the bearing is flush with the end of the housing and the caliper mounting bracket is used to retain the axle.

Check to make sure your rotor is lined up in the center of your caliper. If it is not, you may need to use washers between your caliper and caliper bracket to move the caliper inwards until it is aligned properly.

Figure B: Order of Assembly

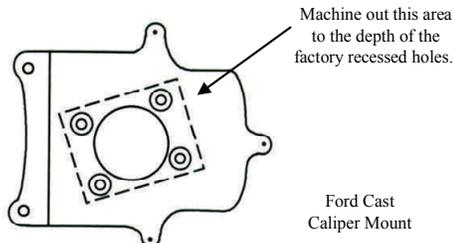


Machining Instructions for Moser 8.8" Ford Housing Ends to fit 1993 Mustang Cobra or 1994-2004 Mustang with factory disc brakes (GT or Cobra)

Note: On the 1994-2004 models with anti-lock disc brakes, the anti-lock feature will not function with this housing end.

1. The factory cast caliper mounts require machining to fit the factory disc brakes on your new housing ends.
2. Overlay your retainer plate on the wheel side of the caliper mount plate making sure the bolt holes are properly aligned.
3. Using the retainer plate as your template, make an outline of the retainer plate on your caliper mount plate.
4. Machine/Mill out the area inside the newly drawn line to a depth equal to that of the factory recessed holes. (See Figure C.)
5. You should now be ready to install your axles and brakes on your new housing ends.

Figure C:



Moser Ring & Pinion Gears Break-In Procedure

A new ring and pinion installed with new bearings will initially generate higher than normal operating temperatures. It is advisable to use whichever of the following break-in procedures matches your application.

STREET:

- 1) With car still on jack stands and rear end filled with proper amount of rear oil, run in forward and reverse for approximately 2 to 3 minutes.**
- 2) Drive vehicle approximately 10 miles at normal operating speed. Accelerate and decelerate several times conservatively, then let cool for one hour.

OVAL TRACK:

Note: For oval track applications, add extra gear lube may be required.

DRAG RACING:

- 1) Repeat step one above.**
- 2) Pull to line.
- 3) Run several laps at slow to medium speeds; let cool.
- 3) Run several hot laps; let cool.

****WARNING: OPERATOR MUST REMAIN IN DRIVER'S SEAT AND ALWAYS MAKE SURE FRONT WHEELS ARE BLOCKED AND JACK STANDS ARE SECURED BEFORE ATTEMPTING THIS PROCEDURE -- NEVER EXCEED 2000 RPM WITH WHEELS OFF GROUND. FAILURE TO FOLLOW THIS WARNING COULD RESULT IN SERIOUS DAMAGE, PHYSICAL INJURY, OR DEATH!**

Gear Noise:

Most all gears we sell are aftermarket gears (non OEM) and are designed mainly for strength and may be louder than OEM gears. The noise may be especially noticeable in non-race and street vehicles.