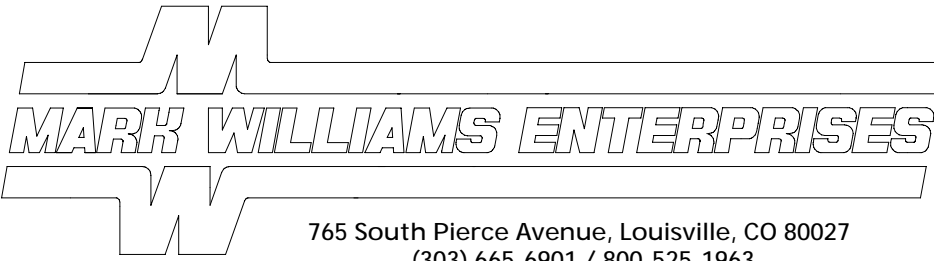


INSTALLATION - SERVICE INSTRUCTIONS



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SERVICE BULLETIN

NO. 0051 PAGE 1 OF 2

STEEL PINION SUPPORT

JANUARY 7, 1998

PART NUMBERS :

57690

DESCRIPTIONS :

STANDARD PINION, BALL/TAPERED BEARING HOUSING, FOR 3/8" ATTACHMENT BOLT/STUDS.

PARTS INCLUDED:

1-SLEEVE, 1 BALL BEARING, 1-BEARING HOUSING WITH 1 RACE, 1-PRE-LOAD SPACER, 1-TAPERED BEARING, 1-SEAL AND 1-O-RING.

PRIMARY APPLICATION :

OVAL TRACK RACING. RECOMMENDED FOR HIGH R.P.M. APPLICATIONS.

INSTALLATION OVERVIEW :

THE BALL /TAPER SUPPORT USES AN ANGULAR CONTACT BALL BEARING IN THE REAR WITH A TAPERED ROLLER BEARING IN FRONT. EXTREME CARE MUST BE EXERCISED WHEN INSTALLING AND REMOVING THE REAR BEARING FROM THE PINION. WHEN INSTALLING THE BEARING AND SUPPORT ALL PRESSING FORCE MUST BE AGAINST THE INTERNAL BEARING RACE. ANY PRESSING PRESSURE ON THE HOUSING OR OUTSIDE RACE WILL DAMAGE THE BALL BEARING. TOOLS ARE AVAILABLE TO REMOVE THE BEARING AND SUPPORT FROM THE PINION (57493). THE UNIT COMES PRE-SET WITH THE PROPER PRE-LOAD. IF YOU REPLACE EITHER OF THE BEARINGS IT WILL BE NECESSARY TO RESET THE PRE-LOAD USING A NEW HARDENED PRE-LOAD SPACER. THE REAR BEARING CAN BE REMOVED FROM THE STEEL HOUSING BY PLACING THE HOUSING WITH THE BALL BEARING DOWN, ON BLOCKS THAT WILL ALLOW THE BEARING TO DROP OUT WHEN THE HOUSING IS HEATED WITH A ELECTRIC HEAT GUN. THE REAR BALL BEARING WITH THE SHIM INSTALLED HAS A LIGHT PRESS FIT ON A PINION THAT IS 1.3125" DIAMETER. ANY DEVIATION FROM THIS DIAMETER WILL REQUIRE RESET-TING THE PRELOAD BY CHANGING THE PRELOAD SPACER (57692) THICKNESS.

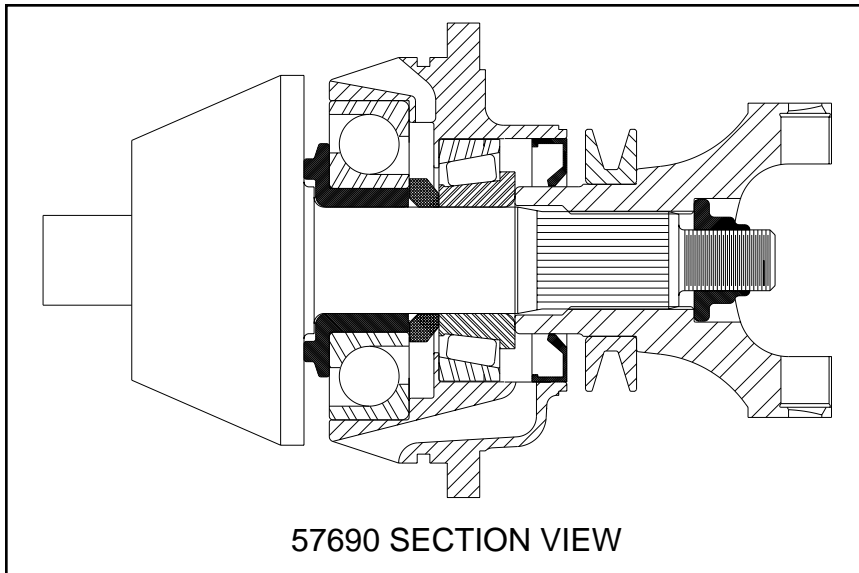
1) PRESS SUPPORT HOUSING WITH THE REAR BEARING CONTAINING THE (57672) SLEEVE IN TO THE PINION. THE BEARING MUST BE SUPPORTED BY THE INSIDE RACE ONLY. USE A PIECE OF TUBING THAT WILL GO OVER THE PINION AND PUSH AGAINST THE INSIDE BEARING RACE. BE SURE THAT THE BEARING AND SPACER ARE TIGHTLY SEATED AGAINST THE PINION HEAD.

2) PLACE THE PRE-LOAD SPACER ON THE PINION AGAINST THE BALL BEARING WITH THE CHAMFERED O.D. TOWARDS THE PINION NUT THEN THE FRONT BEARING AND PINION YOKE. THE SEAL WILL BE INSTALL AFTER THE PRELOAD IS VERIFIED.

3) TORQUE THE PINION NUT TO AN INITIAL SETTING OF 130 FT. LBS. CHECK PINION PRE-LOAD, IT SHOULD BE APPROXIMATELY 6-7 INCH LBS. IF ROTATIONAL TORQUE IS LESS THAN 5 INCH LBS., INCREASE PINION NUT TORQUE GRADUALLY UNTIL 6-7 INCH LBS. IS OBTAINED. DO NOT EXCEED 175 FT. LBS. MAXIMUM TORQUE. IF ROTATIONAL DRAG IS GREATER THAN 7 OR LESS THAT 5 INCH LBS. IT WILL BE NECESSARY TO RESET THE PRE-LOAD AS PER THE INSTRUCTIONS "CHANGING THE PRELOAD" BOX ON THIS PAGE,

MAINTENANCE REQUIREMENTS :

PERIODIC INSPECTION OF BEARINGS AND RACES FOR HEAT DISCOLORATION AND WEAR. PERIODIC CHECK OF BEARING PRE-LOAD.



57690 SECTION VIEW

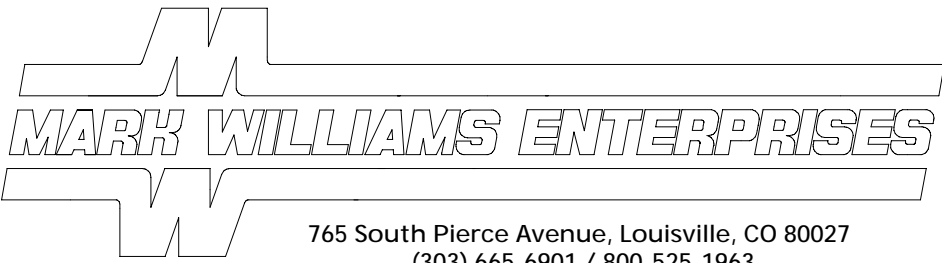
CHANGING THE PRELOAD

If the rotational drag is too high or low the pre-load spacer p/n 57692, it must be changed. The support is pre-set at the factory for a pinion that measures 1.3125" diameter. We recommend polishing the pinion to this diameter before installing the support. If your pinion is this diameter the drag should be 6 to 7 inch pounds when torquing the pinion nut to 130 to 150 ft lbs.

RESETTING GUIDE FOR PRELOAD

For every .001" increase in spacer thickness the rotational drag will decrease 4 inch pounds. These values are measured without the pinion seal installed. The seal will add approximately 5 inch pounds. This amount can vary with seals from different manufactures.

INSTALLATION - SERVICE INSTRUCTIONS

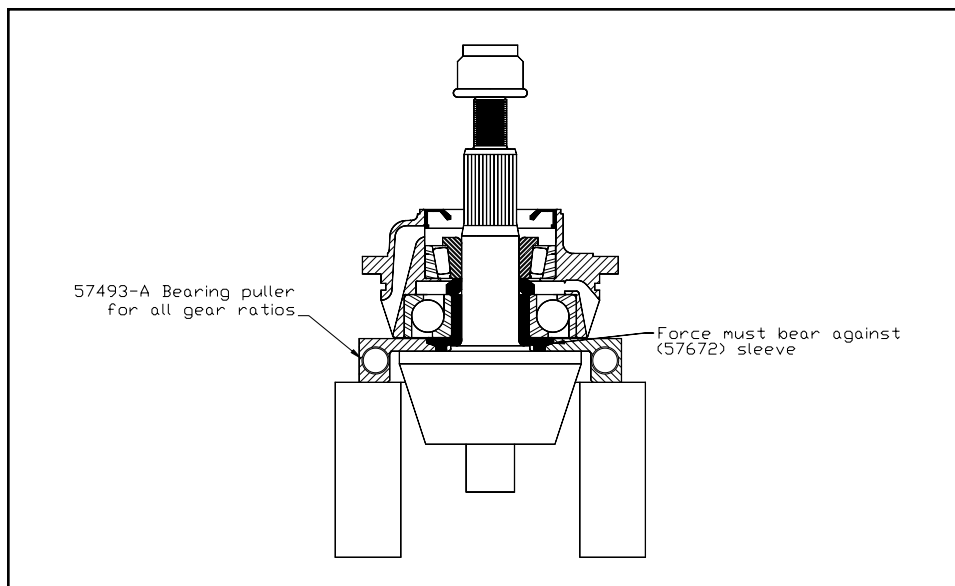
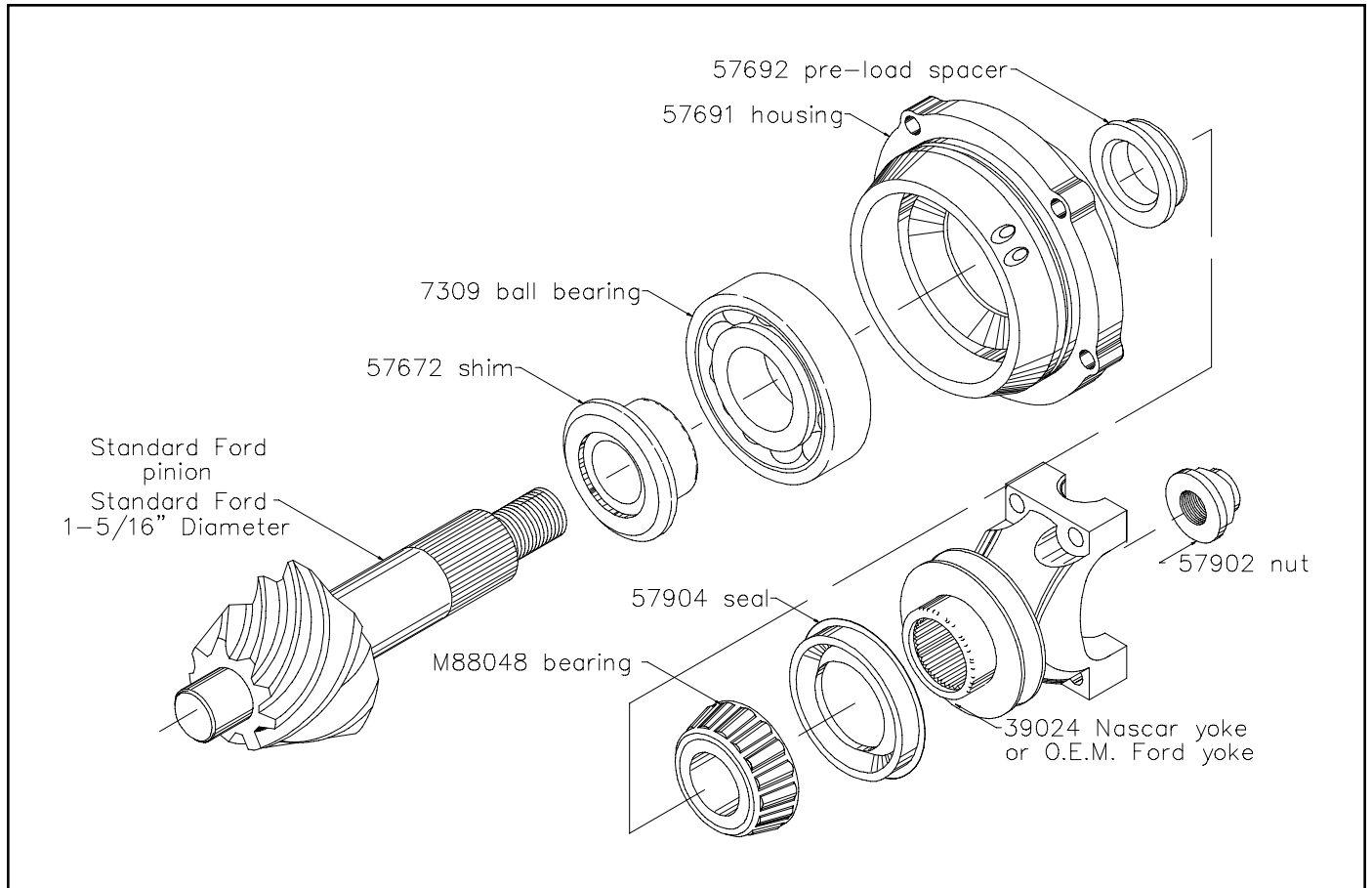


SERVICE BULLETIN

NO. 0051 PAGE 2 OF 2

STEEL PINION SUPPORT

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REMOVING BALL BEARING SUPPORT

EXTREME CARE MUST BE EXERCISED WHEN INSTALLING AND REMOVING THE REAR BEARING FROM THE PINION. WHEN INSTALLING AND REMOVING THE BEARING AND SUPPORT ALL PRESSING FORCE MUST BE AGAINST THE INTERNAL BEARING RACE. ANY PRESSING PRESSURE ON THE HOUSING OR OUTSIDE RACE WILL DAMAGE THE BALL BEARING. TOOLS ARE AVAILABLE TO REMOVE THE BEARING AND SUPPORT FROM THE PINION (57493).