# **INSTALLATION - SERVICE INSTRUCTIONS**

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#### page 1 of 1 Bulletin #19 9" Ford Pinion Supports

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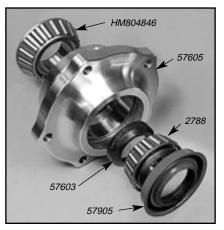
#### PART NUMBERS:

#### DESCRIPTION

57610.....Tapered bearing pinion support assembly for 35 spline pinion (3/8" pinion studs). 57630......Tapered bearing pinion support assembly for 35 spline pinion (7/16" pinion studs).

#### PARTS INCLUDED:

1 - 57605	Aluminum pinion bearing housing with
	bearing races installed.
1248	Pinion housing "O" ring.
1 - 57905	Pinion seal.
1 - 2788	Front Timken pinion bearing.
1 - HM804846	.Rear Timken pinion bearing.
1 - 57603	Solid preload spacer (this spacer is
	machined to the proper thickness if part
	of complete support assembly).
1 - 57606	Flanged reducer bushings, set of 5 (for
	3/8" pinion studs) included w/57610 only.



#### **PRIMARY APPLICATIONS:**

Drag racing. Must be used with 3.20 to 4.88 Pro gears w/35 spline pinion.

## **INSTALLATION OVERVIEW:**

- 1) The diameter of the pinion shaft is very important. MW pinion supports are pre-assembled and bearing preload determined based on a pinion shaft diameter of 1.8750" max. If the shaft is too large it will affect the preload on the bearings. Measure pinion shaft and polish shaft if needed.
- 2) Press on the rear pinion bearing. It is best to use a short piece of tubing, with an I.D. large enough to slip over the pinion shaft, to push on the inner race of the bearing while installing. Make sure bearing is fully seated.
- 3) Stand the pinion on end on the pilot stub. Slide the 57603 preload spacer down the pinion shaft to the rear bearing. The the tapered end of the preload spacer will be facing up.
- 4) Set pinion housing (57605) down on the pinion and slide front the pinion bearing (2788) into position.
- 5) Before installing the seal it is a good idea to check the bearing preload, even with a new assembly. Install yoke or coupler on the pinion, install pinion nut and torque to 140-170 ft/lbs (if possible it is suggested to use a used pinion nut during this operation). Rotate the pinion with an inch/lbs. torque wrench. The rotational drag should be 20-25 in/lbs (if re-assembling a support with used bearings the rotational drag can be 10-15 in/lbs). If the rotational drag is too low step up the pinion nut torque in 10 ft/lbs increments and re-check the drag. Once the correct drag is achieved note the pinion nut torque. Maximum pinion nut torque is 200 ft/lbs. If the amount of drag is too high the preload spacer is too thin and should be replaced (new spacers will require machining).
- 6) With the bearing preload checked and/or set, remove the yoke or coupler, install the pinion seal, re-install the yoke or coupler. Install a new pinion nut with Loctite and torque to the amount determined in step #6.

### **TORQUE SPECS:**

Pinion Nut 140-170 ft/lbs unless higher torgue required per step #6 above. Pinion housing nuts (3/8-24) 30-35 ft/lbs.

Pinion housing nuts (7/16-20) 40-45 ft/lbs.

#### **MAINTENANCE REQUIREMENTS:**

Periodic visual inspection. Periodic inspection of bearings and races for excessive heat (discoloration) or wear (pitting). It is recommended that gear oil be changed once a season after initial break-in.