INSTALLATION - SERVICE INSTRUCTIONS

765 South Pierce Avenue Louisville, Colorado 80027

303-665-6901 800-525-1963 www.markwilliams.com

PART NUMBERS: **DESCRIPTION**

57679.....PINION SUPPORT, 10" GEAR ASSY BALL/BALL 35 SPL. (7/16" pinion studs).

PARTS INCLUDED:

See page two for item list and assemblie view

PRIMARY APPLICATIONS:

Drag racing. Must be used with 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 1.8765" . If the shaft is too large it will affect the preload on the bearings. The rear bearing in a Mark Williams support are manufactured with a bore size of 1.8760, this allows for a light press or slip fit the pinion with luberize coating. You might have to remove some of the luberize coating by polishing in a lathe for the proper fit.*

2) *The hardened bearing spacer washer (57612) is the first item to go on the pinion. The large radius on the I.D. of the shim should face the gear of the pinion. If using a Motive Brand gear the 57612 is replaced with a TRD-3244 spacer.*

3) *Support assemblies are supplied with rear pinion bearing installed in the housing so it is necessary to install these two pieces on the pinion as one unit. When pressing the bearing and housing onto the pinion shaft 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. This will prevent damage to the bearing.*

Note: *To safely remove the rear bearing from the pinion without damage, use MW #57494 bearing puller. This tool is designed to fit under the shim behind the rear bearing which in turn contacts the inner race of the bearing. Pressure to the bearing housing and/or the outer race of the bearing will result in damage to the bearing.*

3) *Stand the pinion on end on the pilot stub. Slide the 57684 preload spacer down the pinion shaft to the rear bearing and put front the pinion bearing (2788) into position. The front bearing should be slip fit on the pinion. If not you mighht have to polish it for a slip on a lathe and fine emery cloth to obtain a slip fit.*

4) *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 ft/lbs (if possible it is suggested to use a used pinion nut until final assembly). Rotate the pinion with an inch/lbs. torque wrench. The rotational drag should be 7-10 in/lbs If the rotational drag*

s 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).

5) *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 #4. The torque will increase with the seal.*

TORQUE SPECS:

Pinion Nut 140 ft/lbs unless higher torque required per step #4 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.

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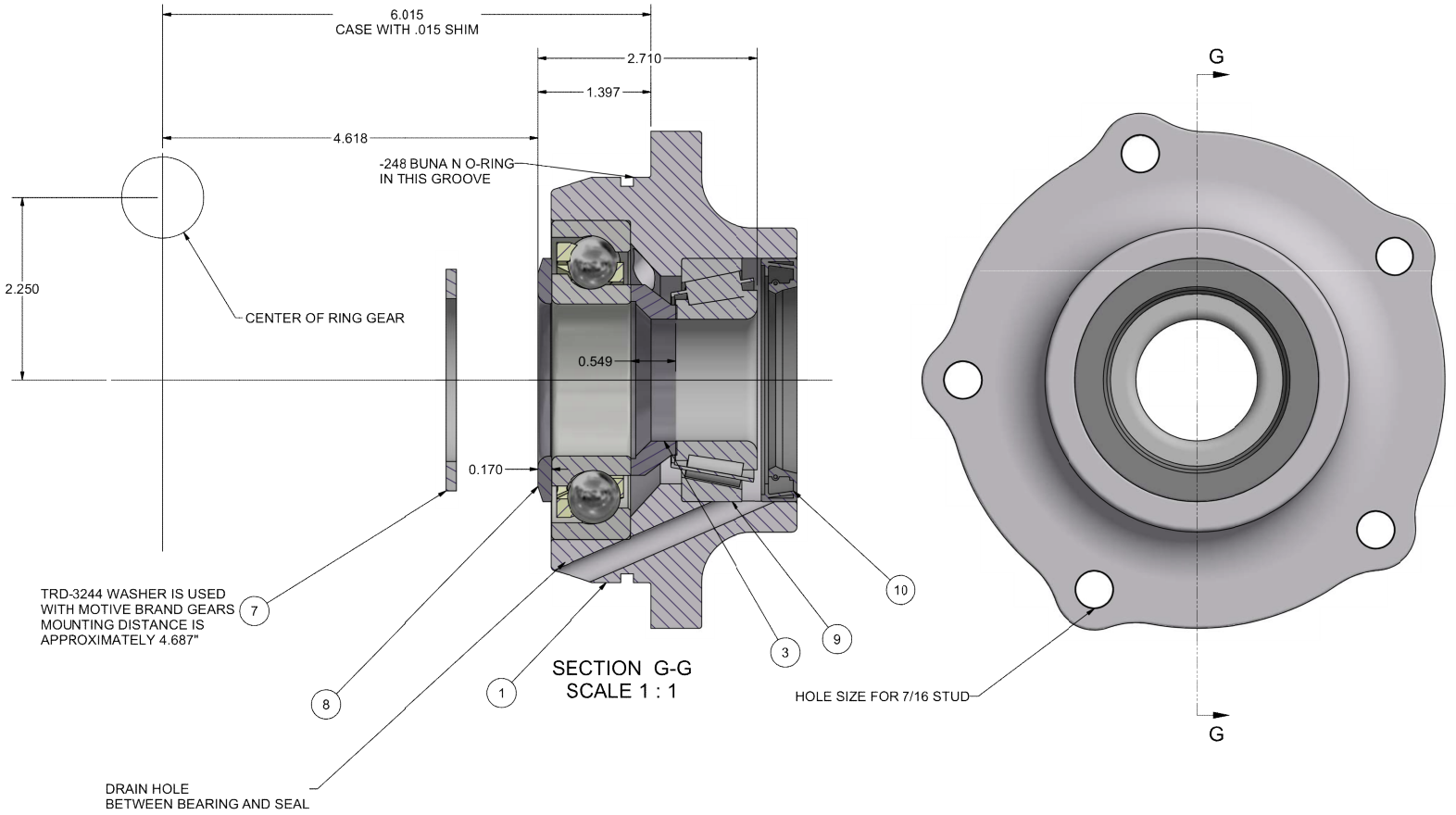

Notes: Units have the pre load set from factory.
if replacing bearing in the field it is
necessary to trim the 57664 spacer
to obtain 7-10 inch pounds preload
without the seal.

Parts List

ITEM	QTY	PART NUMBER	DESCRIPTION	FILE NAME
1	1	57678	HOUSING, BALL/TAPER SUPPORT 9.5/10"	003179IN.ipt
3	1	57684	SPACER, PRELOAD LARGE (35 SPLINE)	001913IN.ipt
7	1	7309BM	BEARING, ANGULAR CONCACT 7309 1.875 BORE	AS004265IN.iam
8	1	57612	SPACER, BALL/TAPER 10" 35 SPLINE GEAR	004029IN.ipt
9	1	2788-2729	Tapered Roller Bearings - TS	2788-2729.ipt
10	1	57405	SEAL, 35 SPLINE PINION 3" OD	21172.ipt
7	1	TRD-3244	SPACER, 35 SPLINE PINION REQUIRED FOR MOTIVE GEAR	TRD-3244 TOR.ipt

MATERIAL	HEAT TREAT
	PROTECTIVE FINISH
	Chromate
Z:\InventorFiles\Assembly_Files\AS003179IN.iam	

STOCK INFORMATION	MACHINING TOLERANCES			
BAR LENGTH: 0 WEIGHT: 0	.XX	.XXX	.XXXX	X°
YIELDS PER BAR: 0	.015	.005	.0005	1/2°
GROSS WEIGHT (PART): 0	SURFACE FINISH UNLESS NOTED $\sqrt{125}$			

Mark Williams Enterprises
765 SOUTH PIERCE AVE, LOUISVILLE, CO 80027

CAD NO.	DRAWN BY
AS003179IN.idw	mwilliams
	DATE 2/25/2015

TITLE: PINION SUPPORT, ASSY B/T LARGE 10"

PLOT DATE	PART NUMBER	CHANGE
8/15/2016	57679	