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Read through the installation instructions carefully before installing your Waterous TMR Reversing Transmission

NOTE: Instructions subject to change without notice

Introduction

This instruction gives the basic steps required to mount a Model TMR Reversing Transmission. Because of the wide variety of chassis arrangements available, these instructions are general in nature. The use of 8 x 2 inch channel is suggested only as one means of supporting the transmission. If another mounting arrangement is used, make sure it provides the same type of support as the one suggested here. Refer to Dimensional Drawing DPL81716 for more information.

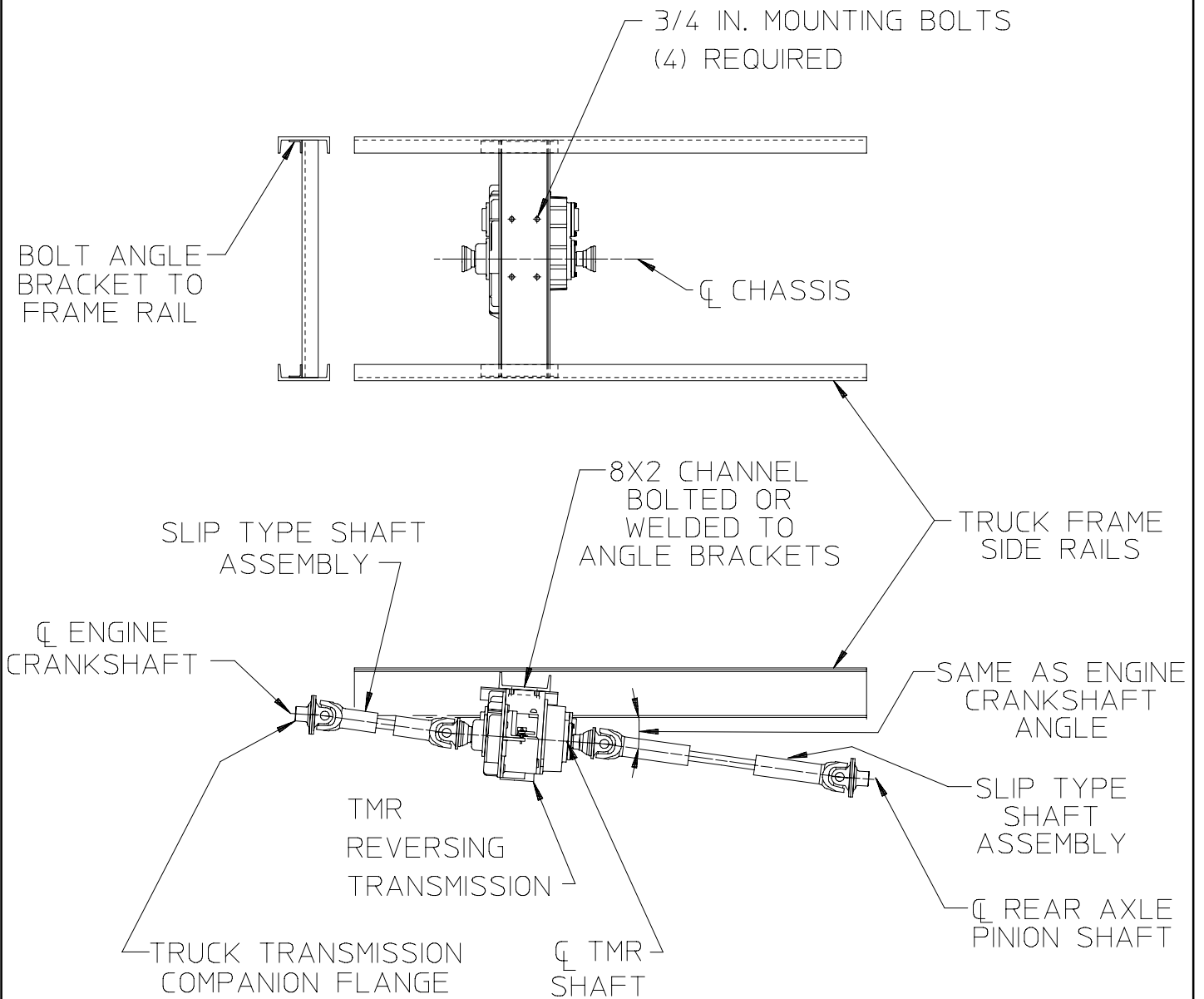
Installation Instructions

1. Select a mounting location which makes the transmission and its accessories readily accessible for maintenance and makes the transmission drive shaft parallel in all planes with transmission output shaft and rear axle pinion shaft. Also, select a location so that when truck is loaded, universal joints on propeller shafts will have proper true working angles (Propeller shaft manufacturers recommend a working angle of 3 degrees or less). Be sure to keep a least a small working angle. For more information on driveshaft installation techniques, see *Spicer Driveshaft Installation Techniques, Form No. J3311-DSD* or similar manufacturer's installation guidelines.
2. Attach the transmission to the steel channel support at the rear with 3/4 in. bolts as shown in Figure 1.
3. Weld or bolt angle bracket to each end of the channel. After the transmission is adjusted to provide a correct shaft angle, bolt brackets to the frame side rails.
4. Install propeller shafts. Make sure propeller shaft yokes are aligned. This is the preferred method of propeller shaft installation.

NOTICE

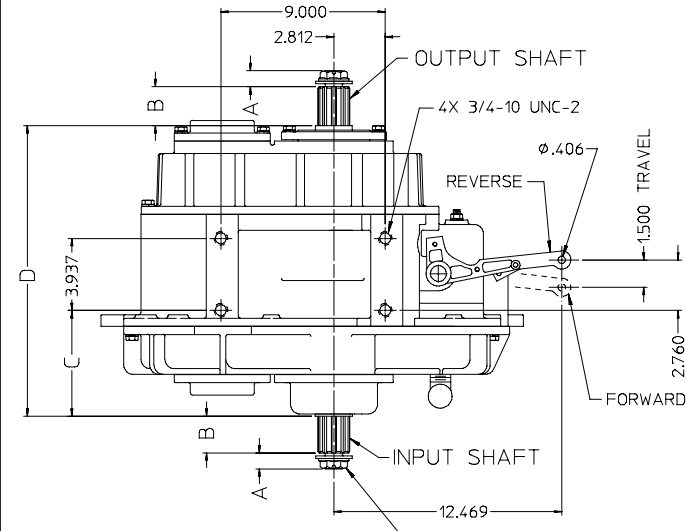
Be sure the propeller shafts used are of slip-joint design. Frame deflection, temperature changes and similar factors may cause a propeller shaft without a slip-joint to produce several axial loads on bearings and damage the transmission.

Figure 1. TMR Mounting Diagram



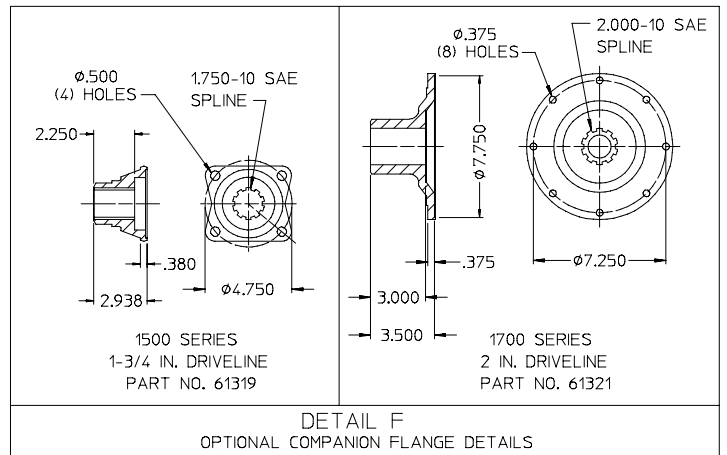
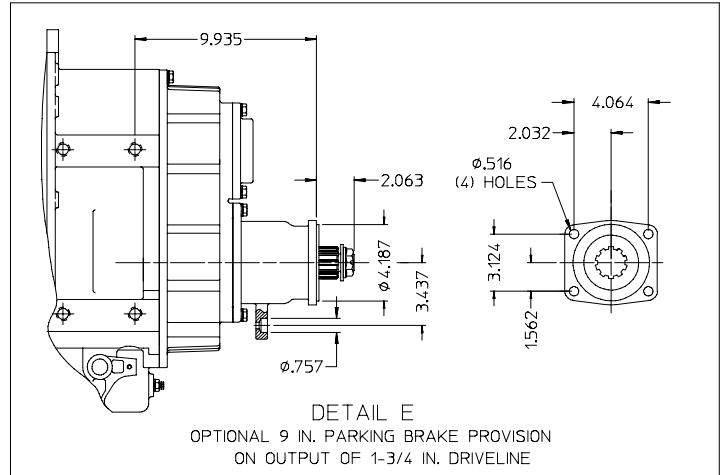
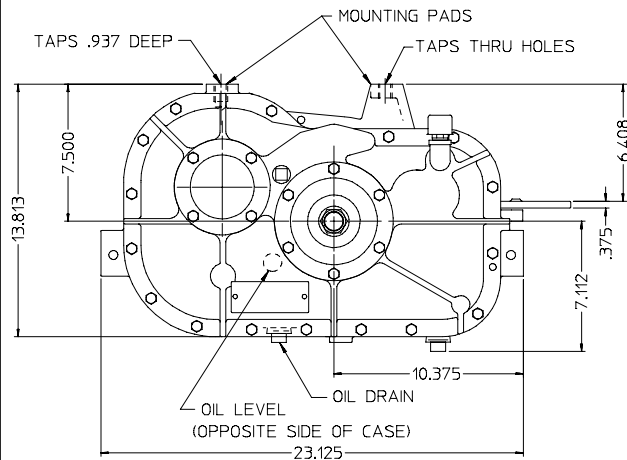
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Figure 2. TMR Dimension Diagram



NOTE: 1-3/4 IN. DRIVELINE FURNISHED FROM THE FACTORY WITH A 1500 SERIES COMPANION FLANGE INSTALLED ON THE INPUT SHAFT, SEE DETAIL F

SELF LOCKING HEX NUT (BOTH SHAFTS), SEE TABLE BELOW FOR TORQUE REQUIREMENTS

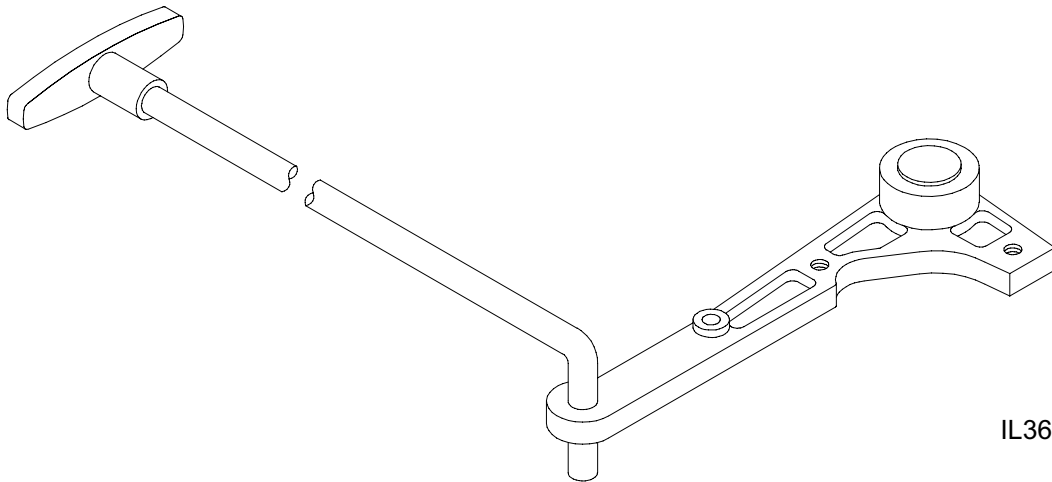


SIZE	SPLINE	DRIVELINE				SELF LOCKING NUT TORQUE VALUE	OPTIONAL PARKING BRAKE PROVISION ON OUTPUT (SEE DETAIL E)	OPTIONAL COMPANION FLANGES (SEE DETAIL F)	
		DIM. A	DIM. B	DIM. C	DIM. D			SERIES	PART NO.
1-3/4 IN.	1.750-10 SAE	.875	2.134	4.260	14.372	275-325 LB-FT	9 IN.	1500	61319
2 IN.	2.000-10 SAE	.875	2.834	5.824	15.189	475-525 LB-FT	NOT AVAILABLE	1700	61321

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Shift Linkage

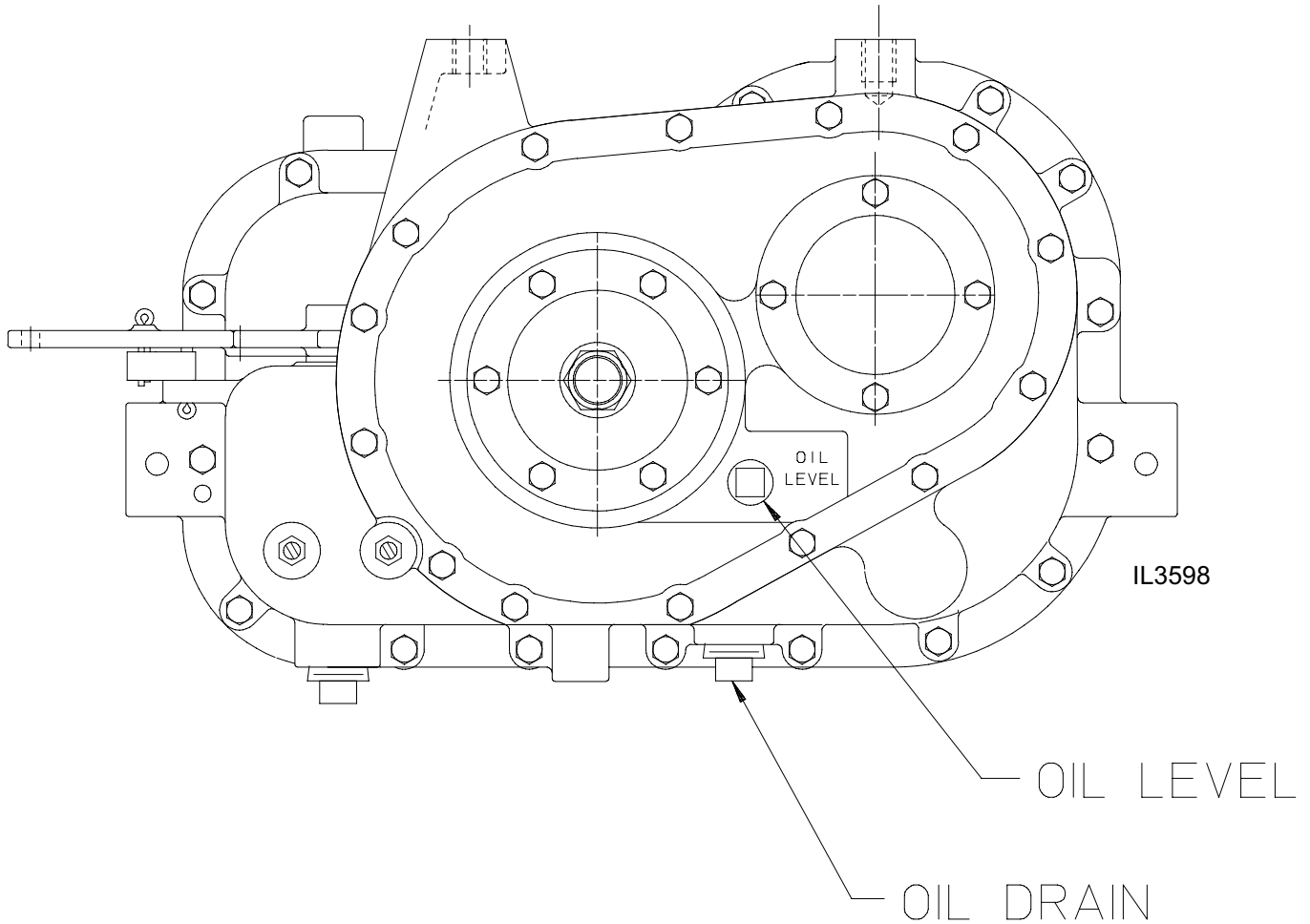
1. Install transmission shift linkage between shift arm and control panel or cab. Control rod not furnished by Waterous.
2. Determine location for the control rod handle on the control panel or other location. Be sure no obstructions interfere with the rod operation. Drill holes and install rubber grommets (if desired).
3. Install the manual shift rod between the control panel and the shift arm on the transmission.
4. Connect the rod to the shift arm with a 3/8 in. ball joint or similar device which will permit the rod to swivel freely on the arm.



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Lubrication

1. Fill transmission to bottom of oil plug with automatic transmission fluid. Transmission holds approximately 5 quarts.



Oil Level and Drain located on Output Shaft Side of Case