



# SILVER SPORT

*Transmissions*



## T56 MAGNUM

### INSTALLATION GENERAL GUIDELINES

**Before installing the transmission into the vehicle**, make sure that the transmission turns freely. Simply turn the input shaft by hand and attempt to shift the transmission into each gear. Make sure the output shaft does **not** turn with the input shaft when the transmission is in Neutral. If you are unable to turn or shift the transmission, slide the clutch disk onto the input shaft and jerk it side to side in order to break it free. If you cannot turn the input shaft or shift it into all 6 gears and Reverse (extra side load effort must be applied in order to overcome non-energized reverse lockout solenoid to put shift handle into REV gate), or if the output shaft turns with the input shaft when the transmission is in neutral, please contact Silver Sport Transmissions' Customer Service at **888-609-0094** for further instructions.

## Oil

**CAUTION! THERE IS NO OIL IN THE TRANSMISSION.** Tremec **H**igh **P**erformance **M**anual **T**ransmission **F**luid is endorsed by Tremec for use in all aftermarket high performance Tremec brand manual transmissions. Dexron III Automatic Transmission Fluid (ATF) is optional for all T56 Magnum transmissions. The transmission should be filled through the fill plug located on the driver's side of the transmission. The proper fill level is achieved when the oil reaches the fill plug hole (approximately 3 quarts, 21 ounces).

## Clutch Housing

**NOTE:** *For traditional (non-LS series) GM engine applications using the 1/2" adapter plate and full-depth (6.3") bellhousing, the bellhousing must be modified to clear the shift rail boss on the transmission. See the Silver Sport Transmission template TMG-03200 for instructions.*

The centerline of the transmission must match the crankshaft centerline, or severe damage to the transmission will occur. If your application uses the 1/2" adaptor plate with a traditional bellhousing, it is recommended that you check the bellhousing runout. If your application uses one of the T56 or T56 Magnum style late-model clutch housings (aluminum cast or SFI-approved steel), the runout can be checked using special T56 Index Plate RM-130 with the dowels inserted into the rear face of the bell housing. See Fig 2-1. See MAA-00101 Instructions for the procedure to use in checking and correcting bell housing runout. A maximum misalignment of 0.005" is allowable (0.010" total indicated runout). The clutch housing must also be perpendicular to the rear of the engine block.

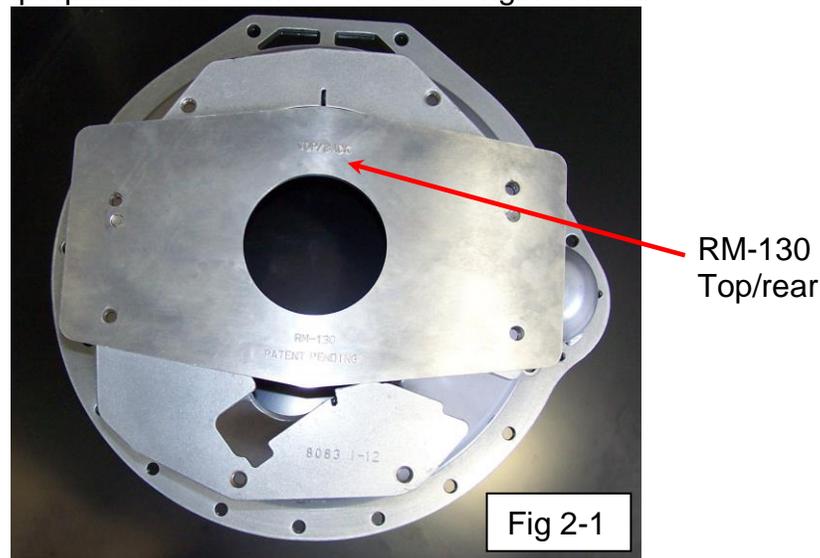


Fig 2-1

## **Clutch Disk**

All T56 Magnum transmissions use a GM 26 spline by 1-1/8" clutch disk. Proper clutch alignment is necessary. Usually an "air gap" of between 0.030 to 0.085 inches is required (please see clutch manufacturer's recommendation). The clutch disk must have this "air gap" to break torque in order to make a clash-free shift and to prevent damage to the transmission. An adjustable clutch cable with a solid mount at the firewall or a hydraulic system is desirable.

## **Driveshaft**

It is extremely important to maintain the original driveline angle and proper driveshaft operating angles. Excessive driveline angle could result in improper driveshaft operating angles that will cause vibrations, shorten U-joint life, and may damage the transmission. All T56 Magnum transmissions use a standard, Ford 31-spline slip yoke, which is available from Silver Sport Transmissions. When installing the slip yoke, be careful not to damage the rear seal as this will result in oil leakage. There is a plastic plug on the output shaft that is used to prevent any remaining oil in the transmission from leaking during shipment. This plug must be removed before inserting the slip yoke. The slip yoke must be able to stroke freely on the transmission's output shaft without bottoming out while maintaining maximum spline contact. Therefore, the proper driveshaft length is critical.

## **Crossmember & Mount**

It is important to have the crossmember located properly to the rear mount location on the transmission. Modifications that result in an "overhang" or a cantilevered mount will result in vibrations and the potential to cause severe damage to the transmission. Proper mount height and crossmember location are very important to maintain the correct driveline angle and corresponding driveshaft operating angles.

## **Shifters**

The transmission will accommodate several applications by using one of the two available stock locations. The stock shifter may be unbolted by removing the 6 bolts and rotating the shifter 180°, which will move the shifter forward 3.6". A front shifter kit is also available from SST. The bolt pattern on the stub lever will fit most Hurst shift handles. Using an aftermarket shifter mechanism from a different source may void your warranty. If a shifter mechanism from another source is used, be sure to remove the shift travel stops. The T56 Magnum has internal shift travel stops and cannot be over-shifted.

## **Electronic Connectors**

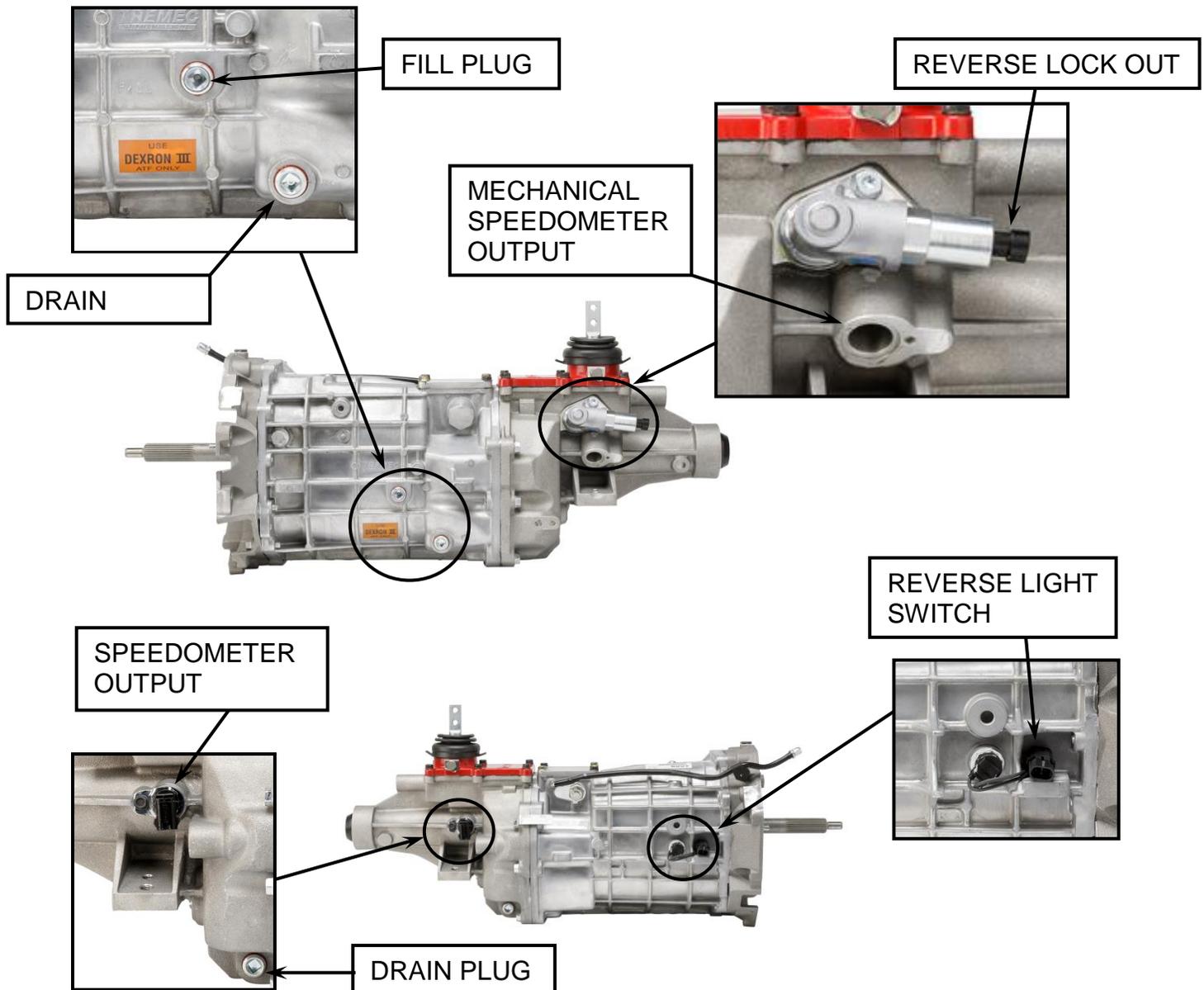
There are three electronic connectors on the T56 Magnum:

- 1) The reverse lockout solenoid
- 2) The reverse light switch
- 3) The electronic speedometer output

The reverse lockout solenoid is on the left side of the tailhousing, directly below the rearmost shift position. The reverse lockout solenoid must be connected to prevent the transmission from accidentally being shifted into reverse. Splice into the brake light circuit downstream of the brake light switch and connect that wire to one of the leads from the solenoid pigtail. Connect the other pigtail lead to the chassis ground. **DO NOT** wire the solenoid in series with the brake lights! The REV lockout solenoid should only be energized when the brake pedal is depressed which allows unrestricted access to the REV shift gate.

The reverse light switch is on the passenger's side of the transmission case and is an open circuit until the transmission is shifted into reverse.

The electronic speedometer output, located on the passenger's side of the rear extension housing, generates 12 pulses per revolution of the output shaft.



## **Mechanical Speedometer Output**

All T56 Magnums have the same, Ford-style, speedometer output which is located on the driver's side of the extension housing. You must use a Ford speedometer cable end. If you are not using the mechanical speedometer output, you must plug the hole with a metal plug (which is available from Silver Sport Transmissions) to prevent oil leaks.

**NOTE: Do not use the black rubber shipping plug**

## **Maintenance**

Recommended oil change intervals should be based on specific usage. In most cases, a 30,000 mile fluid change is adequate, while in severe applications (such as racing) a more frequent fluid change should be prescribed. Excessive heat will cause transmission fluid to break down and ultimately cause damage to the transmission.

## **Driving Techniques**

A 500 mile break-in period will prevent premature wear and possible damage to the transmission. During this break-in period, you must avoid high RPM shifts and drag starts. The clutch must be fully disengaged to shift the transmission. **Do not use excessive force when shifting the transmission.** If you experience clashing shifts (grinding), check the travel of the release bearing to ensure proper clutch disengagement. Another possible cause of clash shifting is improper transmission installation (i.e. excessive driveline angle, resulting in poor driveline alignment). **Do not attempt to shift the transmission when the engine speed is above 6500 RPM's. Do not hold the transmission in gear by applying force to the shifter handle.** This will damage the pads on the shift forks and may result in significant damage to the transmission.

## **Warranty**

See Silver Sport Transmissions' warranty policy for specific information on the T56 Magnum transmission warranty.

### **CONTACT INFORMATION**

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*SILVER SPORT TRANSMISSIONS IS DEDICATED TO YOUR SATISFACTION AND ENJOYMENT OF THIS PRODUCT. PLEASE SEND US PICTURES OF YOUR CAR ALONG WITH A TESTIMONIAL OF HOW YOU RATE THIS PRODUCT. WE WILL BE POSTING MANY CUSTOMER FEEDBACK LETTERS AND PICTURES ON OUR WEBSITE AND BROCHURES.*

**ENJOY YOUR SILVER SPORT  
TRANSMISSION SYSTEM!**