



## CHRYSLER 62TE MANUAL SELECTOR SHAFT SEAL LEAKAGE

**COMPLAINT:** A Chrysler or Dodge vehicle equipped with the 62TE transmission has just had transmission repairs completed and has been taken for a post repairs road test. Upon final inspection for leaks, a pool of transmission fluid is seen on top of the transmission in the manual selector shaft seal area.

Since the seal is located at the top of the transmission there is difficulty in understanding how that area can leak since it is supposedly a non-pressurized area.

**CAUSE:** After further inspection it is realized that transmission fluid is being forced past the seal during highway operation. The top cavity of the transmission case directly above the valve body is part of the transmission vent system as seen in Figure 1.

The 62TE is a clutch control system based on volume tracking. For this reason it is desirable to minimize or exclude air in the clutch circuits as a prerequisite for optimal pressure control needed for precision shift control. The hydraulic circuit was designed to prevent pockets of trapped air with an additional step to route the clutch vent circuit into a common exhaust chamber called a "vent reservoir." The vent reservoir's exit path is located at the top of the valve body (See Figure 2) allowing a fluid trap to be maintained above the clutch circuits venting all air when the clutch circuits vent.

The manual selector shaft has a plastic bushing at the top which keeps the shaft centered and allows the selector shaft seal to prevent oil from being forced out past the seal. At highway speeds the vent exhaust pressure is high enough and is directed at the selector shaft seal. When the plastic bushing is cracked, vent exhaust oil will push past the seal causing a pool of oil at the top of the transmission.

The bushing is cracked when the build technician rolls the transmission over on the bench thereby putting enough weight on the selector shaft to crack the plastic bushing, See Figure 3.

**CORRECTION:** One method of preventing this from happening is to install two long bolts into the threaded holes on top of the case as shown in Figure 4 so that even if the transmission is rolled over on that area the bolts will prevent the weight load from resting on the selector shaft.

If the selector shaft bushing is cracked replace it using the part number under "Service Information".

### SERVICE INFORMATION:

*Manual Selector Shaft.....5078756AA*

*A special thanks to Max of King Transmission, Chicago, Ill. for the heads up on this problem.*

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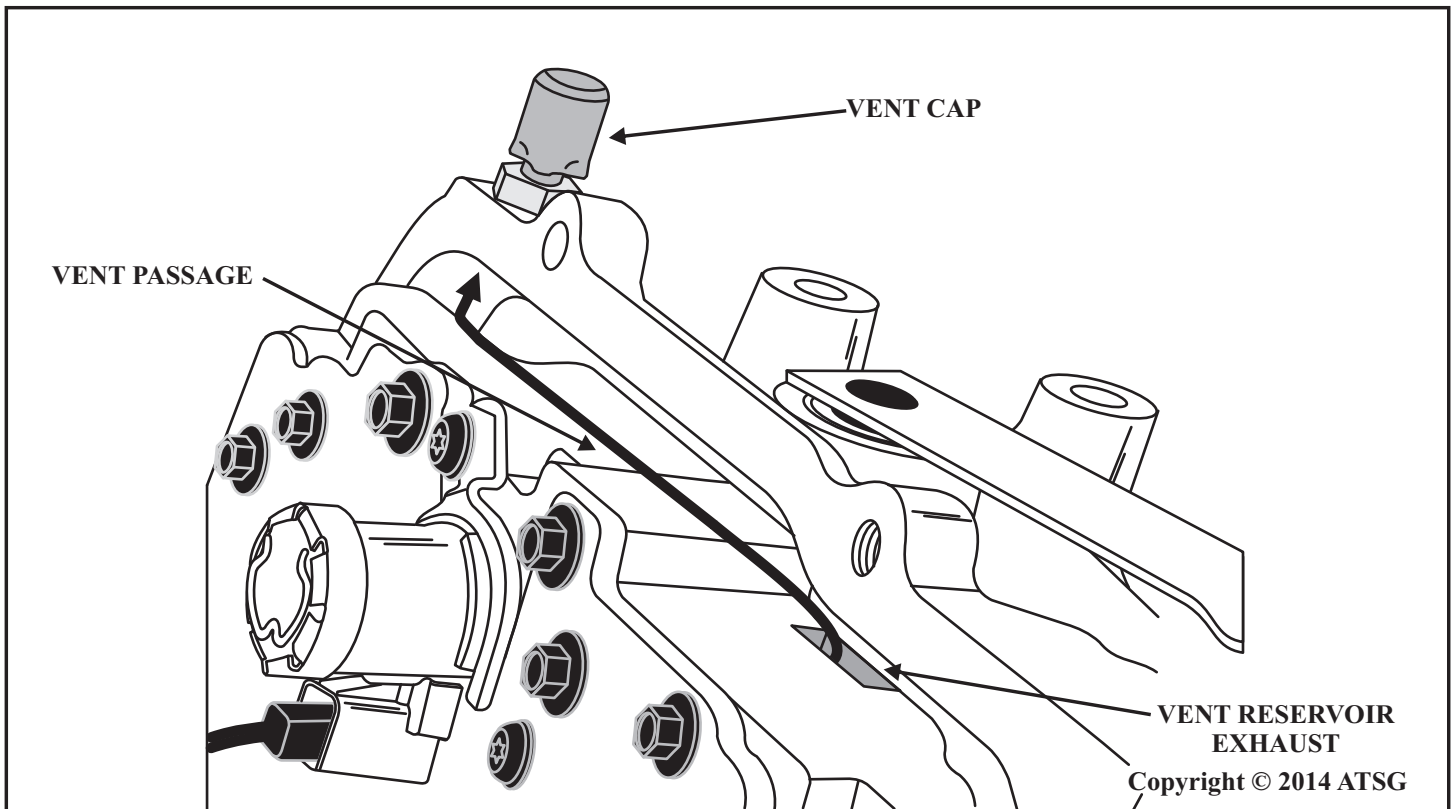


Figure 1

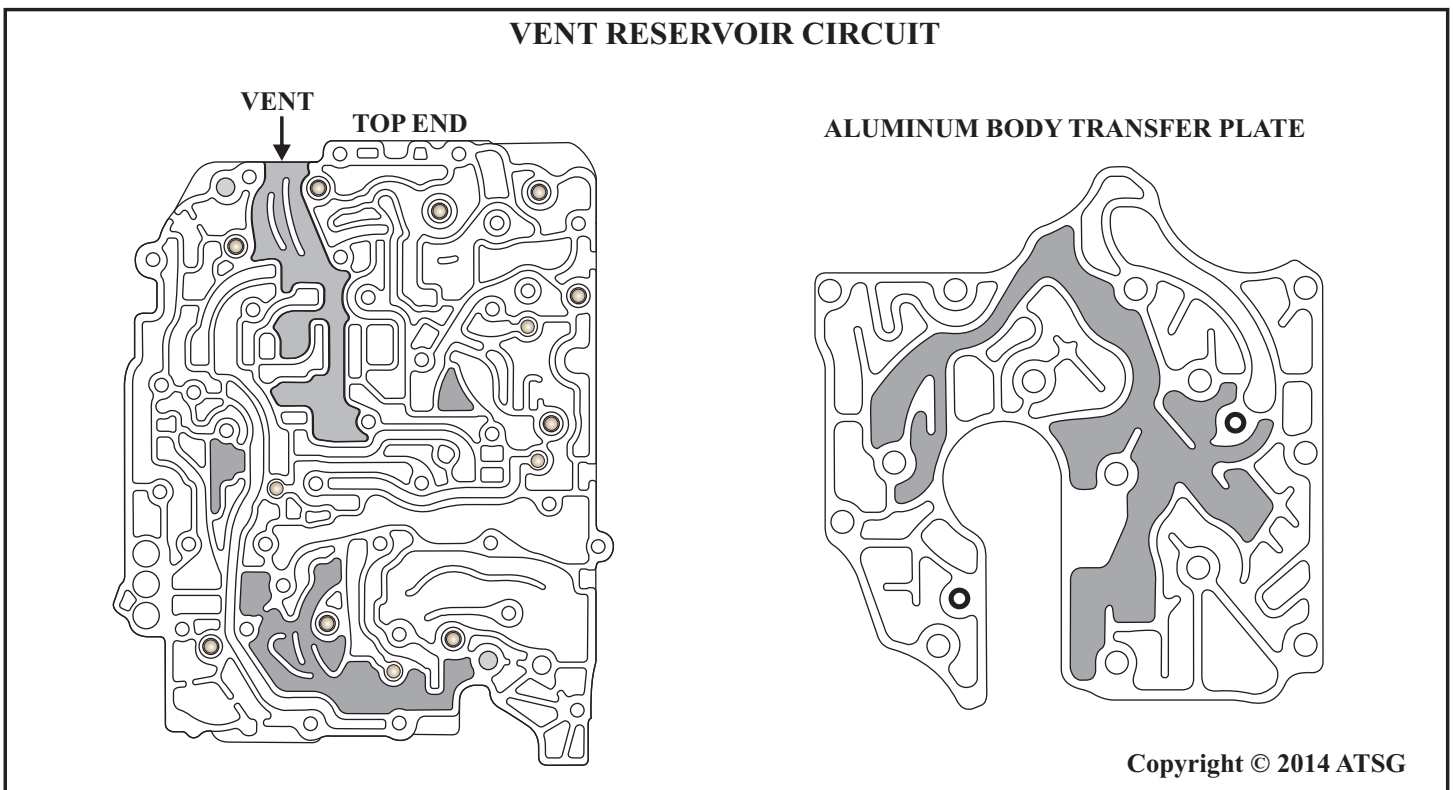
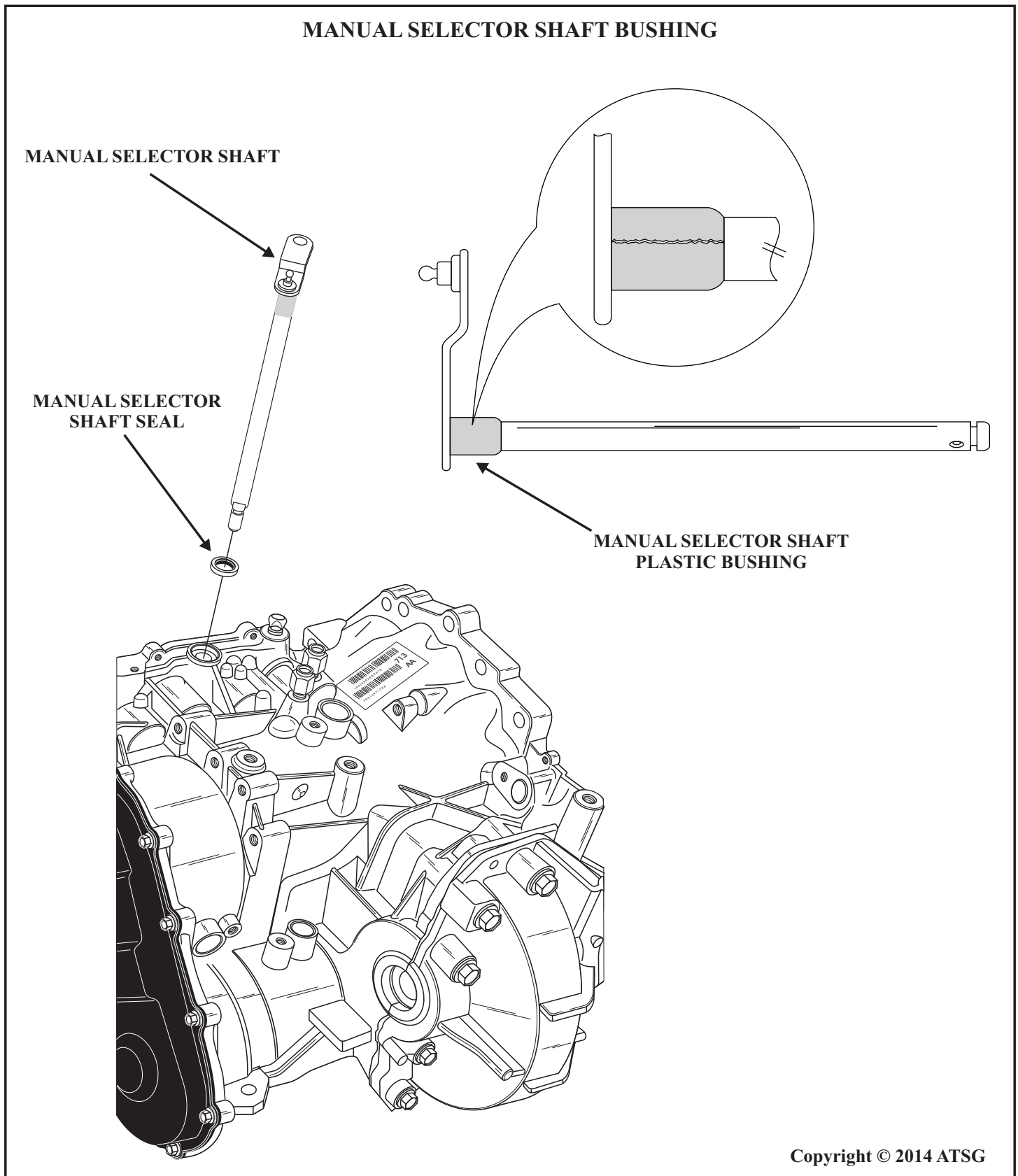


Figure 2

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Figure 3

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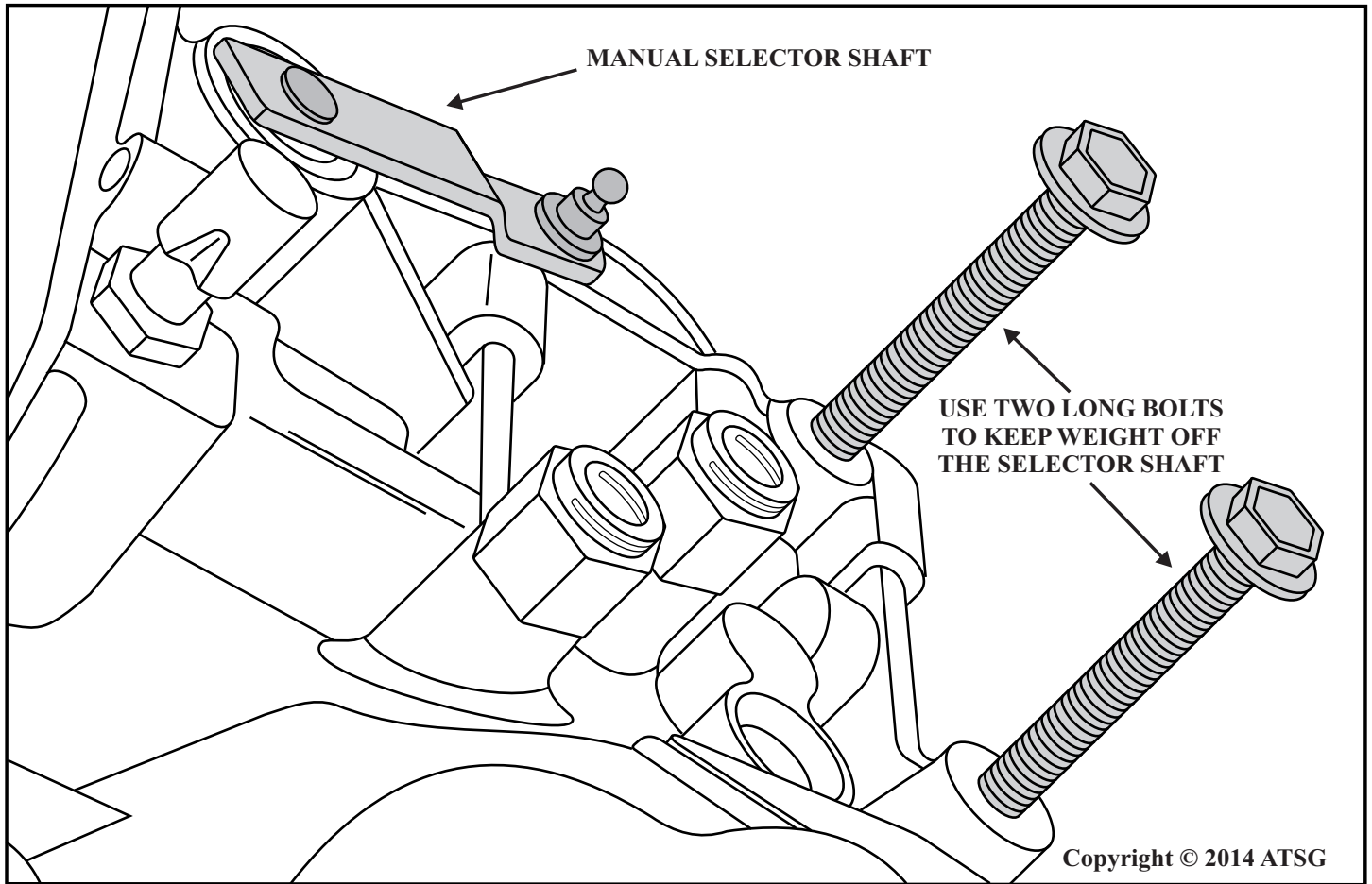


Figure 4