

Potential Transmission Leak

by Tom Endy

Quite often you see transmission oil leaking out around the U-joint housing. It can also leak down the torque tube into the differential banjo if the grease seal behind the roller bearing in the front of the torque tube is shot.

The reason for the leak is that oil can pass under the front bearing stop on the main shaft. It then passes under the bearing and continues on until it is stopped by the special washer that fastens to the end of the main shaft in conjunction with the bolt that holds the U-joint to the end of the main shaft.



The special flat washer with the notch is used in conjunction with the bolt and lock washer that attaches the U-joint to the rear of the main shaft.



Note the spaces under the bearing stop on the main shaft. There is a space under each flute for the two sliding gears.



The U-joint is attached to the end of the main shaft and acts as the rear bearing stop. The notched washer fits around the fluted end of the main shaft and is what prevents oil from escaping from the transmission.

It is common to find this washer either missing or being substituted with a flat washer that is smaller in diameter. This will allow oil to escape into the U-joint housing and possibly down the torque tube to the banjo if the seal behind the torque tube roller bearing is shot.

It is prudent to apply some sealer to the front flange of the U-joint and to the front of the notched washer when installing the U-joint.



End view of the main shaft showing the spaces under the bearing stop.