

Ultima R.S.D. 6spd Transmission Instructions & Considerations

MW# 201-31(Natural), 201-32 (Black), 201-33 (Polished)

It is recommended that this transmission be installed by a qualified motorcycle mechanic.

Failure to read & follow the outlined instructions can result in failure of transmission.

Ultima 80W90 Severe Duty Gear Oil (MW#103-116) is recommended for the first 500 miles. After the first initial 500 break-in miles **Ultima 80W140 Synthetic Gear Oil (MW#103-117)** can be used.

This R.S.D. trans. is shipped dry & requires 22-26 oz before operation.
22 oz wet -- 26 oz dry

Transmissions are shipped w/o clutch push rods. Order **MW#96-442**.

Always verify final drive pulley nut & lockplate bolts are properly torqued w/red (high strength) threadlocker.

Pulley nut 120 ft/lbs 1/4-20 lockplate bolts 9-10 ft/lbs

Due to the clutch release assembly being a separate unit (No trans fluid saturation) from the rest of the transmission it is imperative that the ball & ramp assembly, throwout bearing assembly, clutch pushrod & all other release components be packed thoroughly w/hi-temp bearing grease. (**See fig. 1-4**) This procedure should be followed every 2500 miles, a minimum of once per year.

When re-installing clutch release assembly, torque the 5/16-18 bolts to 15 ft/lbs using blue (med. Strength) threadlocker.

If transmission is hard to shift or wants to jump into or out of gear, verify pawl adjustment is equal in both forward & rear directions. This should be checked w/the trans. in third gear (See pre-99' service manual for adjustment instructions). If shifter arm throw is not equal in both directions adjustment of the pawl may need to be performed. This can be done w/or without trans. installed. Simply loosen the locknut located above shifter arm on trans. case. After loosening, adjust allen screw until equal motion is achieved & lock down the locknut to 20 ft/lbs. Always make sure clutch adjustment is set properly for this will also cause shifting issues.



FIG 1



FIG 2



FIG 3



Ultima 80W90 Gear Oil
MW#103-116

Ultima 80W140 Synthetic
Gear Oil MW#103-117



FIG 4