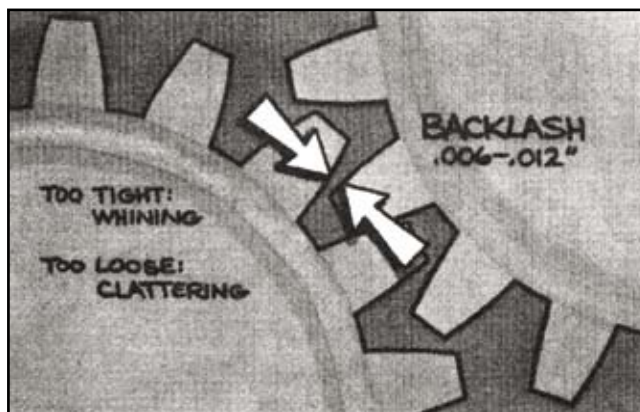
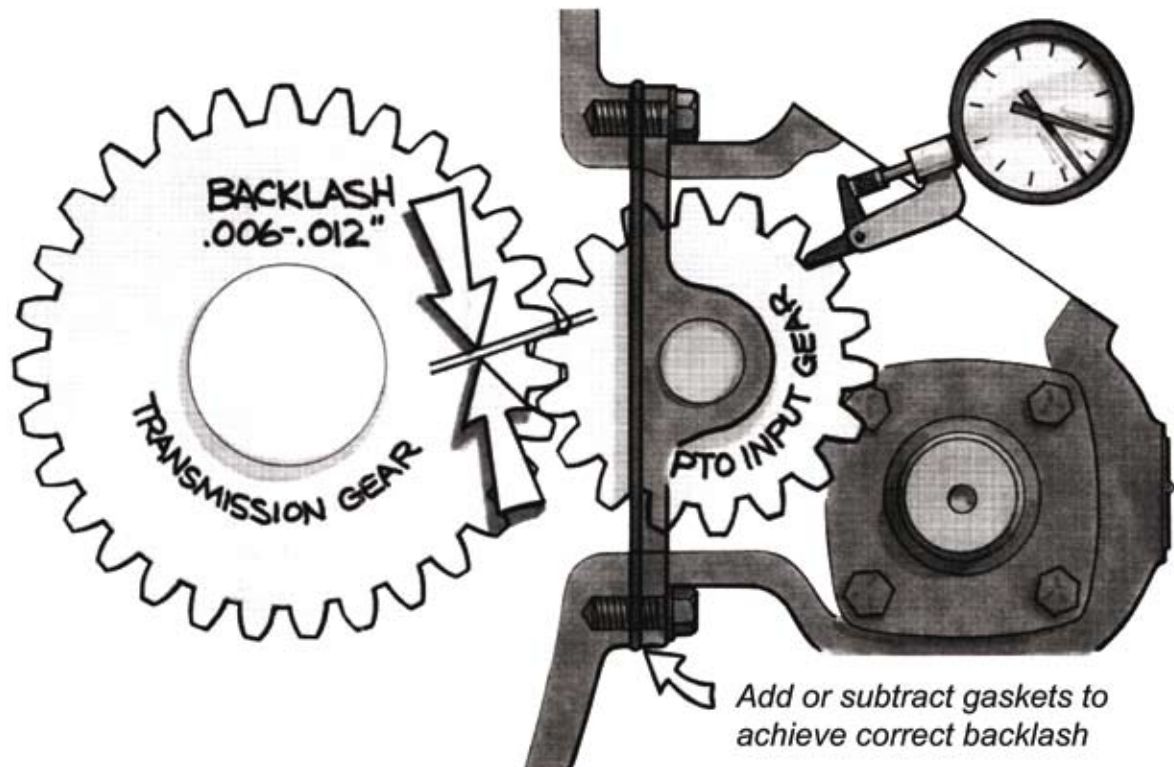


PTO INSTALLATION



Backlash is necessary to allow gears to mesh adequately and without undue stress between the gears.

Without the correct backlash (.006" - .012") excessive tooth loading will damage the gears, either from too tight a fit 'whining', or from too loose 'clattering'. Backlash (B) is the shortest distance between non-mating surfaces of adjacent teeth in mating gears.



Torque required for tightening bolts/nuts

- 6 Bolt Cast Iron Housings = 35 – 40 Nm
- 6 Bolt Aluminium housings = 35 – 40 Nm
- 8 Bolt Housings = 60 – 65 Nm

NOTE: These notes are a guide only always refer to the manufacturers instructions.

HYDRAULICS

PTO INSTALLATION

Prevent any dirt from entering the gearbox by blocking the aperture with a clean rag when cleaning up the mounting pad of any gasket remnants. Install the studs provided with Loctite to ensure leaks do not occur along the stud.

Before fitting the PTO, check the amount of movement and freeness of the transmission gear. This will help determining the feel of the backlash if tested from the PTO output shaft. If the PTO has a removable airshift assembly or inspection plug, remove it so that access is provided to the PTO gear. In some cases this also allows the selector gear to be moved easily into the engaged position.

Hold the gear that mates with the transmission secure, and rotate the PTO output shaft to check the amount of backlash within the PTO. When fitted to the gearbox, the movement of the output shaft should be doubled. The PTO is designed with a minimum of 0.15mm backlash. Without any gaskets, and with the selector gear in the engaged position if a sliding idler gear PTO, fit the PTO onto the studs, and put nuts onto the top and bottom studs only, tightening the nuts only finger tight. This should put the PTO and transmission gears together without any backlash. With feeler gauges, measure the thickness of the gap between the transmission and the PTO at the top and the bottom of the housing.

Add the top thickness to the bottom thickness and divide by two to obtain the gap thickness. Add to this figure 0.45mm to determine the thickness of gaskets required to provide .25mm backlash. Fit the calculated thickness of gaskets to the studs, ensuring that an oilproof gasket (one with printing on) is placed adjacent to each metal surface. Gaskets without printing are packing gaskets only. Fit the PTO and tighten the nuts fully. Check the backlash on the gears.

