HI-REV AOD GOVERNOR:

GOVERNOR ASSEMBLY:

The governor valve senses the output shaft speed via centrifugal force of this valve against line pressure. As forces increase, more line pressure is applied to the valve body to signal shift valves to stroke. The weight of this valve has a direct relationship on how much centrifugal force (output shaft speed) is needed before pressure increases to make those valves stroke. There are three different weighted valves available through Ford. The effect of the governor valve has an effect on shift points for all gears through the entire RPM range.

If you have rear gears that are 3.73:1, or numerically higher, you should consider the installation of the governor. <u>If the</u> governor is supplied with a new SPT valve body – please install and test the vb and it's new shift points before the governor installation. This valve is lighter than any production Ford unit. It will increase your moderate throttle pressure shift points to 5500 RPM. The VB provided already has provisions to increase shift point. If you find the desire to increase this shift point even more, the valve should be installed. Note that some additional tweaks to the VB might be required to fine tune the shift point. In that case, please contact me.

TOOLS:

Jack, stands or lift, 13mm or ½" socket and ratchet (or wrenches), gasket scraper, possible gasket cleaning solution (ex. carb cleaner), 12 point 12mm wrench (driveshaft bolts), snapring pliers (expanding), mallet. Misc sockets to remove crossmember.

INSTALLATION:

Installation requires the removal of the transmission extension housing that contains the output shaft and the governor assembly. This procedure is simple, but does require effort.

First task is to block the front tires and secure car on jack stands so that the rear of the vehicle is as high as you can comfortably get it. Remove the driveshaft from the axle pinion with 12mm 12 point wrench. A mallet might be needed to beat the shaft loose from the pinion. Pull shaft and yoke out of transmission. Have a catch pan ready, only slight fluid lose is associated with this procedure – usually just drips.

It is often necessary to remove the tailpipes from the H / X / Midpipe for the next step and let them hang freely. Support the transmission pan with the jack (block might be needed) and remove the cross member assembly that supports the transmission. This assembly comes in many configurations. The end result is you need access to the bolts holding the extension housing to the transmission case.

Remove the speed sensor and wires, and loosen the six $\frac{1}{2}$ " / 13mm bolts securing the housing. Completely remove the housing from the vehicle. A mallet might be needed to break the housing loose from its gasket. 90% of the time this gasket is not harmed. A new gasket should have been provided.

You will see the governor assembly hanging from the output shaft. (fig 1) Put transmission in NEUTRAL and rotate the output shaft so the aluminum housing is pointed down. Remove the snapring retaining the governor to the shaft, slip it off the shaft – might need a slight tap. Once loose, pull out gently. Feel on the top side the output shaft and you will notice a bump in the shaft that retains the governor position – this is a ¹/₄" steel ball bearing setting in a socket. <u>DO NOT LOOSEN OR REMOVED IT.</u>

Place the supplied governor on with the 7mm bolt heads facing the transmission.

Reassemble in reverse order using new gasket provided. Torque housing bolts to 20ft lbs.



fig 1