



WOODWARD SGT GOVERNOR

1-Fuel control lever. 2-High idle screw for the torque converter governor. 3-Speed adjusting lever. 4-High idle screw for the engine governor.

The SGT Governor for the torque converter has two speed droop governors assembled in a single housing so that either governor can control fuel to the engine. One governor is operated by the engine. The other governor is operated by a flexible cable from the torque converter.

The two governors use a single servo piston to move the fuel system linkage. The actions of the speeder springs in the governor, which are operated by the servo piston, are separate so that adjustment of either speed droop can be made for control of engine and torque converter speed. Oil from the pilot valve of the engine governor is moved to and from the governor servo piston by going through the pilot valve of the converter governor.

When the torque converter speed is less than the value given in the specifications, the pilot valve for the converter governor gives a straight through oil passage from the engine governor to the servo piston because the force from the flyweights of the converter governor is not enough to lift the pilot valve. Under this condition the fuel is under control of the engine governor only. At an increase in the engine speed setting or at a decrease in the load, the speed of the torque converter will go to the maximum speed adjustment for the converter governor. At this point, the pilot valve for the converter governor will be lifted to close the passage between the engine governor and the servo piston and the converter governor will take control. A decrease in load or increase in engine speed setting will now cause no increase in torque converter speed because the pilot valve for the converter governor will be lifted to release oil from the servo piston and the converter governor will control fuel flow to the engine.

Governor Air Actuators

The governor air actuator gives remote control of variable speed for the engine. The actuator operates on air pressure. Air pressure on the cup in the actuator moves the plunger, spring and rod. This motion controls the governor through the linkage.