

11/20/2020 303-100-2188-INST

Installation Manual v1.2: 303-100-2188 GM Governor Pressure Solenoid Block Conversion Kit Dodge 1996-2007

GM conversion Governor Pressure Solenoid Block Conversion Kit, Dodge, 1996-2007, fits all 46-RE, 47-RE and 48-RE Dodge/Chrysler Gas and Diesel Transmissions. Replaces Mopar Factory P/N 4617210. Corrects codes PO1756, PO1763, PO1762 and PO1757.

This is a precision cast aluminum pressure manifold block that completely replaces the original part. Dodge uses a very cheap, problematic solenoid that is modulated to emulate governor pressure. This assembly removes the small stock solenoid and cast housing and replaces it with an over sized GM Heavy duty solenoid that has 6 times the force to accurately control the metering valve that creates governor pressure. Governor pressure is responsible for making the transmission to up shift, down shift and part throttle shifts. Common causes of a failing factory governor pressure solenoid are no up shifts, late up shifts, sticking in a gear, erratic shifting when cold and poor shift performance. In many cases a check engine light will come on indicating there is a transmission problem, often being caused be a failing governor pressure solenoid. This part can easily be changed by simply dropping the pan, removing 4 bolts and installing the new aluminum solenoid block and HD Solenoid.



STEP BY STEP INSTRUCTIONS

Please read all instructions before installation.

1. Drain transmission fluid and remove transmission pan.

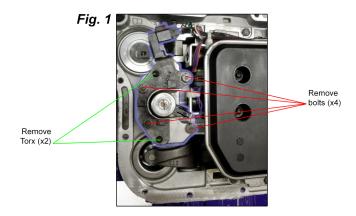
ATS Deep Transmission Pan (P/N 301-900-2116)

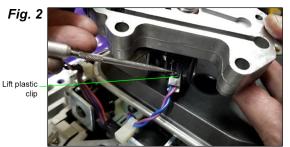
Drain oil using the drain plug, then remove pan.

Stock transmission pan

Remove bolts and leave two bolts still treaded in on one side so pan can tilt to drain the fluid. Once most of the fluid is drained from pan remove the remaining bolts and finish empting the pan.

- 2. After the transmission pan is removed, leave a catch pan under the transmission to catch the drips. The fluid will continue to drip for quite a while.
- **3.** Remove the 4 bolts holding governor body to valve body using a 7/16 socket, set aside they will be used to mount the new solenoid block. Remove the 4 Torx screws. (*Fig.*1)
- **4.** Separate governor body from valve body. (*Fig. 2*) Rotate governor body to access wire connector clips. Disengage wire connectors from governor solenoid. Gently lift plastic clip to disconnect.
- **5.** Disconnect pressure sensor connector. Using a small screwdriver lift tab up and push red clip to disengage the lock. Disconnect connector.
- **6.** Pull pressure sensor from governor body. The pressure sensor is either attached by an internal spring clip or an external retaining plate with a
- 7. Remove gasket from valve body.









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- 8. Install pressure sensor in GM Governor Solenoid Block using automatic transmission fluid on the o-ring.
 - If your pressure sensor has an internal spring clip, remove and discard the supplied external retaining plate and bolt. (Fig. 4)
 - If your pressure sensor doesn't have the internal clip, discard the factory retainer and use the ATS supplied retainer. (Fig. 5)
- 9. Place gasket in position on back of governor body.
- 10. Place two bolts to keep the gasket aligned.
- 11. Place the governor body in position on a clean valve body, thread in the bolts.
- 12. Install remaining bolts in governor body and tighten to 100 in./lb.
- 13. Engage wire connectors into solenoid and pressure sensor, engage red locking tab. (Fig. 6)
- 14. Install new filter (MOPAR P/N 52118789) and transmission pan. Torque Pan Bolts to 120 in./lb.
- 15. Replace transmission fluid with manufacturer recommended automatic transmission fluid Plus 4.

See our website at:

https://www.atsdiesel.com/ats2/fluidcapacities.asp for fluid capacities.

Fig. 4 Internal clip

Fig. 5 External clip

Fig. 6



Pressure Sensor Connector

Governor Solenoid Connector

Bill of Materials

- 1. 303-100-2188 GM solenoid Pressure Solenoid Block with Solenoid
- 2. Gasket
- 3. 303-018-2188 Solenoid Jumper Harness

We strive to make our instructions as clear and complete as possible. To achieve this, our instructions are under constant construction. We encourage you to visit our Technical Support Website: http://www.atsdiesel.com/ATSWebsite/Technical.asp to check for the most up-to-date manuals and diagrams as well as other information. If you have any suggestions as to how we can improve this installation manual, email and let us know at: suggestions@atsdiesel.com

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