



Roadranger®

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Bulletin: TMIB-0158

Date: January 8, 2010

Bulletin Type: Service

Topic: OUTPUT (SPEEDOMETER) SPEED SENSOR INSPECTION PROCEDURE

Issue Description:

As a result of a significant percentage of returned speed sensors tested being found to have no verifiable failure; Eaton Corporation is implementing a test procedure to all. This test is a very simple and quick test to determine if a warrantable failure has occurred. The equipment involved is simply an ohm meter which is a standard item at all repair facilities.

The purpose of this test is to minimize the amount of claims submitted for sensors with no verifiable failure.

Revised Process:

- 1) Check for vehicle codes or complaints pertaining to cruise control, speedometer, engine codes, J-1939, ABS or any other Output speed related code. Resolve any of these codes prior to looking at the speed sensor. (Non Eaton Warranty repair)
- 2) Inspect wiring and connector going to the speed sensor. Repair any cut, damaged, or corroded wires, connectors, pins or sockets leading to the speed sensor. (Non Eaton Warranty repair)
- 3) Inspect the pins on the mating connector on the speed sensor for corrosion, being bent or broke. (Non Eaton Warranty repair)
- 4) For a single output speed sensor, place the leads of an ohmmeter across the pins (A&B). For Dual Output sensors, place the leads across the left 2 pins (A&B) and right 2 pins (C&D).
 - a. Please reference chart for resistance specifications
 - b. If above or below this reading, replace the speed sensor and note the ohm reading on the RO and warranty claim. This needs to be forwarded with the warranty claim to the Eaton Warranty Return Center through normal warranty channels.

For speed sensor diagnostics pertaining to AutoShift or DM transmission sensors, follow diagnostic procedure laid out in the troubleshooting guide.

The material contained in this bulletin is process improvement information. Eaton and Dana Corporation are not committed to, or liable for, canvassing existing products.

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Assembly Number	Sensor Number	Resistance Range	Assembly Number	Sensor Number	Resistance Range
A-6368	4301352	2000 to 4000 OHMS	A-7365	691905	1500 to 3500 OHMS
A-6398	4302691	2000 to 4000 OHMS	A-7462	691905	1500 to 3500 OHMS
A-6724	4302691	2000 to 4000 OHMS	A-7366	691906	2000 to 4000 OHMS
A-6399	4302692	2000 to 4000 OHMS	A-7518	691906	2000 to 4000 OHMS
A-6736	4302692	2000 to 4000 OHMS	A-7449	691957	600 to 800 OHMS
A-7045	691631	1500 to 3500 OHMS	A-7478	691957	600 to 800 OHMS
A-7046	691631	1500 to 3500 OHMS	A-7421	5501549	621 to 759 OHMS
			A-7383	5501549	621 to 759 OHMS

- 05-01-07 Eaton started putting anti-seize on the barrel of the sensor. That should prevent them from becoming frozen in the bore.
- Using a cut off date of 01-01-2008
- After trans build date of 01-01-08
 - A sensor that's broke and it had anti-seize on it (built after 01-01-08) will be considered NON Warrantable
- For sensors prior to 01-01-08 the following will be considered warrantable failures
 - If the sensor is rusty and broke between the barrel and cap

- If there is evidence of cracking between the barrel and bore
- A hole in the bottom of the barrel where the magnet escaped
- If they fail ohm testing
- For all sensors, the following will be considered NON warrantable failures
 - Sensor that pass ohm testing broken or not
 - Sensors that have obvious damage other than described above.

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