

**S-TYPE**

DATE 05/00

S206-02

SERVICE**TECHNICAL BULLETIN****Installation of Wheel Speed Sensor
in Front Wheel Bearing Housing –
Sealing Procedure**MODEL 2000 MY-ON
S-TYPE

VIN L00001-ON

Issue:

A sealing procedure has been introduced to use when installing a wheel speed sensor into a front wheel bearing housing, to prevent the entry of water that otherwise may lead to replacing the wheel bearings.

The sealing procedure detailed below must be followed if it is necessary to replace a wheel speed sensor, or if the sensor has been removed from the sensor housing for any reason.

Action:

Flagging of the following DTCs may be an indication of potential water ingress into the front Wheel Speed sensor systems, indicating that sensor replacement may be required:

- DTC 1145 - Right Front sensor: Input Circuit failure
- DTC 1155 - Left Front sensor: Input Circuit failure
- DTC 1233 - Left Front sensor: Input Signal missing
- DTC 1234 - Right Front sensor: Input Signal missing

In case a wheel speed sensor needs to be replaced, carefully inspect for signs of water entry, caused by an inadequate seal between the wheel speed sensor and the bearing housing.

Water entry may be visible on the tip of the speed sensor itself. In this case replace the wheel bearing and speed sensor assembly since irreparable damage to the wheel bearing will have started to occur. Do **not** separate the sensor from the new wheel bearing assembly since it is fully sealed into the bearing housing.

The sensor can be replaced by itself **only if there is no evidence** of water entry.

WHEEL SPEED SENSOR REMOVAL & INSTALLATION

Whenever removing a wheel speed sensor from the wheel bearing housing, use the following procedure:

1. Press the 'flat' of the retaining clip towards the wheel speed sensor until the sensor is released. Remove the sensor head from the bearing housing for careful inspection. If necessary, replace the sensor.
2. Remove and discard the existing retaining clip.
3. Remove and discard the existing O-ring seal from the bearing housing.
4. Clean the sensor housing in the bearing cap with a clean, dry, oil-free cloth.

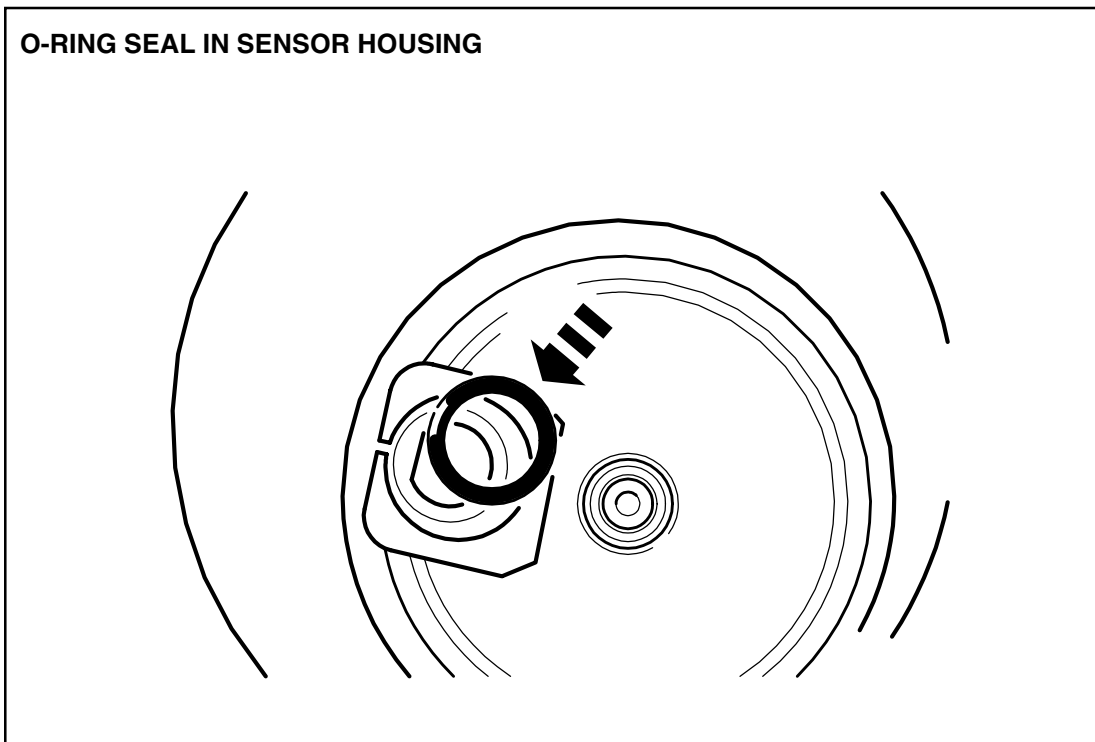


ILLUSTRATION 1

5. Install a **new** O-ring seal into the housing (Illustration 1).
6. Install a **new** retaining clip to the housing.

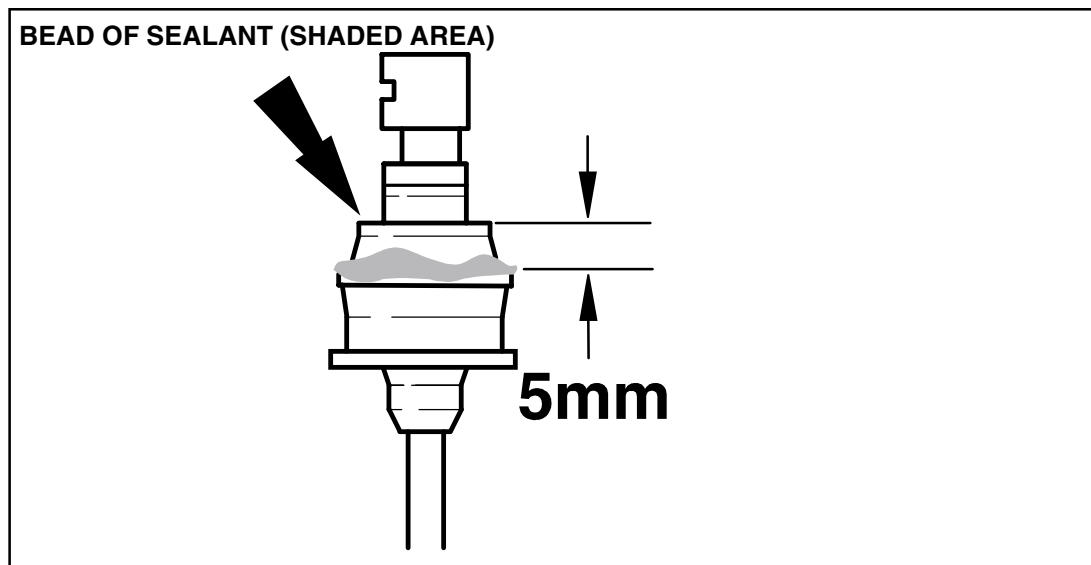


ILLUSTRATION 2

7. Apply a continuous bead of Loctite Permatex Ultra Blue Sealant to the sensor. The bead of sealant should be approximately 2.5mm thick and located approximately 5mm from the flange, as illustrated. The bead must be continuous and completely encircle the sensor (Illustration 2).
8. With the retaining clip pushed fully towards the housing, insert the sensor until it 'bottoms' in the housing.
9. Release the clip. If the sensor is fully seated, the 'ears' of the clip will not be visible - see illustration 3.
10. If the 'ears' are visible, the sensor has not been fully seated. Push the sensor into the housing until the retaining clip takes up its correct position, with the sensor fully seated in the housing.

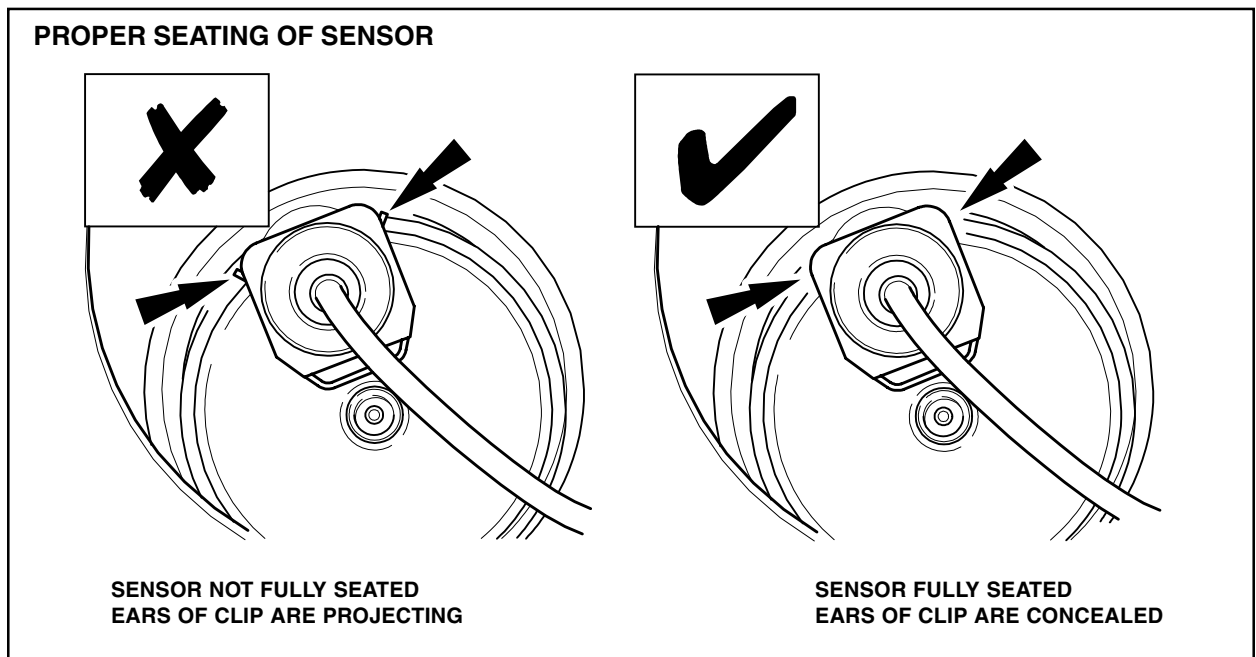


ILLUSTRATION 3

Parts Information:

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Front Wheel Speed Sensor Kit - includes O-ring clip and sealant	XR8 16319	(2) A/R
Front Wheel Bearing Assembly (complete with Speed Sensor)	XR8 19273	(2) A/R
O-ring seal, sensor to housing	XR8 5018	(2) A/R
Clip, sensor retaining	JLM 21246	(2) A/R
Loctite Permatex Ultra Blue	JLM 21208	A/R

If the sensor is being sealed only a new O-ring and spring clip must be used.

Warranty Information:

<u>FAULT CODE</u>	<u>R.O. NUMBER</u>	<u>DESCRIPTION</u>	<u>TIME ALLOWANCE</u>
HG BB D8	70.60.03	Left Front Wheel Speed Sensor, Replace.	0.30 hrs
HG CB D8	70.60.03	Right Front Wheel Speed Sensor, Replace.	0.30 hrs