



Technical Service Information

FORD 6F35 HARSH SHIFTS OR ENGAGEMENTS

COMPLAINT (1): A 2010 Ford Fusion/2009 - 2010 Escape or a 2010 Mercury Milan/2009 - 2010 Mariner may have a complaint of harsh engagements or harsh shifts or 5th gear limp mode. Diagnostic Trouble Codes P0720 (Output Speed Sensor Circuit Fault) or P0722 (Output Speed Sensor - No Signal) may be set.

(2): A 2010 Ford Fusion/2009 - 2010 Escape or a 2010 Mercury Milan/2009 - 2010 Mariner may have a complaint of harsh reverse engagements and occasionally a harsh drive engagement. There may also be a complaint of a harsh 2-3 shift and a flared 2-3 shift that occurs on the first two shifts of the day only, no Diagnostic Trouble Codes are present.

CAUSE (1): There is an open circuit in the Main Control Lead Frame to which the Output Speed Sensor is connected or the Output Speed Sensor is faulty.
There is a defect in the Main Control Lead Frame in these model years which can be identified by the Julian Date located on the lead frame.
The first 2 digits are the year of manufacture and the next 3 digits are the day of the year, for example if the Julian Date on the lead frame is 09184, it was manufactured in the 2009 model year on the 184th day of the year which would be July 3 (July 4 in Leap Year).
Lead Frames with Julian Dates not to be used are: 09184, 09185, 09186, 09229, 09230, 09234, 09235, 09236 and 09237, Figure 1.

(2): The Powertrain Control Module (PCM) requires a software update.

CORRECTION (1): If your Lead Frame has one of these Julian Dates on it, replace both the Lead Frame and the Output Speed Sensor, Figure 2.

(2): Reprogram the PCM per Factory **TSB 11-12-8** (Figure 3) to the latest calibration using the Ford website to obtain software release 76.03 or higher. Operate the vehicle until all shift adapts have been learned.

The technician can also reference **Ford Factory TSB 11-08-10** which addresses similar complaints on these same model year vehicles such as a harsh 2-3 upshift after a cold soak and/or a 3-4 flared upshift. These vehicles may also exhibit harsh rolling engagements if the vehicle is shifted into reverse or drive before coming to a complete stop.

This too is a reprogramming repair by accessing the Ford website in order to obtain the latest software calibration release 69.04 and higher.

SERVICE INFORMATION:

Output Speed Sensor.....9L8Z-7H103-A
Main Control Lead Frame.....9L8Z-7G276-A



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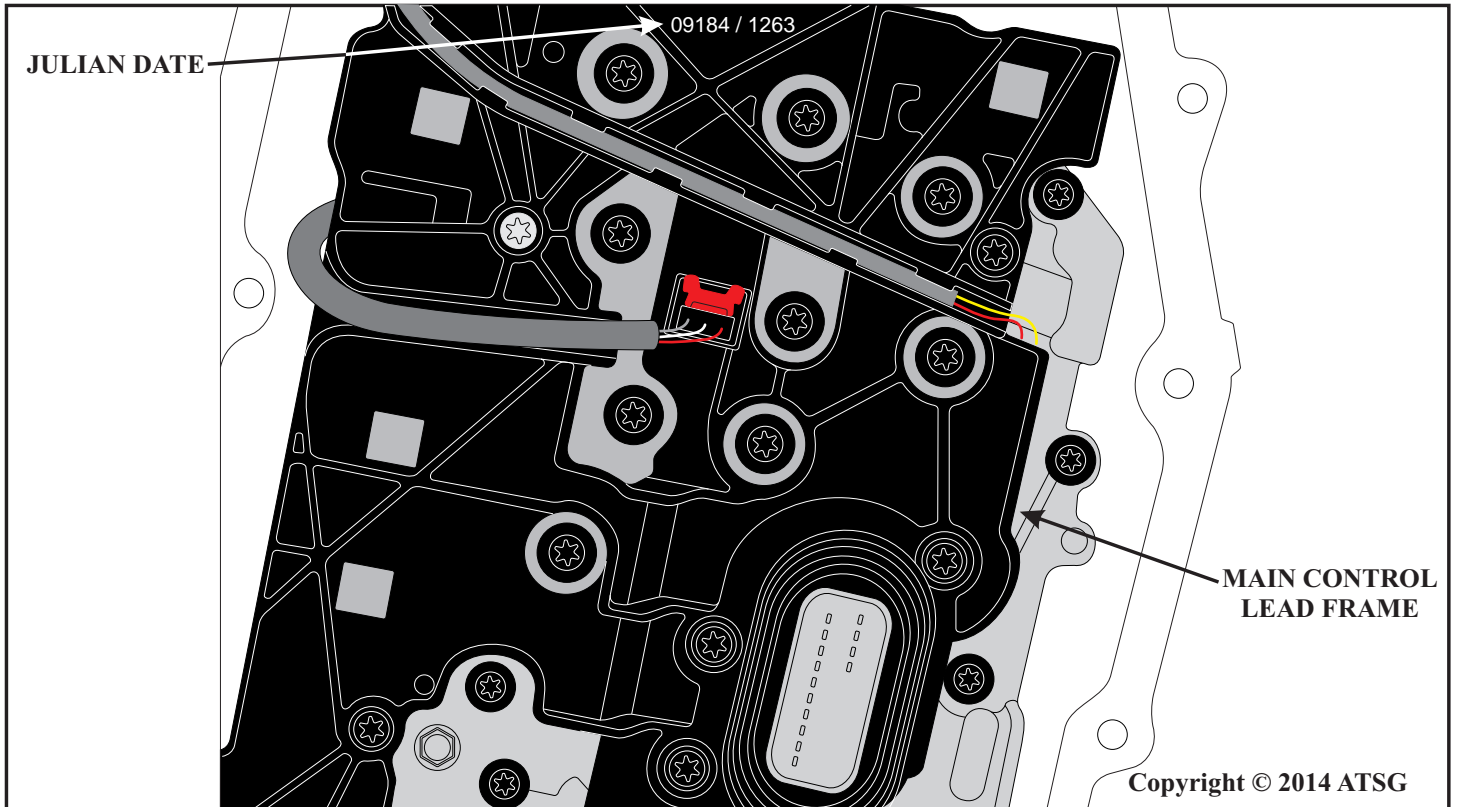


Figure 1

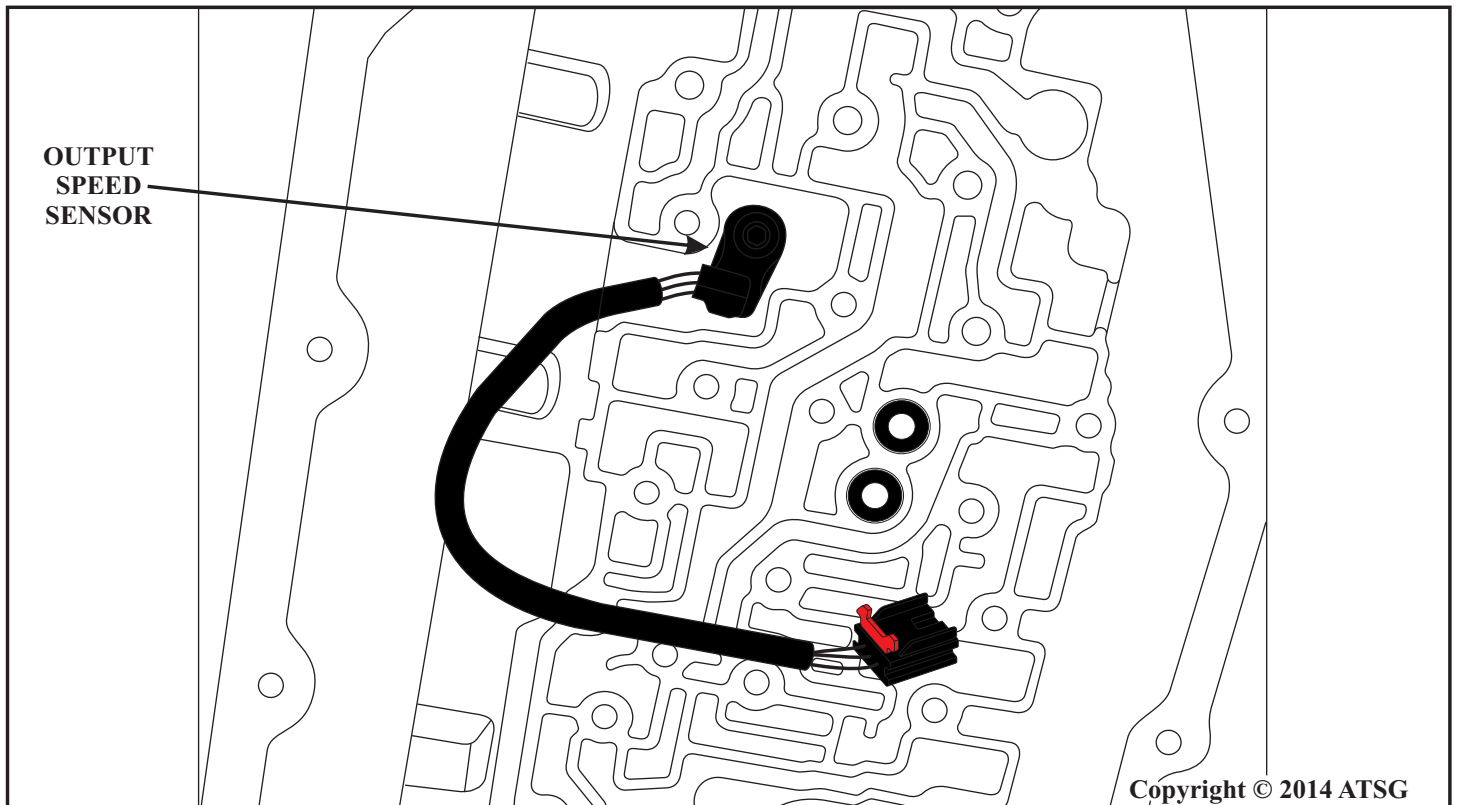


Figure 2



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AUTHORIZED MODIFICATIONS

THE FOLLOWING MODIFICATIONS HAVE BEEN MADE:

***Reprogrammed Powertrain Control Module
(PCM) per TSB 11-12-8***

THESE MODIFICATIONS HAVE BEEN APPROVED,
AS APPROPRIATE, BY EPA AND CARB

DEALER NUMBER:

DATE:

CHANGE AUTHORITY:

FPS 8262 9/78

FORD MOTOR COMPANY

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Figure 3