



Mack Chassis - Automated Manual Transmission Model F (AMT-F, mDrive) - Possible Infrequent Hiccup/Stumble During Steady Engine/Vehicle Speed; Diagnostic Trouble Code P1074-92, P1074-94, P1074-96 Logging, Appears As Inactive - Common Model Years 2018



> Internal Content

If a vehicle presents the symptoms described above:

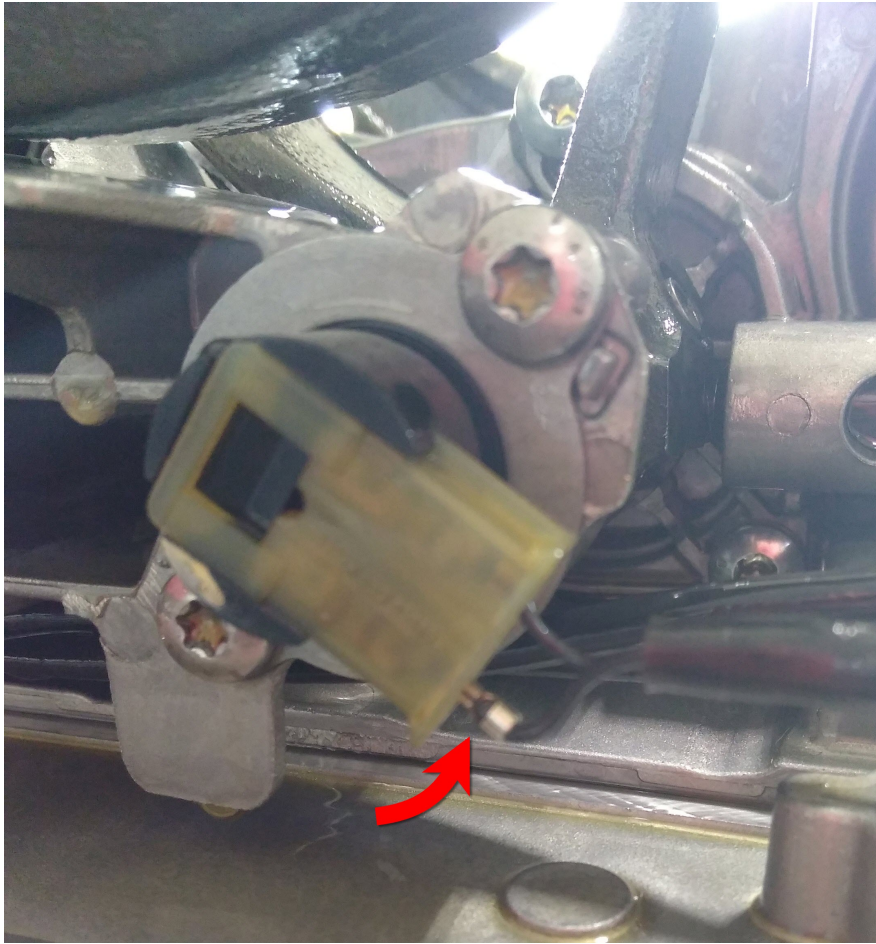
1. Using Premium Tech Tool (PTT) run Operation [4311-08-03-02 - Input Signals for Gear Selection](#), located under the Test tab.

2. Monitor the [Transmission 2/3 Cylinder Position](#), located under the [Gearbox Actuator](#) section of the test while operating the transmission to replicate the issue.

- During steady state operations, the signal for the shifter should be stable.
- If the position values are found to fluctuate, the signal can get outside the MIN/MAX values and the TECU will think the shifter has left the position it was in.

3. If the signal is fluctuating: Inspect the internal wiring harness.

- The internal wiring harness have been found in a some cases to have terminals that have pushed back in the connector and not making good connection. An example is shown below:



4. Proceed according to findings:

-  Tags
- **If pins are found to be pushed out of the connector:** Reinstall the terminals in the connector and verify that the locking tabs are
- [p1074-94](#) th [p1074-96](#) [p107494](#) [p107496](#)
- [k91121166](#) on [p1074-92](#) **id to be bad:** Replace the harness.

5. Verify the repair.

Related links and attachments

No links or attachments available



Feedback

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to help improve the content of this article



Product Product History Diagnose Test Calibrate Program Impact

Test

Select an operation and click Start



Sort by function



+ 1 - Service and maintenance

+ 2 - Engine, Engine mounting and equipment

+ 3 - Electrical system and instruments

- 4 - Transmission

4000-08-03-11 Gear Activation, Control Housing (for Removal/Replacement)

4111-08-03-02 Clutch wear check

4111-08-03-05 Clutch Drag

4111-08-03-06 PWM Valves Clutch Activation

4311-08-03-02 Input Signals for Gear Selection

4315-08-02-01 Interlock System

4313-08-03-01 Solenoid valve, Transmission brake (Input shaft brake/ Countershaft brake)

4313-08-04-01 Solenoid valve, Transmission brake (Input shaft brake/Countershaft brake)(Transmission removed)

4320-08-03-01 Clutch cylinder

4320-08-03-02 Range Cylinder

4320-08-03-03 Split Cylinder

4320-08-03-05 Gear Selector Cylinder 2/3

4320-08-03-06 Gear selector

4320-08-03-24 Gear Selector Cylinder 1/Reverse

4320-08-03-32 PWM Valves Clutch

4320-08-03-33 Transmission Speed Sensors

4320-08-03-34 Pressure sensor

4320-08-03-40 Gears

4320-08-03-49 Ultra-Low Crawler Cylinder

+ 5 - Brakes

6 - Axles, suspension and steering

7 - Frame, springs, shocks and wheels

8 - Body, cab and interior

9 - Miscellaneous

4311-08-03-02 Input Signals for Gear Selection



Run the operation in simulation mode

Purpose

To evaluate if all signals used for gear selection are displayed correctly and with reasonable values

Description

- All signals and values must be evaluated to see if they correspond to reality
- The test gives a good understanding of the most vital internal signals and sensors
- All relevant diagnostic trouble codes (DTCs) must be corrected
- It is possible to run this operation in the workshop (stationary) or while driving (two persons required)

**Note:** After performing a stationary test and a test drive, run the test again in replay mode to properly evaluate all signals and values[Transmission, Function description](#)

Start >

Cancel





Product

Product History

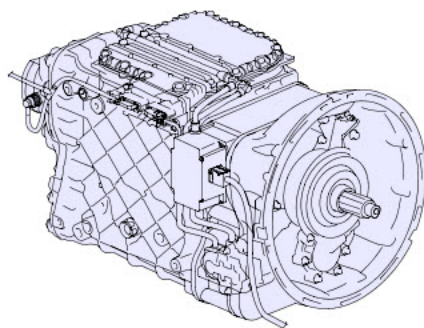
Diagnose

Test

Calibrate

Program

Impact



4311-08-03-02 Input Signals for Gear Selection

 Simulation

Information >> Execution

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[Transmission, Function description](#)

Continue >

Cancel



 Simulation

Information >> Execution

- Start the test
- It is possible to run this operation in the workshop (stationary) or while driving (two persons required)
- If a problem occurs, take notes of the time on the X-axis of the graph. The notes can be used as a reference when evaluating the recorded values in replay mode
- Check and make note of the value for the Gross Combination Weight (GCW)

- Check that all signals and values are stable and without abnormal deviations
- Check that all signals are displaying realistic values according to the actual conditions

 **Note:** After performing a stationary test and a test drive, run the test again in replay mode to properly evaluate all signals and values

▼ **Additional information**

Transmission, Function description

[Continue >](#)