



Mack Chassis - Vehicles Equipped With AMT-C, AMT-D, And AMT-F (mDrive) Transmissions - Grade Gripper Engaging On Flat Ground, Inclination Sensor Calibration



> Internal Content

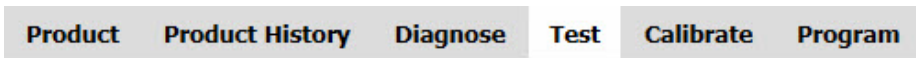
Sensor Calibration

AMT-C And AMT-D models:

1. Program the TECU using Premium Tech Tool, Operation [1700-08-03-39 Program Electronic Control Unit](#) under the Program tab.
2. Calibrate the transmission, Operation [4320-07-03-01 Transmission, clutch, engagement point](#) under the Calibrate tab.

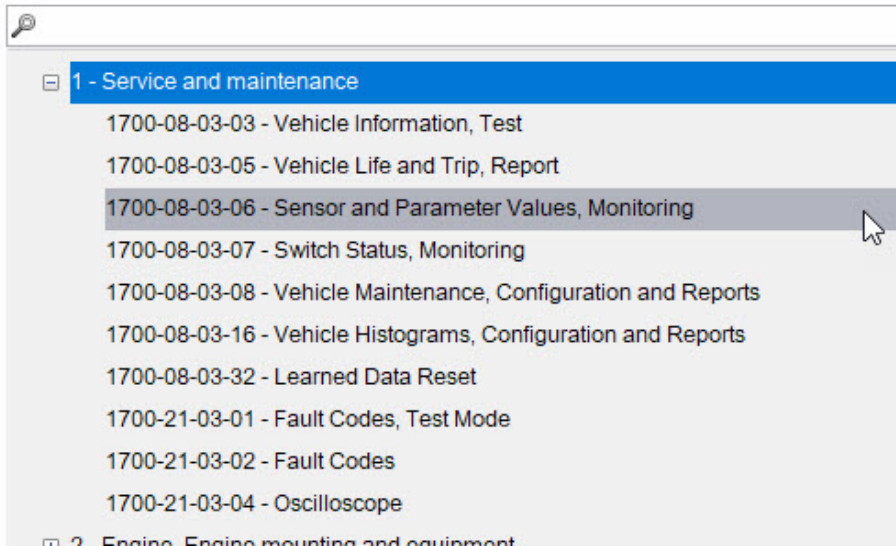
AMT-F models:

1. Program the TECU using Premium Tech Tool, Operation [1700-08-03-39 Program Electronic Control Unit](#) under the Program tab.
 - **DO NOT** attempt to calibrate the AMT at this time.
2. Drive the vehicle on a route that is between 1-1.5 kilometers (approximately $\frac{3}{4}$ to 1 mile) long.
3. When the proper distance is reached, turn around and follow the same route from the finish back to the start.
4. When parking, ensure the vehicle is on flat ground.
5. With the driving portion completed, connect to the vehicle with PTT.



Test

Select an operation and click Start



6. Under the Test tab, select Operation [1700-008-03-06 Sensor and Parameter Values, Monitoring](#).
7. Locate and select parameter [P1EU2\[5\] - Inclination Sensor \(TECU\)](#).

Tech Tool

Tech ToolLinksHelp

ProductProduct HistoryDiagnoseTestCalibrate

Available signals

Select the signals you want to monitor.

View:Control UnitFunction

TemplatesInstructions

Control Unit	Signal	Name
☐	ACM	
☐	EMS	
☐	TECU	
☐	P1EU2[4] - Accelerator Pedal Position (TECU)	
☐	P1EU2[5] - Inclination Sensor (TECU)	
☐	P1EU2[6] - Relative Wheel Speed, Left Front (TECU)	
☐	P1EU2[7] - Relative Wheel Speed, Right Front (TECU)	
☐	P1EU2[8] - Relative Wheel speed, Left Rear (TECU)	
☐	P1EU2[9] - Relative Wheel Speed, Right Rear (TECU)	
☐	P1EU2[10] - Brake Pedal Position (TECU)	

8. Verify the inclination sensor is reading between -1.5° and 1.5°.

Tags

k04706208

mack

Related links and attachments

No links or attachments available

Feedback

[Give feedback](#)

to help improve the content of this article

Tech Tool

Tech ToolLinksHelp

BRADLEY PICKENS

ProductProduct HistoryDiagnoseTestCalibrateProgramImpact

Available updates

Software Package	Status
☐ Information display (MID 140)	Blocked
☐ Vehicle ECU (MID 144)	Blocked
☐ Telematics GateWay (TGW)	Blocked

1700-08-03-39 Program Electronic Control Unit

Simulation

This operation shows all updates that are available for this product.

Select the software packages for the control units to be updated and then click Program to start.

To reinstall the same software version in a control unit, exit the operation and select the operation Replace hardware.

When multiple software packages are selected, there will be a request to run a key cycling after each package

Package status information

If a software package requires attention, a symbol is shown in the Status column

Blocked software package

The software package cannot be applied. Software packages can be blocked due to control unit data mismatches
Go to Product Identification and look for information about mismatches in Product Status
If you are interested in a software package that is blocked, and no reason for the block can be found in Product Status, then please contact help desk.

Control unit calibration

It may be necessary to perform calibrations after an Electronic Control Unit has been programmed

☒ I have read and understand the above advisory

Program >Cancel

Chassis ID: M763 16441VIN: 1M2AV02C2HM016441Work Order: 00000

ProductOnline

1:05 PM12/22/20218

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
 - 4000-07-04-01 Transmission (Transmission removed)
 - 4320-07-03-01 Transmission, clutch, engagement point
- + 5 - Brakes
- 6 - Axles, suspension and steering
- 7 - Frame, springs, shocks and wheels
- 8 - Body, cab and interior
- 9 - Miscellaneous

4320-07-03-01 Transmission, clutch, engagement point



Run the operation in simulation mode

Purpose

Calibrate the clutch, the transmission and the engagement point

Calibration must be carried out when:

- Gear control unit, top cover has been replaced
- Clutch cylinder has been replaced
- Clutch plate has been replaced
- The transmission has been rebuilt or replaced

 Note: Calibration can only be performed when the transmission is installed in the product and the propeller shaft is connected

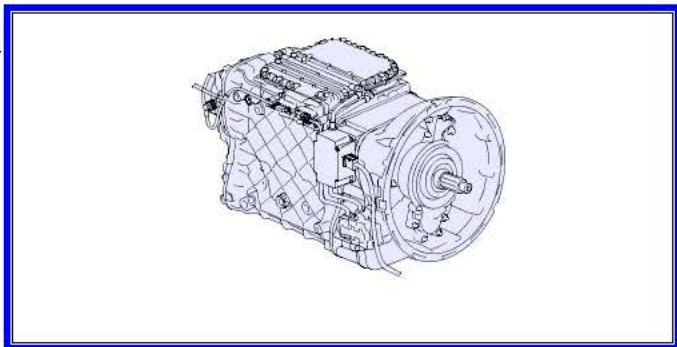
 Note: Don't perform a calibration if only the TECU is being programmed

Start >

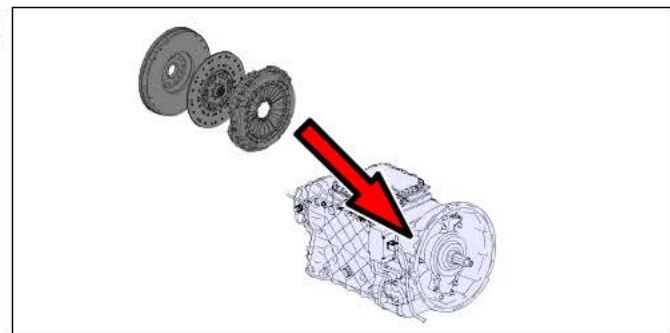
Cancel

Product Online

A



B



Illustrations are used for reference only, may differ slightly from the actual vehicle
The essential information in the illustrations is, however, always correct.

4320-07-03-01 Transmission, clutch, engagement point

Simulation

Information >> Conditions >> Execution >> Result

Purpose

Calibrate the clutch, the transmission and the engagement point

Calibration must be carried out when:

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Note: Calibration can only be performed when the transmission is installed in the product and the propeller shaft is connected

Note: Don't perform a calibration if only the TECU is being programmed

Selections

Select the illustration corresponding to the method or test to be performed

A

Run a complete calibration sequence, and keep the existing X1 value. Use this option if the disc has not been replaced, for example after replacing the clutch cylinder

B

Run a clutch calibration sequence and set a new X1 value. Use this option after replacing the clutch plate

Note: When replacing the disc and the transmission or the TECU, run calibration sequence A first, then run calibration sequence B

Continue >

Cancel

1	 = 0 rpm	0 rpm	
2	 		
3	 > 94 psi	99 psi	

4320-07-03-01 Transmission, clutch, engagement point

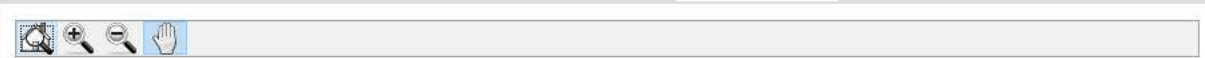
 Simulation

Information >> **Conditions** >> Execution >> Result

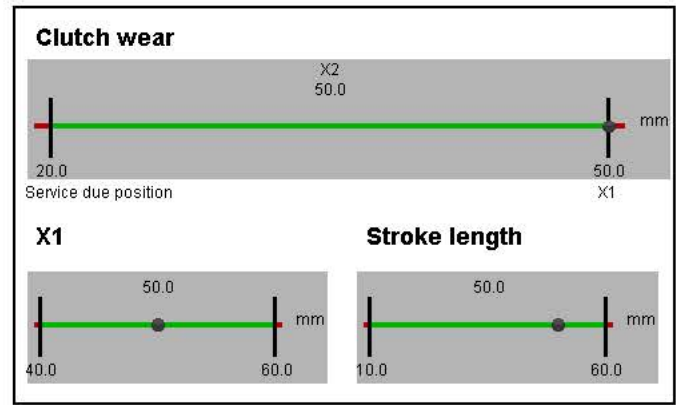
Automatically checked conditions

- 1 Engine not running
- 2 Parking brake applied
- 3 Air pressure above 94 psi

Continue > **Cancel**



 Detailed information



Split cylinder

Continue >

4320-07-03-01 Transmission, clutch, engagement point

 Simulation

Information >> Conditions >> Execution >> Result

Result

Calibration successful

 **Note:** The X2 value might vary slightly between each test execution due to different conditions, such as oil temperature. On a relatively new clutch, these variations might cause an indication of a small negative wear ($X2 > X1$). This is normal and not a fault indication