



AMT-F Transmission Electronic Control Unit (TECU) Software (MSW) Information – Improvement List (Change Log) And Explanations For Issues And Diagnostic Trouble Codes (DTC, Fault Codes) From Start of Production to Present



Software Release Tables

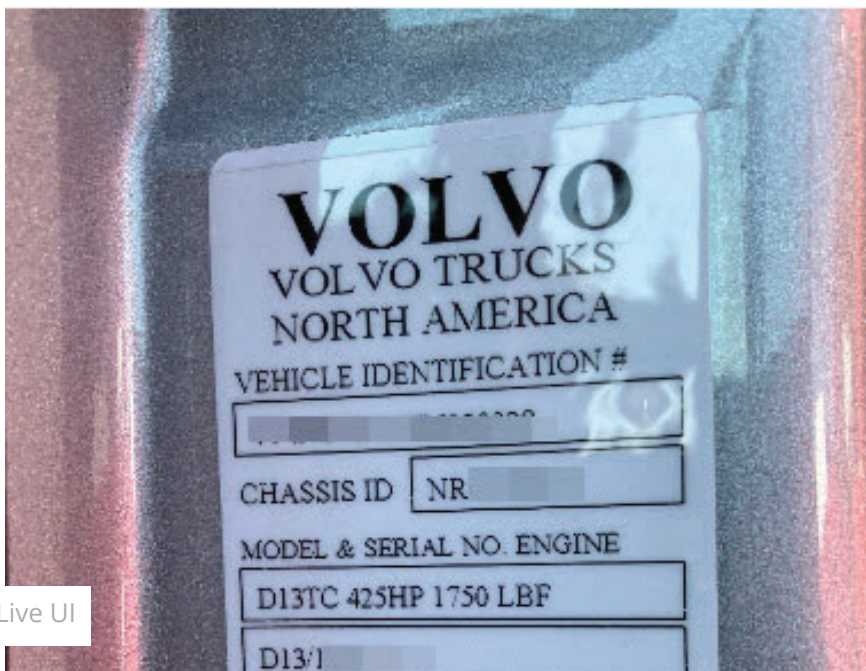
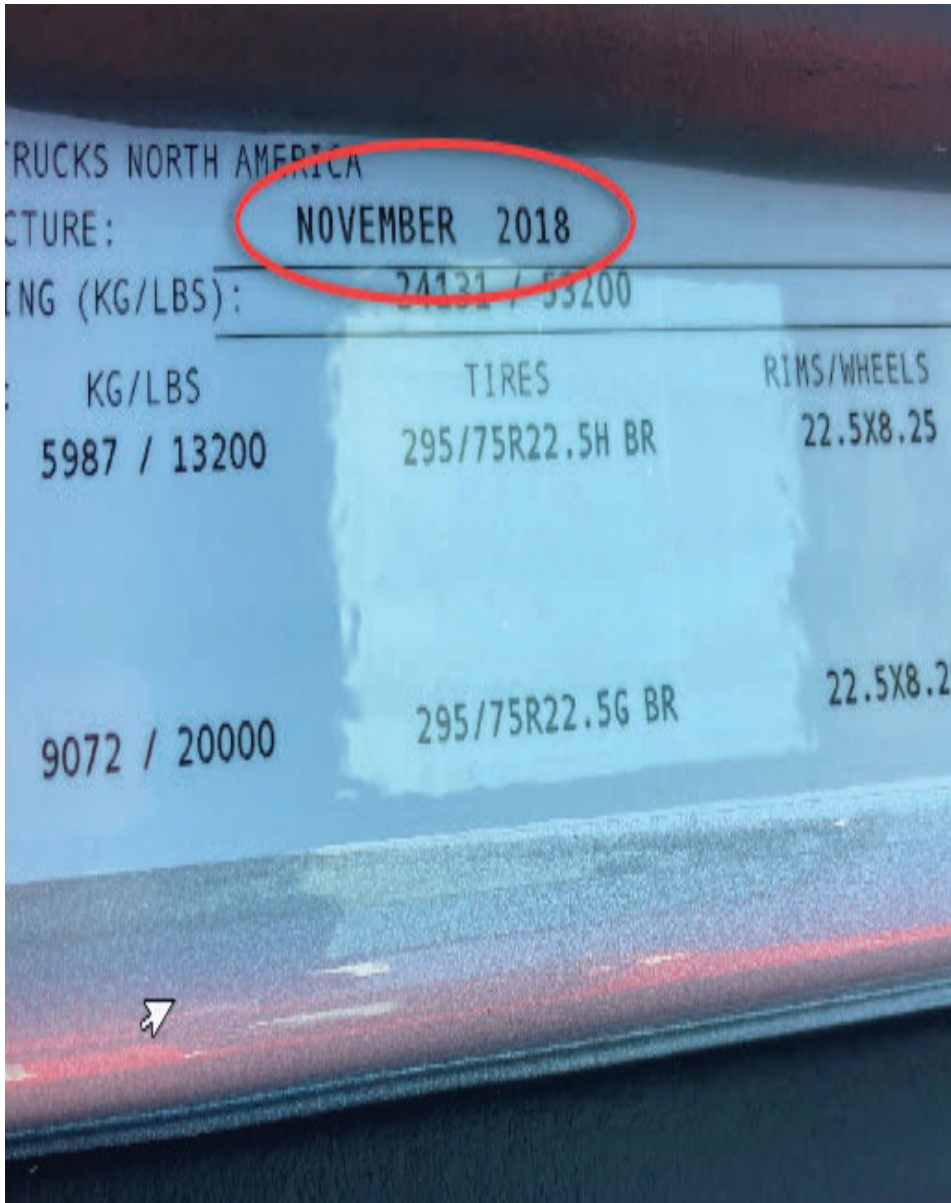
This document covers ALL North American AMT-F gearbox software. The Transmission Electronic Control Unit (TECU) software and gearbox production does not follow an Emissions release schedule like the Engine Control Module (EMS), so the Production Start Date and Build Date of the chassis should be used here to find the appropriate software table. Using a known Main Software (MSW) number, the tables below can be used to determine any improvements that have been made compared to previous versions, as well as further changes that have been made in newer versions.

If the MSW number currently shown to be installed on the vehicle is not on the table, contact Tech Support if more information is needed.

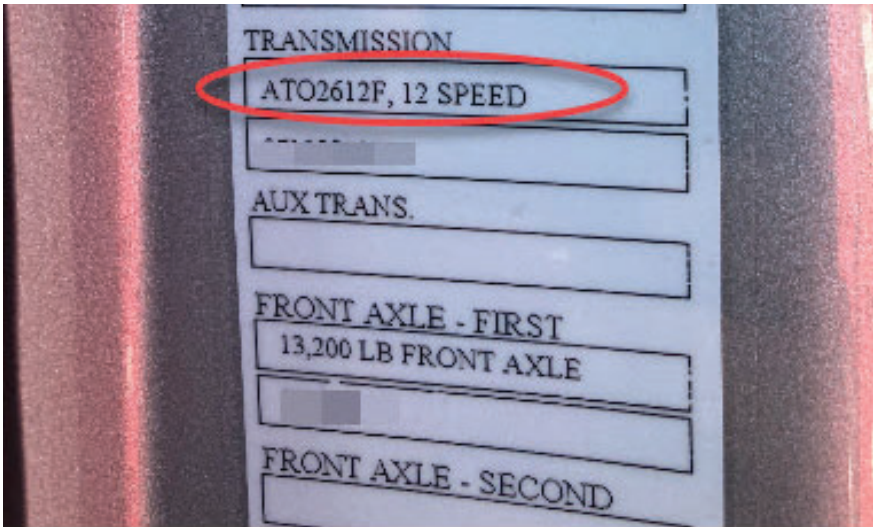
This document will be updated as new SW becomes available.

Build Date Location

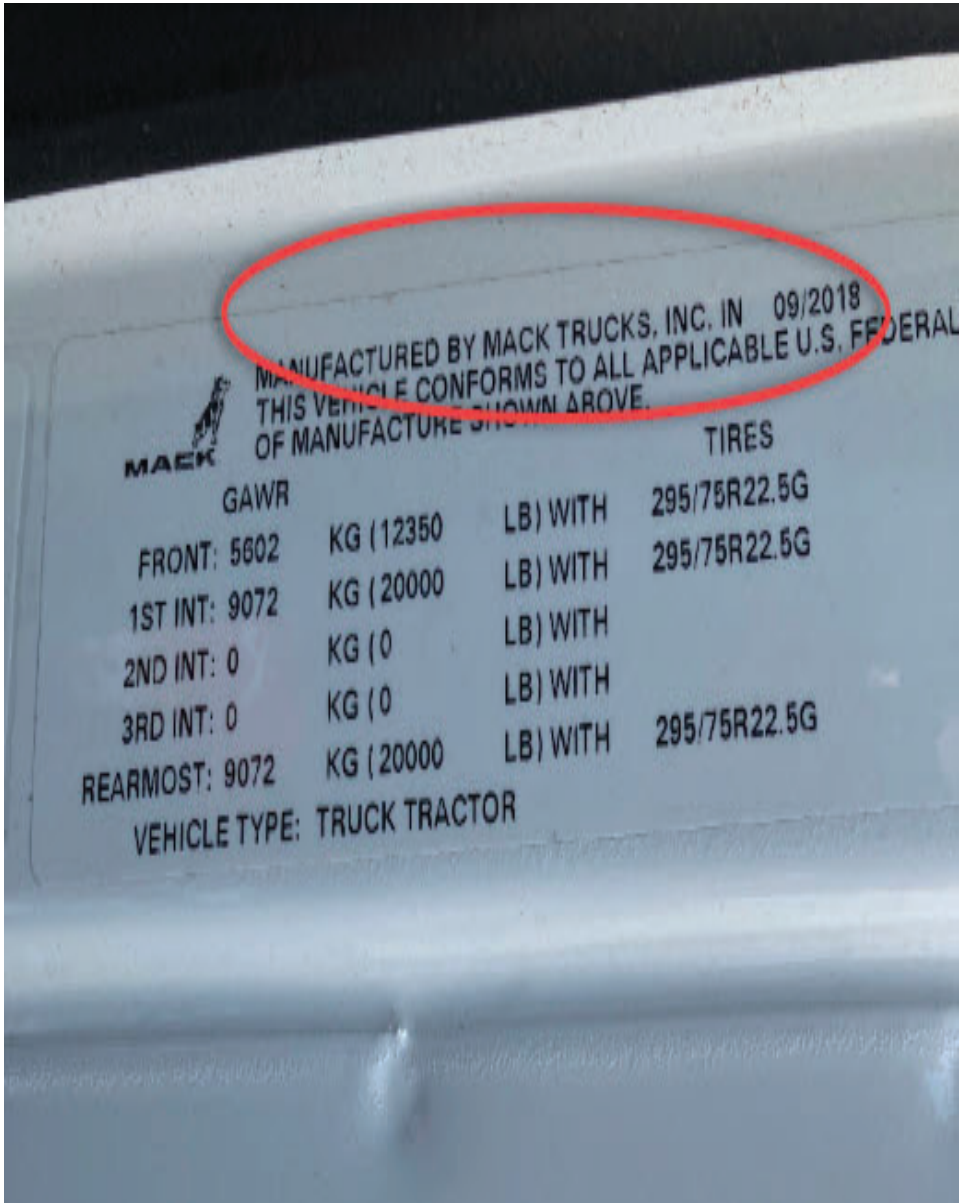
For Volvo trucks, the Build date can be found on the sticker on the B-Pillar. The Transmission model is on the B-Pillar on the Vehicle identification sticker.



Live UI



Mack Vehicles can find the build date on the edge of the drivers door.



**Mack and Volvo Chassis With AMT-F Version
Gearboxes Installed In Trucks Built Between
November 2016 and November 2019
AT2612F, ATO2612F, ASO-C, ASO-ULC, UASO,
US17/US18**

Software Part Number (MSW)	Release Notes
24147627	Improved clutch timing where the clutch releases slowly from the idle drive position and when stopped in gear when the brake pedal is depressed.
23647591	Improve engagement of split neutral gears to secure lubrication.

Software Part Number (MSW)	Release Notes
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23344747	• Improve idle drive when pressing brake pedal or using accelerator with a fleet shifter and no shift buttons. Allows up shifting and downshifting while in 'Idle Drive' on vehicles with fleet shifters. • Changed the default value for P1ALV-Road Speed Limit, Legislated to prevent 'Inconsistent' parameters error when reading parameters in Tech tool. • Split shaft PTO functionality implemented for Mack MRU concrete pumpers with AMT gearboxes. • Improved monitor for fault P1052-18 OC for clutch position sensor. • Add possibility to heal DTC P10AE81 if slip point is not calibrated. • New Parameters make it possible to have C1 or C2 as the highest start gear in Manual and Automatic: ◦ P1LCM Highest start gear in Automatic mode (12spd gearbox) ◦ P1LCL Highest start gear in Manual mode (12spd gearbox) ◦ P1RP9 Start Gear Selection, Automatic Mode, Highest Gear (14 spd gearbox) ◦ P1RQA Start Gear Selection, Manual Mode, Highest Gear (14 spd gearbox) ◦ P1RQB Start Gear Selection, Automatic Mode, Highest Gear (13 spd gearbox) ◦ P1RQC Start Gear Selection, Manual Mode, Highest Gear (13 spd gearbox)
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Software Part Number (MSW)	Release Notes
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23263953	Solved problems: • Missing manual shift disable parameter (disable buttons). Disables shift buttons on Premium shifter. • The automated selection of reverse start gear will not select RC as frequently. • Changed SW to not try and disengage clutch in Key on-engine off when no air supply, to reduce noise from CVU. • Grinding PTO. Corrected an issue when switching between PTO1 and PTO2 quickly or at vehicle startup when the vehicle is shut down with PTO engaged. New parameter: • P1Q9C, to disable idle drive while in reverse. Allowed by default, changeable with Tech tool.
23090996	Remote Software Download: • Changed clutch calibration DTC to not set at startup after SWDL. • Send out new signal for IC to display when when calibration is on-going to implement Clutch calibration pop-up. • Changed engaged gear in Neutral to be saved over SWDL. • Save inclination sensor offset over SWDL. Other Improvements: • AMT Clutch error MID 130 PSID27 FMI 8/P107538 Fault limit improvements to help prevent unnecessary fault logging. • AMT-F Vehicle Mass Calculation improvements for units using Electronic Suspension for US. • Open circuit fault (P1052-18) on clutch position sensor set to frequently in AMT-F.

Software Part Number (MSW)	Release Notes
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23016584	• Improve start gear selection in downhill for Performance Plus (P+) or HD. • Implement auto neutral function for North America (New Function). • Improve shifting strategy when downshift is requested in Engine brake lever stalk position 'B-mode' during engine braking TC engine (Volvo).
22948521	• Start of production.

**Mack and Volvo Chassis With AMT-F Version
Gearboxes Installed In Trucks Built After November
2019-October 2020
AT2612F, ATO2612F, ASO-C, ASO-ULC, UASO, EOBD-
U19, EOBD-U20**

Software Part Number (MSW)	Release Notes
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	• Improvements to Engine idle that was causing speed oscillations and dropping out of fast idle when vehicle and gearbox air pressure is building. Engine speed will drop to idle and then back to set point when the gearbox air pressure is reliable and the clutch disengages and shifts to low range. • Improved clutch timing where the clutch releases slowly from the idle drive position and when stopped in gear when the brake pedal is depressed. • Improvements to the 12th gear lockout function and the GST-TMH (Take Me Home) variant would not prevent shifting to 12th gear when loaded. • Improvements to prevent TECU from using I-See preview data to allow an incorrect upshift to overdrive and lugging the engine prior to a hill when driving using the throttle.
24147789	i-See improvements • Schwung setting to be 0 from factory on all I-SEE equipped vehicles without forward facing radar (UCAVS and CAVS-ACS) • Schwung setting to be 5 or 8 km/hr on all I-SEE equipped vehicles with forward facing radar (CAVS-AC4/CAVS-AC5/CAVS-AF5) • Schwung is the allowable vehicle speed above the CCB set speed that allows the truck to maintain a higher speed in preparation for the next anticipated hill, or coasting into flat terrain. • Various improvements have been made to the Offroad mode (P+) that now allow transmission to skip gears on more occasions. • Improved downshifting response when Veh Speed is over CCB speed and/or during ACC. • Improved downshifting engine brake performance (16L_MackAustralia only)
23872356	• Improvement to shift points and shift speeds from crawler gears. • Implement dynamic torque limitation on reverse crawler high range. For transmission overtorque protection. • Allow eco-roll if conditions are met and accelerator position is less than 5%.=
23244717	Start of production

25544/47	Start of production.
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**Mack and Volvo Chassis With AMT-F Version
Gearboxes Installed In Trucks Built After October
2020
AT2612F, ATO2612F, ASO-C, ASO-ULC, UASO, EOBD-
U21**

Software Part Number (MSW)	Release Notes
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Software Part Number (MSW)	Release Notes
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24043314	• Improvements to Engine idle that was causing speed oscillations and dropping out of fast idle when vehicle and gearbox air pressure is building. Engine speed will drop to idle and then back to set point when the gearbox air pressure is reliable and the clutch disengages and shifts to low range. • Improved clutch timing for instances where the clutch releases slowly from the idle drive position and when stopped in gear when the brake pedal is depressed. • Improvements for to the GST-TMH Take Me Home feature and the 12 gear lock out functionality to ensure 12 gear not enabled when loaded • Improvements to prevent lugging and incorrect upshift while using I-See and approaching a hill. • I-See improvements: ◦ Schwung setting to be 0 from factory on all I-SEE equipped vehicles without forward facing radar (UCAVS and CAVS-ACS)S ◦ Schwung setting to be 5 or 8 km/hr on all I-SEE equipped vehicles with forward facing radar (CAVS-AC4/CAVS-AC5/CAVS-AF5) ◦ Schwung is the allowable vehicle speed above the Cruise Control Brake set speed that allows the truck to maintain a higher speed in preparation for the next anticipated hill, or coasting into flat terrain. • Various improvements have been made to the Offroad mode (P+) that now allow transmission to skip gears on more occasions. • Improved downshifting response when Veh Speed is over Cruise Control Brake speed and/or during ACC. • Improved downshifting engine brake performance (16L_Mack Australia only)
24015820	• Improved drive mode cycle time for instrument cluster display to decrease delay when moving between E/EE/Perf. • Values added for possible missing CC speed offsets in DID for I-See feature.

Software Part Number (MSW)	Release Notes
23941868	Start of Production



Tags

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