

TECHNICAL BULLETIN
LTB00782NAS1
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NOTE: The information in Technical Bulletins is intended for use by trained, professional Technicians with the knowledge, tools, and equipment required to do the job properly and safely. It informs these Technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by 'do-it-yourselfers'. If you are not a Retailer, do not assume that a condition described affects your vehicle. Contact an authorized Land Rover service facility to determine whether this bulletin applies to a specific vehicle.

SECTION: 307-00

Transmission Shift Quality Concerns

AFFECTED VEHICLE RANGE:

LR2 (LF)

Model Year: 2011-2015
VIN: 216517-439912
Manufacturing Plant: Halewood

Range Rover Evoque (LV)

Model Year: 2012-2013
VIN: 000447-856579
Manufacturing Plant: Halewood

MARKETS:

NAS

CONDITION SUMMARY:

Situation: A number of transmission shift quality concerns may be evident. Examples are:

- A rough gear change or 'jerk' from stationary when selecting DRIVE(D) from NEUTRAL(N).
- A rough gear change or 'jerk' when releasing the foot brake from a stationary position while the vehicle is in DRIVE(D) (handbrake not applied). For example, in a traffic jam or pulling away from traffic lights.
- A rough gear change or 'jerk' while driving vehicle on coastdown from sixth gear (off accelerator) but **only** when downshifting from fifth to fourth gear.

Cause: This may be caused by Transmission Control Module (TCM) software programming.

Action: Should a customer express any of these concerns, follow the Diagnostic Procedure outlined below.

TOOLS:



NOTE: this is an 'Active Bulletin' that will display a functional programming shortcut if accessed within a diagnostic session using SDD.

SDD with latest DVD and Calibration File

Jaguar Land Rover-approved Midtronics battery power supply

WARRANTY:



NOTE: Repair procedures are under constant review, and therefore times are subject to change; those quoted here must be taken as guidance only. Always refer to TOPIx to obtain the latest repair time.



NOTE: DDW requires the use of causal part numbers. Labor only claims must show the causal part number with a quantity of zero.

DESCRIPTION	SRO	TIME (HOURS)	CONDITION CODE	CAUSAL PART
Automatic transmission - Tune download	44.90.10	0.2	42	LR023467
Automatic transmission - Adaptation procedure	44.90.16	0.8	42	LR023467



NOTE: Normal Warranty procedures apply.

DIAGNOSTIC PROCEDURE:



CAUTION: a Jaguar Land Rover-approved Midtronics battery power supply must be connected to the vehicle battery during SDD diagnosis / module programming.



CAUTION: ensure all ignition 'ON' / ignition 'OFF' requests are carried out; failure to perform these steps may cause damage to control modules in the vehicle.



NOTE: SDD must be loaded with DVD143.01 v.217 or later.

- 1** Connect the Jaguar Land Rover-approved Midtronics battery power supply to the vehicle battery.
- 2** Turn ignition 'ON' (engine not running).
- 3** Connect the Symptom Driven Diagnostics (SDD) system to the vehicle and begin a new session.
- 4** Follow the on-screen prompts, allowing SDD to read the VIN and identify the vehicle and initiating the data collect sequence.
- 5** Select 'Diagnosis' from the Session Type screen.
- 6** Select the 'Selected Symptoms' tab, and then select one of the following:
 - Powertrain > Automatic transmission and transaxle > Automatic transmission and transaxle symptoms > Bump from transmission on shutdown **or**
 - Powertrain > Automatic transmission and transaxle > Automatic transmission and transaxle symptoms > Harsh gear change **or**
 - Powertrain > Automatic transmission and transaxle > Automatic transmission and transaxle symptoms > Harsh gear engagement from park or neutral
- 7** Select 'continue'.
- 8** Select the 'Recommendations' tab, and then select 'Run' to perform the 'Configure existing module - Transmission control module' option.
- 9** Follow all on-screen instructions to complete this task, ensuring all DTCs are cleared.
- 10** Exit the current session.

11 Disconnect the battery power supply from the vehicle.

AWF21 6-Speed Automatic Transmission Adaptation Procedure



NOTE: Before carrying out the following adaptation procedure make sure there is sufficient space for the vehicle to be moved forwards.



12 CAUTION: Do not apply the brake and accelerator pedal, in DRIVE to heat up the automatic transmission. This will lead to internal damage of the automatic transmission

To complete the AWF21 6-Speed Automatic Transmission Adaptation procedure, it is necessary to follow the **HEAT-UP PROCEDURE** below:

- Start the vehicle and select NEUTRAL. Check that the NEUTRAL LED illuminates with foot brake applied and raise the engine speed up to 2,000 rpm.
- Using SDD, check the datalogger signal '**Oil Temp Sensor (TCM)**'.

Follow the HEAT-UP procedure until the transmission oil temperature has reached 74°C.

13 Transmission oil temperature (74-81°C)

1. With the foot brake applied, select NEUTRAL. Check that the NEUTRAL LED illuminates and then wait ten seconds.
2. Keeping the foot brake applied, select DRIVE and wait 90 seconds..
3. Do not press the accelerator pedal. Release the foot brake and allow the vehicle to move forward for two meters.
4. Bring the vehicle to a complete stop; wait for 10 seconds with the foot brake applied.
5. Repeat the Steps 1-4 (**repeat one more time**).

If required, follow the HEAT-UP procedure until the transmission oil temperature has reached 82°C.

14 Transmission oil temperature (82-90°C)

1. With the foot brake applied, select NEUTRAL. Check that the NEUTRAL LED illuminates and then wait ten seconds.
2. Keeping the foot brake applied, select DRIVE and wait 90 seconds.
3. Do not press the accelerator pedal. Release the foot brake and allow the vehicle to move forward for two meters.
4. Bring the vehicle to a complete stop; wait for 10 seconds with the foot brake applied.
5. Repeat the Steps 1-4 (**repeat four more times**).

If required, follow the HEAT-UP procedure until the transmission oil temperature has reached 90°C.

15 Transmission oil temperature (90-100°C)

1. With the foot brake applied, select NEUTRAL. Check that the NEUTRAL LED illuminates and then wait ten seconds.
2. Keeping the foot brake applied, select DRIVE and wait 90 seconds.
3. Do not press the accelerator pedal. Release the foot brake and allow the vehicle to move forward for two meters.

4. Bring the vehicle to a complete stop; wait for 10 seconds with the foot brake applied.
5. Repeat the Steps 1-4 **(repeat four more times)**.

16When all tasks are complete, return the vehicle to the workshop and exit the current session.

17Disconnect the SDD from the vehicle.

When the vehicle is returned, the customer MUST be informed that as a result of the Transmission Control Module (TCM) software update the gearshift quality may not be fully optimized until the TCM has adapted itself. The adaptation process can take several weeks depending on the customer's driving style.

NEUTRAL Idle Exit is a mode entered when the vehicle is in DRIVE(D) and held with the brake applied for a period of time greater than a threshold (approximately six seconds). The transmission then releases clutch pressure to effect a NEUTRAL(N) condition -- 'Idle Neutral'. When the brakes are released, the transmission will re-engage DRIVE(D) -- 'Idle NEUTRAL Exit'.