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This reissue replaces all previous versions. Please destroy all previous versions. Only refer to the electronic version of this TSB in TOPIx. This bulletin supersedes TSB JTB00230v5/2012 dated 08 NOV 2012, which should either be destroyed or clearly marked to show it is no longer valid (e.g. with a line across the page). Only refer to the electronic version of this TSB in TOPIx.

SECTION: 307-00

Transmission Rotary Switch Module - DTC Diagnostics

AFFECTED VEHICLE RANGE:

XF (X250)	Model Year:	2008 Onwards
	VIN:	R00001 Onwards
XJ Range (X351)	Model Year:	2010 Onwards
	VIN:	V00001 Onwards
XK Range (X150)	Model Year:	2010 Onwards
	VIN:	B32753 Onwards

MARKETS:

CONDITION SUMMARY:

Situation:

This bulletin is issued to aid in the diagnosing of Diagnostic Trouble Codes (DTC) for the Transmission Rotary Switch (TRS) Module. A customer may report a concern that the transmission Rotary Switch (TRS) , fail to rise, fails to rotate out of park and or fails to rotate between gears.

This version has been issued to add a Note below 'The following DTCs may be generated by Brake Pedal pressure or Brake Pedal Switch DTCs. Follow the Service Instruction below for Brake Pedal Switch/Brake Pedal Pressure Diagnostics'.

ONOTE: The Transmission Rotary Switch (TRS) is also known by various other descriptions:

Gear Selector Module (GSM)

Electronic Transmission Switch (ETS)

Jaguar Drive Selector

Transmission Control Switch (TCS)

Transmission Shift Module (TSM)

Transmission Range Selector(TRS)

igtriangleonNOTE: Use the table below to help with the diagnosing of the various Diagnostic Trouble Codes (DTC).

NOTE: Any repairs should be carried out as a separate warranty claim.

Cause: There are various root causes which can make the ETS fail to respond to inputs. This bulletin shows the various DTC's that can be stored in the ETS/TCM and the actions to take if this is the case. Suggested Customer Concern Code P01.

Action: Should a customer express concern, follow the Service Instruction outlined below.

WARRANTY:

h

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 DDW 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	CONDITION CODE	CAUSAL PART
ransmission Rotary Switch Module - DTC Diagnostics	10.10.99	0.2 hours	42	XF C2Z22516, XJ C2D17959. XK C2P20671

△ NOTE: Normal Warranty policies and procedures apply.

Use the Diagnostic Trouble Codes (DTC) table below for the Transmission Rotary Switch (TRS) Module fault diagnosis.

CNOTE: X = DO NOT REPLACE TRS Module- Perform the diagnostics specified in SDD/TOPIx Workshop Manual Section 100-00 Diagnostics.

NOTE: Y = Replace the TRS Module.

Diagnostic Trouble Codes (DTC)	TRANSMISSION ROTARY SWITCH (TRS) MODULE - INTERMEDIATE DTC	TRANSMISSION ROTARY SWITCH (TRS) MODULE - PERMANENT DTC	TRANSMISSION CONTROL MODULE (TCM) - INTERMEDIATE DTC	TRANSMISSION CONTROL MODULE (TCM) - PERMANENT DTC
P176A-01	x	Y	Х	х
P176A-13	x	Y	Х	Х
P176A-19	x	Y	Х	Х
P176A-94	x	Y	Х	х
P176C-07	x	0	Х	х
P176C-11	x	Y	Х	х
P176C-12	x	Y	Х	х
P176B-71	x	Y	Х	х
P176C-73	x	0	Х	х
B1087-87	x	х	Х	0
U101B-87	x	х	Х	0
P0814-01	x	Y	Х	х
P0850-02	x	х	Х	х
P1707-07	x	х	Х	х
P1707-77	x	х	Х	х
P1707-72	x	х	Х	х
P0606-47	x	Х	Х	x
P0919-93	x	Х	Х	х
C1B00-68	x	Х	Х	х
P0850-29	x	х	Х	x
P081C-64	x	х	Х	x

NOTE: 0 = Step 1: Perform Diagnostics Specified in SDD/Topix - Step 2: Clear All DTC, Cycle the ignition, Engage the drive then return to the park position, Test with SDD Step 3: If Step 1 and 2 do not resolve issue replace TRS Module.

The following DTCs may be generated by Brake Pedal pressure or Brake Pedal Switch DTCs. Follow the Service Instruction below for Brake Pedal Switch/Brake Pedal Pressure Diagnostics.

△NOTE: The Service Instruction below does not apply to XF vehicles built prior to VIN R47154.

△NOTE: X = DO NOT REPLACE TRS Module- Perform the diagnostics specified in SDD/TOPIx Workshop Manual Section 100-00 DTC Diagnostics.

Diagnostic Trouble Codes (DTC)	TRANSMISSION ROTARY SWITCH (TRS) MODULE - INTERMEDIATE DTC	TRANSMISSION ROTARY SWITCH (TRS) MODULE - PERMANENT DTC	TRANSMISSION CONTROL MODULE (TCM) - INTERMEDIATE DTC	TRANSMISSION CONTROL MODULE (TCM) - PERMANENT DTC
C1D15-64	x	х	Х	Х
P1571-64	x	х	Х	Х
P0571-68	х	х	Х	Х
P0504-62	Х	Х	Х	Х

SERVICE INSTRUCTION:

1. Connect the Jaguar approved battery conditioner/power supply to the vehicle.

- 2. Connect the Symptom Driven Diagnostic (SDD) system and follow the standard process to identify the vehicle.
- 3. Select the session type as 'Measurement Applications'.
- $\textbf{4.} \ \textbf{Select the `Recommendations' tab.}$
- 5. From the 'Recommendations' tab run 'complete data logger'.

6. Select / expand the Brake system tab.



7. Select 'brake fluid hydraulic pressure' and click on the icon shown (see graphic E140285 number 2).

			Vehicle Set	tings Session
Session	Recommendations			
	1			
	Brake fluid hydraulic pressure	(ABS control module)		
	Control module supply voltage.			
	Steering wheel angle - raw			Ģ
	Wheel speed - Rear right wheel speed			
	Wheel speed - Rear left wheel speed			-
	Wheel speed - Front right wheel speed			_
	Wheel speed - Front left wheel speed			(2)
	Vehicle speed			
	Countback pulse counter.			
	Total cycle count			
	Primary apply switch voltage data			
	Primary release switch voltage data	*		
440205	Number of selected signals	1	Update time (estimated)	55ms

8. Expand Engine system.

• Select 'engine input/output parameter - Brake switch 2' then click on the icon shown (See graphic E140286 number 2).



			Engine input/output parameters - Brake switch	
•	Engine input/output parameters - Brake switch 2 🕨	^	[Powertrain control module]	
	Engine input/output parameters - Brake switch		No help currently available	
•	Stop start - Feature status - Flags - Driver's			
	door			
•	Stop start - Feature status - Flags - Driver's			
	safety belt buckle			
	Boost pressure actuator - Bank 1 - Measured			2
,	position			\bigcirc
•	Boost pressure actuator - Bank 1 - Desired			
1	position			
	Particulate filter differential pressure - Measured			
•	Exhaust gas recirculation cooler - Bypass valve	*		
	Number of selected signals	3	Update time (estimated)	165m

E 140286

Session Recommendations

9. Select 'engine input/output parameter - Brake switch' then click on the icon shown (See graphic E140287 number 2).

				🚳 🗐 📛 🚄 Vehicle Settings Se	<u>í</u> , ssion
Session	Re	commendations			
		Engine input/output parameters - Brake switch 2 Engine input/output parameters - Brake switch Stop start - Feature statu oor Stop start - Feature status - Flags - Driver's safety belt buckle Boost pressure actuator - Bank 1 - Measured position Boost pressure actuator - Bank 1 - Desired position Particulate filter differential pressure - Measured		Engine input/output parameters - Brake switch [Powertrain control module] No help currently available 2	
		Exhaust gas recirculation cooler - Bypass valve	~	Lindate time (estimated) 165ms	

E 140287

10. Click on the icon shown.



E 144838

11. Click on the icon shown.

SDD Acce	ess Specialised Updates				Vebicle Settio	🗒 🎑 🚺
Session Recommenda	tions					
Erake fluid hydraulic pressure (ABS control module)	1.480) 9% - 150	125	θż	65	.de	
Engine inputo parameters Eeste veritek						
Engine input/ output parameters Brake rodich 2						
調 策 森 発	Engin	ne input/output parameters -	Brake switch			V =
lange Rover Sport (LSDI) 7	12906 - 18 Apr 2012 12:12 (DVD	128-56 v.193)			The V	/CM is connec

E144839

12. Press the brake pedal. The first graph to change must be the brake light switch (confirm by asking someone to watch brake lights come on). The brake pressure applied, shown in the top bar chart, should be between 1 and 7 BAR.



13. The next graph to change should be the cruise cancel switch. The brake pressure applied, shown in the top bar chart, should be between 4.5 and 14 BAR.



14. Last graph to move should be brake pressure, Please note the reading for this will vary depending on whether the engine is running and foot pressure applied.



 ${\bf 15.}$ Switch the data logger off before disconnecting the SDD from the vehicle.

• If the results show that the brake pedal switch is working as expected do not replace the switch. It will be necessary to investigate the cause of the issue. Please

- If the results show that the brake switch is working as expected up not replace the switch. It will be in use technical support if you need any help.
 If the results show that the brake switch is not working correctly, remove the brake pedal switch and refit.
 If the results still show the brake switch is not working correctly the switch should be replaced.

 $\label{eq:16.1} \textbf{16.} \ \text{Disconnect the SDD} \ \text{and the battery conditioner/power supply}.$