



## **TECHNICAL BULLETIN**

S-TYPE PCM Reflash – Service Action S139 MODEL 2000-01 MY S-TYPE

VIN L00001-M02205

Remove and destroy Bulletin S303-S139, dated 12/00. Replace with this Bulletin. Revisions are marked with a bar and in **bold text**.

## Issue:

A significant change has been introduced in production to the programming of the Powertrain Control Module (PCM) that provides a perceptible enhancement to the response of the engine, transmission, throttle and to the selected mode of transmission operation. In production, this change has been introduced from VIN M02206.

For owners of earlier S-TYPE vehicles to enjoy the same enhanced drivability, we have introduced an Enhancement Program that will enable the new software to be installed into the memory of the PCM. This action is performed using the Worldwide Diagnostic System (WDS) in association with JTP 759/16 or later software installed.

This minor rework should be performed prior to handover (in the case of all unsold vehicles) or at the first service opportunity/next Dealer visit (in the case of all vehicles already in service).

This Service Action supersedes Service Action S129 – no further claims for reprogramming of the PCM under S129 will be accepted. S139 supersedes **all** previous reflash software.

## Action:

Perform this reflash on all S-TYPE vehicles in the VIN range L00001-M02205. This update must be performed on all unsold vehicles before delivery to the customer. It must be performed at the next service opportunity for vehicles already in service.

Do not use the S129 PDU software for any more PCM updates. Remove this software from active use.

**Note:** Use this opportunity to check for any other outstanding service actions or recalls that may need to be performed on the vehicle.



Note: The PCM is described as the ECM when using WDS.

When entering the ECM re-configuration section the user will be prompted to determine the engine serial number on V6 vehicles.

If the first six digits of the engine number are outside the specified serial number range (103981\*\*\* to 127908\*\*\*) the user will be allowed through to re-calibrate the vehicle PCM with a standard set of calibrations.

If the engine serial number falls within the given range the system will automatically divert to a more aggressive set of calibrations.



**ILLUSTRATION 1** 



**ILLUSTRATION 2** 

**Note:** The V6 engine number is located on the bar code label on the engine front cover (Illustration 1) or on the left-hand side of the engine bedplate (Illustration 2). Position the vehicle on a lift as needed to gain access.

**Caution:** Before starting the reprogramming procedure, make sure **DISC ISSUE 16 JTP 759 or later** is installed on the WDS.

- 1. Open hood. Place protective covers over the fenders.
- 2. Temporarily remove the transit isolation device if it is still present on the vehicle and reconnect the battery.
- 3. Switch 'ON' the WDS. (Press green button)
- 4. While the WDS is powering-up, connect the diagnostic cable to the WDS and the vehicle.

**Note:** Ensure that WDS remains in docked position throughout procedure. Ensure socket is securely connected.

- If a previous session exists in the memory of WDS, a pop-up message will appear 'AN INCOMPLETE SESSION WAS FOUND, DO YOU WISH TO CONTINUE THE SESSION?' Select 'NO', then √. (Press check mark on display)
- 6. Wait for pop-up message 'CONFIRM CHOICE', select one item, then  $\sqrt{.}$
- 7. Enter VIN (last six digits), then  $\sqrt{.}$
- 8. Read warning screen, then  $\sqrt{}$ .
- 9. Read second warning screen, then  $\sqrt{.}$
- 10. Wait for pop-up message 'DO YOU WISH TO READ CONFIGURATION INFORMATION FROM THE VEHICLE?' Select 'NO', then √.
- Wait for pop-up message 'IS THE CONFIGURATION CORRECT?' Select 'YES', then √. (Based on the VIN, the display will show 99.25, 00, or 01 as the model year. Early VINs will indicate as 99.25 model year on the WDS.)
- 12. Wait for pop-up message 'DO YOU WISH TO READ THE DTC'S NOW?' Select 'NO', then  ${\bf v}.$
- 13. Wait for pop-up message 'ADAPTIVE DAMPING?' Select one choice, then  $\sqrt{}$ .
- 14. Select the 'VEHICLE CONFIGURATION' tab, which has the symbol showing a wrench over a car.
- 15. Select 'CONFIGURE EXISTING MODULE' from menu, then  $\sqrt{}$ .
- 16. Select 'ENGINE CONTROL MODULE' from menu, then  $\sqrt{}$ .

**Note:** The PCM is described as the ECM when using WDS.

- 17. Connect the WDS cable to the diagnostic link connector as prompted.
- 18. Wait for pop-up message 'ENGINE TYPE'. Select choice, then  $\sqrt{}$ .
- 19. Wait for pop-up message 'TRANSMISSION'. Select choice, then  $\sqrt{.}$
- 20. Wait for pop-up message 'Does the vehicle have an engine number between 103981\*\*\* to 127908\*\*\*"? Select choice, then  $\sqrt{.}$
- 21. Select Calibration Type from menu entitled 'CALIBRATION SELECT', appropriate to the vehicle market specification, then  $\sqrt{.}$

**Note:** When highlighting a Calibration File, all the markets that are affected will be displayed on right-hand side of screen. Ensure the Calibration File is correct for the vehicle specification.

VIN L0000	1 – L86901			
Vehicle Specification		Market	Calibration*	Use for:
3.0L V6	Auto Transmissior	n Federal	XDAF3B4	USA & Canada
			XDAF3BZ	
3.0L V6	Auto Transmissior	n European	XDAF3C4 XDAF3CZ	Mexico
4.0L V8	Auto Transmission	Federal	XDAF2J8	USA & Canada
4.0L V8	Auto Transmission	European	XDAF2KZ	Mexico
	* based on V6 engine n	umber		
VIN L86902	2 – M02205			
Vehicle Specification		Market	Calibration*	Use for:
3.0L V6	Auto Transmissior	n Federal	XDAF3BY	USA & Canada
			XDAF3B2	
3.0L V6	Auto Transmissior	n Mexico	XDAF3S4	Mexico
			XDAF3S2	
4.0L V8	Auto Transmission	Federal	XDAF2J3	USA & Canada
4.0L V8	Auto Transmission	Rest of World	XDAF2RZ	Mexico
	* based on V6 engine n	umber		

**Note:** These calibration files offer two separate improvements: the shift quality improvement (Technical Bulletin S307-07) and the rectification of the false flagging of DTC P1383 or P1388 (Technical Bulletin S303-09). If a vehicle exhibits both concerns, it is not necessary to perform these bulletins, since both improvements will result when performing this service action.

22. Wait for pop-up message 'Warning! Selecting the wrong calibration file will cause the emission specification of the vehicle to be incorrect. Do you wish to continue Set ignition switch to ignition OFF?' Select 'YES', then  $\sqrt{.}$ 

- 23. Wait for pop-up message 'Set ignition switch to ignition ON'. Switch ignition 'ON', then  $\sqrt{.}$
- 24. Wait for pop-up message 'CALIBRATION FILENAME OK: \*\*\*\*\*\*\* ' followed by a reminder to fill out the update label. Note the revised PCM part number as displayed by the WDS.
   'Do you wish to continue? Select 'YES', then √.
- 25. Wait for pop-up message 'Set ignition switch to OFF'. Switch ignition 'OFF', then  $\sqrt{.}$
- 26. Wait for pop-up message 'Set ignition switch to ignition ON'. Switch the ignition on, then  $\sqrt{}$ .
- 27. The pop-up message 'Programming in progress' will appear. (This takes approximately six minutes).



## **ILLUSTRATION 3**

**Note:** While WDS is reprogramming PCM, apply generic update label (JJM 998499/20) alongside the VCATS label in the trunk with revised part number (as noted in step 24), and date of re-configuration added to label (Illustration 3).



28. On both 3.0L V6 and 4.0L V8 vehicles, visually inspect air cleaner for loose, faulty or damaged clips. (Illustration 4)



**ILLUSTRATION 4** 

29. If the vehicle is 4.0L V8, visually inspect lower edge of the spark plug coil covers for water seepage. (Illustration 5). If the vehicle is a 3.0L V6, continue to step 28.

**Note:** If watermarks are visible, remove the coil cover to identify if any coils may be corroded. If corrosion is found, replace any damaged coils, and replace the affected coil cover with part no. AJ8 3078.



**ILLUSTRATION 5** 



- 30. On all vehicles, wait for pop-up message 'Set ignition switch to OFF'. Switch ignition 'OFF', then  $\sqrt{}$ .
- 31. Wait for pop-up message 'Set ignition switch to ON'. Switch ignition 'ON', then  $\sqrt{.}$
- 32. Wait for throttle contol unit application setup to complete.
- 33. Wait for pop-up message 'Set ignition switch to OFF'. Switch ignition 'OFF', then  $\sqrt{2}$ .
- Wait for pop-up message
  'The programming of the engine control module has completed successfully. Calibration file updated to xxxxxx', Revised part no. xxxxxx. Make sure a new generic label has been fixed alongside the PECUS label in the luggage compartment', then √.
- 35. Disconnect diagnostic cable from the vehicle and the WDS.
- 36. Shut down the WDS.

## **INSTALL AUTHORIZED MODIFICATION LABEL**

Enter your dealer number and the date on the Authorized Modification Label (Illustration 6). Apply the label to **the left B-post below the striker.** Then apply the clear sheet over the label. Place the label over any S129 label that might be present. Do not cover an S120 label if present.

# To avoid confusion, discard any S120/S129 or S129 only stickers remaining in inventory.



**ILLUSTRATION 6** 

## Parts Information:

#### DESCRIPTION

Generic update label

## PART NUMBER QTY JJM 998499/20 1

To obtain S139 Authorized Modification Labels from the Product Legislation and Compliance Department, refer to Administration Bulletin 6-94 (USA) or 6-16/02 (Canada) titled "Availability of Service Action and Recall Authorized Modification Labels/ stickers."

#### **DESCRIPTION**

S139 Authorized Modification label

#### PART NUMBER

S 139 STK

Date of issue 12/00 Amended 07/02

JAGUAR

## Warranty Information:

## GLOBAL ACES

Warranty claims should be submitted quoting the information found in the table below. This will result in payment of the stated time and, where applicable parts/miscellaneous expense codes as listed.

Drive in/drive out may only be claimed when the vehicle has been brought in for this action alone to be undertaken.

Use S139 as the program code with the relevant option code and **also enter** the SRO (s) and parts details on the claim applicable to the repair completed.

## Service Action S139

3.0L
2000 MY VIN YFL00600-YFL77677
2001 MY VIN 1FL77678-1FM02205
4.0L
2000 MY VIN YGL00600-YGL77677
2001 MY VIN 1GL77678-1GM02205

Program Code	Option	Description	SRO	Time	Causal Part Number	Causal Part Description	Qty
S139	В	Reprogram PCM	18.91.26	0.4 hrs.	XR8 14085 XR8 18437	PCM VIN L00001- L86901 PCM VIN L86902- M44997	1
S139	С	Reprogram PCM	18.91.26	0.4 hrs.	XR8 14085 XR8 18437	PCM VIN L00001- L86901 PCM VIN L86902- M44997	1
		Drive in/Drive out	10.10.10	0.1 hrs.			

**NOTE:** Always perform a DDW claim search first to determine whether this service action has been performed on this vehicle. The warranty selection under the vehicle inquiry will give a listing of all claims against the vehicle. If **S139** appears in the fault code field, do not perform this service action.