

DTC 247 - RIGHT HAND SIDE IMPACT AIR BAG CIRCUIT POWER STAGE ERROR

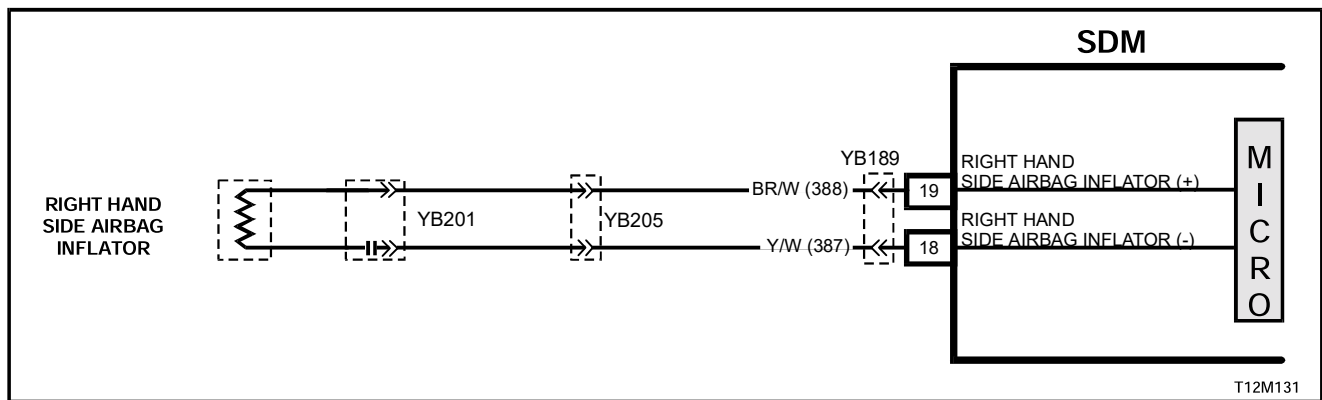


Figure 12M-80

CIRCUIT DESCRIPTION

At ignition on, the SDM performs an initial system self check of the SDM power stages. If during this initial self test the SDM detects a fault with the Right Hand Side Impact Air Bag Circuit power stage a current DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage Error will set. On completion of the initial system self test the SDM then performs a test of the Right Hand Side Impact Air Bag Circuit. If the SDM detects a problem with this circuit the associated Right Hand Side Impact Air Bag Circuit DTC will be set and the DTC 247 Right Hand Side Impact Air Bag Circuit Air Bag Circuit Power Stage Error will become a history DTC.

DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage Error will set if a fault occurs in the Right Hand Side Impact Air Bag, connector YB201 with the in-built capacitor, connector YB205, the SRS wiring harness, connector YB189/YB190 or SDM.

When a history DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage Error sets, the SDM illuminates the SRS warning lamp. Should the fault conditions detected by the SDM clear during the same ignition cycle the code will remain a history DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage Error for all ignition cycles until cleared. The SRS warning lamp will remain on for the remainder of the ignition cycle.

When a DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage Error sets, the SDM illuminates the SRS warning lamp for the remainder of the ignition cycle. Should the fault conditions detected by the SDM clear during the same ignition cycle the code will remain a history DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage Error for all ignition cycles until cleared. The SRS warning lamp will also remain illuminated until the history DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage Error is cleared.

If a DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage is set, dependent on where the fault is, the Right Hand Pre-Tensioner may not operate.

ACTION REQUIRED

If DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage Error and any other DTC is set then the diagnostics for the other DTC should be carried out first. For example if a DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage Error and a DTC 101 Right Hand Side Impact Air Bag Circuit Resistance High are set, the diagnostics for a DTC 101 Right Hand Side Impact Air Bag Circuit Resistance High should be carried out first.

If only a DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage Error is set then the SDM should be replaced.

NOTE: An intermittent in the Right Hand Side Impact Air Bag Circuit may cause a DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage Error to set.

After the fault has been rectified, ensure that all SRS components are reconnected, clear DTCs, enable the SRS and verify the correct operation of the system (i.e. warning lamp not illuminated after five seconds of ignition being switched ON).

NOTE: After replacement, the front seat should be put through its full adjustment (forward/backwards, full recline and up and down) to ensure the wiring harness does not foul with any of the seat components.

Test Description

The following numbers refer to Step numbers in the following diagnostic chart.

1. Uses TECH 2 to check if a DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage Error is history code, and if any other Right Hand Side Impact Air Bag Circuit current or history DTCs are set. If any other DTCs are set refer to these DTCs first.
2. Checks for intermittent fault by monitoring TECH 2 screen during ignition on cycle. If screen display changes during a wiring 'wiggle' test, a fault with the wiring is at that location.
3. If no other DTCs are set and there are no intermittents in the Right Hand Side Impact Air Bag Circuit then the SDM should be replaced.

Notes on Diagnostic Chart

- For all wiring harness checking procedures, refer to VT Series 1 Service Information, WIRING DIAGRAMS, **SECTION 12P**.
- Refer to VT Series 1 Service Information Section 12M, SRS VERSION 6.2, **2.8 SRS WIRING REPAIR** before conducting any SRS wiring harness repairs.

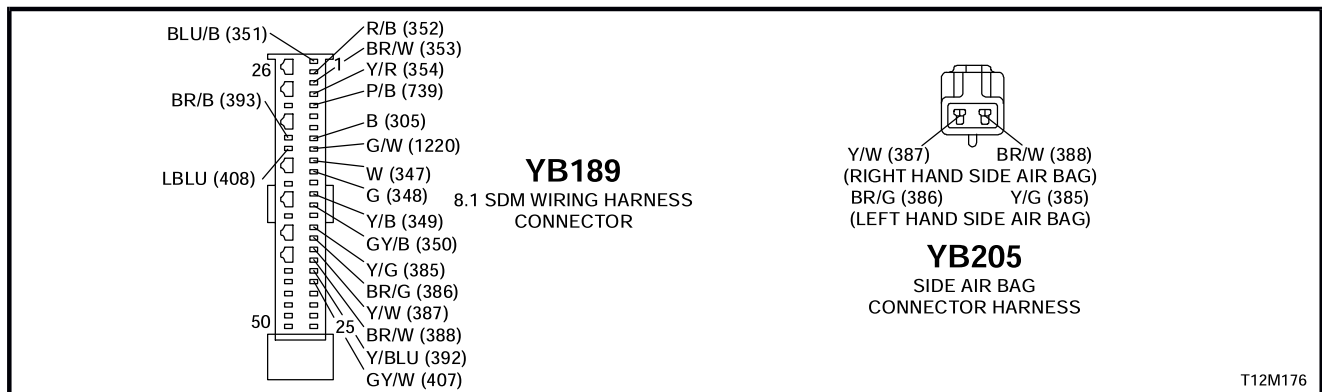


Figure 12M-81

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| STEP | ACTION | VALUE | YES | NO |
|--|---|-------|--|---------------|
| 1. | <ul style="list-style-type: none"> Install TECH 2 to DLC. Select Body / SRS / Diagnostic Trouble Codes / Read DTC Information. Is a DTC 247 Right Hand Side Impact Air Bag Circuit Power Stage Error a history DTC, and are any other Right Hand Side Impact Air Bag Circuit DTCs set? | | Go to other Right Hand Side Impact Air Bag Circuit DTC diagnostic chart in this Section. | Go to Step 2. |
| 2. | <ul style="list-style-type: none"> With TECH 2 still connected, select Diagnostic Trouble Codes / Clear DTC Information and clear all (if any) DTCs. Select Diagnostic Trouble Codes / Read DTC Information and monitor the TECH 2 screen display to see if it changes status while performing the following: Put right hand front seat through it's full adjustment (forward / backward, up / down and full recline). 'Wiggle' SRS wiring harness, at all accessible locations between the SDM and the side impact air bag wiring harness connector YB205. Does TECH 2 screen display change status from No Diagnostic Trouble Codes? | | Go to applicable DTC chart in this Section. | Go to step 3. |
| 3 | <ul style="list-style-type: none"> Replace SDM, refer to VT Series 1 Service Information Section 12M, SRS VERSION 8.0 & 8.1, 2.4 SENSING AND DIAGNOSTIC MODULE (SDM). Recheck circuit to verify repair. | | | |
| WHEN ALL DIAGNOSIS AND REPAIRS ARE COMPLETED, ENSURE ALL SRS COMPONENTS ARE RECONNECTED, CLEAR ALL DTC'S, ENABLE THE SRS AND VERIFY CORRECT OPERATION | | | | |