SUBJECT:	O2 SENSOR REPLACEMENT AND ECU UPDATE FOR DTC P0133

GDS 🔵 HYUNDAI Global Diagnostic System **ECU Update**

Description:

This bulletin provides information related to B1S1 O2 Sensor replacement and ECM (Engine Control Module) software update for certain 13-15MY Veloster Turbo vehicles with check engine light ON for:

- DTC P0133 - Heated Oxygen Sensor (HO2S) B1S1 - Slow response.

The O2 sensor may have developed heavy carbon buildup in use.   Repair requires replacing the O2 sensor and performing an ECM Update. There is no vehicle performance issue associated with this condition.

Applicable Vehicle: Certain 2013-2015MY Veloster (FS) with **1.6L Turbo** GDI engines

GDS Information:

System Selection: **ENGINE (ECM)**

Event #	Description
403*	FS 1.6T-GDI FRONT LAMBDA SENSOR LOGIC IMPROVEMENT

(*or use a later available event as listed in the GDS ECU Update screen if one is available.)

NOTE:

- Refer to TSB **15-GI-001** for the tablet-based Mobile GDS ECU update procedures.
- Refer to TSB **15-GI-002** for the PC-based GDS ECU update procedures.

Parts Information:

Part Name	Part Number
SENSOR ASSY-OXYGEN	39210-2B250

Warranty Information:

Model	Op Code	Operation	Op Time	Causal P/N
VELOSTER (FS)	**39210F09**	O2 SENSOR REPLACEMENT AND ECU UPGRADE	0.6 M/H	392102B250

Service Procedure:

1. Replace the B1S1 O2 Sensor located as shown in the diagram on the next page.
2. Perform the ECU Update listed above and then erase all DTC(s).

B1S1 Oxygen Sensor Location:

ECU Update Warnings:

⚠WARNING

GDS ECU Update Vehicle Battery Voltage Warning:
If voltage is below 12 volts as per the below GDS warning, then select **Back** and run the engine at least 15 minutes to reach an adequate battery state of charge to prevent ECU Update failure. Cycle the ignition **OFF/ON** before retrying ECU update again.

NOTICE

You must initially perform GDS ECU Update in Auto Mode.
- If the ECU Update starts but then fails in Auto Mode, perform the update in Manual Mode to recover.

ROM ID Information Table:

NOTE: **IMMO** = Start Stop Button, **NON IMMO** = Key Start

Model	TM	IMMO	Part No	OLD ROM ID	NEW ROM ID
FS	AT	No (Key)	39118-2BBK5	GTFS-CNU6PS00C00 GTFS-CNU6PS01C00 GTFS-CNU6PS02C00 GTFS-CNU6PS03C00	GTFS-FNU6PF02C00
		Yes (SSB)	39118-2BBJ5	GTFS-CNU6QS00C00 GTFS-CNU6QS01C00 GTFS-CNU6QS02C00 GTFS-CNU6QS03C00	GTFS-FNU6QF02C00
			39118-2BBR5	GTFS-ENU6QS00C00 GTFS-ENU6QF00C00	
			39118-2BBR1 39118-2BBR2	GTFS-FNU6QS00C00 GTFS-FNU6QS01C00	
	MT	No (Key)	39118-2BBK0	GTFS-CNU6ES00600 GTFS-CNU6ES01600 GTFS-CNU6ES02600 GTFS-CNU6ES03600	GTFS-FNU6EF03600
			39118-2BBS0	GTFS-ENU6ES00600 GTFS-ENU6ES01600 GTFS-ENU6EF01600	
			39118-2BBS6	GTFS-FNU6ES00600 GTFS-FNU6ES01600 GTFS-FNU6ES02600	
		Yes (SSB)	39118-2BBJ0	GTFS-CNU6FS00600 GTFS-CNU6FS01600 GTFS-CNU6FS02600 GTFS-CNU6FS03600	GTFS-FNU6FF03600
			39118-2BBR0	GTFS-ENU6FS00600 GTFS-ENU6FS01600 GTFS-ENU6FF01600	
			39118-2BBR6	GTFS-FNU6FS00600 GTFS-FNU6FS01600 GTFS-FNU6FS02600	

Manual Mode Password Information Table:

MENU	PASSWORD
FS 1.6T-GDI AT -IMMO 39118-2BBK5/S1/S2/S5	1825
FS 1.6T-GDI AT +IMMO 39118-2BBJ5/R1/R2/R5	1826
FS 1.6T-GDI MT -IMMO 39118-2BBK0/S0/S6	1827
FS 1.6T-GDI MT +IMMO 39118-2BBJ0/R0/R6	1828

NOTE: **IMMO** = Start Stop Button, **NON IMMO** = Key Start