

GROUP	NUMBER
CAMPAIGN	13-01-001-1
DATE	MODEL(S)
MARCH	Veloster (FS)

Technical Service Bulletin

#### SUBJECT

T VELOSTER INSTRUMENT PANEL UPDATE (SERVICE CAMPAIGN TN7)

This TSB supersedes TSB 13-01-001 to include Retail Vehicles.

# **\*** IMPORTANT

\*\*\* Dealer Stock and Retailed \*\*\*

Dealers must perform this Service Campaign on all affected vehicles prior to customer retail delivery and whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the Service Department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

**Description:** This bulletin describes the service procedure to update the Instrument Panel Module (IPM) software for the Veloster (FS).

Applicable Vehicles: 2012-13 Model Year Veloster

Applicable Production Date Range: May 24, 2011 to Dec. 17, 2012

\* NOTE

- The IPM update can be performed using Auto or Manual Mode.
- The IPM update should be performed with the passenger door open. (Driver door should remain closed and undisturbed during the service procedure)
- The IPM update should be performed in the 'IGN KEY OFF' position. (IGN ON/OFF toggle will be stated within this bulletin where it is needed.)
- The IPM update applies to vehicles with P/N (95400-2V070, 95400-2V071, 95400-2V040, 95400-2V041)
- The IPM update applies to both keyless entry systems and key based entry systems.

### WARRANTY INFORMATION

MODEL	OP CODE	OP NAME	OP TIME
Veloster (FS)	20C130R1	VELOSTER IPM UPDATE	0.3 M/H

Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

#### SERVICE PROCEDURE

**CAUTION** 

#### **VELOSTER IPM UPDATE**

A) Make sure the vehicle's battery has a reasonable charge. If the vehicle has been in storage for days, run the engine to ensure an adequate battery charge state before update begins.

B) Turn off all lamps (Do not leave the head lamp switch in auto mode.) and all accessories.

(Including heater, A/C, blower, radio, seat warmer, defroster, etc.) to prevent the battery from being discharged during the update.

C) Perform the update with the ignition switch in the off position.

*D*) Be careful not to disconnect any cables connected to the vehicle or GDS <u>during</u> the update, unless a procedure requests this.

E) Do not start the engine or turn on the ignition <u>during</u> the update.

#### 1) GDS setup procedure.



A: Diagnostic terminal / B: VCI (Vehicle Communication Interface) / C: USB (Universal Serial Bus) cable / D: Power supply cable / E: DLC cable

2) Connect the power supply cable to the diagnostic terminal.

### \* NOTE

**If attempting to perform the update with the power supply cable disconnected** from the diagnostic terminal, make certain that the diagnostic terminal is charged enough for the update. If not, the update may fail in progress. Therefore, it is strongly recommended to connect the power supply cable to the diagnostic terminal during the update procedure.

3) Connect the USB cable between the VCI and the diagnostic terminal.

*	NOTE

When performing the update using the GDS, wireless communication between the VCI and the diagnostic terminal is NOT available. Therefore, be sure to connect the USB cable between the VCI and the diagnostic terminal.

- 4) Turn on the GDS and diagnostic terminal with the ignition key in the OFF position.
- 5) Automatic update procedure
- 6) Start the GDS program and select Vehicle or ECU upgrade.



7) The following pop up will be shown after the VIN scan completes, press OK to continue to step (8).

	GDS VIN Search To search vehicle, Ple M	ase insert VIN	SB. On VML: Off Inte Search Auto VIN Year	rnet: On Clear En	Frevious Vehicle
	ACCENT(LC) ACCENT(MC) ACCENT(RB) ACCENT(X3) AZERA(HG) AZERA(HG) AZERA(TG) ELANTRA COL ELANTRA GT(( ELANTRA TOU ELANTRA(HD) ELANTRA(HD) ELANTRA(HD) ELANTRA(RD)	GDS This Vehicle cann GDS_UR_0004	비 ot support VIN function.		
	Gr Fault Cor	oup	OK	Symptom	
Se				Cance	Tesk Opdarie

8) Select the vehicle Model, Year and Engine.

9) After the vehicle Model, Year and Engine type is selected, choose **BCM** on the following screen.

GDS VIN Search	rpet : On
To search vehicle, Please insert VIN       Search       Auto VIN         VELOSTER(FS)       2012	Clear Previous Vehicle G 1.6 GDI
System	Selected System
ENGINE A/T ABS/ESC AIRBAG AIR/CON EPS	Selected System
Group	Symptom
Fault Code Searching OK	Cancel

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10) Next select Instrument Panel Module from the small pop up window then press OK.

GDS VIN Search	ff 🧖 Internet : On 🗐 🗐
To search vehicle, Please insert VIN Search	Auto VIN Clear Previous Vehicle
VELOSTER(FS) 2	012 G 1.6 GDI
System	
Select System	Selected System
All Systems Instrument Panel Module Cluster Module	
OK Cancel	Symptom
Fault Code Searching OK	Cancel

11) With the *Instrument Panel Module* chosen as the **Selected System**, press the **OK** button.



12) After the system has been set up the menu will automatically transition to the ECU Upgrade screen.

13 From the ECU Upgrade screen select **Auto Mode** then press the **Next** button.





14) Select BCM then press the OK button on the screen shown below.



15) The ROM ID of the IPM will be read as shown in the image below.



**16)** The following failure message could be shown.



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17) After the ROM ID is successfully read it will be shown in the Current ROM ID field, select <u>299.FS IPM (RKE) LOGIC IMPROVEMENT</u>, and then press the Upgrade button to begin the process.

		VCI : USB On 🛛 🌑	VMI : Off	linternet : On		-×
GD	Preparation	Diagno	sis Ve	ehicle S/W Managemer	nt Repair	0
Vehicle 🕨 VELOSTE	R(FS)/2012/G 1.6 GDI		System	Body Control/Inst	rument Panel Module	0 5
Vehicle S/W Management	ECU Upgrade					
ECU Upgrade 🗾	Event Group	Even	tList			TSB
Mode Auto Mode	<ul> <li>Current ROM II</li> <li>Latest ROM ID</li> </ul>	D [103 [111				
►System BCM	299.FS IPM(RKE)		ENT revicus	Upgrade		
	<ul> <li>Event select</li> <li>Review and</li> <li>Select repro</li> <li>Click the Up</li> </ul>	tion understand relate gramming event grade button to l	ed TSB for from Upgra begin ECU i	vehicle reprogramr de Event pull dowr upgrade.	ning. 1 menu above.	*
ID Register						
Option Treatment						
Data Treatment						
Inspection / Test						
ECU Mapping Verification						×
Setup Manual	TSB Case Analysis	DTC Current Data	Actuation Test	Flight Record DVQM	Oscilloscope Simulation Test	Internet Update

18) Before the update proceeds, the battery voltage will be checked, If the battery state of charge is good the message below will be shown. Skip step (19) if this message is shown.

<ul> <li>Latest ROM ID</li> </ul>	111	
SIPM : 95400-2V070/7	Information	
	BATTERY VOLTAGE:12.12V	
	Voltage is OK. Press OK to upgrade ECU. Press CANCEL to return to previous screen.	
CAUTION * During the ECU Ur Failure to follow the		
1) DO NOT operate ar 2) DO NOT disturb or ( 3) DO NOT turn off the 4) DO NOT start the v 5) DO NOT operate any	OK Canc	el

19) If the voltage is below 12 volts a prompt shown below will be displayed.

Before continuing place a charger on the battery then press **OK** to continue.



20) The information pop up for the required Ignition state and passenger door state will be shown one final time before update begins. Press **OK** on the information pop up if the IGN and passenger door states are correct.



21) The following screen is an example of the update progress.



22)

The following will be displayed after the download reaches 100%.



23) The information screen shown below will be the final information results after the update is complete.

		VCI : USB On 🛛 🌔	VMI : Off	Internet :	On				- ×
GD	Preparation	Diagnos	sis V	ehicle S/W N	lanagemen	it F	Repair		0
Vehicle > VELOSTER	(FS)/2012/G 1.6 GDI		System	Body C	ontrol/Instr	ument Pane	l Module		• =
Vehicle S/W Management	🛓 ECU Upgrade								
ECU Upgrade 🗾	<ul> <li>Event Group</li> </ul>	Event	List				Carlos Sec	TSB	
• Mode Auto Mode	<ul> <li>Current ROM II</li> <li>Latest ROM ID</li> </ul>	) [103 [111							
►System BCM	299.FS IPM(RKE)	OGIC IMPROVEM	ENT					81 - N	
► Event Group 299.FS IPM(RKE) LOG		Th	e ECU Upgrad R'	le is successf OM ID : 111	ully finished	I.			
ID Register	CAUTION *During the ECU Failure to follow 1, DO NOT operate	Ur thu							*
Option Treatment	2, DO NOT disturb 3, DO NOT turn off	or th		OK		1.71.51			
Data Treatment	4. DO NOT start the 5. DO NOT operate	al al	New Contest	-UN					
Inspection / Test ECU Mapping Verification I									×
Setup Manual TS	SB Case Analysis	DTC Current Data	Actuation Test	Flight Record	DVQM	Oscilloscope	Simulation Test	Internet Update	•

24) Update procedure is complete using Auto Mode.

Continue to step (25) below for Manual mode procedure.

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- 25) To update the IPM using the Manual Mode option follow steps <u>1-12</u> above.
- 26) After completing procedure 1-12 above select the Manual Mode button while on the ECU Upgrade screen and then click Next.



27) From the system selection screen choose BCM and then click OK.



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- 28) In Manual Mode the screen transitions directly to the software selection screen.
- 29) Select the software <u>FS IPM : 95400-2V070/71</u> displayed in the Event Group field, and then press Upgrade button.



30) Enter the password <u>2071</u> and then click the OK button.



31) Before the update proceeds, the battery voltage will be checked, If the battery state of charge is good, the message below will be shown. Proceed to procedure (33) if this message is displayed.

			VCI : U	SB On 🏾 🔍	VMI : Off	🍈 Internet	: On			- ×
GD	Prep	paration		Diagnos	sis	Vehicle S/W I	Managemen	it F	Repair	0
Vehicle 🕨 VELOSTER	R(FS)/2012	2/G 1.6 GDI			System	Body	Control/Instr	ument Pane	I Module	0 2
Vehicle S/W Management	ECU L	Jpgrade								STATE AND
ECU Upgrade 🗾	(-	Event		Event	List					TSB
► Mode Manual Mode	● Curr ● Late	rent ROM IE est ROM ID	)	111						
►System BCM	FS IPM	1:95400-2V	070/7	Informatic	n BAT		GE:12.12V			
► Event Group 299.FS IPM(RKE) LOG					Pres Pre t	Voltage is 0 s OK to upgra ss CANCEL to o previous sc	DK. ade ECU. o return reen.			
ID Register Option Treatment Data Treatment Inspection / Test	<ul> <li>CA + Dur Failur         <ol> <li>DO</li></ol></li></ul>	NOT opera NOT disturt NOT disturt NOT turn o NOT start t NOT opera NOT opera	UUr the or o ff the he vi ate any		OK nicles othe	er systemst	Car	ncel mroi, lignur	g,	*
ECU Mapping Verification I	TSB Cas	e Analysis	DTC	Current Data	Actuation Test	Flight Record	DVQM	Oscilloscope,	Simulation Test	Internet Update

**32)** If the battery state of charge is low, the pop up below will be displayed. If this is shown place a battery charger on the battery before proceeding to procedure **(33)**.



33) The information pop up for the required <u>Ignition state</u> and <u>passenger door state</u> will be shown one final time before update begins. Press OK on the information pop up if the IGN and passenger door states are correct.



34) If the failure in the image below occurs, follow the steps in the note; Manual Mode failure message.





seconds then turn ignition back to the off position. Verify GDS power is on, and then press OK to retry Update.

2) If step (1) above does not work. Disconnect the (-) battery terminal then reconnect after 20 seconds and press ok to retry the Update.

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35) The information screen shown below will be shown after the update is 100% complete.

	<u></u>	CI : USB On 🛛 🕚	VMI : Off	Internet	: On				- X
GD	Preparation	Diagnos	sis	/ehicle S/W I	Managemer	nt F	Repair	1000	0
	FS)/2012/G 1.6 GDI	a de antigen de la competencia de la competencia	System	Body (	Control/Instr	ument Pane	el Module		08
Vehicle S/W Management	ECU Upgrade		allen and see		17.30				a started and
ECU Upgrade 🗾	• Event	Event	List				CTANE TO	TSB	
► Mode Manual Mode	<ul> <li>Current ROM ID</li> <li>Latest ROM ID</li> </ul>	111							
►System BCM	FS IPM : 95400-2V07	0/71							
Event Group 299.FS IPM(RKE) LOG		The	≥ECU Upgra	de is success ROM ID : 111	fully finishe	1.			
ID Register	CAUTION + During the ECU Failure to follow 1 1) DO NOT operate								*
Option Treatment	2) DO NOT disturb ( 3) DO NOT turn off			OK					
Data Treatment	4) DO NOT start the 5) DO NOT operat		(Marries						
ECU Mapping Verification I	audio, etc.)	- Million - Million							*
Setup Manual TS	B Case Analysis DT	C Current Data	Actuation Test	Flight Record	DVQM	Oscilloscope	Simulation Test	Inter	ate

36) End of procedure, IPM update using Manual Mode is complete.