

 HYUNDAI Technical Service Bulletin	GROUP CAMPAIGN	NUMBER 21-01-023H-3
	DATE OCTOBER, 2021	MODEL(S) APPLICABLE VEHICLES BELOW
SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)		

This TSB supersedes TSB# 21-01-023H-2 due to new models added to Applicable Vehicles list.

★ IMPORTANT

***** Retail Vehicles *****

Dealers must perform this Service Campaign 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 (VIS)" via WEBDCS to identify open campaigns.

Description:

Hyundai is conducting a campaign to enhance the knock sensor software to detect abnormal engine bearing noise before potentially severe engine damage occurs. If abnormal engine bearing noise is detected, the Malfunction Indicator Lamp (MIL) will blink continuously, and the vehicle will be placed in Engine Protection Mode allowing the customer to drive to the nearest Hyundai dealer for diagnosis and repair. In addition, DTC P132600 will be recorded in the ECM. The vehicle can continue to be operated for a limited time in Engine Protection Mode, but it will accelerate slower and have a reduced maximum speed. Engine RPMs will be limited to approximately 1800-2000 RPM.

Applicable Vehicles:

- Certain 2010-2012 MY Santa Fe (CM) vehicles with Theta II 2.4L MPI engines
- Certain 2012-2017 MY Veloster (FS) vehicles with Gamma 1.6L GDI engines
- Certain 2010-2013 MY Tucson (LM) vehicles with Theta II 2.4L MPI engines
- Certain 2011-2015 MY Sonata Hybrid (YF HEV) vehicles with Theta II 2.4L MPI Atkinson engines
- Certain 2014MY Elantra Coupe (JK) vehicles with Nu 2.0L GDI engines
- Certain 2014-2016 MY Elantra (MD) vehicles with Nu 2.0L GDI engines
- Certain 2014-2015 MY Tucson (LM) vehicles with Nu 2.0L GDI engines
- Certain 2014-2017 MY Elantra GT (GD) vehicles with Nu 2.0L GDI engines
- Certain 2016-2017 MY Sonata Hybrid/Plug-In (LF HEV/PHEV) vehicles with Nu 2.0L GDI engines
- Certain 2016-2017 MY Tucson (TL) vehicles with Nu 2.0L GDI engines

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)**GDS Information:**

Event #	Description
644	CMA 2.4MPI - IMPROVED KSDS LOGIC APPLICATION
663	FS 1.6 GDI - IMPROVED KSDS LOGIC APPLICATION
690	LM 2.4MPI - IMPROVED KSDS LOGIC APPLICATION
713	YF HEV 2.4 MPI - IMPROVED KSDS LOGIC APPLICATION
717	JK Nu 2.0 GDI - IMPROVED KSDS LOGIC APPLICATION (BASE)
715	MD Nu 2.0 GDI - IMPROVED KSDS LOGIC APPLICATION (BASE)
625	LM 2.0GDI - IMPROVED KSDS LOGIC APPLICATION
730	GD Nu 2.0 GDI - IMPROVED KSDS LOGIC APPLICATION (BASE)
733	LF HEV/PHEV 2.0GDI - IMPROVED KSDS LOGIC APPLICATION
739	TL Nu 2.0 GDI (16~17MY) - IMPROVED KSDS LOGIC APPLICATION (BASE)

NOTES:

- Refer to TSB 15-GI-001 for additional tablet-based Mobile GDS ECU update information.
- After the ECU Upgrade process shows 100% complete, **cycle the ignition key to OFF for at least 30 seconds to reset the control unit**. This step is important for establishing normal powertrain communication and to prevent system errors.
- Clear DTC(s) present after the ECU update.
- Start engine to confirm proper operation of the vehicle.

⚠ WARNING**GDS Vehicle Battery Voltage Warning:**

If voltage is below 12 volts as per the 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.

Warranty Information:

MY / Engine / Model	Op Code	Operation	Op Time	Causal P/N	Nature	Cause
10-12MY Theta II 2.4L MPI Santa Fe (CM)	10D021R0	ECM UPGRADE	0.3 M/H	39104-2G341	E13	ZZ3
12-17MY Gamma 1.6L GDI Veloster (FS)	10D021R1			39110-2BBH3		
10-13MY Theta II 2.4L MPI Tucson (LM)	10D021R2			39106-2G800		
11-15MY Theta II 2.4L MPI Sonata Hybrid (YF HEV)	10D021R3			39105-2G910		
14MY Nu 2.0L GDI Elantra Coupe (JK)	10D021R4			39137-2EJA0		
14-16MY Nu 2.0L GDI Elantra (MD)	10D021R5			39135-2EMA0		

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)

14-15MY Nu 2.0L GDI Tucson (LM)	10D021R6			39137-2ELC0	
14-17MY Nu 2.0L GDI Elantra GT (GD)	10D021R7			39137-2EGB0	
16-17MY Nu 2.0L GDI Sonata Hybrid/Plug-In (LF HEV/PHEV)	10D021R8			39161-2EEB0	
16-17 MY Nu 2.0L GDI Tucson (TL)	10D021R9			39133-2ETA0	

NOTE 1: Submit claim on Campaign Claim Entry Screen

NOTE 2: If a part that is not covered by this campaign is found in need of replacement while performing this campaign and the affected part is still under warranty, submit a separate claim using the Same Repair Order. If the affected part is out of warranty, submit a Prior Approval Request for goodwill consideration prior to performing the work.

NOTICE

You must initially perform all GDS ECU Updates 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:

- Perform the ECM Update.
- Verify the ECM ROM ID before updating the software. Refer to the table below.
- **IMMO (O)** = Start Stop Button
- **NON IMMO (X)** = Key Start

MODEL	TM	IMMO	ECM P/N	ECM ROM ID	
				OLD	NEW (EVENT #644)
Santa Fe (CM) 2.4L MPI (10MY)	AT	O	39104-2G330	FAC4RLKA	FAC4RLKB
		X	39104-2G340	FAC4MLKA	FAC4MLKB
	MT	O	39114-2G330	FAC4RL1K	FAC4RL2K
		X	39114-2G340	FAC4ML1K	FAC4ML2K
Santa Fe (CM) 2.4L MPI (11MY)	AT	O	39104-2G331	FBC4RM2A FBC4RM2B FBC4RQ0A	FBC4RQKA
		X	39104-2G341	FBC4MM2A FBC4MM2B FBC4MQ0A	FBC4MQKA
	MT	O	39114-2G331	FBC4RM2A FBC4RM2B FBC4RQ0A	FBC4RQ1K
		X	39114-2G341	FBC4MM2A FBC4MM2B FBC4MQ0A	FBC4MQ1K

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)

Santa Fe (CM) 2.4L MPI (12MY)	AT	O	39104-2G332	FCC4RQ0A FCC4RR1A	FCC4RRKA
		X	39104-2G342	FCC4MQ0A FCC4MR1A	FCC4MRKA
	MT	O	39114-2G332	FCC4RQ0A FCC4RR1A	FCC4RR1K
		X	39114-2G342	FCC4MQ0A FCC4MR1A	FCC4MR1K

MODEL	TM	IMMO	ECM P/N	ECM ROM ID	
				OLD	NEW (EVENT #663)
Veloster (FS) 1.6L GDI	DCT	X	39110-2BBH3 39110-2BBC7 39110-2BBR3	GGFS-BFU6ES00H00 GGFS-BFU6ES01H00 GGFS-BFU6ES02H00 GGFS-BFU6ES03H00 GGFS-BFU6ES04H00 GGFS-BFU6ES05H00 GGFS-BFU6ES06H00 GGFS-BFU6EF00H00 GGFS-DFU6ES00H00 GGFS-DFU6ES01H00 GGFS-DFU6ES02H00 GGFS-DFU6ES03H00 GGFS-DFU6ES04H00 GGFS-DFU6ES05H00 GGFS-EFU6ES00H00 GGFS-EFU6ES01H00 GGFS-EFU6EF01H00 GGFS-EFU6EF02H00 GGFS-EFU6EF03H00	GGFS-EFU6EK33H00
		O	39110-2BBH0 39110-2BBB7 39110-2BBR0	GGFS-BFU6FS00H00 GGFS-BFU6FS01H00 GGFS-BFU6FS02H00 GGFS-BFU6FS03H00 GGFS-BFU6FS04H00 GGFS-BFU6FS05H00 GGFS-BFU6FS06H00 GGFS-BFU6FF00H00 GGFS-DFU6FS00H00 GGFS-DFU6FS01H00 GGFS-DFU6FS02H00 GGFS-DFU6FS03H00 GGFS-DFU6FS04H00 GGFS-DFU6FS05H00 GGFS-EFU6FS00H00 GGFS-EFU6FS01H00 GGFS-EFU6FF01H00 GGFS-EFU6FF02H00 GGFS-EFU6FF03H00	GGFS-EFU6FK33H00

SUBJECT:**ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)**

Veloster (FS) 1.6L GDI	MT	X	39110-2BBF3 39110-2BBN9 39110-2BBR9	GGFS-BFU6ES00600 GGFS-BFU6ES01600 GGFS-BFU6ES02600 GGFS-BFU6ES03600 GGFS-BFU6ES04600 GGFS-BFU6ES05600 GGFS-DFU6ES00600 GGFS-DFU6ES01600 GGFS-DFU6ES02600 GGFS-DFU6ES03600 GGFS-EFU6ES01600 GGFS-EFU6EF01600 GGFS-EFU6EF02600 GGFS-EFU6EF03600	GGFS-EFU6EK33600
		O	39110-2BBF0 39110-2BBN6 39110-2BBR6	GGFS-BFU6FS00600 GGFS-BFU6FS01600 GGFS-BFU6FS02600 GGFS-BFU6FS03600 GGFS-BFU6FS04600 GGFS-BFU6FS05600 GGFS-DFU6FS00600 GGFS-DFU6FS01600 GGFS-DFU6FS02600 GGFS-DFU6FS03600 GGFS-EFU6FS01600 GGFS-EFU6FF01600 GGFS-EFU6FF02600 GGFS-EFU6FF03600	GGFS-EFU6FK33600
	DCT	X	39110-2BBR4	GGFS-FFU6ES00H00 GGFS-FFU6ES01H00 GGFS-FFU6EF01H00 GGFS-FFU6EF02H00	GGFS-FFU6EK32H00
		O	39110-2BBR1	GGFS-FFU6FS00H00 GGFS-FFU6FS01H00 GGFS-FFU6FF01H00 GGFS-FFU6FF02H00	GGFS-FFU6FK32H00
	MT	X	39110-2BBR8	GGFS-FFU6ES00600 GGFS-FFU6ES01600 GGFS-FFU6ES02600 GGFS-FFU6EF02600 GGFS-FFU6EF03600	GGFS-FFU6EK33600
		O	39110-2BBR5	GGFS-FFU6FS00600 GGFS-FFU6FS01600 GGFS-FFU6FS02600 GGFS-FFU6FF02600 GGFS-FFU6FF03600	GGFS-FFU6FK33600
	DCT	X	39125-2BFK5	GGFS-GFU6ES00H00 GGFS-GFU6ES01H00 GGFS-GFU6ES02H00	GGFS-GFU6EK32H00

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)

Veloster (FS) 1.6L GDI	MT	O	39125-2BFK0	GGFS-GFU6FS00H00 GGFS-GFU6FS01H00 GGFS-GFU6FS02H00	GGFS-GFU6FK32H00
		X	39121-2BFK5	GGFS-GFU6ES00600 GGFS-GFU6ES01600 GGFS-GFU6ES02600	GGFS-GFU6EK32600
		O	39121-2BFK0	GGFS-GFU6FS00600 GGFS-GFU6FS01600 GGFS-GFU6FS02600	GGFS-GFU6FK32600

VEHICLE			IMMO	ECU P/N	OLD ROM ID	NEW ROM ID (Event #690)
Tucson (LM) 2.4L MPI (10MY)	AT	ULEV	-IMMO	39106-2G800	LAC4MK3A LAC4MK3B LAC4MQ0B	LAC4MQKA
			+IMMO	39106-2G810	LAC4RK3A LAC4RK3B LAC4RQ0B	LAC4RQKA
			-IMMO	39106-2G820	LAS4MK3A LAS4MK3B LAS4MQ0B	LAS4MQKA
		SULEV	+IMMO	39106-2G880	LAS4RK3A LAS4RK3B LAS4RQ0B	LAS4RQKA
			-IMMO	39116-2G800	LAC4MK3A LAC4MK3B LAC4MQ0B	LAC4MQ1K
			+IMMO	39116-2G810	LAC4RK3A LAC4RK3B LAC4RQ0B	LAC4RQ1K
	MT	ULEV	-IMMO	39106-2G801	LAC4ML0A LBC4MM2A LBC4MQ0A LBC4MQ0B LBC4MQ0C	LBC4MQKA
			+IMMO	39106-2G811	LAC4RL0A LBC4RM2A LBC4RM2B LBC4RQ0A LBC4RQ0B	LBC4RQKA

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)

Tucson (LM) 2.4L MPI (11MY)		SULEV	-IMMO	39106-2G821	LBC4RQ0C	LBS4MQKA
					LAS4ML0A	
					LBS4MM2A	
					LBS4MQ0A	
					LBS4MQ0B	
		LBS4MQ0C				
		+IMMO	39106-2G881	LAS4RL0A	LBS4RQKA	
				LBS4RM2A		
				LBS4RQ0A		
				LBS4RQ0B		
LBS4RQ0C						
MT	ULEV	-IMMO	39116-2G801	LAC4ML0A	LBC4MQ1K	
				LBC4MM2A		
				LBC4MQ0A		
				LBC4MQ0B		
				LBC4MQ0C		
		+IMMO	39116-2G811	LAC4RL0A	LBC4RQ1K	
				LBC4RM2A		
				LBC4RM2B		
				LBC4RQ0A		
				LBC4RQ0B		
LBC4RQ0C						
Tucson (LM) 2.4L MPI (12MY)	AT	ULEV	-IMMO	39106-2G802	LCC4MP4A	LCC4MRKA
					LCC4MQ0A	
					LCC4MQ0B	
					LCC4MR1A	
			+IMMO	39106-2G812	LCC4MR1B	
					LCC4RP4A	LCC4RRKA
					LCC4RQ0A	
					LCC4RR1A	
		SULEV	-IMMO	39106-2G822	LCC4RR1B	
					LCC4RR1C	
					LCS4MP4A	LCS4MRKA
			LCS4MQ0A			
			LCS4MQ0B			
			+IMMO	39106-2G882	LCS4MR1A	
LCS4MR1B						
LCS4RP4A	LCS4RRKA					
LCS4RQ0A						
LCS4RQ0B						

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)

Tucson (LM) 2.4L MPI (12MY)	MT	ULEV	-IMMO	39116-2G802	LCS4RR1A	LCC4MR1K	
					LCS4RR1B		
					LCC4MP4A		
					LCC4MQ0A		
					LCC4MQ0B		
			LCC4MR1A				
			LCC4MR1B				
			+IMMO	39116-2G812	LCC4RP4A		LCC4RR1K
					LCC4RQ0A		
					LCC4RR1A		
LCC4RR1B							
LCC4RR1C							
Tucson (LM) 2.4L MPI (13MY)	AT	ULEV	-IMMO	39106-2G803	LDC4MS0A	LDC4MTKC	
					LDC4MT0A		
					LDC4MT0B		
					LDC4MT1B		
		+IMMO	39106-2G813	LDC4RS0A	LDC4RTKC		
				LDC4RT0A			
				LDC4RT0B			
				LDC4RT1B			
	SULEV	-IMMO	39106-2G823	LDS4MS0A		LDS4MTKC	
				LDS4MT0A			
				LDS4MT0B			
				LDS4MT1B			
	+IMMO	39106-2G883	LDS4RS0A	LDS4RTKC			
			LDS4RT0A				
			LDS4RT0B				
			LDS4RT1B				
MT	ULEV	-IMMO	39116-2G803	LDC4MS0A	LDC4MT3K		
				LDC4MT0A			
				LDC4MT0B			
				LDC4MT1B			
	+IMMO	39116-2G813	LDC4RS0A	LDC4RT3K			
			LDC4RT0A				
			LDC4RT0B				
			LDC4RT1B				
					LDC4RT1C		

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)

VEHICLE	MY	IMMO	ECU P/N	ROM ID	
				OLD	NEW (Event #713)
Sonta Hybrid (YF HEV) 2.4L MPI	11MY	IMMO	39105-2G910	YBY4RAAC YBY4RABA YBY4RC0A YBY4RG2A	YBY4RGKA
	12MY	IMMO	39105-2G911	YCY4RC1A YCY4RG2A	YCY4RGKA
	13MY	IMMO	39105-2G912 39105-2G915	YDY4RE1A YDY4RF3A YDY4RG1A YDY4RG2A	YDY4RGKA
	14MY	IMMO	39105-2G913	YFY4RG2A	YFY4RGKA
	15MY	IMMO	39105-2G916 39105-2G917	YFY4RG3A	YFY4RGKA

VEHICLE	MY / EMISSION	TM	IMMO	ECU P/N	ROM ID	
					OLD	NEW (Event #717)
Elantra Coupe (JK) 2.0L GDI	14MY ULEV	MT	O	39135-2EJA0	GGJK-ENUAFS00600	GGJK-ENUAFK00600
			X	39137-2EJA0	GGJK-ENUAES00600	GGJK-ENUAEK00600
		AT	O	39131-2EJA0	GGJK-ENUAQS00C00	GGJK-ENUAQK00C00
			X	39133-2EJA0	GGJK-ENUAPS00C00	GGJK-ENUAPK00C00
	14MY SULEV	AT	O	39131-2EJC0	GGJK-ENSAQS00C00	GGJK-ENSAQK00C00
			X	39133-2EJC0	GGJK-ENSAPS00C00	GGJK-ENSAPK00C00

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)

VEHICLE	MY / EMISSION	TM	IMMO	ECU P/N	ROM ID	
					OLD	NEW (Event #715)
Elantra (MD) 2.0L GDI	14MY ULEV	MT	O	39135-2EMA0	GGMD-ENUAFS00600	GGMD-ENUAFK00600
			X	39137-2EMA0	GGMD-ENUAES00600	GGMD-ENUAEK00600
		AT	O	39131-2EMA0	GGMD-ENUAQS00C00	GGMD-ENUAQK00C00
			X	39133-2EMA0	GGMD-ENUAPS00C00	GGMD-ENUAPK00C00
	14MY SULEV	AT	O	39131-2EMB0	GGMD-ENSAQS00C00	GGMD-ENSAQK00C00
			X	39133-2EMB0	GGMD-ENSAPS00C00	GGMD-ENSAPK00C00
	15MY ULEV	MT	O	39135-2EMA1	GGMD-FNUAFS00600 GGMD-FNUAFS02600	GGMD-FNUAFK02600
			X	39137-2EMA1	GGMD-FNUAES00600 GGMD-FNUAES02600	GGMD-FNUAEK02600
		AT	O	39131-2EMA1 39131-2EMA2	GGMD-FNUAQS00C00 GGMD-FNUAQS02C00	GGMD-FNUAQK02C00
			X	39133-2EMA1 39133-2EMA2	GGMD-FNUAPS00C00 GGMD-FNUAPS02C00	GGMD-FNUAPK02C00
	15MY SULEV	AT	O	39131-2EMB1 39131-2EMB2	GGMD-FNSAQS00C00 GGMD-FNSAQS02C00	GGMD-FNSAQK02C00
			X	39133-2EMB1 39133-2EMB2	GGMD-FNSAPS00C00 GGMD-FNSAPS02C00	GGMD-FNSAPK02C00
	16MY ULEV	MT	O	39135-2EMA2	GGMD-GNUAFS00600 GGMD-GNUAFS01600	GGMD-GNUAFK01600
			X	39137-2EMA2	GGMD-GNUAES00600 GGMD-GNUAES01600	GGMD-GNUAEK01600
		AT	O	39131-2EMA3	GGMD-GNUAQS00C00 GGMD-GNUAQS01C00	GGMD-GNUAQK01C00
			X	39133-2EMA3	GGMD-GNUAPS00C00 GGMD-GNUAPS01C00	GGMD-GNUAPK01C00
	16MY SULEV	AT	O	39131-2EMB3	GGMD-GNSAQS00C00 GGMD-GNSAQS01C00	GGMD-GNSAQK01C00
			X	39133-2EMB3	GGMD-GNSAPS00C00 GGMD-GNSAPS01C00	GGMD-GNSAPK01C00

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)

VEHICLE / EMISSION	MY	TM	IMMO	ECU P/N	ROM ID	
					OLD	NEW (Event #625)
Tucson (LM) 2.0L GDI (ULEV)	14MY	MT (2WD)	O	39135-2ELC0	GGLM-ENUAFS00600 GGLM-ENUAFS01600 GGLM-ENUAFS02600 GGLM-ENUAFS03600	GGLM-ENUAFK13600
			X	39137-2ELC0	GGLM-ENUAES00600 GGLM-ENUAES01600 GGLM-ENUAES02600 GGLM-ENUAES03600	GGLM-ENUAEK13600
		AT (2WD)	O	39131-2ELC0	GGLM-ENUAQS00C00 GGLM-ENUAQS01C00 GGLM-ENUAQS02C00 GGLM-ENUAQS03C00	GGLM-ENUAQK13C00
			X	39133-2ELC0	GGLM-ENUAPS00C00 GGLM-ENUAPS01C00 GGLM-ENUAPS02C00 GGLM-ENUAPS03C00	GGLM-ENUAPK13C00
		AT (4WD)	O	39131-2ELC1	GGLM-ENUAQS00D00 GGLM-ENUAQS01D00 GGLM-ENUAQS02D00 GGLM-ENUAQS03D00	GGLM-ENUAQK13D00
			X	39133-2ELC1	GGLM-ENUAPS00D00 GGLM-ENUAPS01D00 GGLM-ENUAPS02D00 GGLM-ENUAPS03D00	GGLM-ENUAPK13D00
	15MY	MT (2WD)	O	39135-2ELC4	GGLM-FNUAFS00600 GGLM-FNUAFS01600	GGLM-FNUAFK11600
			X	39137-2ELC4	GGLM-FNUAES00600 GGLM-FNUAES01600	GGLM-FNUAEK11600
		AT (2WD)	O	39131-2ELC4	GGLM-FNUAQS00C00 GGLM-FNUAQS01C00	GGLM-FNUAQK11C00
			X	39132-2ELC4	GGLM-FNUAPS00C00 GGLM-FNUAPS01C00	GGLM-FNUAPK11C00
		AT (4WD)	O	39131-2ELC5	GGLM-FNUAQS00D00 GGLM-FNUAQS01D00	GGLM-FNUAQK11D00
			X	39133-2ELC5	GGLM-FNUAPS00D00 GGLM-FNUAPS01D00	GGLM-FNUAPK11D00

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)

VEH	MY	TM	IMMO	ECU P/N	ROM ID	
					OLD	NEW (Event #730)
Elantra GT (GD) 2.0L GDI	14MY	MT	O	39135-2EGB0	GGGD-DNUAFS01600	GGGD-DNUAFK01600
			X	39137-2EGB0	GGGD-DNUAES01600	GGGD-DNUAEK01600
		AT	O	39131-2EGB0 39131-2EGB2	GGGD-DNUAQS01C00	GGGD-DNUAQK01C00
			X	39133-2EGB0 39133-2EGB2	GGGD-DNUAPS01C00	GGGD-DNUAPK01C00
	15MY	MT	O	39135-2EGE0	GGGD-FNUAFS01600	GGGD-FNUAFK01600
			X	39137-2EGE0	GGGD-FNUAES01600	GGGD-FNUAEK01600
		AT	O	39131-2EGE0	GGGD-FNUAQS01C00	GGGD-FNUAQK01C00
			X	39133-2EGE0	GGGD-FNUAPS01C00	GGGD-FNUAPK01C00
	16MY 17MY	MT	O	39135-2EGB1	GGGD-ENUAFS01600	GGGD-ENUAFK01600
			X	39137-2EGB1	GGGD-ENUAES01600	GGGD-ENUAEK01600
		AT	O	39131-2EGB1	GGGD-ENUAQS01C00	GGGD-ENUAQK01C00
			X	39133-2EGB1	GGGD-ENUAPS01C00	GGGD-ENUAPK01C00

VEHICLE	MY	ENG	ECU P/N	ROM ID	
				OLD	NEW (Event #733)
Sonata Hybrid/Plug-In (LF HEV/PHEV) Nu 2.0L GDI	16MY	HEV	39161-2EEB0	LF6UPHMS65BA LF6UPHMS65CA LF6UPHMS66AA LF6UPHMS673A	LF6UPHMF750K
		PHEV	39161-2EEG0	LF6SPPMS670A LF6SPPMS673A	LF6SPPMF750K
	17MY	HEV	39161-2EEB1	LF7UPHMS690A	LF7UPHMF6A0K
		PHEV	39161-2EEG1	LF7SPPMS690A	LF7SPPMF6A0K
		HEV	39161-2EEB2	LF7UPHMS6A0A	LF7UPHMF6A1K
		PHEV	39161-2EEG2	LF7SPPMS6A0A	LF7SPPMF6A1K

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)

VEH ENG	MY	2WD/ 4WD	IMMO	ECU P/NO	ROM ID	
					OLD	NEW (Event #739)
Tucson (TL) 2.0L GDI	16MY	2WD	O	39131-2ETA0	GGTL-FNUAQS00C00 GGTL-FNUAQS01C00 GGTL-FNUAQS02C00	GGTL-FNUAQK02C00
			X	39133-2ETA0	GGTL-FNUAPS00C00 GGTL-FNUAPS01C00 GGTL-FNUAPS02C00	GGTL-FNUAPK02C00
		4WD	O	39131-2ETA2	GGTL-FNUAQS00D00 GGTL-FNUAQS01D00 GGTL-FNUAQS02D00 GGTL-FNUAQS03D00	GGTL-FNUAQK03D00
			X	39133-2ETA2	GGTL-FNUAPS00D00 GGTL-FNUAPS01D00 GGTL-FNUAPS02D00 GGTL-FNUAPS03D00	GGTL-FNUAPK03D00
	17MY	2WD	O	39131-2ETA4 39131-2ETA6	GGTL-GNUAQS00C00 GGTL-GNUAQS01C00	GGTL-GNUAQK01C00
			X	39133-2ETA4 39133-2ETA6	GGTL-GNUAPS00C00 GGTL-GNUAPS01C00	GGTL-GNUAPK01C00
		4WD	O	39131-2ETA5 39131-2ETA7	GGTL-GNUAQS00D00 GGTL-GNUAQS01D00	GGTL-GNUAQK01D00
			X	39133-2ETA5 39133-2ETA7	GGTL-GNUAPS00D00 GGTL-GNUAPS01D00	GGTL-GNUAPK01D00

If the Automatic ECU Upgrade process fails, **cycle the ignition key to OFF for at least 30 seconds to reset the control unit.** Then resume programming using the Manual ECU Upgrade processes.

After the ECU Upgrade process shows 100% complete, **cycle the ignition key again to OFF for at least 30 seconds to reset the control unit.** This step is important for establishing normal powertrain communication and to prevent system errors.

MODE PASSWORD INFORMATION TABLE: #644 Santa Fe (CM) 2.4L

ECM MENU (#644)	PASSWORD
CMA 10MY 2.4MPI AT -IMMO 39104-2G340	6509
CMA 10MY 2.4MPI AT +IMMO 39104-2G330	6510
CMA 10MY 2.4MPI MT -IMMO 39114-2G340	6511
CMA 10MY 2.4MPI MT +IMMO 39114-2G330	6612
CMA 11MY 2.4MPI AT -IMMO 39104-2G341	6441
CMA 11MY 2.4MPI AT +IMMO 39104-2G331	6442
CMA 11MY 2.4MPI MT -IMMO 39114-2G341	6443
CMA 11MY 2.4MPI MT +IMMO 39114-2G331	6444

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)

CMA 12MY 2.4MPI AT -IMMO 39104-2G342	6445
CMA 12MY 2.4MPI AT +IMMO 39104-2G332	6446
CMA 12MY 2.4MPI MT -IMMO 39114-2G342	6447
CMA 12MY 2.4MPI MT +IMMO 39114-2G332	6448

MODE PASSWORD INFORMATION TABLE: #663 Veloster (FS) 1.6L

ECM MENU (#663)	PASSWORD
FS 12~14MY -IMMO 39110-2BBH3/C7/R3	6301
FS 12~14MY +IMMO 39110-2BBH0/B7/R0	6302
FS 12~14MY -IMMO 39110-2BBF3/N9/R9	6303
FS 12~14MY +IMMO 39110-2BBF0/N6/R6	6304
FS 15MY -IMMO 39110-2BBR4	6305
FS 15MY +IMMO 39110-2BBR1	6306
FS 15MY -IMMO 39110-2BBR8	6307
FS 15MY +IMMO 39110-2BBR5	6308
FS 16MY-17MY -IMMO 39125-2BFK5	6309
FS 16MY-17MY +IMMO 39125-2BFK0	6310
FS 16MY-17MY -IMMO 39121-2BFK5	6311
FS 16MY-17MY +IMMO 39121-2BFK0	6312

MODE PASSWORD INFORMATION TABLE: #690 Tucson (LM) 2.4L

ECM MENU (#690)	PASSWORD
LM 10MY AT -IMMO 39106-2G800	2800
LM 10MY AT +IMMO 39106-2G810	2810
LM 10MY AT -IMMO 39106-2G820	2820
LM 10MY AT +IMMO 39106-2G880	2880
LM 10MY MT -IMMO 39116-2G800	2800
LM 10MY MT +IMMO 39116-2G810	2810
LM 11MY AT -IMMO 39106-2G801	2801
LM 11MY AT +IMMO 39106-2G811	2811
LM 11MY AT -IMMO 39106-2G821	2821
LM 11MY AT +IMMO 39106-2G881	2881
LM 11MY MT -IMMO 39116-2G801	2801
LM 11MY MT +IMMO 39116-2G811	2811
LM 12MY AT -IMMO 39106-2G802	2802
LM 12MY AT +IMMO 39106-2G812	2812
LM 12MY AT -IMMO 39106-2G822	2822
LM 12MY AT +IMMO 39106-2G882	2882
LM 12MY MT -IMMO 39116-2G802	2802
LM 12MY MT +IMMO 39116-2G812	2812
LM 13MY AT -IMMO 39106-2G803	2803
LM 13MY AT +IMMO 39106-2G813	2813

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)

LM 13MY AT -IMMO 39106-2G823	2823
LM 13MY AT +IMMO 39106-2G883	2883
LM 13MY MT -IMMO 39116-2G803	2803
LM 13MY MT +IMMO 39116-2G813	2813

MODE PASSWORD INFORMATION TABLE: #713 Sonata Hybrid (YF HEV) 2.4L

ECM MENU (#713)	PASSWORD
YF HEV 2.4MPI 11MY +IMMO 39105-2G910	2910
YF HEV 2.4MPI 12MY +IMMO 39105-2G911	2911
YF HEV 2.4MPI 13MY +IMMO 39105-2G912/5	2915
YF HEV 2.4MPI 14MY +IMMO 39105-2G913	2913
YF HEV 2.4MPI 15MY +IMMO 39105-2G916/7	2917

MODE PASSWORD INFORMATION TABLE: #717 Elantra Coupe (JK) 2.0L

ECM MENU (#717)	PASSWORD
JK Nu 2.0 GDI 14MY MT -IMMO 39137-2EJA0	1701
JK Nu 2.0 GDI 14MY MT +IMMO 39135-2EJA0	1702
JK Nu 2.0 GDI 14MY AT -IMMO 39133-2EJA0	1703
JK Nu 2.0 GDI 14MY AT +IMMO 39131-2EJA0	1704
JK Nu 2.0 GDI 14MY AT -IMMO 39133-2EJC0	1705
JK Nu 2.0 GDI 14MY AT +IMMO 39131-2EJC0	1706

MODE PASSWORD INFORMATION TABLE: #715 Elantra (MD) 2.0L

ECM MENU (#715)	PASSWORD
MD Nu 2.0 GDI 14MY MT -IMMO 39137-2EMA0	1501
MD Nu 2.0 GDI 14MY MT +IMMO 39135-2EMA0	1502
MD Nu 2.0 GDI 14MY AT -IMMO 39133-2EMA0	1503
MD Nu 2.0 GDI 14MY AT+IMMO 39131-2EMA0	1504
MD Nu 2.0 GDI 14MY AT -IMMO 39133-2EMB0	1505
MD Nu 2.0 GDI 14MY AT+IMMO 39131-2EMB0	1506
MD Nu 2.0 GDI 15MY MT -IMMO 39137-2EMA1	1507
MD Nu 2.0 GDI 15MY MT +IMMO 39135-2EMA1	1508
MD Nu 2.0 GDI 15MY AT -IMMO 39133-2EMA1/2	1509
MD Nu 2.0 GDI 15MY AT +IMMO 39131-2EMA1/2	1510
MD Nu 2.0 GDI 15MY AT -IMMO 39133-2EMB1/2	1511
MD Nu 2.0 GDI 15MY AT+IMMO 39131-2EMB1/2	1512
MD Nu 2.0 GDI 16MY MT -IMMO 39137-2EMA2	1513
MD Nu 2.0 GDI 16MY MT +IMMO 39135-2EMA2	1514
MD Nu 2.0 GDI 16MY AT -IMMO 39133-2EMA3	1515
MD Nu 2.0 GDI 16MY AT +IMMO 39131-2EMA3	1516
MD Nu 2.0 GDI 16MY AT -IMMO 39133-2EMB3	1517
MD Nu 2.0 GDI 16MY AT +IMMO 39131-2EMB3	1518

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)**MODE PASSWORD INFORMATION TABLE: #625 Tucson (LM) 2.0L**

ECM MENU (#625)	PASSWORD
LM 14MY 2.0GDI MT 2WD -IMMO 39137-2ELC0	3720
LM 14MY 2.0GDI MT 2WD +IMMO 39135-2ELC0	3520
LM 14MY 2.0GDI AT 2WD -IMMO 39133-2ELC0	3320
LM 14MY 2.0GDI AT 2WD +IMMO 39131-2ELC0	3120
LM 14MY 2.0GDI AT 4WD -IMMO 39133-2ELC1	3321
LM 14MY 2.0GDI AT 4WD +IMMO 39131-2ELC1	3121
LM 15MY 2.0GDI MT 2WD -IMMO 39137-2ELC4	3724
LM 15MY 2.0GDI MT 2WD +IMMO 39135-2ELC4	3524
LM 15MY 2.0GDI AT 2WD -IMMO 39132-2ELC4	3224
LM 15MY 2.0GDI AT 2WD +IMMO 39131-2ELC4	3124
LM 15MY 2.0GDI AT 4WD -IMMO 39133-2ELC5	3325
LM 15MY 2.0GDI AT 4WD +IMMO 39131-2ELC5	3125

MODE PASSWORD INFORMATION TABLE: #730 Elantra GT (GD) 2.0L

ECU MENU (#730)	PASSWORD
GD Nu 2.0 GDI 14MY MT -IMMO 39137-2EGB0	9137
GD Nu 2.0 GDI 14MY MT +IMMO 39135-2EGB0	9135
GD Nu 2.0 GDI 14MY AT -IMMO 39133-2EGB0/2	9133
GD Nu 2.0 GDI 14MY AT+IMMO 39131-2EGB0/2	9131
GD Nu 2.0 GDI 15MY MT -IMMO 39137-2EGE0	3720
GD Nu 2.0 GDI 15MY MT +IMMO 39135-2EGE0	3520
GD Nu 2.0 GDI 15MY AT -IMMO 39133-2EGE0	3320
GD Nu 2.0 GDI 15MY AT +IMMO 39131-2EGE0	3120
GD Nu 2.0 GDI 16MY MT -IMMO 39137-2EGB1	3721
GD Nu 2.0 GDI 16MY MT +IMMO 39135-2EGB1	3521
GD Nu 2.0 GDI 16MY AT -IMMO 39133-2EGB1	3321
GD Nu 2.0 GDI 16MY AT +IMMO 39131-2EGB1	3121

MODE PASSWORD INFORMATION TABLE: #733 Sonata Hybrid/Plug-In (LF HEV/PHEV) 2.0L

ECU MENU (#733)	PASSWORD
LF HEV 2.0GDI 39161-2EEB0 (16MY)	0216
LF PHEV 2.0GDI 39161-2EEG0 (16MY)	0217
LF HEV 2.0GDI 39161-2EEB1 (17MY)	1216
LF PHEV 2.0GDI 39161-2EEG1 (17MY)	1217
LF HEV 2.0GDI 39161-2EEB2 (17MY)	2216
LF PHEV 2.0GDI 39161-2EEG2 (17MY)	2217

SUBJECT: ENGINE MONITORING LOGIC (SERVICE CAMPAIGN 966)**MODE PASSWORD INFORMATION TABLE: #739 Tucson (TL) 2.0L**

ECM MENU (#739)	PASSWORD
TL 2WD -IMMO 39133-2ETA0 (16MY)	3901
TL 2WD +IMMO 39131-2ETA0 (16MY)	3902
TL 4WD -IMMO 39133-2ETA2 (16MY)	3903
TL 4WD +IMMO 39131-2ETA2 (16MY)	3904
TL 2WD -IMMO 39133-2ETA4/6 (17MY)	3905
TL 2WD +IMMO 39131-2ETA4/6 (17MY)	3906
TL 4WD -IMMO 39133-2ETA5/7 (17MY)	3907
TL 4WD +IMMO 39131-2ETA5/7 (17MY)	3908

NOTE: After the ECU update has been completed:

- Clear any ECM DTC(s) after the ECU update, if present.
- Start the engine to confirm proper operation of the vehicle.