 <b>HYUNDAI</b> <b>Technical Service Bulletin</b>	GROUP <b>CAMPAIGN</b>	NUMBER <b>19-01-002H-1</b>
	DATE <b>FEBRUARY 2019</b>	MODEL(S) <b>SONATA (YF) SONATA (LF) SANTA FE SPORT (AN) TUSCON (LM) TUSCON (TL)</b>
<b>SUBJECT:</b> ENGINE MONITORING LOGIC PRODUCT IMPROVEMENT (SERVICE CAMPAIGN 953)		

**This TSB supersedes TSB# 19-01-002 and modifies the list of ROM IDs for 17MY Sonata (LF).**

**\* IMPORTANT**

**\*\*\* Retail Vehicles \*\*\***

Dealers must perform this Campaign on all affected vehicles 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:** Hyundai is conducting a product improvement 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, a chime will sound on certain vehicles, 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 2011-2014 MY Sonata (YF) vehicles with 2.0L Turbo and 2.4L engines  
 Certain 2015-2018 MY Sonata (LF) vehicles with 2.0L Turbo and 2.4L engines  
 Certain 2013-2018 MY Santa Fe Sport (AN) vehicles with 2.0L Turbo and 2.4L engines  
 Certain 2014-2015 MY Tuscon (LM) vehicles with 2.4L engines  
 Certain 2018 MY Tucson (TL) vehicles with 2.4L engines

**GDS Information:****ROM ID Information Table - Engine ECM**

Model / Engine	MY	Event #	Part Number	OLD ROM ID	NEW ROM ID
Sonata (YF) 2.4L	11MY	500	391**-2G670 391**-2G670	YBC4R75A YBC4R75B	YBC4RF3K
		500	391**-2G671 391**-2G671	YBC4R86B YBC4R86C YBC4R88A YBC4R88B YBC4R88C	YBC4RF3L
		500	391**-2G660 391**-2G660	YBC4M75A YBC4M75B	YBC4MF3K
		500	391**-2G661 391**-2G661	YBC4M86B YBC4M86C YBC4M88A YBC4M88B YBC4M88C	YBC4MF3L
		500	391**-2G675	YBS4R82A YBS4RF3E YBS4RF3G	YBS4RF3K
		500	391**-2G676	YBS4R86B YBS4R86C YBS4R88A YBS4R88B YBS4RF3F YBS4RF3H	YBS4RF3L
		500	391**-2G665	YBS4M82A YBS4MF3E YBS4MF3G	YBS4MF3K
		500	391**-2G666	YBS4M86B YBS4M86C YBS4M88A YBS4M88B YBS4MF3F YBS4MF3H	YBS4MF3L
	12MY	500	391**-2G672 391**-2G672	YCC4RB3A YCC4RB3B YCC4RB3C	YCC4RB3K
		500	391**-2G662 391**-2G662	YCC4MB3A YCC4MB3B YCC4MB3C	YCC4MB3K
		500	391**-2G677	YCS4RB3A YCS4RB3B YCS4RB3C	YCS4RB3K
		500	391**-2G667	YCS4MB3A YCS4MB3B YCS4MB3C	YCS4MB3K

	13MY	500	391**-2G673 391**-2G673	YDC4RF0A YDC4RE1A YDC4REAA YDC4RF0A YDC4RF3A YDC4RF3B YDC4RF3C	YDC4RF3K
		500	391**-2G663 391**-2G663	YDC4MF0A YDC4ME1A YDC4MEAA YDC4MF0A YDC4MF3A YDC4MF3B YDC4MF3C	YDC4MF3K
		500	391**-2G678	YDS4RE1A YDS4REAA YDS4RF0A YDS4RF3A YDS4RF3B YDS4RF3C	YDS4RF3K
		500	391**-2G668	YDS4ME1A YDS4MEAA YDS4MF0A YDS4MF3A YDS4MF3B YDS4MF3C	YDS4MF3K
	14MY	500	391**-2G674 391**-2G674	YEC4RH2A YEC4RH2B	YEC4RH2K
		500	391**-2G664 391**-2G664	YEC4MH2A YEC4MH2B	YEC4MH2K
		500	391**-2G679	YES4RH2A YES4RH2B	YES4RH2K
		500	391**-2G669	YES4MH2A YES4MH2B	YES4MH2K
Sonata (YF) 2.0T	11MY	500	391**-2G690	YBC0R95B YBC0R95D YBC0R95E YBC0R96A YBC0R97A YBC0R97B YDC0RF3A YDC0RF3B	YDC0RF3K
		500	391**-2G680	YBC0M95B YBC0M95D YBC0M95E YBC0M96A YBC0M97A YBC0M97B YDC0MF3A YDC0MF3B	YDC0MF3K

	12MY	500	391**-2G691	YCC0RB3A YCC0RC0B YCC0RC0C	YDC0RF3K	
		500	391**-2G681	YCC0MB3A YCC0MC0B YCC0MC0C	YDC0MF3K	
	13MY	500	391**-2G691	YDC0RE1A YDC0REAA YDC0REAB YDC0RE3A YDC0RE5A YDC0RF3A YDC0RF3B	YDC0RF3K	
				YDC0ME1A YDC0MEAA YDC0MEAB YDC0ME3A YDC0ME5A YDC0MF3A YDC0MF3B	YDC0MF3K	
		500	391**-2G692	YDC0RF3A YDC0RF3B	YDC0RF3K	
		500	391**-2G682	YDC0MF3A YDC0MF3B	YDC0MF3K	
		500	391**-2G694	YDC0RG1A YDC0RG1B	YDC0RG1K	
		500	391**-2G684	YDC0MG1A YDC0MG1B	YDC0MG1K	
	14MY	500	391**-2G693	YEC0RH2A YEC0RH2B	YEC0RH2K	
		500	391**-2G683	YEC0MH2A YEC0MH2B	YEC0MH2	
	Sonata (LF) 2.4L	15MY	480	391**-2GGK5	LFAFNC4ER86A LFAFNC4ER86B LFAFNC4ER86C LFAFNC4ER87A LFAFNC4ER87B LFAFNC4ER88A LFAFNC4ERA51 LFAFNC4ERA53 LFAFNC4ERC0A	LFAFNC4ERC0K

		480	391**-2GGK0	LFAFNC4EM86A LFAFNC4EM86B LFAFNC4EM86C LFAFNC4EM87A LFAFNC4EM87B LFAFNC4EM88A LFAFNC4EMA51 LFAFNC4EMA53 LFAFNC4EMC0A	LFAFNC4EMC0K
		480	391**-2GGL5	LFAFNS4ER86A LFAFNS4ER86B LFAFNS4ER86C LFAFNS4ER87A LFAFNS4ER87B LFAFNS4ER88A LFAFNS4ERA51 LFAFNS4ERA53 LFAFNS4ERC0A	LFAFNS4ERC0K
		480	391**-2GGL0	LFAFNS4EM86A LFAFNS4EM86B LFAFNS4EM86C LFAFNS4EM87A LFAFNS4EM87B LFAFNS4EM88A LFAFNS4EMA51 LFAFNS4EMA53 LFAFNS4EMC0A	LFAFNS4EMC0K
	16MY	509	391**-2GGK6	LFAGNC4ERA3A LFAGNC4ERA5A LFAGNC4ERB0B LFAGNC4ERC0A	LFAGNC4ERC0K
		509	391**-2GGK1	LFAGNC4EMA3A LFAGNC4EMA5A LFAGNC4EMB0B LFAGNC4EMC0A	LFAGNC4EMC0K
		509	391**-2GGL6	LFAGNS4ERA3A LFAGNS4ERA5A LFAGNS4ERB0B LFAGNS4ERC0A	LFAGNS4ERC0K
		509	391**-2GGL1	LFAGNS4EMA3A LFAGNS4EMA5A LFAGNS4EMB0B LFAGNS4EMC0A	LFAGNS4EMC0K
	17MY	527	391**-2GGK8	LFAHNC4ERC0B LFAHNC4ERC3A LFAHNC4ERC3B	LFAHNC4ERC3K
		527	391**-2GGK3	LFAHNC4EMC0B LFAHNC4EMC3A LFAHNC4EMC3B	LFAHNC4EMC3K
		527	391**-2GGL8	LFAHNS4ERC0B LFAHNS4ERC3A LFAHNS4ERC3B	LFAHNS4ERC3K

		527	391**-2GGL3	LFAHNS4EMC0B LFAHNS4EMC3A LFAHNS4EMC3B	LFAHNS4EMC3K	
		527	391**-2GGK8	LFAHNC4ERC5A	LFAHNC4ERC5K	
		527	391**-2GGK3	LFAHNC4EMC5A	LFAHNC4EMC5K	
		527	391**-2GGL8	LFAHNS4ERC5A	LFAHNS4ERC5K	
		527	391**-2GGL3	LFAHNS4EMC5A	LFAHNS4EMC5K	
		527	391**-2GGK7	LFAHNC4ERC0A	LFAHNC4ERC0K	
		527	391**-2GGK2	LFAHNC4EMC0A	LFAHNC4EMC0K	
		527	391**-2GGL7	LFAHNS4ERC0A	LFAHNS4ERC0K	
		527	391**-2GGL2	LFAHNS4EMC0A	LFAHNS4EMC0K	
	18MY	527	391**-2GGJ5	LPAINC4ERDAA LPAINC4ERDAB LPAINC4ERD5A LPAINC4ERD5B	LPAINC4ERD5K	
		527	391**-2GGJ0	LPAINC4EMDAA LPAINC4EMDAB LPAINC4EMD5A LPAINC4EMD5B	LPAINC4EMD5K	
		527	391**-2GGK5	LPAINS4ERDAA LPAINS4ERDAB LPAINS4ERD5A LPAINS4ERD5B	LPAINS4ERD5K	
		527	391**-2GGK0	LPAINS4EMDAA LPAINS4EMDAB LPAINS4EMD5A LPAINS4EMD5B	LPAINS4EMD5K	
	Sonata (LF) 2.0T	15MY	480	391**-2GTE5	LFAFNC0ER87A LFAFNC0ER87B LFAFNC0ER88A	LFAFNC0ER88K
		16MY	509	391**-2GTE6	LFAGNC0ERA3A	LFAGNC0ERA3K
			509	391**-2GTE1	LFAGNC0EMA3A	LFAGNC0EMA3K
17MY		527	391**-2GTE7	LFAHNC0ERC2A LFAHNC0ERC3A	LFAHNC0ERC3K	
		527	391**-2GTE2	LFAHNC0EMC2A LFAHNC0EMC3A	LFAHNC0EMC3K	
18MY		527	391**-2GTE5 391**-2GTE6	LPAINC08RD3A LPAINC08RD3B LPAINC08RD5A LPAINC08RD5D	LPAINC08RD5K	

		527	391**-2GTE0 391**-2GTE1	LPAINC08MD3A LPAINC08MD3B LPAINC08MD5A LPAINC08MD5D	LPAINC08MD5K	
Santa Fe Sport (AN) 2.4L	13MY	499	391**-2GAE0 391**-2GAE0	2WD_BDC4RE3A 2WD_BDC4RE5A 2WD_BDC4RG0B 2WD_BDC4RG0D	2WD_BDC4RG1K	
		499		2WD_BDC4RE5B 2WD_BDC4RE5C 2WD_BDC4RE5D 2WD_BDC4RF3A 2WD_BDC4RG0A 2WD_BDC4RG0C 2WD_BDC4RG0E	2WD_BDC4RG1M	
		499	391**-2GAE5	4WD_BDC4RE3A 4WD_BDC4RE5A 4WD_BDC4RG0B 4WD_BDC4RG0D	4WD_BDC4RG1L	
		499		4WD_BDC4RE5B 4WD_BDC4RE5C 4WD_BDC4RE5D 4WD_BDC4RF3A 4WD_BDC4RG0A 4WD_BDC4RG0C 4WD_BDC4RG0E	4WD_BDC4RG1N	
		499	391**-2GAG0 391**-2GAG0	2WD_BDC4ME3A 2WD_BDC4ME5A 2WD_BDC4MG0B 2WD_BDC4MG0D	2WD_BDC4MG1K	
		499		2WD_BDC4ME5B 2WD_BDC4ME5C 2WD_BDC4ME5D 2WD_BDC4MF3A 2WD_BDC4MG0A 2WD_BDC4MG0C 2WD_BDC4MG0E	2WD_BDC4MG1M	
		499	391**-2GAG5	4WD_BDC4ME3A 4WD_BDC4ME5A 4WD_BDC4MG0B 4WD_BDC4MG0D	4WD_BDC4MG1L	
		499		4WD_BDC4ME5B 4WD_BDC4ME5C 4WD_BDC4ME5D 4WD_BDC4MF3A 4WD_BDC4MG0A 4WD_BDC4MG0C 4WD_BDC4MG0E	4WD_BDC4MG1N	
		14MY	499	391**-2GAE1 391**-2GAE1	2WD_BEC4RH2A 2WD_BEC4RH2B	2WD_BEC4RH2K
			499	391**-2GAE6	4WD_BEC4RH2A 4WD_BEC4RH2B	4WD_BEC4RH2L

		499	391**-2GAG1 391**-2GAG1	2WD_BEC4MH2A 2WD_BEC4MH2B	2WD_BEC4MH2K
		499	391**-2GAG6	4WD_BEC4MH2A 4WD_BEC4MH2B	4WD_BEC4MH2L
	15MY	493	391**-2GAE2 391**-2GAE7 391**-2GAE2	BFC4RH5A BFC4RH5B	BFC4RH6A
		493	391**-2GAG2 391**-2GAG7 391**-2GAG2	BFC4MH5A BFC4MH5B	BFC4MH6A
	16MY	512	391**-2GAE4 391**-2GAE4	2WD_BGC4RH5A 2WD_BGC4RH5B	2WD_BGC4RH6A
		512	391**-2GAE9	4WD_BGC4RH5A 4WD_BGC4RH5B	4WD_BGC4RH6B
		512	391**-2GAG4 391**-2GAG4	2WD_BGC4MH5A 2WD_BGC4MH5B	2WD_BGC4MH6A
		512	391**-2GAG9	4WD_BGC4MH5A 4WD_BGC4MH5B	4WD_BGC4MH6B
	17MY	520	391**-2GKP0	2WD_DMAHNC4ERB 2A 2WD_DMAHNC4ERB 2B 2WD_DMAHNC4ERB 2C 2WD_DMAHNC4ERB 4A	2WD_DMAHNC4ERB4 K
		520	391**-2GKP5	4WD_DMAHNC4ERB 2A 4WD_DMAHNC4ERB 2B 4WD_DMAHNC4ERB 2C 4WD_DMAHNC4ERB 4A	4WD_DMAHNC4ERB4 L
		520	391**-2GKR0	2WD_DMAHNC4EM B2A 2WD_DMAHNC4EM B2B 2WD_DMAHNC4EM B2C 2WD_DMAHNC4EM B4A	2WD_DMAHNC4EMB4 K
		520	391**-2GKR5	4WD_DMAHNC4EM B2A 4WD_DMAHNC4EM B2B 4WD_DMAHNC4EM B2C 4WD_DMAHNC4EM B4A	4WD_DMAHNC4EMB4 L

	18MY	520	391**-2GKP1	2WD_DMAINC4ERB 4A 2WD_DMAINC4ERC 0A 2WD_DMAINC4ERB 5A 2WD_DMAINC4ERB 5B	2WD_DMAINC4ERB5K
		520	391**-2GKP6	4WD_DMAINC4ERB 4A 4WD_DMAINC4ERC 0A 4WD_DMAINC4ERB 5A 4WD_DMAINC4ERB 5B	4WD_DMAINC4ERB5L
		520	391**-2GKR1	2WD_DMAINC4EMB 4A 2WD_DMAINC4EMC 0A 2WD_DMAINC4EMB 5A 2WD_DMAINC4EMB 5B	2WD_DMAINC4EMB5 K
		520	391**-2GKR6	4WD_DMAINC4EMB 4A 4WD_DMAINC4EMC 0A 4WD_DMAINC4EMB 5A 4WD_DMAINC4EMB 5B	4WD_DMAINC4EMB5L
Santa Fe Sport (AN) 2.0T	13MY	499	391**-2GBB0	2WD_BDC0RE3A 2WD_BDC0RE3B 2WD_BDC0RE5A 2WD_BDC0RE5B 2WD_BDC0RF2A 2WD_BDC0RF3A 2WD_BDC0RG0A 2WD_BDC0RG01 2WD_BDC0RG02	2WD_BDC0RG1K
		499	391**-2GBC0	4WD_BDC0RE3A 4WD_BDC0RE3B 4WD_BDC0RE5A 4WD_BDC0RE5B 4WD_BDC0RF2A 4WD_BDC0RF3A 4WD_BDC0RG0A 4WD_BDC0RG01 4WD_BDC0RG02	4WD_BDC0RG1L

		499	391**-2GBD0	2WD_BDC0ME3A 2WD_BDC0ME3B 2WD_BDC0ME5A 2WD_BDC0ME5B 2WD_BDC0MF2A 2WD_BDC0MF3A 2WD_BDC0MG0A 2WD_BDC0MG01 2WD_BDC0MG02	2WD_BDC0MG1K
		499	391**-2GBE0	4WD_BDC0ME3A 4WD_BDC0ME3B 4WD_BDC0ME5A 4WD_BDC0ME5B 4WD_BDC0MF2A 4WD_BDC0MF3A 4WD_BDC0MG0A 4WD_BDC0MG01 4WD_BDC0MG02	4WD_BDC0MG1L
14MY		499	391**-2GBB1	2WD_BEC0RH2A 2WD_BEC0RH2B	2WD_BEC0RH2K
		499	391**-2GBC1	4WD_BEC0RH2A 4WD_BEC0RH2B	4WD_BEC0RH2L
		499	391**-2GBD1	2WD_BEC0MH2A 2WD_BEC0MH2B	2WD_BEC0MH2K
		499	391**-2GBE1	4WD_BEC0MH2A 4WD_BEC0MH2B	4WD_BEC0MH2L
15MY		493	391**-2GBB2 391**-2GBC2	BFC0RH5A	BFC0RH6A
		493	391**-2GBD2 391**-2GBE2	BFC0MH5A	BFC0MH6A
16MY		512	391**-2GBB4	2WD_BGC0RH5A	2WD_BGC0RH6A
		512	391**-2GBC4	4WD_BGC0RH5A	4WD_BGC0RH6B
		512	391**-2GBD4	2WD_BGC0MH5A	2WD_BGC0MH6A
		512	391**-2GBE4	4WD_BGC0MH5A	4WD_BGC0MH6B
17MY		520	391**-2GKS0	2WD_DMAHNC0ERB 2A 2WD_DMAHNC0ERB 4A	2WD_DMAHNC0ERB4 K
		520	391**-2GKS5	4WD_DMAHNC0ERB 2A 4WD_DMAHNC0ERB 4A	4WD_DMAHNC0ERB4 L
		520	391**-2GKT0	2WD_DMAHNC0EM B2A 2WD_DMAHNC0EM B4A	2WD_DMAHNC0EMB4 K

		520	391**-2GKT5	4WD_DMAHNC0EMB2A 4WD_DMAHNC0EMB4A	4WD_DMAHNC0EMB4L
	18MY	520	391**-2GKS1	2WD_DMAINCOERB4A 2WD_DMAINCOERB5A 2WD_DMAINCOERB5B 2WD_DMAINCOERB5C	2WD_DMAINCOERB5K
		520	391**-2GKS6	4WD_DMAINCOERB4A 4WD_DMAINCOERB5A 4WD_DMAINCOERB5B 4WD_DMAINCOERB5C	4WD_DMAINCOERB5L
		520	391**-2GKT1	2WD_DMAINCOEMB4A 2WD_DMAINCOEMB5A 2WD_DMAINCOEMB5B 2WD_DMAINCOEMB5C	2WD_DMAINCOEMB5K
		520	391**-2GKT6	4WD_DMAINCOEMB4A 4WD_DMAINCOEMB5A 4WD_DMAINCOEMB5B 4WD_DMAINCOEMB5C	4WD_DMAINCOEMB5L
Tucson (LM) 2.4L	14MY	496	391**-2GBB0 391**-2GBB5	LEC4RH2A LEC4RH2B LEC4RH2C	LEC4RH2K
		496	391**-2GBD0 391**-2GBD5	LEC4MH2A LEC4MH2B LEC4MH2C	LEC4MH2K
		496	391**-2GBC0 391**-2GBC5	LES4RH2A LES4RH2B LES4RH2C	LES4RH2K
		496	391**-2GBE0 391**-2GBE5	LES4MH2A LES4MH2B LES4MH2C	LES4MH2K
	15MY	496	391**-2GBB1 391**-2GBB2 391**-2GBB6 391**-2GBB7	LFC4RH4A LFC4RH4B	LFC4RH4K

		496	391**-2GBD1 391**-2GBD2 391**-2GBD6 391**-2GBD7	LFC4MH4A LFC4MH4B	LFC4MH4K
		496	391**-2GBC6 391**-2GBC7	LFS4RH4A LFS4RH4B	LFS4RH4K
		496	391**-2GBE6 391**-2GBE7	LFS4MH4A LFS4MH4B	LFS4MH4K
Tucson (TL) 2.4L	18MY	523	391**-2GAA0	TSDINC4ERD5A	TSDINC4ERD5K
		523	391**-2GAA0	TSDINC4EMD5A	TSDINC4EMD5K
		523	391**-2GAB0	TSDINC4ERD5C	TSDINC4ERD5L
		523	391**-2GAB0	TSDINC4EMD5C	TSDINC4EMD5L

**GDS Information:****ROM ID Information Table – Cluster**

Note: Cluster update only applies to 15MY Sonata (LF) and 15MY Santa Fe Sport (AN).

Model	Event # / Cluster Type	Part Number	OLD ROM ID	NEW ROM ID
2015 MY Sonata (LF)	EVENT #481 STANDARD CLUSTER	94001-C2000	94001-C2000_A03	94001-C2000_103
			94001-C2000_110	94001-C2000_104
		94021-C2000	94021-C2000_A02	94021-C2000_103
			94021-C2000_100	94021-C2000_104
	EVENT #482 SUPER VISION CLUSTER	94011-C2000	94011-C2000_101 94011-C2000_102	94011-C2000_103
		94031-C2000	94031-C2000_100 94031-C2000_101	94031-C2000_103
2015 MY Santa Fe Sport (AN)	EVENT #494 STANDARD CLUSTER	9400*-4Z300 9400*-4Z310 9400*-4Z320	94001-4Z300_200 94001-4Z310_200 94001-4Z320_200 94002-4Z300_200 94002-4Z310_200 94002-4Z320_200 94001-4Z300_201 94001-4Z310_201 94001-4Z320_201 94002-4Z300_201 94002-4Z310_201 94002-4Z320_201	9400*-4Z3*0_204

**SUBJECT:**

ENGINE MONITORING LOGIC PRODUCT IMPROVEMENT (SERVICE CAMPAIGN 953)

	EVENT #495 SUPER VISION CLUSTER	9401*-4Z300 9401*-4Z310 9401*-4Z320	94011-4Z300_201 94011-4Z310_201 94011-4Z320_201 94012-4Z300_201 94012-4Z310_201 94012-4Z320_201 94011-4Z300_202 94011-4Z310_202 94011-4Z320_202 94012-4Z300_202 94012-4Z310_202 94012-4Z320_202 94011-4Z300_203 94011-4Z310_203 94011-4Z320_203 94012-4Z300_203 94012-4Z310_203 94012-4Z320_203	9401*-4Z3*0_204
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**Warranty Information:**

Model	Op. Code	Operation	Op. Time	Causal Part No.	Nature Code	Cause Code
11-14MY SONATA (YF)	80CA08R5	ECM UPDATE	0.3 M/H	39111- 2G670	E13	ZZ3
15MY SONATA (LF)	80CA08R0	ECM & CLUSTER UPDATE	0.5 M/H	39111- 2GGK5	E13	ZZ3
16-18MY SONATA (LF)	80CA08A6	ECM UPDATE	0.3 M/H	39111- 2GGK6	E13	ZZ3
13-14MY SANTA FE SPORT (AN)	80CA08A5	ECM UPDATE	0.3 M/H	39100- 2GAE0	E13	ZZ3
15MY SANTA FE SPORT (AN)	80CA08R4	ECM & CLUSTER UPDATE	0.5 M/H	39100- 2GAE2	E13	ZZ3
16-18MY SANTA FE SPORT (AN)	80CA08A7	ECM UPDATE	0.3 M/H	39100- 2GAE4	E13	ZZ3
14-15MY TUCSON (LM)	80CA08A2	ECM UPDATE	0.3 M/H	39106- 2GBB0	E13	ZZ3
18MY TUCSON (TL)	80CA08B0	ECM UPDATE	0.3 M/H	39171- 2GAA0	E13	ZZ3

**NOTE 1:** Submit Claim on Campaign Claim Entry Screen**NOTE 2:** If a part 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(s) are out of warranty, request a Prior Authorization # for goodwill consideration prior to completing the Campaign.

## Service Procedure:

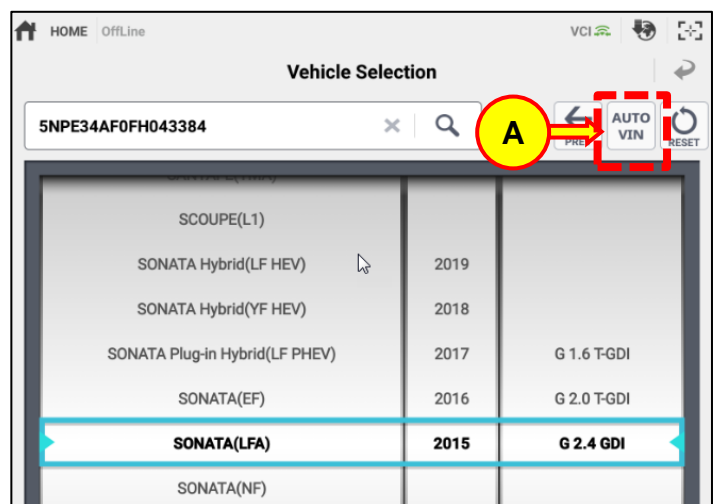
**NOTICE**

- Update the Engine ECM on all models and Cluster if applicable. Refer to Cluster ROM ID Information Table.
- Check the ROM ID of the vehicle's ECM and cluster and reference the ROM ID Information Table before attempting any updates.
- Ensure the GDS Mobile and the vehicle's battery are fully charged. Run the engine to charge the battery if necessary before attempting any updates.
- Turn off all lamps and do not leave the head lamp switch in auto mode. Turn off all accessories (including heater, A/C, blower, radio, seat warmer, defroster, etc.). Do not allow the battery to be discharged during update.
- Perform update with the ignition switch in the ON position.
- Be careful not to disconnect any cables connected to the vehicle or scan tool during update.
- Do not start the engine during update.
- Do not turn off the ignition switch during update unless specifically directed by the GDS Mobile.

1. Connect the VCI-II into the vehicle's DLC connector under the driver side instrument panel.



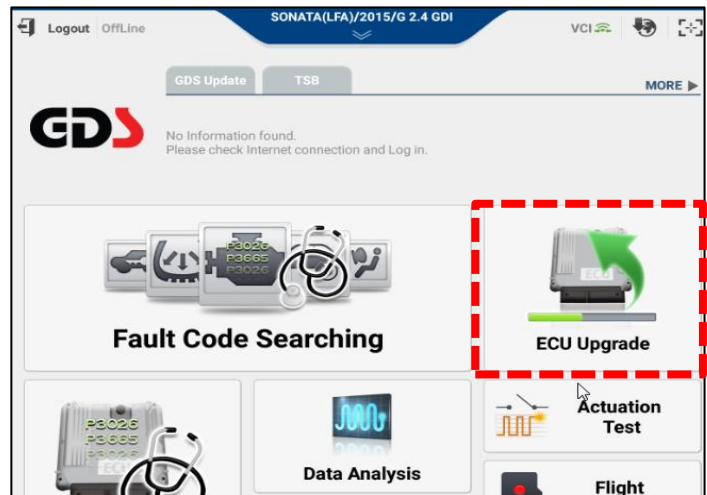
2. With the ignition in the ON position, open the GDS app on the GDS Mobile. Confirm GDS communication with the vehicle and use the **AUTO VIN** button (A) to detect the vehicle's VIN.



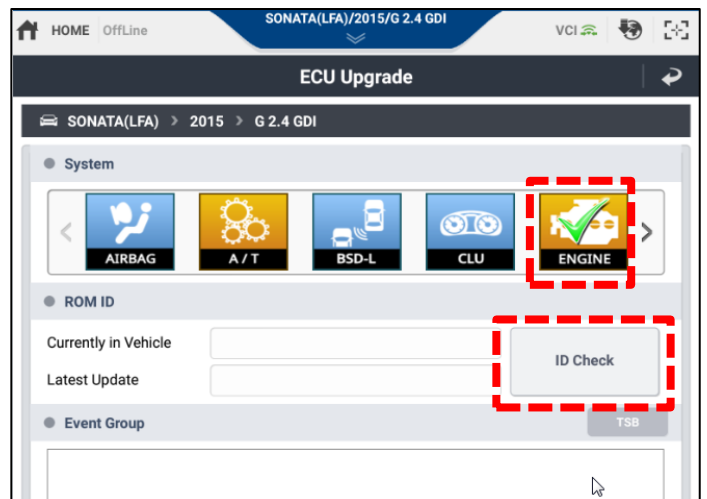
3. Select **ECU Upgrade** from the GDS main screen and then select **Auto Mode**.

## NOTICE

Do not update using Manual Mode unless the Auto Mode fails.



4. Under **System**, select **Engine** to update the engine ECM. Then select **ID Check** to search for available updates.

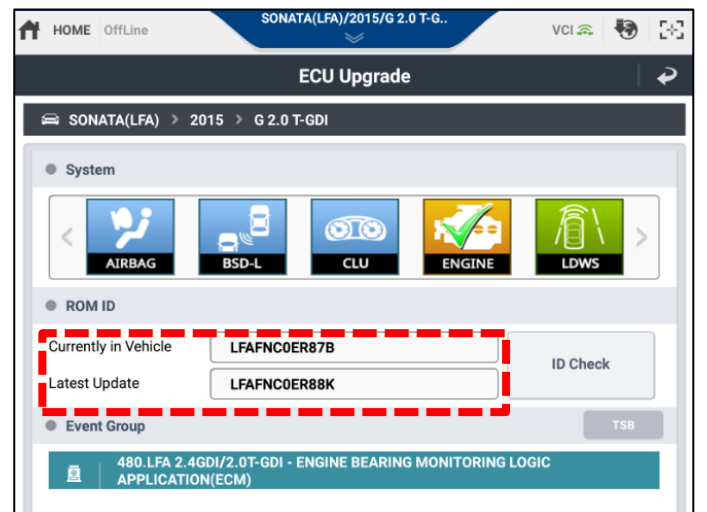


5. Confirm the ROM IDs match those in the ROM Information table for the vehicle specification. Select the event under **Event Group** and then select **Upgrade** to start the update.

The update is performed in two parts. Follow the prompts on the GDS to complete the update.

## NOTICE

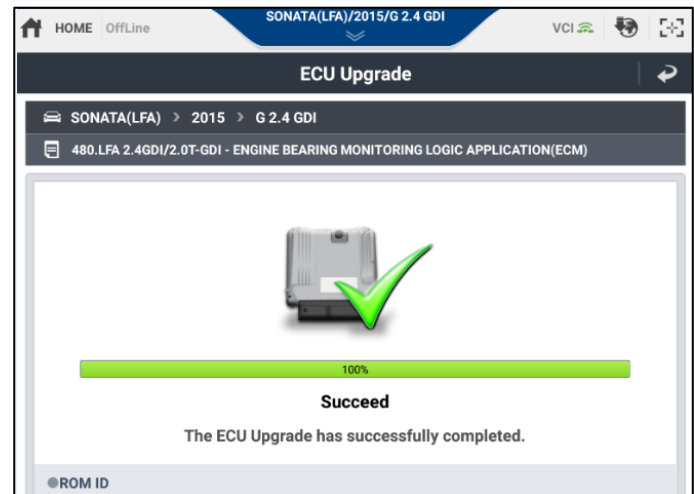
Do not touch the GDS buttons ('Back', 'Home', etc) while performing the update. Do not start the engine.



6. Once the update is performed successfully, select **OK** to continue. When prompted to run a fault code search, select **Yes** to check for DTCs. Clear all DTCs if any are stored.

## NOTICE

Various warning messages may appear in the instrument cluster during the update. Clear any DTCs after the update.

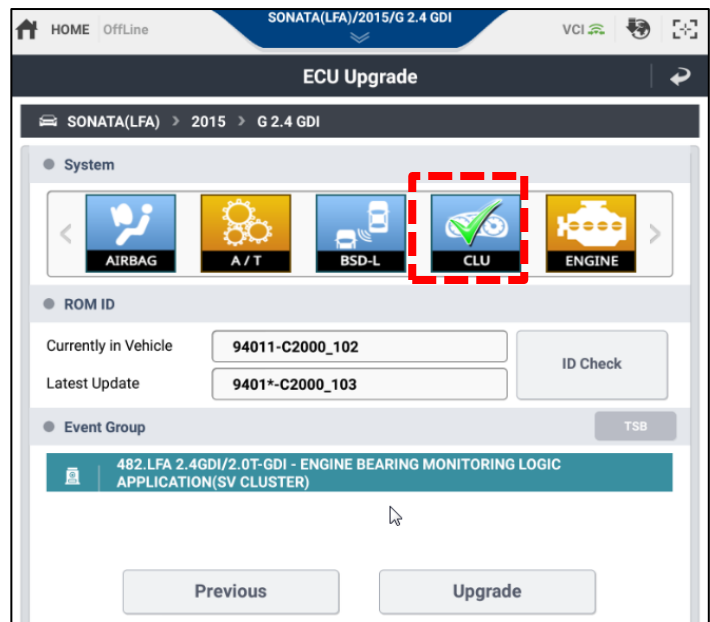


7. Next update the cluster software (if applicable) starting with the process outlined in Step 3. Under **System** in the **ECU Upgrade** menu, select **CLU** to update the cluster. Skip to Step 8 for vehicles without cluster updates.

## NOTICE

Update the Engine ECM on all models and Cluster if applicable. Refer to Cluster ROM ID Information Table.

Do not update using Manual Mode unless the Auto Mode fails.



8. When both the engine ECM and cluster updates (if applicable) are completed, start the engine to confirm proper operation.

9. Check for any DTCs and perform the appropriate diagnostic service. Ensure no warning lights are present to complete the procedure.

## Manual Update Procedure:

### NOTICE

The manual update should be performed only when the automatic update fails.

If automatic update fails, turn the ignition off for about 10 seconds and then place it back in the on position to reset the control unit before performing a manual update.

1. Select **ECU Upgrade** from the GDS main screen and then select **Manual Mode**.

### NOTICE

Do not update using Manual Mode unless the Auto Mode fails.

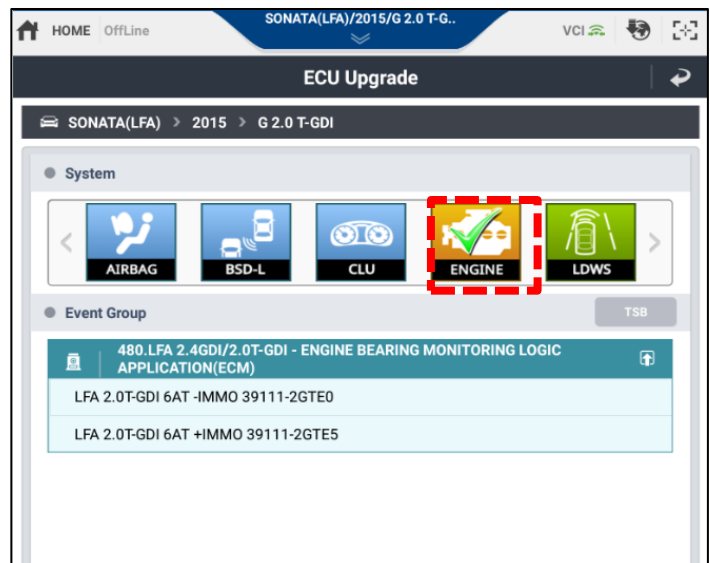
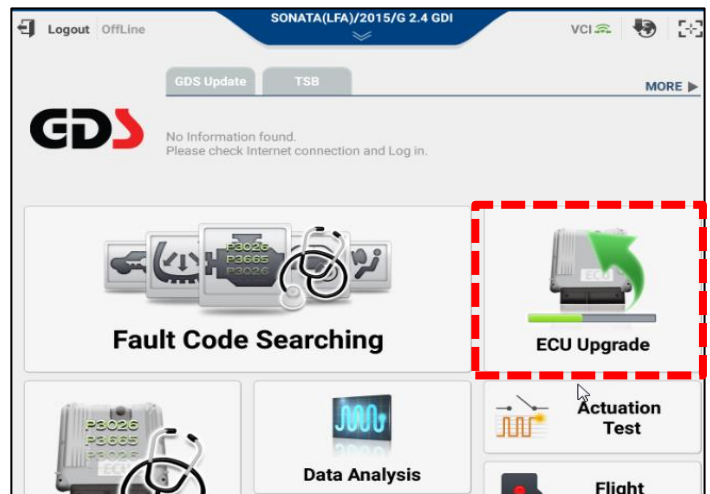
Ensure the correct update is performed by using the ROM ID Info tables. Any attempt to update using an incorrect ROM ID may cause the ECU to be inoperative.

Do not touch the GDS buttons ('Back', 'Home', etc) while performing the update.

Do not start the engine.

Various warning messages may appear in the instrument cluster during the update. Clear any DTCs after the update.

2. Under **System**, select **Engine** to update the engine ECM and, if applicable, **CLU** to update the cluster. Select the appropriate update by referencing the ROM ID Information and password tables. Select **Upgrade** and follow the prompts on the GDS to complete the update.



3. When both the engine ECM and cluster updates (if applicable) are completed, start the engine to confirm proper operation.

4. Check for any DTCs and perform the appropriate diagnostic service. Ensure no warning lights are present to complete the procedure.

### Manual Mode Update Passwords:

#### Engine ECM Update

Model	Update Name	Password
11-14MY Sonata (YF)	YFA 2.4GDI -IMMO 39111/2-2G660	2660
	YFA 2.4GDI -IMMO 39111/2-2G661	2661
	YFA 2.4GDI -IMMO 39111-2G665	2665
	YFA 2.4GDI -IMMO 39111-2G666	2666
	YFA 2.4GDI -IMMO 39111/2-2G662	2662
	YFA 2.4GDI -IMMO 39111-2G667	2667
	YFA 2.4GDI -IMMO 39111/2-2G663	2663
	YFA 2.4GDI -IMMO 39111-2G668	2668
	YFA 2.4GDI -IMMO 39111/2-2G664	2664
	YFA 2.4GDI -IMMO 39111-2G669	2669
	YFA 2.4GDI +IMMO 39111/2-2G670	2670
	YFA 2.4GDI +IMMO 39111/2-2G671	2671
	YFA 2.4GDI +IMMO 39111-2G675	2675
	YFA 2.4GDI +IMMO 39111-2G676	2676
	YFA 2.4GDI +IMMO 39111/2-2G672	2672
	YFA 2.4GDI +IMMO 39111-2G677	2677
	YFA 2.4GDI +IMMO 39111/2-2G673	2673
	YFA 2.4GDI +IMMO 39111-2G678	2678
	YFA 2.4GDI +IMMO 39111/2-2G674	2674
	YFA 2.4GDI +IMMO 39111-2G679	2679
	YFA 2.0T-GDI -IMMO 39101-2G680/1/2	2680
	YFA 2.0T-GDI -IMMO 39111-2G684	2684
	YFA 2.0T-GDI -IMMO 39111-2G683	2683
YFA 2.0T-GDI +IMMO 39101-2G690/1/2	2690	
YFA 2.0T-GDI +IMMO 39111-2G694	2694	
YFA 2.0T-GDI +IMMO 39111-2G693	2693	
15MY Sonata (LF)	LFA 2.4GDI 6AT -IMMO 39111-2GGK0	1120
	LFA 2.4GDI 6AT -IMMO 39111-2GGL0	1121
	LFA 2.4GDI 6AT +IMMO 39111-2GGK5	1122
	LFA 2.4GDI 6AT +IMMO 39111-2GGL5	1123
	LFA 2.0T-GDI 6AT +IMMO 39111-2GTE5	1125
16-18MY Sonata (LF)	LFA 16MY 2.4GDI 6AT -IMMO 39111-2GGK1	1121
	LFA 16MY 2.4GDI 6AT -IMMO 39111-2GGL1	1122
	LFA 16MY 2.4GDI 6AT +IMMO 39111-2GGK6	1126
	LFA 16MY 2.4GDI 6AT +IMMO 39111-2GGL6	1127
	LFA 16MY 2.0T-GDI 6AT -IMMO 39111-2GTE1	1123
	LFA 16MY 2.0T-GDI 6AT +IMMO 39111-2GTE6	1128

	LFA 17MY 2.4GDI 6AT -IMMO 39111-2GGK3 [ROM ID: LFAHNC4EMC0B/3A/3B]	1123
	LFA 17MY 2.4GDI 6AT -IMMO 39111-2GGL3 [ROM ID: LFAHNS4EMC0B/3A/3B]	1124
	LFA 17MY 2.4GDI 6AT -IMMO 39111-2GGK3 [ROM ID: LFAHNC4EMC5A]	1125
	LFA 17MY 2.4GDI 6AT -IMMO 39111-2GGL3 [ROM ID: LFAHNS4EMC5A]	1126
	LFA 17MY 2.4GDI 6AT +IMMO 39111-2GGK8 [ROM ID: LFAHNC4ERC0B/3A/3B]	1127
	LFA 17MY 2.4GDI 6AT +IMMO 39111-2GGL8 [ROM ID: LFAHNS4ERC0B/3A/3B]	1128
	LFA 17MY 2.4GDI 6AT +IMMO 39111-2GGK8 [ROM ID: LFAHNC4ERC5A]	1129
	LFA 17MY 2.4GDI 6AT +IMMO 39111-2GGL8 [ROM ID: LFAHNS4ERC5A]	1130
	LFA 17MY 2.0T-GDI 6AT -IMMO 39111-2GTE2 [ROM ID: LFAHNC0EMC2A/3A]	1122
	LFA 17MY 2.0T-GDI 6AT +IMMO 39111-2GTE7 [ROM ID: LFAHNC0ERC2A/3A]	1131
	LFA 17MY 2.4GDI 6AT -IMMO 39111-2GGK2 [ROM ID: LFAHNC4EMC0A]	1132
	LFA 17MY 2.4GDI 6AT -IMMO 39111-2GGL2 [ROM ID: LFAHNS4EMC0A]	1133
	LFA 17MY 2.4GDI 6AT +IMMO 39111-2GGK7 [ROM ID: LFAHNC4ERC0A]	1134
	LFA 17MY 2.4GDI 6AT +IMMO 39111-2GGL7 [ROM ID: LFAHNS4ERC0A]	1135
	LFA 18MY 2.0T-GDI 6AT -IMMO 39112-2GTE0/1 [ROM ID: LPAINC08MD3A/3B/5A/5D]	1222
	LFA 18MY 2.0T-GDI 6AT +IMMO 39112-2GTE5/6 [ROM ID: LPAINC08RD3A/3B/5A/5D]	1227
	LFA 18MY 2.4GDI 6AT -IMMO 39112-2GGJ0 [ROM ID: LPAINC4EMDAA/AB/5A/5B]	1220
	LFA 18MY 2.4GDI 6AT -IMMO 39112-2GGK0 [ROM ID: LPAINS4EMDAA/AB/5A/5B]	1221
	LFA 18MY 2.4GDI 6AT +IMMO 39112-2GGJ5 [ROM ID: LPAINC4ERDAA/AB/5A/5B]	1225
	LFA 18MY 2.4GDI 6AT +IMMO 39112-2GGK5 [ROM ID: LPAINS4ERDAA/AB/5A/5B]	1226
13-14MY Santa Fe Sport (AN)	AN 13MY 2.4GDI(2WD) -IMMO 39100/10-2GAG0 [2WD_BDC4ME3A/E5A/G0B/G0D]	1020
	AN 13MY 2.4GDI(2WD) -IMMO 39100/10-2GAG0 [2WD_BDC4ME5B/E5C/E5D/F3A/G0A/G0C/G0E]	1021
	AN 13MY 2.4GDI(4WD) -IMMO 39100-2GAG5 [4WD_BDC4ME3A/E5A/G0B/G0D]	0025
	AN 13MY 2.4GDI(4WD) -IMMO 39100-2GAG5 [4WD_BDC4ME5B/E5C/E5D/F3A/G0A/G0C/G0E]	0026
	AN 13MY 2.4GDI(2WD) +IMMO 39100/10-2GAE0 [2WD_BDC4RE3A/E5A/G0B/G0D]	1022
	AN 13MY 2.4GDI(2WD) +IMMO 39100/10-2GAE0 [2WD_BDC4RE5B/E5C/E5D/F3A/G0A/G0C/G0E]	1023
	AN 13MY 2.4GDI(4WD) +IMMO 39100-2GAE5 [4WD_BDC4RE3A/E5A/G0B/G0D]	0027
	AN 13MY 2.4GDI(4WD) +IMMO 39100-2GAE5 [4WD_BDC4RE5B/E5C/E5D/F3A/G0A/G0C/G0E]	0028
	AN 14MY 2.4GDI(2WD) -IMMO 39100/10-2GAG1 [2WD_BEC4MH2A/B]	1024
	AN 14MY 2.4GDI(4WD) -IMMO 39100-2GAG6 [4WD_BEC4MH2A/B]	0029

	AN 14MY 2.4GDI(2WD) +IMMO 39100/10-2GAE1 [2WD_BEC4RH2A/B]	1025
	AN 14MY 2.4GDI(4WD) +IMMO 39100-2GAE6 [4WD_BEC4RH2A/B]	0030
	AN 13MY 2.0T-GDI(2WD) -IMMO 39100-2GBD0 [2WD_BDC0ME3A/E3B/E5A/E5B/F2A/F3A/G0A/G01/G02]	0031
	AN 13MY 2.0T-GDI(4WD) -IMMO 39100-2GBE0 [4WD_BDC0ME3A/E3B/E5A/E5B/F2A/F3A/G0A/G01/G02]	0032
	AN 13MY 2.0T-GDI(2WD) +IMMO 39100-2GBB0 [2WD_BDC0RE3A/E3B/E5A/E5B/F2A/F3A/G0A/G01/G02]	0033
	AN 13MY 2.0T-GDI(4WD) +IMMO 39100-2GBC0 [4WD_BDC0RE3A/E3B/E5A/E5B/F2A/F3A/G0A/G01/G02]	0034
	AN 14MY 2.0T-GDI(2WD) -IMMO 39100-2GBD1 [2WD_BEC0MH2A/B]	0035
	AN 14MY 2.0T-GDI(4WD) -IMMO 39100-2GBE1 [4WD_BEC0MH2A/B]	0036
	AN 14MY 2.0T-GDI(2WD) +IMMO 39100-2GBB1 [2WD_BEC0RH2A/B]	0037
	AN 14MY 2.0T-GDI(4WD) +IMMO 39100-2GBC1 [4WD_BEC0RH2A/B]	0038
15MY Santa Fe Sport (AN)	AN 2.4GDI -IMMO 39100-2GAG2/7, 39110-2GAG2	1022
	AN 2.4GDI +IMMO 39100-2GAE2/7, 39110-2GAE2	1023
	AN 2.0T-GDI -IMMO 39100-2GBD2/E2	0222
	AN 2.0T-GDI +IMMO 39100-2GBB2/C2	0223
16-18MY Santa Fe Sport (AN)	AN 16MY 2.4GDI(2WD) -IMMO 39100/10-2GAG4 [2WD_BGC4MH5A/B]	1024
	AN 16MY 2.4GDI(4WD) -IMMO 39100-2GAG9 [4WD_BGC4MH5A/B]	0029
	AN 16MY 2.4GDI(2WD) +IMMO 39100/10-2GAE4 [2WD_BGC4RH5A/B]	1025
	AN 16MY 2.4GDI(4WD) +IMMO 39100-2GAE9 [4WD_BGC4RH5A/B]	0030
	AN 16MY 2.0T-GDI(2WD) -IMMO 39100-2GBD4 [2WD_BGC0MH5A]	0024
	AN 16MY 2.0T-GDI(4WD) -IMMO 39100-2GBE4 [4WD_BGC0MH5A]	0025
	AN 16MY 2.0T-GDI(2WD) +IMMO 39100-2GBB4 [2WD_BGC0RH5A]	0026
	AN 16MY 2.0T-GDI(4WD) +IMMO 39100-2GBC4 [4WD_BGC0RH5A]	0027
	AN 17MY 2.4GDI(2WD) -IMMO 39100-2GKR0 [2WD_DMAHNC4EMB2A/2B/2C/4A]	2020
	AN 17MY 2.4GDI(4WD) -IMMO 39100-2GKR5 [4WD_DMAHNC4EMB2A/2B/2C/4A]	4025
	AN 17MY 2.4GDI(2WD) +IMMO 39100-2GKP0 [2WD_DMAHNC4ERB2A/2B/2C/4A]	2021
	AN 17MY 2.4GDI(4WD) +IMMO 39100-2GKP5 [4WD_DMAHNC4ERB2A/2B/2C/4A]	4026
	AN 18MY 2.4GDI(2WD) -IMMO 39100-2GKR1 [2WD_DMAINC4EMB4A/B5A/B5B/C0A]	2022
	AN 18MY 2.4GDI(4WD) -IMMO 39100-2GKR6 [4WD_DMAINC4EMB4A/B5A/B5B/C0A]	4027
	AN 18MY 2.4GDI(2WD) +IMMO 39100-2GKP1 [2WD_DMAINC4ERB4A/B5A/B5B/C0A]	2023
	AN 18MY 2.4GDI(4WD) +IMMO 39100-2GKP6 [4WD_DMAINC4ERB4A/B5A/B5B/C0A]	4028
	AN 17MY 2.0T-GDI(2WD) -IMMO 39100-2GKT0 [2WD_DMAHNC0EMB2A/4A]	2024
	AN 17MY 2.0T-GDI(4WD) -IMMO 39100-2GKT5 [4WD_DMAHNC0EMB2A/4A]	4029
	AN 17MY 2.0T-GDI(2WD) +IMMO 39100-2GKS0 [2WD_DMAHNC0ERB2A/4A]	2025
	AN 17MY 2.0T-GDI(4WD) +IMMO 39100-2GKS5 [4WD_DMAHNC0ERB2A/4A]	4030

	AN 18MY 2.0T-GDI(2WD) -IMMO 39100-2GKT1 [2WD_DMAINCOEMB4A/5A/5B/5C]	2026
	AN 18MY 2.0T-GDI(4WD) -IMMO 39100-2GKT6 [4WD_DMAINCOEMB4A/5A/5B/5C]	4031
	AN 18MY 2.0T-GDI(2WD) +IMMO 39100-2GKS1 [2WD_DMAINCOERB4A/5A/5B/5C]	2027
	AN 18MY 2.0T-GDI(4WD) +IMMO 39100-2GKS6 [4WD_DMAINCOERB4A/5A/5B/5C]	4032
14-15MY Tucson (LM)	LM 2.4GDI -IMMO 39106-2GBD0/5	0625
	LM 2.4GDI -IMMO 39106-2GBE0/5	0626
	LM 2.4GDI -IMMO 39106-2GBD1/2/6/7	0627
	LM 2.4GDI -IMMO 39106-2GBE6/7	0628
	LM 2.4GDI +IMMO 39106-2GBB0/5	0629
	LM 2.4GDI +IMMO 39106-2GBC0/5	0630
	LM 2.4GDI +IMMO 39106-2GBB1/2/6/7	0631
	LM 2.4GDI +IMMO 39106-2GBC6/7	0632
18MY Tucson (TL)	TL 18MY 2.4GDI(2WD) -IMMO 39173-2GAA0	7320
	TL 18MY 2.4GDI(4WD) -IMMO 39173-2GAB0	7321
	TL 18MY 2.4GDI(2WD) +IMMO 39171-2GAA0	7120
	TL 18MY 2.4GDI(4WD) +IMMO39171-2GAB0	7121

**Cluster Update**

Note: Cluster update only applies to 15MY Sonata (LF) and 15MY Santa Fe Sport (AN).

Model	Update Name	Password
15MY Sonata (LF)	LFA STD CLUSTER(BASE) 94001-C2000 (ROM ID : 94001-C2000_A03)	2000
	LFA STD CLUSTER(BASE) 94001-C2000 (ROM ID : 94001-C2000_110)	2001
	LFA STD CLUSTER(SPORTS PACK) 94021-C2000 (ROM ID : 94021-C2000_A02)	2002
	LFA STD CLUSTER(SPORTS PACK) 94021-C2000 (ROM ID : 94021-C2000_100)	2003
	LFA SV CLUSTER(BASE) 94011-C2000	2004
	LFA SV CLUSTER(SPORTS PACK) 94031-C2000	2005
15MY Santa Fe Sport (AN)	AN STD CLUSTER 94001/2-4Z300/10/20	4320
	AN SV CLUSTER 94011/2-4Z300/10/20(ROM ID : 201)	4321
	AN SV CLUSTER 94011/2-4Z300/10/20(ROM ID : 202)	4322
	AN SV CLUSTER 94011/2-4Z300/10/20(ROM ID : 203)	4323