



# HYUNDAI

## Technical Service Bulletin

|                           |                                                  |
|---------------------------|--------------------------------------------------|
| GROUP<br><b>CAMPAIGN</b>  | NUMBER<br><b>22-01-028H</b>                      |
| DATE<br><b>MARCH 2022</b> | MODEL(S)<br><b>APPLICABLE<br/>VEHICLES BELOW</b> |

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

This TSB supersedes TSB# 21-01-023H-4 to add the 2019MY Sonata Hybrid/Plug-In (LF HEV/PHEV) to the Applicable Vehicles list. In addition, the latest GDS ECU Update Events are available for 2017-2018MY Sonata Hybrid/Plug-In (LF HEV/PHEV) and 2014-2015 Tucson (LM) 2.0L vehicles.

### ★ 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 2010-2013 MY Tucson (LM) vehicles with Theta II 2.4L MPI engines
- Certain 2014-2015 MY Tucson (LM) vehicles with Nu 2.0L GDI engines
- Certain 2016-2018 MY Tucson (TL) vehicles with Nu 2.0L GDI engines
- Certain 2011-2015 MY Sonata Hybrid (YF HEV) vehicles with Theta II 2.4L MPI Atkinson engines
- Certain 2016-2019 MY Sonata Hybrid/Plug-In (LF HEV/PHEV) vehicles with Nu 2.0L GDI engines
- Certain 2012-2017 MY Veloster (FS) vehicles with Gamma 1.6L GDI 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 2014-2017 MY Elantra GT (GD) vehicles with Nu 2.0L GDI engines
- Certain 2018-2019 MY Elantra GT (PD) vehicles with Nu 2.0L GDI engines

**GDS Information:**

| Event # | Description                                                           |
|---------|-----------------------------------------------------------------------|
| 644     | CMA 2.4MPI - IMPROVED KSDS LOGIC APPLICATION                          |
| 690     | LM 2.4MPI - IMPROVED KSDS LOGIC APPLICATION                           |
| 806     | LM 2.0GDI - IMPROVED KSDS LOGIC APPLICATION (BASE)                    |
| 739     | TL Nu 2.0 GDI (16~17MY) - IMPROVED KSDS LOGIC APPLICATION (BASE)      |
| 756     | TL 2.0GDI (18MY) - IMPROVED KSDS LOGIC APPLICATION (BASE)             |
| 713     | YF HEV 2.4 MPI - IMPROVED KSDS LOGIC APPLICATION                      |
| 733     | LF HEV/PHEV 2.0GDI (16MY) - IMPROVED KSDS LOGIC APPLICATION           |
| 797     | LF HEV/PHEV 2.0GDI (17-19MY) - IMPROVED KSDS LOGIC APPLICATION (BASE) |
| 663     | FS 1.6 GDI - 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)                |
| 730     | GD Nu 2.0 GDI - IMPROVED KSDS LOGIC APPLICATION (BASE)                |
| 754     | PD 2.0GDI (18-19MY) - 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<br><b>Santa Fe (CM)</b>                     | 10D021R0 | <b>ECM UPGRADE</b> | 0.3 M/H | 39104-2G341 | E13    | ZZ3   |
| 12-17MY Gamma 1.6L GDI<br><b>Veloster (FS)</b>                        | 10D021R1 |                    |         | 39110-2BBH3 |        |       |
| 10-13MY Theta II 2.4L MPI<br><b>Tucson (LM)</b>                       | 10D021R2 |                    |         | 39106-2G800 |        |       |
| 11-15MY Theta II 2.4L MPI<br><b>Sonata Hybrid (YF HEV)</b>            | 10D021R3 |                    |         | 39105-2G910 |        |       |
| 14MY Nu 2.0L GDI<br><b>Elantra Coupe (JK)</b>                         | 10D021R4 |                    |         | 39137-2EJA0 |        |       |
| 14-16MY Nu 2.0L GDI<br><b>Elantra (MD)</b>                            | 10D021R5 |                    |         | 39135-2EMA0 |        |       |
| 14-15MY Nu 2.0L GDI<br><b>Tucson (LM)</b>                             | 10D021RD |                    |         | 39137-2ELC0 |        |       |
| 14-17MY Nu 2.0L GDI<br><b>Elantra GT (GD)</b>                         | 10D021R7 |                    |         | 39137-2EGB0 |        |       |
| 16MY Nu 2.0L GDI<br><b>Sonata Hybrid/Plug-In<br/>(LF HEV/PHEV)</b>    | 10D021R8 |                    |         | 39161-2EEB0 |        |       |
| 17-19MY Nu 2.0L GDI<br><b>Sonata Hybrid/Plug-In<br/>(LF HEV/PHEV)</b> | 10D021RB |                    |         | 39161-2EEB1 |        |       |
| 16-18 MY Nu 2.0L GDI<br><b>Tucson (TL)</b>                            | 10D021R9 |                    |         | 39133-2ETA0 |        |       |
| 18-19MY Nu 2.0L GDI<br><b>Elantra GT (PD)</b>                         | 10D021RA |                    |         | 39131-2EPE0 |        |       |

**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)<br>2.4L MPI<br>(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)<br>2.4L MPI<br>(11MY) | AT | O    | 39104-2G331 | FBC4RM2A<br>FBC4RM2B<br>FBC4RQ0A | FBC4RQKA         |
|                                     |    | X    | 39104-2G341 | FBC4MM2A<br>FBC4MM2B<br>FBC4MQ0A | FBC4MQKA         |
|                                     | MT | O    | 39114-2G331 | FBC4RM2A<br>FBC4RM2B<br>FBC4RQ0A | FBC4RQ1K         |
|                                     |    | X    | 39114-2G341 | FBC4MM2A<br>FBC4MM2B<br>FBC4MQ0A | FBC4MQ1K         |
| Santa Fe (CM)<br>2.4L MPI<br>(12MY) | AT | O    | 39104-2G332 | FCC4RQ0A<br>FCC4RR1A             | FCC4RRKA         |
|                                     |    | X    | 39104-2G342 | FCC4MQ0A<br>FCC4MR1A             | FCC4MRKA         |
|                                     | MT | O    | 39114-2G332 | FCC4RQ0A<br>FCC4RR1A             | FCC4RR1K         |
|                                     |    | X    | 39114-2G342 | FCC4MQ0A<br>FCC4MR1A             | FCC4MR1K         |

| MODEL                        | TM  | IMMO | ECM P/N                                   | ECM ROM ID                                                                                                                                                                                                                                   |                  |
|------------------------------|-----|------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
|                              |     |      |                                           | OLD                                                                                                                                                                                                                                          | NEW (EVENT #663) |
| Veloster<br>(FS)<br>1.6L GDI | DCT | X    | 39110-2BBH3<br>39110-2BBC7<br>39110-2BBR3 | GGFS-BFU6ES00H00<br>GGFS-BFU6ES01H00<br>GGFS-BFU6ES02H00<br>GGFS-BFU6ES03H00<br>GGFS-BFU6ES04H00<br>GGFS-BFU6ES05H00<br>GGFS-BFU6ES06H00<br>GGFS-BFU6EF00H00<br>GGFS-DFU6ES00H00<br>GGFS-DFU6ES01H00<br>GGFS-DFU6ES02H00<br>GGFS-DFU6ES03H00 | GGFS-EFU6EK33H00 |

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|                              |    |   |                                           |                                                                                                                                                                                                                                                                                                                                                                                          |                  |
|------------------------------|----|---|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
|                              |    |   |                                           | GGFS-DFU6ES04H00<br>GGFS-DFU6ES05H00<br>GGFS-EFU6ES00H00<br>GGFS-EFU6ES01H00<br>GGFS-EFU6EF01H00<br>GGFS-EFU6EF02H00<br>GGFS-EFU6EF03H00                                                                                                                                                                                                                                                 |                  |
|                              |    | O | 39110-2BBH0<br>39110-2BBB7<br>39110-2BBR0 | GGFS-BFU6FS00H00<br>GGFS-BFU6FS01H00<br>GGFS-BFU6FS02H00<br>GGFS-BFU6FS03H00<br>GGFS-BFU6FS04H00<br>GGFS-BFU6FS05H00<br>GGFS-BFU6FS06H00<br>GGFS-BFU6FF00H00<br>GGFS-DFU6FS00H00<br>GGFS-DFU6FS01H00<br>GGFS-DFU6FS02H00<br>GGFS-DFU6FS03H00<br>GGFS-DFU6FS04H00<br>GGFS-DFU6FS05H00<br>GGFS-EFU6FS00H00<br>GGFS-EFU6FS01H00<br>GGFS-EFU6FF01H00<br>GGFS-EFU6FF02H00<br>GGFS-EFU6FF03H00 | GGFS-EFU6FK33H00 |
| Veloster<br>(FS)<br>1.6L GDI | MT | X | 39110-2BBF3<br>39110-2BBN9<br>39110-2BBR9 | GGFS-BFU6ES00600<br>GGFS-BFU6ES01600<br>GGFS-BFU6ES02600<br>GGFS-BFU6ES03600<br>GGFS-BFU6ES04600<br>GGFS-BFU6ES05600<br>GGFS-DFU6ES00600<br>GGFS-DFU6ES01600<br>GGFS-DFU6ES02600<br>GGFS-DFU6ES03600<br>GGFS-EFU6ES01600<br>GGFS-EFU6EF01600<br>GGFS-EFU6EF02600<br>GGFS-EFU6EF03600                                                                                                     | GGFS-EFU6EK33600 |
|                              |    | O | 39110-2BBF0<br>39110-2BBN6<br>39110-2BBR6 | GGFS-BFU6FS00600<br>GGFS-BFU6FS01600<br>GGFS-BFU6FS02600<br>GGFS-BFU6FS03600<br>GGFS-BFU6FS04600<br>GGFS-BFU6FS05600<br>GGFS-DFU6FS00600<br>GGFS-DFU6FS01600<br>GGFS-DFU6FS02600<br>GGFS-DFU6FS03600<br>GGFS-EFU6FS01600                                                                                                                                                                 | GGFS-EFU6FK33600 |

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|                              |     |   |             |                                                                                                  |                  |
|------------------------------|-----|---|-------------|--------------------------------------------------------------------------------------------------|------------------|
| Veloster<br>(FS)<br>1.6L GDI |     |   |             | GGFS-EFU6FF01600<br>GGFS-EFU6FF02600<br>GGFS-EFU6FF03600                                         |                  |
|                              | DCT | X | 39110-2BBR4 | GGFS-FFU6ES00H00<br>GGFS-FFU6ES01H00<br>GGFS-FFU6EF01H00<br>GGFS-FFU6EF02H00                     | GGFS-FFU6EK32H00 |
|                              |     | O | 39110-2BBR1 | GGFS-FFU6FS00H00<br>GGFS-FFU6FS01H00<br>GGFS-FFU6FF01H00<br>GGFS-FFU6FF02H00                     | GGFS-FFU6FK32H00 |
|                              | MT  | X | 39110-2BBR8 | GGFS-FFU6ES00600<br>GGFS-FFU6ES01600<br>GGFS-FFU6ES02600<br>GGFS-FFU6EF02600<br>GGFS-FFU6EF03600 | GGFS-FFU6EK33600 |
|                              |     | O | 39110-2BBR5 | GGFS-FFU6FS00600<br>GGFS-FFU6FS01600<br>GGFS-FFU6FS02600<br>GGFS-FFU6FF02600<br>GGFS-FFU6FF03600 | GGFS-FFU6FK33600 |
|                              | DCT | X | 39125-2BFK5 | GGFS-GFU6ES00H00<br>GGFS-GFU6ES01H00<br>GGFS-GFU6ES02H00                                         | GGFS-GFU6EK32H00 |
|                              |     | O | 39125-2BFK0 | GGFS-GFU6FS00H00<br>GGFS-GFU6FS01H00<br>GGFS-GFU6FS02H00                                         | GGFS-GFU6FK32H00 |
|                              | MT  | X | 39121-2BFK5 | GGFS-GFU6ES00600<br>GGFS-GFU6ES01600<br>GGFS-GFU6ES02600                                         | GGFS-GFU6EK32600 |
|                              |     | O | 39121-2BFK0 | GGFS-GFU6FS00600<br>GGFS-GFU6FS01600<br>GGFS-GFU6FS02600                                         | GGFS-GFU6FK32600 |

| MODEL                             |    |       | IMMO        | ECU P/N     | OLD<br>ROM ID | NEW<br>ROM ID (Event #690) |
|-----------------------------------|----|-------|-------------|-------------|---------------|----------------------------|
| Tucson (LM)<br>2.4L MPI<br>(10MY) | AT | ULEV  | -IMMO       | 39106-2G800 | LAC4MK3A      | LAC4MQKA                   |
|                                   |    |       |             |             | LAC4MK3B      |                            |
|                                   |    |       |             |             | LAC4MQ0B      |                            |
|                                   |    | +IMMO | 39106-2G810 |             | LAC4RK3A      | LAC4RQKA                   |
|                                   |    |       |             |             | LAC4RK3B      |                            |
|                                   |    |       |             |             | LAC4RQ0B      |                            |
|                                   |    | SULEV | -IMMO       | 39106-2G820 | LAS4MK3A      | LAS4MQKA                   |
|                                   |    |       |             |             | LAS4MK3B      |                            |
|                                   |    |       |             |             | LAS4MQ0B      |                            |

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|                                   |    |       |             |             |          |          |
|-----------------------------------|----|-------|-------------|-------------|----------|----------|
|                                   | MT | ULEV  | +IMMO       | 39106-2G880 | LAS4RK3A | LAS4RQKA |
|                                   |    |       |             |             | LAS4RK3B |          |
|                                   |    |       |             |             | LAS4RQ0B |          |
|                                   |    |       | -IMMO       | 39116-2G800 | LAC4MK3A | LAC4MQ1K |
|                                   |    |       |             |             | LAC4MK3B |          |
|                                   |    |       |             |             | LAC4MQ0B |          |
|                                   |    |       | +IMMO       | 39116-2G810 | LAC4RK3A | LAC4RQ1K |
|                                   |    |       |             |             | LAC4RK3B |          |
|                                   |    |       |             |             | LAC4RQ0B |          |
| Tucson (LM)<br>2.4L MPI<br>(11MY) | AT | ULEV  | -IMMO       | 39106-2G801 | LAC4ML0A | LBC4MQKA |
|                                   |    |       |             |             | LBC4MM2A |          |
|                                   |    |       |             |             | LBC4MQ0A |          |
|                                   |    |       |             |             | LBC4MQ0B |          |
|                                   |    |       |             |             | LBC4MQ0C |          |
|                                   |    | +IMMO | 39106-2G811 |             | LAC4RL0A | LBC4RQKA |
|                                   |    |       |             |             | LBC4RM2A |          |
|                                   |    |       |             |             | LBC4RM2B |          |
|                                   |    |       |             |             | LBC4RQ0A |          |
|                                   |    |       |             |             | LBC4RQ0B |          |
|                                   |    | SULEV | -IMMO       | 39106-2G821 | LAS4ML0A | LBS4MQKA |
|                                   |    |       |             |             | LBS4MM2A |          |
|                                   |    |       |             |             | LBS4MQ0A |          |
|                                   |    |       |             |             | LBS4MQ0B |          |
|                                   |    |       |             |             | LBS4MQ0C |          |
|                                   |    | +IMMO | 39106-2G881 |             | LAS4RL0A | LBS4RQKA |
|                                   |    |       |             |             | LBS4RM2A |          |
|                                   |    |       |             |             | LBS4RQ0A |          |
|                                   |    |       |             |             | LBS4RQ0B |          |
|                                   |    |       |             |             | LBS4RQ0C |          |
| Tucson (LM)<br>2.4L MPI<br>(11MY) | MT | ULEV  | -IMMO       | 39116-2G801 | LAC4ML0A | LBC4MQ1K |
|                                   |    |       |             |             | LBC4MM2A |          |
|                                   |    |       |             |             | LBC4MQ0A |          |
|                                   |    |       |             |             | LBC4MQ0B |          |
|                                   |    |       |             |             | LBC4MQ0C |          |
|                                   |    |       | +IMMO       | 39116-2G811 | LAC4RL0A | LBC4RQ1K |
|                                   |    |       |             |             | LBC4RM2A |          |
|                                   |    |       |             |             | LBC4RM2B |          |
|                                   |    |       |             |             | LBC4RQ0A |          |
|                                   |    |       |             |             | LBC4RQ0B |          |

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|                                   |    |       |             |             |          |          |
|-----------------------------------|----|-------|-------------|-------------|----------|----------|
|                                   |    |       |             |             | LBC4RQ0C |          |
| Tucson (LM)<br>2.4L MPI<br>(12MY) | AT | ULEV  | -IMMO       | 39106-2G802 | LCC4MP4A | LCC4MRKA |
|                                   |    |       |             |             | LCC4MQ0A |          |
|                                   |    |       |             |             | LCC4MQ0B |          |
|                                   |    |       |             |             | LCC4MR1A |          |
|                                   |    |       |             |             | LCC4MR1B |          |
|                                   |    | +IMMO | 39106-2G812 |             | LCC4RP4A | LCC4RRKA |
|                                   |    |       |             |             | LCC4RQ0A |          |
|                                   |    |       |             |             | LCC4RR1A |          |
|                                   |    |       |             |             | LCC4RR1B |          |
|                                   |    |       |             |             | LCC4RR1C |          |
|                                   |    | SULEV | -IMMO       | 39106-2G822 | LCS4MP4A | LCS4MRKA |
|                                   |    |       |             |             | LCS4MQ0A |          |
|                                   |    |       |             |             | LCS4MQ0B |          |
|                                   |    |       |             |             | LCS4MR1A |          |
|                                   |    |       |             |             | LCS4MR1B |          |
|                                   |    | +IMMO | 39106-2G882 |             | LCS4RP4A | LCS4RRKA |
|                                   |    |       |             |             | LCS4RQ0A |          |
|                                   |    |       |             |             | LCS4RQ0B |          |
|                                   |    |       |             |             | LCS4RR1A |          |
|                                   |    |       |             |             | LCS4RR1B |          |
| Tucson (LM)<br>2.4L MPI<br>(12MY) | MT | ULEV  | -IMMO       | 39116-2G802 | LCC4MP4A | LCC4MR1K |
|                                   |    |       |             |             | LCC4MQ0A |          |
|                                   |    |       |             |             | LCC4MQ0B |          |
|                                   |    |       |             |             | LCC4MR1A |          |
|                                   |    |       |             |             | LCC4MR1B |          |
|                                   |    | +IMMO | 39116-2G812 |             | LCC4RP4A | LCC4RR1K |
|                                   |    |       |             |             | LCC4RQ0A |          |
|                                   |    |       |             |             | LCC4RR1A |          |
| Tucson (LM)<br>2.4L MPI<br>(13MY) | AT | ULEV  | -IMMO       | 39106-2G803 | LDC4RS0A | LDC4RTKC |
|                                   |    |       |             |             | LDC4RT0A |          |
|                                   |    |       |             |             | LDC4MT0B |          |
|                                   |    |       |             |             | LDC4MT1B |          |
|                                   |    |       | +IMMO       | 39106-2G813 | LDC4RS0A | LDC4RTKC |
|                                   |    |       |             |             | LDC4RT0A |          |
|                                   |    |       |             |             | LDC4RT0B |          |
|                                   |    |       |             |             | LDC4RT1B |          |
|                                   |    |       |             |             | LDC4RT1C |          |

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|  |    |       |             |             |          |          |
|--|----|-------|-------------|-------------|----------|----------|
|  |    | 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 |          |

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

| MODEL                             | MY /<br>EMISSION | TM | IMMO | ECU P/N     | ROM ID           |                  |
|-----------------------------------|------------------|----|------|-------------|------------------|------------------|
|                                   |                  |    |      |             | OLD              | NEW (Event #717) |
| Elantra<br>Coupe (JK)<br>2.0L GDI | 14MY<br>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<br>SULEV    | AT | O    | 39131-2EJC0 | GGJK-ENSAQS00C00 | GGJK-ENSAQK00C00 |
|                                   |                  |    | X    | 39133-2EJC0 | GGJK-ENSAPS00C00 | GGJK-ENSAPK00C00 |

| MODEL                    | MY / EMISSION | TM | IMMO | ECU P/N                    | ROM ID                               |                  |
|--------------------------|---------------|----|------|----------------------------|--------------------------------------|------------------|
|                          |               |    |      |                            | OLD                                  | NEW (Event #715) |
| Elantra (MD)<br>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<br>GGMD-FNUAFS02600 | GGMD-FNUAFK02600 |
|                          |               |    | X    | 39137-2EMA1                | GGMD-FNUAES00600<br>GGMD-FNUAES02600 | GGMD-FNUAEK02600 |
|                          |               | AT | O    | 39131-2EMA1<br>39131-2EMA2 | GGMD-FNUAQS00C00<br>GGMD-FNUAQS02C00 | GGMD-FNUAQK02C00 |
|                          |               |    | X    | 39133-2EMA1<br>39133-2EMA2 | GGMD-FNUAPS00C00<br>GGMD-FNUAPS02C00 | GGMD-FNUAPK02C00 |
|                          | 15MY SULEV    | AT | O    | 39131-2EMB1<br>39131-2EMB2 | GGMD-FNSAQS00C00<br>GGMD-FNSAQS02C00 | GGMD-FNSAQK02C00 |
|                          |               |    | X    | 39133-2EMB1<br>39133-2EMB2 | GGMD-FNSAPS00C00<br>GGMD-FNSAPS02C00 | GGMD-FNSAPK02C00 |
|                          | 16MY ULEV     | MT | O    | 39135-2EMA2                | GGMD-GNUAFS00600<br>GGMD-GNUAFS01600 | GGMD-GNUAFK01600 |
|                          |               |    | X    | 39137-2EMA2                | GGMD-GNUAES00600<br>GGMD-GNUAES01600 | GGMD-GNUAEK01600 |
|                          |               | AT | O    | 39131-2EMA3                | GGMD-GNUAQS00C00<br>GGMD-GNUAQS01C00 | GGMD-GNUAQK01C00 |
|                          |               |    | X    | 39133-2EMA3                | GGMD-GNUAPS00C00<br>GGMD-GNUAPS01C00 | GGMD-GNUAPK01C00 |
|                          | 16MY SULEV    | AT | O    | 39131-2EMB3                | GGMD-GNSAQS00C00<br>GGMD-GNSAQS01C00 | GGMD-GNSAQK01C00 |
|                          |               |    | X    | 39133-2EMB3                | GGMD-GNSAPS00C00<br>GGMD-GNSAPS01C00 | GGMD-GNSAPK01C00 |

| MODEL                   | MY   | TM       | IMMO | ECU P/N     | ROM ID           |                  |
|-------------------------|------|----------|------|-------------|------------------|------------------|
|                         |      |          |      |             | OLD              | NEW (Event #806) |
| Tucson (LM)<br>2.0L GDI | 14MY | MT (2WD) | O    | 39135-2ELC0 | GGLM-ENUAFS00600 | GGLM-ENUAFK33600 |
|                         |      |          |      |             | GGLM-ENUAFS01600 |                  |
|                         |      |          |      |             | GGLM-ENUAFS02600 |                  |
|                         |      |          |      |             | GGLM-ENUAFS03600 |                  |
|                         |      |          |      |             | GGLM-ENUAFK13600 |                  |
|                         |      |          | X    | 39137-2ELC0 | GGLM-ENUAES00600 | GGLM-ENUAEK33600 |
|                         |      |          |      |             | GGLM-ENUAES01600 |                  |
|                         |      |          |      |             | GGLM-ENUAES02600 |                  |
|                         |      |          |      |             | GGLM-ENUAES03600 |                  |
|                         |      |          |      |             | GGLM-ENUAEK13600 |                  |
|                         |      |          | O    | 39131-2ELC0 | GGLM-ENUAQS00C00 | GGLM-ENUAQK33C00 |

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

|  |      |                  |   |             |                  |                  |
|--|------|------------------|---|-------------|------------------|------------------|
|  |      | AT<br>(2WD)      |   |             | GGLM-ENUAQS01C00 |                  |
|  |      |                  |   |             | GGLM-ENUAQS02C00 |                  |
|  |      |                  |   |             | GGLM-ENUAQS03C00 |                  |
|  |      |                  |   |             | GGLM-ENUAQK13C00 |                  |
|  |      |                  | X | 39133-2ELC0 | GGLM-ENUAPS00C00 | GGLM-ENUAPK33C00 |
|  |      |                  |   |             | GGLM-ENUAPS01C00 |                  |
|  |      |                  |   |             | GGLM-ENUAPS02C00 |                  |
|  |      |                  |   |             | GGLM-ENUAPS03C00 |                  |
|  |      | GGLM-ENUAPK13C00 |   |             |                  |                  |
|  |      | AT<br>(4WD)      | O | 39131-2ELC1 | GGLM-ENUAQS00D00 | GGLM-ENUAQK33D00 |
|  |      |                  |   |             | GGLM-ENUAQS01D00 |                  |
|  |      |                  |   |             | GGLM-ENUAQS02D00 |                  |
|  |      |                  |   |             | GGLM-ENUAQS03D00 |                  |
|  |      |                  |   |             | GGLM-ENUAQK13D00 |                  |
|  |      |                  | X | 39133-2ELC1 | GGLM-ENUAPS00D00 | GGLM-ENUAPK33D00 |
|  |      |                  |   |             | GGLM-ENUAPS01D00 |                  |
|  |      |                  |   |             | GGLM-ENUAPS02D00 |                  |
|  |      | GGLM-ENUAPS03D00 |   |             |                  |                  |
|  |      | GGLM-ENUAPK13D00 |   |             |                  |                  |
|  | 15MY | MT<br>(2WD)      | O | 39135-2ELC4 | GGLM-FNUAFS00600 | GGLM-FNUAFK31600 |
|  |      |                  |   |             | GGLM-FNUAFS01600 |                  |
|  |      |                  |   |             | GGLM-FNUAFK11600 |                  |
|  |      |                  | X | 39137-2ELC4 | GGLM-FNUAES00600 | GGLM-FNUAEK31600 |
|  |      |                  |   |             | GGLM-FNUAES01600 |                  |
|  |      |                  |   |             | GGLM-FNUAEK11600 |                  |
|  |      | AT<br>(2WD)      | O | 39131-2ELC4 | GGLM-FNUAQS00C00 | GGLM-FNUAQK31C00 |
|  |      |                  |   |             | GGLM-FNUAQS01C00 |                  |
|  |      |                  |   |             | GGLM-FNUAQK11C00 |                  |
|  |      |                  | X | 39132-2ELC4 | GGLM-FNUAPS00C00 | GGLM-FNUAPK31C00 |
|  |      |                  |   |             | GGLM-FNUAPS01C00 |                  |
|  |      |                  |   |             | GGLM-FNUAPK11C00 |                  |
|  |      | AT<br>(4WD)      | O | 39131-2ELC5 | GGLM-FNUAQS00D00 | GGLM-FNUAQK31D00 |
|  |      |                  |   |             | GGLM-FNUAQS01D00 |                  |
|  |      |                  |   |             | GGLM-FNUAQK11D00 |                  |
|  |      |                  | X | 39133-2ELC5 | GGLM-FNUAPS00D00 | GGLM-FNUAPK31D00 |
|  |      |                  |   |             | GGLM-FNUAPS01D00 |                  |
|  |      |                  |   |             | GGLM-FNUAPK11D00 |                  |

| MODEL | MY | TM | IMMO | ECU P/N | ROM ID |
|-------|----|----|------|---------|--------|
|-------|----|----|------|---------|--------|

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

|                             |              |    |   |                            | OLD              | NEW (Event #730) |
|-----------------------------|--------------|----|---|----------------------------|------------------|------------------|
| Elantra GT (GD)<br>2.0L GDI | 14MY         | MT | O | 39135-2EGB0                | GGGD-DNUAFS01600 | GGGD-DNUAFK01600 |
|                             |              |    | X | 39137-2EGB0                | GGGD-DNUAES01600 | GGGD-DNUAEK01600 |
|                             |              | AT | O | 39131-2EGB0<br>39131-2EGB2 | GGGD-DNUAQS01C00 | GGGD-DNUAQK01C00 |
|                             |              |    | X | 39133-2EGB0<br>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<br>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 |

| MODEL                                                 | MY   | ENG  | ECU P/N     | ROM ID                                                       |                  |
|-------------------------------------------------------|------|------|-------------|--------------------------------------------------------------|------------------|
|                                                       |      |      |             | OLD                                                          | NEW (Event #733) |
| Sonata Hybrid/Plug-In<br>(LF HEV/PHEV)<br>Nu 2.0L GDI | 16MY | HEV  | 39161-2EEB0 | LF6UPHMS65BA<br>LF6UPHMS65CA<br>LF6UPHMS66AA<br>LF6UPHMS673A | LF6UPHMF750K     |
|                                                       |      | PHEV | 39161-2EEG0 | LF6SPPMS670A<br>LF6SPPMS673A                                 | LF6SPPMF750K     |

| MODEL                                                 | MY   | ENG  | ECU P/N     | ROM ID                                                       |                  |
|-------------------------------------------------------|------|------|-------------|--------------------------------------------------------------|------------------|
|                                                       |      |      |             | OLD                                                          | NEW (Event #797) |
| Sonata Hybrid/Plug-In<br>(LF HEV/PHEV)<br>Nu 2.0L GDI | 17MY | HEV  | 39161-2EEB1 | LF7UPHMS690A<br>LF7UPHMF6A0K                                 | LF7UPHMF6A2K     |
|                                                       |      | PHEV | 39161-2EEG1 | LF7SPPMS690A<br>LF7SPPMF6A0K                                 | LF7SPPMF6A2K     |
|                                                       |      | HEV  | 39161-2EEB2 | LF7UPHMS6A0A<br>LF7UPHMF6A1K                                 | LF7UPHMF6A3K     |
|                                                       |      | PHEV | 39161-2EEG2 | LF7SPPMS6A0A<br>LF7SPPMF6A1K                                 | LF7SPPMF6A3K     |
| Sonata Hybrid/Plug-In<br>(LF HEV/PHEV)<br>Nu 2.0L GDI | 18MY | HEV  | 39161-2ELF0 | LF8SPHMS6D1A<br>LF8SPHMS6D1B<br>LF8SPHMS6D1C<br>LF8SPHMF6D4K | LF8SPHMF6D5K     |
|                                                       |      | PHEV | 39161-2ELH0 | LF8SPPMS6D1A<br>LF8SPPMS6D1B<br>LF8SPPMF6D4K                 | LF8SPPMF6D5K     |

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

|                                                       |      |      |                            |                                                                              |              |
|-------------------------------------------------------|------|------|----------------------------|------------------------------------------------------------------------------|--------------|
| Sonata Hybrid/Plug-In<br>(LF HEV/PHEV)<br>Nu 2.0L GDI | 19MY | HEV  | 39161-2ELF1<br>39161-2ELF2 | LF9SPHMS6F2A<br>LF9SPHMS6F2B<br>LF9SPHMS6F4A<br>LF9SPHMS6F4B<br>LF9SPHMF6FAK | LF9SPHMF6FBK |
|                                                       |      | PHEV | 39161-2ELH1<br>39161-2ELH2 | LF9SPPMS6F2A<br>LF9SPPMS6F4A<br>LF9SPPMS6F4B<br>LF9SPPMF6FAK                 | LF9SPPMF6FBK |

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

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

| MODEL / ENGINE          | MY   | 2WD/ 4WD | ECU P/NO    | ROM ID                                                   |                  |
|-------------------------|------|----------|-------------|----------------------------------------------------------|------------------|
|                         |      |          |             | OLD                                                      | NEW (Event #756) |
| Tucson (TL)<br>2.0L GDI | 18MY | 2WD      | 39131-2ETA8 | GGTL-HNUAQS00C00<br>GGTL-HNUAQS01C00<br>GGTL-HNUAQF01C00 | GGTL-HNUAQK01C00 |
|                         |      |          | 39133-2ETA8 | GGTL-HNUAPS00C00<br>GGTL-HNUAPS01C00<br>GGTL-HNUAPF01C00 | GGTL-HNUAPK01C00 |
|                         |      | 4WD      | 39131-2ETA9 | GGTL-HNUAQS00D00<br>GGTL-HNUAQS01D00<br>GGTL-HNUAQF01D00 | GGTL-HNUAQK01D00 |
|                         |      |          | 39133-2ETA9 | GGTL-HNUAPS00D00<br>GGTL-HNUAPS01D00<br>GGTL-HNUAPF01D00 | GGTL-HNUAPK01D00 |

| MODEL                          | MY   | TM | ECU P/NO    | ECU ROM ID       |                  |
|--------------------------------|------|----|-------------|------------------|------------------|
|                                |      |    |             | OLD              | NEW (Event #754) |
| Elantra GT<br>(PD)<br>2.0L GDI | 18MY | AT | 39131-2EPE0 | GGPD-HNUAQS00C00 | GGPD-HNUAQK02C00 |
|                                |      |    |             | GGPD-HNUAQS01C00 |                  |
|                                |      |    |             | GGPD-HNUAQS02C00 |                  |
|                                |      |    | 39133-2EPE0 | GGPD-HNUAPS00C00 | GGPD-HNUAPK02C00 |
|                                |      |    |             | GGPD-HNUAPS01C00 |                  |
|                                |      |    |             | GGPD-HNUAPS02C00 |                  |
|                                |      | MT | 39131-2EPE1 | GGPD-HNUAQS03C00 | GGPD-HNUAQK03C00 |
|                                |      |    | 39133-2EPE1 | GGPD-HNUAPS03C00 | GGPD-HNUAPK03C00 |
|                                |      |    | 39135-2EPE0 | GGPD-HNUAFS00600 | GGPD-HNUAFK02600 |
|                                |      |    |             | GGPD-HNUAFS01600 |                  |
|                                |      |    |             | GGPD-HNUAFS02600 |                  |
|                                | 19MY | AT | 39131-2EPE2 | GGPD-INUAQS00C00 | GGPD-INUAQK01C00 |
|                                |      |    |             | GGPD-INUAQS01C00 |                  |
|                                |      |    | 39133-2EPE2 | GGPD-INUAPS00C00 | GGPD-INUAPK01C00 |
|                                |      |    |             | GGPD-INUAPS01C00 |                  |
|                                |      |    | 39131-2EPE3 | GGPD-INUAQS00C01 | GGPD-INUAQK01C01 |
|                                |      |    |             | GGPD-INUAQS01C01 |                  |
|                                |      |    | 39133-2EPE3 | GGPD-INUAPS00C01 | GGPD-INUAPK01C01 |
|                                |      |    |             | GGPD-INUAPS01C01 |                  |
|                                |      | MT | 39135-2EPE2 | GGPD-INUAFS00600 | GGPD-INUAFK01600 |
|                                |      |    |             | GGPD-INUAFS01600 |                  |

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

|  |  |             |                  |                  |
|--|--|-------------|------------------|------------------|
|  |  | 39137-2EPE2 | GGPD-INUAES00600 | GGPD-INUAEK01600 |
|  |  |             | GGPD-INUAES01600 |                  |

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 | 0340     |
| CMA 10MY 2.4MPI AT +IMMO 39104-2G330 | 0330     |
| CMA 10MY 2.4MPI MT -IMMO 39114-2G340 | 1340     |
| CMA 10MY 2.4MPI MT +IMMO 39114-2G330 | 1330     |
| 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     |
| 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**

| <b>ECM MENU (#690)</b>       | <b>PASSWORD</b> |
|------------------------------|-----------------|
| 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            |
| 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**

| <b>ECM MENU (#713)</b>                 | <b>PASSWORD</b> |
|----------------------------------------|-----------------|
| 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**

| <b>ECM MENU (#717)</b>                  | <b>PASSWORD</b> |
|-----------------------------------------|-----------------|
| 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**

| <b>ECM MENU (#715)</b>                    | <b>PASSWORD</b> |
|-------------------------------------------|-----------------|
| 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            |

**MODE PASSWORD INFORMATION TABLE: #806 Tucson (LM) 2.0L**

| <b>ECM MENU (#806)</b>                  | <b>PASSWORD</b> |
|-----------------------------------------|-----------------|
| LM 14MY 2.0GDI MT 2WD -IMMO 39137-2ELC0 | 3520            |
| LM 14MY 2.0GDI MT 2WD +IMMO 39135-2ELC0 | 3720            |
| LM 14MY 2.0GDI AT 2WD -IMMO 39133-2ELC0 | 3120            |
| LM 14MY 2.0GDI AT 2WD +IMMO 39131-2ELC0 | 3320            |
| LM 14MY 2.0GDI AT 4WD -IMMO 39133-2ELC1 | 3121            |
| LM 14MY 2.0GDI AT 4WD +IMMO 39131-2ELC1 | 3321            |
| LM 15MY 2.0GDI MT 2WD -IMMO 39137-2ELC4 | 3524            |
| LM 15MY 2.0GDI MT 2WD +IMMO 39135-2ELC4 | 3724            |
| LM 15MY 2.0GDI AT 2WD -IMMO 39132-2ELC4 | 3124            |
| LM 15MY 2.0GDI AT 2WD +IMMO 39131-2ELC4 | 3224            |
| LM 15MY 2.0GDI AT 4WD -IMMO 39133-2ELC5 | 3125            |
| LM 15MY 2.0GDI AT 4WD +IMMO 39131-2ELC5 | 3325            |

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

| <b>ECU MENU (#730)</b>                    | <b>PASSWORD</b> |
|-------------------------------------------|-----------------|
| 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            |

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

|                                         |      |
|-----------------------------------------|------|
| 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**

| <b>ECU MENU (#733)</b>            | <b>PASSWORD</b> |
|-----------------------------------|-----------------|
| LF HEV 2.0GDI 39161-2EEB0 (16MY)  | 0216            |
| LF PHEV 2.0GDI 39161-2EEG0 (16MY) | 0217            |

**MODE PASSWORD INFORMATION TABLE: #762 Sonata Hybrid/Plug-In (LF HEV/PHEV) 2.0L**

| <b>ECU MENU (#797)</b>              | <b>PASSWORD</b> |
|-------------------------------------|-----------------|
| LF HEV 2.0GDI 39161-2EEB1 (17MY)    | 7971            |
| LF PHEV 2.0GDI 39161-2EEG1 (17MY)   | 7972            |
| LF HEV 2.0GDI 39161-2EEB2 (17MY)    | 7973            |
| LF PHEV 2.0GDI 39161-2EEG2 (17MY)   | 7974            |
| LF HEV 2.0GDI 39161-2ELF0 (18MY)    | 7975            |
| LF PHEV 2.0GDI 39161-2ELH0 (18MY)   | 7976            |
| LF HEV 2.0GDI 39161-2ELF1/2 (19MY)  | 7977            |
| LF PHEV 2.0GDI 39161-2ELH1/2 (19MY) | 7978            |

**MODE PASSWORD INFORMATION TABLE: #739 Tucson (TL) 2.0L**

| <b>ECM MENU (#739)</b>            | <b>PASSWORD</b> |
|-----------------------------------|-----------------|
| 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            |

**MODE PASSWORD INFORMATION TABLE: #756 Tucson (TL) 2.0L**

| <b>ECM MENU (#756)</b>              | <b>PASSWORD</b> |
|-------------------------------------|-----------------|
| TL 2.0GDI AT 2WD 39131-2ETA8 (18MY) | 3128            |
| TL 2.0GDI AT 2WD 39133-2ETA8 (18MY) | 3328            |
| TL 2.0GDI AT 4WD 39131-2ETA9 (18MY) | 3129            |
| TL 2.0GDI AT 4WD 39133-2ETA9 (18MY) | 3329            |

**MODE PASSWORD INFORMATION TABLE: #754 Elantra GT (PD) 2.0L**

| <b>ECU MENU (#754)</b>          | <b>PASSWORD</b> |
|---------------------------------|-----------------|
| PD 2.0GDI AT 39131-2EPE0 (18MY) | 5401            |
| PD 2.0GDI AT 39133-2EPE0 (18MY) | 5402            |
| PD 2.0GDI AT 39131-2EPE1 (18MY) | 5403            |
| PD 2.0GDI AT 39133-2EPE1 (18MY) | 5404            |
| PD 2.0GDI MT 39135-2EPE0 (18MY) | 5405            |
| PD 2.0GDI MT 39137-2EPE0 (18MY) | 5406            |
| PD 2.0GDI AT 39131-2EPE2 (19MY) | 5407            |
| PD 2.0GDI AT 39133-2EPE2 (19MY) | 5408            |
| PD 2.0GDI AT 39131-2EPE3 (19MY) | 5409            |
| PD 2.0GDI AT 39133-2EPE3 (19MY) | 5410            |
| PD 2.0GDI MT 39135-2EPE2 (19MY) | 5411            |
| PD 2.0GDI MT 39137-2EPE2 (19MY) | 5412            |

**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.