

 <b>HYUNDAI</b> <b>Technical Service Bulletin</b>	GROUP <b>CAMPAIGN</b>	NUMBER <b>21-01-025H</b>
	DATE <b>MARCH 2021</b>	MODEL(S) <b>SEE APPLICABLE VEHICLES BELOW</b>
<b>SUBJECT:</b> OP CODE/PART NUMBER (REFERENCE GUIDE FOR SERVICE CAMPAIGN T6G)		

**Please note that this TSB references the op codes and part numbers to use for claim submission based on the vehicle's inspection results from TSB # 21-01-024H.**

Consult the Hyundai Warranty Policy & Procedures and the below tables to determine New or Reman engine usage. Please note that a Reman engine may not be available for certain vehicle models/model years listed in this TSB.

#### Applicable Vehicles:

Certain 2016 MY Sonata Hybrid (LF HEV) vehicles equipped with Nu 2.0L GDI Hybrid engines  
 Certain 2012-2017 MY Veloster (FS) vehicles equipped with Gamma 1.6L GDI engines

### Parts Information

#### Sonata Hybrid (LFE)

Part Name	Part Number / Description	Note
Engine Short Block	2D312-2EU02A 2D322-2EU01	BASE
KNOCK SENSOR	39250-2E100	For sole replacement of Knock Sensor

#### Veloster (FS)

Part Name	Part Number / Description	Note
Engine Long Block	21101-2BK04FFF/FFHRM	BASE
	21101-2BK05FFF/FFHRM	w/ DCT
FUEL TUBE	35305-2B000FFF	
SERVICE KIT 1	<b>21111-2BS01FFF</b>	<b>(Includes Components Below)</b>
	26611-2B611	ROD ASSY – OIL LEVEL
	26612-2G601	GUIDE ASSY – OIL LEVEL
	28521-2B400	GASKET-EXHAUST MANIFOLD
	28411-2B600	GASKET-INTAKE MANIFOLD
	35312-2G750	INJECTOR O-RING KIT (Includes): <ul style="list-style-type: none"> <li>• COMBUSTION SEAL RING: 35312-2B110</li> <li>• SUPPORT DISC: 35312-2B111</li> </ul>

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

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		• O-RING: 35312-2B112
	35313-2B110	WASHER-INJECTOR
	35322-2G700	O-RING (HIGH PRESSURE PUMP)
	11405-06206K	BOLT (HIGH PRESSURE PUMP)
	23124-2B020	PULLEY-DAMPER
	23127-2B700	BOLT-CRK/SHF PULLEY
	<b>21112-2BS02FFF</b>	<b>(Includes Components Below)</b>
	25452-2B000	GASKET-HEATER PIPE
	25457-2B000	PIPE-HEATER
	11403-08126K	BOLT-FLANGE
	13396-06007K	NUT-FLANGE
	21516-35010	BOLT-FLANGE(6X12)
	25500-2B000	THERMOSTAT ASSY
	25600-2B600	CONTROL ASSY-WATER TEMP
	25631-2B051	FITTING ASSY-WATER INLET
	11403-06207S	BOLT FLANGE
	13386-08007C	NUT-FLANGE
	26300-35505	FILTER ASSY-OIL
	39250-2B000	KNOCK SENSOR
	11403-08306K	BOLT-FLANGE
	28751-1R000	GASKET (FRT MUFFLER)
	28679-2B000	NUT(FRT MUFFLER)
KNOCK SENSOR	39250-2B100	For sole replacement of Knock Sensor

**Warranty Information Notes:**

- 1) Submit Claim on **Campaign Claim Entry Screen**.
- 2) **If Service Campaign 966 is currently open and a software update is available** in reference to op codes below, please submit a campaign claim under 966 after software update has been performed.
- 3) PA Approval **required** for OP Codes **with engine** replacement.
  - **Note:** OP Codes for engine replacement should only be used if engine replacement is deemed necessary by the service procedure in **Campaign T6G TSB (TSB# 21-01-024H** or latest revision).
- 4) PA Approval **NOT required** for OP Codes **without engine** replacement.
- 5) If a **part(s) are in need of replacement** and the **failure is directly caused by Campaign T6G** related engine failure, **or** if **additional labor** is required while performing Campaign T6G:
  - Submit one compiled separate claim using the same Repair Order number AND
  - Submit with **NTT** using the engine Causal Part number associated with the T6G OP Code AND
  - Ensure part replacement and punch times are accurate and that they match the labor performed along with the service manager's signature approving the TT time.
    - For TT time best practices, refer to [Hyundaidealer.com](http://Hyundaidealer.com) > Service Tab > Documents Library > Warranty > ATT-NTT Documentation and Claim Submission Guide
  - **If the part replacement does not require additional labor**, follow the above steps and use the system minimum of .1 labor time with a quantity of 1.
- 6) If a **part(s) are found in need of replacement** while performing this campaign and the affected part (**failure not directly caused by Campaign T6G**) 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.

**Key Notes for Op Code Tables:**

**NOTE 1:** \*RM in 3<sup>rd</sup> column of tables refers to Reman Engine, if applicable.

**NOTE 2:** Campaign claim for Sonata Hybrid only covers listed engine part/labor for short block engine replacement. If additional part(s) and/or labor are required, please refer to notes 5 and 6 above under the Warranty information.

**Op Code Table of Contents:**

- 1) **2012-2017 Veloster 1.6L – Page 4**
- 2) **2016 Sonata Hybrid 2.0L (Short block P/N: 2D3122EU02A) – Page 5**
- 3) **2016 Sonata Hybrid 2.0L (Short block P/N: 2D3122EU01) – Page 6**

**SUBJECT: OP CODE/PART NUMBER (REFERENCE GUIDE FOR SERVICE CAMPAIGN T6G)**

**1) 2012-2017 Veloster (FS) 1.6L Op Code Table**

Model	MY	NEW (OE) /RM*	Size	Vehicle Symptom	Long Block Engine	Service Kit 1	Service Kit 2	Fuel Tube	Knock Sensor	Operation Description	Op Code	Op Time	
VELOSTER (FS)	12-17	OE	1.6L	P1326 MIL ON	211012BK04FFF (Base) 211012BK05FFF (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022DA	7.0	
		RM	1.6L		211012BK04FFHRM (Base) 211012BK05FFHRM (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022DB	7.0	
		OE	1.6L		211012BK04FFF (Base) 211012BK05FFF (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022DC	6.9	
		RM	1.6L		211012BK04FFHRM (Base) 211012BK05FFHRM (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022DD	6.9	
		OE	1.6L	Poor Engine Start	211012BK04FFF (Base) 211012BK05FFF (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022DE	7.0	
		RM	1.6L		211012BK04FFHRM (Base) 211012BK05FFHRM (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022DF	7.0	
		OE	1.6L		211012BK04FFF (Base) 211012BK05FFF (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022DG	6.9	
		RM	1.6L		211012BK04FFHRM (Base) 211012BK05FFHRM (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022DH	6.9	
		OE	1.6L	Engine Noise	211012BK04FFF (Base) 211012BK05FFF (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022DI	7.0	
		RM	1.6L		211012BK04FFHRM (Base) 211012BK05FFHRM (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022DJ	7.0	
		OE	1.6L		211012BK04FFF (Base) 211012BK05FFF (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022DK	6.9	
		RM	1.6L		211012BK04FFHRM (Base) 211012BK05FFHRM (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022DL	6.9	
		OE	1.6L	Engine Noise	211012BK04FFF (Base) 211012BK05FFF (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT Pass (PASS) + Audible Noise (YES) + Contact Techline + Replace Engine + New ECM S/W Available (NO)	10D022DO	7.0	
		RM	1.6L		211012BK04FFHRM (Base) 211012BK05FFHRM (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT Pass (PASS) + Audible Noise (YES) + Contact Techline + Replace Engine + New ECM S/W Available (NO)	10D022DP	7.0	
		OE	1.6L		211012BK04FFF (Base) 211012BK05FFF (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT Pass (PASS) + Audible Noise (YES) + Contact Techline + Replace Engine + New ECM S/W Available (YES)	10D022DQ	6.9	
		RM	1.6L		211012BK04FFHRM (Base) 211012BK05FFHRM (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	Crank Rotation (YES) + BCT Pass (PASS) + Audible Noise (YES) + Contact Techline + Replace Engine + New ECM S/W Available (YES)	10D022DR	6.9	
		-	1.6L	Not Specified	N/A	N/A	N/A	N/A	N/A	392502B000	Crank Rotation (YES) + BCT (PASS) + Audible Noise (NO) + New ECM S/W Available (NO) + Replace Knock Sensor	10D022DS	1.2
		-	1.6L		N/A	N/A	N/A	N/A	N/A	N/A	Crank Rotation (YES) + BCT (PASS) + Audible Noise (NO) + New ECM S/W Available (YES)	10D022DT	0.7
		-	1.6L		N/A	N/A	N/A	N/A	N/A	N/A	Crank Rotation (YES) + BCT (PASS) + Audible Noise (YES) + Contact Techline + New ECM Update Available (NO)	10D022DM	0.8
		-	1.6L		N/A	N/A	N/A	N/A	N/A	N/A	Crank Rotation (YES) + BCT (PASS) + Audible Noise (YES) + Contact Techline + New ECM Update Available (YES)	10D022DN	0.7
		OE	1.6L	Not Specified	211012BK04FFF (Base) 211012BK05FFF (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	N/A	Crank Rotation (NO) + Oil Measure (YES) + Replace Engine + New ECM S/W Update (NO)	10D022D1	6.7
		RM	1.6L		211012BK04FFHRM (Base) 211012BK05FFHRM (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	N/A	Crank Rotation (NO) + Oil Measure (YES) + Replace Engine + New ECM S/W Update (NO)	10D022D2	6.7
		OE	1.6L		211012BK04FFF (Base) 211012BK05FFF (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	N/A	Crank Rotation (NO) + Oil Measure (YES) + Replace Engine + New ECM S/W Update (YES)	10D022D3	6.6
		RM	1.6L		211012BK04FFHRM (Base) 211012BK05FFHRM (DCT)	211112BS01FFF	211122BS02FFF	353052B000FFF	N/A	N/A	Crank Rotation (NO) + Oil Measure (YES) + Replace Engine + New ECM S/W Update (YES)	10D022D4	6.6

## 2) 2016 Sonata Hybrid (LF HEV) 2.0L Op Code Table

### - Short Block P/N: 2D3122EU02A

Model	MY	NEW (OE)/RM*	Size	Vehicle Symptom	Short Block Engine	Knock Sensor	Operation Description	Op Code	Op Time		
SONATA HYBRID (LFE)	16	OE	2.0L	P1326 MIL ON	2D3122EU02A	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022CA	10.4		
		OE	2.0L				2D3122EU02A	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022CC	10.3
		OE	2.0L	Poor Engine Start	2D3122EU02A	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022CE	10.4		
		OE	2.0L				2D3122EU02A	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022CG	10.3
		OE	2.0L	Engine Noise	2D3122EU02A	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022CI	10.4		
		OE	2.0L				Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022CK	10.3		
		OE	2.0L				Crank Rotation (YES) + BCT (PASS) + Audible Noise (YES) + Contact Techline + Replace Engine + New ECM S/W Available (NO)	10D022CO	10.4		
		OE	2.0L				Crank Rotation (YES) + BCT (PASS) + Audible Noise (YES) + Contact Techline + Replace Engine + New ECM S/W Available (YES)	10D022CQ	10.3		
		-	2.0L				N/A	392502E000	Crank Rotation (YES) + BCT (PASS) + Audible Noise (NO) + New ECM S/W Available (NO) + Replace Knock Sensor	10D022CS	1.8
		-	2.0L				N/A	N/A	Crank Rotation (YES) + BCT (PASS) + Audible Noise (NO) + New ECM S/W Available (YES)	10D022CT	0.7
		-	2.0L				N/A	N/A	Crank Rotation (YES) + BCT (PASS) + Audible Noise (YES) + Contact Techline + New ECM Update Available (NO)	10D022CM	0.8
		-	2.0L				N/A	N/A	Crank Rotation (YES) + BCT (PASS) + Audible Noise (YES) + Contact Techline + New ECM Update Available (YES)	10D022CN	0.7
		-	2.0L	Not Specified	2D3122EU02A	N/A	Crank Rotation (NO) + Oil Measure (YES) + Replace Engine + New ECM S/W Available (NO)	10D022C1	10.1		
		-	2.0L				2D3122EU02A	N/A	Crank Rotation (NO) + Oil Measure (YES) + Replace Engine + New ECM S/W Available (YES)	10D022C3	10.0

### 3) 2016 Sonata Hybrid (LF HEV) 2.0L Op Code Table - Short Block P/N: 2D3122EU01

Model	MY	NEW (OE)/RM*	Size	Vehicle Symptom	Short Block Engine	Knock Sensor	Operation Description	Op Code	Op Time	
SONATA HYBRID (LFE)	16	OE	2.0L	P1326 MIL ON	2D3122EU01	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022EA	10.4	
		OE	2.0L		2D3122EU01	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022EC	10.3	
		OE	2.0L	Poor Engine Start	2D3122EU01	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022EE	10.4	
		OE	2.0L		2D3122EU01	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022EG	10.3	
		OE	2.0L	Engine Noise	2D3122EU01	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022EI	10.4	
		OE	2.0L		2D3122EU01	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022EK	10.3	
		OE	2.0L		2D3122EU01	N/A	Crank Rotation (YES) + BCT (PASS) + Audible Noise (YES) + Contact Techline + Replace Engine + New ECM S/W Available (NO)	10D022EO	10.4	
		OE	2.0L		2D3122EU01	N/A	Crank Rotation (YES) + BCT (PASS) + Audible Noise (YES) + Contact Techline + Replace Engine + New ECM S/W Available (YES)	10D022EQ	10.3	
		-	2.0L		N/A	392502E000	Crank Rotation (YES) + BCT (PASS) + Audible Noise (NO) + New ECM S/W Available (NO) + Replace Knock Sensor	10D022ES	1.8	
		-	2.0L		N/A	N/A	Crank Rotation (YES) + BCT (PASS) + Audible Noise (NO) + New ECM S/W Available (YES)	10D022ET	0.7	
		-	2.0L		N/A	N/A	Crank Rotation (YES) + BCT (PASS) + Audible Noise (YES) + Contact Techline + New ECM Update Available (NO)	10D022EM	0.8	
		-	2.0L		N/A	N/A	Crank Rotation (YES) + BCT (PASS) + Audible Noise (YES) + Contact Techline + New ECM Update Available (YES)	10D022EN	0.7	
		-	2.0L		Not Specified	2D3122EU01	N/A	Crank Rotation (NO) + Oil Measure (YES) + Replace Engine + New ECM S/W Available (NO)	10D022E1	10.1
		-	2.0L			2D3122EU01	N/A	Crank Rotation (NO) + Oil Measure (YES) + Replace Engine + New ECM S/W Available (YES)	10D022E3	10.0