

 HYUNDAI Technical Service Bulletin	GROUP CAMPAIGN	NUMBER 21-01-025H
	DATE MARCH 2021	MODEL(S) SEE APPLICABLE VEHICLES BELOW
SUBJECT: 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	39250-2E000	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	21111-2BS01FFF	(Includes Components Below)
	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"> COMBUSTION SEAL RING: 35312-2B110 SUPPORT DISC: 35312-2B111

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

		• 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
	21112-2BS02FFF	(Includes Components Below)
SERVICE KIT 2	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	39250-2B000	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 > 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 3rd 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: 2D3222EU01) – Page 6**

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	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	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	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: 2D3222EU01

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	2D3222EU01	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022EA	10.4	
		OE	2.0L		2D3222EU01	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	2D3222EU01	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022EE	10.4	
		OE	2.0L		2D3222EU01	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022EG	10.3	
		OE	2.0L	Engine Noise	2D3222EU01	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (NO)	10D022EI	10.4	
		OE	2.0L		2D3222EU01	N/A	Crank Rotation (YES) + BCT (NO PASS) + Replace Engine + New ECM S/W Available (YES)	10D022EK	10.3	
		OE	2.0L		2D3222EU01	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		2D3222EU01	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	2D3222EU01	N/A	Crank Rotation (NO) + Oil Measure (YES) + Replace Engine + New ECM S/W Available (NO)	10D022E1	10.1
		-	2.0L			2D3222EU01	N/A	Crank Rotation (NO) + Oil Measure (YES) + Replace Engine + New ECM S/W Available (YES)	10D022E3	10.0