		GROUP CHA	MODEL 2014~2016MY Optima Hybrid (TF HEV)		
		NUMBER 067	DATE March 2016		
TECHNICAL SERVICE BULLETIN					
SUBJECT:	ECU UPGRADE – MIL	ON WITH DTC (	C1356		

This bulletin provides information related to an IBAU (Integrated Brake Actuation Unit) software upgrade for some 2014~2016MY Optima Hybrid (TF HEV) vehicles, produced from December 2, 2013 through July 22, 2015, which may exhibit a Malfunction Indicator Light (MIL) ON with DTC C1356 and no drivability concerns. To resolve the concern, reprogram the IBAU using the GDS/KDS download, as described in this bulletin. For confirmation that the latest reflash has been performed, verify ROM ID using the tables in this TSB.

### DTC C1356 Pressure Sensor (Wh2)



Global Diagnostic System (GDS)



Kia Diagnostic System (KDS)



SUBJECT:

### ECU UPGRADE – MIL ON WITH DTC C1356

Upgrade Procedure:

# The ECU should be reprogrammed using the GDS/KDS Download, as described in this bulletin.

#### UPGRADE EVENT NAME

#### 278.TF HEV IBAU MIL ON DTC (C1356) LOGIC IMPROVEMENT

# **\*** NOTICE

- A fully charged battery is necessary before ECU upgrade can take place. It is recommended that the Midtronics GR8-1299 system be used in ECU mode during charging. DO NOT connect any other battery charger to the vehicle during ECU upgrade.
- All ECU upgrades must be done with the ignition key in the 'ON' position.
- Be careful not to disconnect any cables connected to the vehicle or GDS during the upgrade procedure.
- DO NOT start the engine during ECU upgrade.
- DO NOT turn the ignition key 'OFF' or interrupt the power supply during ECU upgrade.
- When the ECU upgrade is completed, turn the ignition 'OFF' and wait 20 seconds before starting the engine.
- ONLY use approved ECU upgrade software designated for the correct model, year.

### **ROM ID INFORMATION TABLES:**

#### Upgrade Event #278

Madal		ROM ID		
Widdei		Previous	New	
TF HEV	58500 4U500 58500 4U600 58500 4U700 58500 4U701	1.4 1.5	1.6	

To verify the vehicle is affected, be sure to check the Calibration Identification of the vehicle's ROM ID and reference the Information Table as necessary.

### **\*** NOTICE

If performing this TSB using KDS, refer to TSB SST 037 for detailed information.

1. Connect the power supply cable to the GDS.

# \* NOTICE

If attempting to perform the ECU upgrade with the power supply cable disconnected from the GDS, be sure to check that the GDS is fully charged before ECU upgrade. If the GDS is not fully charged, failure to perform the ECU upgrade may occur. Therefore, it is strongly recommended that the power supply connector be connected to the GDS.

2. Connect the USB cable between the VCI and the GDS.



When performing the upgrade using the GDS, wireless communication between the VCI and GDS is not available. Therefore, be sure to connect the USB cable between the VCI and the GDS.

- 3. Connect the Main 16-pin DLC cable (GHDM 241000) to the VCI.
- Connect the Main 16-pin DLC cable (GHDM – 241000) to the OBD-II connector, located under the driver's side of the instrument panel.



5. With the ignition key ON, turn ON the VCI and GDS. Access the GDS vehicle identification number (VIN) screen and configure the vehicle using the **VIN AUTO DETECT** Function.

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## ECU UPGRADE – MIL ON WITH DTC C1356

GDS VIN Search	insert VIN Search	Auto VIN	Clear Previous Vehicle		
	RID(TF HEV)	2016	G 2.4 THETA II HEV		
System	ABSIESC				
Se	lect System	Select All	Selected System Clear All		
ENGINE A/T ABS/ A/T ABS/ A/T ABS/ ABS/ ABS/ HCU MC HCU MC MC HCU MC MC MC MC	ESC EPB AIRBAG EPB AIRBAG AIRBAG DC C BMS CLDC LDC LDC TMU TMU	ODS AAF SMK	ABS/ESC		
Grou	ıp	_	Symptom		
Fault Code	Searching	ок	Cancel		

6. Once back at the GDS Main Screen, select ECU Upgrade from the bottom right-hand corner. Next select **Auto Mode**, and then **ABS/ESC** as the system. Perform the upgrade in accordance with normal GDS upgrade procedures.



- 7. Check for Diagnostic Trouble Codes using the GDS and erase any DTCs stored such as EPS, ESC, and TPMS that may have been set during reprogramming.
- 8. Verify proper brake operation and no MIL re-occurrence.

Manual Mode Upgrade

Before attempting an upgrade on any Kia model, make sure to first determine whether the particular model is equipped with an immobilizer security system. Failure to follow proper procedures may cause the PCM to become inoperative after the upgrade and any claims associated with this repair may be subject to chargeback.

### **\*** NOTICE

Do NOT attempt to perform a Manual Mode upgrade unless Auto Mode fails. Always follow the instructions given on the GDS in either Auto or Manual mode. See table for Manual Mode passwords.

#### MANUAL MODE UPGRADE PASSWORDS:

Upgrade Event #278 OptimaHybrid (TF HEV)

Event #	Menu	Password	
#278	TF HEV IBAU : 58500-4U500/600/700/701	4701	

- 1. Within the Upgrade screen, select Manual Mode in the left column, select **ABS/ESC** and then select Upgrade Event #278. Select the appropriate control unit part number by referring to the ROM ID Information Table on Page 2, and click **OK**.
- 2. Enter the appropriate password from the table above, and click **OK**.
- 3. Upgrade will begin and the progress of the upgrade will appear on the bar graph.
- 4. When the GDS reports that the upgrade has been successfully completed, click **OK**, turn OFF the ignition key, and wait at least 10 seconds before attempting to start the engine.
- 5. Check for Diagnostic Trouble Codes using the GDS and erase any DTCs stored such as EPS, ESC, and TPMS that may have been set during reprogramming.
- 6. Verify proper brake operation and no MIL re-occurrence.

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# ECU UPGRADE – MIL ON WITH DTC C1356

### AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production Date Range			
Optima Hybrid (TF HEV)	2014~2016MY			

### WARRANTY CLAIM INFORMATION:

Claim Type	Causal P/N	Qty	N Code	C Code	Repair Description	Labor Op Code	Time	Related Parts	Qty
W	58500 4U701	0	130	ZZ3	(CHA 067) IBAU Upgrade	58500F03	0.3 M/H	N/A	0