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2020.0 DEFENDER (LE), 414-02C

GENERATOR AND REGULATOR - INGENIUM I6 3.0L PETROL

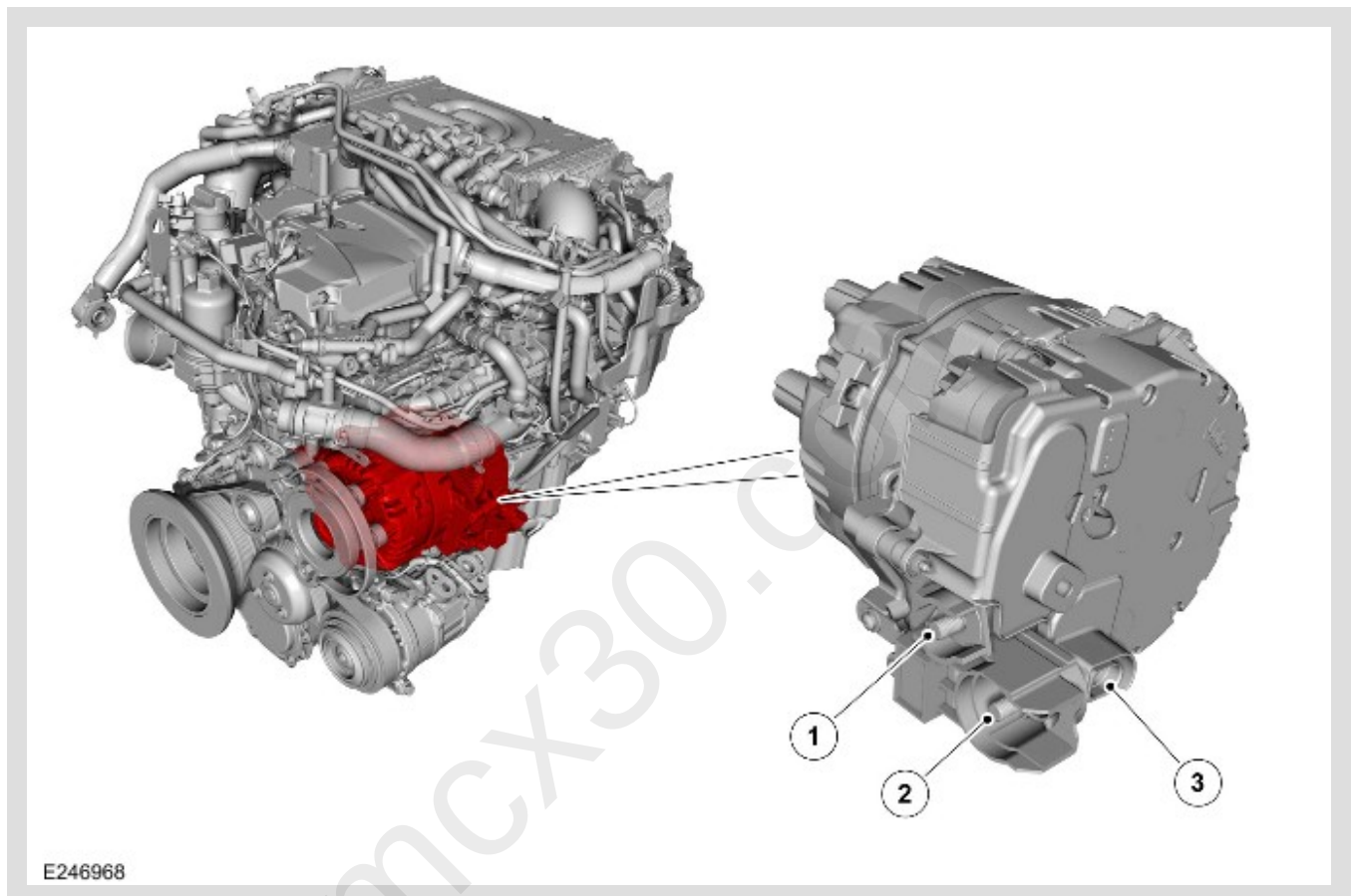
BELT INTEGRATED STARTER GENERATOR (G2342552)

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DESCRIPTION AND OPERATION

COMPONENT LOCATION

COMPONENT LOCATION - 1 OF 1



ITEM	DESCRIPTION
1	MHEV battery Negative connection
2	MHEV battery Positive connection
3	Electrical connector

OVERVIEW

The Belt Integrated Starter Generator (BISG) is used as a generator on the Mild Hybrid Electric Vehicle (MHEV). The output voltage of the generator is 48V. The BISG provides 48V for the Direct Current to Direct Current (DC/DC) converter for use on the vehicle systems. The output voltage also charges the MHEV battery.

For additional information, refer to: Belt Intergrated Starter Generator (414-03 Battery Charging - INGENIUM I6 3.0L Petrol, [+] MHEV, Description and Operation).

The BISG is used to start the engine during the auto stop/start events. The BISG provides a virtually silent engine crank.



NOTE:

The conventional starter motor always does the first crank, regardless of the ambient temperature.

For additional information, refer to: [Starting System](#) (303-06C Starting System - INGENIUM I6 3.0L Petrol, Description and Operation).

For additional information, refer to: Belt Intergrated Starter Generator (414-03 Battery Charging - INGENIUM I6 3.0L Petrol, [+] MHEV, Description and Operation).

The Belt Integrated Starter Generator (BISG) also assists the engine to reduce fuel consumption. The BISG is driven by 48V from the MHEV battery.

For additional information, refer to: Belt Intergrated Starter Generator (414-03 Battery Charging - INGENIUM I6 3.0L Petrol, [+] MHEV, Description and Operation).

Electric supercharger

The electric supercharger operates when in Power Mode 7 (engine running). The BISG provides the supply for the electric supercharger.

For additional information, refer to: [Intake Air Distribution and Filtering](#) (303-12C Intake Air Distribution and Filtering - INGENIUM I6 3.0L Petrol, Description and Operation).

Direct Current to Direct Current (DC/DC) converter

For additional information, refer to: [Direct Current to Direct Current Converter](#) (414-03 Battery Charging - INGENIUM I6 3.0L Petrol, [+] MHEV, Description and Operation).

MHEV battery

For additional information, refer to: MHEV Battery and Cables (414-01A, Description and Operation).