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2023 Ford E-Transit Service and Repair Manual

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Sample

High-Pressure Fuel Pump

303-04D Fuel Charging and Controls - 3.5L V6 PowerBoost (CN)	2022 F-150
Removal and Installation	Procedure revision date: 10/18/2021

High-Pressure Fuel Pump

Removal

NOTICE

Do not loosen any fittings or plugs on the high-pressure fuel pump.

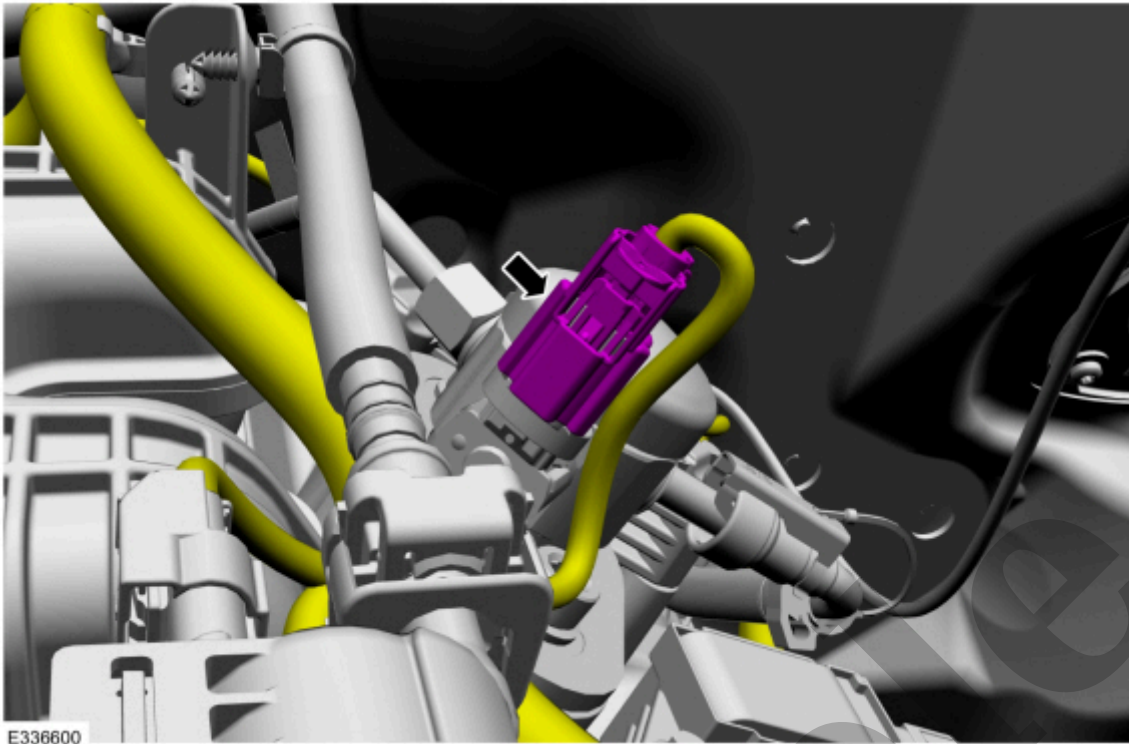
1. With the vehicle in NEUTRAL, position it on a hoist.

Refer to: [Jacking and Lifting - Overview](#)(100-02 Jacking and Lifting, Description and Operation).

2. NOTE

PowerBoost shown, EcoBoost is similar.

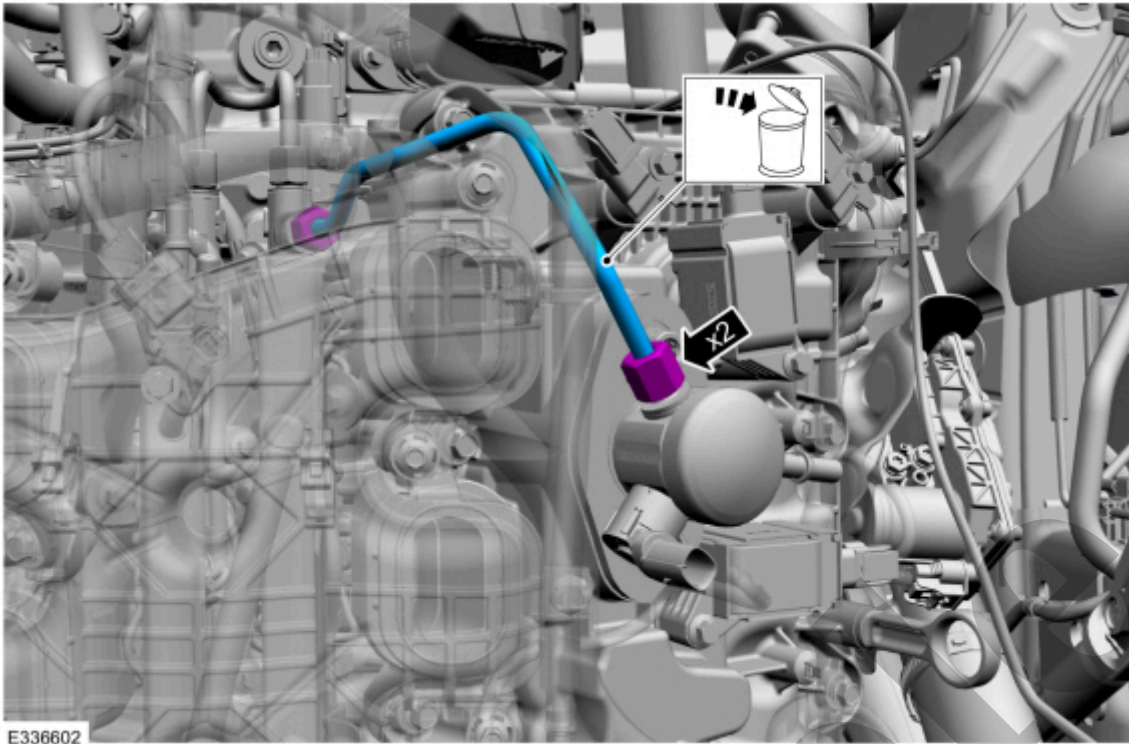
Remove the engine appearance cover retainers, release the engine appearance cover from the rear retaining tabs on the intake manifold, then remove the engine appearance cover.



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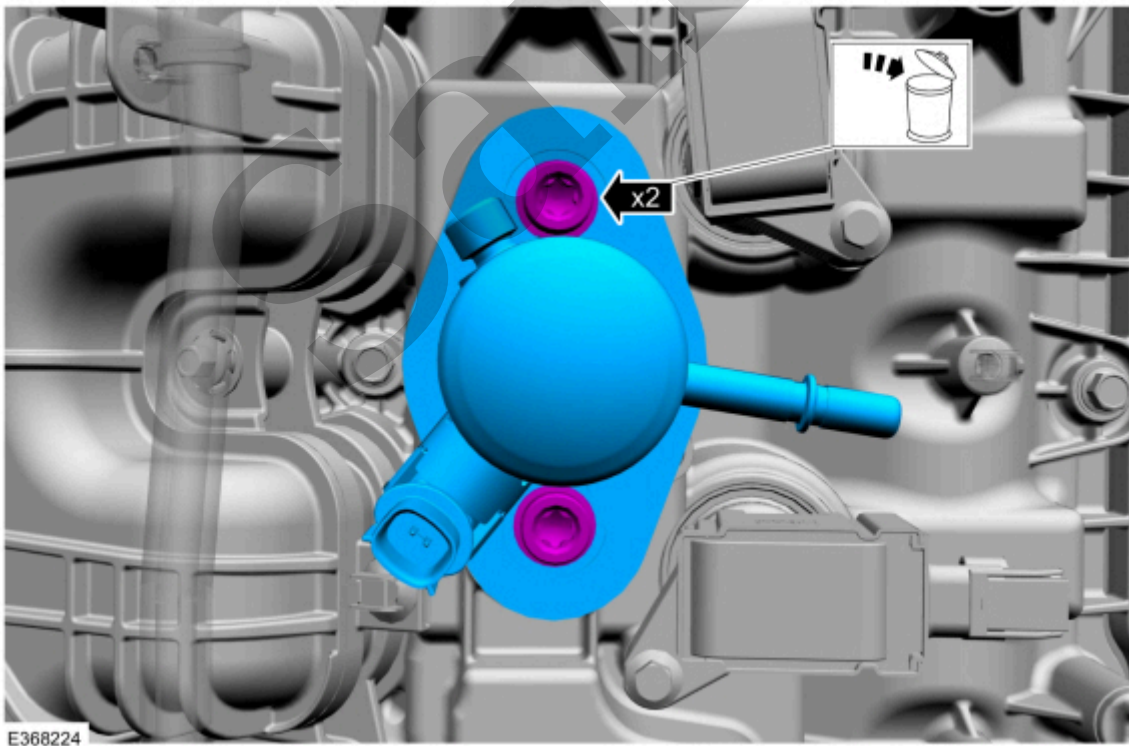
6.
 1. Disconnect the secondary latch and position out of the way.
 2. Disconnect the spring lock coupling, then disconnect the high-pressure fuel pump supply line.

Refer to: [Spring Lock Couplings](#)(310-00D Fuel System - General Information - 3.5L V6 PowerBoost (CN), General Procedures).



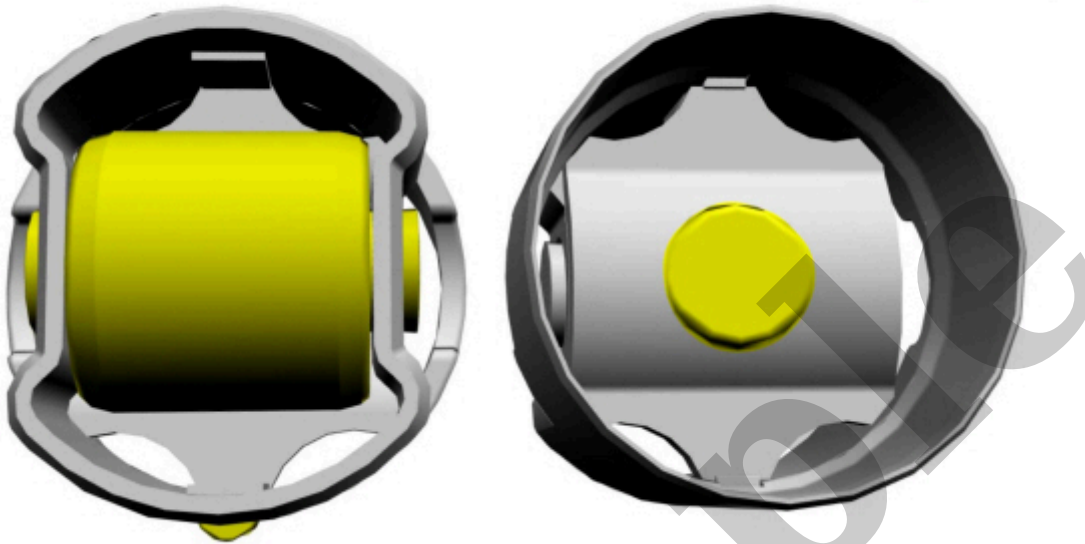
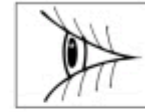
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8. Remove and discard the high-pressure fuel pump bolts by alternately loosening the bolts one complete revolution at a time, then remove the high-pressure fuel pump.



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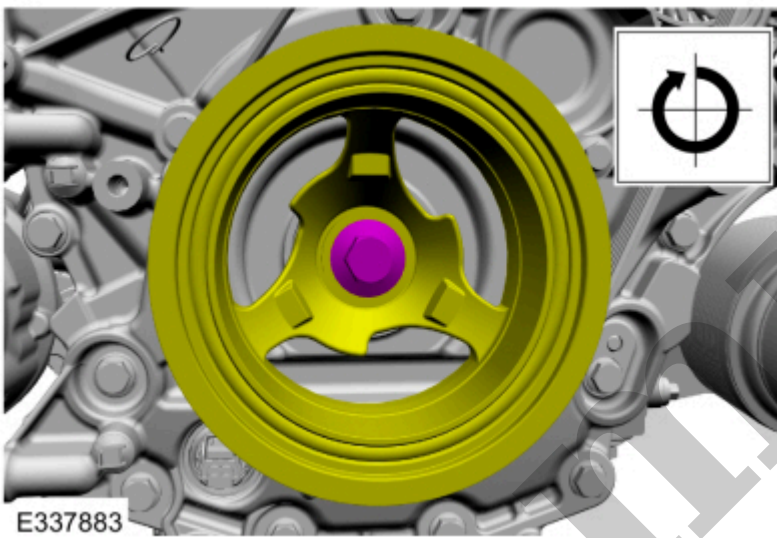
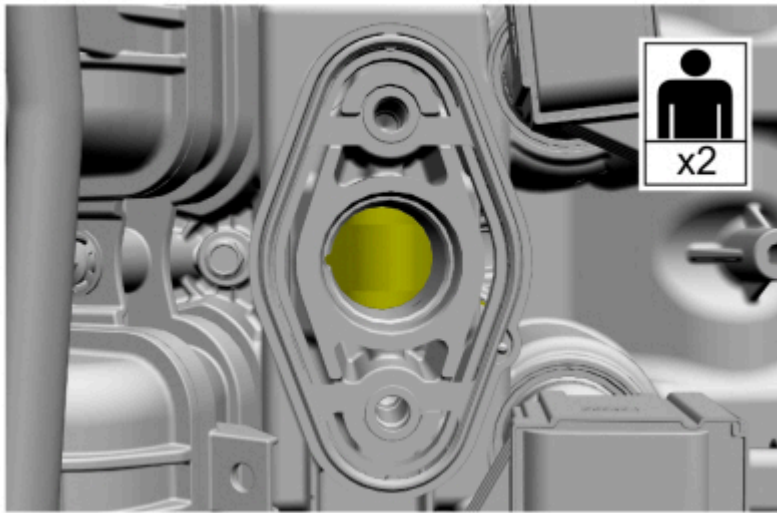
11. Inspect the roller tappet. If any flat spots or scoring are found, especially in the indicated areas, then inspect the high-pressure fuel pump and the roller tappet drive lobe. Install new components as needed.



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12. Remove any dirt or foreign material from the high-pressure fuel pump bolt holes.



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2. Inspect the high-pressure fuel pump mounting plate seal, clean and replace it as needed. Lubricate the mounting plate seal with clean engine oil.

Refer to: [Specifications\(303-01D Engine - 3.5L V6 PowerBoost \(CN\), Specifications\)](#).

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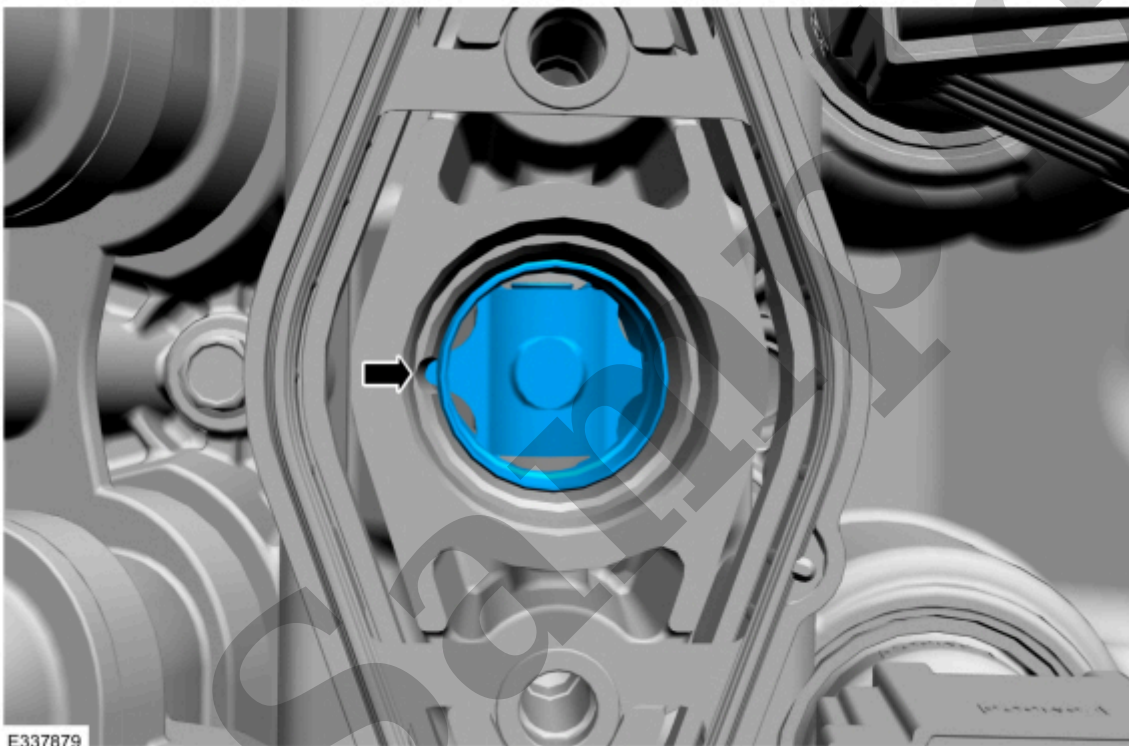
4. NOTICE

The roller tappet's roller goes down towards the camshaft.

NOTE

Align the notch on the roller tappet with the groove in the high-pressure fuel pump drive unit bore.

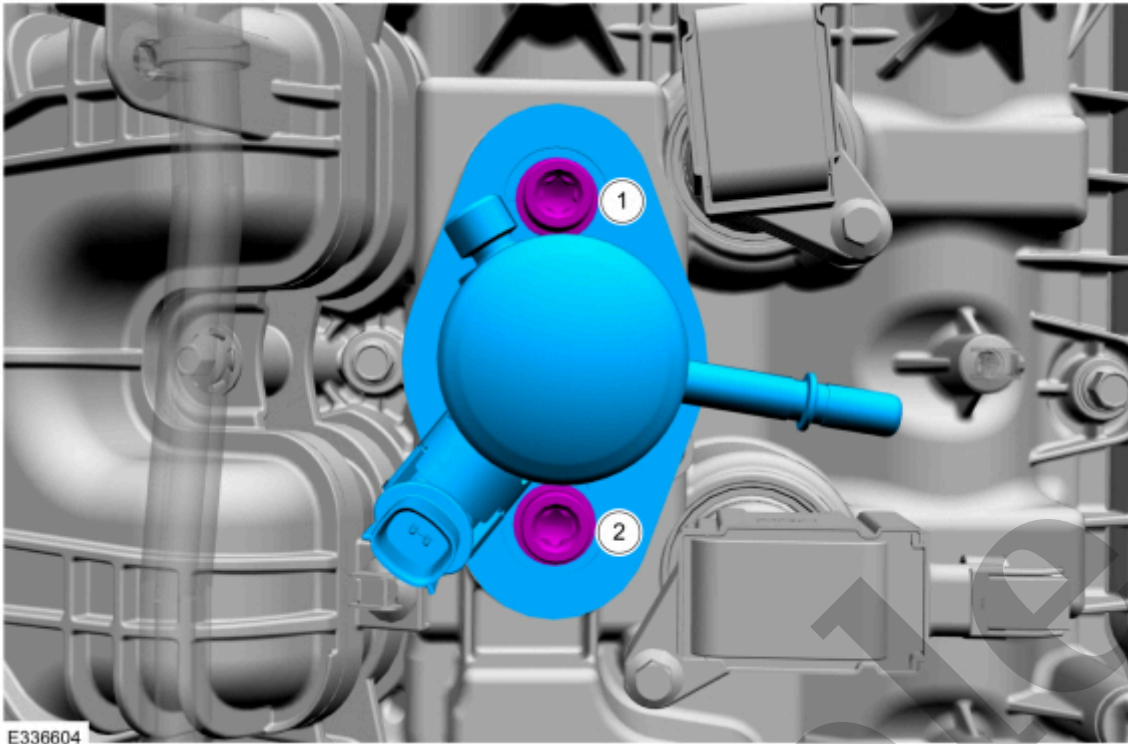
Install the roller tappet.



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5. Install a new high-pressure fuel pump O-ring seal. Lubricate with clean engine oil.

Refer to: [Specifications\(303-01D Engine - 3.5L V6 PowerBoost \(CN\), Specifications\)](#).



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7. 1. Calculate the correct torque wrench setting for the following torque using the Torque Wrench Adapter Formulas.

2. **NOTE**

Make sure that a new high-pressure fuel tube is installed.

Install the high-pressure fuel tube and tighten the flare nuts finger tight.

3. **NOTICE**

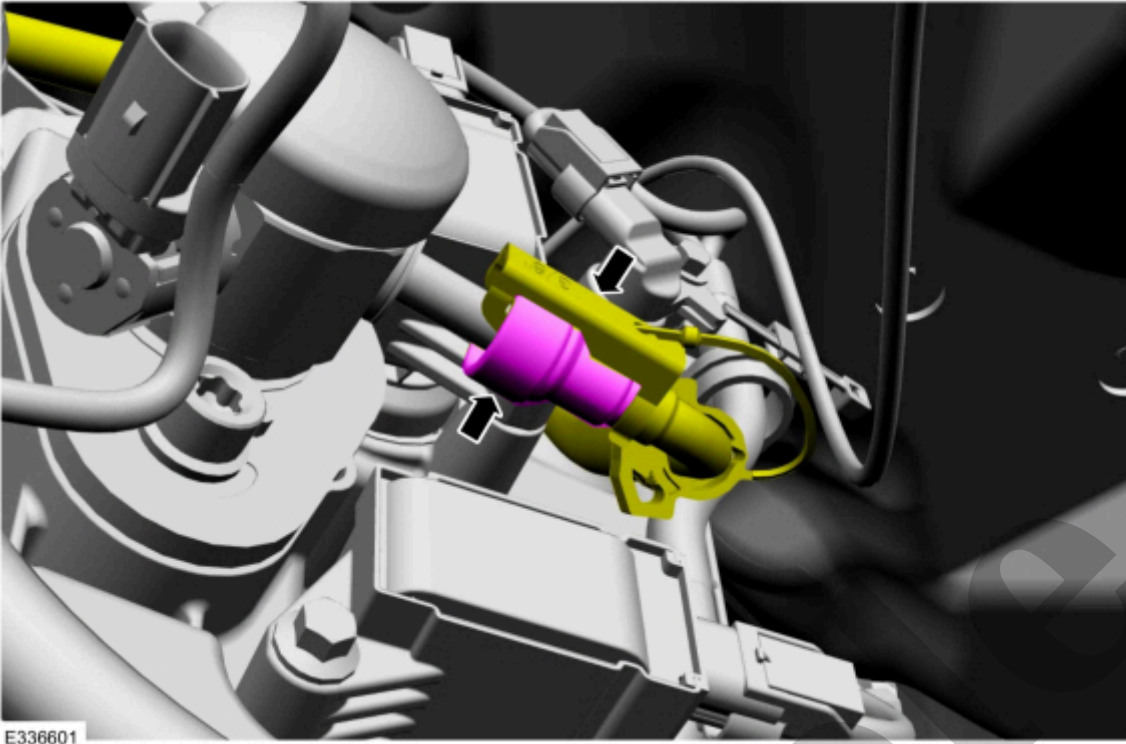
In stage 3, if the torque required to tighten any flare nut on the new high-pressure fuel tube reaches or exceeds 55 lb.ft (75 Nm), then that high pressure fuel tube must be discarded and replaced with another new high-pressure fuel tube.

Tighten the high-pressure fuel tube flare nuts, in the following 3 stages.

Torque :

Stage 1: Tighten to : 80 lb.in (9 Nm)

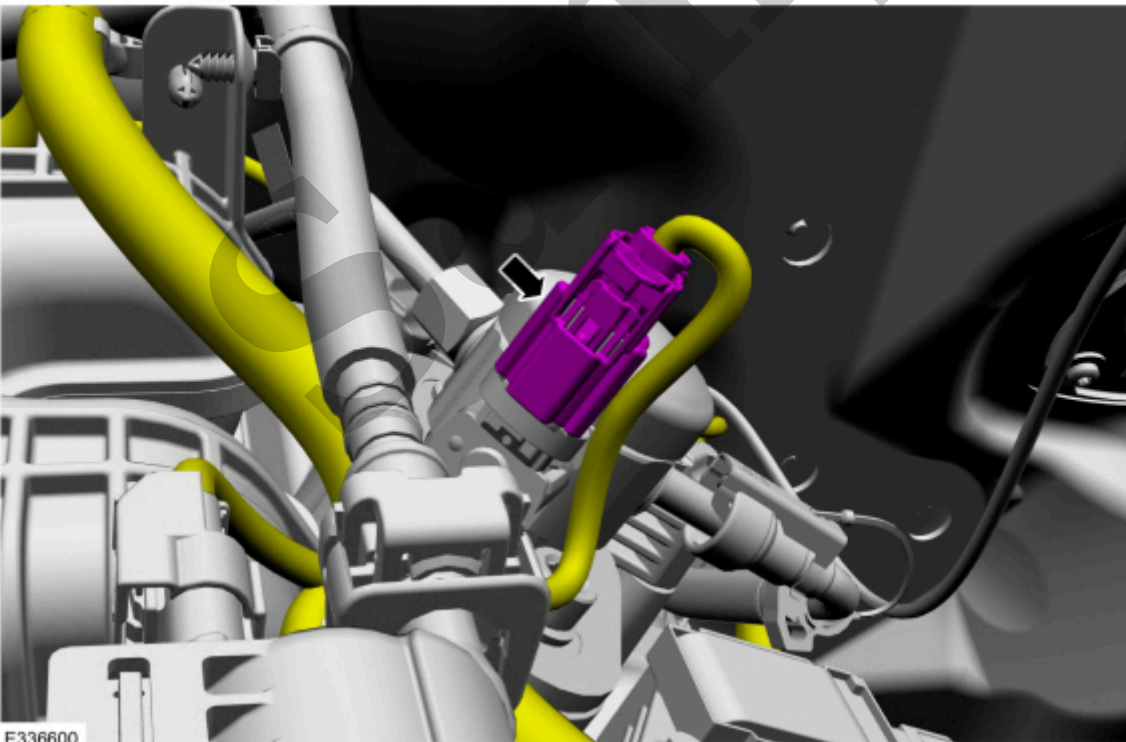
Stage 2: Tighten to : 89 lb.in (10 Nm)



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9. Connect the high-pressure fuel pump electrical connector.



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10. Connect the battery.