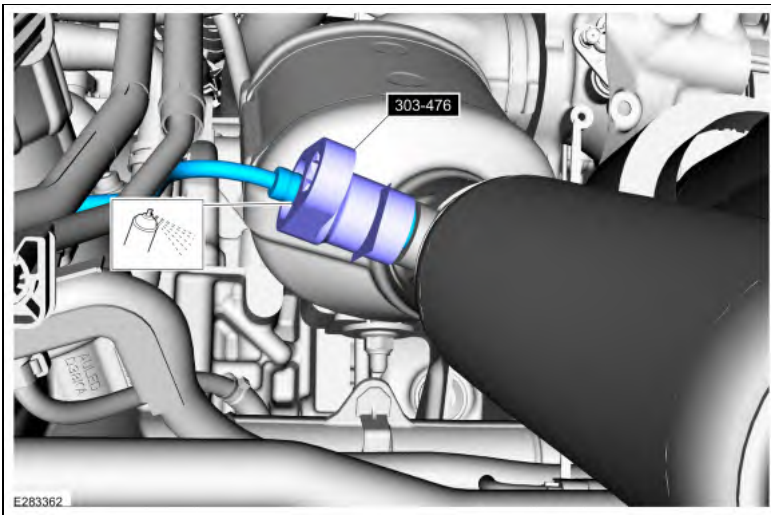
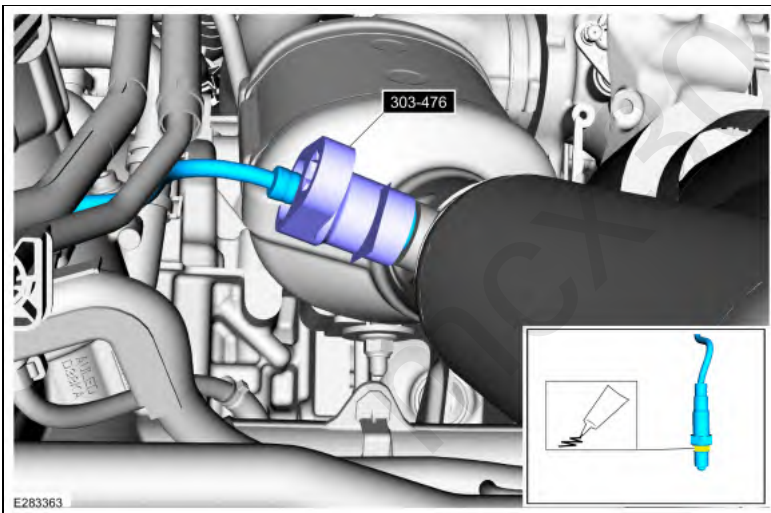




Installation

1. To install, reverse the removal procedure.
2. Apply anti-seize to thread of sensor, using the special tool install the Catalyst monitor sensor. Use Special Service Tool: 303-476 (T94P-9472-A) Socket, Exhaust Gas Oxygen Sensor.
Material: Motorcraft® High Temperature Nickel Anti-Seize Lubricant / XL-2
Torque: 35 lb.ft (48 Nm)



Crankshaft Position (CKP) Sensor

Special Tool(s) / General Equipment

	303-1521 Alignment Tool, Crankshaft Position Sensor TKIT-2010C-FLM
	303-507 Timing Peg, Crankshaft TDC TKIT-2001N-FLM TKIT-2001N-ROW

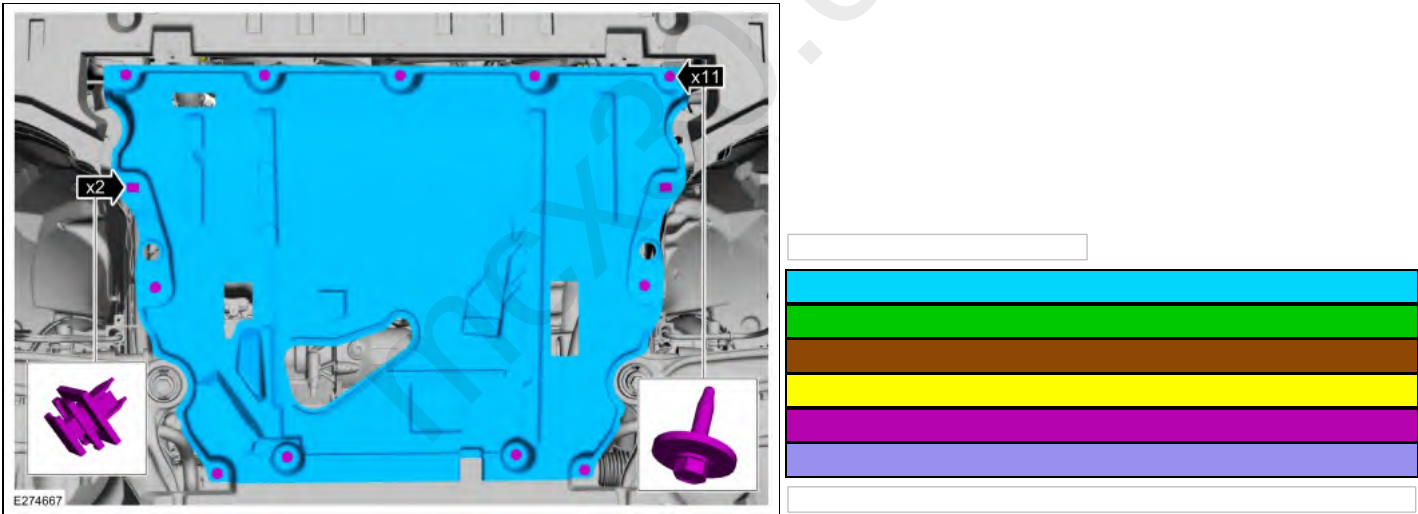
Removal

All Vehicles

NOTE: Do not loosen or remove the crankshaft pulley bolt without first installing the special tools as instructed in this procedure. The crankshaft pulley and the crankshaft timing sprocket are not keyed to the crankshaft. The crankshaft, the crankshaft sprocket and the pulley are fitted together by friction, using diamond washers between the flange faces on each part. For that reason, the crankshaft sprocket is also unfastened if the pulley bolt is loosened. Before any repair requiring loosening or removal of the crankshaft pulley bolt, the crankshaft and camshafts must be locked in place by the special service tools, otherwise severe engine damage can occur.

NOTE: During engine repair procedures, cleanliness is extremely important. Any foreign material (including any material created while cleaning gasket surfaces) that enters the oil passages, coolant passages or the oil pan can cause engine failure.

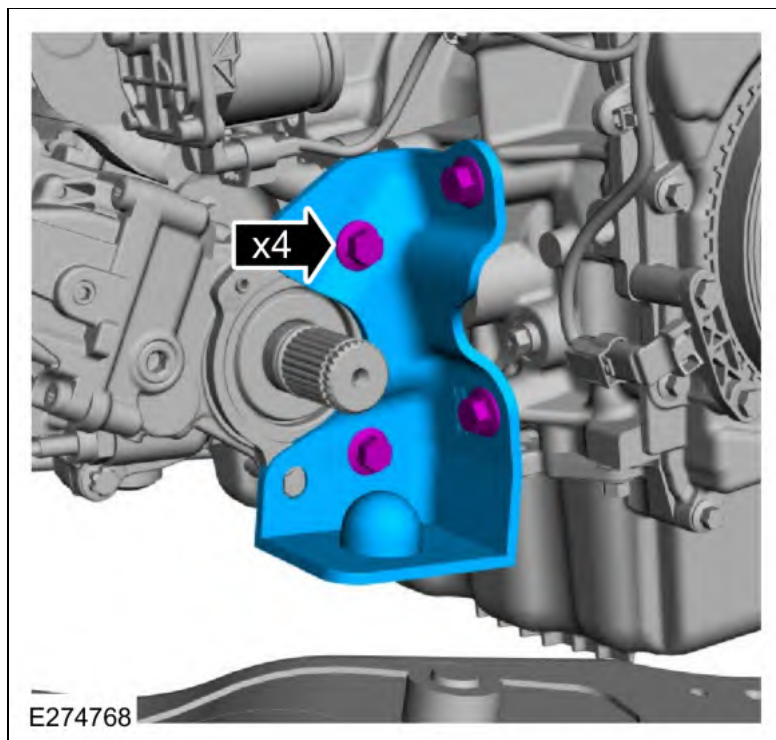
1. With the vehicle in NEUTRAL, position it on a hoist.
Refer to: Jacking and Lifting - Overview (100-02 Jacking and Lifting, Description and Operation).
2. Remove the retainers and the underbody shield.



3. Remove the RH fender splash shield.
Refer to: Fender Splash Shield (501-02 Front End Body Panels, Removal and Installation).

AWD

4. Remove the RH halfshaft.
Refer to: Front Halfshaft RH - 2.0L EcoBoost (184kW/250PS) â€“ MI4, All-Wheel Drive (AWD) (205-04 Front Drive Halfshafts, Removal and Installation).
5. Remove the bolts and the transfer case support bracket.

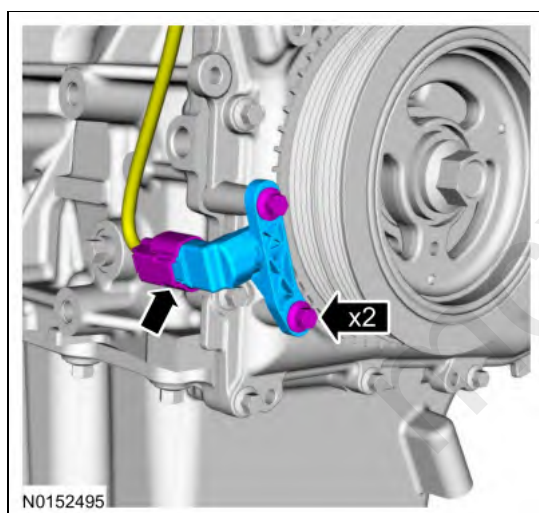


6.

All Vehicles

7.

- Disconnect the CKP sensor electrical connector.
- Remove the 2 bolts and the CKP sensor.



8.

Installation

All Vehicles

1. Turn the crankshaft clockwise until the No.1 piston is 45 degrees BTDC using the guide holes on the engine front cover and the crankshaft pulley.