




Crankshaft Rear Seal with Retainer Plate (12.21.20)

Removal

NOTE :


The crankshaft rear seal and retainer plate are supplied as an assembly and cannot be serviced separately.

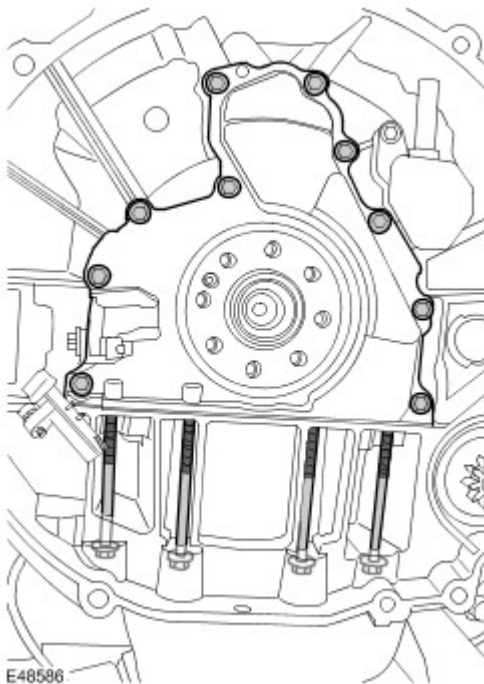
1. Disconnect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)

2.  **WARNING: Do not work on or under a vehicle supported only by a jack. Always support the vehicle on safety stands.**


Raise and support the vehicle.

3. Remove the CKP sensor ring. For additional information, refer to [Crankshaft Position \(CKP\) Sensor Ring \(18.30.14\)](#) (Section 303-14)
4. Remove the crankshaft retainer plate.

 Remove the 14 bolts.



Installation

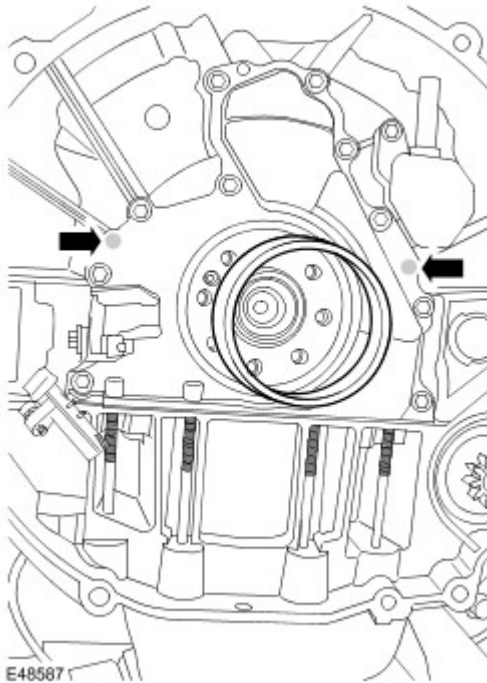
1.  **CAUTION: Oil seals must be fitted dry.**



CAUTION: Tighten the bolts securing the seal retainer to the cylinder block first.

Install the crankshaft retainer plate.

- Clean the component mating faces.
- Install the seal retainer with its protection sleeve onto the crankshaft.
- Locate the seal retainer onto the sump flange.
- Engage the seal retainer dowels with the cylinder block and lightly tighten 2 bolts on opposite sides of the retainer.
- Remove the seal protection sleeve.
- Install remaining bolts and tighten all bolts evenly to 10 Nm (7 lb.ft).



- 2 . Install the CKP sensor ring to the crankshaft. For additional information, refer to [Crankshaft Position \(CKP\) Sensor Ring \(18.30.14\)](#) (Section 303-14)
- 3 . Connect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)