




SECTION 303-01C: Engine — 5.4L (3V)
 IN-VEHICLE REPAIR

2005 F-150 Workshop Manual
 Procedure revision date: 08/28/2008

Timing Drive Components  [Printable View \(786 KB\)](#)

Special Tool(s)

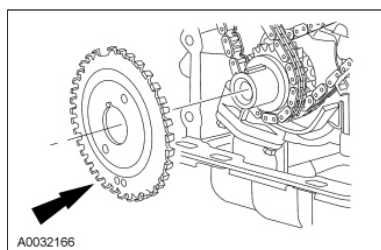
 ST2804-A	Compressor, Valve Spring 303-1039
 ST2807-A	Locking Tool, Cam Phaser Sprocket 303-1046
 ST1335-A	Holding Tool, Crankshaft 303-448 (T93P-6303-A)

Material

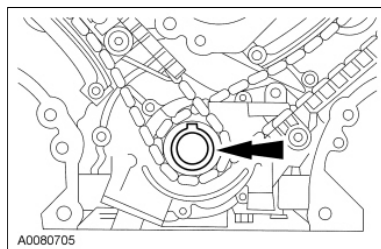
Item	Specification
Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil XO-5W20-QSP (in Canada Motorcraft SAE 5W-20 Super Premium Motor Oil CXO-5W20-LSP12) or equivalent	WSS-M2C930-A
Hydraulic Chain Tensioner Retaining Clip 1L3Z-6P250-AA	—

Removal

1. Remove the engine front cover. For additional information, refer to [Engine Front Cover](#) in this section.
2. Remove the crankshaft sensor ring from the crankshaft.



3. Position the crankshaft keyway at the 12 o'clock position.



4. **NOTE:** If the camshaft lobes are not exactly positioned as shown, the crankshaft will require one full additional rotation to 12 o'clock.

The No. 1 cylinder camshaft exhaust lobe must be coming up on the exhaust stroke. Verify by noting the position of the 2 intake camshaft lobes and the exhaust lobe on the No. 1 cylinder.