**NOTE:** Ford does not provide a procedure to align the **timing components** without the OE tools specified.

1. Remove the engine front cover. **NOTE:** Do not turn the **crankshaft** until instructed to do so.

2. Remove the (A) crankshaft sensor ring from the (B) **crankshaft**.

3. Rotate **crankshaft** until the crankshaft keyway points toward the top of the engine (12 o'clock).
4. Install the (A) **Camshaft** Holding Tools on the (B) LH and RH camshafts.

5. Remove the (A) LH **timing chain tensioner** bolts and the (B) LH timing chain tensioner.
6. Remove the (A) RH timing chain tensioner bolts and the (B) RH timing chain tensioner.
7. Remove the LH and RH timing chain tensioner guides from the dowel pins.
8. Remove the RH and LH timing chains and crankshaft sprockets.

   a. Lift the RH timing chain off the camshaft sprocket and slide the timing chain and crankshaft sprocket off the crankshaft.
   b. Lift the LH timing chain off the camshaft sprocket and slide the timing chain and the crankshaft sprocket off the crankshaft. **CAUTION:** Unless otherwise instructed, at no time, when the timing chains are removed and the cylinder heads are installed may the crankshaft or camshaft be rotated. Severe piston and valve damage will occur.

9. Remove the timing chain guide bolts; remove the timing chain guides.