

2016 Chevrolet Malibu L4-1.5L Turbo

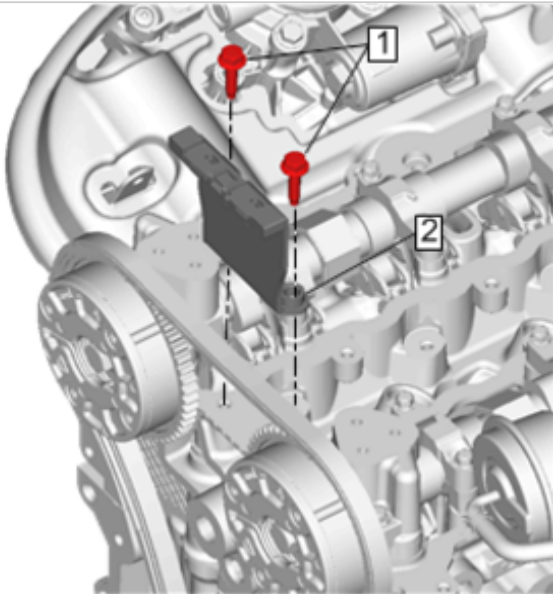
Vehicle > Engine, Cooling and Exhaust > Engine > Timing Components > Timing Chain > Service and Repair > Removal and Replacement

CAMSHAFT TIMING CHAIN REPLACEMENT

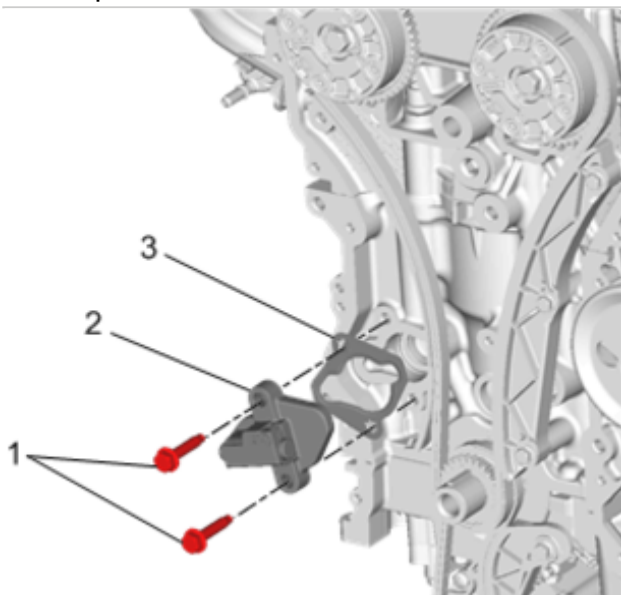
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Removal Procedure

1. Engine Front Cover » Remove – Engine Front Cover Replacement
2. Remove the timing chain guide fasteners (1) then remove the timing chain guide (2).

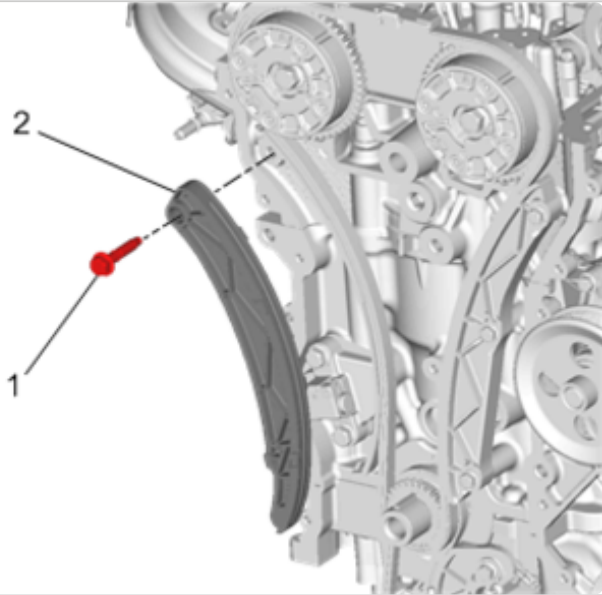


3. Reset the tensioner plunger and inspect for proper operation. Camshaft Timing Chain and Sprocket Cleaning and Inspection

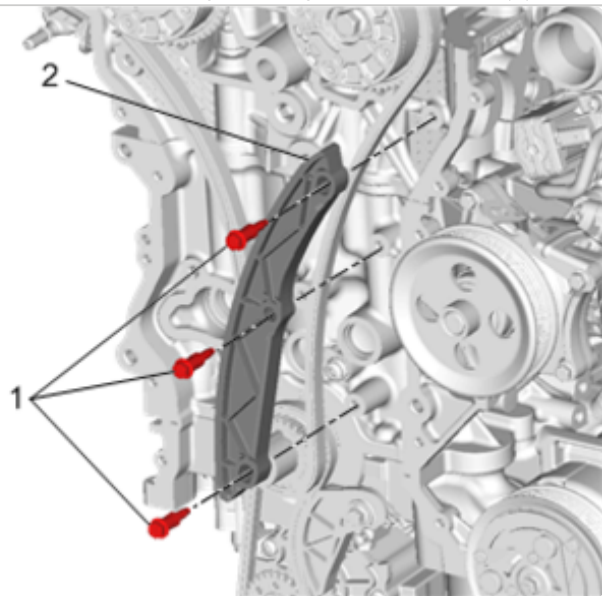


4. Remove the timing chain tensioner fasteners (1), tensioner (2) and gasket (3).

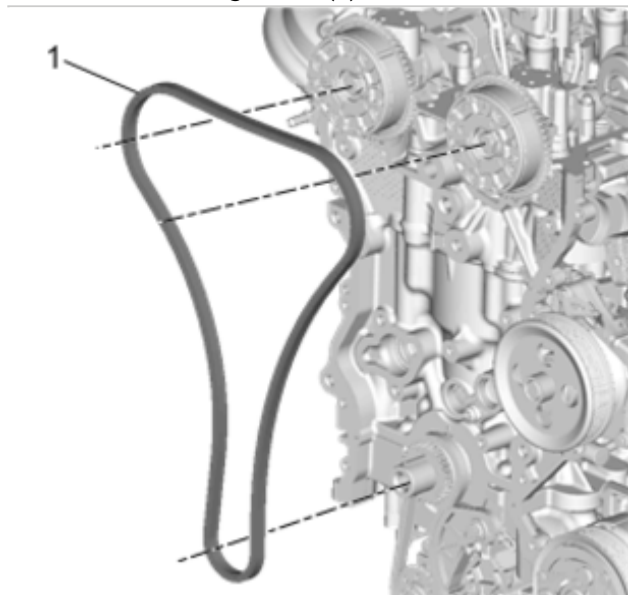
5. Remove the timing chain tensioner shoe fastener (1) then remove the tensioner shoe (2).



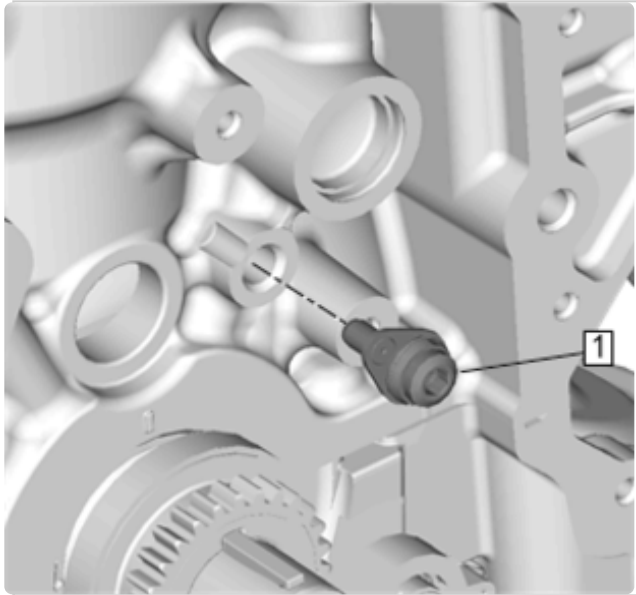
6. Remove the timing chain guide fasteners (1) then remove the timing chain guide (2).



7. Remove the timing chain (1).



8. Remove the timing chain oil nozzle (1).

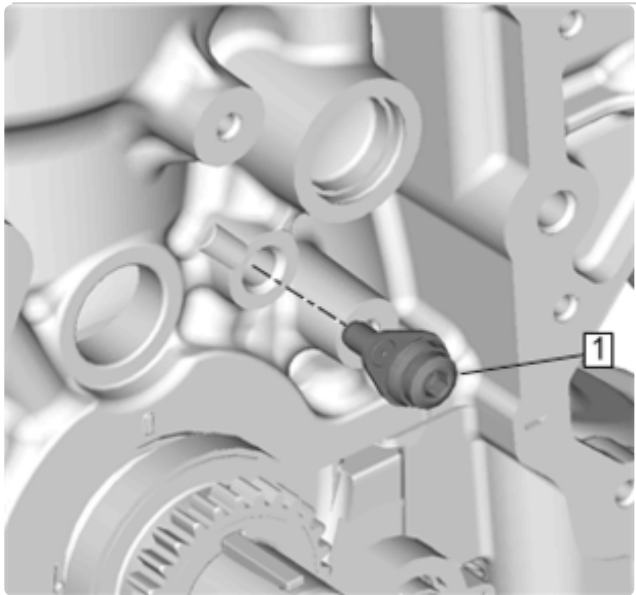


9. Clean and inspect the timing chain components. Camshaft Timing Chain and Sprocket Cleaning and Inspection

Installation Procedure

Caution: Refer to Component Fastener Tightening Caution.

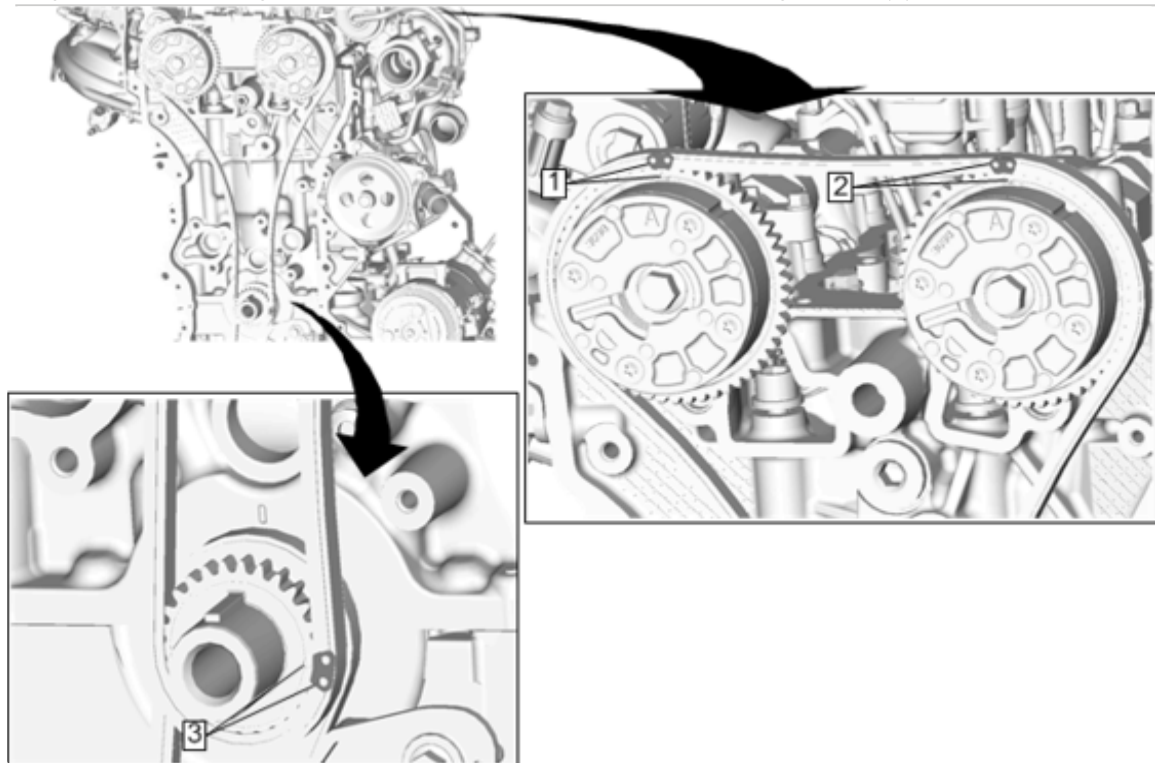
1. Install the timing chain oil nozzle (1). Tighten to **15 Nm (11 lb ft)**.



Note: Ensure the actuator timing marks and the crankshaft sprocket keyway are at the 12 O'Clock position.

Note: Ensure the correct timing link is aligned with the timing mark. The color of the actuator timing links are the same, and the color of the crankshaft sprocket timing link is unique.

2. Align the first timing chain link with the intake actuator timing marks (1).



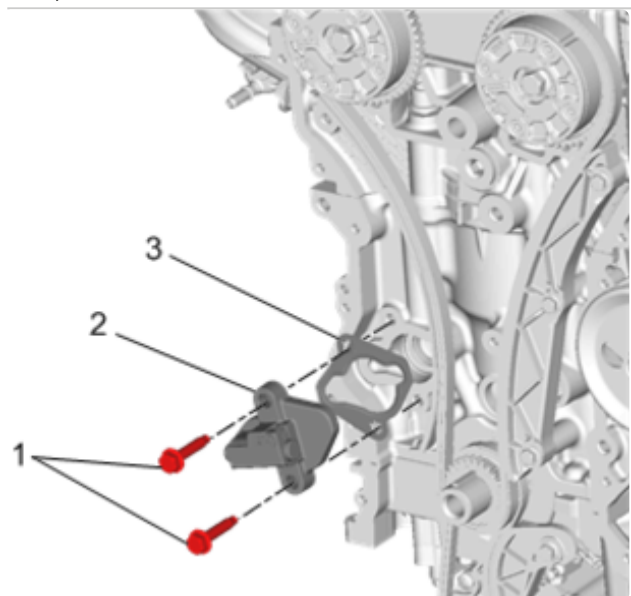
1. Align the second timing chain link with the exhaust actuator timing marks (2).

2. Align the final timing chain link with the crankshaft sprocket timing mark (3).

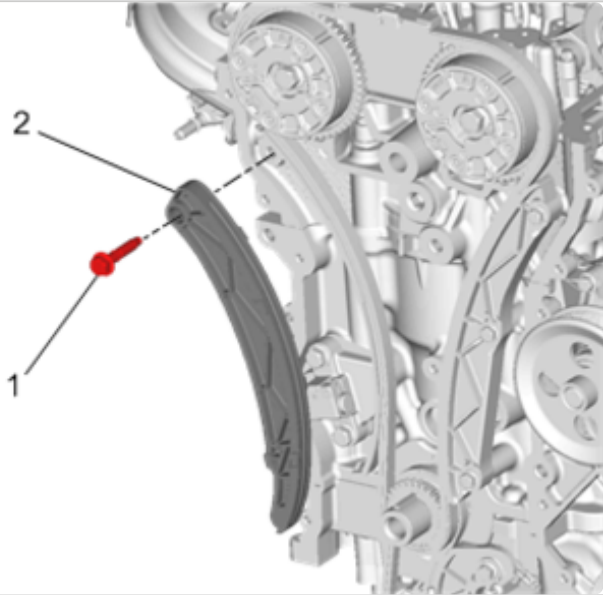
Note: Do not engage the timing chain tensioner until all guides have been installed.

Caution: Refer to Fastener Caution.

3. Position the timing chain tensioner (2) and gasket (3) then hand start the fasteners (1). Tighten to **25 Nm (18 lb ft)**.

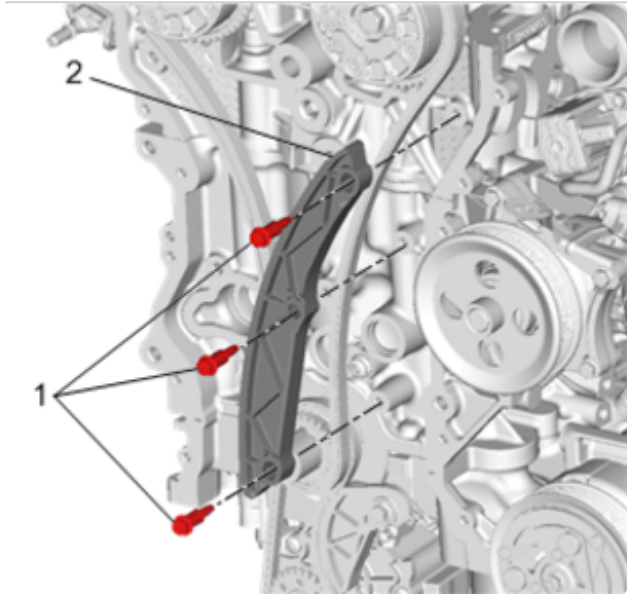


4. Position the timing chain guide (2) then hand start the fastener (1). Tighten to **10 Nm (89 lb in)**.

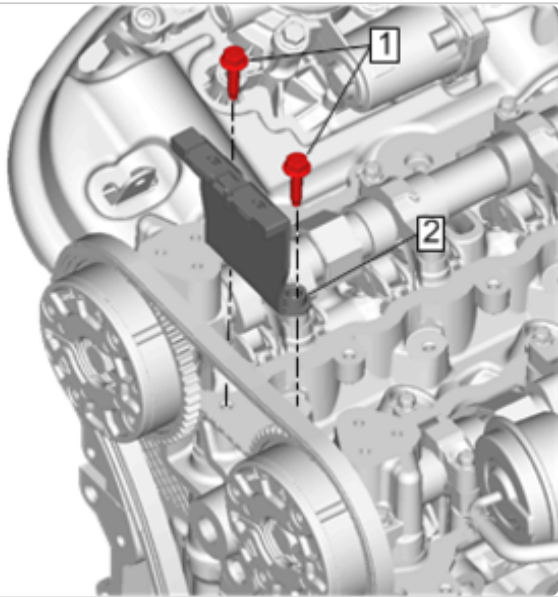


Caution: Refer to Fastener Caution.

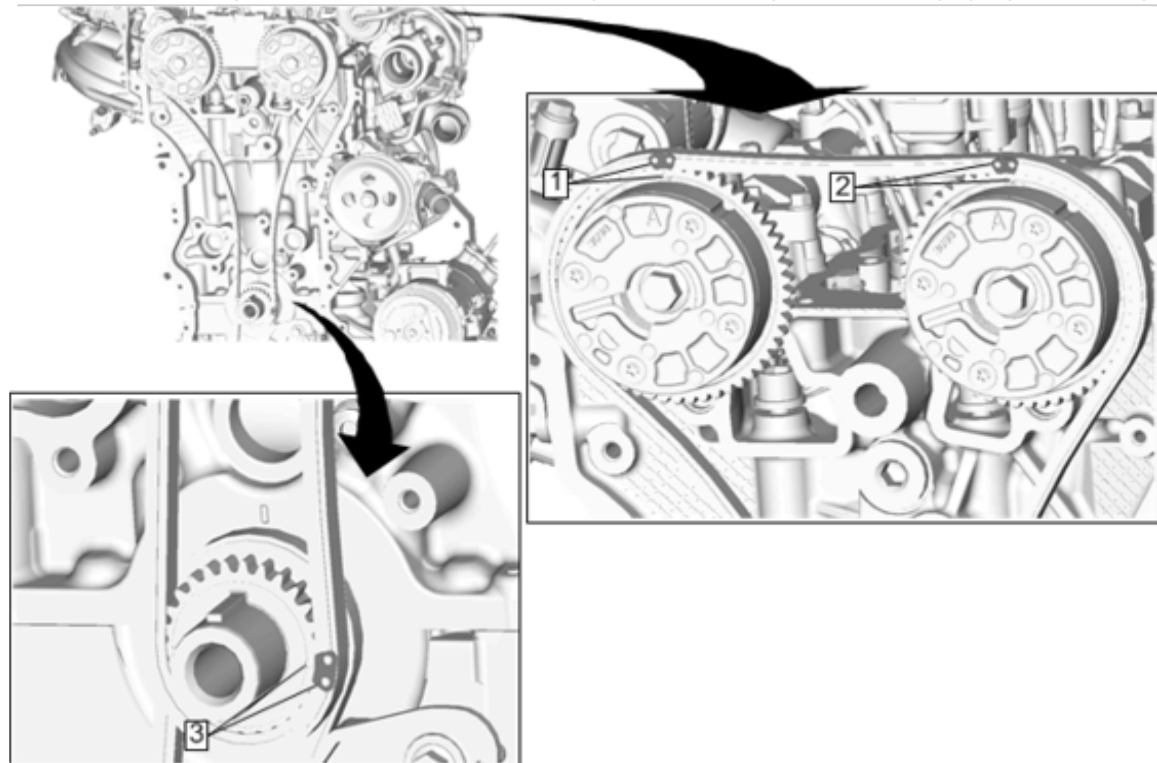
5. Position the timing chain guide (2) then hand start the fasteners (1). Tighten to **10 Nm (89 lb in)**.



6. Position the timing chain guide (2) then hand start the fasteners (1). Tighten to **10 Nm (89 lb in)**



7. Engage the timing chain tensioner.
8. Inspect the timing chain marks to confirm they remained aligned after engaging the timing chain tensioner.



9. Engine Front Cover » Install – Engine Front Cover Replacement