

2017 Chevrolet Malibu L4-1.5L Turbo

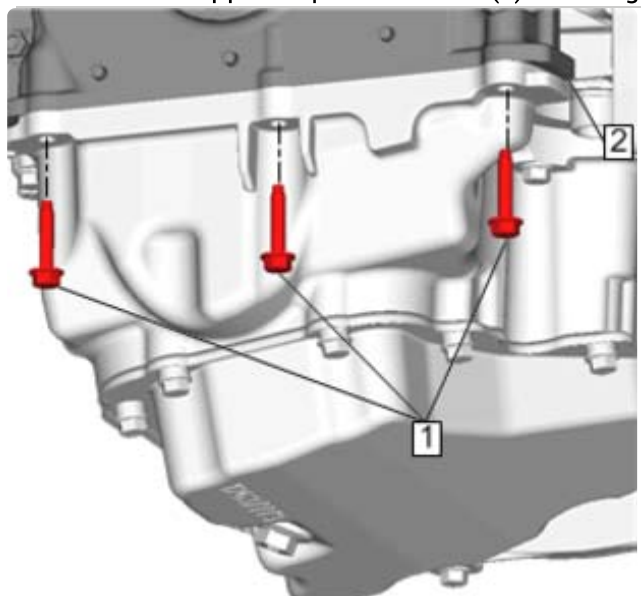
Vehicle > Engine, Cooling and Exhaust > Engine > Timing Components > Timing Cover > Service and Repair > Removal and Replacement

## ENGINE FRONT COVER REPLACEMENT

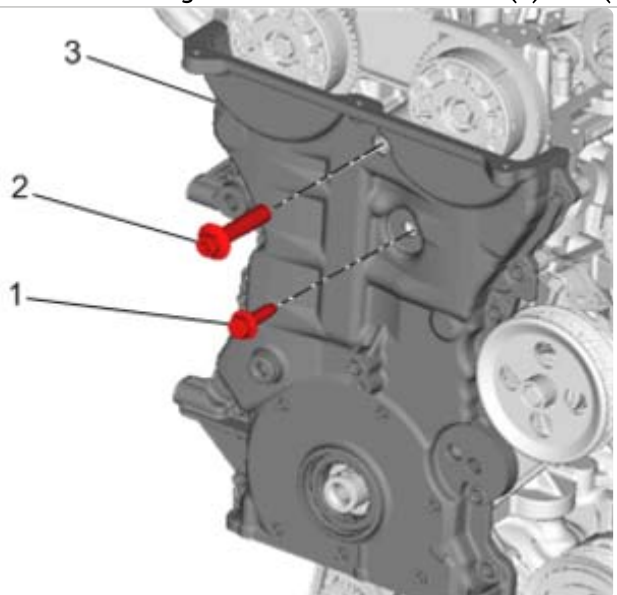
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### Removal Procedure

1. Remove the camshaft cover. Refer to Camshaft Cover Replacement.
2. Remove the engine mount bracket. Refer to Engine Mount Bracket Replacement.
3. Remove the crankshaft balancer. Refer to Crankshaft Balancer Replacement.
4. Remove the drive belt tensioner. Refer to Drive Belt Tensioner Replacement.
5. Remove the generator. Refer to Generator Replacement.
6. Remove the 3 upper oil pan fasteners (1) securing the oil pan to the engine front cover (2).



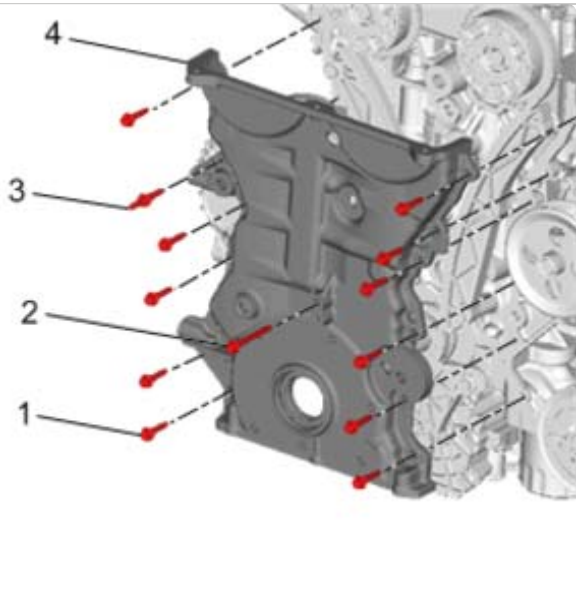
7. Remove the engine front cover fasteners (1) and (2) from the engine front cover (3).



**Note:** Note the location of the long fastener (2), short fasteners (1) and stud fastener (3) for correct

installation.

8. Remove the engine front cover fasteners (1),(2) and (3). then remove the engine front cover (4).



9. Transfer parts as needed.

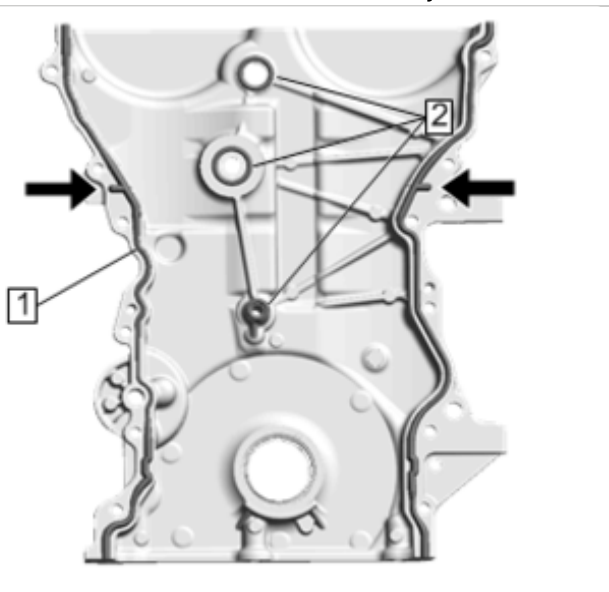
10. Install a NEW crankshaft front oil seal as needed. Refer to Crankshaft Front Oil Seal Replacement.

## Installation Procedure

### Note:

- The engine front cover surface must be free of contamination prior to applying the sealer.
- Additional sealant is necessary to reduce the possibility of leakage where the cylinder head to engine block interface along the bead path flange on the front cover.
- Install and align the cover within 20 minutes of applying the sealer.
- The cover must be fastened to final torque specification within 20 minutes of applying the sealer.

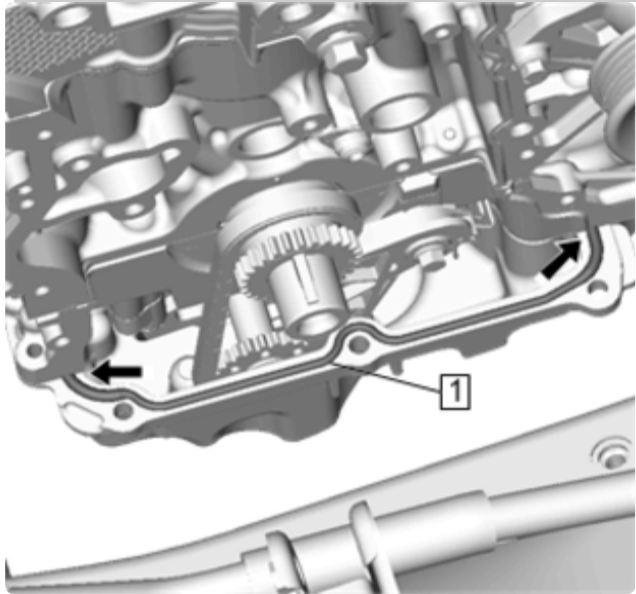
1. Apply a **4 mm** bead of sealer directly in the flange (1) of the engine front cover perimeter mating surface. Also apply a **3 mm** bead of sealer directly to the locations indicated (2). Finally, apply a **3 mm** dab of sealant at the locations indicated by arrows. Refer to Adhesives, Fluids, Lubricants, and Sealers.



### Note:

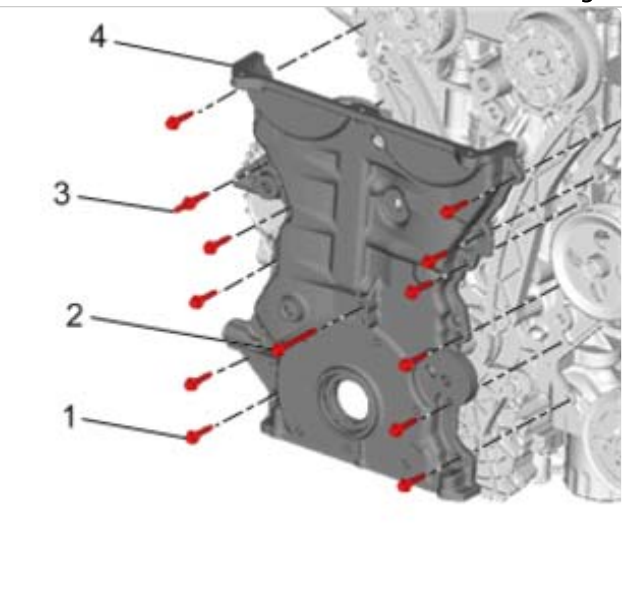
- The engine front cover surface must be free of contamination prior to applying the sealer.
- Additional sealant is necessary to reduce the possibility of leakage where the engine oil pan, engine front cover and engine block mate.
- Install and align the cover within 20 minutes of applying the sealer.
- The cover must be fastened to final torque specification within 60 minutes of applying the sealer.

2. Apply a **4 mm** bead of sealer directly in the flange (1) of the engine oil pan. Apply an additional **3 mm** bead of sealer in the corners indicated by arrows.



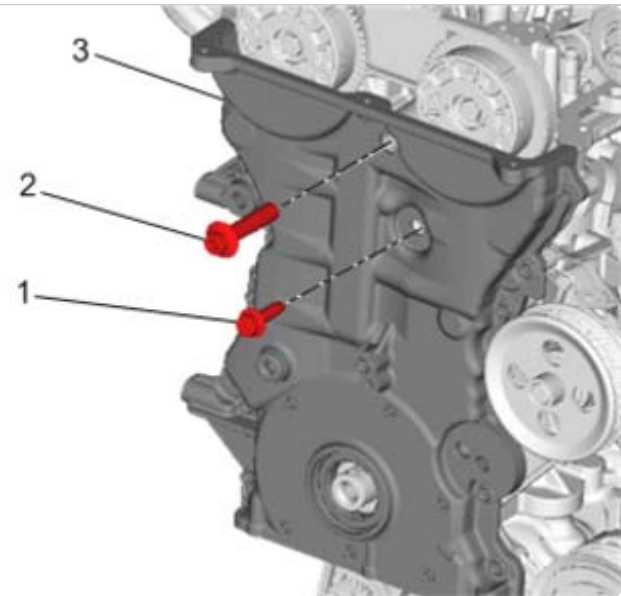
**Note:** Torque to specification after all front cover fasteners are installed hand-tight.

3. Position the front cover then hand start the engine front cover fasteners (1), (2) and (3).



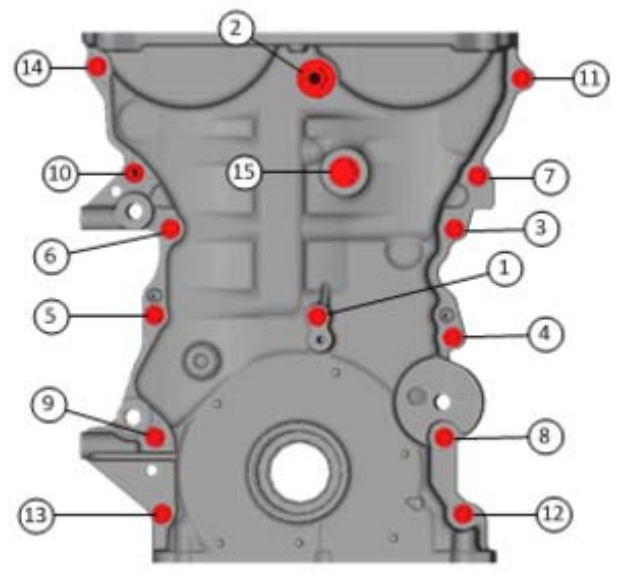
**Note:** Torque to specification after all front cover fasteners are installed hand-tight.

4. Hand start the last two fasteners (1) and (2) into the front cover (3).



**Caution:** Refer to Fastener Caution.

5. Tighten all fasteners in sequence



1. First pass to **5 Nm (44 lb in)**.

2. Final pass torque to specification. Tighten fasteners (1 and 3-14) to **15 Nm (133 lb in)**. Tighten fasteners 2 and 15 to **58 Nm (43 lb ft)**.

6. Install the crankshaft balancer. Refer to Crankshaft Balancer Replacement.

7. Install the camshaft cover. Refer to Camshaft Cover Replacement.

8. Install the engine mount bracket. Refer to Engine Mount Bracket Replacement.

9. Install the generator. Refer to Generator Replacement.

10. Install the drive belt tensioner. Refer to Drive Belt Tensioner Replacement.