

303-01 Engine - 2.3L EcoBoost (201kW/273PS)  
Removal and Installation

2019 Ranger  
Procedure revision date: 01/4/2019

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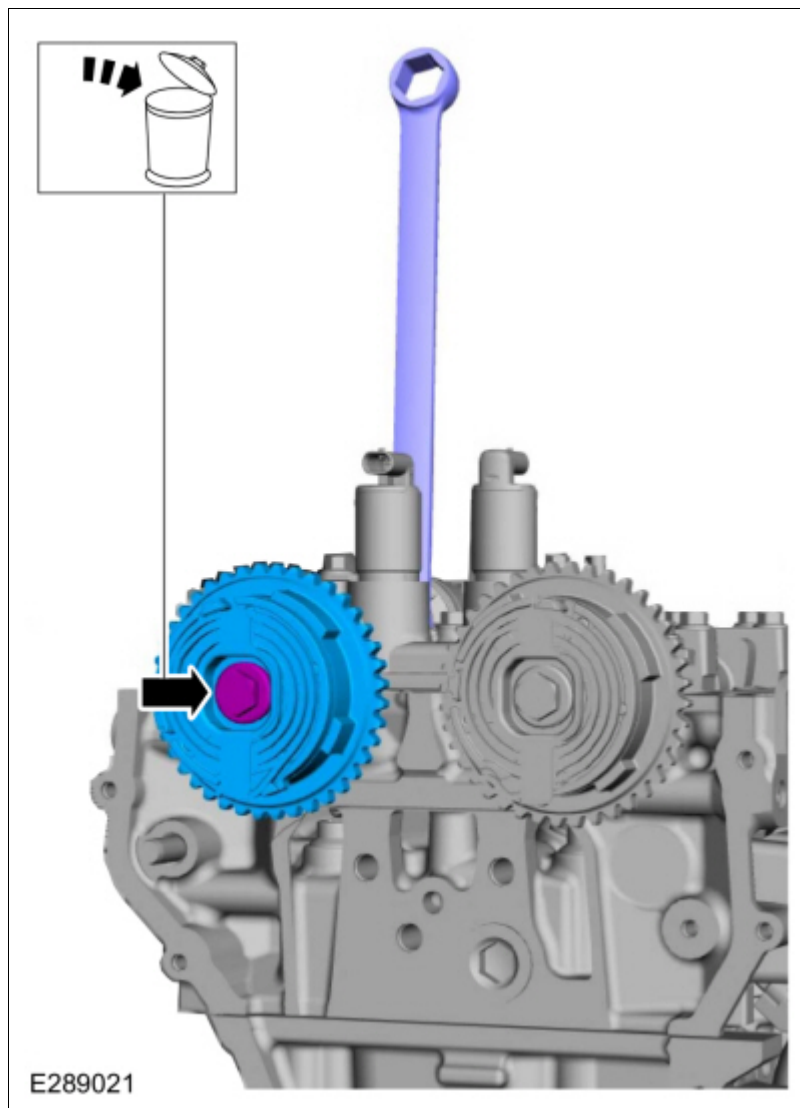
### Variable Camshaft Timing (VCT) Unit

#### Removal

**NOTICE:** During engine repair procedures, cleanliness is extremely important. Any foreign material, including any material created while cleaning gasket surfaces, that enters the oil passages, coolant passages or the oil pan can cause engine failure.

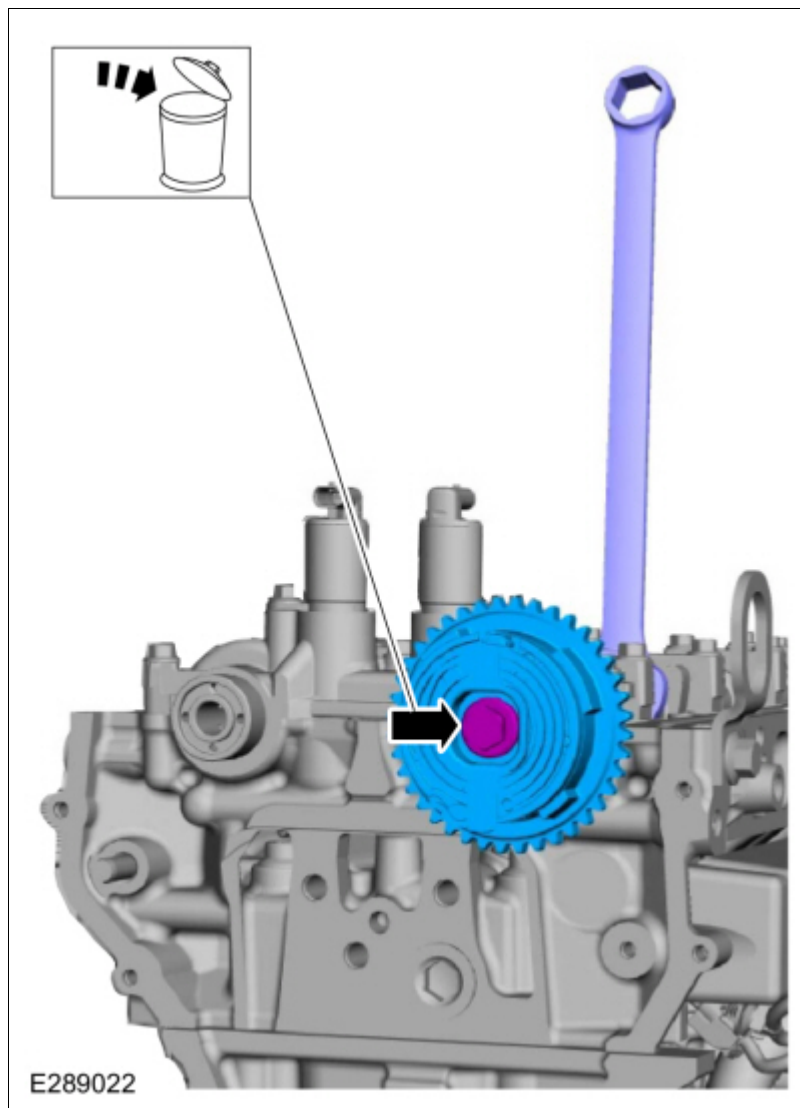
1. Remove the timing chain.  
Refer to: [Timing Chain](#) (303-01 Engine - 2.3L EcoBoost (201kW/273PS), Removal and Installation).
2.
  - Using a wrench on the flats of the exhaust camshaft to prevent cam rotation, remove the bolt and the exhaust VCT unit.
  - Discard the bolt.





3.

- Using a wrench on the flats of the intake camshaft to prevent cam rotation, remove the bolt and the intake VCT unit.
- Discard the bolt.

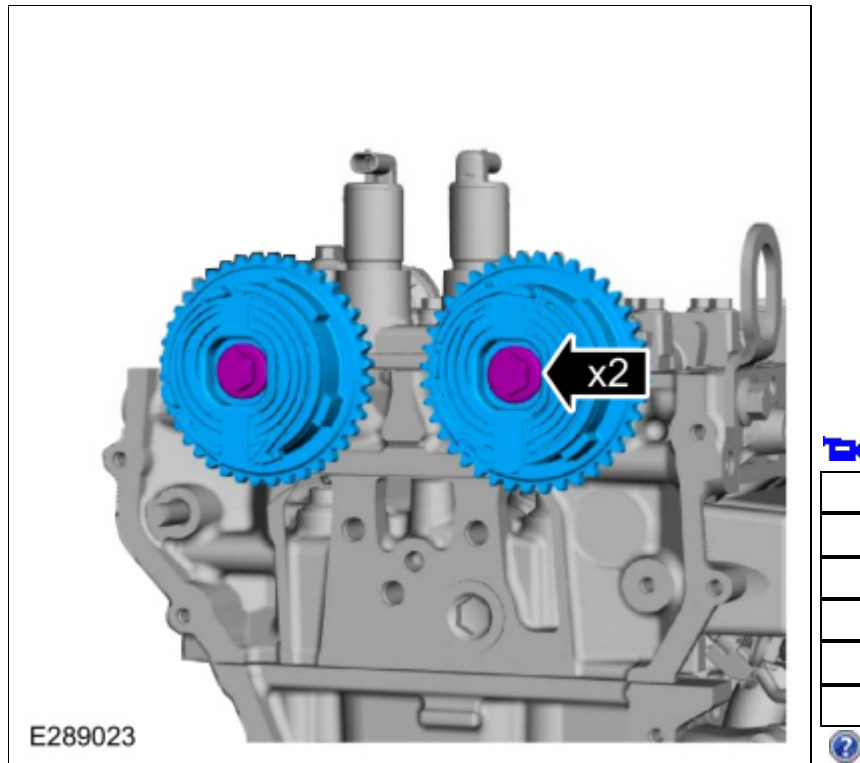


## Installation

1. **NOTE:** Install new VCT unit bolts.

**NOTE:** Do not tighten the bolts at this time. The bolts will be tightened during the timing chain installation procedure.

Install the exhaust and intake VCT units and the new bolts finger tight.



2. Install the timing chain.  
Refer to: [Timing Chain](#) (303-01 Engine - 2.3L EcoBoost (201kW/273PS), Removal and Installation).

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