

SECTION 303-05: Accessory Drive
REMOVAL AND INSTALLATION

2014 F-150 Workshop Manual
Procedure revision date: 10/25/2013

Air Conditioning (A/C) Compressor Belt — 3.5L GTDI, 3.7L, 5.0L

Special Tool(s)

 ST3085-A	Remover, Stretchy Belt 303-1419
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Removal

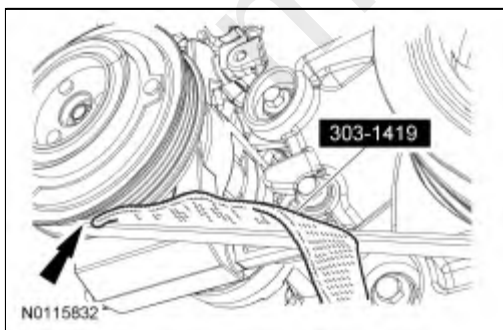
NOTICE: Under no circumstances should the A/C compressor belt, accessory drive belt, tensioner or pulleys be lubricated as potential damage to the belt material and tensioner damping mechanism will occur. Do not apply any fluids or belt dressing to the A/C compressor belt, accessory drive belt or pulleys.

All Engines

1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to [Section 100-02](#).
2. Remove the accessory drive belt. For additional information, refer to [Front End Accessory Drive \(FEAD\) — Exploded View](#) in this section.

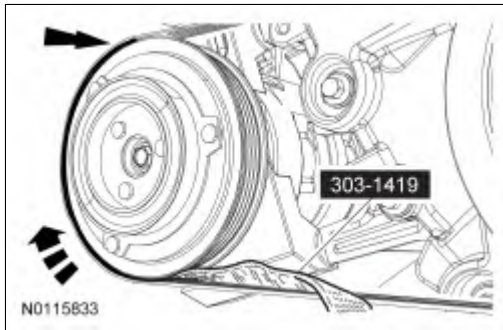
3.5L and 3.7L Engines

3. Position the Stretchy Belt Remover on the A/C compressor belt as shown.

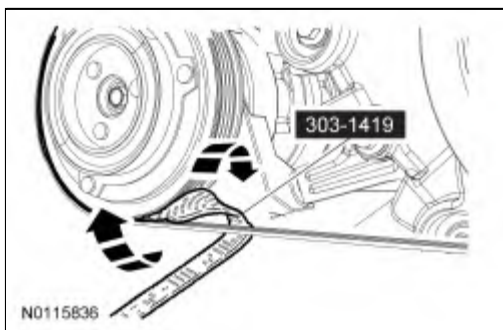


4. **NOTE:** Feed the Stretchy Belt Remover on to the A/C compressor pulley approximately 180 degrees.

Turn the crankshaft clockwise and feed the Stretchy Belt Remover evenly between the A/C compressor pulley and the A/C compressor belt as shown.



5. Remove the A/C compressor belt.
 - Fold the Stretchy Belt Remover around the inside of the A/C compressor belt as shown.
 - In one quick motion, firmly pull the Stretchy Belt Remover from below the vehicle and remove the A/C compressor belt.

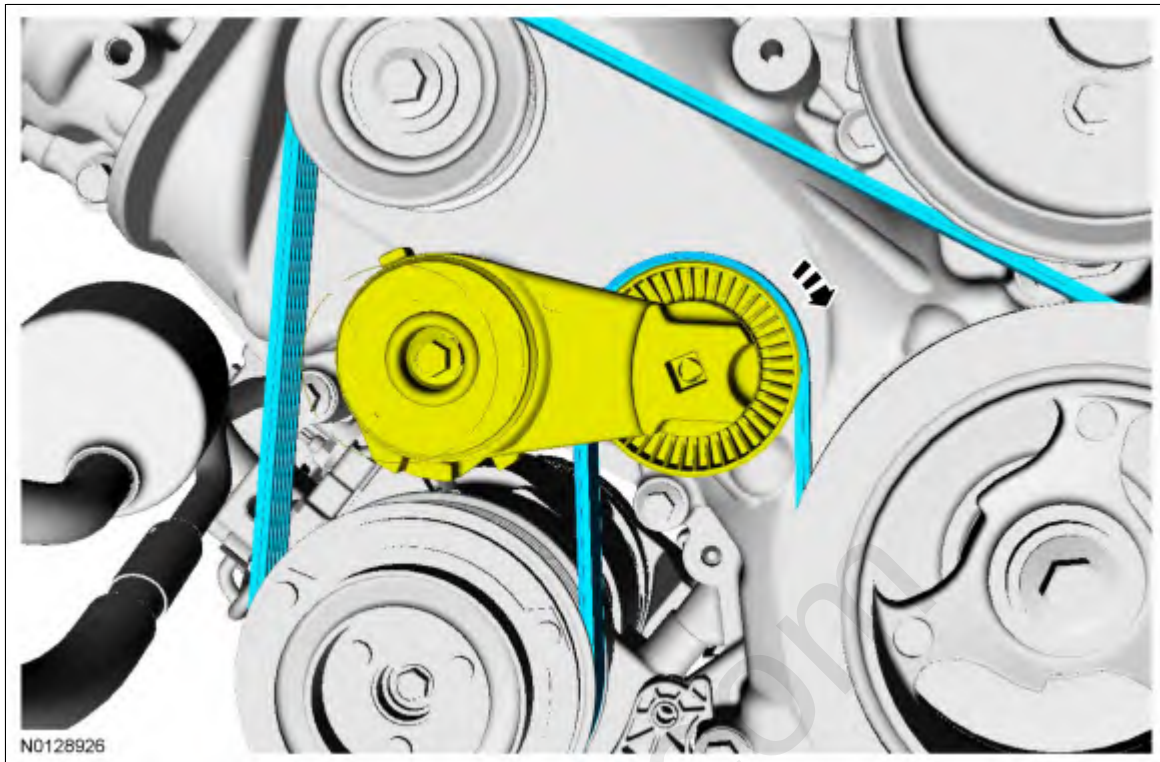


5.0L (4V) Early Build Vehicles

6. Cut the A/C compressor belt and discard the belt.

5.0L (4V) Late Build Vehicles

7. Rotate the drive belt tensioner clockwise and detach the A/C compressor drive belt from the idler pulley and remove the A/C compressor drive belt.



Installation

3.5L GTDI, 3.7L, 5.0L (4V) Early Build Vehicles

1. **NOTE:** 5.0L (4V) engine shown, 3.5L and 3.7L engines similar.

Position the A/C compressor belt in 2 stages.

- Stage 1: Slide the A/C compressor belt between the crankshaft pulley and the accessory drive belt tensioner.
- Stage 2: Position the A/C compressor belt behind the crankshaft pulley with the accessory drive belt ribs facing towards the front of the vehicle.
- **NOTE:** Make sure the A/C compressor belt is correctly seated on the A/C compressor pulley.

Stage 3: Position the A/C compressor belt onto the A/C compressor pulley with the lower portion of the accessory drive belt ribs facing towards the front of the vehicle and above the oil pan as shown.



2. **NOTE:** 5.0L (4V) engine shown, 3.5L and 3.7L engines similar.

NOTE: After installation, make sure the A/C compressor belt is correctly seated on the crankshaft and A/C compressor pulleys.

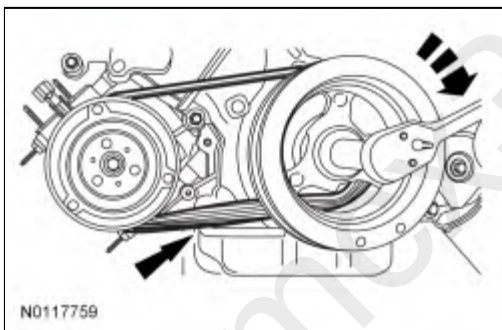
Position the A/C compressor belt onto the top of the crankshaft pulley and feed a tie strap with a minimum width of 3 mm (0.12 in) through the crankshaft pulley spokes, up and over the A/C compressor belt and tighten the tie strap.



3. **NOTICE:** The A/C compressor belt must be above the oil pan flange or damage to the A/C compressor belt and engine can occur.

NOTE: 5.0L (4V) engine shown, 3.5L and 3.7L engines similar.

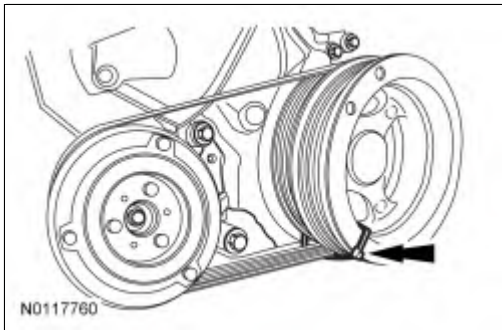
With the A/C compressor belt positioned above the oil pan flange, rotate the crankshaft by hand clockwise until the tie strap is at the 6 o'clock position.



4. **NOTE:** 5.0L (4V) engine shown, 3.5L and 3.7L engines similar.

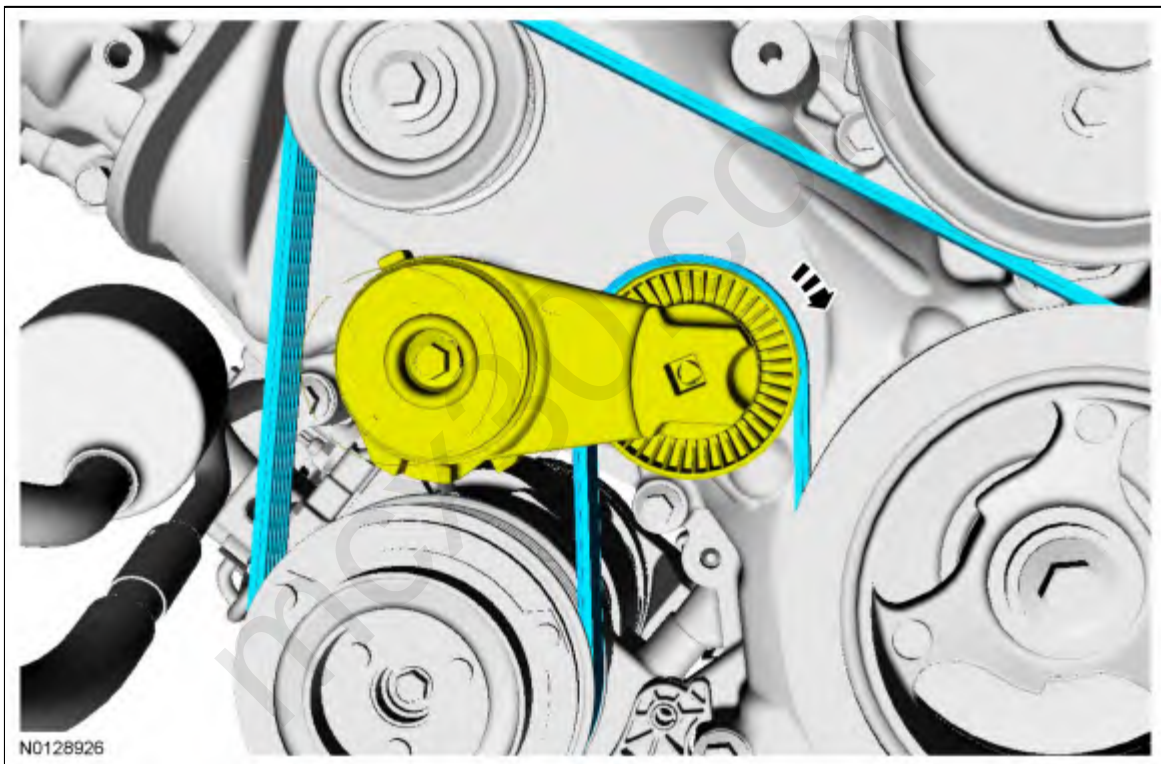
NOTE: After installation, make sure the A/C compressor belt is correctly seated on the crankshaft and A/C compressor pulleys.

Remove the tie strap and rotate the crankshaft clockwise 1 full rotation to verify the A/C compressor belt has correctly seated onto the crankshaft and A/C compressor pulleys.



5.0L (4V) Late Build Vehicles

5. Position the A/C drive belt and rotate the drive belt tensioner clockwise and attach the A/C compressor drive belt to the idler pulley.



All Engines

6. Install the accessory drive belt. For additional information, refer to [Front End Accessory Drive \(FEAD\) — Exploded View](#) in this section.

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