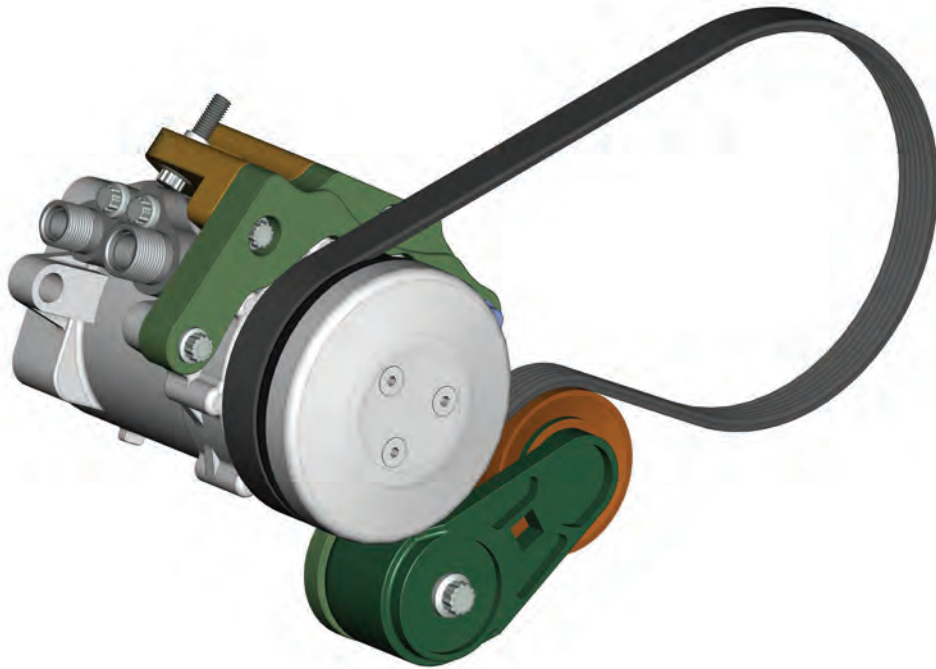




an ISO 9001:2015 Registered Company

# **Boss/Coyote 5.0**

Compressor *without* Power Steering  
Serpentine Drive System  
174007



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# Table of Contents

Cover.....	1
Table of Contents/Information.....	2
Packing List/Parts Disclaimer.....	3
Additional Parts & Accessories.....	4
Engine Block Modification, Lower Bracket Assembly.....	5
Lower Bracket Installation.....	6
Belt Tensioner Installation.....	7
Compressor Fitting Installation, Compressor Installation.....	8
Belt Installation & Routing.....	9
Packing List.....	10

### Additional Items Needed for Installation:

1. Permatex Anti-Seize Lubricant
2. 1/4"-Diameter Rod or Bolt (Approximately 2 1/2" Long)

## Important Notice—Please Read

*For Maximum System Performance, Vintage Air Recommends the Following:*

**Ford Motorsports recommends a heater control valve bypass to maintain continuous coolant flow through the right bank of Coyote engines. In-line bypass fitting (H-pipe) available separately (Vintage Air Part # 344470).**

### Refrigerant Capacities:

**Vintage Air System:** 1.8 lbs. (1 lb., 12 oz.) of **R134a**, charged by weight with a quality charging station or scale. **NOTE: Use of the proper type and amount of refrigerant is critical to system operation and performance. Vintage Air systems are designed to operate with R134a refrigerant only. Use of any other refrigerant could damage your A/C system and/or vehicle, and possibly cause a fire, in addition to potentially voiding the warranties of the A/C system and its components.**

**Other Systems:** Consult manufacturer's guidelines.

### Lubricant Capacities:

**New Vintage Air-supplied Sanden Compressor:** No additional oil needed (Compressor is shipped with proper oil charge).

**All Other Compressors:** Consult manufacturer (Some compressors are shipped dry and will need oil added).

### Service Info:

**Protect Your Investment:** Prior to assembly, it is critical that the compressor, evaporator, A/C hoses and fittings, hardlines, condenser and receiver/drier remained capped. Removing caps prior to assembly will allow moisture, insects and debris into the components, possibly leading to reduced performance and/or premature failure of your A/C system. This is especially important with the receiver/drier.

Additionally, when caps are removed for assembly, **BE CAREFUL!** Some components are shipped under pressure with dry nitrogen.

**Evacuate the System for 35-45 Minutes:** Ensure that system components (Drier, compressor, evaporator and condenser) are at a temperature of at least 85° F. On a cool day, the components can be heated with a heat gun **or** by running the engine with the heater on before evacuating. Leak check and charge to specifications.

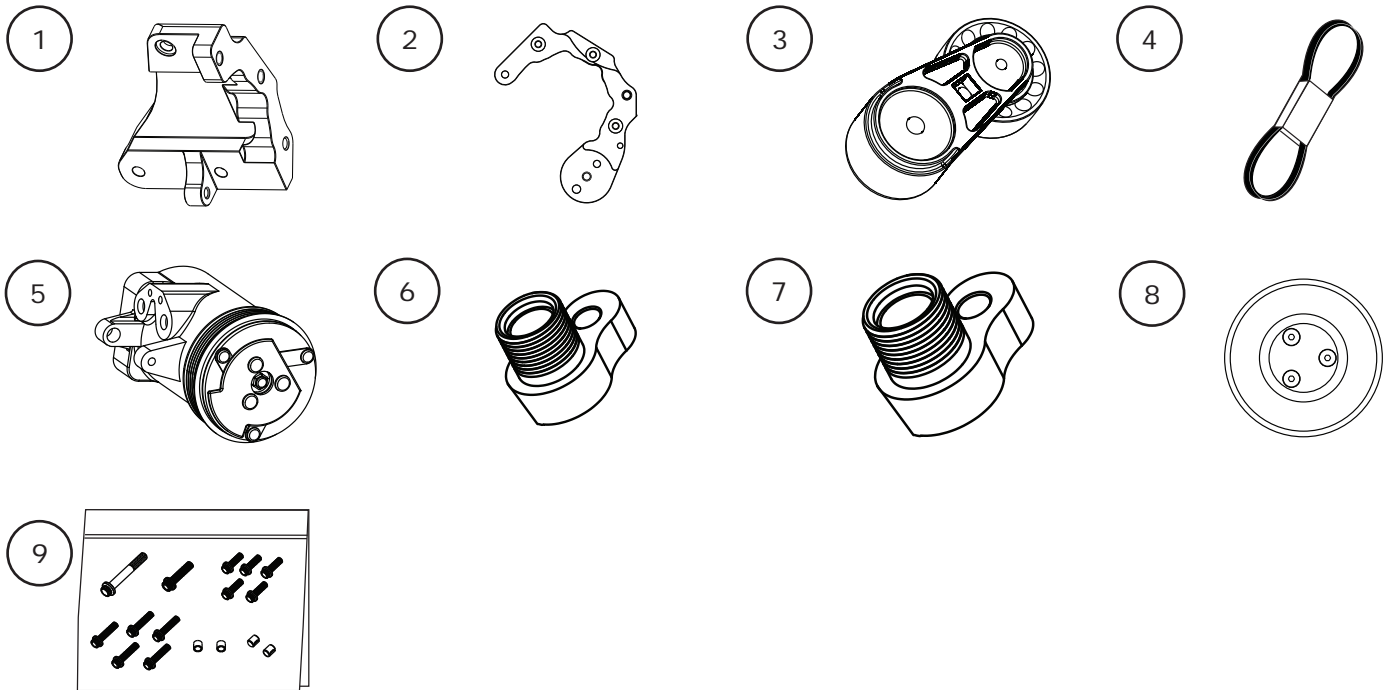


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## Packing List: Front Runner™ Kit (174007) Boss/Coyote 5.0 without Power Steering

No.	Qty.	Part No.	Description
1.	1	176016	Bracket, Compressor
2.	1	176015	Bracket, Tensioner
3.	1	39603-SCH	Tensioner
4.	1	724851	Belt, 35" Serpentine
5.	1	04670-MTA	Compressor, Multi-Groove
6.	1	045008-VUR	Fitting, #8 Compressor
7.	1	045010-VUR	Fitting, #10 Compressor
8.	1	044093	Clutch Cover Assembly, Black
9.	1	199013	Hardware Kit

**\*\* Before beginning installation, open all packages and check contents of shipment. Please report any shortages directly to Vintage Air within 15 days. After 15 days, Vintage Air will not be responsible for missing or damaged items.**



**NOTE: Images may not depict actual parts and quantities. Refer to packing list for actual parts and quantities.**



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## Additional Parts & Accessories

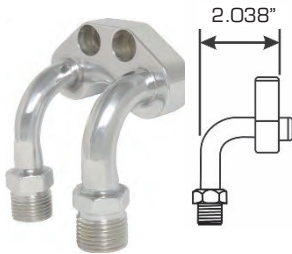
The following additional parts and accessories are available for your Front Runner drive system:

### Other Accessories

#### **Compressor Block Fittings**

**342310** Front Runner TiteFit Line Kit

**342311** Front Runner TiteFit Line Kit,  
fully polished as shown





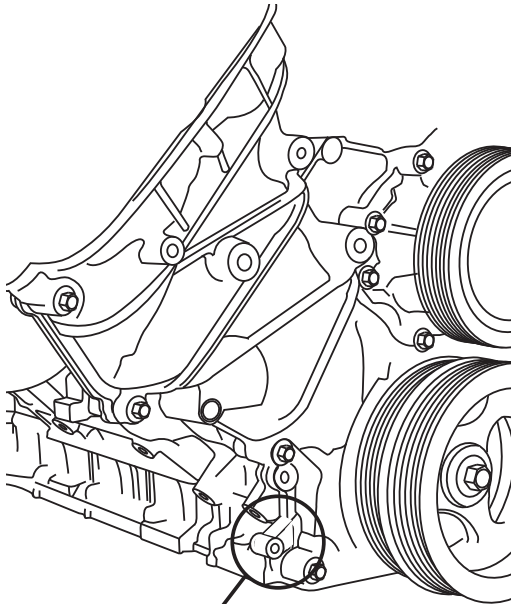
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## Important Information Before Beginning:

- Read instructions completely and thoroughly before installing the Vintage Air Front Runner system. Follow instructions step-by-step for proper installation.
- Anti-seize must be used on all bolt threads, or mechanical locking will occur, preventing removal of nuts from bolts and causing damage to fasteners.

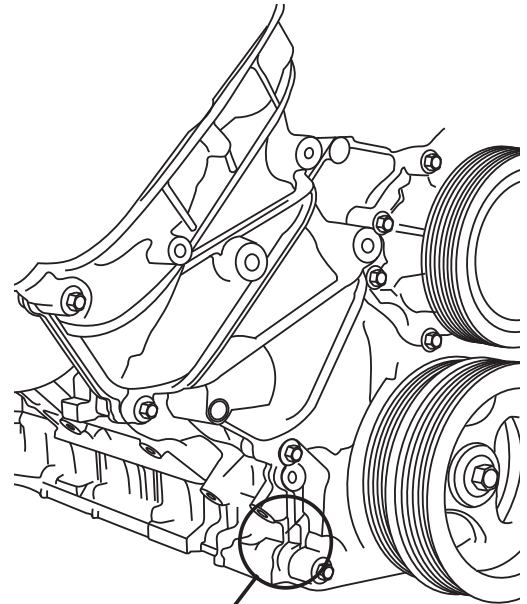
## Engine Block Modification

1. Disconnect the negative battery terminal.
2. Remove the tab on the lower left side of the timing cover as shown in Figures 1 & 2, below.



Before Modification

Figure 1



After Modification

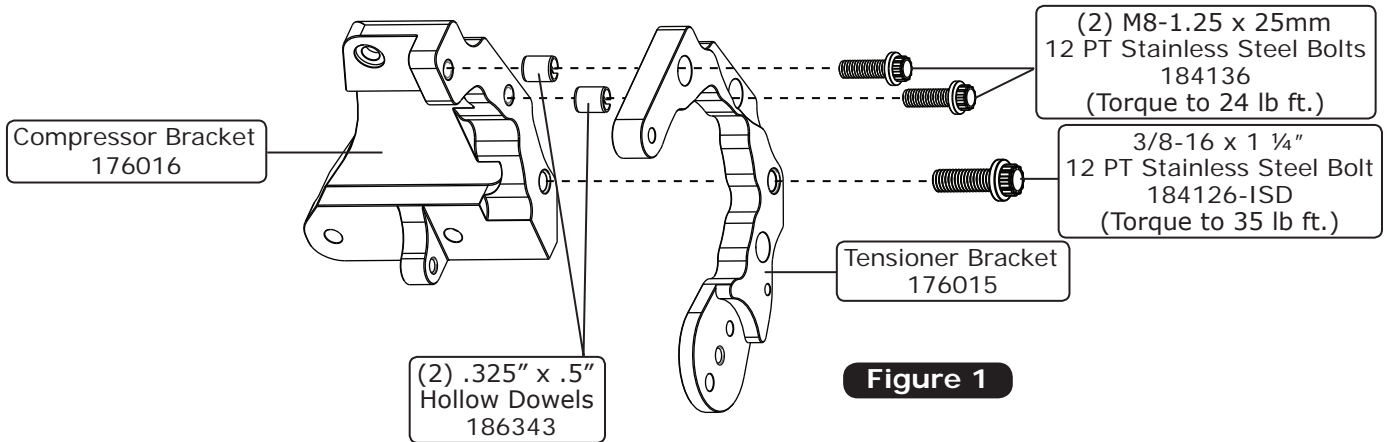
Figure 2



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## Lower Bracket Assembly

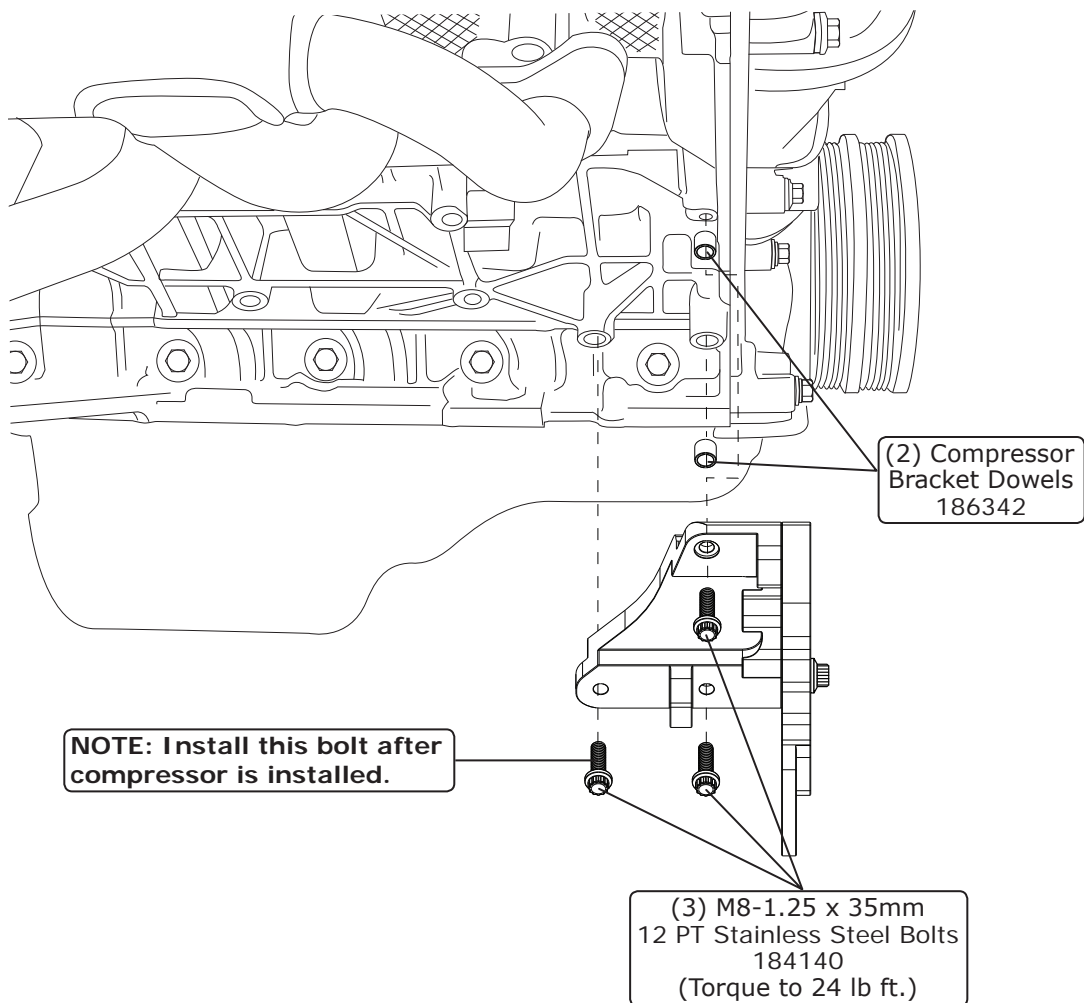
1. Assemble the compressor and tensioner brackets as shown in Figure 1, below.



**Figure 1**

## Lower Bracket Installation

1. Mount the compressor/tensioner bracket assembly onto the engine as shown in Figure 1, below.



**Figure 1**



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## Belt Tensioner Installation

1. Install the tensioner onto the tensioner bracket using the M10-1.5 x 70mm 12 PT stainless steel bolt (See Figure 1, below)

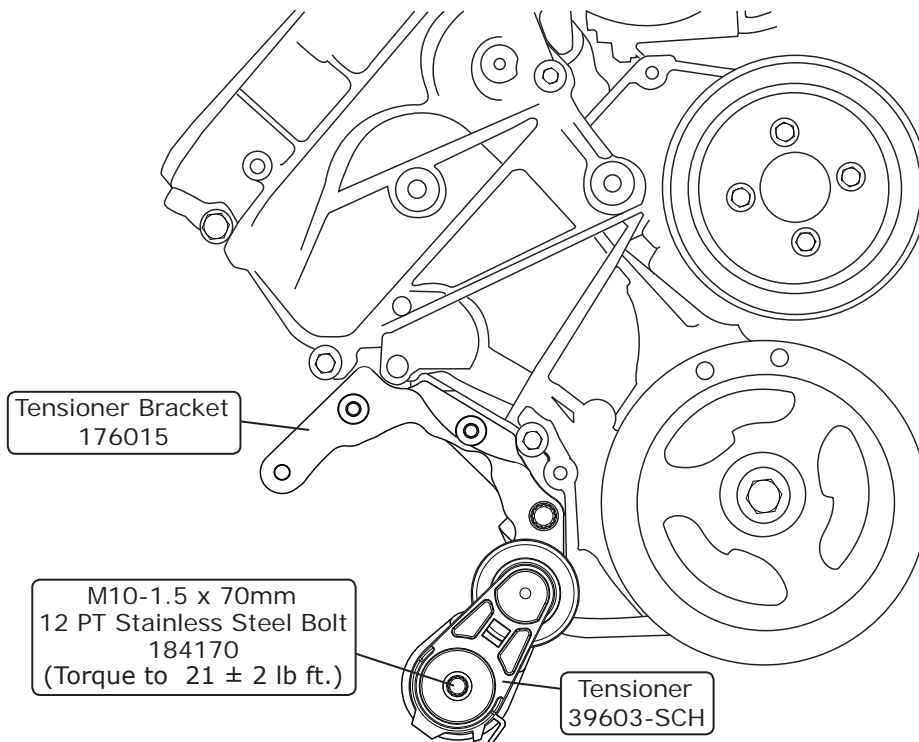


Figure 1

2. Spring back the tensioner, and lock it into place using a 1/4"-diameter rod or bolt (approximately 2 1/2" long) (See Figure 2, below).

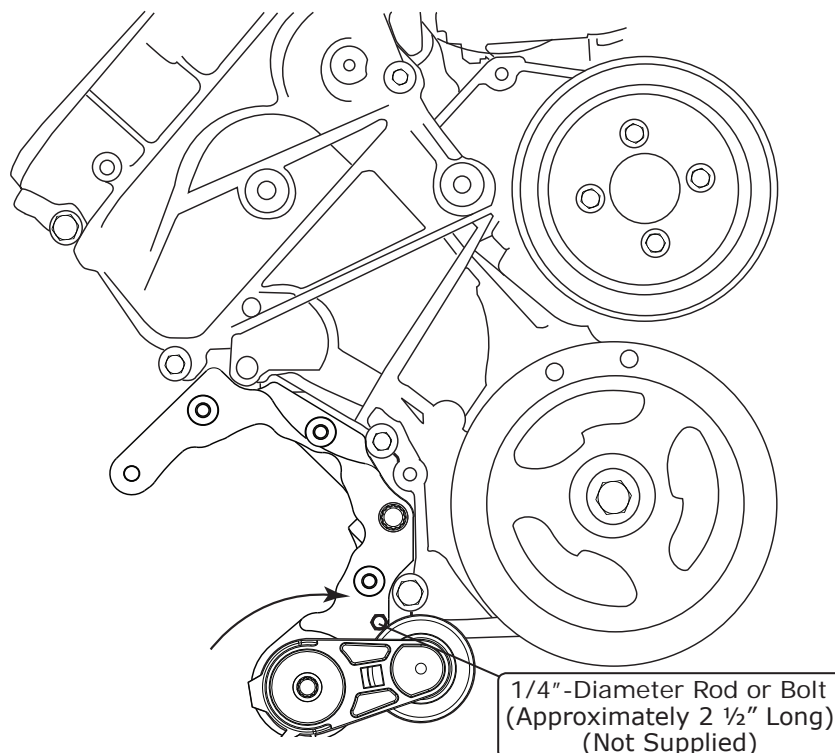


Figure 2



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## Compressor Fitting Installation

1. Install the #8 and #10 compressor fittings onto the compressor as shown in Figure 1, below. **NOTE: Be sure to keep the open ports pointing above level to avoid spilling the oil from the compressor.**

(2) M8-1.25 x 25mm  
12 PT Stainless Steel Bolts  
184136  
(Torque to 24 lb ft.)

#8 Compressor  
Fitting  
045008-VUR

#10 Compressor  
Fitting  
045010-VUR

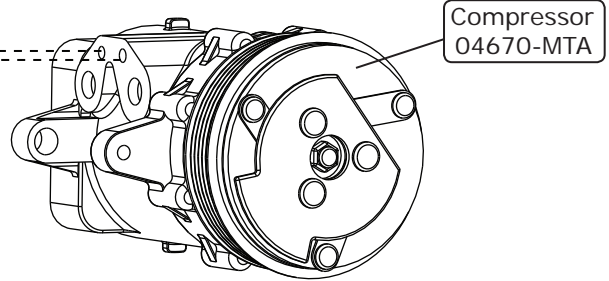


Figure 1

## Compressor Installation

1. Install the compressor onto the compressor/tensioner bracket assembly in a diagonal motion using (2) M8-1.25 x 35mm 12 PT stainless steel bolts and (1) M8-1.25 x 25mm 12 PT stainless steel bolt (See Figures 1 & 2, below). Torque the bolts to 24 lb ft.

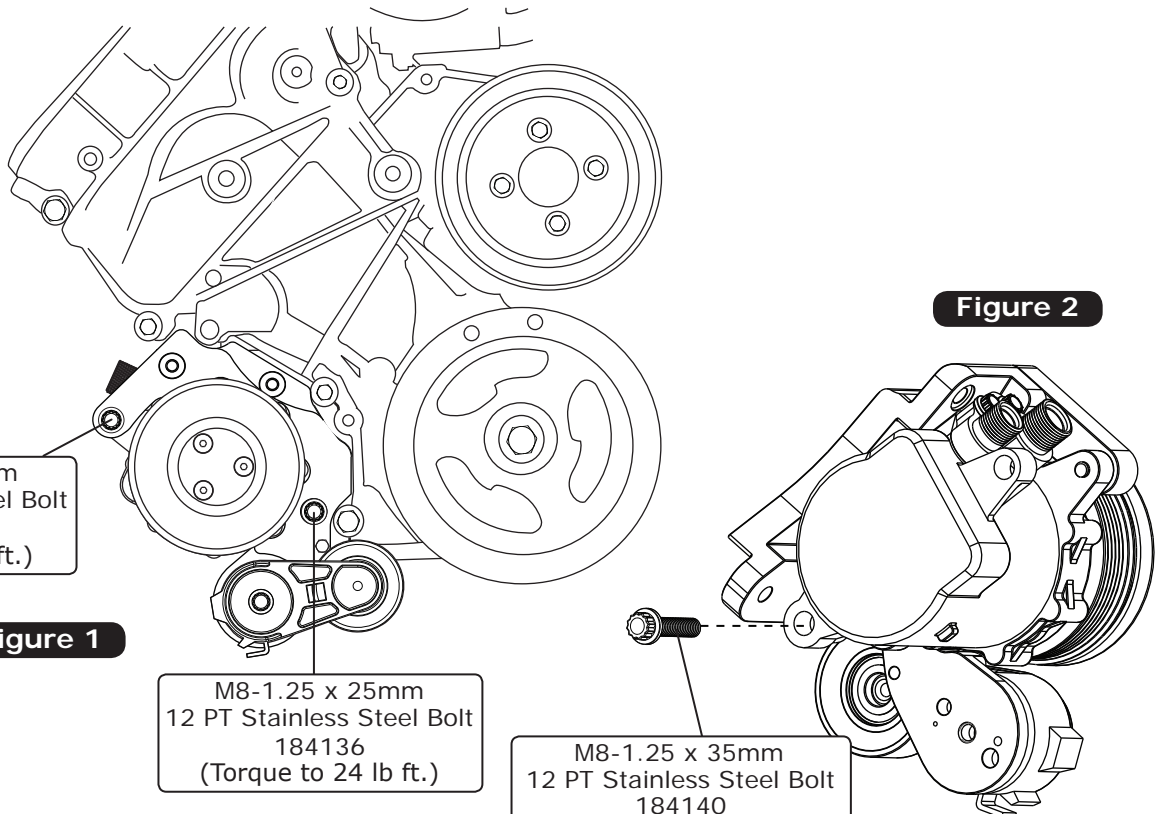
M8-1.25 x 35mm  
12 PT Stainless Steel Bolt  
184140  
(Torque to 24 lb ft.)

Figure 1

M8-1.25 x 25mm  
12 PT Stainless Steel Bolt  
184136  
(Torque to 24 lb ft.)

M8-1.25 x 35mm  
12 PT Stainless Steel Bolt  
184140  
(Torque to 24 lb ft.)

Figure 2







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## Belt Installation & Routing

1. Install the belt over the pulleys, sliding the smooth side of the belt over the tensioner pulley last, and remove the holding rod/bolt. The belt should be routed as shown in Figure 1, below.

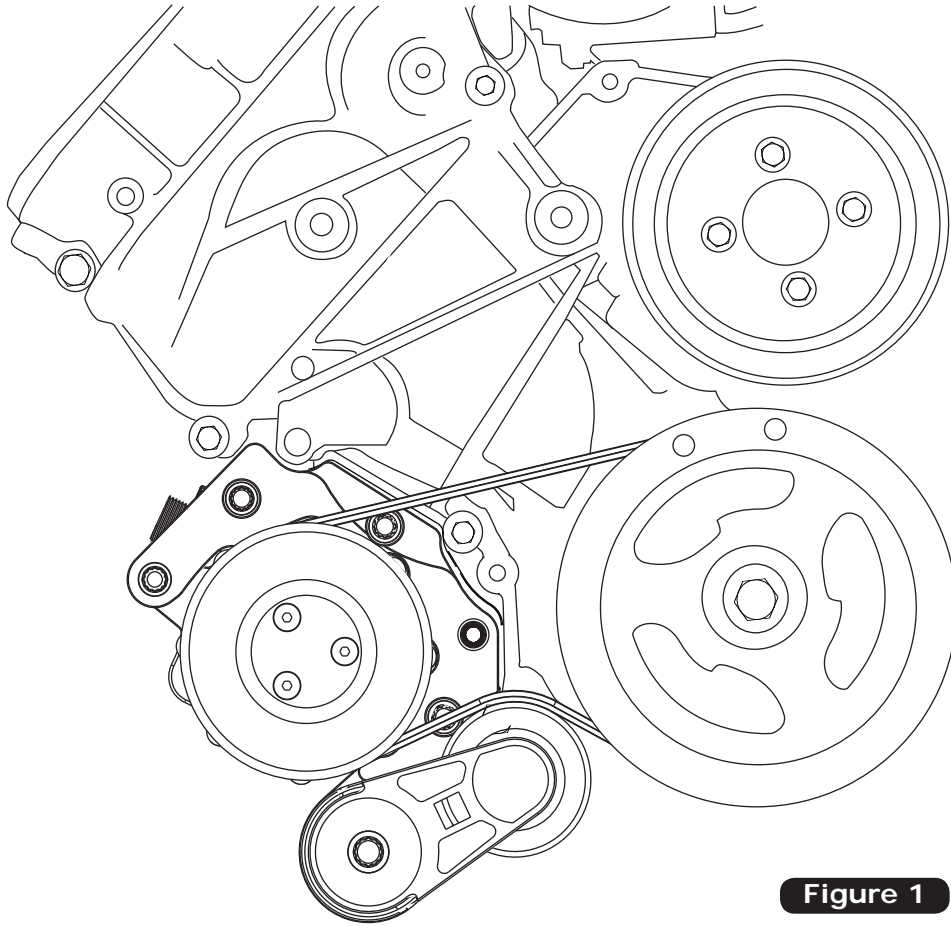


Figure 1



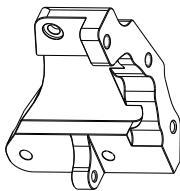
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# Packing List: FrontRunner™ Kit (174007) Boss/Coyote 5.0 without Power Steering

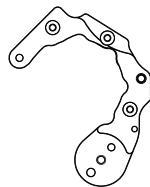
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7.	1	045010-VUR	Fitting, #10 Compressor
8.	1	044093	Clutch Cover Assembly, Black
9.	1	199013	Hardware Kit

Checked By: \_\_\_\_\_  
Packed By: \_\_\_\_\_  
Date: \_\_\_\_\_

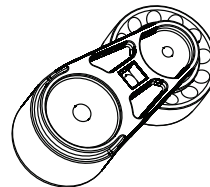
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2



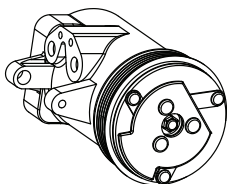
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4



5



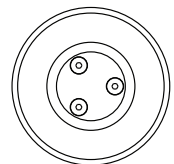
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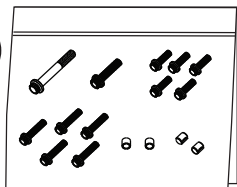
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8



9



**NOTE: Images may not depict actual parts and quantities.  
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