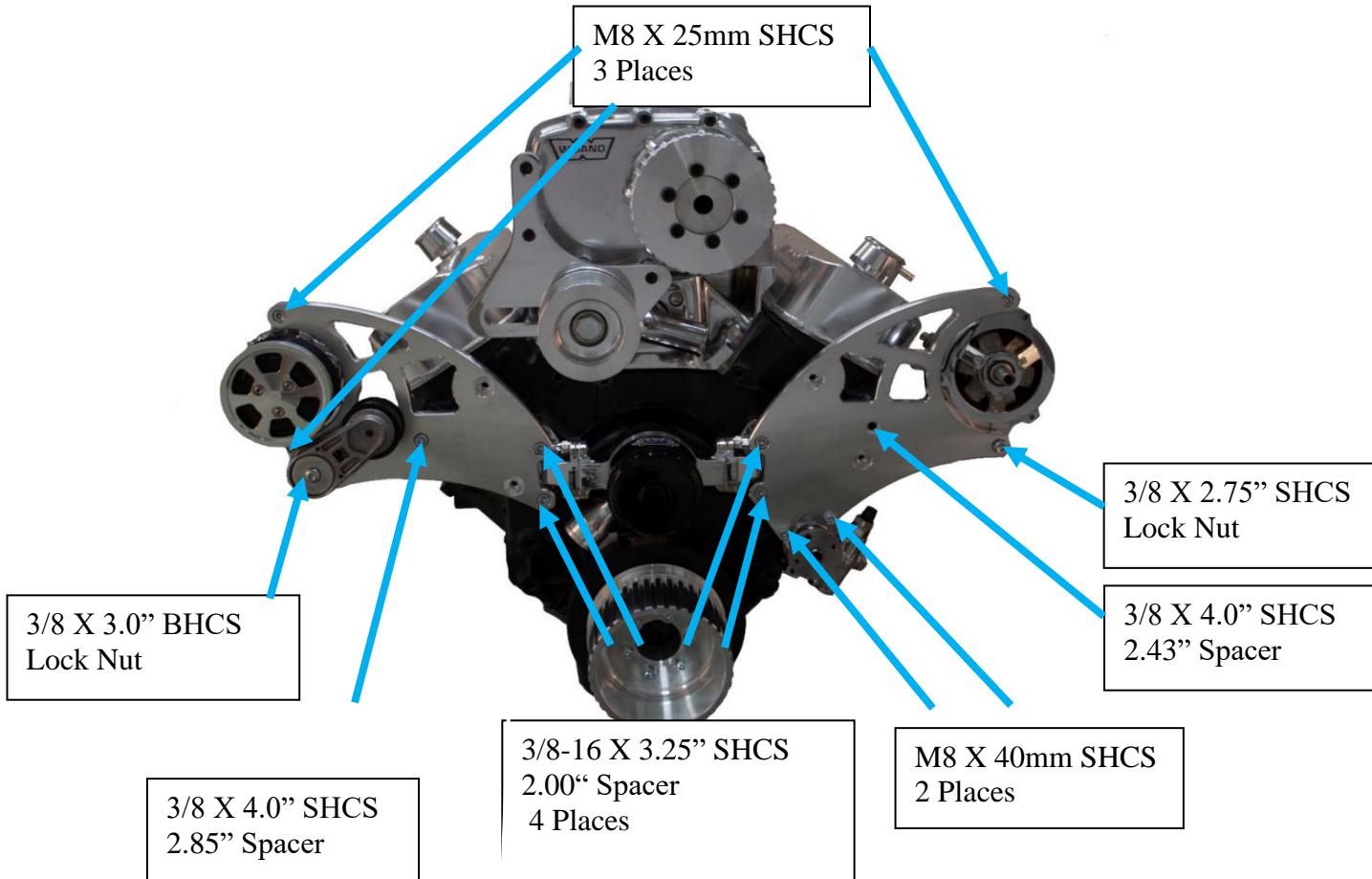


# 454SC-BRKT-KIT-WR-EWP Instructions Rev B

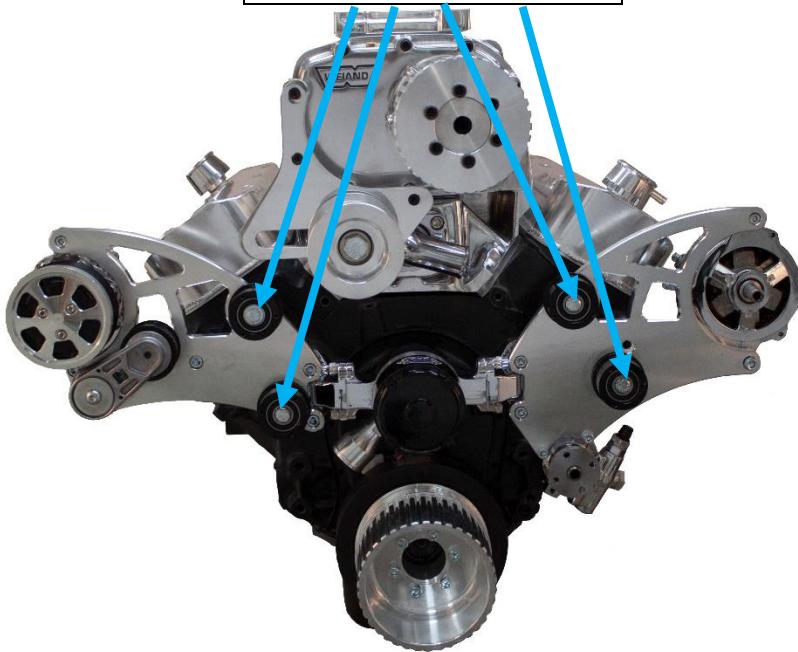
## Big Block Chevy Super Charged & NA Wide Mount Bracket Parts List for Electric Water Pump

| Item | Description            | Qty | Comments   |
|------|------------------------|-----|--|
| 1    | 3/8-16 X 2.75" SHCS    | 1   | Bottom Alternator Bolt   |
| 2    | 3/8-16 X 3.0" BHCS     | 1   | Idler Assembly Bolt  |
| 3    | 3/8-16 X .468 Lock Nut | 6   | Lock Nut for Tensioner Assembly, Idler Assembly's & Bottom Alternator Bolt |
| 4    | 3/8-16 X 2.5" HHS      | 4   | Idler to Bracket Bolt  |
| 5    | 3/8" SAE Washer        | 4   | Washer Between Idler Pulley Assembly & Bolt                                |
| 6    | M8-1.25 X 25mm         | 3   | Top Compressor Bolt<br>Top Alternator Bolt                                 |
| 7    | M8-1.25 X 40mm         | 2   | Bolts for Power Steering Pump (if used)                                    |
| 9    | 3/8-16 X 3.25 SHCS     | 4   | Bracket to Water Pump Bolts  |
| 9    | 3/8-16 X 4.0" SHCS     | 1   | Bracket to passenger side head   |
| 10   | 3/8-16 X 3.5 SHCS      | 1   | Bracket to driver side head  |
| 11   | 6257722-200 Spacer     | 4   | 2.0" Spacers Btwn Bracket and Water Pump                                   |
| 12   | 6257722-243 Spacer     | 1   | 2.43" Spacer Btwn Bracket and head   |
| 13   | 6257722-285 Spacer     | 1   | 2.84" Spacer Btwn Bracket and head   |
| 14   | 45422-SC               | 1   | Alternator/Power Steering Bracket  |
| 15   | 454247-SC              | 1   | Compressor Bracket   |
|      | Total Parts            | 35  | 13X10X2  |

Notes: SHCS = Socket Head Cap Screw & BHCS = Button Head Cap Screw



Idler Pulley Assembly  
 Washer  
 3/8 X 2.5" HHS  
 3/8 Lock Nut  
 Idler Pulley Cap  
 #8-32 X 0.5" SHCS



Step 1: Remove old brackets pulleys and water pump (if applicable)

Step 2: Apply RTV Blue or similar gasket sealer to both sides of the water pump gaskets and install the water pump.

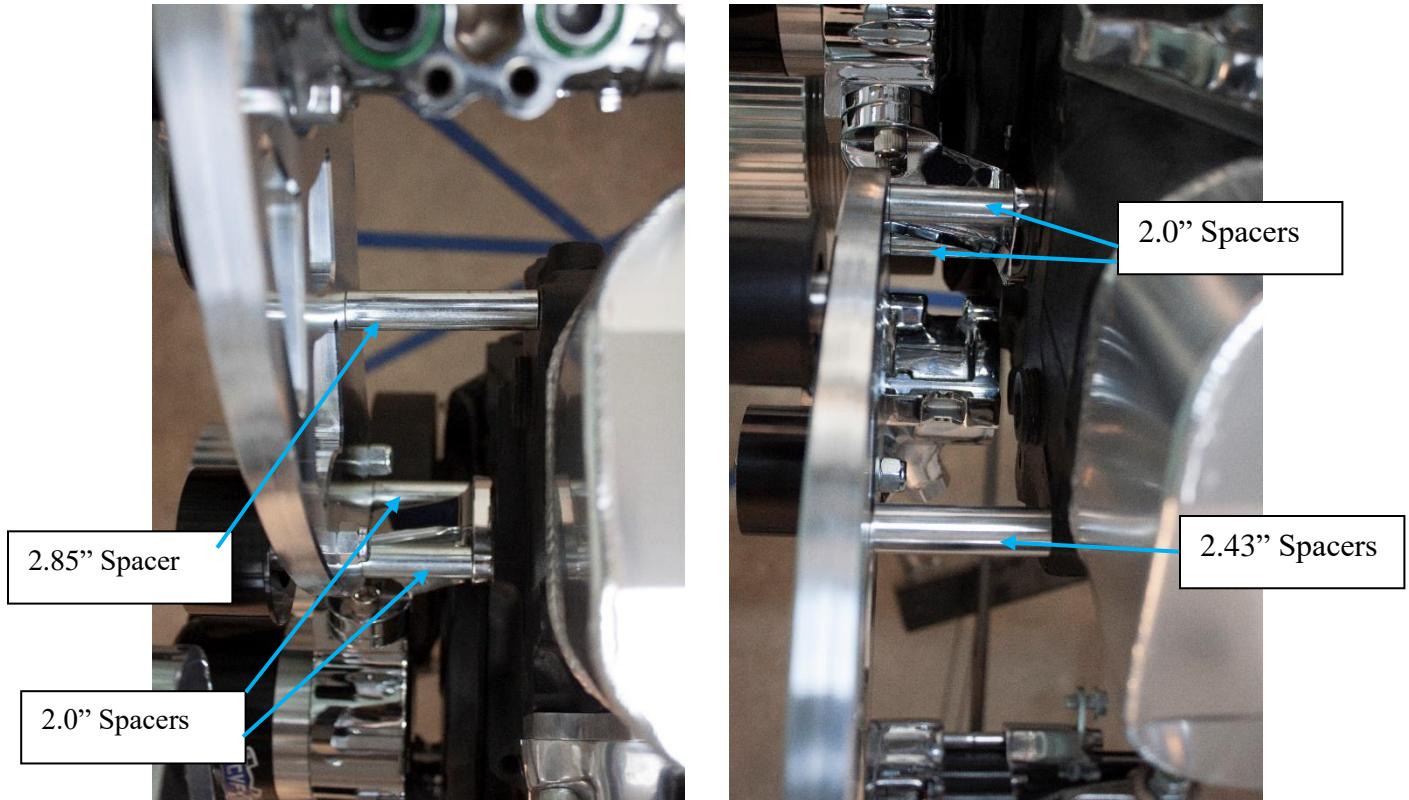
Step 2: Attach Alternator Bracket using two 3/8 X 3.25" bolts with two 2.00" Spacer attached to water pump and one 3/8 X 3.5" bolt with 2.43" spacer to head. Attach compressor bracket using two 3/8 X 3.25" bolts with two 2.00" Spacer attached to water pump and one 3/8 X 4.0" bolt with 2.85" spacer to head. Tighten the water pumps 4 bolts in alternating pattern to 36 ft-lbs (48.8N-m), then the head bolts.

Step 3: Install Alternator using M8 X 25mm SHCS on top bolt and 3/8 X 2.75" SHCS on bottom bolt with 3/8" Lock Nut. See torque specs below

**Tech Tip:** If side post of alternator is not in a desired location, you can carefully unbolt the back housing of the alternator and rotate to a preferred location. DO NOT REMOVE the back housing completely or you will have to re-install the bushings.

Step 4: Install compressor with fittings facing up. Use (Two) M8 X 25mm SHCS. Tighten to 36 ft-lbs (48.8N-m). See AC Delete Instructions if not running AC (Also included on page 4 of these instructions)

Step 5: Install Gates spring loaded idler pulley using 3.0" Button Head Cap Screw and 3/8" Lock Nut



Step 6: Install the remaining pulleys and pulley covers with the bolts that are in each box

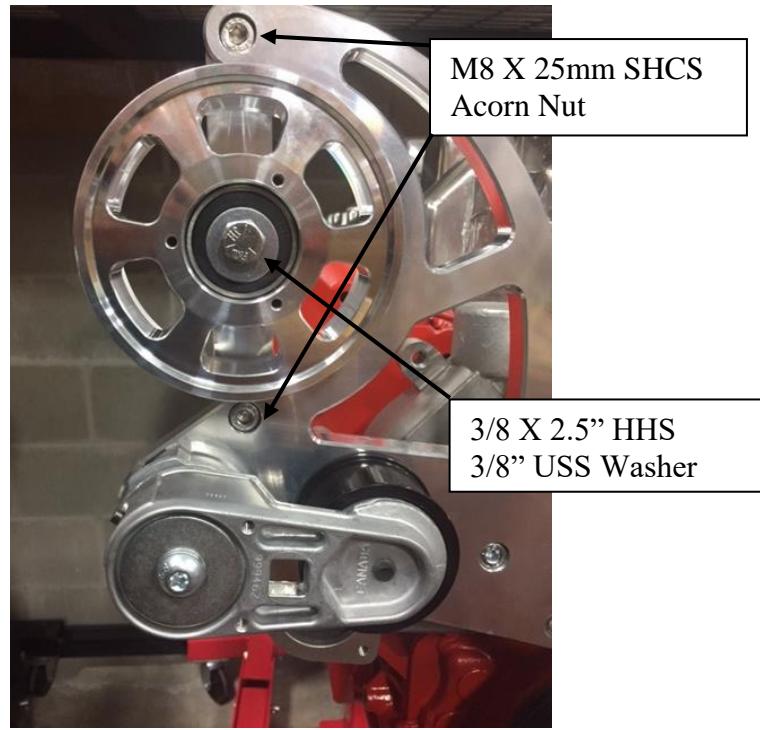
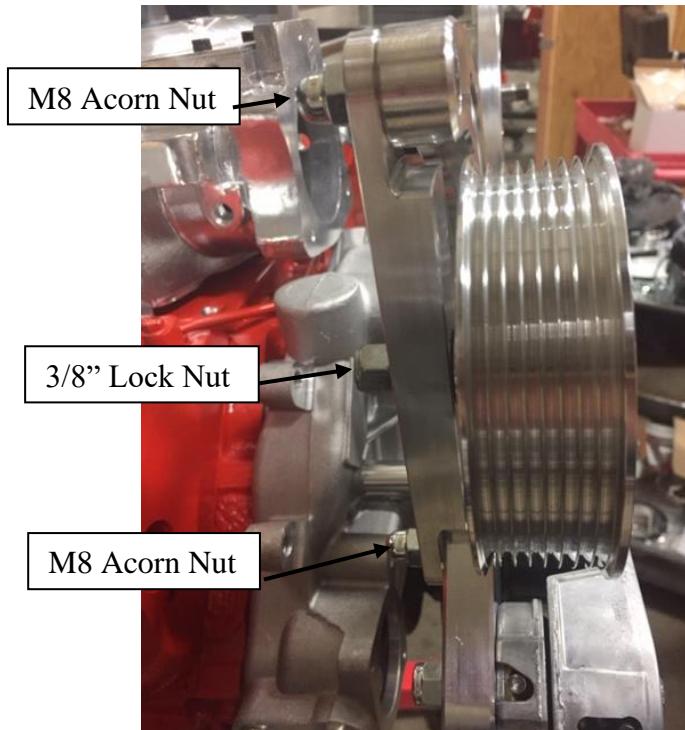
Step 7: Use a 1/2" ratchet to apply tension to the idler pulley and install the belt as shown.

Step 8: Install the idler tensioner cover using the two #10 X 0.5" SHCS

Step 9: Install and plumb the remote reservoir. (The fittings on the bottom of the reservoir are 3/8" NPT)

**Tech Tip:** After initial start-up, you will need to bleed air from your power steering system. To do this, you want to put the front of the car on jack stands and steer into the left stops and then into the right stops repeatedly. Check fluid level frequently and add as needed.

Optional AC Delete Bracket & Idler Pulley  
(See detailed instructions in box for Idler Delete)



Belt Routing with and without Power Steering



Torques Specs:

#8 Socket Cap Screw: 30 in-lbs (3.4 N-m)  
 #10 Socket Cap Screw: 65 in-lbs (7.3 N-m)  
 M8 Socket Cap Screw: 36 ft-lbs (48.8 N-m)  
 1/4-20 Button Head Screw: 16 ft-lbs (21.7 N-m)  
 5/16-18 Socket Cap Screw (Fine): 38 ft-lbs (51.5 N-m)  
 5/16-24 Socket Cap Screw (Coarse): 34 ft-lbs (46.1 N-m)  
 3/8-16 Socket Cap Screw: 61 ft-lbs (82.7 N-m)  
 3/8-16 Button Head Screw: 30 ft-lbs (40.7 N-m)

**Tech Tip:** Installing belt- In some cases when installing the belt, the belt can be too tight to fit over the pulley. If you remove the alternator pulley cap and the nut that holds the pulley onto the alternator, place belt around alternator pulley as shown in the pictures below. Release tension on the tensioner and slide alternator pulley onto the shaft of the alternator. Install alternator nut and alternator pulley cap. This is also possible by removing the Power Steering pulley as shown below

