



***Kit 20035***

***LS-Alternator / Power Steering / A/C Kit***  
***Kit 20030 LS-Alternator / A/C Kit (only)***

### **20021 Alternator Bracket**

- 1-20021-A .....Main Alternator Bracket
- 3-AC3-2.300.....Alum, Tube Spacers
- 3-S547.....M8-1.25 x 140mm SHCS
- 1-TP7-2.625.....Tube Spacer
- 1-S568.....M10-1.5 x 140mm SHCS
- 1-S551.....M8-1.25 x 25mm SHCS
- 1-740-A.....Idler Pulley
- 1-302-A.....Idler pulley Cover
- 3-S022.....8/32 x 3/8 SHCS
- 1-S321.....3/8 x 1-3/4 Hex Bolt
- 1-S666.....3/8 Washer

### **\*\*\*Power steering Bracket (option)**

- 1-20022-A .....Main Mounting Bracket
- 1-20023-A.....P/S Spacer Bracket 1.580
- 1-TP7-1.525.....Tube Spacer
- 3-S570.....M10-1.50 x 65mm SHCS
- 2-S162.....5/16 x 3" SHCS

### **\*\*20028 Tensioner Bracket**

- 1-20028-A .....Bracket
- 3-S545.....M8-1.25 x 95mm SHCS
- 1-S324.....3/8 x 2-1/4" Hex Bolt
- 1-780-A.....Cap Retainer
- 1-307-A.....Alt Cap
- 3-S025.....8/32 x 5/8 SHCS

### **Optional Crank set ups**

**P800 Fluid Dampener W/ 6361-A Pulley & 3-S292**

**456-Hub (Camaro)**

**457-Hub (Is-7)**

**458-Hub (corvette Hub)**

**6341-Crank pulley for use with all hubs 3-S248**

Note when using a Crank hub, Install hub into the factory crank pulley by removing the center bolt installing the hub and replace the bolt with the provided (S686) washer and The M16 x 130mm Hex Bolt and retork.



Note P/S parts listed for P/S Kit 20035

- 1-P116 .....LS Water Pump
- 1-P755.....Belt Tensioner
- 1-P576.....Alternator
- 1-P345.....P/S pump with Clip on Reservoir and Press on 600 hub
- 1-P412 .....A/C unit (Chrome)
- 1-P417.....A/C hose fittings

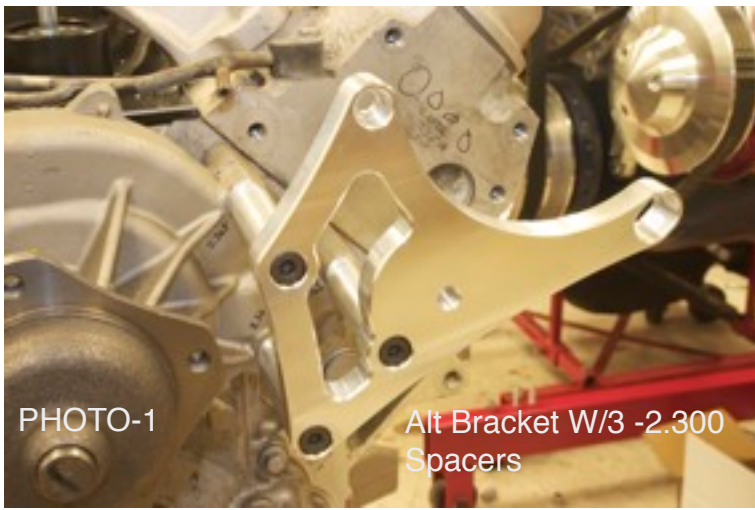
### **Pulleys 20030-208**

- 1-Crank pulley optional Balancer hub or Fluid Dampener (P800)
- 1-6362-A.....W/P Pulley
- 1-411-A.....W/P Pulley cap
- 1-208-A.....Alt. Pulley
- 1-307-A.....Alt. Pulley Cap
- 1-221-A.....Alt.Fan
- 1-650-A.....P/S Pulley w/3 (S144)
- 1-394-A.....A/C Cover w/3 -S124 Button heads
- 3-S028.....8/32 x 1" SHCS
- 1-S685.....Lock Nut
- 3-S292.....3/8 -24 x 3/4" SHCS
- 4-S549.....M8 x 25mm Flat Head
- 6-S022.....8/32 x 3/8 SHCS

### **20024 A/C Bracket**

- 1-20024-A .....Front Bracket
- 1-20027-A.....Rear Support Bracket
- 1-20026-A.....Spacer Block
- 2-S563.....M10-1.50 x 70mm SHCS
- 2-S549.....M8-1.25 x25mm SHCS
- 1-S561.....M10-1.50 x 30mm SHCS
- 1-S158.....5/16 x 2-1/2" SHCS
- 1-S616.....5/16 Lock nut
- 1S452.....5/8 threaded bushing





**Photo-1**

Mount the Water Pump (P-116) and gaskets. Start with the drivers side and install the Alt. Bracket.

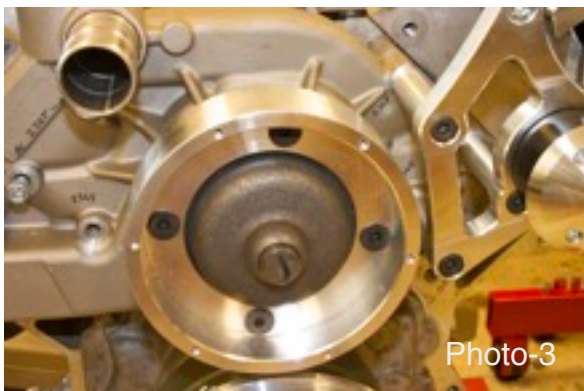
(20021-A) to the Water Pump. Use Three (AC3-2.300) Spacers between the W/P and the Main Bracket and three M8 x 140mm SHCS (S568) as shown. This will secure the water pump on the drivers side until the passenger side Belt Tensioner can be installed

**Photo-2**

Install The (740-A) Idler Pulley to the bracket using the provided 3/8 x 1-3/4" Hex Bolt (S321) and also a 3/8 washer (S666) then add the Idler Cover (302-A) using the three 8/32 x 3/8 long SHCS (S022). Now mount the Alternator (P576) to the main bracket. In the upper bracket hole use a M8 x 25mm SHCS (S551). In the outer bolt hole use the provided M10 x 140mm long SHCS (S568), and between the head and the rear of the Alternator use the TP7-2.625 Tube Spacer. Slide the bolt thru the main bracket, then the Alternator, then the spacer tube, and Thread into the outer tapped hole of the head. Now Install the Alt. Fan (221-A) and the Alt. Pulley (208-A) using the (S685) lock nut. Now add the Alt Cap (307-A) install with three 8/32 x 1" SHCS (S028) As shown.



Photo-2



**Photo-3**

Install the Water Pump pulley (6362-A) use Four 8mm Flat head screws (S549)

Photo-3

**Photo-4**

Install the Water Pump Cap (411-A) use six 8/32 x 3/8 SHCS (S022) as Shown.



Photo-4



Photo-5

**Photo-5**

Install the Crank Pulley. This view shows a Fluid dampener using three 3/8-24 x 1" SHCS (S292) Note: (6361-A) Crank Pulley for Fluid Dampener, (6341-A) used with crank hubs. Crank Pulley uses three 3/8-18 x 1" SHCS (S248).

**Photo-6**

Install the Tensioner Bracket (20028-A) to the pass. side of the water pump, Using three M8 x 90mm SHCS (S545) as shown.



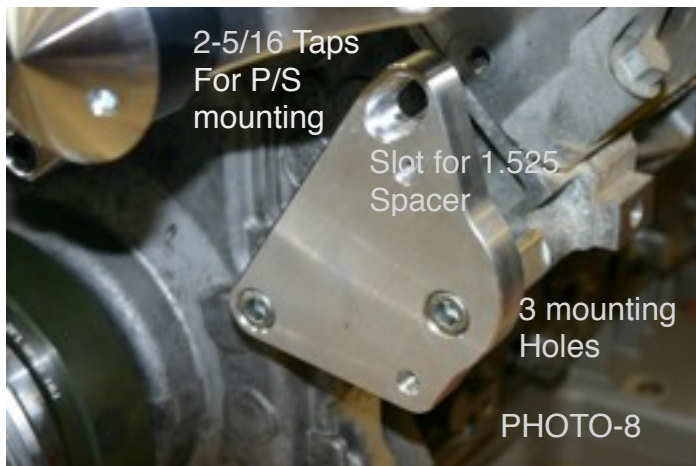
Photo-6



Photo-7

**Photo-7**

Mount the Belt Tensioner (P755) to the Idler Bracket using a 3/8 x 2-1/4" Hex Bolt (S324) aligning pin with the hole in the bracket. Remove pulley and install the Cap Retainer (780-A), then re-install bolt. Now add the (307-A) Cap using three 8/32 x 5/8 SHCS (S025)



**Photo-8**

If using the Power Steering option, mount the Power Steering Main Bracket (20022-A). Use the (20023-A) spacer block between the main bracket and the lower holes of the drivers side block. Thru the main bracket and the spacer block, use two M10 x 65mm SHCS (S570). Then add the (TP7-1.525) spacer tube between the main bracket and the head. Where the slot is located install the third M10 x 65mm SHCS.

**Photo-9**

Mount the P/S pump (P345) to the main Bracket using two 5/16 x 3" SHCS (S162) thru the two clearance holes of the pump. Then mount the P/S Pulley (650-A) to the pressed on hub using three 5/16 x 7/8 SHCS (S144).

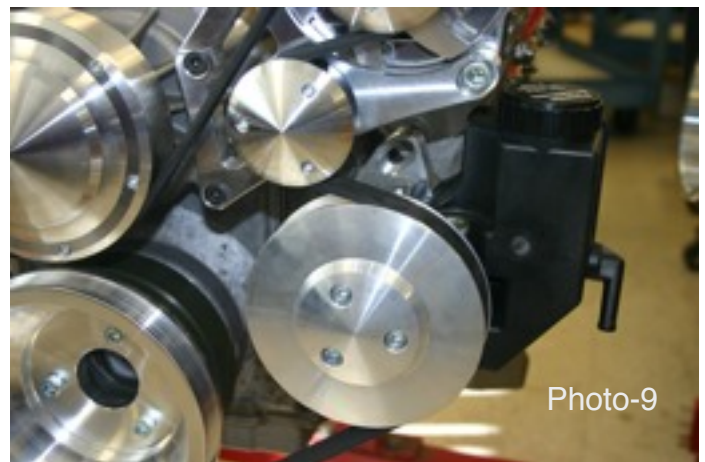


Photo-9



**Photo-10**

Mount the Front A/C bracket (20024-A) to the REAR of the front A/C unit (P412) ears with two bolts coming from the back side use two M8 x 25mm SHCS (S549).

**Photo-11**

Mount the A/C front support, to the two pass. side water pump tangs. Use the spacer bracket (20026-A) between the W/P tangs and the front support bracket. Use two M10 x 70mm SHCS (S563) to install the compressor to the water pump tangs.



**Photo-12**

This is the Rear A/C Support (20027-A). Note: The preinstalled the 5/8 threaded bushing (S452) and the M10 x 30mm SHCS (S561) in counterbored slot (S561). Use the 5/8 bushing to adjust any gap in the rear A/C unit ear.

**Photo-13**

Mount the Rear Support to the outer head. Bolt with the M10 x 30mm SHCS then run the 5/16 x 2-1/2" SHCS (S158) thru the rear counter sunk outer hole of the rear support, then thru the rear A/C ear. Secure with the 5/16 Lock Nut (S616). Now you can add the A/C front cover (394-A) using three 1/4-20 x 3/4" button head screws (S124).



**Photo-14**

Install the belt by removing the (307-A) cap from the belt tensioner and pulling the tensioner back with a socket on the center bolt. Now install the 90-1/2" Belt, installing over the bottom of the crank last. Now reinstall the (307-A) cap. Check all bolts. Start and let the motor run. 5 min. Recheck Bolts. Charge A/C and P/S Properly. For Non P/S Kits Use a 87-1/2" belt. Belt routing is the same way less the P/S Pulley.

## Final Assembly

If you are going to be installing your Air Conditioning hoses and charging the system at this time, Remove the cover plate on top of the compressor body. Install the (P417) A/C adapter lines, hoses And connect the clutch wire and charge the system. **IMPORTANT:** If you are not installing hoses and charging the system at this time, leave the cover plate on the compressor. Do not connect the compressor wire or apply power to the clutch wire without the hoses connected and the system charged. **Serious damage will occur to the compressor.**