

# Highly Styled, Low Cost Serpentine Drive

Installation Instructions

# Ultra Drive Chevy Small Block #20250, #20270, #20275 (without Power Steering)

#20260, #20280, #20285 (with Remote Power Steering)



# **Parts List**

Alternator Front Bracket P/N 20251  1 20251-A Alternator Bracket Body  1 S270 <sup>3</sup> / <sub>8</sub> " x 3 <sup>1</sup> / <sub>2</sub> "Lg Soc Hd Bolt  1 S272 <sup>3</sup> / <sub>8</sub> " x 3 <sup>3</sup> / <sub>4</sub> "Lg Soc Hd Bolt  1 S278 <sup>3</sup> / <sub>8</sub> " x 5"Lg Soc Hd Bolt  1 S622 <sup>3</sup> / <sub>8</sub> " Lock Nut  1 BS3750 <sup>3</sup> / <sub>8</sub> " Id x <sup>3</sup> / <sub>4</sub> " Lg Steel Bushing	Power Steering Bracket P/N 20257  For Kit # 20260 Only 1 20257-A Power Steering Bracket 1 20257-B Power Steering Cover 2 S248
Alternator Rear Support Brk P/N 20252  1 20252-A Alternator Rear Support Body  1 S244	Pulley Kit       P/N 20250-208 / 20260-208         1 6266-A       Crank Shaft Pulley         1 6267-A       Water Pump Pulley         1 208-A       Alternator Pulley         1 222-A       Alternator Cap         2 307-A       Water Pump Pulley Cap         1 331-A       AC Cover
1 20253-A AC Front Bracket Body 1 S2723/8" x 33/4"Lg Soc Hd Bolt 1 S2743/8" x 4" Lg Soc Hd Bolt 1 S5468mm x 100mm LgMetric Hex Hd Bolt	1 650-A Power Steering Pulley For Kit # 20260 Only 1 780-A Tensioner Pulley Cap Mount 3 S025
AC Support Bracket P/N 20254  1 S3093/8" x 1" Lg Button Hd Bolt  1 S3113/8" x 3/4" Lg Hex Hd Bolt  1 S557M8 x 120mm Metric Soc Hd Bolt  2 S6663/8" Id x 3/4" Od Flat Washer  1 S750	3 S124
Wing Front Mount P/N 20255  1 20255-A Wing Front Mount Body 2 S120 <sup>1</sup> / <sub>4</sub> " x <sup>3</sup> / <sub>4</sub> " Flat Hd Bolt  Tensioner Bracket/Cover P/N 20256  1 20256-A Tensioner Bracket Body 1 20256-B Tensioner Cover Body 1 781-A Tensioner Front Cover Body 2 S248 <sup>3</sup> / <sub>8</sub> " x 1"Lg Soc Hd Bolt 2 S250 <sup>3</sup> / <sub>8</sub> " x 1 <sup>1</sup> / <sub>4</sub> " Lg Soc Hd Bolt 1 S268 <sup>3</sup> / <sub>8</sub> " x 3 <sup>1</sup> / <sub>4</sub> " Lg Soc Hd Bolt	Accessories  1 P112

# **Required Tools and Materials**

RTV Silicone Loc-Tite® Thread Locker Anti-seize Compound Gasket Scraper, Steel Wool or Sandpaper to clean gasket surfaces 3/16" Allen Head Driver 5/16" Allen Head Driver 1/4" Allen Head Driver 6mm Allen Head Driver 5/8" Combo Wrench

%16" Combo Wrench 11/16" Combo Wrench 3/4" Combo Wrench Socket Wrench & Extension 10mm 12pt. socket 12mm 12pt. socket Serpentine Belt

61" for Kits Without Power Steering 62" for Kits With Remote Power Steering

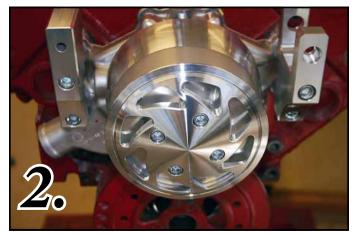
#### **Preparing to Install**

- Disconnect the battery to prevent accidental engagement of starter motor.
- Drain coolant from system
- If your A/C is intact and charged it must be evacuated. This is best done by a professional garage with proper recycling equipment
- Remove the existing alternator, air conditioning compressor and associated brackets.

- Remove all pulleys and water pump.
- Remove all traces of old gasket and sealer with gasket scraper and steel wool pad.
- Clean threads in block by chasing with appropriate thread chasers.

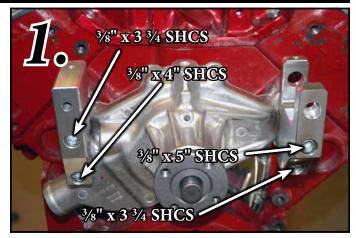
## Installing the Kit

*Photo-1* Ensure the sealing face of the coolant outlets are clean, flat and free of old gasket material. Using new gaskets install the Water Pump (P112), along with A/C Bracket (20253-A) and Alternator Bracket (20251-A). In the A/C Bracket use one <sup>3</sup>/<sub>8</sub> x 4" SHCS (S274) in the lower hole, and a <sup>3</sup>/<sub>8</sub> x 3<sup>3</sup>/<sub>4</sub>" (S272) in the upper hole. In the Alternator Bracket use a <sup>3</sup>/<sub>8</sub> x 5" SHCS (S278) in the upper hole, and a <sup>3</sup>/<sub>8</sub> x 3<sup>3</sup>/<sub>4</sub>" SHCS (S272) in the lower hole. *Note the Alternator Bracket Mounts To the Drivers Side* 



**Photo-3** Install the Crank pulley (6266-A) Using (3) 3/8 x1" SHCS (S292).





**Photo-2** Install The Water Pump Pulley (6267-A) and the Water Pump Cap (331-A) using (4)  $\frac{5}{16}$  x  $\frac{7}{8}$ " Long Fine Thread SHCS (S186) as shown.



**Photo-4** (NOTE Skip steps on power steering build for non power steering kits) Install the Power Steering pulley (619-A) to the Remote Power Pump (Press Fit) and (740-A) Cover.

**Photo-5** Install the Power Steering Pump into the Cover (20257-B) and thru the back of the cover use (2) M8 x 20mm SHCS (S550)



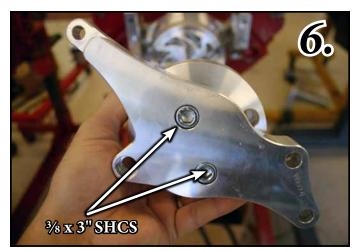
**Photo-6** Building the Power Steering Bracket (20257-A) and (20257-B) use (2)  $\frac{3}{8}$  x 1" SHCS from the rear of the bracket to mount the cover as shown.



**Photo-8** Mount the Tensioner Cover(20256-B) to the Tensioner Base Bracket (20256-A) using (2) <sup>3</sup>/<sub>8</sub> x 1" SHCS (S248). Note the slot in the cover will be pointing to the bottom of the bracket.







*Photo-7* Mount the Power Steering unit to the Drivers side lower bolt holes using (2)  $\frac{3}{8}$  x  $1^{1}/4$ " SHCS Note: The line fittings point down towards the steering box.

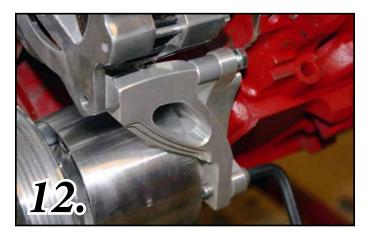


**Photo-8** 1. Hold Tensioner Body in a vise to remove bolt & washer from tensioner pulley. Note: Bolt is a left handed thread, turn clockwise to remove. Install the Tensioner into the 20256-B Bracket cover use a  $\frac{3}{8}$  x  $\frac{3}{4}$ " SHCS and install the (781-A) cover as shown and bolt into place.

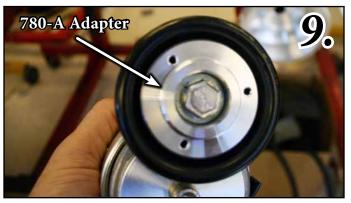
**Photo-9** Disregard the tensioner washer and replace with the (780-A) adapter as shown and reinstall the tensioner pulley.



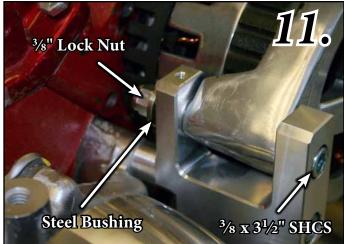
**Photo-11** Mount the Alternator into the main bracket (20251-A). Use one  $\frac{3}{8} \times \frac{3}{2}$  SHCS (S270) thru the front top bolt hole. Thru the rear of the bracket use the provided Steel Bushing and one  $\frac{3}{8}$  lock nut. (S666)



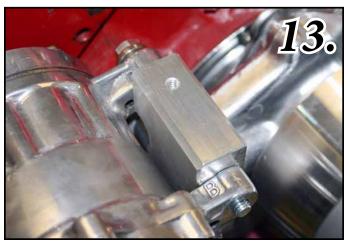
**Photo13** Mounting the A/C Unit. Remove the A/C bracket ear from the water pump leaving a Alt ear on tight, thru the rear ear of the A/C unit use a M8 x 120mm hex bolt then reinstall the A/C ear to the water pump.



**Photo-10** Install the Tensioner unit to the two lower passenger side holes using (2)  $\frac{3}{8}$  x  $1\frac{1}{4}$ " SHCS (S250).



**Photo-12** Install the Alternator Side Support (20252-A). Thru the top back of the Power steering Bracket use one M8 x 120mm Hex Bolt (S559) and a TP3.625 Steel Spacer. Thru the lower hole use a 3/8 x 3/4" SHCS (S244) Its best to install all bolts at the same time and leave them loose for proper alignment.

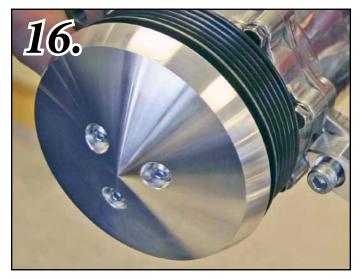


**Photo 14** Installing the A/C rear and side supports, Mount the rear A/C support (20254-B) to the outer head bolt using a 3/8 x 1" Hex bolt (S312) then from the rear of the bracket run a M8 x 120mm SHCS (S557) thru the rear support and thru the side support (20254-A). The side support mounts between the two ears of the A/C unit. Then mount the lower support to the tensioning bracket with a 3/8 x 3/4" Button head screw (S316) as shown.



**Photo 16** Install the Belt 62" for kits with Power Steering and 61" for non Power Steering kits.

Using a socket and driver pull back on the spring loaded tensioner and slide the belt into place. Release the tensioner. Install the tensioner cover.





**Photo 15** Mount the upper support (20255-A) use (2)  $^{1}$ /<sub>4</sub> x  $^{5}$ /<sub>8</sub>" Flat head Bolts (S120)



*Fig 17.* Place the compressor clutch cover (394-A) onto the compressor clutch and align. Thread the three (3) (S520) M6 - 1.0 x 16mm Button Head Bolts. through the cover and into the clutch and tighten. Caution – Do not over-tighten!

Tighten alternator pulley nut (impact to 90 ft, pounds). Check and tighten all bracket bolts and alternator and A/C lower mounting bolts. Turn engine over once by hand to check for any belt rubbing and proper belt alignment. Run engine three minutes and check belt tension again.

Install Alternator Pulley cover (306-A) with three socket head cap screws (S028).

## **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 clutch wire and charge system.

**Important:**If you are NOT installing hoses and charging the system at this time, leave cover plate on compressor. Do not connect the clutch wire or apply power to clutch wire without the hoses connected and the system charged – *Serious damage will occur to compressor.*