

Small Block Chevy Supercharged Wraptor –EWP (Procharger)

Thank you for your purchase from CVF Racing!

Please note that installation is the same for all finishes, your part numbers *may* have different prefixes based on what finish you chose ("B-" for Black, "C-" for Clear, "BD" for Black Diamond).

Our tech lines are available Monday-Friday from 8-5 PM CST at 651-356-8593 or support@cvfracing.com



Torque Specs:

#8 Socket Cap Screw: 48 in-LBS

#10 Socket Cap Screw: 70 in-LBS

M8 Socket Cap Screw: 28.6 ft-lbs

1/4-20 Button Head Screw: 167 in-lbs

5/16-18 Socket Cap Screw (Coarse): 28.6
ft-lbs

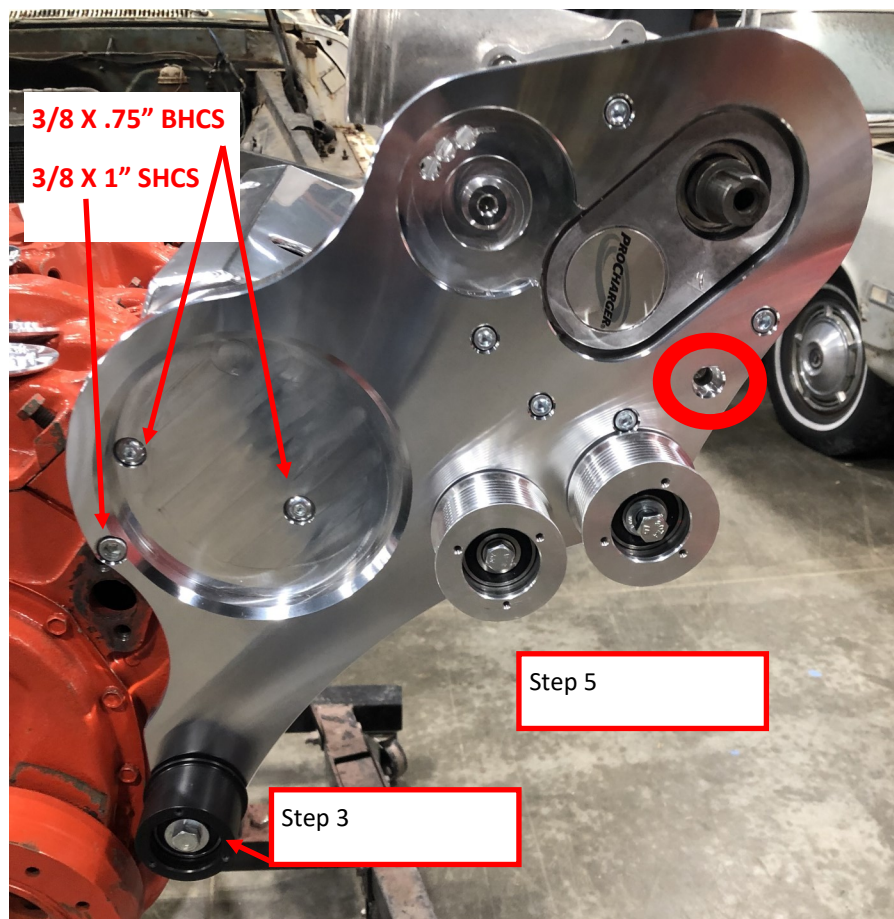
5/16-24 Socket Cap Screw (Fine): 31.8 ft-
lbs

3/8-16 Socket Cap Screw: 51 ft-lbs

3/8-16 Button Head Screw: 29 ft-lbs



Product	QUANTITY
3/8-16 X 2.75 SHCS	1
3/8-16 X 3.0 BHCS	2
3/8-16 X 2.5 HHS	3
3/8 SAE Washer	5
3/8-16 X .468 Lock Nut	3
M8-1.25 X 25MM SHCS	3
M8-1.25 X 40MM SHCS	2
3/8-16 X 6.0 SHCS	4
5307722- 375	4
6257722-104	4
3/8-16 X 2.0 HHS	1
3/8-16 Thin Lock Nut	2
3/8-16 X 0.75 BHCS	2
3/8-16 X 1.0 SHCS	2
5/16-18 X 1.0 SHCS	5
TOTAL	43



1. Remove all current accessories, brackets, pulleys, and the water pump.
2. Install the main procharger plate (**350-WR-PC**) to the engine block using (2) 3/8 X .75" BHCS and (1) 3/8 X 1" SHCS. The bolts can be torqued to spec once all three have been started.
3. Install the non-ribbed idler (**SERP-IDLER-WR-PC**) to the very bottom of the bracket using the (1) 3/8 X 2" HHS and a washer. Secure with lockite (not included). Leave all the caps off until the very end of your build.
4. Install the Procharger unit to the main Procharger plate. You will use (5) 5/16 X 1" and (1) 3/8" X 1" SHCS. The hole requiring the larger bolt is circled on the image to the left.



5. Install the two remaining PC idlers (**S-SERP-IDLER-WR-PC**) as seen in the image to the left. Both will use a 3/8 X 2.5" HHS, washer, and secured on the backside with a thin locknut.
6. Install the tensioner (**TENSIONER-KIT-10**) using (1) 3/8 X 3" SHCS and a washer. Lockite is recommended for this piece as well. You will mount the tensioner in the farthest left Hole.
7. Install the Procharger pulley (**S-PC10BLOW-S408**) to the supercharger unit using a standard keyway. This should have been supplied in your Procharger kit. Fully secure it to the unit with the bolt and washer supplied by Procharger.
8. Route the 10 rib belt as seen in the image to the right (**K100710**). Use a breaker bar to extend the tensioner allowing for an easy install.

9. Install the large crank pulley (**S-SBCS1CR-10**). Secure with the bolt provided. Reuse the washer from your current balancer.
10. Install the hub adapter (**350-HUB-ADAPT-10**) and crank pulley (**S-SBCS1CR-WR**) using the provided hardware.
11. Install the main Wraptor Plate (**350-WR-S**) and the water pump (**SBC-EWP**). This is done as an assembly at one time. Use (4) 3/8 X 6" SHCS, (4) 530 x 3.75" Spacers, and (4) .625 x 1.04". The longer spacers will be used closest to the EWP while the shorter ones are stacked on top next to the main bracket.



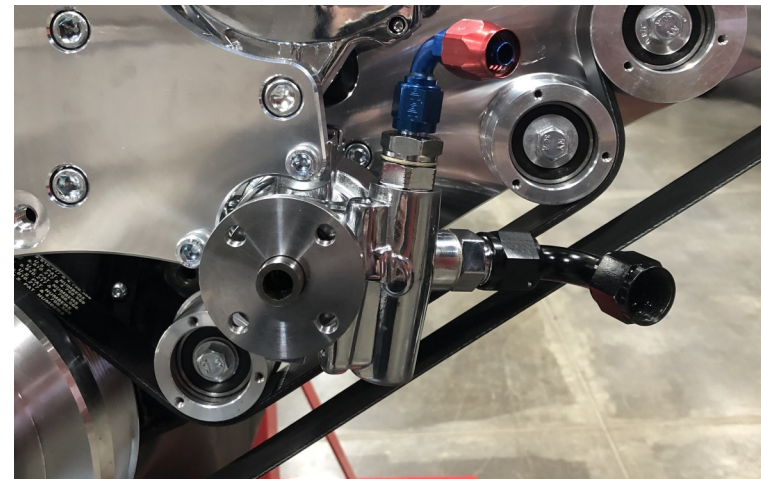
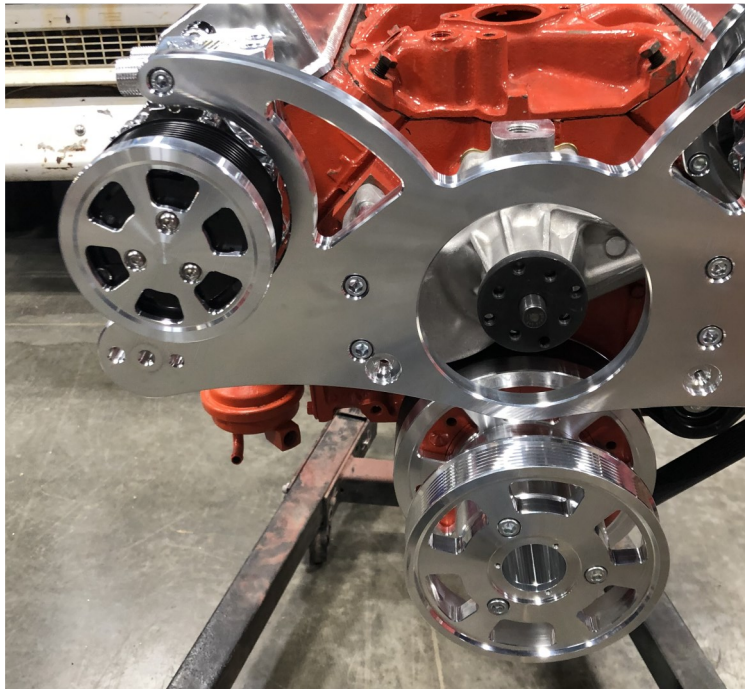


12. Install the alternator. It is recommended to use a rag to protect the Procharger plate while you slip the alternator into its location. Secure with a 25MM bolt on top and a 3/8 X 2.75 SHCS & lock nut on the bottom. Remove the steel alternator fan and pulley from the alternator.

13. Install the AC Compressor (**Peanut**) to the left side of the main wrapor plate using the (2) 25 MM. Secure the bottom bolt with an acorn nut. The cap (**AC-CAP-LS**) can be installed now or at the end using the provided hardware.

14. Install the power steering pump. If you are using an attached reservoir, you will want to add the decorative caps to the 10 rib idlers on the procharger plate as they will be difficult to get to once the pump is installed. The power steering pump is installed with (2) 40MM Bolts. 90 Degree AN Fittings are highly recommended when running your power steering lines.

15. Install the power steering pulley (**S-LS11PS**) using the provided hardware.



16. Install the tensioner (**TENSIONER-KIT**) using a 3/8 X 3" BHCS and lock-nut
17. Install the last idler (**SERP-IDLER-WR**) using a 3/8 X 2.5" HHS, washer, and locknut.
18. Install the alternator fan (**ALTFAN-LS**) and alternator pulley (**S-SBC1ALT**). Do not secure the alternator pulley yet.
19. Route the 8 rib belt (**K080690**). If your belt is tough to get on, route it without the alternator pulley, pull the tensioner back, and use the alternator pulley as leverage to get it back onto the shaft.
20. Finish off your build by installing all of the decorative caps on your idlers, tensioners, accessories, and pulleys. (**REMOTE-PS-RES**) is your power steering reservoir. Bleeding instructions are found on the next page.



Power Steering Bleeding Instructions

*****IMPORTANT***** - *It is very important to follow these instructions and procedures entirely. Failure to do so could result in voiding of warranty and severe damage to the power steering pump.*

Do not start the engine until the entire bleed process is completed and there are no air bubbles present in the reservoir

If using a remote reservoir, the fittings on the bottom of the reservoir should be above the fittings on the power steering pump

If using a hydro boost system, follow the bleeding instructions from the manufacturer

Use only quality power steering fluid, preferably synthetic or one that is specially formulated for race applications

Do not reduce the return side of the pump if using a remote reservoir. Combination of line ID and fitting couplings should not be smaller than 3/8"

Inspection

Carefully inspect the power steering system plumbing and ensure that all hoses are free and clear from touching any other part of the vehicle, i.e., not resting on the frame rail or gearbox, etc. Also check that all the fittings are mated correctly and tight

Bleeding Process

*****IMPORTANT***** - Please re-read the section above before beginning the bleeding process

Raise the front wheels off the ground and place the vehicle on jack stands

Turn the steering wheel all the way to the left

Add power steering fluid to the cold fluid level on the dipstick or to 1/4" below the thread line on the remote reservoir. Leave the cap off the reservoir

With the aid of another person one person watch the fluid level in the reservoir while the other very slowly turns the steering wheel from lock to lock a minimum of 20 times. There is no way to circumvent and speed this up. Rushing it will only require repeating the process.

If the fluid level has not dropped or there are any air bubbles still present this means that there is still air in the system. A rise in fluid level is also indicative of air trapped in the system. Continue to cycle back and forth until there are no air bubbles present and fluid level remains constant. This may take up to 40 or 50 cycles.

Once the fluid remains level and there are no air bubbles present, proceed to disabling the vehicle ignition system and crank the engine for 3-4 revolutions.

If the fluid level changes or air bubbles become visible repeat Step 4. Continue until there are no changes in fluid level or air bubbles.

Install reservoir cap

Return the vehicle to the ground and let the car sit at idle for 2-3 minutes while cycling the steering in both directions. At this point you should have smooth operation of the power steering and no noise from the power steering pump. The fluid should be clear and free of any bubbles or foam and the level should remain constant.