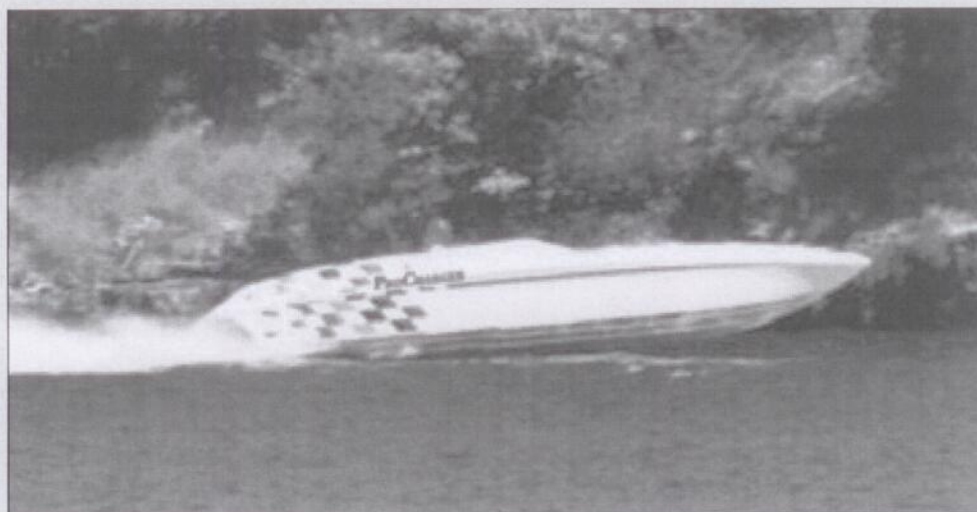


# OWNER'S MANUAL

MERCUISER CARBURETED SMALL BLOCK

**PROCHARGER**<sup>®</sup>  
*Marine*

*Centrifugal Supercharger Systems*



*The Intercooled Supercharging Experts!*<sup>®</sup>



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1MC181-NN; 1MC222-NN





## **INSTALLATION OVERVIEW**

Congratulations on the purchase of your ProCharger® centrifugal supercharger system, and welcome to the world of centrifugal supercharging. You are now the owner of the most powerful and reliable supercharger system available, and the latest technology in supercharging!

This Owner's Manual contains the following sections:

- **INTRODUCTION**
- **INSTALLATION INSTRUCTIONS**
- **OPERATION AND MAINTENANCE**
- **WARRANTY**

If you are performing the installation of this system and this is your first ProCharger installation, you will likely benefit from reading the entire installation instructions prior to proceeding, and then reviewing each section as you go. If you are familiar with supercharging, remember that centrifugal supercharging is different from roots supercharging, and the same rules do not apply, primarily due to the unparalleled efficiency of the ProCharger, and the vastly cooler intake temperatures that result, especially when intercooled.

### **A. PREPARATION**

### **B. OIL DRAIN SETUP**

### **C. OIL FEED SETUP**

### **D. ENGINE ACCESSORY AND PROCHARGER INSTALLATION**

### **E. AIR INLET AND INTERCOOLER TUBING INSTALLATION**

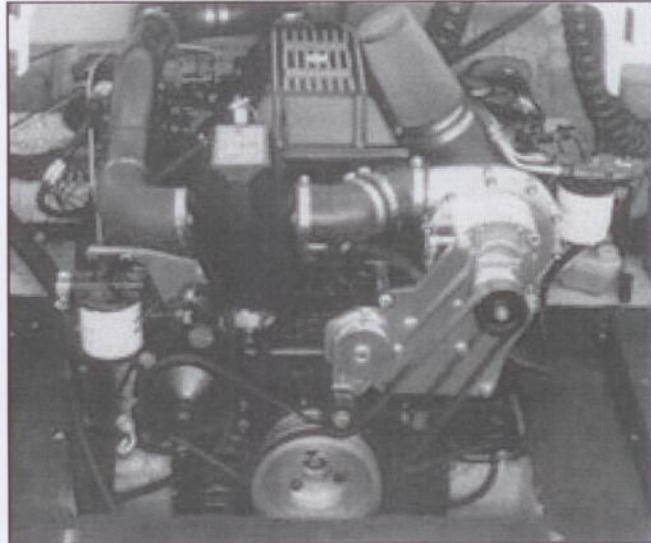
### **F. WATER LINE INSTALLATION**

### **G. FUEL SYSTEM UPGRADES**

### **H. INSTALLATION REVIEW AND SAFETY CHECK**



### **I. TUNING**

### **J. OPERATION AND MAINTENANCE, SPECIAL NOTES FOR SC APPLICATIONS**



## IMPORTANT CONCEPTS FOR RELIABLE OPERATION!

With blow-through carburetion used in ProCharger Marine systems, **it is extremely important that your fuel delivery be boost-referenced.** This simply means that a boost line is run to your fuel system so that fuel pressure is increased by 1 psi for every 1 psi of boost pressure. For example, if your fuel pressure is 7 psi at idle and you run 9 psi of boost pressure without boost referencing, you would have 2 psi of net pressure (9 psi - 7 psi) forcing fuel back into your fuel tank! By running a boost reference line, when boost pressure reaches 9 psi your fuel pressure will now be at 16 psi to ensure proper fuel delivery. In this example, net pressure will still be 7 psi (16 psi - 9 psi), so you have maintained the same net fuel pressure you had at idle. Please refer to section E of the enclosed installation instructions for more information. **Failure to properly boost-reference your fuel delivery can result in severe engine damage!** You should also ensure that you have proper jetting in your carburetor. **Never run a ProCharged motor with stock jets!** Please refer to the tuning section at the end of this manual regarding jetting.

Torque Specification Chart	 Grade 5			 Grade 8		
	Thread Size	Torque (lb. ft.)			Torque (lb.ft.)	
1/4-20	11	8	7	16	12	10
1/4-26	13	10	8	18	14	11
5/16-18	23	17	14	33	25	20
5/16-24	26	19	15	36	27	22
3/8-16	41	31	25	58	44	35
3/8-24	47	35	28	66	49	39
7/16-14	66	49	40	93	70	56
7/16-20	74	55	44	104	78	62
1/2-13	101	75	60	142	106	85
1/2-20	113	85	68	160	120	96

## INSTALLATION OVERVIEW

For best results we recommend that you review the installation instructions beforehand, and follow the installation instructions closely and in sequence. A detailed packing list is provided (inside box) to help you identify the components of your ProCharger Marine system. The following tools will be required to install your ProCharger Marine supercharger system:

### REQUIRED TOOLS & SUPPLIES

- 3/8" SOCKET SET (STANDARD & METRIC)
- 1/2" SOCKET SET (STANDARD & METRIC)
- SCREWDRIVER SET
- OPEN END WRENCH SET (STANDARD & METRIC)
- RAZOR BLADE OR CARPET KNIFE
- ADJUSTABLE WRENCH
- NUT DRIVER SET
- 8 SPARK PLUGS\*\*
- SPARK PLUG SOCKET\*\*
- OIL FILTER<sup>1</sup>
- 9 QUARTS ENGINE OIL (STRAIGHT 40W AS RECOMMENDED BY MERCUISER)<sup>1</sup>
- HEAVY GREASE\*<sup>1</sup>
- SILICONE SEALER\*<sup>1</sup>
- LARGE HAMMER\*<sup>1</sup>
- 3/8" NPT TAP\*<sup>1</sup>
- 9/16" TAPERED PUNCH\*<sup>1</sup>
- CENTER PUNCH\*<sup>1</sup>
- PLIER SET
- WIRE CUTTERS
- OIL FILTER WRENCH<sup>1</sup>

You should also have the following gauges available to properly check the finished installation and monitor your vessel's performance (especially for high performance applications):

- boost/vacuum gauge (plumbed to intake manifold)
- fuel pressure gauge (0-100 psi) (plumbed to ATI fuel pressure regulator)

Both gauges should be of a type that can be read from the cockpit while performing a W.O.T. performance test. Cockpit-mounted gauges are preferable, although use of a shop fuel pressure gauge (which has a hose long enough to be read during testing) is an option.

The motor on which the ProCharger is installed should have stock compression. If your engine has been modified in any way, please check with ATI or your dealer before proceeding. This supercharger system is intended for use on strong, well maintained engines. Installation on a worn or troublesome engine should be reconsidered. **Accessible Technologies is not responsible for damage to an engine.**



**Warning: Motor and propeller should be configured so that maximum speed does not exceed boat manufacturer's recommendations for your hull.**

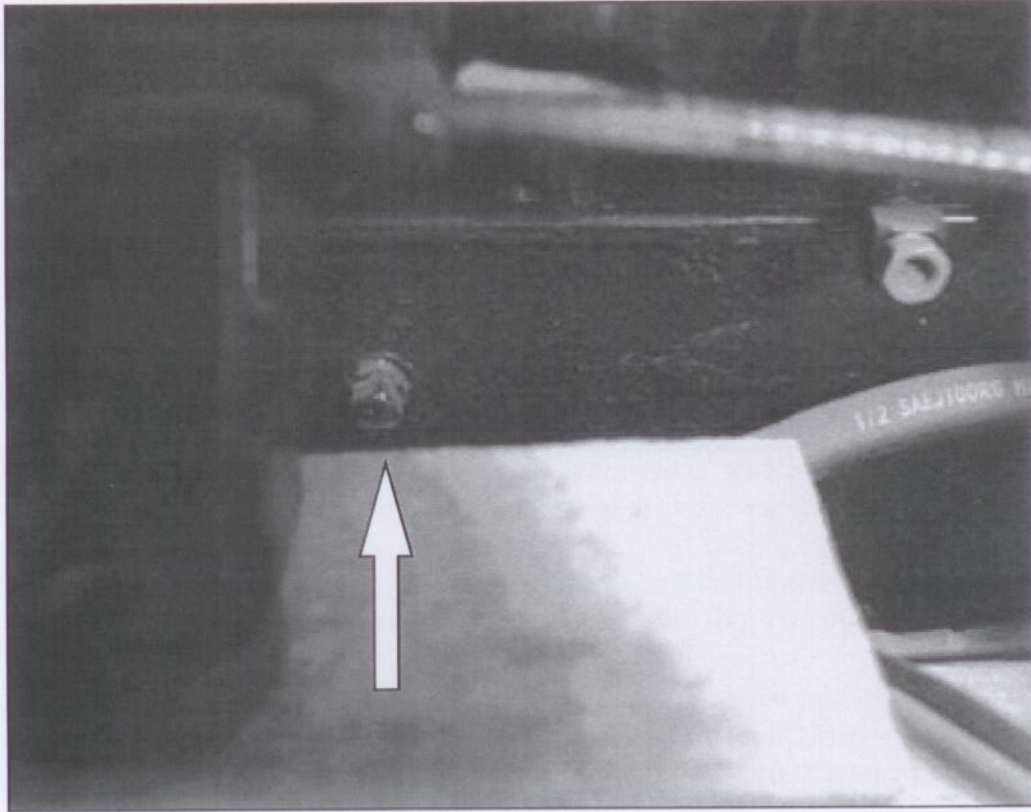
Note: There are minor variations in Mercruiser motors across model years (such as water hose routing for coolers) which may not *specifically* be addressed in these installation instructions. Please contact an ATI service technician should you have any questions.

\* if oil pan does not already have oil return fitting

\*\*if current plugs have more than 100 hours, or are more than 1 yr old

<sup>1</sup>Not required for Self Contained (SC) Applications

REVISED 03-09-01



**FIGURE B1**

**OIL DRAIN FITTING LOCATION**

**THE FITTING WILL BE CONNECTED TO A 90° ELBOW TO CLEAR THE  
OIL COOLER WHICH RUNS ALONGSIDE IT.**

# INSTALLATION INSTRUCTIONS

## A. PREPARATION

*Completion of this section will configure motor for installation of the ProCharger system.*

1. Remove all engine accessories from front of motor except the harmonic balancer and sea water pump. ( water pump, power steering pump, alternator, water separator, and crank pulley).
2. Remove water lines running to the thermostat housing assembly. Remove the thermostat housing assembly from the top front of the intake manifold. There is no need to re-install the thermostat.
3. Remove the 1/2" NPT plug from the top of the intake manifold adjacent to the thermostat inlet. Install the supplied 1/2"MPT to 3/8"FPT bushing into the hole. Install overheat warning sending unit from factory thermostat housing into bushing.
4. Install ATI supplied thermostat housing using new gasket (supplied). Install second sending unit from Mercruiser thermostat housing into new thermostat housing.
5. Install supplied crossover tube between the two water pump ports using supplied gaskets, 3/8" washers, and 3/8" x 1" bolts. The open end of the tube should face the port side of the engine.
6. Cut the 1 1/4" main water hose coming from the power steering cooler in the vertical section just above the bend. Cut out enough from the remaining 90° elbow so that when rejoined, the elbow can be attached to the open end of the crossover tube. Using the straight 1 1/4" metal connector and two hose clamps, splice the two pieces together. Clamp open end to crossover tube.
7. Install ATI supplied crankshaft pulley assembly.
8. Unbolt the oil dipstick retaining bracket from the motor. Rotate the dipstick outward as far as it will go.

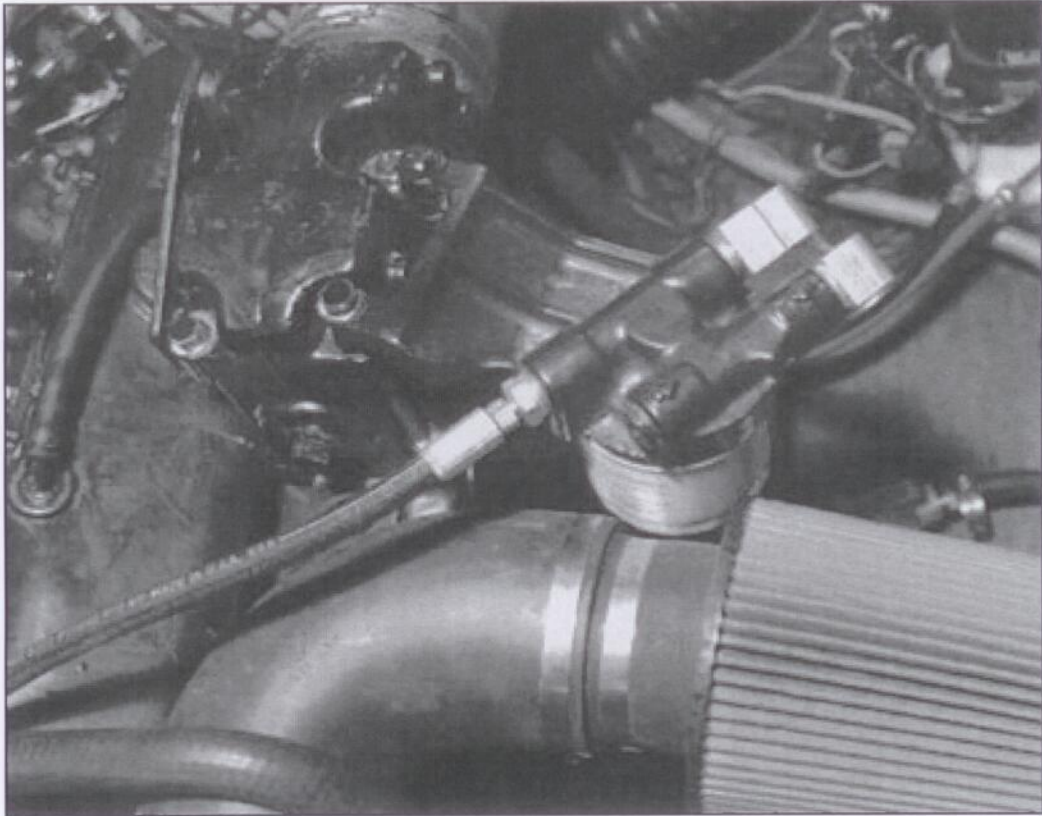
## B. OIL DRAIN SETUP (OMIT ON SC SYSTEMS)

*Completion of this section will establish a fitting for the oil return line, which drains oil from the ProCharger into the engine oil pan*

### **Description and Operation**

The main components consist of the oil drain fitting and oil return line. The oil return line is routed from the ProCharger to the oil pan. The drain fitting is installed in the oil pan via either an existing threaded hole or one that must be created. This is a gravity feed system, therefore, this oil return line must be kink free and downhill the entire length, and should drain into the pan above the oil level line.

1. Punch (Don't drill) a small pilot hole 3/4" behind the first bolt hole from the front on the port side of the pan and 2" down from the pan flange. Stepping up punch sizes sequentially, enlarge pilot hole to approximately 9/16".
2. Tap hole with 3/8" NPT (National Pipe Thread) tap. (FYI: 3/8" NPT refers to the pipe's inner diameter. Clean any foreign matter from inside of pan.
3. Using silicone sealer, install the supplied oil return fitting into the pan.
4. Temporarily attach the oil return line to the fitting. Perform an oil and filter change at this point. After initially draining the oil, pour approximately 1/2 quart of oil down the drain line to flush all chips from side of pan, then continue with oil change normally. Remove oil return line from fitting until done later.



**Figure C1**  
*Oil feed line installation*



### **C. OIL FEED SETUP (OMIT ON SC SYSTEMS)**

*Completion of this section will allow establishment of an oil feed line from the engine to the ProCharger for oil mist lubrication of bearings and gears.*

#### **Description and Operation**

The main components consist of the oil feed bushing, elbow, and oil feed line. The oil feed bushing and elbow are installed in the vacant feed port on the oil filter housing, and provide an oil supply port for the feed line. The oil supply at this location is just downstream of the oil filter. The oil supply is used to supply filtered, high pressure oil to the ProCharger bearings and gears.

1. On the oil filter housing there are several ports. Remove the plug from the plugged off discharge port (with the arrow facing out, see figure C1) and install the supplied 1/2" MPT - 1/8" FPT bushing into the port.
2. Remove the oil filter housing from the port side exhaust manifold. Attach the inboard tab on the housing to the outboard bolt on the manifold, and using the supplied bracket, attach the outboard tab to the rear outboard exhaust manifold bolt.
3. Install 1/8" NPT 90° elbow into bushing from step 1, so that it faces toward the front port side of the engine.
4. Connect oil feed line to 1/8" NPT 90° elbow. **Do not use Teflon™ tape or sealant on the fitting,** as this could block the ProCharger oil inlet and damage the precision bearings inside the ProCharger, as well as void your warranty.

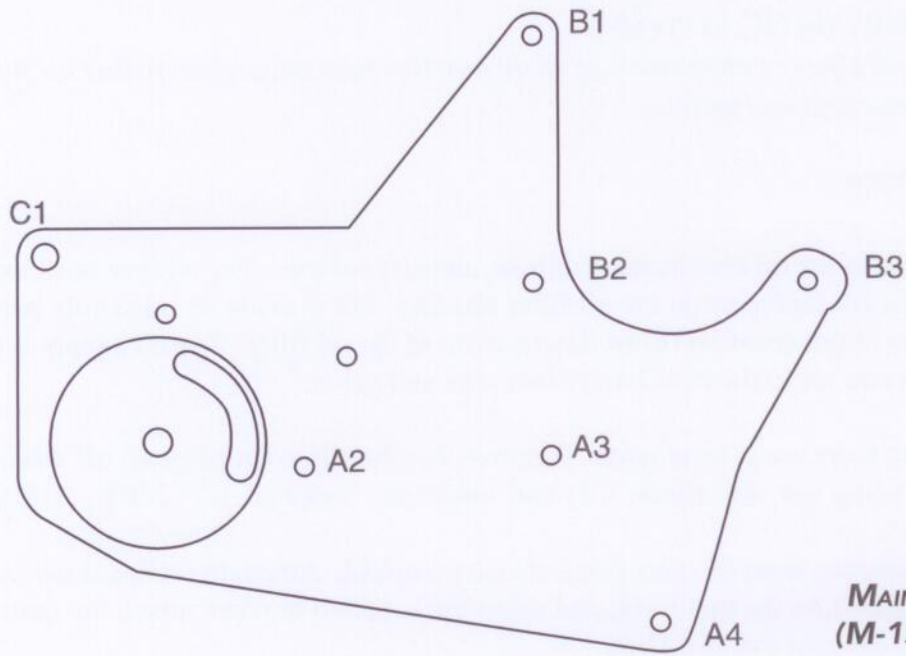
### **D. ENGINE ACCESSORIES AND PROCHARGER INSTALLATION**

*In this section you will install the ProCharger and connect all related oil lines and air hoses*

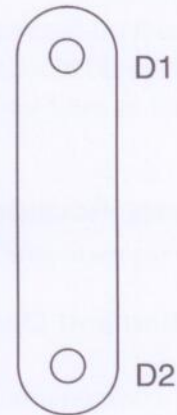
#### **Description and Operation**

The main components of the ProCharger system are the ProCharger, ProCharger mounting bracket, alternator bracket, and power steering bracket. The ProCharger is a gear-driven centrifugal compressor, driven by an 8 or 12 rib serpentine belt. It uses a billet aluminum impeller, super precision bearings and carburized gears. The impeller speed is dictated by engine rpm, crank pulley-to-driven pulley ratio and the final internal gear ratio. As engine speed is increased both airflow and boost (resulting from engine back-pressure) are increased. The quoted boost levels of the kit can be exceeded if the factory-set redline is surpassed. The mounting brackets are flat billet aluminum types which utilize a series of spacers to properly position the ProCharger and alternator, and relocate the power steering pump.

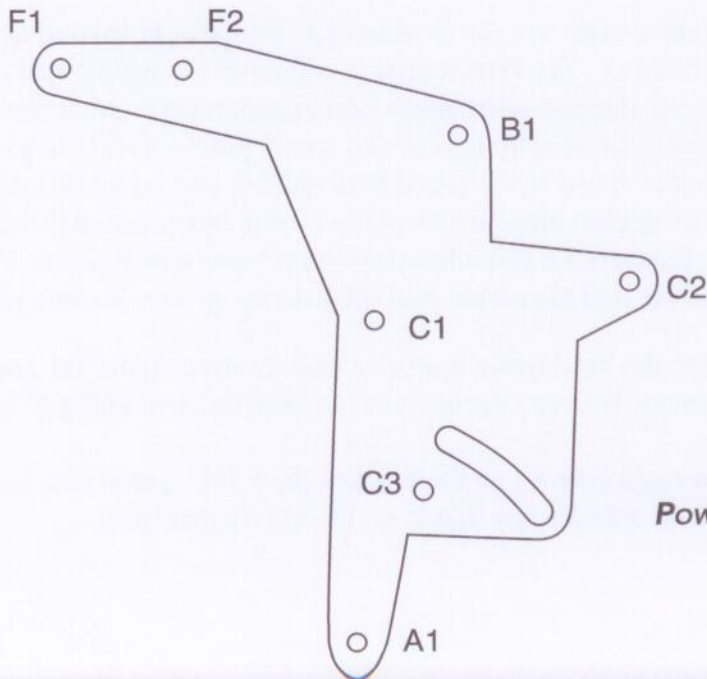
1. Bolt the ProCharger main bracket to the head using holes A1 and A2 from figure D1 and holes 1 and 2 from figure --. Use the 4" spacers between the bracket and head and two 3/8" x 5" bolts. Do not tighten fully.
2. Run the remaining 3/8" x 5" bolt through hole A3 on the bracket, the 3 3/4" spacer and hole D1 on the alternator support, and thread into hole 3 from figure --. Do not tighten fully.



**FIGURE D1**  
**MAIN BRACKET ORIENTATION**  
**(M-15C BRACKET IS SIMILAR)**

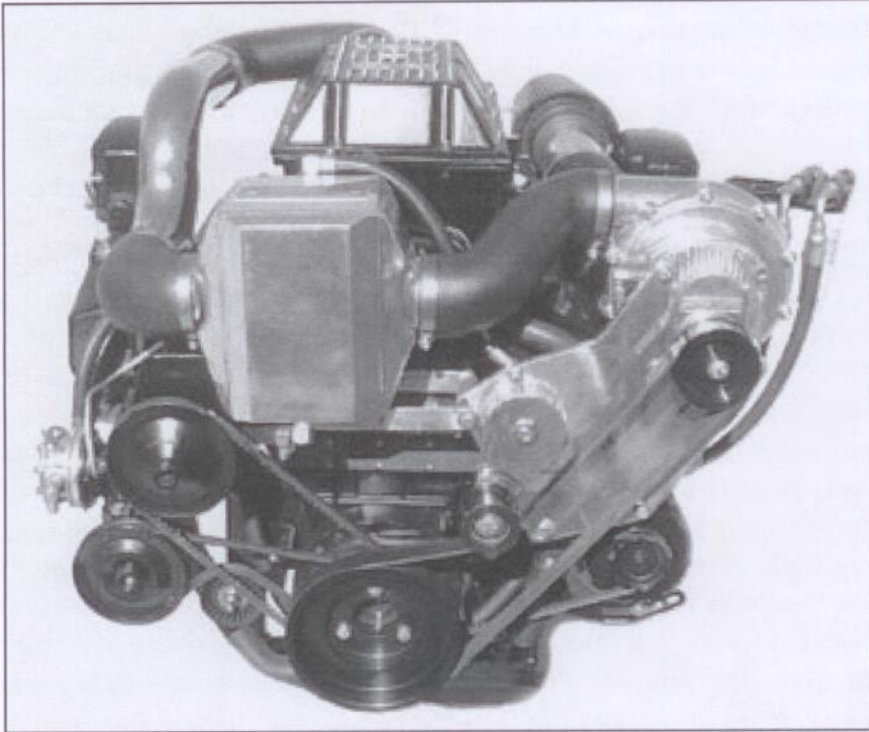


**FIGURE D2**  
**ALTERNATOR BRACKET ORIENTATION**

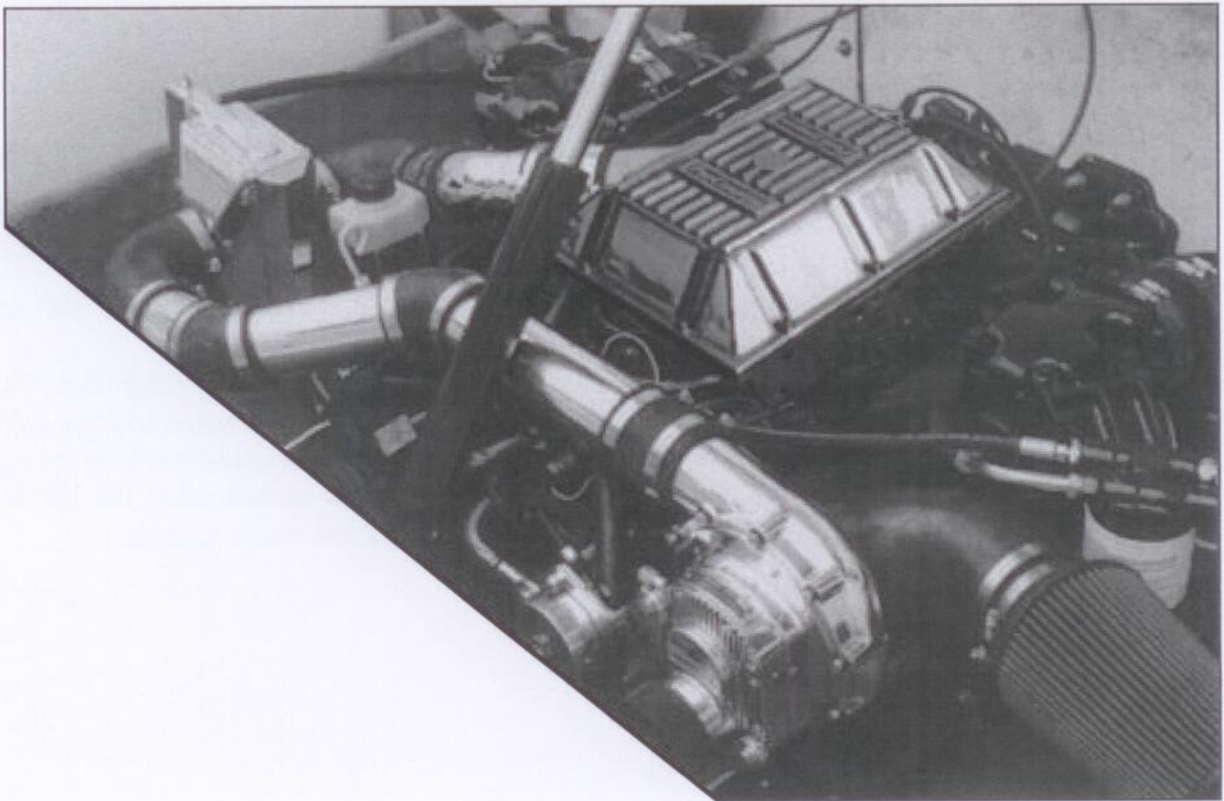


**FIGURE D3**  
**POWER STEERING BRACKET ORIENTATION**

3. Reattach the factory alternator lower support bracket in its original position. Slide the alternator up so that the upper support hole is in front of hole D2 on the ATI alternator bracket and behind hole A4 on the main bracket. Slide the 1 3/4" spacer between the alternator and the main bracket. Run the 3/8" x 5.5" bolt through the main bracket, spacer, alternator, and alternator bracket and thread the 3/8" nylon locking nut onto back side. Leave somewhat loose until you tighten alternator belt.
4. Tighten all bracket mounting bolts installed up to this point securely.
5. Attach the power steering bracket to the starboard side head oriented as shown in figure D3. Mount with bracket holes C1, C2, and C3 using the three 1.5" spacers between the bracket and head, and the three 3/8" x 2.5" bolts.
6. Remove the water separator from its sheet metal mounting bracket. Using the two holes in the cast portion and two supplied 5/16" x 1" bolts, washers, and nuts, attach the separator to the power steering bracket at the two holes (F1 & F2) on the top of the bracket.
7. Separate the power steering pump from its associated stock bracketry. Remove the spacer from the lower power steering stud. Place two of the original thick gold colored shims from the upper power steering stud over the lower stud. Leave only the thin shim on the upper stud. Install the power steering pump with the lower stud through hole A1 in the installed power steering bracket. The upper stud goes into the arched groove. Place washers onto the studs, and thread the original nuts down onto them.
8. The power steering lines will need to be rerouted to reach the pump. The high pressure fitting should be brought from above as before and threaded tightly. The return line should be replaced by the supplied section of 3/8" line, cut to proper length, and clamped onto its fitting.
9. Install the Gates #7375 belt on the alternator, the stock belt on the seawater pump, and the Gates #7380 on the power steering pump.
- 10a. M-1 only: Using the supplied 5/16" bolts and holes B1, B2, and B3 on main bracket, attach the ProCharger to the main bracket. Connect oil feed line to side of the ProCharger and tighten. Connect oil return line to fitting in engine oil pan. Run the return line up to the ProCharger oil return fitting on the bottom of the ProCharger **making sure that the line runs continuously downhill without any kinks or tight bends**. Cut the return line to the proper length, push onto fitting, and clamp at both ends.
- 10b. M-1SC only: Attach the ProCharger to the main bracket using the supplied 3/8" and 5/16" hardware.
11. Place the serpentine belt around the crankshaft pulley and ProCharger driven pulley. The spring loaded idler should be above the belt pushing down. Tighten the 3/8" nylon locking nut down to tighten the idler down onto the belt. Tension to approximately the second mark on the side of the tensioner. Tighten the 1/2" main bolt holding the tensioner to the main bracket, the 3/8" bolt going into the back of the tensioner, and the swing bolt the locking nut works against.



**FIGURE E1**



**FIGURE E2**  
**REMOTE INTERCOOLER EXAMPLE**

## **E. AIR INLET AND INTERCOOLER TUBING INSTALLATION**

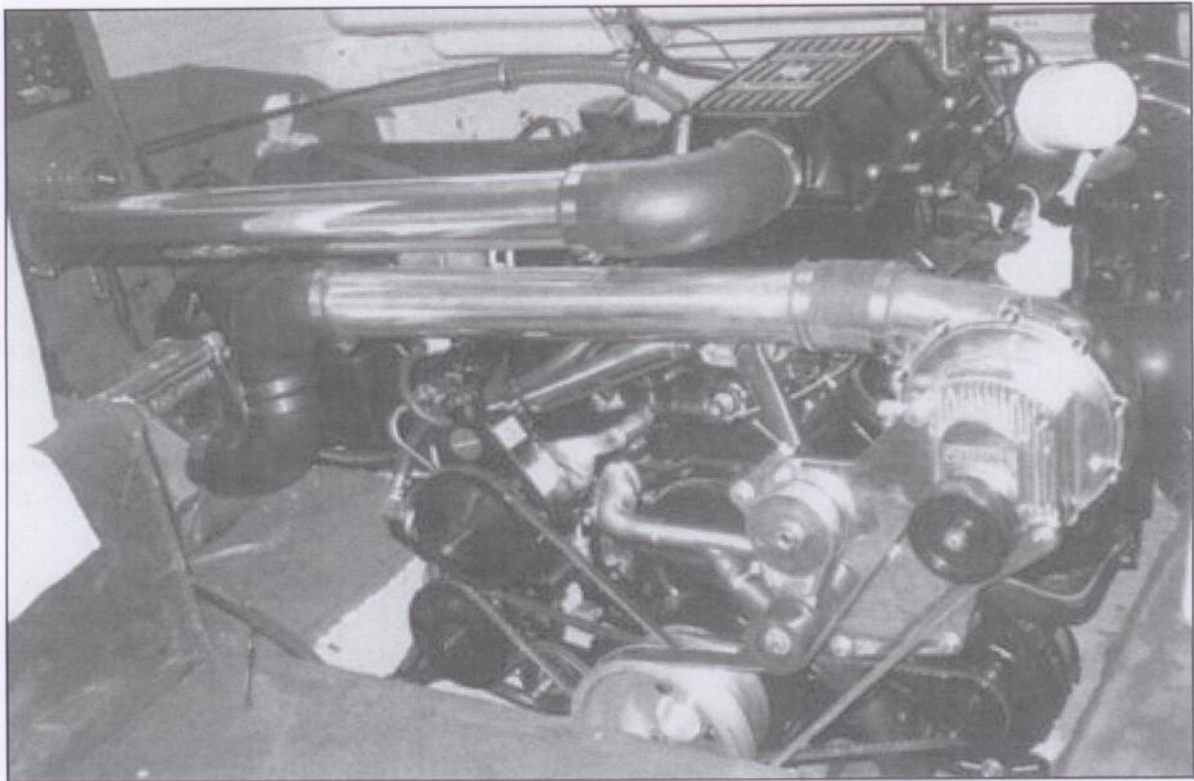
*The intercooler will either be mounted to the engine between the power steering and main bracket, or remotely. Each mounting option has it's own section under this heading.*

### **Description and Operation**

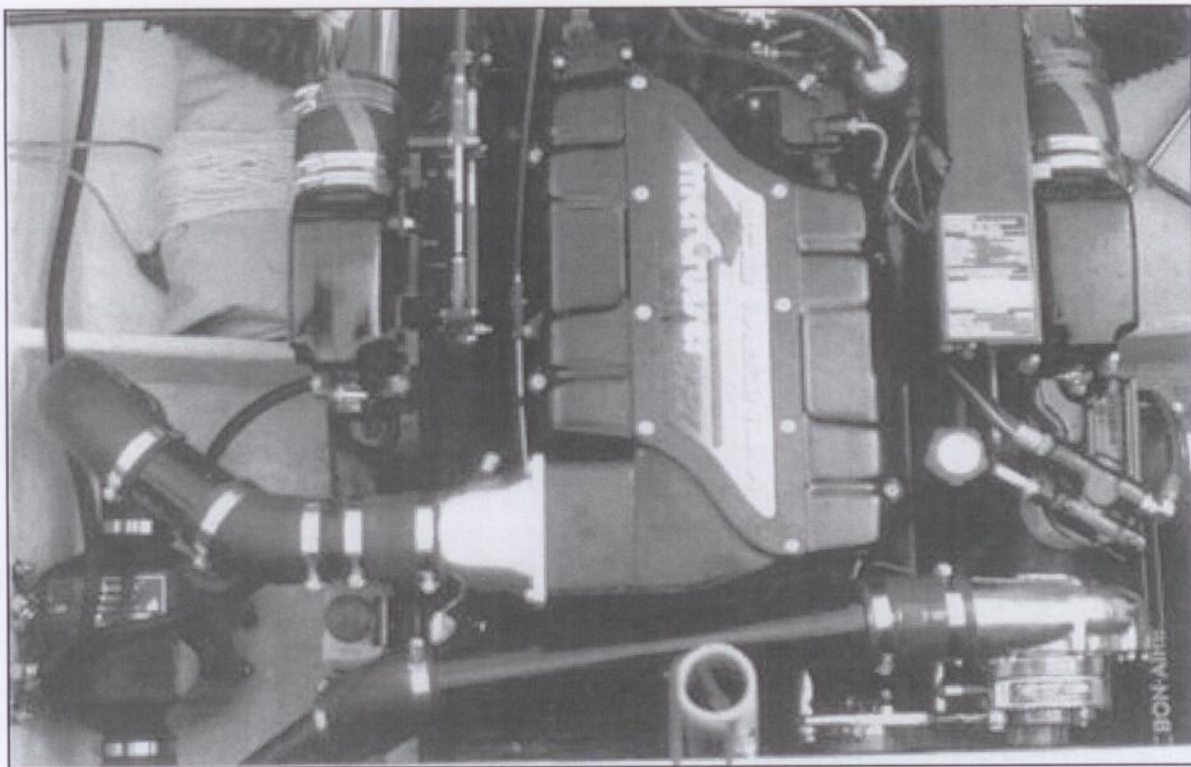
The intercooler system main components consist of the intercooler and tubing. The intercooler is a two core, plate style, air-to-water heat exchanger. The charge air (compressed and therefore heated) coming from the ProCharger enters the intercooler plenum, passes thru a series of passages and exits the opposite plenum. Water taken from the seawater pump is pumped through the crossflow passages in the intercooler, thereby cooling the charge air. The cooled charge air is then routed to the carburetor. The air inlet system uses a bellmouth connect to the inlet of the ProCharger.

### **Engine Mounted Intercoolers:**

1. If you will be mounting your intercooler remotely, proceed to the next section titled: **Remotely Mounted Intercoolers**, otherwise, continue. Look over figure E1 before starting. Take the intercooler (I/C). The I/C tabs should be on the bottom of the I/C with the side with two tabs facing the port side of the motor. Attach the starboard side tab to the power steering bracket at hole B1 with the tab behind the bracket using a 3/8" x 1" bolt, and locking nut. Leave slightly loose so that you can rotate the I/C into place on the port side.
2. The starboard side I/C tabs will mount to hole C1 on the main bracket in the following sequence: front I/C tab in front, then main bracket hole C1, then 3 1/2" spacer, and finally the rear I/C tab. Run the supplied 3/8"-16 x 5" bolt through, and thread on locking nut.
3. Place one 3" 45° elbow over the outlet of the ProCharger with the open end facing forward. Insert the supplied 3" o.d. x 2" long metal connector into the open end. Place the other 3" 45° elbow over the inlet to the intercooler. Rotate the elbow back so that the metal connector can be inserted into it's open end, joining the two 45° elbows together. Clamp all connections securely.
4. Place one end of the 3" 90° elbow over the outlet of the intercooler with the end facing back.
5. Remove air cleaner, fuel line(s), vacuum lines, and throttle linkage from the carburetor. Remove the carburetor from the intake manifold. If present, remove carb spacer and/or studs from manifold. You should now be down to the bare intake manifold.
6. Place the appropriate gasket onto the manifold, lining holes in gasket up with holes in manifold. Lower the bottom half of the ATI carburetor box onto the gasket with the throttle linkage on the port side. Using 4 of the supplied 5/16" socket head cap screws, bolt the box down to the intake manifold.
7. Place the other carb gasket onto the mounting pad. Lower your carburetor down onto the pad and slide toward the throttle linkage so that the linkage bushing slips into the 1/2" hole in the carburetor linkage. Tighten down nut connecting the two linkages together. Using the remaining supplied 5/16" socket head cap screws, bolt the carburetor to the carburetor box.
8. Connect the two fuel lines in the box to the fuel fittings on the front and back of the carburetor. Run your fuel line from the fuel pump to the outside fitting on the box. Clamp all connections securely.
9. Remove the throttle cable mounting stud from it's bracket, previously mounted to the carburetor. Install the stud into the threaded hole in the box, in the rear, on the port side. Bolt the throttle cable



**FIGURE E3**  
**REMOTE INTERCOOLER EXAMPLE**



**FIGURE E4**  
**REMOTE INTERCOOLER EXAMPLE**

to the stud leaving enough play for the cable to rotate. Adjusting the front part of the throttle cable as necessary, bolt it to the throttle linkage on the box. Check the linkage to make sure that the throttle opens and closes all the way. Adjust the cable if needed.

10. Install the flame arrestor/filter on the carburetor.
11. Check all connections on inside of box and make sure all are secure. Place the supplied 1/4" bolts through the holes in the top half of the box. Push the supplied gasket over the bolts. Lower the top down onto the bottom with the inlet facing rearward. Tighten down bolts.
12. For boost-referenced fuel delivery, connect the 1/4" aluminum tubing between the fitting on the fuel pump and the small fitting on the carb box with the supplied hose sections and clamps.



**Failure to perform this step will result in insufficient fuel pressure and possible engine damage!**

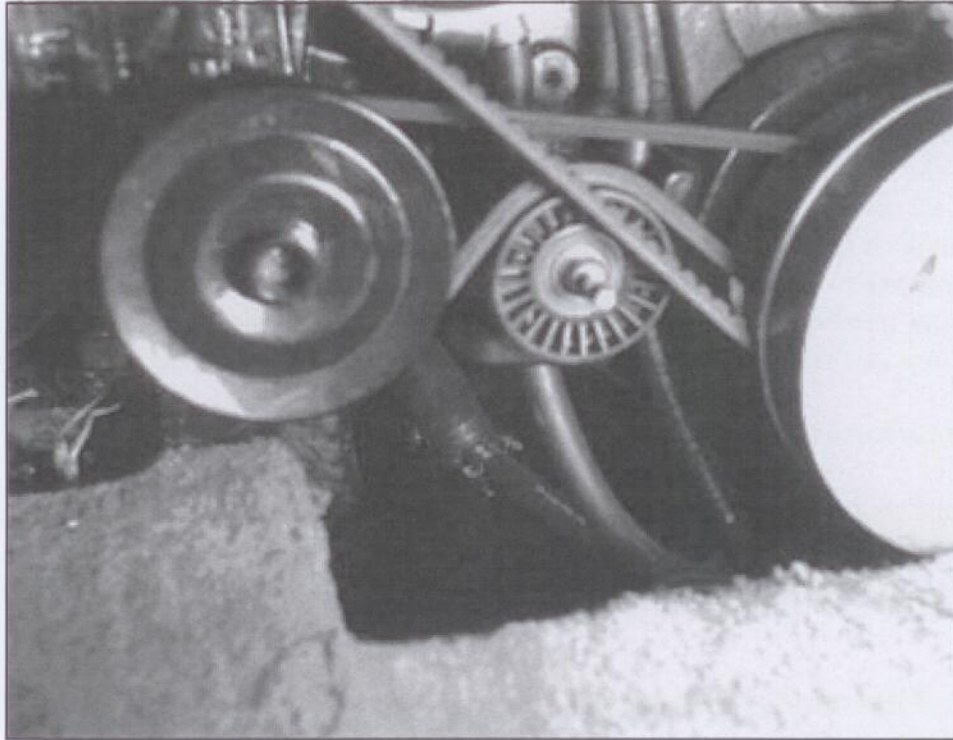
13. Insert the short end of the extended offset metal tube into the open end of the elbow coming off the intercooler. Insert the other end of the tube into one end of the rubber 180° elbow. Attach the other end of the rubber elbow to the inlet of the carb box. Clamp all connections securely.

### **Remotely Mounted Intercoolers:**

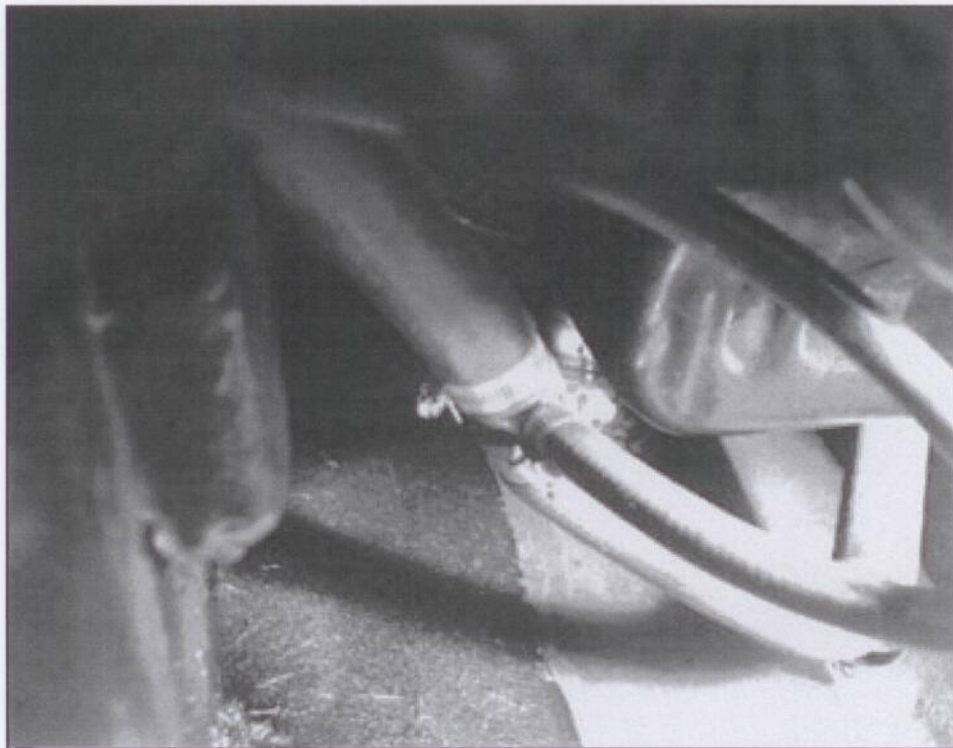
1. Refer to the **Engine Mounted Intercoolers** section. Follow steps 6 through 12 to install the carburetor box, then return to this section and proceed with step 3.
2. Determine where you are going to mount the intercooler. The intercooler has several mounting tabs attached to it, find a place where these can be used, it will be out of the way of the engine, and sits close to the level of the outlet of the ProCharger. Generally, you would like to keep it somewhat close to the engine to minimize the distance the charge air has to flow and the number of bends it has to make. Refer to figure E2 for an example. After you have determined the mounting location, bolt or screw the side tabs to the mounting surface. Included in the kit is a straight piece of strap. At the bottom of the intercooler is another tab. Bend and drill the strap so that it can be bolted to the bottom tab and to another mounting surface.

### **Air inlet system:**

1. Attach the bellmouth to the inlet of the ProCharger using the supplied hose clamp.
2. Using the supplied 1/2" x 4 ft. line, route the breather lines from the valve covers to the fittings in the bellmouth, trimming the line to the proper length, as required.



**FIGURE F1**



**FIGURE F2**



4. The supplied 3" dia. aluminum tubing will be used to fabricate the intercooler tubing. You will need to cut this tubing as required, dependent on the location of your intercooler. After you make a cut, it is important that you deburr and flare the ends. Flare the end by closing down a crescent wrench so that it just fits over the tubing wall. Pull out on the wrench slightly so that about 1/4" of the wall is crimped outward at about a 20° angle. Do this all the way around the tube. When done, fit a rubber connector over the end to make sure it is not flared too much. After the first one, you should get a good idea of how much flare is needed.
5. Measuring out the proper distances, use a series of straight metal tubes, rubber connectors, and rubber elbows, to run between the outlet of the ProCharger and one side of the intercooler, being sure to bend around obstructions.
6. Again, using a series of metal tubes, connectors, and elbows, plumb the intercooler tubing from the other side of the intercooler to the 3" end of the elbow on the carburetor cover. Clamp all connections on the system securely with the appropriately sized hose clamps.
7. Test your intercooler system to insure that it is rigidly mounted (it will be full of water when in operation) and does not interfere with other systems within the compartment.

## **F. WATER LINE INSTALLATION**

### **Description and Operation**

The water lines established in this section allow water to be routed to and from the air-to-water intercooler. This is accomplished by teeing into the outlet of the seawater pump for the feed line, and installing an overboard fitting for the discharge line.

1. Reattach the 1" water lines (running to the exhaust) to the fittings on the thermostat housing.
3. The discharge hose from the seawater pump is the one coming off the bottom of the pump and going to the oil cooler. "T" into the hose with the supplied 1 1/4"-1/2" "T" and clamp tightly. See figures F1 and F2.
4. Connect the supplied 1/2" line to the 1/2" barb fitting on the previously installed "T". Run the line up to the intercooler. Install a 90° 3/8" NPT to 1/2" barb fitting into each 3/8" NPT threaded hole on the intercooler. Cut the line from the seawater pump to length and slide onto the barb fitting on the front of the intercooler on the bottom. Use the remaining hose to attach to the fitting on the top back of the intercooler. It is important that the water feed line for the intercooler be attached at the bottom and the discharge at the top, otherwise the intercooler will not fill up with water and will provide little cooling effect.
5. Find a spot on the transom just above the drive clear of obstructions. Drill a hole to match the size of the outer diameter of the supplied overboard fitting. Cover the outside of the fitting with silicon and slide through the hole with the barb fitting on the inside. Tighten down the nut on the fitting to secure the fitting to the transom.
6. Attach the intercooler water discharge line to the barb fitting on the overboard fitting, and clamp down. The cooling water from the intercooler should now discharge out of the back of the boat onto the drive, thereby cooling it also.

# ProCharger Marine Application Guide

LOCATE MOTOR AND DESIRED HP LEVEL TO IDENTIFY RECOMMENDED CONFIGURATION

MerCruiser™ Motor	ProCharger System	Boost Level	Crankshaft HP*	Fuel System Upgrade Required	Carb Rec**	Min Octane	Engine Modifications Required
350 MPI (300/330 hp)	Intercooled, 5 psi		490	<i>included in ProCharger system</i>	n/a	91	thru-transom exhaust req'd
350 MPI	Intercooled, 7 psi		540	Fuel Delivery Upgrade Req'd	n/a	91	thru-transom exhaust req'd
5.7/350 (250/280 hp)	M-1B Intercooled	3.5 psi	365	n/a	600	89	-
350 Mag	M-1B Intercooled	5 psi	390	n/a	600	91	thru-transom exhaust req'd
350 Mag	M-1 Intercooled	7 psi	415	n/a	600	91	thru-transom exhaust req'd
350 Mag	M-1 Intercooled	9 psi	440	n/a	600	91	thru-transom exhaust req'd
7.4 (300/330 hp)	M-1 Intercooled	3.5 psi	435	n/a	600	89	-
7.4	M-1 Intercooled	5 psi	465	n/a	600	89	-
7.4	M-1 Intercooled	7 psi	495	Electric Feeder Pump Kit	600	91	thru-transom exhaust req'd
7.4	M-1 Intercooled (12 rib)	9 psi	525	550 HP Fuel System***	600	91	thru-transom exhaust req'd
7.4 MPI (310/340 hp)	M-1 Intercooled	5 psi	500	<i>included in ProCharger system</i>	n/a	89	thru-transom exhaust req'd
7.4 MPI	M-1 Intercooled	7 psi	560	Fuel System Upgrade Required	n/a	91	thru-transom exhaust req'd
454 Mag (350/380 hp)	M-1 Intercooled	3.5 psi	500	n/a	650	89	thru-transom exhaust req'd
454 Mag	M-1 Intercooled	5 psi	535	Electric Feeder Pump Kit	650	91	thru-transom exhaust req'd
454 Mag	M-1 Intercooled	6 psi	570	550 HP Fuel System***	650	91	thru-transom exhaust req'd
454 Mag	M-1 Intercooled (12 rib)	7.5 psi	605	Competition Fuel System	650	91	thru-transom exhaust req'd
454 Mag	M-3 Intercooled	9 psi	675	Competition Fuel System	650	91	thru-transom exhaust req'd
454 Mag	Standard	call	call	n/a	650	91	call
454 MPI (385/415 hp)	M-1 Intercooled	3.5 psi	560	<i>included in ProCharger system</i>	n/a	89	thru-transom exhaust req'd
454 MPI	M-1 Intercooled	5 psi	610	<i>included in ProCharger system</i>	n/a	91	thru-transom exhaust req'd
454 MPI	M-3 Intercooled	5 psi	630	<i>included in ProCharger system</i>	n/a	89	thru-transom exhaust req'd
454 MPI	M-3 Intercooled	7 psi	685	<i>included in ProCharger system</i>	n/a	91	thru-transom exhaust req'd
502 MPI (415/445 hp)	M-1 Intercooled	3.5 psi	570	<i>included in ProCharger system</i>	n/a	89	thru-transom exhaust req'd
502 MPI	M-1 Intercooled	5 psi	620	<i>included in ProCharger system</i>	n/a	91	thru-transom exhaust req'd
502 MPI	M-3 Intercooled	5 psi	645	<i>included in ProCharger system</i>	n/a	89	thru-transom exhaust req'd
502 MPI	M-3 Intercooled	7 psi	700	<i>included in ProCharger system</i>	n/a	91	thru-transom exhaust req'd
496 MAG HO (425/455 hp)	Intercooled	3.5 psi	580	<i>included in ProCharger system</i>	n/a	91	thru-transom exhaust req'd
496 Mag HO	Intercooled	5 psi	625	Fuel System Upgrade Required	n/a	91	thru-transom exhaust req'd
496 Mag (375/405 hp)	Intercooled	3.5 psi	550	<i>included in ProCharger system</i>	n/a	91	thru-transom exhaust req'd
496 Mag	Intercooled	5 psi	590	Fuel System Upgrade Required	n/a	91	thru-transom exhaust req'd
500 EFI (500 hp)	M-1 Intercooled	3.5 psi	660	<i>included in ProCharger system</i>	n/a	91	thru-transom exhaust req'd
500 EFI	M-1 Intercooled	5 psi	740	<i>included in ProCharger system</i>	n/a	91	thru-transom exhaust req'd
500 EFI	M-3 Intercooled	5 psi	765	<i>included in ProCharger system</i>	n/a	91	thru-transom exhaust req'd
500 EFI	M-3 Intercooled	8 psi	830	Fuel System Upgrade Required	n/a	91	thru-transom exhaust req'd
HP 500 (500 hp)	M-1 Intercooled	4.5 psi	710	Competition Fuel System	stock 800	91	-
HP 500	M-1 Intercooled (12 rib)	7 psi	760	Competition Fuel System	call	91	-
HP 500	M-3 Intercooled	8 psi	820	Competition Fuel System	call	91	-
HP 500	Standard	call	call	call	stock 800	91	call

\* Crankshaft hp with ProCharger system running indicated octane fuel with factory rev limiter (subtract 30 hp for prop hp rating)

\*\* All carbureted applications require Holley double pumper (carburetor prep kit included with system, carburetors sold separately)

\*\*\* Location of fuel tanks/pickups may require Competition Fuel System; consult with ATI

Note: Ignition upgrade may be required for applications generating more than 600 crankshaft horsepower

Note: Air horns are now supplied with all systems instead of air filters. Air horns are easier to install and provide improved airflow due to their venturi effect.

- Inspection of product should occur immediately upon arrival. Any claims of shortages or errors originating at ATI must be made within 30 days from date of shipment. Damage to product or packaging must be claimed in accordance with the carrier's policies.
- Returns of new, unused product must be pre-approved by ATI. A 20% restocking fee will apply to part orders, and a 10% restocking fee will apply to supercharger systems. An RMA (Returned Merchandise Authorization) number must be assigned by ATI and must be displayed in clear view on the outside of the package and be contained in all correspondence. No returns are accepted after 90 days. Supercharger systems returned with the factory seal intact are subject to a restocking fee of only 7.5%. No C.O.D or Freight Collect shipments will be accepted by ATI. Used, damaged, special order or discontinued items may not be returned.
- All packed orders not shipped within 60 days will be returned to inventory and are subject to a 5% restocking fee.
- All prices are F.O.B. Lenexa, Kansas. Prices and specifications are subject to change without notice.

## **G. FUEL SYSTEM UPGRADES\***



**Warning:** Ensure that all fuel lines are correctly sized for the supercharged horsepower rating of the engine. Please contact an ATI service technician should you have any questions.

### **G1. MARINE BLOW-THROUGH CARBURETOR MODIFICATION**

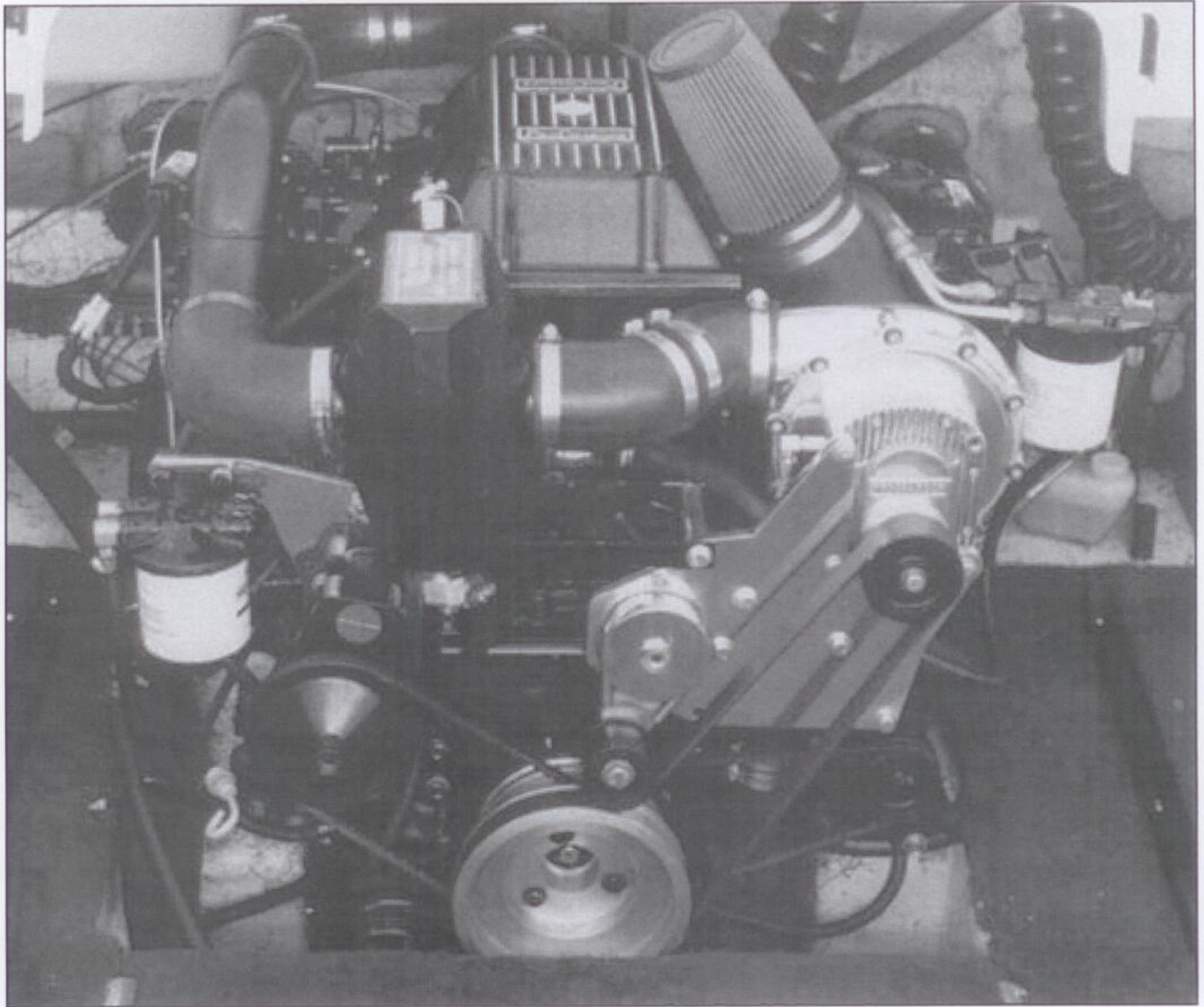
1. Remove the choke butterfly from its shaft in the choke horn. Unhook the shaft from the choke linkage and slide out of the carburetor. Remove the three bolts holding the choke linkage assembly to the carburetor. Remove the entire choke linkage assembly.
2. Cut the section of the throttle linkage which hangs down below the mounting surface of the carburetor. Identify the tab which is bent outward on the top part of the throttle linkage. Either cut this tab or bend it back even with the rest of the linkage.
3. Remove the front and rear float bowls. Remove the stock floats and replace with the supplied black nitrophyll floats. The notched float (for use with jet extensions) goes on the back bowl. Before replacing the bowls, change jet sizes and push the supplied jet extensions onto the rear jets.
4. If your carburetor is not a marine carburetor, remove the straight bowl vent tubes with vise-grips or pliers. Install the supplied "J" shaped vent tubes into the vents so that they discharge into the carburetor. Tap the tubes into place lightly with a hammer so that they fit tightly, but avoid excessive denting of the tubes.

### **G2. GEN. V HOLLEY FUEL PUMP CONVERSION\***

*Note: Holley mechanical fuel pumps are a direct bolt on replacement for the stock pump on Generation IV motors (with the mechanical fuel pump bolted to the engine block). Only Generation V motors (with the mechanical fuel pump bolted to the seawater pump) require the following steps.*

1. Remove the 6 bolts holding the bottom half of the stock fuel pump to the top. Keep the bolts for reassembly. Remove the bottom. This piece will not be reused.
2. Orient the adapter plate with the counterbored bolt holes facing out. Using the original bolts in the counterbored holes, attach the adapter plate to the top part of the fuel pump.
3. If not already done, remove the bottom section of the supplied Holley fuel pump from the top. Align the mounting holes in the Holley fuel pump bottom with the holes in the adapter plate so that the inlet and outlet are in the desired position. Two of the bolts and mounting holes in the fuel pump bottom will not be used.
4. Run the Holley bolts back through the pump bottom. Match the holes in the supplied gasket with the pump bolts and push the gasket down onto the bolts. Thread into the adapter. Tighten all bolts securely.
5. Attach the fuel lines to the pump. Start the engine and check for leaks.

\* Optional, see fuel system upgrade chart on opposite page.



**FIGURE H1.**  
**COMPLETED INSTALLATION**



## H. INSTALLATION REVIEW AND SAFETY CHECK

1. Carefully review the entire installation. (figure H1) Check oil and fuel lines near moving parts and the exhaust system to ensure that these lines are safe, secure and not twisted or kinked. All wires and hoses should be firmly secured with clamps or wire ties. Also, ensure that the air filter or inlet screen is installed.
2. Check all fluid levels. Your tank should be filled with 91 octane or higher fuel before any hard running.
3. Start engine and idle for a few minutes. You should be running stock Mercruiser timing. Check and adjust if necessary. It is better to err on the side of less timing and no detonation!
4. Shut off engine and check for fluid leakage, signs of rubbing parts, and other potential problems.
5. Your motor should display a significant increase in performance when you hard into the throttle, with no detonation. If this is not so, review your installation, then contact your dealer or ATI for assistance.
6. For best performance and reliability, **always use premium grade fuel (91 octane or higher)** and listen for signs of detonation. Back off throttle should detonation occur. With a properly installed ProCharger and appropriate timing, detonation should not be an issue.
7. Never race your engine (and ProCharger) when your engine is cold. Allow the water temperature to climb into operating range before revving above 2,500 rpm.
8. Be sure you have purchased and properly installed a fuel pressure gauge and/or fuel/air ratio meter to monitor fuel delivery. Installation of a boost pressure gauge is also recommended.
9. It is very important that all fuel lines are sized according to the supercharged horsepower rating of the engine. This includes the anti-siphon valve, fuel filters, etc. . Please contact an ATI service technician should you have any questions.
10. Please review the maintenance and warranty sections within this owner's manual

# TUNING

## Fuel Pressure and Jetting

On a carbureted motor, adequate fuel pressure and correct jetting are the most important factors in maintaining the correct fuel-air ratio. When supercharging a carbureted motor, extra fuel beyond that supplied by the stock fuel pump and carburetor/jets is required, due to the extra oxygen in the cylinder. This extra fuel is provided by boost-referencing your fuel system and increasing the stock jetting on a Holley double pumper carburetor (see fuel systems recommendation chart on back of price list and in section E of this manual. Variations in fuel pressure gauges can cause improper fuel pressure readings on the gauge; therefore, what is important is the observed **increase** in fuel pressure (not the overall fuel pressure, but the amount of additional pressure added to the stock pressure at idle). After the system is installed, fuel pressure at idle should be checked. Whatever that reading is, under boost you should see an increase of 1 psi of fuel pressure for every 1 psi of boost pressure. It is extremely important to check the fuel pressure as the motor may run fine, **but due to insufficient pressure may be dangerously lean and exposed to serious engine damage.** Carburetor jetting must also be correct. Never run a ProCharged motor with stock jets! ProCharged motors will always require jets larger than stock. Please contact your dealer or an ATI technician regarding jetting recommendations.

## Timing

All motors may require subtly different timing for best tuning. However, as most motors are close to the same, we can give general guidelines. Most medium sized V Hulls, twin engine applications, and generally boats with 1.50 gear ratios or more (lower) that are able to plane with relative ease in a tall propped, high speed setup, will generally not need as much initial timing. Dyno results have shown that most moderate compression GM BB's, such as Mercruiser types will not show significant variances in peak HP if total timing is between 29-32°. However, in the previously mentioned boat types which exhibit good planing & driveability characteristics, backing the timing down from the 32° Merc. Stock setting can provide some additional margin for error in the event the boat is operated with insufficient octane fuel and/or other abuses. Large single engine boats, high speed tunnel cats, and other high performance and/or 1.36 geared boats may benefit from the more advanced Merc. total 32° specification, since this will essentially increase on-plane torque due to non-aggressive low RPM tuning. Although this aggressive timing will not allow as great a margin of error at WOT, this should not pose a problem, due to the fact that these high performance applications are only capable of short bursts of full throttle operation due to water speed and general safety conditions. Obviously, the manner in which the desired timing is set will ultimately influence the final jetting.

## Plugs

As to reading the plugs, the following information should help identify what to look for: What we want to focus on is the threads. The threads are directly connected to the cylinder, and so when the plug is removed, essentially part of the combustion chamber is removed. On almost all cases the appearance of the top of the plug threads is also what the chamber and pistons look like. We want the threads and the chamber to be black and have soot deposits. This indicates a rich supercharged condition and therefore would mean cooler exhaust temperatures. The negative ground should be clean and show no signs of blue discoloration. The electrode should be clean and white; this indicates good combustion. The following are signs of problems: If the negative ground is discolored, it indicates high temperatures. If the electrode is fuel soaked or black this indicates a misfire or fouled plug condition. If any of the 1st thread is not completely black, there is not enough fuel in the cylinder. Even if only a small part of the thread's circumference is clean, this condition may produce excellent power, but will probably produce excessive cylinder temperatures.

## **Checking Your EGT's and/or Reading Your Plugs Is Extremely Important!**

Many activities that are good for you are usually not too enjoyable. Fortunately, when it comes to your marine engine, the simple process of monitoring your exhaust gas temperatures (EGT's) or reading your plugs can save thousands of dollars of unnecessary engine repairs and provide many enjoyable hours of trouble free service.

Monitoring EGT's requires the installation of EGT probes and gauges. If you are not familiar with this process, contact your dealer or an ATI service technician. Reading your plugs is a relatively simple alternative to monitoring EGT's, but is not as precise.

As for reading plugs, we must first start by saying that **when** a plug is read is as important as **what** is observed. If a spark plug is removed & read at the wrong time, not only will a misdiagnosis occur, but in many cases the tuner may actually mistakenly tune the engine in the wrong direction and unintentionally create a lean engine-damaging condition. Therefore, the only real way to read plugs is to remove the spark plugs immediately following a wide open throttle, full power condition. This is done by accelerating the boat at wide open throttle to full operating range for a few seconds, or until it is clear that rapid acceleration has ceased ( in most marine engines a good plug reading can be taken from 4500 to 5500 rpm) and then immediately shutting off engine and coasting to a stop. Although many spark plugs may only require less than 60 seconds each to be read & completely reinstalled, this previously described simple process provides a tremendous opportunity to literally take a snapshot of the combustion process and what is happening inside the engine.

If a hundred engine builders were asked to estimate what it would require to properly tune your engine there may be a hundred different answers since no two engines are exactly alike. It is called the cumulative tolerances theorem, a half a percent difference in total valve lift, a slight variance in piston ring gap, a small amount of unremoved casting flashing in a cooling passageway, and hundreds of other minute differences can lead to identical engines requiring some differences in fuel pressure to produce proper and uniform combustion. To properly read a spark plug we must first have the correct spark plug. Most Champion, AC & other GM spark plugs are easy to read; however, many Ford Motorcraft are black in color & therefore difficult to read. It is suggested for best results that a brand new set of spark plugs be installed before any attempts to gather information. Let us remind you the following tuning tips are based on unleaded pump gas operations in the stock compression ratio range. Since today's pump fuels register significantly lower octane ratings, and therefore are significantly more susceptible to engine knock or ping, than yesterdays high octane fuels, it is important that some additional fuel be placed in the cylinder - not intended to be burned, but just to act as a cooling medium. This simply means that a richer than "ideal" air fuel ratio is now highly desired for maximum performance on todays pump gas engines. After the system is installed, fuel pressure at idle should be checked. Whatever that reading is, fuel pressure under boost should rise by **at least** 1 psi for every psi of boost pressure. For example, if your fuel pressure is 7 psi at idle and you are running 7 psi of boost at max rpm, then fuel pressure should be at least 14 psi at the max rpm. This increase in fuel pressure is accomplished by boost-referencing your fuel system as discussed in the fuel system installation instructions. It is extremely important to check the fuel pressure as the motor may run seemingly fine, but due to insufficient pressure is running dangerously lean. Carburetor jetting must also be correct. Never run a ProCharged motor with stock jets! ProCharged motors will always require larger than stock jets. Please contact an ATI technician regarding jetting recommendations. You will still need to read your plugs to finalize the jetting, but ATI Technical Service can at least give you a good starting point. Remember that leaning the motor will increase HP but can create an extremely dangerous lean condition - which can result in severe engine damage.

# OPERATION AND MAINTENANCE

- **COLD STARTING**

Never race your engine (and ProCharger) when your engine is cold. Allow the water temperature to climb into operating range before revving above 2,500 rpm.

- **FUEL QUALITY**

For best performance and reliability, **always use at least 89 octane fuel (91 octane with 7 psi)**. Always listen for signs of detonation after refueling, and after replacement or modification of any fuel system components. Back off throttle should detonation occur. With a properly installed ProCharger intercooled supercharger system, detonation should not be an issue

- **OIL AND FILTER MAINTENANCE**

M1 only: Always change your oil and filter every 25-30 hours. Delaying your oil change beyond the recommended interval risks the health of both your high performance engine and ProCharger. For M-1SC and M-3SC, see SC applications page for SC oil change intervals.

- **IGNITION SYSTEM MAINTENANCE**

If your spark plugs are more than two years old or have more than 100 hours use, you should change your plugs before operating your boat under load. Additionally, spark plug wires should be changed every 200 hours of use, or whenever resistance exceeds factory specifications.

- **AIR INLET**

**Your motor and ProCharger should never be run without an air inlet screen!**

- **BELT TENSIONING AND REPLACEMENT**

The belt which turns your ProCharger will stretch after initial run-in, and may need retightening after the first few hours, if not sooner. After possibly one more tightening of the belt with the tensioner, further stretching should not occur. Tighten the belt sufficiently to avoid slippage, but do not overtighten, as this could cause damage to the ProCharger's precision bearings. Should you throw a belt and find that it needs constant retightening, the belt is damaged and should be replaced. 8-rib belts can be bought from ATI or your local parts store. Gates Micro-V belts are recommended; these belts are available at CarQuest™, NAPA™ and other auto parts stores. Your nearest CarQuest store can be found by dialing 800-492-7278, the nearest NAPA store at 800-538-6272.

- **IMPELLER SPEED**

Maximum impeller speed should not exceed the redline stated for each model in the table below. Maximum impeller speed = crankshaft pulley diameter (N1) divided by supercharger pulley diameter (N2), multiplied by the step-up ratio stated in the table, multiplied by engine rpm at redline.

$$\text{Impeller RPM} = (N1/N2) \times (3.05, 4.10 \text{ or } 4.44) \times \text{engine RPM}$$

Model:	M1B	M1	M1SC	M2	M3SC	M3	M4
RPM (MAX):	54,000	50,000	57,000	59,000	50,000	53,000	50,000
Step-Up Ratio:	3.05:1	3.05:1	4.10:1	4.44:1	4.10:1	4.44:1	4.44:1

**If you require technical support please contact us at (913) 338-3086 9:00-5:00 CST, Monday - Friday, or contact technical services via email at [techserv@procharger.com](mailto:techserv@procharger.com)**



# SC APPLICATIONS

- **WARNING:**



**ALL SC SUPERCHARGERS CONTAIN NO OIL FROM THE FACTORY. YOU MUST ADD THE SUPPLIED PROCHARGER OIL PRIOR TO USE.**

Use only ATI supplied oil in your SC ProCharger. The ATI oil has been specially formulated for the bearings in the ProCharger and use of oil other than that supplied by ATI will void your warranty.

- **OIL CHANGE INTERVALS**

The first oil change should be performed at 15 hours and at 100 hour intervals thereafter. Clean drain plug after every oil change. Drain oil by removing the magnetic drain plug. Clean off the magnetic drain plug before reinstalling. *See figure below, left*

- **OIL LEVEL**

The oil level must be checked periodically (when cold) to ensure the proper oil level in the ProCharger. The dipstick can be loosened using a flat blade screwdriver or a coin. When installed, the oil level should be between the min and max levels (See fig. below). If the oil level falls below min, fill the ProCharger, through the dipstick hole, until the proper oil level is reached. **Warning: Filling the ProCharger higher than the "max" level on the dipstick will lead to bearing and/or seal damage.** The SC ProChargers are sealed units and normally will not require the addition of oil between service intervals. If excessive consumption is noted, the unit should be sent to ATI for inspection/repair. Disassembly of the supercharger will void your warranty.

- **GENERAL**

When removing the dipstick, be sure to retain the nylon washer. A spare washer is provided with each box of SC oil (a box is included with each system). Do not remove or replace either the nylon washer on the dipstick, or the rubber o-ring on the drain plug with anything other than ATI supplied replacements. **Evidence of either case may void factory warranty.** A discoloration of the oil and residue on the drain plug will be noticed during initial oil changes. This is no cause for concern and will eventually diminish. The serial tag on your SC ProCharger must be pointing upwards for proper orientation. Installing the supercharger in another orientation will result in inadequate oiling and supercharger failure. If you have any questions about the maintenance of your SC ProCharger they should be directed to an ATI service technician or dealer.



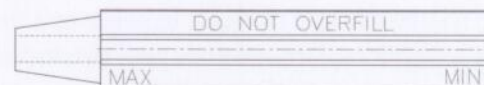
SEALED PLUG  
(SOCKET HEAD)

MAGNETIC  
DRAIN PLUG  
(HEX HEAD)



SEALED PLUG  
(SOCKET HEAD)

DIPSTICK  
(FLAT HEAD)



## **THE PROCHARGER® AND PROCHARGER INSTALLATION SYSTEM LIMITED WARRANTY**

Accessible Technologies, Inc. ("ATI") is proud to offer a twelve-month limited warranty on its ProCharger supercharger systems and a thirty-six month limited warranty on oil-fed ProChargers (supercharger only) ordered with a 5 psi (or less) pulley. ATI's warranty obligations are limited to the terms set below:

ATI warrants the ProCharger and ProCharger installation system (together "product") against defects in materials and workmanship for a period of TWELVE (12) months from the date of original purchase from your local dealer, or date of shipment from the factory if purchased directly from ATI. If the product is used in its intended manner, ATI will repair or replace any component found to be defective at no charge to the customer. **SHOULD THE CONSUMER ELECT TO USE A DRIVEN PULLEY OTHER THAN THE ORIGINAL PULLEY SHIPPED WITH THE SYSTEM, THIS TWELVE-MONTH LIMITED WARRANTY IS VOID.** This warranty coverage is extended only to the original consumer purchaser, and excludes hoses, sleeves and electronic support components manufactured by other companies.

To obtain service under this warranty you must do the following during the warranty period:

1. Phone ATI (913-338-3086) and provide us with the following information:
  - ProCharger serial number
  - vehicle year, make, model, engine modifications and other modifications
  - description of perceived problem
2. If no solution to your problem can be found after the above phone conversation, you will be assigned a warranty claim number. You must then properly ship your product, at your expense, to the ATI factory. The product should be carefully packaged in a rugged box so that none of the components being shipped could strike each other or the side of the box during shipping. The box should be strong enough to safely contain the weight of the components being shipped.
3. Include the following information inside the box with your product:
  - copy of your original invoice or receipt
  - name, address and daytime telephone number
  - warranty claim number
  - vehicle year, make, model, engine modifications and other modifications
  - description of perceived problem
4. Clearly mark the warranty claim number on the top and one side of the box in characters no less than 2" tall. Ship the properly packaged product, prepaid and insured for the retail value of the component(s) being returned, to the following address:  
Accessible Technologies, 14801 West 114th Terrace, Lenexa, Kansas 66215.

ATI agrees to honor a warranty claim at its sole discretion and only after inspection by engineers at the ATI factory. No warranty will be honored if any product subassembly is found to have been improperly installed, tampered with, mis-handled or misused in any way. **DISASSEMBLY OF THE PROCHARGER OR REMOVAL OF THE PROCHARGER SERIAL PLATE VOIDS ALL WARRANTIES.** Claims for freight damages should be directed to the freight company.

If ATI's limited warranty applies, your product will be repaired or replaced at ATI's option and shipped back to you, freight prepaid, via UPS ground service. If the limited warranty does not apply, we will advise you of the specific reason for denial, and advise you of repair expense and timing. After advising you of this information we will, at your option, either proceed with repairs or return your product to you in the state in which it was received. In either case the product will be shipped to you COD, insured at replacement value. This means that you would pay the return shipping and insurance charges if ATI's limited warranty does not apply to your product.

**THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. THE DURATION OF ANY AND ALL WARRANTIES ON THE PRODUCTS DISCUSSED ARE LIMITED TO TWELVE MONTHS. ATI IS NOT RESPONSIBLE IN ANY EVENT FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. No ATI dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.**

# **THE PROCHARGER SC EXTENDED COVERAGE PROGRAM**

## **DESCRIPTION**

- The ProCharger Extended Coverage Program extends the warranty coverage for your M-1SC or M-3SC ProCharger an additional TWENTY-FOUR (24) months, for a total of thirty-six months. This extended coverage applies to parts and labor for the ProCharger centrifugal supercharger unit only, and does not include other system components.
- Under the extended coverage program, ATI will repair or replace any component within the ProCharger which is found to be defective.
- Service under the extended coverage program is obtained through the same process as described in The ProCharger Twelve Month Limited Warranty.

## **QUALIFICATION**

- Only the original consumer purchaser of the ProCharger is eligible, so long as this purchaser qualifies under the terms described below.
- Completion of the Extended Coverage Registration Form is required, along with a \$49 registration fee. In return for the \$49 registration fee, your system record will be updated to reflect the extended warranty and you will receive (6) additional bottles of ATI SC oil. This form must be completed in its entirety, and must be submitted along with payment within 30 days from the date of original purchase from your local dealer, or date of shipment from the factory if purchased directly from ATI.
- **PARTICIPANTS MUST HAVE ORDERED THE PROCHARGER WITH AN 8 RIB DRIVE SYSTEM WITH THE 5 PSI (OR LESS) PULLEY,** and must agree to maintain this original pulley, and not remove this pulley or disassemble or modify the ProCharger unit in any manner. With respect to the ProCharger itself, all terms and conditions within the ProCharger Twelve-Month Limited Warranty apply. Tampering with the driven pulley and any other modification of the ProCharger unit will disqualify an owner from participating in the Extended Coverage Program. Acts resulting in disqualification include but are not limited to the following:
  - Removal or attempted removal of the ProCharger driven pulley
  - Removal or attempted removal of the ProCharger serial plate
  - Removal or attempted removal of the compressor housing or transmission case
- **PARTICIPANTS MUST AGREE TO PROPERLY MAINTAIN THE PROCHARGER, AND PROVIDE PROOF OF COMPLIANCE WITH THE FOLLOWING REQUIRED MAINTENANCE:**
  - Only ATI supplied oil must be used in the ProCharger.
  - ProCharger oil level must always remain within the specified limits.
  - ProCharger oil change every 100 hours using the ATI supplied oil. (After initial oil change at 15 hours)
  - See special notes on SC applications page.



# PROCHARGER® SC EXTENDED COVERAGE PROGRAM REGISTRATION FORM

(MUST BE RETURNED WITHIN 30 DAYS OF PURCHASE WITH \$49 CHECK)

Name: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Address: \_\_\_\_\_

Purchased From: \_\_\_\_\_

City: \_\_\_\_\_

ProCharger Serial #: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

Boat Year: \_\_\_\_\_

Daytime Phone: \_\_\_\_\_

Boat Make: \_\_\_\_\_

Evening Phone: \_\_\_\_\_

Boat Model: \_\_\_\_\_

Which information sources most influenced your decision to purchase a ProCharger system? Please rank in order of importance (1 = most important, 2 = second most important, etc.).

- Magazine advertising
- Dealer recommendation
- ProCharger Brochures
- Witnessed performance on a car
- Test drive
- Magazine editorials
- Friends
- Conversations with ATI technicians
- Web Site (please specify) \_\_\_\_\_
- Other (please specify) \_\_\_\_\_

What issues most influenced your decision to purchase a ProCharger system? Please rank the following issues in order of importance.

- Reliability
- Standard warranty
- Extended coverage warranty
- Performance
- Quiet operation
- Removability (ability to return car to stock)
- Cost
- Ease of installation

Who installed your ProCharger system?  Dealer  Self  Other

Have you owned a forced induction system previously?  Yes  No

Supercharger: Brand(s) \_\_\_\_\_ Vehicle(s) \_\_\_\_\_  
Turbocharger: Brand(s) \_\_\_\_\_ Vehicle(s) \_\_\_\_\_

I have read and understand the terms and qualifications for the ProCharger Extended Coverage Program. I have not modified my ProCharger in any way and will not during my participation in the extended coverage program. I have read and answered all questions on this form. I have also enclosed my check for \$49, payable to ATI, for enrolling my ProCharger (serial # indicated above) in the extended coverage program for an additional 24 months beyond the standard limited warranty period of 12 months.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Please mail completed registration form to ATI at: 14801 West 114th Terrace, Lenexa, KS 66215.

If you have any questions, please contact us at (913) 338-3086 9:00-5:00 CST, Monday - Friday

Or, contact technical services via email at [techserv@procharger.com](mailto:techserv@procharger.com)

cut along dotted line

cut along dotted line

