



Owner's Installation Guide for the
Paxton Automotive
Novi 1200 Supercharger
for the
Universal Small Block
Mopar/318/340/360 Carbureted System*

**Legal in California only for racing vehicles which may never be used upon a highway.*

Paxton Automotive . 1300 Beacon Place . Oxnard CA 93033
805 487-3796 • FAX (805) 247-0669

FOREWORD

This manual provides information on the installation, maintenance and service of the Paxton supercharger kit designed for small block Mopar carbureted engines. Contact Paxton Automotive Corporation for any additional information regarding this kit and any of these modifications at (805) 487-3796 8:00am-4:30pm PST.

An understanding of the information contained herein will help novices, as well as experienced technicians, to correctly install and receive the greatest possible benefit from their Paxton supercharger. When reference is made in this manual to a brand name, number, specific tool or technique, an equivalent product may be used in place of the item mentioned. All information, illustrations and specifications contained herein are based on the latest product information available at the time of this publication. All rights reserved to make changes at any time without notice.

NOTES

- The crank pulley supplied with this kit is designed to accommodate the stock water pump pulley, alternator and power steering. Vehicles with different accessories may need custom spacing or elimination of some accessories.
- Distributor clearance to the carburetor enclosure is minimal. Distributors must have a small diameter cap in order to fit.
- Due to the many possible engine configurations and boost requirements, a supercharger pulley has not been included in this kit. See pg. iii for options.

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Proper installation of this system requires general automotive mechanic knowledge and experience. Please browse through each step of this instruction manual prior to beginning the installation to determine if you should refer the job to a professional installer/technician. Please call Paxton Automotive for installers in your area.

***** NOTE *****

The following carbureted base system support parts are not included as part of the system but are available from Paxton Automotive:

1. Carburetor enclosure **P/N: 8PM205-060/068** (Included in 1201851/-P)
2. Optional fuel line/fittings kits for the carburetor. They include custom bent stainless steel lines, billet -8 bulkhead adapter with fuel pressure port and plug, -8/-6 junction TEE, aluminum swivel hose ends and USCG approved fuel hose.
 - **#8M110-020** Holley 4150 series (w/dual metering blocks), SS fuel line kit.
 - **#8M110-030** Demon series, SS fuel line kit.
3. Carburetor air diffuser, straightens airflow into the carburetor for improved response/driveability.
 - **#8M011-001** Ø5.75" x 2.50" tall carburetor air diffuser, stainless steel.
4. Supercharger discharge assembly (for use with **8M205-060/-068**)
P/N: 4PCX112-030. (Included in 1201851/-P)
5. Compressor bypass valve and flange (require on applications exceeding 5 psig boost) (**P/N: 8D204-010** included in **4PCX112-030**, can be purchased seperately). Contact the technical department to determine the proper valve selection for the application.
 - **#8D201-010** Race Bypass Valve
 - **#8D004-052** Race Bypass Valve weld-on flange (aluminum)
 - **#8D004-055** Tube, aluminum Ø1.5" x 1" (for welding 8D004-052 to round tube)
 - **#8D103-001** Mondo Race Bypass Valve
 - **#8D003-052** Mondo Race Bypass Valve weld-on flange (aluminum)
 - **#9AT200-090** Tube, aluminum Ø2.0" x specify length (for welding 8D004-052 to round tube)
6. Boost referenced ignition/timing retard systems.
 - **#5A001-009** HI-6 TR Ignition System "CRANE"
 - **#5A001-001** Stand alone ignition retard "MSD" (not an ignition enhancer)
7. Supercharger pulleys: (Contact technical department for proper appication match)
 - Paxton #4MA031-312: 3.12" Diameter 10-rib driven pulley
 - Paxton #4MA031-333: 3.33" Diameter 10-rib driven pulley
 - Paxton #4MA031-347: 3.47" Diameter 10-rib driven pulley
 - Paxton #4MA031-360: 3.60" Diameter 10-rib driven pulley
 - Paxton #4MA031-387: 3.87" Diameter 10-rib driven pulley
 - Paxton #4MA018-041: 6.00" Diameter 10-rib drive (crank) pulley

Items to be supplied by installer/end user:

- Carburetor with mechanical secondaries (4150 Holley/Barry Grant MD style)
- High performance fuel pump (boost referenced)

Optional: Aftermarket blow-through style carburetor bonnet.

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Universal Small Block Mopar Carbureted System

Installation Instructions

PLEASE READ CAREFULLY

This kit should only be installed by qualified mechanics. **It is imperative that the correct air/fuel mixture be maintained at all times. This Kit is to be supplied to competent engine tuners for their completion by the addition of, and tuning of, an appropriate carburetor unit.**

This product is intended for use on healthy, well maintained engines. Installation on a worn-out or damaged engine is not recommended and may result in failure of the engine.

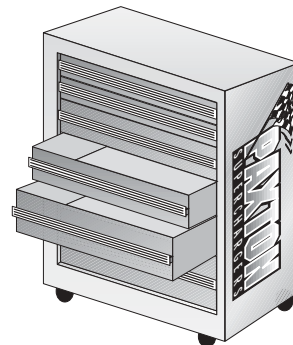
Paxton Automotive is not responsible for engine damage. Installation on new engines will not harm or adversely affect the break-in period so long as factory break-in procedures are followed.

For best performance and continued durability, please take note of the following key points:

1. Use only premium grade fuel 91 octane or higher (R+M/2).
2. The engine must have stock or lower than stock compression ratio.
3. If the engine has been modified in any way, check with Paxton prior to using this product.
4. Always listen for any sign of detonation (pinging) and discontinue hard use (no boost) until problem is resolved.
5. Perform an oil and filter change upon completion of this installation and prior to operating the vehicle. Thereafter, always use a high grade "SF" rated engine oil or a high quality synthetic, and change the oil and filter every 3000 miles.
6. Before beginning installation, replace all spark plugs with one to two step colder heat range and reset timing to no more than 26° total or install a boost retard ignition. (Always follow the procedures indicated in the factory repair manual.)

TOOL & SUPPLY REQUIREMENTS:

- Factory Repair Manual
- 3/8" Drive and Socket Set: SAE and Metric
- 1/2" Drive and Socket Set: SAE and Metric
- Open End Wrenches: SAE and Metric
- Center Punch
- SF Rated Quality Engine Oil
- Loctite Sealer #RC-609
- Oil Filter, and Wrench
- Heavy Grease
- Silicone Sealer
- Teflon Paste Sealant
- TAP, 3/8-18 NPT





Small Block Mopar "Tuner" Kit

318/340/360

Part No. 1201850/-P

PARTS LIST

IMPORTANT: Before beginning installation, verify that all parts are included in the kit. Report any shortages or damaged parts immediately.

<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1016118	S/C ASY, NOVI 1200, CW CURV	1		OPTIONAL EQUIPMENT	
4PCX110-044	BRKT ASY, S/C MNT DDG CRB	1	4MA031-275	S/C PULLEY, 2.75"	1
4PCX010-044	BRKT, S/C MNT DODGE CARB	1	4MA0310295	S/C PULLEY, 2.95"	1
4PCX010-034	BRKT, S/C MNT SUPPT	1	4MA031-312	S/C DRIVE PULLEY 3.12"	1
2A017-102-132	SPACER, 1"OD x .406" x 1.321"	2	4MA031-333	S/C DRIVE PULLEY 3.33"	1
2A017-102-175	SPACER, 1"OD x .406" x 1.755"	3	4MA031-347	S/C DRIVE PULLEY 3.47"	1
2A017-102-427	SPACER, 1"OD x .406" x 4.276"	1	4MA031-360	S/C DRIVE PULLEY 3.60"	1
4PCX017-175	SPACER, .625"OD x .406" x 1.755"	1	4MA031-387	S/C DRIVE PULLEY 3.87"	1
7A375-100	3/8-16 x 1"G5 HXHD PLT	7	5A001-008	HI-6 TR IGN. SYSTEM, CRANE	1
7A375-324	3/8-16 x 3-1/4"HXHD GR5 PLD	1	8M110-020	FUEL LINE ASY, HOLLEY 4150	1
7A375-451	3/8-16 x 4.50"HXHD GR5 ZINC	2	8M110-030	FUEL LINE ASY, DEMON CARB.	1
7A375-527	3/8-16 x 5.25"HXHD GR8	1			
7K375-030	3/8"AN FLAT WASHER SS	15		<i>(INCLUDED IN 1201851/-P)</i>	
7F375-017	3/8-16 NYLOCK NUT	2	4PCX112-030	DISC. ASY, SB. DDG W/CARB. ENCLOSURE	1
4PCX118-011	10-RIB DRIVE ASY, SB DODGE CARB	1	8M205-060	CARB. ENCL. ASY UNIV SAT.	1
2A017-093	SPACER, S/C PULLEY, .093"	1			
2A040-011	PULLEY RETAINER S/C	1			
7K375-040	3/8"AN960 FLAT WASHER PLATED	1			
7U100-071	KEY, 3/16" SQUARE x 1-1/8"LONG	1			
7B375-150	3/8-24 x 1-1/2" GR8 HX	1			
7J012-092	12mm WASHER, FLAT	3			
7G010-175	12mm x 1.75" NUT	1			
7C012-065	M12 x 1.75" x 65mm HX	1			
7C012-020	M12 x 1.75" x 20mm HXHD CL8.8	3			
4FA016-171	DUST COVER (IDLER PULLEY)	1			
4FA011-042	BELT TENS. PLATE, HEAVY DUTY	1			
4PCX017-085	SPACER, S/C TNSR. IDLER PLY	1			
4MA116-160	IDLER ASY, MARINE GEN2	1			
2A041-607	BELT, K100607 GATES 10-RIB	1			
4PCX017-245	SPACER, UNIVS. CRANK PULLEY, 2.45"	1			
4MA018-051	7" CRANK PULLEY, UNIVERSAL	1			
7K312-001	5/16"AN WASHER, PLATED	6			
7A312-375	5/16-18 x 3-3/4"SHCS	6			
1019345	ASY, S/C OIL SUPPLY	1			
7U250-090-320	OIL FEED HOSE, 32" -4 x 90°	1			
7P125-005	1/8"NPT STR, x -4 JIC FTG STL	1			
7P125-004	1/8"NPT x 90° x -4 JIC FTG STL	1			
7P125-034	1/8"NPT x 1/8"NPT STRT T	1			
4FP130-036	OIL DRAIN ASY	1			
7U030-036	1/2" OIL DRAIN HOSE	1.5'			
7R001-008	#8 STNLS HOSE CLAMP	2			
7P375-017	3/8"NPT x 1/2" BEADED HOSE BARB	1			
4PCX112-010	INLET ASY, S.B. DODGE CARB	1			
8H040-030	AIR FILTER 3.5"FLG x 6"L	1			
4FA012-011	INTAKE TUBE, 180° w/o BOSSES	1			
7PS350-200	SLEEVE, BLACK 3.50"ID x 2.0"LG	1			
7R002-056	#56 SAE TYPE "F" SS HOSE CLAMP	3			



Small Block Mopar "Universal" Kit

318/340/360

Part No. 1201851/-P

PARTS LIST

IMPORTANT: Before beginning installation, verify that all parts are included in the kit. Report any shortages or damaged parts immediately.

<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1016118	S/C ASY, NOVI 1200, CW CURV	1		OPTIONAL EQUIPMENT	
4PCX110-044	BRKT ASY, S/C MNT DGD CRB	1	4MA031-275	S/C PULLEY, 2.75" GEN2 MERC	1
4PCX010-044	BRKT, S/C MNT DODGE CARB	1	4MA0310295	S/C PULLEY, 2.95" GEN2 MERC	1
4PCX010-034	BRKT, S/C MNT SUPPT	1	4MA031-312	S/C DRIVE PULLEY 3.12" GEN2 MERC	1
2A017-102-132	SPACER, 1"OD x .406" x 1.321"	2	4MA031-333	S/C DRIVE PULLEY 3.33" GEN2 MERC	1
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7A375-527	3/8-16 x 5.25"HXHD GR8	1			
7K375-030	3/8"AN FLAT WASHER SS	15			
7F375-017	3/8-16 NYLOCK NUT	2			
4PCX118-011	10-RIB DRIVE ASY, SB DODGE CARB	1			
2A017-093	SPACER, S/C PULLEY, .093"	1			
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7G010-175	12mm x 1.75" NUT	1			
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7P125-004	1/8"NPT x 90° x -4 JIC FTG STL	1			
7P125-034	1/8"NPT x 1/8"NPT STRT T	1			
4FP130-036	OIL DRAIN ASY	1			
7U030-036	1/2" OIL DRAIN HOSE	1.5'			
7R001-008	#8 STNLS HOSE CLAMP	2			
7P375-017	3/8"NPT x 1/2" BEADED HOSE BARB	1			
4PCX112-010	INLET ASY, S.B. DODGE CARB	1			
8H040-030	AIR FILTER 3.5"FLG x 6"L	1			
4FA012-011	INTAKE TUBE, 180° w/o BOSSES	1			
7PS350-200	SLEEVE, BLACK 3.50"ID x 2.0"LG	1			
7R002-056	#56 SAE TYPE "F" SS HOSE CLAMP	3			
4PCX112-030	DISC. ASY, SB. DGD W/CARB. ENCLOSURE	1			
7PS350-200	SLEEVE, BLACK, 3.50"ID x 2.0"	1			
4PFX012-031	DISCHARGE TUBE, SBF, '69 351	1			
8D204-010	RACE BYPASS VALVE-BLACK	1			
7R002-056	#56 SAE TYPE "F" SS HOSE CLAMP	3			
7R002-044	#44 SAE TYPE "F" SS HOSE CLAMP	1			
7U030-046	5/32" VACUUM LINE	3			
7PS350-302	ELBOW, BLK-SIL 3.5" - 2.75" w/30	1			
8M003-041	MACHINE, 3.5" FLANGE SATIN	1			
8M205-060	CARB. ENCL. ASY UNIV SAT. G2 LID	1			

Section 1

INTRODUCTION

Congratulations! You have purchased the finest street Supercharger available. The centerpiece of this kit is the highly efficient and reliable Paxton Automotive Corp. NOVI-1200 supercharger. A mechanically driven (by belt) centrifugal blower (supercharger). This kit comes with all of the parts you'll need for a successful installation. The operations required have been grouped in order of sequence. Photos and drawings accompany the text, allowing quick orientation and parts identification.

Installation requires a selection of tools which are listed on *page vi*.

We also suggest that you obtain a shop manual and become familiar with the details of your cars systems.

For best results follow the instructions closely and in sequence. The average installation time for this kit is 6 hours. Your actual installation time will depend on skill level and working conditions. The estimate does not include time for initial vehicle inspection, cleaning, fine tuning or troubleshooting. Before even picking up a wrench, read this entire manual. We are available for technical assistance at (805) 487-3796, 8am-4:30pm pacific time.

After reading the manual, verify that all major assembly groups are present in the main kit box. You should have ample space to layout the components. As you remove a box or bag from the main kit, note the identification label and compare it with the parts list. Please check the box for small parts.

Paxton makes every effort to insure that all parts are included in the box. However, if you discover any missing or mislabeled parts, please contact Paxton by phone for service.

***** WARNING *****

DO NOT attempt installation if any part(s) are missing from this kit. Failure to contact Paxton prior to beginning installation will result in a charge for any missing parts.

Before starting the installation, we suggest your engine compartment be clean. You can clean the engine and compartment with a pressure washer (such as those used at self serve car washes) and a safe-for-aluminum

cleaner/degreaser. Cover the distributor with a plastic bag to prevent water from entering.

***** CAUTION *****

We do not recommend proceeding with the kit installation unless your vehicle is within normal operating parameters.

You are undoubtedly enthusiastic about getting started on your project, but take just a little more time to insure that your safety is not jeopardized. A moment's lack of attention can result in an accident, as can failure to observe certain simple safety precautions. The possibility of an accident will always exist, and the following points should not be considered a comprehensive list of all dangers. Rather, they are intended to make you aware of the risk and to encourage a safety conscious approach to all work you do on your vehicle.

We look forward to hearing from you, particularly if you have any comments or suggestions regarding this manual at:

(805) 487-3796
Paxton Automotive Corporation
1300 Beacon Place
Oxnard, CA 93033
E-mail Address
info@paxtonauto.com.

***** NOTE *****

Throughout these procedures the word "discard" is

- Never rely solely on a jack when working under a vehicle. Always use an approved set of jackstands to support the vehicle and place them under the recommended lift points.
- When jacking a vehicle, make sure it is on a level surface, preferably concrete or asphalt. The transmission should be in “PARK” or “FIRST”, the parking brake engaged and the wheels blocked.
- Never start the car without first verifying that the transmission is in neutral and the parking brake is set.
- Never remove the radiator cap while the engine is hot.
- Always wear eye protection when using power tools such as drills, saws, grinders, etc., or when working under a vehicle.
- Never smoke, use an open flame, or have spark-producing items around gasoline or flammable solvents. Always have a fire extinguisher rated for chemical and electrical fires handy when working on motor vehicles.
- Run engines only in well ventilated areas. Carbon monoxide, gasoline, and solvent vapors are colorless and sometimes odorless. These can asphyxiate or explode without warning.
- Always disconnect at least the negative (-) or ground terminal of the battery when doing any electrical, fuel system, or underdash work.

Paxton Automotive makes every effort to insure that all parts are included in the box, but mistakes do occur. If you discover that you are missing any part, or that a part is damaged in transit, please call Paxton Automotive for service. **DO NOT** attempt installation if any part(s) are missing from this kit. Failure to contact Paxton prior to beginning installation will result in a charge for any missing parts.

We look forward to hearing from you, particularly if you have any comments or suggestions regarding this manual.

Section 2

PREPARATION/REMOVAL

2.1 PREPARATION/REMOVAL

- A. Disconnect the negative lead of all batteries.

*** NOTE ***

Refer to Fig. 2.1-a for the following steps.

- B. Loosen all nuts and bolts that are used to tension the alternator and power steering pump V-belts.
- C. Remove all of the belts from the accessories.
- D. Remove the stock crank pulley.
- E. Remove the alternator stay (adjustment bar) and retain hardware to be reused in a later step.

*** NOTE ***

If you have not changed spark plugs in the last 15,000 miles do so prior to the installation of this kit.

- F. Remove the remaining hardware securing the alternator bracket to the cylinder head. Discard it and the bracket, as they will not be reused.

*** NOTE ***

If you are installing a universal supercharger kit, some of the following instructions may not apply or may require custom fabrication.

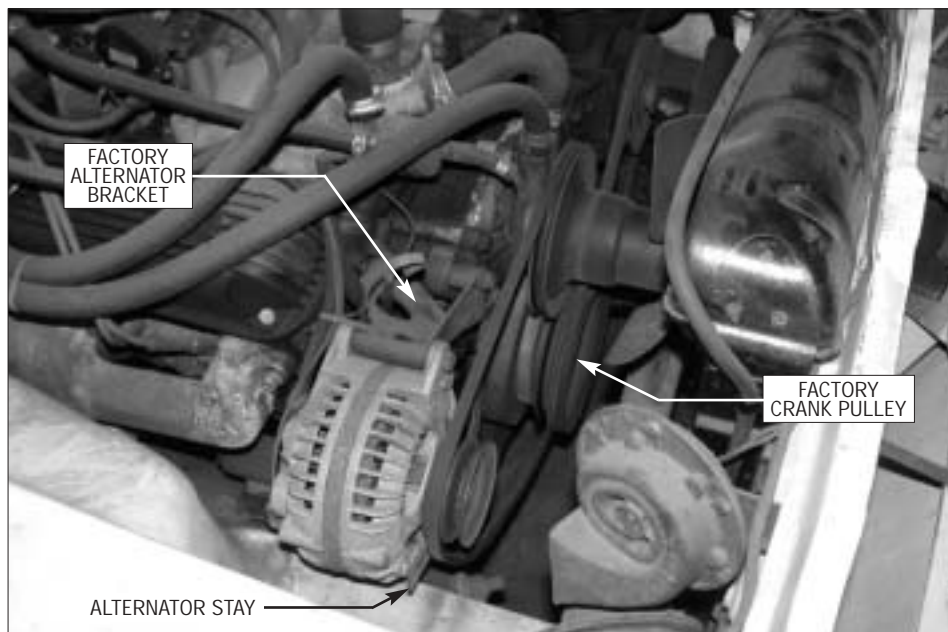


Fig. 2.1-a

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Section 3

OIL FEED INSTALLATION

3.1 OIL FEED INSTALLATION

- A. The supercharger uses engine oil for lubrication and must have an oil feed line connected to a filtered oil access on the engine.
- B. Remove the 1/4"NPT oil pressure sending unit from the engine block (next to the distributor). Install the supplied 1/4"NPT street TEE into the block. Install the oil pressure sender into the end of the TEE. Install the 1/4" x -4 fitting into the branch of the TEE. Position the fitting so that the opening faces the passenger's side/rear of the engine. (See Fig. 3.1-a.)

***** NOTE *****

Use clean engine oil on the pipe threads. Teflon tape and sealant is NOT recommended as it might loosen and cause blockage of the small oil feed orifice resulting in supercharger failure.

- C. Attach the 90° end of the supplied -4 braided oil feed line to the installed fitting. (See Fig. 3.1-a.) Secure the hose with the tie-wraps provided, routing it away from exhaust heat, chafing and/or sharp objects. Temporarily cover the open end from debris until the connection is made to the supercharger.



Fig 3.1-a.

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Section 4

OIL DRAIN INSTALLATION

4.1 OIL DRAIN INSTALLATION

- A. To provide an oil drain for the supercharger, it is necessary to make a hole in the oil pan. Locate and mark the hole location. (See Figs. 4-a.) It is best to punch the hole rather than drill.

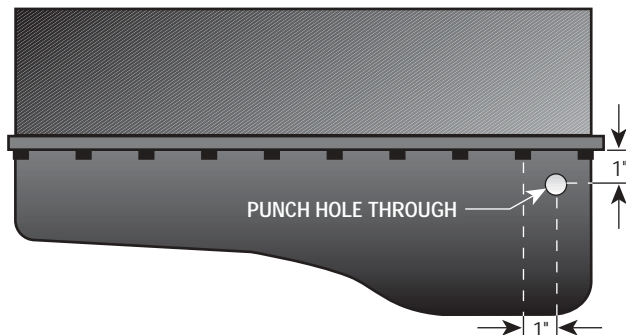


Fig. 4-a
Passenger side oil drain

*** NOTE ***

Removal of the oil pan may ease oil drain fitting installation on some applications.

- B. Remove any paint from around the hole area.
- C. Use a small center punch to perforate the pan and expand the hole, switch to a larger diameter punch and expand the hole further to approximately $\text{Ø}9/16$ ". Most punches are made from hexagon material and may be placed in a socket with an extension to make this procedure easier. Use caution so that the hole is not enlarged too much and that the punch does NOT contact the engine internals.
- D. Tap the hole with a 3/8"NPT tap approximately 1/4" deep. Pack the flutes of the tap with heavy grease to hold the chips. Use a small magnet to check for any stray chips.

*** NOTE ***

This method of rolling over the lip of the hole and tapping works very well if carefully done and should cause no problems.

- E. Thoroughly clean the threaded area. Apply a small amount of silicone sealer to the new threads. Apply more sealer to the supplied 3/8"NPT x 1/2" barb, and secure in the previously threaded hole. Make sure a seal is formed all around the fitting.
- F. Drain the engine oil, install a new filter and refill with fresh oil.

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Section 5

MOUNTING BRACKET/SUPERCHARGER INSTALLATION

5.1 MOUNTING BRACKET/SUPERCHARGER INSTALLATION

- A. It will be necessary to slightly bend the factory oil dipstick for supercharger clearance. (See Fig. 5-1-a.)

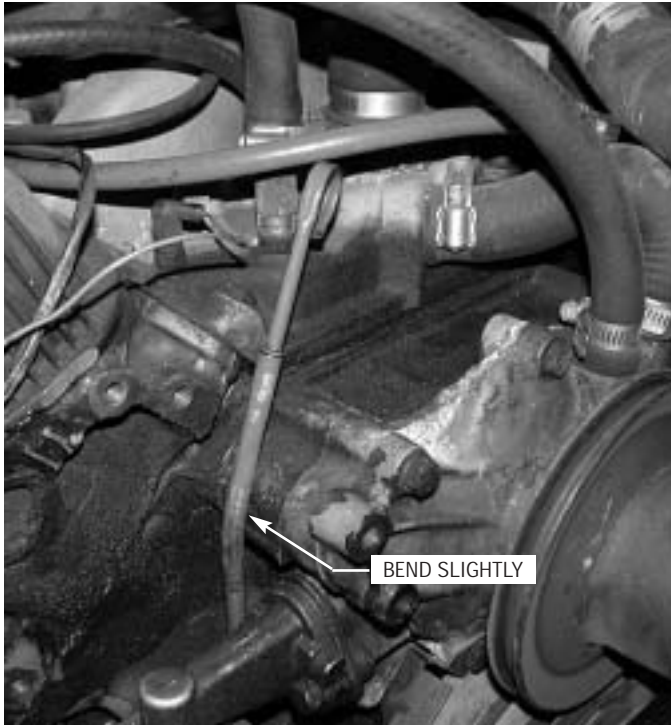


Fig. 5.1-a

- B. Clean the front of the passenger's side cylinder head so that the mounting spacers will sit flat when installed.
- C. Clean the front of the water pump where the alternator bracket was previously attached so the supercharger bracket will mount flat against the mounting surface.

*** NOTE ***

Refer to Fig. 5.1-b for assistance in the next few steps. DO NOT tighten hardware until all fasteners and spacers are installed.

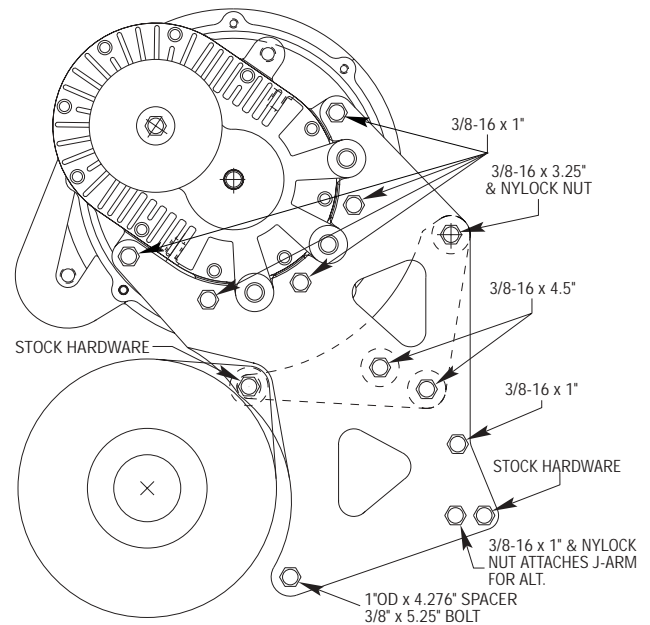


Fig. 5.1-b

- D. Locate the 4PCX110-040 mounting bracket assembly
- E. Install the bolt and washer that previously secured the alternator and alternator bracket through the supercharger bracket and into the water pump. (See Figs. 5.1-b, 5.1-c.)
- F. Install the 1"OD x 4.276" long spacer and secure to the engine block using the 3/8-16 x 5.25 bolt and washer provided. (See Figs. 5.1-b, 5.1-e.)
- G. Attach the factory alternator stay using a 3/8-16 x 1" bolt and nyloc nut. (See Figs. 5.1-b, 5.1-d.)

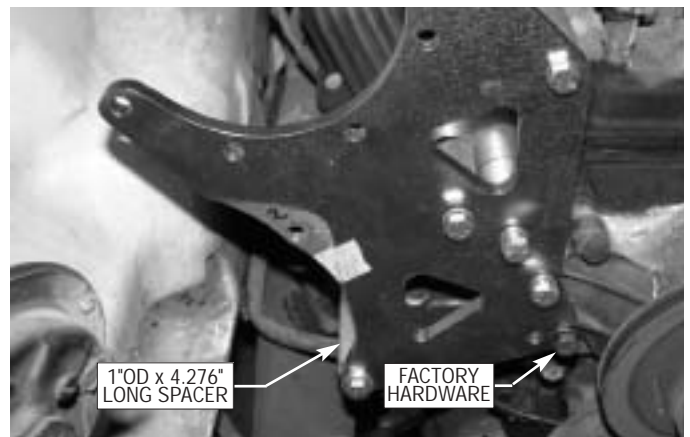


Fig. 5.1-c

- H.** Locate the S/C support bracket and one of the 1"OD x 1.755" long spacers provided. Loosely attach the support bracket to the S/C bracket by placing the provided 3/8-16 x 3.25" bolt and washer through the S/C bracket, spacer and then attaching the support bracket. Secure using the 3/8-16 nyloc nut and washer provided. (See Fig. 5.1-b, 5.1-d.)

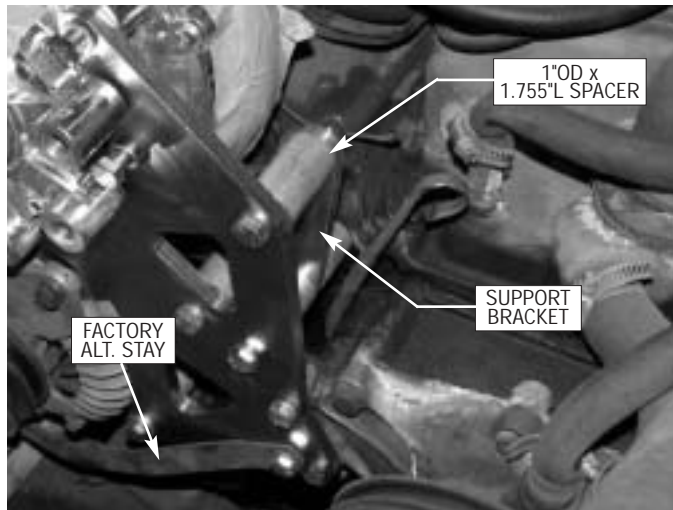


Fig. 5-d

- I** Locate the remaining two 1"OD x 1.755" long spacers and the two 1"OD x 1.321" spacers. Secure these by installing the two 3/8-16 x 4.5" bolts and washers through the S/C bracket, 1.755" long spacers, support bracket, 1.321" spacers and into the cylinder head. (See Figs. 5.1-b, 5.1-e.)

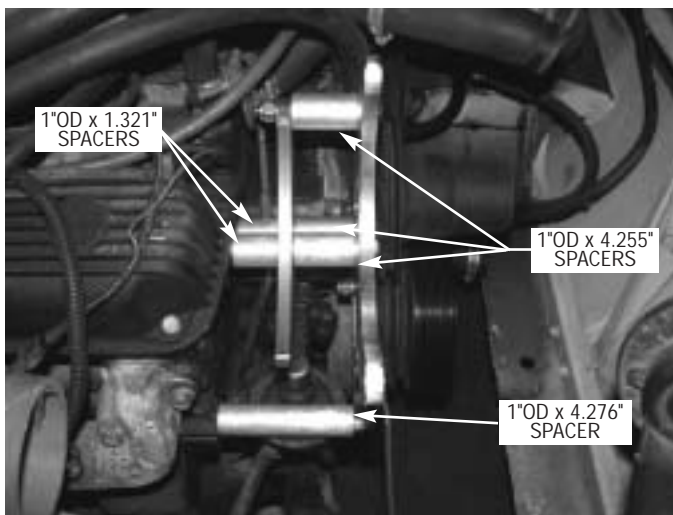


Fig. 5-e

- J** Using the factory alternator hardware and the .625"OD x 1.755" long spacer provided, install the alternator as shown. (See Figs. 5.1-f, 5.1-g.)

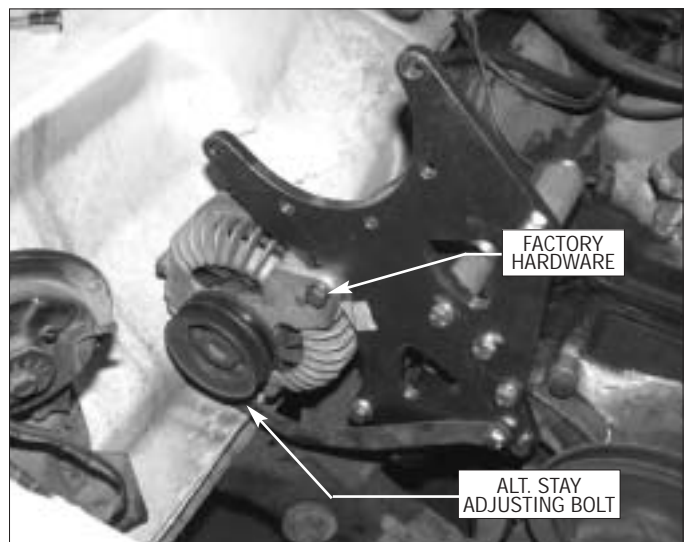


Fig. 5-f

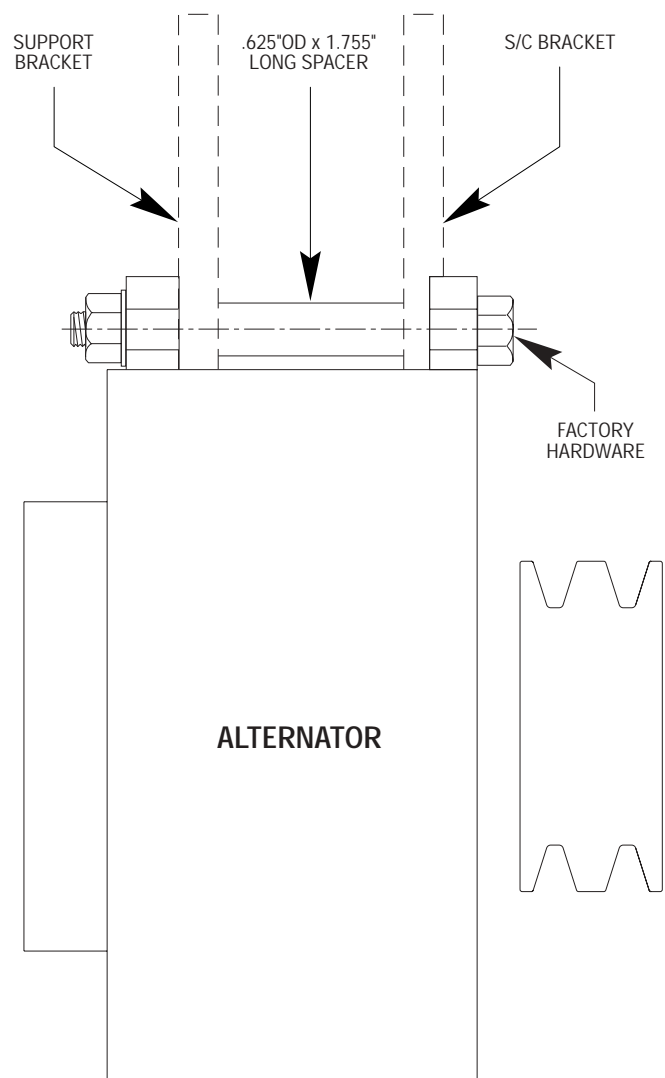


Fig. 5-1-g

- K.** Attach the alternator stay to the alternator using the factory retainer.
- L.** Tighten all hardware installed to this point, making sure that all spacers and brackets are flat against their mounting surfaces. (See Fig. 5.1-e.)

5.2 SUPERCHARGER INSTALLATION

- A.** Attach the oil drain line to the supercharger and secure using one of the #8 hose clamps provided.
- B.** Lower the supercharger onto the mounting plate installed on the engine.
- C.** Loosely start the remaining five 3/8" x 1" bolts through the mounting plate and into the supercharger gear case. Tighten in steps. (See Figs. 5.1-b, 5.2-a.)
- D.** Attach the oil drain line to the fitting previously installed in the oil pan and secure using the supplied #8 hose clamp.

***** NOTE *****

The oil drain hose may need to be trimmed for proper fit. It must maintain a continuous downward direction free of any dips or restrictions.

- E.** Install the 1/8"NPT x -4 x 90° fitting onto the oil feed fitting using oil to lubricate the threads. Attach the oil feed hose to this fitting and tighten. (See Fig. 5.2-a.)



Fig. 5-2-a

***** NOTE *****

Some applications (depending on intake manifold height) may require the relocking of the supercharger volute. If relocking is required for your application, loosen and remove the six 1/4-20 cap screws and retaining plates that hold the compressor housing (volute) to the gearcase. If the compressor housing does not rotate freely relative to the gearcase, DO NOT FORCE IT. SERIOUS SUPERCHARGER DAMAGE MAY OCCUR. The machined mating surfaces are designed to prevent pressurized air from escaping and have minimal tolerances. If the housing will not move or is very tight, contact Paxton Automotive immediately at 888 9-paxton and ask our service department for further assistance.

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Section 6

CRANK PULLEY AND SUPERCHARGER DRIVE PULLEY INSTALLATION

6.1 CRANK PULLEY AND SUPERCHARGER DRIVE PULLEY INSTALLATION

- A. Locate the 4PCX118-011 10-rib assembly.
- B. Assemble the crank pulley assembly as follows. Install six 5/16-18 x 3.75" bolt and washers through the provided 7" 10-rib crank pulley, through the supplied crank pulley spacer, and through the factory crank pulley. Make sure the spacer pilot is seated in the supplied 10-rib pulley. (See Fig. 6.1-a.)

***** NOTE *****

Some supplied crank pulleys may have multiple bolt patterns to fit different applications. Be sure to select the bolt pattern that matches the stock crank pulley.

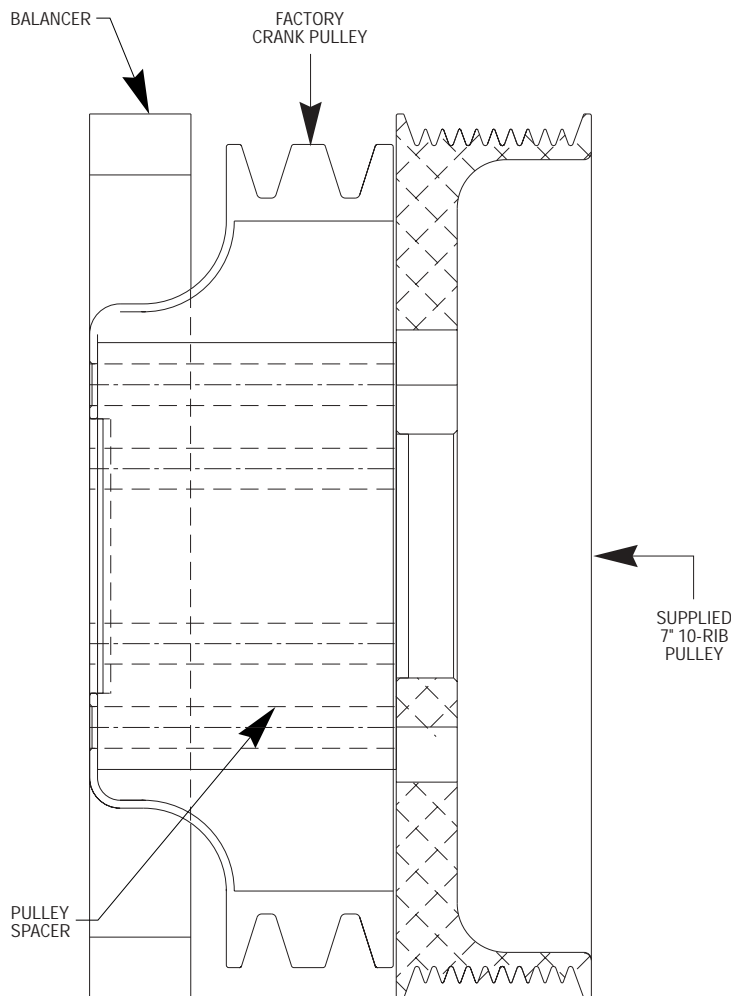


Fig. 6.1-a

- C. Install the crank pulley assembly onto the engine balancer and secure using the previously installed hardware.

***** NOTE *****

Make sure that the pulleys are seated and piloting correctly when secure.

- D. Lightly grease the supercharger drive pulley bore. Install the .093" thick drive pulley spacer onto the supercharger input shaft. Install the supercharger pulley onto the supercharger input shaft and rotate the pulley to align the keyways. Slide the key into the keyway. Install the pulley retainer assembly into the input shaft and hand-tighten.

***** NOTE *****

If the supercharger drive pulley will not slide onto the shaft, DO NOT FORCE IT. Light heating of the supercharger drive pulley with a propane torch will aid in installation.

6.2 BELT TENSIONER INSTALLATION

- A1.** Loosely install the three supplied 12mm bolts through the tensioner plate and into the supercharger cover. Install the idler and spacer onto the front side of the plate in one of the holes provided. (See Fig. 6.2-a.)

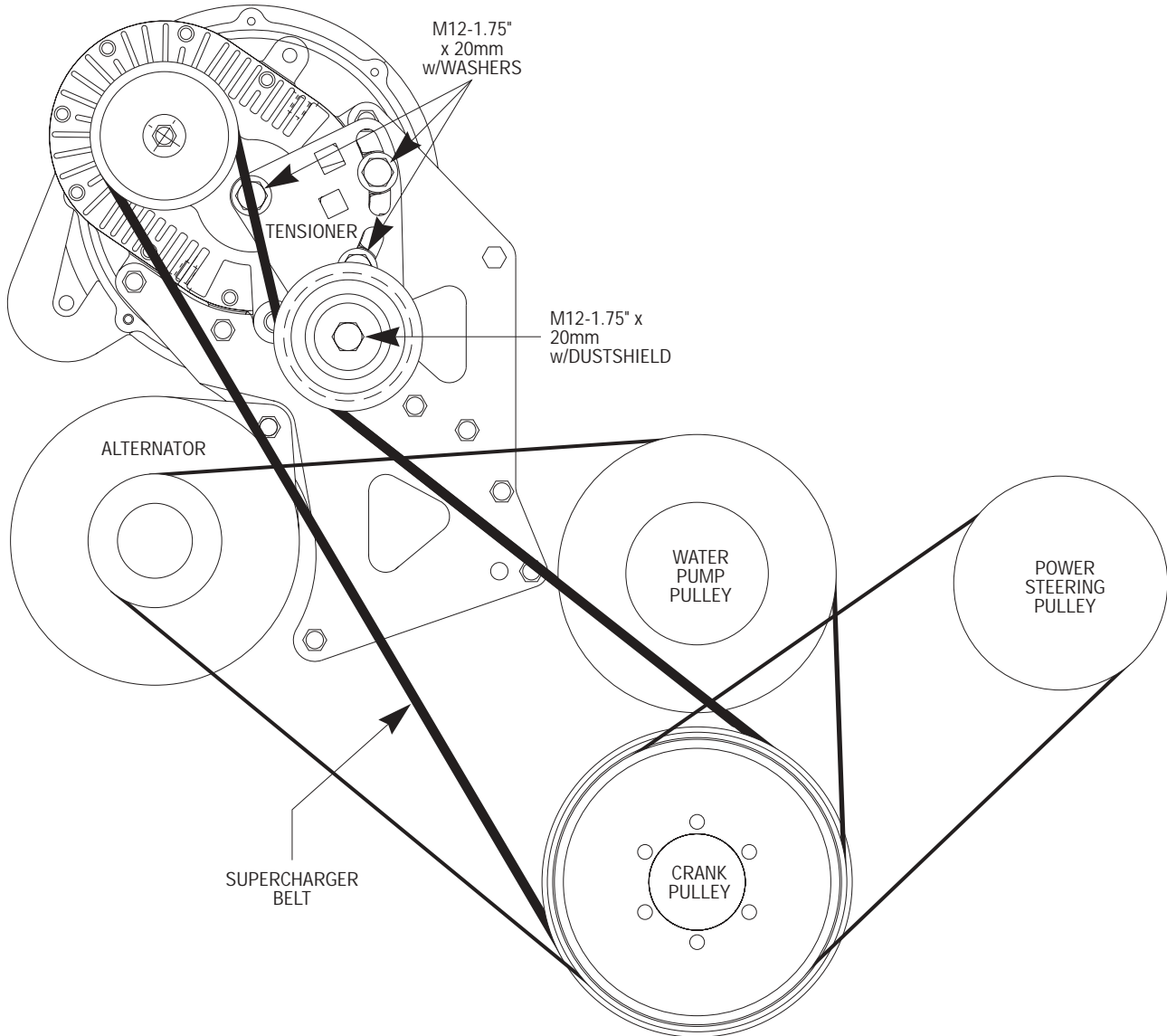


Fig. 6.2-a / Belt Routing With A/C

6.3 BELT INSTALLATION

- A.** Install the power steering, alternator and supercharger drive belts and tension each. (Do not over-tension the supercharger drive belt. Press down firmly on the idler while tightening the three tensioner plate bolts). (See Fig. 6.2-a.)
- B.** Tighten the previously installed supercharger pulley retainer assembly to 30-35 ft/.lbs.

Section 7

AIR INLET DUCTING INSTALLATION

7.1 AIR INLET DUCTING INSTALLATION

- A. Locate the Air Inlet Assembly P/N: 4PCX112-010.
- B. Install the 3.5" x 2" long sleeve onto the supercharger inlet and secure using the #56 hose clamp provided.
- C. Install the 180° molded inlet duct in the sleeve previously installed and secure using the remaining #56 hose clamp.
- D. Secure the supplied filter to the open end of the 180° inlet duct. (See *Fig. 7.1-a.*)



Fig. 7.1-a

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Section 8

CARBURETOR MODIFICATIONS

8.1 CARBURETOR MODIFICATIONS

- A.** If you have purchased a 1201851/-P, a 8M205-060/068 carburetor enclosure assembly was included. Please refer to the instruction manual included with the carburetor enclosure at this time for carburetor installation.
- B.** If you have purchased a 1201850/-P you will need to provide a supercharger discharge to the carburetor. This may be accomplished by using an enclosure or blow-through bonnet of some kind.

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Section 9

DISCHARGE INSTALLATION (OPTION)

9.1 DISCHARGE INSTALLATION (For Use With 8M205-060/068 Carb Enclosure)

- A. Once the carburetor enclosure assembly installation is complete per the instructions included in that assembly, locate the 4PCX112-030/038 discharge assembly.

*** NOTE ***

Refer to Fig. 9-a for the following steps.

- B. Using the supplied 1/4-20 hardware and gasket, attach the 3.5" aluminum flange to the carburetor enclosure lid. (See Fig. 9-a.)
- C. Secure the 3.5" x 2.0" sleeve to the flange using a supplied #56 hose clamp.
- D. Locate the supplied Race By-Pass Valve. Secure the valve to the Ø3.5" tube/w welded flange using the supplied 1/4-20 hardware and gasket. (See Fig. 9-a.)
- E. Install the by-pass valve assembly into the previously installed 3.5" sleeve and secure using a #56 hose clamp provided. The by-pass valve discharge should face the passenger's side of the vehicle. (See Fig. 9-a.)
- F. Connect the 3.5" to 2.75" x 90° molded elbow between the by-pass tube and supercharger discharge and secure using the remaining #56 and #44 hose clamps supplied. (See Fig. 9-a.)
- G. Connect the supplied vacuum line to the vacuum port on the by-pass valve. Locate an engine vacuum source and secure the open end of the previously installed vacuum line.

*** NOTE ***

The vacuum source used should be non-ported intake manifold vacuum.

*** NOTE ***

Some applications (depending on intake manifold height) may require the relocking of the supercharger volute. If relocking is required for your application, loosen and remove the six 1/4-20 cap screws and retaining plates that hold the compressor housing (volute) to the gearcase. If the compressor housing does not rotate freely relative to the gearcase, DO NOT FORCE IT. SERIOUS SUPERCHARGER DAMAGE MAY OCCUR. The machined mating surfaces are designed to prevent pressurized air from escaping and have minimal tolerances. If the housing will not move or is very tight, contact Paxton Automotive immediately at 888 9-paxton and ask our service department for further assistance.

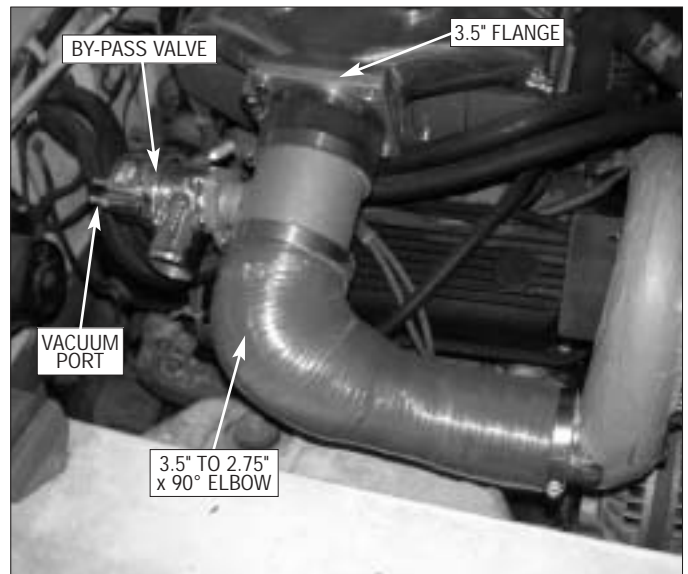


Fig. 9-a

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Section 10

FINAL RE-ASSEMBLY AND CHECK

10.1 FINAL REASSEMBLY AND CHECK

***** WARNING *****

Do not attempt to operate the vehicle until all components are installed and all operations are completed including final check.

- A.** Reconnect the battery.
- B.** If your vehicle has gone over 15,000 miles since its last spark plug change, you will need to change the spark plugs now before test driving the vehicle.
- C.** Check all fittings, nuts, bolts and clamps for tightness. Pay particular attention to oil and fuel lines around moving parts, sharp edges and exhaust system parts. Make sure all wires and lines are properly secured with clamps or tie wraps.
- D.** Check all fluid levels, making sure that your tank(s) is filled with 91 octane or higher fuel before commencing test drive.
- E.** Start engine and allow to idle a few minutes, then shut off.
- F.** Recheck to be sure that no hoses, wires, etc. are near exhaust headers or moving parts and for signs of any fluid leakage. Re-jet the carburetor as required. Install a boost referenced high-performance mechanical fuel pump or high performance electric fuel pump with boost referenced fuel regulator. Use a wide band O₂ sensor to verify a proper air/fuel ratio (*Vortech suggests 11.0:1 for 91 octane pump fuel.*) Check ignition timing to make sure it is properly set before commencing test drive.
- G. PLEASE TAKE SPECIAL NOTE:**

Operating the vehicle without all sub assemblies completely and properly installed and working may cause FAILURE OF MAJOR ENGINE COMPONENTS.
- H.** Keep in mind that this manual does not address air/fuel or ignition timing considerations. (See *Page iv.*)
- I.** Test drive the vehicle.
- J.** Read the Street Supercharger System Owner's Manual and RETURN THE Warranty REGISTRATION FORM within thirty (30) days of purchasing your supercharger system to qualify.



Fig. 10-a



1300 Beacon Place • Oxnard, CA 93033-9901 • (805) 604-1336
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