



Owners Installation Manual for the

PAXTON NOVI 1220 Supercharger for the

1986-1993 5.0L Mustang

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DP/N: 4809631 - v2.0 07/25/07

FOREWORD

his manual provides information on the installation, maintenance and service of the Paxton supercharger kit expressly designed for this vehicle. All information, illustrations and specifications contained herein are based on the latest product information available at the time of this publication. Changes to the manual may be made at any time without notice. Contact Paxton Automotive for any additional information regarding this kit and any of these modifications at (805) 888-PAXTON 8:00am-4:30pm PST.



Take note of the following before proceeding:

- 1. Proper installation of this supercharger kit 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 contact your dealer or Paxton Automotive for possible installers in your area.
- **2.** This product was designed for use on stock (un-modified, OEM) vehicles. The PCM (computer), engine, transmission, drive axle ratios and tire O.D. must be stock. If the vehicle or engine has been modified in any way, check with Paxton prior to installation and use of this product.
- **3.** Use only premium grade fuel with a minimum of 91 octane (R+M/2).
- **4.** Always listen for any sign of detonation (*knocking/pinging*) and discontinue hard use (*no boost*) until the problem is resolved.
- **5.** Paxton is not responsible for any clutch, transmission, drive-line or engine damage.

Exclusions from Paxton warranty coverage considerations include, but not limited to:

- 1. Neglect, abuse, lack of maintenance, abnormal operation or improper installation.
- **2.** Continued operation with an impaired vehicle or sub-system.
- **3.** The combined use of Paxton components with other modifications such as, but not limited to, exhaust headers, aftermarket camshafts, nitrous oxide, third party PCM programming or other such changes.

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NOTICE

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This Paxton 5.0 supercharger kit was designed for installation and use on Mass Air Flow (*MAF*) equipped vehicles. The model years include 1988 California and all 1989-1993 models. All other years not equipped with MAF systems (*factory or aftermarket*) require the installation of a MAP sensor) check valve assembly (*Paxton part number 4FD113-010*). This allows proper function of early (*1986-1988*) models equipped with speed density processors.

1986 - 1993 FORD 5.0L MUSTANG Installation Instructions

Congratulations on selecting the best performing and best backed automotive supercharger available today... the PAXTON® supercharger!

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

Before beginning this installation, please read through this entire instruction booklet and the Street Supercharger System Owner's Manual which includes the Limited Warranty Program, the Warranty Registration form and return envelope.

Paxton supercharger systems are performance improving devices. In most cases, increases in torque of 30-35% and horsepower between 35-45% can be expected with the boost levels specified by Paxton Automotive. 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 as well as the supercharger. Paxton Automotive is not responsible for engine damage.

Installation on new vehicles 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 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 the problem is resolved.
- **5.** Perform an oil and filter change upon completion of this installation and prior to test driving your vehicle. Thereafter, always use a high grade SF rated engine oil or a high quality synthetic, and change the oil and filter at least every 3,000 miles. Never attempt to extend the oil change interval beyond 3,000 miles, regardless of oil manufacturer's claims as potential damage to the supercharger may result.
- 6. Before beginning installation, replace all spark plugs that are older than one year or 15,000 miles with original heat range plugs as specified by the manufacturer and reset timing to factory specifications (follow the procedures indicated within the factory repair manual and/or as indicated on the factory underhood emissions tag). Do not use platinum spark plugs unless they are original equipment. Change spark plugs every 20,000 miles.

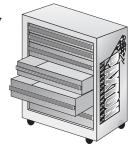
TOOL & SUPPLY REQUIREMENTS

- Factory repair manual
- Timing light
- 3/8" socket and drive set: SAE & metric
- 1/2" socket and drive set: SAE & metric
- 1/2" breaker bar and 4" extension
- 1/8" NPT tap, 3/8" NPT tap, 3/8-16 tap & handle
- Adjustable wrench
- Open end wrenches: 3/8", 7/16", 1/2", 9/16" "Slimline" 19mm - Snap-On #LTAM1719
- Center punch and a 5/8" tapered punch
- Ford springlock 3/8" fuel fitting disconnect tool
- 5 quarts SF rated quality engine oil, oil filter and wrench

If it has been 10,000 miles or more since your vehicle's last spark plug change,

- Spark plug socket
- NEW spark plugs

- Large screwdriver or pry bar
- Flat #2 screwdriver
- Phillips #2 screwdriver
- Heavy grease
- Silicone sealer
- Drill motor
- 3/32", "R" or 5/16", 7/16" drill bits





1986-1993 Mustang Part No. 1001831

PARTS LIST

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

| PART NO. | DESCRIPTION | QTY | PART NUMBER | DESCRIPTION | QTY. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 1016142 4FA111-042 7J012-092 4FA011-032 7C012-065 4FA016-170 2A017-011 7C012-020 7G010-175 4PFA112-010 7PS350-200 4FA012-012 4PFA013-012 7J006-093 7P375-097 7S300-100 7E010-046 8H040-010 7R002-056 7R002-052 7U035-000 4PFA112-020 | NOVI 1220 SUPERCHARGER ASY SUPERCHARGER BELT TENSIONER ASY 12mm FLAT WASHERS BELT TENSIONER PLATE 12mm-1.75 x 65mm BOLT SMOOTH PULLEY TENSIONER IDLER PULLEY SPACER 12mm-1.75 x 20mm BOLTS 12mm-1.75 NUT AIR INTAKE ASY 3-1/2" x 2" SLEEVE 90° INTAKE ELBOW AIR CLEANER COVER 6mm WASHERS 3/8"NPT x 3/8" BARB 3" x 1" SLEEVE #8 x 3/4" SHEET METAL SCREWS AIR FILTER #56 HOSE CLAMPS 3-1/2" x 12" FLEX HOSE AIR DISCHARGE ASY | 1 1 3 1 1 1 1 3 1 1 1 1 1 2 1 1 2 1 1 2 1 | 4FA110-011 4FA010-011 7A375-100 7J375-044 7F375-016 7A500-350 7F500-013 7J012-092 4FA114-023 4FA014-011 7R002-024 4FA011-021 4FA010-034 4FA015-015 4FA017-021 7A375-625 7A375-700 7A437-175 7A375-650 7A375-075 | SPRING TENSIONER MOUNTING ASY TENSIONER MOUNTING BRACKET 3/8-16 x 1" BOLTS 3/8'SAE WASHERS 3/8-16 NUT 1/2-13 x 3-1/2" CARRIAGE BOLT 1/2-13 NUT 12mm FLAT WASHER RADIATOR HOSE ASY RADIATOR PIPE #24 HOSE CLAMPS MOUNTING BRACKET ASY MOUNTING BRACKET ASY MOUNTING PLATE ALTERNATOR STAY SMOG PUMP SPACER 3/8-16 x 6-1/4" BOLT 3/8-16 x 1-3/4" BOLT 3/8-16 x 2" BOLT 3/8-16 x 2" BOLT 3/8-16 x 2" BOLT 3/8-16 x 3/4" BOLT 3/8-16 x 3/4" BOLT | 1 1 2 3 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 |
| 4FA012-020 7PS275-200 7PS300-200 7R002-044 7R002-048 4FA139-096 | DISCHARGE TUBE 2-3/4" x 2" SLEEVE 3" x 2" SLEEVE 444 HOSE CLAMPS #48 HOSE CLAMPS PCV BYPASS KIT | 1 1 1 2 2 | 7F375-016 7A375-100 7K375-040 7J375-044 7J012-092 4FA130-026 | 3/8-16 NUTS 3/8-16 X 1" BOLTS 3/8"AN960 FLAT WASHERS 3/8"SAE WASHERS 12mm FLAT WASHER OIL FEED ASY | 1 2 7 5 10 1 |
| 8H040-020 7U375-052 7U030-056 4PF238-068 1211808 4FA145-010 4FA145-020 7U030-046 7E010-046 7U100-055 4FA130-036 7R001-008 7P375-017 7U030-036 4FA114-023 4FA014-011 7R002-024 70000 | 3/8" INLINE FILTER 3/8" VACUUM CAP 3/8" x 22" FUEL HOSE FMU (WITH LINES) 12:1 BLACK FUEL MANAGEMENT UNIT MALE FUEL LINE ASY FEMALE FUEL LINE ASY 5/32" x 54" VACUUM LINE #8 x 3/4" SHEET METAL SCREWS 6" NYLON TIE-WRAPS OIL DRAIN ASY #8 STAINLESS HOSE CLAMPS 3/8"NPT x 1/2" STRAIGHT HOSE BARB 1/2" x 28" OIL DRAIN HOSE RADIATOR HOSE ASY RADIATOR PIPE-POLISHED #24 SAE TYPE "F" SS HOSE CLAMP INSPECTOR NUMBER | 1 1 1 1 1 1 1 1 2 2 2 1 1 1 1 1 2 2 1 1 | 4FA130-026 7P525-067 7P250-066 7P125-027 7P125-103 7U030-026 7P250-121 7P250-122 7P250-075 7P250-082 4PFA116-041 2A048-550 4FA018-021 70000 7A375-178 7J375-044 7L375-075 | JOIL FEED ASY .500" CRIMP FERRULES #4 SWIVEL x 1/4" HOSE BARB FITTING 1/8"NPT STRAIGHT FITTING 1/8"NPT x -4 x 45" MALE ELBOW 1/4" x 25" OIL FEED HOSE 3" NIPPLE 1/4" TEE 45° ELBOW 90° FLARE CRANK PULLEY ASY BELT, KO8050-GATES 6.0/6.87" 8-GV CRANK PULLEY INSPECTOR NUMBER 3/8-16 x 1-3/4 HXHD G8 3/8"SAE WASHER, PLTD 3/8" LOCK WASHER | 1 2 2 1 1 1 1 1 1 1 1 1 0 4 4 |



1986-1993 Mustang Part No. 1001831SL

PARTS LIST

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

| PART NO. | DESCRIPTION | QTY | PART NUMBER | DESCRIPTION | QTY. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| 1016160 4FA111-042 7J012-092 4FA011-032 7C012-065 4FA016-170 2A017-011 7C012-020 7G010-175 | NOVI 1220 SUPERCHARGER ASY SUPERCHARGER BELT TENSIONER ASY 12mm FLAT WASHERS BELT TENSIONER PLATE 12mm-1.75 x 65mm BOLT SMOOTH PULLEY TENSIONER IDLER PULLEY SPACER 12mm-1.75 x 20mm BOLTS 12mm-1.75 NUT | 1 1 3 1 1 1 1 3 1 | 4FA110-011 4FA010-011 7A375-100 7J375-044 7F375-016 7A500-350 7F500-013 7J012-092 4FA114-023 4FA014-011 | SPRING TENSIONER MOUNTING ASY TENSIONER MOUNTING BRACKET 3/8-16 x 1" BOLTS 3/8"SAE WASHERS 3/8-16 NUT 1/2-13 x 3-1/2" CARRIAGE BOLT 1/2-13 NUT 12mm FLAT WASHER RADIATOR HOSE ASY RADIATOR PIPE | 1 1 2 3 1 1 1 1 |
| 4PFA112-010 7PS350-200 4FA012-012 4PFA013-012 7J006-093 7P375-097 7S300-100 7E010-046 8H040-010 7R002-056 7R002-056 7R002-052 7U035-000 4PFA112-020 | AIR INTAKE ASY 3-1/2" x 2" SLEEVE 90° INTAKE ELBOW 2 AIR CLEANER COVER 6mm WASHERS 3/8"NPT x 3/8" BARB 3" x 1" SLEEVE #8 x 3/4" SHEET METAL SCREWS AIR FILTER #56 HOSE CLAMPS #52 HOSE CLAMPS 3-1/2" x 12" FLEX HOSE AIR DISCHARGE ASY | 1 1 1 1 2 1 1 2 1 2 1 2 1 2 | 1 7R002-024 1 4FA111-021 1 4FA011-021 2 4FA010-034 4FA015-015 1 4FA017-021 2 7A375-625 2 7A375-700 1 7A437-175 2 7A375-175 2 7A375-175 | #24 HOSE CLAMPS MOUNTING BRACKET ASY MOUNTING BRACKET MOUNTING PLATE ALTERNATOR STAY SMOG PUMP SPACER 3/8-16 x 6-1/4" BOLTS 3/8-16 x 1-3/4" BOLT 3/8-16 x 6-1/2" BOLT 3/8-16 x 2" BOLT 3/8-16 x 2" BOLT 3/8-16 x 3/4" BOLT | 1 1 1 1 1 2 1 1 1 1 |
| 4FA012-020 7PS275-200 7PS300-200 7R002-044 7R002-048 | DISCHARGE TUBE 2-3/4" x 2" SLEEVE 3" x 2" SLEEVE #44 HOSE CLAMPS #48 HOSE CLAMPS | 1 1 1 2 2 | 7F375-016 7A375-100 7K375-040 7J375-044 7J012-092 | 3/8-16 NUTS 3/8-16 x 1" BOLTS 3/8"AN960 FLAT WASHERS 3/8"SAE WASHERS 12mm FLAT WASHER | 1 2 7 5 10 1 |
| 4FA139-096 8H040-020 7U375-052 7U030-056 4PF238-068 1211808 4FA145-010 4FA145-020 7U030-046 7E010-046 7U100-055 | PCV BYPASS KIT 3/8" INLINE FILTER 3/8" VACUUM CAP 3/8" x 22" FUEL HOSE FMU (WITH LINES) 12:1 BLACK FUEL MANAGEMENT UNIT MALE FUEL LINE ASY FEMALE FUEL LINE ASY 5/32" x 54" VACUUM LINE #8 x 3/4" SHEET METAL SCREWS 6" NYLON TIE-WRAPS | 1 1 1 1 1 1 1 1 1 2 2 | 4PFA116-041 2A048-550 4FA018-021 70000 7A375-178 7J375-044 7L375-075 009030 | CRANK PULLEY ASY BELT, K080550-GATES 6.0/6.87" 8-GV CRANK PULLEY INSPECTOR NUMBER 3/8-16 x 1-3/4 HXHD G8 3/8"SAE WASHER, PLTD 3/8" LOCK WASHER 3-PAK, S/C LUBE | 1 1 1 0 4 4 4 1 |
| 4FA114-023 4FA014-011 7R002-024 70000 | RADIATOR HOSE ASY RADIATOR PIPE-POLISHED #24 SAE TYPE "F" SS HOSE CLAMP INSPECTOR NUMBER | 1 1 2 0 | | | |

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Section 1 PREPARATION/REMOVAL

1.0 DISASSEMBLY

- **A.** Disconnect the battery negative cable.
- **B.** Remove the accessory drive belt.
- **C.** Remove the radiator fan assembly and carefully place it in the fan shroud, out of the way.
- **D.** Remove all components that lead to the throttle body including air filter assembly, rubber bellows, mass air flow (*MAF*) sensor and bracket with rubber mounts and resonator from inner fender. Separate the MAF sensor from the mounting bracket and set aside.
- E. The ground wire attached to the radiator support must be rerouted so as to pass through the hole behind the right headlight and secured from the front. Make sure to clean away any paint that would insulate the end of the ground wire from the grounding point on the vehicle.
- **F.** Drain approximately one gallon of coolant. Remove upper radiator hose and set aside.
- **G.** Remove the crankcase vent tube from between oil filter and throttle body.
- **H.** Remove belt tensioner assembly.
- **I.** Unplug wire connections and remove alternator assembly (*make sure the battery is disconnected*).
- **J.** Remove brace from between the smog pump and front engine cover.
- **K.** Disconnect hoses and remove smog pump and cast mounting bracket.
- **L.** Relocate the evaporative canister forward (at a slight angle) by using only the front bolt in the bracket's rear hole. (See Fig. 1.0-a.)

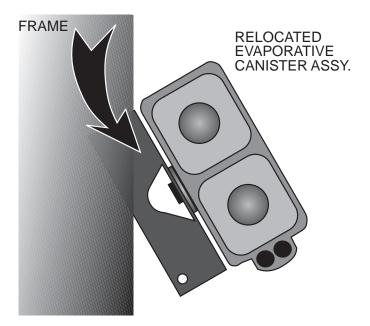


Fig. 1.0-a

Section 2 CRANKSHAFT PULLEY

2.0 CRANKSHAFT PULLEY REMOVAL

- **A.** Remove crankshaft pulley.
- **B.** Remove the factory crank pulley and replace with the new high-output crank pulley. Secure with the supplied bolts and washers.

*** **NOTE** *** Tighten bolts progressively and evenly in a crisscross pattern so that pulleys align properly.

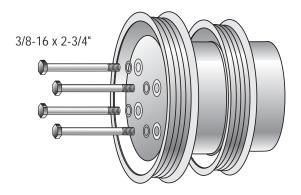


Fig. 2.0-a

Section 3

OIL DRAIN

(Engine Oil Fed Kits Only, NOVI SL Kits Skip to Section 5)

3.0 ADDING OIL DRAIN

- **A.** To provide an oil drain for the supercharger, it is necessary to make a hole in the oil pan. Locate and mark hole per diagram. It is best to punch the hole rather than drill.
- **B.** Remove paint from around the hole area.
- C. Use a small center punch to perforate the pan and expand hole. Switch to a larger diameter punch and expand the hole further to approximately 9/16" diameter. Most punches are made from hexagon material and may be placed in a socket with an extension to make this procedure easier.
- **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 chips. Use a small magnet to check for any stray chips.

*** NOTE ***

This method of rolling over the lip of the hole and tapping it 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 3/8"NPT hose fitting and secure in the hole. Make sure a seal is formed all around the fitting.
- **F.** Drain the engine oil and change the filter.

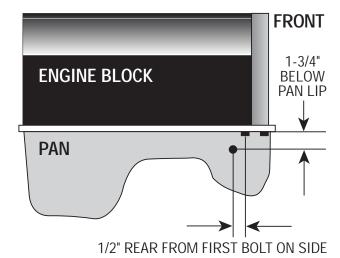


Fig. 3.0-a

Section 4

OIL FEED LINE

(Engine Oil Fed Kits Only, NOVI SL Kits Skip to Section 5)

4.0 OIL FEED LINE ASSEMBLY

- **A.** Remove the oil pressure sender and mounting boss fitting from the engine. These are found on the engine's left side just ahead of the oil filter.
- **B.** Thread the supplied 3" x 1/4"NPT nipple into the block using engine oil on the threads. Pipe tape, paste or other sealant is *not* recommended as it might loosen and cause blockage of the oil feed orifice, resulting in supercharger failure.
- C. Thread the supplied 1/4" female TEE into the nipple. Rotate the TEE so that the center leg points toward the front of the vehicle. Thread the 45° elbow into the leg of the TEE and pointing toward the side of the vehicle.
- **D.** Install the factory sending unit into the 45° elbow.
- **E.** Thread the supplied flared fitting into the remaining leg of the TEE.
- **F.** Connect the red oil feed line to the fitting at the pressure sender and route it behind the A/C mounting plate to the supercharger location. Cover the end of the hose with a clean plastic bag. Connect the line to the supercharger with the flared fitting provided.

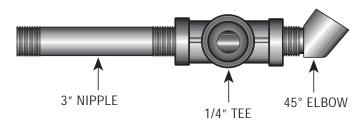
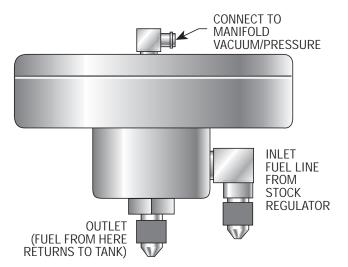


Fig. 4.0-a

Section 5 FUEL MANAGEMENT UNIT

5.0 FUEL MANAGEMENT UNIT INSTALLATION

- **A.** Relocate the relay using the stock screw.
- **B.** Locate the fuel management unit against the inner fender panel ahead of the shock tower about an inch from the top. Drill holes and secure with the sheet metal screws provided. (See *Fig. 5.0-a.*)
- C. Disconnect the fuel rail return line at the rubber hose on the engine's lower right side with a 3/8" spring lock disconnect tool. The return line does not have the pressure test fitting on it.



SHOCK TOWER

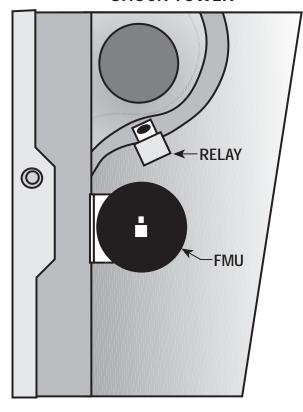


Fig. 5.0-a

D. Connect the Fuel Management Unit (FMU) input hose (the hose that goes to the 90° fitting on the side of the FMU) to the return line coming from the fuel rail regulator as shown. (See Fig. 5.0-b.)

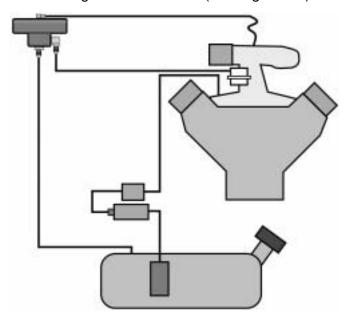


Fig. 5.0-b

- **E.** Connect the unit's return hose (*that connects to the center fitting*) to the stock return hose.
- **F.** Secure the fuel lines away from the exhaust header with the tie-wraps provided.
- **G.** Connect the top fitting on the FMU to the multi-branch fitting located on the driver's side firewall using the supplied 5/32" hose. Use the port with the "B/R" designation. (See *Fig. 5.0-c.*)

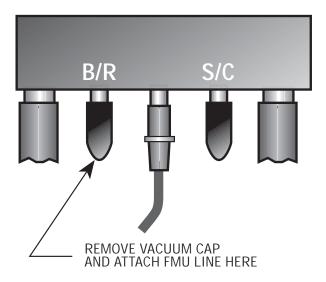


Fig. 5.0-c

Section 6 MAIN BRACKET ASSEMBLY

6.0 MAIN BRACKET ASSEMBLY

Assemble the main bracket, plate and other parts necessary to relocate the alternator and smog pump and make room for the supercharger. For 1992 and later vehicles, please review points "A" through "H" before starting.

- **A.** Measure the length of the pivot boss on the alternator and record. It should be very close to 3".
- **B.** In a similar manner, measure the boss on the smog pump. When combined with the .920" spacer, it should be 4.050". Record these measurements so that in the event of a belt alignment problem, Paxton can properly advise you.
- C. Place the smog pump and alternator on the large aluminum mounting bracket as shown. After making sure the 6-1/4" bolts have washers on them, enter the cast mounting bracket from the rear (*coming towards you*). Place the .920" tube spacer over the bolt on the smog pump. Lower supercharger mounting plate over bolts. The idea is to sandwich the alternator and smog pump between the mounting bracket and plate. Place washers and nuts on the 6-1/4" bolts and finger tighten. For vehicles equipped with alternators having larger 7/16" pivot bolts, it will be necessary to enlarge the corresponding hole in the plate.
- **D.** Start the 3/8-16 x 1" fastener with a washer at the top of the bracket and finger tighten. Insert the 6-1/2" and 7" bolts. These bolts will later hold the assembly to engine.

*** **NOTE** ***
Remember to place the .920" spacer between the smog pump and mounting plate.

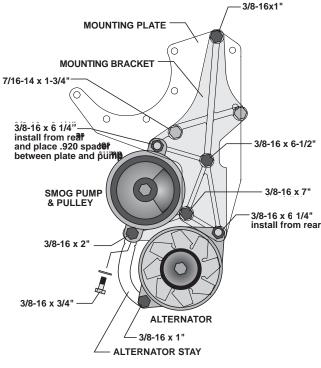


Fig. 6.0-a

- **E.** Attach the Paxton alternator brace between the boss on the smog pump and alternator with the 3/8-16 x 1" bolts. On 1992 and later Mustangs, it may be necessary to drill and tap the "blanked" hole in the smog pump. To accomplish this use an "R" size bit and a 3/8-16 size tap.
- **F.** Tighten all fasteners in the bracket/accessory assembly.
- **G.** Lower the entire assembly into position and start all four fasteners that hold it to the engine. Tighten all fasteners in a progressive manner.
- **H.** Reconnect alternator wires and use a tie-wrap to secure the wires.

Section 7 SMOG PUMP HOSE ASSEMBLY

7.0 SMOG PUMP HOSES

- **A.** Separate the short hose and bent hose from the air control valve and place the shorter hose on the diverter valve (*the valve closest to the firewall*) as shown.
- **B.** Connect the air control valve to the short hose.
- **C.** Trim approximately 1-1/2", or as necessary, off the longer straight portion of the bent hose for proper fit.
- **D.** Secure the hose as shown with the stock clamps.
- **E.** It may be necessary to reroute the vacuum control line after the supercharger is in place.

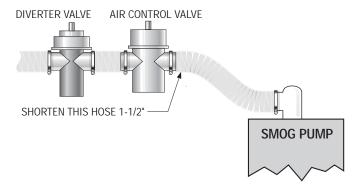


Fig. 7.0-a

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Section 8 RADIATOR HOSE ASSEMBLY

80 RADIATOR HOSE

- **A.** From the stock radiator hose, make two 90° elbows by trimming as shown. The first is with 3" long legs for the thermostat housing end. The second, with 2" long legs, is from the middle of the stock hose and attaches to the radiator.
- **B.** Place the stainless water pipe between the two hoses placing the shorter leg nearer the radiator.
- **C.** Position the hoses and tube so there is ample overlap for sealing, then secure with provided clamps.
- **D.** Refill radiator and coolant bottle.

*** NOTE ***

Make sure the cooling system is completely full. Air is often trapped in 5.0 systems.

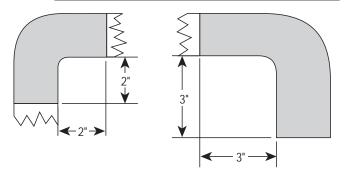


Fig. 8.0-a

Section 9 ACCESSORY BELT TENSIONER

9.0 ACCESSORY BELT TENSIONER MOUNTING BRACKET

- **A.** Secure the factory spring tensioner assembly to the Paxton belt tensioner mounting bracket using the 1/2" carriage bolt.
- **B.** Replace the locking type nut on the A/C mounting bracket stud closest to the water pump with a standard nut.
- **C.** Depending on Ford's manufacturing tolerances, it may be necessary to trim about 1/8" off the edge of the flange on the A/C mounting bracket to provide room for the tensioner mounting bracket.
- **D.** Install the tensioner mounting bracket with tensioner between the supercharger mounting plate and A/C bracket stud using two standard flat washers as a spacer. Secure with two 3/8-16 x 1" bolts and washers and a 3/8-16 nut.
- **E.** Reinstall radiator shroud and fan assembly.
- **F.** Reinstall stock accessory belt.

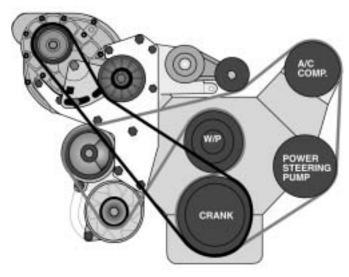


Fig. 9-a

*** NOTE ***

Check the accessory belt tensioner pulley alignment. It may be necessary to add or remove a washer to the stud behind the tensioner bracket.

Section 10 SUPERCHARGER MOUNTING

10. SUPERCHARGER MOUNTING

- *A. Place the oil drain hose onto the supercharger drain fitting and secure with a hose clamp. Arrange the clamp screw housing so it will not interfere with the mounting plate when installed.
- *B. Feed the oil drain hose over the top of the smog pump and down towards the oil pan fitting while lowering the supercharger into position.
 - **C.** Secure the supercharger with five 3/8-16 x 1" bolts and AN washers.
- * **D.** Connect the lower end of the oil drain hose to the fitting on the pan and secure with a hose clamp.
- **E. Secure the remote drain hose away from the belt and other hoses using tie-wraps.
 - * Engine oil fed units only
 - ** SL kits only

Section 11 SUPERCHARGER DRIVE BELT

11.0 SUPERCHARGER DRIVE BELT

- **A.** Place the supercharger belt idler assembly on the supercharger using the 12mm bolts and washers. Position the thin head bolt nearest pulley.
- **B.** Fit the supercharger drive belt over the new crank pulley and supercharger pulley.
- **C.** Tension the belt by rotating the tensioner plate and secure.

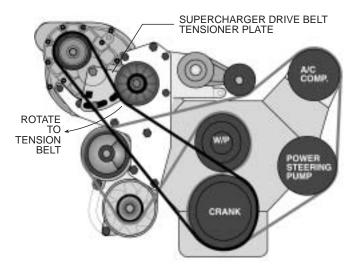


Fig. 11.0-a

Section 12 AIR FILTER ASSEMBLY

12.0 AIR FILTER ASSEMBLY

- A. Place the Paxton air filter cover against the inner fender just behind the right headlight. Use it as a template to mark and drill two 3/32" holes. Do not install the cover at this time.
- **B.** Insert the mass air flow (*MAF*) sensor into the back of the air filter cover. Place the air filter with clamp (*from the inside*) over the protruding MAF and the air filter flange. Rotate the MAF so that the connector runs parallel to the top as shown. Tighten the clamp.
- **C.** Mount the air filter assembly behind the headlight and secure with the sheet metal screws provided.
- **D.** Attach the 3-1/2" molded elbow to the supercharger with the sleeve and clamps.
- **E.** Connect the 3-1/2" flex tube to the molded elbow and the back of the MAF with the 3" x 1" adapter sleeve on the MAF (*as a spacer*) and secure with clamps.
- **F.** Connect the air discharge tube to the throttle body and supercharger with the sleeves and clamps provided.

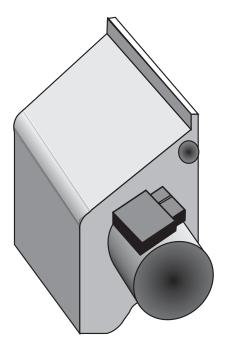


Fig. 12.0-a

- **G.** Clamp the provided rubber cap onto the vent fitting on the throttle body.
- **H.** With the 3/8" rubber hose, route blowby to the air filter cover through the inline filter provided.

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Section 13 CHECK-OUT PROCEDURES

13. FINAL CHECK

*** WARNING ***

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

- **A.** Reconnect the battery.
- **B.** If your vehicle has gone over 10,000 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 is filled with 91 octane or higher fuel before commencing test drive.
- **E.** Visually inspect the fan, belts and shroud for clearance before running the vehicle. Pay special attention to the upper radiator hose-to-belt and pulley clearance.
- **F.** Start the engine and allow to idle for a few minutes, then shut off.
- **G.** Recheck to be sure that no hoses, wires, etc. are near exhaust headers or moving parts, and for signs of any fluid leakage. Check ignition timing to make sure it is set to stock specifications before commencing test drive.

H. PLEASE TAKE SPECIAL NOTE:

Operating the vehicle without ALL the sub-assemblies completely and properly installed may cause *FAILURE OF MAJOR COMPO-NENTS*.

- **I.** Test drive the vehicle.
- **J.** The supercharger drive belt stretches initially and will require adjustment between 250 and 400 miles.
- **K.** 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.

FOR INTERNALLY LUBRICATED NOVI SL UNITS ONLY

This supercharger has been factory pre-filled with special Paxton synthetic lubricant. Oil does not need to be added to a brand new unit; however, a fluid level check should be performed.

Prior to operating the supercharger on the vehicle and after installation onto the vehicle:

Remove the factory installed flat-head brass shipping plug (not the dipstick) from the top of the supercharger case. Replace the sealed shipping plug with the supplied "vented" plug. Do not operate the supercharger without it. Check the supercharger fluid level.

Fluid level checking procedure:

- 1. Ensure that the .06" copper sealing washer is located on the dipstick base.
- Thread the clean dipstick into the unit until it seats.
- 3. Once the dipstick has seated, remove the dipstfick from the unit. Fluid should register in the crosshatched area on the dipstick
- 4. DO NOT OVERFILL!!! Drain excess fluid from the unit if it is above the maximum level on the dipstick.

Check the fluid level using the dipstick at least every 2,500 miles.

Initial supercharger fluid change must be performed at 2,500 miles. The supercharger fluid must be changed at least every 7,500 miles.

Drain the fluid, re-fill the unit with 4oz of Paxton SL lubricating fluid and then confirm proper oil level using the dipstick. *DO NOT OVERFILL!!!*

*** WARNING ***

Use of any fluid other than the special Paxton supplied lubricating fluid will void the warranty and may cause component failure.



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DP/N: 4809631 - v2.0 07/25/07