

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-195-5
Relating to Exemptions Under Section 27156
of the Vehicle Code

PAXTON PRODUCTS, INC.
SUPERCHARGER KIT MODEL NO. SN-89, PART NO. 10018

Pursuant to the authority vested in the Air Resources Board by Section 27156 of the Vehicle Code; and

Pursuant to the authority vested in the undersigned by Section 39515 and 39516 of the Health and Safety Code and Executive Order G-45-5;

IT IS ORDERED AND RESOLVED: That the installation of the add-on Supercharger Kit Model No. SN-89, Part No. 10018 manufactured by Paxton Products, Inc. of 929 Olympic Blvd., Santa Monica, CA 90404-3795, has been found not to reduce the effectiveness of required motor vehicle pollution devices and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for 1986-1991 model-year Ford Motor Company passenger cars powered by a 302 CID electronic fuel injection (EFI) engine.

This Executive Order is valid provided that installation instructions for this supercharger kit will not recommend tuning the vehicle to specifications different from those submitted by Paxton Products, Inc.

This exemption will not apply to any other device, apparatus, or mechanism advertised, offered for sale or sold with, or installed on, a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

Changes made to the design or operating conditions of the supercharger kit, as exempted by the Air Resources Board, that adversely affect the performance of a vehicle's pollution control system shall invalidate this Executive Order.

Marketing of this supercharger kit using an identification other than that shown in this Executive Order or marketing of this supercharger kit for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of a supercharger kit shall not be construed as an exemption to sell, offer for sale, or advertise any component of the kit as an individual device.

This Executive Order does not constitute any opinion as to the effect the use of this supercharger kit may have on any warranty either expressed or implied by the vehicle manufacturer.

THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF THE PAXTON PRODUCTS, INC. SUPERCHARGER KIT MODEL NUMBER SN-89, PART NUMBER 10018.

No claims of any kind, such as "Approved by the Air Resources Board" may be made with respect to the action taken herein in any advertising or other oral or written communication.

Section 17500 of the Business and Professional Code makes untrue or misleading advertising unlawful, and Section 17534 makes violation punishable as a misdemeanor.

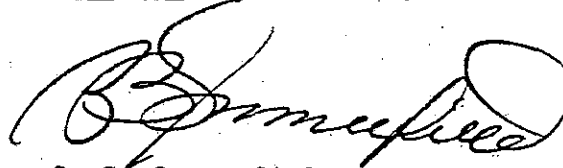
Section 43644 of the Health and Safety Code provides as follow:

"43644, (a) No person shall install, sell, offer for sale, or advertise, or, except in an application to the state board for certification of a device, represent, any device as a motor vehicle pollution control device for use on any used motor vehicle unless that device has been certified by the state board. No person shall sell, offer for sale, advertise, or represent any motor vehicle pollution control device as a certified device which, in fact, is not a certified device. Any violation of this subdivision is a misdemeanor."

Any apparent violation of the conditions of this Executive Order will be submitted to the Attorney General of California for such action as he deems advisable.

Executive Order D-195-3, dated December 04, 1989 is superseded and of no further force and effect.

Executed at El Monte, California, this 14th day of March, 1991.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division

SUMMARY

Paxton Products, Inc. (Paxton) has requested to update Executive Order D-195-3 which exempts Paxton's add-on Supercharger Kit Model No. SN-89, Part No. 10018, to be used on 1986-1990 model-year Ford Motor Company passenger cars powered by a 302 CID (5.0 L) electronic fuel injection (EFI) engine, from the prohibitions in Section 21756 of the California Vehicle Code. The update is requested to include the 1991 model-year Ford Motor Company passenger cars powered by a 302 CID electronic fuel injection engine.

Comparative emission tests previously performed by Paxton and confirmed by the Air Resources Board (ARB) showed no significant increase in emissions due to the installation of the supercharger kit. Based on the test results and since the 1991 vehicles for which the exemption update is requested are carried-over from the model-years for which an exemption has been granted, the staff concludes that Paxton's add-on Supercharger Kit Model No. SN-89, Part No. 10018 will not adversely affect exhaust emissions from the vehicles for which an exemption is requested.

The staff recommends that Paxton be granted an exemption for their add-on Supercharger Kit Model No. SN-89, Part No. 10018 for installation on 1986-1991 Ford Motor Company passenger cars powered by a 302 CID EFI engine, and that Executive Order D-195-5 be issued.

State of California
AIR RESOURCES BOARD

EVALUATION OF PAXTON PRODUCTS, INC.'S ADD-ON SUPERCHARGER KIT MODEL NO.
SN-89, PART NO. 10018 FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE
CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE
CALIFORNIA CODE OF REGULATIONS

March 1991

State of California
AIR RESOURCES BOARD

EVALUATION OF PAXTON PRODUCTS, INC.'S ADD-ON SUPERCHARGER KIT MODEL NO.
SN-89, PART NO. 10018 FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE
CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE
CALIFORNIA CODE OF REGULATIONS

by

Mobile Source Division
State of California
Air Resources Board
9528 Telstar Avenue
El Monte, CA 91731-2990

(This report has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources Board, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.)

TABLE OF CONTENTS

	Page Number
SUMMARY	i
CONTENTS	ii
I. INTRODUCTION	1
II. CONCLUSION	1
III. RECOMMENDATIONS	2
IV. DEVICE DESCRIPTION AND OPERATION	2
V. DISCUSSION	3
VI. APPENDIX : INSTALLATION INSTRUCTIONS	5

EVALUATION OF PAXTON PRODUCTS, INC.'S ADD-ON SUPERCHARGER KIT MODEL NO. SN-89, PART NO. 10018, FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

I. INTRODUCTION

Paxton Products, Inc. (Paxton) of 929 Olympic Blvd., Santa Monica, CA 90404-3795, has requested an update to the existing Air Resources Board's Executive Order (E. O.) D-195-3 which exempted Paxton's add-on Supercharger Kit Model No. SN-89, Part No. 10018 from the prohibitions in California Vehicle Code (VC) Section 27156. The existing E. O. includes 1986-1990 model-year passenger cars powered by Ford Motor Company's (Ford) 302 CID EFI engines, e.g., Mustang, LTD Crown Victoria, LTD Crown Victoria Wagon, Grand Marquis, Grand Marquis Wagon, Mark VII, and Town Car. The exemption update is requested to include the 1991 Ford Motor Company passenger cars powered by a 302 CID EFI engine.

Paxton claims no changes to the installation instructions or tune-up specifications are necessary for use of the Supercharger Kit Model No. SN-89, Part No. 10018, on 1991 model-year passenger cars powered by Ford Motor Company's 302 CID EFI engine.

II. CONCLUSIONS

Comparative emission tests previously performed by Paxton using a 1989 Ford Mustang powered by a 302 CID EFI engine and confirmed by the Air Resources Board (ARB) showed no significant increase in emissions due to the installation of the supercharger kit. Based on the test results and because the 1991 model-year passenger cars for which the exemption update is requested are carried-over from the model-years for which an exemption has been granted, the staff concludes that Paxton's add-on Supercharger Kit

Model No. SN-89, Part No. 10018 will not adversely affect exhaust emissions from vehicles for which an exemption is requested.

III. RECOMMENDATIONS

The staff recommends that Paxton be granted an exemption for their add-on Supercharger Kit Model No. SN-89, Model No. 10018 for installation on 1986-1991 Ford Motor Company's passenger cars powered by a 302 CID EFI engine. The staff also recommends that Executive Order D-195-5 be issued.

IV. DEVICE DESCRIPTION AND OPERATION

The Paxton supercharger kit is specifically designed for installation on 1986-1991 Ford passenger cars powered by a 302 CID EFI engine. The kit operates in conjunction with the original equipment manufacturer (OEM) computer controlled electronic port fuel injection and emission control systems already certified with the stock engine. All the necessary hardware and supplies for installing the supercharger are included in the kit.

The purpose of supercharging an engine is to increase its volumetric efficiency by forcing more air than it would consume naturally aspirated (non-supercharged condition). This is accomplished by the addition of a centrifugal blower (Paxton Model No. SN-60, Part No. 10018) that is belt driven at 1.5 times the speed of the engine. Intake air is delivered from the OEM air filtering system to the centrifugal blower. It is then compressed by the supercharger and routed to the throttle body of the electronic fuel injection system.

Maximum positive manifold pressure (boost) is limited to 5 psig by the blower scroll housing and the impeller design. No wastegate or other active boost limiting device is used.

To provide additional fuel to maintain proper air/fuel ratios during boost conditions a fuel control unit is added. At boost, a positive pressure of about 1 psi induced by the supercharger causes an increase of the static pressure in the fuel return line beyond the maximum 34 psi of the OEM fuel pressure regulator. The fuel control unit has a set static pressure of 70 psi. This condition causes an increase in air/fuel charge, while maintaining the proper air/fuel ratio.

The blower is self lubricated by a piston-type oil pump. The oil pump has a capacity of 12 fluid ounces and uses type "F" automatic transmission fluid. All OEM emission controls are left intact.

V. DISCUSSION

Paxton previously submitted comparative emission data from tests conducted by Automated Custom Systems, using a 1989 Ford Mustang powered by a 302 CID electronic fuel injection engine. The test data submitted by Paxton showed a decrease in emissions of carbon monoxide and an insignificant increase in oxides of nitrogen and hydrocarbons (within the 10 percent maximum increase) due to the installation of the supercharger kit. The confirmatory testing conducted by the ARB yielded a similar result (see tables 1 & 2). Paxton plans to offer the supercharger kit for installation on 1991 Ford passenger cars with 302 CID EFI engines. Paxton claims no changes to the installation instructions or tune-up specifications are necessary for use of the supercharger kit on this new application. Since previous tests results have shown that the Paxton supercharger Model No. SN-89, Part No. 10018, did not reduce the effectiveness of the emissions control system of the vehicles and the Paxton supercharger will be installed on 1991 model-year vehicles which are carried-over from the same engine

family which has an existing exemption, no further testing is required. The staff recommends the request for an update be granted and Executive Order D-195-5 be issued to include all 1986-1991 Ford Motor Company passenger cars powered by a 302 CID EFI engine.

Table 1

Exhaust Emission Test Results from
Automated Custom Systems, Inc.

<u>Test Mode</u>	<u>Exhaust Emissions (gm/mi)</u>			<u>Fuel Economy (mpg)</u>
	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>City</u>
Baseline	0.203	0.753	0.519	17.655
Baseline	0.222	0.882	0.513	17.757
Average	0.213	0.818	0.516	17.706
Device	0.218	0.679	0.564	17.556
Device	0.252	0.667	0.558	17.647
Average	0.235	0.673	0.561	17.602
Change	+ 10%	- 18%	+ 9%	- 1%

Table 2

Exhaust Emission Test Results From
Air Resources Board

<u>Test Mode</u>	<u>Exhaust Emissions (gm/mi)</u>			<u>Fuel Economy (mpg)</u>	
	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>City</u>	<u>Highway</u>
Baseline	0.243	2.398	0.539	17.464	29.595
Baseline	0.212	1.506	0.524	17.572	29.597
Average	0.228	1.952	0.532	17.518	29.596
Device	0.248	1.443	0.547	17.578	29.574
Device	0.225	0.835	0.462	17.578	29.891
Average	0.237	1.139	0.505	17.660	29.733
Change	+ 4%	- 42%	- 5%	+ 1%	0%

VI. APPENDIX: INSTALLATION INSTRUCTIONS



Installation Instructions

And Owner's Manual

MUSTANG

1986-90 MODELS

(91)

ALL FUEL INJECTED 302 ENGINES
California or Federal Models*
(With Air Conditioning)

*California Air Resources Board Exemption Order D-195-3

D-195-
TO BE ASSIGNED
BY CALIF. ARB.

Form No. 6189250

Supercharger Serial Number: _____

Date of Shipment: _____

PAXTON PRODUCTS, INC.

929 Olympic Boulevard
Santa Monica, CA 90404 U.S.A.
(213) 450-4800

PAXTON



SUPERCHARGERS & CENTRIFUGAL BLOWERS

929 Olympic Blvd. • Santa Monica, CA 90404-3795 • (213) 450-4800 • Telex 183674 • FAX: (213) 452-8093

PAXTON SUPERCHARGER, SN-89 MAINTENANCE & WARRANTY

MAINTENANCE

Your new Paxton Supercharger Model SN-89 is equipped with a self-contained oil reservoir. The reservoir can be accessed only through the dipstick opening.

The oil pump inside your Paxton Supercharger must be oriented in the vertical position in order to assure proper delivery of fluid to the patented Planetary Ball System, bearings, and other lubricated components. To achieve the vertical position of the pump, the red Paxton Supercharger label must be in the Top Dead Center (TDC) position.

Before starting the engine when the Paxton Supercharger is attached, make sure the oil reservoir is full of Type F Transmission Fluid, or Paxta-trak Traction Fluid. The fluid level should be on the top mark of the dipstick.

In order to assure the long life of your Paxton Supercharger, you should change the fluid whenever you change your engine oil, usually every 3,000 miles, more often if the vehicle is used off-road or in dirty conditions. The oil is changed by using a suction gun with a 1/4 inch tube on the end of the suction gun. The air filter element should also be changed at the same time.

WARRANTY INFORMATION

Your new Paxton Supercharger Model SN-89 is a high performance unit. While most high performance parts carry no warranty whatsoever, your new Paxton Supercharger carries a 90-Day Warranty on parts and repair labor, starting from the date of purchase from your local retailer, or from the date of shipment, if purchased directly from the Paxton Factory.

The warranty does not include any freight or shipping charges, damage due to misuse, or damage due to improper installation or maintenance. No warranty will be honored if, for any reason, the unit has been tampered with in any way or the warranty seal is broken.

Paxton Products, Inc. warrants its Supercharger at its sole discretion, and only after inspection at our plant. All returns, if approved in advance by Paxton, will be subject to a 25% re-stocking fee. Any warranty claim must be accompanied by the Supercharger itself, the dated original purchase receipt, the place purchased and the name, address and telephone number of the customer claiming warranty.

IMPORTANT INFORMATION

In order to avoid engine damage, you must always use Premium Octane (92) or above fuel in any engine affixed with a Paxton Supercharger.

Paxton supplies a water injection or other knock suppressing system (such as the patented "Boost Controlled Electronic Spark Module") with any kit that is used on a high compression engine (8.5:1 or higher). If such a system is supplied, it must be in working order. If not, do not run the engine with the Paxton Supercharger affixed. **FAILURE TO COMPLY WILL RESULT IN SERIOUS ENGINE DAMAGE!!**

On carbureted models, the jetting and distributor curve instructions must be followed or severe engine damage will occur.

**INSTALLATION OF ANY PULLEY OTHER THAN
PULLEY SUPPLIED WITH THE SUPERCHARGER KIT
AUTOMATICALLY VOIDS THE WARRANTY**

Before installing your new Paxton Supercharger Kit, you should check the following items:

1. Engine Compression should be within Vehicle Manufacturer's specifications, and all cylinders should be within 10 pounds of each other.
2. Engine Timing should be at 10° BTDC, per Manufacturer's specifications.
3. Spark plugs should be in good working order and conform to Manufacturer's specifications.
4. If your vehicle is not equipped with a Mass Air Flow Sensor (MAF), we suggest you purchase one from Ford Special Vehicle Office. This Paxton Supercharger Kit was designed to work with a Mass Air Flow Sensor.
5. Make sure you are not using an Aftermarket Computer Module or Computer Chip. Failure to do this will result in serious engine damage.

The following tools are needed to install the Paxton Supercharger 1986 - 1990 Mustang Kit:

1. Metric Socket Set ranging from 7mm to 19mm.
2. SAE Socket Set ranging from 7/16" to 11/16".
3. 1/2" Open-End Wrench.
4. 7/16" Open-End Wrench.
5. 9/16" Open-End Wrench.
6. Flathead Screwdriver.
7. Hose Cutter or Knife.
8. Pry Bar or long Screwdriver.
9. Hack Saw or Metal Cutting Saw.
10. Scribe.
11. Drill Motor and Bits.
12. Drain Pan.

PREPARATION INSTRUCTIONS

1. Remove battery Ground Strap.
2. Drain some Coolant (approximately one gallon).
3. Remove top Radiator hose.
4. Remove fan bolts.
5. Remove accessory Belt.
6. Remove Fan, place in Radiator shroud. (Be careful not to damage Radiator.)
7. Remove rubber bellows between Throttle Body and MAF.
8. On vehicle so equipped, remove the MAF with its Bracket by removing the two sheet metal screws that secure Bracket to strut housing.
9. Remove entire Air Cleaner Assembly.
10. Remove rubber "Lord Mounts" that attach the Air Cleaner Assembly to the inner fender-well.
11. Remove the push connector on the headlight wire loom.
12. Relocate ground wire to the front of the Radiator support and re-secure with the stock screw.
13. Remove MAF from its Bracket by removing the three 8mm bolts.
14. Remove entire Idler Assembly from the Bracket using a 19mm socket.
15. Unplug Alternator and detach 10 gauge wire.
16. Remove Alternator from Mounting Bracket and set aside.
17. Loosen Hose Clamp on Smog Pump hose and remove hose.
18. Remove nut from Smog Pump brace.
19. Remove Mounting Bracket bolts.
20. Move entire Mounting Bracket forward approximately 3" and remove Smog Pump from Bracket.

PREPARATION INSTRUCTIONS (Continued)

21. Remove Bracket from car.
22. Remove Brace from back of Smog Pump.
23. Loosen steel Fuel Line Brace located in front of the right front (#1) Cylinder.
24. Relocate Evaporative Canister by using the front bolt in the rear Bracket hole. When relocated, Canister will be at an angle, as shown in Figure 1.
25. Remove Crankshaft Pulley.

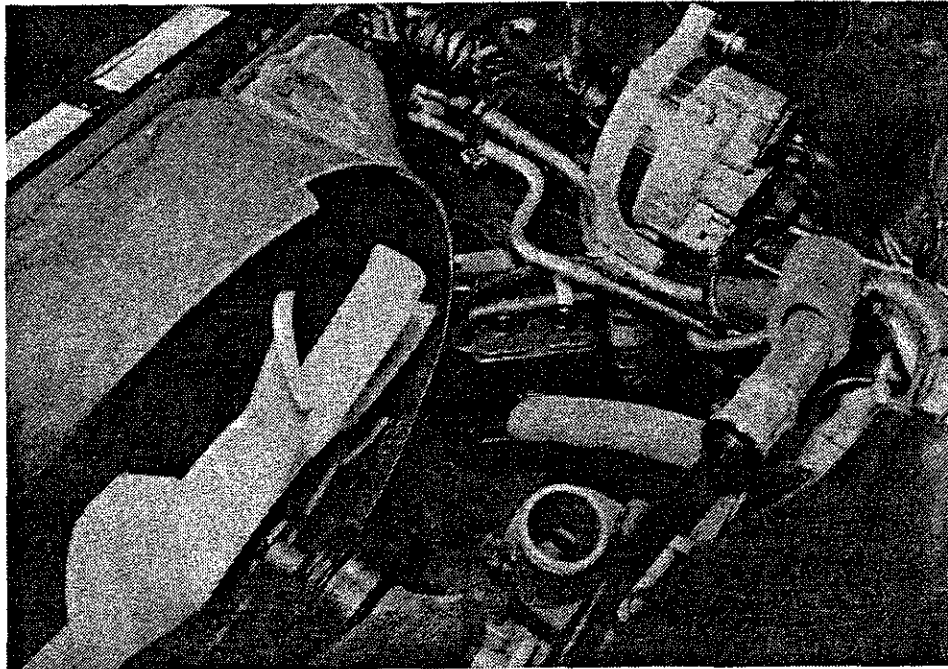


FIGURE 1

INSTALLATION INSTRUCTIONS

1. Place Paxton Supercharger Crankshaft Pulley (P/N 48032-6.00) and stock Crankshaft Pulley, as a unit, onto the Crankshaft and secure with four 3/8-16 x 2" bolts and washers provided (P/N 102257, P/N 100375) as shown in Figure 2. Tighten securely!
2. Place the Mounting Bracket Plate (P/N 48069) over the Smog Pump and Mounting Bracket Base, placing the appropriate bolts in their corresponding holes as shown in Figure 3. Use the 3/8" ID x .92" spacer (P/N 48085) between the Smog Pump and the Mounting Bracket Plate. Do not tighten all bolts!

NOTE: Both 3/8-16 x 6-1/4" pivot bolts (#11 in drawing) for the Smog Pump and Alternator pass through from the Bracket Base (casting) side and exit out the front plate.

3. The pivotal end of the Alternator is placed between the Mounting Bracket Base and Mounting Bracket Plate as shown in Figure 3.
4. Affix the Alternator Stay (P/N 48086) to the Smog Pump using one 3/8-16 x 1" Bolt and Washer (P/N's 27404 and 27405). Swing the Alternator into position. Affix Stay to the Alternator using another 3/8-16 x 1" Bolt and Washer (P/N's 27404 and 27405). Tighten bolts.
5. The Smog Pump pivot bolt (P/N 48139) and Alternator pivot bolt (P/N 48139) may now be tightened using the nut and washers provided (P/N's 48139, 27405, 38276 and 38565).

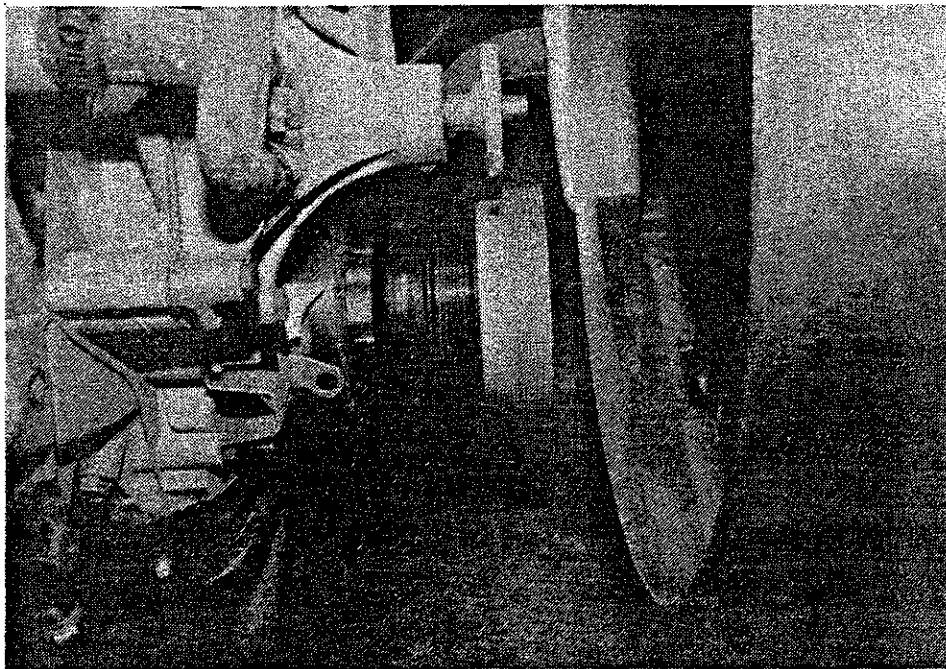
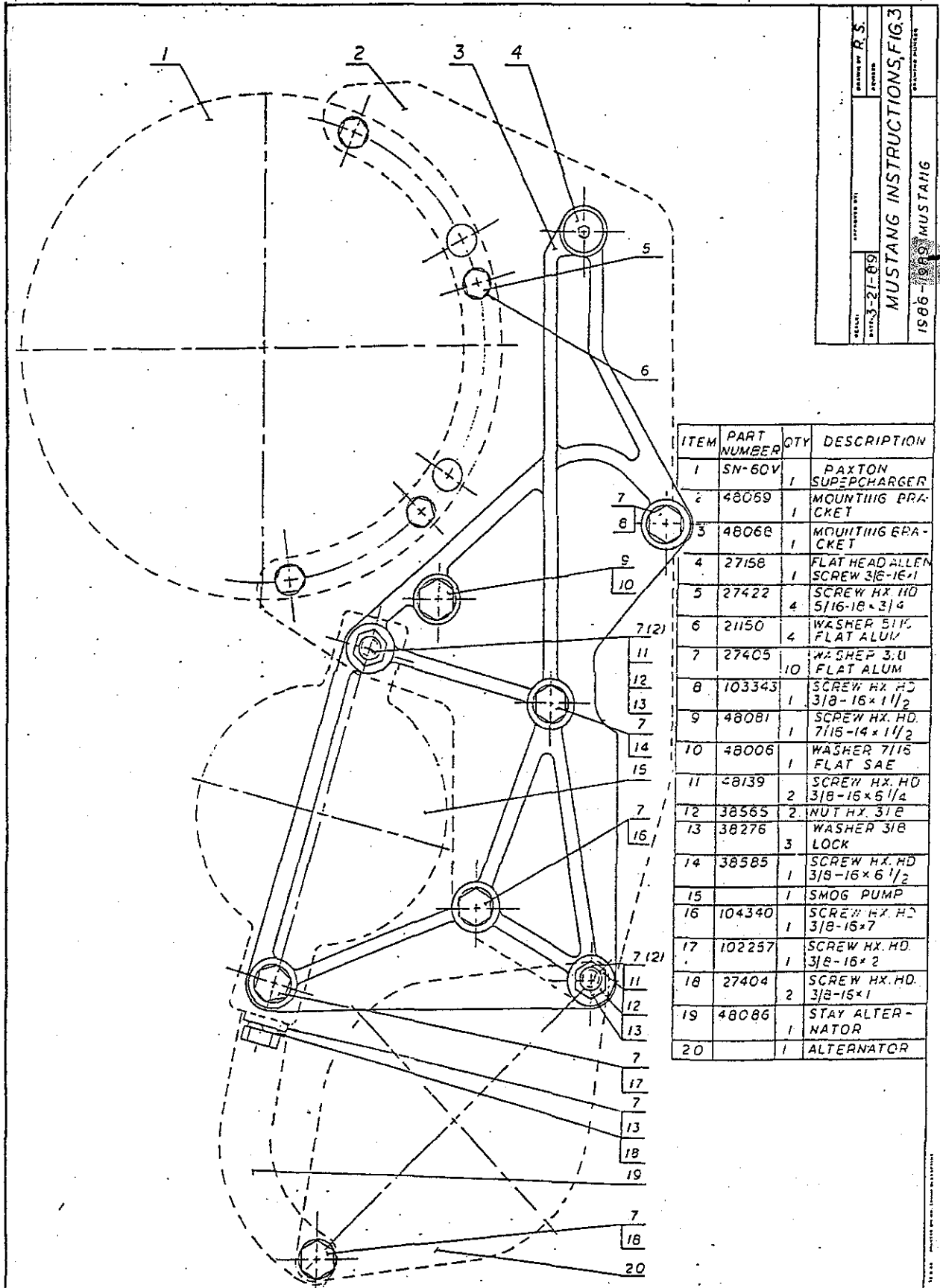


FIGURE 2



DRAWN BY R.S.
 PART 3-21-69
 APPROVED BY
 MUSTANG INSTRUCTIONS, FIG. 3
 1965-1966 MUSTANG

1991

ITEM	PART NUMBER	QTY	DESCRIPTION
1	SN-60V	1	PAXTON SUPERCHARGER
2	48059	1	MOUNTING BRACKET
3	48068	1	MOUNTING BRACKET
4	27158	1	FLAT HEAD ALLEN SCREW 3/8-16x1
5	27422	4	SCREW HX. HD 5/16-18x3/4
6	21150	4	WASHER 5/16 FLAT ALUM
7	27405	10	WASHER 3/8 FLAT ALUM
8	103343	1	SCREW HX. HD 3/8-16x1 1/2
9	48081	1	SCREW HX. HD. 7/16-14x1 1/2
10	48006	1	WASHER 7/16 FLAT SAE
11	48139	2	SCREW HX. HD 3/8-16x5 1/4
12	38565	2	NUT HX. 3/8
13	38276	3	WASHER 3/8 LOCK
14	38585	1	SCREW HX. HD 3/8-16x6 1/2
15		1	SMOG PUMP
16	104340	1	SCREW HX. HD 3/8-15x7
17	102257	1	SCREW HX. HD. 3/8-16x2
18	27404	2	SCREW HX. HD. 3/8-16x1
19	48086	1	STAY ALTERNATOR
20		1	ALTERNATOR

FIGURE 3

6. Lower the entire Assembly into engine compartment and affix to engine using the bolts provided, in appropriate holes as shown in Figures 3 and 4. TIGHTEN ALL BOLTS!
7. For a professional installation, you should remodel (shorten) the molded hose that runs between the Smog Pump Diverter and By-pass Valves. This is accomplished by cutting 3" of hose from the center section of the molded hose, and 1-1/2" from the rearward end, as shown in Figure 5.
8. Place the furnished 3/4" O.D. x 1-1/2" aluminum tube (P/N 38630-1.5) inside the hose and secure with the two clamps provided (P/N HC-4210) as shown in Figure 6.
9. Re-install shortened molded hose.
10. Modify the upper radiator hose as shown in Figure 7. The idea is to make two rubber 90° elbows. One from the end with 3" long legs and one from the middle with 2-1/2" long legs. Discard the unused portions.

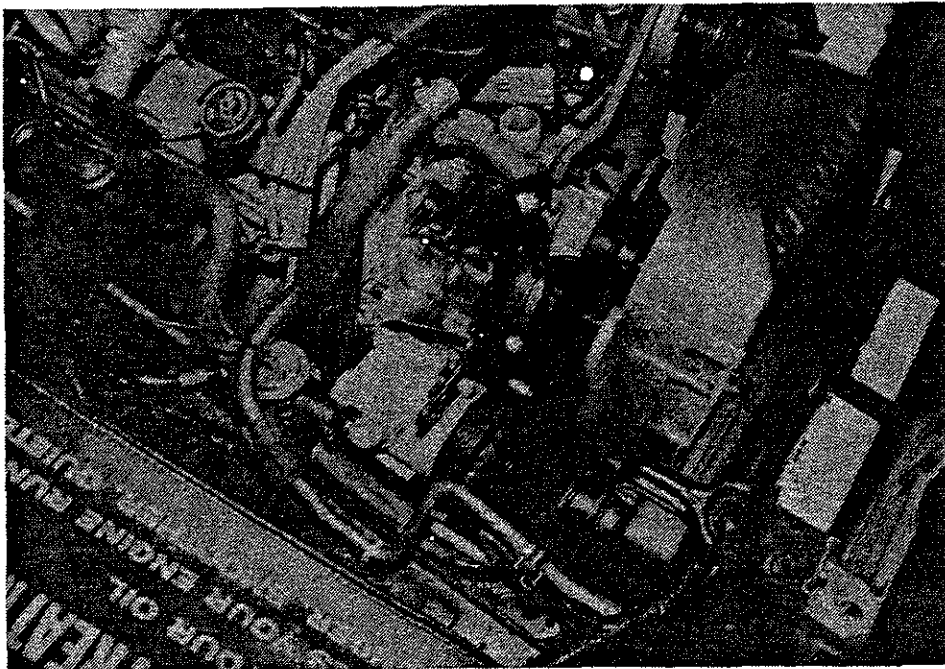


FIGURE 4

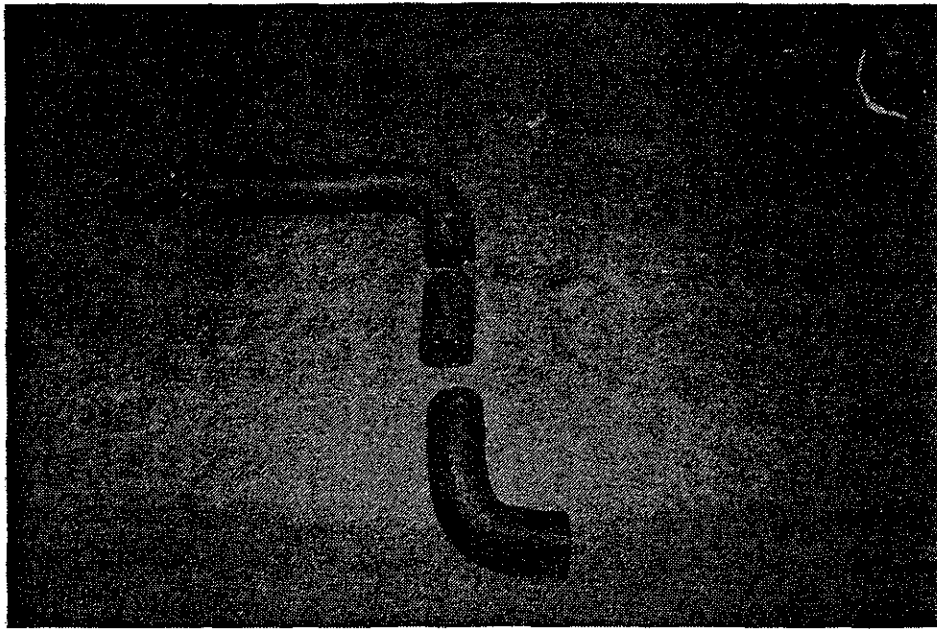


FIGURE 5

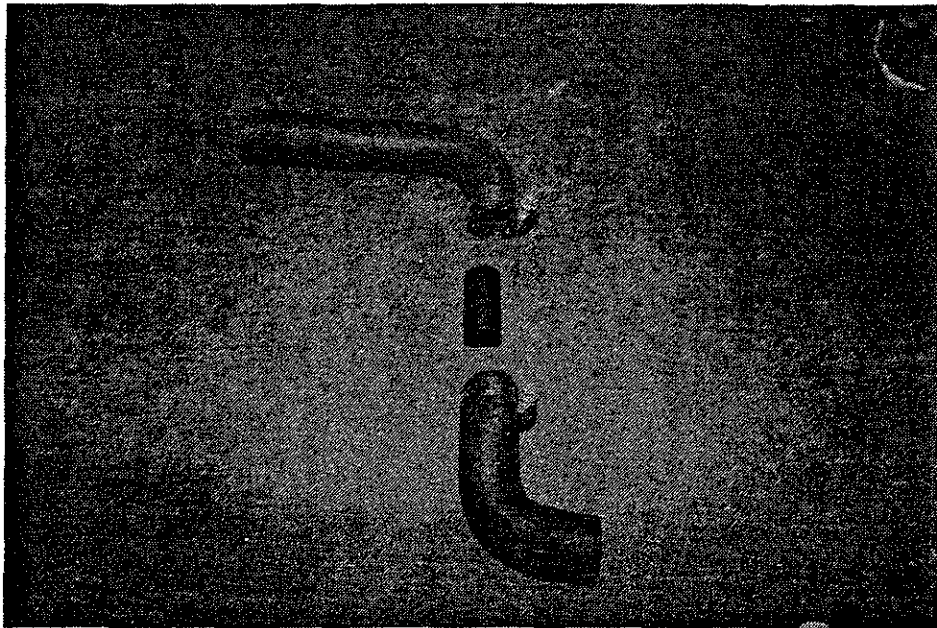


FIGURE 6

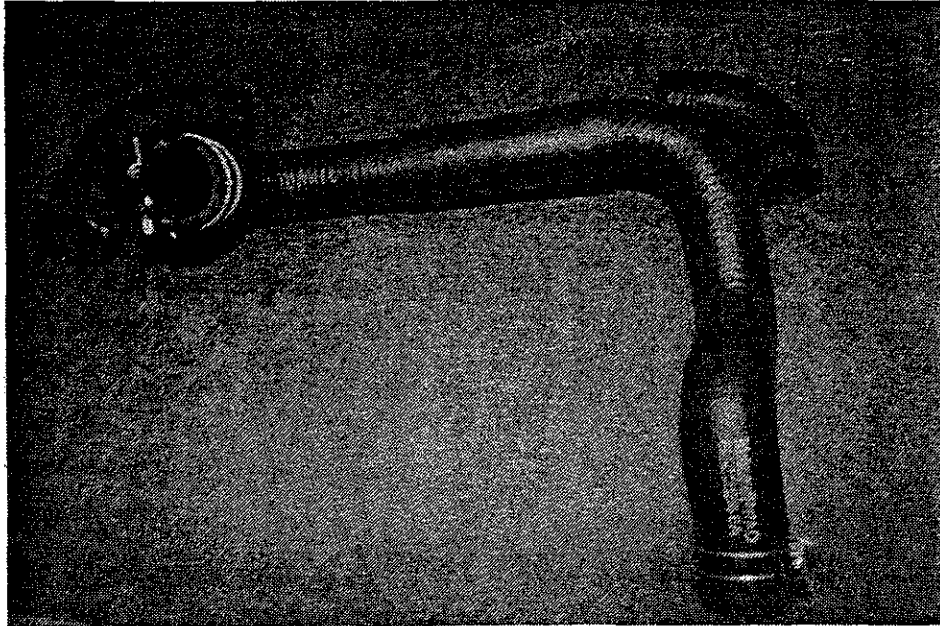


FIGURE 7

11. Place the furnished Water Pipe (P/N 48093) between the two 90° elbows, as shown in Figure 8. Place the short leg nearer the Radiator. (Do not re-install at this time.)
12. Replace Fan Assembly and tighten securely using the stock bolts.

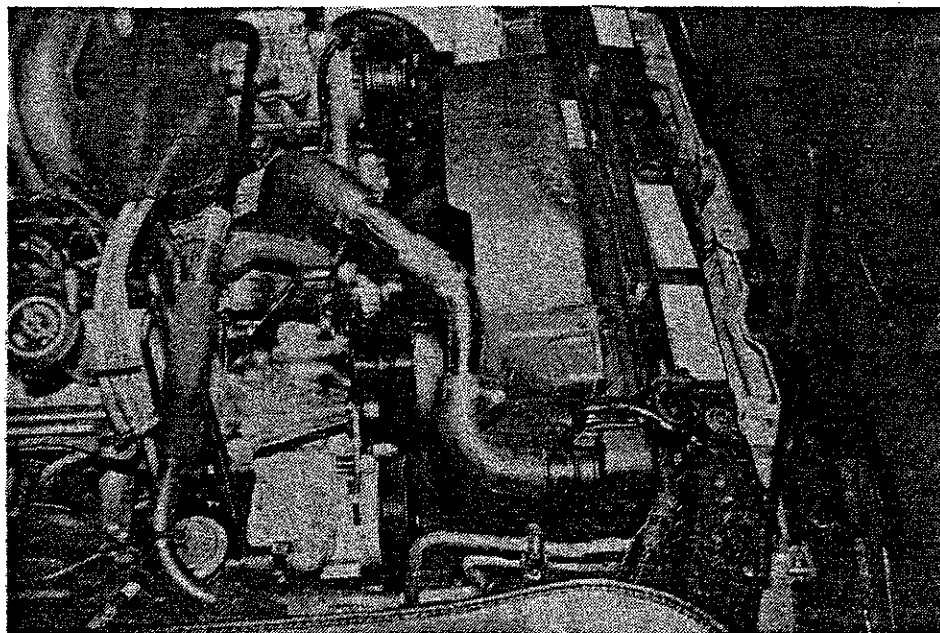


FIGURE 8

13. Place the stock Idler Pulley Assembly on the Paxton Belt Tensioner Plate (P/N 48067), using the 1/2-13 x 3-1/2" Carriage Bolt (P/N 48082) provided and the 1/2-13 nut and washer (P/N's 102822 and 101320), as shown in Figure 9.

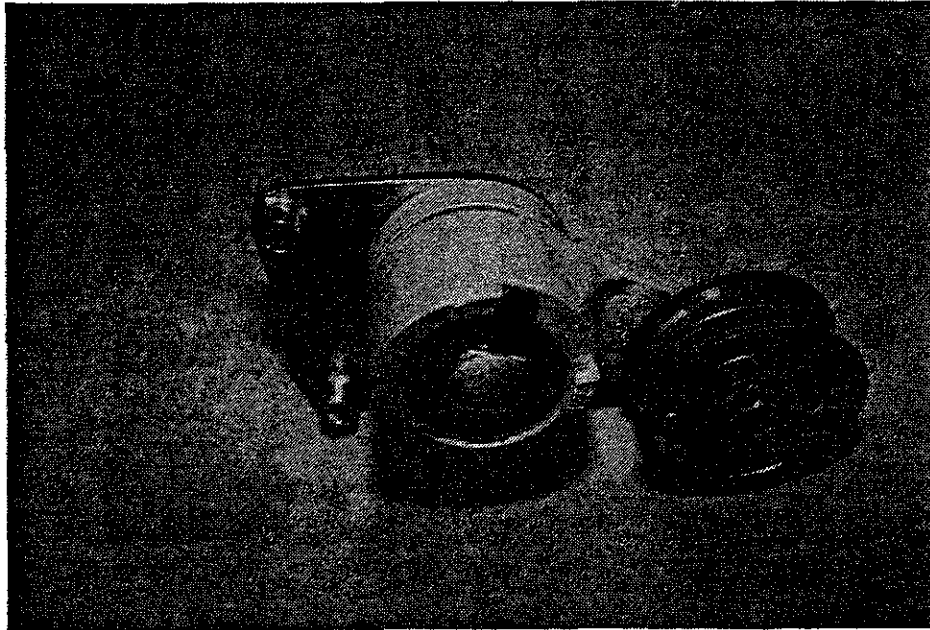


FIGURE 9

14. Install the complete Belt Tensioner Plate (P/N 48067) to the Mounting Bracket and upper Water Pump stud, as shown in Figure 10. Secure with 3/8-16 x 1-1/4" Bolts (P/N 102148), 3/8 Washers (P/N 100375), and 3/8-16 nut - on Water Pump stud - (P/N 38565).

NOTE: Due to allowable tolerances in Manufacturer's specifications, some extra 3/8 washers (P/N 100375) are supplied to "shim-up" the Belt Tensioner Plate. Use as needed to make sure the OEM belt tensioner rides flat and centered on the belt.

15. Re-install the stock accessory drive Serpentine Belt as per diagram (Figure 11). Install the furnished new Understood Sticker (P/N 48130) over the stock one.
16. Relocate Relay, near the Air Filter location, onto the strut tower, as shown in Figure 12, using the stock sheet metal screw.

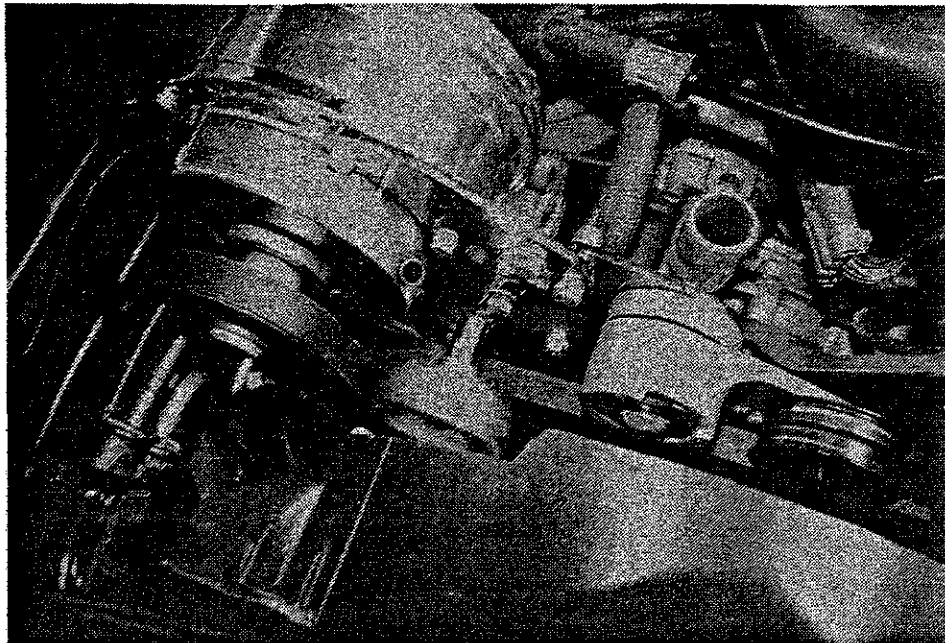
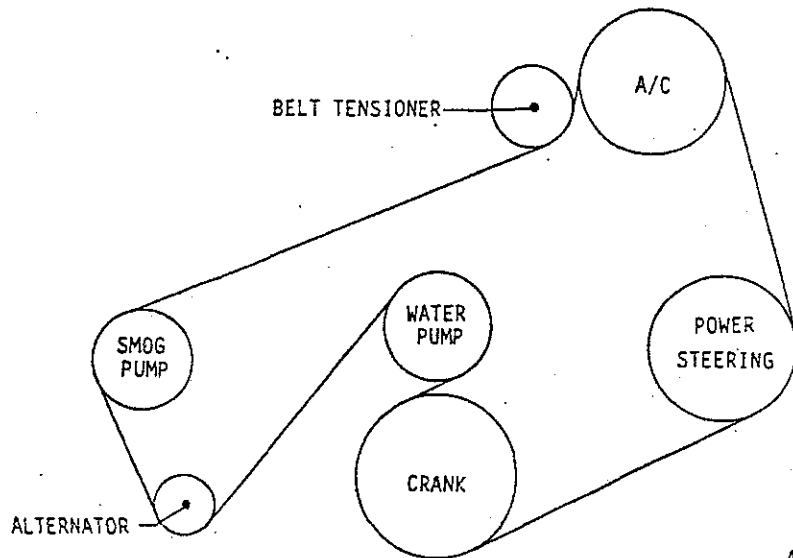


FIGURE 10

91
86-87 MUSTANG
BELT ROUTING DIAGRAM



48130

FIGURE 11

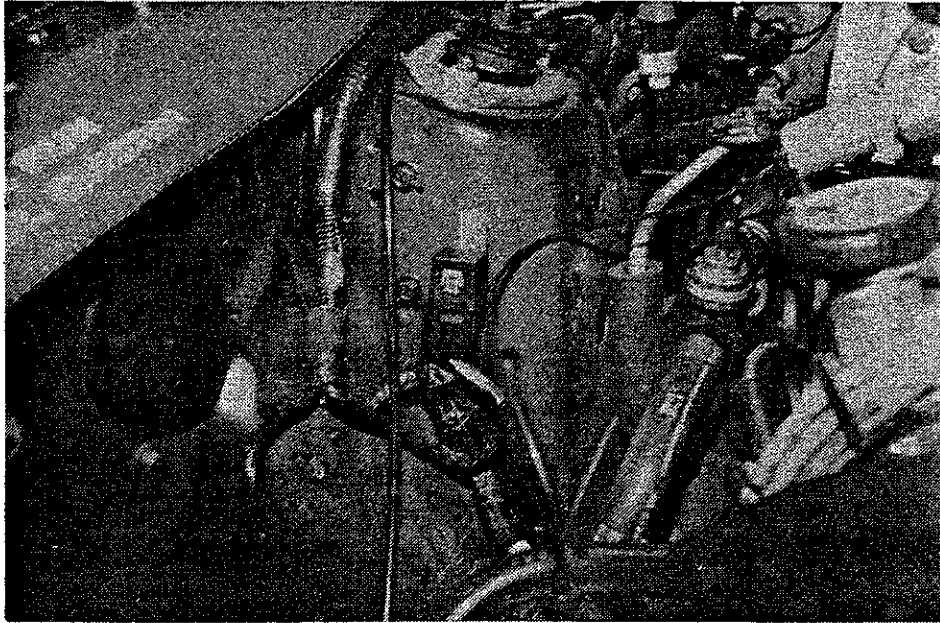


FIGURE 12

17. Install Paxton Fuel Control Unit, per the Instructions that came with Fuel Control Unit.
18. Connect Alternator wires.

NOTE: Some 4" tie-wraps are supplied with your Paxton Mustang Kit. Use these to secure any wires or lines away from moving parts, such as the belts or accessories. Make sure enough play is left in wires and lines to allow for engine torque.

19. Place Paxton Supercharger (Assembly #10164) in Mounting Bracket, and secure with four 5/16-18 x 3/4" screws and 5/16" washers (P/N's 27422 and 27150). Make sure that the red Supercharger label is in the top-dead-center position! Fill Supercharger with Type-F Transmission Fluid to a point between the two lines on the dipstick.

20. Install Supercharger Drive Belt (P/N 48057) and Idler Pulley Kit (P/N 10169) as shown in Figure 10.

NOTE: It is necessary to install the Supercharger Drive Belt very tight to help compensate for significant initial stretching. Check tension after a few miles and reset if necessary.

Due to allowable manufacturer tolerances, it may be necessary for the installer to align the Supercharger Drive Pulleys manually.

This can be accomplished by running a straight edge from the Crank Pulley (P/N 48032) to the Supercharger Drive Pulley (P/N 48033-4.0) and making sure the two pulleys align. If not, shim the Supercharger Pulley accordingly. Also make sure the Belt rides flat and true in the middle of the Idler Pulley.

21. Install the 90° Rubber Elbow (P/N 12122) by snapping it onto the 3-1/2" air intake part of the Paxton Supercharger. (No clamp is needed.)
22. Install the furnished Air Filter onto the intake side of the Mass Air Flow Sensor (side with screen), as shown in Figure 13. (See Manufacturer's specifications for Air Filter maintenance.)

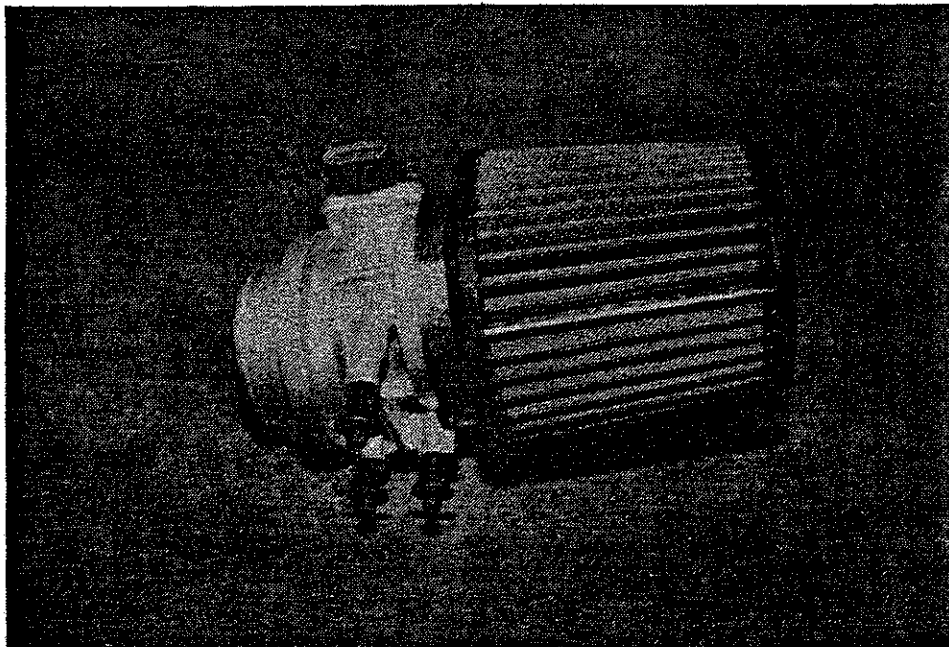


FIGURE 13

23. Using the supplied Template (P/N 48203), center the two Mounting Bolt holes, and scribe the line to be cut on the stock MAF Bracket. Remove the Template. Drill out the two center punched holes to $21/64$ " and cut the Bracket along the scribed mark as shown in Figure 14.
24. Affix the supplied Template (P/N 48204) to the lower bolt that holds the Air Baffle inside the engine bay fender-well as shown in Figure 15. Use tape to hold the Template so that it follows the contour of the engine bay, center punch the two holes as shown in Figure 15. Remove the Template and drill out the two center punched holes to $21/64$ ".
25. Slip the supplied bolts and washers (P/N's 102199 and 101608) through the two new holes in the MAF Bracket.
26. Install the MAF (with air filter attached) to the modified Bracket using the stock mounting bolts.
27. Install the entire MAF/Air Filter Assembly to the car as shown in Figure 16. Secure with fender washers, lock washers and $5/16-24$ " nuts as shown in Figure 16. Don't forget spacers.

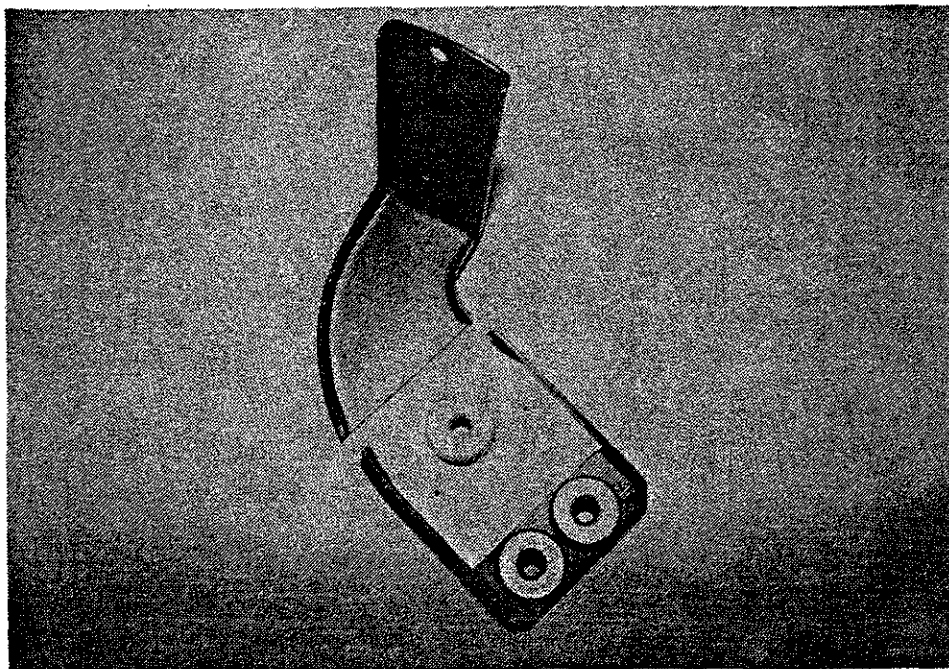


FIGURE 14

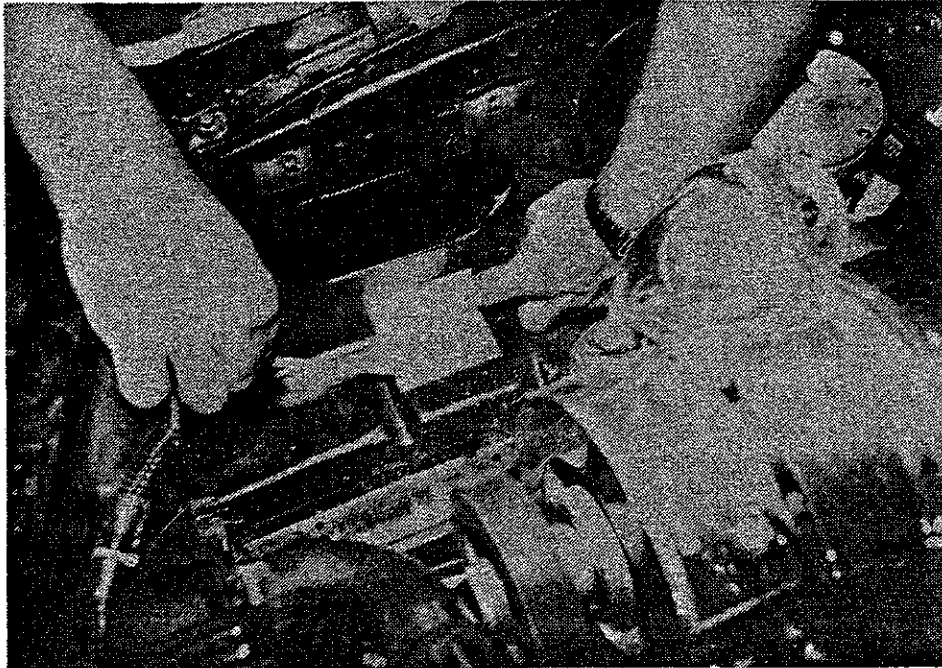
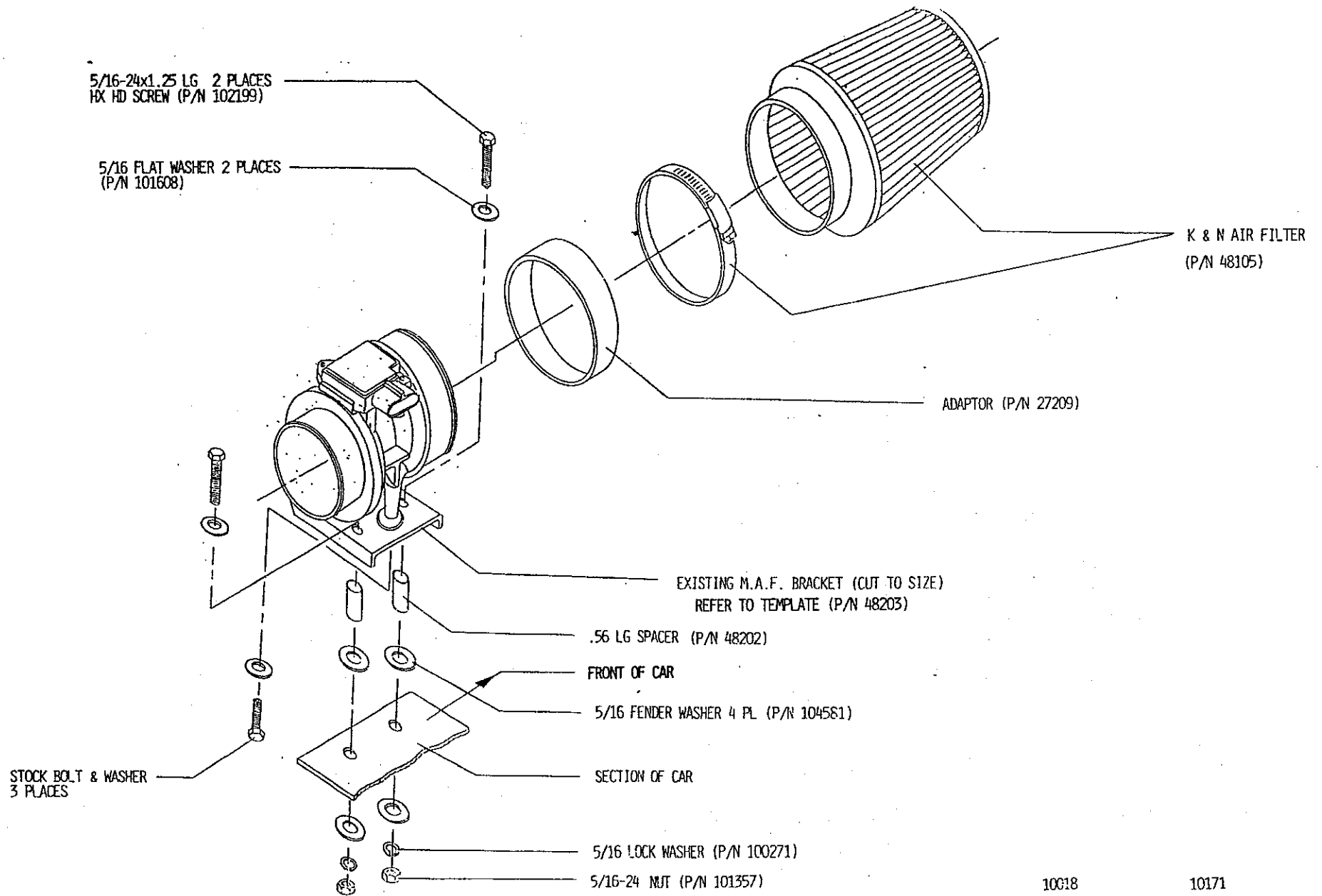


FIGURE 15

28. Slip the Air Filter Cover (P/N 48105) over the MAF/Air Filter and slide to front of vehicle as shown in Figure 17. Make sure not to crimp or cut any wires.
29. Drill two holes in the engine bay fender-well using the Air Filter Cover mounting holes as a Template, and secure with the sheet metal screws provided (P/N 38664) as shown in Figure 17.
30. Connect the 3-1/4" flex tube (P/N 48136) to the rubber elbow with the clamp provided (P/N HC-44).
31. Connect the rubber elbow to the MAF with the 3-1/4" flex tube and clamps provided (P/N's 48136, HC-44).
32. Connect the Air Discharge Tube (P/N 48101) to the Throttle Body and the Paxton Supercharger using the sleeves and clamps provided (P/N's 27174-T-SLV2, HC-44 and HC-48).



10018
FINAL ASSY

10171
NEXT ASSY

FIGURE 16



FIGURE 17

33. Relocate Blow-by Tube by running the 3/8" hose provided between the oil filler neck and the nipple on the Air Filter Cover and clamping securely. Clamp the furnished cover for the Blow-by Tube on the throttle body nipple securely.
34. Replace remodeled Radiator Hose and clamp tightly as shown in Figure 18.
35. Refill Radiator.
36. Check to be sure that you filled the Paxton Supercharger with 10 to 12 oz. of Type-F Transmission Fluid. (See enclosed Warranty and Maintenance Bulletin for further details.)
37. Re-check all fittings, clamps and bolts for tightness.
38. Start engine and check belts for smoothness and pulley alignment.

NOTE: After running engine, re-check coolant level in Radiator and refill as necessary. Do not check coolant when engine is hot.

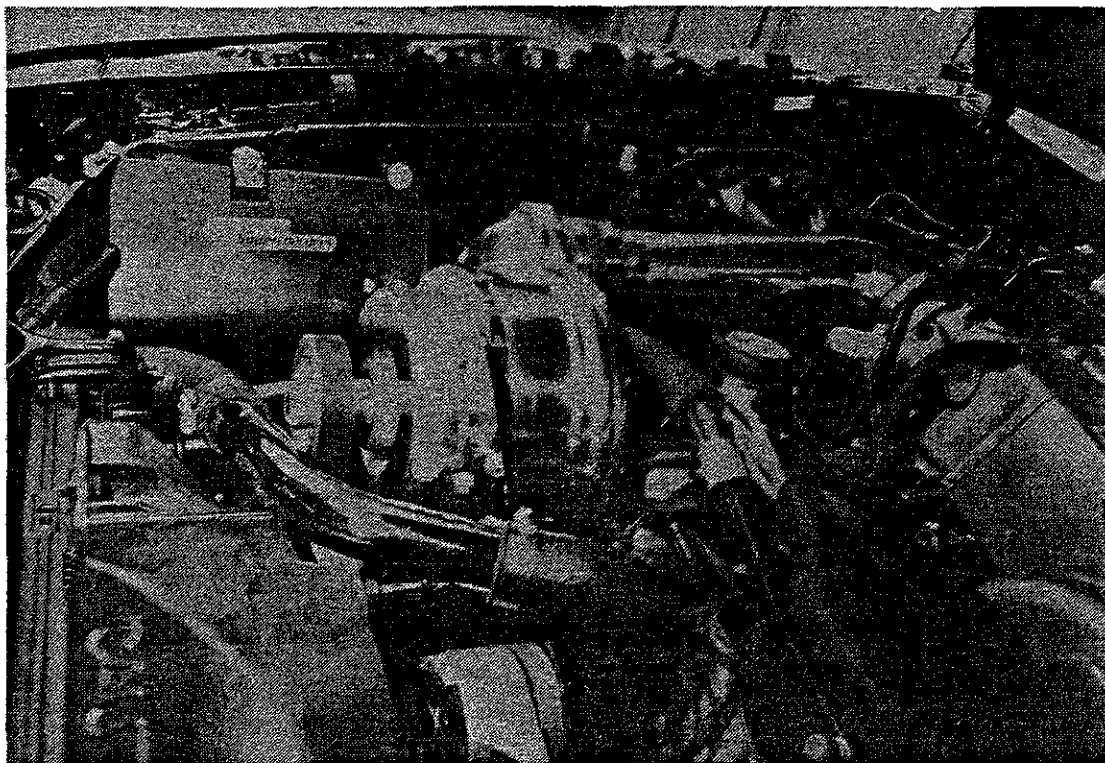


FIGURE 18

PAXTON



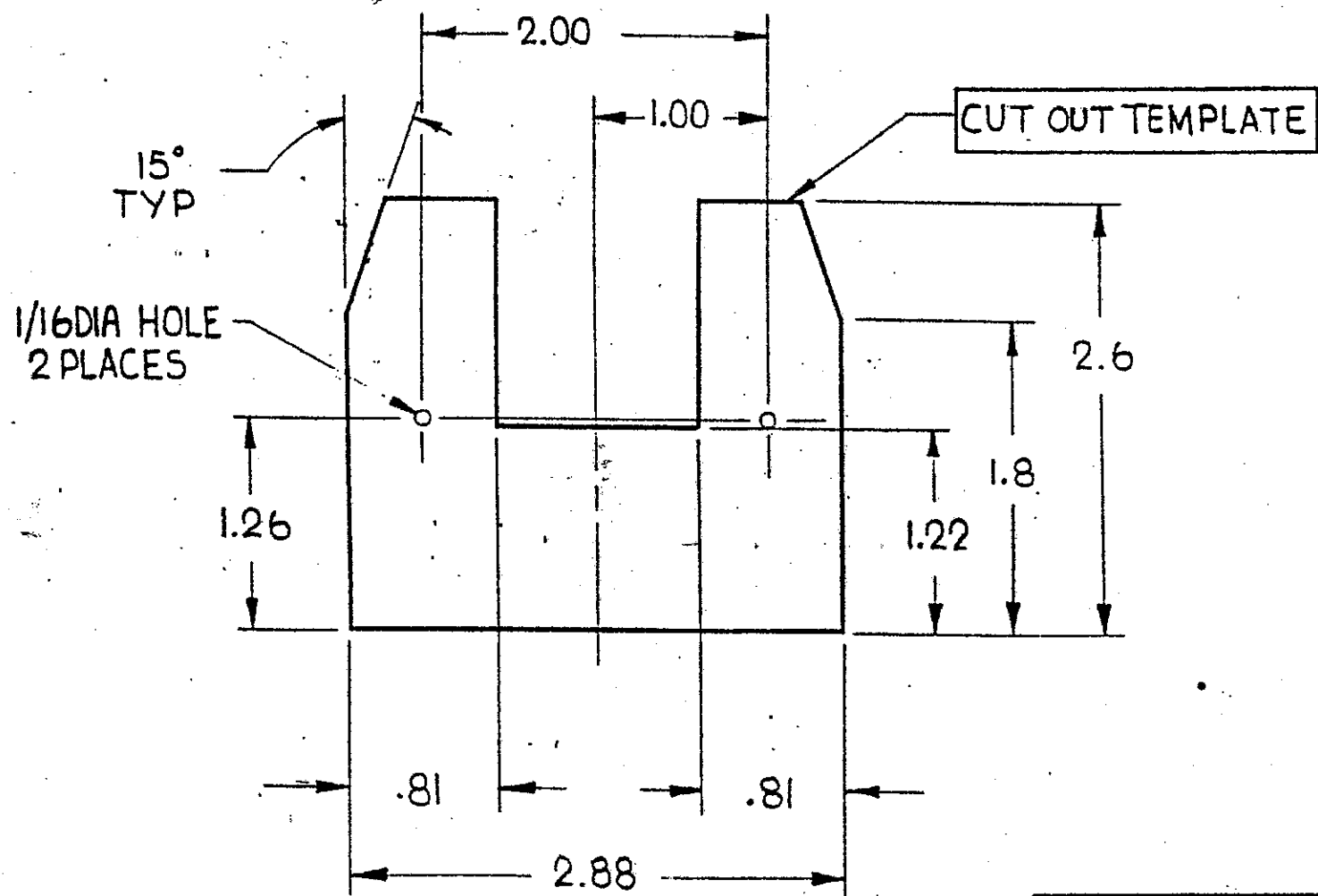
SUPERCHARGERS & CENTRIFUGAL BLOWERS

929 Olympic Blvd. • Santa Monica, CA 90404-3795 • (213) 450-4800 • Telex 183674 • FAX: (213) 452-8093


INSTALLATION INSTRUCTIONS, FORD

PAXTON FUEL CONTROL UNIT

1. Using the mounting bracket (P/N 48215) as a template, center-punch two mounting holes on the strut tower as close as possible to the fuel rail return line.
2. Affix the mounting bracket to the strut tower with sheet metal screws provided (P/N 38664).
3. Affix the F.C.U. to the mounting bracket.
4. Route the vacuum line provided to a manifold vacuum source and to the 90° nipple on the top of the F.C.U.
5. Using special Ford fuel line snap connector tool, disconnect the fuel line snap connector on the return line to the tank. This connector is usually located at the end of the steel fuel rail.
6. Connect the female snap connector (P/N 48059) on the F.C.U. to the stock male snap connector on the fuel rail.
7. Connect the male snap connector (P/N 48058) on the F.C.U. to the stock female snap connector on the return line to tank.
8. Route lines away from any moving parts or heat source of any kind; make sure to allow for engine torque. Secure with tie wraps (P/N 48217).



AUG 22 1989

 PAXTON PRODUCTS INC. 929 Olympic Blvd., Santa Monica, CA 90404. (213) 394-2751		
SCALE: FULL	DIMENSIONS ARE IN INCHES	CHECKED: <input checked="" type="checkbox"/>
DRAWN: NARONG	GENERAL TOLERANCES	APPROVED:
DATE: 5/23/89	ANGLES ± .1, .X ± .03, .XX ± .010, .XXX ± .	DATE:
TEMPLATE, MAF BRACKET		
10018 FINAL ASSY		10171 NEXT ASSY
48203		1

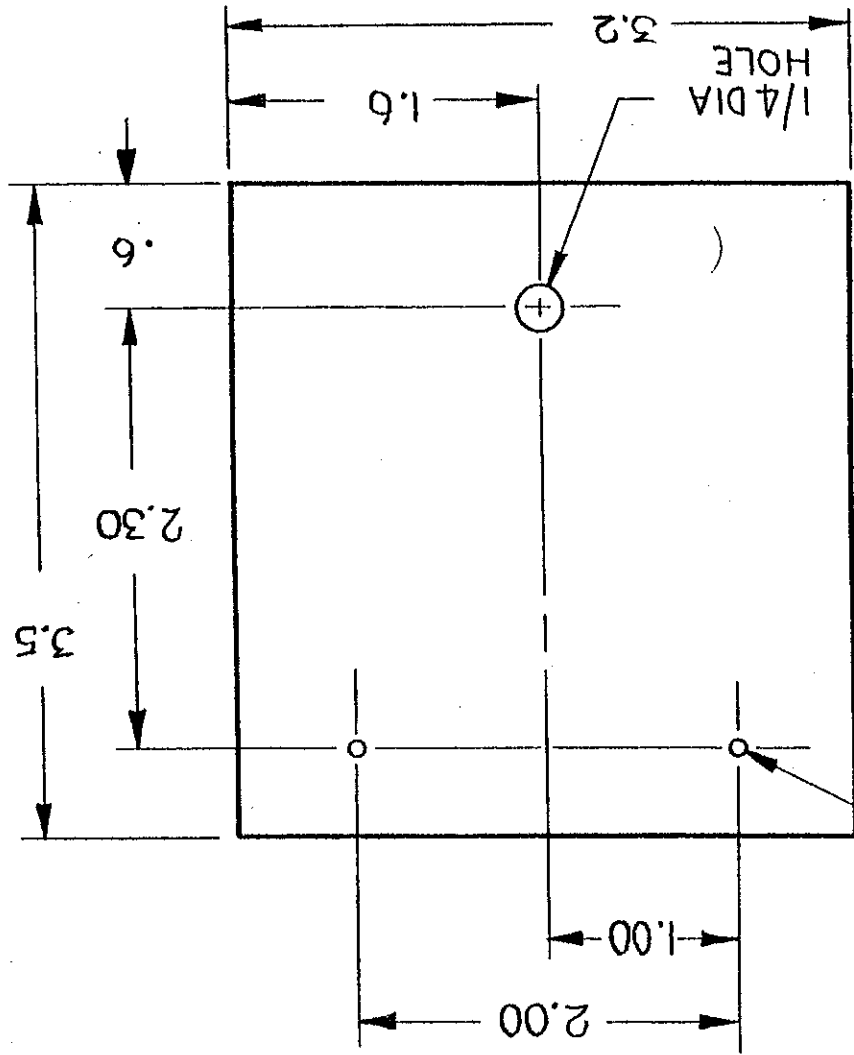
1

2

3

4

DRAWING NO. 48204		FINAL ASSY 10018	NEXT ASSY 10171
DRAWING N 48204		1	
PAXTON PRODUCTS INC. 929 Olympic Blvd, Santa Monica, CA 90404, (213) 394-2751		SCALE: FULL	
DIMENSIONS ARE IN INCHES		CHECKED: <i>JK</i>	
GENERAL TOLERANCES ANGLES ±.XX DIO, XXX ±		DATE: 5/23/89	
DRAWN: NARONG		APPROVED:	
DATE: 5/23/89		DATE:	
FENDER HOLE LOCATION		TEMPLATE	



CUT OUT
TEMPLATE

1/16 DIA HOLE
2 PLACES

DRAWING N	48204
REV	1