



PAXTON
AUTOMOTIVE CORPORATION
SUPERCHARGERS



*Installation Manual for the
PAXTON Automotive
Intercooler Kit #1300001*

*for the
1999-2003 Ford Mustang GT*

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TABLE OF CONTENTS

| | |
|---|------------|
| TABLE OF CONTENTS | <i>iii</i> |
| IMPORTANT NOTES | <i>iv</i> |
| 1.1 INITIAL PREPARATION AND REMOVAL | 1-1 |
| 2.1 AFTERCOOLER INSTALLATION | 2-1 |
| 3.1 FINAL ASSEMBLY | 3-1 |
| APPENDIX | A-1 |
| List of Appendices | A-2 |
| Appendix A 7000185 ASY, S/C NOVI 1000 | A-3 |
| Appendix B 1300001 Kit, Parts List | A-4 |

IMPORTANT NOTES

Congratulations! You have purchased the finest street charge cooler available for the Mustang GT. The centerpiece of this kit is the Highly Efficiency PAXTON charge cooler.

This kit comes with all the parts you will need to install the charge cooler. The instruction manual has been edited in order of sequence, and photographs and drawings have been included to illustrate the text. This will allow you quick part identification and orientation.

The installation will require metric and SAE sockets and wrenches, a hand drill and bits.

Become familiar with the details of your car's system. If it is not operating within normal parameters, we do not recommend the installation or use of the charge cooler.

For the quickest installation time, we suggest that you read this manual thoroughly before

beginning. Make sure that you understand the process, have identified the areas of the car that you will be working on, and have the tools that you will need on hand. The average installation time is 6 to 8 hours, but your time will depend on your working conditions, experience installing superchargers, charge cooler, personal skill level, and preparedness for the job. This estimate does not include time for the initial vehicle inspection, cleaning, fine tuning, or trouble-shooting. Once again, we recommend reading the manual before beginning the process. We are available for tech support at (805) 604-1336, Monday through Friday, 7AM - 3 PM PST.

After reading the manual, verify that all major assembly groups are present in the main kit box. As you remove a box or bag, note the identification label and compare it to the parts list.

PAXTON AUTOMOTIVE makes every effort to insure that all parts are included in the box. If you discover that you are missing any part, or that a part was damaged in shipping, call PAXTON immediately. DO NOT begin installation if a part is missing. Failure to contact PAXTON prior to beginning installation will result in a charge for the missing part.

We suggest that the engine compartment be cleaned before the installation. You can clean the engine with a pressure washer that is found

at self-serve car washes. Use a safe-for-aluminum cleaner/degreaser, and cover the distributor and any electronics with a plastic bag to prevent water from entering.

You are undoubtedly eager to get started, but please take a little more time to insure that your safety is not in jeopardy. A moment's lack of attention may cause a serious injury to you, or to someone else who happens to be standing around. By following some

simple safety precautions, you can avoid many potential dangers. The following list is not meant to be a comprehensive list, but rather it is meant to make you aware of some of the risks, and encourage you to take a safety minded approach to your work area.

- *Never rely solely on a floor jack when working underneath a vehicle. Always use jack stands that are rated for the weight of your vehicle, use them at the recommended lift points, and place your vehicle in 'PARK' or 'FIRST' gear with the parking brake set.*
- *Always use eye protection when using power tools, such as drills, saws, and grinders, or when working underneath a vehicle.*
- *Never smoke, use an open flame, or have spark producing items around gasoline or flammable objects. Always have a fire extinguisher that is rated for chemical and electrical fires handy when working on motor vehicles. Also, make sure that the extinguisher is fully charged.*
- *Operate engines only in a well ventilated area. Carbon Monoxide, gasoline, and solvent vapors are colorless and sometimes odorless, and may asphyxiate and explode without warning.*
- *Always disconnect the battery from your engine before doing work on the electrical or fuel systems, or doing underdash work.*
- *The chemicals used in the vehicle systems, such as oils and coolants, are poisonous. Clean up any spills immediately, and dispose of waste materials properly. Pets, wild animals, and children may die if they ingest the liquid.*

PAXTON Automotive thanks you for your purchase. We welcome your comments and sugges-

tions to help us improve our product.

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Section 1

INITIAL PREPARATION AND REMOVAL

1.1 INITIAL PREPARATION AND REMOVAL

- A.** Remove the plastic clips(4) that hold the grill cover in place. (See Fig. 1-a.)

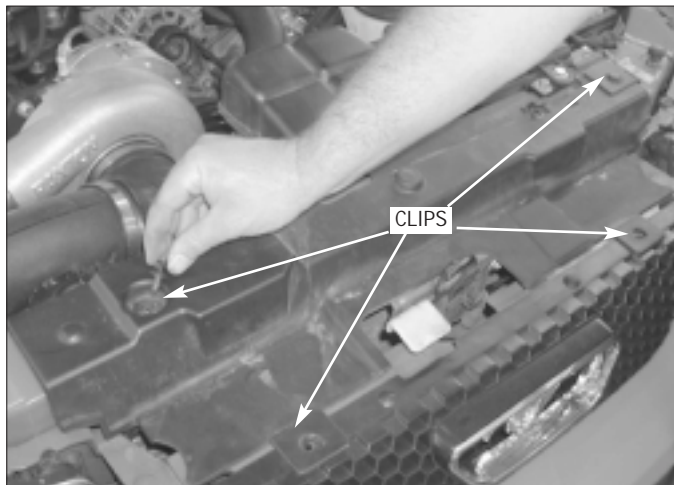


Fig. 1-a

- B.** Remove the hood latch support screw using a T-30 torx bit. (See Fig. 1-b.)

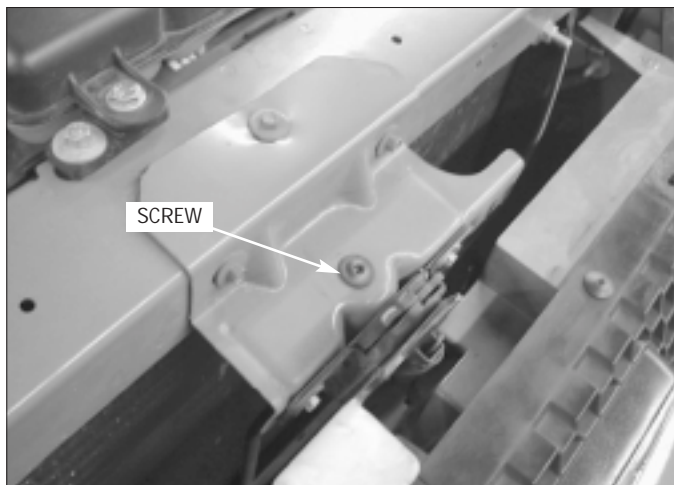


Fig. 1-b

- C.** Place car on lift or jackstands.
D. Remove the screw at the bottom of the support bar. (See Fig. 1-c.)

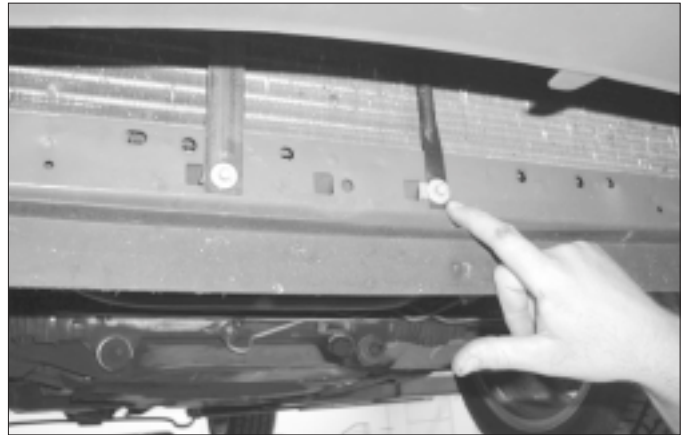


Fig. 1-c

- E.** Remove the power steering cooler line support screw. (See Fig. 1-d.)



Fig. 1-d

- E. Remove the plastic clips (4) that hold the air deflector in place. (See Fig. 1-e)



Fig. 1-e

- F. Remove the plastic clips(2) that attach the front bumper to the frame. (See Fig. 1-f.)



Fig. 1-f

- G. Remove the screw that holds the power steering cooler bracket in place. Set the line aside to be installed in a later step of the installation. (See Fig. 1-g.)



Fig. 1-g

- H. Pop loose the clips on the air deflector to the left and right sides of the radiator. (See Fig. 1-h.)



Fig. 1-h

- I. Disconnect the rear radiator reservoir support brace from the bottom of the frame. (See Fig. 1-i.)



Fig. 1-i

Section 2

INTERCOOLER INSTALLATION

2.1 INTERCOOLER INSTALLATION

- A. Install the intercooler and support with jack-stands or wood blocks. (See *Fig. 2-a.*)



Fig. 2-a

- B. Drill two 1/8" holes as shown in *Fig. 2-b.* Install two 1/4" sheetmetal screws.



Fig. 2-b

- C. Drill one more 1/8" hole and re-attach the rear radiator overflow reservoir support in its new location with a 1/4" sheetmetal screw. (See *Fig. 2-c.*)



Fig. 2-c

- D. Re-attach the powersteering cooler line to the intercooler.
- E. Re-attach the front bumper to the frame re-using the stock plastic clips.

- F.** Attach the supplied intercooler mounting bracket with the bolts supplied in the kit. (See *Fig. 2-g.*)

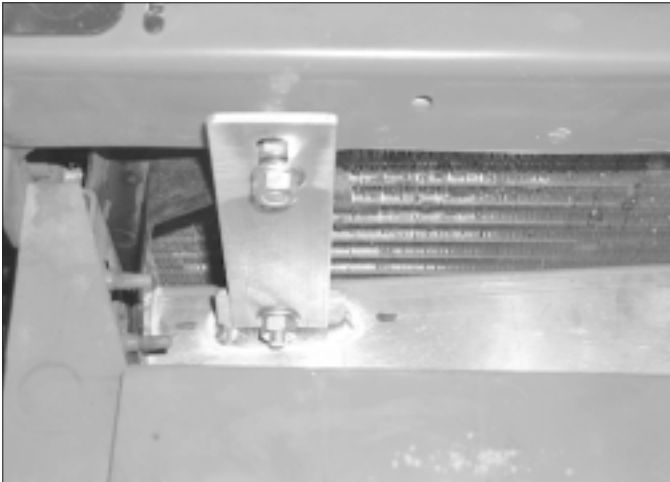


Fig. 2-g

- G.** Remove the discharge tube, bypass valve and air intake tube. (See *Fig. 2-h.*)



Fig. 2-h

- H.** Disconnect the oil lines. Disconnect the oil return at the pan and the oil feed at the supercharger.
- I.** Remove the accessory drive belt by relaxing the tensioner.

- J.** Disconnect the supercharger. You will need to loosen the two bolts on the coolant reservoir and move the reservoir to the side to gain access to the supercharger. (See *Fig. 2-i.*)

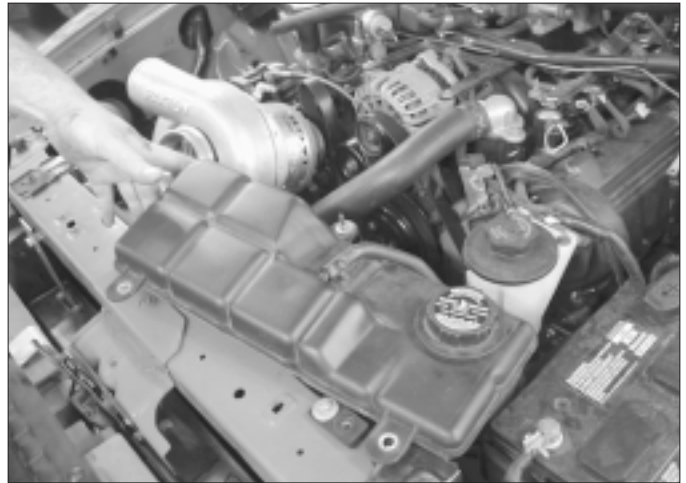


Fig. 2-i

Section 3

FINAL ASSEMBLY

3.1 FINAL ASSEMBLY

- A. Re-clock the supercharger scroll. Refer to the supercharger assembly drawing in the back of the installation manual for positioning.
- B. Re-attach the oil lines.
- C. Connect the discharge tube between the intercooler and the supercharger. (See Fig. 3-a.)



Fig. 3-a

- D. Attach the discharge tube assembly between the intercooler and the throttle body. (See Fig. 3-b.)



Fig. 3-b

- E. Re-install the air intake tube between the air filter/mass air meter and the supercharger. (See Fig. 3-c.)



Fig. 3-c

- F. Re-install the bypass valve from air intake to discharge tube. (See Fig. 3-d.)



Fig. 3-d

- G. Install inlet air control to discharge tube at the throttle body. (See Fig. 3-e)



Fig. 3-e



Here is your completed installation.

APPENDIX

Please understand that PAXTON Automotive is constantly improving the performance and appearance of its various components. The parts in your kit may appear differently than what is pictured in this manual. This may be due to photographs being taken in pre-production, changes in materials, or improvements in performance.

Rest assured that you have purchased the best quality kit that PAXTON Automotive manufactures at this time. The installation of the materials will remain the same.

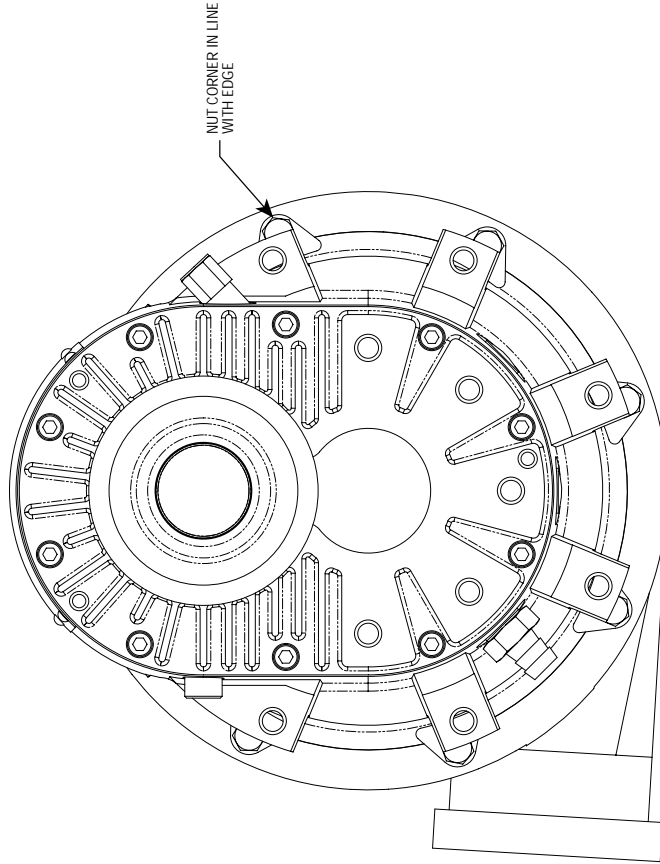
LIST OF APPENDICES

| Appendix Number | DWG Number | Rev | DWG Title |
|------------------------|-------------------|------------|--------------------|
| A | 1300001 | NC | Kit, Parts List |
| B | 7000185 | NC | Asy, S/C NOVI 1000 |

1300001


FORD, 4.6L MUST A/A COOLER ASSEMBLY

| Part Number | Description | Qty/Parent |
|---------------|--------------------------------|------------|
| .8PN101-001 | COOLR CORE,W/CAPS/DUCTS,A/A | 1 |
| .8PN012-010 | DISCH TUBE A,COOLR TO TB 4.6 A | 1 |
| .8PN012-020 | DISCH TUBE B, S/C TO COOLR INL | 1 |
| .8PN012-030 | DISCH TUBE C, FROM COOLR DISCH | 1 |
| .7PS300-400 | BUMP HOSE, 3.00D x 4.00L | 2 |
| .7PS300-401 | SLEEVE, BLACK 3.00D x 4.00 | 3 |
| .7R002-048 | #48 SAE TYPE F SS HOSE CLAMP | 10 |
| .7A250-400 | 1/4-20 x 4 HXHD GR5 | 1 |
| .7J250-022 | 1/4" WASHER SAE STAINLESS | 3 |
| .7A312-075 | 5/16-18 x 3/4 HXCS GR5 ZINC | 4 |
| .7F312-017 | 5/16-18 NYLOCK NUT | 4 |
| .7J312-000 | 5/16 FLAT WASHER-SAE | 8 |
| .7E014-075 | #14 x .75 SHEETMETAL SCREW | 3 |
| .4809638 | INST MAN, CHARGE COOLER 4.6 | 1 |
| .2A017-876-09 | SPACER, .875 OD x 3.210 LONG | 1 |
| .7A250-051 | 1/4-20 x .50 HHCS ZINC PLTD | 2 |
| .7U133-100 | HOSE,ELBOW,90^,1"ID, MOLDED | 1 |
| .7C060-050 | M6 x 1.0 x 50 HXHD ZINC PLATE | 1 |
| .7J006-093 | 6MM WASHER, PLATED | 1 |
| .2A017-876-07 | SPACER, .875 OD x 1.490 LONG | 1 |



S/C ROTATION

RE: CLOCK SCROLL AS SHOWN

| | | | |
|---|--|-------------|---|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: .XX±.01 DECIMALS: .XXX±.005 FRACTIONS: ±1/2" ANGLES: ±1/16 | CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE | |  1300 BEACON PLACE OXNARD, CA 93033 TEL: (805) 604-1336 FAX: (805) 604-1337 |
| | APPROVALS | DATE | |
| MATERIAL | SEE PARTS LIST | ENGINEERING | PAXTON AUTOMOTIVE INTERCOOLER-1999-2003 MUSTANG GT w/ INTERCOOLER |
| FINISH | NONE | R&D | |
| | | APPR. | SIZE D DWG. NO. 7000185 |
| | | WEIGHT | SCALE: 2:1 DO NOT SCALE DRAWING SHEET 1 OF 1 |
| | | | |

Appendix B - Asy, S/C NOVI 1000

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