



Owner Installation Manual for
PAXTON AUTOMOTIVE NOVI 2000
Supercharger Kit

for the
1999/2001 4.6L FORD
F Series/Expedition

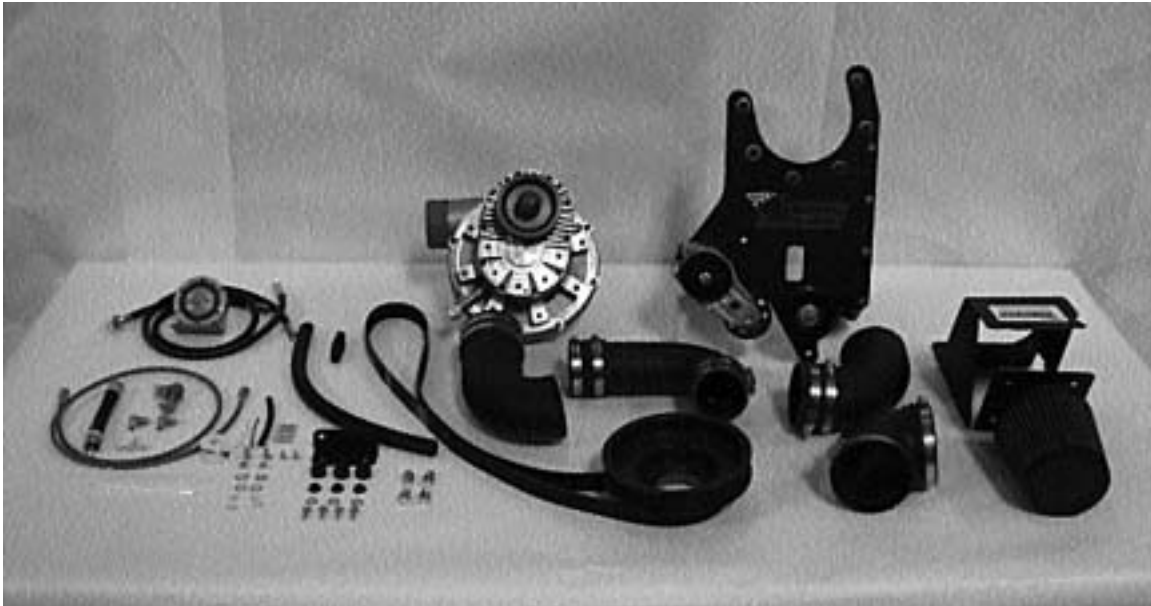
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FOREWORD

This manual provides information on the installation, maintenance and service of the Paxton supercharger kit expressly designed for the 2000 Ford F series/Expedition. Contact Paxton Automotive Corporation for any additional information regarding this kit and any of these modifications at (805) 604-1336 8:00 a.m. - 4:30 p.m. P.S.T..

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.



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1999/2001 4.6 Ford F Series/Expedition

IMPORTANT NOTES

On the 1999-2001 Ford 4.6L Expedition installation you must send in your computer. The computer is located under the dash on the passenger side.

You must complete the chip voucher form supplied with your kit and return it with your ECM to Paxton Automotive in order for you to receive the appropriate chip for your vehicle. If you have any question concerning the removal of the Engine Control Module, please contact Paxton Automotive at 805 604-1336 for assistance.

POWER TRAIN CONTROL MODULE REMOVAL

- A. Start this procedure by removing the positive and negative battery cable from the battery using an 8mm wrench or socket. (See *Fig A.*)



Fig. A

- B. Remove the plastic battery cover and the battery hold located at the base of the battery using a 8mm wrench or socket.
- C. Remove the battery and set aside to be reinstalled.
- D. Located at the fire wall directly behind the battery is the main engine control harness that is attached to the engine control unit locate the 10mm bolt that secures the main harness to the ECM using a 10mm Socket remove the ECM plug from the ECM.
- E. From inside the Passenger compartment remove the plastic doorsill cover. By lifting up on the plastic cover. Set aside to be reinstalled after you have received your computer back from Paxton Automotive. (See *Fig B.*)



Fig. B

- F. Remove the cover in the foot well that covers the ECM and set aside. (See *Fig. C.*)



Fig. C

- G. Locate the small plastic clip that retains the ECM to the ECM Bracket and remove and set aside this clip will not be reused. (See *Fig. D.*)



Fig. D

- H. Looking up into the foot well locate and remove the ECM. (See *Fig. E.*)



Fig. E

- I. With the ECM removed fill out the chip voucher and send your ECM to Paxton Automotive to receive the appropriate ECM module for your vehicle.

Section 1

INTRODUCTION

Congratulations! You have purchased the finest street Supercharger available for the 1999-2001 4.6L Ford Expedition F-150. The centerpiece of this kit is the highly efficient and reliable Paxton Automotive Corp. NOVI 2000 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 in a table at the end of this section. We also suggest that you obtain a Ford shop manual and become familiar with the details of your cars systems. Manuals may be obtained from your local Ford dealer or you can order one from Helm publications at (800) 782-4356.

For best results follow the instructions closely and in sequence. The average installation time for this kit is 8-10 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) 604-1336, 7a.m. - 3:30 p.m. 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.

Never rely solely on a jack when working under a vehicle. Always use approved jackstands to support the vehicle and place them under the manufactures recommended lift points.

When jacking the 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 with out first verifying that the transmission is in neutral and the parking brake is set. Never remove the radiator cap while the engine is still 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 a well ventilated area.

Carbon monoxide, gasoline and solvent vapors are colorless, and sometimes odorless. These can asphyxiate or explode without warning.

Always disconnect at least the negative (-) terminal of the battery when doing any electrical, fuel system or under dash work.

We look forward to hearing from you, particularly if you have any comments or suggestions regarding this manual at (805) 604-1336 Paxton Automotive Corporation, 1300 Beacon Place, Oxnard, CA 93033, e-mail address:

info@paxtonauto.com

RECOMMENDED TOOLS FOR INSTALLATION:

1. Metric and Standard sockets sets
2. Metric and Standard combination wrenches
3. Phillips and common screwdrivers
4. 12" crescent wrench or 36mm open end wrenches
5. Pliers
6. Wire cutters and wire crimping tool
7. Hose cutters
8. 1/8" and 3/8" drill bit and hand drill
9. 12mm allen wrench
10. Small heat source
11. 3/8 NPT Tap
12. Ruler
13. Compressor
14. Air Hammer

*** NOTE ***

Through these procedures the word "discard" is used periodically in relationship to items that will no longer be utilized in conjunction with the supercharger installation. It is recommended that these items be saved for future use should it become necessary.

Section 2

INITIAL PREPARATION AND DISASSEMBLY

2.1 AIR INTAKE ASSEMBLY

Begin the initial preparation and disassembly process by disconnecting the battery cables.

- A. With a 10mm socket, remove the three bolts holding the plastic throttle body cover.
- B. Carefully remove the air inlet temperature sensor (2 wire sensor located in the rubber air intake assembly).
- C. Remove the two plastic vent hoses located on driver's side, connecting to the air intake assembly right before the throttle body.
- D. Remove the air intake assembly by unsnapping the large clamp that holds the air cleaner housing together and using a flat-blade screwdriver on the clamp located at the throttle body. (See *Fig. 2-a.*)

*** NOTE ***

Unplug the 4 wire connector coming from the air intake assembly, located behind the air filter housing. (See *[Fig. 2-1]*)



Fig. 2-b

- F. Using a 10mm socket, remove the two nuts that retain the air flow meter to the plastic cover plate. Place the air flow meter aside to be reused in a later step. (See *Fig. 2-c.*)



Fig. 2-a



Fig. 2-c

- E. Disassemble the air intake assembly by gently prying the air flow meter cover plate from the air filter housing, using a small screwdriver. Push the large rubber grommet (surrounding the 4 air flow meter wires) into the housing, and remove the air flow meter. (See *Fig. 2-b.*)
- G. Remove the air filter housing by pulling directly up on the housing. Once released, pull the remainder of the air filter housing from the inner fender.

2.2 FAN AND FAN SHROUD REMOVAL

- H. Where applicable, remove the jack handle from the fan shroud cover. On some applications, it will be necessary to unclip the coolant reservoir from the fan shroud. To do this, wedge a flat-blade screwdriver between the reservoir and the shroud on either side near the middle. This will release the buttons and allow you to lift it straight up leaving the hose attached. Set the hose aside. On vehicles that the coolant reservoir is not attached to the fan shroud, it will not be necessary to remove it.
- I. Remove the plastic fan shroud cover by removing the 8 plastic Phillips-head style rivets. Unscrew the fan from the water pump snout using a 36mm wrench or a large crescent wrench. Remove the two bolts retaining the fan shroud to the radiator, using an 8mm socket. Remove the fan and the fan shroud simultaneously, (although not necessary, removal of the upper radiator hose will ease the removal of the fan shroud). (See Fig. 2-d.)



Fig. 2-d

2.3 POWER STEERING RESERVOIR

- J. Remove the power steering reservoir from its bracket by removing the three 8mm bolts, set to the side to be used in a later step. Do not remove the power steering hoses. Remove the factory bracket from the engine, using an 8mm socket for the upper mounting bolt attached to the thermostat housing, and an 18mm socket for the lower two mounting bolts located on the side of the cylinder head.

2.4 ABS RELOCATING

- K. On vehicles equipped with ABS, you will need to move the unit for clearance. Using a 13mm socket, remove the rear inner bolt (closest to the engine) on the ABS bracket. Next, loosen the rear outer bolt (fender side). Remove the front mounting bolt and pivot the ABS unit toward the fenderwall. Install the supplied ABS bracket and hardware. (See Fig. 2-e.)

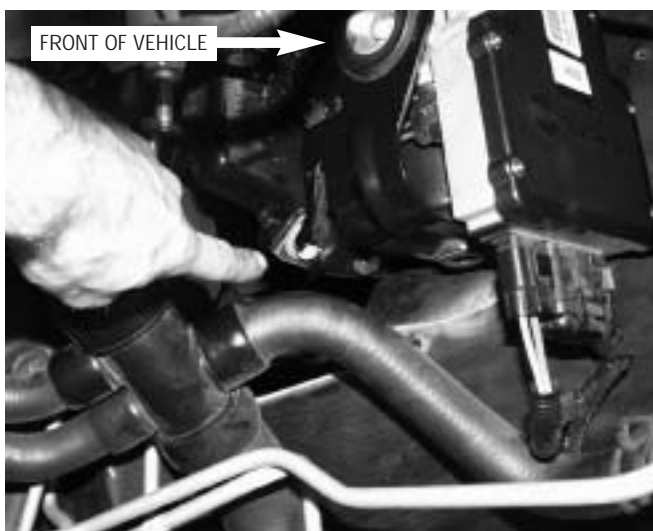


Fig. 2-e

2.5 COIL PACK RELOCATION

You will need to relocate the Coil Pack to make room for the supercharger bracket.

- L. Remove Coil Pack and factory bracket from the driver's side Intake Manifold, then remove the bracket from the coil pack. Attach the supplied relocation bracket (see Fig 2-f) to the coil pack using the factory fasteners. (See Fig 2-g.).



Fig. 2-f



Fig. 2-g

- M.** Modify the Spark Plug Wire Bracket by cutting off the Driver's Side portion. (See Fig. 2-h.)

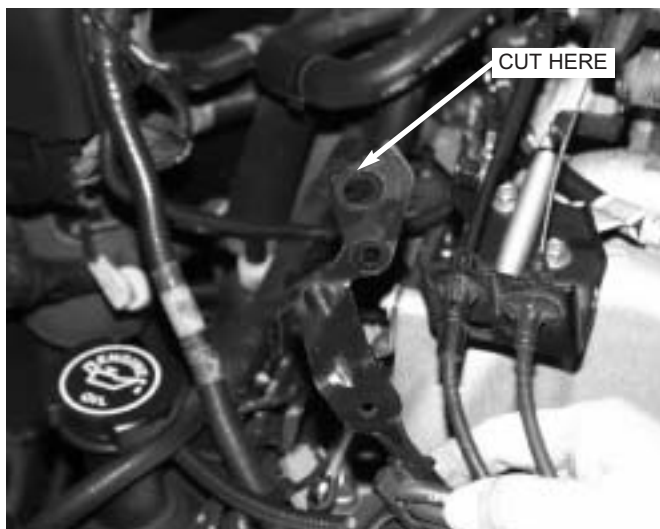


Fig. 2-h

- N.** Disconnect the POSITIVE battery terminal. Remove the 12v Battery Supply to the alternator. Remove the Red Plastic locating clip and rotate the 12v battery cable downwards to clear the new placement of the coil pack. (See Fig 2-i.)



Fig. 2-i

- O.** Install the Coil Pack into the Intake Manifold ,where indicated in Fig 2-i. You may need to re-route the spark plug wires to gain enough length for the new placement of the Coil Pack. (Fig 2-j shows the new placement with the discharge tube installed.)



Fig. 2-j

2.6 FUEL CONTROL UNIT

*** CAUTION ***

Fuel system may be under pressure. Relieve pressure before removing the line.

- P.** At the back of the engine on the driver's side, locate the fuel lines. Locate the smaller diameter return line closest to the driver's side. Using the supplied yellow decoupling tool to separate the return fuel line from the fuel rail.
- Q.** Connect the supplied fuel hoses to the previously separated fuel line. Connect the hose coming from the motor to the IN port on the Fuel Control Unit (FCU) and the hose going to the tank to the OUT port on the FCU.
- R.** Hold the FCU assembly against the firewall on the driver's side. Mark and drill the two mounting holes, using a 1/8" drill bit. Secure the unit with the supplied two sheet metal screws. (See *Fig. 2-k*.)



Fig. 2-k

Section 3

SUPERCHARGER INSTALLATION AND ASSEMBLY

3.1 SUPERCHARGER SUPPORT BRACKET

- A. Install the new supercharger side brace mount (see Fig. 3-a) in the original lower mounting location of the power steering reservoir. Using a 12mm Allen wrench, snug the bolts so that the mount can be moved to align with a small amount of pressure.



Fig. 3-a

- B. Next, attach the supercharger side brace to the main supercharger mounting bracket with the 4 tapered head 1/4-20 x 1" long bolts and torque to 10 ft. lbs. Then slide the three black aluminum spacers (about 1/2" thick) over the three studs protruding from the front of the driver's side head and temporarily install the main supercharger mounting bracket with the supplied 8mm x 1.25 nuts and washers (finger tighten only). Start the two 5/16-18 x 1" long tapered head Allen bolts through the side brace into the previously installed brace mount, adjusting the brace mount to align the bolt holes. After adjusting the brace mount, remove the two bolts and the main supercharger mounting bracket, finish tightening the brace mount.
- C. Re-install the main supercharger mounting bracket, be sure to loop the cam position wiring harness through the opening of the main supercharger mounting bracket. Start

all nuts and bolts before tightening. (See Fig. 3-b.)

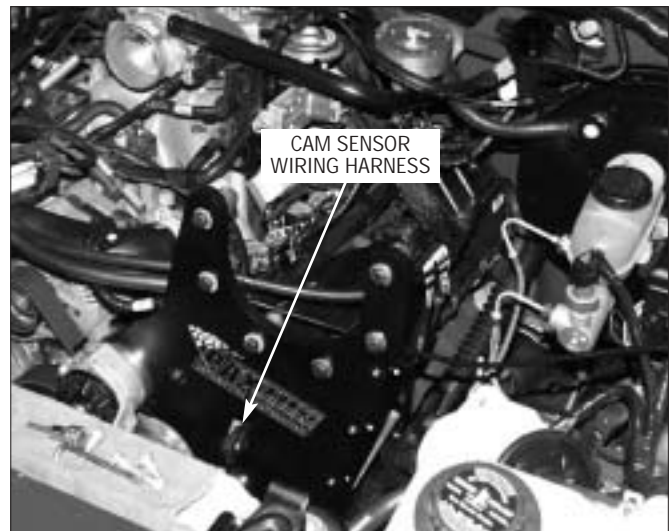


Fig. 3-b

3.2 SUPERCHARGER CRANK PULLEY

- D. Install the supercharger crank pulley and spacer using the three supplied 10mm x 1.5 x 35mm long bolts using an 8mm Allen wrench.

*** NOTE ***

Use loctite on crank pulley bolts. (See Fig. 3-c.)

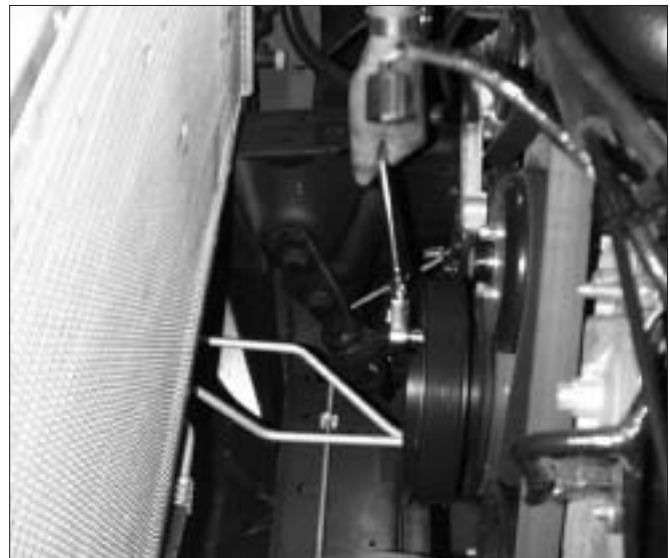


Fig. 3-c

3.3. EGR/EMISSION CONTROL BRACKET

- E. You will need to relocate the EGR bracket from it's original location to gain clearance for the supercharger. Remove the two 10mm factory bolts and set the factory bracket aside. Install the supplied relocation bracket using the factory bolts. Use the supplied spacers, nuts, and bolts to attach the factory bracket and EGR to the relocation bracket. (See Fig 3-d.)

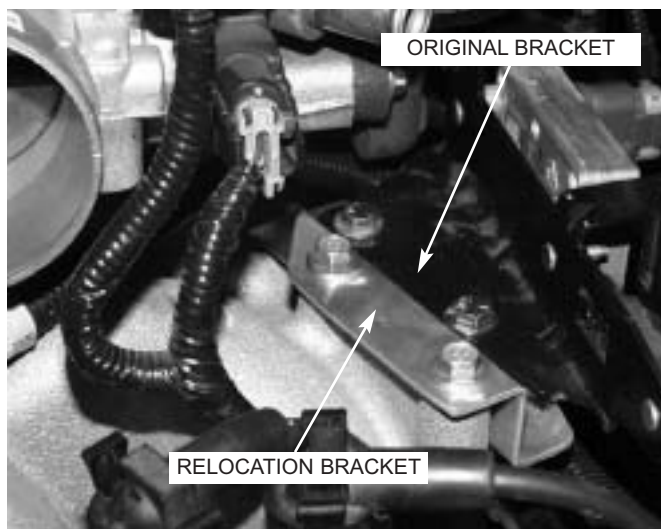


Fig. 3-d

3.4 OIL DRAIN

This step will require an air-impact hammer, (and therefore an air compressor), drill motor, 3/16-inch drill bit, 3/8-inch X 18 NPT tap, anti-seize lubricant and heavy grease.

- F. The Paxton Automotive Novi 2000 supercharger relies on pressurized engine oil for it's lubrication. The oil must then be returned to the pan, via a drain back fitting that must be installed into the pan. This involves making a hole in the front of the oil pan. To do this, first scribe an 'X' into the middle of the raised portion of the pan, 3/4-inch below the pan rail. (See Fig 3-e.) After the 'X' is scribed, drill a 3/16 inch pilot hole into the center of the 'X'.

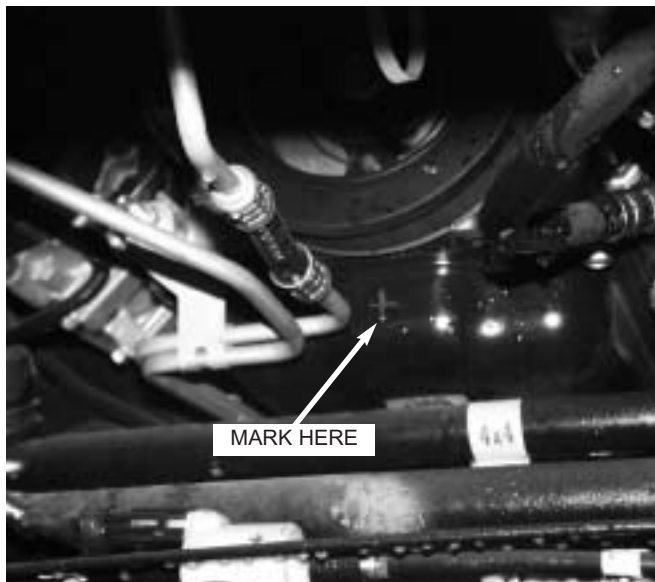


Fig. 3-e

- G. Apply a small amount of anti-seize lubricant to the supplied hole punch. Place the tip of the punch into the pilot hole, and with an air-impact hammer.

*** NOTE ***

A hand held hammer should not be used for this step, as it will dent the front of the pan as the hole is made.

After the punch is halfway into the hole, stop and check the hole size with a 3/8" x 18 NPT tap (not included). The finished hole should be Ø9/16". The tip of the tap should barely fit into the hole; if the hole is still too small, use the punch again to bring the hole up to size.

*** NOTE ***

Be careful not to make the hole too big. (See Figs. 3-f, 3-g.)



Fig. 3-f



Fig. 3-g

- H. Apply a liberal amount of grease to the threads of a 3/8-inch X 18 NPT tap and slowly insert into the hole. The grease will make tapping the hole easier, and will also keep metal chips from falling into the pan. (See Fig 3-h.)



Fig. 3-g

- I. Clean the finished threads with a clean rag. Apply a sparing amount of sealer, such as silicon RTV, to the threads of the supplied drain back fitting, and install.

- J. Connect the oil return line (Asy #1015409) to brass fitting on S/C. Tighten the hose clamp.
- K. Attach the supercharger to the mounting bracket using the six 3/8-16 x 2" long bolts. Route the oil return line making sure that it is away from the exhaust manifold and all moving parts. Attach line to the fitting on the oil pan.

*****IMPORTANT*****

To avoid snapping off oil jet, support the oil jet within the supercharger with a wrench while tightening the 90 degree fitting.

3.3 OIL FEED LINE INSTALLATION

- L. Using a 3/16" allen wrench remove the small pipe plug from the side of the passenger side cylinder head. It is located below the valve cover in line with the oil fill. Using liquid teflon sealer, thread in the 90 degree fitting so it points straight up. Attach the steel braided hose and route over the valve cover, under the alternator and loop under the supercharger. (See Fig. 3-h.)



Fig. 3-h

3.4 SUPERCHARGER BELT

Install the supercharger belt tensioner to the supercharger mounting plate using the supplied mounting hardware and spacer.

- M.** Install the supercharger drive belt by using a 1/2" ratchet or a breaker bar to rotating spring loaded tensioner clockwise. This will allow you to install the belt as shown. (See Fig. 3-i.)

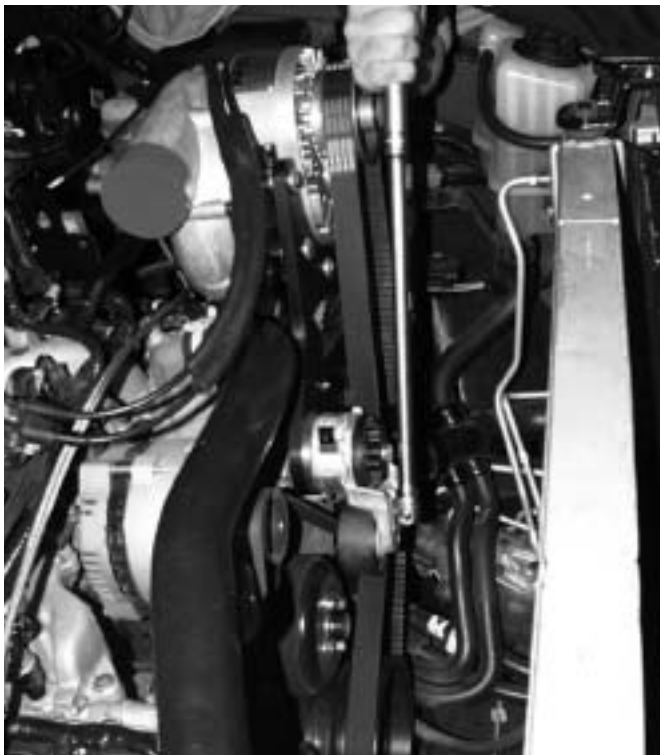


Fig. 3-i

3.5 FAN AND FAN SHROUD

Refer to Fig. 3-j to identify which style fan clutch snout your vehicle has.

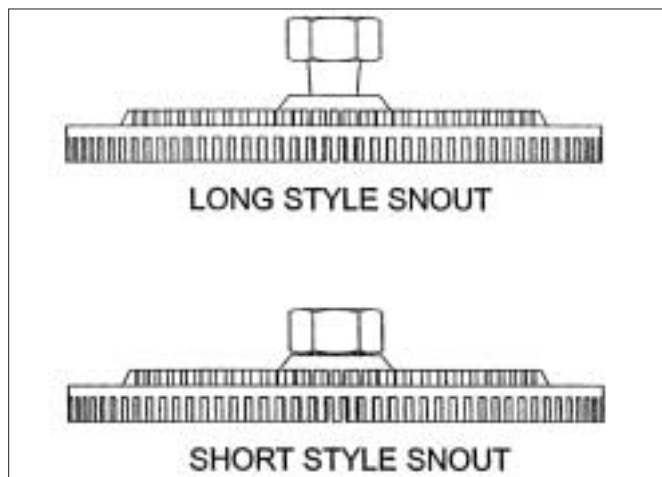


Fig. 3-j

Long Style Fan Clutch Snout:

- N.** Use the provided short hex fan spacer and the fan to clutch spacer along with the provided hardware to sandwich the spacer between the fan and clutch. (See Fig. 3-k.). Install the included hex fan spacer on the snout.



Fig. 3-k

Short Style Fan Clutch Snout:

- O.** The short style fan snout will only require the longer hex space. Install on snout and tighten.

3.6 POWER STEERING RESERVOIR BRACKET

*** NOTE ***

The power steering reservoir relocation bracket has a dual pattern bolt holes, the wider bolt pattern is used for the fan shroud.

- P.** Using the supplied power steering reservoir bracket, measure the 1 1/2" from side edge of the shroud and 2" down from the top of the shroud. Mark and drill the two holes using a 1/4" drill bit. Bolt the bracket to shroud using the supplied two 1/4-20 x 3/4" long bolts, washers and nuts. (See Fig. 3-k.)



Fig. 3-k

- Q.** Install the fan and fan shroud by lowering both into the vehicle at the same time. Re-attach the fan shroud by re-using the factory hardware. Install the fan and tighten to manufacturer's specifications. Re-install the shroud cover and replace the jack-handle in its original location.
- R.** Mount the power steering reservoir to the re-locating bracket using the supplied 1/4-20 x 3/4" bolts, washers and nuts. You will have to twist and rotate the hoses on the reservoir so they route without kinks. (See *Fig. 3-l*.)



Fig. 3-l

- S.** Assemble the new airbox as shown using the supplied hardware. (See *Fig. 3-m*.)



Fig. 3-m

- T.** Mount the airbox in the factory location. Remove the two rubber grommets that retained the factory airbox assembly. Mount the lower leading edge of the plastic air box even with the edge of the metal mounting flange. It may be necessary to move the large wiring harness that runs along the fender for air cleaner clearance. Using the airbox as a template, drill two 1/4" holes (see *Fig. 3-n*) and mount the new airbox, as shown, using the two 1/4-20 x 3/4" long bolts provided. Reconnect the mass air meter connector.



Fig. 3-n

- U. Remove the black plastic tube coming from the 90° elbow on the driver's side valve cover. Install the supplied plastic barbed fitting into the rubber elbow and attach the supplied hose between the plastic fitting and the fitting on the new Paxton Automotive airbox.
- V. Installation of inlet tubing, start by installing the air inlet temp. sensor into the hole on the rubber elbow. Install the rubber elbow on to the supercharger inlet, making sure that the temp sensor points to the intake manifold. Reconnect the harness to the sensor. If the sensor wires are too short, use the supplied extension kit. Leaving the hose clamp loose, insert the short plastic elbow into the rubber elbow. Then attach the long 3-1/2" elbow between the air flow meter and the short plastic elbow, twist and rotate the inlet assembly for best alignment. Tighten all clamps.
- W. Install the supplied idle air supply hose in place of the factory IAC hose. This will be connected to the supercharger discharge tube in a later step. (See Fig. 3-o.)



Fig. 3-o

- X. Install the discharge tube as shown. Connect the IAC hose to the underside of the discharge tube. (See Fig. 3-p.)



Fig. 3-p

3.7 FUEL PUMP INSTALLATION

*** NOTE ***

Depressurize the fuel system by removing the cap on the schraeder valve and depress the valve using a pen or small screwdriver to release fuel pressure.

- Y. Locate fuel pump filter inside the driver's side frame rail. Using supplied white plastic tool, install the supplementary fuel pump (see *Appendix drawing 1017721* and Fig. 3-q) by disconnecting the fuel line on the output side of the fuel filter.

Connect the fuel pump inlet line to the disconnected port on the fuel filter and the fuel pump outlet line to the disconnected line going to the engine. Hoses are left intentionally long so you have the freedom in mounting, trim lines as necessary. Route all fuel lines away from any heat source or moving parts and secure using supplied clamps and wire-ties.

3.8 FUEL PUMP RELAY

- Z. Mount the relay in a safe, dry place in the engine compartment away from any heat source. Wire the relay as per Appendix. On terminal 86, tap into the pink wire with a black lead that is located in the large wiring harness running along the inside of the driver's side frame rail up to the engine compartment.

Section 4

FINAL CHECK OUT AND START-UP

This section covers pre-start checks and inspections, as well as initial start-up.

4.1 INSPECT THE FOLLOWING:

1. Wires, harness and electrical connections. Are all items properly dressed, connected and secured?
2. Hoses, lines and fittings. Are all items properly dressed, connected and secured?
3. Fasteners, brackets, and clamps. Are all items properly installed and tightened?
4. **Fluid levels.** Is the radiator coolant and the engine oil at their proper levels? Are there any fluid leaks?
5. **Belt(s).** Is the serpentine drive belt (or accessory drive and supercharger drive belts, depending on the requirement of your vehicle) properly installed, aligned and tensioned?

4.2 PERFORM THE FOLLOWING:

1. Cycle the ignition key from the “off” to “on” position three (3) times at fifteen (15)

second intervals. Afterwards, check the entire fuel system for any leaks.

2. Start the car. Verify that the oil pressure is within the normal operating range. Listen closely. The engine should idle and sound the same as it did before you began the installation. Shut off the engine, disconnect the oil feed line from the blower. Remove the oil jet from the blower. Blow through the oil jet to ensure there is no blockage or foreign matter plugging it. Re-install oil jet and oil feed line and proceed.
3. Allow the engine to come up to normal operating temperature. Bleed the cooling system and top off as necessary.

4.3 CHECK FOR THE FOLLOWING:

1. Fuel leaks.
2. Fluid leaks.
3. Belt slippage.
4. Throttle response.

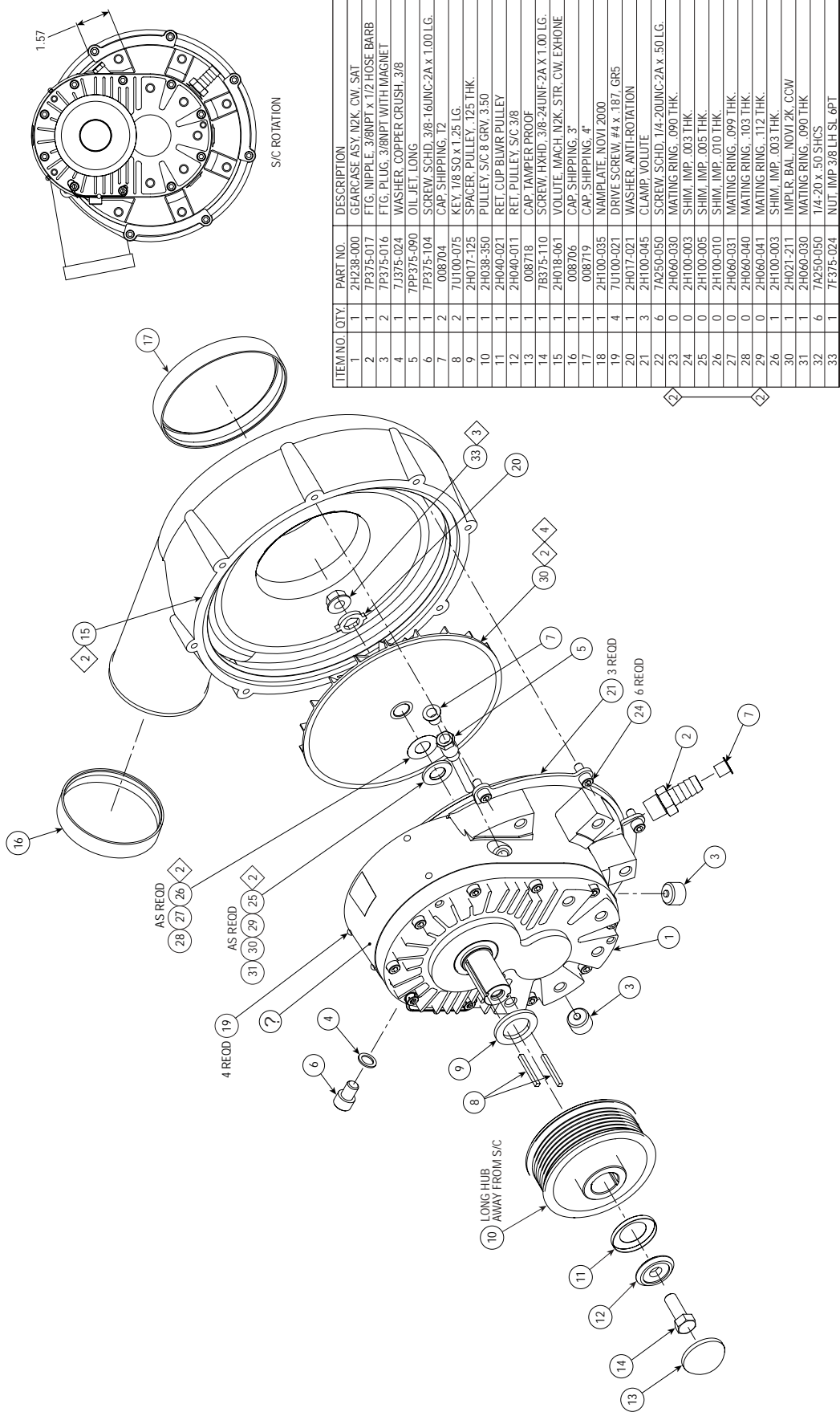


Congratulations!! Here is your finished supercharger equipped engine.


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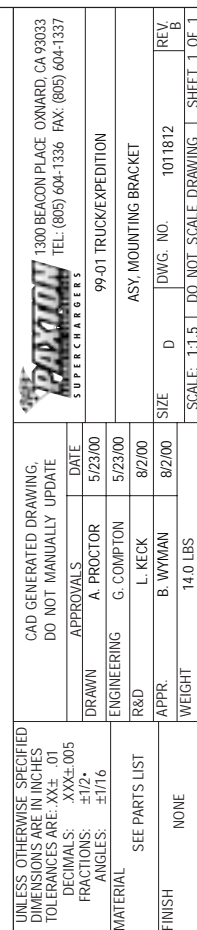
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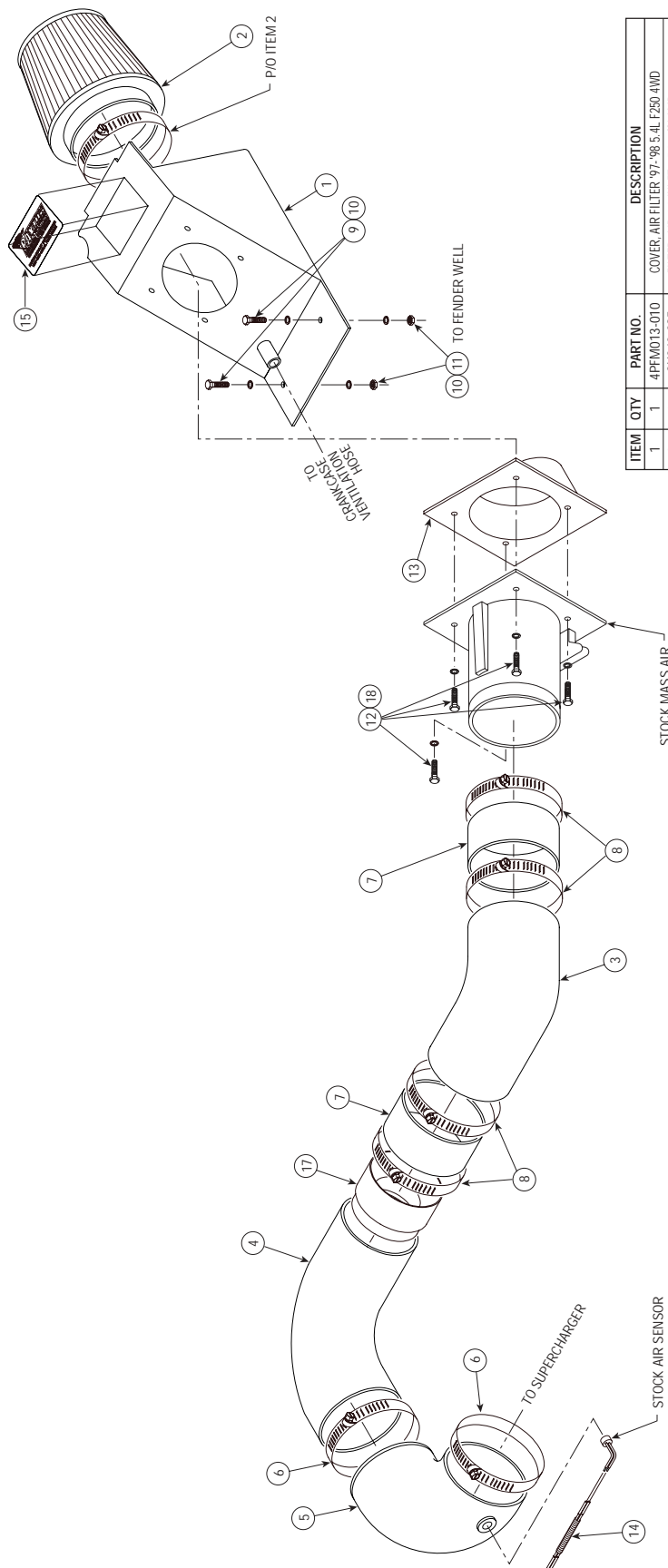
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ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	2H238-000	GEARCASE ASY N2K CW SAT
2	1	7P375-017	FTG. NIPPLE .38NPT x 1/2 HOSE BARB
3	2	7P375-016	FTG. PLUG .3/8NPT WITH MAGNET
4	1	7J375-024	WASHER, COPPER CRUSH, 3/8
5	1	7P375-090	OIL JET LONG
6	1	7P375-104	SCREW, SCHD. 3/8-16UNC-2A x 1.00 LG.
7	2	008704	CAP SHIPPING, T2
8	2	7U100-125	KEY, 7/8 SQ x 1.25 LG.
9	1	2H038-350	PULLEY, S/C 8 GRV, 3.50
10	1	2H038-350	PULLEY, S/C 8 GRV, 3.50
11	1	2H040-021	RET. CUP BLWR PULLEY
12	1	2H040-011	RET. PULLEY S/C 3/8
13	1	008718	CAP TAMPER PROOF
14	1	7B375-110	SCREW HHXD. 3/8-24UNF-2A x 1.00 LG.
15	1	2H018-061	VOLUTE, MACH. N2K, STR. CW, EXHONE
16	1	008706	CAP SHIPPING, 3"
17	1	008719	CAP SHIPPING, 4"
18	1	2H100-035	NAMPLATE, NOVI 2000
19	4	7U100-021	DRIVE SCREW #4 x 1.87 GR5
20	1	2H017-021	WASHER, ANTI-ROTATION
21	3	2H100-045	CLAMP, VOLUME
22	6	7A250-050	SCREW, SCHD. 1/4-20UNC-2A x .50 LG.
23	0	2H060-030	MATING RING, .090 THK.
24	0	2H100-003	SHIM, IMP. .003 THK.
25	0	2H100-005	SHIM, IMP. .005 THK.
26	0	2H100-010	SHIM, IMP. .010 THK.
27	0	2H060-031	MATING RING, .099 THK.
28	0	2H060-040	MATING RING, .103 THK.
29	0	2H060-041	MATING RING, .112 THK.
30	1	2H100-003	SHIM, IMP. .003 THK.
31	1	2H021-211	IMPLR. BAL. NOVI 2K, CCW
32	6	7A250-050	1/4-20 x .50 SHCS
33	1	7F375-024	NUT, IMP. 3/8 LH SL. 6PT

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		
	DRAWN	G.	DATE	99-01 4.6L FORD TRUCK/ EXP					
	ENGINEERING	G.	10/16/00	ASV S/C NOVI 2000 FORWARD ROTATION, 99-01 4.6L, SATIN					
	R&D	L. KECK	10/16/00						
MATERIAL SEE PARTS LIST	APPR.	G.	10/16/00	SIZE	D	DWG. NO.	REV.		
	WEIGHT	L. KECK		SCALE: 3:4	DO NOT SCALE DRAWING	SHEET 1 OF 1			



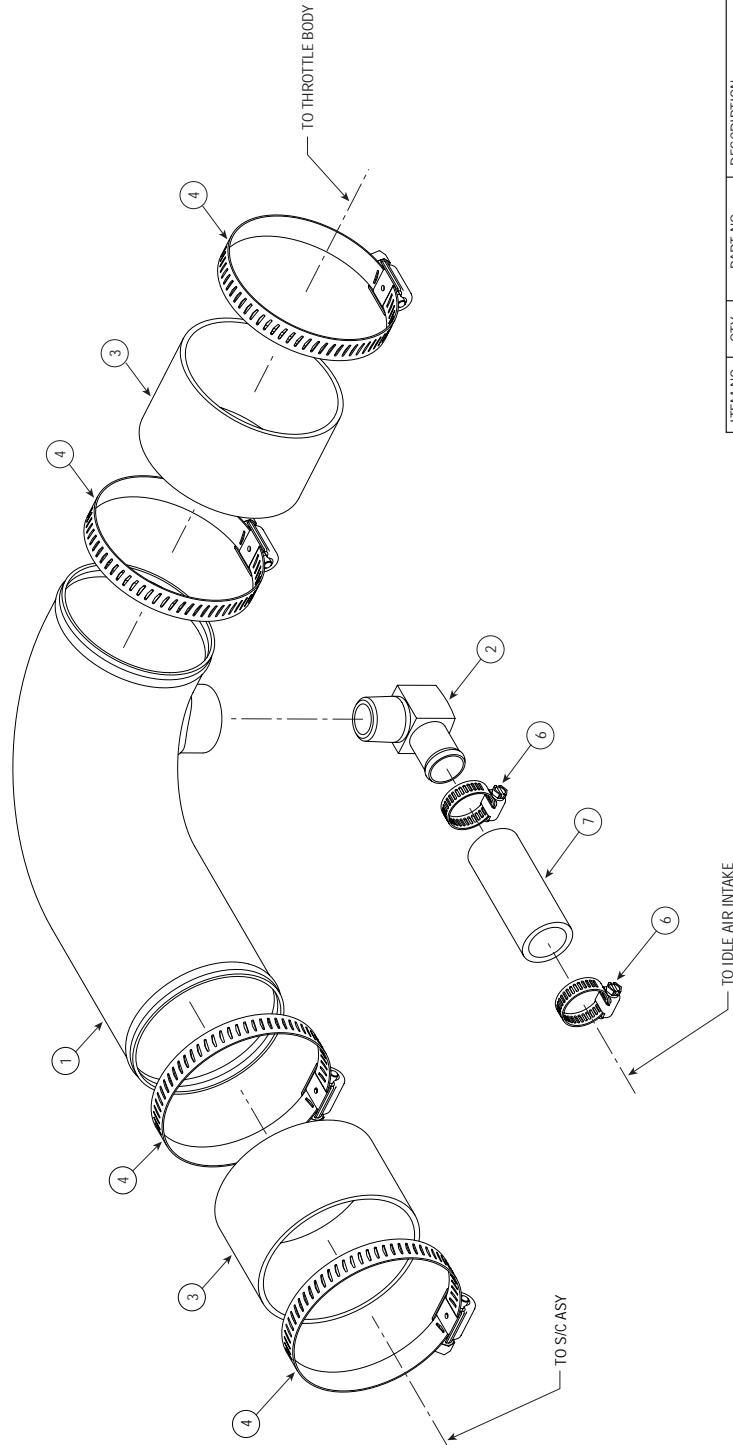


ITEM	QTY	PART NO.	DESCRIPTION
1	1	4PFM013-075	COVER, AIR FILTER 97-98 5.4L F250 4WD
2	1	8H040-095	FILTER, AIR 4.0 INLET 4.5 w/CAMP
3	1	4PFM012-051	3 1/2" 90° ELBOW MODIFIED
4	1	4PFM012-040	3 1/2" TO 4" ELBOW
5	1	4PFM012-075	90° RUBBER ELBOW 4"
6	2	7R002-064	CLAMP HOSE #64
7	2	7PS350-200	HOSE, TURBO 3.50 x 2 BLK
8	4	7R002-056	CLAMP HOSE #56
9	2	7A250-074	SCREW, 1/4-20 x .75 HEXHD GR5
10	4	7J250-022	WASHER, 1/4 FLAT US5 GR5
11	2	7F250-021	NUT, 1/4 HEX GR5 W/ Nylon INSERT
12	4	7J006-093	WASHER, 1/4 ALUM AN660-D16
13	1	4PFM011-080	ADAPTER, AIR FILTER
14	1	1018001	ASY WIRE EXT. AIR TEMP SENSOR
15	1	3863516	DECAL KIT IDENTIFICATION
16	1	7P375-106	VALVE PCV
17	1	4PFM017-021	RESTRICTOR, AIR INTAKE 38C/BBC/F250 5.4L FORD
18	4	7A250A-024	SCREW, 1/4-20 x .75 ALUM SST


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: XX .01 DECIMALS: .XX±.005 FRACTIONS: 1/16± ANGLES: ±1/16	CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE				 1300 BEACON PLACE OXNARD CA 93033 TEL: (805) 604-1336 FAX: (805) 604-1337
	DRAWN	APPROVALS	BKE	DATE 12/09/97	
	ENGINEERING				
MATERIAL	R&D				99-101 TRUCK/EXPEDITION
FINISH	SEE PARTS LIST				ASSY AIR INTAKE
	APPR.	SIZE	D	DWG. NO.	
	WEIGHT	SCALE: NONE	DO NOT SCALE	DRWING	
	NONE	---	LBS		
					REV. C
					SHEET 1 OF 3

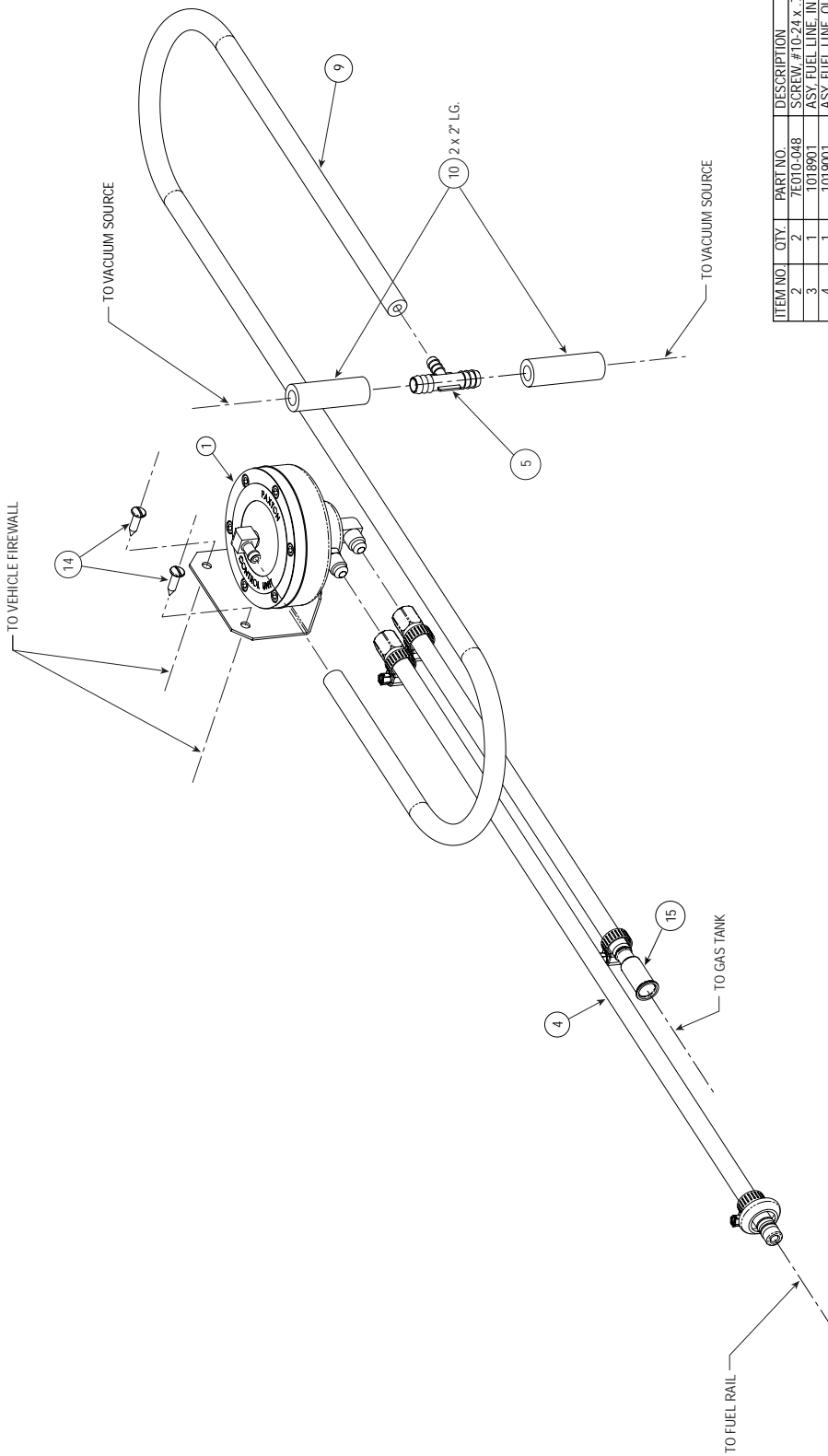
NOTES: (UNLESS OTHERWISE SPECIFIED)

1. ITEM 16 IS REPLACEMENT FOR STOCK PCV VALVE.



ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	4PHM112-031	TUBE, AIR
2	1	7P500-026	FTG. ELBOW, 1/2 NPT x 3/4 HOSE BARB
3	2	7P5300-200	SIV. BLK. 3.00D x 2.00
4	4	7R002-048	CLAMP HOSE #48
6	2	7R002-010	CLAMP HOSE #10
7	1	7U038-000X25	

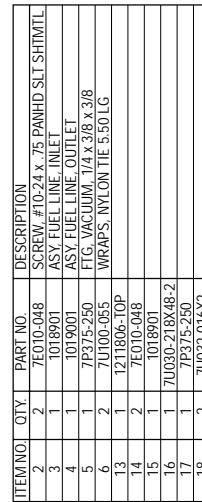
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: XX+.01 DECIMALS: XXX+.005 FRACTIONS: ±1/2 ANGLES: ±1/16	CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE					1300 BEACON PLACE OXNARD, CA 93033 TEL: (805) 604-1336 FAX: (805) 604-1337		
	DRAWN	APPROVALS	DATE	99, 01 4.6L TRUCK/EXPEDITION				
	ENGINEERING	JFC	12/10/9					
	R&D	-----	-----	ASY, AIR DISCHARGE				
	APPR.	-----	-----	SIZE D DWG. NO. 1016005 REV. D				
FINISH NONE	WEIGHT 1.6 LBS				SCALE: 3/4 DO NOT SCALE DRAWING SHEET 1 OF 1			



ITEM NO.	QTY.	PART NO.	DESCRIPTION
2	2	76010-048	SCREW #10-24 x .75 PANHD SLT SHITMTL
3	1	1018901	ASY. FUEL LINE INLET
4	1	1019001	ASY. FUEL LINE OUTLET
5	1	7P375-250	FIG. VACUUM 1/4 x 3/8 x 3/8
6	2	70100-055	WRAPS, NYLON TIE 5.50 LG
13	1	1211806-10P	
14	2	76010-048	
15	1	1018901	
16	1	7U030-218X48-2	
17	1	7P375-250	
18	2	7U032-016X2	

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	99-01 4.6L FORD TRUCK/EXPEDITION	
DRAWN		DW	5/19/00	KIT, FUEL CONTROL	
ENGINEERING		G.	5/19/00		
R&D		L. KECK	5/19/00		
APPR.		B	5/19/00		
FINISH		NONE			
WEIGHT		3.6 LBS			
SCALE: 1:1.5		DO NOT SCALE	DRAWING	SHEET 1 OF 1	

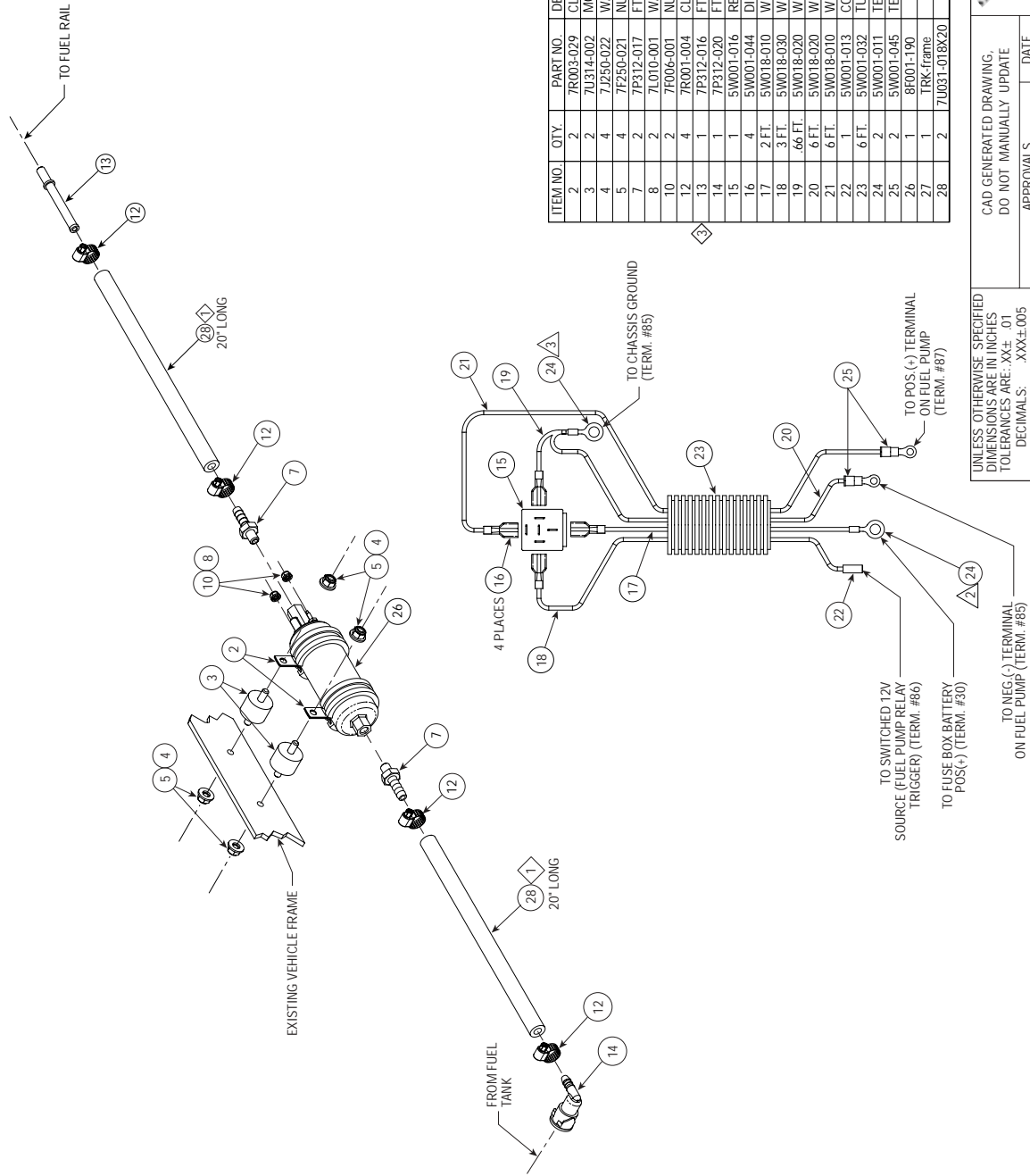
NOTES: UNLESS OTHERWISE SPECIFIED
1. TO BE SHIPPED LOOSE



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: .XX± .01 DECIMALS: .XXX±.005 FRACTIONS: 1/16	CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE
	APPROVALS
	DATE

SUPERCHARGERS		KIT, FUEL CONTROL		REV. A
99-01 4.6L FORD TRUCK/EXPEDITION		DWG. NO.	1017730	SHEET 1 OF 1
SCALE:	1:1.5	DO NOT SCALE DRAWING		

SCALE: 1:1.5	DO NOT SCALE DRAWING	SHEET 1 OF 1
--------------	----------------------	--------------



NOTES: UNLESS OTHERWISE SPECIFIED

1. ITEM 11, HOSE LENGTH IS LEFT LONG, INTENTIONALLY. CUSTOMER WILL ROUTE AND CUT HOSE TO SUITABLE LENGTH.
2. ALL FUEL FITTINGS MUST BE FULLY TIGHTENED PRIOR TO SHIPMENT.

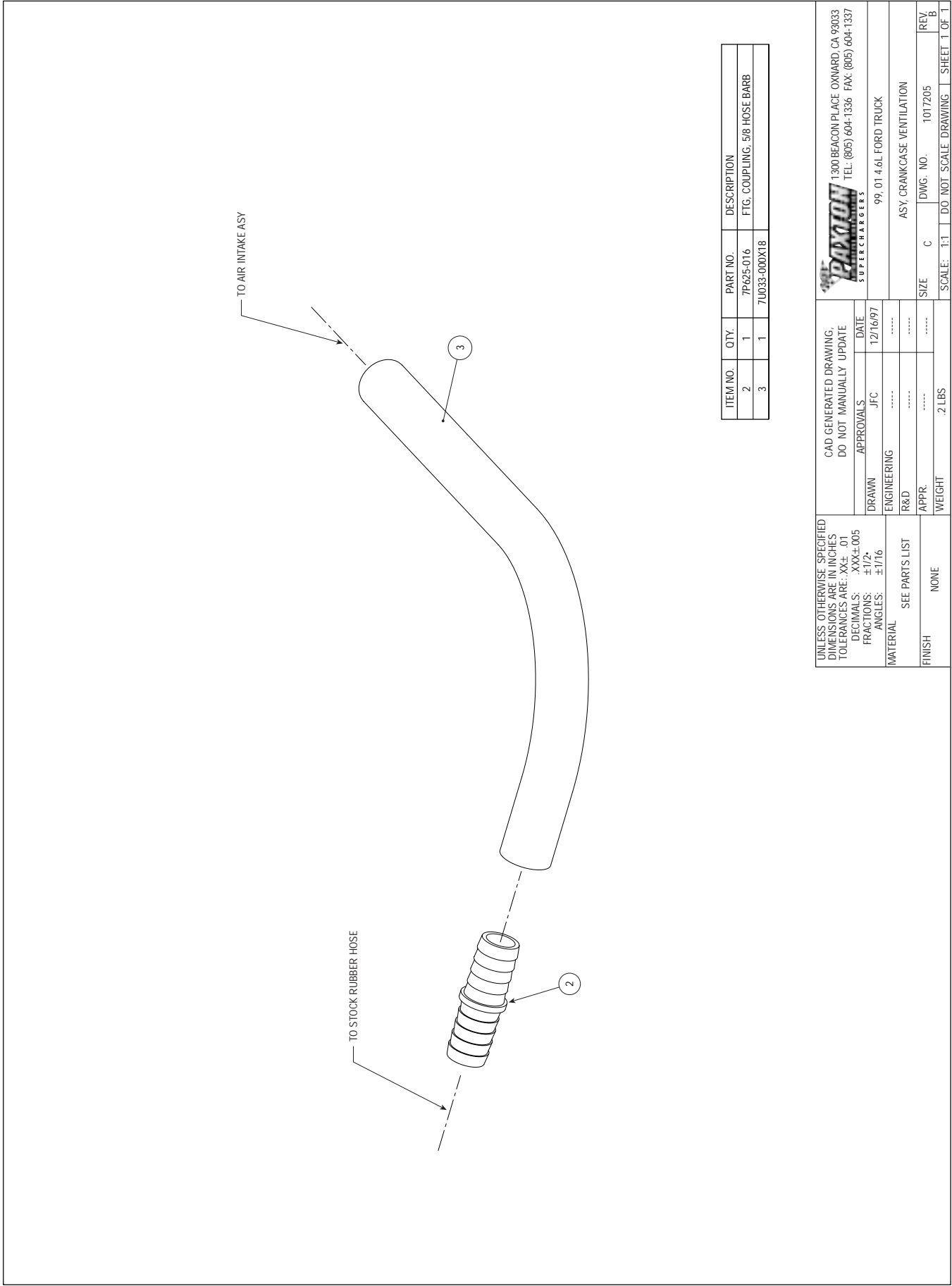
ITEM NO.	QTY.	PART NO.	DESCRIPTION
2	2	7R003-029	CLAMP, LOOP CUSHIONED 1-7/16 I.D.
3	2	7U0314-002	MOUNT, 1.00 O.D. x .760 W/(2) 1/4-20 x .50 STUDS
4	4	7J250-022	WASHER, 1/4 FLAT SAE GR5
5	4	7F250-021	NUT, 1/4-20 HEX W/ NYLON INSERT GR5
7	2	7F312-017	FTG, 9mm, BARB
8	2	7L010-001	WASHER, #10 LOCK INT
10	2	7F006-001	NUT, 6-32 HEX GR5 W/NYLON INSERT
12	4	7R001-004	CLAMP, HOSE #4
13	1	7F312-016	FTG, FUEL STRAIGHT 5/16 HOSE
14	1	7F312-020	FTG, 90° FUEL RAIL TO HOSE 8.3mm HOSE x 7 9mm TUBE
15	1	5W001-016	RELAY, 30AMP, 12 VDC
16	4	5W001-044	DISCONNECT, FEMALE SPADE 10-12 GAUGE
17	2 FT.	5W018-010	WIRE, 18AWG x 24.00 LG, RED
18	3 FT.	5W018-030	WIRE, 18AWG x 36.00 LG, GREY
19	66 FT.	5W018-020	WIRE, 18AWG x 8.00 LG, BLACK
20	6 FT.	5W018-020	WIRE, 18AWG x 72.00 LG, BLACK
21	6 FT.	5W018-010	WIRE, 18AWG x 72.00 LG, RED
22	1	5W001-013	CONNECTOR, BUTT 14-16AWG
23	6 FT.	5W001-032	TUBING, SPLIT POLY LOOM 1/4 x 72.00 LG
24	2	5W001-011	TERMINAL, RING 14-16AWG
25	2	5W001-045	TERMINAL, RING 14-16AWG
26	1	8F001-190	TRK, frame
27	1	7U031-018X20	
28	2	7U031-018X20	

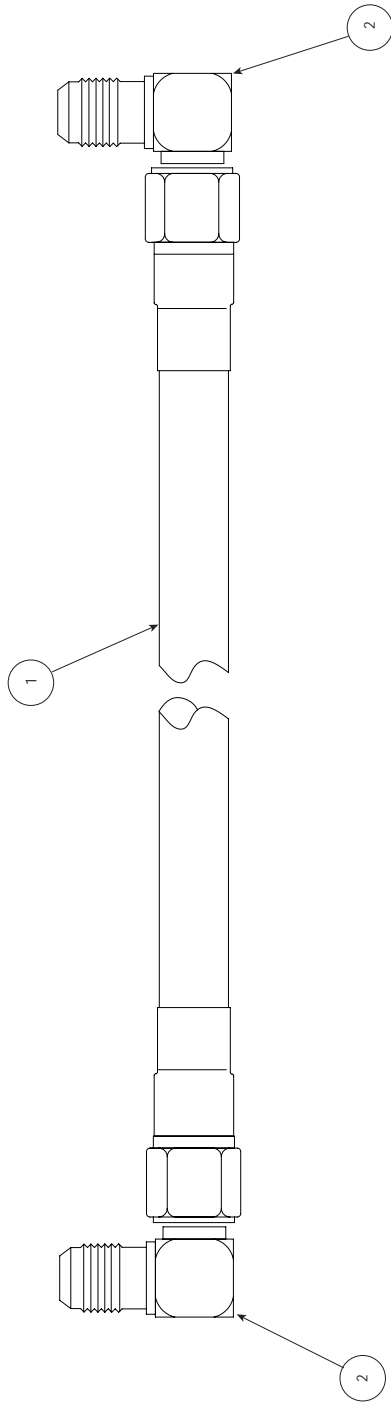
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE: XX±.01
DECIMALS: .XXX±.005
FRACTIONS: ±1/2-
ANGLES: ±1/16

CAD GENERATED DRAWING,
DO NOT MANUALLY UPDATE

1300 BEACON PLACE ONWARD, CA 93033
TEL: (805) 604-1336 FAX: (805) 604-1337
SUPERCHARGERS

DRAWN	JFC	DATE	11/17/9
APPROVALS	-----	-----	-----
ENGINEERING	-----	-----	-----
R&D	-----	-----	-----
APPR.	-----	-----	-----
WEIGHT	2.4 LBS	SCALE: 1:2	DO NOT SCALE DRAWING
FINISH	NONE	SIZE	D
MATERIAL	SEE PARTS LIST	DWG. NO.	1017721
ASSEMBLY	ASY, AUX FUEL SYSTEM	REV.	K



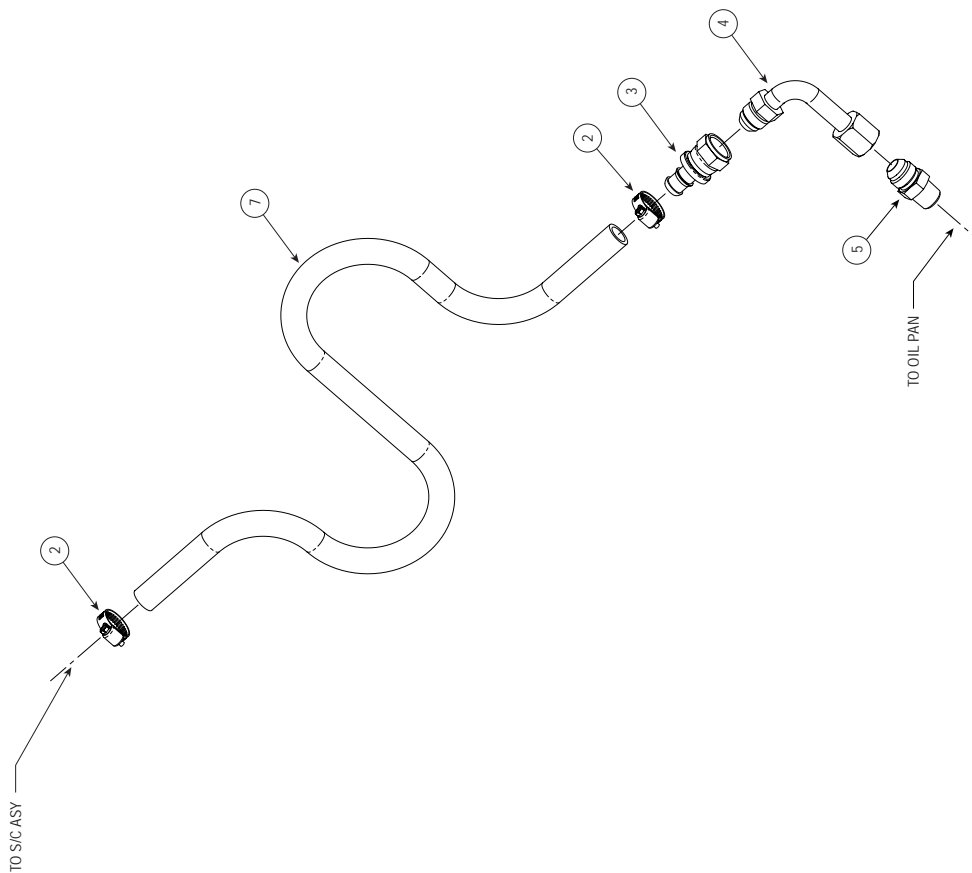


ITEM	QTY	PART NO.	DESCRIPTION
1	1	8002665	HOSE, OIL STEEL BRAID
2	2	8002663	FTG, ELBOW 90° #4-AN MALE x 1/8 NPT

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: XX+ .01 DECIMALS: .XX±.005 FRACTIONS: ±1/2" ANGLES: ±1/16		CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE		DATE 12/15/97	
		DRAWN BE	APPROVALS		
MATERIAL SEE PARTS LIST		ENGINEERING	R&D		
FINISH NONE		APPR.	WEIGHT ***** LBS		
		SIZE A	DWG. NO. 1019317	SCALE: NONE	DO NOT SCALE DRAWING
		REV. A	SHEET 1 OF 1		



1300 BEACON PLACE OXNARD, CA 93033
TEL: (805) 604-1336 FAX: (805) 604-1337
ASY OIL SUPPLY HOSE
99-01 TRUCK/EXPEDITION




TO S/C ASY

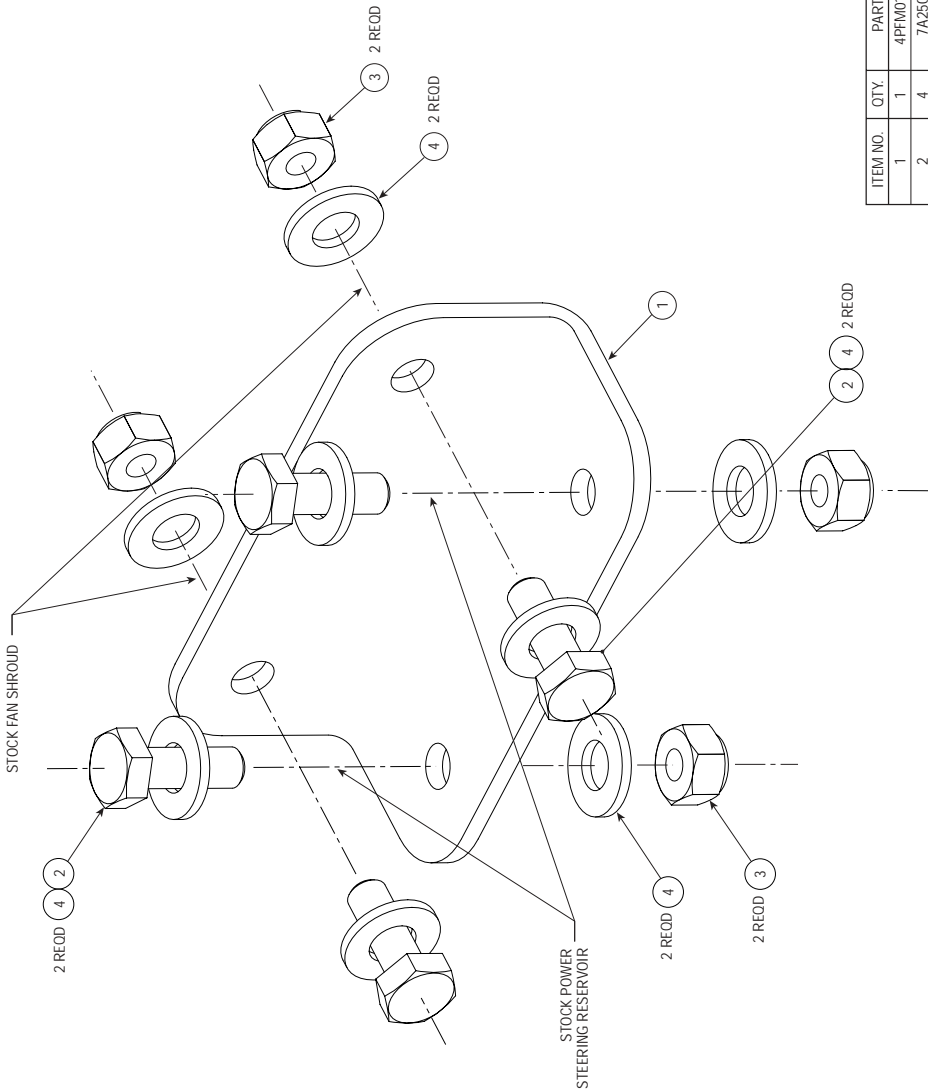
TO OIL PAN

ITEM NO.	QTY.	PART NO.	DESCRIPTION
2	2	7R002-010	CLAMP, HOSE #10 MINIATURE
3	1	7P500-063	FTG, FEM SWIVEL AN-8 x 1/2" HOSE BARB
4	1	7P500-052	FTG, 90 DEG. SWIVEL FEM AN-8 x MALE AN-8
5	1	7P375-053	FTG, STRT AN-8 MALE x 3/8 NPT
7	1	7U030-036X29S	

1

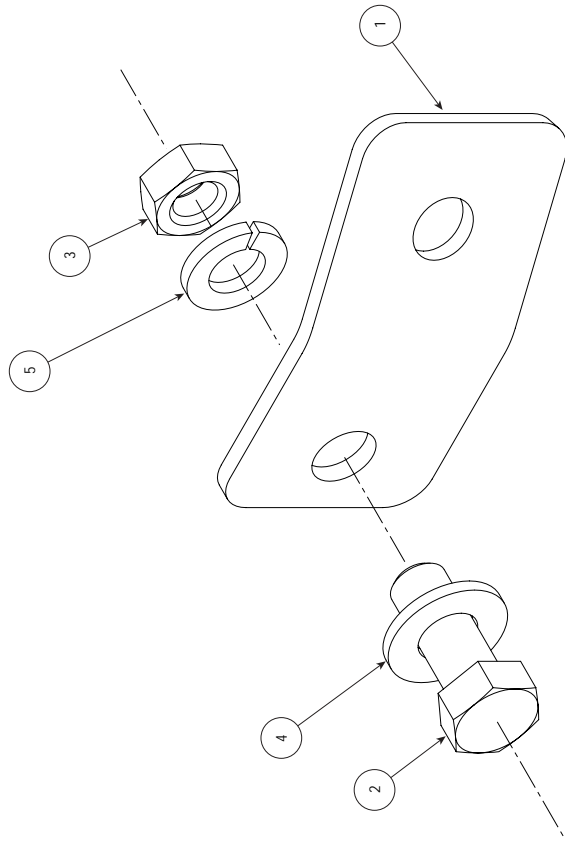
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: .XX± .01 DECIMALS: .XXX±.005 FRACTIONS: ±1/2" ANGLES: ±1/16		CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE		 1300 BEACON PLACE OXNARD, CA 93033 TEL: (805) 604-1336 FAX: (805) 604-1337		
		DRAWN	APPROVALS			DATE
		ENGINEERING	A. PROCTOR			7/13/00
		R&D	G. COMPTON			10/16/00
		APPR.	L. KECK			10/16/00
MATERIAL		SEE PARTS LIST	99 01 4.6L EXPEDITION			
FINISH	NONE	WEIGHT	.9 LBS			
		SCALE: 1:3	DO NOT SCALE DRAWING	SIZE C	REV. A	
				DWG. NO. 1015409	SHEET 1 OF 1	

NOTES: UNLESS OTHERWISE SPECIFIED:
1. SHIP ITEM LOOSE.




ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	4PFM010-070	BRKT, POWER STEERING RELOC.
2	4	7A250-074	SCREW, HXHD, 1/4-20UNC-2A x .75 LG.
3	a	7F250-021	NUT, HXHD, 1/4-20-UNC-2B WITH NYLOK
4	8	7J250-022	WASHER, FLAT, 1/4

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	
DRAWN: JFC		APPROVALS: DATE: 12/17/97		SUPERCHARGERS	
ENGINEERING: R&D		SEE PARTS LIST		99, 01 4.6L FORD TRUCK	
FINISH: NONE		APPR: .3 LBS		ASY, POWER STEERING RESERVOIR	
SCALE: 2:1		DO NOT SCALE DRAWING		REV: C	
SHEET 1 OF 1		DWG. NO. 1016205		REV: C	



ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	4PFM010-011	BRKT, ABS RELOC.
2	1	7A375-100	3/8-16 X 1 HXHD
3	1	7F375-016	3/8-16 HX NUT
4	1	7J375-044	WASHER, 3/8 SAE PLTD
5	1	7L375-075	WASHER, LOCK, 3/8

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: .XX+ .01 DECIMALS: .XXX+0.05 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			
	DRAWN		APPROVALS		RV		DATE	
	ENGINEERING		R&D		APPR.		WEIGHT	
	MATERIAL		SEE PARTS LIST		FINISH		NONE	
REV. C		SCALE: 1:1		DO NOT SCALE DRAWING		SHEET 1 OF 1		

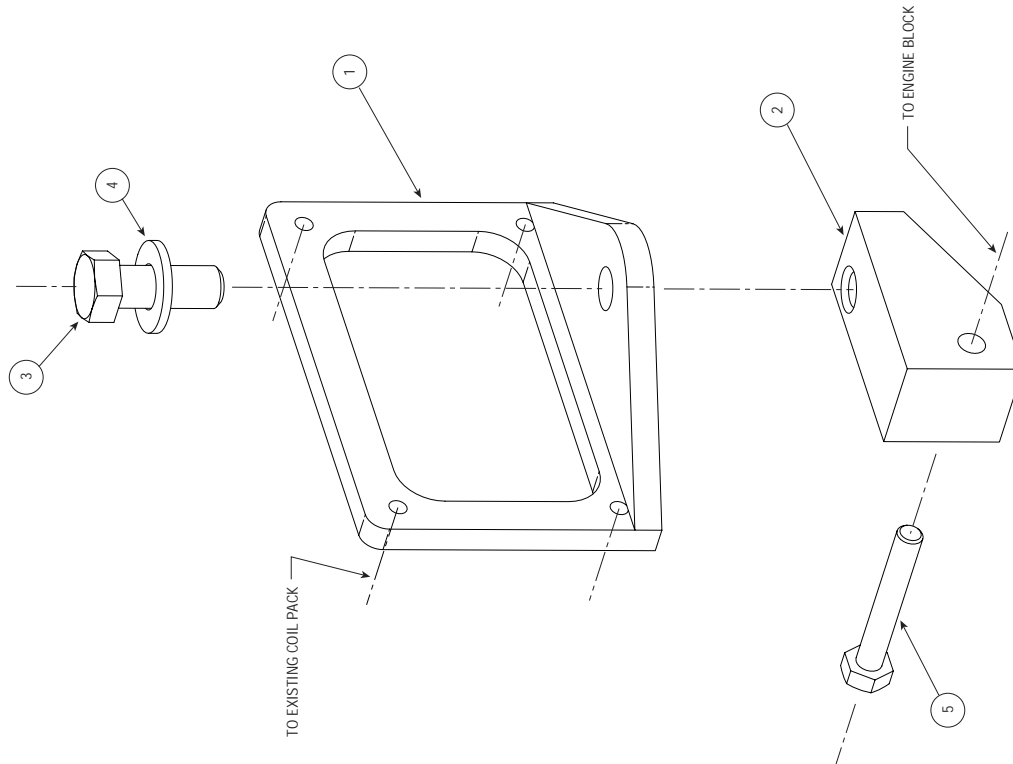
Appendix L

Drawing No. 1015805


Asy, ABS Bracket Relocation

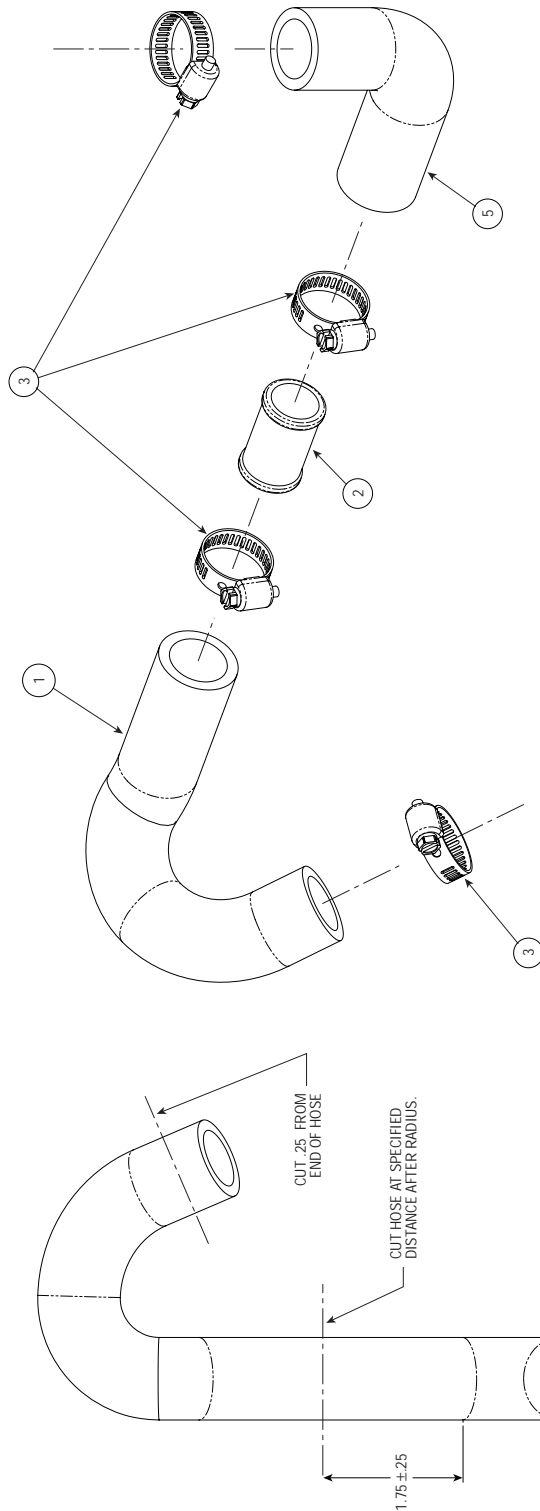
ITEM NO.	QTY.	PART NO.	DESCRIPTION
2	1	4PFM017-051	SPACER, CLUTCH FAN
3	1	4PCE017-041	SPACER, FAN, M30 x 1.5 x .80 LG.
4	4	7A312-100	SCREW, HXHD, 5/16-18UNC-2A x 1.00 LG.
5	4	7K312-001	WASHER, FLAT, 5/16
6	1	TEST-BOM	

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			
	DRAWN	APPROVALS	DATE	99-01 4.6L FORD TRUCK			
	ENGINEERING	JFC	6/24/98				
	R&D	*****	*****				
MATERIAL	SEE PARTS LIST			ASY, FAN SPACER			
FINISH NONE	APPR.	*****	SIZE	B	DWG. NO.	1015705	REV. C
	WEIGHT	***** LBS	SCALE: 1:1	DO NOT SCALE DRAWING	SHEET 1 OF 1		



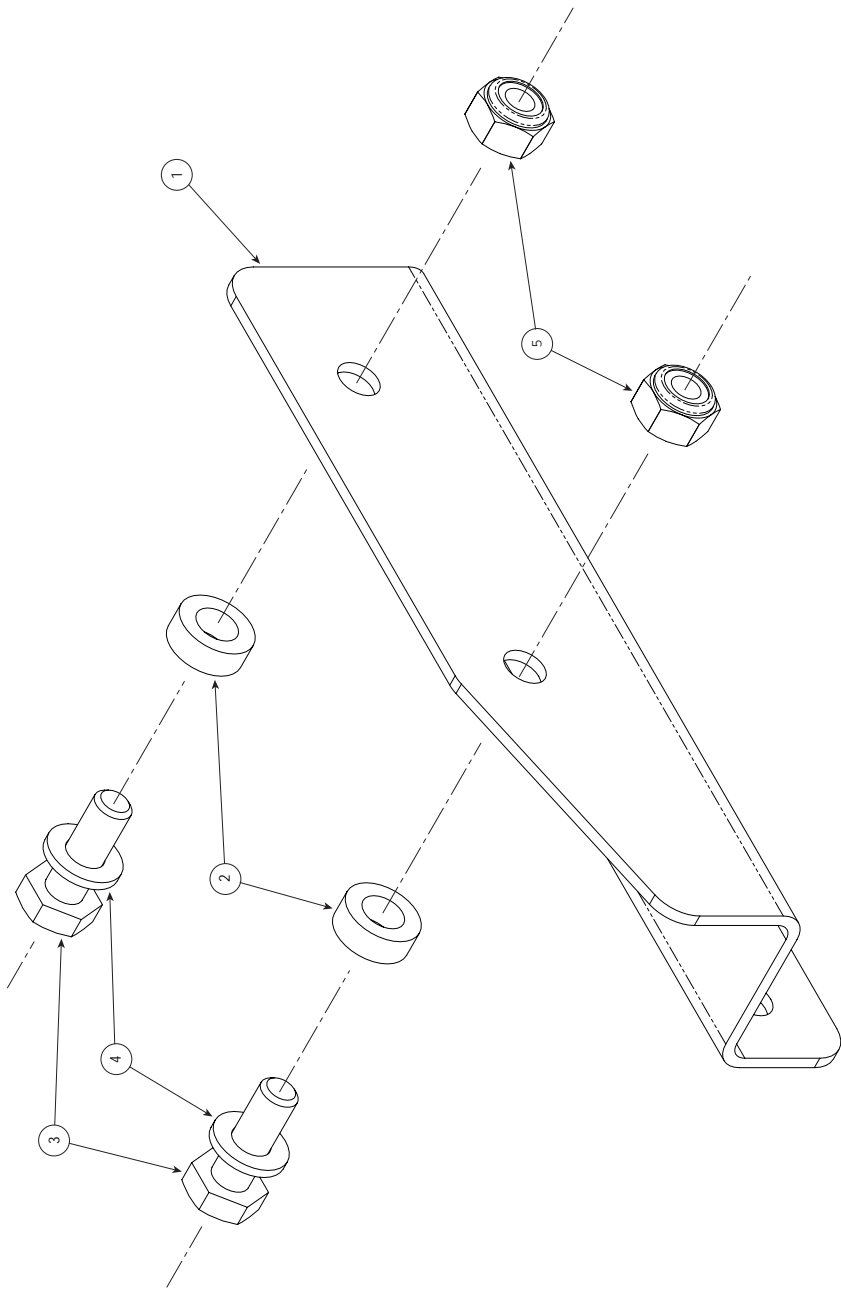
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	4PFH010-041	BRKT. MTG COIL
2	1	4PFH010-031	BRKT. COIL RELOCATION
3	1	7A375-100	3/8-16 x 1 HXHD
4	1	7J375-044	WASHER, 3/8 SAE PLTD
5	1	7C060-040	M6 x 1.0 x 40 HXHD CL8

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 ONYARD, CA 93033 TEL: (805) 604-1336 FAX: (805) 604-1337					
MATERIAL SEE PARTS LIST		DRAWN	APPROVALS	DATE	99-01 4.6L TRUCK/EXPEDITION					
		ENGINEERING	A. PROCTOR	5/19/00						
		R&D	G. COMPTON	5/19/00						
		APPR.	L. KECK	8/2/00						
FINISH	NONE	WEIGHT	.4 LBS		SIZE	C	DWG. NO.	1016012	REV	A
		SCALE: 1:25:1			DO NOT SCALE	DRAWING	SHEET 1	OF 1		



ITEM NO.	QTY.	PART NO.	DESCRIPTION
2	1	7P375-075	COUPLING, .75 I.D.
3	4	7R002-010	CLAMP, HOSE #10
5	1	7UT33-075-1	
6	1	7UT33-075-2	

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 SUPERCHARGERS	
DRAWN	A. PROCTOR	DATE	5/19/00	99-01 4.6L EXPEDITION	
ENGINEERING	G. COMPTON		5/19/00		
R&D	L. KECK		8/2/00		
APPR.	B. WYMAN				
FINISH	NONE	SIZE	C	DWG. NO.	1015407
WEIGHT	.4 LBS	SCALE:	1:1	DO NOT SCALE	DRAWING
				REV	A
					SHEET 1 OF 1



ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	4PFM010-100	BRKT. EGR RELOCATION
2	2	4PFM017-111	SPACER, .500 O.D. x .281 I.D. x .188 THK
3	2	7A250-074	SCREW, HXHD, .250-20UNC-2A x .75 LG. STEEL GR5
4	2	7J250-001	WASHER, FLAT, .250
5	2	7F250-021	NUT, HXHD, .250-20UNC-2B, STEEL GR5

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 DRAWN: A. PROCTOR ENGINEERING: G. COMPTON R&D: L. KECK APPR.: G. COMPTON WEIGHT: 2 LBS	DATE: 5/19/00 5/19/00 8/2/00	99-01 4.6L EXPEDITION ASY EGR RELOCATION	
MATERIAL: SEE PARTS LIST		FINISH: NONE		SIZE: C	REV: A
				DWG. NO: 1016013	SHEET 1 OF 1
				SCALE: 2:1	DO NOT SCALE DRAWING

Asy, EGR Relocation

Drawing No. 1016013

Appendix P



1300 Beacon Place • Oxnard, CA 93033-9901 • (805) 604-1336
FAX (805) 604-1337 • paxtonautomotive.com • M-F 8:00 AM - 4:30 PM PST