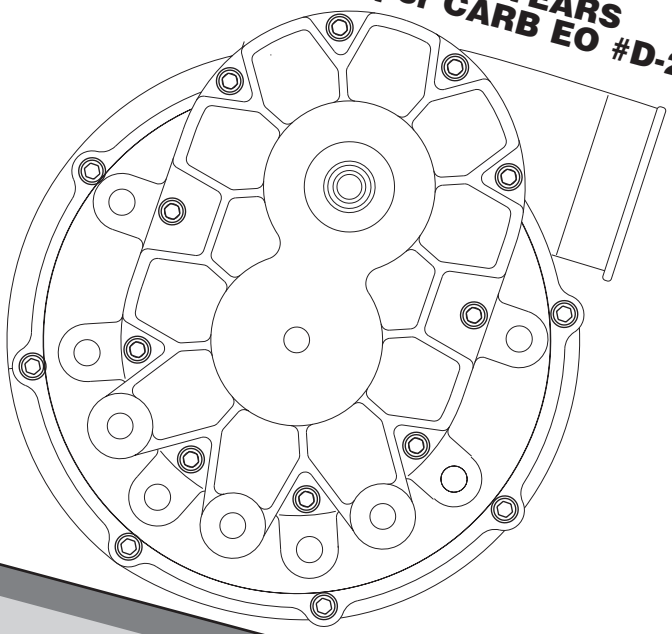
Ford 4.6L SOHC Mustang GT & BULLITT (2 Valve)

Supercharger System Installation Instructions

1996-1999 MODEL YEARS
50 State Smog Legal per CARB EO #D-213-17
2000-2004 MODEL YEARS
50 State Smog Legal per CARB EO #D-213-25



VORTECH®

ENGINEERING, LLC

1650 Pacific Avenue, Channel Islands CA 93033-9901 • Phone: 805 247-0226
Fax: 805 247-0669 • www.vortechsuperchargers.com • M-F 8:00AM - 4:30PM (PST)

DP/N: 4FL020-010) v3.0 04/12/08

FOREWORD

This manual provides information on the installation, maintenance and service of the Vortech 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 Vortech Engineering for any additional information regarding this kit and any of these modifications at (805) 247-0228 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 Vortech Engineering 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 Vortech 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. Vortech is not responsible for any clutch, transmission, drive-line or engine damage.

Exclusions from Vortech 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 Vortech 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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FORD 4.6L SOHC MUSTANG IMPORTANT NOTES

1999-2004 Models

This kit requires ECM modification and the installation of a Vortech ECM Module. The ECM must be sent directly to Vortech by the installing customer (the charge for this service with module installation has been included in the purchase price).

- Included in this kit is a prepaid next-day air shipping box and a credit tag for one (1) Vortech ECM Module.
- The modules are made specifically for each individual vehicle with respect to the factory ECM calibration.
- Simply contact the Vortech Service Department at (805) 247-0226 to request a Return Authorization Number (See ECM Module Credit Tag for more details).
  - Mail to Vortech the enclosed "ECM Module Credit Tag" (send original tag - no photocopies will be accepted) and ECM in the supplied box.
  - Turnaround time will be 1-2 days (each application varies). Vortech will give an estimate at the time of your order.

Your Vortech ECM Module comes with a twelve (12) month limited warranty from the original date of purchase of your supercharger system (see Owner's Manual for details).

NOTE: Vortech Engineering is not responsible for engine or ECM damage due to an improperly installed/mishandled ECM module or ECM.

1997-1999 Models

Most Mustangs produced after 11/01/96 may utilize a water pump pulley that employs a large lip on both the front and rear edges (earlier units used a lip only on the rear). The front lip on the pulley may cause belt installation problems. For proper clearance, the "1996 style" pulley (Ford P/N F3LY-8509-A) may be installed. This pulley is available from your Ford dealer or Vortech Distributor (Vortech P/N 4FK016-081).

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1996-2004
FORD 4.6L SOHC MUSTANG
Installation Instructions

50 State Smog Legal, as per CARB EO #D-213-17 / #D-213-25

Congratulations on selecting the best performing and best backed automotive supercharger available today...the VORTECH® V-2® Supercharger!

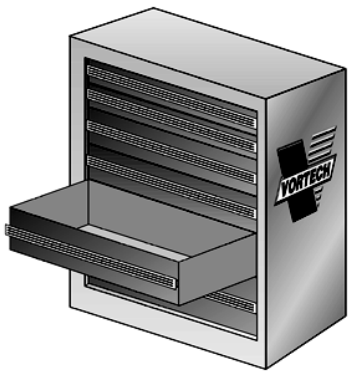
Before beginning this installation, please read through this entire instruction booklet and the Street Supercharger System Owner's Manual which includes the Automotive Limited Warranties Program and the Warranty Registration form.
Vortech supercharger systems are performance improving devices. In most cases, increases in torque of 30-35% and horsepower of 35-45% can be expected with the boost levels specified by Vortech Engineering. 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. Vortech Engineering 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 Vortech prior to using this product.
4. Always listen for any sign of detonation (pinging) and discontinue hard use (no boost) until problem is resolved.
5. Perform an oil and filter change upon completion of this installation and prior to 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 every 3,000 miles or less. 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 1 year or 10,000 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 at least 15,000 miles and spark plug wires at least every 50,000 miles.

TOOL & SUPPLY REQUIREMENTS:

- Factory Repair Manual
- 3/8" Socket and Drive Set: SAE & Metric
- 1/2" Socket and Drive Set: SAE & Metric
- 3/8" NPT Tap and Handle
- Adjustable Wrench
- Open End Wrenches: 3/8", 7/16", 1/2", 9/16"
- Center Punch and a 5/8" Tapered Punch
- Ford Springlock 3/8" Fuel Fitting Disconnect Tool
- 5 Quarts SH/CF Rated Quality Engine Oil
- Oil Filter and Wrench
- Flat #2 Screwdriver
- Phillips #2 Screwdriver
- Heavy Grease
- Silicone Sealer
- Drill Motor
- 1/8", 3/16", 27/64" Drill Bits
- 1/2" Tube Bender (1996-1998 Models only)
- 3/16" Allen Wrench
- Wire Strippers and Crimpers
- Utility Knife



If your vehicle has in excess of 10,000 miles since its last spark plug change, then you will also need:

- Spark Plug Socket
- NEW Spark Plugs

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1996-1997 4.6L SOHC Mustang GT
Part No. 4FH218-010SQ/018SQ

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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.
2E229-130	**SUPERCHARGER ASSEMBLY**	**1**
2E129-030	V-2 SQ SUPERCHARGER	1
2A036-360	3.60" SUPERCHARGER PULLEY	1
8R101-001	6-RIB PULLEY RETAINER ASY	1
4FH111-041	**MOUNTING BRACKET ASY GEN 3**	**1**
7A375-178	3/8-16 X 1-3/4" HXHD G8	5
7K375-040	3/8"AN960 FLAT WASHR	6
2A046-113	BELT, K061130-GATES	1
7C080-065	8MM-1.25 X 65 SOC	2
7C080-140	8MM-1.25 X 140 HXH	3
7K312-001	5/16" AN-WASHER	9
7C080-051	8MM-1.25 X 50 HXHD 10.9	1
7C080-025	8MM-1.25 X 25 HXHD	1
4FE014-010	RADIATOR PIPE-STNLSS	1
7R002-024	#24 GOLDSEAL HOSE CLAMPS	2
7R003-013	ADEL CLAMP, 3/4"ID	1
7C010-050	10-24 X 1/2" SOC HD CAP, ZINC PLT	1
7J010-001	#10 FLAT WASHER	1
7J312-000	5/16" FLAT WASHER-SAE	2
7A375-208	3/8-16 X 2" G8 HXHD	1
4FH016-150	IDLER PULLEY, 6-RIB 3"V FLANGED	1
4FA016-171	DUST COVER (IDLER PULLEY)	1
7C012-020	12MM-1.75 X 20MM PLD	1
2A017-045	SPACER, IDLER PLATE 2V G3	1
4FH111-032	IDLER PLT ASY, 2V GEN3	1
4FH011-041	MOUNTING BRACKET-MACH	1
4FH112-010	**AIR INTAKE ASY**	**1**
4FA012-012	90° INTAKE ELBOW	1
4FH110-050	MAF METER BRACKET ASY	1
7R002-056	#56 HOSE CLAMPS	4
7S350-200	3-1/2" X 2" SLEEVE	2
7U035-000	3-1/2" X 9" FLEX HOSE	1
7R002-052	#52 HOSE CLAMPS	2
8H040-090	AIR FILTER	1
7A250-075	1/4-20 X 3/4" SHCS	4
7F250-021	1/4-20 NYLOCK NUTS	4
7J250-001	1/4" SAE WASHERS	4
4FK012-040	INLET ELBOW	1
7P750-100	3/4"NPT X 1" HOSE FITTING	1
7U033-000	5/8" X 48" HOSE	1
7U038-000	3/4" X 27" HOSE	1
7U100-052	7/16" RUBBER GROMMET	1
4FH112-020	**DISCHARGE ASY**	**1**
4FH012-020	DISCHARGE TUBE	1
7S300-200	3" X 2" SLEEVE	1
7S275-200	2-3/4" X 2" SLEEVE	1
7R002-044	#44 HOSE CLAMPS	2
7R002-048	#48 HOSE CLAMPS	2
7R002-016	#16 HOSE CLAMPS	6
8D001-001	BYPASS VALVE	1
7U034-016	1" X 3.5" HEATER HOSE	1
7U034-016	1" X 13.5" HEATER HOSE	1
7U030-046	5/32" X 24" VACUUM LINE	1
7P156-082	5/32" TEE	1
7P100-010	1" HOSE UNION	1
7U133-090	1" X 90° RUBBER ELBOW	1

PART NUMBER	DESCRIPTION	QTY.
4FH130-026	**OIL FEED ASY**	**1**
7U030-026	1/4" X 26" OIL FEED HOSE	1
7P525-067	.525" CRIMP FERRULES	2
7P250-066	#4 SWIVEL X 1/4" HOSE BARB FITTING	2
7P125-103	1/8"NPT -4 X 45° MALE ELBOW	1
7P250-082	1/4"NPT X -4 90° FITTING	1
7P250-034	1/4"NPT STREET TEE	1
7P250-036	-4 FLARE TO 1/4"NPT	1
4FH130-036	**OIL DRAIN ASY**	**1**
7U030-036	1/2" X 14" OIL DRAIN HOSE	1
7R001-008	#8 STAINLESS HOSE CLAMPS	2
7P500-003	90° 1/2" ALUM. TUBE	1
7P500-020	TUBE NUT	1
7P375-042	MALE CONNECTOR	1
4FH238-068	FMU (WITH LINES)	1
6Z110-123	10:1 BLUE FUEL MANAGEMENT UNIT	1
4FH145-010	MALE FUEL LINE	1
4FH145-020	FEMALE FUEL LINE	1
7U030-046	5/32" X 46" VACUUM LINE	1
7P156-082	5/32" TEE	1
4FH110-040	**COIL BRACKET ASY**	**1**
4FH010-040	COIL BRACKET	1
7C010-150	10-24 X 1-1/2" SH BOLTS	4
7F010-024	10-24 NYLOCK NUTS	4
7J010-001	#10 FLAT WASHERS	4
8F202-265	**T-REX ASY**	**1**
4FA020-030	T-REX TEMPLATE	1
5W001-001	WIRE TAP	1
5W001-011	16-14GA EYELETS	3
7E010-050	#12 X 1/2 SHEET METAL SCREW	1
7F008-032	8-32 HEX LOCK NUTS	8
7J008-001	#8 FLAT WASHERS	8
7P312-001	FUEL FITTING ADAPTER	1
7P312-003	5/16 FEMALE FUEL CONNECTOR	1
7R004-003	14.5 STEPLESS CLAMPS	2
7R004-002	17.0 STEPLESS CLAMPS	2
7U100-044	4" TIE-WRAPS	6
7U100-055	6" TIE-WRAPS	6
7U031-018	5/16" X 17-1/2" HIGH PRESSURE FUEL HOSE	1
7U032-016	3/8" X 23" FUEL HOSE	1
7U314-001	#8 LORD MOUNTS	4
7U375-135	ADHESIVE MOUNTING PADS	4
8F002-265	T-REX FUEL PUMP	1
8F101-200	T-REX WIRING ASY	1
008340	T-REX FUEL PUMP DECAL	1
5W001-014	FUSE HOLDER	1
5W001-015	20A BLADE TYPE FUSE	1
5W001-019	12-10 GA. SOLDERLESS CONNECTOR	1
5W001-005	3/8" X 8" PLASTIC WIRE LOOM	1
7S625-000	FIRE SLEEVE	1
5W001-010	16-14GA. FEMALE SLIDE	1
5W001-002	FUSE TAP	1

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1998 4.6L SOHC Mustang GT
Part No. 4FH218-070SQ/078SQ
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.
2E229-130	**SUPERCHARGER ASY**	**1**
2E129-030	V-2 SQ SUPERCHARGER	1
2A036-360	3.60" SUPERCHARGER PULLEY	1
8R101-001	6-RIB PULLEY RETAINER ASY	1
4FH111-041	**MOUNTING BRACKET ASY GEN 3**	**1**
7A375-178	3/8-16 X 1-3/4" HXHD G8	5
7K375-040	3/8"AN960 FLAT WASHR	6
2A046-113	BELT, K061130-GATES	1
7C080-065	8MM-1.25" X 65 SOC	2
7C080-140	8MM-1.25" X 140 HXH	3
7K312-001	5/16"AN-WASHER	9
7C080-051	8MM-1.25" X 50 HXHD 10.9	1
7C080-025	8MM-1.25" X 25 HXHD	1
4FE014-010	RADIATOR PIPE-STNLSS	1
7R002-024	#24 GOLDSEAL HOSE CLAMP	2
7R003-013	ADEL CLAMP, 3/4"ID	1
7C010-050	10-24 X 1/2" SOC HD CAP, ZINC PLT	1
7J010-001	#10 FLAT WASHER	1
7J312-000	5/16" FLAT WASHER-SAE	2
7A375-208	3/8-16 X 2" G8 HXHD	1
4FH016-150	IDLER PULLEY, 6-RIB 3" FLANGED	1
4FA016-171	DUST COVER (IDLER PULLEY)	1
7C012-020	12MM-1.75" X 20MM PLD	1
2A017-045	SPACER, IDLER PLATE 2V G3	1
4FH111-032	IDLER PLT ASY, 2V GEN3	1
4FH011-041	MOUNTING BRACKET-MACH	1
4FH112-010	**AIR INTAKE ASY**	**1**
4FA012-012	90° INTAKE ELBOW	1
4FH110-050	MAF METER BRACKET ASY	1
7R002-056	#56 HOSE CLAMPS	6
7S350-200	3-1/2" X 2" SLEEVE	2
7U035-000	3-1/2" X 9" FLEX HOSE	1
7R002-052	#52 HOSE CLAMPS	2
8H040-090	AIR FILTER	1
7A250-075	1/4-20 X 3/4" SHCS	4
7F250-021	1/4-20 NYLOCK NUTS	4
7J250-001	1/4"SAE WASHERS	4
4FK012-040	INLET ELBOW	1
7P750-100	3/4"NPT X 1" HOSE FITTING	1
7U033-000	5/8" X 48" HOSE	1
7U038-000	3/4" X 27" HOSE	1
7U100-052	7/16" RUBBER GROMMET	1
4FH112-020	**DISCHARGE ASY**	**1**
4FH012-020	DISCHARGE TUBE	1
7S300-200	3" X 2" SLEEVE	1
7S275-200	2-3/4" X 2" SLEEVE	1
7R002-044	#44 HOSE CLAMPS	2
7R002-048	#48 HOSE CLAMPS	2
7R002-016	#16 HOSE CLAMPS	6
8D001-001	BYPASS VALVE	1
7U034-016	1" X 3.5" HEATER HOSE	1

PART NUMBER	DESCRIPTION	QTY.
7U034-016	1" X 13.5" HEATER HOSE	1
7U030-046	5/32" X 24" VACUUM LINE	1
7P156-082	5/32" TEE	1
7P100-010	1" HOSE UNION	1
7U133-090	1" X 90° RUBBER ELBOW	1
4FH130-026	**OIL FEED ASY**	**1**
7U030-026	1/4" X 26" OIL FEED HOSE	1
7P525-067	.525" CRIMP FERRULES	2
7P250-066	#4 SWIVEL X 1/4" HOSE BARB FITTING	2
7P125-103	1/8"NPT -4 X 45° MALE ELBOW	1
7P250-082	1/4"NPT X -4 90° FITTING	1
7P250-034	1/4"NPT STREET TEE	1
7P250-036	-4 FLARE TO 1/4"NPT	1
4FH130-036	**OIL DRAIN ASY**	**1**
7U030-036	1/2" X 14" OIL DRAIN HOSE	1
7R001-008	#8 STAINLESS HOSE CLAMPS	2
7P500-003	90° X 1/2" ALUM. TUBE	1
7P500-020	TUBE NUT	1
7P375-042	MALE CONNECTOR	1
4FH238-068	**FMU (WITH LINES)**	**1**
6Z110-123	10:1 BLUE FUEL MANAGEMENT UNIT	1
4FH145-010	MALE FUEL LINE	1
4FH145-020	FEMALE FUEL LINE	1
7U030-046	5/32" X 46" VACUUM LINE	1
7P156-082	5/32" TEE	1
4FH110-040	**COIL BRACKET ASY**	**1**
4FH010-040	COIL BRACKET	1
7C010-150	10-24 X 1-1/2" SH BOLTS	4
7F010-024	10-24 NYLOCK NUTS	4
7J010-001	#10 FLAT WASHERS	4
4FF101-002	**FUEL PUMP ASY**	**1**
8F001-002	155 INLINE FUEL PUMP	1
8F101-200	T-REX WIRING ASY.	1
5W001-010	16-14 GAUGE FEMALE SLIDE, INSULATED	3
7R004-003	14.5 STEPLESS CLAMPS	2
7R001-004	#4 HOSE CLAMPS	2
7U030-050	12MM FUEL HOSE (2.41')	1
7U031-018	5/16" FUEL HOSE (2')	1
7R003-024	ADEL CLAMP, 1-1/2"ID	1
7E010-075	#12 X 3/4" SHEET METAL, HEX ONLY	2
7P312-003	5/16" FEMALE FUEL CONNECTOR	1
7P500-004	1/2" FUEL ADAPTER FITTING	1
7C008-032	#8-32 HEX LOCK NUT	1
7J008-001	#8 FLAT WASHER	1
5W001-001	WIRE TAP	1
7U100-055	TIE-WRAP, 6" NYLON	5
5W001-002	FUSE TAP	1
5W001-015	BLADE TYPE FUSE, 20AMP	1
5W001-014	#10 FUSE HOLDER	1
5W001-019	SOLDERLESS CONNECTOR, 12-10 GAUGE	1
5W001-011	16-14GA EYELET, .25" BOLT	1
7U375-135	MOUNTING PAD	5
7U100-044	TIE-WRAP	5
7S625-000	FIRE SLEEVE	1'

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1999 4.6L SOHC Mustang GT
Part No. 4FL218-010SQ/018SQ
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.
2E229-130	**SUPERCHARGER ASY**	**1**
2E128-030	V-2 SQ SUPERCHARGER	1
2A036-360	3.60" SUPERCHARGER PULLEY	1
8R101-001	6-RIB PULLEY RETAINER ASY	1
4FL111-041	**MOUNTING BRACKET ASY, '99 2V**	**1**
7A375-178	3/8-16 X 1-3/4" HXHD G8	5
7K375-040	3/8"AN960 FLAT WASHER	6
2A046-113	BELT, K061130-GATES	1
7C080-065	8MM-1.25 X 65 SOC	2
7C080-140	8MM-1.25 X 140 HXH	1
7K312-001	5/16" AN-WASHER	7
7C080-051	8MM-1.25 X 50 HXHD 10.9	1
7C080-025	8MM-1.25 X 25 HXHD	1
4FE014-010	RADIATOR PIPE-STNLSS	1
7R002-024	#24 GOLDSEAL HOSE CLAMP	2
7R003-013	ADEL CLAMP, 3/4" ID	1
7C010-050	10-24 X 1/2 SOC HD CAP, ZINC PLT	1
7J010-001	#10 FLAT WASHER	1
7C010-140	10MM-1.50 X 140 HXHD	2
7J010-002	10MM WASHER, ZINC PLATED	3
7C010-066	10MM-1.5 X 65 BOLT, SHCS	1
7E010-046	#8 X 3/4" SHEET METAL	1
7A375-208	3/8-16 X 2" G8 HXHD	1
4FH016-150	IDLER PULLEY,6-RIB 3" FLANGED	1
4FA016-171	DUST COVER (IDLER PULLEY)	1
7C012-020	12MM-1.75 X 20MM PLD	1
2A017-045	SPACER, IDLER PLATE 2V G3	1
4FH111-032	IDLER PLT ASY, 2V GEN3	1
4FH011-041	MOUNTING BRACKET-MACH	1
4FH112-010	**AIR INTAKE ASY**	**1**
4FA012-012	90° INTAKE ELBOW	1
4FH110-050	MAF METER BRACKET ASY	1
7R002-056	#56 HOSE CLAMPS	6
7S350-200	3-1/2" X 2" SLEEVE	3
7U035-000	3-1/2" X 9" FLEX HOSE	1
7R002-052	#52 HOSE CLAMPS	2
8H040-090	AIR FILTER	1
7A250-075	1/4-20 X 3/4" SHCS	4
7F250-021	1/4-20 NYLOCK NUTS	4
7J250-001	1/4" SAE WASHERS	4
4FK012-040	INLET ELBOW	1
7P750-100	3/4"NPT X 1" HOSE FITTING	1
7U033-000	5/8" X 48" HOSE	1
7U038-000	3/4" X 27" HOSE	1
7U100-052	7/16" RUBBER GROMMET	1
7P625-002	5/8" BARB	1
4FH130-026	**OIL FEED ASY**	**1**
7U030-026	1/4" X 26" OIL FEED HOSE	1
7P525-067	.525" CRIMP FERRULES	2
7P250-066	#4 SWIVEL X 1/4" HOSE BARB FITTING	2
7P125-103	1/8"NPT X -4 X 45° MALE ELBOW	1
7P250-082	1/4"NPT X -4 90° FITTING	1
7P250-034	1/4"NPT STREET TEE	1
7P250-036	-4 FLARE TO 1/4"NPT	1

PART NUMBER	DESCRIPTION	QTY.
4FH130-036	**OIL DRAIN ASY**	**1**
7U030-036	1/2" X 14" OIL DRAIN HOSE	1
7R001-008	#8 STAINLESS HOSE CLAMPS	2
7P500-003	90° X 1/2" ALUM. TUBE	1
7P500-020	TUBE NUT	1
7P375-042	MALE CONNECTOR	1
4FH112-020	**DISCHARGE ASY**	**1**
4FH012-020	DISCHARGE TUBE	1
7S300-200	3" X 2" SLEEVE	1
7S275-200	2-3/4" X 2" SLEEVE	1
7R002-044	#44 HOSE CLAMPS	2
7R002-048	#48 HOSE CLAMPS	2
7R002-016	#16 HOSE CLAMPS	6
8D001-001	BYPASS VALVE	1
7U034-016	1" X 3.5" HEATER HOSE	1
7U034-016	1" X 13.5" HEATER HOSE	1
7U030-046	5/32" X 52" VACUUM LINE	1
7P156-082	5/32" TEE	1
7P100-010	1" HOSE UNION	1
7U133-090	1" X 90° RUBBER ELBOW	1
4FL020-020	**ECM CHIP PACKAGE**	**1**
4F060-030	**30LB. INJECTORS**	**8**
8F101-260	**FUEL PUMP ASY, '99 4.6, INTANK**	**1**
8F001-260	FUEL PUMP, 99+ FORD 4.6	1
5W001-052	PUMP, FUEL, PIGTAIL-CONNECTION	1
2A017-048	SPACERS	2

P/N: 4FL020-010
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2001 4.6L SOHC Mustang BULLITT

Part No. 4FL218-070SQ/078SQ

ENGINEERING, LLC

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.
2E229-130	**SUPERCHARGER ASY**	**1**
2E128-030	V-2 SQ SUPERCHARGER	1
2A036-360	3.60" SUPERCHARGER PULLEY	1
8R101-001	6-RIB PULLEY RETAINER ASY	1
4FL111-051	**MTNG BRKT ASY BULLITT**	**1**
7A375-178	3/8-16 X 1-3/4" HXHD G8	5
7K375-040	3/8"AN960 FLAT WASHERS	5
2A046-109	BELT, 109" DAYCO	
4FL011-031	MACH, 2000 GT MTG BRKT	1
7C080-065	8MM-1.25" X 65 SOC	1
7C080-140	8MM-1.25" X 140 HXHD	1
7K312-001	5/16" AN-WASHER	4
7C060-050	6MM-1.0" X 50MM HXHD ZINC	1
7C080-025	8MM-1.25" X 25 HXHD	1
4FE014-010	RADIATOR PIPE-STNLSS	1
7R002-024	#24 GOLD SEAL HOSE C	2
7R003-013	ADEL CLAMP, 3/4"ID	1
7C010-050	10-24 X 1/2" SOC HD CAP, ZINC PLT	1
7J010-001	#10 FLAT WASHER	1
7C010-140	10MM-1.50" X 140 HEX HEAD	2
7J010-002	10MM WASHER, ZINC PLATED	4
7C010-066	10MM-1.5" X 65 BOLT, SHCS	1
7E010-046	#8 X 3/4" SHEET METAL	1
4FL116-150	2000 2V IDLER PLY ASY	1
4FH111-032	IDLER PLT ASY, 2V GEN3	1
4FH016-150	IDLER PULLEY, 6-RIB 3" FLANGD	1
4FA016-171	DUST COVER (IDLER PULLEY)	1
7C012-020	12MM-1.75 X 20MM PLD	1
2A017-055	SPACER, IDLER BULLITT	1
4FK016-081	WATER PUMP PULLEY, STOCK	1
7A375-208	3/8-16 X G8 HXHD	1
7J250-001	1/4"SAE WASHER, PLTD	1
7C080-140	M8-1.25 X 140 BOLT	2
4FH112-010	**AIR INTAKE ASY**	**1**
4FA012-012	90° INTAKE ELBOW	1
4FH110-050	MAF METER BRACKET ASY	1
7R002-056	#56 HOSE CLAMPS	6
7S350-200	3-1/2" X 2" SLEEVE	2
7U035-000	3-1/2" X 9" FLEX HOSE	1
7R002-052	#52 HOSE CLAMPS	2
8H040-090	AIR FILTER	1
7A250-075	1/4-20 X 3/4" SHCS	4
7F250-021	1/4-20 NYLOCK NUTS	4
7J250-001	1/4"SAE WASHERS	4
4FK012-040	INLET ELBOW	1
7P750-100	3/4"NPT X 1" HOSE FITTING	1
7U033-000	5/8" X 48" HOSE	1
7U038-000	3/4" X 27" HOSE	1
7U100-052	7/16" RUBBER GROMMET	1
7P625-002	5/8" BARB	1

PART NUMBER	DESCRIPTION	QTY.
4FH130-026	**OIL FEED ASY**	**1**
7U030-026	1/4" X 26" OIL FEED HOSE	1
7P525-067	.525" CRIMP FERRULES	2
7P250-066	#4 SWIVEL X 1/4" HOSE BARB FITTING	2
7P125-103	1/8"NPT -4 X 45° MALE ELBOW	1
7P250-082	1/4"NPT X -4 90° FITTING	1
7P250-034	1/4"NPT STREET TEE	1
7P250-036	-4 FLARE TO 1/4"NPT	1
4FH130-036	**OIL DRAIN ASY**	**1**
7U030-036	1/2" X 14" OIL DRAIN HOSE	1
7R001-008	#8 STAINLESS HOSE CLAMPS	2
7P500-003	90° 1/2" ALUM. TUBE	1
7P500-020	TUBE NUT	1
7P375-042	MALE CONNECTOR	1
4FL112-020	**DISCHARGE ASY**	**1**
7S300-200	3" X 2" SLEEVE	1
7R002-044	#44 HOSE CLAMPS	1
7R002-048	#48 HOSE CLAMPS	3
7R002-016	#16 HOSE CLAMPS	6
8D001-001	BYPASS VALVE	1
7U034-016	1" X 10" HEATER HOSE	1
7U030-046	5/32" X 52" VACUUM LINE	1
7P156-082	5/32" TEE	1
7P100-010	1" HOSE UNION	1
7U133-090	1" X 90° RUBBER ELBOW	2
4FL012-021	DISCHARGE TUBE “A”	1
4FK012-050	DISCHARGE TUBE “B”	1
7S300-275	REDUCER, 3.00" - 2.75"	1
7R002-072	#72 GOLDSEAL CLAMP	2
7S450-250	SLEEVE, Ø4.50" X 2.5" WIDE	1
4FL120-025	**ECM CHIP PACKAGE**	**1**
8F060-038	**38LB. INJECTORS**	**8**
8F101-260	**FUEL PUMP ASY, 99 4.6, INTANK**	**1**
8F001-260	FUEL PUMP, '99+ FORD 4.6	1
5W001-052	PUMP, FUEL, PIGTAIL-CONNECTION	1
2A017-048	SPACERS	2

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2000-2004 4.6L SOHC Mustang GT

Part No. 4FL218-130SQ/138SQ

ENGINEERING, LLC

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.
2E229-130	**SUPERCHARGER ASY**	**1**
2E128-030	V-2 SQ SUPERCHARGER	1
2A036-360	3.60" SUPERCHARGER PULLEY	1
8R101-001	6-RIB PULLEY RETAINER ASY	1
4FL111-031	**MTNG BRKT ASY, '00-'03 2V GT**	**1**
7A375-178	3/8-16 X 1-3/4" HXHD G8	5
7K375-040	3/8"AN960 FLAT WASHERS	5
2A046-080	BELT, K061080-GATES SALEEN	1
4FL011-031	MACH, 2000 GT MTG BRKT	1
7C080-065	8MM-1.25 X 65 SOC	1
7C080-140	8MM-1.25 X 140 HXH	1
7K312-001	5/16" AN-WASHER	4
7C060-050	6MM-1.0" X 50MM HXHD ZINC	1
7C080-025	8MM-1.25" X 25 HXHD	1
4FE014-010	RADIATOR PIPE-STNLSS	1
7R002-024	#24 GOLD SEAL HOSE C	2
7R003-013	ADEL CLAMP, 3/4"ID	1
7C010-050	10-24 X 1/2" SOC HD CAP, ZINC PLT	1
7J010-001	#10 FLAT WASHER	1
7C010-140	10MM-1.50 X 140 HEX HEAD	2
7J010-002	10MM WASHER, ZINC PLATED	4
7C010-066	10MM-1.5 X 65 BOLT, SHCS	1
7E010-046	#8 X 3/4" SHEET METAL	1
4FL116-150	2000 2V IDLER PLY ASY.	1
4FH111-032	IDLER PLT ASY, 2V GEN3	1
4FH016-150	IDLER PULLEY, 6-RIB 3" FLANGD	1
4FA016-171	DUST COVER (IDLER PULLEY)	1
7C012-020	12MM-1.75 X 20MM PLD	1
2A017-045	SPACER, IDLER PLATE 2V G3	1
7A375-208	3/8-16 X G8 HXHD	1
7J250-001	1/4"SAE WASHER, PLTD	1
7C080-140	M8-1.25 X 140 BOLT	2
4FH112-010	**AIR INTAKE ASY**	**1**
4FA012-012	90° INTAKE ELBOW	1
4FH110-050	MAF METER BRACKET ASY	1
7R002-056	#56 HOSE CLAMPS	6
7S350-200	3-1/2" X 2" SLEEVE	2
7U035-000	3-1/2" X 9" FLEX HOSE	1
7R002-052	#52 HOSE CLAMPS	2
8H040-090	AIR FILTER	1
7A250-075	1/4-20 X 3/4" SHCS	4
7F250-021	1/4-20 NYLOCK NUTS	4
7J250-001	1/4"SAE WASHERS	4
4FK012-040	INLET ELBOW	1
7P750-100	3/4"NPT X 1" HOSE FITTING	1
7U033-000	5/8" X 48" HOSE	1
7U038-000	3/4" X 27" HOSE	1
7U100-052	7/16" RUBBER GROMMET	1
7P625-002	5/8" BARB	1
4FH012-012	90° INLET ELBOW W/HOLE	1

PART NUMBER	DESCRIPTION	QTY.
4FH130-026	**OIL FEED ASY**	**1**
7U030-026	1/4" X 26" OIL FEED HOSE	1
7P525-067	.525" CRIMP FERRULES	2
7P250-066	#4 SWIVEL X 1/4" HOSE BARB FITTING	2
7P125-103	1/8"NPT X -4 X 45° MALE ELBOW	1
7P250-082	1/4"NPT X -4 X 90° FITTING	1
7P250-034	1/4"NPT STREET TEE	1
7P250-036	-4 FLARE TO 1/4"NPT	1
4FH130-036	**OIL DRAIN ASY**	**1**
7U030-036	1/2" X 14" OIL DRAIN HOSE	1
7R001-008	#8 STAINLESS HOSE CLAMPS	2
7P500-003	90° X 1/2" ALUM. TUBE	1
7P500-020	TUBE NUT	1
7P375-042	MALE CONNECTOR	1
4FH112-020	**DISCHARGE ASY**	**1**
4FH012-020	DISCHARGE TUBE	1
7S300-200	3" X 2" SLEEVE	1
7S275-200	2-3/4" X 2" SLEEVE	1
7R002-044	#44 HOSE CLAMPS	2
7R002-048	#48 HOSE CLAMPS	2
7R002-016	#16 HOSE CLAMPS	6
8D001-001	BYPASS VALVE	1
7U034-016	1" X 3.5" HEATER HOSE	1
7U034-016	1" X 13.5" HEATER HOSE	1
7U030-046	5/32" X 52" VACUUM LINE	1
7P156-082	5/32" TEE	1
7P100-010	1" HOSE UNION	1
7U133-090	1" X 90° RUBBER ELBOW	1
4FL120-020	**ECM CHIP PACKAGE**	**1**
4F060-038	**38LB. INJECTORS**	**8**
8F001-265	**FUEL PUMP**	**1**
4FL139-096	**PCV ASY, 2004 MUSTANG GT**	**1**
4P375-106	PCV VALVE	1
7P625-375	5/8" TO 3/8" REDUCER BARB	1
7U032-016	3/8" HOSE (6")	1
7U033-000	5/8" HOSE (6")	1
7R001-006	#6 HOSE CLAMP	4

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2000-2004 4.6L SOHC Mustang GT

Part No. 4FL218-130L/138L

PARTS LIST

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

PART NO.	DESCRIPTION	QTY.
2F329-040	**V3-SI SUPERCHARGER ASY**	**1**
2A036-360	3.60" SUPERCHARGER PULLEY	1
8R101-001	6-RIB PULLEY RETAINER ASY	1
4FL111-031	**MTNG BRKT ASY, '00-'03 2V GT**	**1**
7A375-178	3/8-16 X 1-3/4" HXHD G8	5
7K375-040	3/8"AN960 FLAT WASHERS	5
2A046-080	BELT, K061080-GATES SALEEN	1
4FL011-031	MACH, 2000 GT MTG BRKT	1
7C080-065	8MM-1.25 X 65 SOC	1
7C080-140	8MM-1.25 X 140 HXH	1
7K312-001	5/16" AN-WASHER	4
7C060-050	6MM-1.0" X 50MM HXHD ZINC	1
7C080-025	8MM-1.25" X 25 HXHD	1
4FE014-010	RADIATOR PIPE-STNLSS	1
7R002-024	#24 GOLD SEAL HOSE C	2
7R003-013	ADEL CLAMP, 3/4"ID	1
7C010-050	10-24 X 1/2" SOC HD CAP, ZINC PLT	1
7J010-001	#10 FLAT WASHER	1
7C010-140	10MM-1.50 X 140 HEX HEAD	2
7J010-002	10MM WASHER, ZINC PLATED	4
7C010-066	10MM-1.5 X 65 BOLT, SHCS	1
7E010-046	#8 X 3/4" SHEET METAL	1
4FL116-150	2000 2V IDLER PLY ASY.	1
4FH111-032	IDLER PLT ASY, 2V GEN3	1
4FH016-150	IDLER PULLEY, 6-RIB 3" FLANGD	1
4FA016-171	DUST COVER (IDLER PULLEY)	1
7C012-020	12MM-1.75 X 20MM PLD	1
2A017-045	SPACER, IDLER PLATE 2V G3	1
7A375-208	3/8-16 X G8 HXHD	1
7J250-001	1/4"SAE WASHER, PLTD	1
7C080-140	M8-1.25 X 140 BOLT	2
4FH112-010	**AIR INTAKE ASY**	**1**
4FA012-012	90° INTAKE ELBOW	1
4FH110-050	MAF METER BRACKET ASY	1
7R002-056	#56 HOSE CLAMPS	6
7S350-200	3-1/2" X 2" SLEEVE	2
7U035-000	3-1/2" X 9" FLEX HOSE	1
7R002-052	#52 HOSE CLAMPS	2
8H040-090	AIR FILTER	1
7A250-075	1/4-20 X 3/4" SHCS	4
7F250-021	1/4-20 NYLOCK NUTS	4
7J250-001	1/4"SAE WASHERS	4
4FK012-040	INLET ELBOW	1
7P750-100	3/4"NPT X 1" HOSE FITTING	1
7U033-000	5/8" X 48" HOSE	1
7U038-000	3/4" X 27" HOSE	1
7U100-052	7/16" RUBBER GROMMET	1
7P625-002	5/8" BARB	1
4FH012-012	90° INLET ELBOW W/HOLE	1

PART NUMBER	DESCRIPTION	QTY.
4FH112-020	**DISCHARGE ASY**	**1**
4FH012-020	DISCHARGE TUBE	1
7S300-200	3" X 2" SLEEVE	1
7S275-200	2-3/4" X 2" SLEEVE	1
7R002-044	#44 HOSE CLAMPS	2
7R002-048	#48 HOSE CLAMPS	2
7R002-016	#16 HOSE CLAMPS	6
8D001-001	BYPASS VALVE	1
7U034-016	1" X 3.5" HEATER HOSE	1
7U034-016	1" X 13.5" HEATER HOSE	1
7U030-046	5/32" X 52" VACUUM LINE	1
7P156-082	5/32" TEE	1
7P100-010	1" HOSE UNION	1
7U133-090	1" X 90° RUBBER ELBOW	1
4FL120-020	**ECM CHIP PACKAGE**	**1**
4F060-038	**38LB. INJECTORS**	**8**
8F001-265	**FUEL PUMP**	**1**
4FL139-096	**PCV ASY, 2004 MUSTANG GT**	**1**
4P375-106	PCV VALVE	1
7P625-375	5/8" TO 3/8" REDUCER BARB	1
7U032-016	3/8" HOSE (6")	1
7U033-000	5/8" HOSE (6")	1
7R001-006	#6 HOSE CLAMP	4
009035	**LUBE ASSY**	**1**

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1. PREPARATION/REMOVAL

A. Disconnect the negative battery cable.

> **NOTE**: 1999-2004 MODELS ONLY
>
> 1. Remove the passenger side front kick panel from the interior of the vehicle. Remove the sound deadening material (if any) that is covering the ECM. Remove the plastic ECM hold-down bracket.
> 2. Using a 10mm socket or wrench, remove the harness and plug from the ECM (as you loosen the bolt, the connector will slowly release). Remove the ECM from the vehicle.
> 3. Contact the Vortech Service Department for a Return Authorization Number. Send both ECM and supplied credit tag to Vortech using the enclosed shipping box.

B. (2001 Bullitt only) - Loosen the four water pump pulley bolts.

C. Remove the accessory drive belt.

D. Remove the plastic radiator cover and fasteners located above the core support.

E. Remove the crankcase vent tube located between the driver's side valve cover and the air inlet and discard. Remove the hose from the air inlet tube to the idle air motor resonator inlet and discard.

F. Remove all components that lead to the throttle body including the rubber bellows, mass air flow (MAF) sensor, air filter assembly and intake air temperature (IAT) sensor. Separate the MAF and IAT sensors from the intake assembly and set aside.

> **NOTE**: 2002-2004 models do not have a separate IAT sensor. (The IAT sensor is integrated with the factory MAF.)

G. Drain approximately one gallon of coolant from the radiator. Remove the upper radiator hose and set aside.

2. OIL DRAIN (ENGINE OIL-FED KITS ONLY. APPLICATIONS WITH V3 SUPERCHARGERS SKIP AHEAD TO STEP 4.)

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. (See Fig. 2-a.) The drain hole must be punched rather than drilled.

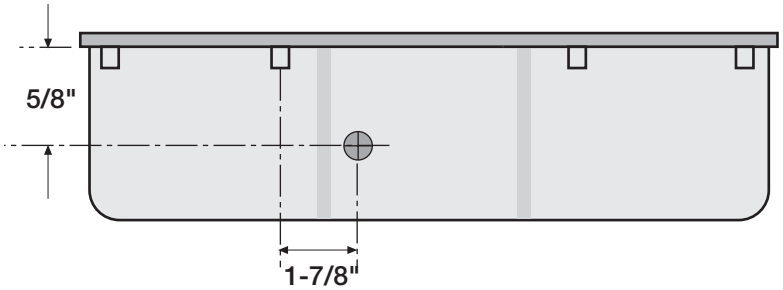

Fig: 2-a / Front of Oil Pan

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2. OIL DRAIN, CONT'D. (ENGINE OIL-FED KITS ONLY. APPLICATIONS WITH V3 SUPERCHARGERS SKIP AHEAD TO STEP 4.)

B. Remove the paint 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.

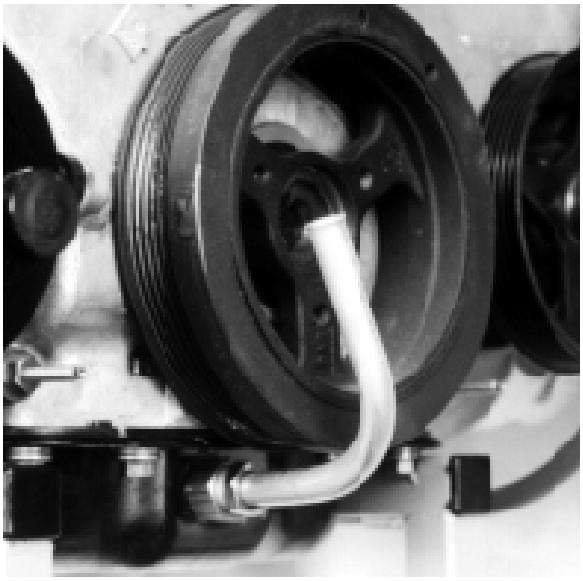

Fig. 2-b

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 x 1/2" inverted flare fitting and secure in hole. Make sure a seal is formed all around the fitting.

F. Thread the tube nut and 1/2" x 90° aluminum tube into the inverted flare fitting by hand. (See Figs. 2-b, 2-c.) Do not tighten until after the supercharger drain hose has been connected.

G. Drain the engine oil and change the filter.

H. Temporarily cap off the oil drain fitting to keep out debris until drain hose is attached at a later time.

I. Refill engine with 5W/30 synthetic or conventional SH/CF rated motor oil.

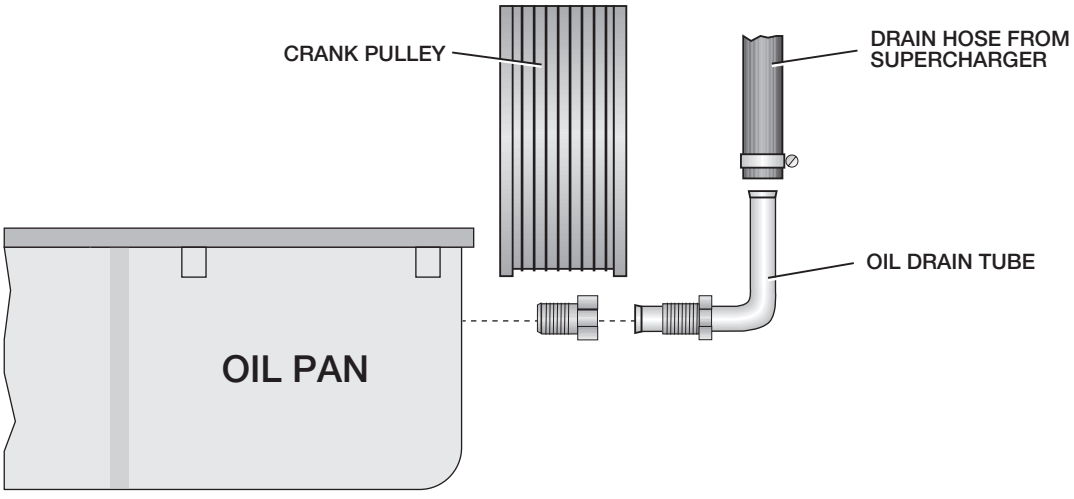

Fig. 2-c / View From Passenger's Side

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3. OIL FEED (ENGINE OIL-FED KITS ONLY. APPLICATIONS WITH V3 SUPERCHARGERS SKIP AHEAD TO STEP 4.)

*A. Remove the 1/4"NPT socket head plug located perpendicular to and directly beneath the factory oil pressure sending unit. This is found on the driver's side below the oil filter.

*B. Thread the supplied 1/4"NPT #4 flare x 90° fitting into the pressure sending unit mount using engine oil on the pipe threads. Rotate the fitting so that the flare points toward the front of the vehicle. (See Fig. 3-a.)

**C. Remove the oil pressure sender. This is located the driver's side of the engine below the oil filter.

**D. Thread the supplied 1/4" street TEE into the pressure sending unit mount using engine oil on the pipe threads.

**E. Install the sending unit and the 1/4"NPT #4 flare fitting into the street TEE as shown and tighten. (See Fig. 3-b.)

F. Temporarily cap off the flare fitting to prevent dirt from entering. The oil feed will be connected at a later time.

NOTE: Teflon tape, or other sealant is not recommended as it might loosen and cause blockage of the oil feed orifice, resulting in supercharger failure.

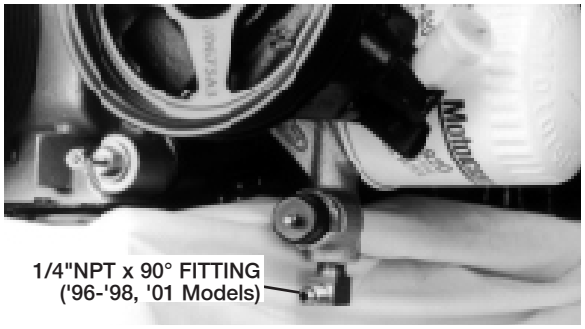

Fig. 3-a

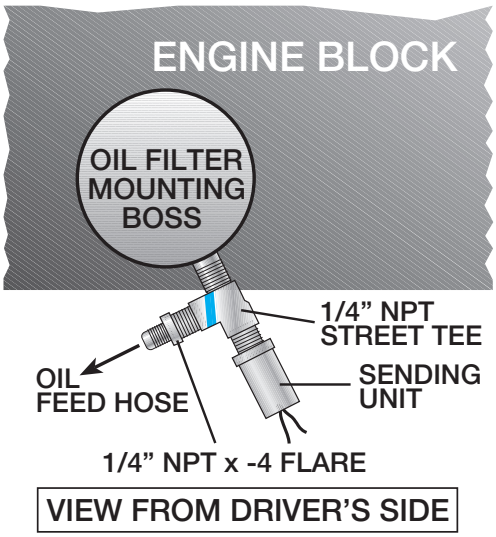

Fig. 3-b / View From Driver's Side ('99-'00 Models Only)

* '96-'98, 01 models only
** '99-'00 models only

4. FUEL MANAGEMENT UNIT (1996-1998 MODELS ONLY)

A. Position the fuel management unit (FMU) against the inner fender ahead of the right side shock tower about an inch from the top. Mark and drill two holes in the inner fender to mount the FMU. Secure with the sheet metal screws provided. (See Figs. 4-a, 4-b, 4-c.)

B. Disconnect and discard the factory rubber fuel return line running from the fuel rail (the return line DOES NOT have a pressure test fitting on it) to the steel return line (the smaller of the two) located behind the right side shock tower using a spring lock disconnect tool.

C. Connect the FMU inlet hose (the hose that goes to the 90° fitting on the side of the FMU) to the return side of the factory fuel regulator on the fuel rail.

D. Connect the FMU outlet hose (attaches to the center fitting on the bottom of the unit) to the steel return line running to the tank. Make sure hose end is securely "snapped" onto factory fuel return line.

E. Secure the fuel lines away from abrasion and exhaust heat with the tie wraps provided.

F. Attach the supplied length of 5/32" vacuum hose to the fitting on top of the FMU. Connect the opposite end of the hose to the factory fuel regulator vacuum connection using the 5/32" TEE provided.

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4. FUEL MANAGEMENT UNIT (1996-1998 MODELS ONLY), CONT'D.

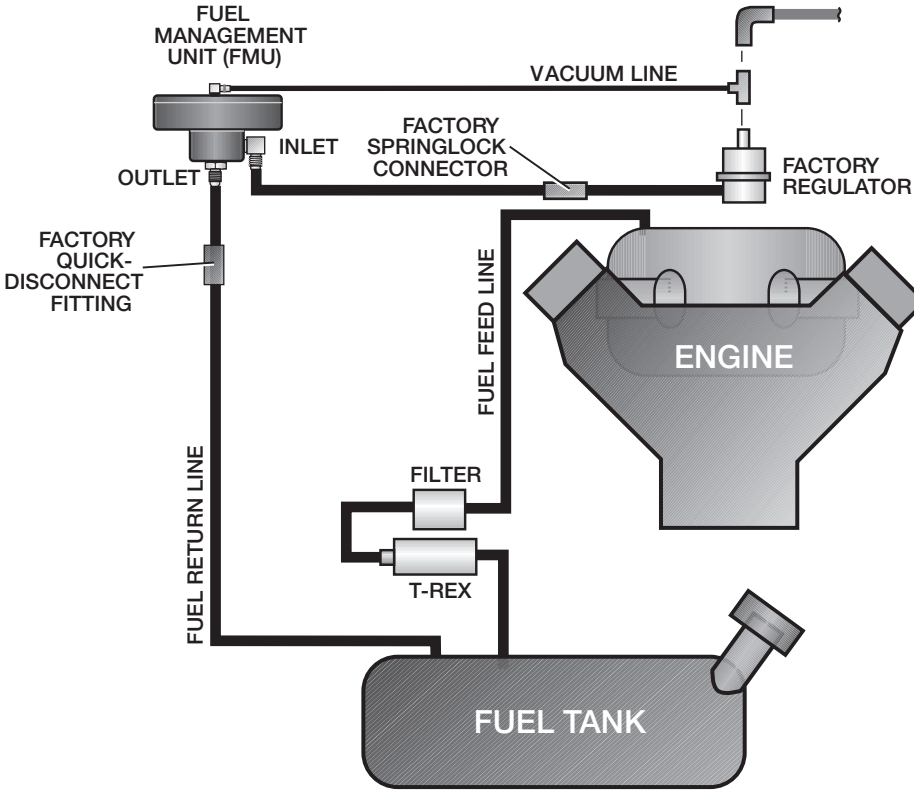

Fig. 4-a

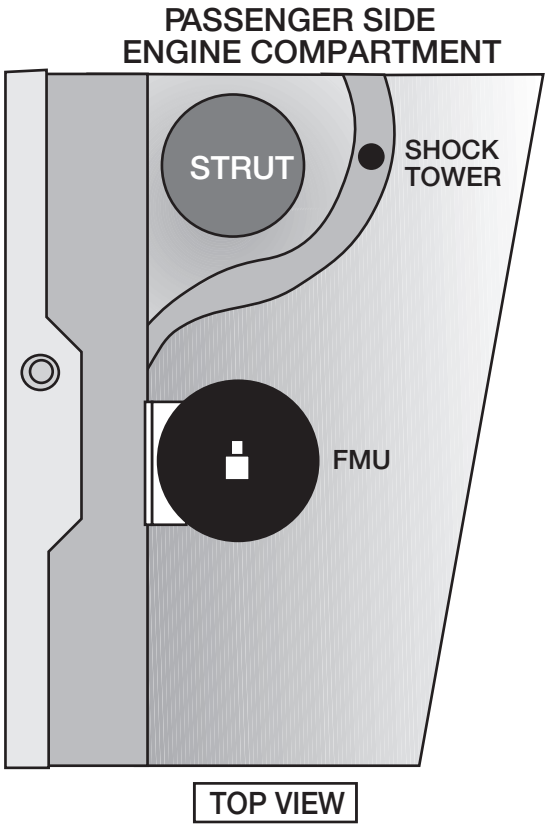

Fig. 4-b

Fig. 4-c

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5.1 FUEL PUMP INSTALLATION (1996-1997 MODELS ONLY)

A. Remove the spare tire, etc. from the trunk.

B. Trim “cut-out” from the template provided in the kit and place over spare tire hold-down. Centerpunch and drill the four 3/16" holes in the trunk floor.

C. Jack up the rear of the car and support with jack stands.

D. Mount the T-Rex fuel pump to the underside of the tire well with the rubber mounts, adel clamps and fasteners provided. Refer to the graphic on the following page.

E. Remove the female hose end connected to the fuel filter inlet.

F. Insert the T-Rex inlet hose assembly into the female supply hose fitting by gently pushing the fittings together and making sure they are locked.

G. Fasten the extended feed line clear of the filter by looping the two 11" cable-ties through the front slot on the fuel filter mount, being careful not to kink the line.

H. Plug the female connector located on the T-Rex discharge line onto the fuel filter inlet making sure the hose assembly clears all exhaust tubing and sharp objects.

I. Position the reflective sleeve on the pump discharge line so that it receives maximum protection from the tailpipe.

> **NOTE**: Use extreme caution when routing fuel lines. Make sure fuel lines are located away from hot exhaust pipes and sharp edges on vehicle underbody.

J. Mark and drill a 1/8" hole and mount the relay inside the trunk in position as shown in the template. Use the sheet metal screw provided.

K. From relay terminal #85, tap the yellow wire into the stock fuel pump harness in the trunk near the right tail light. Tap into the purple wire with the supplied scotch lock. (On some model years, the wire may be brownish-green.)

L. Connect the short red wire on relay terminal #8 to the (+) terminal on the fuel pump.

M. Connect the longer black wire from the (-) terminal on the fuel pump to a clean ground.

N. Connect the short black wire to a clean ground from relay terminal #86 (relay screw mount works well).

O. Route the remaining long red wire from relay terminal #30 up to the fuse panel located under the dash. Using a solderless connector, connect the supplied fuse holder and fuse to the end of the wire. Crimp the fuse wire to the supplied female slide and fuse tap. Attach fuse tap and wire to fuse #17.

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5.1 FUEL PUMP INSTALLATION, (1996-1997 MODELS ONLY, CONT'D.)

NOTE: Make sure everything is secure and away from all moving parts or exhaust pipes. Make sure no wires will rub on sharp edges. After you have activated the pump, check for any leaks and correct if necessary.

Mount relay in the right rear corner of the spare tire well. Make sure wires are connected as per the relay schematic below. Provide a good ground connection free of rust and paint, for both the pump and relay. Connect the red power lead from the relay position #30 to fuse #17 in the under-dash fuse panel. Route the wire underneath the rear seat and carpet. Take care to avoid sharp edges and not damage the wire insulation.

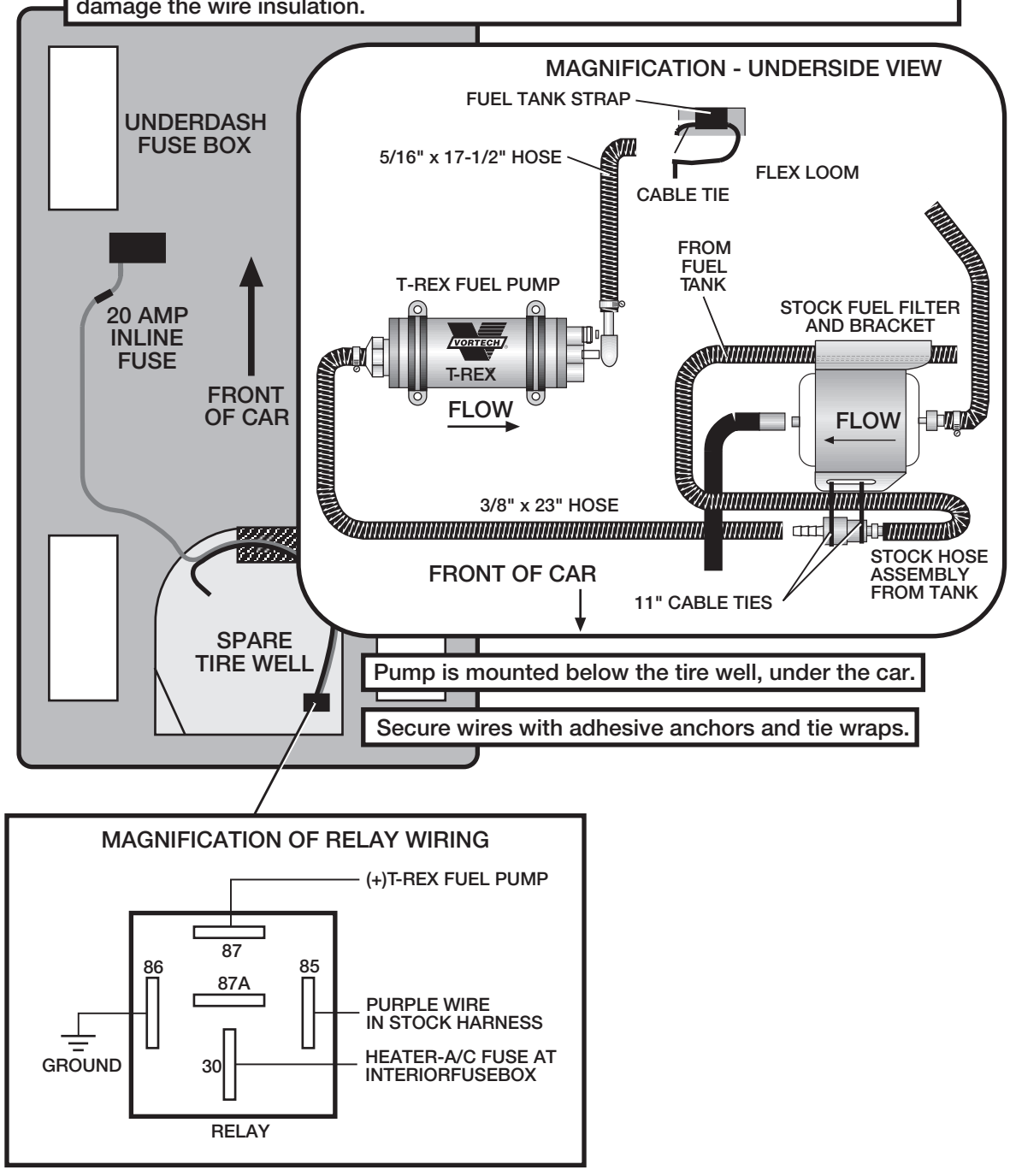

Fig. 5.1-a

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5.2 FUEL PUMP INSTALLATION (1998 MODELS ONLY)

A. Remove the spare tire, etc. from the trunk.

B. Jack up the rear of the car and support with jack stands.

C. Mount the fuel pump to the underside of the spare tire well with the adel clamp and #8 fasteners provided. (See Figs. 5.2-a, 5.2-b.)

D. Remove the factory female hose end connected to the fuel filter inlet.

E. Insert the supplied 1/2" fuel pump inlet hose adapter fitting into the factory female supply hose fitting by gently pushing the fittings together and making sure they are locked.

F. Attach the supplied 1/2" fuel hose to the pump inlet and the inlet hose adapter fitting. Use the supplied #4 clamps to secure both ends. Cut hose length, if necessary.

G. Fasten the extended pump inlet line clear of the filter by looping the two 11" cable ties through the front slot on the fuel filter mount, being careful not to kink the line.

H. Plug the female connector located on the pump discharge line onto the fuel filter inlet making sure the hose assembly clears all exhaust tubing and sharp objects.

> **NOTE**: Use extreme caution when routing fuel lines. Make sure fuel lines are located away from hot exhaust pipes and sharp edges on the vehicle underbody.

I. Mark and drill a 1/8" hole and mount the relay inside the trunk in position as shown in the template. Use the sheet metal screw provided.

J. From relay terminal #85, tap the yellow wire into the stock fuel pump harness in the trunk near the right tail light. Tap into the purple wire with the supplied scotch lock. (On some model years, the wire may be brownish-green.)

K. Connect the short red wire on relay terminal #8 to the (+) terminal on the fuel pump.

L. Connect the longer black wire from the (-) terminal on the fuel pump to a clean ground.

M. Connect the short black wire to a clean ground from relay terminal #86 (relay screw mount works well).

N. Route the remaining long red wire from relay terminal #30 up to the fuse panel located under the dash. Using a solderless connector, connect the supplied fuse holder and fuse to the end of the wire. Crimp the fuse wire to the supplied female slide and fuse tap. Attach fuse tap and wire to fuse #17.

Fig. 5.2-a

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5.2 FUEL PUMP INSTALLATION (1998 MODELS ONLY), CONT'D.

Mount relay in the right rear corner of the spare tire well. Make sure wires are connected as per the relay schematic below. Provide a good ground connection free of rust and paint, for both the pump and relay. Connect the red power lead from the relay position #30 to fuse #17 in the underdash fuse panel. Route the wire underneath the rear seat and carpet. Take care to avoid sharp edges and not damage the wire insulation.

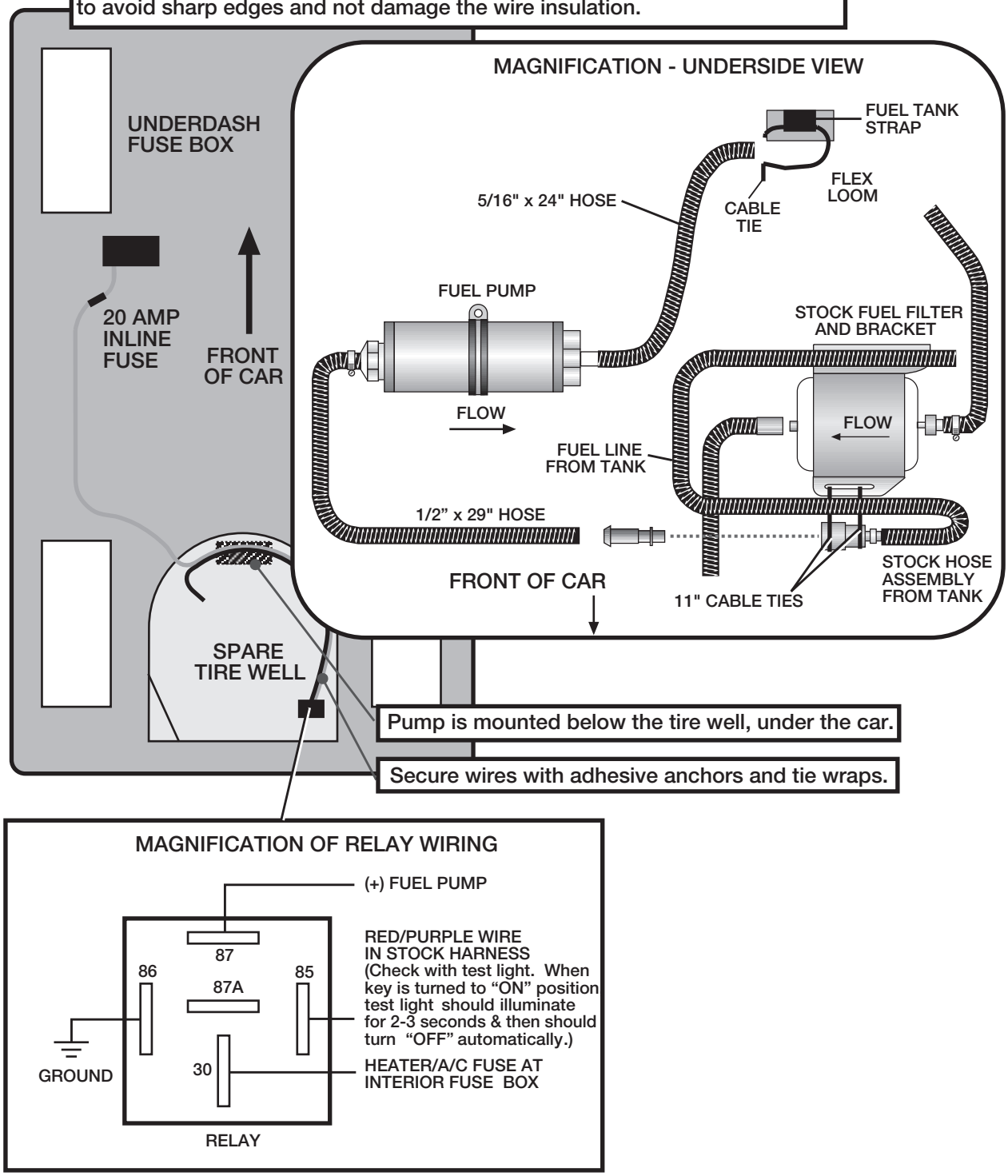

Fig. 5.2-b

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5.3 FUEL PUMP INSTALLATION (1999-2004 MODELS ONLY)

A. Raise the rear of the car and support it with jack-stands.

B. Open the fuel door and remove the fuel-cap and the three filler neck screws using a 10mm socket.

C. Remove the fuel filter inlet line with a 3/8" springlock tool.

D. With the weight of the fuel tank supported with a jack, remove the bolts securing the two fuel tank straps.

E. Slowly lower the fuel tank, allowing it to lean over with the filler side up, until the electrical connections leading to the center mounted fuel pump are revealed. Disconnect these two electrical connections.

F. Remove the six bolts securing the fuel pump access cover (on top of the fuel tank) with an 8mm wrench. Depress the two clips securing the plastic fuel pump enclosure and slide it out of the tank. The fuel sender float is attached to the fuel pump enclosure and must be handled with care. Ensure that the tank has been lowered enough to remove the fuel pump enclosure.

G. Remove the two screws securing the plastic fuel pump outlet manifold to the enclosure cap. Pull the manifold up and away from the fuel pump.

H. Remove the three screws securing the fuel pump enclosure's cover using a 3/16 nut-driver and remove the cover.

I. Remove the stock fuel pump from its enclosure. Separate the rubber pump support from beneath the filter and install it on the supplied pump. Secure the support with the new filter provided.

J. Using the supplied fuel pump, reassemble the fuel pump assembly and canister with cap.

K. Reinstall the canister assembly into the fuel tank and reattach the electrical connections.

L. Reinstall the fuel tank, reconnect the fuel filter inlet line, reattach the fuel filler neck and reinstall the fuel cap.

M. Turn the ignition key on and check the fuel pump for leaks.

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6. FUEL INJECTOR REPLACEMENT (1999-2004 MODELS ONLY)

A. Disconnect the eight (8) fuel injector wiring clips and retainers from the fuel injectors. Release any residual fuel pressure from the rail by opening the schrader valve on the rail. Have a fire extinguisher nearby and use extreme caution.

B. Remove the bolts holding down the factory fuel rail onto the intake manifold. Lift up on to the rails evenly, removing all eight injectors.

C. Using a small amount of clean motor oil, lightly lubricate the O-rings on both ends on the Vortech supplied fuel injectors.

D. Install the new injectors into the fuel rails with the terminals facing outward.

E. Carefully lower the fuel rail/injector assembly down onto the intake manifold. Check to see that each injector has been seated properly into the manifold.

F. Tighten down the fuel rail assembly with the original bolts and attach the wiring clips to the injector terminals.

NOTE: Make sure injector retainers are secure and properly installed. Recheck after cycling fuel system.

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7. AIR CONDITIONING LINE MODIFICATION

*A. Remove the factory ignition coil, coil bracket and all coil mounting hardware from the passenger side of the engine.

*B. Remove the 8mm fastener attaching the air conditioning pressure line silencer to the lower radiator support to allow line movement during line modification. (See Fig. 7-b.)

*C. Using a hand-held 1/2" tubing bender, bend the high pressure air conditioning line (the line with the pressure port and cap) so that the pressure port rotates down for supercharger inlet clearance. (See Figs. 7-a, 7-c.)

*D. Reattach the air conditioning silencer bracket to the radiator support.

NOTE: Air conditioning lines are under high pressure and the fluid is highly toxic; therefore, use extreme caution when bending the line to avoid kinking or breaking the line. Support the assembly as much as possible while bending for clearance.

**E. Bend the high pressure air conditioning line (the line with the pressure port and cap) so that the pressure port rotates down (for supercharger inlet clearance). (See Fig. 7-d.)

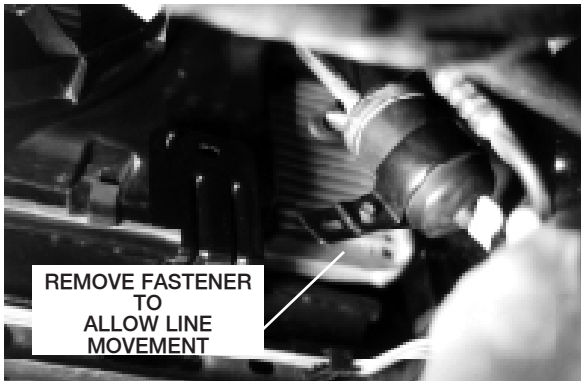

Fig. 7-b / '96-'98 Models Only

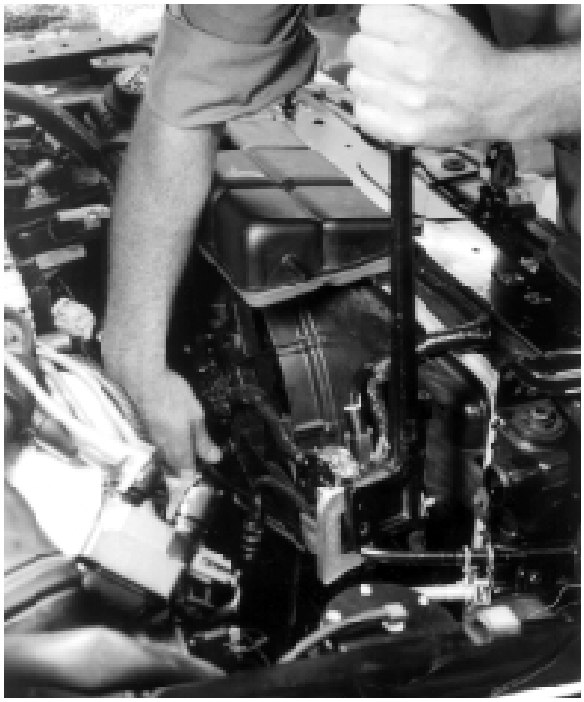

Fig. 7-c / '96-'98 Models Only

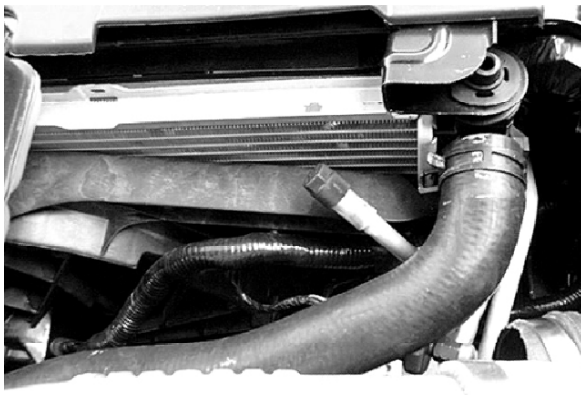

Fig. 7-d / '99-'03 Models Only

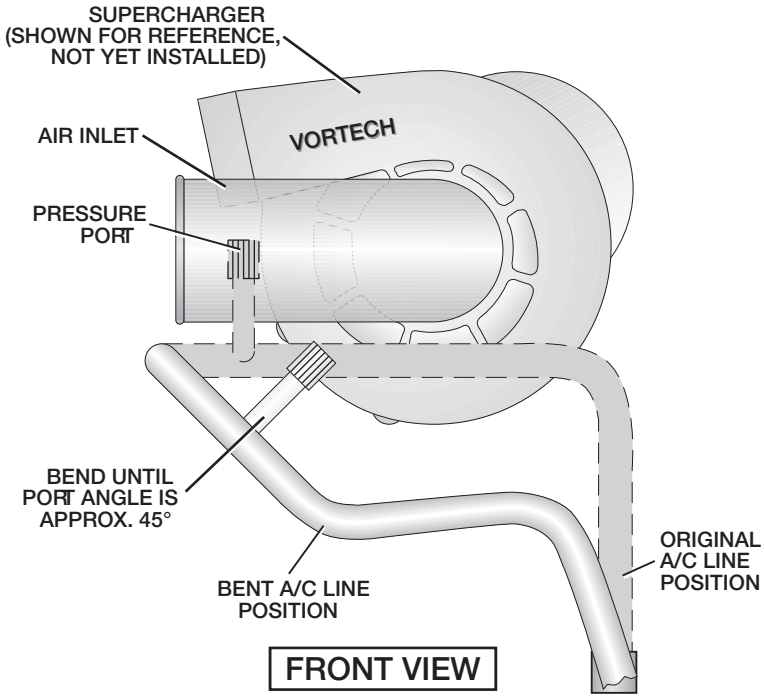

Fig. 7-a

* '96-'98 Models Only
** '99-'03 Models Only

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8.1 MAIN BRACKET ASSEMBLY (1996-1999 Models Only)

*A. Attach the supplied 1/8"NPT x 45° flare fitting and oil feed hose to the oil feed fitting on the supercharger. Rotate the fitting so that it points forward, toward the volute (intake) side of the supercharger, perpendicular to the front cover. When tightening the fitting, use a 1/2" wrench on the oil feed base for support.

WARNING: When threading the 1/8" NPT x 45° flare fitting into the supercharger, use engine oil on the pipe threads for lubrication. Teflon tape, paste or other sealant is not recommended as it might loosen and cause blockage of the oil feed orifice, resulting in supercharger failure.

Fig. 8.1-a

*B. Slide the supplied 1/2" oil drain hose onto the supercharger drain and secure with a #8 hose clamp.

C. Install the 8mm x 65mm bolt and washer through the supercharger bracket in the location shown. (See Fig. 8.1-e).

D. Using the supplied 3/8-16 x 1.75 bolts and 3/8"AN washers, secure the supercharger to the Vortech aluminum mounting bracket. (See Figs. 8.1-a, 8.1-b.)

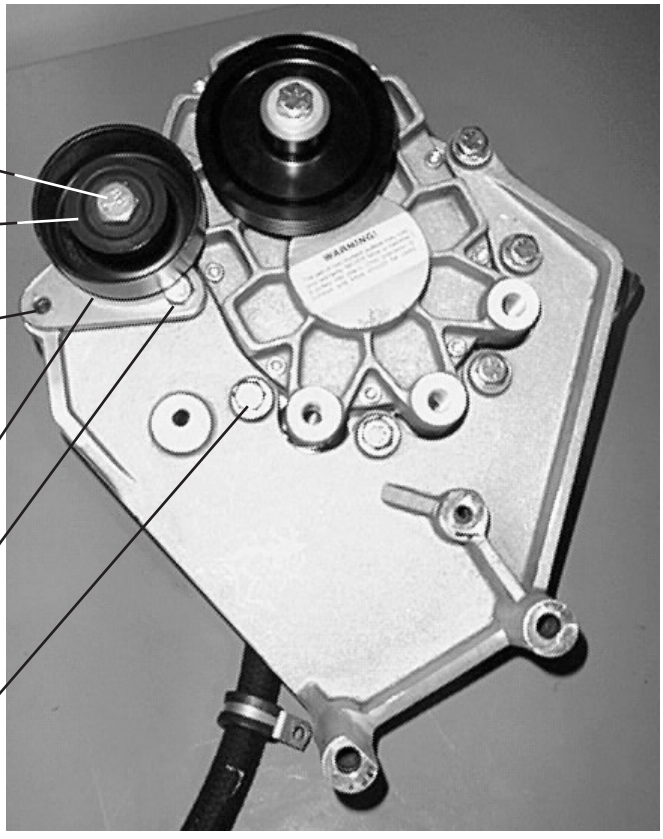

Fig. 8.1-b

* Applies to "engine oil-fed" units only.
V3 applications skip these steps.

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8.1 MAIN BRACKET ASSEMBLY (1996-1999 MODELS ONLY), CONT'D.

E. Using the supplied 3/8-16 x 2" bolt, fasten the Vortech idler mounting plate to the supercharger and mounting bracket. Do not use a washer. Align the second hole while torquing the bolt. Secure the supplied composite idler to the idler mounting plate with the supplied 12mm x 25mm bolt and dust shield. Use thread locking compound. (See Fig. 8.1-b.)

F. Remove the four timing cover bolts, fixed idler pulley bolt and right side alternator mounting bolt from the front of the engine. Remove the upper bolt/stud located on the factory belt tensioner and replace with the supplied 8mm x 25mm bolt and washer. (See Fig. 8.1-c.)

> **NOTE**: On some 1996-1999 models, a tensioner stop has been added to the tensioner. This must be removed before bracket installation. Remove the mounting studs and thread the two supplied 8mm x 25mm bolts and washers in their place.

G. Remove the air conditioning line silencer bracket and mounting hardware from the silencer and front cover. Enlarge both of the holes on the bracket with a 27/64" drill bit, remove any sharp edges around the enlarged hole and reinstall onto the silencer. (See Fig. 8.1-e.)

> **NOTE**: When mounting the supercharger bracket assembly to the front cover, make sure that the air conditioning line silencer bracket is sandwiched in between the Vortech aluminum bracket and the front cover in positions #1 and #2. (See Fig. 8.1-e.) On vehicles not equipped with A/C, two .060" washers must be installed in positions #1 and #2 in place of the factory A/C silencer bracket. These have been included with the kit.

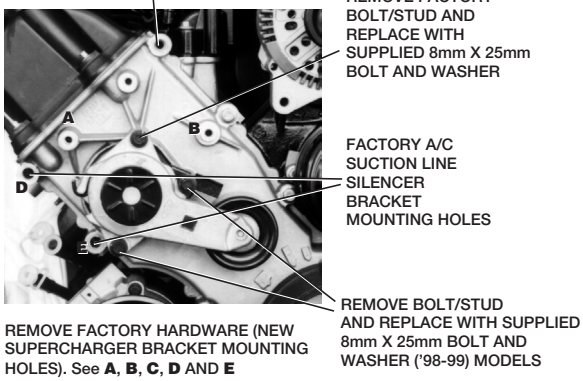

Fig. 8.1-c

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8.1 MAIN BRACKET ASSEMBLY (1996-1999 MODELS ONLY), CONT'D.

H. Route the Vortech supplied accessory drive belt around all engine pulleys except for the water pump pulley. Lower the supercharger/bracket assembly into place and route the belt around the supercharger pulley and the relocated factory idler. (See Fig. 8.1-d.) Insert the alternator spacer and secure the supercharger/bracket assembly with the supplied fasteners per Figs. 8.1-e, 8.1-f. Use a 1/2" breaker bar or ratchet to release the belt tension. Push the belt over the top radius of the water pump pulley and release the tensioner.

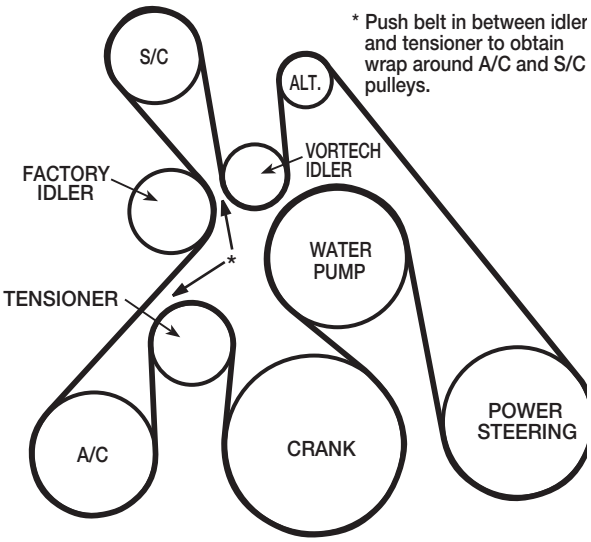


Fig. 8.1-d

NOTE: It is imperative that the tensioner does not become overloaded when being pulled down during belt installation. Bending of the tensioner may cause belt throwing/shredding problems when vehicle is driven at high engine speeds.

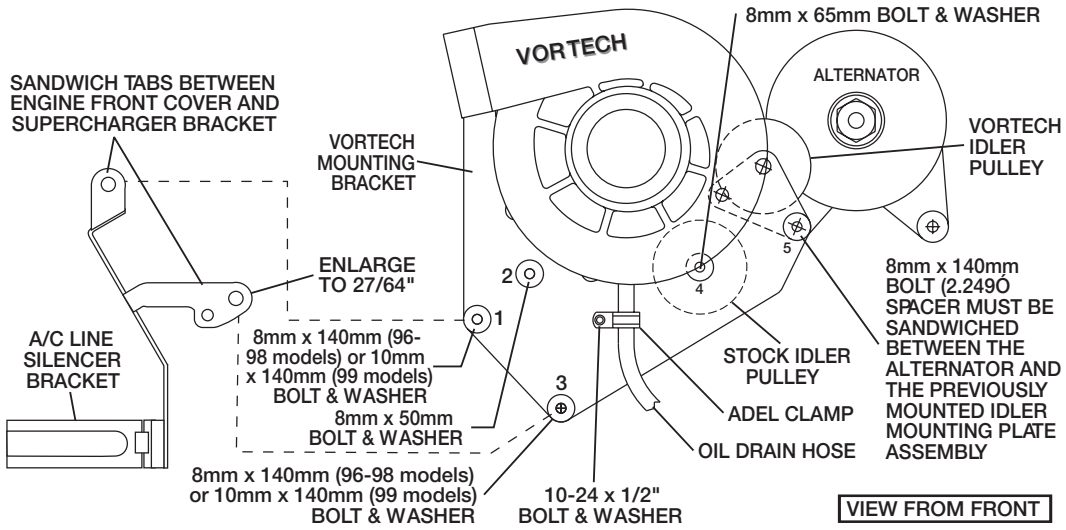
*I. Secure the oil drain hose to the mounting bracket using the supplied adel clamp, #10 bolt and washer. (See Figs. 8.1-a, 8.1-e.)

*J. Route the oil drain hose down to the oil pan tube previously installed. The hose must be routed downhill, free of dips and kinks. Trim hose end if necessary, slide it onto the drain tube and secure with a #8 hose clamp. Support the fitting in the oil pan with a wrench while tightening the drain tube fitting.

*K. Route the oil feed hose next to the drain hose, down to the feed fitting and secure. Use tie-wraps to fasten the lines together.

Fig. 8.1-f

NOTE: The new longer accessory drive belt is routed the same as the original belt except for the accommodation of the supercharger and idler pulley. Should an emergency arise, the factory belt may be reinstalled in its original configuration.



* Applies to "engine oil-fed" units only. V3 applications skip these steps.

Fig. 8.1-e / View From Front

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8.2 MAIN BRACKET ASSEMBLY (2000-2004 MODELS ONLY)

NOTE: 2001 Bullitt applications require the water pump pulley to be removed and replaced with the unit provided.

*A. Attach the supplied 1/8"NPT x 45° flare fitting and oil feed hose to the oil feed fitting on the supercharger. Rotate the fitting so that it points forward, toward the volute (intake) side of the supercharger, perpendicular to the front cover. When tightening the fitting, use a 1/2" wrench on the oil feed base for support.

WARNING: When threading the 1/8"NPT x 45° flare fitting into the supercharger, use engine oil on the pipe threads for lubrication. Teflon tape, paste or other sealant is not recommended as it might loosen and cause blockage of the oil feed orifice, resulting in supercharger failure.

*B. Slide the supplied 1/2" oil drain hose onto the supercharger drain and secure with a #8 hose clamp.

C. Remove the A/C silencer and wiring harness support bracket from the timing cover stud. Remove the 3 timing cover bolts/studs and the passenger side alternator mounting bolt. (See Fig. 8.2-a.) Install the supplied 10mm x 65mm socket head bolt and washer in place of the upper-most bolt/stud.

D. Replace the factory ribbed and smooth idler pulley with the supplied Vortech idlers. Use thread lock on the bolts. Set the factory smooth idler aside for use in Step G.

**E. Unscrew the previously loosened water pump pulley bolts and install the Vortech supplied water pump pulley.

NOTE: After removing the factory smooth steel idler pulley, you must check the clearance between the front cover webbing and the supplied plastic pulley. (See Fig. 8.2-a and 8.2-b.) Modify the front cover if necessary.

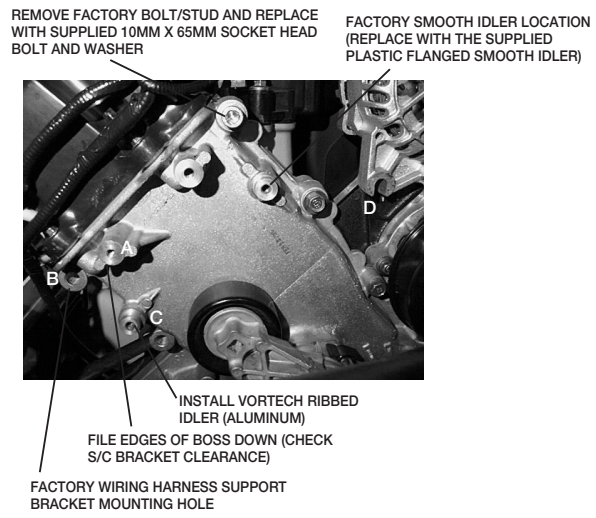

Fig. 8.2-a / Timing Cover

* Applies to "engine oil-fed" units only. V3 applications skip these steps.
** 2000 models only

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8.2 MAIN BRACKET ASSEMBLY (2000-2004 MODELS ONLY), CONT'D.

F. Using the supplied 3/8-16 x 1.75" bolts and 3/8" AN washers, secure the supercharger to the Vortech aluminum mounting bracket, except where indicated. (See Fig. 8.2-c.)

G. Using the supplied 3/8-16 x 2" bolt, fasten the Vortech idler mounting plate to the supercharger and mounting bracket. Do not use a washer. Align the second hole while torquing the bolt. Secure the factory smooth idler to the idler mounting plate with the supplied 12mm x 25mm bolt and dust shield. Use thread locking compound. Make sure the "open" side of the pulley is installed toward the alternator.

**H. Detach the wiring harness support bracket from the harness. Enlarge the hole on the bracket using a 27/64" drill bit. (See Fig. 8. 2-d.) Remove any sharp edges around the enlarged hole and reinstall it onto the harness. (Failure to re-install this bracket between the Vortech bracket and front cover will result in bracket misalignment and possible parts failure.)

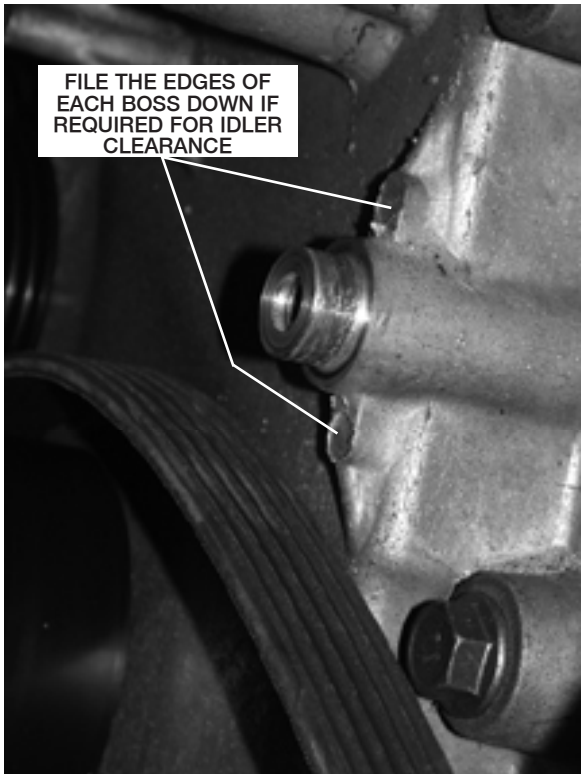

Fig. 8.2-b/ Upper Idler

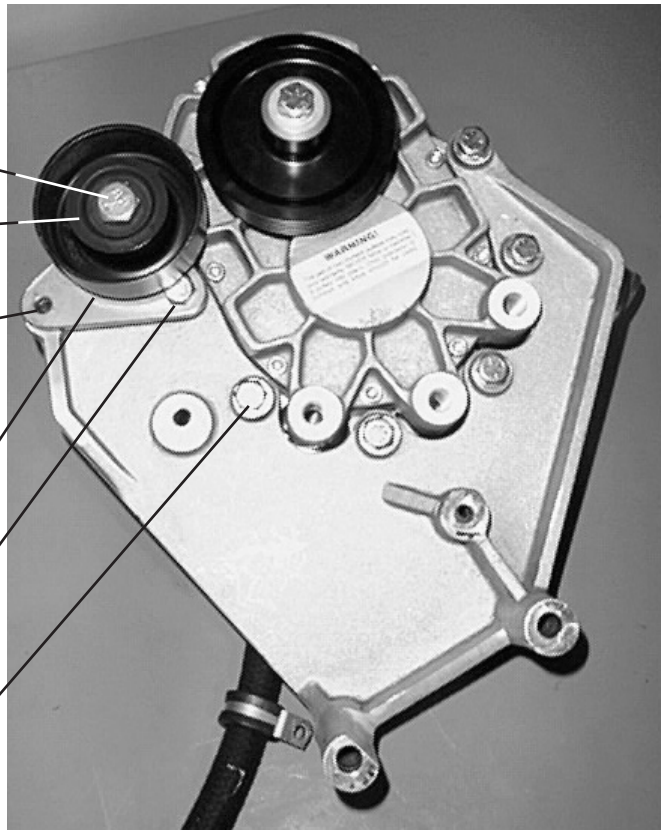

Fig. 8.2-c

** 2000 Models Only

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8.2 MAIN BRACKET ASSEMBLY (2000-2004 MODELS ONLY), CONT'D.

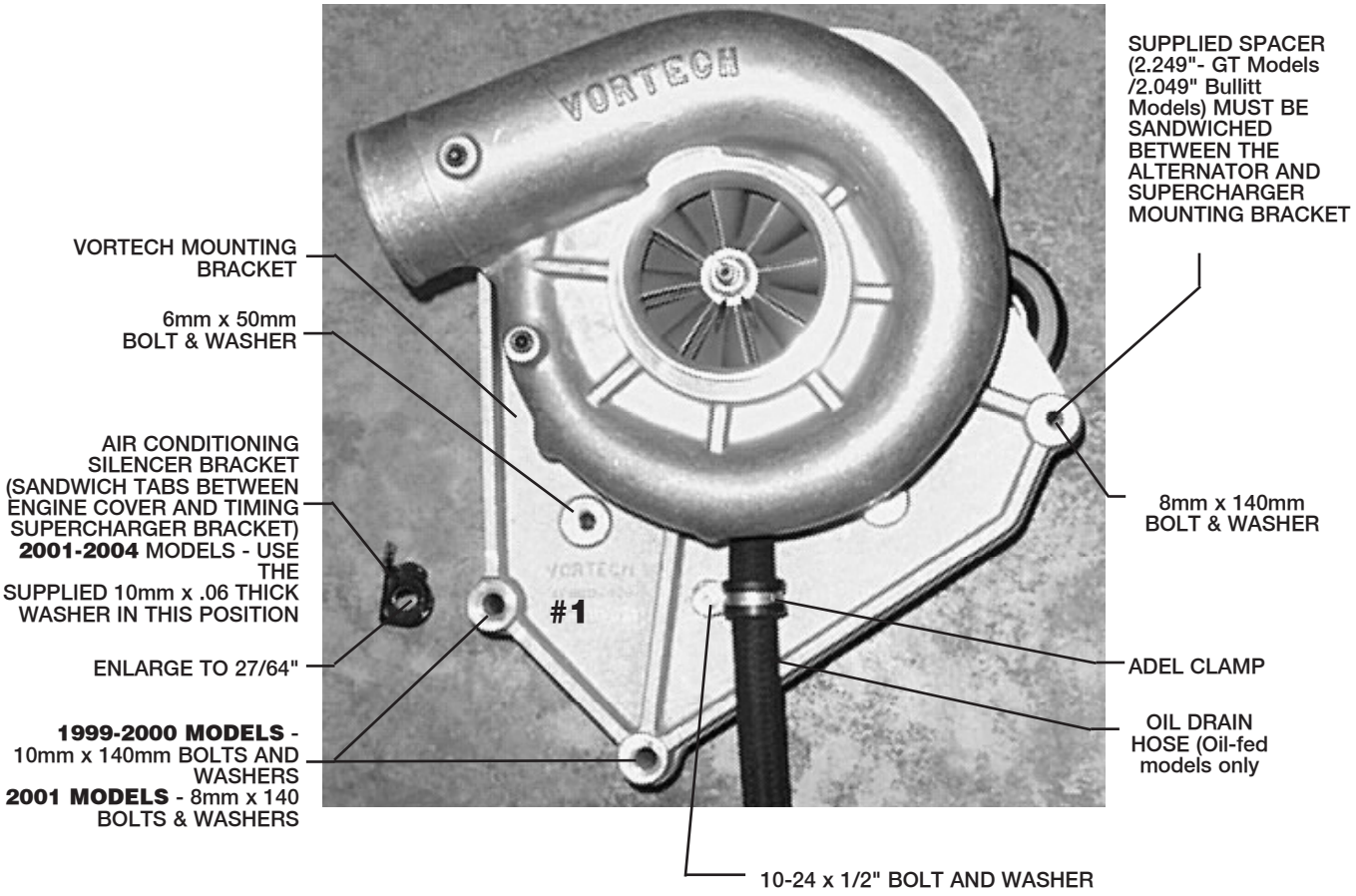

Fig. 8.2-d / Supercharger-Front View

NOTE: When mounting the supercharger bracket assembly to the front cover, make sure the wiring harness support bracket is sandwiched in-between the timing cover and the Vortech aluminum bracket in position #1. (See Fig. 8.2d.)

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8.2 MAIN BRACKET ASSEMBLY (2000-2004 MODELS ONLY), CONT'D.

I. Route the Vortech supplied accessory drive belt around all engine pulleys except for the water pump pulley. Lower the supercharger/bracket assembly into place and route the belt around the supercharger pulley and the relocated factory idler. (See Figs. 8.2-e, 8.2-f.) Insert the alternator spacer and secure the supercharger/bracket assembly with the supplied fasteners per diagram. Use locking pliers to release the belt tension. Push the belt over the top radius of the water pump pulley and release the tensioner.

Fig. 8.2-e

NOTE: The new, longer accessory drive belt is routed the same as the original belt except for the accommodation of the supercharger and idler pulley. Should an emergency arise, the factory belt may be reinstalled in it's original configuration.

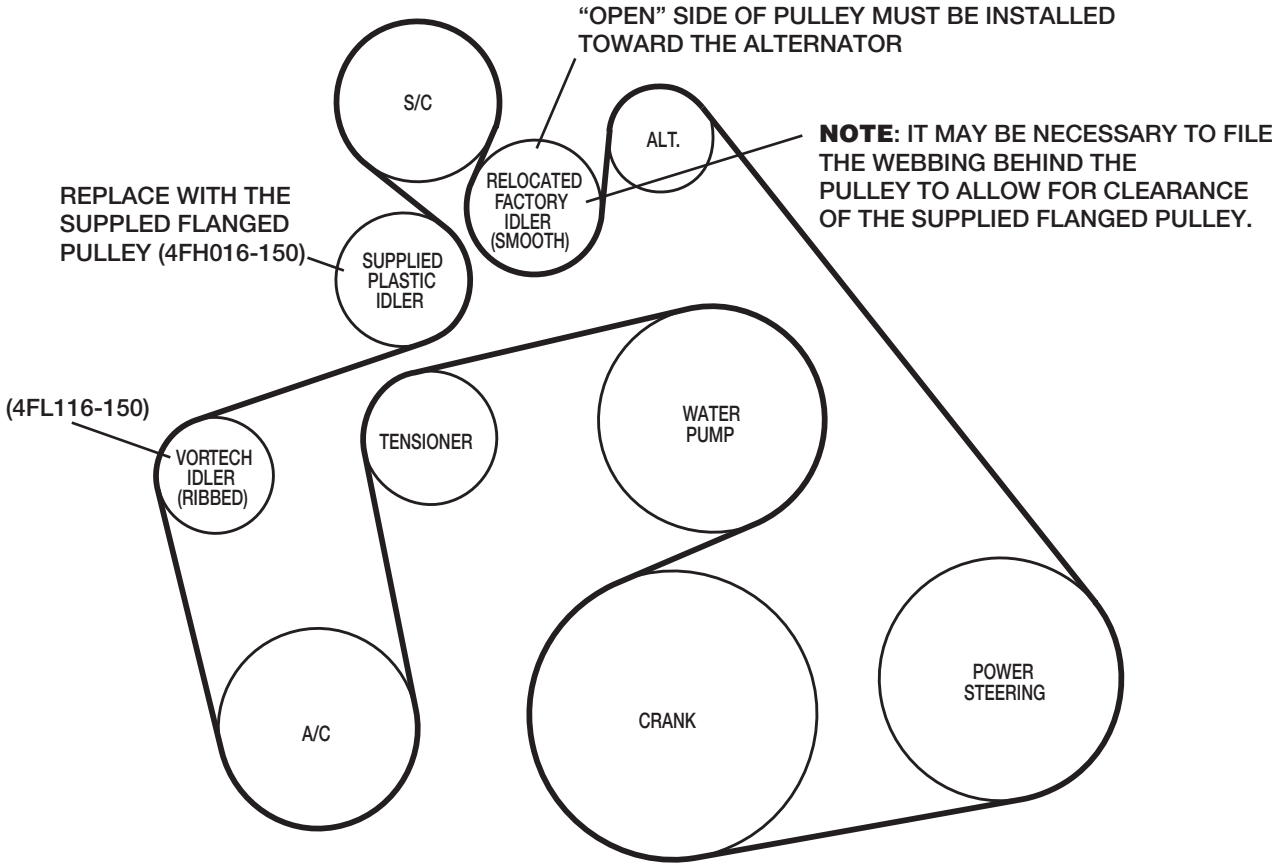

Fig. 8.2-f / Belt Diagram

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8.2 MAIN BRACKET ASSEMBLY (2000-2004 MODELS ONLY), CONT'D.

J. Secure the air conditioning silencer and the oil drain hose to the mounting bracket using the adel clamp, #10 bolt and washer. (See Fig. 8.2-g.)

> **NOTE**: Minor bending of the air conditioning lines may be necessary.

*K. Route the oil drain hose down to the oil pan tube previously installed. The hose must be routed downhill, free of dips and kinks. Trim the hose end if necessary, slide the hose onto the drain tube and secure it with a #8 hose clamp. Support the fitting in the oil pan with a wrench while tightening the drain tube fitting.

*L. Route the oil feed hose next to the drain hose, down to the feed fitting and secure.

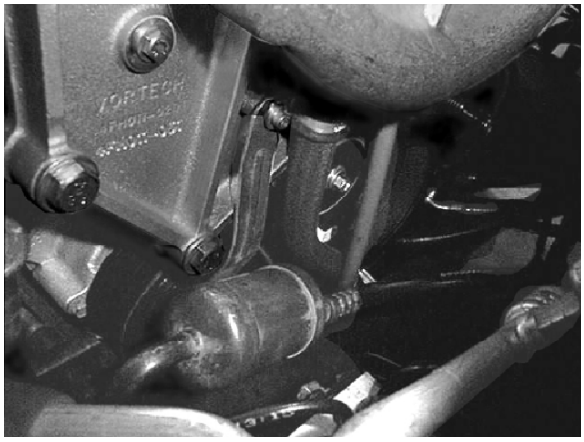

Fig. 8.2-g / Air Conditioning Silencer

* Applies to "engine oil-fed" units only. V3 applications skip these steps.

9. COOLANT HOSE MODIFICATION

A. Trim 1" of hose from the radiator end of the upper radiator hose (straight portion). (See Fig. 9-b.) Cut the radiator hose, into 2 pieces in the middle of the upper straight section.

B. Install the supplied stainless steel radiator tube into the separated radiator hose and secure with the supplied clamps. Reinstall radiator hose, and refill radiator (see Fig. 9-a).

Fig. 9-a

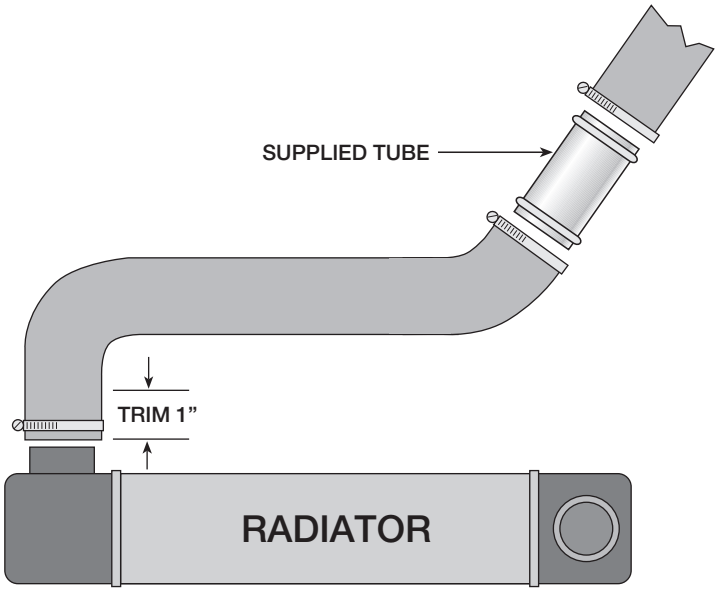

Fig. 9-b

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10. AIR INLET

A. Using the supplied 1/4-20 hardware, mount the MAF meter to the Vortech MAF bracket and secure. (See Fig. 10-a). Remove the factory MAF screen before attaching the meter to the new bracket.

B. Attach the supplied K & N air filter, 3-1/2" sleeve, 90° 3-1/2" elbow and #56 hose clamps to the MAF and secure. (1996-2001 models only.)

> **NOTE**: 1996-2001 models use the 90° x 3-1/2" plastic inlet elbow with the hole and grommet in the side. 2002+ models use the 90° x 3-1/2" plastic elbow without any hole in the side. Both elbows have been supplied.

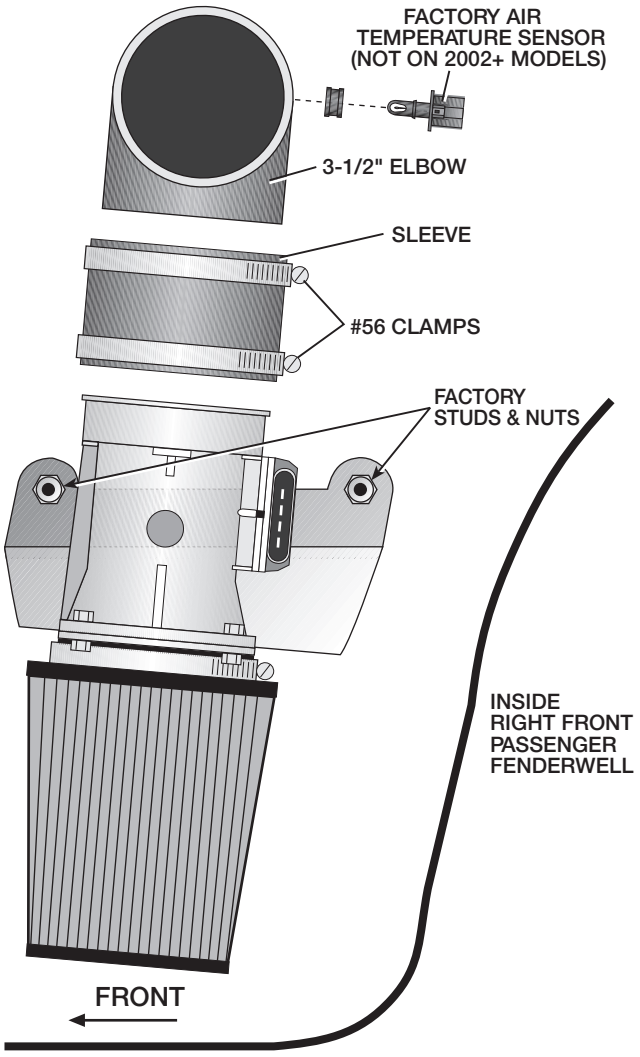
C. (1996-2001 Models only) Insert the factory air temperature sensor into the rubber grommet located on the side of the 90° elbow. Lubricate for easier fit.

> **NOTE**: 2002-2004 models do not have a separate IAT sensor.

D. Working from beneath the vehicle, remove the two factory nuts and washers from the passenger's side lower fender valence. Mount the MAF/ bracket assembly onto the existing studs using the same washers and nuts originally removed. (See Fig. 10-a.)

E. Using a #52 hose clamp, connect the piece of 3-1/2" flex hose to the elbow attached to the MAF meter and route it through the opening in the right side inner fender toward the supercharger. Make sure the 3-1/2" flex hose does not contact or rub on the edge of the inner fender opening. (Eventual hose failure will result if the hose is not properly routed.)

F. Route the factory temperature sensor and MAF sensor connectors out through the inner fender opening. Re-attach the connectors to the relocated sensors.



VIEW FROM INSIDE ENGINE COMPARTMENT
(Steel inner fender not shown for ease of description)

Fig. 10-a

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10. AIR INLET, CONT'D.

***G. Attach the supplied 1" x 3.5" rubber hose to the white 1" plastic barb fitting located on the molded plastic supercharger inlet duct. (See Fig. 10-d.) Attach the supplied compressor bypass valve outlet to the 1" x 3.5" rubber hose (make sure the vacuum nipple is oriented as shown).

**H. Attach the 1" x 90° rubber elbow to the white 1" plastic barb fitting located on the molded plastic supercharger inlet duct. (See Fig. 10-e.) Attach the supplied compressor bypass valve outlet to the 1" x 90° elbow (make sure the vacuum nipple is oriented as shown).

***I. Attach the 1" x 13.5" rubber hose to the inlet of the compressor bypass valve. Secure both hoses with supplied #16 hose clamps.

*J. Insert the 1" x 10" rubber hose to the inlet of the compressor bypass valve. Secure both hoses with the supplied #16 hose clamps.

K. Connect the plastic inlet duct (with bypass valve and hoses attached) to the supercharger inlet using the supplied 3-1/2" sleeve and #56 clamps. (See Fig. 10-b.) The 13.5" bypass hose will need to be routed in between the brake line coming out of the ABS unit and the ABS unit itself.

L. Join the supercharger inlet duct to the previously installed MAF hose with the supplied #52 hose clamp.

M. Charge cooled applications Only: Install the second compressor bypass as shown. (See Figs. 10-f, 10-g, 10-h.)

N. Install the supplied lenghts of 5/8" and 3/4" hoses to the barbs located on the plastic supercharger inlet duct. Connect the opposite ends of each hose to the crankcase breather fitting on the driver's side valve cover (5/8" hose) and the idle air control resonator (3/4" hose). Trim hose length if required.

*O. Install the 5/8" hose union into the crankcase breather line. It may be necessary to trim this line to ensure a proper fit. (See Fig. 10-c.)

P. The plastic radiator cover removed in Step 1C must be modified to clear the air inlet duct (1996-1997 only). Install the cover in its original position and mark it as to where material needs to be removed for duct clearance. Using a razor blade or utility knife, cut out the radiator cover to fit the inlet ducting. Reinstall the cover and re-secure.

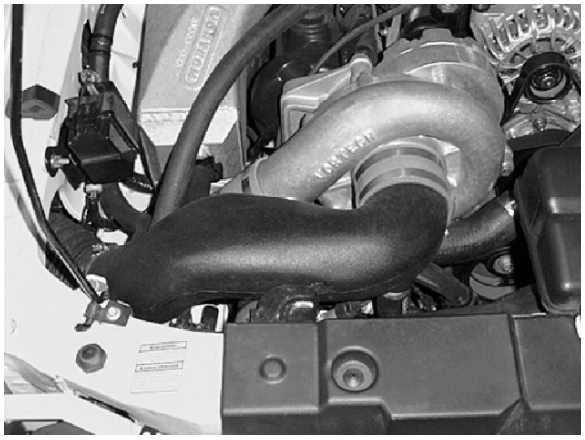

Fig. 10-b

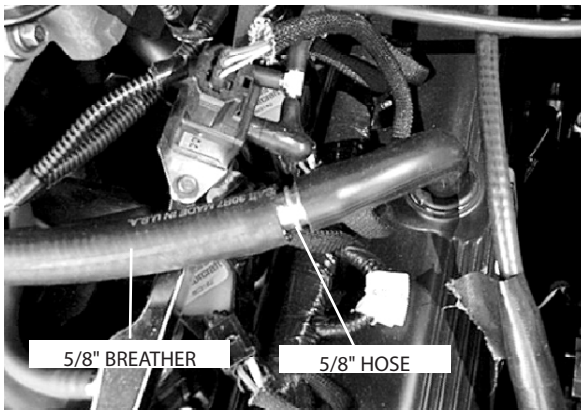

Fig. 10-c / '99-'03 Models Only

NOTE: The hose will need to be modified for fit cut approximately 2" of the 4" end and check the fit.

* '99-'04 GT models only
** '01 Bullitt Model Only
*** '96-'04 GT Models Only

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10. AIR INLET, CONT'D.

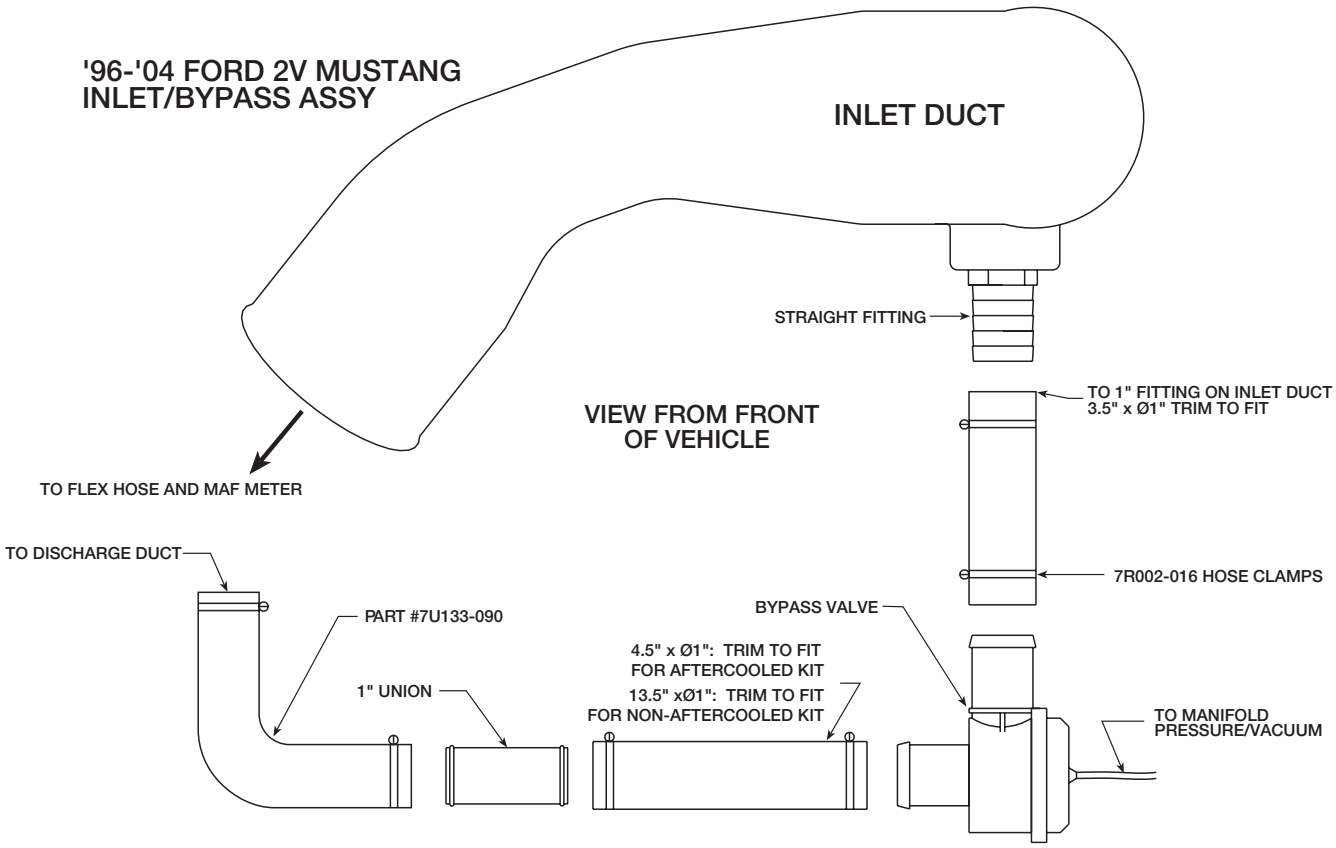

Fig. 10-d

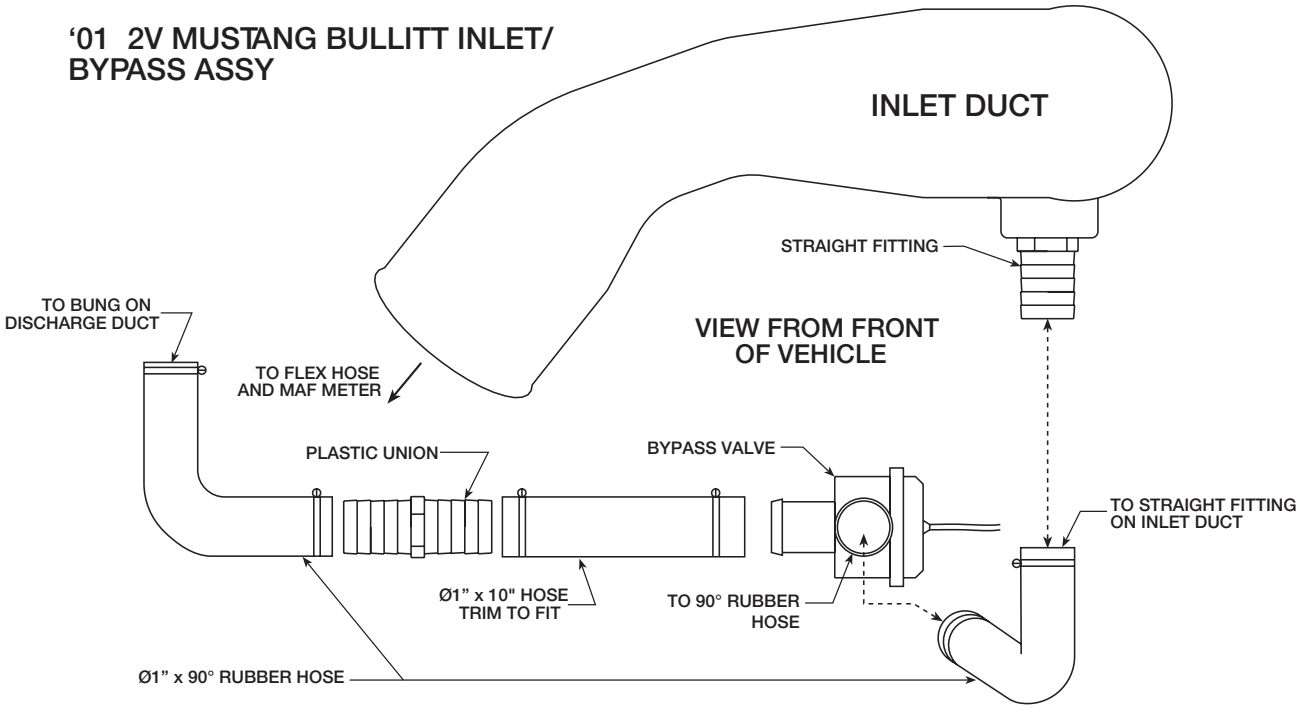

Fig. 10-e

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10. AIR INLET, CONT'D.

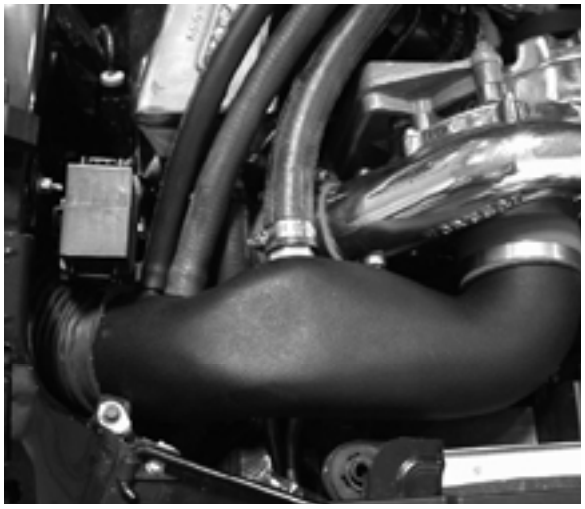

Fig. 10-f | Charge Cooled H.O. Vehicles Only

Fig. 10-g | Charge Cooled H.O. Vehicles Only

Fig. 10-h | Charge Cooled H.O. Vehicles Only

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11.1 SUPERCHARGER DISCHARGE (GT models only)

NOTE: AFTERCOOLER KITS ONLY: If an aftercooler kit is being installed, please substitute the supplied "Maxflow Power Cooler" instructions in place of Step 11. Resume at Step 12 after the completion of the aftercooler installation..

A. Slide the 3" sleeve and #48 hose clamps onto the throttle body. Slide the 2-3/4" sleeve and #44 hose clamps onto the supercharger discharge.

B. Install the supplied 1" x 90° rubber elbow to the 1" bung on the supercharger discharge tube using a #16 hose clamp. Insert the plastic 1" hose union fitting into the remaining end of the rubber elbow. (See Fig. 10-d.)

*C. Install the discharge tube assembly. Align the bypass valve, all hoses and tighten all clamps. (See Fig. 11-a.)

**D. Join the end of the plastic hose union to the 1" bypass inlet hose installed in Step 10. Secure all hoses with the supplied #16 hose clamps.

E. Route the 5/32" vacuum line to the bypass valve and TEE into the FMU vacuum line with the supplied 5/32" TEE.

F. Route the 5/32" vacuum line from the bypass valve over to the fuel pressure sensor and TEE into the vacuum line. Refer to Figures on previous page.

Fig. 11.1-a

* '96-'98 models only
** '99-'04 models only

11.2 SUPERCHARGER DISCHARGE (BULLITT MODELS ONLY)

A. Slide the 4-1/2" sleeve and #72 hose clamps onto the throttle body.

B. Install the supplied 1" x 90° rubber elbow to the 1" bung on the supercharger discharge Tube-A using a #16 hose clamp. Insert the 1" hose union into the remaining end of the rubber elbow.

C. Install discharge Tube-A onto the supercharger discharge using the 2-3/4" - 3" adapter sleeve with #44 and #48 hose clamps.

D. With discharge Tube-A in position, install discharge Tube-B between discharge Tube-A and the throttle body. Secure with the 3" x 2" sleeve and #48 hose clamps.

E. Join the end of the plastic hose union to the 1" bypass inlet hose installed in Step 10. Secure all hoses with the supplied #16 hose clamps.

F. Route the 5/32" vacuum line from the bypass valve over to the fuel pressure sensor and TEE onto the vacuum line.

Fig. 11.2-a

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12. IGNITION RELOCATION

*A. Separate the passenger side ignition coil from the factory bracket previously removed from the front engine cover.

*B. Remove the two bolts located at the front/ top corner of the passenger side valve cover.

*C. Install the Vortech supplied coil bracket onto the valve cover reusing the factory bolts to secure.

*D. Attach the coil to the new bracket using the supplied #10 hardware. Orient the assembly following the graphic (see Figs. 12-b, 12-c), reattach all plug wires and reconnect the factory harness.

**E. Relocate the ignition capacitor to the passenger side alternator mounting bolt. The paint may need to be scraped away to ensure proper grounding. (See Fig. 12-a.)

1999-2004 Models Only

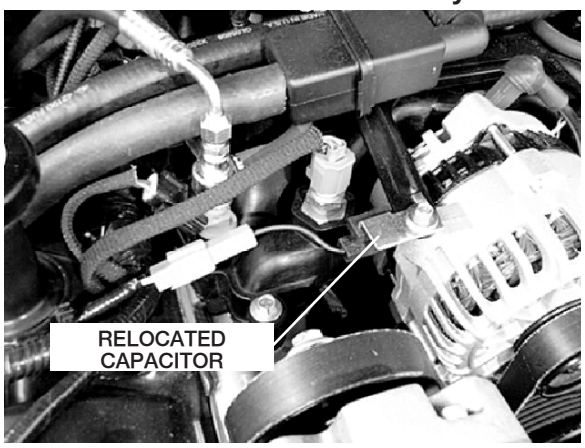

Fig. 12-a

1996-1998 Models Only

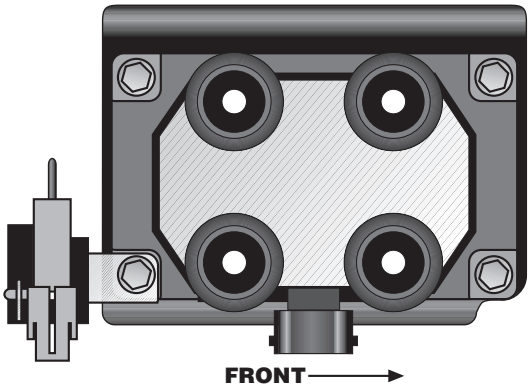

Fig. 12-b

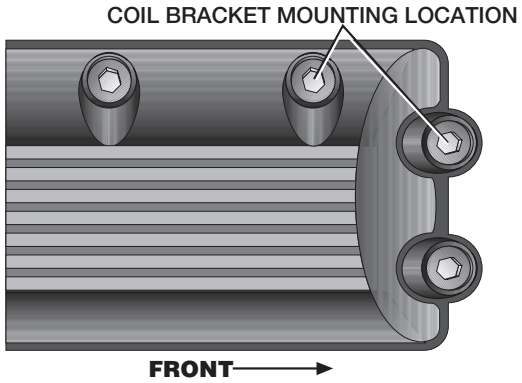

Fig. 12-c

* '96-'98 models only
** '99-'04 GT/01 Bullitt models

13. PCV ASSEMBLY, (2003-2004 MODELS ONLY)

A. Remove the plastic tube connecting the throttle body to the passenger's side valve cover. Remove the foam insulation cover from the tube and discard.

B. Trim 4" off of the end of the plastic tube that connected previously to the passenger's side valve cover.

C. Replace the factory PCV valve with the supplied PCV valve.

D. Trim the 3/8" hose line to 2" in length and install onto the supplied PCV valve. Connect the open hose end to the supplied reducer barb. Trim the supplied 5/8" hose to the factory plastic tube. (See Fig. 13-a .)

E. Reconnect the PCV tube to the throttle body.

Fig. 13-a

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

14. FINAL CHECK

NOTE: 99-04 MODELS ONLY - Once the ECM is received back from Vortech with the ECM module installed, reinstall the ECM into the vehicle. In some cases, the extra height of the ECM module will not allow the use of the factory hold-down bracket. Reconnect the factory harness and reinstall the factory kick panel.

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. (See Fig. 13-a.)

D. Check all fluid levels, making sure that your tank(s) is/are filled with 91 octane or higher fuel before commencing test drive.

E. Start engine and allow to idle a few minutes, then shut off.

F. Recheck to be sure that no hoses, wires, etc. are near exhaust headers or moving parts and for signs of any fluid leakage.

G. PLEASE TAKE SPECIAL NOTE: Operating the vehicle without ALL the subassemblies completely and properly installed may cause FAILURE OF MAJOR COMPONENTS.

H. Test drive the vehicle.

I. Read the Street Supercharger System Owner's Manual and RETURN THE Warranty REGISTRATION FORM within thirty (30) days of purchasing your supercharger system to qualify

Fig. 14-a / Final Check

For internally lubricated V3 units only

This supercharger has been factory pre-filled with special Vortech 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.
2. Thread the clean dipstick into the unit until it seats.
3. Once the dipstick has seated, remove the dipstick 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, refill the unit with 4 oz. of Vortech V3 lubricating fluid and then confirm proper oil level using the dipstick. DO NOT OVERFILL!!!

WARNING:	Use of any other fluid other than the special Vortech lubricant will void the warranty and may cause component failure.

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