PAXTON
SUPERCHARGERS

Owner's Installation Guide for the

Paxton Automotive Novi 1200 Supercharger

for the

2005 Mustang GT

Paxton Automotive . 1300 Beacon Place . Oxnard CA 93033
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DP/N: 4809654 v2.0 *07/29/05*

FOREWORD

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 call Paxton Automotive for installers in your area.

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2005 Mustang GT

IMPORTANT NOTES

This supercharger kit is designed to work on stock vehicles. Vehicles with modifications may not be compatible with this kit as delivered and should be tested with a wide band oxygen sensor and fuel pressure gauge to determine if the air/fuel ratio is safe. Detonation will quickly damage an engine.

2005 Ford Mustang GT

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.

Paxton 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 **Paxton Automotive. This product is intended for use on healthy, well maintained engines.** Installation on a worn-out or damaged engine is not recommended and may result in failure of the engine as well as the supercharger. Paxton Automotive is not responsible for engine damage.

Installation on new vehicles will not harm or adversely affect the break-in period so long as factory break-in procedures are followed.

For best performance and continued durability, please take note of the following key points:

1. Use only premium grade fuel 91 octane or higher (R+M/2).
2. The engine must have stock compression ratio.
3. If the engine has been modified in any way, check with Paxton prior to using this product.
4. Always listen for any sign of detonation (pinging) and discontinue hard use (no boost) until 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 20,000 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 at least every 25,000 miles.

RECOMMENDED TOOLS FOR INSTALLATION:

1. Factory Repair Manual
2. 3/8" Socket and Drive Set: SAE & Metric
3. 1/2" Socket and Drive Set: SAE & Metric
4. 3/8" NPT Tap and Handle
5. Adjustable Wrench
6. Combination Wrench Set
7. Center Punch
8. Springlock 3/8" and 5/8”Fuel Fitting Disconnect Tool
9. 6 Quarts SH/CF Rated Quality Engine Oil
10. Oil Filter and Wrench
11. Flat #2 Screwdriver
12. Phillips #2 Screwdriver
13. Heavy Grease
14. Silicone Sealer
15. Drill Motor / Pneumatic Right Angle
16. 1/8", 13/32", 5/16" Drill Bits
17. Stepless Clamp Pliers
18. 3/16" Allen Wrench
19. Wire Strippers and Crimpers
20. Utility Knife
21. 7/8" Hole Saw (H.O. only)
22. Pliers

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

23. Spark Plug Socket
24. NEW Spark Plugs

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2005 Mustang GT, Standard
Part No. 1001851

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.
1016130	**SUPERCHARGER ASSY, 3.8 PLY**	**1**
4FU130-036	**OIL DRAIN ASSY**	**1**
7U030-036	1/2" DRAIN HOSE	2.5'
7R001-008	#8 HOSE CLAMP	2
7P375-017	3/8"NPT x 1/2" HOSE BARB	1
4FU130-026	**OIL FEED ASSY**	**1**
7U250-090-260	OIL FEED LINE SS	1
7P125-005	1/8" x -4 JIC STRT	1
7P250-091	1/4"NPT x JIC x 90° FITTING	1
7P250-034	1/4" x STREET TEE	1
4PFU112-020	**DISCHARGE ASSY, STD**	
4FU012-021	DISCHARGE DUCT, NON-COOLED	1
7PS450-200	SLEEVE	1
7PS300-276	SLEEVE REDUCER	1
7R002-044	#44 CLAMP	1
7R002-048	#48 CLAMP	1
7R002-072	#72 CLAMP	2
7R002-016	#16 CLAMP	4
7P157-219	REDUCER UNION	1
7P156-082	5/32" TEE	1
7U030-046	5/32" VAC HOSE	5'
8D001-001	STANDARD BYPASS	1
7U034-016	1" HOSE	1.25'
7U034-016	1" HOSE	.58'
4PFU112-010	**AIR INTAKE ASSY**	
4FU012-010	INLET DUCT “A”	1
4FU012-015	INLET DUCT “B”	1
7R002-056	#56 CLAMP	1
7R002-064	#64 CLAMP	5
7PS400-200	SLEEVE, 4.0" x 2.0"	2
7PS400-351	REDUCER SLEEVE, 4.0" x 3.5 x 2"L	1
8H040-225	AIR FILTER, LARGE	1
7U030-053	90° HOSE	1
7U030-056	3/8"PCV HOSE	3'
7P375-050	3/8" x 3/8" HOSE UNION	1
8A103-061	MAF ASSY	1
4FU010-071	BRACKET, INTAKE SUPPORT	1
4FU111-044	**SUPERCHARGER MTG BRKT ASSY**	
4FU010-044	S/C MTG PLATE	1
4FU010-034	IDLER PULLEY MTG PLATE	1
4FU017-011	SPACER, STUDDED	2
2A017-750-05	SPACER	2
2A017-750-06	SPACER	1
2A017-754-06	SPACER (IDL PUL TO MTG BRKT)	1
2A017-750-07	SPACER (IDLER PULLEY SHORT)	1
4FU017-021	IDLER PULLEY STANDOFF	1
7K312-030	5/16"AN WASHER	4
7A375-375	3/8-16 x 3.75" HXHD BOLT	1
7A375-100	3/8-16 x 1.00" HXHD BOLT	7
7K375-030	3/8"AN WASHER	8
7C080-150	8mm x 1.25" x 150 BOLT	1
7C080-140	8mm x 1.25" x 140 BOLT	2
4PCS016-160	PULLEY, 3.5"	1
2A046-120	BELT GATES K061203	1
4FU214-021	**COOLANT HOSE RELOC ASSY**	**1**
4FU114-021	WATER OUTLET ASSY, WELD	1
4FU014-040	COOLANT TUBE	1
7J875-010	O-RING WASHER	1
7F875-010	7/8" x 14 NUT	1
7P375-075	3/4" HOSE BARB UNION	1
7U038-000	3/4" HOSE	1'
7U133-185	“S” SHAPED HOSE	1
7U133-050	HOSE	1
7R002-020	CLAMP	4
7R002-024	CLAMP	2
7P125-002	FREEZE PLUG	1
7R002-010	#10 SAE TYPE “F” HOSE CLAMP	4

PART NUMBER	DESCRIPTION	QTY.
4FU110-010	**P/S RESERVOIR RELOCATION**	
7P375-075	3/4" HOSE BARB UNION	1
7P375-050	3/8" HOSE BARB UNION	1
7R001-004	#4 HOSE CLAMP	2
7R001-008	#8 HOSE CLAMP	2
7U032-016	3/8" EFI HOSE	3'
7U038-030	HOSE, P/S, 3/4"	3'
7A250-075	1/4-20 x .75" SGCS PLTD	1
7J250-001	1/4" WASHER, SAE PLTD	2
7F250-021	1/4-20 NYLOC NUT	1
4FU010-010	P/S RESERVOIR BRKT	1
4FU139-096	**PCV/IAT ASSEMBLY '05 GT**	
7P375-106	PCV VALVE	1
7P625-375	REDUCER	1
7R001-006	#6 CLAMPS	2
7R001-008	#8 HOSE CLAMPS	4
7U030-056	3/8" VAC HOSE	1'
7U133-024	5/8" x 90° HOSE	1
5W018-010	18GA WIRE, RED	1'
5W018-020	18GA WIRE, BLACK	1'
5W018-080	18GA WIRE, BLUE	1'
5W018-090	18GA WIRE, BROWN	1'
5W018-100	18GA WIRE, PURPLE	1'
5W018-030	18GA STRD WIRE/GRAY	
5W001-006	SHRINK SLEEVE	1.5'
5W001-005	3/8" SPLIT LOOM	1.5'
5W001-012	16-18 BUTT CONN	12
8F060-048	**'04 COBRA INJECTORS**	**8**
4809654	**INSTRUCTION SHT**	**1**
3863515	**DECAL**	**2**
008575	**WARRANTY PACKET**	**1**
8F101-262	**FUEL PUMP ASSY**	**1**
5A003-035	**DIABLO SPORT PREDATOR**	**1**

PARTS LIST

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

PART NO.	DESCRIPTION	QTY.
1016135	**S/C ASY, NOVI 2200 05 MUST SAT, 3.33 PLY**	**1**
4FU130-036	**OIL DRAIN ASSY, '05 MUST GT**	**1**
7U030-036	1/2" OIL DRAIN HOSE	25'
7R001-008	#8 STNLS HOSE CLAMP	2
7P375-017	3/8"NPT x 1/2" BEADED HSE BRB	1
4FU130-026	**OIL FEED ASSY, '05 MUST GT**	**1**
7U250-090-260	OIL FEED HOSE, 26" -4 x 90°	1
7P125-005	1/8"NPT STR x -4 JIC FTG STL	1
7P250-091	1/4"NPT 90° x -4 JIC FTG STL	1
7P250-034	1/4"NPT x 1/4"NPT STRT "T"	1
4PFU112-010	**AIR INLET ASY, '05 MUST GT**	**1**
4FU012-010	INLET DUCT, "A", '05 MUST GT	1
4FU012-015	INLET DUCT, "B", '05 MUST GT	1
7R002-056	#56 SAE TYPE "F" SS HOSE CLAMP	1
7PS400-200	SLEEVE, BLACK 4"OD x 20	3
7PS400-351	SLEEVE, 40 x 35 x 235L	1
7R002-064	#64 SAE TYPE "F" SS HOSE CLAMP	6
8H040-225	AIR FILTER, '05 MUST HO	1
8A103-061	MAF WELDED ASSY, '05 MUST GT	1
7P750-102	3/4"NPT x 1" x 90° HSE FIT	1
7P250-047	1/4"NPT TO 3/8" BARB 90°	1
4FU010-071	BRKT, INTAKE SUPPORT	1
4FU111-044	**S/C MTG BRKT ASSY, '05 MUST GT**	**1**
4FU010-044	S/C MOUNT PLT, '05 MUST GT	1
4FU010-034	IDLER MOUNT PLATE, '05 MUST	1
4FU017-011	SPACER, STUDDED '05 MUST GT	2
2A017-750-05	SPACER, .750"OD x 2691 LONG	2
2A017-750-06	SPACER, .750"OD x 2712 LONG	1
2A017-754-06	SPACER, .750"OD x 1776 LONG	1
2A017-750-07	SPACER, .750"OD x 097 LONG	1
4FU017-021	SPACER, ALT, '05 MUST GT	1
4PCS016-160	PULLEY, IDLER, SRT10 TRUCK	1
2A046-120	BELT, GATES K061203	1
7A375-375	3/8-16 x 3-3/4" HX HD	1
7C080-150	M8 x 1.25 x 150mm HXHD CL109	1
7C080-140	M8 x 1.25 x 140 HXHD CL88	2
7A375-100	3/8-16 x 1" G5 HXHD PLT	7
7K312-030	5/16" AN WASHER, SS	2
7K375-040	3/8"AN960 FLAT WASHR PLATED	10
4FU214-021	**COOL BYP HOSE RELOC ASY, '05 GT**	**1**
4FU114-021	ASY, WATER OUTLET, '05 MUST GT	1
4FU014-040	COOL BYP TUBE, '05 GT MUST	1
7J875-010	7/8" SEALING WASHER	1
7F875-010	NUT, 7/8-14, SHORT/JAM	1
7U133-050	15" x 90° HOSE, LONG LEG	1
7U133-185	"S" SHAPED COOLANT HOSE, '05 GT	1
7U038-000	3/4" HEATER HOSE	35'
7P375-075	3/4" HOSE BARB UNION, BRASS	1
7R002-020	#20 SAE TYPE "F" SS HOSE CLAMP	4
7R002-024	#24 SAE TYPE "F" SS HOSE CLAMP	2
7P125-002	FREEZE PLUG, Ø1.25", 25 TAL	1
7R002-010	#10 SAE TYPE "F" SS HOSE CLAMP	4
4FU110-010	**P/S RESERV RELOC, '05 MUST GT**	**1**
7P375-075	3/4" HOSE BARB UNION, BRASS	1
7P375-050	3/8" HOSE UNION, BRASS	1
7R001-004	#4 HOSE CLAMP	2
7R001-008	#8 STNLS HOSE CLAMP	2
7U038-030	HOSE, P/S, 3/4"ID	3'
7U032-016	3/8" EFI FUEL HSE HI-PSR	3'
7A250-075	1/4-20 x 75 SHCS PLTD	1
7J250-001	1/4" WASHER, SAE, PLTD	2
7F250-021	1/4-20 NYLOCK NUT ZINC PLATED	1
4FU010-010	P/S RELOC BRKT, '05 GT MUST	1
7U100-055	TIE-WRAP, 7.5" NYLON	4

PART NUMBER	DESCRIPTION	QTY.
8PN201-050	**CAC ASSY, '05 GT AIR/AIR**	**1**
8PN101-050	WELDED CORE ASSY, '05 MUST GT	1
4PFU012-021	DISCH DUCT, T/B '05 MUSTANG	1
4PFU012-030	CAC TUBE, "A" '05 MUST GT	1
4PFU012-040	CAC TUBE, "B" '05 MUST GT	1
4PFU012-050	CAC TUBE, "C" '05 MUST GT	1
4PFU012-060	CAC TUBE, "D" '05 MUST GT	1
4PFU012-070	CAC TUBE, "E" '05 MUST GT	1
7PS300-301	BUMP HOSE, Ø3.00" x 3.00"L	3
7PS300-300	SLEEVE, BLACK, Ø3.00" x 3.00"L	2
7R002-048	#48 SAE TYPE "F" SS HOSE CLAMP	14
7R002-072	#72 SAE TYPE "F" SS HOSE CLAMP	2
7S300-003	RUBBER ELBOW 3" MODIFIED	2
7PS450-200	SLEEVE, BLACK Ø4.5" x 2.0"L	1
2A017-036	SPACER, PLTBRGHSG, 0186"	4
7C080-035	M8 x 125 x 35 BLT CL88	4
7F008-020	NUT, M8 x 125	4
7J312-000	5/16" FLAT WASHER-SAE	10
7R002-044	#44 SAE TYPE "F" SS HOSE CLAMP	1
7A312-050	5/16-18 x 1/2" HXHD GR5, ZINC	2
8PN010-030	SUPPRT, '05 MUST COOLR DUCT, ZN	2
7R002-016	#16 SAE TYPE "F" SS HOSE CLAMP	8
7P156-082	5/32" TEE	2
7U030-046	5/32" VACUUM LINE	8'
8D001-001	STD COMPRESS BYPASS VALVE	2
7U133-100	HOSE, ELBOW, 90°, 1"ID, MOLDED	1
7U034-016	1" GS HEATER HOSE	25'
7P750-100	3/4"NPT x 1" HOSE FITTING	1
7P218-156	VAC TEE, 7/32", 7/32", 5/32"	1
7U100-055	TIE-WRAP, 7.5" NYLON	4
8N155-080	**COOLANT RES RELOC, '05 MUST**	**1**
8N055-080	TANK, RAD OVERFLOW, '05 MUST	1
4FU010-051	MTG BRKT "A", RES RELOC '05 MUST	1
4FU010-061	BRKT "B", COOL RES RELOC '05 MUST	1
7A250-051	1/4-20 x 50 HHCS ZINC PLTD	4
7P250-045	1/4" MALE NPT x 3/8" MALE BARB	1
7J006-093	6mm WASHER, PLATED	4
7R002-010	#10 SAE TYPE "F" SS HOSE CLAMP	1
7P375-050	3/8" HOSE UNION, BRASS	1
7U030-056	3/8" PCV/VAC RUBBER HOSE	25'
7R004-002	STEPLESS CLAMP, 170-70	3
7C060-020	M6 x 10 x 20mm HHCS ZN	3
7J006-093	6mm WASHER, PLATED	3
4FU139-096	**PCV/MAF MOD ASSY, '05 GT**	**1**
7P375-106	PCV VALVE, FORD, 3/8" HOSE	1
7P625-375	REDUCER, 5/8" BARB TO 3/8" BARB	1
7R001-006	#6 STNLS HOSE CLAMP, NARROW	2
7R001-008	#8 STNLS HOSE CLAMP	4
7U032-016	3/8" EFI FUEL HSE HI-PSR	5'
5W018-030	18GA STRD WIRE GREY	1'
5W018-010	18GA STRD WIRE RED	1'
5W018-020	18GA STRD WIRE BLK, UL1015	1'
5W018-080	18GA STRD WIRE BLUE BULK	1'
5W018-090	18GA STRD WIRE BROWN BULK	1'
5W018-100	18GA STRD WIRE PURPLE	1'
5W001-007	3/16" HEAT-SHRINK TUBING	1.5'
5W001-005	3/8" PLASTIC WIRE LOOM	1.5'
5W001-012	18-22 GA BUTT CONN RED INSUL	12
7U033-020	HOSE, 5/8"ID CLASS 1 EMISSIONS	6.6'

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PARTS LIST

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PART NO.	DESCRIPTION	QTY.	PART NUMBER	DESCRIPTION	QTY.
8F060-048	**FUEL INJ, 39LB EV6, OEM '03 COB**	**8**			
008575	**S/C STRT INFO PKG ASSY PAXT**	**2**			
3863515	**DECAL, PAXTON COLOR 9" x 3"**	**1**			
4809654	**INSTR MAN, '05 MUST GT**	**1**			
8F101-262	**FUEL PMP ASY, '05 MUST TWIN INTA**	**1**			
7U032-016	3/8" EFI FUEL HSE HI-PSR	2.3'			
7U100-055	TIE-WRAP, 7.5" NYLON	4			
7R004-002	STEPLESS CLAMP, 170-70	2			
8F001-255	255 INTANK FUEL PUMP '86-'97	1			
7R002-044	#44 SAE TYPE “F” SS HOSE CLAMP	1			
7R004-006	STEPLESS CLAMP, 11.3 x 5mm WIDE	4			
5W001-022	T-TAP CONN,14-16 AWG	2			
5W001-009	16-14GA MALE SLIDE INSULATED	2			
5W001-080	FUSE, 20AMP MINI BLADE	1			
7P375-099	Y-UNION, 3/8" BARBED TEFLON	1			
7U032-025	HOSE, 5/16"ID, 3/8"OD, 1/32"W	6.25'			
7U032-030	HOSE, PIRAL 3/8" CUFF ID, 1'L	2			
5A003-035	**DIABLO PREDATOR, '05 MUST GT**	**1**			
5A001-025	**DIABLO MAFIA, '05 MUST**	**1**			

Section 1
PREPARATION/REMOVAL

1. PREPARATION/REMOVAL

A. Loosen the hose clamp at the throttle body. Disconnect the plastic 3/8" tube assembly attached to the passenger's side valve cover. Remove the plastic 3/8" x 90° connector from the plastic tube that was connected at the passenger's side valve cover. Set this connector aside to be re-used in a later step. Discard the remainder of the hose assembly, as it will not be re-used. (See *Fig. 1-a*.)

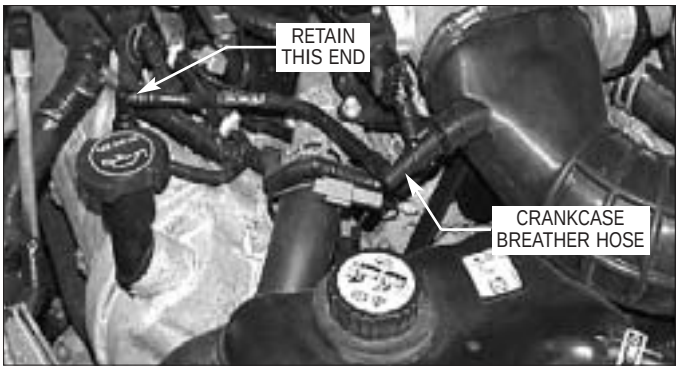

Fig. 1-a

****** NOTE ******

The preferred method of removing the 90° connector from its original plastic tube is to apply a small amount of heat to the tube and slide the connector free.

B. Disconnect the mass air flow (MAF) sensor plug and remove the inlet duct and upper air filter cover from the car. (See *Figs. 1-a, 1-b, 1-c*.)

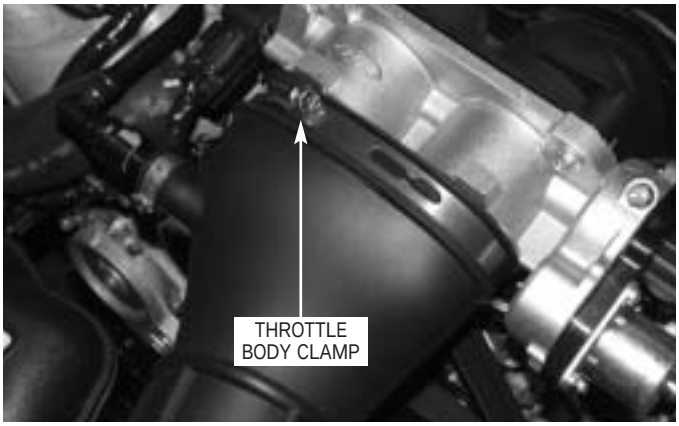

Fig. 1-b

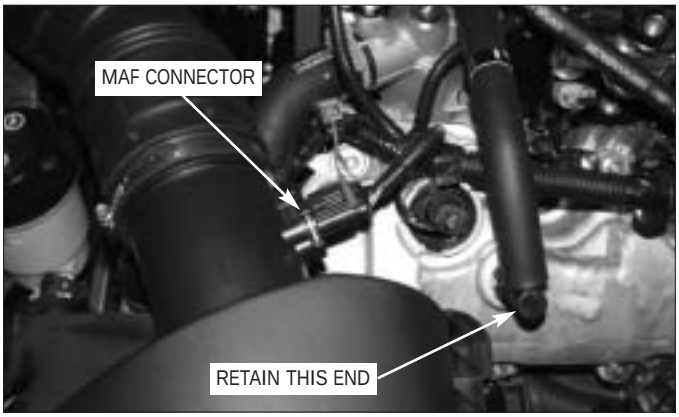

Fig. 1-c

C. Remove the 10mm headed bolt that is located next to the inner fender which secures the lower portion of the air filter enclosure. Remove the lower portion from the car-it will not be reused. (See *Fig. 1-d*.)

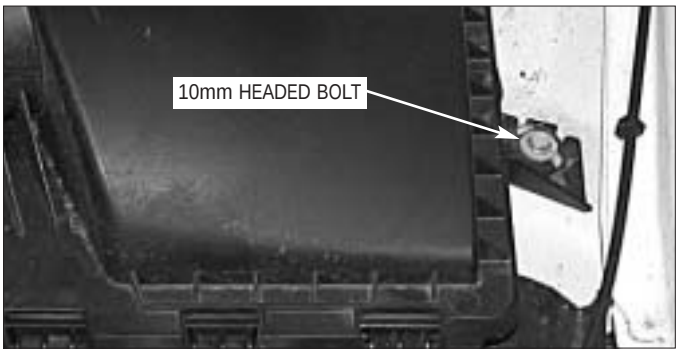

Fig. 1-d

D. Remove the six plastic push pins securing the radiator cover. Remove the cover and set aside to be reinstalled later. (See *Fig. 1-e*.)

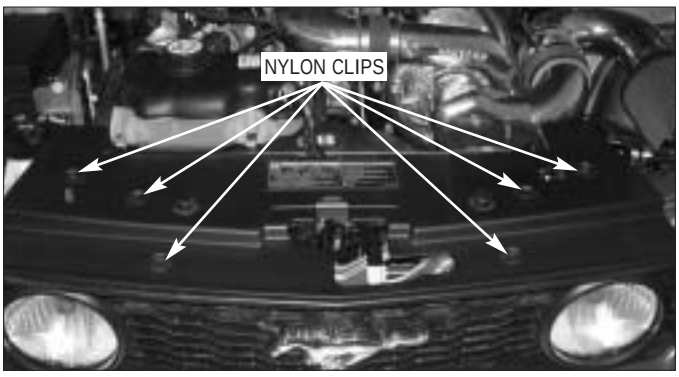

Fig. 1-e

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1. PREPARATION/REMOVAL, cont'd

E. Locate the coolant drain plug on the passenger side of the radiator. Next drain the coolant into a clean container. This coolant will be reused in a later step.

F. Remove the two 8mm headed bolts securing the coolant overflow reservoir to the plastic fan shroud. (See *Fig. 1-f.*)

G. Disconnect the small overflow hose (running across the top of the radiator) from the overflow reservoir. (See *Fig. 1-f.*)

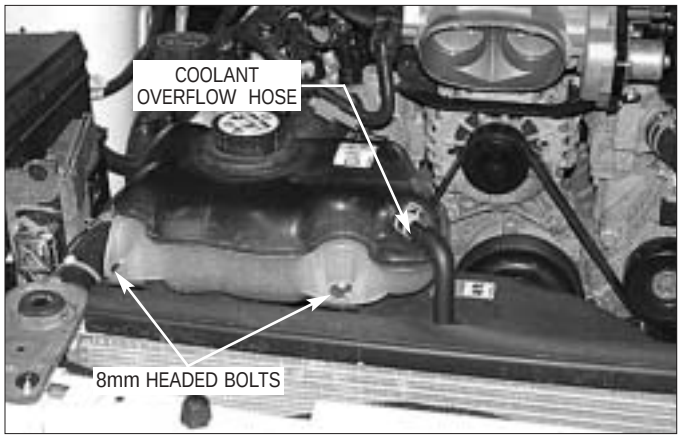

Fig. 1-f

H. Remove the large hose connecting the thermostat housing to the bottom of the overflow reservoir. Set the hose and reservoir aside to be reinstalled in a later step. (See *Fig. 1-g.*)

****** NOTE ******

If you are installing H.O. (charge cooled) kit, the coolant reservoir will not be reused. Retain only the filler cap for reuse.

I. Remove the two upper radiator hoses from the engine coolant crossover tube and set aside. The radiator hose located on the driver's side will not be reused. (See *Fig. 1-g.*)

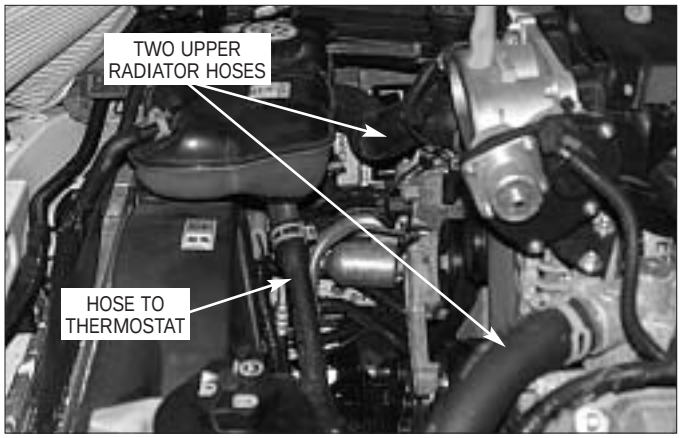

Fig. 1-g

J. Remove the thermostat housing from the large formed hose leading to the engine block and the lower outlet of the radiator. (See *Fig. 1-h.*) Set the thermostat housing aside to be reinstalled in a later step.

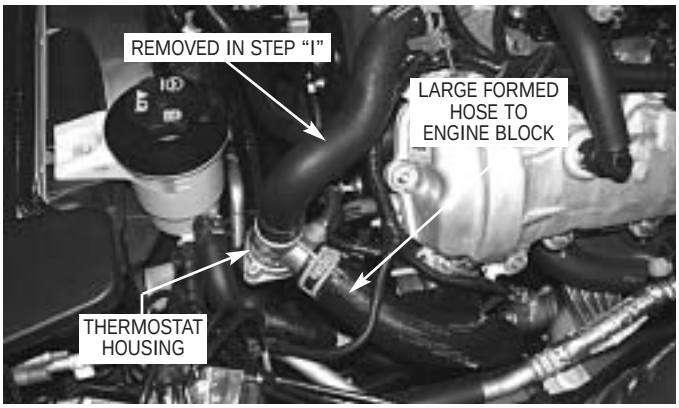

Fig. 1-h

K. Remove the lower hose on the radiator and set the hose aside, as it will not be reused.

L. Drain and remove the power steering reservoir. This reservoir will be relocated in a later step.

M. Disconnect and remove the factory 5/8" plastic breather hose assembly attached to the driver's side valve cover and intake manifold. Remove the fittings from the ends of the plastic tube for re-use. Discard the stripped plastic tube. (See *Fig. 1-c.*)

N. The installation of this supercharger system requires the removal of the intake manifold so that modifications can be made to the coolant crossover tube.

1. Remove the wiring connectors for each of the eight injectors. Remove all of the vacuum hoses and connectors located at the front and rear of the intake manifold. Remove the connector attached to the intake manifold runner control (IMRC) unit located at the rear of the manifold on the passenger's side.

2. Remove the four 8mm headed bolts securing the injector rails to the intake manifold. Do not remove the small clips that retain the injectors to the fuel rails. Using a 5/8" spring lock tool, disconnect the fuel feed line from the fuel rail. Remove the vacuum line form the fuel regulator. Remove the rails and injectors as a complete unit and set aside. New injectors will be installed in a later step.(See *Figs. 1-i, 1-j.*)

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1. PREPARATION/REMOVAL, cont'd

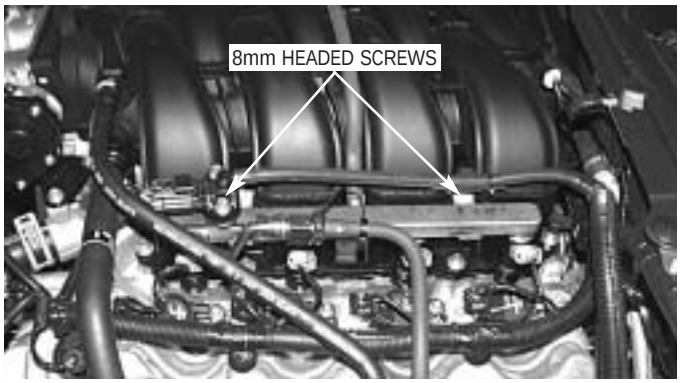

Fig. 1-i

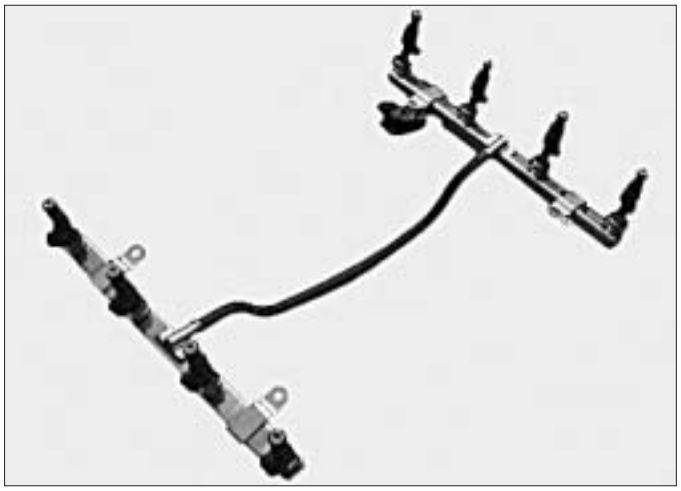

Fig. 1-j

3. Locate and remove the remaining 10mm headed bolts retaining the intake manifold to the cylinder heads. There are five on each side.

4. Remove the manifold and set aside so it can be reinstalled after modifications to the coolant crossover tube are made.

****** NOTE ******

Modification to the crossover tube will be completed in a later step.

O. Using a 1/2" ratchet, release the tension from the accessory drive belt and remove it from the car. This drive belt will be replaced with a longer one later in the installation.

P. Locate and remove the stud that secures the alternator in place as well as the stud-bolts located to the right of the alternator. (See *Fig. 1-j*.)

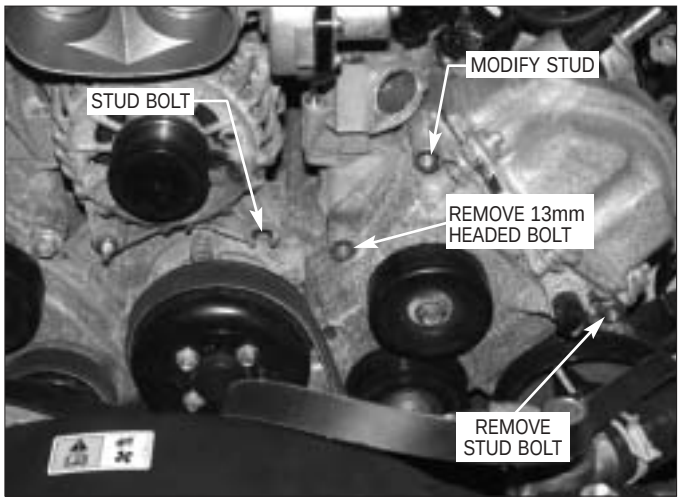

Fig. 1-j

Q. There is a small tab that secures the wiring harness in place on the valve cover that will need to be removed to gain clearance for the supercharger belt. This tab is best removed with a small air saw but a grinder will work. After removal, smooth the area to prevent damage to the belt. (See *Figs. 1-k, 1-l*.)

****** NOTE ******

Do not allow material to enter the open cylinder head runners.

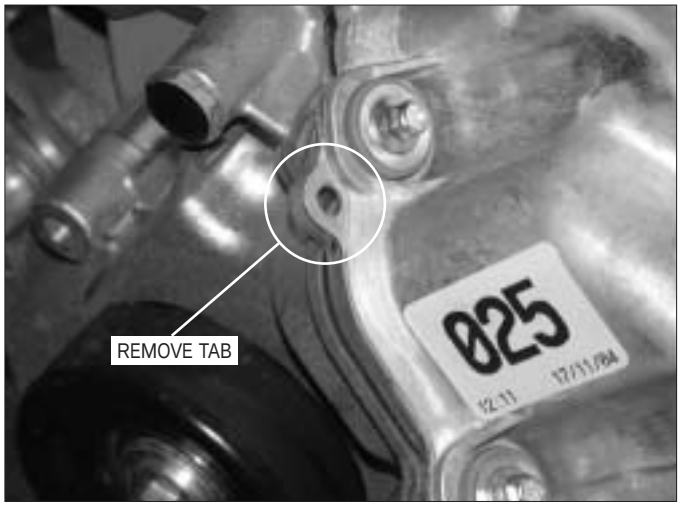

Fig. 1-k

1. PREPARATION/REMOVAL, cont'd

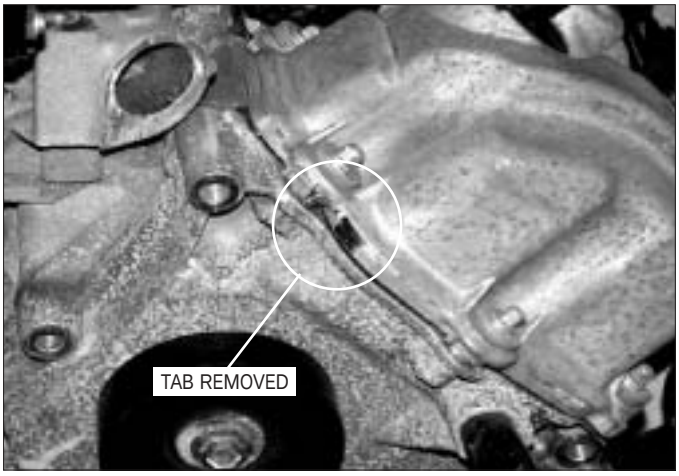

Fig. 1-l

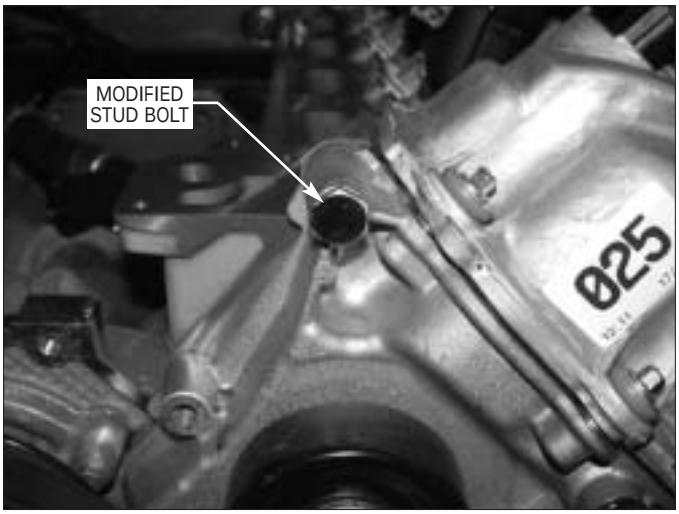

Fig. 1-m

R. Using a 15mm socket or wrench, remove the nut that secures the capacitor resistor and coolant hose support bracket to the stud bolt. Using an 18mm socket or wrench, remove the stud bolt. As seen in *Fig. 1-j,* the upper bolt is removed from the timing chain cover. This bolt will have to be modified by cutting off the threaded end where the resistor attaches. Modify and reinstall the bolt. (See *Fig. 1-m*.)

S. Disconnect the plug to the cam position sensor. Remove the wiring harness from the retaining clips that hold it to the valve cover. Move the harness out of the way. This harness will have to be relocated to gain clearance for the supercharger.

Section 2
OIL FEED INSTALLATION

2. OIL FEED INSTALLATION

A. Locate the factory oil sensor on the driver's side of the vehicle near the oil filter.

B. Remove the sending unit and set aside.

C. Locate the supplied 1/4"NPT street TEE fitting. Install the TEE in the same location as the factory sending unit with the 1/4" x –4 x 90° installed in the TEE at the location noted. (See *Fig. 2-a*.)

D. Attach the stainless steel –4 hose to the –4 fitting installed in the street TEE. (See *Fig. 2-a*.)

E. Route the hose away from hot, sharp or moving parts and to the top of the engine to be attached to the supercharger oil feed.

****** NOTE ******

The oil feed hose to the S/C will be installed in a later step of the installation. Temporarily cap the open end of the hose to prevent contamination to the inside of the hose.

F. Reinstall the factory sensor in the branch of the TEE as shown. (See *Fig. 2-a*.)

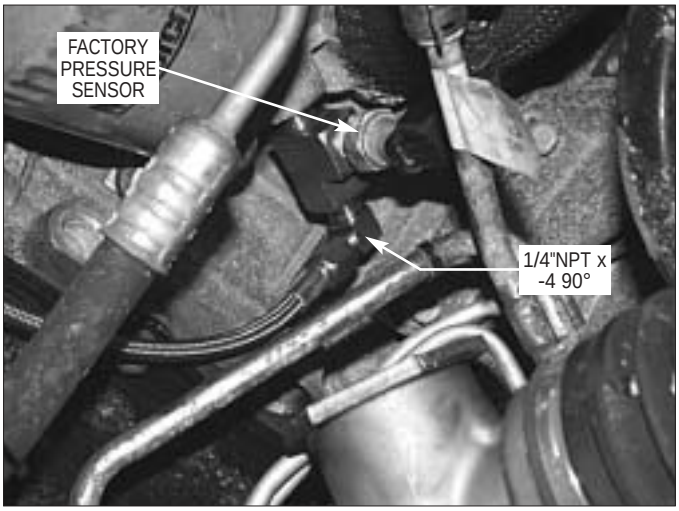

Fig. 2-a

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Section 3
OIL DRAIN ASSEMBLY INSTALLATION

3. OIL DRAIN ASSEMBLY INSTALLATION

A. To provide an oil drain for the supercharger, it is necessary to make a hole in the oil pan It is best to punch the hole rather than to drill it.

B. Remove paint from around the hole area.

C. Mark the oil pan 5/8" down from the oil pan mounting rail on the driver's side of the engine. Measure forward 3/4" from the first bolt on the side of the oil pan. (See *Fig. 3-a*.)

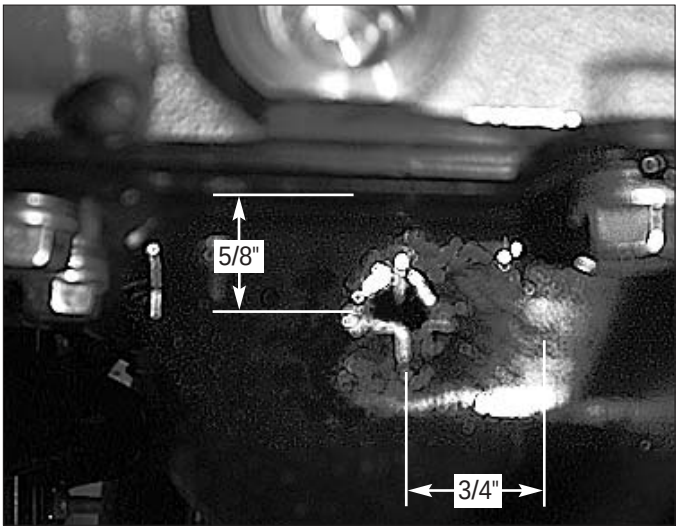

Fig. 3-a

D. Use a small center punch to perforate the pan and expand the hole. Switch to a larger diameter punch and expand the hole further to approximately Ø9/16". Most punches are made from hexagon material and may be placed in a socket with an extension to make this procedure easier.

E. 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.

F. Thoroughly clean the threaded area. Apply a small amount of silicone sealer or teflon paste to the new threads. Apply more sealer to the 3/8"NPT hose fitting and secure in the hole. Make sure a seal is formed all around the fitting. (See *Fig. 3-b*.)

G. Drain the engine oil and change the filter.

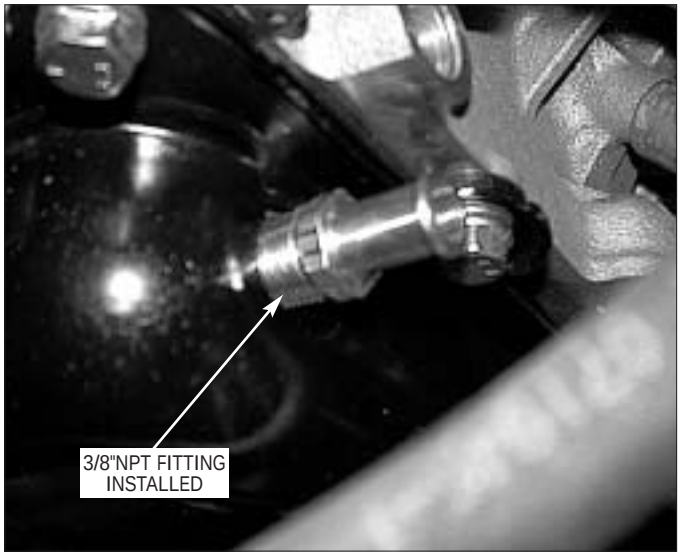

Fig. 3-b

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Section 4
POWER STEERING RELOCATION

4. POWER STEERING RELOCATION

A. Locate the power steering assembly 4FU110-010.

B. Attach the P/S relocation bracket 4FU010-010 using the hardware provided to the P/S reservoir removed in an earlier section. (See *Fig. 4-a*.)

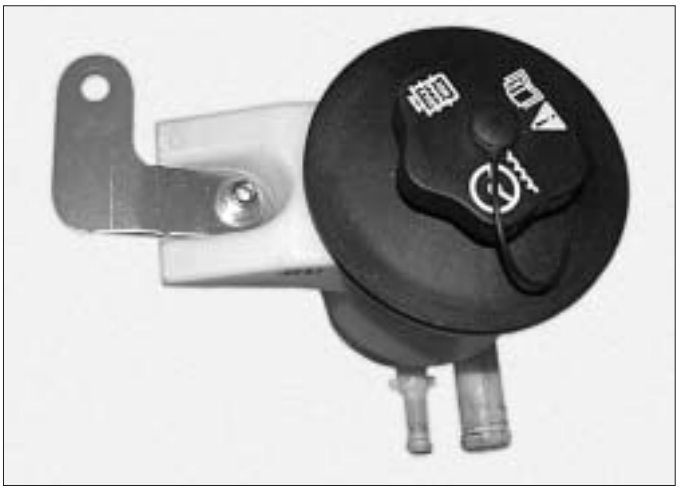

Fig. 4-a

C. Attach the supplied 3/4" and 3/8" P/S hoses to the outlets of the reservoir with the clamps provided. (See *Fig. 4-b*.)

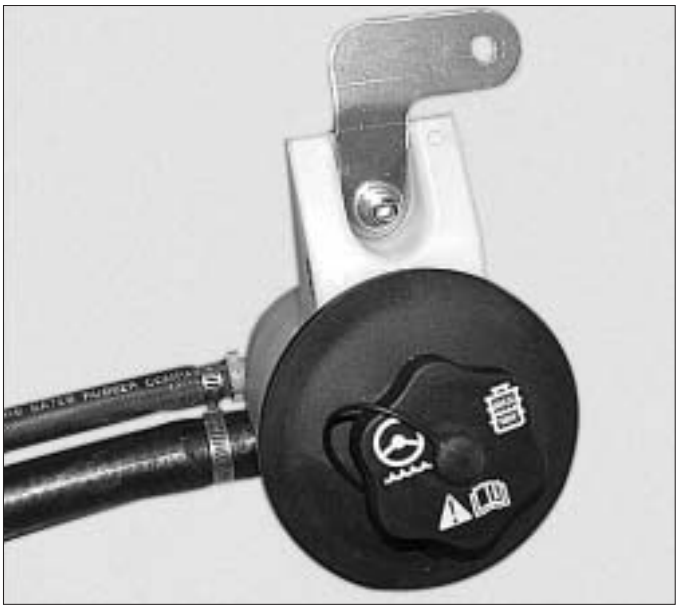

Fig. 4-b

D. Attach the 3/4" and the 3/8" hose barb unions to the factory hoses using the factory clamps.

E. Attach the reservoir to the passenger's side radiator core support using one of the factory ground strap retaining bolts. (See *Fig. 4-c*.)

Fig. 4-c

F. Attach the hoses from the reservoir to the factory P/S hoses and secure with the supplied clamps. Trim for best fit. Secure the hose to the fan shroud away from heat and moving objects.

G. It will be necessary to trim the corner of the radiator core support cover to clear the relocated P/S reservoir. (See *Fig. 4-d*.)

Fig. 4-d

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Section 5
COOLANT TUBE RELOCATION

5. COOLANT TUBE RELOCATION

A. Locate assembly 4FU214-021.

B. Remove the hose connected to the back lower portion of the engine coolant cross-over tube. (See *Fig. 5-a.*)

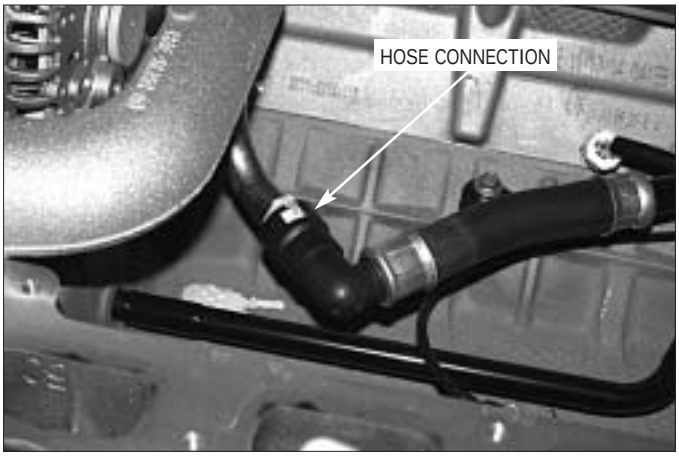

Fig. 5-a

C. Remove the nylon clip retaining the wire harness to the alternator brace and the four 10mm headed bolts securing the alternator brace. Set the brace aside to be reinstalled. (See *Fig. 5-b.*)

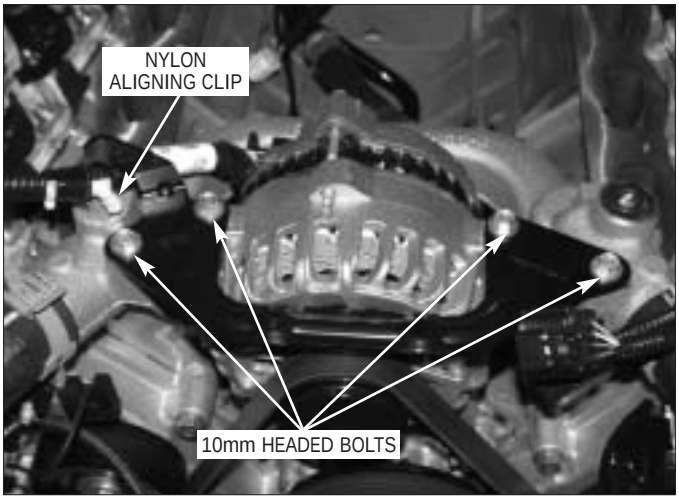

Fig. 5-b

D. Remove the factory coolant bleed plug and set the plug aside. It will not be reused. (See *Fig. 5-c.*)

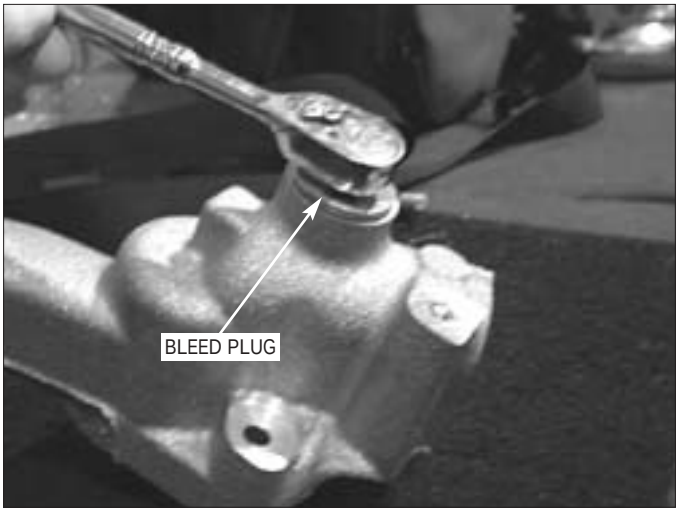

Fig. 5-c

E. Remove the two remaining 10mm head bolts securing the cross-over tube to the cylinder heads.

F. Remove the factory O-ring type gaskets to prevent damage. Clamp the driver's side steel hose barb end of the coolant cross-over tube in a vise as shown. Using a small amount of heat, heat the aluminum cross-over tube. Using a twisting motion, remove the steel insert. (See *Fig. 5-d.*) Penetrating oil will also aid in this step.

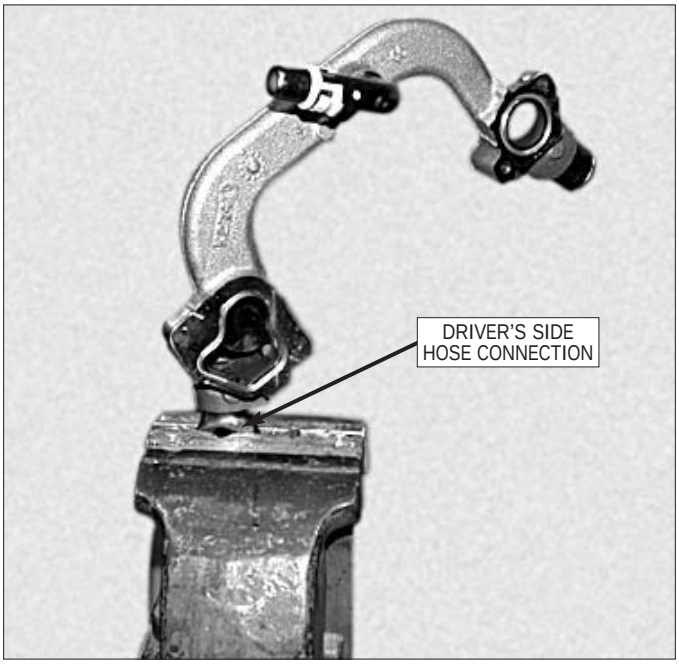

Fig. 5-d

5. COOLANT TUBE RELOCATION

G. Locate the supplied 1-1/4" expansion plug (7P125-002.)

H. Coat the expansion plug with sealant. Using a tube or socket that matches the recessed diameter of the plug, install the plug flush with the machined surface sealing the outlet of the cross-over tube. (See *Figs. 5-e, 5-f.*)

Fig. 5-e

Fig. 5-f

I. Locate the supplied coolant relocation fitting, sealing nut and O-ring washer. (See *Fig. 5-g.*)

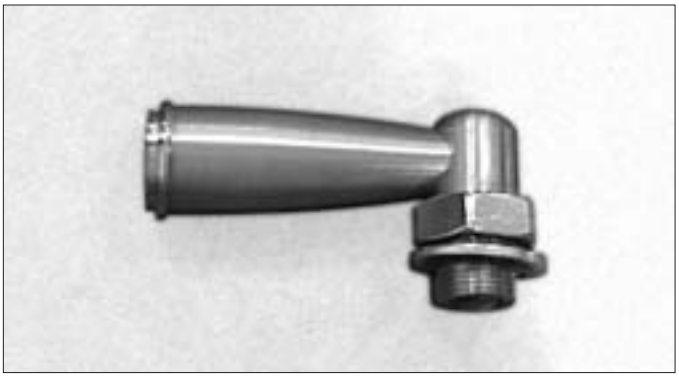

Fig. 5-g

J. Install the fitting in the location of the factory coolant bleed plug. (See *Fig. 5-h.*) Screw the jam nut all the way onto the fitting. Tighten the fitting in the position shown. (See *Fig. 5-h.*) Secure with the jam nut.

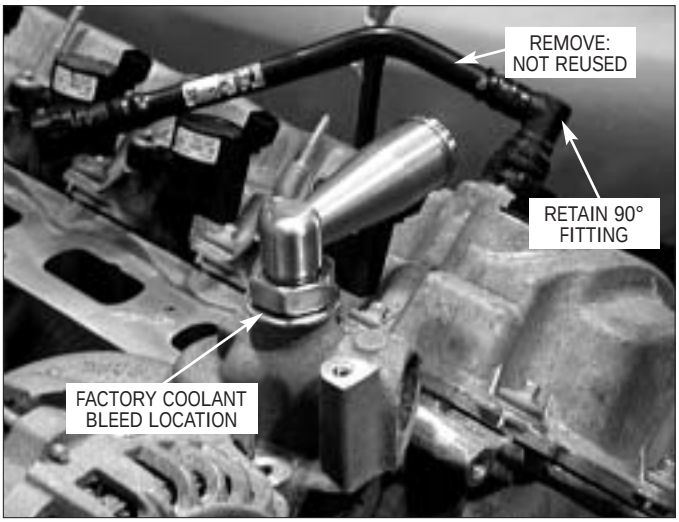

Fig. 5-h

****** NOTE ******

It is recommended that sealant be used to seal the thread of the fitting.

K. Reinstall the factory O-ring gaskets to the crossover tube.

L. Set the coolant crossover tube back in its original location.

M. Reinstall the two 10mm headed bolts through the cross-over tube into the cylinder heads. Temporarily install two intake manifold retaining bolts through the cross-over tube into the cylinder heads, where the manifold will be secured. Leave these loose as they are there only as a pilot for the cross-over tube.

5. COOLANT TUBE RELOCATION

N. Tighten the cross-over tube retaining bolts, and remove the two manifold retaining bolts.

O. Reconnect the coolant cross-over tube hose at the lower rear portion of the coolant cross-over tube. Remove any coolant that may have spilled into the engine valley.

P. Reinstall the alternator support bracket and the four 10mm headed retaining bolts removed earlier. Attach the capacitor resistor removed from the stud bolt on the front cover to one of the 10mm bracket retainers. Route the resistor and its wire away from moving parts.

****** NOTE ******

Leave two 10mm headed bolts that attach the bracket to the cross-over tube loose.

Q. Reinstall the Intake Manifold, removed in a previous step. Check to see that the rubber intake runner gaskets are in place and undamaged. Make sure the cylinder head surface is clean.

R. Lower the intake manifold onto the cylinder heads.

S. Install the ten factory 10mm headed manifold retainers, and tighten to factory specifications. Tighten the two 10mm headed bracket bolts that were previously left loose.

T. Reconnect the IMRC control unit at the rear of the manifold along with the vacuum hose.

U. Remove the small clips that retain the factory fuel injectors to the fuel rail. Remove the factory fuel injectors and set a side, these will not be reused.

V. Locate the supplied fuel injectors. Lubricate the injector o-rings with clean motor oil and install in to the fuel rail. Reinstall the small retaining clips on to the injectors.

W. Lower the fuel rail/injector assembly on to the manifold, making sure that the injectors seat properly into the manifold. Secure with the four factory 8mm headed bolts.

X. Locate the breather hose removed from the driver's side valve cover and the intake manifold. Remove and retain the 90° plastic hose-end connector. Discard the plastic tube.

****** NOTE ******

The preferred method of removing the hose-end is to apply a small amount of heat to the plastic tube and slide the ends free.

Y. Reconnect the fuel injector plugs and all other connections and vacuum lines previously removed from the manifold assembly.

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Section 6
THERMOSTAT HOUSING RELOCATION

6. THERMOSTAT HOUSING RELOCATION

A. It will be necessary to relocate the thermostat housing to gain clearance for the supercharger mounting bracket.

B. Locate hose 7U133-050. The hose will be modified and will replace the factory lower radiator hose removed in a previous step. (See *Fig. 6-a*.)

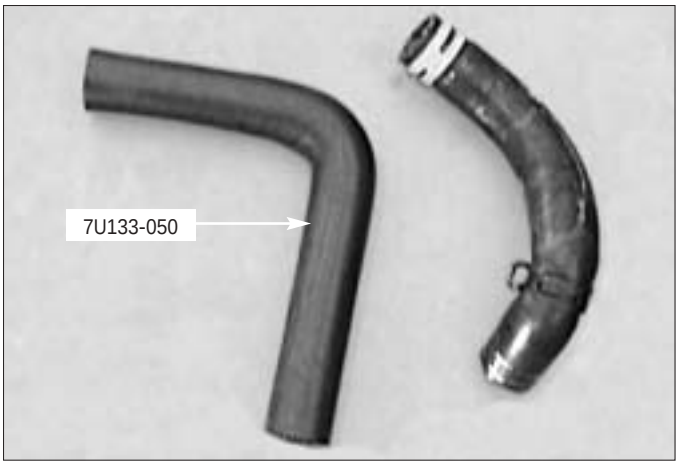

Fig. 6-a

C. Modify the supplied hose as seen in the figure below. (See *Figs. 6-b, 6-c*.)

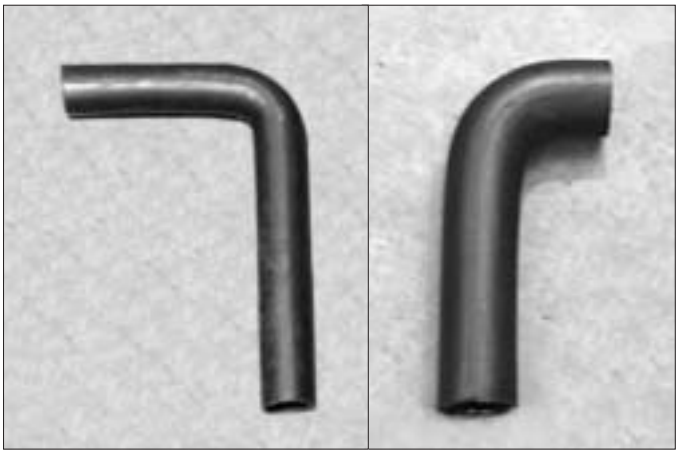

Fig. 6-b

D. Trim approximately 5" off of the 9" end of the hose and 5-1/4" of the 13" end.

****** NOTE ******

Because of manufacturing tolerances, it is best to leave this hose long and trim to fit.

E. Install the long end of the modified hose to the outlet of the radiator with a #24 hose clamp. Leave the clamp loose for adjustment.

F. Install the thermostat housing to the open end of the new the lower radiator hose and the large formed factory hose. Adjust the thermostat's location making sure it clears any moving parts.

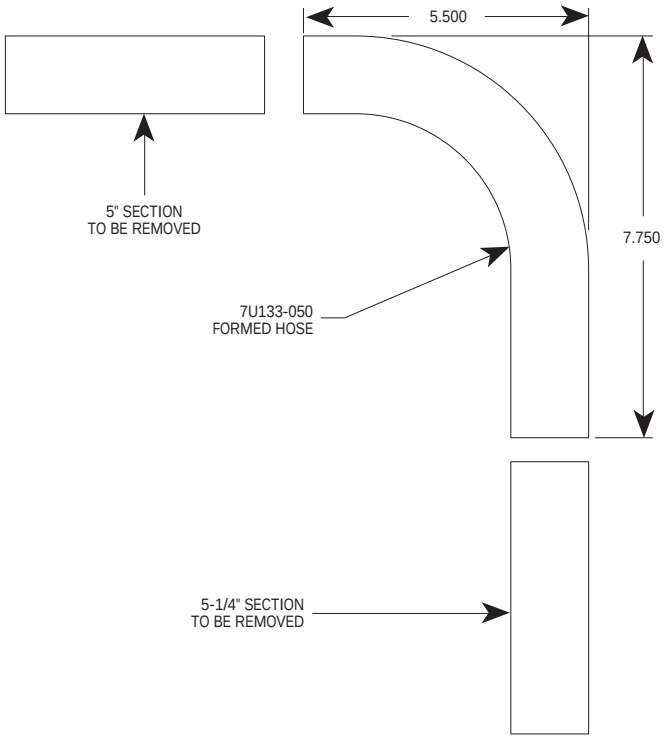

Fig. 6-c

****** NOTE ******

The hose clamps will be left loose for adjustment of the thermostat's location until after the installation of the supercharger and supercharger mounting bracket are installed.

6. THERMOSTAT HOUSING RELOCATION

G. Locate hose 7U133-185 “S” shaped hose. (See *Fig. 6-c*.)

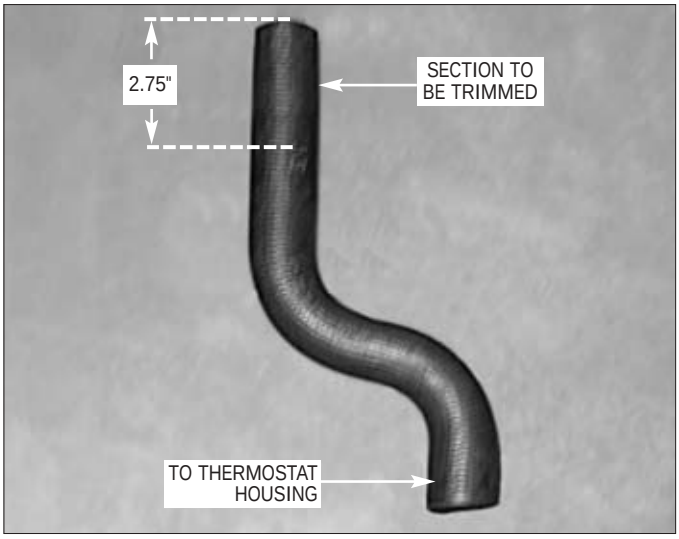

Fig. 6-c

H. This hose will need to have a portion of the long end removed. Cut approximately 2-3/4" off the long end of the hose and set aside.

I. Attach the short end of the “S” hose to the inlet of the thermostat housing using one #20 hose clamp. (See *Fig. 6-f*.)

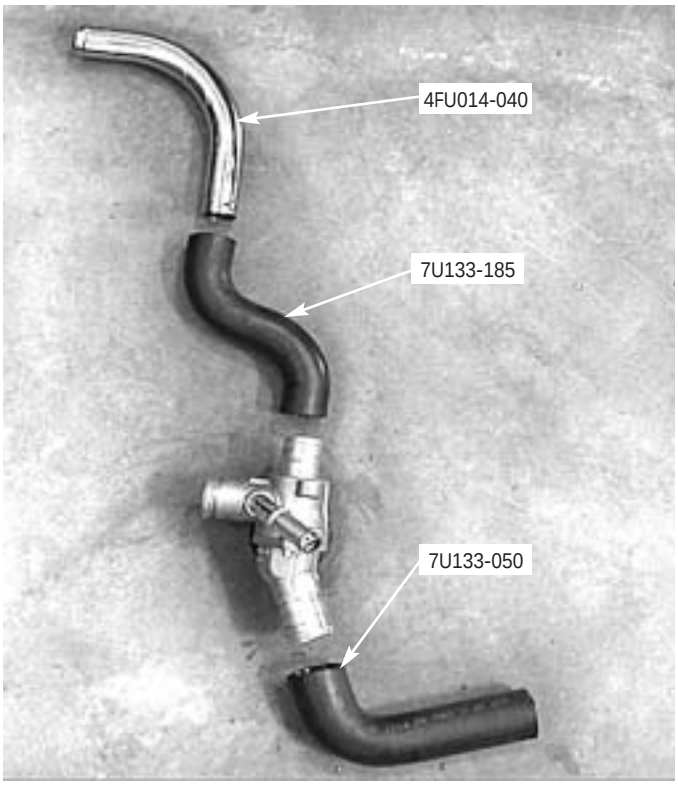

Fig. 6-f

J. Attach the 2-3/4" piece of hose (removed from the long end of the “S” shaped hose,) to the supplied outlet of the cross-over tube. (See *Fig. 6-d*.)

Fig. 6-d

K. Install the supplied formed coolant tube to the 2-3/4" long section of hose installed in the last step. Secure the “S” shaped hose in place with the #20 clamps provided. (See *Fig. 6-e, 6-f*.)

Fig. 6-e

Section 7
SUPERCHARGING MOUNTING PLATE INSTALLATION

7. SUPERCHARGER MOUNTING PLATE INSTALLATION

A. The mounting plate is provided with the spacers and bolts as they would be installed on the vehicle. Keep these bolts and spacers marked as to their locations. They are all different in size and mismatching them will result is misalignment of the mounting plate.

B. Locate the two supplied stud bolt spacers (see *Figs. 7-a, 7-b*) in the S/C mounting plate assembly. Remove the factory screws retaining the idler pulleys on the driver's side of the engine and replace with the stud spacers.

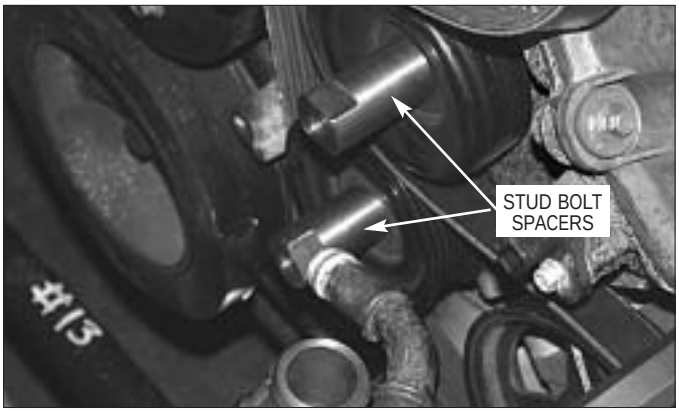

Fig. 7-a

****** NOTE ******

This figure is just for reference. The small idler pulley mounting bracket will need to be installed at the same time as the S/C Mounting Plate. (See Fig. 7-d.)

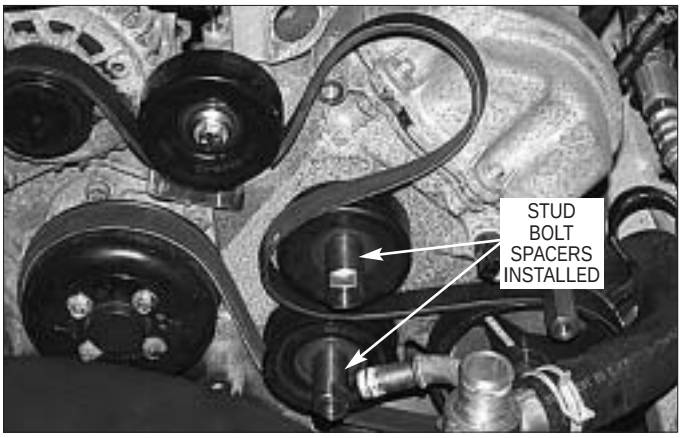

Fig. 7-b

C. It is necessary to install the supercharger accessory drive belt and loosely route it following *Fig. 7-e*, as not all pulleys are currently in place.

D. Locate the supercharger mounging plate 4FU010-044 from the supercharger mounting plate assembly. (See *Fig. 7-c*.)

E. Locate the two 8mm x 140mm long bolts and washers from the mounting bracket assembly and install in the locations noted. (See *Fig. 7-c*.)

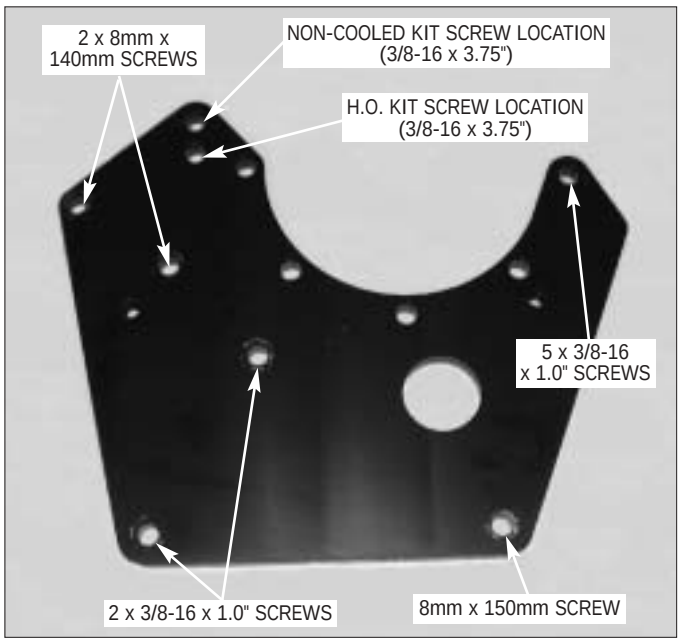

Fig. 7-c

F. Slide the two 2.691" long spacers onto the bolts previously installed. (See *Fig. 7-f*.) Install the small triangle-shaped idler pulley mounting bracket to the spacers. Install the .097" spacer onto the bolt that will be attached in the alternator location.

G. Lower the mounting plate assembly into position on the front of the engine. Be sure to route the drive belt on the correct side of the idler bracket and spacers. (See *Fig. 7-g*.)

H. Loosely attach the plate using the previously installed 140mm hardware. Locate the two 3/8-16 x 1.0" bolts and washers and install through the plate into the two stud bolt spacers retaining the factory idlers. (See *Figs. 7-a, 7-b*.)

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7. SUPERCHARGER MOUNTING PLATE INSTALLATION, cont'd

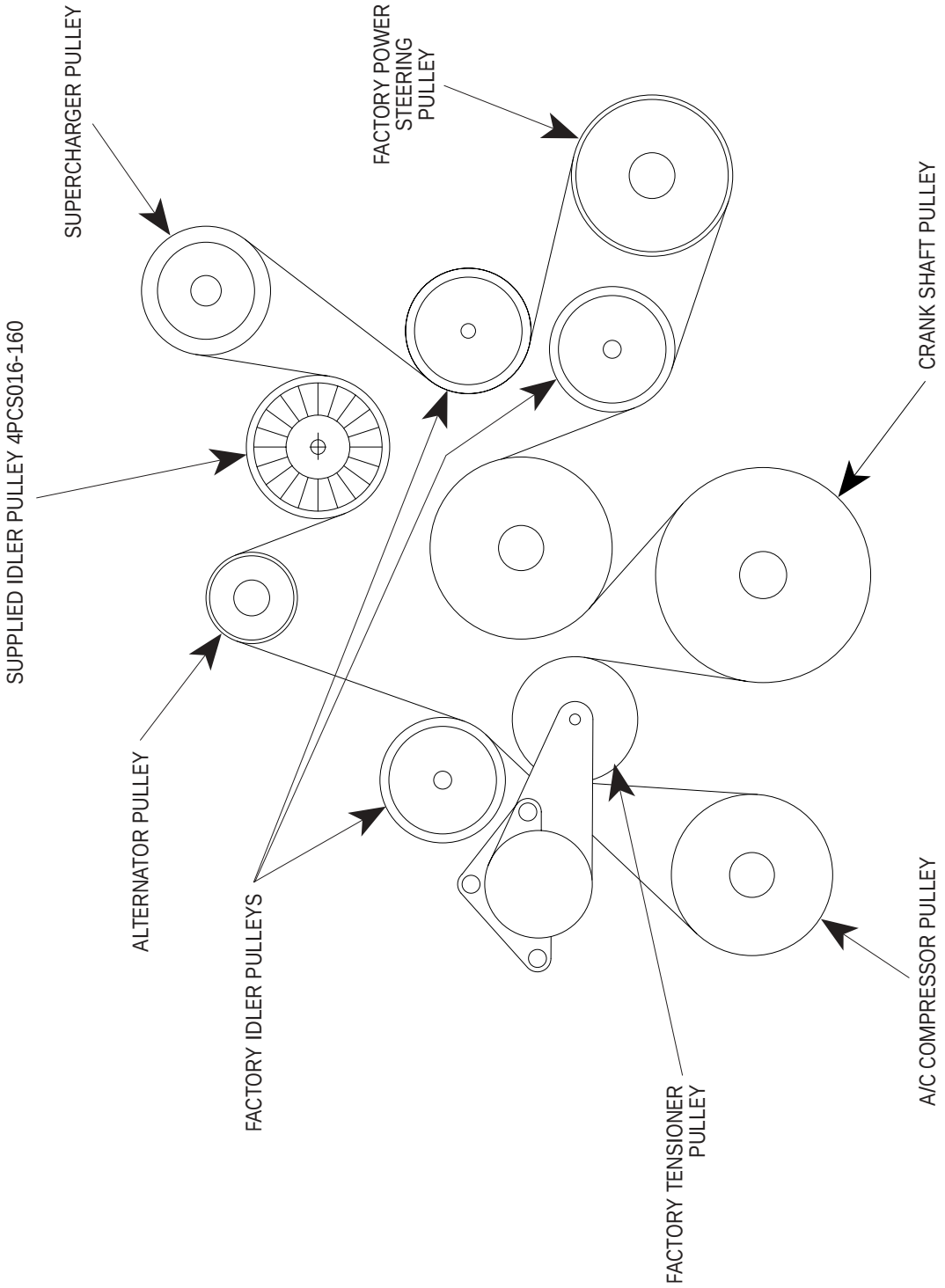

Fig. 7-e / Belt routing

7. *SUPERCHARGER MOUNTING PLATE INSTALLATION, cont'd*

I. Locate the 8mm x 150mm bolt and washer. Loosely install the bolt through the mounting plate and remaining 2.712" long spacer into the engine cover using *Fig. 7-a* for location reference.

J. Locate the supplied idler, 1.776" idler spacer, idler pilot spacer, 3/8-16 x 3.75" long bolt and washer. Install the bolt/washer through the mounting plate, 1.776" spacer, supplied idler, idler pilot spacer and into the triangle-shaped bracket. Use *Figs. 7-f to 7-h* for assistance.

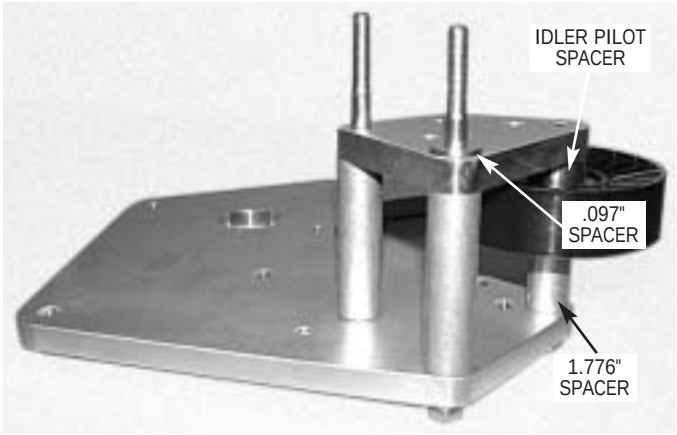

Fig. 7-f

****** NOTE ******

If installing a standard output kit (non-cooled), the 3/8" x 3.75" bolt and idlers w/spacers will be installed in the upper hole location. H.O. kits install in the lower hole. (See Fig. 7-c.)

K. Tighten all mounting plate hardware, making sure the drive belt is properly routed and no wiring or hoses are between the mounting surfaces. (See *Fig. 7-g*.)

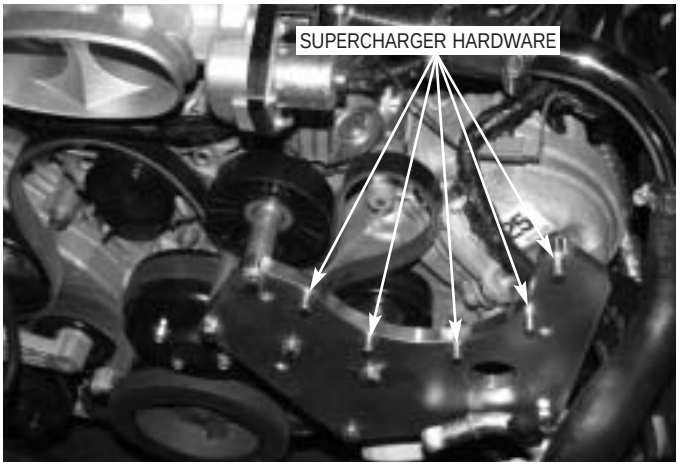

Fig. 7-g

L. Install the five 3/8-16 x 1.0" bolts and washers through the back side of the mounting plate. (See *Fig. 7-g*.)

Fig. 7-h

M. Attach the supplied length of 1/2" oil drain line hose to the 1/2" barbed fitting on the supercharger. Secure with the #8 hose clamp provided.

N. Install the supplied 1/8"NPT x -4 straight fitting from assembly 4FU130-026 to the oil feed fitting on the supercharger.

****** NOTE ******

Use only clean engine oil on the pipe threads. Teflon tape or pipe sealant is not recommended as if might loosen and cause blockage of the small oil feed orifice resulting in possible supercharger failure.

O. Attach the supercharger assembly to the mounting plate using the previously installed hardware. A 9/16" ratcheting end wrench will greatly aid this step.

P. Secure the oil drain hose to the prevously installed brass fitting in the oil pan, making sure to route in a smooth downward manner away from moving or hot objects.

****** NOTE ******

Any dips, "uphill" sections, kinks or restrictions may cause drainage problems and possible supercharger failure.

Q. Attach the -4 oil feed hose to the straight -4 fitting previously installed in the supercharger. Secure away from moving of hot objects.

R. Using a 1/2" ratchet, rotate the factory spring tensioner clockwise and install the accessory drive belt. Refer to *Fig. 7-e* for proper belt routing.

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Section 8
CHARGE AIR COOLER INSTALLATION (H.O. Kits Only)

8. CHARGE AIR COOLER INSTALLATION (H.O. KITS ONLY)

****** NOTE ******

For non-cooled kits skip this section and proceed to Section 9.

A. BUMPER COVER AND SPLASH PAN

1. Raise the vehicle with a floor jack and set on jack stands.

2. Remove the seven 5.5mm headed screws retaining the lower splash panel. (See *Fig. 8A-a*.)

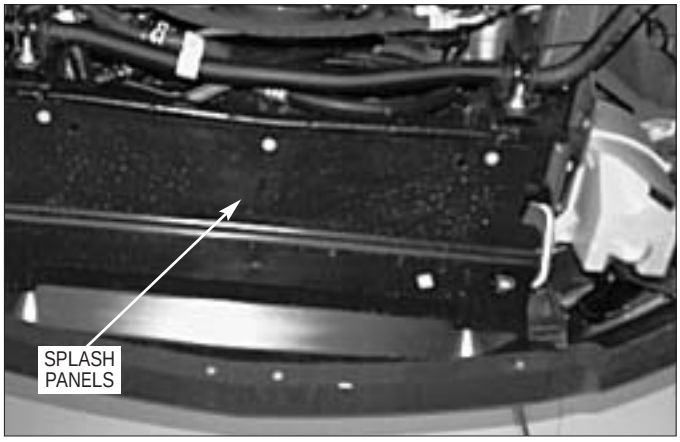

Fig. 8A-a

3. Remove the six Phillips-head screws (3 each side) on the lower portions of the plastic inner fender liners. (See *Fig. 8A-b*.)

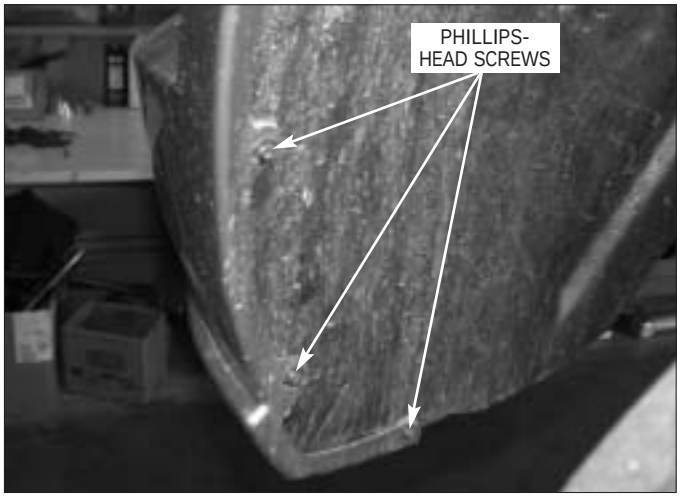

Fig. 8A-b

4. Remove the five plastic clips retaining the front portion of the fender liner. Both sides need to be removed. (See *Fig. 8A-c*.)

Fig. 8A-c

5. Remove the four 10mm nuts (2 each side) retaining the bumper cover to the fenders. (See *Fig. 8A-d*.)

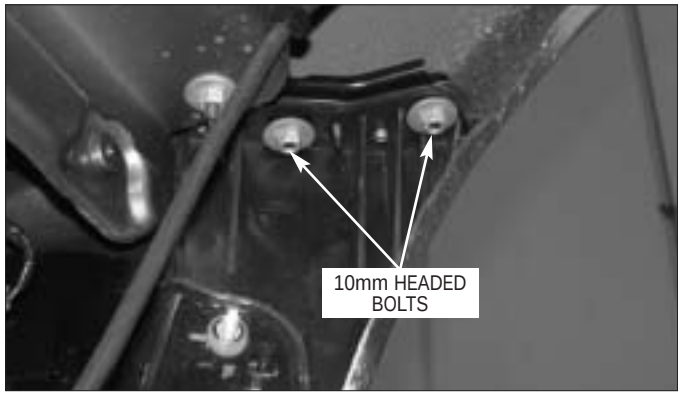

Fig. 8A-d

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8A. CHARGE AIR COOLER INSTALLATION, cont'd (H.O. KITS ONLY)

6. Disconnect the connectors on the parking and the lower fog lights. (See *Fig. 8-e*.)

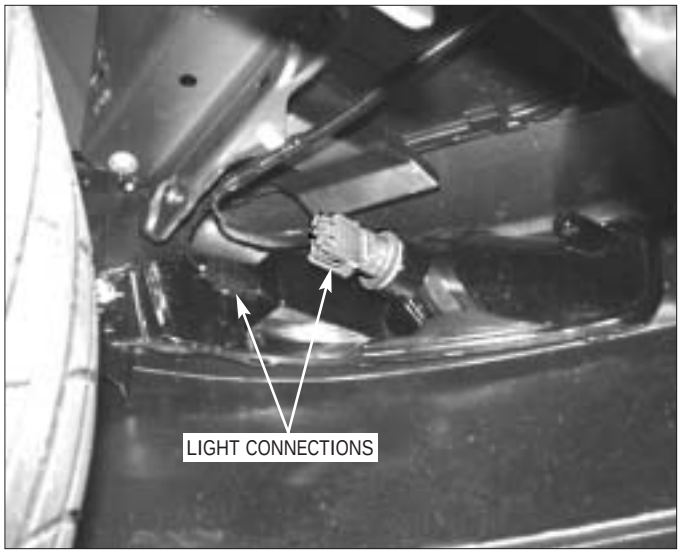

Fig. 8A-e

7. Remove the six nylon clips retaining the upper radiator core support cover. (See *Fig. 8A-f*.)

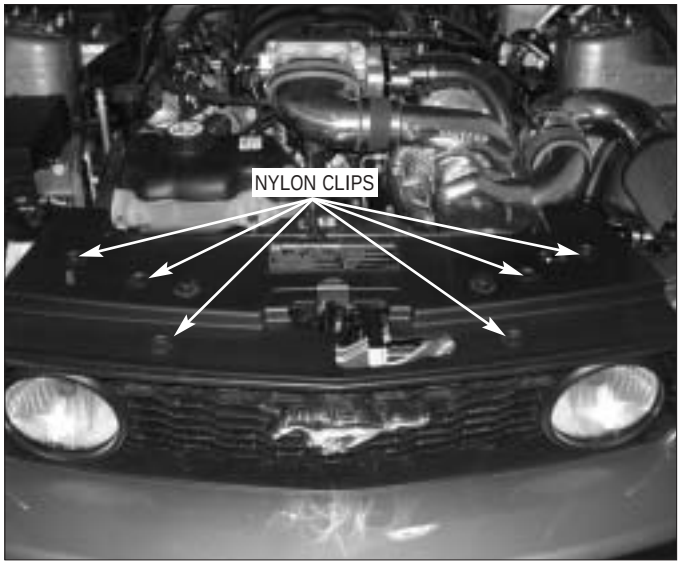

Fig. 8A-f

8. Remove the two 10mm headed bolts (1 each side upper portion of grill). (See *Fig. 8A-g*.)

Fig. 8A-g

9. Lift up on the tabs releasing them from the clips. (See *Fig. 8A-h*.)

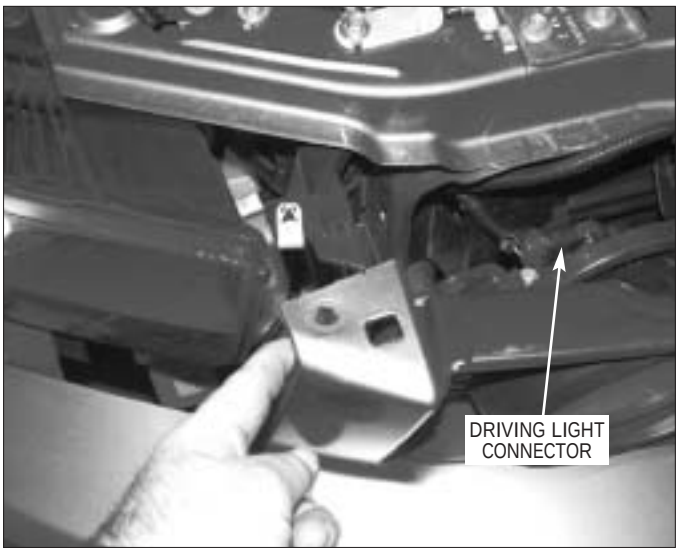

Fig. 8A-h

10. Pull out on the bumper cover

11. Remove the connectors to the driving lights in the grill. (See *Fig. 8A-h*.)

12. Remove the bumper cover and set aside. (See *Fig. 8A-i*.)

8A. CHARGE AIR COOLER INSTALLATION, cont'd (H.O. KITS ONLY)

Fig. 8A-i

13. Remove four nylon push pins from the styrofoam bumper support and set the support and the pins aside to be reinstalled. (See *Fig. 8A-j*.)

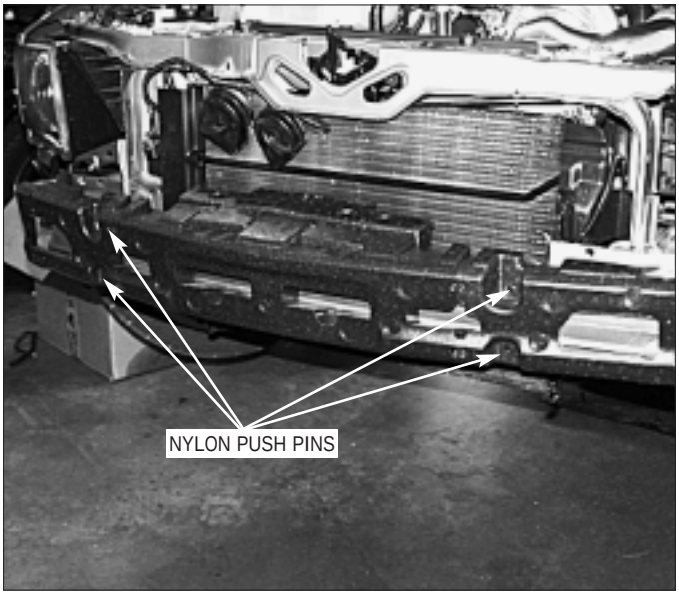

Fig. 8A-j

14. Remove four inner bolts of eight 13mm headed bolts retaining the metal bumper support. (See *Fig. 8A-k*.)

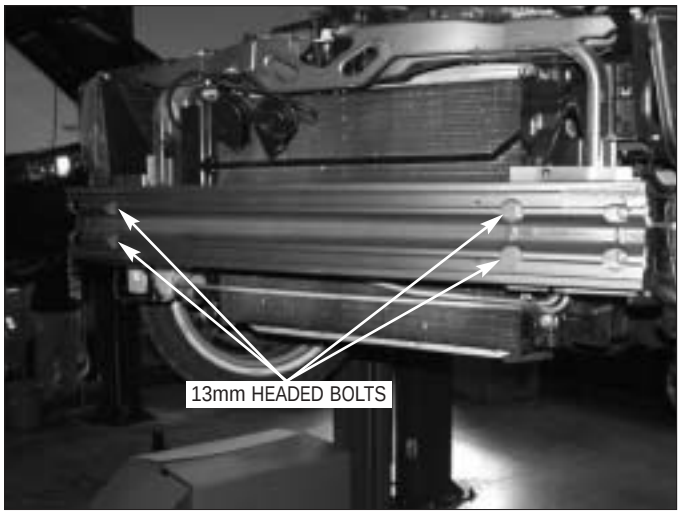

Fig. 8A-k

15. Replace the bolts previously removed with the four 8mm x 1.25" x 35mm long bolts and washers provided.

16. Install the four 2A017-036 spacers (two each side) to the bolts. (See *Fig. 8A-l*.)

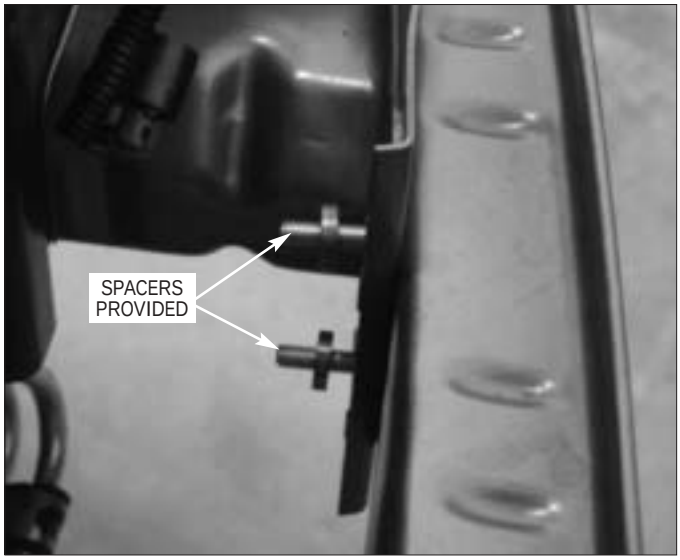

Fig. 8A-l

17. Replace the styrofoam bumper support using the factory retainers.

8B. CHARGE AIR COOLER INSTALLATION, cont'd (H.O. KITS ONLY)

B. CHARGE AIR COOLER ASSEMBLY

****** NOTE ******
Use Fig. 8B-a to aid in the next few steps

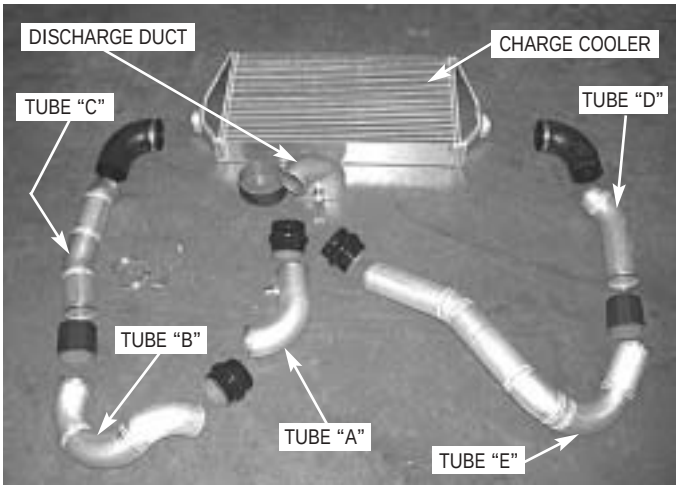

Fig. 8B-a

1. Locate the Charge Air Cooler assembly. Place the cooler onto the previously installed hardware, making sure the four spacers remain in place. Align the top of the cooler flush with the top of the styrofoam bumper support. Secure the cooler using the nuts and washers provided. (See *Fig. 8B-b*.)

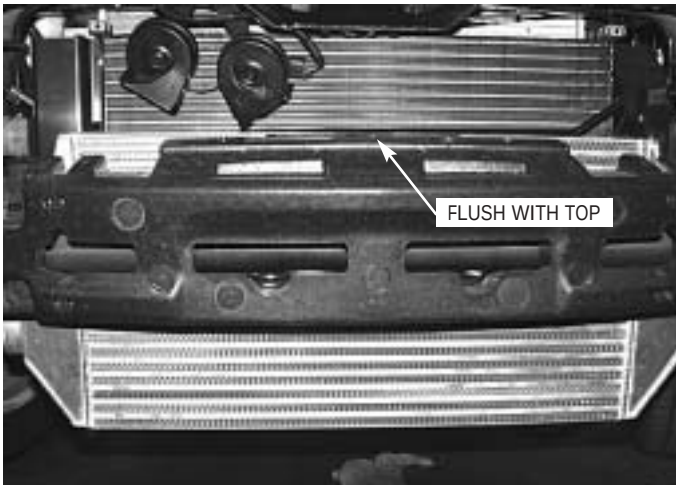

Fig. 8B-b

2. Loosely install the short ends of the two 90° rubber elbows onto each end of the charge cooler using the supplied #48 hose clamps. (See *Fig. 8B-c*.)

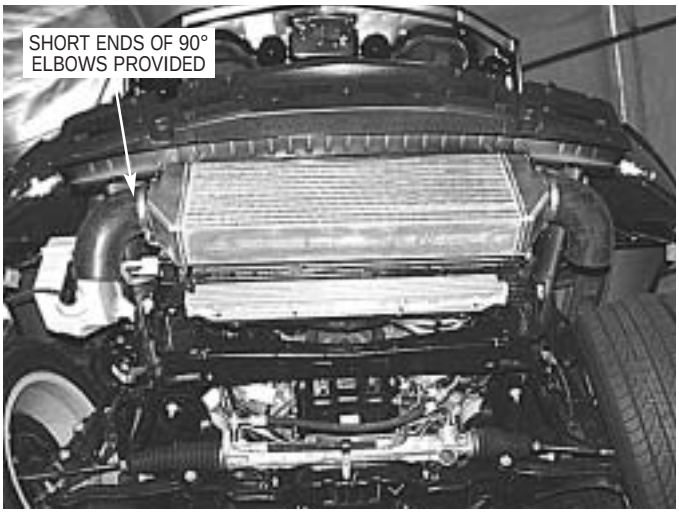

Fig. 8B-c

3. Using a 3" x 3" bump sleeve and two #48 hose clamps, loosely attach tube "A" to the supercharger discharge.

**** NOTE ****
The by-pass port should be facing the driver's side

4. Attach tube "B" using a second 3" x 3" bump sleeve and the provided #48 hose clamps to the open end of tube "A".

**** NOTE ****
For better duct clearance, rotate the power steering return fitting so that it points to the front of the vehicle. Use care not to damage the fitting or hose. If necessary, rotate the power steering line from the rack to the radiator closer to the frame. (See Fig. 8B-d.)

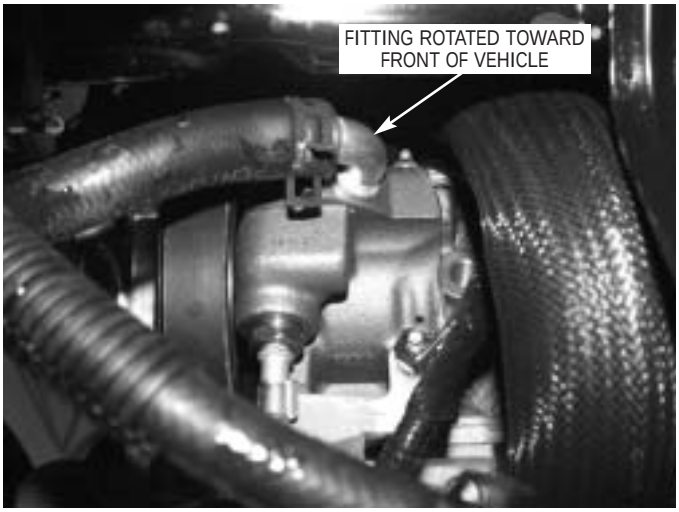

Fig. 8B-d

8B. CHARGE AIR COOLER INSTALLATION, cont'd (H.O. KITS ONLY)

5. Install the provided 3" x 3" sleeve and #48 hose clamps onto the open end of tube "B".

6. Using a 5/16-18 tap, tap the lower hole on the driver's and passenger's side core support. Locate the tube support brackets, 5/16-18 x 1/2" screws and washers. Loosely attach the tube support brackets to the core support. (See *Fig. 8B-e, 8B-g.*)

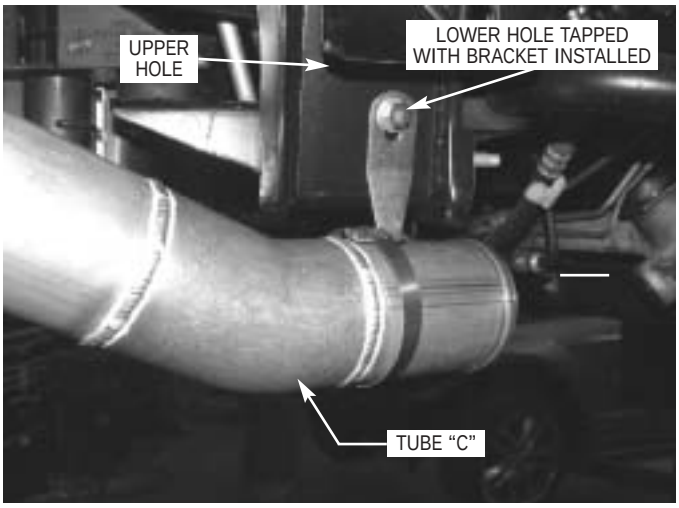

Fig. 8B-e | Driver's side

7. Install tube "C" between the 90° rubber elbow and the 3" x 3" sleeve previously installed on tube "B". Attach tube "C" to its support bracket using the #44 hose clamp. Tighten the clamp and bracket. Secure all hose connections to this point using the #48 hose clamps provided adjusting for best fit and clearance.

8. Install the short end of tube "D" into the open end of the passenger's side 90° rubber elbow previously install. (See *Fig. 8B-f.*)

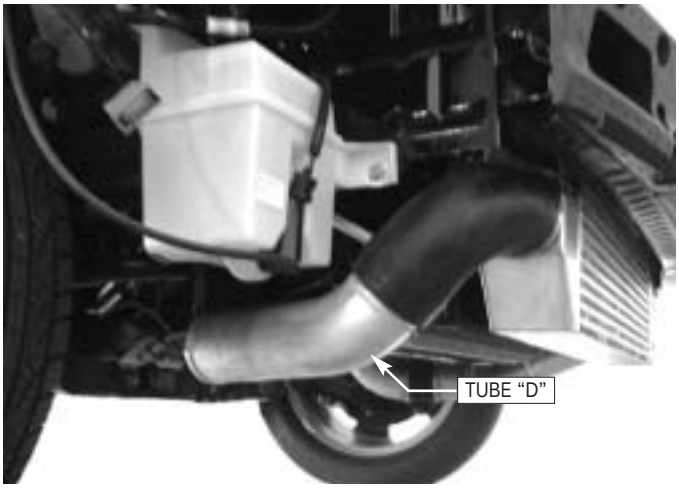

Fig. 8B-f

9. Attach a 3" x 3" sleeve and #48 hose clamps to the open end of tube "D".

10. Install the short end of tube "E" into the sleeve attached to tube "D". Secure the tube support bracket using the previously installed #48 hose clamp. (See *Fig. 8B-g.*)

**** NOTE ****

For better fit, the transmission cooler lines (if equipped) will need to be pushed upward slightly so that tube "E" will fit between them and the A/C compressor. (See Fig. 8B-g.)

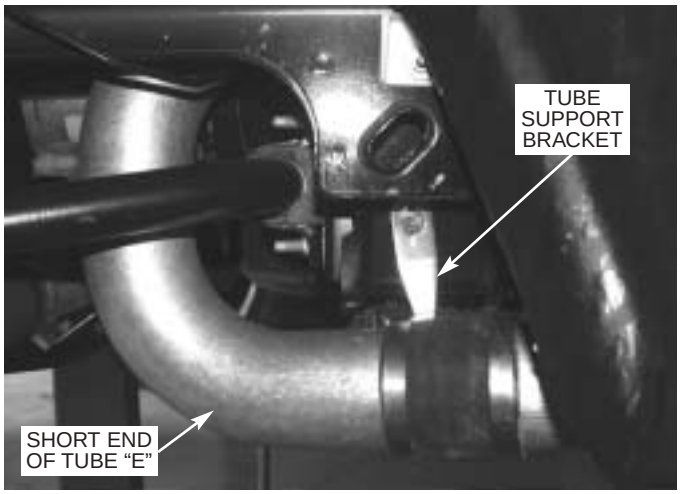

Fig. 8B-g | Passenger's side

11. Attach the cast discharge duct to the throttle body using the supplied 4.5" sleeve and #72 hose clamps.

12. Using the remaining 3" x 3" bump sleeve and #48 hose clamps, connect the long end of tube "E" to the cast discharge tube. (See *Fig. 8B-h.*)

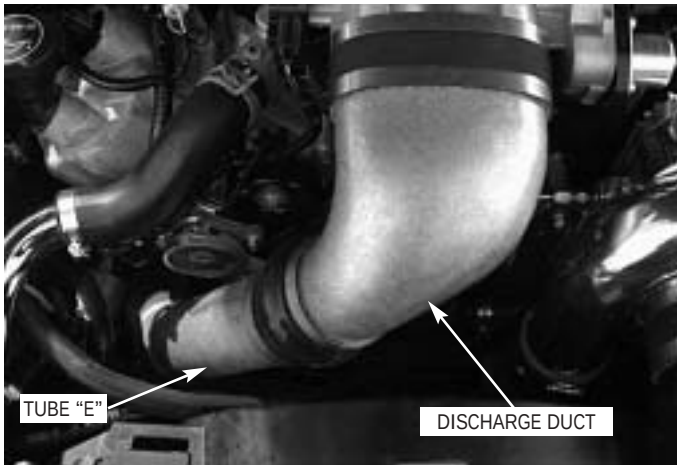

Fig. 8B-h

13. Secure all hose connections at this time, adjusting for best fit and clearance.

8C. CHARGE AIR COOLER INSTALLATION, cont'd (H.O. KITS ONLY)

C. COMPRESSOR BYPASS VALVE ASSEMBLY INSTALLATION

1. *Bypass valve #1:*

a. Cut a piece of the provided 1" heater hose approximately 3" long and secure it to the by-pass valve inlet (opposite the vacuum port) using the #16 hose clamps provided.

b. Locate the 1" molded rubber 90° elbow and cut approximately 6" from the long end and 1" from the short end. Attach the long end to the by-pass valve discharge and secure using the #16 hose clamps provided. (See *Fig. 8C-a, 8C-d*.)

c. Attach the open end of the 3" long hose to the by-pass port on tube "A" and secure using a #16 hose clamp. The open end of the 90° hose will be connected to the inlet duct in a later step. See *Fig. 8C-d*.)

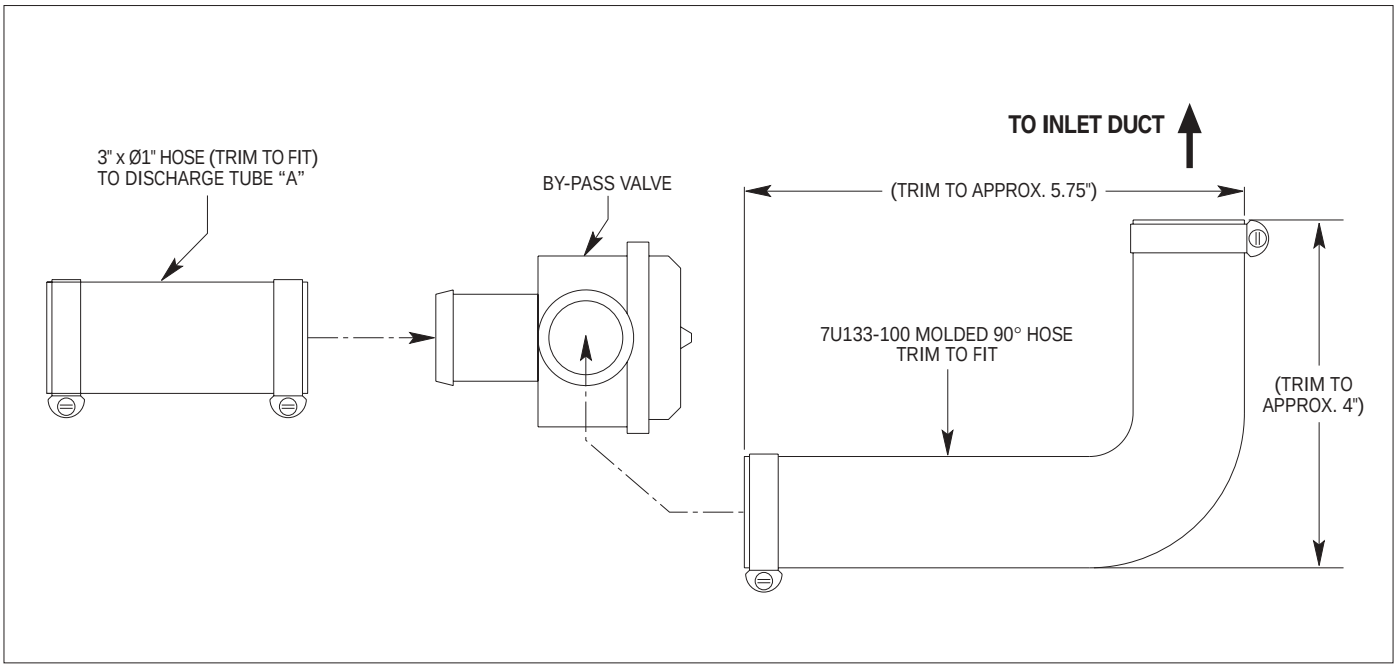

Fig. 8C-a

8C. CHARGE AIR COOLER INSTALLATION, cont'd (H.O. KITS ONLY)

C. *COMPRESSOR BYPASS VALVE ASSEMBLY INSTALLATION, cont'd*

2. *Bypass valve #2:*

a. Cut a piece of the supplied 1" heater hose 4.5" long and a piece 15" long.

b. Attach the 4.5" piece of hose to the inlet of the by-pass valve, securing it with a #16 hose clamp.

c. Secure the 15" piece to the by-pass valve discharge using a #16 hose clamp.

d. Attach the open end of the 4.5" hose to the by-pass port on the cast discharge duct and secure using a #16 hose clamp. The open end of the 15" long hose will be attached to the inlet duct in a later step. (See *Fig. 8C-b, 8C-d*.)

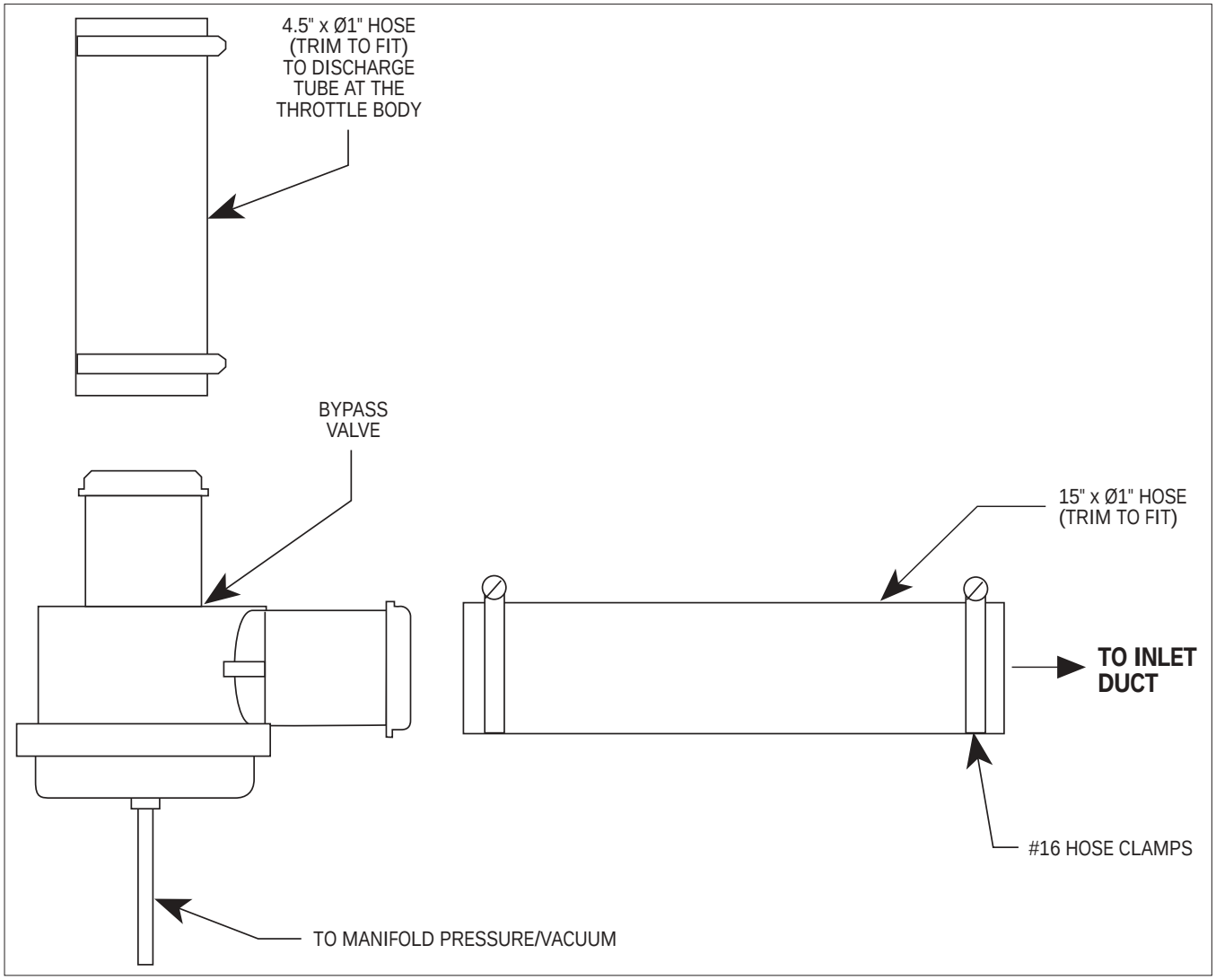

Fig. 8C-b

8C. CHARGE AIR COOLER INSTALLATION, cont'd (H.O. KITS ONLY)

e. Attach a length of 5/32" vacuum hose to bypass valve #2 and route to the vacuum port of the fuel rail sensor.

f. Cut a section of the factory hose and install the vacuum TEE that is provided. (See *Fig. 8C-c*.)

g. Attach the vacuum hose from the bypass valve to the TEE.

h. Attach a length of 5/32" vacuum hose to the previously installed bypass valve #1. Connect the open end to the previously installed vacuum line running to the fuel rail from bypass #2 using the TEE provided. (See *Fig. 8C-d*.)

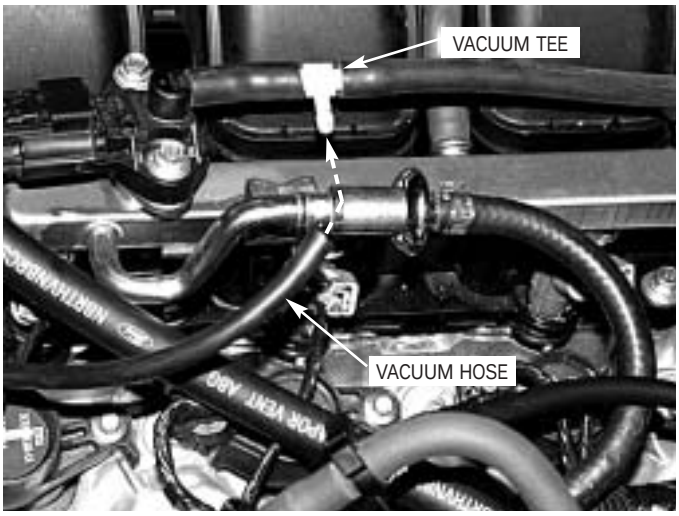

Fig. 8C-c

8C. CHARGE AIR COOLER INSTALLATION, cont'd (H.O. KITS ONLY)

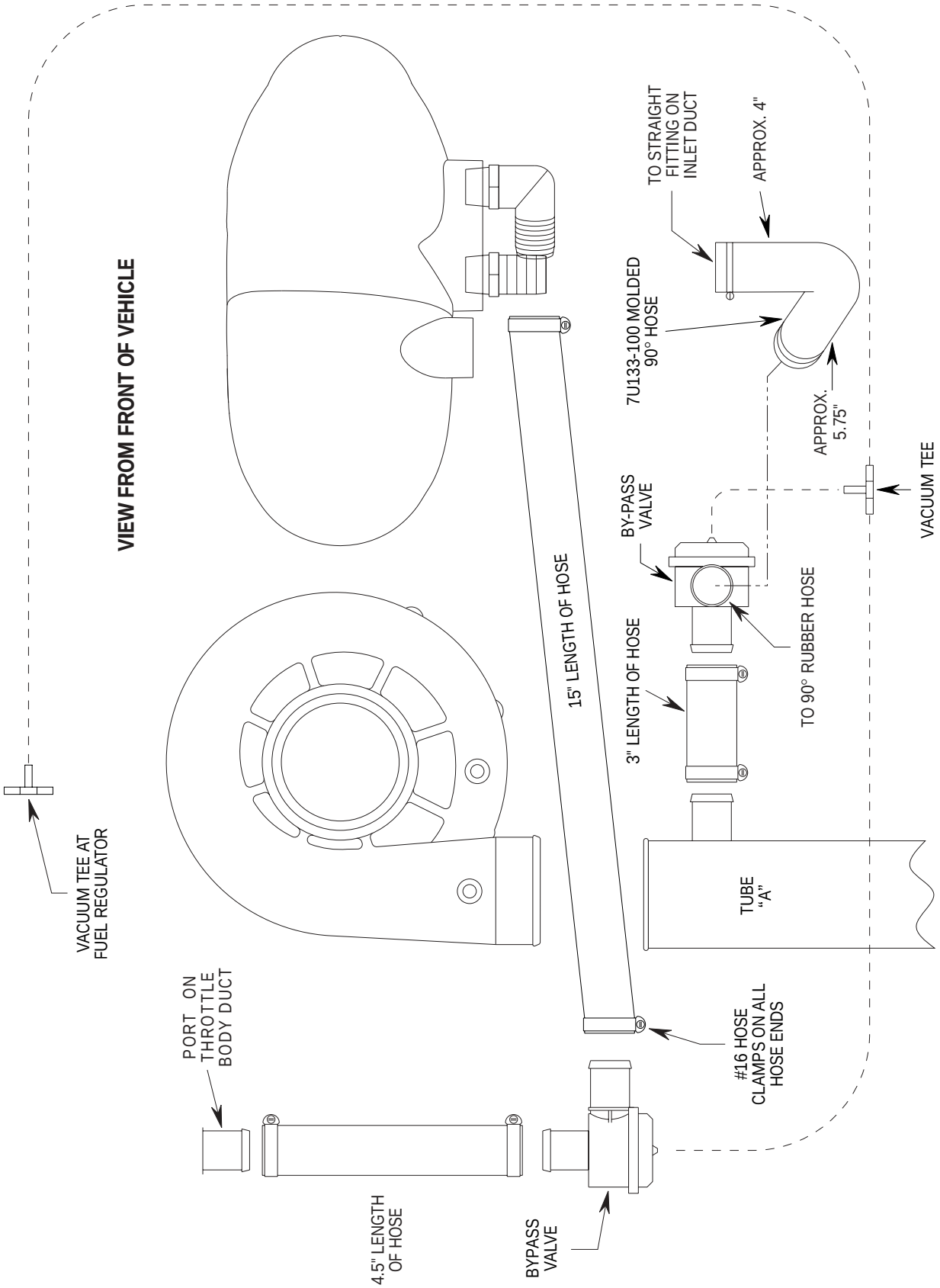

Fig. 8C-d

8D. CHARGE AIR COOLER INSTALLATION, cont'd (H.O. KITS ONLY)

D. WIRING HARNESS RELOCATION

1. On the passenger's side of the engine, attached to the valve cover, is a large wire harness. The harness will have to be relocated to gain clearance for the radiator overflow reservoir. (See *Fig. 8D-a*.)

Fig. 8D-a

2. Detach the wiring harness from the retaining clips and move the harness to the shock tower. Secure the harness to the A/C line with wire ties. (See *Fig. 8D-b*.)

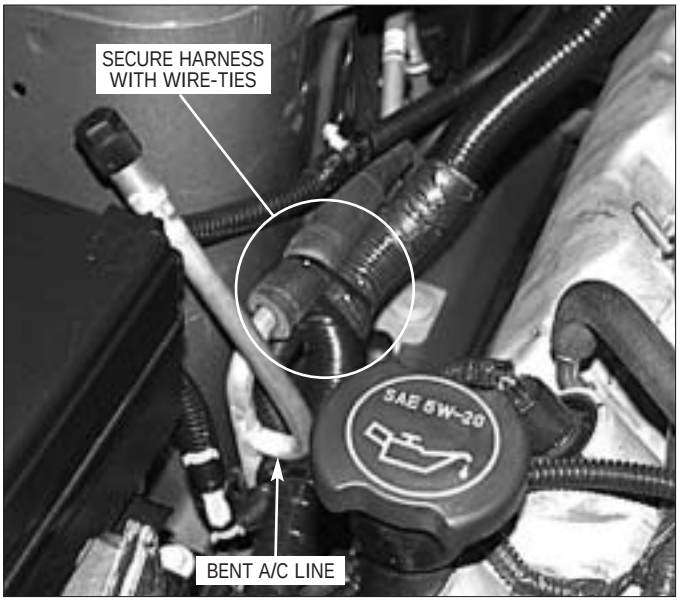

Fig. 8D-b

3. Remove the small clip retaining the small wiring harness to the shock tower. (See *Fig. 8D-b*.)

4. Attach the small harness to the large harness with wire ties.

5. To gain clearance for the coolant reservoir the A/C line will need to be bent slightly towards the passenger's side fender. (See *Fig. 8D-b*.)

6. Remove the 10mm headed screw retaining the ground strap to the bracket on the strut tower. (See *Fig. 8D-c*.)

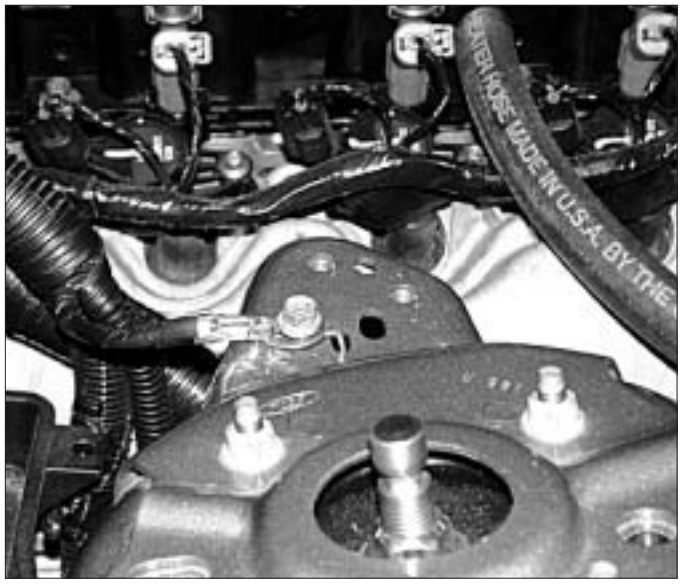

Fig. 8D-c

8E. CHARGE AIR COOLER INSTALLATION, (H.O. KITS ONLY)

E. ENGINE COOLANT RESERVOIR INSTALLATION

1. Locate assembly 8N155-080.

2. Attach the rear reservoir mounting bracket 4FU010-051 to the reservoir with the 1/4-20 x 3/4" long bolts and washers provided. (See *Fig. 8E-a*.)

Fig. 8E-a

3. Attach bracket 4FU010-061 to the front of the reservoir with the hardware provided. (See *Fig. 8E-b*.)

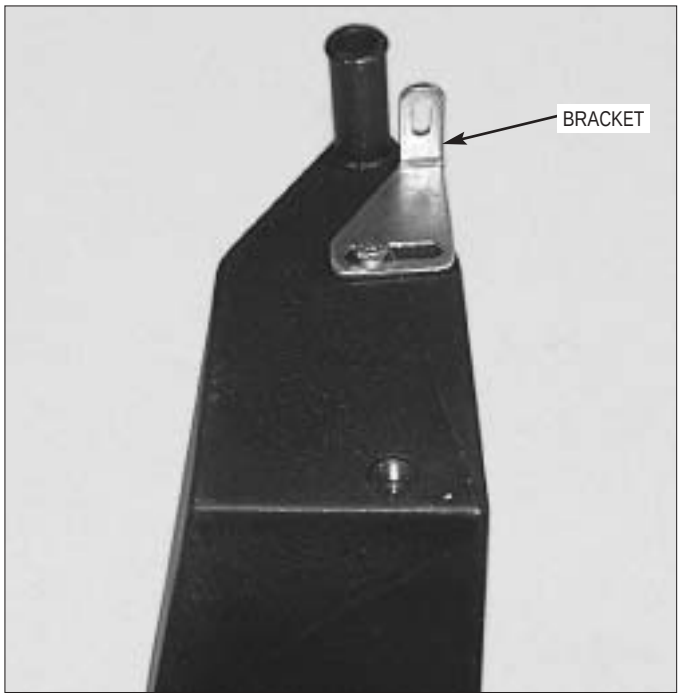

Fig. 8E-b

4. Locate and install 1/4"NPT x 3/8" barbed fitting in the tapped hole just above the previously installed mounting bracket. This hole may have to be opened using the appropriate drill bit. (See *Fig. 8E-c*.)

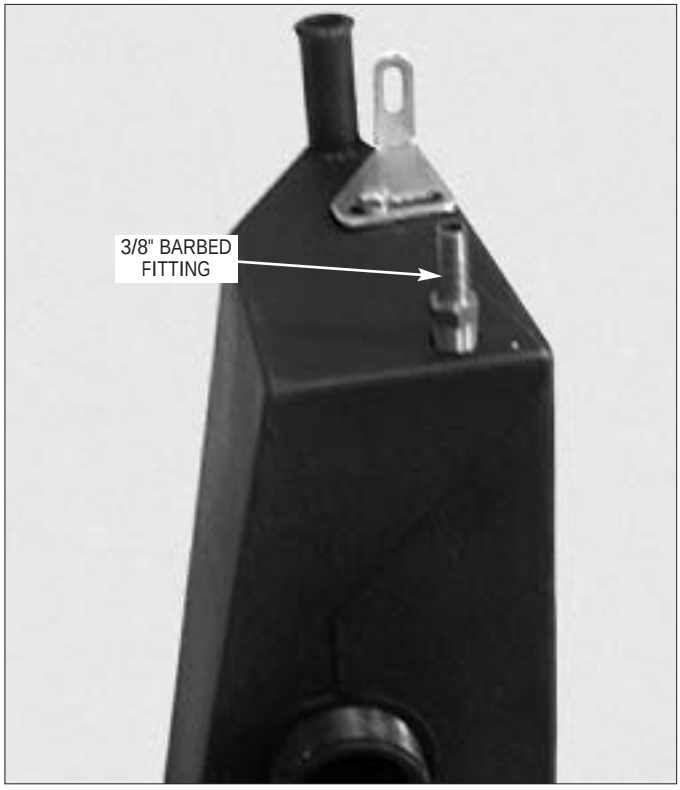

Fig. 8E-c

8E. CHARGE AIR COOLER INSTALLATION, cont'd (H.O. KITS ONLY)

5. Remove the 10mm headed bolt that secures the back of the ECU and the power distribution box. (See *Fig. 8E-d*.)

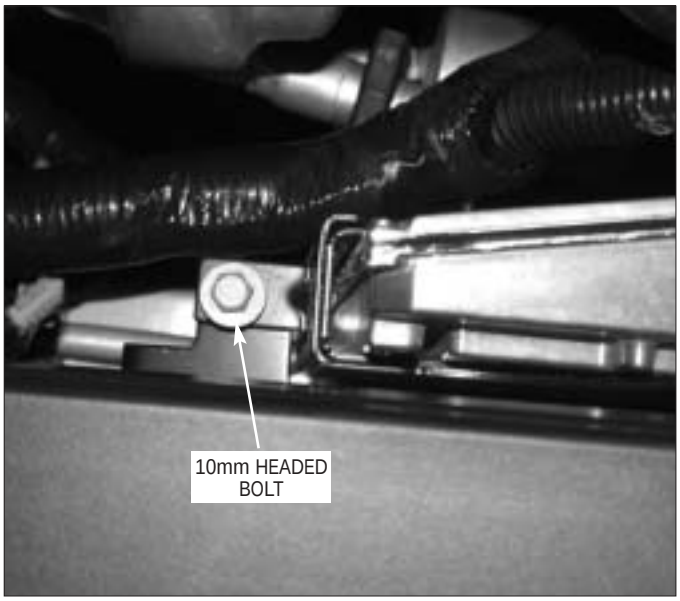

Fig. 8E-d

6. Install the coolant reservoir. Secure the front of the reservoir with the factory fastener removed previously. (See *Fig. 8E-e*.)

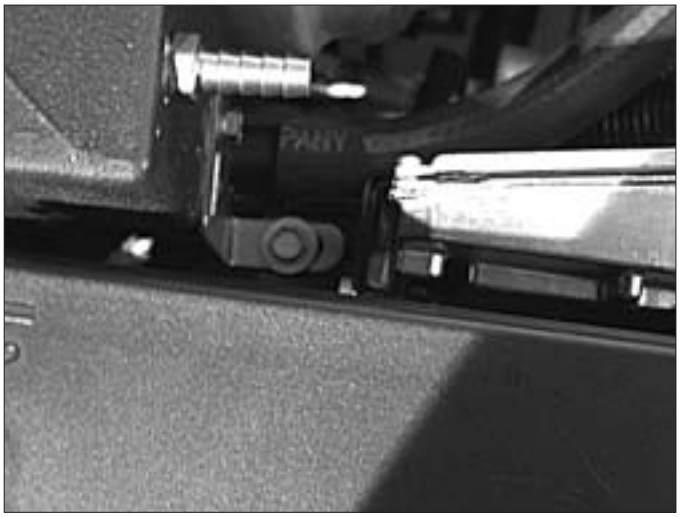

Fig. 8E-e

**** NOTE ****
Leave this bolt loose for final adjustment in a later step.

7. Attach the rear mounting bracket to the strut tower with the 6mm x 20mm long screws and washer provided. (See *Fig. 8E-f*.)

****** NOTE ******
Reinstall the factory ground wire with one of the 6mm screws and washers.

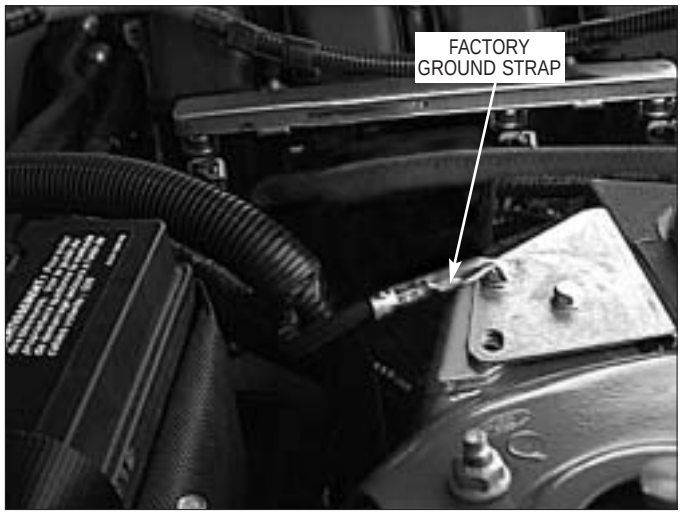

Fig. 8E-f

8. Attach a length of 3/4" hose (approximately 3') to the 3/4" bung on the front of the coolant reservoir. Route the hose to the 3/4" outlet on the thermostat housing secure the hose with the clamps provided. (See *Fig. 8E-g*.)

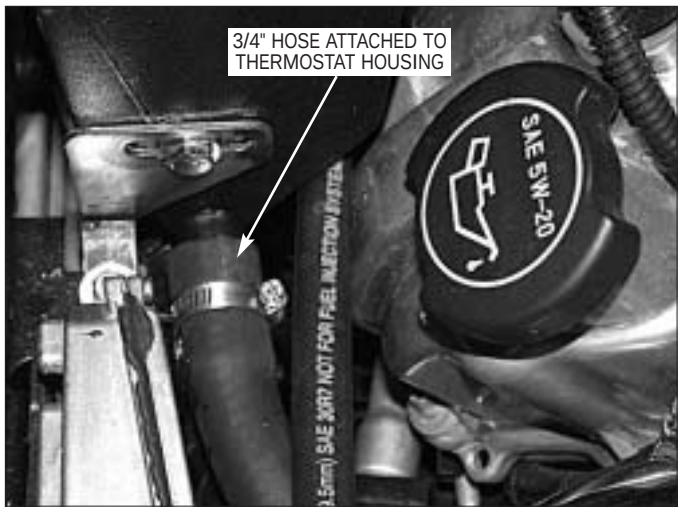

Fig. 8E-g

8E. CHARGE AIR COOLER INSTALLATION, cont'd (H.O. KITS ONLY)

9. Reinstall the factory passenger's side upper radiator hose removed in a previous step. (See *Fig. 8E-j*.)

10. Modify the small hose removed from the factory coolant overflow reservoir. By cutting the "S" bend off the hose end. (See *Fig. 8E-h*.)

Fig. 8E-h

11. Install a 3/8" union and a #17 stepless clamp. Secure the clamp. Using a length of 3/8" (approximately 30" long) hose that is provided, secure the hose to the union with a #17 stepless clamp. (See *Fig. 8E-i.*)

Fig. 8E-i

12. Route the overflow hose across the radiator and under the radiator retaining bracket to the 1/4"NPT x 3/8" hose barb fitting in the coolant reservoir securing with a clamp. (See *Fig. 8E-j*.)

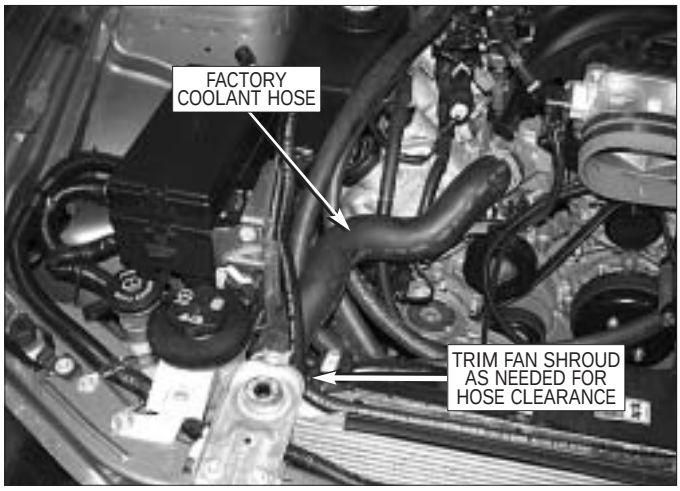

Fig. 8E-j

13. Check to see that all hose connections are secure.

14. Refill the coolant system using the factory coolant (if in good condition). Use the factory radiator cap saved during a previous step.

15. Reinstall the front bumper assembly including the foam inner bumper, all plastic splash panels and light connections in the reverse order removed.

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Section 9
AIR DISCHARGE ASSEMBLY INSTALLATION (Non-cooled Kits Only)

9. AIR DISCHARGE ASSEMBLY (non-cooled kits only)

A. Attach the 4.5" sleeve to the discharge duct with the #72 clamps provided.

B. Install the 3.0" x 2.75" reducer to the inlet of the discharge duct.

C. Install the duct to the inlet of the throttle body and the outlet of the supercharger. (See *Fig. 9-a*.)

Fig. 9-a

D. Assemble the compressor by-pass valve by using a piece of 1" hose cut 15" long and a piece cut to 4.25" long, and four #16 hose clamps.

E. Attach the 4.25" piece of hose to the inlet of the by-pass and secure with a #16 clamp. (See *Fig. 9-b.*)

F. Secure the 15" piece to the by-pass valve outlet using a #16 hose clamp. (See *Fig. 9-b*.)

G. Attach the open end of the 4.25" hose to the 1" boss on the air discharge duct. Secure with a #16 hose clamp. The open end of the 15" long hose will be connected to the air inlet in a future step.

H. Connect the supplied length of 5/32" vacuum to the port on the bypass valve. Route the line to the fuel regulator vacuum hose. Using the supplied vacuum TEE, connect the bypass vacuum line. (See *Figs. 9-b, 9-c on Page 9-2*, for assistance.)

9. AIR DISCHARGE ASSEMBLY (Non-cooled Kits Only)

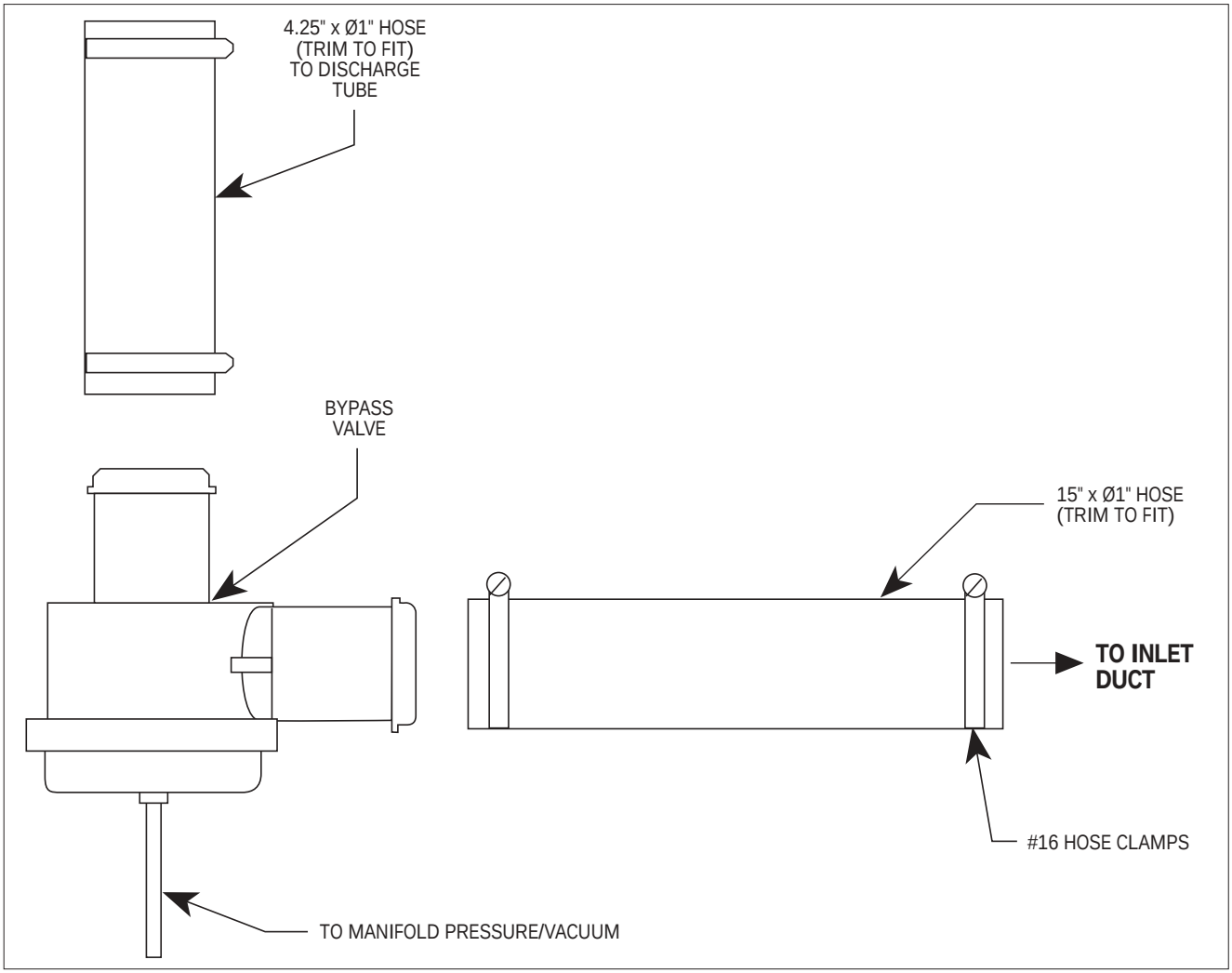

Fig. 9-b

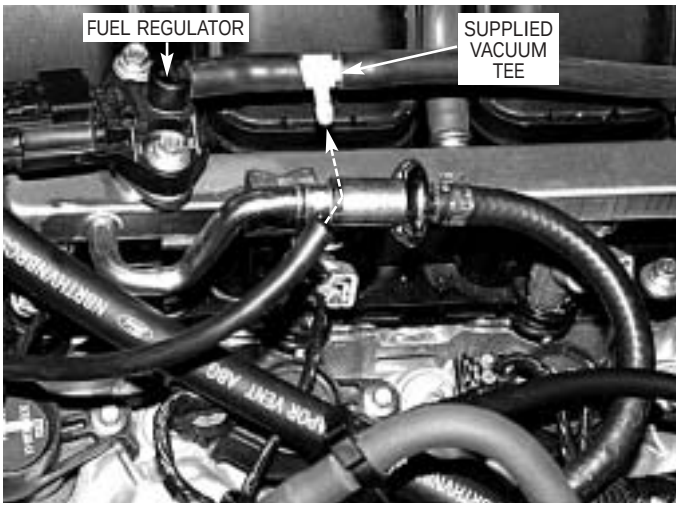

Fig. 9-c

Section 10

COOLANT RESERVOIR RE-INSTALLATION (Non-Cooled Kits Only)

10. COOLANT RESERVOIR RE-INSTALLATION (Non-cooled Kits Only)

A. Reinstall the factory passenger's side upper radiator hose removed in a previous step.

B. Reinstall the factory coolant reservoir using factory hardware to secure.

C. Reattach the large hose at the bottom of the reservoir to the thermostat housing using the factory hose clamp.

D. Reconnect the small overflow hose at the top using the factory clamps.

E. Check all cooling system hose connections to make sure they are secured with the appropriate hose clamps.

F. Refill the cooling system using the previously drained coolant.

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Section 11
CRANK CASE BREATHER AND PCV INSTALLATION

11. CRANK CASE BREATHER AND PCV INSTALLATION

A. Locate PVC/MAF assembly 4FU139-096.

B. Locate the factory 5/8" x 90° hose end connector removed in a previous step. Cut two pieces of the supplied 5/8"ID hose approximately 3" long. Connect one hose to the 90° fitting.

C. Install the supplied PCV valve into the 5/8" hose.

D. Cut a piece of the supplied 3/8"ID hose 5" long and connect to the previously installed PCV valve.

E. Install the supplied 3/8" to 5/8" hose union to the open end of the 3/8" hose. Connect the second 5/8" x 3" hose to the hose union.

F. Install the hose assembly between the driver's side valve cover and the intake manifold. Secure hose connections as necessary using the supplied hose clamps. Use *Figs. 11-a, 11-b* for assistance.

G. Locate the factory 3/8" x 90° fitting removed from the passenger's side valve cover in a previous step.

H. Connect the remainder of the supplied 3/8"ID hose to the 90° fitting and connect to the passenger's side valve cover. (See *Fig. 11-c*.)

I. Route the open end of the 3/8" hose behind the alternator and across to where the air inlet duct will be located.

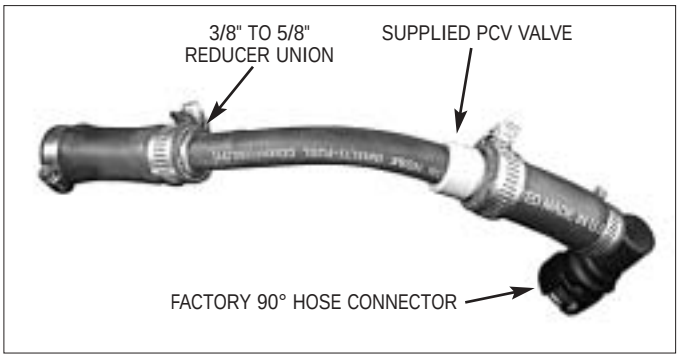

Fig. 11-a

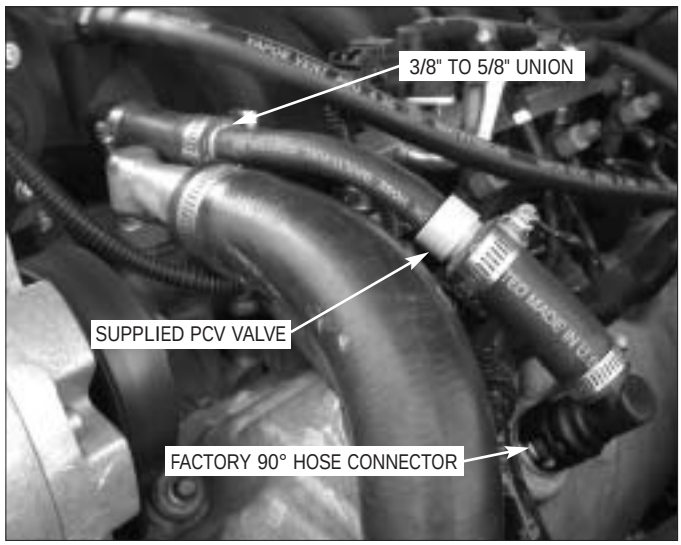

Fig. 11-b

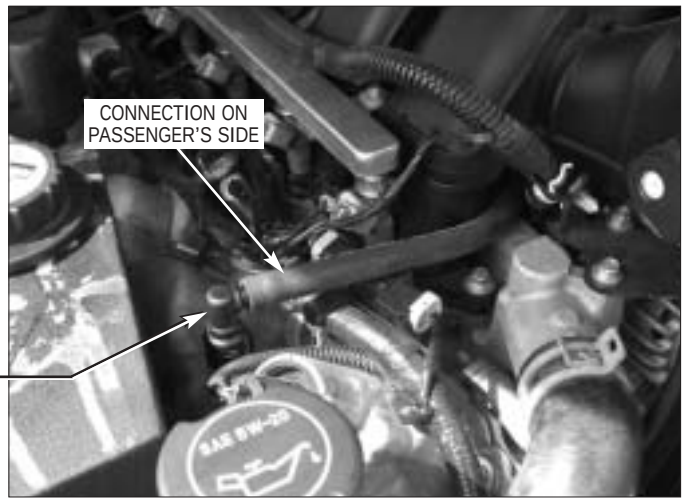

Fig. 11-c

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Section 12
AIR INLET ASSEMBLY

12. AIR INLET ASSEMBLY

A. Locate assembly 4FU112-010.

B. Remove two of the 3/8-16 x 1" bolts securing the supercharger in place. Install the air inlet support bracket and secure with the 3/8" bolts removed from the supercharger mounting plate. (See *Fig. 12-a*.)

Fig. 12-a

C. Install the 3/4"NPT x 1" 90° Plastic fitting to the air inlet duct. (See *Fig. 12-b*.)

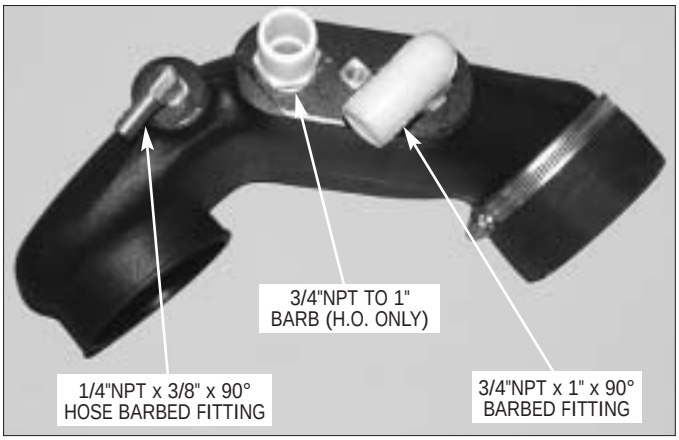

Fig. 12-b

D. Install the 1/4"NPT x 3/8" hose barb fitting in the location noted. (See *Fig. 12-b*.)

Fig. 12-c

E. Attach the 4.0 x 3.5 reducer sleeve (H.O. kits, 4.0" x 2.0" long sleeve) to the inlet duct. Secure the sleeves with the clamps provided. (See *Fig. 12-c*.)

H.O. Kits only *(Non-cooled - skip to Step 12-i.)*

F. Using a 7/8" hole saw, drill the secondary by-pass provision. Be careful not to damage the plastic threads.

G. Apply a small amount of pipe sealant to the supplied 3/4"NPT to 1" straight barb fitting. Install the fitting in the previously drilled hole. (See *Fig. 12-b*.)

H. Attach the open end of the previoulsy installed 1" x 90° hose to the 1" straight barb fitting and secure with a #16 hose clamp provided.

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12. AIR INLET ASSEMBLY, cont'd

I. Attach the 1" bypass outlet hose to the 90° plastic fitting and secure the hose with a # 16 hose clamp.

J. Attach the 3/8" hose previously connected to the passenger's side valve cover, to the 1/4"NPT x 3/8" hose x 90° fitting installed in a previous step.

****** NOTE ******

Trim hoses for best fit.

K. Install the duct to the inlet of the supercharger and secure in place with the clamps provided.

L. Locate and install a 4.0" x 2.0" long sleeve to the inlet of duct 4FU012-010 and 2 # 64 clamps. (See *Fig. 12-e*.)

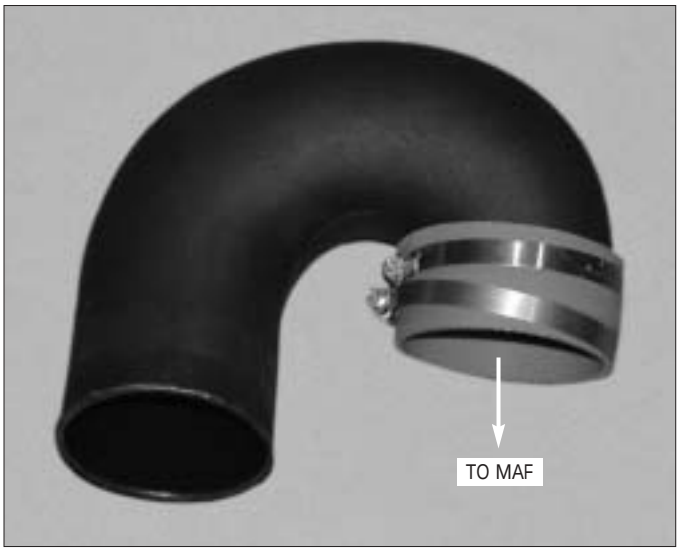

Fig. 12-e

M. Remove the Factory MAF sensor element from the top portion of the air filter housing.

N. Install the element reusing the factory hardware to the supplied MAF tube that is provided. (See *Figs. 12-f, 12-g*.)

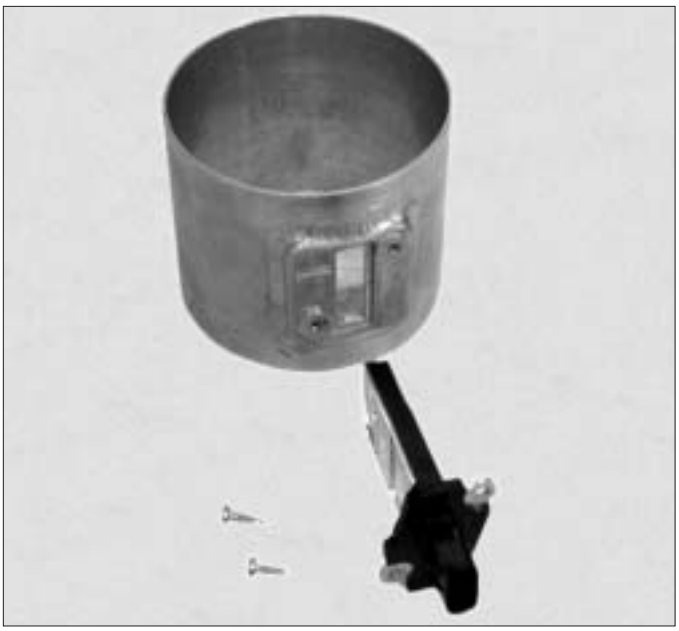

Fig. 12-f

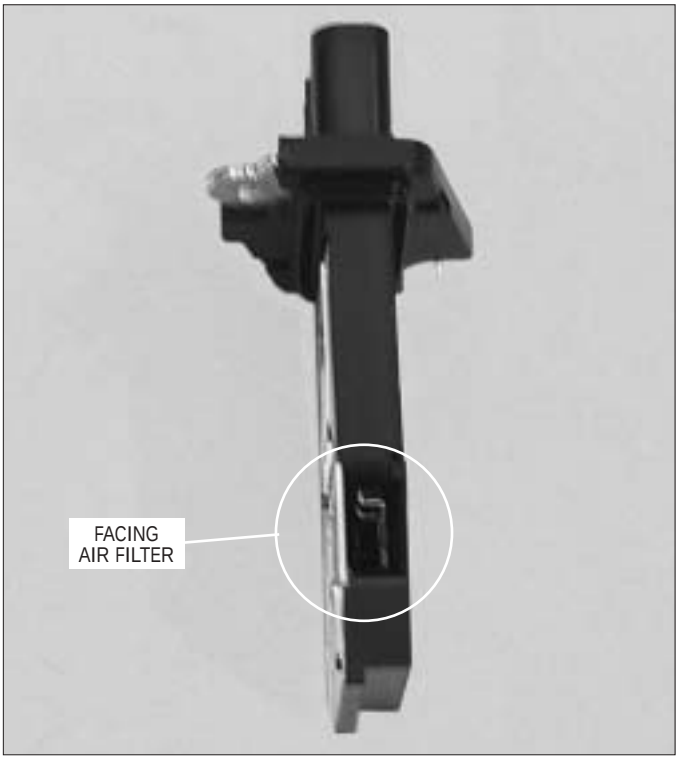

Fig. 12-g

12. AIR INLET ASSEMBLY, cont'd

***** NOTE *****

Install the MAF sensor element so the inlet of the sensor faces the air filter. (See Fig. 10-h.)

L. Install the MAF sensor and air filter to the 180° duct. (See *Fig. 12-h*.)

Fig. 12-h

M. Install the 180° duct and the MAF sensor with filter to the inlet duct leading to the Supercharger. (See *Fig. 12-i*.) Clock the MAF exactly as shown in the *Figure*. MAF, keeping the wires away from hot or moving parts.

N. Secure the rear clamp at the inlet duct union to the previously installed support bracket. (See *Fig. 12-i.*)

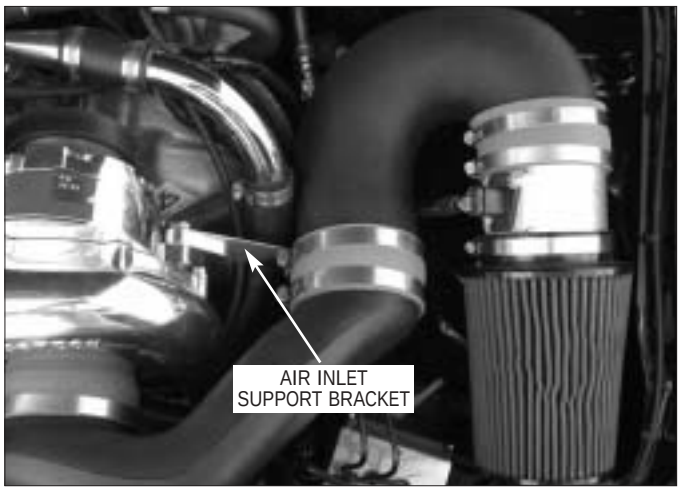

Fig. 12-i

O. MAF (Mass Air Meter) Harness Extension (Non-cooled kits only):

1. Locate the supplied wire and butt connectors in assembly 4FU139-096.

***** NOTE *****

It is strongly recommended that the wires be soldered. Temporary solderless connectors have been provided in case you are unable to solder.

2. Remove the split loom from the factory wires on the MAF (Mass Air Meter) sensor.

3. Cut the wires to the connector approximately 2" from the plug.

4. Using the supplied connectors and wire extend the connector to the MAF.

5. Install the supplied 3/8" split loom to the extended sensor plug. Secure the split loom with wire-ties or tape.

6. Route the lengthened wires and connector to the MAF, keeping the wires away from hot or moving parts.

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12. AIR INLET ASSEMBLY, cont'd

P. MAF Interface Adapter Installation (H.O. kits only)

1. If in the event you have received a MAF Interface Adapter that is not a "plug in" unit, it will be necessary to modify the adapter as outlined in steps 2 & 3 below. Otherwise, plug the MAF interface adapter between the factory MAF and the MAF harness connector and ignore steps 2 & 3 below.

2. Remove the connector that is attached to the MAF Interface Adapter leave approximately 2-3" of wire measured from the plug end.

3. Remove the factory MAF sensor plug from the car leaving an adequate length of wire to be soldered to the wires of the MAF Interface Adapter. (Approximately 2-3".)

4. Install the MAF Interface Adapter to the wires of the factory harness.

5. Install the factory MAF sensor connector to the MAF adapter in place of the original MAF adapter connector.

6. Refer to the diagram provided for wire colors and their locations.

7. Remove the small red cover in the middle of the supplied MAF Interface Adapter box.

8. Verify that the MAF Interface Adapter box is set on number "2".

9. If you find that the MAF Interface Adapter box in not set, use the tool that is provided with the MAF Interface Adapter box and set to number "2".

10. Replace the cover and secure the MAF Interface Adapter box away from hot or moving parts with nylon ties.

****** NOTE ******

It is critical that the MAF Interface Adapter box be set on number "2", The calibration that is provided with this kit has been created to work at this setting. Any change to the MAF Interface Adapter box by setting it to a higher or lower number could cause damage to the engine.

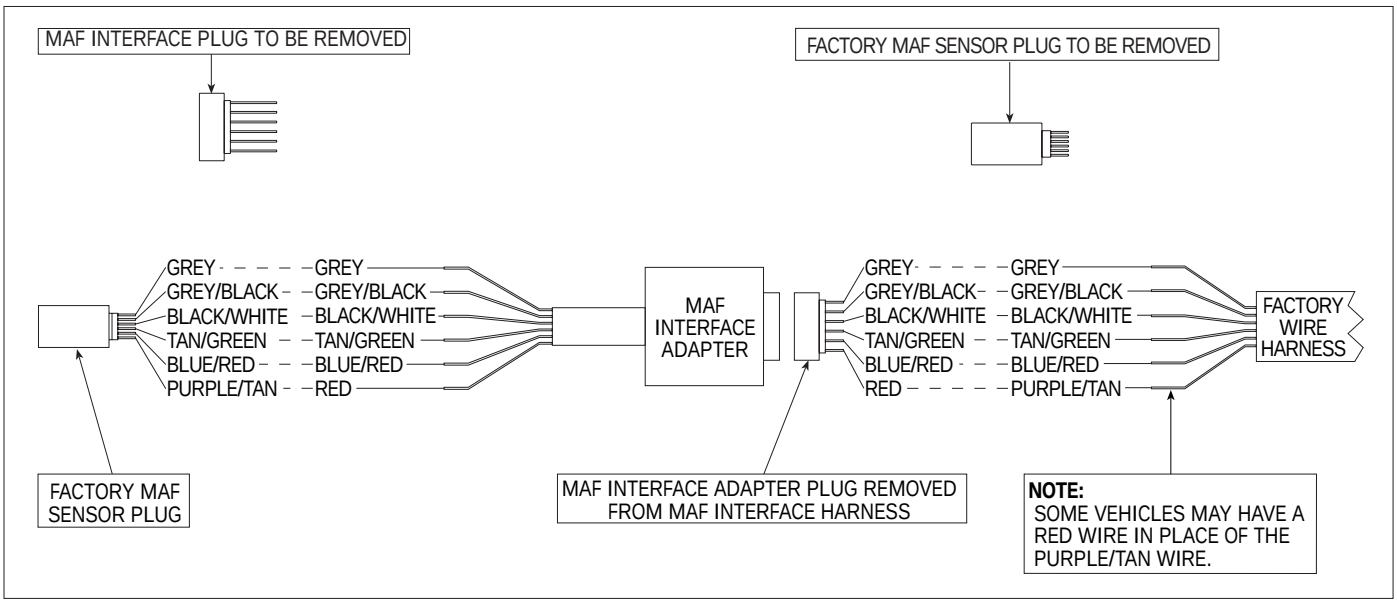

Fig. 12-j

Section 13
FUEL PUMP UPGRADE

13. FUEL PUMP UPGRADE

***** NOTE *****
This section is best performed with the fuel level BELOW half a tank.

A. Remove the rear seat by depressing the two release buttons at the front edge of the seat. (See *Fig. 13-a*.)

Fig. 13-a

B. Remove the round plastic inspection cover on the driver's side. (See *Fig. 13-b*.)

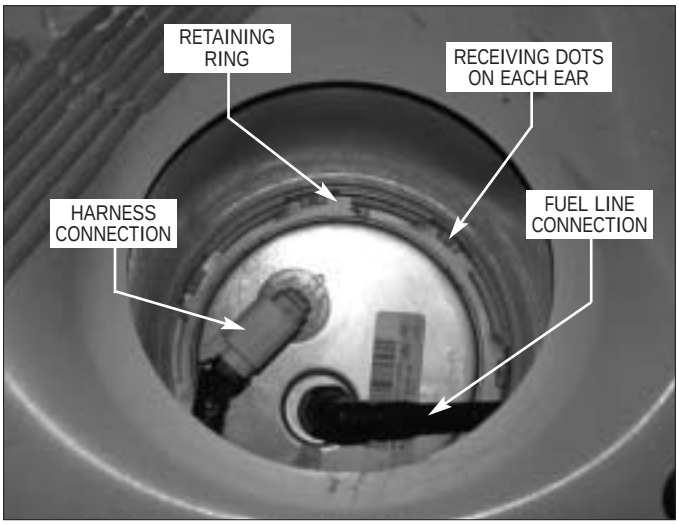

Fig. 13-b

C. Unplug the sending unit harness and disconnect the fuel line connection.

D. Using a small screwdriver or chisel and hammer, tap the retaining ring in a counter clockwise direction. Remove the retaining ring and set aside. (See *Fig. 13-b*.)

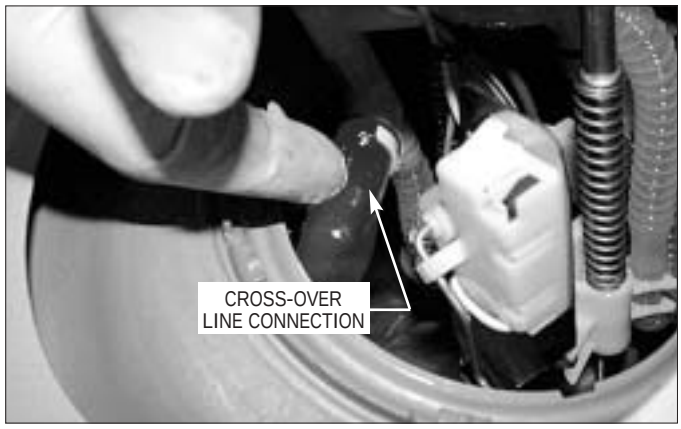

Fig. 13-c

E. Slowly pull the fuel pump assembly up. Locate the cross-over fuel line connection on the fuel pump assembly and disconnect. (See *Fig. 13-c*.)

F. Remove the pump assembly from the tank being careful not to damage or lose the rubber O-ring.

G. Carefully cut the step-less clamps securing the short corrugated fuel line between the fuel pump outlet and distribution rail. Remove the fuel line and discard. (See *Fig. 13-d*.)

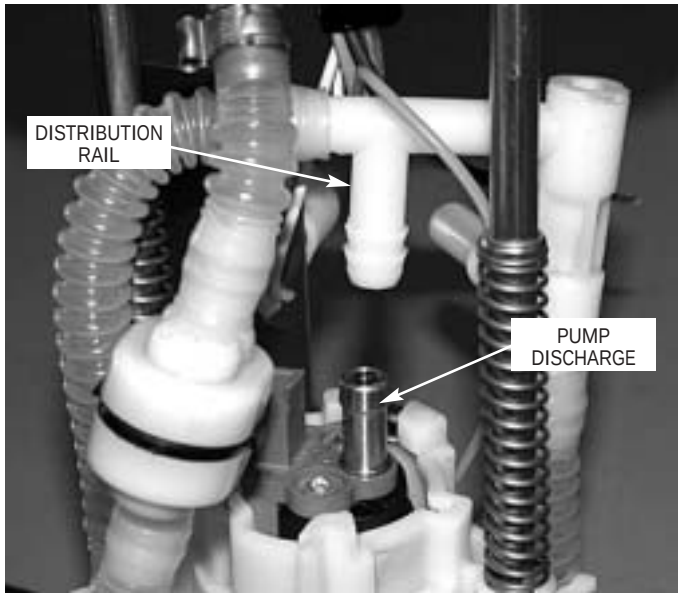

Fig. 13-d

H. Using the supplied 17.0 stepless clamps and 2.75" length of Ø3/8" rubber hose, connect supplied “Y” fitting to the distribution rail. (See *Fig. 13-e.*)

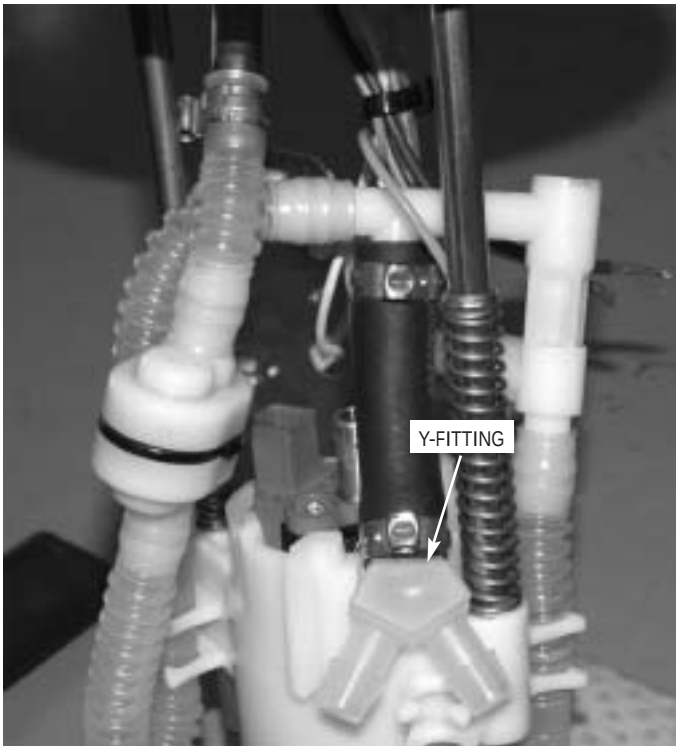

Fig. 13-e

I. Locate the supplied fuel pump and pump inlet screen. Attach the pump inlet screen to the pump and orient exactly as shown. (See *Fig. 13-f.*)

J. Secure the supplied fuel pump to the side of the factory pump assembly using the #44 hose clamp supplied. Verify that the hose clamp is routed inside of the metal posts so that they can be pushed down without restriction. (See *Fig. 13-f.*)

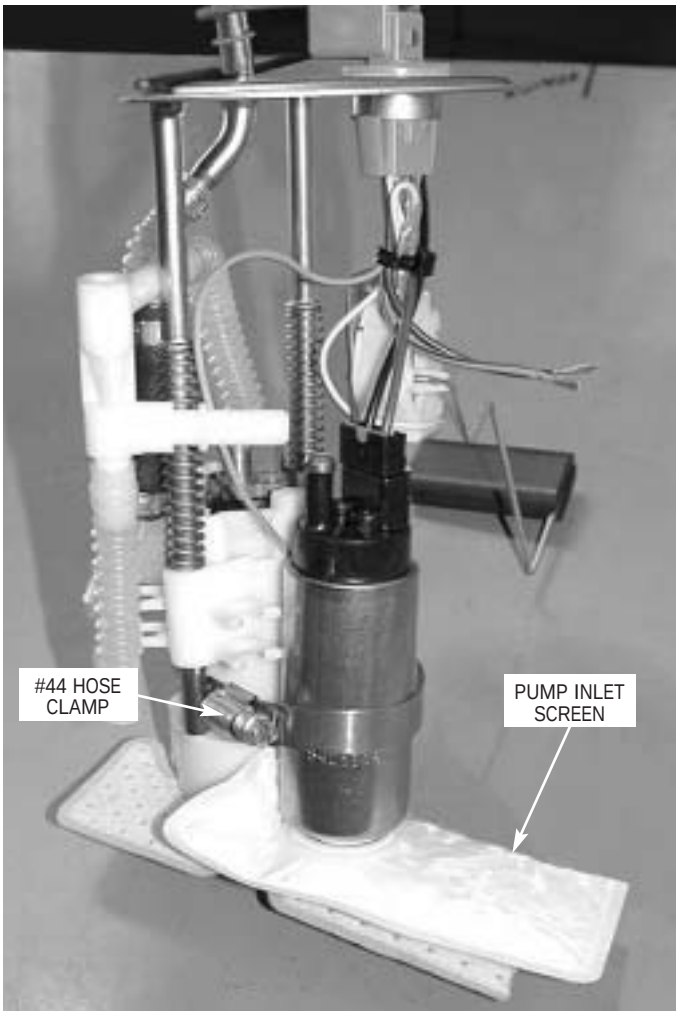

Fig. 13-f

K. Slide the two supplied .75" long teflon sleeves over the discharge of each fuel pump. (See *Fig. 13-g.*)

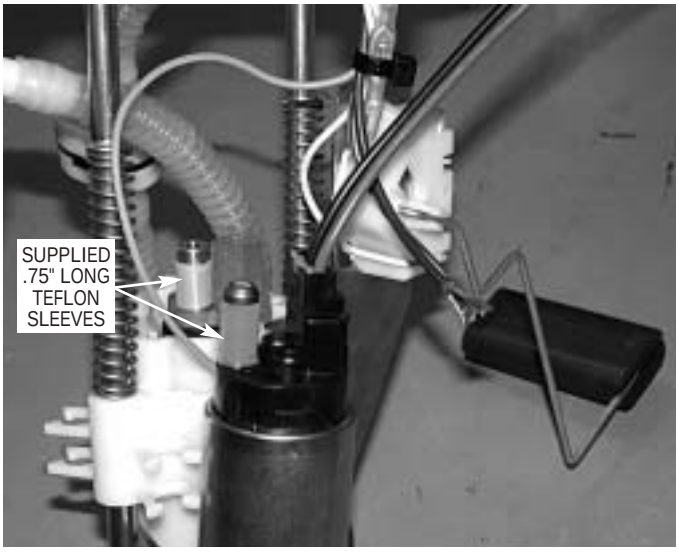

Fig. 13-g

L. Slide the supplied 11.3 stepless clamps onto the two open legs of the Y-fitting. Connect the discharge of both pumps to the previously installed “Y” fitting using the two supplied Ø3/8" corrugated teflon hoses. Secure the remaining hose ends using the supplied 11.3 stepless clamps. (See *Fig. 13-h*.)

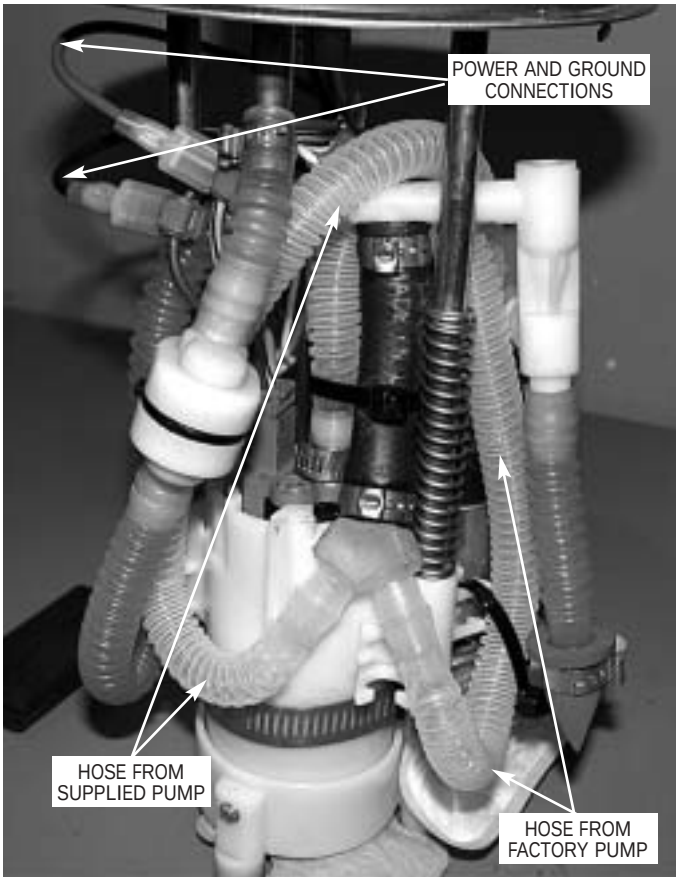

Fig. 13-h

M. Secure all hoses to the fuel pump assembly using the supplied ties. Make sure the lid is able to spring up and down without restriction and that the hoses do not kink. (See *Fig. 13-h*.)

N. Use the supplied T-splice and slide connectors to connect the black and red wires from the supplied pump to the corresponding power and ground on the factory pump. (See *Fig. 13-h*.)

O. Reinstall the fuel pump assembly into the fuel tank in the reverse order of removal. Ensure that the fuel hoses do not rub on the sharp edges of the fuel tank. Take care not to damage the assembly. **INSTALLATION WILL BE TIGHT**. Connect all fuel and electrical connections. Verify that the fuel gauge float is able to move freely. Make sure the O-ring seal is in place and not damaged. There is an alignment arrow on the pump assembly top that will need to be aligned with the dot on the fuel tank. (See *Fig. 13-b*.)

****** NOTE ******

Retaining ring indents must engage their receivers for proper seal. (See Fig. 13-b.)

P. Locate the power distribution box located in the engine compartment on the passenger’s side. Verify the #41 fuse is fuel pump. Replace the factory 15AMP fuse with the supplied 20AMP fuse.

Q. Cycle the ignition key and check for any fuel leaks, verify proper fuel gauge operation.

R. Reinstall the plastic inspection cover and rear seat.

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Section 14
REFLASH COMPUTER

14. REFLASH COMPUTER

IMPORTANT! *To ensure trouble-free programming of your vehicle's computer:*
- *Make sure the vehicle's battery is sufficiently charged.*
- *Turn off all accessories and close doors to prevent unnecessary drain on the battery.*
- *Do not attempt to program your vehicle while a battery charger is connected.*
- *Improper battery voltage will result in failure of the programming process.*
- *Do not disconnect the cable or turn off the ignition during programming.*

A. Reconnect the battery.

B. Locate the vehicles OBD2 connector located in the lower left hand corner of the dash on the drivers side of the vehicle. (See *Fig 14-a*.)

Fig. 14-a

C. Attach the OBD2 connector from the Flash tool that is provided in the kit to the vehicle's OBD2 port. (See *Fig 14-b*.) Make sure this connector is seated all the way in the vehicles OBD2 port. You do not want this connector coming out during programming or damage may occur to the vehicle's ECM.

Fig. 14-b

D. The Reflash tool should power up and display three parameters.
1. Performance Tune
2. Diagnostics
3. Options

E. Select "Performance Tune" and press the enter button in the middle of the arrow keys. (See *Fig 14-c*.)

Fig. 14-c

F. Read the disclaimer entirely, then select agree and press enter.

G. At this point please read the screen displayed on the reflash tool. If you have any questions, either refer to the manual that is provided with the reflash tool or contact our service department for further assistance.

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13. REFLASH COMPUTER, cont'd

H. Turn the ignition on (do not start the vehicle). Set the parking brake and press the ENTER button to continue.

I. SELECT TUNE will be displayed at the top of the screen. Use the arrow keys to select the appropriate tune for your vehicle and press the ENTER button. You will have a choice of four to choose from:

1. STD OUTPUT (non charge-cooled)

2. Charge-cooled, air/water - *(this option is NOT used in this application.)*

3. Charge-cooled, air/air

4. Original Backup

J. Continue to follow the screen and when finished unplug the reflash tool from the vehicles OBD2 port.

**** NOTE ****

Do not disturb the cable, or turn the ignition off during this time. If the programming is disrupted, the computer will not start or run your vehicle!

Section 15
FINAL CHECK

15. FINAL CHECK

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

A. If your vehicle has gone over 15,000 miles since its last spark plug change, you will need to change the spark plugs now before test driving the vehicle.

B. 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.

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

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

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

F. **PLEASE TAKE SPECIAL NOTE:** Operating the vehicle without ALL the sub-assemblies completely and properly installed may cause **FAILURE OF MAJOR COMPONENTS.**

G. Test drive the vehicle.

H. Always listen carefully for engine detonation. Discontinue heavy throttle usage if detonation is heard.

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.

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