



PAXTON
SUPERCHARGERS



Owner's Installation Guide for the
Paxton Automotive
Novi 1200 Supercharger
for the
Dodge Hemi

Paxton Automotive . 1300 Beacon Place . Oxnard CA 93033
(805 604-1336 . FAX (805) 604-1337

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.

© 2005 PAXTON AUTOMOTIVE

All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, or translated into another language in any form, by any means without written permission of Paxton Automotive.

TABLE OF CONTENTS

FOREWORD	<i>ii</i>
TABLE OF CONTENTS	<i>iii</i>
RECOMMENDED TOOLS FOR INSTALLATION	<i>iv</i>
PARTS LIST	<i>v</i>
1. COMPONENT REMOVAL	1-1
2. OIL FEED ASSEMBLY	2-1
3. OIL DRAIN ASSEMBLY	3-1
4. HEATER HOSE RELOCATION	4-1
5. COOLANT RESERVOIR RELOCATION	5-1
6. SUPERCHARGER MOUNTING BRACKET	6-1
7. AIR INTAKE ASSEMBLY	7-1
8. FUEL SYSTEM ASSEMBLY	8-1
9. ENGINE CONTROL UNIT INSTALLATION	9-1
10. CHARGE COOLER INSTALLATION	10-1
11. HEAT EXCHANGER INSTALLATION	11-1
12. SURGE AND RESERVOIR TANK INSTALLATION	12-1
13. WATER HOSE ROUTING	13-1
14. WATER PUMP WIRING	14-1
15. FINAL ASSEMBLY AND CHECK	15-1

2002 Dodge Hemi

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 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 at least every 15,000 miles and spark plug wires at least every 50,000 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. Open End Wrenches: Metric and Standard
7. Center Punch and a 5/8" Tapered Punch
8. Springlock 3/8" and 5/8" Fuel Fitting Disconnect Tool
9. 5 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
16. 1/8", 3/16", 27/64" Drill Bits
17. Wire Strippers and Crimpers
18. Utility Knife
19. Power Steering Pulley/Puller & Installer
20. Pliers

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

21. Spark Plug Socket
22. NEW Spark Plugs



2003 Dodge Hemi

Part No. 1201220

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	PART NO.	DESCRIPTION	QTY
4PCH110-044	S/C MNTG BRKT ASSY '03 HEMI	1	4PCH101-001	FUEL PUMP ASSY '03 HEMI	
4PCH 010-044	SUPERCHARGER MTG PLT	1	7U031-018	5/16" EFI FUEL HOSE	24"
4PCH010-010	SUPPORT S/C MOUNTING PLT	1	7U031-018	5/16" EFI FUEL HOSE	9"
4PCH010-020	SUPPORT S/C MTG PLT	1	7U031-018	5/16" EFI FUEL HOSE	1.8"
4PCH010-030	ALTERNATOR BRACE	1	7U031-018	5/16" EFI FUEL HOSE	1.8"
4PCH017-011	COLLAR, IDLER PULLEY	1	7U031-018	5/16" EFI FUEL HOSE	6.5"
7A312-125	5/16" x 18 x 1.25" HXHD GR5 BOLT	2	7U033-010	FUEL/PWR STEERING HOSE 5/8"	2.0"
7K312-001	WASHER AN	6	7P312-017	FUEL PUMP FITTING	1
7A312-100	5/16" x 18 x 1.00" HXHD GR5 BOLT	4	7P312-020	FUEL LINE FITTING 90°	1
7C080-120	8mm x 120mm x 1.25"	1	7P312-016	5/16" x 5/16" FORD FITTING	1
7C010-130	10mm x 130 x 1.5" BOLT	1	8F001-500	FUEL PUMP PURBURG	1
7J010-002	10mm WASHER	1	7R003-028	ADEL CLAMP 2-3/8" .26" HOLE	2
7J012-092	12mm WASHER	2	7P312-082	TEE HOSE BARB	2
7C012-100	12mm x 1.00" x 1.75" BOLT	1	7R004-003	14.5 STEPLESS CLAMP	14
7G010-175	12mm x 1.75" NUT	1	7E010-075	SHEET METAL SCREW	2
4FR016-150	SMOOTH IDLER PULLEY	1	7A250-101	1/4" x 20 x 1.0" BOLT	2
7A437-325	7/16" x 3.25" x 14 BOLT	1	7F250-021	NYLOC NUT	2
7K437-001	WASHER AN	2	7J006-094	6mm SS WASHER	4
7J438-072	7/16" WASHER .94"OD x .109" THICK	1"	7F010-024	NYLOC NUT	2
7F437-000	7/16" x 14 NYLOC NUT	1	7C010-075	BOLT	2
4PCH130-026	OIL FEED ASSY '03 HEMI		7J010-001	# 10 WASHER	4
7P125-108	1/8"NPT NIPPLE 1"	1	4PCH010-070	FUEL PUMP/FMU MTG BRKT	1
7P125-104	1/8"NPT FEMALE TEE	1	4PCH238-068	FMU ASSY '03 HEMI	
7P125-004	1/8"NPT TO -4 x 90° JIC FITTING	1	6PZ001-001	DECAL PAXTON FMU	1
7U250-090-240	OIL FEED HOSE -4 x 26" LONG	1	6Z010-101	FMU HOUSING (BLUE ANODIZED)	1
7P125-005	1/4" x -4 JIC FITTING	1	6Z010-111	FMU VALVE COVER	1
4PCH130-036	OIL DRAIN ASSY '03 HEMI		6Z010-132	COVER FMU w/SPRING NO LZR,	
7P375-053	3/8"NPT x -8 FTG	1	6Z020-130	SML DIAPHRAM	1
7P500-500	- 8 x 90° ALUM FITTING	1	6Z020-140	LRG DIAPHRAM	1
7U030-036	1/2" OIL DRAIN HOSE	48"	6Z030-150	BRACKET FMU	1
7R004-002	STEPLESS CLAMP 17.0-70	2	6Z040-160	PISTON, FMU	1
7R001-006	#6 STNL HOSE CLAMP, NARROW	2	6Z050-161	FMU WASHER, 6:1/30LB PLATED	1
7R004-687	CLAMP, 13/16" ONE EAR	2	6Z060-181	SHIM, FMU	1
7P375-055	3/8"NPT x 1/2" HOSE BARB	1	6Z070-010	FMU RING SPCR 6:1	1
4PCH112-020	DISCHARGE ASSY '03 HEMI		6Z080-011	RETAINER,FMU SPRING 4.3 GM	2
4PCH012-020	DISCHARGE DUCT, '03 DODGE HEMI	1	6Z090-010	SPRING FMU	1
7P156-082	5/32" TEE	2	7C010-050	10-24 x .50" SHCS GR8 PLT	6
7PS350-275	SLEEVE REDUCER 3.5"-2.75"	1	7C010-075	10-24 x 3/4" SHCS GR5 ZINC	4
7R002-016	#16 HOSE CLAMP	5	7C024-025	10-24 x 1/4" PHIL HEAD	3
7R002-056	#56 HOSE CLAMPS	1	7P125-025	1/8"NPT x 5/32" HOSE 90°	1
7U030-046	5/32" VAC HOSE	3'	7P125-031	1/8"NPT x 90° 5/16" HOSE BARB	1
7U034-016	1" GS HOSE	2'	7P125-032	1/8"NPT x 5/16" STR HOSE BARB	1
8D001-001	STANDARD COMPRESSOR BYPASS	1	7U030-218	7/32" VAC HOSE	12"
7P100-103	1" WELD ON BUNG	1	7P157-219	5/32" x 7/32" UNION	1
7PS275-200	SLEEVE 2.75" x 2"	2	7P156-082	5/32" TEE	1
7R002-044	#44 HOSE CLAMP	4	7U030-046	5/32" VACUUM HOSE	10'
4PCH212-010	AIR INTAKE ASSY		7U100-030	O-RING, FMU	1
4PCH013-010	AIR BOX, WELDED, ROTO	1	8PN101-180	POWER CHARGE COOLER ASSY '03 HEMI	
4HS110-010	FLANGE ASSY, AIR BOX	1	8N003-070	COOLER DUCT,LT1,GROUND	
8H040-050	AIR FILTER 3.5" FLG x 7"L	1	8N101-001	WELDED CORE, ASSY W/ENDS ONLY	
7R002-056	# 56 HOSE CLAMPS	4	8N003-011	INLET DUCT, MACH	
7R002-060	#60 HOSE CLAMP	2	8PN105-010	WATER TANK MTG ASSY '03 HEMI	
8H040-050	FILTER 3.50" x 7.0" LONG	1	8N055-030	RESERVOIR	1
7U035-001	FLEX HOSE 3.5" x 12"	1'	4PCH010-110	BRKT RESERVOIR	1
4PCH112-010	INLET DUCT, ASSY	1	7A250-050	1/4-20 SHD 1/2" LONG	3
7P100-103	BUNG WELD ON,		7A250-074	1/4-20 HHD, 3/4" LONG PLTD	3
7P500-112	BUNG WELD ON, 1/2"NPT	1	7J006-093	1/4" WASHER	8
7P100-578	AIR TEMP SENSOR BUNG	1	7U038-000	3/4" HEATER HOSE CUT TO FIT	14"
7PS275-200	SLEEVE, 2.75" x 2.00"	2	7U038-012	3/4" 90° HOSE 4" x 12"	5
7PS350-200	SLEEVE,3.5" x 2.00"	1	7U030-065	3/4" HOSE (TANK-PUMP)	1
7P500-026	1/2"NPT x 3/4" HOSE BARB	1	7R007-001	NYLON CLAMP 1-1/8"	16
7U038-012	3/4" x 90° HOSE 4" x 12" LONG	2	7P500-026	1/2" TO 3/4" 90° HOSE BARB	2
7P375-075	3/4" HOSE MENDER	1	7U038-150	3/4" x 150° HOSE	2
7A250-126	1/4" x 20 x 1" HXHD BOLT	4	7P375-075	3/4" HOSE MENDER	1
7F250-021	1/4" NYLOC	4	7F250-021	1/4" NYLOCK NUTS	3
7K250-001	1/4"AN WASHERS	8	7J250-150	1/4" FENDER WASHERS	3



2003 Dodge Hemi

Part No. 1201220-P

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
8PN104-010	ASSY SURGE TANK '03 HEMI	
8N056-060	SURGE TANK	1
7E010-075	#12 SHEET METAL SCREWS	2
7P500-078	1/2" x 3/4" STR HOSE BARB	2
8N055-050	PLASTIC CAP, SURGE TANK	1
7J006-093	6mm WASHER, PLATED	4
7C060-016	M6 x 1.00" x 16 HXHD	2
7U100-055	6" TIE-WRAP	10
7P500-078	1/2" x 3/4" STR HOSE BARB	3
7P500-026	1/2" x 3/4" 90° HOSE BARB	1
7U100-044	4" TIE-WRAP	5
7A250-050	1/4-20 SHCS 1/2" LONG	2
8N010-130	MTG TAB	1
8PN107-010	WATER PUMP MTG ASSY, '03 HEMI	
8F001-402	PUMP, HELLA WATER	1
7R003-027	ADEL CLAMP	1
5W001-009	16-14GA MALE SLIDE INSULATED	2
5W001-010	16-14GA FEMALE INSULATED	2
5W001-019	10-12GA BUTT CON INSUL	1
5W001-042	12-10GA x 3/16" RING TERMINAL	1
5W001-017	3/8" RING TERMINAL 12GA	1
5W001-030	14GA STRD WIRE BLACK	3'
5W001-014	FUSE HOLDER 10GA WIRE	1
5W001-011	16-14GA EYELET .25" HOLE	2
5W001-015	FUSE, BLADE TYPE 20AMP	1
5W001-009	16-14GA MALE SLIDE INSULATED	1
7A250-050	1/4-20 x .50" SHCS ZINC PLTD	1
7J006-093	6mm WASHER, PLTD	1
5W001-022	T-TAP CONN 14-16AWG	1
8F101-510	H2O PUMP WIRING ASSY	1
8PN106-010	WATER CLR MTG ASSY, '03 HEMI	
8N006-010	WATER COOLER	1
7P500-026	1/2"NPT TO 3/4" HOSE BARB 90°	2
7A250-074	1/4-20 HHD 3/4" LONG	8
7F250-021	1/4-20 NYLOCK NUT	8
7J250-001	1/4" FLAT WASHER	16
1016419	SUPERCHARGER ASSY	
2A047-119	ACCESSORY DRIVE BELT	
4PCH114-018	COOLANT RESV ASSY	
7R002-016	# 16 HOSE CLAMPS	3
2A017-876-01	.875" x .328" x .952" LONG SPACERS	3
7C060-050	6mm x 1.0" x 50mm LONG BOLTS	3
7J006-093	6mm LARGE OD FLAT WASHERS	3
4PCH014-010	FORMED COOLANT TUBE	1
7U038-012	3/4" x 90° HOSE 4" x 12"	1
7P375-045	45° STREET ELBOW	2
7R002-012	#12 HOSE CLAMP	2
7U133-065	"J" SHAPED HOSE	
7P500-001	1/2" HOSE UNION	1
5A001-110	ENGINE CONTROL UNIT	
5A001-111	PROGRAMMED ENGINE CONTROL UNIT	



2003 Dodge Hemi

Part No. 1201220-P

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	PART NO.	DESCRIPTION	QTY
4PCH110-044	S/C MNTG BRKT ASSY '03 HEMI	1	4PCH101-001	FUEL PUMP ASSY '03 HEMI	
4PCH010-044	SUPERCHARGER MTG PLT	1	7U031-018	5/16" EFI Fuel hose	24"
4PCH010-010	SUPPORT S/C MOUNTING PLT	1	7U031-018	5/16" EFI Fuel hose	9"
4PCH010-020	SUPPORT S/C MTG PLT	1	7U031-018	5/16" EFI Fuel hose	1.8"
4PCH010-030	ALTERNATOR BRACE	1	7U031-018	5/16" EFI Fuel hose	1.8"
4PCH017-011	COLLAR, IDLER PULLEY	1	7U031-018	5/16" EFI Fuel hose	6.5"
7A312-125	5/16" x 18 x 1.25" HXHD GR5 BOLT	2	7U033-010	FUEL/PWR STEERING HOSE 5/8"	2.0"
7K312-001	WASHER AN	6	7P312-017	FUEL PUMP FITTING	1
7A312-100	5/16" x 18 x 1.00" HXHD GR5 BOLT	4	7P312-020	FUEL LINE FITTING 90°	1
7C080-120	8mm x 120mm x 1.25"	1	7P312-016	5/16" x 5/16" FORD FITTING	1
7C010-130	10mm x 130mm x 1.5" BOLT	1	8F001-500	FUEL PUMP PURBURG	1
7J010-002	10mm WASHER	1	7R003-028	ADEL CLAMP 2-3/8", .26" HOLE	2
7J012-092	12mm WASHER	2	7P312-082	TEE, HOSE BARB	2
7C012-100	12mm x 100 x 1.75" BOLT	1	7R004-003	14.5 STEPLESS CLAMP	14
7G010-175	12mm x 1.75" NUT	1	7E010-075	SHEET METAL SCREW	2
4FR016-150	SMOOTH IDLER PULLEY	1	7A250-101	1/4" x 20 x 1.0" BOLT	2
7A437-325	7/16" x 3.25" x 14 BOLT	1	7F250-021	NYLOC NUT	2
7K437-001	WASHER AN	2	7J006-094	6mm SS WASHER	4
7J438-072	7/16" WASHER .94"OD x .109" THICK	1	7F010-024	NYLOC NUT	2
7F437-000	7/16" x 14 NYLOC NUT	1	7C010-075	BOLT	2
4PCH130-026	OIL FEED ASSY '03 HEMI		7J010-001	#10 WASHER	4
7P125-108	1/8"NPT NIPPLE 1"	1	4PCH010-070	FUEL PUMP/ FMU MTG BRKT	1
7P125-104	1/8"NPT FEMALE TEE	1			
7P125-004	1/8"NPT TO -4 x 90° JIC FITTING	1	4PCH238-068	FMU ASSY '03 HEMI	
7U250-090-240	OIL FEED HOSE -4 x 26" LONG	1	6P2001-001	DECAL PAXTON FMU	1
7P125-005	1/4" x -4 JIC FITTING	1	6Z010-101	FMU HOUSING (BLUE ANODIZED)	1
4PCH130-036	OIL DRAIN ASSY '03 HEMI		6Z010-111	FMU VALVE COVER	1
7P375-053	3/8"NPT x -8 FTG	1	6Z010-132	COVER FMU w/SPRING NO LZR,	1
7P500-500	-8 x 90° ALUM FITTING	1	6Z020-130	SML DIAPHRAM	1
7U030-036	1/2" OIL DRAIN HOSE	48"	6Z020-140	LRG DIAPHRAM	1
7R004-002	STEPLESS CLAMP 17.0-70	2	6Z030-150	BRACKET FMU	1
7R001-006	#6 STNL HOSE CLAMP, NARROW	2	6Z040-160	PISTON, FMU	1
7R004-687	CLAMP, 13/16" ONE EAR	2	6Z050-161	FMU WASHER,6:1/30LB PLATED	1
7P375-055	3/8"NPT x 1/2" HOSE BARB	1	6Z060-181	SHIM, FMU	1
4PCH112-028	DISCHARGE ASSY '03 HEMI		6Z070-010	FMU RING SPACER 6:1	1
4PCH012-020	DISCHARGE DUCT, '03 DODGE HEMI	1	6Z080-011	RETAINER,FMU SPRING 4.3 GM	2
7P156-082	5/32" TEE	2	6Z090-010	SPRING FMU	1
7PS350-275	SLEEVE REDUCER 3.5" - 2.75"	1	7C010-050	10-24 x .50" SHCS GR8 PLT	6
7R002-016	#16 HOSE CLAMP	5	7C010-075	10-24 x 3/4" SHCS GR5 ZINC	4
7R002-056	#56 HOSE CLAMPS	1	7C024-025	10-24 x 1/4" PHIL HEAD	3
7U030-046	5/32" VAC HOSE	3'	7P125-025	1/8"NPT x 5/32" HOSE 90°	1
7U034-016	1" GS HOSE	2'	7P125-031	1/8"NPT x 90° 5/16" HOSE BARB	1
8D001-001	STANDARD COMPRESSOR BYPASS	1	7P125-032	1/8"NPT x 5/16" STR HOSE BARB	1
7P100-103	1" WELD ON BUNG	1	7U030-218	7/32" VAC HOSE	12"
7PS275-200	SLEEVE 2.75" x 2"	2	7P157-219	5/32" x 7/32" UNION	1
7R002-044	#44 HOSE CLAMP	4	7P156-082	5/32" TEE	1
4PCH212-010	AIR INTAKE ASSY		7U030-046	5/32" VAC HOSE	10'
4PCH013-010	AIR BOX, WELDED, ROTO	1	7U100-030	O-RING, FMU	1
4HS110-010	FLANGE ASSY, AIR BOX	1	8PN101-188	POWER CHARGE COOLER ASSY '03 HEMI	
8H040-050	AIR FILTER 3.5" FLG x 7L	1	8N003-078	COOLER DUCT,LT1,GROUND	
7R002-056	# 56 HOSE CLAMPS	4	8N101-001	WELDED CORE, ASSY W/ENDS ONLY	
7R002-060	#60 HOSE CLAMP	2	8N003-018	INLET DUCT, MACH	
8H040-050	FILTER 3.50" x 7.0" LONG	1	8PN105-010	WATER TANK MTG ASSY '03 HEMI	
7U035-001	FLEX HOSE 3.5" x 12"	1'	8N055-030	RESERVOIR	1
4PCH112-010	INLET DUCT, ASSY	1	4PCH010-110	BRKT RESERVOIR	1
7P100-103	BUNG WELD ON,	1	7A250-050	1/4-20 SHD 1/2" LONG	3
7P500-112	BUNG WELD ON, 1/2"NPT	1	7A250-074	1/4-20 HHD,3/4" LONG PLTD	3
7P100-578	AIR TEMP SENSOR BUNG	1	7J006-093	1/4" WASHER	8
7PS275-200	SLEEVE, 2.75" x 2.00"	2	7U038-000	3/4" HEATER HOSE CUT TO FIT	14"
7PS350-200	SLEEVE,3.5" x 2.00"	1	7U038-012	3/4" 90° HOSE 4" x 12"	5
7P500-026	1/2"NPT x 3/4" HOSE BARB	1	7U030-065	3/4" HOSE (TANK-PUMP)	1
7U038-012	3/4" x 90° HOSE 4" x 12" LONG	2	7R007-001	NYLON CLAMP 1-1/8"	16
7P375-075	3/4" HOSE MENDER	1	7P500-026	1/2" TO 3/4" 90° HOSE BARB	2
7A250-126	1/4" x 20 x 1" HXHD BOLT	4	7U038-150	3/4" x 150° HOSE	2
7F250-021	1/4" NYLOC	4	7P375-075	3/4" HOSE MENDER	1
7K250-001	1/4"AN WASHERS	8	7F250-021	1/4" NYLOCK NUTS	3
			7J250-150	1/4" FENDER WASHERS	3



2003 Dodge Hemi

Part No. 1201220

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	PART NO.	DESCRIPTION	QTY
8PN104-010	ASSY SURGE TANK '03 HEMI				
8N056-060	SURGE TANK	1			
7E010-075	#12 SHEET METAL SCREWS	2			
7P500-078	1/2" x 3/4" STR HOSE BARB	2			
8N055-050	PLASTIC CAP, SURGE TANK	1			
7J006-093	6mm WASHER, PLATED	4			
7C060-016	M6 x 1.00" x 16 HXHD	2			
7U100-055	6" TIE-WRAP	10			
7P500-078	1/2" x 3/4" STR HOSE BARB	3			
7P500-026	1/2" x 3/4" 90° HOSE BARB	1			
7U100-044	4" TIE-WRAP	5			
7A250-050	1/4-20 SHCS 1/2" LONG	2			
8N010-130	MTG TAB	1			
8PN107-010	WATER PUMP MTG ASSY, '03 HEMI				
8F001-402	PUMP, HELLA WATER	1			
7R003-027	ADEL CLAMP	1			
5W001-009	16-14GA MALE SLIDE INSULATED	2			
5W001-010	16-14GA FEMALE INSULATED	2			
5W001-019	10-12GA BUTT CON INSUL	1			
5W001-042	12-10GA x 3/16" RING TERMINAL	1			
5W001-017	3/8" RING TERMINAL 12GA	1			
5W001-030	14GA STRD WIRE BLACK	3'			
5W001-014	FUSE HOLDER 10GA WIRE	1			
5W001-011	16-14GA EYELET .25" HOLE	2			
5W001-015	FUSE, BLADE TYPE 20AMP	1			
5W001-009	16-14GA MALE SLIDE INSULATED	1			
7A250-050	1/4-20 x .50" SHCS ZINC PLTD	1			
7J006-093	6mm WASHER, PLTD	1			
5W001-022	T-TAP CONN 14-16AWG	1			
8F101-510	H2O PUMP WIRING ASSY	1			
8PN106-010	WATER CLR MTG ASSY, '03 HEMI				
8N006-010	WATER COOLER	1			
7P500-026	1/2"NPT TO 3/4" HOSE BARB 90°	2			
7A250-074	1/4-20 HHD 3/4" LONG	8			
7F250-021	1/4-20 NYLOCK NUT	8			
7J250-001	1/4" FLAT WASHER	16			
1016419-P	SUPERCHARGER ASSY				
2A047-119	ACCESSORY DRIVE BELT				
4PCH114-018	COOLANT RESV ASSY				
7R002-016	# 16 HOSE CLAMPS	3			
2A017-876-01	.875" x .328" x .952" LONG SPACERS	3			
7C060-050	6mm x 1.0" x 50mm LONG BOLTS	3			
7J006-093	6mm LARGE OD FLAT WASHERS	3			
4PCH014-010	FORMED COOLANT TUBE	1			
7U038-012	3/4" 90° HOSE 4" x 12"	1			
7P375-045	45° STREET ELBOW	2			
7R002-012	#12 HOSE CLAMP	2			
7U133-065	"J" SHAPED HOSE				
7P500-001	1/2" HOSE UNION	1			
5A001-110	ENGINE CONTROL UNIT				
5A001-111	PROGRAMMED ENGINE CONTROL UNIT				

Section 1

COMPONENT REMOVAL

1. COMPONENT REMOVAL

- A.** Using a suitable container drain the engine coolant. On the driver's side of the vehicle at the lower corner of the radiator locate the drain petcock using a 16mm open-end wrench rotate the petcock and drain the coolant.
- B.** Locate the coolant over flow reservoir located on the top of the radiator, loosen the hose clamp securing the large 1" coolant hose and remove the hose from the reservoir. Disconnect the smaller coolant hose from the over flow reservoir that connects to the radiator. (See *Figs. 1-a, 1-b.*)



Fig. 1-a

- C.** Remove the three 10mm headed screws that retain the reservoir to the top of the radiator fan shroud and set the reservoir aside to be reinstalled at a later stage of the installation. (See *Fig. 1-b.*)

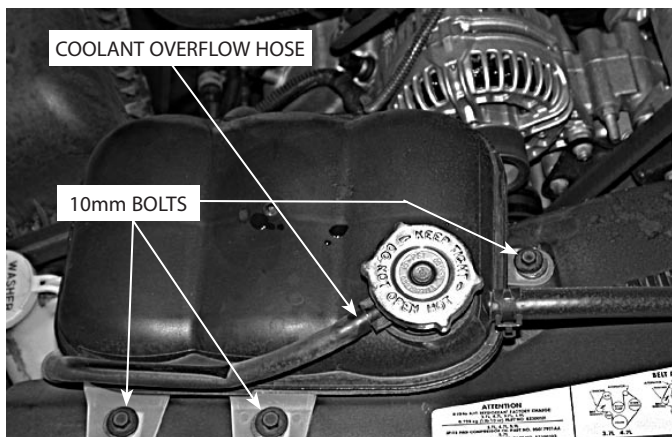


Fig. 1-b

- D.** Using a pair of needle nose pliers or a spring hose clamp tool remove the spring clamps that retain the two heater hoses that are located on the passenger side of the front cover. Remove the hoses.

*** NOTE ***

Set the hoses aside in the engine compartment to be modified in a later step of the installation)

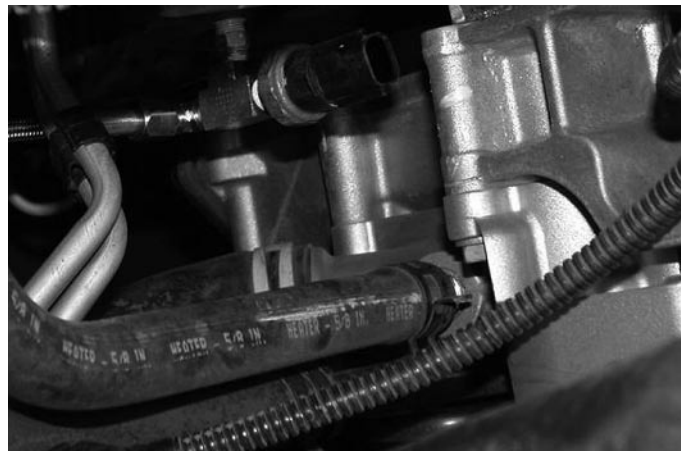


Fig. 1-c

- E.** Using a 19mm deep socket or wrench remove the heater hose barbed fitting at the front cover. Set the fitting aside to be installed in a later step of the installation.
- F.** Locate the hose clamp securing the factory air ducting attached to the large plastic throttle body enclosure to the air filter cover. Using a 8mm socket or flat blade screwdriver loosen the clamp and remove the duct from the plastic throttle body enclosure. (See *Fig. 1-d.*)

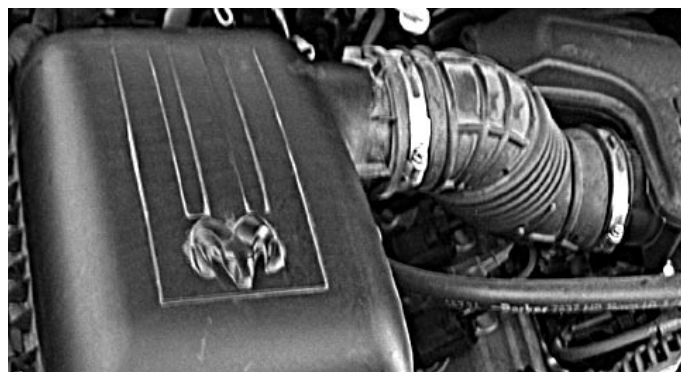


Fig. 1-d

- G.** Unclip the 4 clips that retain the top portion of the factory air filter housing and set the housing and rubber duct aside it will not be reused.
- H.** Remove the air filter and lift up on the lower portion of the factory air filter housing and remove it from the air filter support bracket set the lower portion of the housing aside it will not be reused. (See Fig. 1-e.)

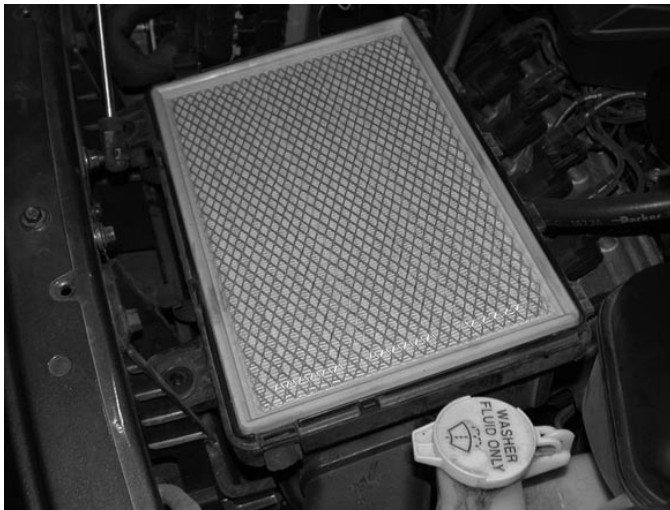


Fig. 1-e

- I.** Locate the intake air temperature sensor on the passenger side of the large plastic throttle body enclosure. Disconnect the wire harness plug, remove the sensor using a twisting motion and set the sensor aside to be reinstalled in a later step of the installation.
- J.** Remove the two 10mm headed bolts securing the plastic throttle body enclosure. Remove the rubber hose going to the oil fill neck and remove the enclosure and set aside it will not be reused. (See Fig. 1-f.)

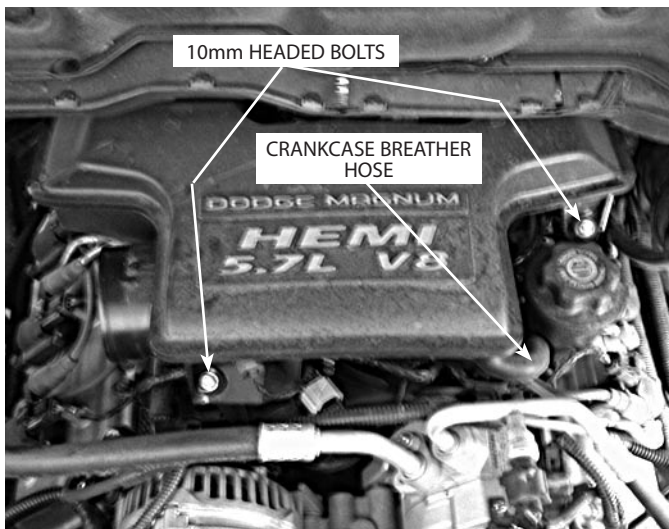


Fig. 1-f

- K.** Remove the factory orange silicone ring from the throttle body and set aside. Remove the accessory drive belt. (See Fig. 1-g.)

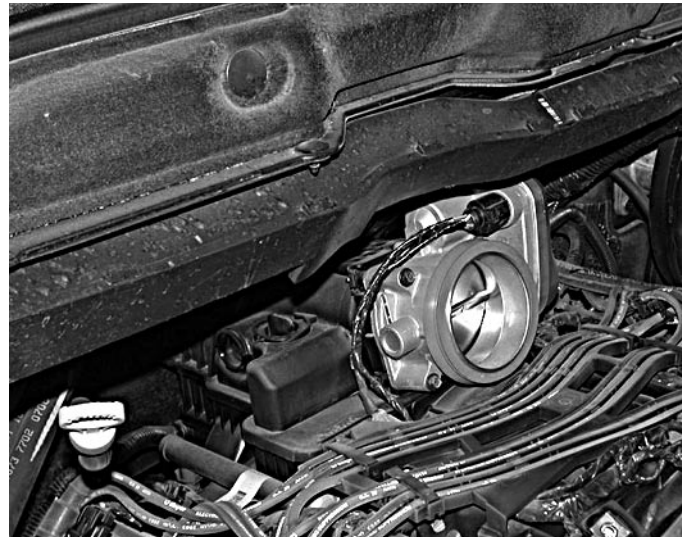


Fig. 1-g

- L.** Using a 8mm socket, remove the eight factory screws securing the underside of the passenger side inner fender well cover. Remove the four 13mm head screws securing the air filter enclosure bracket to the fender and remove the bracket it will not be reused. Reinstall the inner fender well cover using the factory hardware. (See Fig. 1-h.)



Fig. 1-h

Section 2

OIL FEED ASSEMBLY

2. OIL FEED ASSEMBLY

- A.** Disconnect the factory oil pressure sending unit wire harness from the sending unit. Remove and set aside the factory oil pressure sender located on the passenger of the engine. Using the supplied fitting install the short 1" nipple into the side of the supplied TEE fitting.

***** NOTE *****

Do not use Teflon paste or Teflon tape on this fitting as it may clog the supercharger oil jet and lead to premature supercharger failure.

- B.** Install the supplied TEE fitting into the location where the factory sending unit was originally located. With the supplied TEE fitting installed and the outlets facing up and down install the factory sending unit into the outlet of the tee that is facing up. Install the supplied 1/8" NPT x -4 x 90° fitting into the outlet that is facing down and orientate the supplied 90° fitting to face to the passenger side of the vehicle. (See *Fig. 2-a.*)

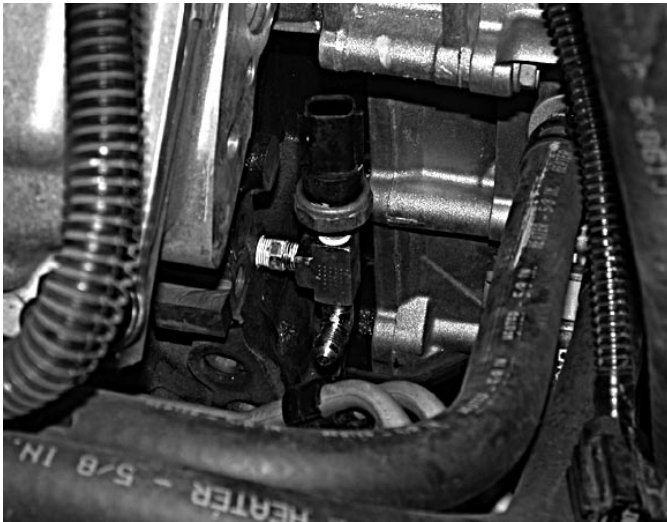


Fig. 2-a

- C.** Install the straight portion of the supplied steel braided -4 hose to the 90° fitting. The 90° end will attach to the supercharger oil jet in a later step.
- D.** Reattach the oil pressure sending unit wire harness. (See *Fig. 2-b.*)

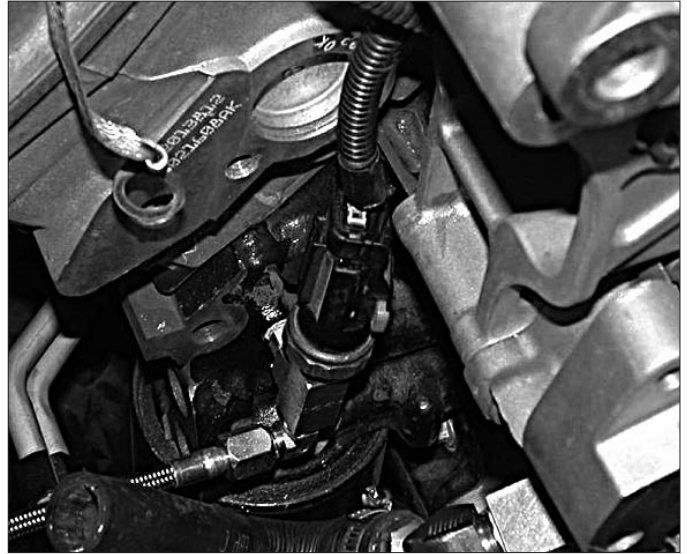


Fig. 2-b

This Page Left Intentionally Blank.

Section 3

OIL DRAIN ASSEMBLY

3. OIL DRAIN ASSEMBLY

- A.** On the passenger side of the oil pan locate the large hump in the oil pan measure down 1-3/4" from the lip of the oil pan and make a mark. Center the mark between the two oil pan retaining bolts. (See *Fig 3-a.*)

*** NOTE ***

It may be necessary to slightly bend the transmission cooler lines to gain access to the oil drain location.

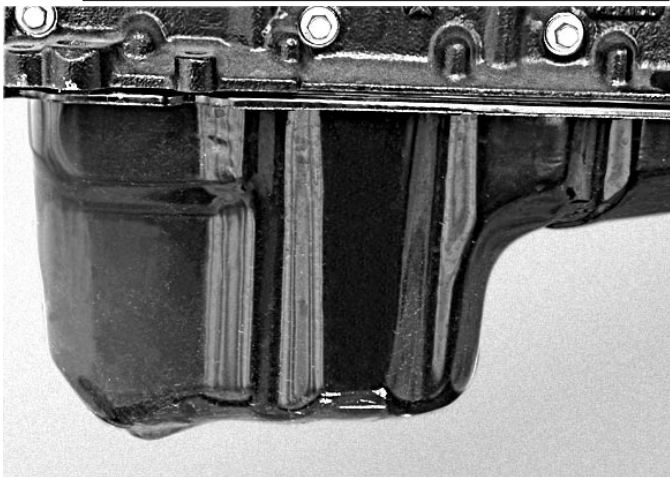


Fig. 3-a

- B.** Using a 3/16" drill bit drill a pilot hole at the designated mark, use grease on the drill bit to catch any metal shavings from falling into the oil pan. With a small piece of wire confirm that there is nothing to interfere with the punch that is provided.
- C.** Using an air hammer and the supplied punch start to enlarge the hole to 9/16" of an inch. It is recommended to use anti seize or grease on the punch, which will allow the punch to role the pan correctly.

*** NOTE ***

Using a hammer can damage the oil pan, extra care is required.)

- D.** When you have the hole enlarged to 9/16" pack the flutes of a 3/8" NPT tap (not supplied). Tap the hole until the fitting can be started.

- E.** Thoroughly clean the threaded area. Reach inside the oil pan and retrieve any stray chips. Apply a small amount of sealer to the new threads. Apply more sealer to the supplied 3/8" x 16 x -8 fitting and secure in the hole using a 13/16" open end wrench. Make sure a seal is formed all around the fitting. (See *Fig. 3-b.*)



Fig. 3-b

- F.** Drain the engine oil, install a new oil filter, and refill the engine with fresh oil.

This Page Left Intentionally Blank.

Section 4

HEATER HOSE RELOCATION

4. HEATER HOSE RELOCATION

- A. Install a supplied 3/8" x 45° street elbow into the front cover of the engine, install the second supplied 3/8" x 45° street elbow into the previously installed elbow. Install the factory hose barb fitting that was removed in *Step 1-e* and install into the open end of the street elbow.

*** NOTE ***

Assemble the fittings using Teflon paste to aid in sealing. Attach the "J" shaped hose to the hose barb and secure with a supplied hose clamp. Orientate the fittings and hose as seen in Fig 4-a.

*** NOTE ***

These fittings may need to be re-oriented to clear the supercharger support bracket.



Fig. 4-a

- B. Install the supplied 5/8" hose mender into the open end of the "J" shaped hose and secure with a supplied hose clamp.
- C. Trim the factory coolant hose for best fitment and connect to the open end of the supplied 5/8" hose mender. Secure using a supplied hose clamp.

This Page Left Intentionally Blank.

Section 5

COOLANT RESERVOIR RELOCATION

5. COOLANT RESERVOIR RELOCATION

- A. Locate the lower radiator hose. Locate the TEE fitting in the lower radiator hose that the 1" hose attaches measure up approximately 2-1/2" from the TEE fitting and cut the upper portion of the hose.
- B. Locate the three spacers, screws, and washers in the coolant relocation assembly. Raise the coolant reservoir using the spacers and secure with the supplied 6mm screws and washers. (See Fig. 5-a.)



Fig. 5-a

- C. Locate the supplied 1" "L" shaped hose, hose clamps and the polished formed coolant tube in the coolant reservoir assembly. Install the straight section of the tube into the modified 1" lower radiator hose and secure with a supplied hose clamp. (See Fig 5-b.)

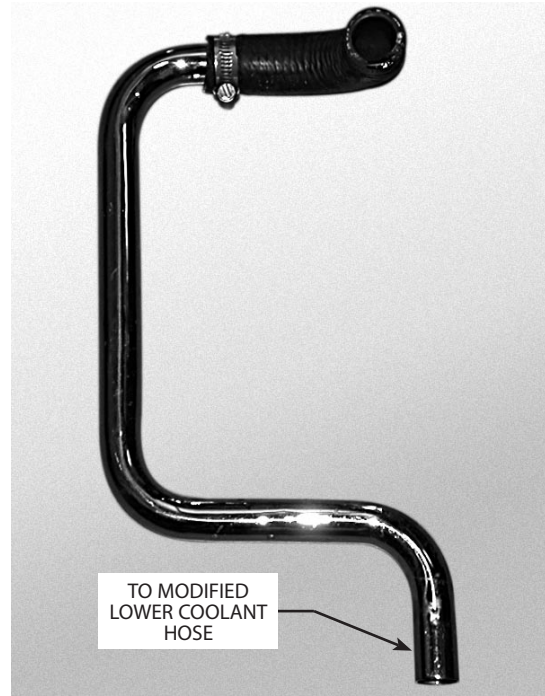


Fig. 5-b

- D. Attach the "L" shaped hose to the outlet of the coolant reservoir. Measure and trim to the appropriate length and secure with the supplied hose clamps. (See Fig. 5-c.)



Fig. 5-c

This Page Left Intentionally Blank.

Section 6

SUPERCHARGER MOUNTING BRACKET

6. SUPERCHARGER MOUNTING BRACKET

- A.** Locate the supplied two small supercharger mounting plate support brackets bolts and washers. Assemble the two brackets using the four 5/16" x 18 x 1.0" bolts and washers that are provided.
- B.** Using the supplied support bracket and the supplied 8mm x 120 bolts and 10mm x 130 bolts confirm that the heater hose fittings and hose previously installed clear the support bracket.
- C.** Remove the 15mm headed bolt closest to the passenger side on the alternator that secures the alternator to the front cover. (See *Fig. 6-a.*) This bolt will be reused to secure the alternator in a later step.

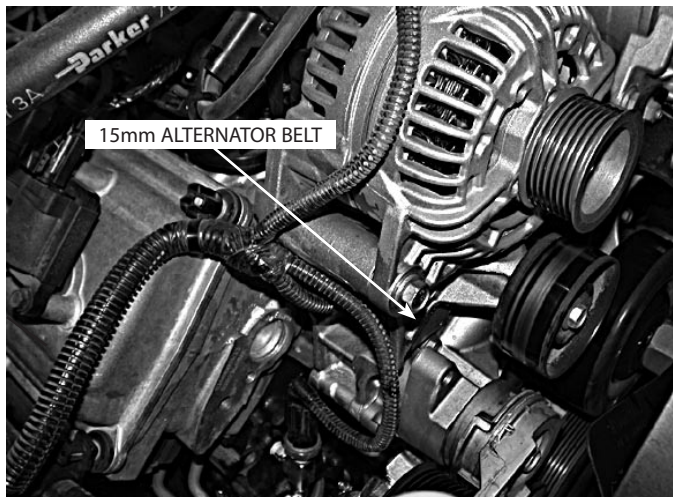


Fig. 6-a

- D.** Remove and set aside the factory plate that secures the alternator, A/C compressor, and front cover together. (See *Fig. 6-b.*)

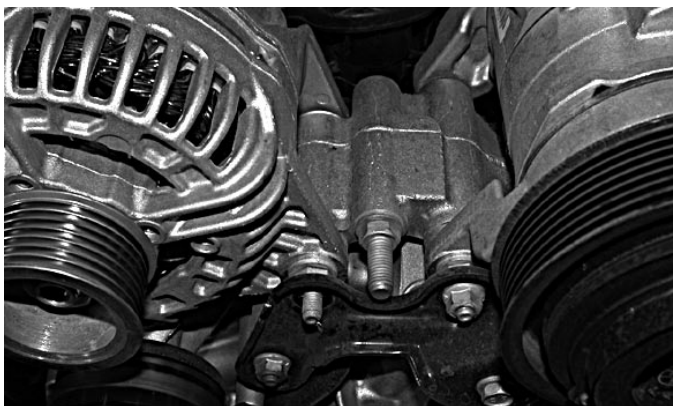


Fig. 6-b

- E.** Loosen the remaining alternator retaining bolt and rotate the alternator up leaving it attached to the front cover. (See *Fig. 6-c.*)



Fig. 6-c

- F.** Remove the 13mm headed bolt just to the left of the upper Idler pulley. Set it aside as it will be reused in a later step. (See *Fig. 6-d.*)

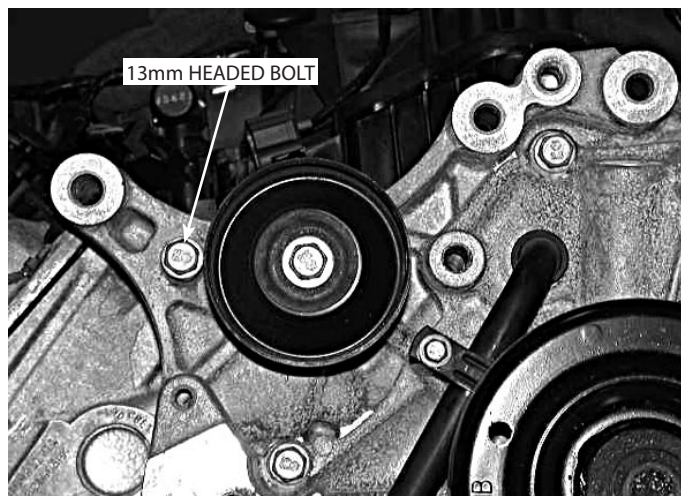


Fig. 6-d

- G.** Remove the casting flash from the lower mounting location using a file or small disc sander.

*** NOTE ***

Care must be taken to not damage the machined surface, as this surface is critical to proper mounting bracket alignment

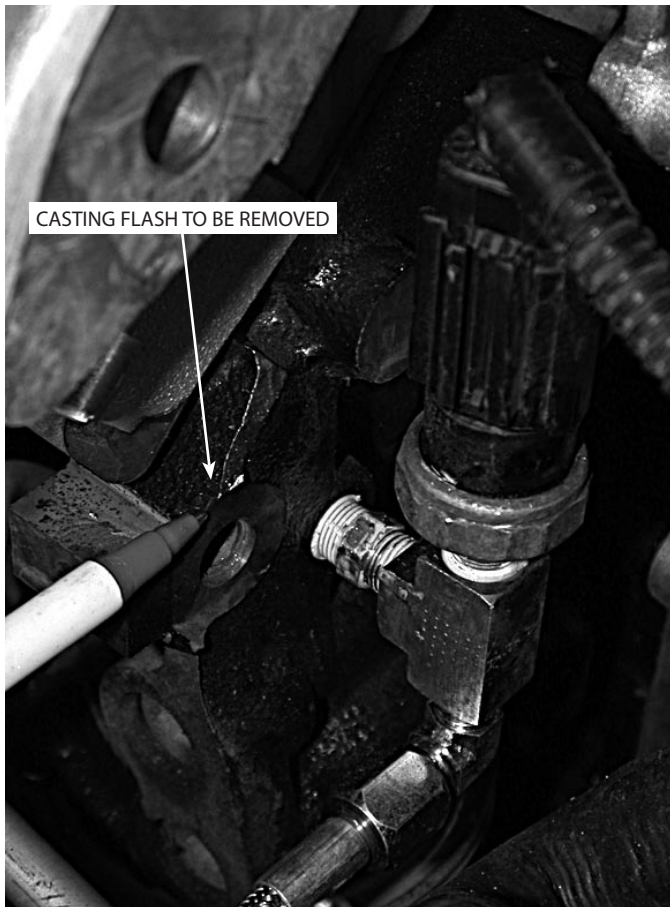


Fig. 6-d

- H.** With the supplied support brackets assembled using the 5/16" x 18 x 1" bolts, and washers confirm that the support bracket sits flush with the cylinder head and engine block.
- I.** Remove the support bracket after confirming that it sits flush with the head and block. Using the three 5/16"- 18 x 1" bolts and washers provided attach the support bracket to the supercharger mounting plate leave these bolts loose. Align the supplied support bracket using the supplied 8mmx120 x 1.25" bolt and 10mm x 130 x 1.5" bolt. (See Fig. 6-e.)

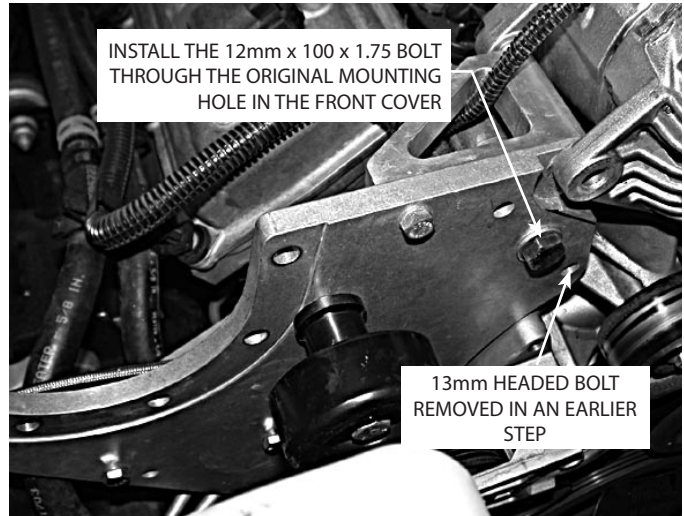


Fig. 6-e

- J.** Install the supplied supercharger mounting plate as an assembly using the cylinder head and the engine block mounting locations. Leaving the 8mm and the 10mm bolts loose at this time.
- K.** Install the supplied 12mm x 100mm x 1.75" bolt through the supercharger mounting plate and into the alternator-mounting boss. Reattach the ground strap sandwiching it between the nut and the alternator boss, secure the bolt with the nut provided leaving the nut loose at this time.
- L.** Install the factory 13mm headed bolt removed in a previous step. (See Fig. 6-e.)
- M.** Locate the supplied supercharger idler pulley, idler pulley stand off and the supplied 7/16" x 3.25" bolt, washers, and nut. Install the idler pulley and standoff in the location noted using the supplied hardware. (See Fig. 6-f.)

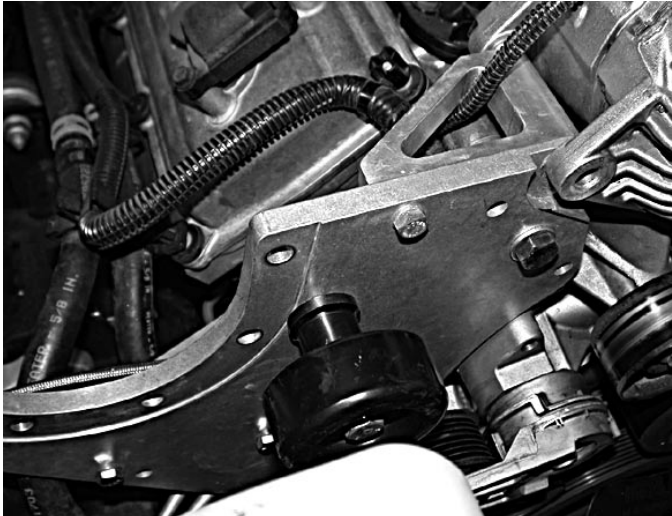


Fig. 6-f

- N.** Attach the supplied 1/2" supercharger oil drain line and supplied hose clamp to the 3/8" NPT barbed fitting on the supercharger, tighten the hose clamp. Lower the supercharger into place and secure using the five supplied 3/8" x 24 x 1.25" long bolts and washers.
- O.** Tighten all mounting hardware. Route the oil drain line down towards the fitting previously installed in the oil pan. Trim the hose for best fitment and install the supplied 90° push-lock fitting into the open end of the supplied oil drain hose. Attach the 90° fitting and drain hose to the fitting previously installed into the oil pan. Secure the hose away from any sharp edges, sources of heat or moving parts using the supplied wire ties. (See Fig 6-g.)

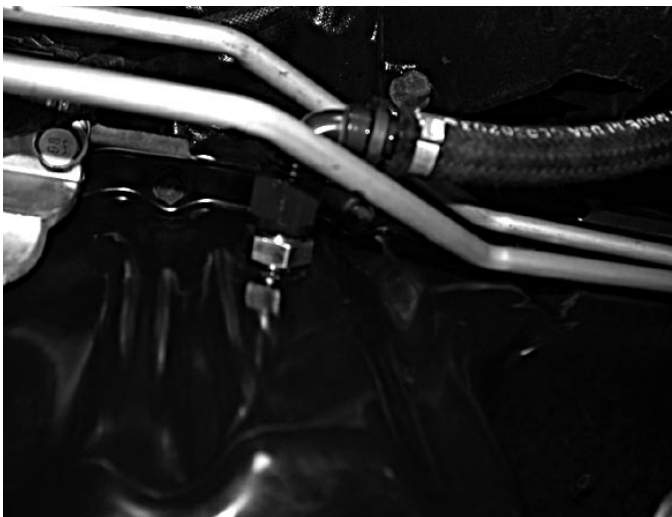


Fig. 6-g

- P.** Install the supercharger/accessory drive belt using the belt routing diagram provided.
- Q.** Install the supplied 1/8" NPT x -4 fitting into the supercharger oil jet, attach the open end of the supplied braided oil feed line to the -4 fitting previously installed. (See Fig. 6-h.)

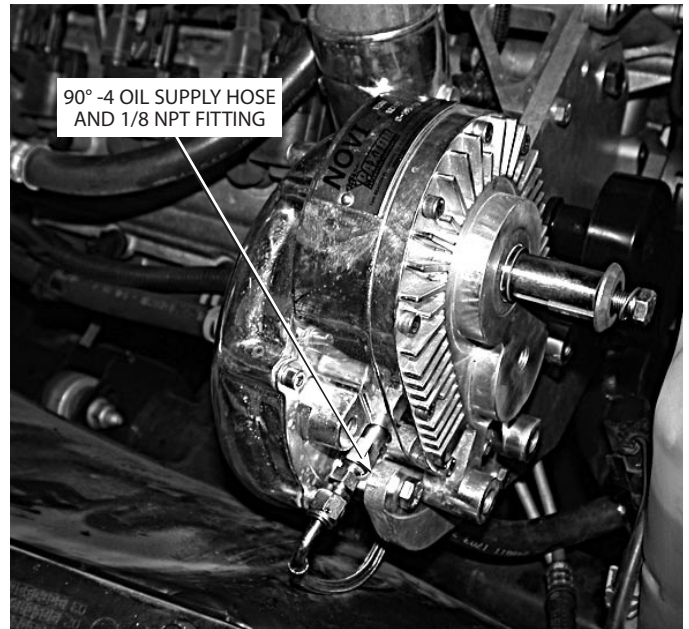
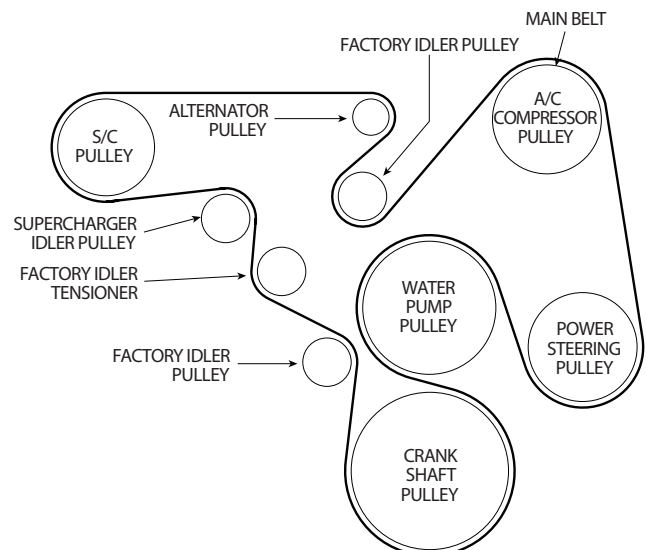


Fig. 6-h

- R.** Reinstall the factory heater hose onto the factory fitting on the side of the front cover using the factory hose clamp. This hose was removed in an earlier step of the installation.



This Page Left Intentionally Blank.

Section 7

AIR INTAKE ASSEMBLY

7. AIR INTAKE ASSEMBLY

- A. Locate the supplied air filter, formed enclosure, mounting flange, and 1/4"-20 mounting hardware.
- B. Attach the flange to the air filter enclosure using the 1/4"-20 nuts, bolts, and washers provided. (See Fig. 7-a.)



Fig. 7-a

- C. Attach the supplied air filter to the air filter mounting flange and secure with the hose clamp provided.
- D. Remove the aluminum A/C line from its plastic clip on the passenger side inner fender. Remove the plastic clip from the vehicle it will not be reused. Gently bend the A/C line up for clearance for the air filter enclosure.
- E. Mount the supplied air filter enclosure to the passenger side inner fender using the supplied sheet metal fasteners provided in the assembly.

*** NOTE ***

The upper mounting tab should be about 1/8" down from the top of the fender. (See Fig 7-x.)

- F. Place the supplied 3-1/2" sleeve and the supplied #56 hose clamps onto the inlet of the supercharger. Leave the hose clamps loose at this time.
- G. Locate the supplied 180° inlet duct. Install the supplied 90° x 3/8" NPT x 1/2" hose barb into the tapped bung on the 180° inlet duct using Teflon paste to seal the threads. This fitting should face straight up. (See Fig. 7-b.)



Fig. 7-b

- H. Install the supplied 180° inlet duct to the supplied 3-1/2" sleeve previously attached to the supercharger. Attach a 6" length of supplied flex hose to the open end of the inlet duct and connect the opposite end to the previously mounted air filter enclosure. Secure all connections using the hose clamps provided. (See Fig. 7-h.)

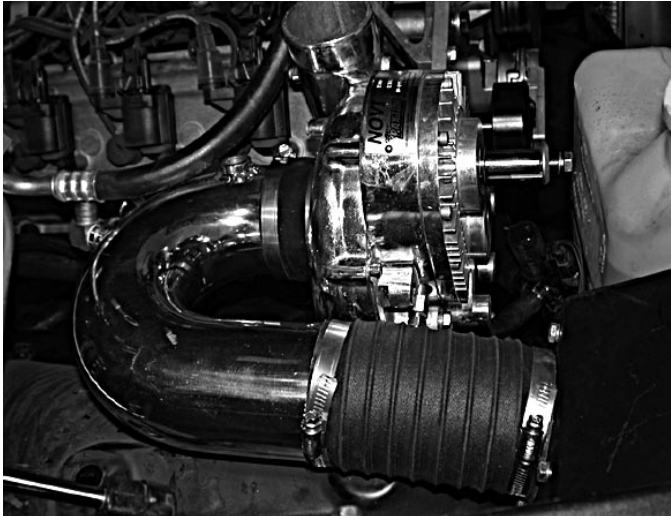


Fig. 7-c

- I. Locate the air intake temperature sensor previously removed, install into the unthreaded bung on the 180° inlet elbow. Locate the air temperature sensor factory plug, strip back the tape to expose the wires and cut the wires approximately 3" from the connector plug. Using the supplied 12" length of wires extend the connector plug to reach the relocated air temperature sensor.

*** NOTE ***

It is recommended that these wire connections be soldered and heat shrink used to insulate the connections to ensure the best contact.

- J. Cut 2" off the short end of a supplied 3/4" 90° elbow hose. Attach the cut end onto the oil fill neck breather barb. Install a supplied 3/4" hose mender into the open end of the installed elbow hose.
- K. Cut a 13" long section of the supplied straight 3/4" hose and connect one end onto the hose mender previously installed, connect the opposite end onto the 3/4" 90° hose barb previously installed into the supplied 180° air inlet duct.
- L. Tighten all hose clamps.

Section 8

FUEL SYSTEM ASSEMBLY

8. FUEL SYSTEM ASSEMBLY

- A.** Locate the supplied supplemental fuel supply assembly 4PCH101-001. Assemble the supplied fuel pump to the supplied fuel pump/FMU mounting bracket using the provided adel clamps and 1/4"-20 bolts, nuts, washers as shown in *Fig. 8-a*.

*** NOTE ***

Verify that the fuel pump outlet fitting is a 5/16" brass barbed fitting and that a copper washer is installed and the fitting is tight, if the fitting 5/16" brass barbed fitting has not been installed it will be necessary to remove the existing fitting from the fuel pump and install the supplied 5/16" brass barbed fitting with a copper washer.

- B.** Mount the supplied FMU to the fuel pump/FMU mounting bracket using supplied 10-24 bolts, nuts, and washers. Assemble per *Fig 8-a*.

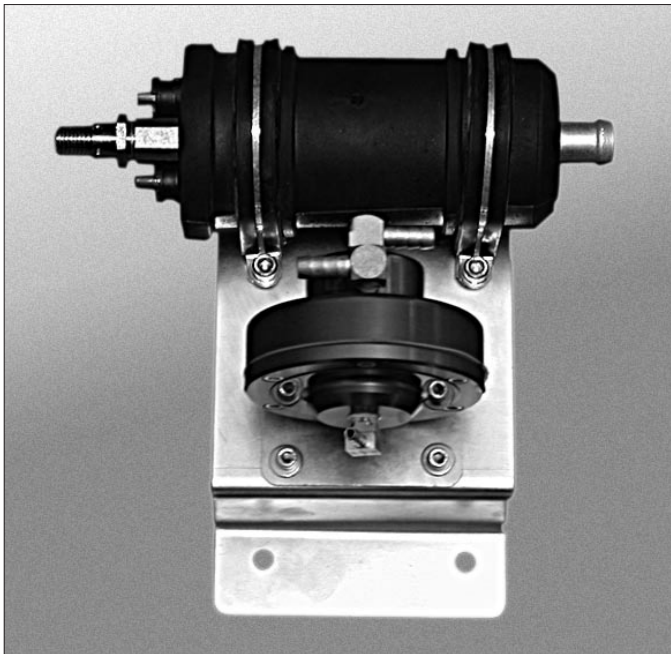


Fig. 8-a

- C.** From beneath the vehicle mark two mounting locations on the inner driver's side frame rail near the factory fuel lines for the fuel pump/FMU bracket assembly to mount. Use the bracket as a template and mount the bracket using the supplied self-tapping sheet metal screws to mount the bracket to the inner frame rail. (See *Fig. 8-b*.)

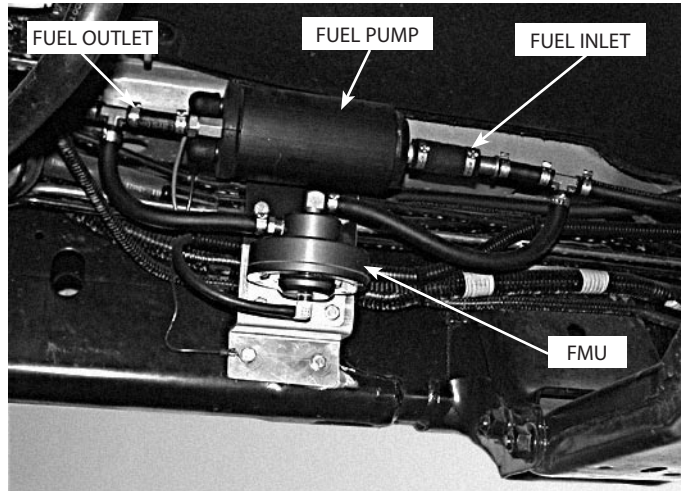


Fig. 8-b

- D.** Using a 5/16" spring lock disconnect tool disconnect the flexible fuel line from the hard line. Attach a length of 5/16" fuel hose to the outlet of the fuel pump and secure with a supplied clamp, route the hose to the open end of the fuel line leading to the engine. Trim the hose for best fit, install the supplied male 5/16" fuel line adapter fitting into the open end of the hose and secure with a supplied clamp. Attach the male adapter fitting to the factory fuel line.
- E.** Attach a 2-1/2" length of supplied 5/8" fuel line onto the inlet of the fuel pump, two of the supplied clamps must be used to secure this hose onto the fuel pump. Install the supplied 5/8" to 5/16" barbed reducer into the open end of the previously installed 5/8" hose, secure using the supplied clamp. Install a section of 5/16" fuel hose onto the previously installed barb and secure the end with a supplied clamp. Route the open end of the hose to the open end of the fuel line leading to the vehicle's gas tank, trim the hose for best fitment and install a provided 5/16" plastic female fitting into the hose and secure with a supplied hose clamp. Attach the supplied female adapter fitting to the factory fuel line.
- F.** Cut the 5/16" fuel hose previously installed from the supplied fuel pump inlet to the factory fuel line, install the supplied TEE fitting at this connection and secure it using two supplied hose clamps. Attach a length of

5/16" fuel hose to the inlet of the FMU and secure using a supplied clamp. Route the open end of the 5/16" fuel hose to the open barb of the TEE fitting, trim the hose for best fitment and secure using a supplied hose clamp.

- G.** Cut the 5/16" fuel hose previously installed from the supplied fuel pump outlet to the factory fuel line, install the supplied TEE fitting at this connection and secure it using two supplied hose clamps. Attach a length of 5/16" fuel hose to the outlet of the FMU and secure using a supplied clamp. Route the open end of the 5/16" fuel hose to the open barb of the TEE fitting, trim the hose for best fitment and secure using a supplied hose clamp.
- H.** Route the hoses away from sharp or hot objects and secure using the supplied wire ties.
- I.** Attach an open end of the supplied 5/32" vacuum line onto the vacuum port of the previously installed FMU. Route the vacuum line along the frame rail and into the engine compartment near the factory brake booster mounted on the vehicle's firewall. Secure the hose line away from any sharp, hot, or moving objects using the supplied wire ties. The vacuum line will be attached to a vacuum source at a later step.

Section 9

ENGINE CONTROL UNIT INSTALLATION

9. ENGINE CONTROL UNIT INSTALLATION

- A.** Using a T-15 torx bit remove the two factory screws securing the panel below the steering column on the driver's side of the vehicle and remove the panel. In a suitable location in the driver's compartment under the dash secure the PECU with the Velcro hook/latch that is provided.
- B.** Locate the two 15mm headed bolts that retain the cover that the clutch actuating cable would pass through, remove the cover and drill a 9/16" hole that will allow the PECU harness and the 5/32" vacuum line to pass through. Reinstall the cover and route the PECU wire harnesses and vacuum hose through the 9/16" opening. (See Fig. 9-a.)



Fig. 9-a

- C.** Run the PCEU harness across the firewall thru the factory wire harness cover to the Factory engine control unit.
- D.** Locate the C2 plug at the factory ECU pin 35, cut the gray/black wire (crank sensor). Using the connectors provided connect the gray wire from the PECU to the gray/black wire leading to the crank sensor. Connect the gray/black wire from the PECU to the gray/black wire going to factory ECU plug.

- E.** Locate pin 34 at the C2 plug on the Factory ECU. Cut the tan/yellow wire (Cam Sensor). Connect the tan wire from the PECU to the tan/yellow wire leading to the cam sensor on the factory ECU. Connect the tan/yellow wire from the PECU to the tan/yellow wire leading to the factory ECU plug.
- F.** Locate pin 23 at the C2 plug on the factory ECU. Cut the green/red wire (Map Sensor). Connect the green wire from the PECU to the green/red wire leading to the map sensor. Connect the green/red wire from the PECU to the wire leading to the factory ECU plug.
- G.** Tape up the violet wire, as it will not be used. Tap the small red wire coming from the PECU to the C1 plug pin 11. Tap the small black wire coming from the PECU to the C1 plug pin 18.
- H.** Route the supplied 5/32" vacuum line into the engine compartment near the brake booster, it will be connected at a later step.

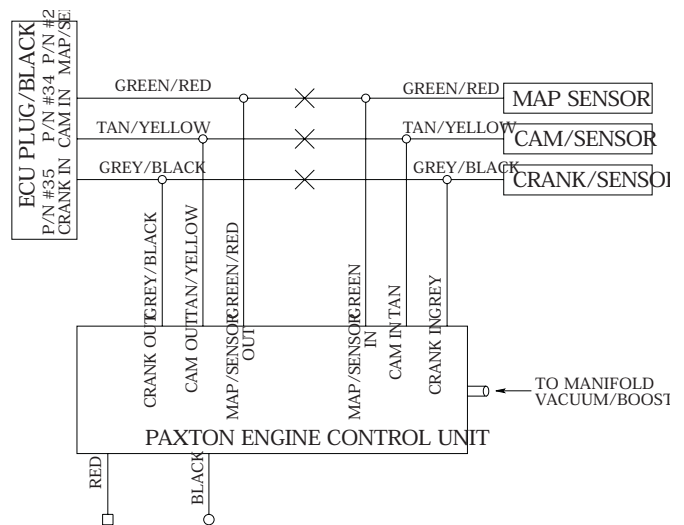


Fig. 9-b

*** NOTE ***

that it is recommended that these and all other connections be soldered.

This Page Left Intentionally Blank.

Section 10

CHARGE COOLER INSTALLATION

10. CHARGE COOLER INSTALLATION

- A.** Install a supplied reducer sleeve onto the throttle body, install the aftercooler core into the reducer sleeve and secure with the supplied hose clamps. Install the supplied 2.75" x 2" sleeve onto the discharge of the supercharger and another on the open end of the aftercooler core previously installed.
- B.** Install the supplied discharge duct between the supercharger and the aftercooler core with the welded bung facing the vehicle's firewall, secure all connections using the supplied hose clamps.
- E.** Attach an end of the supplied 5/32" vacuum hose onto the vacuum nipple on the previously installed bypass valve. Route the length of supplied vacuum hose to the brake booster mounted on the driver's side firewall and secure the hose as necessary using the supplied wire ties.
- F.** Remove the small vacuum cap from the factory fitting on the vehicle's brake booster. Attach the supplied vacuum hose onto the open port on the brake booster, install a supplied 5/32" brass reducer into the vacuum line previously installed. Trim the supplied 5/32" vacuum line connected to the bypass valve for the best fitment and install onto the open port of the previously installed reducer.
- G.** Install a supplied 5/32" brass vacuum TEE fitting into the bypass valve vacuum line previously installed and attach the vacuum line from the FMU to the supplied TEE. Install another supplied 5/32" brass TEE into the bypass valve vacuum line; attach the vacuum hose from the PECU to the previously installed TEE.

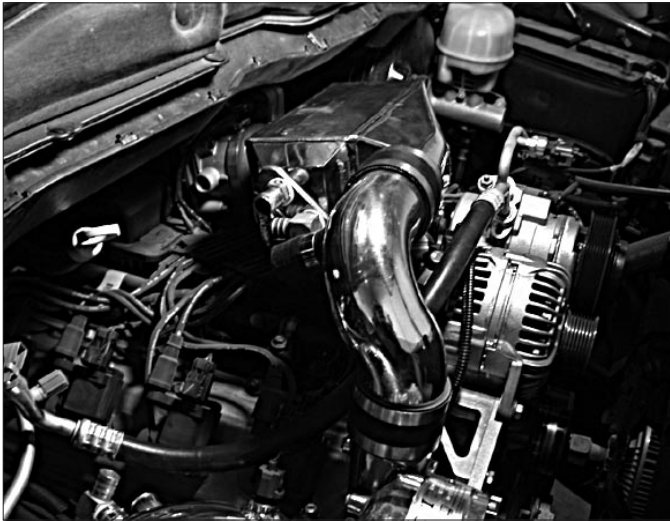


Fig. 10-a

*** NOTE ***

It may be necessary to gently bend the air conditioning line to gain clearance between it and the supercharger discharge.

- C.** Install the supplied 3/4" NPT x 90° brass fitting into the lower threaded opening of the aftercooler core; the fitting must face towards the firewall of the vehicle. Install the supplied 1/2" x 3/4" straight brass fitting into the upper threaded opening in the aftercooler core.
- D.** Install the short end of the supplied 1" 90° elbow hose onto the bung on the 180° air inlet duct. Attach a 6" section of 1" hose onto the bung on the supercharger discharge duct. Install the supplied bypass valve into the hose lines per Fig. 10-c.

This Page Left Intentionally Blank.

Section 11

HEAT EXCHANGER INSTALLATION

11. HEAT EXCHANGER INSTALLATION

- A.** Install the two supplied $\frac{1}{2}$ " 90° brass fittings into the supplied heat exchanger, both must be pointing in the same direction to the side. (See *Fig 11-a.*)

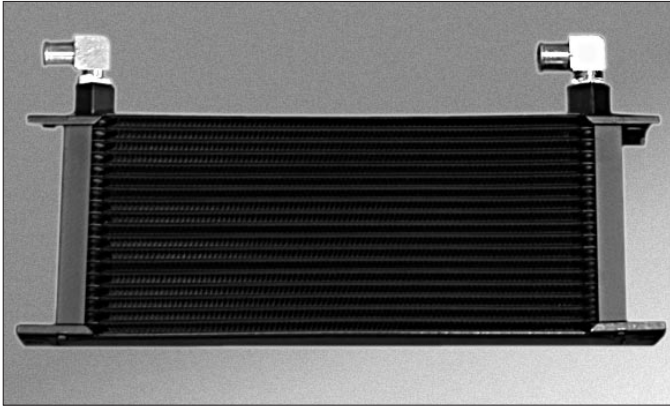


Fig. 11-a

- B.** Using the supplied heat exchanger as a template mark two mounting locations on the radiator core support, the heat exchanger should be mounted towards the passenger side.
- C.** Mount the supplied heat exchanger with the previously installed $\frac{1}{2}$ " x 90° brass fittings pointing toward the passenger side of the vehicle, use the supplied $\frac{1}{4}$ "-20 nuts, bolts, and washers to secure to the radiator core support. (See *Fig. 11-b.*)



Fig. 11-b

This Page Left Intentionally Blank.

Section 12

SURGE AND RESERVOIR TANK INSTALLATION

12. SURGE AND RESERVOIR TANK INSTALLATION

- A. Screw two supplied 3/4" x 1/2" NPT straight brass fittings into the plastic surge tank.
- B. Using the supplied 1/4"-20 x .50" SHCS screw and washers attach the supplied surge tank to the supplied surge tank-mounting bracket. (See *Fig 12-a.*)

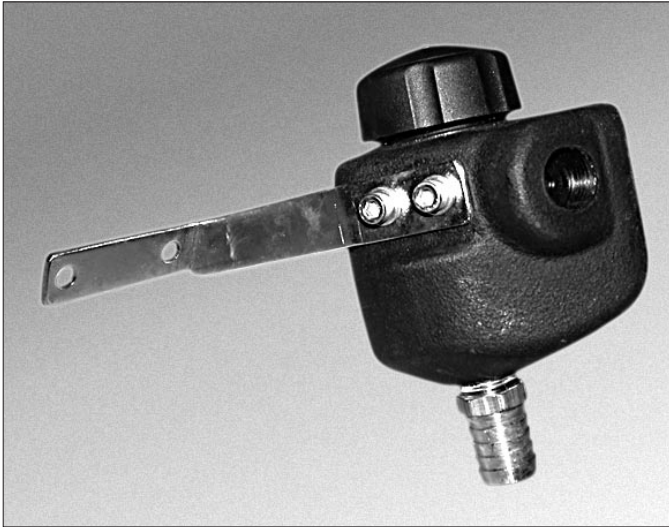


Fig. 12-a

- C. The factory ground wire located on the passenger side of the firewall will need to be relocated. Using a 10mm socket remove the nut securing the ground strap to the stud as well as the nut secured on the stud to the right of it. Secure the ground strap to the second stud using the factory hardware.
- D. Attach the surge tank to the stud the ground strap had been originally secured to using the factory 10mm headed nut.
- E. Mark and drill a hole using the supplied sheet metal screw to secure the open mounting location on the bracket. See *Fig 12-b.*)



Fig. 12-b

- F. Mount the supplied water pump to the side of the supplied triangle water reservoir using the supplied 1/4"-20 hardware and adel clamp.
- G. Install the supplied 3/4" x 1/2" NPT 90° brass fittings into the water reservoir. Mount the supplied triangle water reservoir to the supplied reservoir mounting bracket using the 1/4"-20 hardware provided. (See *Fig. 12-c.*)

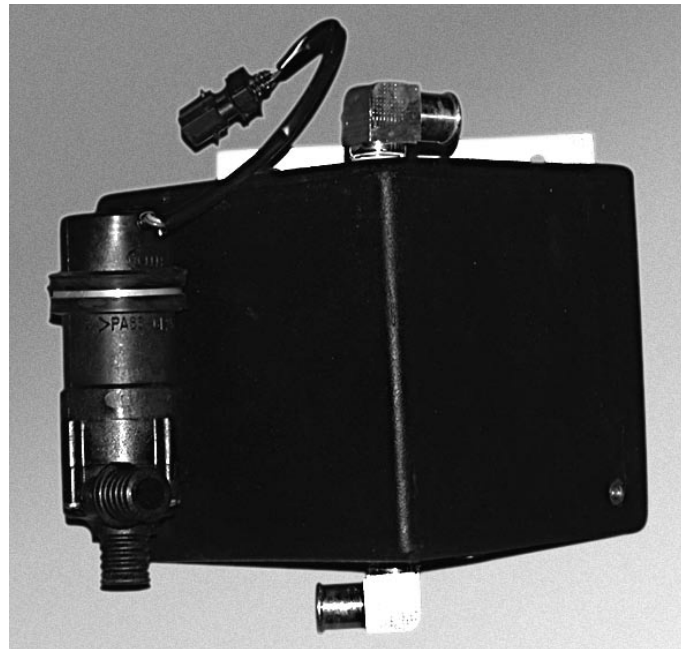


Fig. 12-c

- H. Attach the supplied 3/4" short 90° hose to the inlet of the water pump and connect to the previously installed brass fitting at the bottom of the reservoir. Secure the hose using the supplied nylon ratchet clamps.
- I. Mark two mounting locations using the water pump reservoir assembly bracket as a template on the passenger side inner frame rail. Drill and secure the water pump reservoir assembly to the frame rail using the supplied sheet metal screws.



Fig. 12-d



Fig. 12-e

- J. Cut the harness for the water pump leaving as much of the wires intact from the pump. Install a supplied ring terminal onto the brown (negative) wire and secure to one of the water pump reservoir assembly mounting screws.

Section 13

WATER HOSE ROUTING

13. WATER HOSE ROUTING

*** NOTE ***

Make sure to leave the hose slightly long to allow for engine movement.

- A. Using a 3/4" 90° molded hose, trim 2" off from the short hose leg, attach the cut end onto the 3/4" x 1/2" NPT 90° brass fitting on the passenger side of the supplied heat exchanger previously installed. Install a supplied 3/4" brass hose mender into the long end of the hose.
- B. Using a supplied 3/4" 90° molded hose, trim 2" off of the short end, install the short end onto the 3/4" 90° brass fitting previously installed in the aftercooler core. Install a supplied 3/4" brass hose mender into the long end of the molded hose.
- C. Cut a 55" section of 3/4" hose, connect one end onto the 3/4" hose mender previously installed in the molded hose attached to the aftercooler. Route the hose along the passenger side inner fender, under the radiator, and connect to the open end of the 3/4" brass hose mender/elbow hose connected to the heat exchanger.
- D. Using another 3/4" 90° molded hose trim 2-1/2" off of the short end of the hose, install the short end onto the outlet of the previously installed water pump. Install a 3/4" brass hose mender into the open end of the hose.
- E. Cut a 27" long section of the supplied 3/4" hose, attach an end to the open end of the previously installed brass hose mender. Attach the open end of the hose to the open fitting on the supplied heat exchanger, trim the hose for best fitment.
- F. Cut a 14" long section of the supplied 3/4" hose, attach one end to the straight fitting on the aftercooler core, connect the open hose end to the fitting on the side of the surge tank, trim the hose length for best fitment.
- G. Cut a 60" long section of the supplied 3/4" hose, attach one end to the 3/4" x 1/2" NPT brass fitting previously installed in the bottom of the supplied surge tank. Route the hose along the passenger side inner fender and connect the open end of the hose to the 3/4" x 1/2" NPT 90° brass fitting on the top of the water reservoir, trim the hose for best fitment.
- H. Secure all hose connections using the supplied nylon hose clamps. Check to ensure all hose lines are free of kinks, secure hose lines as needed away from sharp, hot, or moving objects using the supplied wire ties.

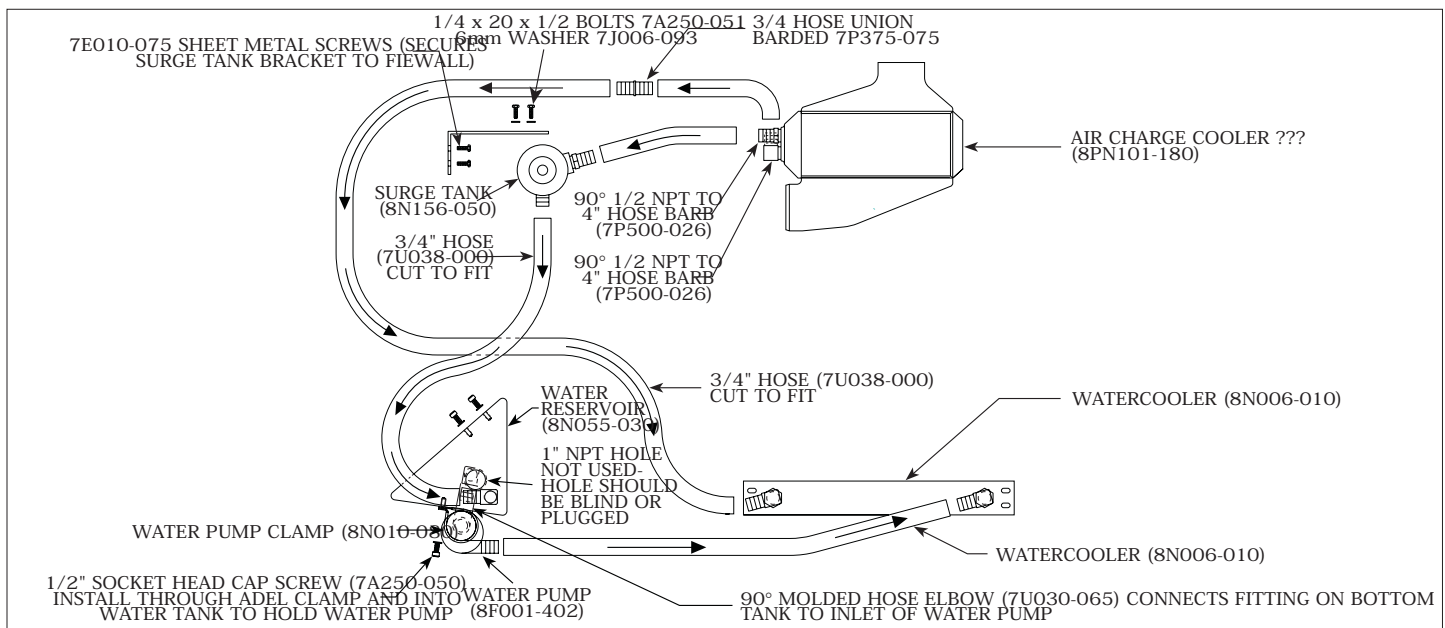


Fig. 13-a

This Page Left Intentionally Blank.

Section 14

WATER PUMP WIRING

14. WATER PUMP WIRING

- A. Using a supplied sheet metal screw, attach the supplied relay to the driver's side radiator core support per *Fig. 14-a*.

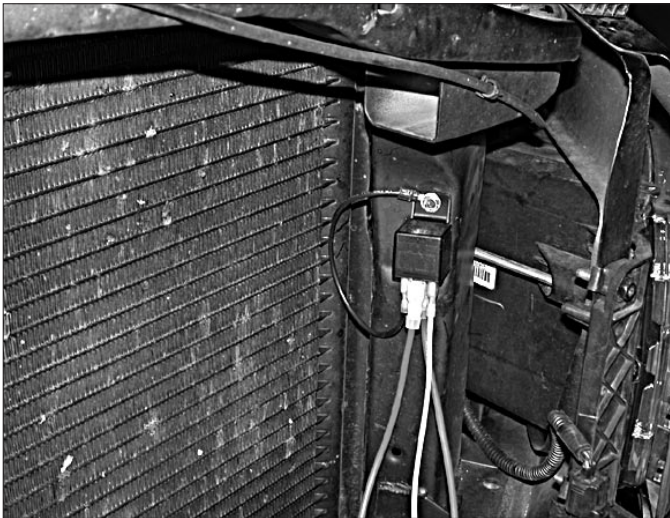


Fig. 14-a

- B. Attach a supplied ring terminal to the ground wire (black) on terminal 86 of the supplied relay; attach a supplied ring terminal to the relay mounting screw.
- C. Route the red wire on terminal 87 down and along the backside of the front bumper and connect to the green wire using the supplied butt connector at the previously installed water pump. Use the supplied wire ties to secure as necessary.
- D. **Route the yellow wire from terminal 85 and the ???**
- E. Route the red wire from terminal 30 on the relay into the engine compartment and attach a supplied ring terminal to the wire end. The ring terminal must be connected to a constant battery power source. Remove the cover from the remote battery lug next to the engine compartment's fuse/relay center. Secure the ring terminal to this lug using factory hardware and use wire ties to secure the wire as needed away from sharp or hot objects.
- F. With the key on, make sure the charge cooler water pump is operating and that water is flowing through the surge tank. Fill the surge tank if necessary with a 50/50 coolant/

water mix. If the water is not flowing, remove the charge cooler supply hose and lower until water flows out of the hose. If necessary, provide light suction to the hose to help prime the pump. Verify water flow. Do not let the pump run for extended periods (30 seconds or more) without water flow. Fill the charge cooler tank until the level stabilizes.

This Page Left Intentionally Blank.

Section 15

FINAL ASSEMBLY AND CHECK

15. FINAL ASSEMBLY AND CHECK

- A.** If your battery was disconnected, reconnect it.
- 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 wire ties.
- 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 the engine and allow to idle for a few minutes.
- F.** Recheck to be sure no hoses, wires, etc. are near exhaust headers or moving parts and check for any signs of fluid leakage. Recheck all fluid levels.
- G.** PLEASE TAKE SPECIAL NOTE:
Operating the vehicle without ALL 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 for the 3-year limited warranty.

This Page Left Intentionally Blank.

This Page Left Intentionally Blank.



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