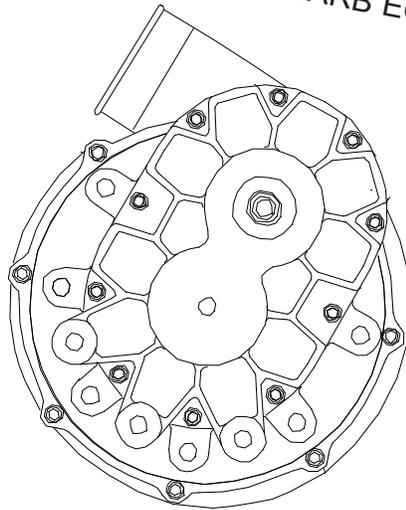


GM 6.0L
2001-2002, 2004, 2006 Denali,
2002-2004 Escalade SUV,
2003-2008 H2 Hummer and
2003-2004 Chevrolet SS
Supercharger System
Installation Instructions
50 State Smog Legal per CARB EO #D-213-26



ENGINEERING, LLC

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

FOREWORD

This manual provides information on the installation, maintenance and service of the Vortech supercharger kit expressly designed for this vehicle. All information, illustrations and specifications contained herein are based on the latest product information available at the time of this publication. Changes to the manual may be made at any time without notice. Contact Vortech Engineering for any additional information regarding this kit and any of these modifications at (805) 247-0226 8:00am-4:30pm PST.



Take note of the following before proceeding:

1. Proper installation of this supercharger kit requires general automotive mechanic knowledge and experience. Please browse through each step of this instruction manual prior to beginning the installation to determine if you should refer the job to a professional installer/technician. Please contact your dealer or Vortech Engineering for possible installers in your area.
2. **This product was designed for use on stock (*un-modified, OEM*) vehicles.** The PCM (*computer*), engine, transmission, drive axle ratios and tire O.D. must be stock. If the vehicle or engine has been modified in any way, check with Vortech prior to installation and use of this product.
3. Use only premium grade fuel with a minimum of 91 octane (*R+M/2*).
4. Always listen for any sign of detonation (*knocking/pinging*) and discontinue hard use (*no boost*) until the problem is resolved.
5. Vortech is not responsible for any clutch, transmission, drive-line or engine damage.

Exclusions from Vortech warranty coverage considerations include, but not limited to:

1. Neglect, abuse, lack of maintenance, abnormal operation or improper installation.
2. Continued operation with an impaired vehicle or sub-system.
3. The combined use of Vortech components with other modifications such as, but not limited to, exhaust headers, aftermarket camshafts, nitrous oxide, third party PCM programming or other such changes.

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2001-2002, 2004, 2006 GMC Denali/ 2002-2004 Cadillac Escalade/ 2003-2008 H2 Hummer 2003-2004 Chevrolet SS

IMPORTANT NOTES

This kit requires ECM programming. The hand-held ECM programmer is not included in the kit box and must be ordered directly from Vortech by the installing customer (the charge for this unit has been included in the purchase price).

Included in this kit is a credit tag for one hand-held programmer. The programmers are made specifically for each individual vehicle with respect to the factory ECM calibration and VIN. Simply follow the instructions on the hand-held programmer credit tag.

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

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

'04-'06 Models: Vehicles equipped with On-star that have aftermarket stereos will experience problems with the ability to re-program the vehicle's ECM. It is necessary to disconnect the aftermarket stereo from the wiring harness before continuing with the programming procedure.

This product is protected by state common law, copyright and/or patent. All legal rights therein are reserved. The design, layout, dimensions, geometry and engineering features shown in this product are the exclusive property of Vortech Engineering. This product may not be copied or duplicated in whole or part, abstractly or fundamentally, intentionally or fortuitously, nor shall any design, dimension, or other information be incorporated into any product or apparatus without prior written consent of Vortech Engineering.

GM 2001-2002, 2004, 2006 Denali/2002-2004 Cadillac Escalade/ 2003-2008 H2 Hummer/2003-2004 SS Truck

50 State Legal Per CARB EO D-213-25* (2007-2008 Models NOT 50-State Legal.)

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

Before beginning this installation, please read through this entire instruction booklet and the Street Supercharger System Owner's Manual which includes the Automotive Limited Warranties Program and the Warranty Registration form.

Vortech supercharger systems are performance improving devices. In most cases, increases in torque of 30-35% and horsepower of 35-45% can be expected with the boost levels specified by Vortech Engineering. This product is intended for use on healthy, well maintained engines. Installation on a worn-out or damaged engine is not recommended and may result in failure of the engine as well as the supercharger. **Vortech is not responsible for engine damage.**

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

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

1. Use only premium grade fuel 91 octane or higher (R+M/2).
2. The engine must have stock compression ratio.
3. If the engine has been modified in any way, check with Vortech prior to using this product.
4. Always listen for any sign of detonation (pinging) and discontinue hard use (no boost) until problem is resolved.
5. Perform an oil and filter change upon completion of this installation and prior to test driving your vehicle. Thereafter, always use a high grade SF rated engine oil or a high quality synthetic, and change the oil and filter every 3,000 miles or less. Never attempt to extend the oil change interval beyond 3,000 miles, regardless of oil manufacturer's claims as potential damage to the supercharger may result.
6. Before beginning installation, replace all spark plugs that are older than 1 year or 10,000 miles with original heat range plugs as specified by the manufacturer and reset timing to factory specifications (follow the procedures indicated within the factory repair manual and/or as indicated on the factory underhood emissions tag). Do not use platinum spark plugs unless they are original equipment. Change spark plugs at least every 15,000 miles and spark plug wires at least every 50,000 miles.

TOOL & SUPPLY REQUIREMENTS

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

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

- Spark Plug Socket
- NEW Spark Plugs





2001-2002 Denali/2002 Escalade

Part No. 4GL218-060/068SQ

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
2E228-390	V2SQ S-TRIM LS1 TRUCK	1	7A250-050	1/4-20 x .50" SHCS ZINC PLTD	2
2A036-333	S/C PULLEY, 3.33" - 6-GRV	1	7J006-093	6mm WASHER, PLTD	2
2A046-113	BELT, K061130-GATES	1	7P375-050	3/8" HOSE UNION, BRASS	1
7A375-224	3/8-16 x 2.25" GR5 HX	5	7S350-200	3-1/2" x 2" SLEEVE	1
7J375-044	3/8"SAE WASHER, PLTD	5	7U133-045	RUBBER ELBOW, Ø1" x 45°	1
7C012-050	M12-1.75 x 50mm HXHD BOLT	1	4PGL012-061	INLET DUCT, MACH H.O. LS1 TRK	1
4FA016-171	DUST COVER (IDLER PULLEY)	1	4GL012-010	DUCT, VORTECH, INLET GM TRK	1
4FH016-150	IDLER PULLEY, 6-RIB 3" FLANGED	1	7P625-375	REDUCER, 5/8" BARB TO 3/8" BARB	1
2A017-462	SPACER, IDLER SMOOTH 6-RIB	1	9BR100-001	Ø1.00" BRASS ROD	2.3225"
2A046-140	BELT, GATES, K061140	1	7U033-000	Ø5/8" PCV HOSE	0.16'
4GL011-021	MTG BRKT	1	4GL114-010	WATER TUBE ASY, GM TRK	1
4GL130-026	OIL FEED LINE ASY	1	4GL014-018	WATER TUBE, GM TRK, POLISHED	1
7P125-026	-4 x 1/8"NPT x 90° MALE	2	7A250-050	1/4-20 x .50" SHCS ZINC PLTD	1
7P525-067	.500" CRIMP FERRULES	2	7J006-093	6mm WASHER, PLTD	1
7P250-066	#4 SWIVEL x 1/4" HOSE BARB	2	7R002-024	#24 SAE TYPE "F" SS HOSE CLAMP	2
7U030-026	1/4" OIL FEED HOSE	3.17'	7R003-022	ADEL CLAMP, 1-3/8"	1
7U100-055	TIE-WRAP, 6" NYLON	2	7U133-125	HOSE, Ø1.25" x 90° LONG LEG	1
4GL130-036	OIL DRAIN ASY	1	4PGL112-020	DISCH. ASY	1
7P375-017	3/8"NPT x 1/2" BEADED HOSE BARB	1	4GL012-030	ELBOW, 3.88" - 3.0" x 90° LS1 TRK	1
7P375-040	3/8" FEMALE ELBOW	1	7R002-044	#44 GOLDSEAL HOSE CLAMP	5
7P375-041	3/8"NPT HEX NIPPLE	1	7R002-048	#48 GOLDSEAL HOSE CLAMP	2
7R001-008	#8 STNLS HOSE CLAMP	2	7R002-064	#64 GOLDSEAL HOSE CLAMP	1
7R003-016	ADEL CLAMP, 7/8"	1	7S275-200	2-3/4" x 2" SLEEVE	2
7U030-036	1/2" OIL DRAIN HOSE	2.75'	4GL012-040	DISCH TUBE "A", 6.0 COOLER POL	1
4GL238-068	FMU ASY 8:1, w/LINES	1	4GL012-050	DISCH TUBE "B", 6.0 COOLER POL	1
7U030-046	5/32" x 12" VACUUM LINE	1	7S300-275	REDUCER, Ø3.00" - Ø2.75"	1
7P156-082	5/32" TEE	1	4GL114-010	ASY, WATER TUBE,	1
4GL101-002	FUEL SYSTEM ASY	1	4GL014-010	WATER TUBE, GM TRUCK	1
7E010-075	#12 x 3/4" SHEET METAL SCREW	2	7A250-050	1/4-20 x 1/2" SHCS ZINC PLTD	1
7P625-030	FTG, GM TRUCK FUEL PUMP	1	7J006-093	6mm WASHER, PLATED	1
7P625-031	FTG, GM TRUCK FILTER	2	7R002-024	#24 GOLDSEAL HOSE CLAMP	2
7R003-027	ADEL CLAMP, 1-11/16"	1	7R003-022	ADEL CLAMP, 1-3/8"	2
7U030-050	12mm FUEL HOSE	1M	7U133-070	FILLER HOSE	1
7R001-008	#8 STNLS HOSE CLAMP	2	8F060-001	FUEL INJECTORS, 8.1	8
8F001-002	155 INLINE FUEL PUMP	1	4PGL120-020	ECM CHIP PACKAGE GM TRUCK	1
7C010-050	10-24 x 1/2" SOC HD CAP, ZINC PL	1	7T560-001	CUTTER, 9/16" ROTOBROACH	1
7F010-024	10-24 NYLOCK NUT	1	7T560-002	ARBOR, ROTOBROACH	1
7J010-001	#10 FLAT WASHER	2	8N106-050	WATR COOLR ASY	1
8F101-320	FUEL PMP RELAY ASY, GM TRUCK	1	8N006-010	WATER COOLER	1
7U100-045	O-RING, Ø.301"	1	7P500-026	1/2"NPT.x 3/4" BARB 90°	2
5W001-014	FUSE HOLDER 10GA WIRE	1	4GL010-080	BRKT "A", WATER COOLER	1
5W001-011	16-14GA EYELET Ø.25" HOLE	1	4GL010-090	BRKT "B", WATER COOLER	1
5W001-025	FEMALE SLIDE, INSULATED, MINI	1	4GL010-100	BRKT "C", WATER COOLER	1
5W001-024	MINI ATC FUSE TAP	1	7A250-075	1/4-20 x 3/4" SHCS PLTD	8
5W001-015	FUSE, BLADE TYPE, 20AMP	1	7F250-021	1/4-20 NYLOCK NUT ZINC PLTD	8
5W001-017	3/8" RING TERMINAL 12GA.	1	7J250-001	1/4"SAE WASHER, PLTD	16
5W001-042	12-10GA 3/16" RING TERMINAL	1	8N105-040	WATER TANK ASY,	1
5W001-005	3/8" PLASTIC WIRE LOOM	2	7U038-000	3/4" HEATER HOSE	19
5W001-019	SOLDERLESS CONNECTOR 10-12GA	1	7R007-001	NYLON CLAMP 1-1/8"	12
5W001-044	TIE-WRAP, 4" NYLON	8	8N055-030	TANK, LT1 AFTERCOOLER	1
7P375-050	3/8" HOSEMENDER	1	7P500-026	1/2"NPT x 3/4" BARB.x 90°	2
4GL112-070	AIR INTAKE ASY	1	7U100-055	TIE-WRAP, 6" NYLON	6
7P156-082	5/32" TEE	1	7U038-012	HOSE, Ø3/4" x 90°, 4" x 12"	1
7R002-016	#16 SAE TYPE "F" SS HOSE CLAMP	4	7U030-065	3/4" x 90° HOSE SHORT	1
7R002-052	#52 SAE TYPE "F" SS HOSE CLAMP	2	7P375-075	3/4" HOSE BARB UNION, BRASS	1
7R002-056	#56 SAE TYPE "F" SS HOSE CLAMP	4	4GL010-060	BRKT, WATER TANK, COOLER	1
7S350-300	3-1/2" x 3" SLEEVE	1	7A250-050	1/4-20 x .50" SHCS ZINC PLTD	4
7U030-046	5/32" VACUUM LINE	1.5'	7J250-001	1/4"SAE WASHER, PLTD	4
7U030-056	3/8" PCV/VAC RUBBER HOSE	2	8N056-060	SURGE TANK, PLASTIC	1
7U034-016	1" GS HOSE	0.33'	8N055-050	PLASTIC CAP, SURGE TANK	1
7U035-001	Ø3-1/2" FLEX HOSE	1.16'	7P500-078	1/2"NPT x 3/4" HOSE FIT STRT	2
7U375-052	3/8" VACUUM CAP	1	4GL010-070	BRKT, SURGE TANK, COOLER	1
8D001-001	STD COMPRESS BYPASS VALVE	1	8N107-050	WATER PUMP ASY,	1
4GL010-011	BRKT, D-SIDE GM TRK AIR INLET	1	8F001-402	PUMP, WATER	1
4GL010-012	BRKT, P-SIDE GM TRK AIR INLET	1	7R003-027	ADEL CLAMP, 1-11/16"	1
			5W001-025	FEM SLIDE, INSULATED MINI	1
			5W001-043	12-10GA x 1/4" RING TERMINAL	3



2001-2002 Denali/2002 Escalade, cont'd

Part No. 4GL218-060/068SQ

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
7A250-050	1/4-20 x .50" SHCS ZINC PLTD	2
5W001-013	14-16AWG, SOLDERLESS	4
5W001-019	SOLDERLESS CONNECTOR 10-12	2
7U100-044	TIE-WRAP, 4" NYLON	4
5W001-022	T-TAP CONN, 14-16AWG	1
7F250-021	1/4-20 NYLOCK NUT ZINC PLTD	1
5W001-015	FUSE, BLADE TYPE 20AMP	1
5W001-005	3/8" PLASTIC WIRE LOOM	2
5W001-014	FUSE HOLDER 10GA WIRE	1
7U100-055	TIE-WRAP, 6" NYLON	6
5W001-041	12-10GA MALE SLIDE	2
8F101-320	FUEL PUMP RELAY ASY	1
8N201-078	PWR COOLER ASY.	1
8N101-118	WELDED CORE ASY.	1
7P500-078	1/2"NPT x 3/4" HOSE FIT STRT	1
7P500-026	1/2"NPT 3/4" BARB x 90°	1
7U250-200	TAPE, FOAM 1/4" x 2" x 50'	1
4GL010-050	BRKT, COOLER CORE SUPPORT	1
4GL114-010	WATER TUBE ASY	1
8N201-070	POWER COOLER ASY	1
8N101-110	WELDED CORE ASY, V-10 S.D.	1
8N101-001	WELDED CORE ASY, w/ENDS ONLY	1
7P500-078	1/2"NPT x 3/4" HOSE FIT STRT	1
7P500-026	1/2"NPT x 3/4" BARB, 90° BRASS	1
7U250-200	TAPE, FOAM-1/4" x 2" x 50'	1
4GL010-050	BRKT, COOLER CORE SUPPORT	1
2A017-875-13	SPACER, .875"OD x .895"LONG	1
9AL6061-0875	Ø7/8" 6061 ALUMINUM ROD	1
7C010-040	M10-1.5 x 40 HXHD CL8.8 ZN	1
7J010-002	10mm WASHER, ZINC PLTD	1
4GL238-068	FMU ASY 8:1	1
4GL238-068	FMU ASY, 8:1 5/16", GM TRK	1
4GPL110-110	'03 5.3L VACUUM PUMP RELOCATION	1
4PGL010-115	BRKT, '03 BRAKE VAC PUMP	1
4PGL010-110	BRKT, '03 BRAKE LINE RELOC	1
7P500-009	1/2" x 90°, HOSE BARB UNION	1
7P500-001	1/2" HOSE UNION	2
7U030-050	12mm (1/2") FUEL HOSE	0.55m
7U030-050	12mm (1/2") FUEL HOSE	0.48m
7U133-500	1/2" x 90°, MOLDED RUBBER HOSE	1
7A312-075	5/16-18 x 3/4" HXCS GR5 ZINC	4
7F312-017	5/16-18 NYLOCK NUT	4
7J312-000	5/16" FLAT WASHER-SAE	8



2003 Escalade/SS

Part No. 4GL218-080/088SQ

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
2E228-390	V2SQ S-TRIM LS1 TRUCK	1	7U133-045	RUBBER ELBOW, Ø1" x 45°	1
2A036-333	S/C PULLEY, 3.33" - 6-GRV	1	4PGL012-017	DUCT, S/C INLET, '03 ESCALADE	1
2A046-113	BELT, K061130-GATES	1	4GL012-010	DUCT, INLET, LONG GM SUV/TRK	1
7A375-224	3/8-16 x 2.25" GR5 HX	5	7P375-097	3/8"NPT x 3/8" BEADED HOSE BARB	1
7J375-044	3/8"SAE WASHER, PLTD	5	4GL114-010	WATER TUBE ASY, GM TRK	1
7C012-050	M12-1.75 x 50mm HXHD BOLT	1	4GL014-018	WATER TUBE, GM TRK, POLISHED	1
4FA016-171	DUST COVER (IDLER PULLEY)	1	7A250-050	1/4-20 x .50" SHCS ZINC PLTD	1
4FH016-150	IDLER PULLEY, 6-RIB 3" FLANGED	1	7J006-093	6mm WASHER, PLTD	1
2A017-462	SPACER, IDLER SMOOTH 6-RIB	1	7R002-024	#24 SAE TYPE "F" SS HOSE CLAMP	2
2A046-140	BELT, GATES, K061140	1	7R003-022	ADEL CLAMP, 1-3/8"	1
4GL011-021	MTG BRKT	1	7U133-125	HOSE, Ø1.25" x 90° LONG LEG	1
4GL130-026	OIL FEED LINE ASY	1	4PGL112-020	DISCH. ASY	1
7P125-026	-4 x 1/8"NPT x 90° MALE	2	4GL012-030	ELBOW, 3.88" x 3.0" x 90° LS1 TRK	1
7P525-067	.500" CRIMP FERRULES	2	7R002-044	#44 GOLDSEAL HOSE CLAMP	5
7P250-066	#4 SWIVEL x 1/4" HOSE BARB	2	7R002-048	#48 GOLDSEAL HOSE CLAMP	2
7U030-026	1/4" OIL FEED HOSE	3.17'	7R002-064	#64 GOLDSEAL HOSE CLAMP	1
7U100-055	TIE-WRAP, 6" NYLON	2	7S275-200	2-3/4" x 2" SLEEVE	2
4GL130-036	OIL DRAIN ASY	1	4GL012-040	DISCH TUBE "A", 6.0 COOLER POL	1
7P375-017	3/8"NPT x 1/2" BEADED HOSE BAR	1	4GL012-050	DISCH TUBE "B", 6.0 COOLER POL	1
7P375-040	3/8" FEMALE ELBOW	1	7S300-275	REDUCER, Ø3.00" x Ø2.75"	1
7P375-041	3/8"NPT HEX NIPPLE	1	4GL114-010	ASY, WATER TUBE,	1
7R001-008	#8 STNLS HOSE CLAMP	2	4GL014-010	WATER TUBE, GM TRUCK	1
7R003-016	ADEL CLAMP, 7/8"	1	7A250-050	1/4-20 x 1/2" SHCS ZINC PLTD	1
7U030-036	1/2" OIL DRAIN HOSE	2.75'	7J006-093	6mm WASHER, PLATED	1
4GL238-068	FMU ASY 8:1, w/LINES	1	7R002-024	#24 GOLDSEAL HOSE CLAMP	2
7U030-046	5/32" x 12" VACUUM LINE	1	7R003-022	ADEL CLAMP, 1-3/8"	2
7P156-082	5/32" TEE	1	7U133-070	FILLER HOSE	1
4GL101-002	FUEL SYSTEM ASY	1	8F060-001	FUEL INJECTORS, 8.1	8
7E010-075	#12 x 3/4" SHEET METAL SCREW	2	4PGL120-020	ECM CHIP PACKAGE GM TRUCK	1
7P625-030	FTG, GM TRUCK FUEL PUMP	1	7T560-001	CUTTER, 9/16" ROTOBROACH	1
7P625-031	FTG, GM TRUCK FILTER	1	7T560-002	ARBOR, ROTOBROACH	1
7R003-027	ADEL CLAMP, 1-11/16"	2	8N106-050	WATR COOLR ASY	1
7U030-050	12mm FUEL HOSE	1M	8N006-010	WATER COOLER	1
7R001-008	#8 STNLS HOSE CLAMP	2	7P500-026	1/2"NPT x 3/4" BARB x 90°	2
8F001-002	155 INLINE FUEL PUMP	1	4GL010-080	BRKT "A", WATER COOLER	1
7C010-050	10-24 x 1/2" SOC HD CAP, ZINC PL	1	4GL010-090	BRKT "B", WATER COOLER	1
7F010-024	10-24 NYLOCK NUT	1	4GL010-100	BRKT "C", WATER COOLER	1
7J010-001	#10 FLAT WASHER	2	7A250-075	1/4-20 x 3/4" SHCS PLTD	8
8F101-320	FUEL PMP RELAY ASY, GM TRUCK	1	7F250-021	1/4-20 NYLOCK NUT ZINC PLTD	8
7U100-045	O-RING, Ø.301"	1	7J250-001	1/4"SAE WASHER, PLTD	16
5W001-014	FUSE HOLDER 10GA WIRE	1	8N105-040	WATER TANK ASY,	1
5W001-011	16-14GA EYELET Ø.25" HOLE	1	7U038-000	3/4" HEATER HOSE	19
5W001-025	FEMALE SLIDE, INSULATED, MINI	1	7R007-001	NYLON CLAMP 1-1/8"	12
5W001-024	MINI ATC FUSE TAP	1	8N055-030	TANK, LT1 AFTERCOOLER	1
5W001-015	FUSE, BLADE TYPE 20AMP	1	7P500-026	1/2"NPT x 3/4" BARB x 90°	2
5W001-017	3/8" RING TERMINAL 12GA.	1	7U100-055	TIE-WRAP, 6" NYLON	6
5W001-042	12-10GA 3/16" RING TERMINAL	1	7U038-012	HOSE, Ø3/4" x 90°, 4" x 12"	1
5W001-005	3/8" PLASTIC WIRE LOOM	2	7U030-065	3/4" x 90° HOSE SHORT	1
5W001-019	SOLDERLESS CONNECTOR 10-12GA	1			
5W001-044	TIE-WRAP, 4" NYLON	8			
7P375-050	3/8" HOSEMENDER	1			
4GL112-080	AIR INTAKE ASY, LS1 H.O. TRK	1			
7P156-082	5/32" TEE	1			
7R002-016	#16 SAE TYPE "F" SS HOSE CLAMP	4			
7R002-052	#52 SAE TYPE "F" SS HOSE CLAMP	2			
7R002-056	#56 SAE TYPE "F" SS HOSE CLAMP	4			
7S350-300	3-1/2" x 3" SLEEVE	1			
7U030-046	5/32" VACUUM LINE	2			
7U030-056	3/8" PCV/VAC RUBBER HOSE	2			
7U034-016	1" GS HEATER HOSE	0.33'			
7U035-001	3-1/2" FLEX HOSE	1			
7U375-052	3/8" VACUUM CAP	1			
8D001-001	STD COMPRESS BYPASS VALVE	1			
4GL010-012	BRKT, P-SIDE GM TRK AIR INLET	1			
7A250-050	1/4-20 x .50" SHCS ZINC PLTD	2			
7J006-093	6mm WASHER, PLATED	2			
7P375-050	3/8" HOSE UNION, BRASS	1			
7S350-200	3-1/2" x 2" SLEEVE	1			



2003 Escalade/SS, cont'd

Part No. 4GL218-080/088SQ

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
7P375-075	3/4" HOSE BARB UNION, BRASS	1
4GL010-060	BRKT, WATER TANK, COOLER	1
7A250-050	1/4-20 x .50" SHCS ZINC PLTD	4
7J250-001	1/4"SAE WASHER, PLTD	4
8N056-060	SURGE TANK, PLASTIC	1
8N055-050	PLASTIC CAP, SURGE TANK	1
7P500-078	1/2"NPT x 3/4" HOSE FIT STRT	2
4GL010-070	BRKT, SURGE TANK, COOLER	1
8N107-050	WATER PUMP ASY,	1
8F001-402	PUMP, WATER	1
7R003-027	ADEL CLAMP, 1-11/16"	1
5W001-025	FEM SLIDE, INSULATED MINI	1
5W001-043	12-10GA x 1/4" RING TERMINAL	3
7A250-050	1/4-20 x .50" SHCS ZINC PLTD	2
5W001-013	14-16AWG, SOLDERLESS	4
5W001-019	SOLDERLESS CONNECTOR 10-12	2
7U100-044	TIE-WRAP, 4" NYLON	4
5W001-022	T-TAP CONN, 14-16 AWG	1
7F250-021	1/4-20 NYLOCK NUT ZINC PLTD	1
5W001-015	FUSE, BLADE TYPE 20AMP	1
5W001-005	3/8" PLASTIC WIRE LOOM	2
5W001-014	FUSE HOLDER 10GA WIRE	1
7U100-055	TIE-WRAP, 6" NYLON	6
5W001-041	12-10GA MALE SLIDE	2
8F101-320	FUEL PUMP RELAY ASY.	1
8N201-078	PWR COOLER ASY.	1
8N101-118	WELDED CORE ASY.	1
7P500-078	1/2"NPT x 3/4" HOSE FIT STRT	1
7P500-026	1/2"NPT x 3/4" BARB, 90°	1
7U250-200	TAPE, FOAM 1/4" x 2" x 50'	1
4GL010-050	BRKT, COOLER CORE SUPPORT	1
4GL114-010	WATER TUBE ASY	1
8N201-070	POWER COOLER ASY	1
8N101-110	WELDED CORE ASY, V-10 S.D.	1
8N101-001	WELDED CORE ASY, w/ENDS ONLY	1
7P500-078	1/2"NPT x 3/4" HOSE FIT STRT	1
7P500-026	1/2"NPT x 3/4" BARB x 90° BRASS	1
7U250-200	TAPE, FOAM-1/4" x 2" x 50'	1
4GL010-050	BRKT, COOLER CORE SUPPORT	1
2A017-875-13	SPACER, .875"OD x .895" LONG	1
9AL6061-0875	Ø7/8" 6061 ALUMINUM ROD	1
7C010-040	M10-1.5 x 40 HXHD CL8.8 ZN	1
7J010-002	10mm WASHER, ZINC PLTD	1
4PGL110-115	'03 5.3L VACUUM PUMP RELOCATION	1
4PGL010-115	BRKT, '03 BRAKE VAC PUMP	1
4PGL010-110	BRKT, '03 BRAKE LINE RELOC	1
7P500-009	1/2" x 90°, HOSE BARB UNION	1
7P500-001	1/2" HOSE UNION	2
7U030-050	12mm (1/2") FUEL HOSE	0.55m
7U030-050	12mm (1/2") FUEL HOSE	0.48m
7U133-500	1/2" x 90°, MOLDED RUBBER HOSE	1
7A312-075	5/16-18 x 1.00" HXCS GR5 ZINC	4
7F312-017	5/16-18 NYLOCK NUT	4
7J312-000	5/16" FLAT WASHER-SAE	8



ENGINEERING, LLC

2003 H2 Hummer Part No. 4GL218-070/078SQ

PARTS LIST

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

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
8F060-005	8.1L INJECTORS	8	5W001-042	12-10GA x 3/16" RING TERMINAL	3
4809639	INSTR. MANUAL DENALI/ESCALADE/HUMMER	1	7P375-072	3/8" FEMALE FUEL FTG, STEEL	1
4GL011-021	MTG BRKT GM TRUCK MACH.	1	7P625-375	REDUCER, 5/8" BARB x 3/8" BARB	1
2E228-390	V2SQ S-TRIM LS1 TRK	1	7P375-010	3/8" GM FUEL x 3/8" BARB FTG	1
2A036-333	S/C PULLEY 3.33" 6-GRV	1	7F012-001	M12 CAP HEX NUT, FUEL PUMP	1
4GL112-040	AIR INLET ASY, H2 HUMMER	1	7R003-028	ADEL CLAMP, 2-3/8" x .26" HOLE	2
4GL012-015	DUCT, INLET, HUMMER H2 TRK	1	7P312-015	FTNG, BANJO 12mm x .312" BARB	1
7P156-082	5/32" TEE	1	7R004-004	STEPLESS CLAMP, 1.0"OD HOSE	2
7R002-016	#16 SAE TYPE "F" SS HOSE CLAMP	4	7E010-075	#12 x 3/4" SHT METAL SCRWB, HEX	3
7R002-052	#52 SAE TYPE "F" SS HOSE CLAMP	2	5W012-000	12GA STRD WIRE, RED	15'
7R002-056	#56 SAE TYPE "F" SS HOSE CLAMP	4	5W001-040	12-10GA FEMALE SLIDE INSULATED	1
7S350-300	3-1/2" x 3" SLEEVE	1	5W012-010	12GA WIRE, BLACK	5'
7U030-046	Ø5/32" VACUUM LINE	1	7R003-008	ADEL CLAMP, 1/2"ID	2
7U030-056	Ø3/8" PVC/VAC RUBBER HOSE	2	8F101-320	RELAY ASY, LS1 TRK	1
7U034-016	Ø1" GS HOSE	0.33'	8N107-050	WATER PUMP ASY.	1
7U035-001	Ø3-1/2" FLEX HOSE	0.83'	8F001-402	WATER PUMP	1
7U375-052	3/8" VACUUM CAP	1	7R003-027	ADEL CLAMP 1-11/16"	1
8D001-001	STD COMPRESS BYPASS VALVE	1	5W001-025	FEMALE SLIDE MINI	1
4PGL010-011	BRKT, D-SIDE H2 TRK AIR INLET	1	5W001-043	12-10GA x 1/4" RING TERMINAL	3
4PGL010-012	BRKT, P-SIDE H2 TRK AIR INLET	1	7A250-050	1/4-20 x .50" SHCS	2
7A250-050	1/4-20 x .50" SHCS ZINC PLTD	2	5W001-013	14-16GA BUTT-CONNECTORS	4
7J006-093	6mm WASHER, PLTD	2	5W001-019	12-10GA BUTT-CONNECTORS	2
7P375-050	3/8" HOSE UNION, BRASS	1	7U100-044	4" TIE-WRAP	4
4PGL012-061	INLET DUCT, MACH H.O. LS1 TRK	1	5W001-022	T-SPLICE CONNECTOR	1
7S350-200	3-1/2" x 2" SLEEVE	1	7F250-021	1/4-20 NYLOCK NUT	1
7U133-045	RUBBER ELBOW, Ø1" x 45°	1	5W001-015	FUSE, BLADE TYPE 20AMP	1
7C060-050	M6-1.0 x 50mm HXHD ZINC PLTD	2	5W001-005	3/8" PLASTIC WIRE LOOM	2
7J250-150	1/4" FENDER WASHER ZN PLTD	2	5W001-014	FUSE HOLDER 10GA WIRE	1
7F006-093	6mm NYLOCK NUT	2	7U100-055	TIE-WRAP, 6" NYLON	6
2A017-752-02	SPACER, .750"OD x .894"LONG	2	5W001-041	12-10GA MALE SLIDE INSULATED	2
7P625-375	REDUCER, 5/8" BARB x 3/8" BARB	1	8F101-320	WATER PUMP RELAY ASY, LS1 TRK	1
7U033-000	5/8" PVC HOSE	0.16'	8N105-050	WATER TANK ASY	1
7S300-275	REDUCER, Ø3.00" x Ø2.75"	1	8N055-030	LT1 WATER TANK	1
4GL130-036	OIL DRAIN ASY	1	7P500-026	90° BARBED BRASS FITTING	2
7P375-017	3/8"NPT x 1/2" BEADED HOSE BARB	1	4PGL010-060	BRKT "A"	1
7P375-040	3/8" FEMALE ELBOW	1	4PGL010-070	BRKT "B"	1
7P375-041	3/8"NPT HEX NIPPLE	1	4PGL010-080	BRKT "C"	1
7R001-008	#8 STAINLESS HOSE CLAMP	2	7A250-102	1/4-20 x 1" SHCS	1
7R003-016	ADEL CLAMP, 1.0"	1	7J250-022	1/4" WASHER	6
7U030-036	Ø1/2" OIL DRAIN HOSE	2.75'	7F250-021	1/4-20 NYLOCK NUT	1
7T560-001	CUTTER, 9/16" ROTABROACH	1	8N056-060	SURGE TANK	1
7T560-002	ARBOR, ROTABROACH	1	8N055-050	SURGE TANK CAP	1
4PGL130-026	OIL FEED ASY	1	4PGL010-090	BRKT, SURGE TANK	1
7U100-055	TIE-WRAP, 6" NYLON	2	7P500-078	12"NPT x 3/4" HOSE FIT	2
7C060-050	M6 x 1.0" x 50 HXHD ZINC PLATE	2	7U038-020	MOLDED "S" HOSE	1
7J006-093	6mm WASHER PLTD	2	7A250-050	1/4-20 x .5" SHCS	4
4GL010-020	ADAPTER, ESCALADE OIL FEED	1	7U038-000	Ø3/4" HEATER HOSE	10
4GL010-030	GASKET, ESCALADE OIL ADAPTER	1	7U033-000	Ø5/8" HOSE	5
4GL010-040	GASKET, 5.3 OIL ADAPTER	1	7P750-625	3/4-5/8" REDUCER BARB	2
7U250-040	OIL FEED HOSE, 40" -4 x 90° 1	1	7E010-075	#12 x 3/4" SHT METAL SCRWB HEX	4
7P125-005	1/8"NPT STR x -4 JIC FTG	1	7U030-065	90° MOLDED ELBOW SHORT	1
7P125-004	1/8"NPT x 90° JIC FTG	2	7J010-001	#10 FLAT WASHER	2
4PGL101-001	FUEL PUMP ASY	1	7R002-020	#20 HOSE CLAMP	2
7P250-047	1/4"NPT to 3/8" BARB x 90°	1	7R007-002	NYLON CLAMPS 7/8"	4
7P312-002	5/16" BARB x 1/4"NPT FEM	1	7R007-001	NYLON CLAMPS 1-1/8"	10
7R004-002	STEPLESS CLAMP, 17.0-70	4	8N201-078	POWER COOLER ASY	1
7R004-001	STEPLESS CLAMP, 15.7-70	2	8N101-118	WELDED CORE ASY V-10 S.D.	1
7U031-018	Ø5/16" EFI FUEL HSE HI-PSR	1.25'	7P500-078	1/2"NPT x 3.4" HOSE FIT	1
7U032-016	Ø3/8" EFI FUEL HSE HI-PSR	.167'	7P500-026	1/2"NPT x 3/4" HOSE BARB 90°	1
7U032-016	Ø3/8" EFI FUEL HSE HI-PSR	.5'	2A017-875-13	SPACER, CAC BRKT	1
7U100-044	TIE-WRAP, 4" NYLON	10	7C010-040	10mm-1.5 x 1.5mm SCREW	1
7U100-055	TIE-WRAP, 6" NYLON	10	7J010-002	10mm WASHER	1
8F001-500	PUMP, FUEL, "PRO-FLO 500"	1	7U250-200	COOLER FOAM	1
7U033-010R	HOSE, 5/8"ID p/STEERING RET	2	4GL010-050	COOLER REST BRACKET	1



2003 H2 Hummer, con't

Part No. 4GL218-0701078SQ

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
4PGL112-028	DISCH ASY	1			
4GL012-041	6.0 TUBE "A"	1			
4GL012-051	6.0 TUBE "B"	1			
4GL012-030	ELBOW, 3.88 x 3.0" x 90° LS1 TRK	1			
7R002-044	#44 GOLDSEAL HOSE CLAMP	5			
7R002-048	#48 GOLDSEAL HOSE CLAMP	2			
7R002-064	#64 GOLDSEAL HOSE CLAMP	1			
7S275-200	2-3/4" x 2" SLEEVE	2			
7S300-275	Ø3.00" x Ø2.75" REDUCER SLEEVE	1			
8N106-075	WATER COOLER ASY	1			
8N006-005	WATER COOLR, SETRAB DUAL-PASS	1			
7A250-102	1/4-20 x 1" SHCS SS	4			
7J250-022	1/4" WASHER SAE STAINLESS	8			
7F250-021	1/4-20 NYLOCK NUT, ZINC PLT	2			
8N010-140	MTG TAB, SETRAB 2-PASS COOLR	4			
7P375-075	3/4" HOSE BARB UNION, BRASS	3			
7U125-200	TAPE, FOAM, 1/8" x 2" x 50'	7.5"			
7U038-020	HOSE, Ø3/4" "S" MOLDED RUBBER	2			
7R007-001	NYLON RATCHET CLAMP, 1-1/8"	4			



2004-2007 H2 Hummer

Part No. 4GL218-090/098SQ (2004 Models)
Part No. 4GL218-150/158SQ (2005-2007 Models)

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
8F060-005	8.1L INJECTORS	8	5W001-019	12-10GA BUTT CONNECTORS	2
4809639	INSTR. MANUAL DENALI/ESCALADE/HUMMER	1	7U100-044	4" TIE-WRAP	4
4GL011-021	MTG BRKT GM TRUCK MACH.	1	5W001-022	T-SPLICE CONNECTOR	1
2E228-390	V2SQ S-TRIM LS1 TRK	1	7F250-021	1/4-20 NYLOCK NUT	1
2A036-333	S/C PULLEY 3.33" 6-GRV	1	5W001-015	FUSE, BLADE TYPE 20AMP	1
4GL112-040	AIR INLET ASY, H2 HUMMER	1	5W001-005	3/8" PLASTIC WIRE LOOM	2
4GL012-015	DUCT, INLET, HUMMER H2 TRK	1	5W001-014	FUSE HOLDER 10GA WIRE	1
7P156-082	5/32" TEE	1	7U100-055	TIE-WRAP, 6" NYLON	6
7R002-016	#16 SAE TYPE "F" SS HOSE CLAMP	4	5W001-041	12-10GA MALE SLIDE INSULATED	2
7R002-052	#52 SAE TYPE "F" SS HOSE CLAMP	2	8F101-320	WATER PUMP RELAY ASY, LS1 TRK	1
7R002-056	#56 SAE TYPE "F" SS HOSE CLAMP	4	8N105-050	WATER TANK ASY	1
7S350-300	3-1/2" x 3" SLEEVE	1	8N055-030	LT1 WATER TANK	1
7U030-046	5/32" VACUUM LINE	1	7P500-026	90° BARBED BRASS FITTING	2
7U030-056	3/8" PVC/VAC RUBBER HOSE	2	4PGL010-060	BRKT "A"	1
7U034-016	Ø1"GS HOSE	0.33'	4PGL010-070	BRKT "B"	1
7U035-001	Ø3-1/2" FLEX-HOSE	0.83'	4PGL010-080	BRKT "C"	1
7U375-052	3/8" VACUUM CAP	1	7A250-102	1/4-20 x 1" SHCS	1
8D001-001	STD COMPRESS BYPASS VALVE	1	7J250-022	1/4" WASHER	6
4PGL010-011	BRKT, D-SIDE H2 TRK AIR INLET	1	7F250-021	1/4-20 NYLOCK NUT	1
4PGL010-012	BRKT, P-SIDE H2 TRK AIR INLET	1	8N056-060	SURGE TANK	1
7A250-050	1/4-20 x .50" SHCS ZINC PLTD	2	8N055-050	SURGE TANK CAP	1
7J006-093	6mm WASHER, PLTD	2	4PGL010-090	BRKT, SURGE TANK	1
7P375-050	3/8" HOSE UNION, BRASS	1	7P500-078	12"NPT x 3/4" HOSE FIT	2
4PGL012-061	INLET DUCT, MACH H.O. LS1 TRK	1	7U038-020	MOLDED "S" HOSE	1
7S350-200	3-1/2" x 2" SLEEVE	1	7A250-050	1/4-20 x .5" SHCS	4
7U133-045	RUBBER ELBOW, Ø1" x 45°	1	7U038-000	Ø3/4" HEATER HOSE	10"
7C060-050	M6-1.0 x 50mm HXHD ZINC PLTD	2	7U033-000	Ø5/8" HOSE	5"
7J250-150	1/4" FENDER WASHER ZN PLTD	2	7P750-625	Ø3/4" x Ø5/8" REDUCER BARB	2
7F006-093	6mm NYLOCK NUT	2	7E010-075	#12 x 3/4" SHT METAL SCR W HEX	4
2A017-752-02	SPACER, .750"OD x .894"LONG	2	7U030-065	90° MOLDED ELBOW SHORT	1
7P625-375	REDUCER, Ø5/8" BARB TO Ø3/8" BARB	1	7J010-001	#10 FLAT WASHER	2
7U033-000	Ø5/8" PVC HOSE	0.16'	7R002-020	#20 HOSE CLAMP	2
7S300-275	REDUCER, Ø3.00" x Ø2.75"	1	7R007-002	NYLON CLAMPS 7/8"	4
7U033-000	Ø5/8" PCV HOSE	.16'	7R007-001	NYLON CLAMPS 1-1/8"	10
7P375-113	PCV VALVE, VIPER, 3/8" x 1/2" BA	1	8N201-078	POWER COOLER ASY	1
7U375-056	Ø3/8" PCV/VAC RUBBER HOSE	.25'	8N101-118	WELDED CORE ASSEMBLY V-10 S.D.	1
4GL130-036	OIL DRAIN ASY	1	7P500-078	1/2"NPT x 3.4" HOSE FIT	1
7P375-017	3/8"NPT x 1/2" BEADED HSE BRB	1	7P500-026	1/2"NPT x 3/4" HOSE BARB x 90°	1
7P375-040	Ø3/8" FEMALE ELBOW	1	2A017-875-13	SPACER, CAC BRKT	1
7P375-041	3/8"NPT HEX NIPPLE	1	7C010-040	10mm-1.5" x 1.5mm SCREW	1
7R001-008	#8 STAINLESS HOSE CLAMP	2	7J010-002	10mm WASHER	1
7R003-016	ADEL CLAMP, 1.0"	1	7U250-200	COOLER FOAM	1
7U030-036	Ø1/2" OIL DRAIN HOSE	2.75'	4GL010-050	COOLER REST BRACKET	1
7T560-001	CUTTER, 9/16" ROTABROACH	1	4PGL112-028	DISCH ASY	1
7T560-002	ARBOR, ROTABROACH	1	4GL012-041	6.0 TUBE "A"	1
4PGL130-026	OIL FEED ASY	1	4GL012-051	6.0 TUBE "B"	1
7U100-055	TIE-WRAP, 6" NYLON	2	4GL012-030	ELBOW, 3.88" - 3.0" x 90° LS1 TRK	1
7C060-050	M6-1.0 x 50mm HXHD ZINC PLATE	2	7R002-044	#44 GOLDSEAL HOSE CLAMP	5
7J006-093	6mm WASHER PLTD	2	7R002-048	#48 GOLDSEAL HOSE CLAMP	2
4GL010-020	ADAPTER, ESCALADE OIL FEED	1	7R002-064	#64 GOLDSEAL HOSE CLAMP	1
4GL010-030	GASKET, ESCALADE OIL ADAPTER	1	7S275-200	2-3/4" x 2" SLEEVE	2
4GL010-040	GASKET, 5.3 OIL ADAPTER	1	7S300-275	3.00" x 2.75" REDUCER SLEEVE	1
7U250-400	OIL FEED HOSE, 40" x -4 x 90°	1	8N106-075	WATER COOLER ASY	1
7P125-005	1/8"NPT STR x -4 JIC FTG	1	8N006-005	WATER COOLR, SETRAB DUAL-PASS	1
7P125-004	1/8"NPT x 90° x JIC FTG	2	7A250-102	1/4-20 x 1" SHCS SS	4
8N107-050	WATER PUMP ASY	1	7J250-022	1/4" WASHER SAE STAINLESS	8
8F001-402	WATER PUMP	1	7F250-021	1/4-20 NYLOCK NUT, ZINC PLT	2
7R003-027	ADEL CLAMP 1-11/16"	1	8N010-140	MTG TAB, SETRAB 2-PASS COOLR	4
5W001-025	FEMALE SLIDE MINI	1	7P375-075	3/4" HOSE BARB UNION, BRASS	3
5W001-043	12-10GA x 1/4" RING TERMINAL	3	7U125-200	TAPE, FOAM, 1/8" x 2" x 50'	7.5"
7A250-050	1/4-20 x .50" SHCS	2	7U038-020	HOSE, Ø3/4" "S" MOLDED RUBBER	2
5W001-013	14-16GA BUTT CONNECTORS	4	7R007-001	NYLON RATCHET CLAMP, 1-1/8"	4
			4GL020-020	MTUNER CREDIT TAG (2004 MODEL YEAR)	1
			5A003-034	DIABLO PREDATOR (2003-2007 MODEL YEAR)	1

* It is recommended that you use the K061140 drive belt.



2004 Escalade/SS Truck

Part No. 4GL218-130/138SQ

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
4GL011-021	MOUNTING BRACKET MACH	1	7R002-024	#24 SAE TYPE "F" SS HOSE CLAMP	2
4PGL130-026	OIL FEED ASY, ESCALADE	1	7R003-022	ADEL CLAMP 1-3/8"	1
4GL010-020	ADAPTOR, ESCALADE OIL FEED	1	7U133-125	HOSE, Ø1.25" x 90° LONG LEG	1
4GL130-030	GASKET, ESCALADE OIL ADAPTER	2	2E228-390	V2SQ S-TRIM LS1 TRUCK	1
7C060-050	M6-1.0 x 50mm HXHD ZINC PLATE	2	2A036-333	S/C PULLEY 3.33" 6-GRV	1
7J006-093	6mm WASHER, PLATED	2	7U100-070	KEY, 3/16" SQUARE x 7/8" LONG	1
7P125-004	1/8"NPT 90° x -4 JIC FTG STL	2	7A040-011	PULLEY RETAINER S/C	1
7P125-005	1/8"NPT STR, x -4 JIC FTG STL	1	7B375-110	3/8-24 x 1" GRADE-8 HXHD	1
7U100-055	TIE-WRAP, 7.5" NYLON	2	7K375-040	3/8"AN960 FLAT WASHER PLATED	1
7U250-090-400	OIL FEED HOSE, 40" x -4 x 90°	1	7A250-037	1/4-20 x .375" SHCS PLTD	6
4GL130-036	OIL DRAIN ASY, GM TRK	1	7U100-023	DRIVE SCREW, 3/4 x 1/4"	2
7P375-017	3/8"NPT x 1/2" BEADED HSE BRB	1	2A046-113	BELT, K061130-GATES	1
7P375-040	3/8"NPT BRASS REM/FEM ELBOW	1	7A375-224	3/8-16 x 2.25" GR5 HX	5
7P375-041	3/8"NPT HEX NIPPLE x 1.5"	1	7J375-044	3/8"SAE WASHER, PLTD	5
7R001-008	#8 STNLS HOSE CLAMP	2	7C012-050	M12-1.75 x 50mm HXHD BOLT	1
7R003-016	ADEL CLAMP, 1.0"	1	4F016-171	DUST COVER (IDLER PULLEY)	1
7U030-036	1/2" OIL DRAIN HOSE	2	4FH016-150	IDLER PULLEY, 6-RIB 3" FLANGED	1
7T560-001	CUTTER, 9/16" ROTABROACH	1	2A017-462	SPACER, IDLER SMOOTH 6-RIB	1
7T560-002	ARBOR, ROTABROACH	1	2A046-140	BELT, GATES K061140	1
4GL112-080	AIR INT ASY, LS1 H.O. TRK	1	8N201-070	PWR COOLER ASY, GMT LS1 H.O.	1
4GL010-011	BRKT, DRIVER'S SIDE SM TRK AIR INLET	1	2A017-875-13	SPACER, .875"OD x .895" LONG	1
4GL012-010	DUCT, INLET, LONG GM SUV/TRK	1	4GL010-050	BRKT, COOLER CORE SUPPORT	1
4GPL012-017	DUCT, S/C INLET, '03 ESCALADE	1	7C010-040	M10-1.5 x 40mm HXHD CL8.8 ZN	1
7A250-050	1/4-20 x .50" SHCS ZINC PLTD	2	7J010-002	10mm WASHER, ZINC PLATED	1
7J006-093	6mm WASHER, PLATED	2	7P500-026	1/2"NPT x 3/4" BARB 90° BRASS	1
7P156-082	5/32" TEE	1	7P500-078	1/2"NPT x 3/4" HOSE FIT STRT	1
7P375-050	3/8" HOSE UNION, BRASS	1	7U250-200	TAPE, FOAM-1/4" x 2" x 50'	12"
7P375-097	3/8"NPT x 3/8" BEADED HOSE BARB	1	8N101-110	WELDED CORE ASY, V-10 S.D.	1
7P375-106	PCV VALVE, FORD, 3/8" HOSE	1	8N107-050	WATER PUMP ASY, GMT LS1 H.O.	1
7R002-016	#16 SAE TYPE "F" SS HOSE CLAMP	4	5W001-005	3/8" PLASTIC WIRE LOOM	5'
7R002-052	#52 SAE TYPE "F" SS HOSE CLAMP	2	5W001-009	16-14GA MALE SLIDE INSULATED	1
7R002-056	#56 SAE TYPE "F" SS HOSE CLAMP	4	5W001-013	14-16AWG, SOLDERLESS CONNECTOR	4
7S350-200	SLEEVE, 3-1/2" x 2", BLUE	1	5W001-014	FUSE HOLDER, 10GA	1
7S350-300	SLEEVE, 3-1/2" x 3", BLUE	1	5W001-015	FUSE, BLADE TYPE 20AMP	1
7S030-046	5/32" VACUUM LINE	1	5W001-019	10-12GA BUTT CONNECTOR, INSULATED	2
7U030-056	3/8" PCV/VAC RUBBER HOSE	2	5W001-022	T-TAP CONNECTOR, 14-16AWG	1
7U034-016	1" GS HEATER HOSE	0.33'	5W001-024	MINI ATC FUSE TAP	1
7U035-001	3-1/2" FLEX HOSE	1	5W001-041	12-10GA MALE SLIDE, INSULATED	2
7U133-045	RUBBER ELBOW, Ø1" x 45°	1	5W001-043	12-10GA x 1/4" RING TERMINAL	3
7U375-052	3/8" VACUUM CAP	1	2A250-050	1/4-20 x .50" SHCS ZINC PLTD	2
8D001-001	STD COMPRESS BYPASS VALVE	1	7F250-021	1/4-20 NYLOCK NUT, ZINC PLATED	1
7U030-056	Ø3/8" PCV/VAC RUBBER HOSE	0.25'	7R003-027	ADEL CLAMP, 1-11/16"	1
7P375-113	PCV VALVE, VIPER, 3/8" x 1/2" BA	1	7U100-044	TIE-WRAP, 4" NYLON	4
4PGL112-020	DISCH ASY, LS1 H.O. TRUCK	1	7U100-055	TIE-WRAP, 7.5" NYLON	6
4GL012-030	ELBOW, 3.88" x 3.0" x 90° GM TRUCK	1	8F001-402	PUMP, WATER, PIERBURG	1
4GL012-040	DISCH TUBE "A", 6.0 COOLER, CAST	1	8F101-320	FUEL PUMP RELAY ASY, LS1 TRK	1
4GL012-051	DISCH TUBE "B", 6.0 COOLER	1	5W001-010	16-14GA FEMALE SLIDE, INSULATED	2
7R002-044	#44 SAE TYPE "F" SS HOSE CLAMP	5	5W001-016	RELAY, BOSCH	1
7R002-048	#48 SAE TYPE "F" SS HOSE CLAMP	2	5W001-040	12-10GA FEMALE SLIDE, INSULATED	2
7R002-064	#64 SAE TYPE "R" SS HOSE CLAMP	1	5W001-042	12-10GA x 3/16" RING TERMINAL	2
7S275-200	SLEEVE, Ø2.75" x 2.00"L, BLUE	2	5W012-000	12GA, STRD WIRE, RED	9'
7S300-275	REDUCER, Ø3.00" x Ø2.75"	1	5W012-000	12GA, STRD WIRE, RED	1.5'
4GL114-010	WATER TUBE ASY, GM TRUCK	1	5W012-010	12GA, WIRE, BLACK	0.5'
4GL014-018	WATER TUBE, GM TRUCK, POLISHED	1	5W014-030	14GA STRD WIRE, BLACK	0.5'
2A250-050	1/4-20 x .50" SHCS ZINC PLTD	1			
7J006-093	6mm WASHER, PLATED	1			



2004 Escalade/SS Truck, cont'd

Part No. 4GL218-130/138SQ

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
N105-040	WATER TANK ASY, GMT LS1 H.O.	1
4GL010-060	BRKT, WATER TANK, COOLER	1
4GL010-070	BRKT, SURGE TANK, COOLER	1
7A250-050	1/4-20 x .50" SHCS ZINC PLTD	4
7J250-001	1/4" WASHER, SAE PLTD	4
7P375-075	3/4" HOSE BARB UNION, BRASS	1
7P500-026	1/2"NPT x 3/4" BARB x 90°, BRASS	3
7P500-078	1/2"NPT x 3/4" HOSE FIT STRT	3
7r007-001	NYLON RATCHET CLAMP, 1-1/8"	12
7U030-065	3/4" x 90° RUBBER HOSE, SHORT	1
7U038-000	Ø3/4" HEATER HOSE	19'
7U038-012	HOSE, Ø3/4" x 90°, 4" x 12" LEGS	1
7U100-055	TIE-WRAP, 7.5" NYLON	6
8N055-030	WATER TANK, TRIANGLE SHAPE	1
8N055-050	PLASTIC CAP, SURGE TANK	1
8N056-060	SURGE TANK, PLASTIC	1
8N106-050	WATER COOLER ASY, GMT LS1 H.O.	1
4GL010-080	BRKT "A", WATER COOLER MOUNT	1
4GL010-090	BRKT "B", WATER COOLER MOUNT	1
4GL010-100	BRKT "C", WATER COOLER MOUNT	1
7A250-075	1/4-20 x 3/4" SHCS PLTD	8
7F250-021	1/4-20 NYLOCK NUT, ZINC PLATED	8
7J250-001	1/4" WASHER, SAE, PLTD	16
7P500-026	1/2"NPT x 3/4" BARB, 90° BRASS	2
8N006-010	WATER COOLER, SETRAB SINGLE PAS	1
4PGL110-110	'03 5.3L ESCALADE VACPMP RELOC	1
4PGL010-110	BRKT, '03 BRAKE LINE RELOC	1
4PGL010-115	BRKT, '03 BRAKE VAC PUMP	1
7A312-075	5/16-18 x 3/4" HXCS GR5 ZINC	4
7F312-017	5/16-18 NYLOCK NUT	4
7J312-000	5/16" FLAT WASHER, SAE	8
7P500-001	1/2" HOSE UNION	2
7P500-009	1/2" x 90° HOSE BARB UNION	1
7U030-050	12mm (1/2") FUEL HOSE	.55m
7U030-050	12mm (1/2") FUEL HOSE	.48m
7U133-500	1/2" x 90° MOLDED RUBBER HOSE	1
8F060-005	FUEL INJECTOR, GM 8.1 MARINE	8
4GL020-015	INSTALL MANUAL, H2/ESCAL/DENALI 01-0	1



2004, 2006 Denali H.O. Kit

Part No. 4GL218-140/148SQ

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
4GL218-140SQ	'04, '06 DENALI H.O. KIT SAT	1	4GL114-010	WATER TUBE ASY, GM TRUCK	1
4GL011-021	MOUNTING BRACKET - MACH	1	7A250-050	1/4-20 x .50" SHCS ZINC PLTD	1
4PGL130-026	OIL FEED ASY, ESCALADE	1	7J006-093	6mm WASHER, PLATED	1
4GL010-020	ADAPTER, ESCALADE OIL FEED	1	7R002-024	#24 SAE TYPE "F" SS HOSE CLAMP	2
4GL010-030	GASKET, ESCALADE OIL ADAPTER	2	7R003-022	ADEL CLAMP, 1-3/8"	1
7C060-050	M6 x 1.0 x 50 HXHD ZINC PLATE	2	7U133-125	HOSE, Ø1.25" x 90° LONG LEG	1
7J006-050	6mm WASHER, PLATED	2	2E228-390	V2SQ S-TRIM LS1 TRUCK	1
7P125-004	1/8"NPT x 90° x -4 JIC FTG STL	2	2A036-333	S/C PULLEY 3.33" 6-GRV	1
7P125-005	1/8"NPT STR. x -4 JIC FTG STL	1	4FH016-150	IDLER, PULLEY, 6-RIB 3" FLANGED	1
7U100-055	TIE-WRAP, 7.5" NYLON	2	2A017-462	SPACER, IDLER SMOOTH 6-RIB	1
7U250-400	OIL FEED HOSE, 40" -4 x 90°	1	2A046-140	BELT, 6-RIB x 114.00 EFFECT. L	1
4GL130-036	OIL DRAIN ASY, GM TRK	1	8N201-070	PWR COOLER ASY, GMT LS1 H.O.	1
7P375-017	3/8"NPT x 1/2" BEADED HOSE BARB	1	2A017-875	SPACER, .875"OD x .895"L	1
7P375-040	3/8"NPT BRASS FEM/FEM ELBOW	1	4GL010-050	BRKT, COOLER CORE SUPPORT	1
7P375-041	3/8"NPT HEX NIPPLE x 1/5"	1	7C010-040	M10-1.5 x 40mm HXHD CL8.8 ZN	1
7R001-008	#8 STNLS HOSE CLAMP	2	7J010-002	10mm WASHER, ZINC PLATED	1
7R003-016	ADEL CLAMP, 1.0"	1	7P500-026	1/2"NPT x 3/4" BARB x 90° BRASS	1
7U030-036	1/2" OIL DRAIN HOSE	2.75'	7P500-078	1/2"NPT x 3/4" HOSE FIT STRT	1
4GL112-080	AIR INT ASY, '03 LS1 H.O. TRK	1	7U250-200	TAPE, FOAM, 1/4" x 2" x 50'	12"
4GL010-011	BRKT, DSIDE GM TRK AIR INLET	1	8N101-110	WELDED CORE ASY, V-10 S.D.	1
4GL010-012	BRKT, PSIDE GM TRK AIR INLET	1	5W001-005	3/8" PLASTIC WIRE LOOM	5'
4GL012-010	DUCT, INLET, LONG GM SUV/TRK	1	5W001-009	16-14GA MALE SLIDE INSULATED	1
4PGL012-017	DUCT, S/C INLET, '03 ESCALADE	1	5W001-013	14-16GS BUTT CONN BLU INSUL	4
7A250-050	1/4-20 x .50" SHCS ZINC PLTD	2	5W001-014	FUSE HOLDER 10GA WIRE	1
7J006-093	6mm WASHER, PLATED	2	5W001-015	FUSE, BLADE TYPE, 20AMP	1
7P156-082	5/32" TEE	1	5W001-019	10-12AGA BUTT CONN INSULATED	2
7P375-050	3/8" HOSE UNION, BRASS	1	5W001-022	T-TAP CONN, 14-16 AWG	1
7P375-097	3/8"NPT x 3/8" BEADED HOSE BARB	1	5W001-024	MINI ATC FUSE TAP	1
7P375-106	PCV VALVE, FORD, 3/8" HOSE	1	5W001-041	12-10GA MALE SLIDE INSULATED	2
7R002-016	#16 SAE TYPE "F" SS HOSE CLAMP	4	5W001-043	12-10GA x 1/4" RING TERMINAL	3
7R002-052	#52 SAE TYPE "F" SS HOSE CLAMP	2	7A250-050	1/4-20 x .50" SHCS ZINC PLTD	2
7R002-056	#56 SAE TYPE "F" SS HOSE CLAMP	4	7F250-021	1/4-20 NYLOCK NUT, ZINC PLATED	1
7S350-200	SLEEVE, 3-1/2" x 2", BLUE	1	7R003-027	ADEL CLAMP, 1-11/16"	1
5S350-300	SLEEVE, 3-1/2" x 3", BLUE	1	7U100-044	TIE-WRAP, 4" NYLON	4
7U030-046	5/32" VACUUM LINE	2'	7U100-055	TIE-WRAP, 7.5" NYLON	6
7U030-056	3/8" PCV/VAC RUBBER HOSE	2.5'	8F001-402	PUMP, WATER, PIERBURG	1
7U034-016	1" GS HEATER HOSE	0.33'	5W001-010	16-14GA FEMALE SLIDE INSULATED	2
7U035-001	3-1/2" FLEX HOSE	1.16'	5W001-016	RELAY, BOSCH	1
7U375-045	RUBBER ELBOW, Ø1" x 45°	1	5W001-002	FUSE TAP	1
7U375-052	3/8" VACUUM CAP	1	2E228-390	V2SQ S-TRIM LS1 TRUCK	1
8D001-001	STD COMPRESS BYPASS VALVE	1	2A036-333	S/C PULLEY 3.33" 6-GROOVE	1
7U030-056	3/8" PCV/VAC RUBBER HOSE	0.25'	2A046-140	BELT, 6-RIB x 114.00 EFFECT. L	1
7F375-113	PCV VALVE, VIPER, 3/8-1/2" BA	1	2A046-113	BELT, 6-RIB x 112.89 EFFECT. L	1
4PGL112-020	DISCH ASY LS1 H.O. TRUCK	1	4FH016-150	IDLER PULLEY, 6-RIB 3" FLANGED	1
4GL112-030	ELBOW, 3.88 x 3.0" x 90° GM TRK	1	2A017-462	SPACER, IDLER SMOOTH, 6-RIB	1
4GL012-040	DISCH TUBE "A", 6.0 COOLER, CAST	1	8N201-070	PWR COOLER ASY, GMT LS1 H.O.	1
4GL012-051	DISCH TUBE "B", 6.0 COOLER	1	2A017-875-13	SPACER, .875"OD x .895"LONG	1
7R002-044	#44 SAE TYPE "F" SS HOSE CLAMP	5	7C010-040	M10-1.5 x 40mm HXHD CL8.8 ZN	1
7R002-048	#48 SAE TYPE "F" SS HOSE CLAMP	2	7J010-002	10mm WASHER, ZINC PLATED	1
7R002-064	#64 SAE TYPE "F" SS HOSE CLAMP	1	7P500-026	1/2"NPT x 3/4" BARB x 90° BRASS	1
7S275-200	SLEEVE, Ø2.75" x 2.00"L, BLUE	2	7P500-078	1/2"NPT x 3/4" HOSE FIT STRT	1
7S300-275	REDUCER, 3.00" x 2.75"	1	7U250-200	TAPE, FOAM, 1/4" x 2" x 50'	12"
			8N101-110	WELDED CORE ASY, V-10 S.D.	1



2004, 2006 Denali H.O. Kit, con't

Part No. 4GL218-140/148SQ

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
8N107-050	WATER PMP ASY, GMT LS1 H.O.	1	8N105-040	WATER TANK ASY, GMT LS1 H.O.	1
5W001-005	3/8" PLASTIC WIRE LOOM	5'	4GL010-060	BRKT, WATER TANK, COOLER	1
5W001-005	16-14GA, MALE SLIDE INSULATED	1	4GL010-070	BRKT, SURGE TANK, COOLER	1
5W001-013	14-16GA BUTT CONN BLU INSUL	4	7A250-050	1/4-20 x .50" SHCS ZINC PLTD	4
5W001-014	FUSE HOLDER 10GA WIRE	1	7J250-001	1/4" WASHER, SAE PLTD	4
5W001-015	FUSE, BLADE TYPE 20-AMP	1	7P375-075	3/4" HOSE BARB UNION, BRASS	1
5W001-019	10-12GA BUTT CONN INSULATED	2	7P500-026	1/2"NPT x 3/4" BARB x 90° BRASS	3
5W001-022	T-TAP CONN. 14-16AWG	1	7P500-078	1/2"NPT x 3/4" HOSE FIT STRT	3
5W001-024	MINI ATC FUSE TAP	1	7R007-001	NYLON RATCHET CLAMP 1-1/8"	12
5W001-041	12-10GA MALE SLIDE INSULATED	2	7U030-065	3/4" x 90° RUBBER HOSE, SHORT	1
5W001-043	12-10GA x 1/4" RING TERMINAL	3	7U038-000	3/4" HEATER HOSE	19'
7A250-050	1/4-20 x .50" SHCS ZINC PLTD	2	7U038-012	HOSE, Ø3/4" x 90°, 4" x 12" LEGS	1
7F250-021	1/4-20 NYLOCK NUT, ZINC PLTD	1	7U100-055	TIE-WRAP, 7.5" NYLON	6
7R003-027	ADEL CLAMP, 1-11/16"	1	8N055-030	TANK, WATER, TRIANGLE SHAPE	1
7U100-044	TIE-WRAP, 4" NYLON	4	8N055-050	PLASTIC CAP, SURGE TANK	1
7U100-055	TIE-WRAP, 7.5" NYLON	6	8N056-060	SURGE TANK, PLASTIC	1
8F001-402	WATER PUMP, PIERBURG	1	2A017-875-08	SPACER, .875"OD x .290"L	2
8F101-320	FUEL PUMP RELAY ASY, LS1 TRK	1	8N106-050	WATER COOLR ASY, GMT LS1 H.O.	1
5W001-010	16-14GA FEMALE SLIDE, INSULATED	2	4GL010-080	BRKT "A", WATER COOLER MOUNT	1
5W001-016	RELAY, BOSCH	1	4GL010-090	BRKT "B", WATER COOLER MOUNT	1
5W001-002	FUSE TAP	1	4GL010-100	BRKT "C", WATER COOLER MOUNT	1
4GL010-060	BRKT, WATER TANK, COOLER	1	7A250-075	1/4-20 x .75" SHCS PLTD	8
4GL010-070	BRKT, SURGE TANK, COOLER	1	7F250-021	1/4-20 NYLOCK NUT ZINC PLATED	8
7A2500-050	1/4-20 x .50" SHCS ZINC PLTD	4	7J250-001	1/4" WASHER, SAE, PLATED	16
7J250-001	1/4" WASHER, SAE, PLTD	4	7P500-026	1/2"NPT x 3/4" BARB x 90° BRASS	2
7P375-075	3/4" HOSE BARB UNION, BRASS	1	8N006-010	WATER COOLER, SETRAB SINGLE PASS	1
7P500-026	1/2"NPT x 3/4" BARB 90° BRASS	3	0088341	VORTECH CHARGE COOLER DECAL	1
7P500-078	1/2"NPT x 3/4" HOSE FIT STRT	3	4PGL110-110	'03 5.3"L ESCALADE VACPMP RELOC	1
7R007-001	NYLON RATCHET CLAMP 1-1/8"	12	4PGL010-110	BRKT, '03 BRAKE LINE RELOC	1
7U030-065	3/4" x 90° RUBBER HOSE, SHORT	1	4PGL010-115	BRKT, '03 BRAKE VAC PUMP	1
7U038-000	3/4" HEATER HOSE	19'	7A312-075	5/16-18 x 3/4" HHCS, GR5, ZINC	4
7U038-012	HOSE, Ø3/4" x 90°, 4" x 12" LEGS	1	7F312-017	5/16-18 NYLOCK NUT	4
7U100-055	TIE-WRAP, 7.5" NYLON	6	7J312-000	5/16" FLAT WASHER-SAE	8
8N055-030	WATER TANK, TRIANGLE SHAPE	1	7P500-001	1/2" HOSE UNION	2
8N055-050	PLASTIC CAP, SURGE TANK	1	7P500-009	1/2" x 90° HOSE BARB UNION	1
8N056-060	SURGE TANK, PLASTIC	1	7U030-050	12mm (1/2") FUEL HOSE	.55M
2A017-875-08	SPACER, .875"OD x .290"LONG	2	7U030-050	12mm (1/2") FUEL HOSE	.48M
4GL010-080	BRKT, "A", WATER COOLER MOUNT	1	7U133-500	1/2" x 90° MOLDED RUBBER HOSE	1
4GL010-090	BRKT "B", WATER COOLER MOUNT	1	5A003-034	DIABLO PREDATOR, '04-'06 GM	1
4GL010-100	BRKT "C", WATER COOLER MOUNT	1	8F060-005	FUEL INJECTOR, GM 8.1 MARINE	8
7A250-075	1/4-20 x .75" SHCS PLTD	8	4GL020-015	INSTALL MANUAL H2/ENC/DEN '01-'05	1
7F250-021	1/4-20 NYLOCK NUT ZINC PLATED	8			
7J250-001	1/4" WASHER, SAE PLTD	16			
7P500-026	1/2"NPT x 3/4" BARB x 90° BRASS	2			
8N006-010	WATER COOLER, SETRAB SINGLE PASS	1			
008341	VORTECH CHARGE COOLER DECAL	1			
4PGL010-110	BRKT, '03 BRAKE LINE RELOC	1			
4PGL010-115	BRKT, '03 BRAKE VAC PUMP	1			
7A312-075	5/16-18 x 3/4" HHCS, GR5, ZINC	4			
7F312-017	5/16-18 NYLOCK NUT	4			
7J312-000	5/15" FLAT WASHER, SAE	8			
7P500-001	1/2" HOSE UNION	2			
7P500-009	1/2" x 90° HOSE BARB UNION	1			
7U030-050	12mm (1/2") FUEL HOSE	.55M			
7U030-050	12mm (1/2") FUEL HOSE	.48M			
7U133-500	1/2" x 90° MOLDED RUBBER HOSE	1			



ENGINEERING, LLC

2008 H2 Hummer, V-3

Part No. 4GL218-330/338L

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
4GL011-021	MTG BRKT GM TRUCK MACH.	1	4PGL010-070	BRKT "B"	1
2F328-040	V-3 SI-TRIM LS1 TRK	1	4PGL010-080	BRKT "C"	1
2A036-333	S/C PULLEY 3.33" 6-GRV	1	7A250-102	1/4-20 x 1" SHCS	1
4GL112-090	AIR INLET ASY, 2008 H2 HUMMER	1	7J250-022	1/4" WASHER	6
4GL012-090	DUCT, INLET, 2008 HUMMER H2	1	7F250-021	1/4-20 NYLOCK NUT	1
7P156-082	5/32" TEE	1	8N056-060	SURGE TANK	1
7R002-016	#16 SAE TYPE "F" SS HOSE CLAMP	4	8N055-050	SURGE TANK CAP	1
7R002-052	#52 SAE TYPE "F" SS HOSE CLAMP	2	4PGL010-090	BRKT, SURGE TANK	1
7R002-056	#56 SAE TYPE "F" SS HOSE CLAMP	4	7P500-078	12"NPT x 3/4" HOSE FIT	2
7U030-046	5/32" VACUUM LINE	1	7U038-020	MOLDED "S" HOSE	1
7U030-056	3/8" PVC/VAC RUBBER HOSE	2	7A250-050	1/4-20 x .5" SHCS	4
7U034-016	Ø1"GS HOSE	0.33'	7U038-000	Ø3/4" HEATER HOSE	10"
7U035-001	Ø3-1/2" FLEX-HOSE	0.83'	7U033-000	Ø5/8" HOSE	5"
7U375-052	3/8" VACUUM CAP	1	7P750-625	Ø3/4" x Ø5/8" REDUCER BARB	2
8D001-001	STD COMPRESS BYPASS VALVE	1	7E010-075	#12 x 3/4" SHT METAL SCRW HEX	4
4PGL010-011	BRKT, D-SIDE H2 TRK AIR INLET	1	7U030-065	90° MOLDED ELBOW SHORT	1
4PGL010-012	BRKT, P-SIDE H2 TRK AIR INLET	1	7J010-001	#10 FLAT WASHER	2
7A250-050	1/4-20 x .50" SHCS ZINC PLTD	2	7R002-020	#20 HOSE CLAMP	2
7J006-093	6mm WASHER, PLTD	2	7R007-002	NYLON CLAMPS 7/8"	4
7P375-050	3/8" HOSE UNION, BRASS	1	7R007-001	NYLON CLAMPS 1-1/8"	10
7S350-200	3-1/2" x 2" SLEEVE	1	8N201-370	CAC ASY 2008 HUMMER H2 6.2L	1
7U133-045	RUBBER ELBOW, Ø1" x 45°	1	8N101-110	WELDED CORE ASSY V-10 S.D.	1
7C060-050	M6-1.0 x 50mm HXHD ZINC PLTD	2	7P500-078	1/2"NPT x 3.4" HOSE FIT	1
7J250-150	1/4" FENDER WASHER ZN PLTD	2	7P500-026	1/2"NPT x 3/4" HOSE BARB x 90°	1
7F006-093	6mm NYLOCK NUT	2	2A017-875-13	SPACER, CAC BRKT	1
2A017-752-02	SPACER, .750"OD x .894"LONG	2	7C010-040	10mm-1.5" x 1.5mm SCREW	1
7P275-133	PCV VALVE, VIPER, 3/8"-12" BA	1	7J010-002	10mm WASHER	1
2A017-125-0280	SPACER, 1.25 od X .328id X .28	1	7U250-200	COOLER FOAM	1
4FA012-013	INTAKE ELBOW, 90 DEG W/BOSSSES	1	4GL010-110	BRKT, CAC SUPPORT	1
7p375-037	3/8 NPT MALE X 3/8 HSE BARB 90	1	8N106-075	WATER COOLER ASY	1
7P750-102	3/4 NPT X 1" X 90° HSE FIT	1	8N006-005	WATER COOLR, SETRAB DUAL-PASS	1
7U030-056	3/8" PCV/VAC RUBBER HOSE	.25'	7A250-102	1/4-20 x 1" SHCS SS	4
4PGL112-028	DISCH ASY	1	7J250-022	1/4" WASHER SAE STAINLESS	8
4GL012-041	6.0 TUBE "A"	1	7F250-021	1/4-20 NYLOCK NUT, ZINC PLT	2
4GL012-051	6.0 TUBE "B"	1	8N010-140	MTG TAB, SETRAB 2-PASS COOLR	4
4GL012-030	ELBOW, 3.88" - 3.0" x 90° LS1 TRK	1	7P375-075	3/4" HOSE BARB UNION, BRASS	3
7R002-044	#44 GOLDSEAL HOSE CLAMP	5	7U125-200	TAPE, FOAM, 1/8" x 2" x 50'	7.5"
7R002-048	#48 GOLDSEAL HOSE CLAMP	2	7U038-020	HOSE, Ø3/4" "S" MOLDED RUBBER	2
7R002-064	#64 GOLDSEAL HOSE CLAMP	1	7R007-001	NYLON RATCHET CLAMP, 1-1/8"	4
7S275-200	2-3/4" x 2" SLEEVE	2	5A003-040	DIABLO PREDATOR (2003-2007 MODEL YEAR)	1
7S300-275	3.00" x 2.75" REDUCER SLEEVE	1	8F060-047	47 lb. DELPHI INJECTORS	8
8N107-050	WATER PUMP ASY	1	4GL020-015	INSTR. MANUAL DENALI/ESCALADE/HUMMER	1
8F001-402	WATER PUMP	1	009035	S/C LUBE PACK	1
7R003-027	ADEL CLAMP 1-11/16"	1			
5W001-025	FEMALE SLIDE MINI	1			
5W001-043	12-10GA x 1/4" RING TERMINAL	3			
7A250-050	1/4-20 x .50" SHCS	2			
5W001-013	14-16GA BUTT CONNECTORS	4			
5W001-019	12-10GA BUTT CONNECTORS	2			
7U100-044	4" TIE-WRAP	4			
5W001-022	T-SPLICE CONNECTOR	1			
7F250-021	1/4-20 NYLOCK NUT	1			
5W001-015	FUSE, BLADE TYPE 20AMP	1			
5W001-005	3/8" PLASTIC WIRE LOOM	2			
5W001-014	FUSE HOLDER 10GA WIRE	1			
7U100-055	TIE-WRAP, 6" NYLON	6			
5W001-041	12-10GA MALE SLIDE INSULATED	2			
8F101-320	WATER PUMP RELAY ASY, LS1 TRK	1			
8N105-050	WATER TANK ASY	1			
8N055-030	LT1 WATER TANK	1			
7P500-026	90° BARBED BRASS FITTING	2			
4PGL010-060	BRKT "A"	1			

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1. COMPONENT REMOVAL

- A. **Escalade/Denali/SS:** Drain a sufficient amount of coolant to allow for removal of the upper radiator hose and clamps.
- B. **Escalade/Denali/SS:** Disconnect the negative battery cable.
H2 Hummer: Disconnect the positive and negative battery
- C. **H2 Hummer:** Remove the screws securing the battery tray, then remove the tray from the vehicle.
- D. Remove all ducting between the MAF meter and the throttle body.
- E. Remove the upper fan shroud. **Escalade/Denali/SS:** Remove the radiator hose. *(Exclude 2006 Model Year.)*
- F. Remove the accessory drive belt. (Keep in the vehicle as a spare.)
- G. Remove the two bolts securing the alternator fusible link junction box and set aside.
- H. Remove the idler from the cast bracket and set aside for later use.
- I. The plastic engine covers that extend over the valve covers will need to be removed. The upper manifold cover section may either be removed completely or left in place and trimmed in order to clear supercharger componentry.
'08 H2: Remove the electric fan assembly and set aside. (To provide clearance to remove the P/S pulley).
- J. Remove the power steering pump pulley with a pulley puller. Remove the three bolts securing the front of the power steering pump.
- K. Remove the alternator, bushings and bolts and set aside for later use. The alternator bushings can be removed by tapping the small end through the bracket with an appropriately sized socket.
- L. Remove the alternator and power steering pump mounting bracket by removing the three bolts securing it to the head and the bottom bolt securing it to the engine block.
- M. Remove the valve cover breather hose from the passenger's side of the throttle body and cap off the throttle body nipple with supplied 3/8" vacuum cap. **(Models with electronic controlled throttle bodies only)**

1. COMPONENT REMOVAL, cont'd

- N. Remove the oil filler neck and cap from the passenger's side valve cover. Do this by twisting in a counter-clockwise motion. Reinstall the cap directly into the valve cover.
- O. **'03 and Earlier Models:** Locate the breather hose on the rear of the driver's side valve cover. Pull the hose and stock PCV valve from the rubber grommet in the valve cover. Remove the stock PCV valve from the breather hose and install the supplied PCV valve in its place. Reinstall the new PCV valve with the hose attached to it into the rubber grommet in the valve cover.

2. COMPUTER RELOCATION (H2 Hummers 2003-2007)

NOTE: 2008 H2 Hummers will not need this step.

- A. Remove the plastic cover protecting the vehicle ECM. Unsnap the ECM from the bracket securing it to the inner fender. Temporarily move the ECM to the side to aid in the bracket relocation.
- B. Remove the two screws securing both the battery tray bracket and the upper tab of the ECM bracket. Remove the final screw securing the bottom of the ECM bracket. Remove the ECM bracket from the vehicle.
- C. With a grinder, modify the plastic bracket by removing the strengthening ribs as shown in (Fig. 2-a)
- D. Using a .25" drill, enlarge the two threaded holes where the ECM bracket was secured. (See Fig. 2-b..)
- E. Put the ECM bracket back in the vehicle placing the mounting tab underneath the original bracket. Place the battery tray mounting bracket back into its stock position. Using the supplied 6mm x 50mm screws, fender washers, 6mm nuts and two .894 spacers, secure the brackets using the original mounting holes that have been enlarged. Use the spacers between the ECM bracket and the inner fender mount to space the ECM bracket down. (See Fig. 2-b.)
- F. Secure the ECM to the relocated bracket and re-install the cover.

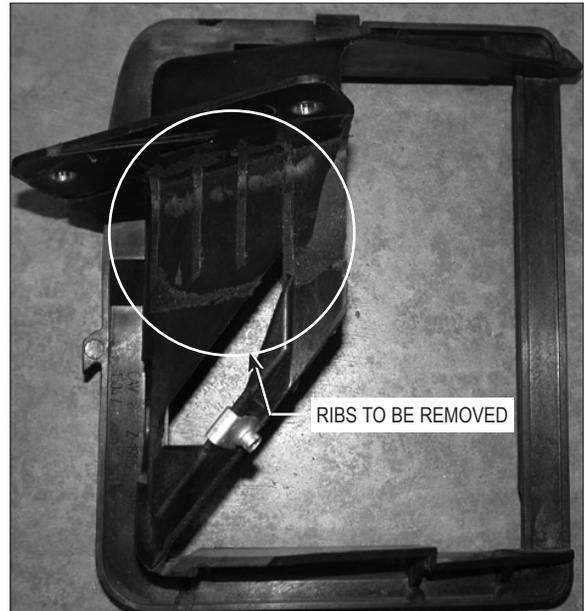


Fig. 2-a

HOLES TO BE ENLARGED



BATTERY BRACKET IN STOCK LOCATION

SUPPLIED SPACER

BRACKET IN RELOCATED POSITION

Fig. 2-b

3. SUPERCHARGER MOUNTING BRACKET

- A. Install the original alternator bushings into the supercharger mounting bracket with the flanged portion pointed back. (See *Figs. 3-a, 3-b.*)
- B. Clean front of driver's side head of debris.
- C. Bolt the supplied Vortech supercharger mounting bracket to the head and block using the original mounting bolts. Make sure the mounting bracket is seated directly on a machined surface on the head and that no wires are pinched.
- D. Tighten the four mounting bolts to 37 ft-lbs (50 N-m).
- E. Install the two original bolts holding the alternator fusible link junction box in the supercharger mounting bracket so that it is in the stock location.
- F. Attach the power steering pump to the Vortech bracket using the original mounting hardware. Tighten the four power steering pump bolts to 37 ft-lbs (50 N-m). (One bolt is still loosely inserted in the engine block.)
- G. Reinstall the power steering pump pulley. Make sure that it is seated flush with the end of the power steering pump shaft.
- H. Reinstall the alternator using the original hardware. (See *Fig. 3-c.*)
- I. Install the factory idler pulley at the location shown in *Fig. 5-b*. Spin the idler to verify that the rotating portion does not contact the alternator bolt.

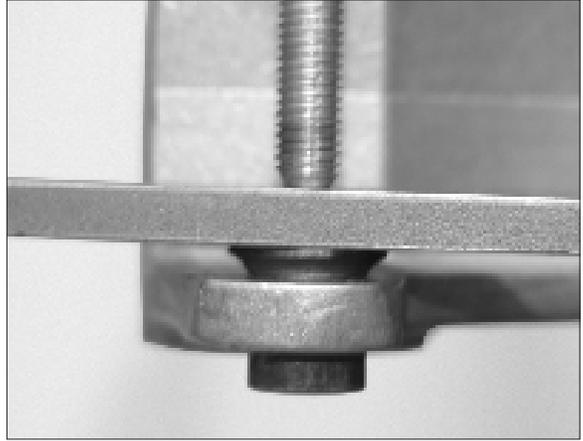


Fig. 3-a

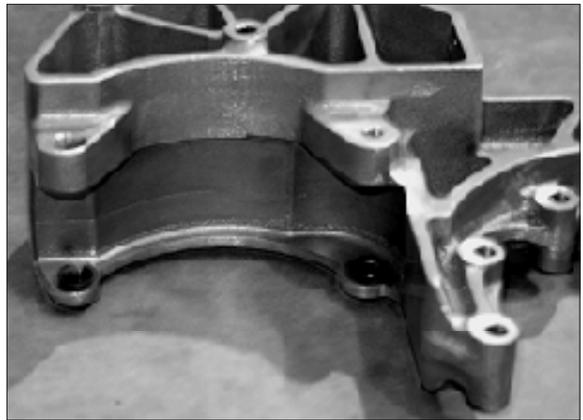


Fig. 3-b



Fig. 3-c

4. FUEL INJECTOR REPLACEMENT

NOTE: Complete removal of the fuel rail will aid in injector replacement. Separate the fuel rail supply line from the rail using springlock disconnect tool.

- A. Relieve the fuel system pressure.
- B. Disconnect the eight fuel injector wiring clips and retainers from the injectors.
- C. Remove the four 10mm bolts holding down the fuel rail on the intake manifold. Lift up on the rails evenly, removing all eight injectors.
- D. Using a small amount of clean motor oil, lightly lubricate the O-rings on both ends of the Vortech supplied fuel injectors.
- E. Install the new injectors into the fuel rails with the terminals facing outward.
- F. Carefully lower the fuel rail/injector assembly down onto the intake manifold. Check to see that each injector has been seated properly into the manifold.
- G. Tighten down the fuel rail assembly with the original bolts and attach the wiring clips to the injector terminals.

5. SUPERCHARGER INSTALLATION

- *A. Remove the Vortech installed drain fitting cap and attach the supplied 1/2" oil drain hose to the supercharger and tighten the clamp.
- B. Loosely install the supercharger onto the Vortech bracket. Start all five 3/8-16 x 2-1/4" supercharger mounting screws with washers.
- C. Tighten the supercharger mounting screws in a rotating pattern to 18 ft-lbs (25 N-m).
- D. Install the Vortech supplied M12 x 50mm bolt, dust cover, idler pulley and spacer onto the supercharger cover as shown in Figs. 5-a, 5-b.
- E. Install the supplied supercharger/accessory drive belt per Fig. 5-b.

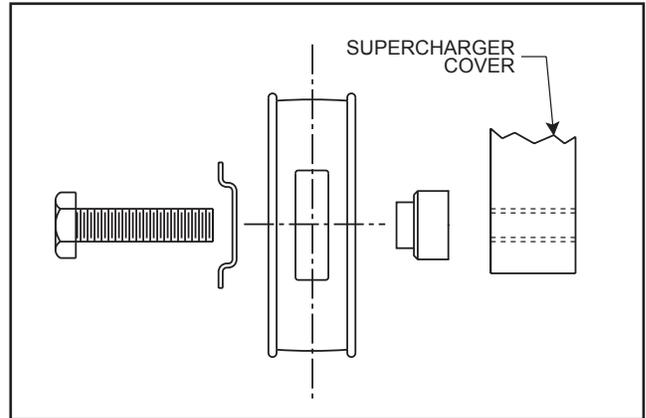


Fig. 5-a

* Applies to "engine oil-fed" units only.
V-3 applications skip this step

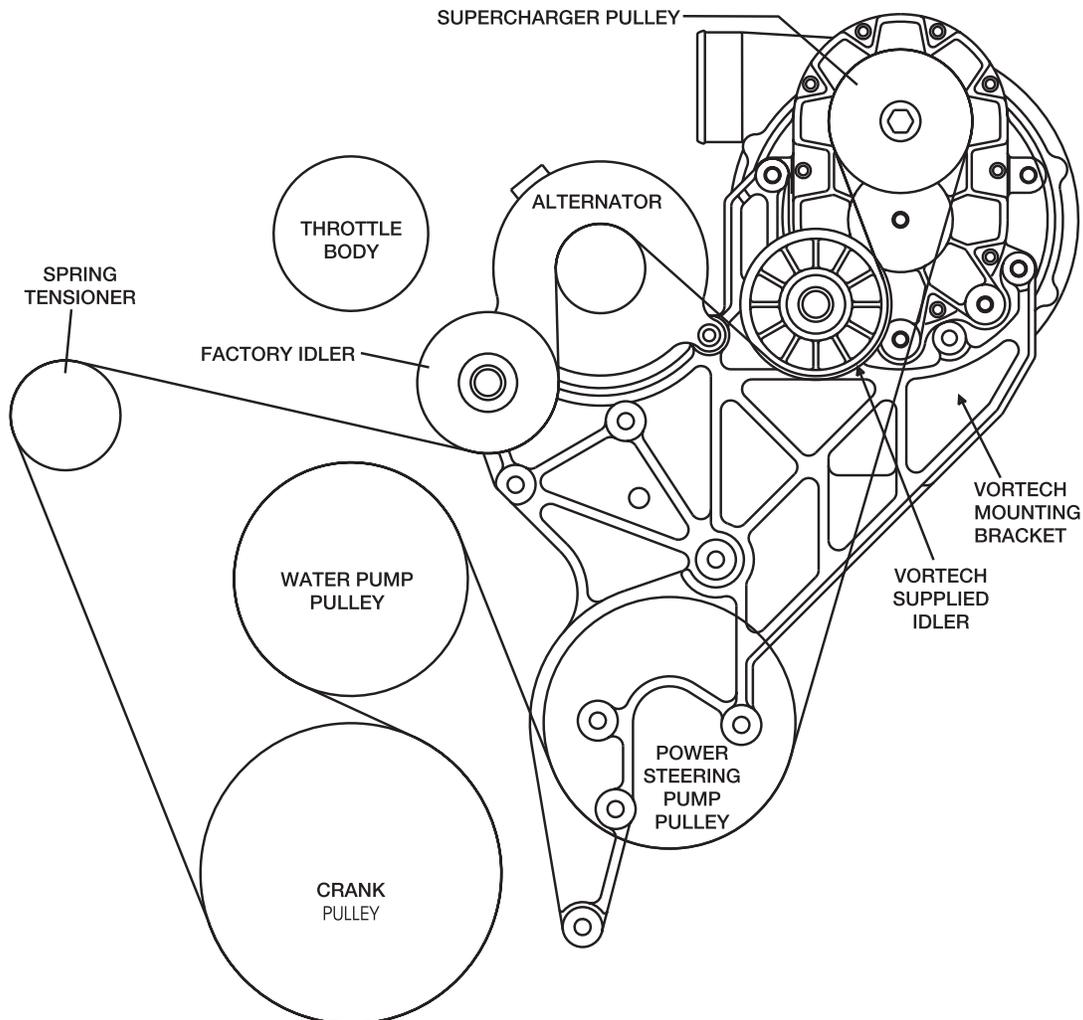


Fig. 5-b

6. OIL DRAIN LINE (ENGINE OIL-FED KITS ONLY. APPLICATIONS WITH V-3 SUPERCHARGER SKIP AHEAD TO STEP 8)

- A. To provide an oil drain for the supercharger, it is necessary to make a hole in the oil pan. Locate and centerpunch the hole per Fig. 6-a. Drill a 1/8" pilot hole at center location.
- B. Use the supplied 9/16" rotobroach to drill the hole in the oil pan. Take care to break through the pan gently and remove the cut out.
- C. Pack the flutes of a 3/8 NPT tap with grease. Tap the hole until the fitting can be started.
- D. 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" NPT hex nipple and secure in the hole. Make sure the seal is formed all around the fitting. Install the supplied 90° elbow and 3/8 NPT x 1/2" barb fitting pointing forward and slightly up.
- E. Route the oil drain hose from the supercharger to the barb fitting, attach and tighten the hose clamp. (See Fig. 6-a.)

IMPORTANT: Oil in the supercharger is gravity drained to the oil pan. Trim the supplied oil drain hose as necessary so that it is continuously sloping down towards the oil pan. Avoid dips, kinks etc.

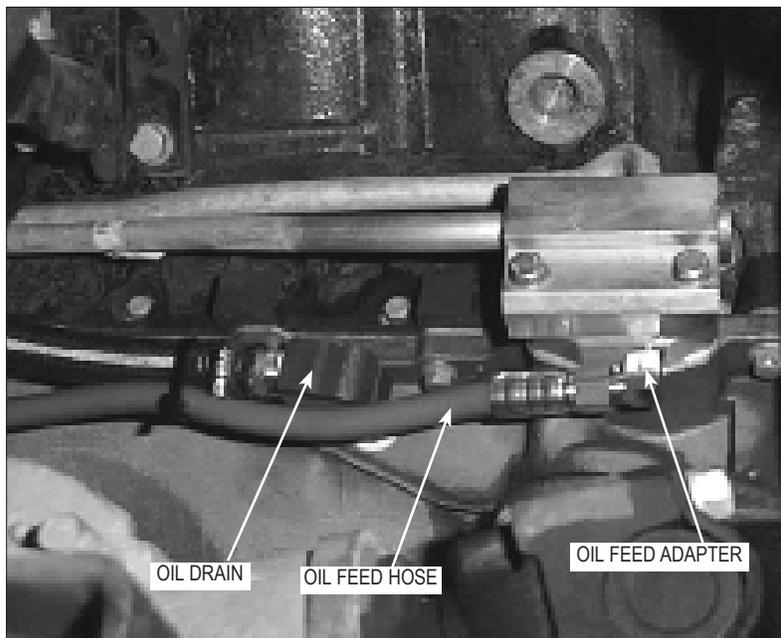


Fig. 6-a

7. OIL FEED LINE (ENGINE OIL-FED KITS ONLY. APPLICATIONS WITH V-3 SUPERCHARGER SKIP AHEAD TO STEP 8)

- A. Remove the two screws holding the small casting or oil cooler block located directly above the oil filter.
- B. Using engine oil on the threads, install 1/8"NPT to #4 90° fitting into the supplied oil feed adapter.
- C. Locate the supplied gasket that matches the factory gasket that was removed. Using the adapter, the appropriate supplied gasket and the supplied longer 6mm screws, assemble the components as shown in *Fig. 6-a*).
- D. Install a 1/8"NPT to #4 90° fitting into the supercharger oil feed filter. Use a small amount of engine oil on the pipe threads.

NOTE: Pipe sealant should not be used as it can clog the filter and damage the supercharger.

Install the 90° end of the stainless steel oil feed line to the 90° fitting already installed on the supercharger. Orient the hose so that it is pointing to the rear of the vehicle. This will allow the air inlet tube to have clearance that is installed later.

- E. Route the oil feed line from the supercharger to the installed fitting. Use an adel clamp on the side of the oil pan and tie wraps to secure the oil feed and oil drain lines and protect them from kinking, abrasion and high heat areas. (See *Fig. 6-a*.)
- F. Drain the engine oil, install a new filter and refill the engine with fresh oil.

8. FUEL MANAGEMENT UNIT (FMU) INSTALLATION ('01-'02 Denali/Escalade Only)

- A. Mount the supplied FMU as shown in *Fig. 8-a* using the existing studs on the firewall as follows:

1. Remove the nuts securing the factory ground straps.
2. Install the FMU over the studs.

NOTE: Not all vehicles have the studs in the same location. Drill an additional 1/4" hole in the fm u bracket as required. (See *Fig. 8-a*.)

3. Loosely reinstall the nuts on top of the FMU bracket.

- B. Disconnect the fuel return line from the fuel rail and connect the respective lines to their snap connectors on the end of the FMU lines. (See *Fig. 8-c*.)

NOTE: The fuel tank return line extends from the fuel regulator to the tank. It is smaller than the fuel rail supply line.

- C. Using the supplied 5/32" vacuum line and TEE, connect the 90° fitting on top of the FMU to the manifold vacuum line connected to the fuel regulator. (See *Fig. 8-c*.)



Fig. 8-a

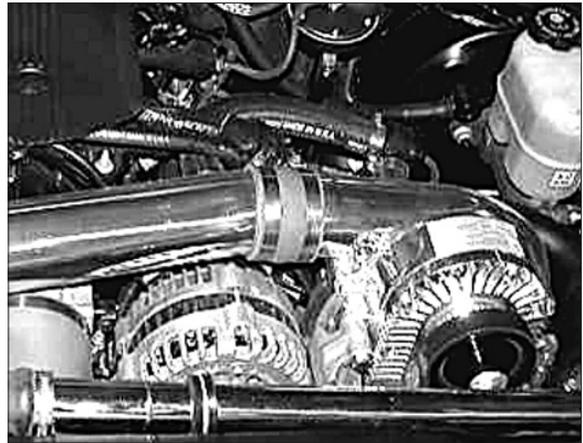


Fig. 8-b

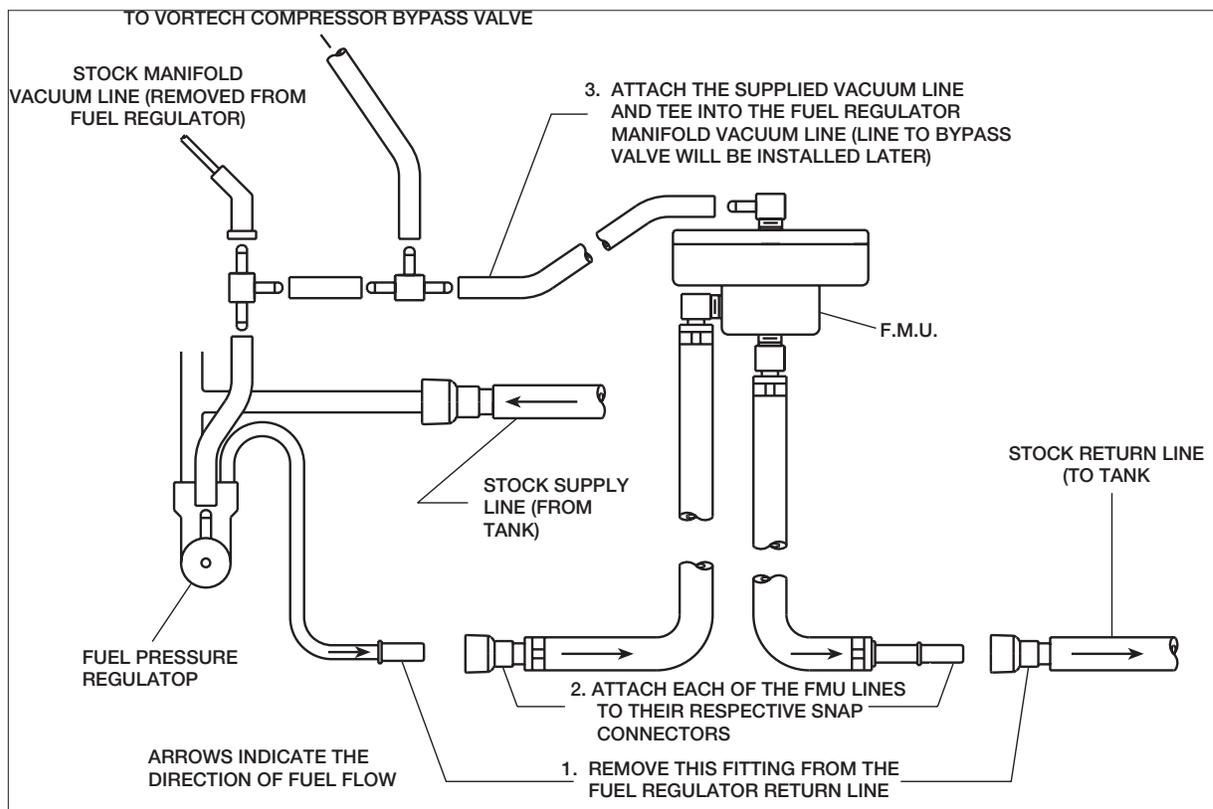


Fig. 8-c

9. BRAKE BOOSTER LINE MODIFICATION (2002 Escalade Only)

NOTE: *The purpose of Section 9 is to bend the brake booster line and give it clearance from the supplied inlet duct.*

- A. Locate the brake booster hard line running from the master cylinder down to the lower left corner of the power steering pump. Disconnect the line at the master cylinder.
- B. With a 3/8" tubing bender, put a 30° bend in the hard line. (See Fig. 9-a.)
- C. Reconnect the line back to the master cylinder with its new bend. (See Fig. 9-b.)
- D. Bleed the system as follows (The engine should be off):
 1. Raise the front wheels off the ground.
 2. Turn the steering wheel full left.
 3. Fill the reservoir to the "FULL COLD" level. Maintain this level throughout the procedure.
 4. Turn the steering wheel lock to lock at least 20 times or until the bubbles stop.

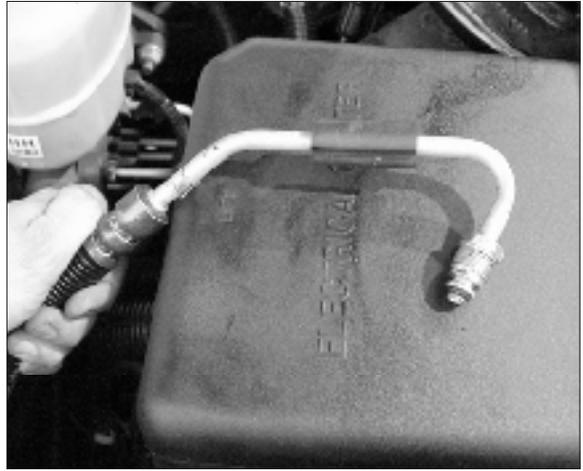


Fig. 9-a



MODIFIED BRAKE BOOSTER HARD
LINE MUST CLEAR INLET DUCT

Fig. 9-b

10. VACUUM PUMP/BRAKE LINE RELOCATION ('03-04 5.3/SS Truck, Vehicles Equipped with adjustable pedals only)

- A. Disconnect the electrical plug from the top of the vacuum pump. Unbolt and remove the vacuum pump from the brake booster. Disconnect the 1/2" hose from the barbed nipple on the vacuum pump.
- B. Attach the vacuum pump to the supplied pump bracket with the supplied 5/16" hardware. (See Fig. 10-c.)

NOTE: For ease of installation, it may be easiest to remove the driver's side hood support and the plastic electrical center cover.

- C. Unscrew the three nuts securing the small computer style box on the driver's side fire-wall. (See Fig. 10-d.)
- D. Take the supplied 1/2" I.D. x 90° molded hose and cut one end short. (See Fig. 10-c.) Slide the cut end of the molded hose on the barbed end of the vacuum pump that was inserted into the grommet in the brake booster. Connect the 1/2" x 19" length of hose to the 90° molded elbow with a 1/2" hose mender. Secure the pump/bracket assembly to the three studs using the same three nuts removed in step C. Reconnect the electrical connector to the vacuum pump.
- E. Route the elongated hose underneath the master cylinder over to the grommet in the brake booster. Connect the 1/2" hose into the grommet with the supplied plastic 1/2" x 90° barbed fitting.

NOTE: When relocating brake lines, be sure that the brake lines are clear of the steering column. Tie-wrap the lines out of the way if necessary.

- F. Unbolt the bracket holding the lower brake line assembly to the brake booster/master cylinder attachment. (See Fig. 10-a.)
- G. Attach the supplied drop bracket to the original bracket securing the brake lines with the supplied 5/16" hardware. With the new bracket added, push down the brake lines and attach the new assembly to the original two studs. This will drop the brake lines making clearance for the inlet tube. (See Fig. 10-b.)
- H. Using the supplied 1/2" x 22" hose and 1/2" hose mender connect the existing hose running from the manifold to the down-turned barb on the vacuum pump. Cut hose lengths for best fit.

NOTE: It is important that the plug running to the pump is properly connected. Failure to do so will cause the throttle not to respond.

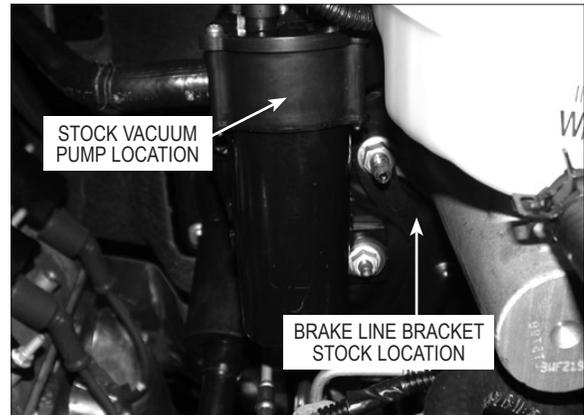


Fig. 10-a

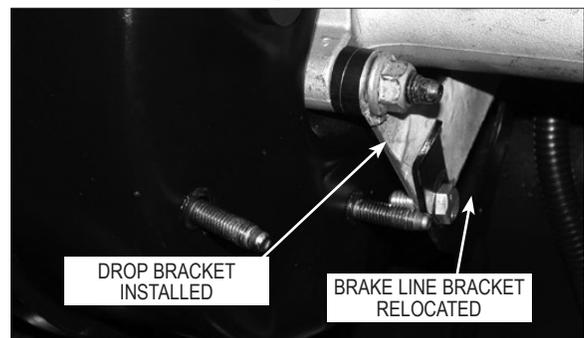


Fig. 10-b



Fig. 10-c



Fig. 10-d

11.A FUEL PUMP WIRING AND INSTALLATION ('01-'03 Escalade/Denali/SS)

- A. Mount the supplied fuel pump relay on the fire wall located to the right of the FMU bracket. (See Fig. 11.A-a.)
- B. Connect the red 12-gauge wire from terminal #30 to the supplied fuse holder using the supplied butt connector. Install a yellow ring terminal on the other end of the fuse holder and bolt to the fuse box power supply terminal as shown in Fig. 11.A-b. In order to reach the terminals, the fuse box cover must be unsnapped from the base and raised for access. (See Fig. 11.A-b.)
- C. Feed the yellow wire from relay terminal #85 to the fuse box (electrical center). Route the wire to the stock fuel pump relay and connect using the supplied fuse tap. Bend the fuse tap as shown in Fig. 11.A-c.
- D. Run the black wire from terminal #86 on the fuel pump relay to ground.
- E. With the long red 12-gauge wire connected to the fuel pump relay terminal #87, route the free end down to the area near the fuel filter on the driver's side inner frame rail under the door. Secure as necessary to avoid heat and sharp edges.

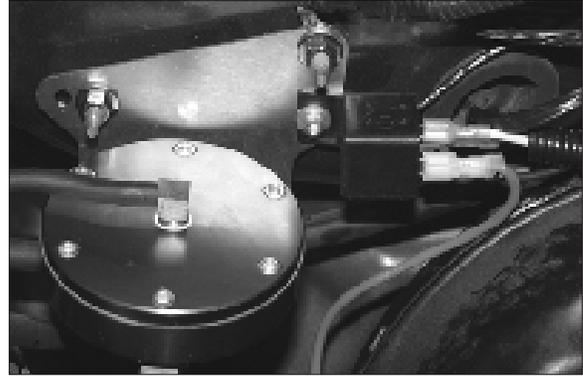
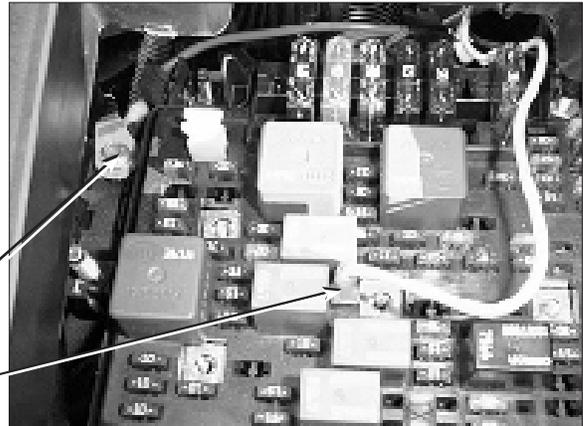


Fig. 11.A-a



RED WIRE FROM VORTECH SUPPLIED
RELAY TERMINAL #30 ATTACHES HERE

YELLOW WIRE FROM VORTECH SUPPLIED
RELAY TERMINAL #85 ATTACHES HERE

Fig. 11.A-b

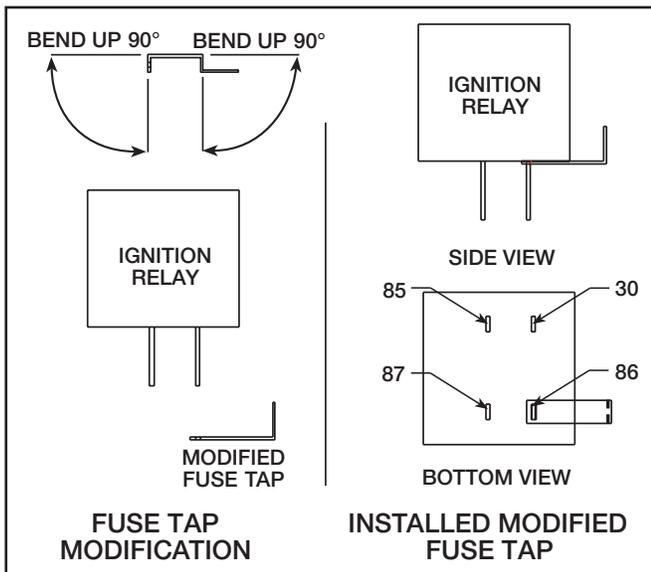


Fig. 11.A-c

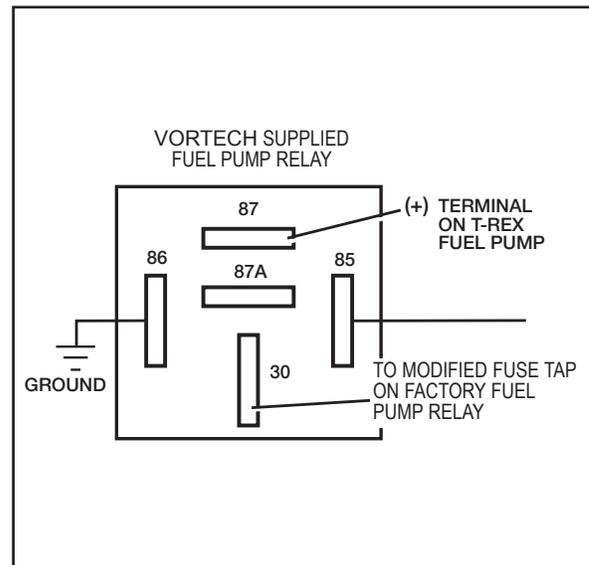
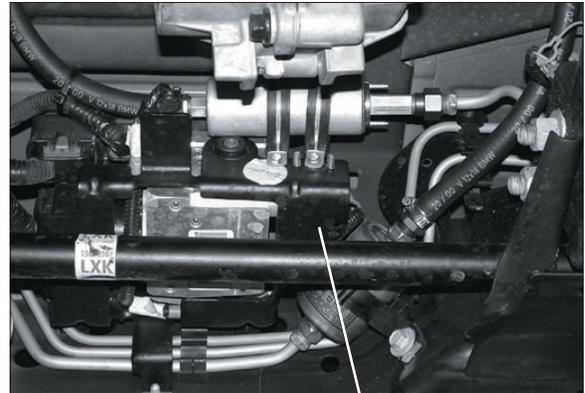


Fig. 11.A-d

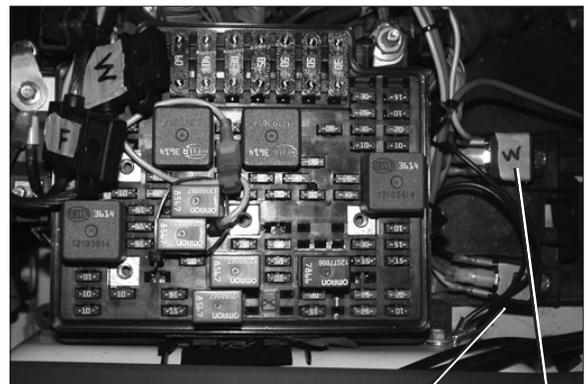
11.A FUEL PUMP WIRING AND INSTALLATION ('01-'03 Escalade/Denali/SS), cont'd

- F. Remove the fuel line from the outlet (front) of the fuel filter. Remove the tube from the plastic retainer holding it so that it can be rotated freely. Some models may vary from the photo slightly. Follow the same procedure, taking care to mount the pump so that the hard line is not stressed.
- G. Making sure the O-ring is seated on the threaded end of the supplied fitting, install into the outlet (front) of the fuel filter and tighten.
- H. Making sure the O-ring is seated on the tube end of the fuel line (removed from the filter) thread the bump tube into the fitting installed on the outlet of the fuel pump and tighten.
- I. Route the free end of the hose connected to the fuel pump inlet to the fitting previously installed on the fuel filter outlet. Use the supplied hose clamp to secure the hose on the barb fitting. Try to make the bends as large as possible, so as to avoid kinking the hose. Secure the hose using the wraps and tighten all of the hose clamps.
- J. Install the supplied adel clamps onto the fuel pump and mark holes to be drilled for #12 sheet metal screws. Drill an 11/64" hole at each location. Using the supplied black 12-gauge wire with yellow ring terminal connectors, install one end under the sheet metal screw nearest the electrical terminal side of the fuel pump. Attach the other end of the ground wire to the (-) terminal of the fuel pump. Secure to the ABS module bracket as shown in Fig. 11.A-e. Tighten both adel clamps.
- K. Attach the previously routed red wire to the positive terminal of the fuel pump using the yellow ring terminal connector.



ABS MODULE BRACKET

Fig. 11.A-e



FUEL PUMP RELAY

WATER PUMP RELAY

Fig. 11.A-f

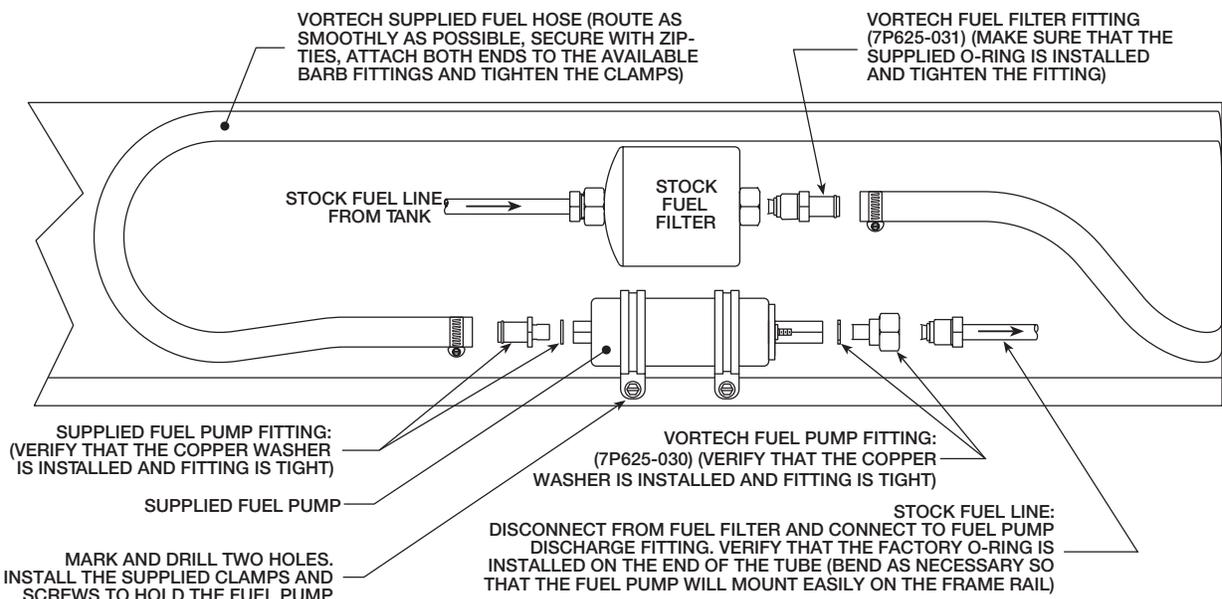


Fig. 11.A-g

11.B FUEL PUMP WIRING AND INSTALLATION, (2003 H2 Hummer)

- A. Remove the hood support from the passengers' side of the vehicle. Remove the plastic cover from the power distribution center. Unsnap the plastic casing surrounding the fuses and relays. Mount the supplied fuel pump relay on the lower plastic area. Leave the hood support and plastic casing off for installation of the water pump relay. (See *Fig. 11.A-f* on page 11-2.)
- B. Connect the red 12-gauge wire from terminal #30 to the supplied fuse holder using the supplied butt connector. Install a yellow ring terminal on the other end of the fuse holder and bolt to the fuse box power supply terminal. (See *Fig. 11.A-b*.)
- C. Feed the yellow wire from relay terminal #85 to the fuse box (electrical center). Route the wire to the stock fuel pump relay and connect using the supplied fuse tap. Bend the fuse tap as shown in *Fig. 11.A-c*.)
- D. Run the black wire from terminal #86 on the fuel pump relay to ground.
- E. With the long red 12-gauge wire connected to the fuel pump relay terminal #87, route the free end down to the area near the fuel filter on the driver's side inner frame rail under the door. Secure as necessary to avoid heat and sharp edges.
- F. Remove the fuel line from the inlet of the fuel filter located on the driver's side inner frame rail directly in front of the fuel tank. Mount the pump below the fuel filter on the cross member taking care not to stress the fuel lines. (See *Fig. 11.B-a*.)
- G. Connect the male fuel fitting supplied in the fuel pump assembly to the female fitting removed from the inlet of the fuel filter. Connect the supplied 3/8" steel female fuel fitting to the open barb on the fuel filter. Route the lines to avoid kinking in the hose. Secure the discharge hose to the cross member with the supplied adel clamp. Secure any other hoses using tie-wraps to avoid heat or sharp areas. (See *Figs. 11.B-a, 11.B-b*.)
- H. Attach the previously routed red wire to the positive terminal of the fuel pump using the yellow terminal connector. Use the supplied black 12-gauge wire with yellow ring terminal to connect the negative terminal on the fuel pump to a sufficient ground.



Fig. 11.B-a

12.A ESCALADE/DENALI INLET DUCT INSTALLATION ('01-'02 Models)

- A. Install the supplied 3-1/2" x 3" sleeve onto the MAF outlet, and the 3-1/2" x 2" sleeve on the inlet of the supercharger.
- B. Reinstall the upper fan shroud with the exception of the top two bolts.
- C. Remove any plastic clips that are no longer used to secure the radiator hose.
- D. Slide the entry of the large plastic inlet duct (See Fig. 12.A-d) into the sleeve installed on the MAF. Lower the inlet duct onto the top of the radiator shroud. Reinstall the factory radiator shroud bolts through the two supplied inlet duct mounting tabs and into their original bolt holes.
- E. Insert the supplied 1/4-20 x 1/2" screws through the bracket and into each side of the inlet duct using the supplied washers. Tighten the screws. (See Fig 12.A-d.)
- F. Install the supplied 180° inlet duct onto the inlet of the supercharger after the supercharger is installed. Orient the duct so that you can just slide your fingers between the duct and the master cylinder.
- G. Install the supplied #52 hose clamps and 3-1/2" x 13" long flex hose between the two ducts just installed. (See Fig. 12.A-b.)
- H. Use the supplied 3/8" hose from the 3/8" fitting on the inlet duct to the passenger side valve cover breather hose. Secure the hose so that it cannot interfere with the throttle arm or cable. (See Fig 12.A-c.)
- I. Install and tighten the hose clamps on each connection. (See Fig. 12.A-d.)

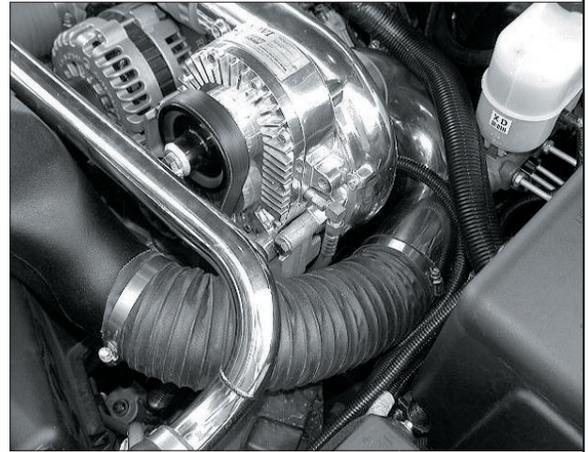


Fig. 12.A-b

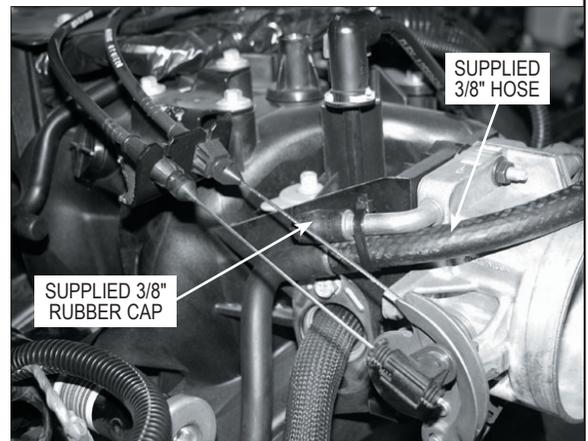


Fig. 12.A-c

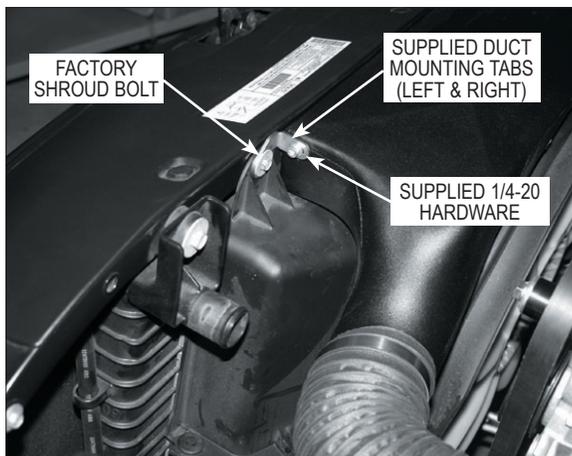


Fig. 12.A-a



Fig. 12.A-d

12.B ESCALADE/DENALI/SS INLET DUCT INSTALLATION ('03-'06 Models)

- A. Install the supplied 3-1/2" x 3" sleeve onto the MAF outlet, and the 3-1/2" x 2" sleeve on the inlet of the supercharger.
- B. Reinstall the upper fan shroud with the exception of the top two bolts. (*Excludes '06 model year.*)
- C. Remove any plastic clips that are no longer used to secure the radiator hose.
- D. Slide the entry of the large plastic inlet duct (See Fig. 12.B-d) into the sleeve installed on the MAF. Lower the inlet duct onto the top of the radiator shroud. Reinstall the factory radiator shroud bolts through the two supplied inlet duct mounting tabs and into their original bolt holes.
- E. Insert the supplied 1/4-20 x 1/2" screws through the bracket and into each side of the inlet duct using the supplied washers. Tighten the screws. (See Fig 12.B-d.)
'06 Model Year: It will be necessary to trim the fan shroud for the electric fans to gain access to the screw locations. Use the supplied 6mm hardware in place of missing factory hardware.
- F. Using Fig. 12.B-b, drill a 9/16" hole in the shown location. Use a 3/8"NPT tap and install the supplied 3/8" NPT x 3/8" hose barb.
- G. Install the supplied 180° inlet duct onto the inlet of the supercharger after the supercharger is installed. Orient the duct so that it swoops over the side of the supercharger with the end pointing at the crossover duct.
- H. Install the supplied #52 hose clamps and 3-1/2" x 7" long flex hose between the two ducts just installed.
- I. Use the supplied 3/8" hose from the 3/8" fitting on the inlet duct to the passenger side valve cover breather hose. Secure the hose so that it cannot interfere with the throttle arm or cable. (See Fig 12.B-c.)
- J. Install and tighten the hose clamps on each connection. (See Fig. 12.B-d.)

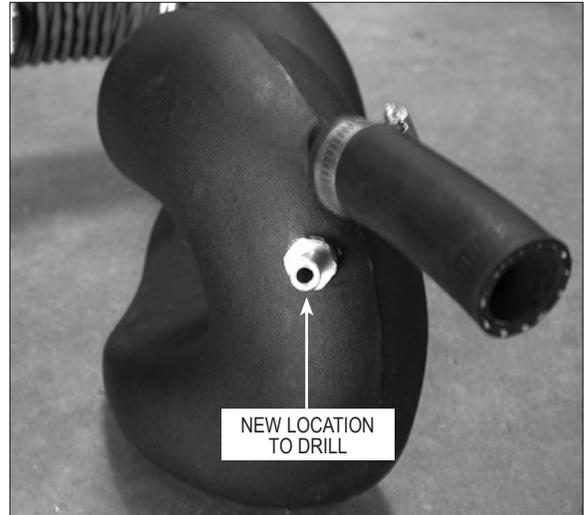


Fig. 12.B-b

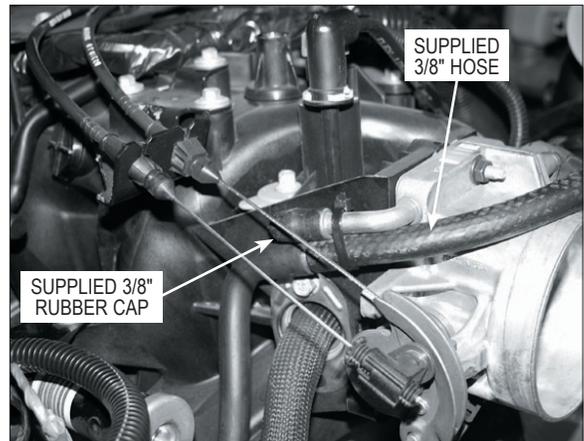


Fig. 12.B-c

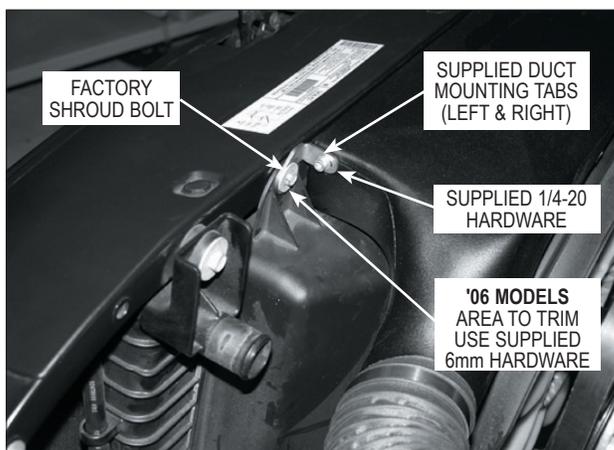


Fig. 12.B-a



Fig. 12.B-d

12.C 2003-2007 H2 HUMMER INLET DUCT INSTALLATION

- A. Install the supplied 3-1/2" x 3" sleeve onto the MAF outlet, and the 3-1/2" x 2" sleeve on the inlet of the supercharger.
- B. Reinstall the upper fan shroud. Remove the two screws securing the top of the radiator to the core support.
- C. Slide the entry of the large plastic inlet duct into the sleeve installed on the MAF. Lower the inlet duct onto the top of the radiator shroud.
- D. Reinstall the factory radiator bolts through the two supplied inlet duct mounting tabs and into their original bolt holes.
- E. Insert the 1/4" -20 x 1/2" screws through the brackets and onto each side of the inlet duct using the supplied washers. Tighten the screws. (See Fig 12.B-g.)
- F. Install the supplied 180° inlet duct onto the inlet of the supercharger. Orient the duct so that there is equal space between, the ECM and the master cylinder. (See Fig. 12.B-e.)
- G. Install the supplied #52 hose clamps and 3-1/2" x 13" long flex hose between the 180° cast duct and the rotomold duct.
- H. Using the supplied 3/8" hose mender, connect the supplied 3/8" hose from the 3/8" fitting on the inlet duct to the passenger's side valve cover breather hose. Secure the hose so that it cannot interfere with the throttle arm or cable. (See Fig. 12.B-c.) Using the 5/8"-to-3/8" reducer, connect the 3/8" hose that comes from the valve cover breather to the 3/8" side of the reducer. With the supplied piece of 5/8" hose, connect it to the barb which in turn will connect to the 5/8" fitting on the back of the 180° inlet duct.
- I. Install and tighten the hose clamps on each connection.

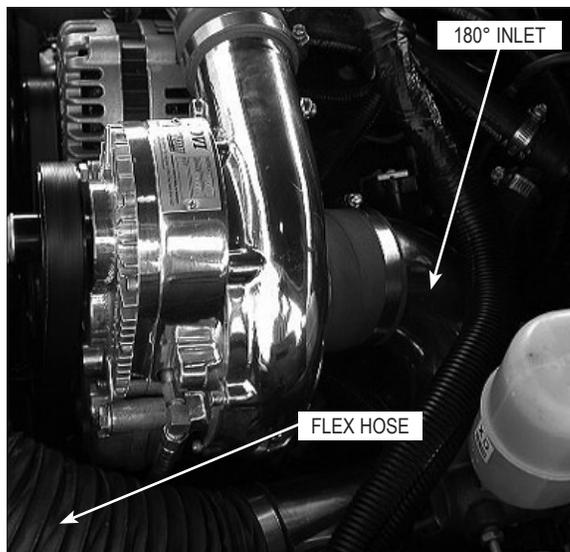


Fig. 12.B-e

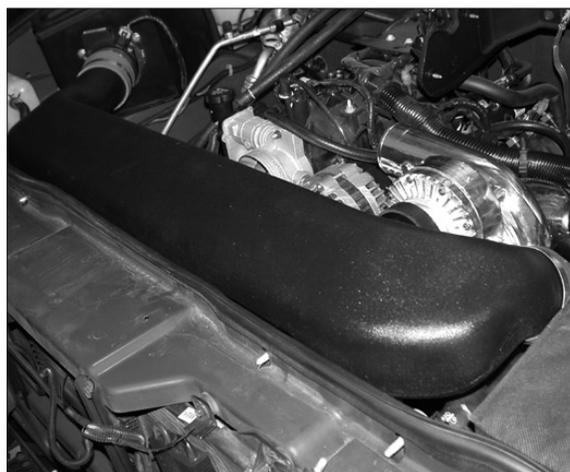


Fig. 12.B-f

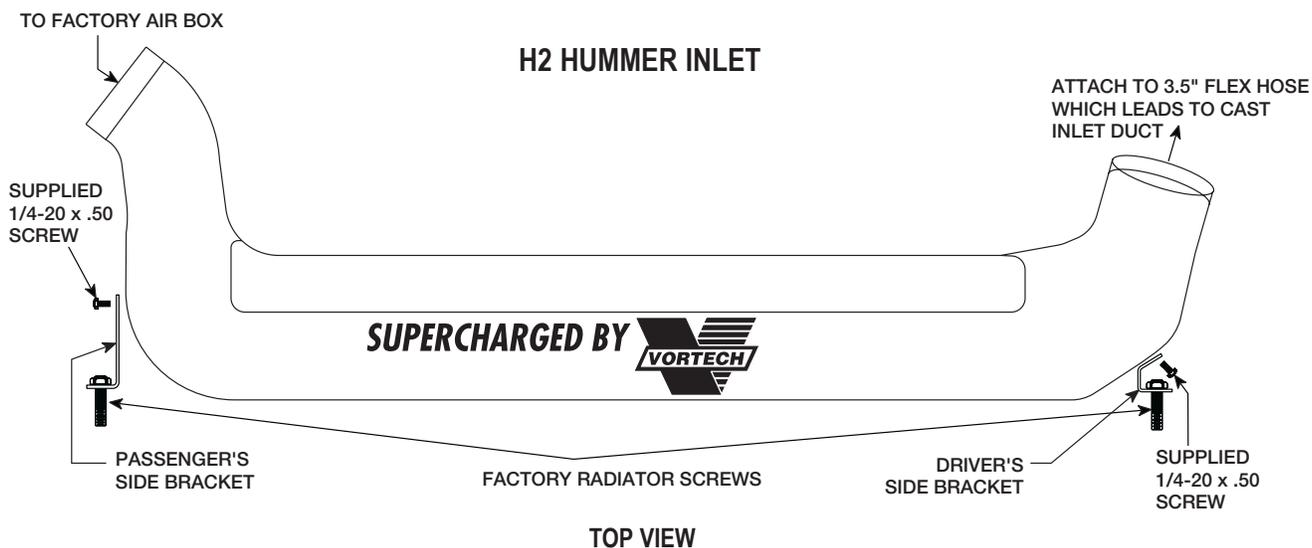


Fig. 12.B-g

12.D 2008 H2 HUMMER INLET DUCT INSTALLATION

- A. Trim fan shroud supports as seen in photos, to clear molded inlet duct (See Fig 12.D-a).
- B. Install inlet duct using factory hardware, supplied brackets and $\text{\O}1.25'' \times .280''$ long spacers. The spacers should be positioned between the Factory rubber grommets and the supplied duct mounting brackets (See Fig 12.D-b Driver side) and Fig 12.D-c passenger side).



Fig. 12.D-a

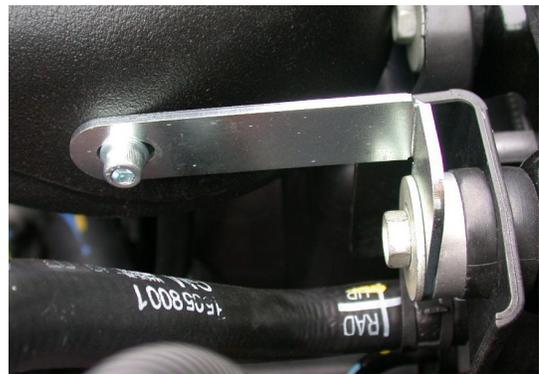


Fig. 12.D-b

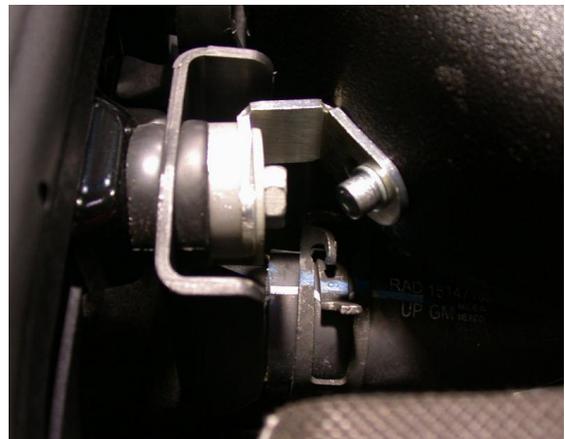


Fig. 12.D-c

12.D 2008 H2 HUMMER INLET DUCT INSTALLATION con't

- C. Install the supplied 4GL012-090 alum inlet duct to the end of the molded inlet duct using $\text{\O}3.5" \times 2"$ sleeve and two #56 hose clamps. (See Fig 12.D-d)
- D. Secure the $\text{\O}3.5" \times 9"$ long flex hose to the alum. inlet duct using a #52 hose clamp. (See Fig 12.D-d).
- E. Install the $3/4"$ NPT x $1"$ 90° fitting and the $3/8"$ NPT x $3/8"$ barb 90° fitting in the 4FA012-013 inlet duct. (See Fig 12.D-e).
- F. Secure the 4FA012-013 duct to the S/C using a $\text{\O}3.5" \times 2"$ sleeve and two #56 hose clamps.
- G. Connect the Flex hose to the 4FA012-013 duct and secure using a #52 hose clamp.
- H. Slight bending of the brake lines may be necessary to clear the inlet ducts.
- I. Cut the supplied 45° hose so the one leg is approx. 2.75" long and one is approx. 1.5" long. (See Fig 12.D-f).
- J. Attach the long end of the hose to the plastic inlet duct and secure with the hose clamp that is provided. Install the compressor by pass to the open end of the hose just installed and secure with a hose clamp.
- K. Using a length of hose cut from the previously install formed hose connect the compressor bypass valve to the discharge duct coming out of the Supercharger. (See Fig 12.D-g)
- L. Attach the $5/32"$ hose installed in an earlier step to the inlet port of the compressor bypass..



Fig. 12.D-d



Fig. 12.D-e



Fig. 12.D-f



Fig. 12.D-g

13. RADIATOR TUBE INSTALLATION (Denali/Escalade/SS Only)

- A. Cut the supplied hose as shown in *Fig. 13-a*.
- B. Using the two original clamps and the two supplied #24 hose clamps, attach the previously trimmed hose pieces to each end of the supplied radiator tube, radiator and water pump. (See *Figs. 13-a, 13-b*.)
- C. Orient the radiator tube and hoses for best fit and tighten all clamps.
- D. Use the supplied adel clamp and 1/4-20 x 1/2" screw and washer to secure the radiator tube to the insert on the large plastic inlet duct. (See *Fig. 13-b*.)
- E. Refill the coolant reservoir.



Fig. 13-a

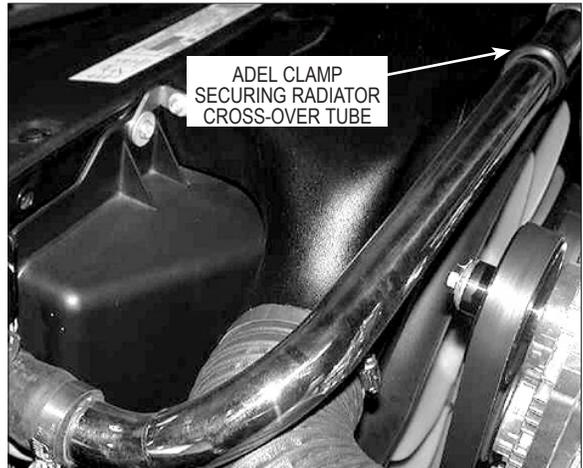


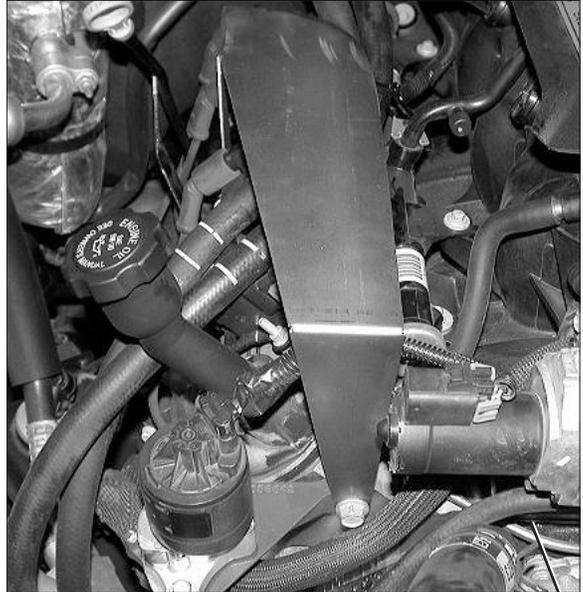
Fig. 13-b

14. CHARGE COOLER INSTALLATION

- A. Remove the screw from the front of the passenger side head. Remove the stud located between the middle coil packs on the passenger side valve cover, below the white electrical connector. (See Figs. 14-a, 14-b.)
- B. Install the charge air cooler support using the fasteners supplied. (See Figs. 14-a, 14-b.) Apply adhesive foam to the top of the support bracket where the charge air cooler rests. Make sure all hoses and wires are clear from the bracket edges.
Cannot bend trans lines: Remove the bracket holding the lines on the passenger's side valve cover. Secure the lines underneath the wiring harness with zip-ties.

NOTE: On H2 Hummer and '04 SS, '06 Denali installations, there will be no EGR assembly. Use the supplied 10mm x 1.5" screw, washer and .975" spacer in its place. (See Fig. 14-a.)

- C. Slightly bend both the transmission and engine oil dipsticks up and away to give clearance for the charge air cooler.
- D. Install the 1/2"NPT x 3/4 90° and straight brass fittings into the charge air cooler using thread sealant on the threads. (See Fig. 14-e.)
- E. Install the S-hose and the 90° hose onto the CAC, then set on support.
- F. Attach the short 90° formed hose to the straight barbed fitting on the charge cooler. (See Fig 14-e).
- G. Set the charge air cooler on the support with the 90° brass fitting in the upper left corner facing toward the passenger's side. Using the 2-3/4" sleeves and #44 hose clamps, connect discharge tube "A" to the discharge of the supercharger and to the inlet of the charge air



On the H2 Hummer, use the supplied 10mm x 1.5 screw, washer and .975" spacer in place of EGR equipment

Fig. 14-a

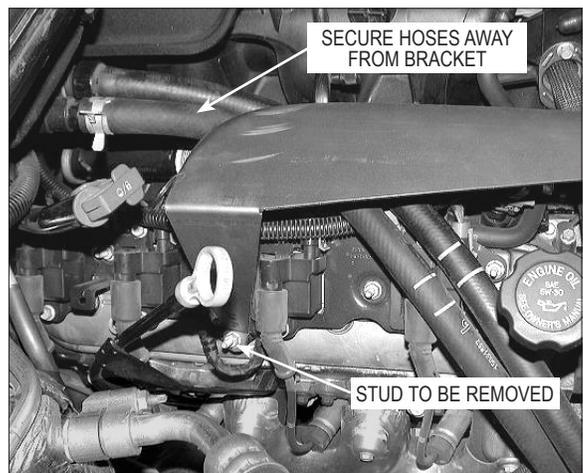


Fig. 14-b

NOTE: It will be necessary to trim 1/2" from the 2.75" end of the reducer sleeve for proper fit.

14. CHARGE COOLER INSTALLATION, cont'd.

cooler.

- H. Slide the 90° silicone elbow sleeve onto the throttle body. Slide the 2-3/4" end of the reducer sleeve onto the outlet side of the cooler. Using the #48 hose clamps install discharge tube "B" from the 3" end of the 90° sleeve to the 3" end of the reducer sleeve on the cooler. Use the #64 hose clamp to secure the 90° sleeve to the throttle body. Tighten all clamps. (See Figs. 14-c, 14-d.)



Fig. 14-c

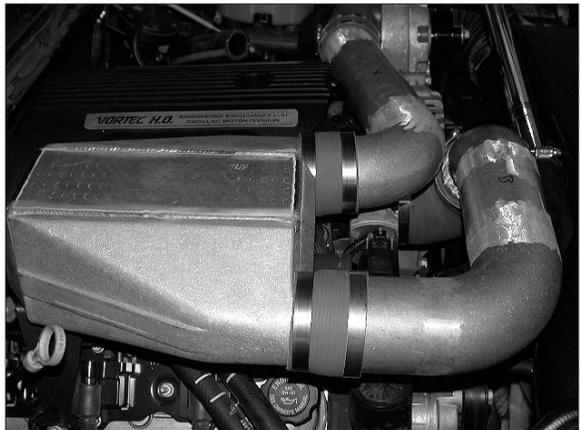
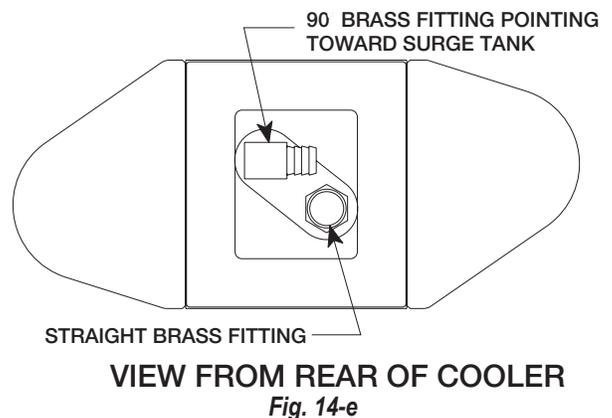


Fig. 14-d



15. SUPERCHARGER BYPASS INSTALLATION

- A. Connect the 4" length of $\text{\O}1$ " hose from the barb on the supercharger inlet duct to the outlet of the bypass valve.
- B. Cut the supplied molded hose as shown in Fig. 15-a.
- C. Using the supplied #16 hose clamps, connect the barb on the discharge duct to the inlet of the bypass valve using the previously cut $\text{\O}1$ " molded hose. (See Fig. 15-b.)

NOTE: Some vehicles may require trimming of the engine cover to clear various components. If necessary, trim the cover to clear the bypass valve hose.

- D. Install and tighten hose clamps on each connection.
- E.1 **'03 and Earlier Models:** Using the supplied $5/32$ " vacuum line and TEE fitting, connect the bypass valve pressure port to the manifold vacuum hose that is connected to the fuel pressure regulator. (See Fig. 8-c.)



Fig. 15-b

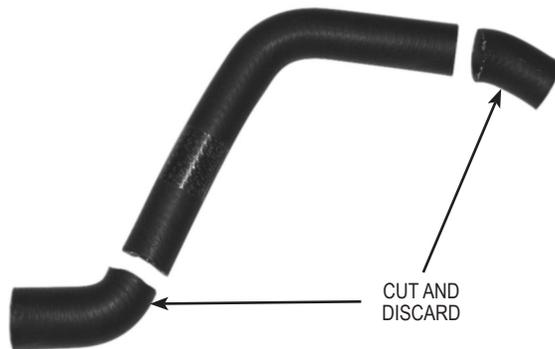


Fig. 15-a

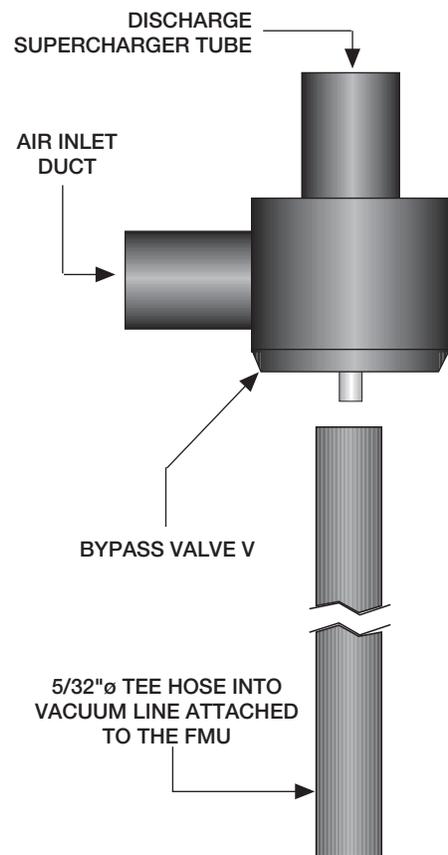


Fig. 15-c

15. SUPERCHARGER BYPASS INSTALLATION, cont'd.

- E.2 '04-'06 Models:** Locate the capped-off manifold vacuum port on the passenger's side of the intake manifold. Using a file or hacksaw, remove the tip of the capped-off section. Using the supplied 5/32" vacuum line, connect the bypass valve pressure port to the modified pressure port. (See Fig. 15-d.)
- F. '04-'06 Models:** Locate the hard plastic line running to the drivers side rear of the engine. Remove the hard line from the rubber hose.
- G. '04-'06 Models:** Install the supplied 90° PCV valve into the rubber hose on the engine.
- H. '04-'06 Models:** Cut the hard plastic line to reach the PCV valve and connect them with the supplied length of 3/8" hose. (See Fig. 15-e.)

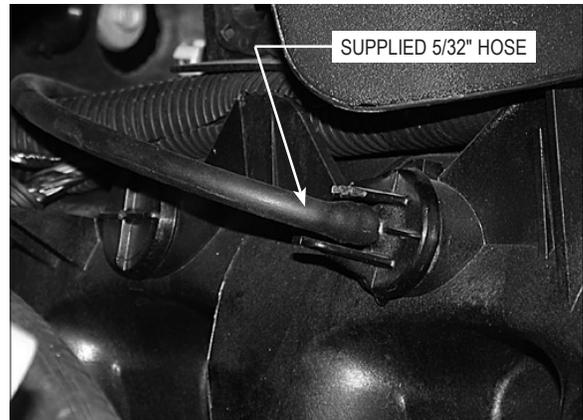


Fig. 15-d / ('04-'06 Models Only)

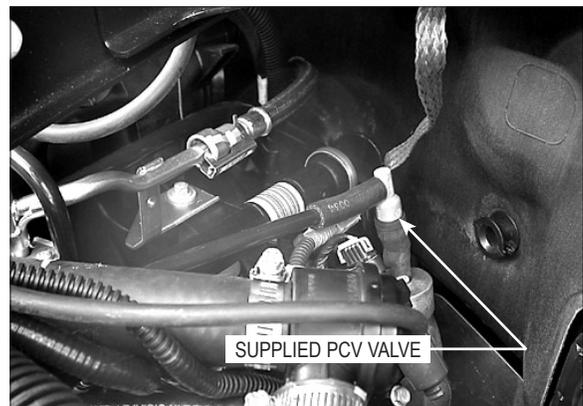


Fig. 15-e ('04-'06 Models Only)

16.A ESCALADE/DENALI/SS SURGE AND RESERVOIR TANK INSTALLATION

- A. Screw two 3/4" straight brass fitting into the plastic surge tank. (See Fig. 16.A-a.)
- B. Using the supplied 1/4-20 x .50 hardware and washers attach the surge tank mounting bracket to the surge tank.
- C. Unbolt the two bolts holding the passenger's side hood hinge brace at the base of the windshield. Install the surge tank and bracket assembly using the stock hardware. (See Fig. 16.A-a.)
- D. Remove the two screws holding the front bumper brace in the passenger's side fender well. (See Fig. 16.A-b.)
- E. Install the reservoir bracket as shown using the two factory screws. (See Fig. 16.A-b.)
- F. Screw the 3/4" 90° brass fittings into the top and bottom of the water reservoir.
- G. Install the water pump on the reservoir using the supplied adel clamp, 1/4-20 x .50 screws and 1/4" washers. Take the short 90° molded elbow and connect the inlet of the water pump to the bottom 90° brass fitting. (See Fig. 16.A-c.)
- H. Mount the water pump/reservoir assembly to the previously installed bracket in the fender-well using two 1/4-20 x .50" cap screws and washers. (See Fig. 16.A-d.)

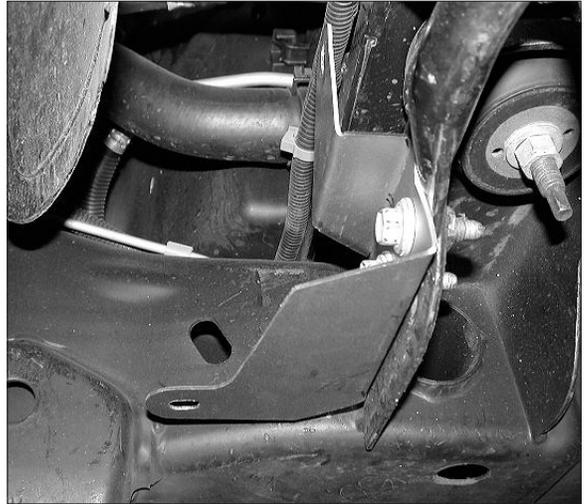


Fig. 16.A-b

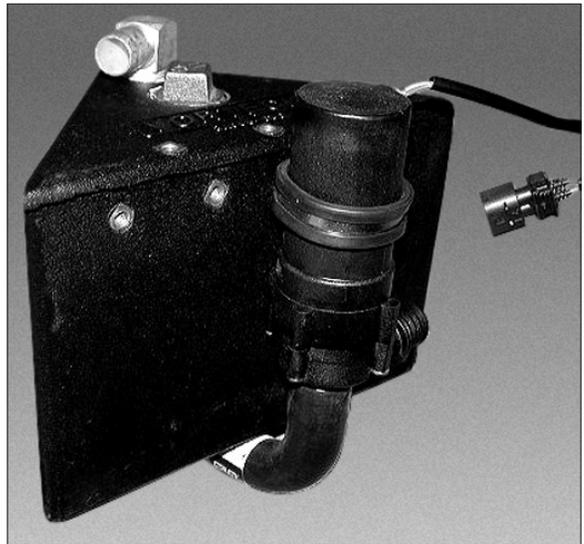


Fig. 16.A-c



Fig. 16.A-a

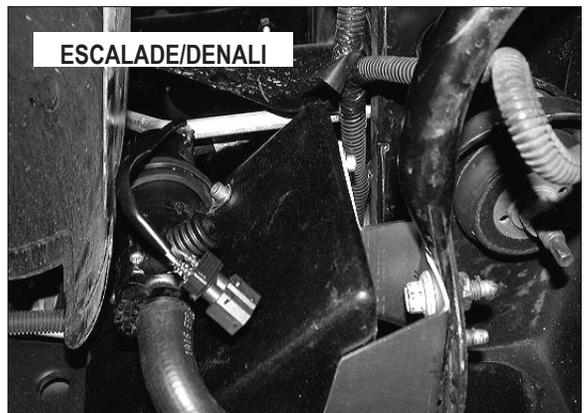


Fig. 16.A-d

16.B H2 HUMMER SURGE AND RESERVOIR TANK INSTALLATION

- A. Screw two 3/4" straight brass fitting into the plastic surge tank. (See Fig. 16.B-e.)
- B. Using the supplied 1/4-20 x .50 hardware and washers attach the surge tank mounting bracket to the surge tank. (See Fig. 16.B-e)
- C. Unbolt the two bolts holding the passenger's side hood hinge brace at the base of the windshield. Remove the plastic push-pin between the two bolts.
- D. Apply light pressure to drop the hood support down and install the surge tank/bracket assembly between the hood support bracket and cowling while aligning the bracket and push-pin holes. Using the stock hardware and push-pin secure the bracket in place. (See Fig. 16.B-e.)
- E. Screw the 3/4" 90° brass fittings into the top and bottom of the water reservoir.
- F. Install the water pump on the reservoir using the supplied adel clamp, 1/4-20 x .50 screws and 1/4" washers. Take the short 90° molded elbow and connect the inlet of the water pump to the bottom 90° brass fitting. (See Fig. 16.B-f.)
- G. Assemble brackets "A", "B" and "C" to the water reservoir as shown in Fig. 16.B-f.
- H. Place the water reservoir assembly under the passenger's side door with the short sides of the triangular tank against the frame rail and nerf bar support.
- I. Holding the assembly in place, mark the three locations where you will need to drill. Use a 1/8" drill for the two locations on the frame rail. Secure those two locations with the supplied sheet metal screws. For the third location on the nerf bar support, use a 9/32" drill and secure with the supplied 1/4-20 x 1" bolt, 1/4" nut and washer. (See Fig. 16.B-g.)

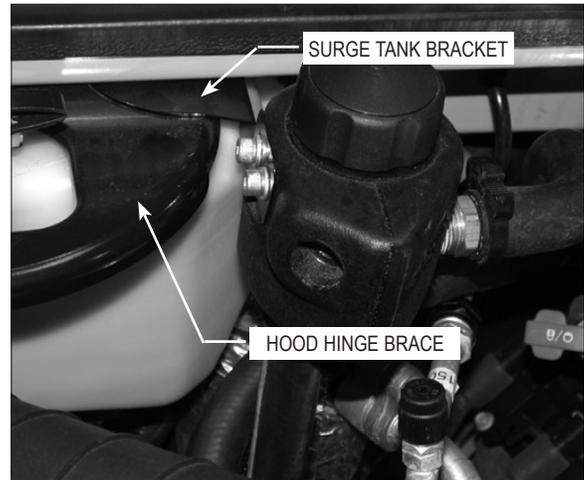


Fig. 16.B-e



Fig. 16.B-f

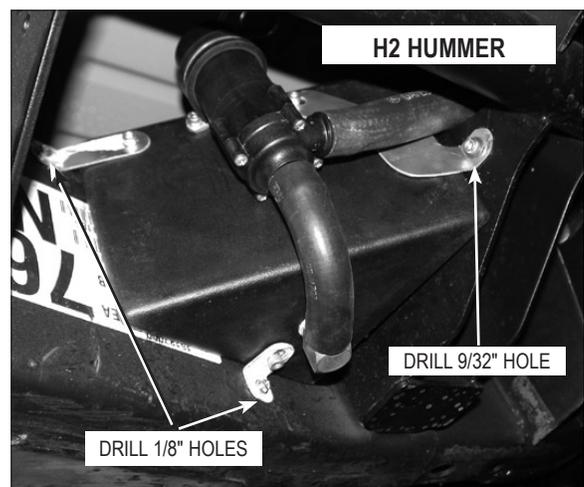


Fig. 16.B-g

17.A ESCALADE/DENALI/SS HEAT EXCHANGER INSTALLATION

- A. Remove the plastic push pins securing the radiator core support cover to the vehicle. Remove the core support cover.
- B. **DENALI:** Use a screw driver to unsnap the four twist snaps securing the grill. Remove the last screw so that it is possible to unsnap the grill and remove it from the vehicle.
ESCALADE/SS: Unsnap the two top snaps and lift the bottom tabs out of their slots. Remove the grill from the vehicle.
- C. Using sealant, install two 90° brass fittings into the inlet and outlet of the cooler. Take brackets "A", "B" and "C" and mount them to their corresponding tabs on the heat exchanger. (See Figs. 17.A-a, 17.A-b, 17.A-c.)
- D. Take the heat exchanger with all three brackets mounted and place it into position. Mark the hole positions from brackets A and B and drill with a 17/64" drill. To mount bracket C, you will remove and use an existing screw in the lower passenger's side of the hood latch support structure. Use the 1/4-20 x 3/4" hardware to secure brackets "A" and "B". (See Figs. 17.A-d, 17.A-e.)

NOTE: Temporarily place a piece of sheet metal between the A/C condenser and the support when drilling to ensure that the condenser is not punctured.

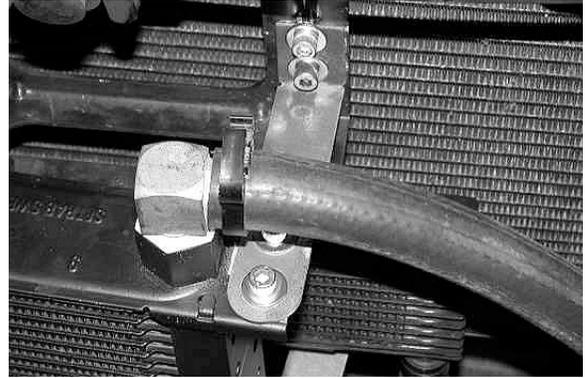


Fig. 17.A-b / BRACKET B - Mount To The Upper Driver's Side Tab.

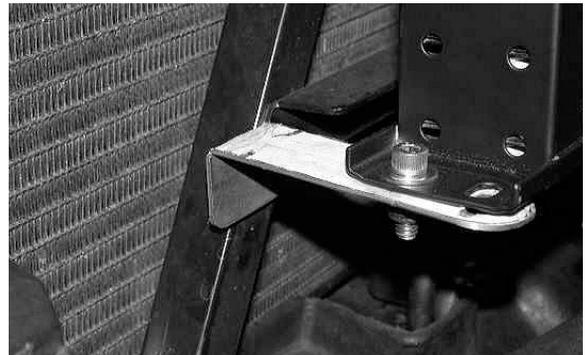


Fig. 17.A-c

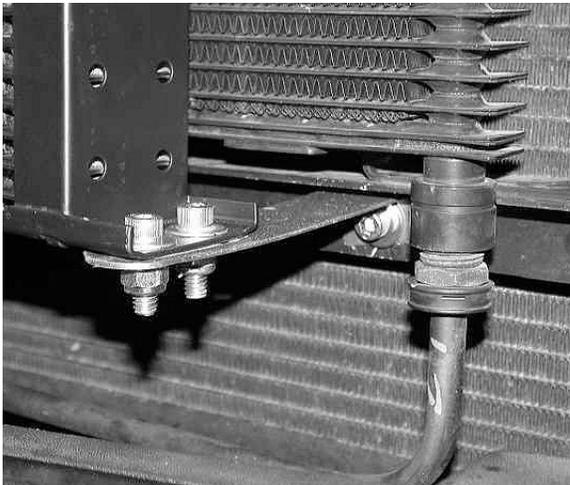


Fig. 17.A-a / BRACKET A - Mount To Lower Driver's Side Tab On The Heat Exchanger.

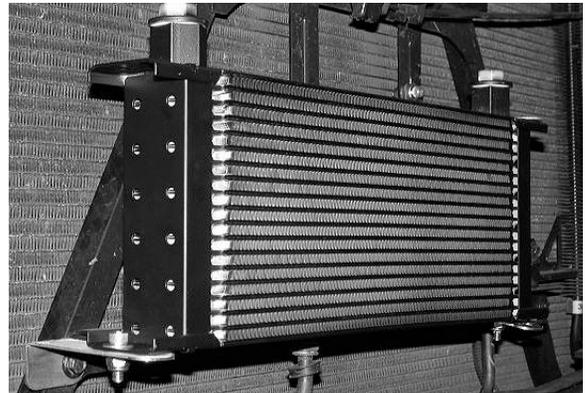


Fig. 17.A-d

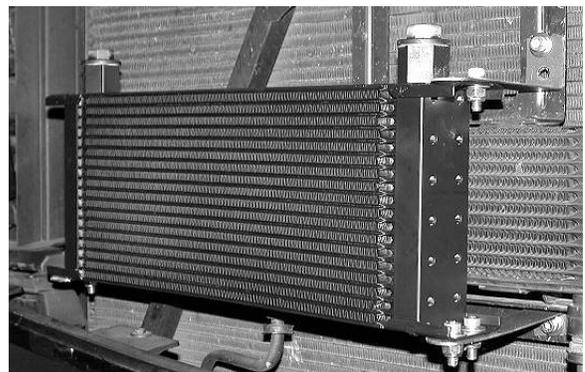


Fig. 17.A-e

17.B H2 HUMMER HEAT EXCHANGER INSTALLATION

- A. Remove the two screws securing the ends of the grill. Unsnap the middle clips and remove the grill from the vehicle. Remove the black insert (diffuser) in the grill. There are eight clips which hold it in.
- B. Take four supplied cooler brackets and line them with the supplied adhesive backed foam. Trim any extra foam.
- C. Unscrew the two factory screws securing the cross supports to the upper core support. (See Fig. 17.B-f.) Place the cooler in the brackets with the barbs facing to the passenger's side. Grind the bottom of the stock washers flat to fit onto the cooler brackets.
- D. Place the brackets on the bottom of the cooler and mark on the cross supports where you will need to drill. Make sure to close the hood with the brackets temporarily installed to verify clearance between the brackets and the hood supports.

NOTE: Temporarily place a piece of sheet metal between the core support and the A/C condenser when drilling to ensure that the condenser is not punctured. (See Figs. 17.B-f, and 17.B-g for the following steps.)

- E. Drill two 9/32" holes at the marked locations on the cross support.
- F. Open the hood and mount the cooler to the cross support with the supplied 1/4" hardware and brackets. Make sure that the cooler is sandwiched snugly between the upper and lower brackets.
- G. **CAREFULLY** and slowly close the hood. Make sure the heat exchanger has clearance with the hood.

NOTE: Some 2005 and later vehicles may require hood support modification as shown in Fig. 17.B-h. Coat any trimmed metal edges with paint or primer to resist corrosion.

- H. Reinstall the hood to its factory location.

NOTE: The clearance will be tight between the heat exchanger and the hood once it is installed.



Fig. 17.B-f



Fig. 17.B-g

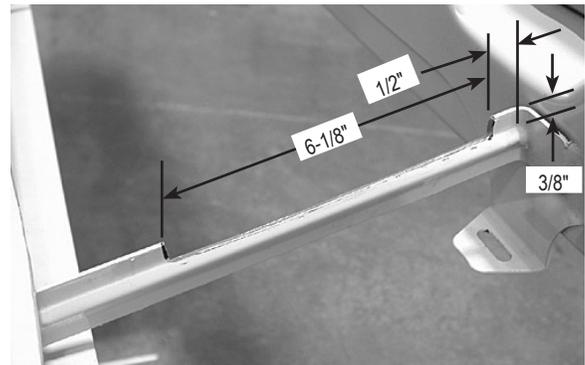


Fig. 17.B-h

17.C 2008 H2 HUMMER GRILL INSERT REMOVAL

- A. Remove the grill from the vehicle using a flat bladed screw driver depress the clips retaining the grill to the vehicle (see Fig 17.B-i).
- B. With the grill on a flat surface depress the clips retaining the grill opening extensions and remove the grill extensions (Note: this will not be reused). See Fig 17.B-j
- C. Reinstall the grill to the vehicle in the reverse order of removal.



Fig. 17.B-i

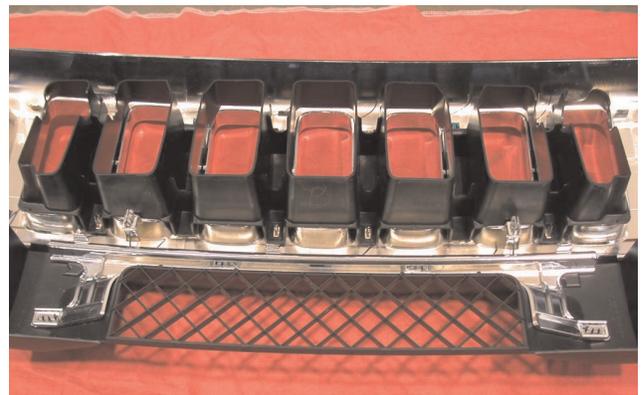


Fig. 17.B-j

18.A ESCALADE/DENALI/SS CHARGE COOLER HOSE ROUTING

NOTE: When routing hoses, refer to Fig. 18.A-a.

- A.** Cut a 13.5" length of 3/4" hose. Run this from the 90° fitting on the charge air cooler to the straight brass fitting on the surge tank.

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

- B.** Cut a 36.5" length of 3/4" hose. Run it from the bottom fitting on the surge tank along the fender toward the front and down to the 90° brass fitting on the top of the water reservoir.
- C.** Take the supplied 4" x 12" 90° molded elbow and cut 1-3/4" from the 4.0" end. Connect the trimmed end to the straight brass fitting on the charge air cooler. Route the long end toward the surge tank. Cut a 110" length of hose and connect it to the end of the installed molded elbow with the supplied 3/4" union. Route the hose along the fender-well, down toward the water reservoir and up under the front bumper. There is

- a small opening in the rubber apron between the bumper and A/C condenser. Pull the hose up and through, then connect it to the driver's side 90° fitting.
- D.** Cut a 64" length of 3/4" hose. Run it from the outlet of the water pump to the same hole in the rubber apron you pulled the previous hose through. Pull the hose up and through, then connect it to the passenger's side 90° fitting.
- E.** Secure all hose ends with the supplied nylon clamps.
- 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. 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.

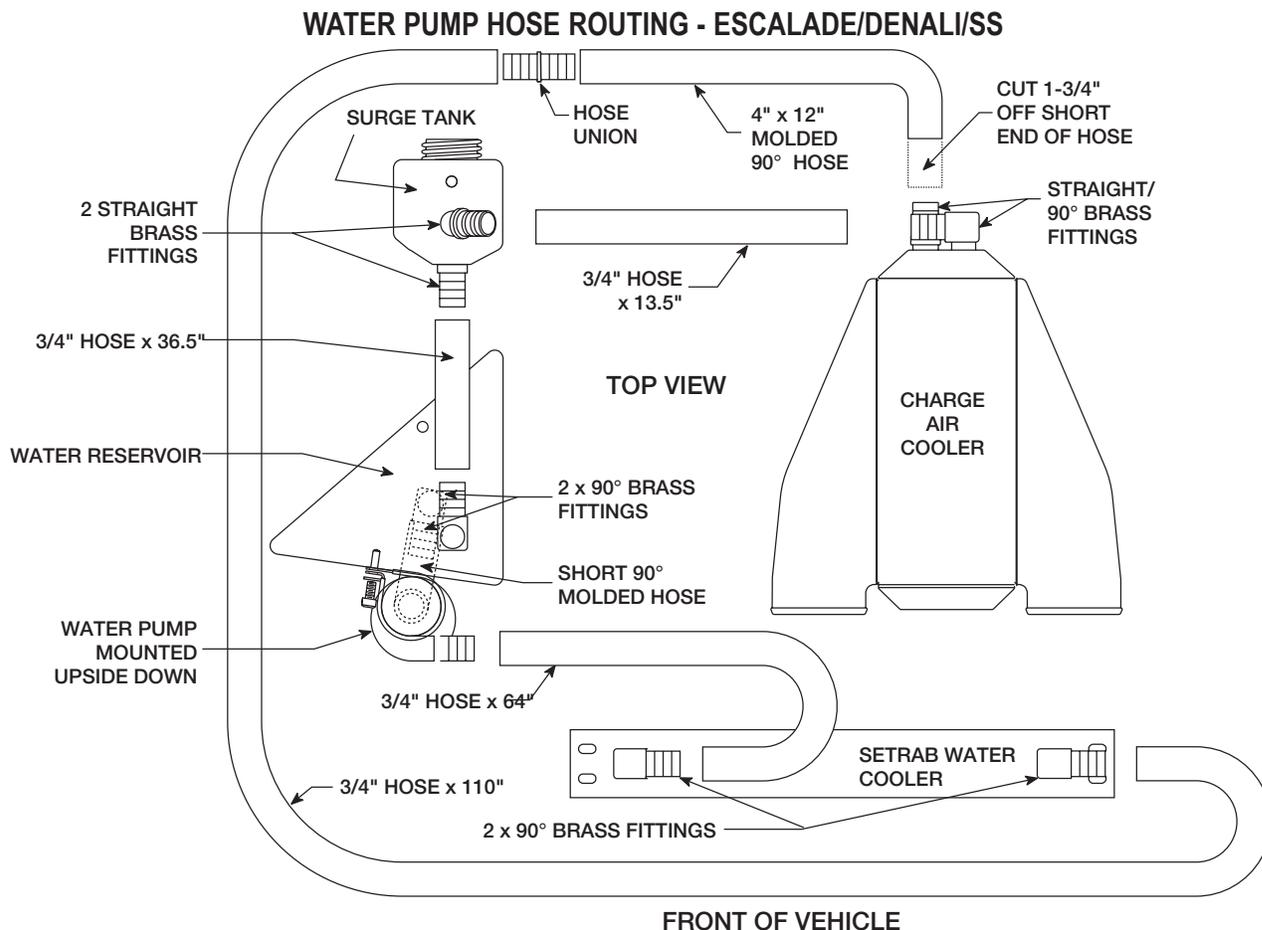


Fig. 18.A-a

18.B H2 HUMMER CHARGE COOLER HOSE ROUTING, cont'd

- H. Cut a 40" piece of Ø3/4" hose. Connect it to the formed hose attached to the top fitting of the front heat exchanger and run it by the passenger's side of the radiator and through the plastic shrouding into the engine compartment. Connect the Ø3/4" hose to the long end of the 90° molded elbow with the supplied 3/4" hose mender.
- I. Secure all hose ends with the supplied nylon clamps.

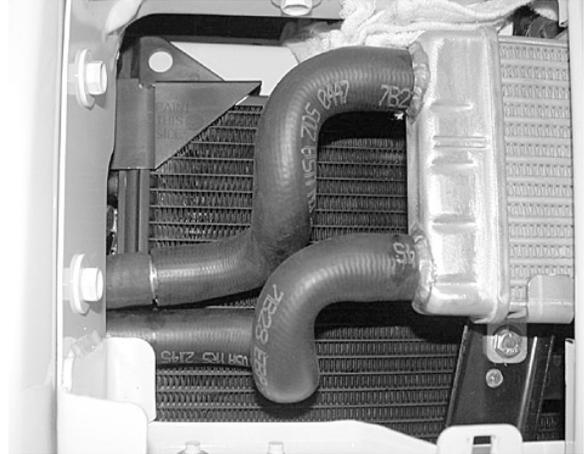


Fig. 18-d

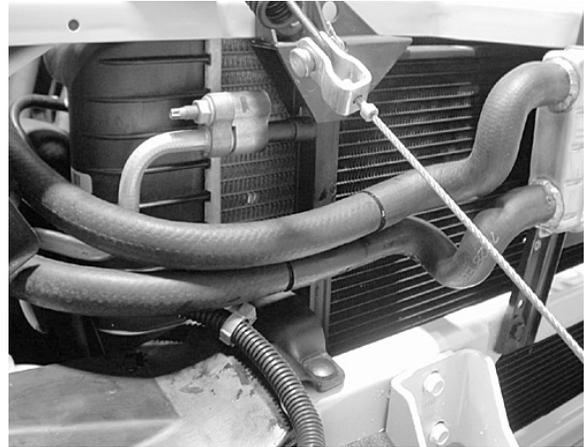


Fig. 18-e

19. WATER PUMP WIRING

- A.1 Escalade/Denali/SS:** Mount the supplied water pump relay on the fire wall located to the right of the FMU bracket. (See Fig. 19-a.)
- A.2 H2 Hummer:** Mount the supplied water pump relay on the lower plastic area of the power distribution block next to the fuel pump relay. (See Fig. 11-f.)
- B.** Connect the red 12-gauge wire from terminal #30 to the supplied fuse holder using the supplied butt connector. Install a ring terminal on the other end of the fuse holder. (See Fig. 19-b.)
- C.** Feed the yellow wire from relay terminal #85 to the fuse box (electrical center) on the driver's side of the engine bay. Route the wire to the yellow wire from the fuel pump relay. Tap into the line using the supplied "T" splice connector. (See Fig. 19-b.) If the vehicle does not require an inline fuel pump, route the wires directly to the fuel pump relay. (See Fig. 19-c.)

NOTE: Vehicles not using supplement fuel pump will tap into the stock fuel pump relay using the supplied fuse tap. (See Fig. 19-c.)

- D.** Run the black wire from terminal #86 on the fuel pump relay to ground.
- E.1 Escalade/Denali/SS:** With the long red 12-gauge wire connected to the water pump relay terminal #87, route the free end down along the fenderwell and under the base of the radiator over to the positive (blue/green) wire on the water pump. Secure as necessary to avoid heat and sharp edges.
- E.2 H2 Hummer:** With the long red 12-gauge wire connected to the water pump relay terminal #87, route the free end down the fenderwell to the positive (blue/green) wire on the water pump. Secure as necessary to avoid heat and sharp edges.
- F.** Run the negative (brown) wire from the water pump to a clean ground.
- G.** 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. 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.

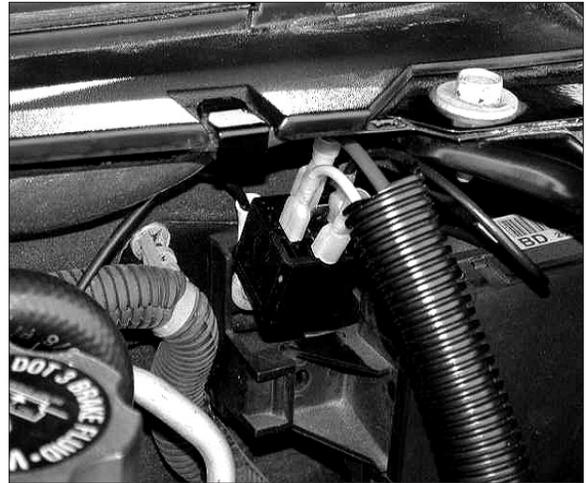


Fig. 19-a

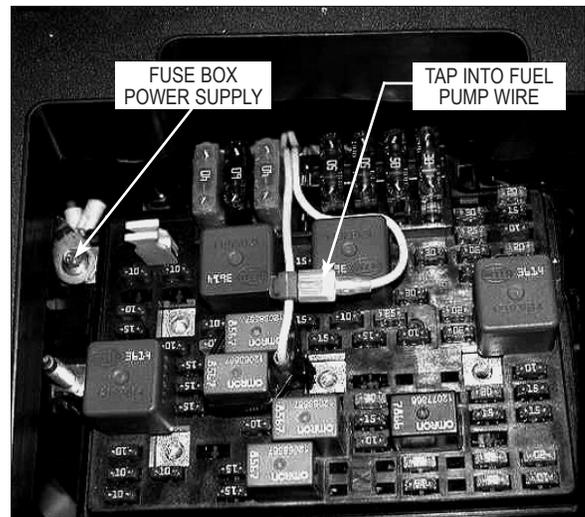
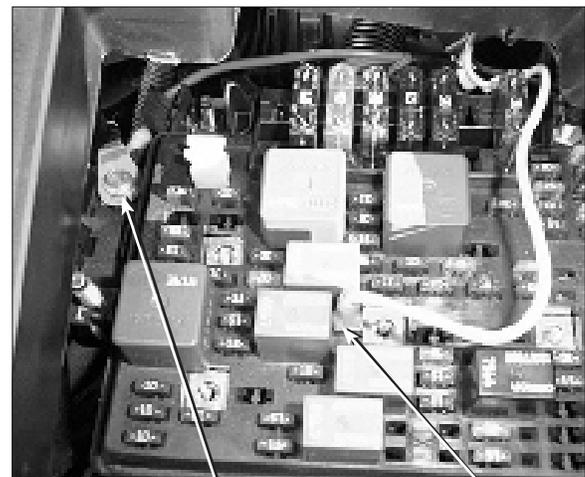


Fig. 19-b



RED WIRE FROM VORTECH SUPPLIED RELAY TERMINAL #30 ATTACHES HERE

YELLOW WIRE FROM VORTECH SUPPLIED RELAY TERMINAL #85 ATTACHES HERE

Fig. 19-c

20. REFLASH COMPUTER (KITS SUPPLIED WITH SUPERCHIPS TUNER)

MICRO TUNER VEHICLE PROGRAMMING INSTRUCTIONS

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.

NOTE: For vehicles equipped with on-star, follow the instructions on the following page before starting.

- A. Reconnect the battery.
- B. Connect the supplied cable to the 9-pin connector at the top of the hand-held unit. If present use the thumbscrews to secure the cable to the connector.
- C. Connect the other end to your ALDL connector located under the dash near the steering column. Make sure this connection is seated all the way in and that it is secure. You do not want this cable coming out of the connector during programming.
- D. Turn the ignition key to the "on" or "run" position but **do not start** the vehicle.
- E. To begin programming your vehicle, you may either press the "YES" button or the "A" button. If you press the "YES" button on the hand-held unit, this will download the Superchips performance program already stored in the hand-held unit. If you press "A", you can alter some predefined options to suit your needs. These options are **not permanently stored** in the hand-held unit. When power is removed from the unit, the changes you made will be lost.
- F. You only need to press the "YES" button once to start the programming cycle. The programming process takes 1 minute and 15 seconds to complete.

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.

- G. The hand-held unit will inform you that the programming process has completed and to turn the ignition off and disconnect the cable. Only at this time should the ignition be turned off and the cable removed.
- H. Programming is now completed. Start the vehicle to ensure proper operation.

21. SUPERCHIPS NOTICE (APPLIES TO KITS SUPPLIED WITH SUPERCHIPS TUNER)

Regarding all GM vehicles with "ON-STAR" and Microtuner 2001. It has come to our attention that GM vehicles equipped with "ON-STAR" communications may have trouble being programmed with a Superchips Microtuner 2001. It appears the "ON-STAR" system interrupts communications between the MT2001 unit and the vehicle's PCM..." and after cycling the ignition the vehicle can be started right back up.

Superchips is reviewing this and to temporarily correct for this situation, it is recommended that any vehicle to be programmed that has "ON-STAR" should follow these additional steps FIRST.

1. Ensure the vehicle is off and keys are out of the ignition.

All model years up to 2002:

Locate "interior" fuse panel and remove QTY 2 SEO labeled fuses.

Locate "exterior" fuse panel and remove QTY 1 SEO labeled fuse.

NOTE: 2004 vehicles equipped with On-star that have aftermarket stereos will experience problems with the ability to re-program the vehicle's ECM. It is necessary to disconnect the aftermarket stereo from the factory wiring harness before continuing with the programming procedure.

2003-2004 models years: Remove the "INFO, RADIO, RADIO AMP" fuse located on the exterior fuse panel.

2. Follow the instructions that came with the Microtuner.

Once programming is completed, ensure the vehicle is off and the keys are out of the ignition and install the fuses in the correct locations.

On GMC trucks, the interior fuse panel should be located to the left of the instrument panel/dash board. If the panel faces the door, open the door to gain full access.

On GMC trucks, the exterior fuse panel should be located under the hood on the right hand side of the vehicle. It will be labeled Fuse Panel or similar.

22. REFLASH COMPUTER, (2004, 2006 Denali & all 2005-2008 Model Year)

IMPORTANT! To ensure trouble-free programming of your vehicle's computer:

- All model years up to 2002:
Locate "interior" fuse panel and remove Qty 2 SEO labeled fuses.
Locate "exterior" fuse panel and remove Qty 2 SEO labeled fuses.
- 2003-2005 model year vehicles"
Locate "exterior" fuse panel and remove Qty 1 INFO, Qty 1 RADIO and Qty 1 RADIO AMP labeled fuses.
- 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.

NOTE: • All vehicles equipped with On-star that have aftermarket stereos will experience problems with the ability to re-program the vehicle's ECM. It is necessary to disconnect the aftermarket stereo from the factory wiring harness before continuing with the programming procedure.

- 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!

- Reconnect the battery.
- Locate the vehicle's OBD2 connector located in the lower left hand corner of the dash on the driver's side of the vehicle.
- Attach the OBD2 connector from the Flash tool that is provided in the kit to the vehicle's OBD2 port. Make sure this connector is seated all the way in the vehicle's OBD2 port. You don't want this connector to disconnect during programming or damage may occur to the vehicle's ECM.
- The Reflash tool should power up and display three parameters.
 - Performance tune
 - Diagnostics
 - Options
- Select "performance tune" and press the enter button in the middle of the arrow keys.
- Read the disclaimer entirely, then select agree and press ENTER.
- 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.
- Turn the ignition on (do not start the ve-

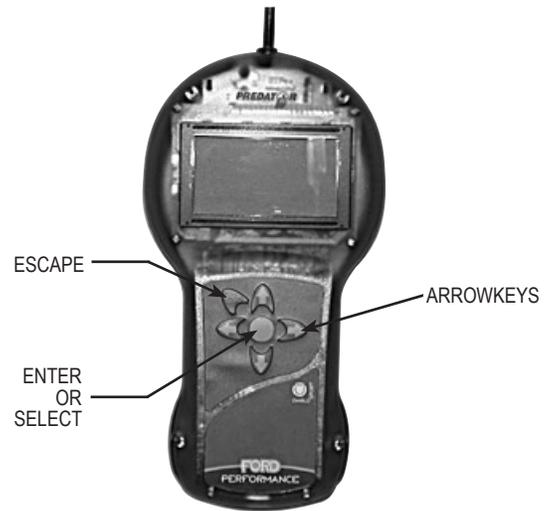


Fig. 22-a

- Set the parking brake and press the ENTER button to continue.
- 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.
- Continue to follow the screen and when finished unplug the reflash tool from the vehicle's OBD2 port.

23. FINAL ASSEMBLY AND CHECK

- A. Reconnect the battery.
- B. If your vehicle has gone over 10,000 miles since its last spark plug change, you will need to change the spark plugs now before test driving the vehicle.
- C. Check all fittings, nuts, bolts and clamps for tightness. Pay particular attention to oil and fuel lines around moving parts, sharp edges and exhaust system parts. Make sure all wires and lines are properly secured with clamps or tie-wraps.
- 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. The plastic engine cover that covers the upper manifold will need to be modified in order to reinstall. Refer to *Fig. 23-b* to trim and reinstall.
- F. Start engine and allow to idle a few minutes.
- G. **'02 Escalade:** With the engine running, check the brake booster line. Turn the steering wheel in both directions.

Verify:

- Smooth power assist
 - Noiseless operation
 - Proper fluid level
 - No system leaks
 - No bubbles, foam or discoloration of fluid
- H. Recheck to be sure no hoses, wires, etc. are near exhaust headers or moving parts and check for any sign of fluid leakage. Recheck all fluid levels.
 - I. **PLEASE TAKE SPECIAL NOTE:** Operating the vehicle without ALL the subassemblies completely and properly installed may cause **FAILURE OF MAJOR COMPONENTS.**
 - J. Test drive the vehicle.
 - K. 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.

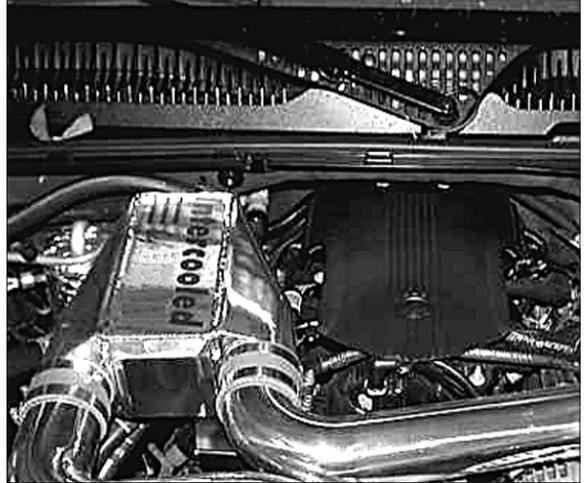


Fig. 23-a



Fig. 23-b

23. FINAL ASSEMBLY AND CHECK, CONT'D

For internally lubricated V3 units only

This supercharger has been factory pre-filled with special Vortech synthetic lubricant. Oil does not need to be added to a brand new unit; however a fluid level check should be performed.

Prior to operating the supercharger on the vehicle and after installation onto the vehicle:

Remove the factory installed flat-head brass shipping plug (not the dipstick) from the top of the supercharger case. Replace the sealed shipping plug with the supplied "vented" plug. Do not operate the supercharger without it. Check the supercharger fluid level.

Fluid level checking procedure:

1. Ensure that the .06" copper sealing washer is located on the dipstick base.
2. Thread the clean dipstick into the supercharger unit it seats.
3. Once the dipstick has seated, remove the dipstick from the unit. Fluid should register in the crosshatched area on the dipstick.
4. **DO NOT OVERFILL!!!** Drain excess fluid the unit if it is above the maximum level on the dipstick.

Check the fluid level using the dipstick at least every 2,500 miles.

Initial supercharger fluid change must be performed at 2,500 miles. The supercharger fluid must be changed at least every 7,500 miles.

Drain the fluid, refill the unit with 4 oz. of Vortech V3 lubricating fluid and then confirm proper oil level using the dipstick. **DO NOT OVERFILL!!!**

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



ENGINEERING, LLC

1650 PACIFIC AVENUE • CHANNEL ISLANDS, CA 93033-9901 • (805) 247-0226
FAX (805) 247-0669 • www.vortechsuperchargers.com • M-F 8:00 AM - 4:30 PM PST