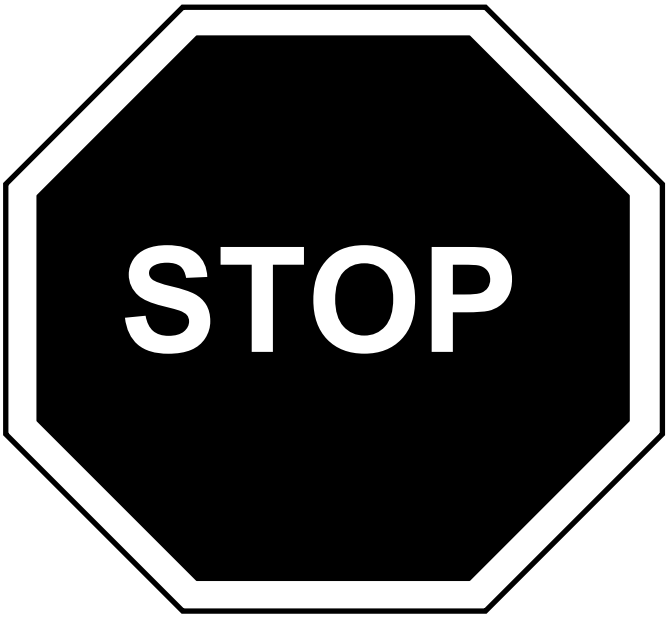
SALEEN SUPERCHARGER KIT INSTALLATION

INSTALLATION MANUAL: 2007-2008 LINCOLN NAVIGATOR
5.4L and Ford Expedition 5.4L

P/N: 10-8002-C15895B

Saleen Performance, Inc.
800-888-8945
www.saleen.com



IF YOU ARE NOT EXPERIENCED IN THE AREA OF AUTOMOTIVE MECHANICS, WE STRONGLY URGE THAT YOU REFER THIS INSTALLATION TO A CERTIFIED INSTALLER OR TECHNICIAN.

ENSURE THE VEHICLE IS PARKED WITH THE PARKING BRAKE ON, AND THE TRANSMISSION IN PARK, WHEN WORKING ON IT.

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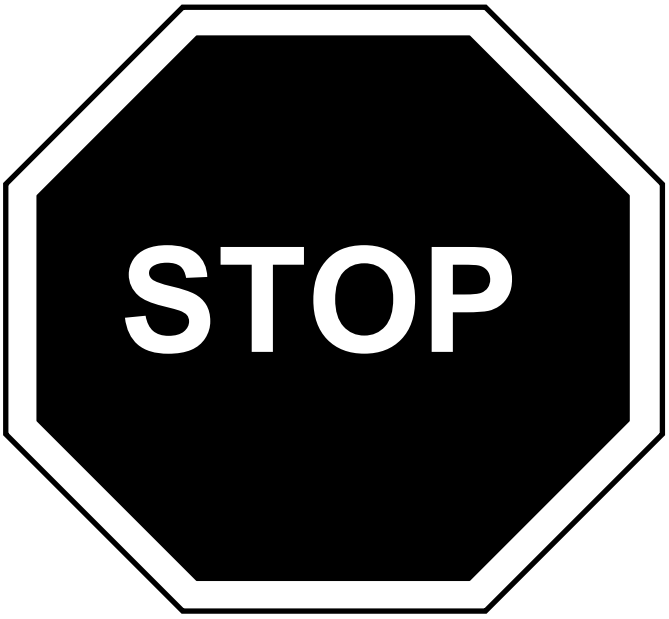
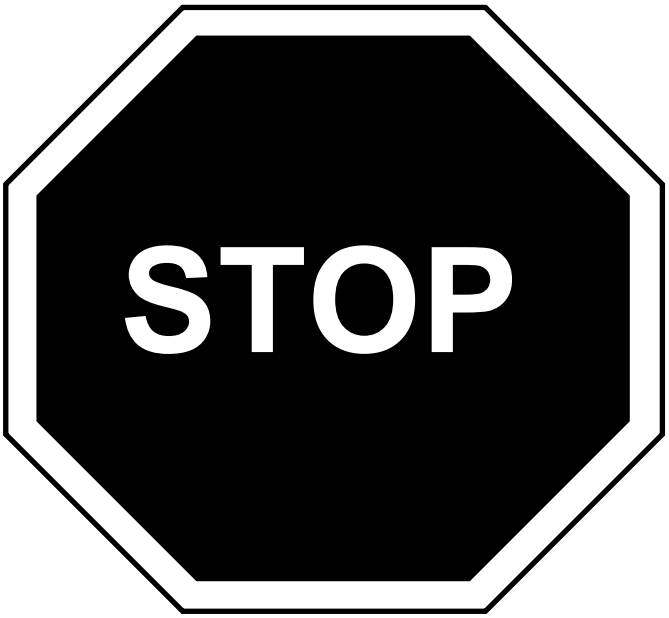
SALEEN SPEEDLAB



THE SALEEN SERIES VI SUPERCHARGER AND ACCOMPANYING PROGRAMMING ARE DESIGNED AROUND THE USE OF 91 OCTANE FUEL OR HIGHER ONLY. BEFORE YOU RUN YOUR VEHICLE WITH THE SERIES VI KIT INSTALLED EVEN ONCE, YOU MUST EITHER DRAIN THE FUEL TANK COMPLETELY AND FILL IT UP WITH 91 OCTANE OR HIGHER, OR BEGIN USING 91 OCTANE OR HIGHER IN YOUR VEHICLE TWO COMPLETE FILLUPS BEFORE INSTALLATION.



DO NOT INSTALL ANY AFTERMARKET CHIPS, PROGRAMMERS, OR HAVE YOUR PCM REPROGRAMMED ANYWHERE BUT AT SALEEN FOR THIS SUPERCHARGER KIT. THE NAVIGATOR & EXPEDITION USE AN ELECTRONIC THROTTLE CONTROL (ETC), WHICH IS CONTROLLED BY THE POWERTRAIN CONTROL MODULE (PCM) AND THE CALIBRATION INSIDE. AFTERMARKET CHIPS DO NOT PROPERLY RECALIBRATE THE ENGINE MANAGEMENT SYSTEM. THIS CREATES A DANGEROUS SITUATION THAT COULD RESULT IN A STUCK THROTTLE AND CAN LEAD TO INJURY OR DEATH. SALEEN FULLY PROGRAMS THE PCM TO FORD STANDARDS, AND ENSURES THAT ALL ENGINE SAFTEY CONTROLS ARE FULLY FUNCTIONAL.

Supercharger Kit
Installation Guide for 2007 to 2008 Navigator & Expedition

WELCOME!

Thank you for buying a Supercharger Kit for the 2007 to 2008 Navgiator & Expedition. We appreciate your business, and we hope you enjoy your product.

For your benefit, please read the following instructions completely and thoroughly before attempting to install a Supercharger Kit. Many questions we have received from customers about the installation of our products could have been easily solved by information listed in this installation guide. We want you to enjoy the product in its fully functional state, and reading this tutorial is a great first step to getting you on your way to a more unique and better performing Navigator/Expedition.

IMPORTANT! IF YOU HAVE ANY AFTERMARKET PARTS ALREADY INSTALLED ON YOUR VEHICLE YOU **MUST** RETURN THE TRUCK TO STOCK LINCOLN NAVIGATOR STATUS. THIS INCLUDES PULLEYS, CHIPS, PROGRAMMERS, ETC. THE TRUCK WILL NOT FUNCTION AND PARTS MAY NOT FIT PROPERLY IF OTHER AFTERMARKET PARTS ARE INSTALLED.

Also, we strongly urge that you have at least one person to help you install the supercharger assembly, as the unit is heavy. With enough help and at least one read through of this installation guide under your belt before you begin your installation, you should be well on your way to one hot SUV!

IMPORTANT! BE SURE THAT YOU FILL OUT THE PROCESSOR QUESTIONNAIRE (LOCATED ON PAGE 2) AND RETURN IT TO SALEEN WITH YOUR PCM! WE CANNOT FLASH YOUR PCM WITHOUT THAT QUESTIONNAIRE!

Again, thank you for choosing Saleen!

PARTS INCLUDED IN SUPERCHARGER KIT:

10-1607-B16858*						**SER VI SC KIT, 2007 NAVIGATOR/EXPEDITION**	**1**	**EACH**
						EXPEDITION/NAVIGATOR SUPERCHARGER GROUP		
10-8002-C18595A						INSTALLATION MANUAL, 2007-2008 EXPEDITION NAVIGATOR	1	EACH
08-9101-C15674						LABEL, BELT DIAGRAM, S331SC	1	EACH
06-1602-C17427						MAFS UPGRADED FROM STOCK S197	1	EACH
06-9101-C10151						Premium Fuel Only Decal	1	EACH
06-9101-C17108						Oil Filler Cap Decal	1	EACH
06-9101-C18624						FRONT GRILLE BADGE 2005 S281	2	EACH
178-429						90 MM IDLER PULLEY	1	EACH
00-9001-C10141						CAPSCRW HEX FLNG M6x1.0mm 25mm FULL THRD Zn PL	12	EACH
00-1601-C13394						SPARK PLUGS, HT0	8	EACH
00-1604-C14814						GOODYEAR GATERBACK 113.0" 6 RIB BELT	1	EACH
00-9010-C07181						3/8" VACUUM HOSE	20	INCH
00-1701-C12076						FUEL INJECTOR, 2005 S281 E	8	EACH
10-1602-C18594						SUPERCHARGER ASSY, EXP, NAV, 3.25" PULLEY	1	EACH
						FUEL SYSTEM GROUP		
08-1903-C18554						Fuel Rail, 5.4 3V Truck	1	EACH
08-1903-C18548						FUEL RAIL PRESS SENSOR PLUG	1	EACH
00-1903-C18549						FUEL RAIL PRESS SENSOR O-RING	1	EACH
00-9001-C15027						CAPSCRW, HEX HEAD, M5x0.8, 20m	2	EACH
00-9004-C00227						WASHER FLAT M5 ST	2	EACH
						RECOVERY TANK GROUP		
00-2001-C09994						CAP TANK	1	EACH
06-2001-C10212						TANK INTERCOOLER RECOVERY	1	EACH
00-9001-C10141						CAPSCRW HEX FLNG M6x1.0mm 25mm FULL THRD Zn PL	5	EACH
10-2001-C16166						BRACKET, I/C RECOVERY TANK, NAV/EXP	1	EACH
00-9006-C14542						Rivet Nut M6X1.0, Zinc-Plated Steel	2	EACH
						WATER PUMP GROUP		
00-2002-C09991						INTERCOOLER WATER PUMP, '05 S281	1	EACH
00-9001-C10064						CAPSCRW HEX FLNG M8x1.25mm 20mm CL 8.8 FULL THRD Zn PL	1	EACH
10-2002-C16189						Bracket, Water Pump, Navigator/Expedition	1	EACH
08-1704-B15126						HARNESS, S331 WATER PUMP	1	EACH
						COOLING FAN SPACER GROUP		
08-1604-C16177						Spacer, Fan, 2007 S331	1	EACH
00-9001-C16490						CAPSCREW, SOCKET HEAD, M6-1.0 X 100MM, CLASS 12.9, ZN	4	EACH
00-9004-C15181						Washer, Round Hole, M6 Zinc Plated, 6.4 mm, 18mm OD, 1.4 mm thk, Fender Washe	4	EACH
						WATER CROSSOVER GROUP		
08-2003-B14559						WATER CROSSOVER KIT, S331	1	EACH
						WIRING GROUP		
08-1704-C15501						HARNESS, S331 TMAP SENSOR EXTENSION	1	EACH
00-1703-C07082						HEAT SHRINK, DUAL WALL 1/4" BLACK	19.5	INCH
00-1704-C09379						WIRE, 20 AWG GRAY	10	INCH
00-1704-C09370						WIRE, 20 AWG GRAY/RED	10	INCH
00-1703-C09017						TERMINAL, RING 18 AWG FOR 1/4" STUD	1	EACH
00-1704-C15307						SLEEVING, CONVOLUTED 1/4" BLACK	28	INCH
00-1704-C06305						WIRE 18 awg YELLOW	18.5	INCH
00-1704-C06528						WIRE 18AWG TAN	9	INCH
00-1704-C06464						WIRE 18awg DK BLUE	18.5	INCH
00-1704-C06435						WIRE 18AWG DARK GREEN	9	INCH
00-1704-C11083						SLEEVING, CONVOLUTED 1/2" BLACK	11	INCH

00-1704-C09260				18 GAUGE, SEAMLESS BUTT CONNECTOR, NON-INSULATED	**17**	EACH
				ALTERNATOR MOUNTING KIT		
08-1604-C14255				ALTERNATOR MOUNT MACHINED S331	1	EACH
00-9003-C15727				NUT M8 X 1.25 DISTORTED THREAD LOCKNUT ZN PLATED	3	EACH
00-9004-C15732				WASHER AN SS 5/16" ALTERNATOR MOUNT	3	EACH
00-9002-C11089				STUD ST BLCK OX M8x1.25x110mm UNEQUAL 31mm&12mm THRD LNGTH	1	EACH
00-9002-C11090				STUD, ST BLACK OXIDE, M8 x 1.25 x 65mm 20mm THRD LNGTH	1	EACH
00-2002-C10091				STUD, ST BLACK OXIDE, M8 x 1.25 x 110mm	1	EACH
00-9001-C10665				CAPSCRW HEX FLNG M8x1.25mm 40mm CL 8.8 FULLY THRD Zn PL	2	EACH
00-9004-C00026				WASHER FLAT AN 0.31inch REG	1	EACH
10-9004-C17618				SPACER ALTERNATOR NAVIGATOR SC KIT, .290 x 0.35 ID x 0.75 OD	1	EACH
				ZIP TUBE GROUP		
10-1602-C18237				ZIP TUBE ASSY - NAVIGATOR / EXPEDITION	1	EACH
00-1602-C18368				SILICONE HUMP COUPLER - 3.5IN	2	EACH
073-709				HOSE CLAMP #56 3 1/16"X4"	4	EACH
				INTAKE ELBOW GROUP		
00-1607-C18532				INTAKE ELBOW	1	EACH
00-9001-C15486				CAPSCRW HEX FLNG M6x1.0mm 20mm PART THRD 8mm min THRD LNGTH brt. Z	4	EACH
00-1607-C18533				THROTTLE BODY O-RING, 5.4L TRUCK	1	EACH
				HEAT EXCHANGER GROUP		
00-9003-C08164				Jam Nut, M12, Light	4	EACH
10-2001-B16188				HEAT EXCHANGER ASSY, NAVIGATOR/EXPEDITION	1	EACH
				IC HOSE GROUP		
08-2003-C14393				HOSE, H/E TO I/C, S331	1	EACH
10-2003-C16888				HOSE I/C TO RECOVERY TANK, NAV/EXP	1	EACH
10-2003-C16891				HOSE I/C TANK TO WATER PUMP,NAV/EXP	1	EACH
10-2003-C16892				HOSE WATER PUMP TO H.E., NAV/EXP	1	EACH
00-2003-C10068				HOSE CLAMP MOLDED HOSE S/C 2005 MUSTANG	8	EACH
				PACKAGING GROUP		
10-8003-C12466				STICKER NEON ORANGE 3"x11.5" PCM BOX	1	EACH
10-8003-C12239				(BOX) PCM 2005 MUSTANG	1	EACH

TOOLS REQUIRED FOR KIT INSTALLATION:

A = (2005 & 2006 Models Only)
B = (2007 Models & Up Only)

1/2" - Drive Breaker Bar		10mm Box-End Wrench
3/8" - Drive Torque Wrench (Lb-ft & Lb-in)		Straight Blade Screwdriver (Medium Size)
3/8" - Drive Ratchet		Philips Screwdriver (Medium Size)
3/8" - Drive, 6" Extension		Large Pry Bar
8mm Socket (3/8" - Drive)		Small Pry Tool (For Clip Removal)
10mm Deep Socket (3/8" - Drive)		Large Crescent Wrench (Up to 1.5")
12mm Deep Socket (3/8" - Drive)		Pliers (Medium Sized)
13mm Deep Socket (3/8" - Drive)		Wire Stripper / Crimper
15mm Deep Socket (3/8" - Drive)		Drill Motor
18mm Deep Socket (3/8" - Drive)		T20 Torx Bit (1/4" - Drive)
13mm Socket (3/8" - Drive)		Lighter (For Heat Shrink)
19mm Socket (3/8" - Drive)		2 Gallon Bucket
1/4" - Drive Ratchet		Adjustable Wrench
1/4" - Drive, 10" Extension		Panel Puller
1/4" - Drive, 3" Extension		Hose Clamp Pliers
8mm Socket (1/4" - Drive)		Ford Fuel Line Disconnect Tool
10mm Socket (1/4" - Drive)		
10mm Swivel Socket (1/4" - Drive)		
12mm Socket (1/4" - Drive)		Drill 3/8"
90 Degree Pick		.375"
Rivnut Installation Tool	A	Ford Motor Co., Holding Tool, Part# T84T-6312-C
Angle Cutters	A	Ford Motor Co., Hub-Nut Tool, Part# T84T-6312-D
Coolant System Pressure Tool	B	Schley Prod. Inc. Fan Clutch Wrench, Part# 61600
Razor Blade	B	Schley Prod. Inc. Spanner Wrench 48mm, Part# 95210

NOTE: If you do not have any of the tools listed above, you may be able to obtain them from your local tool lending service

MATERIALS REQUIRED FOR KIT INSTALLATION:

Red Loctite #262	Silicone Grease (For Fuel Injector O-Rings)
Electrical Tape	3M Body Schutz
Pipe Thread Sealant	Automotive Adhesion Promoter For VHB Tape
Anti-Seize (For spark plugs)	

TORQUE | ? ITEM NUMBER | OPERATION

10	Write down all radio station presets; record in notes section below
20	Lower the running board
30	Using an 8 mm socket on 1/4" drive ratchet, remove the negative battery terminal by loosening the terminal pinch nut, and pulling up on the terminal. Then remove the positive battery cable from the battery.
40	Remove the battery and set aside in a safe, dry place.

ITEM	PART NUMBER	QTY.	DESCRIPTION

Notes:

TORQUE

SALEEN

PROCESS NAME	PAGE
DISCONNECT BATTERY	1

TODAYS DATE: / /

PROCESSOR QUESTIONNAIRE

2007 - 2009 EXPEDITION / NAVIGATOR S/C

SHIP TO ADDRESS FOR PCM (PLEASE NO P.O. BOXES)

CONTACT NAME:	DEALER NAME:
SHIPPING ADDRESS:	PHONE NUMBER:
CITY: STATE: ZIP:	EMAIL:
CUSTOMERS NAME:	TECH SUPPORT SALEEN REPORT#: (IF ONE WAS GIVEN)

VIN:

VEHICLE YEAR:	VEHICLE MODEL:	VEHICLE BUMPER#:	VEHICLE MILEAGE:
TIRE MANUFACTURER:		REAR TIRE SIZE:	
		ENGINE SIZE:	DIFFERENTIAL GEAR RATIO: (please look at vehicle)

DRIVETRAIN: 2WD ☐ 4WD ☐ AWD ☐ TRACTION CONTROL: Y N

OTHER MODIFICATION / AFTERMARKET PARTS INSTALLED - NON SALEEN

e.g. HEADERS, INTAKES, AIR OR FUEL MANAGEMENT, EXHAUST, OTHER CAL. 'TUNERS'

PLEASE LIST ALL ITEMS:

REASON FOR PROGRAMMING --- DO NOT LEAVE BLANK

PLEASE EXPLAIN:

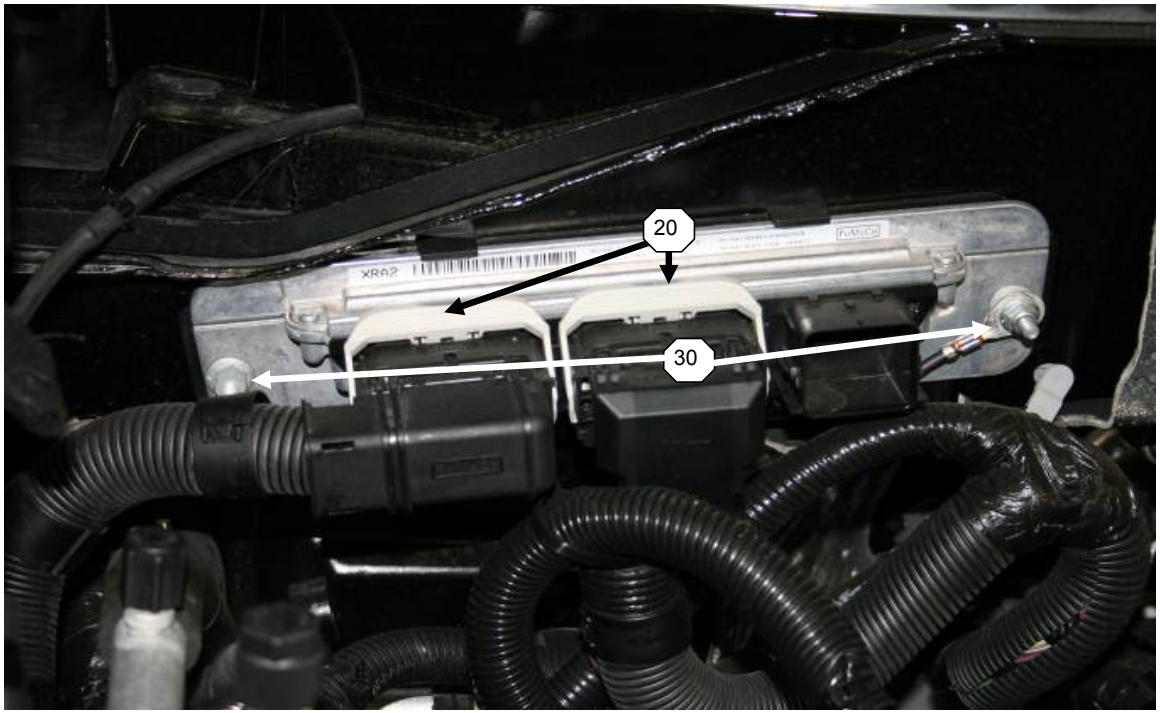
SHIP PCM TO > "SEND PCM" "OVERNIGHT"	SALEEN - PCM PROGRAMMING 1225 E. MAPLE RD TROY, MI 48083	SALEEN USE ONLY SHIP (N) (G) SL (Y) (N) TAG	
		REC SENT	OLD NEW

CONTACT NUMBERS: DIRECT: 1.800.888.8945 ext 36241 FAX: 1.248.743.6479

9/22/2008

** PLEASE INCLUDE THIS WITH THE PCM YOU ARE SHIPPING **

TORQUE ? ITEM NUMBER OPERATION



10 The PCM is located under the hood on the engine compartment bulkhead between the engine and the battery.

20 Pull back on the plastic locking tab for each electrical connector and disconnect the connectors from the PCM by carefully pulling on them.

30 Remove the two bolts holding the PCM to its mounting bracket.

40 Remove the PCM.

50 Fill out the PCM questionnaire on the preceding page **COMPLETELY**, including the address to which you want the PCM returned to, and send it to the following address…

Saleen, Attn: PCM Programming
1225 East Maple Rd.
Troy, MI 48083

If you have any issues, please call 248-743-4800 and ask for the technical assistance hotline.

ITEM	PART NUMBER	QTY.	DESCRIPTION

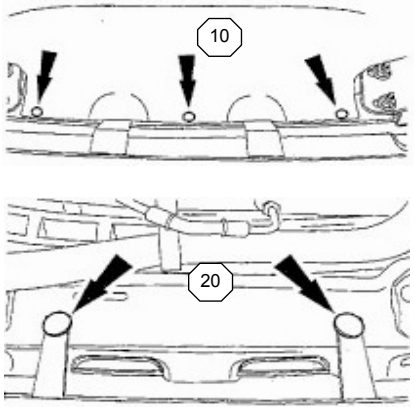
Notes:

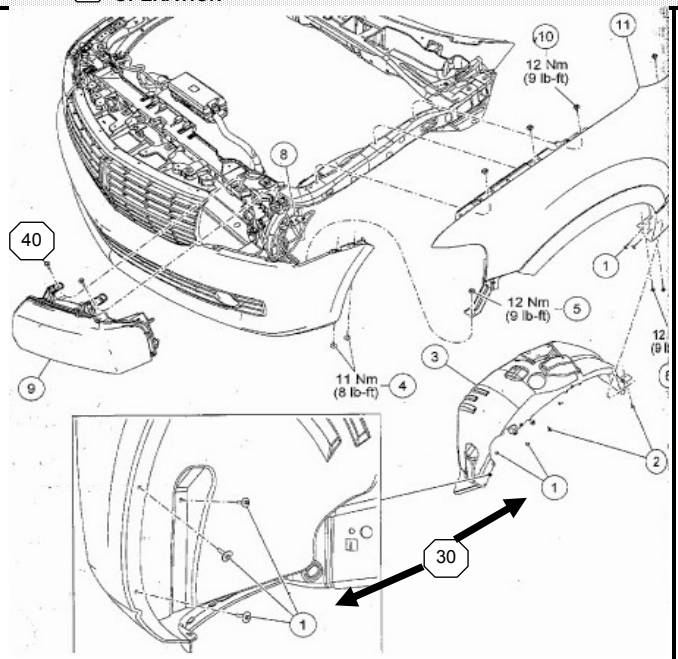
TORQUE

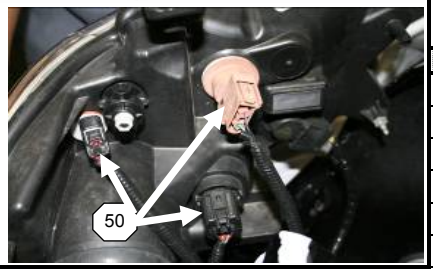
SALEEN

PROCESS NAME	PAGE
DISCONNECT PCM & REMOVE	3

TORQUE | ? ITEM NUMBER | OPERATION







10	Remove the three lower air deflector pin-type retainers
20	Remove the 2 front fascia lower pin-type retainers
30	Remove the four plastic screws from the front of each wheel well liner
40	Remove the two upper bolts securing each headlight
50	Disconnect the three electrical connectors from the back of each headlight, and set the headlights aside

ITEM	PART NUMBER	QTY.	DESCRIPTION

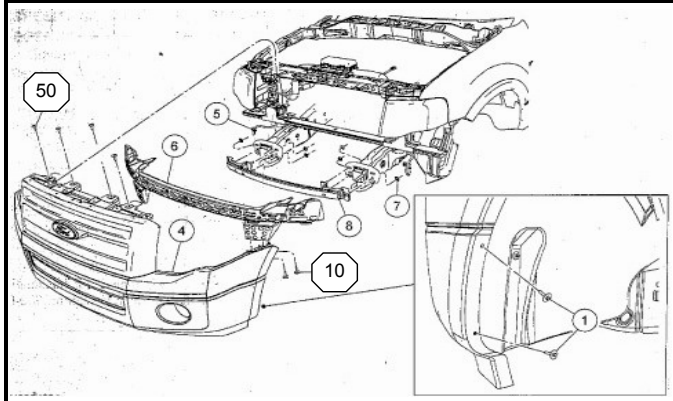
TORQUE	

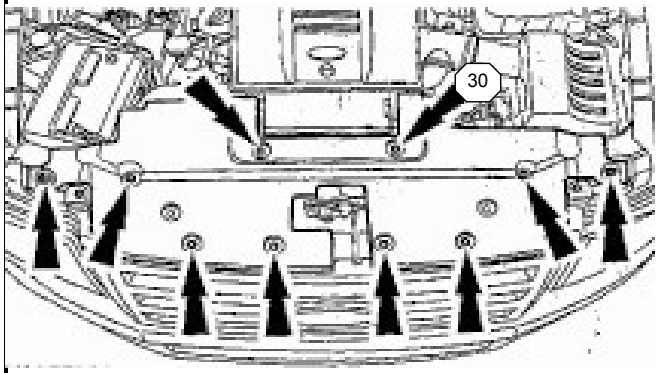
Notes:

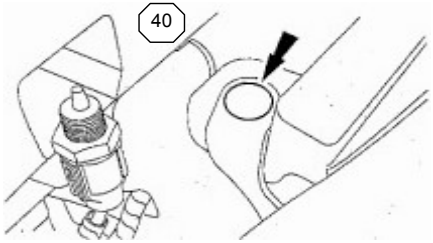
SALEEN

PROCESS NAME	PAGE
FASCIA + HEADLAMP REMOVAL	4

TORQUE ? ITEM NUMBER OPERATION







10	Remove the four front fascia to fender bolts from each side of the front fascia
20	If equipped, disconnect the fog lamp electrical connectors
30	Remove the 10 pin-type retainers from the upper air deflector, and remove the air deflector from the car
40	Remove the two upper pin-type retainers from the lower air deflector, and remove the deflector
50	Remove the four grille to radiator support bolts and remove the front fascia

ITEM	PART NUMBER	QTY.	DESCRIPTION

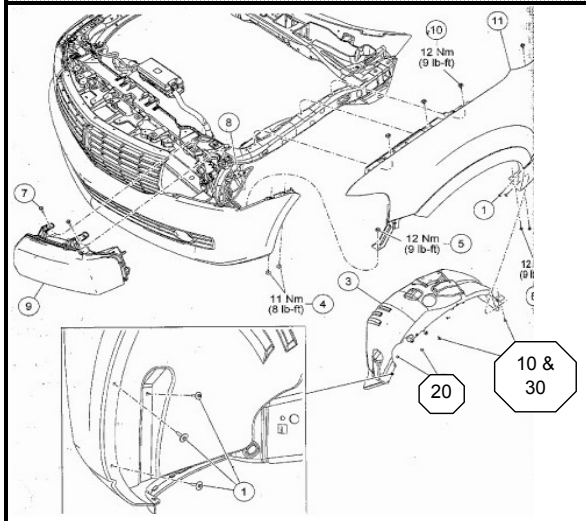
Notes:

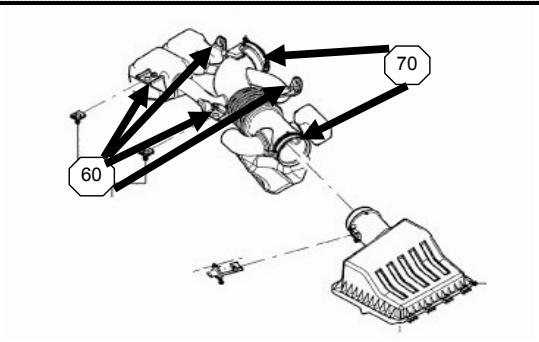
TORQUE	

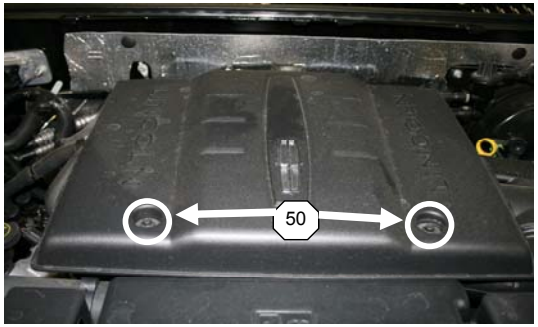
SALEEN

PROCESS NAME	PAGE
FASCIA REMOVAL (CONTINUED)	5

TORQUE | ? ITEM NUMBER | OPERATION







10	Remove the lower pin-type retainer (there are three total, the others to be removed after the wheel well liner) from the fender
20	Remove the 8 wheel well liner plastic screws
30	Remove the 2 remaining pin-type retainers from the wheel well liner then remove the wheel well liner
40	Remove the wheel well liner
50	Remove the bolts securing the engine cover in place, then remove the engine cover
60	Remove the four bolts securing the airbox outlet pipe in place
70	Using a flat blade screwdriver loosen the clamp at each end of the airbox outlet pipe and remove the pipe

ITEM	PART NUMBER	QTY.	DESCRIPTION

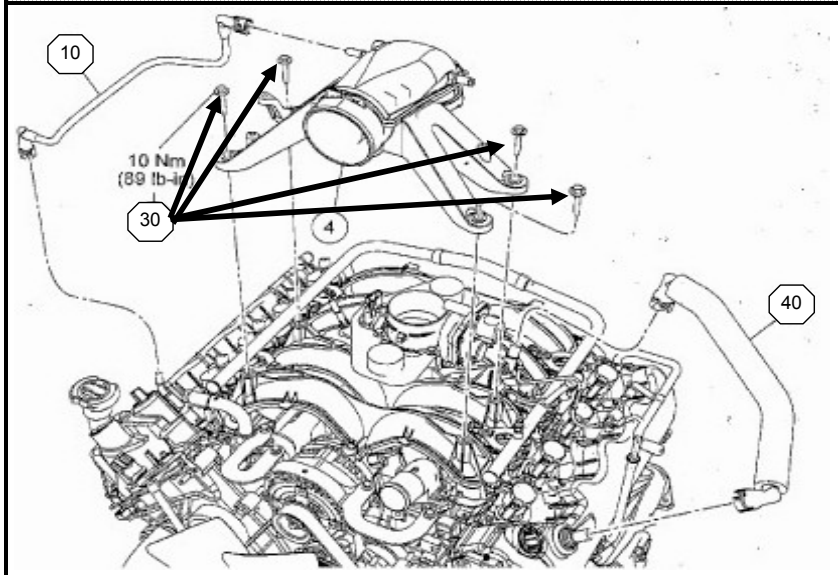
Notes:

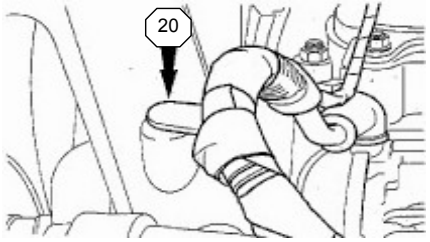
TORQUE	

SALEEN

PROCESS NAME	PAGE
FASCIA,AIRBOX OUTLET PIPE AND ENGINE COVER REMOVAL	6

TORQUE ? ITEM NUMBER OPERATION





NOTE: You must NOT SMOKE or allow an open flame anywhere near the car after this point; there will be highly flammable fuel vapors present.

10 Disconnect the crankcase vent tube from the airbox outlet pipe to throttle body (TB) adapter

- push and twist the locking tab to release the fitting from the adapter

20 Disconnect the alternator harness retainer from the TB adapter

30 Remove the airbox outlet pipe to throttle body adapter by removing the four bolts

40 Disconnect the positive crankcase ventilation (PCV) line from the intake manifold; Push and twist the locking tab to disconnect the tube

ITEM	PART NUMBER	QTY.	DESCRIPTION

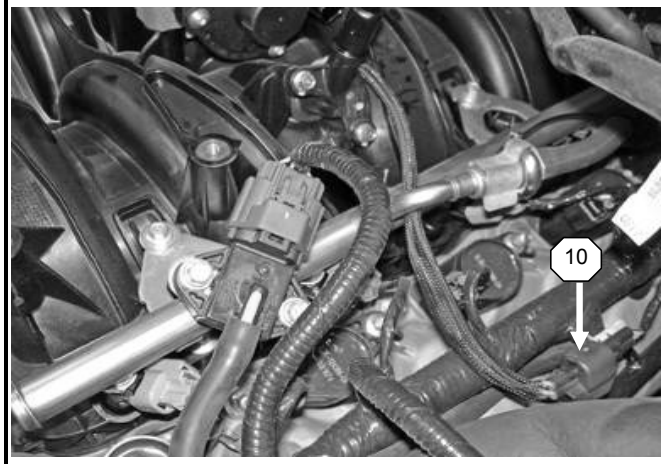
Notes:

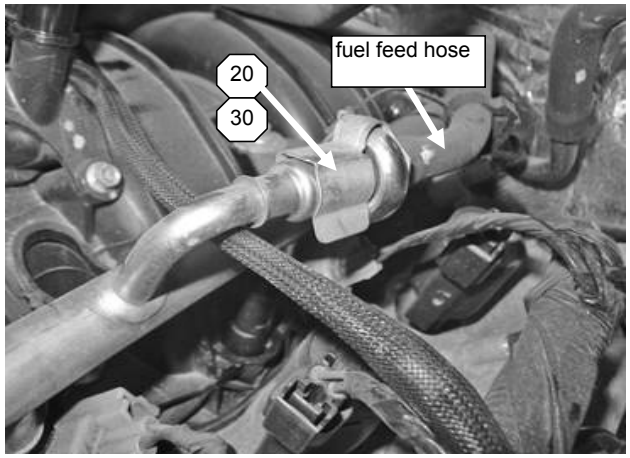
TORQUE

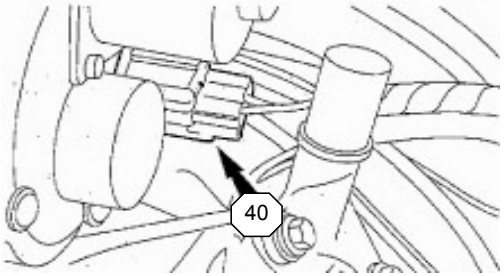
SALEEN

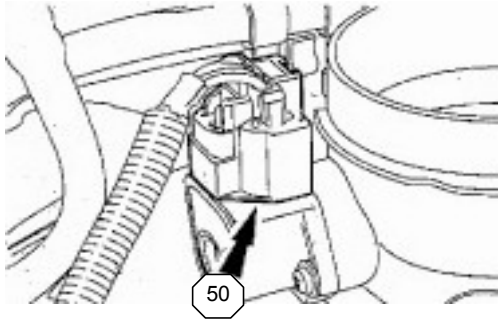
PROCESS NAME	PAGE
THROTTLE BODY TO ZIP TUBE ADAPTER REMOVAL	7

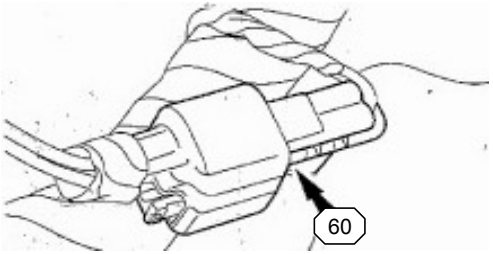
TORQUE ? ITEM NUMBER OPERATION











10	Disconnect the harness connector on the driver's side of the fuel rail.
20	Push the safety clip off the fuel feed hose connection on the driver's side of the fuel rail.
30	Using the Ford fuel line disconnect tool, disconnect the fuel feed hose from the fuel rail
40	Disconnect the electronic throttle control electrical connector
50	Disconnect the throttle position sensor electrical connector
60	Disconnect the heated PCV intake fitting electrical connector

ITEM	PART NUMBER	QTY.	DESCRIPTION

Notes:

TORQUE

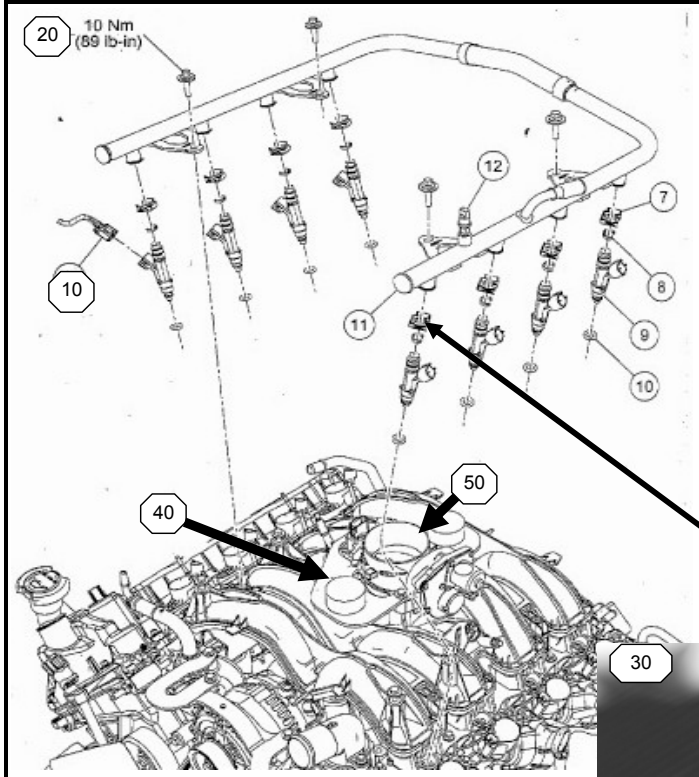
SALEEN

PROCESS NAME

REMOVE INTAKE MANIFOLD, WATER CROSSOVER & THROTTLE BODY

PAGE

TORQUE | ? ITEM NUMBER | OPERATION



10	Disconnect the 8 fuel injector electrical connectors
20	Remove the 4 fuel rail bolts and remove the fuel rail with injectors. Drain the fuel into a container certified to hold gasoline, and dispose of in accordance with all federal, state and local government regulations
30	Using a small flat blade screwdriver, carefully pry the fuel injector clips off the injectors, remove the injectors, and discard the O-rings. BE CAREFUL when removing the fuel injector clips, as they will be used to install the new fuel injectors into the new fuel rail.
40	Remove the bracket from above the base of the throttle body
50	Remove the four throttle body to intake manifold bolts and remove the throttle body. Keep the bolts for re-installation

ITEM	PART NUMBER	QTY.	DESCRIPTION

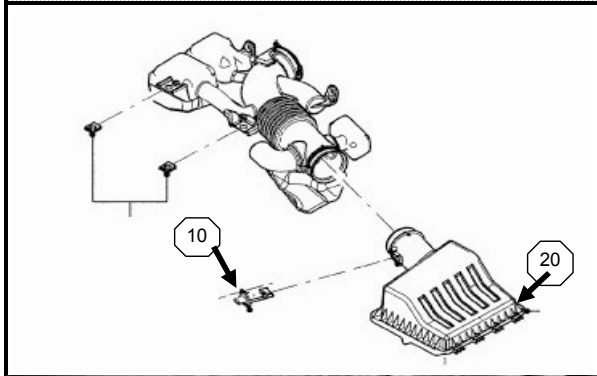
TORQUE	

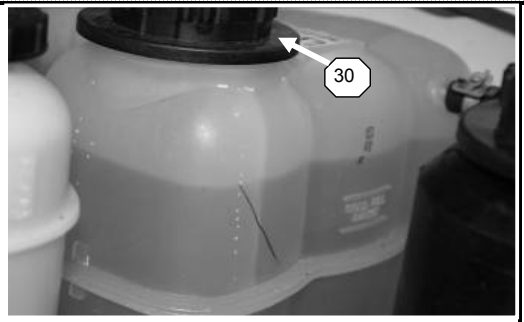
Notes:

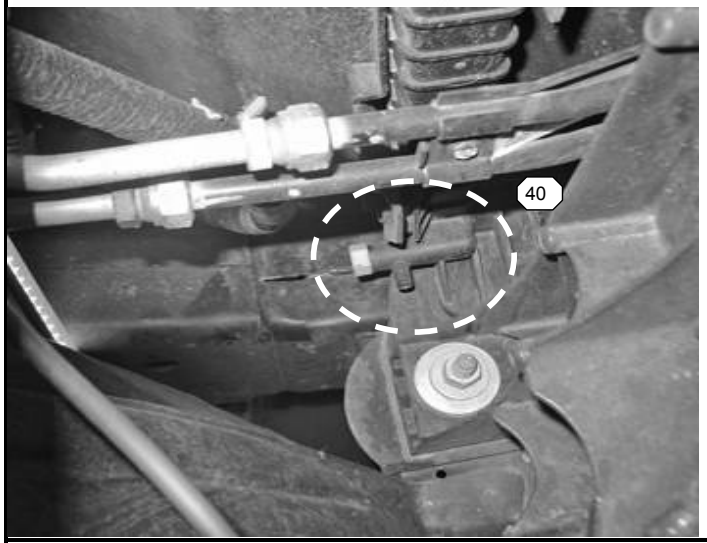
SALEEN

PROCESS NAME	PAGE
ELECTRICAL CONNECTORS REMOVAL + FUEL RAIL REMOVAL	9

TORQUE ? ITEM NUMBER OPERATION







10	Disconnect the mass air sensor connector; first pull back the red locking tab, then push down on the release tab, and pull the sensor off
20	Pull back on the locking tabs and remove the airbox lid
30	Remove the coolant recovery tank cap
40	Open the passenger lower radiator drain valve and empty all the coolant into a large pan capable of holding at least 2.5 gallons
50	When the fluid is completely drained from the engine, re-install the coolant reservoir cap and tighten the drain valve.

ITEM	PART NUMBER	QTY.	DESCRIPTION

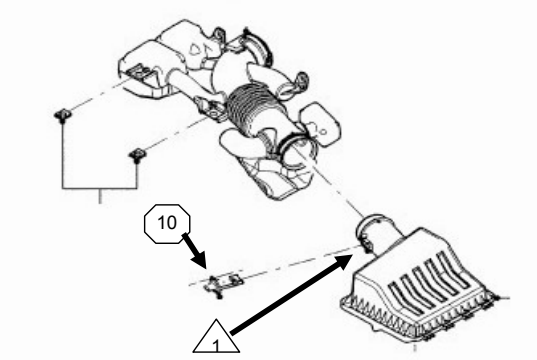
Notes:

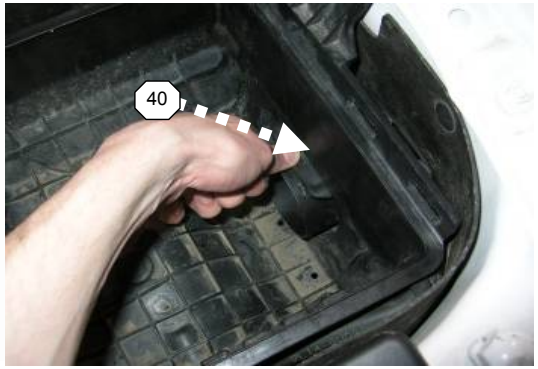
TORQUE	

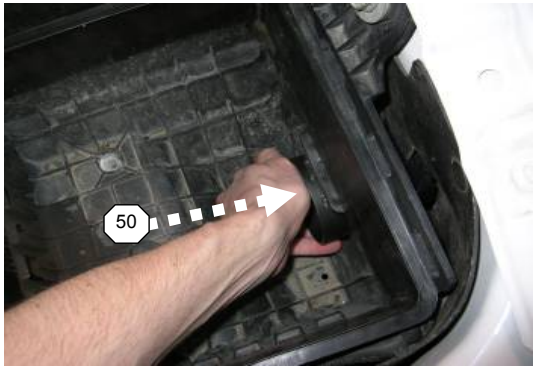
SALEEN

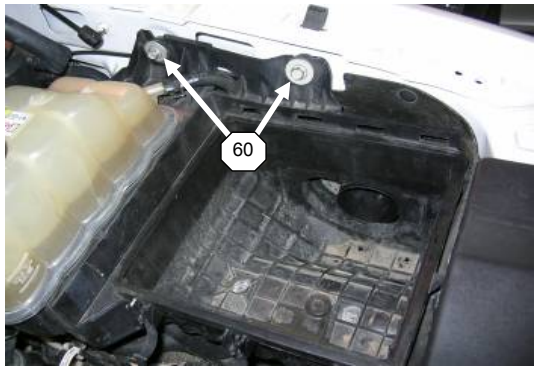
PROCESS NAME	PAGE
MAF REMOVAL + COOLANT DRAIN	10

TORQUE ? ITEM NUMBER OPERATION









10	Remove the two bolts that secure the MAF to the airbox lid using a T20 torx bit. Remove the production sensor.
20	Locate the supplied Saleen MAF sensor**(A)**, and seat it in the MAF socket of the airbox lid.
30	Secure the MAF sensor with the original screws, **tighten to 35 in-lb**
40	Push down and outboard on the airbox snorkel to release the upper retaining clip.
50	Push outboard on the snorkel until the lower clip releases. The snorkel will be caught by the inner fender skirt, and will be removed later.
60	Remove the two bolts at the top of the lower airbox / coolant reservoir assembly.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	06-1602-C17427	1	MAFS UPGRADED FROM STOCK S197

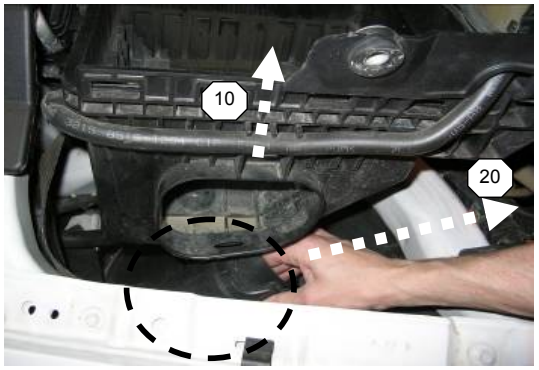
Notes:

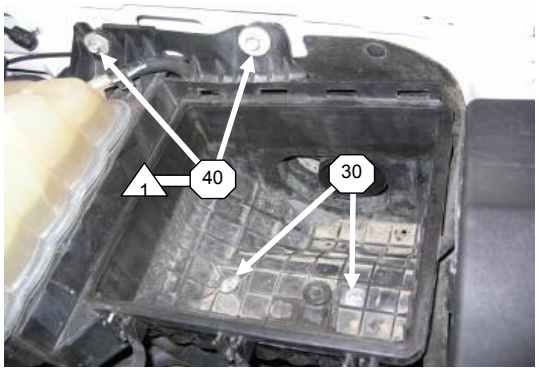
TORQUE	
1	35inlb

SALEEN

PROCESS NAME	PAGE
INLET SNORKEL REMOVAL & MAF REPLACEMENT	11

TORQUE ? ITEM NUMBER OPERATION





10	Rotate the lower airbox / coolant reservoir upward and toward the engine being carefull not to put too much stress on the coolant hose.
20	Remove the intake snorkel now that the airbox is rotated out of the way.
30	Put the lower airbox / coolant reservoir back in place being careful that the two mounting posts under the airbox section are aligned with the grommets in the sheet metal underneath.
40	Insert and tighten the two airbox / coolant reservoir bolts. **Tighten to 89 in-lb.**

ITEM	PART NUMBER	QTY.	DESCRIPTION

Notes:

TORQUE	
1	89inlb

SALEEN

PROCESS NAME	PAGE
INLET SNORKEL REMOVAL CONTINUED	12

TORQUE ? ITEM NUMBER OPERATION

10	Remove the upper thermostat housing by removing the two bolts.
20	Remove thermostat with gasket and keep with vehicle.
30	Remove the upper radiator hose at radiator by removing the clamp and keep both the hose and clamp with the vehicle.
40	Cut a 1-1/4" section off of the radiator side of the radiator hose.

*** Save thermostat and thermostat gasket for re-use with the new water crossover.**

ITEM	PART NUMBER	QTY.	DESCRIPTION

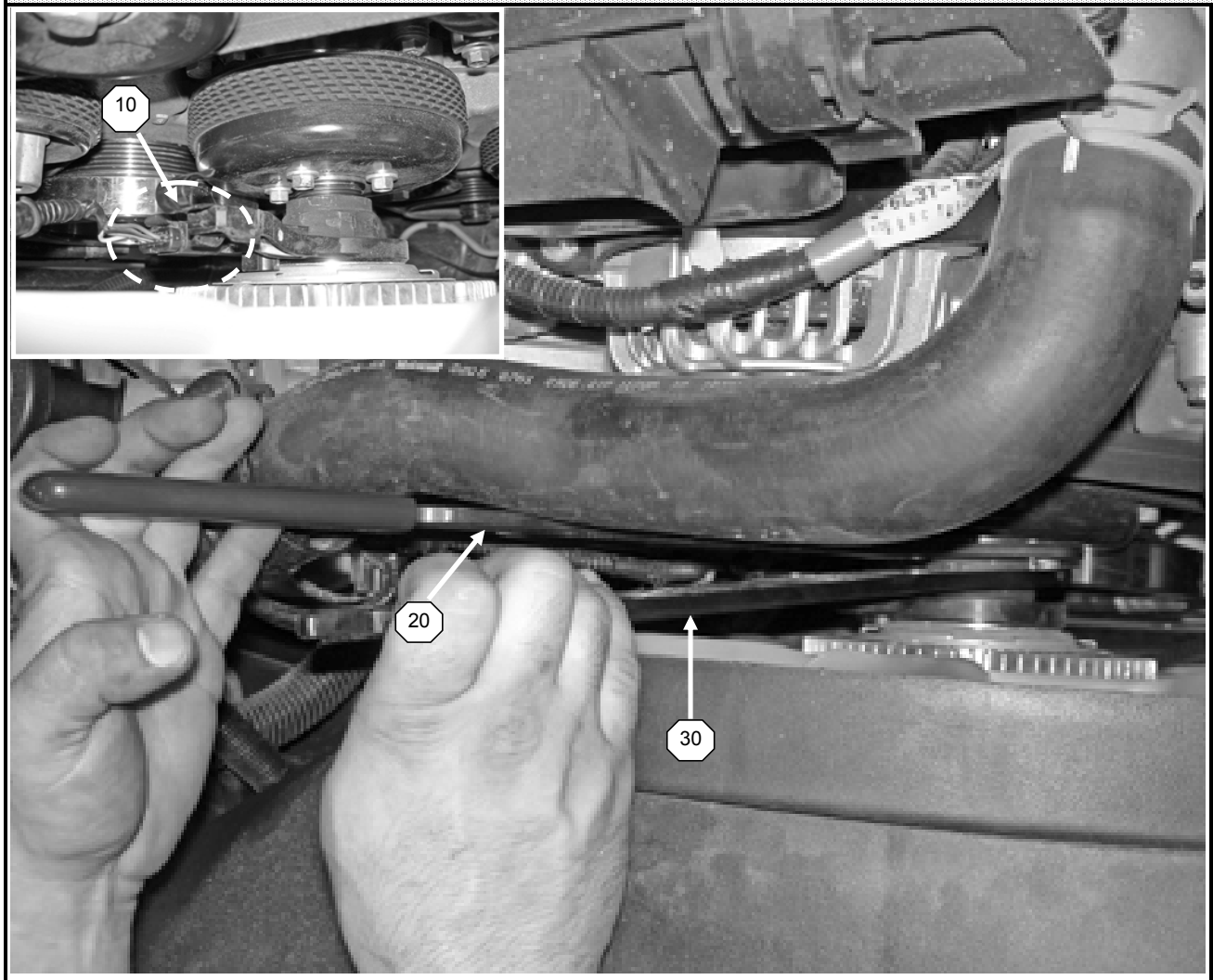
Notes:

TORQUE

SALEEN

PROCESS NAME	PAGE
REMOVE UPPER RADIATOR HOSE	13

TORQUE ? ITEM NUMBER OPERATION



10 Disconnect the fan clutch harness electrical connector.

20 While holding the water pump steady, place a 48mm Spanner wrench on the fan hub nut, and partially loosen the fan clutch from the hub

30 Do not completely remove the fan, you need to remove the lower fan shroud first.

***Saleen recommends using the following tools for this process.**

Schley Product Inc. Fan Clutch Wrench, Part #61600

Schley Product Inc. Spanner Wrench 48mm, Part #95210

ITEM	PART NUMBER	QTY.	DESCRIPTION

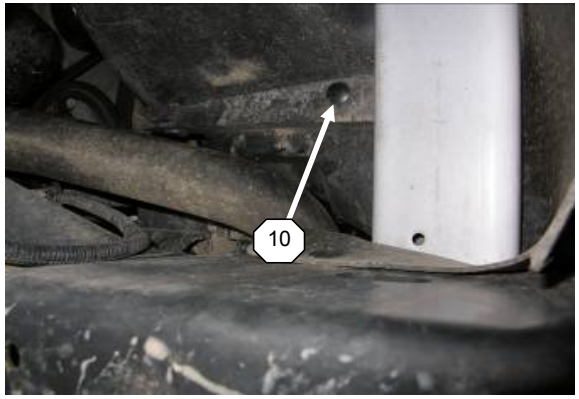
Notes:

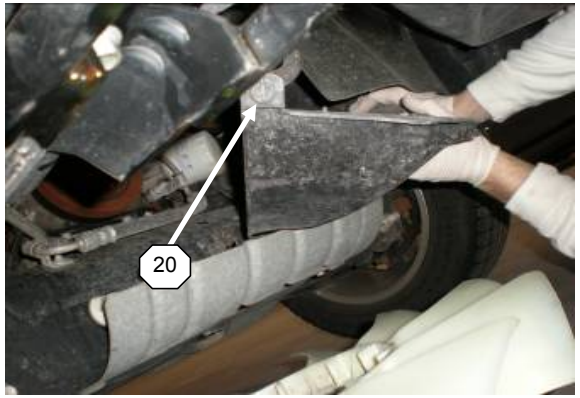
TORQUE

SALEEN

PROCESS NAME	PAGE
LOOSEN MECHANICAL FAN	14

TORQUE ? ITEM NUMBER OPERATION





10 Remove one push pin from each side of the fan shroud where the upper and lower halves meet. This view is from underneath the vehicle.

20 Unclip the bottom portion of the fan shroud from the upper portion, and remove the lower portion of the fan shroud. There is one clip on either side of the lower shroud.

30 Finish unscrewing the fan clutch and remove the mechanical fan assembly by pulling it out from the underside of the vehicle. It will be modified later.

ITEM	PART NUMBER	QTY.	DESCRIPTION

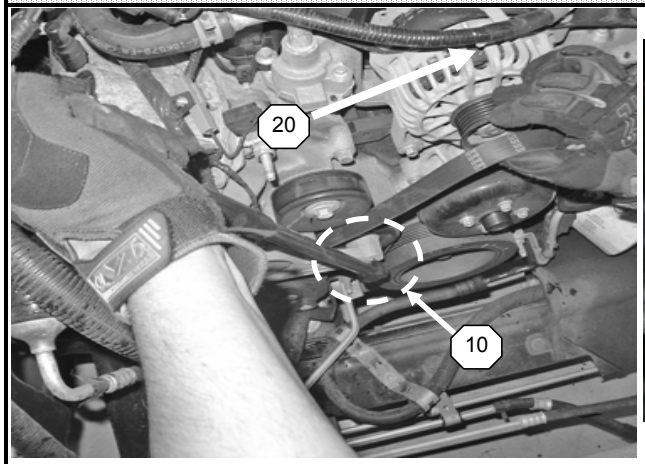
Notes:

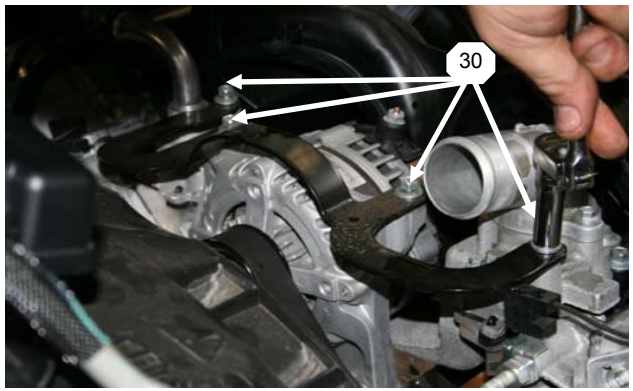
TORQUE

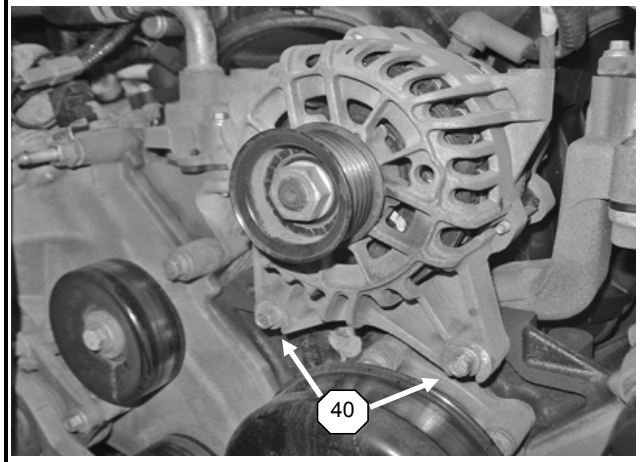
SALEEN

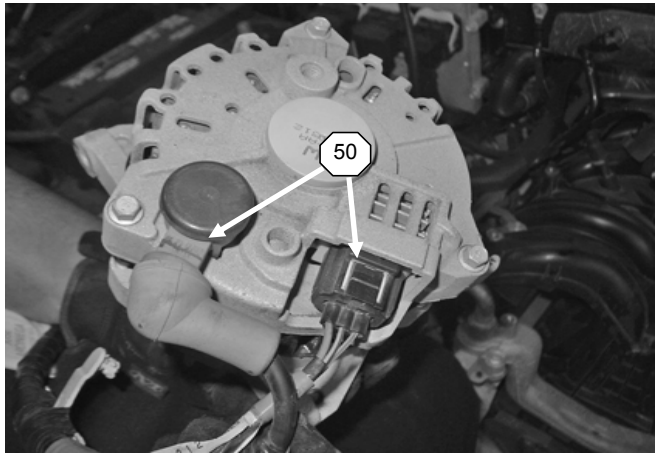
PROCESS NAME	PAGE
REMOVE FAN & SHROUD	15

TORQUE ? ITEM NUMBER OPERATION









10	Use a 1/2" drive breaker bar to release belt tension and then remove the serpentine belt.
20	Release the harness clip from the upper alternator support strap.
30	Remove four bolts from the alternator support strap and remove the strap.
40	Loosen the two lower alternator mounting bolts.
50	Lift the alternator off of the mounting bolts and disconnect the harness connector and B+ charge wire. Then remove the two alternator mounting bolts.
60	Set the alternator aside for re-use later.

ITEM	PART NUMBER	QTY.	DESCRIPTION

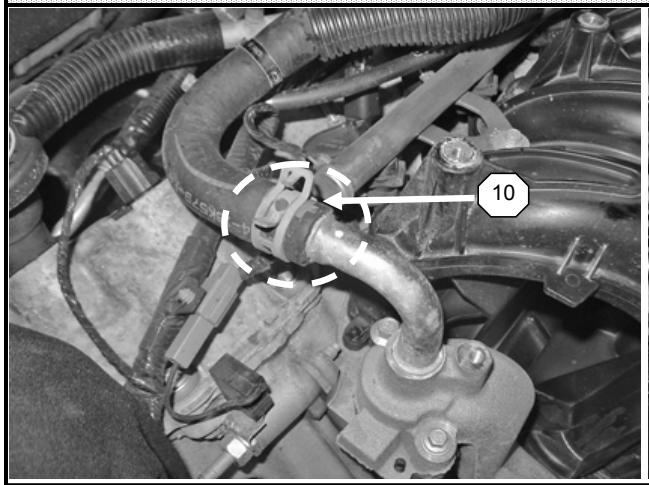
Notes:

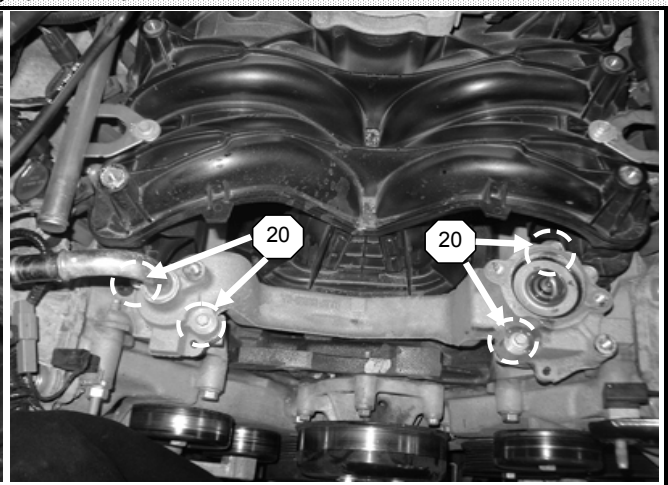
TORQUE

SALEEN

PROCESS NAME	PAGE
REMOVE SERPENTINE BELT & STOCK ALTERNATOR	16

TORQUE ? ITEM NUMBER OPERATION





Do not remove the crossover tube yet, you will remove it at the same time as removing the intake manifold.

10 Disconnect the coolant hose from the passenger side of the stock crossover tube.

20 Remove the four bolts that secure the coolant crossover tube to the cylinder heads.

ITEM	PART NUMBER	QTY.	DESCRIPTION

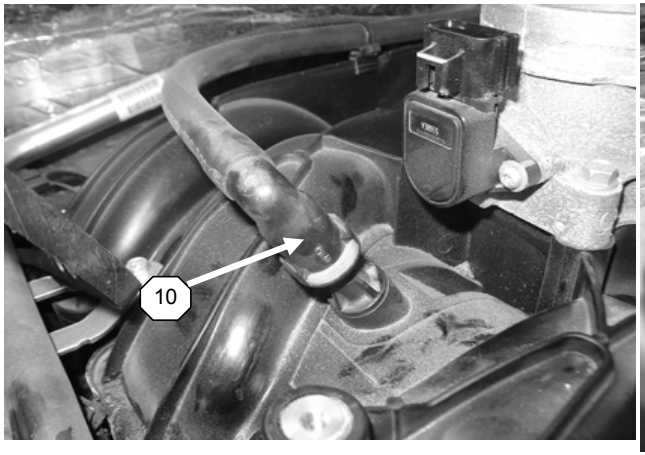
Notes:

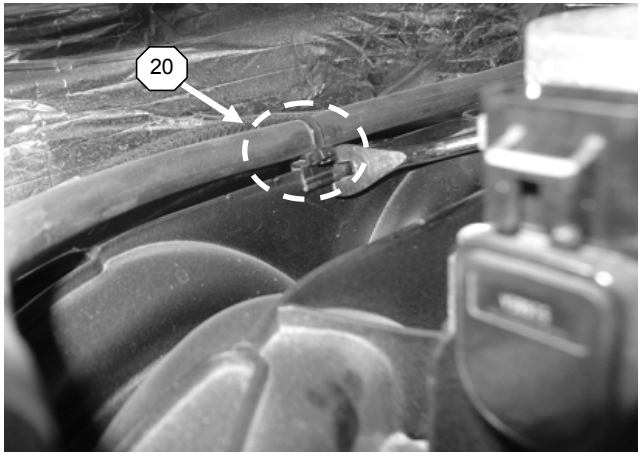
TORQUE

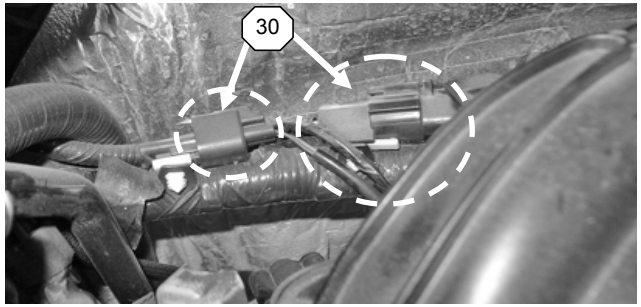
SALEEN

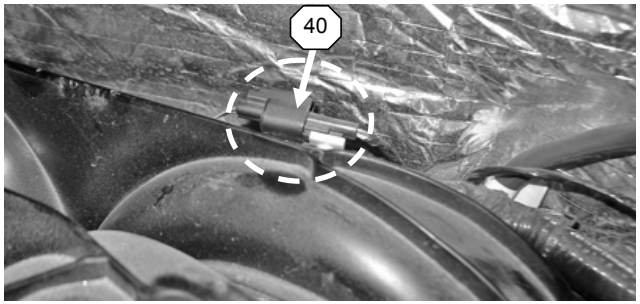
PROCESS NAME: REMOVE INTAKE MANIFOLD

TORQUE | ? ITEM NUMBER | OPERATION









10	Disconnect the EVAP hose from the passenger side of intake manifold near the Throttle Position Sensor (TPS).
20	Remove the vacuum hose clip from the rear of the intake manifold between the throttle body and the engine firewall.
30	Disconnect the harness connectors located between the intake manifold and the passenger side engine compartment bulkhead.
40	Disconnect the harness connector located between the intake manifold and the driver's side engine compartment bulkhead.

ITEM	PART NUMBER	QTY.	DESCRIPTION

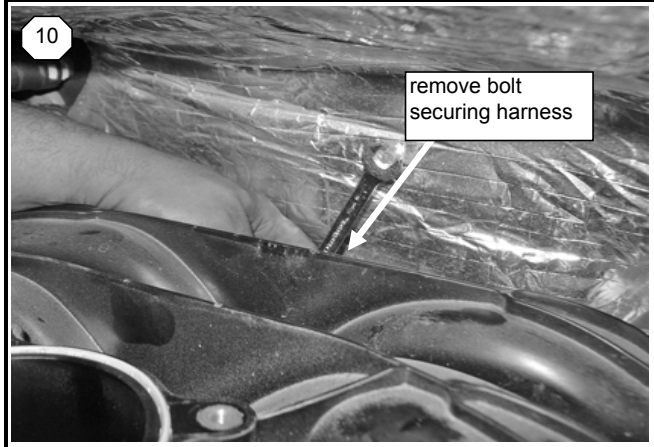
Notes:

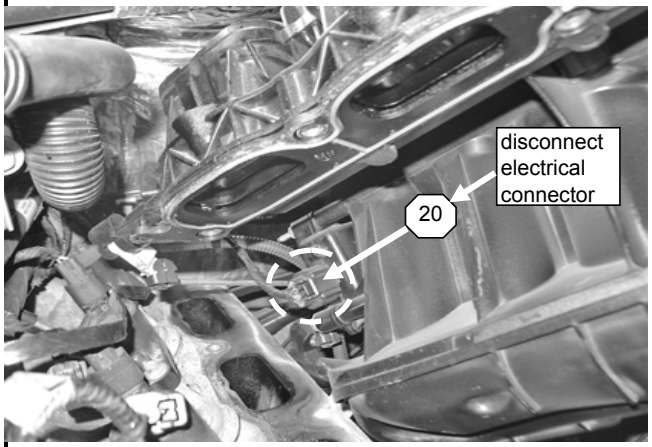
TORQUE

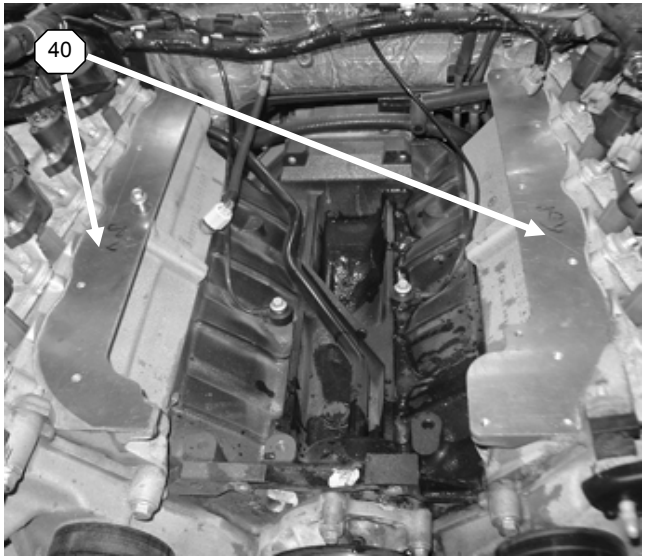
SALEEN

PROCESS NAME	PAGE
REMOVE FUEL INJECTORS, FUEL RAIL + INTAKE MANIFOLD ACCESSORIES	18

TORQUE | ? ITEM NUMBER | OPERATION







Save the Throttle Body, Throttle Body Bolts, Throttle Body O-Ring Gasket, and Water Crossover Gaskets for re-use.

Notes:

10	Use a 10mm wrench to remove the nut that secures the harness that runs along the rear of the manifold.
20	Remove the 10 Intake manifold bolts. Lift the intake manifold up a few inches, and disconnect the power valve actuator connector.
30	Remove the intake manifold and water crossover tube.
40	Immediately cover the intake ports on the cylinder heads with masking tape. It is important to do so to prevent fasteners and debris from falling into the engine.
50	Save the throttle body, throttle body bolts, throttle body o-ring gasket, and water crossover gasket (LH & RH) for re-use.

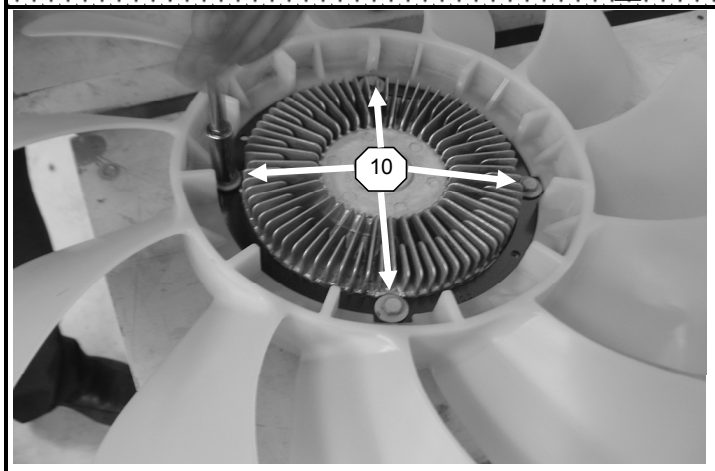
ITEM	PART NUMBER	QTY.	DESCRIPTION

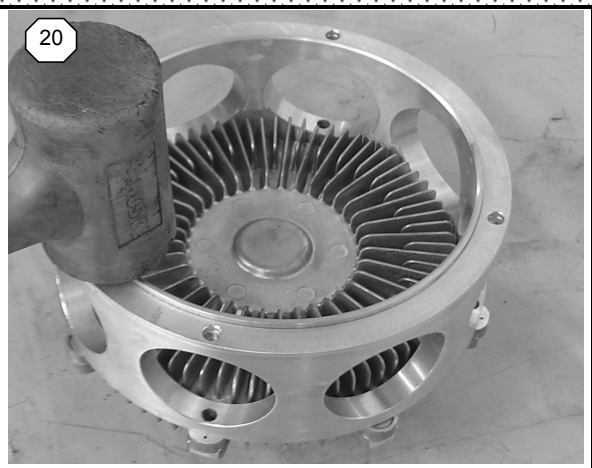
TORQUE	

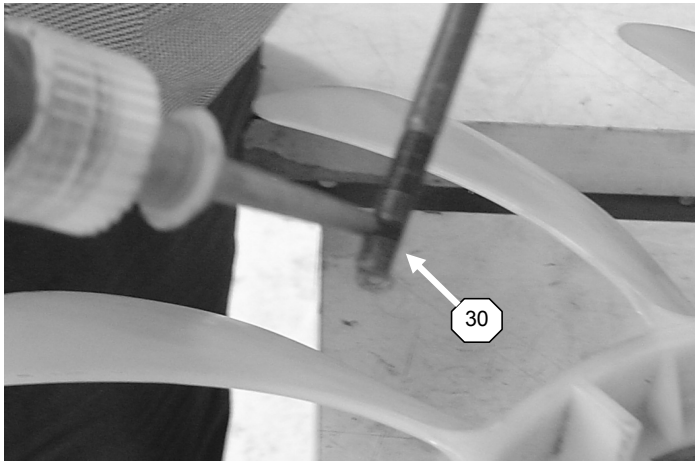
SALEEN

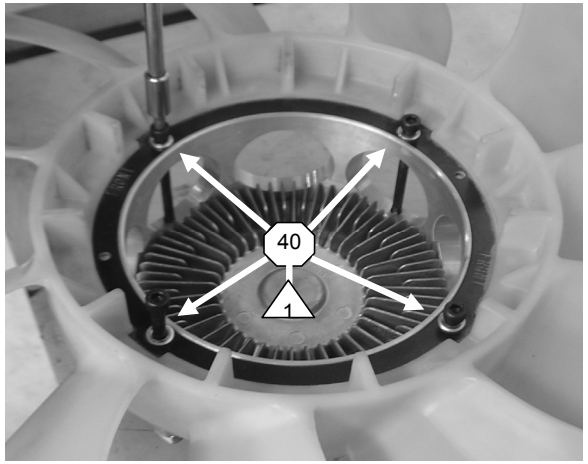
PROCESS NAME: REMOVE INTAKE MANIFOLD

TORQUE | ? ITEM NUMBER | OPERATION









10	Using a 8 mm socket and ¼" drive ratchet, remove the 4 bolts from the fan & hub assembly.
20	Install the spacer **(A)** onto the fan hub by lining up the holes in the bottom of the spacer with the holes in the hub, then push it on by hand or tap with a rubber mallet if necessary. Tap on multiple points along the surface of the spacer, so as to drive it down evenly. Check that the spacer is flush against the clutch all the way around – use a feeler gauge to measure the gap consistency
30	Apply a drop of red loctite at the bottom of each capscrew.
40	Install the fan over the spacer by ensuring the fan is flush against the spacer, and then install each capscrew **(B)** with one washer **(C)**. **62 +/- 9.3 Lb-in**

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	08-1604-C16177	1	Spacer, Fan
B	00-9001-C16379	4	Cpscrw, SKT Head, M6 x 90MM
C	00-9004-C00296	4	Washer Flat M6 ST

TORQUE	
1	62 +/- 9.3 Lb-in

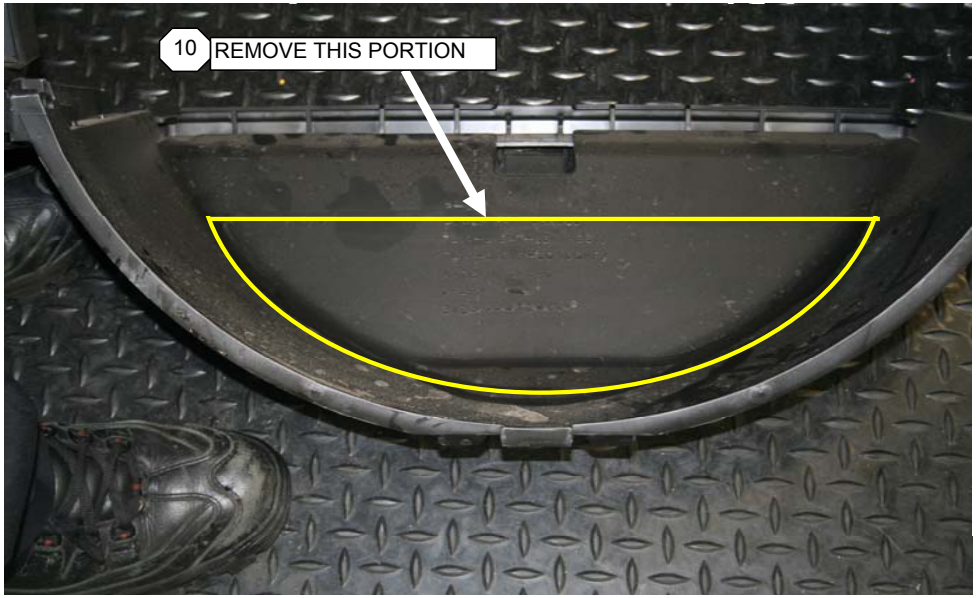
Notes:

SALEEN

PROCESS NAME: FAN + CLUTCH + SPACER SUBASSEMBLY

PAGE: 20

TORQUE ? ITEM NUMBER OPERATION



10 Using an air saw or hand powered saw, cut out and remove the portion of the lower shroud where shown.

ITEM	PART NUMBER	QTY.	DESCRIPTION

Notes:

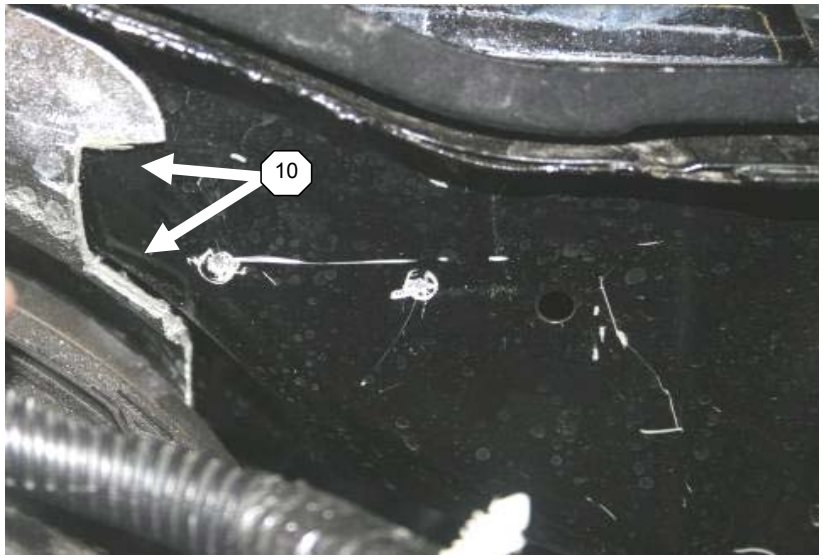
TORQUE

SALEEN

PROCESS NAME: LOWER SHROUD MODIFICATION

PAGE 21

TORQUE ? ITEM NUMBER OPERATION



10	Trim the heat shield at the back of the firewall as shown to clear the recovery tank bracket
20	Put the recovery tank into place against the firewall, between the brake booster and the driver's fender, and mark the hole locations on the firewall through the bracket.
30	Drill two .375” holes where marked in step 20
40	Apply 3M Body Schutz to the drilled hole edges
50	Install two M6 rivnuts **(A)** into the two holes you just drilled
60	Secure the recovery tank bracket to the firewall with the two provided bolts **(C)**
70	Bolt the recovery tank to the bracket using the remaining three provided bolts **(C)**

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-9006-C14542	2	Rivet Nut M6X1.0, Zinc-Plated Steel
B	10-2001-C16166	1	BRACKET, I/C RECOVERY TANK, NAV
C	00-9001-C10141	5	Capscrw Hex Flng M6x1.0mm 25mm
D	06-2001-C10212	1	TANK INTERCOOLER RECOVERY

Notes:

TORQUE

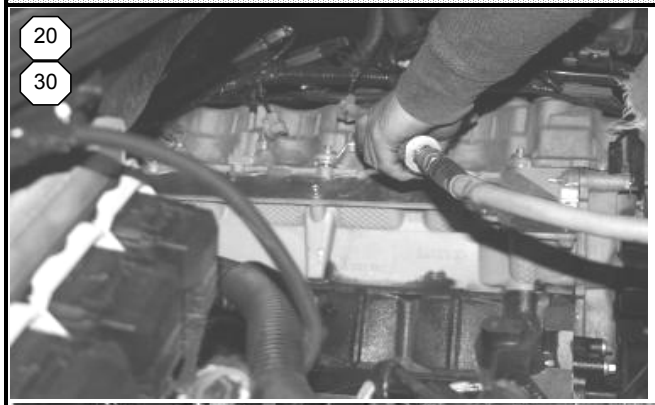
SALEEN

PROCESS NAME

DRILL HOLES FOR RECOVERY TANK BRACKET

PAGE

TORQUE ? ITEM NUMBER OPERATION



10	Remove the eight ignition coil bolts.
20	Once bolts are removed, pull up on the coils. Once the coil comes loose from the spark plug, move the coil off to the side **(You don't need do disconnect the coil from the harness)**.
30	Remove the 8 stock spark plugs.
40	Retrieve the eight new spark plugs **(A)** and apply anti-seize to the threads.
50	Insert eight new spark plugs **(A)** and fasten down with a torque wrench. **25 +/- 3.7 Lb-ft**
60	Re-install ignition coils with the eight stock coil bolts. **53 +/- 8 Lb-in**

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-1601-C13394	8	Spark Plug HT0

TORQUE	
1	25 +/- 3.7 Lb-ft
2	53 +/- 8 Lb-in

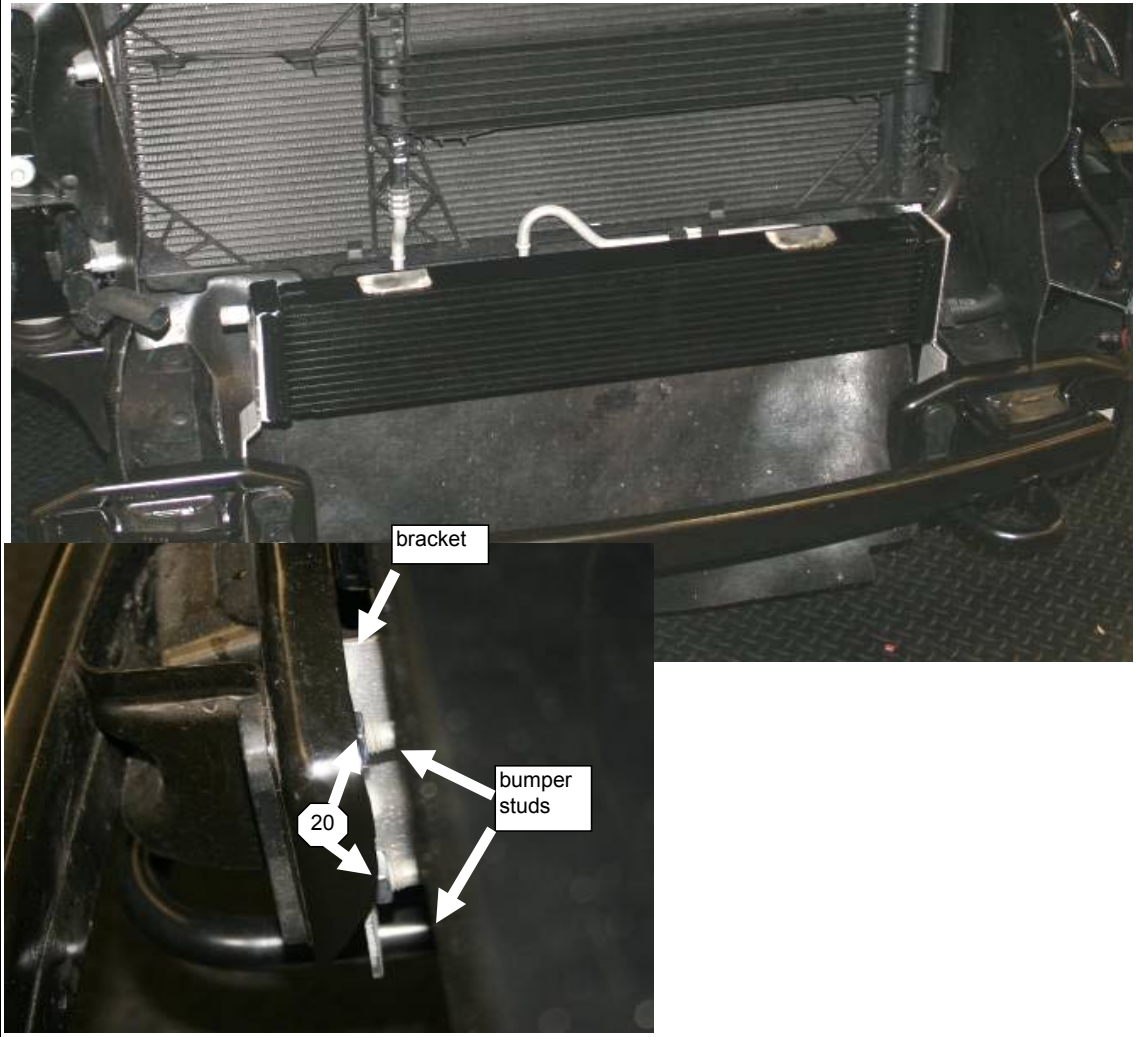
Notes:

SALEEN

PROCESS NAME: REPLACE SPARK PLUGS

Mandatory Torque Procedure

TORQUE ? ITEM NUMBER OPERATION



10 Install the heat exchanger with brackets pointing towards the ground. The brackets will slide over the four studs which protrude from the rear of the bumper

20 Secure the heat exchanger with the four provided nuts

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	10-2001-B16188	1	Heat Exchanger
B	00-9003-C08164	4	Jam Nut, M12, Light

Notes:

TORQUE

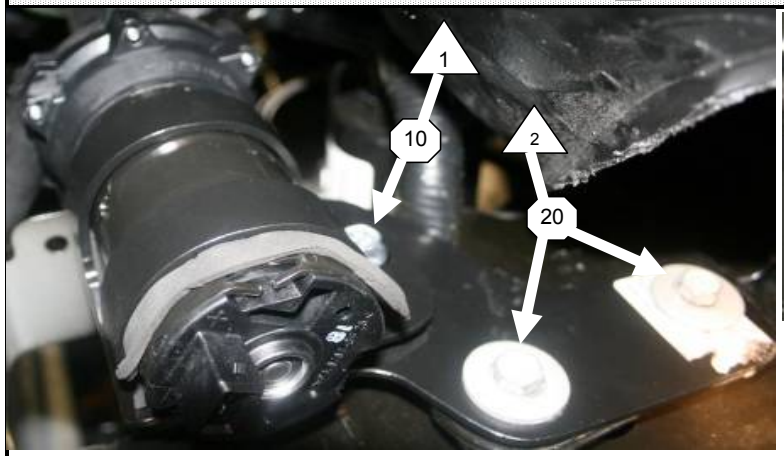
SALEEN

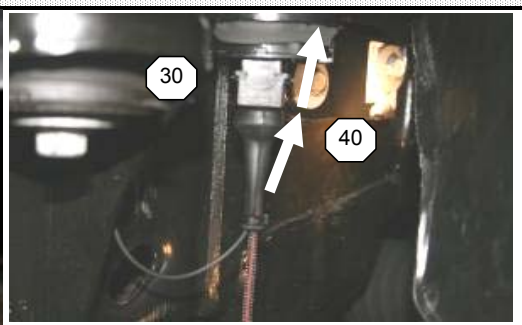
PROCESS NAME

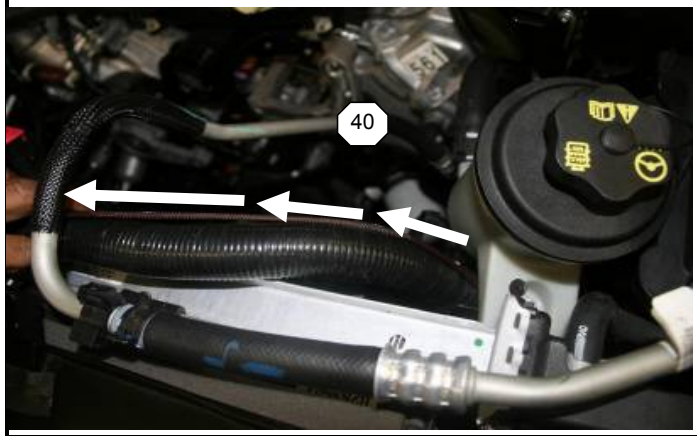
INSTALL HEAT EXCHANGER

PAGE

TORQUE ? ITEM NUMBER OPERATION







10 Install the supercharger intercooler water pump **(A)** to its bracket **(B)** with one bolt **(C)**. **120 +/- 18 Lb-in**

20 Install the intercooler water pump assembly to the chassis with the two existing bolts. **91 +/- 13.6 Lb-in**

30 Connect the water pump harness connector (D).

40 Route the water pump harness up along the large factory harness and past the power steering fluid reservoir

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-2002-C09991	1	Intercooler Water Pump
B	10-2002-C16189	1	Bracket, Water Pump
C	00-9001-C10064	1	Capscrw Hex Flng M8x1.25mm 20mm
D	08-1704-C15126	1	Harness, Water Pump

TORQUE	
1	120 +/- 18 Lb-in
2	91 +/- 13.6 Lb-in

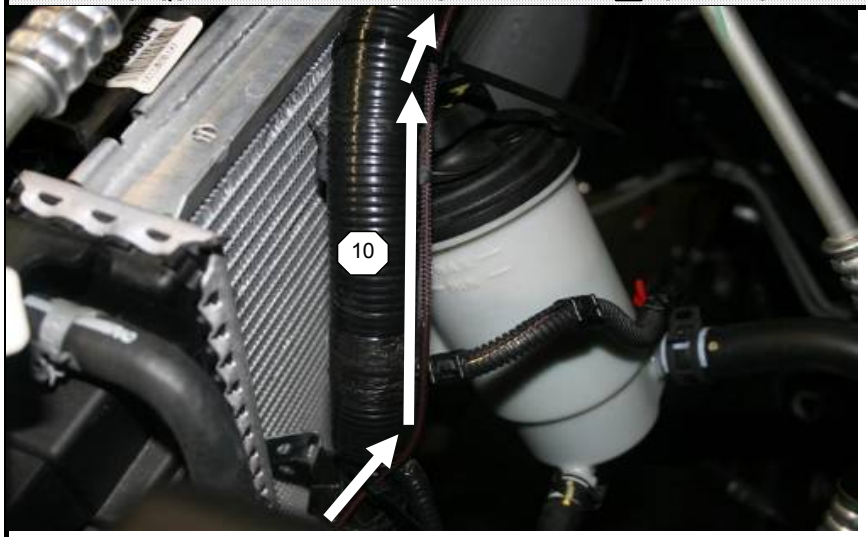
Notes:

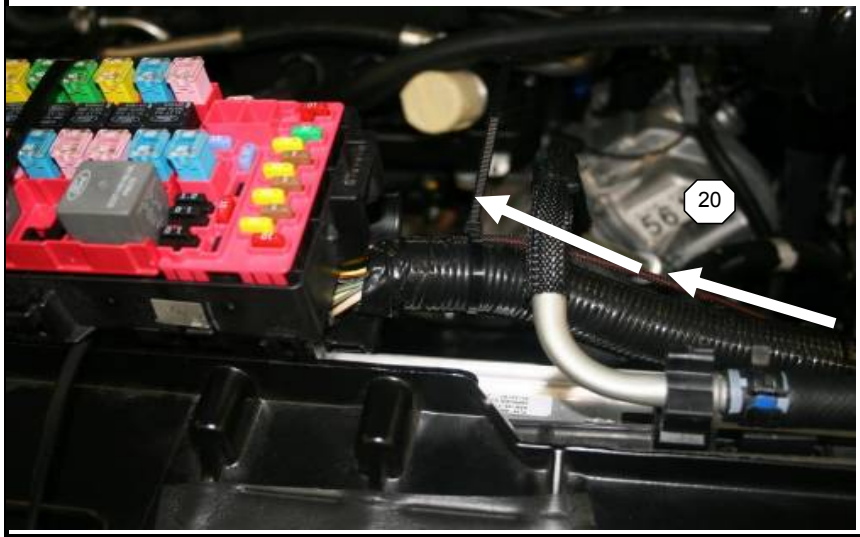
SALEEN

PROCESS NAME: INSTALL WATER PUMP

PAGE 25

TORQUE ? ITEM NUMBER OPERATION





10 Route the water pump harness along the back (engine side) of the radiator. Secure the harness to the stock harness with a zip tie every 6 - 8 inches

20 Route the water pump harness along the engine bay fuse box harness, then to the fan clutch harness connector

30 Open the convolute at the end of the water pump harness with the black, and white with purple stripe wires exiting.
- Cut 49.5in from the white with purple stripe wire.
- Cut 18.5in from the ground wire that has the ring terminal on the end.
- Cut 20.25in from the convolute.
Tape the end of the convolute on the wiring harness.

40 Slide a piece of heat shrink (B) over the end of the black ground wire, and strip 0.5in of insulation off of the end.

50 Crimp the supplied ring terminal (A) onto the end of the black ground wire, and shrink the heat shrink over the connection.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-1703-C09017	1	TERMINAL, RING 18 AWG FOR 1/4" STU
B	00-1703-C07082	1"	HEAT SHRINK, DUAL WALL 1/4" BLACK

Notes:

TORQUE

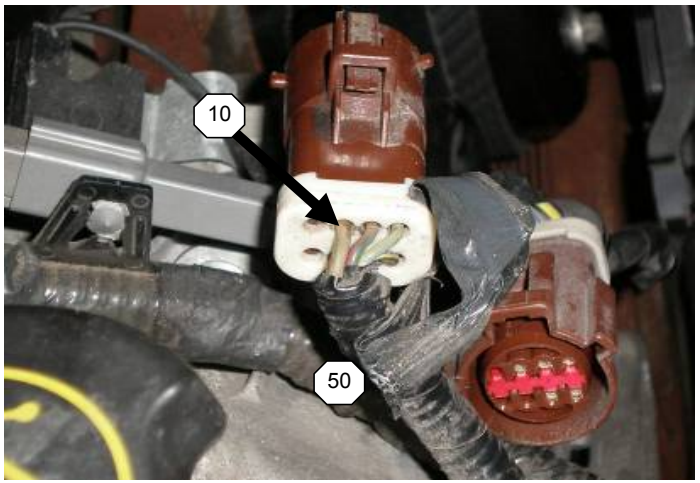
SALEEN

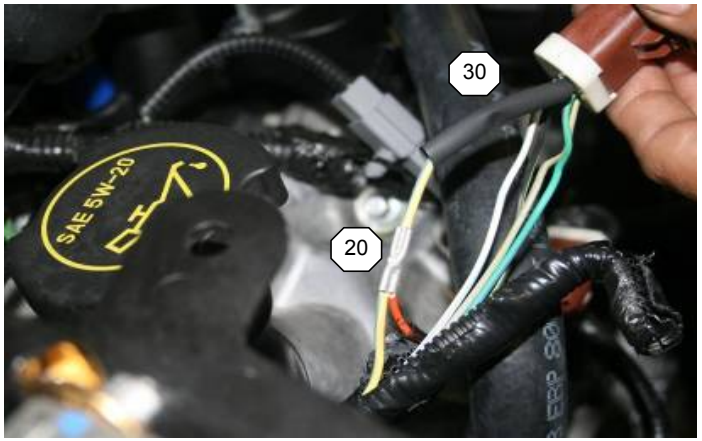
PROCESS NAME

ROUTE WATER PUMP HARNESS POWER WIRE

PAGE

TORQUE ? ITEM NUMBER OPERATION





10	Find the yellow with green stripe wire in pin 2 of the fan harness connector; make the cut about 3 inches back from the connector.
20	Strip 1 inch of insulation off each cut end of the wire, then crimp one cut end with the water pump power wire (white with purple stripe) into the provided butt connector.
30	Slide the heat shrink over the butt connector, then crimp the other end of the cut yellow/green wire into the open end of the butt connector.
40	Shrink the heat shrink over the butt connector
50	Push the stock wiring back into the convoluted sleeving, and close up the sleeving with electrical tape
60	Remove the nut from the negative battery cable terminal, install the terminal from the water pump wiring harness over the bolt, and reinstall the nut.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-1704-C09262	1	16 Gauge, Seamless Butt Connector
B	00-1703-C07082	1	Heat Shrink 1/4" Black

Notes:

TORQUE

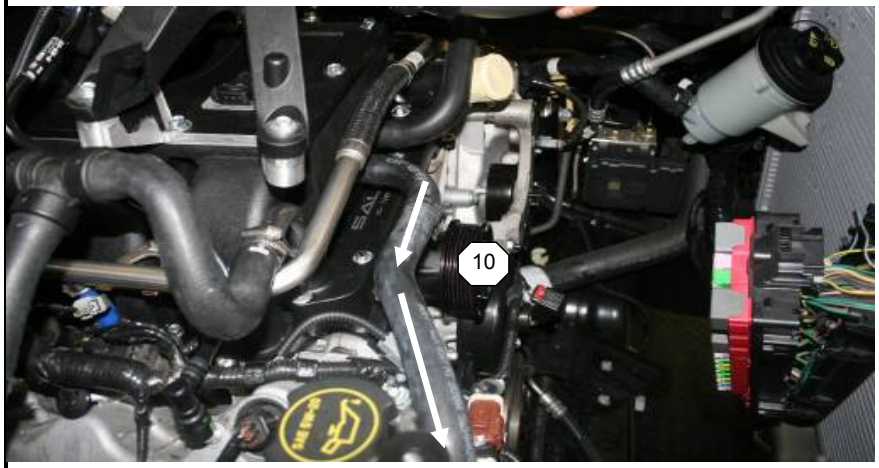
SALEEN

PROCESS NAME

SPLICE WATER PUMP HARNESS POWER WIRE INTO STOCK FAN CLUTCH CONTROL CONNECTOR

PAGE

TORQUE | ? ITEM NUMBER | OPERATION



10 Place a hose clamp **(A)** over the intercooler-end of the intercooler to heat exchanger hose **(B)** and install that hose end onto the passenger side fitting on the front of the supercharger.

20 Route the intercooler to heat exchanger hose towards the passenger fender, past the oil fill cap. Then route the hose underneath and outside (farther towards the passenger side) the stock harnesses and HVAC lines to the front bumper

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-2003-C10068	8	HOSE CLAMP
B	08-2003-C14393	1	HOSE, H/E TO I/C
C	10-2003-C16892	1	HOSE WATER PUMP TO H.E.
D	10-2003-C16891	1	HOSE I/C TANK TO WATER PUMP
E	10-2003-C16888	3	HOSE RECOVERY TANK TO I/C

Notes:

TORQUE

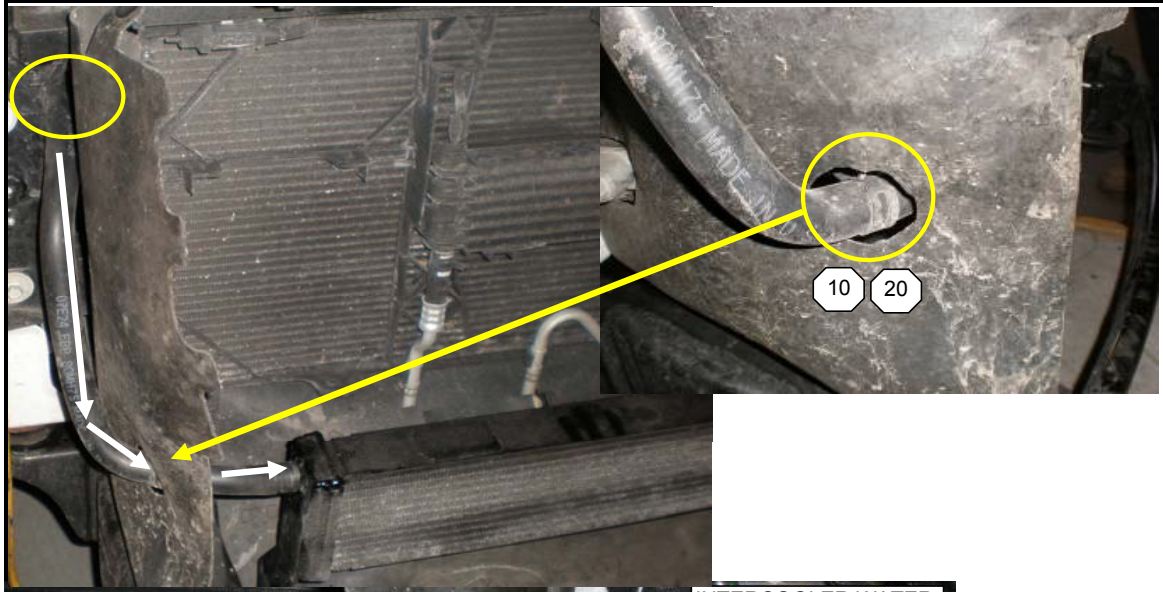
SALEEN

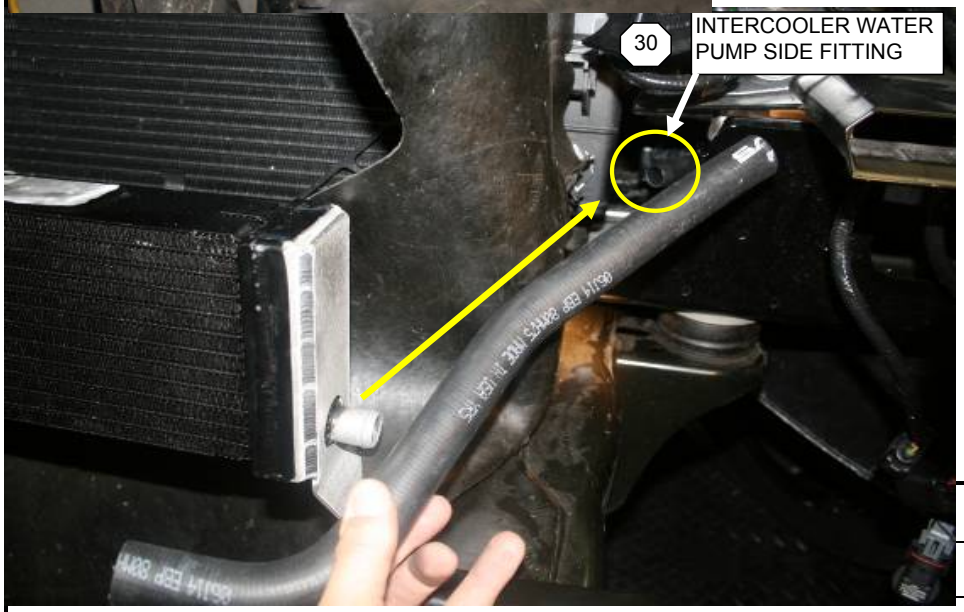
PROCESS NAME

INSTALL INTERCOOLER HOSES

PAGE

TORQUE ? ITEM NUMBER OPERATION





10 Cut a hole 1 inch in diameter in the passenger side radiator shroud. Locate the hole where the heat exchanger to intercooler hose will pass through.

20 Route the intercooler to heat exchanger hose **(B)** through the opening near the top of the radiator core support . Insert the heat exchanger end of the hose through the hole you cut in the baffle. Then slip another hose clamp over the end of the hose, and connect to the heat exchanger.

30 Slide a hose clamp **(A)** over each end of the heat exchanger to water pump hose **(C)**. Then install the curved end of the hose onto the heat exchanger driver side fitting, and the straight end onto the water pump outlet (the side / horizontal fitting).

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-2003-C10068	8	HOSE CLAMP
B	08-2003-C14393	1	HOSE, H/E TO I/C
C	10-2003-C16892	1	HOSE WATER PUMP TO H.E
D	10-2003-C16891	1	HOSE I/C TANK TO WATER PUMP
E	10-2003-C16888	3	HOSE I/C TO RECOVERY TANK

TORQUE

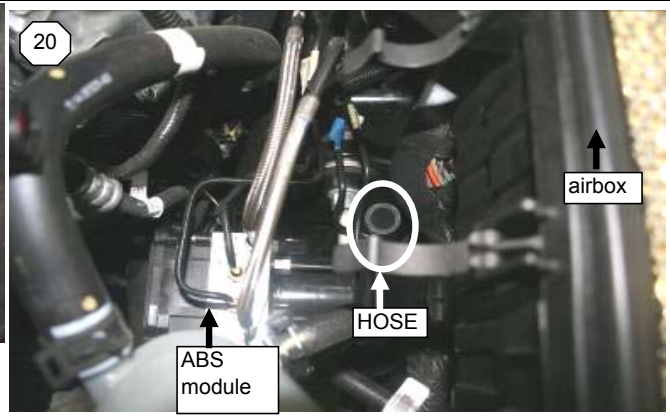
SALEEN

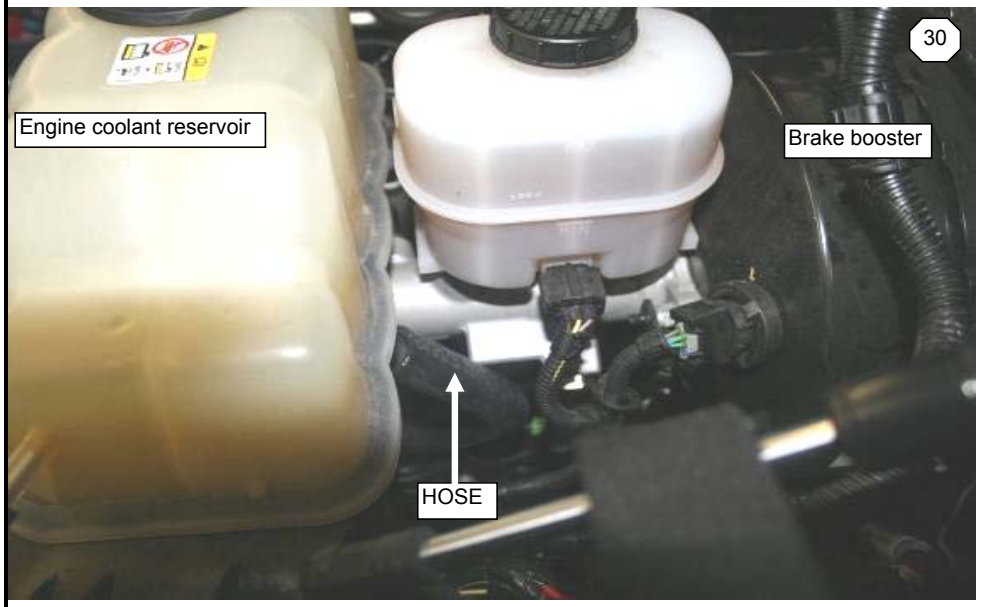
PROCESS NAME

INSTALL INTERCOOLER HOSES - part 2

PAGE

TORQUE | ? ITEM NUMBER | OPERATION





10 Insert the recovery tank-end of the water pump to recovery tank hose **(D)** through the core support above the heat exchanger to water pump hose.

20 Route the recovery tank end of the hose **(D)** up into the engine compartment, between the ABS module and the airbox, then wrap the hose around the airbox towards the driver's fender

30 Reach underneath the engine coolant reservoir and pull the hose **(D)** up towards the brake booster. Slide a hose clamp over the end of the hose and install onto the recovery tank inlet (the horizontal port on the side of the tank)

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	08-2003-C14393	1	HOSE, H/E TO I/C, S331
B	00-2003-C10068	8	HOSE CLAMP
C	10-2003-C16892	1	HOSE WATER PUMP TO H.E.
D	10-2003-C16891	1	HOSE I/C TANK TO WATER PUMP
E	10-2003-C16888	3	HOSE I/C TO RECOVERY TANK

Notes:

TORQUE

SALEEN

PROCESS NAME

INSTALL INTERCOOLER HOSES - part 3

PAGE

TORQUE ? ITEM NUMBER OPERATION

10 Slide a hose clamp **(A)** onto the bottom of the pump to tank hose and install the hose onto the top fitting on the water pump

20 Slide a hose clamp **(A)** over each end of the recovery tank to intercooler hose **(E)**

30 Install the short end of the hose **(E)** into the intercooler fitting on the driver's side/front of the supercharger, and install the long end onto the bottom tube on the recovery tank.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	08-2003-C14393	1	HOSE, H/E TO I/C, S331
B	00-2003-C10068	8	HOSE CLAMP MOLDED HOSE S/C 2005
C	10-2003-C16892	1	HOSE WATER PUMP TO H.E., NAV/EXP
D	10-2003-C16891	1	HOSE I/C TANK TO WATER PUMP,NAV/
E	10-2003-C16888	3	HOSE I/C TO RECOVERY TANK, NAV/E

Notes:

TORQUE

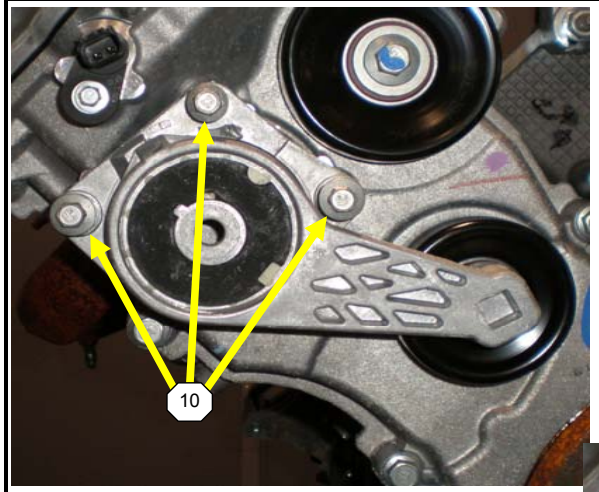
SALEEN

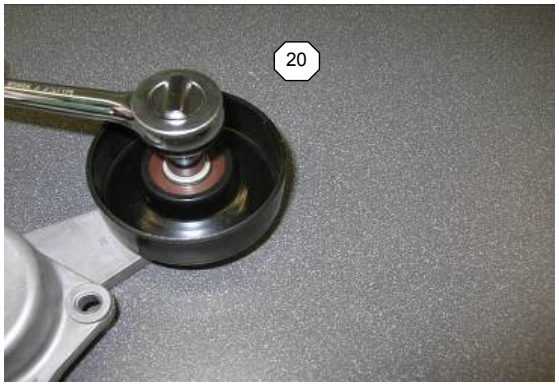
PROCESS NAME

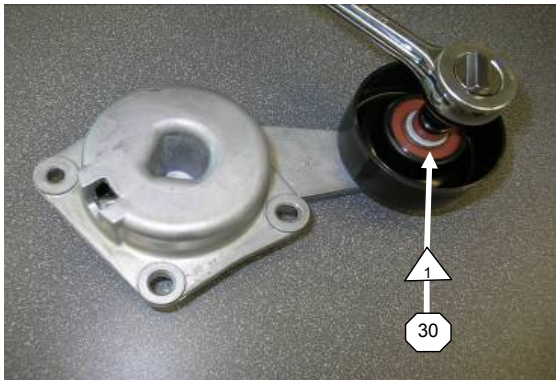
INSTALL INTERCOOLER HOSES - part 4

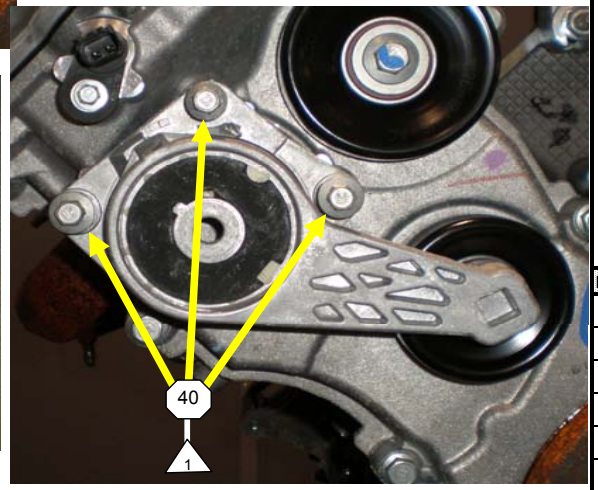
PAGE

TORQUE | ? ITEM NUMBER | OPERATION









10	Remove the factory belt tensioner from the engine front cover by removing the 3 mounting bolts.
20	Remove the pulley from the tensioner arm using an impact wrench, or by securely holding the tensioner body and using a breaker bar. Be careful not to damage the aluminum castings.
30	Install a 90mm pulley **(A)** onto the tensioner arm, reusing the production bolt. Torque to **18 ft-lb** and use blue threadlocker.
40	Reinstall the tensioner onto the engine using the production bolts. Torque to **18 ft-lb**, and use blue threadlocker.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	178-429	1	90 MM IDLER PULLEY

TORQUE	
1	18 +/- 2.7 Lb-ft

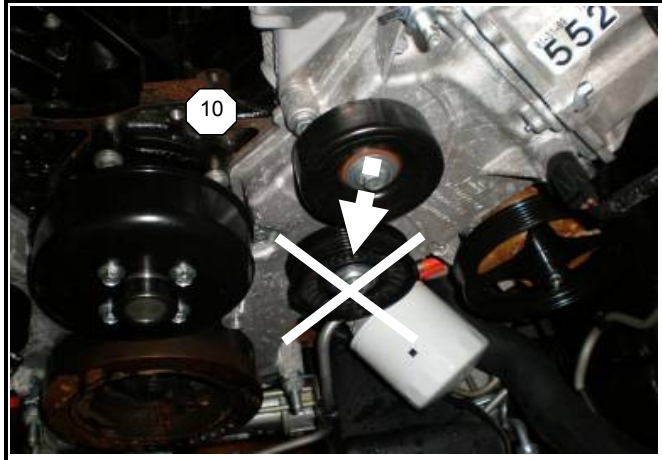
SALEEN

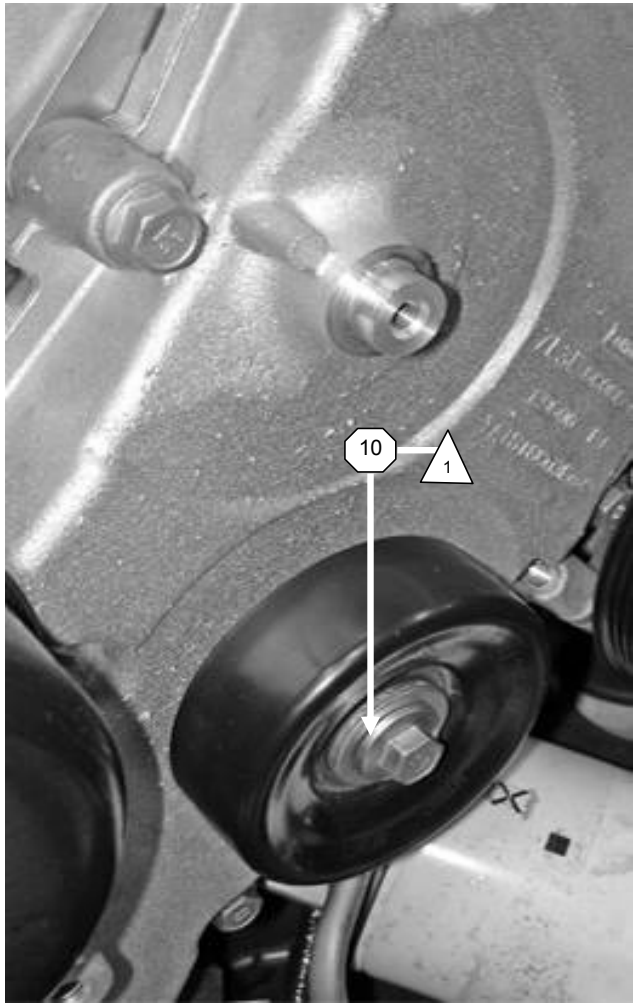
PROCESS NAME: FEAD TENSIONER PULLEY CHANGE

PAGE: 32

Notes:

TORQUE ? ITEM NUMBER OPERATION





10 Remove the two drive belt idler pulleys from the driver's side of the front engine cover. Discard the bottom grooved pulley and install the top smooth pulley in the lower position. Secure the smooth pulley in the lower position with the stock bolt, and torque the bolt to **18 +/- 2.7 Lb-ft**

20 Remove the driver's side timing chain cover upper inboard stud and nut; discard both.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	178-429	1	90 MM IDLER PULLEY

TORQUE	
1	18 +/- 2.7 Lb-ft

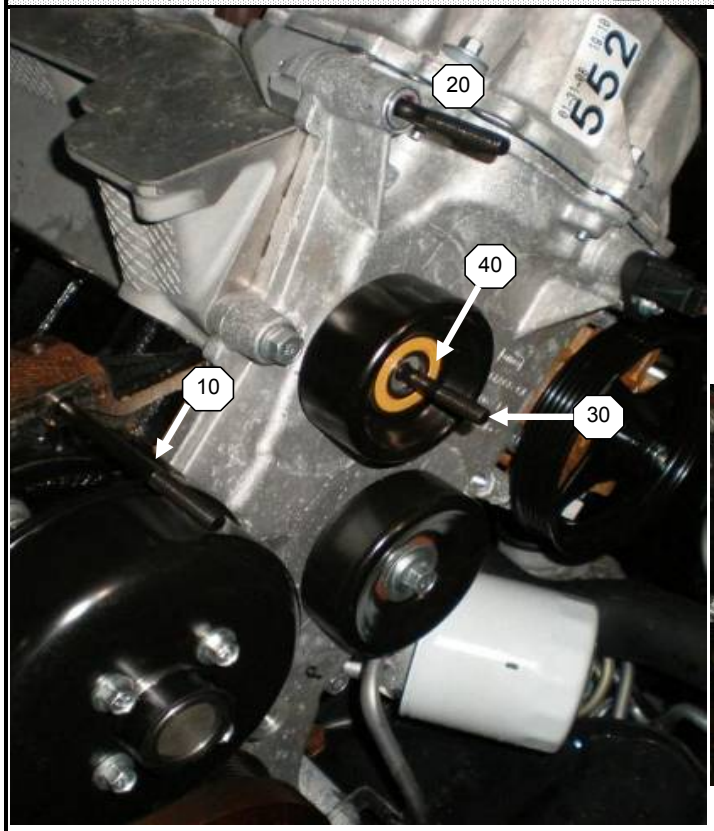
Notes:

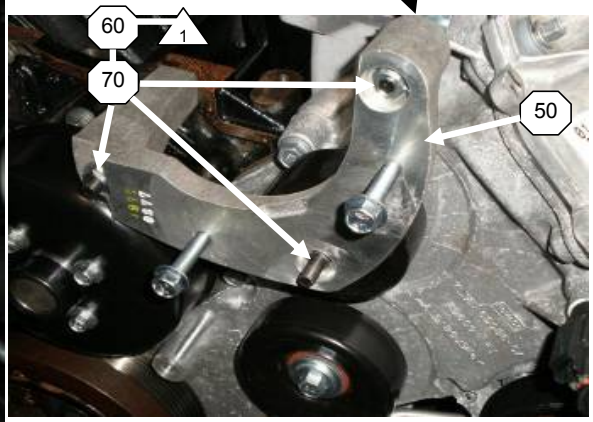
SALEEN

PROCESS NAME: PERFORM FEAD REARRANGEMENT

PAGE 33

TORQUE ? ITEM NUMBER OPERATION





10	Apply red Loctite #262 to the stud with un-equal length threads (110mm long) **(A)**, and install the end of the stud with the shorter threaded section to the front of the engine above the water pump.
20	Apply red Loctite #262 to the stud with equal length threads (110mm long) **(B)**, and install the stud to the front of the engine. Then slide the stock noise suppressor and the provided spacer **(C)** over the stud.
30	Apply red Loctite #262 to the stud (65mm long) **(D)**, and install the stud to the front of the engine where the upper idler pulley will sit.
40	Obtain the smooth idler pulley which you removed from the tensioner on the page 32. Slide it over the stud installed in step 30 above. It will be secured in place with the alternator bracket.
50	Install the new alternator bracket **(E)** by sliding it over the three studs.
60	Apply red Loctite #262 to the exposed threads on the three bracket mounting studs.
70	Slide a washer **(F)** over each mounting stud and install a nut **(G)** on each mounting stud. Torque each nut to **18 +/- 2.7 Lb-ft**

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-9002-C11089	1	Stud Blk Ox M8x1.25x110mm Unequal
B	00-2002-C10091	1	Stud Blk Ox M8 x 1.25 x 110mm
C	10-9004-C17618	1	Alternator Mount Spacer
D	00-9002-C11090	1	Stud Blk Ox M8 x 1.25 x 65mm
E	08-1604-C14255	1	Alternator Mount Machined
F	00-9004-C15732	3	Washer AN SS 5/16" Alternator Mount
G	00-9003-C15727	3	Nut M8 X 1.25 Locknut

Notes:

TORQUE	
1	18 +/- 2.7 Lb-ft

SALEEN

PROCESS NAME	PAGE
INSTALL ALTERNATOR MOUNTING KIT	34

TORQUE ? ITEM NUMBER OPERATION

10 Trim the heat shield at the back of the engine bay where shown to provide clearance for the supercharger inlet

ITEM	PART NUMBER	QTY.	DESCRIPTION

Notes:

TORQUE

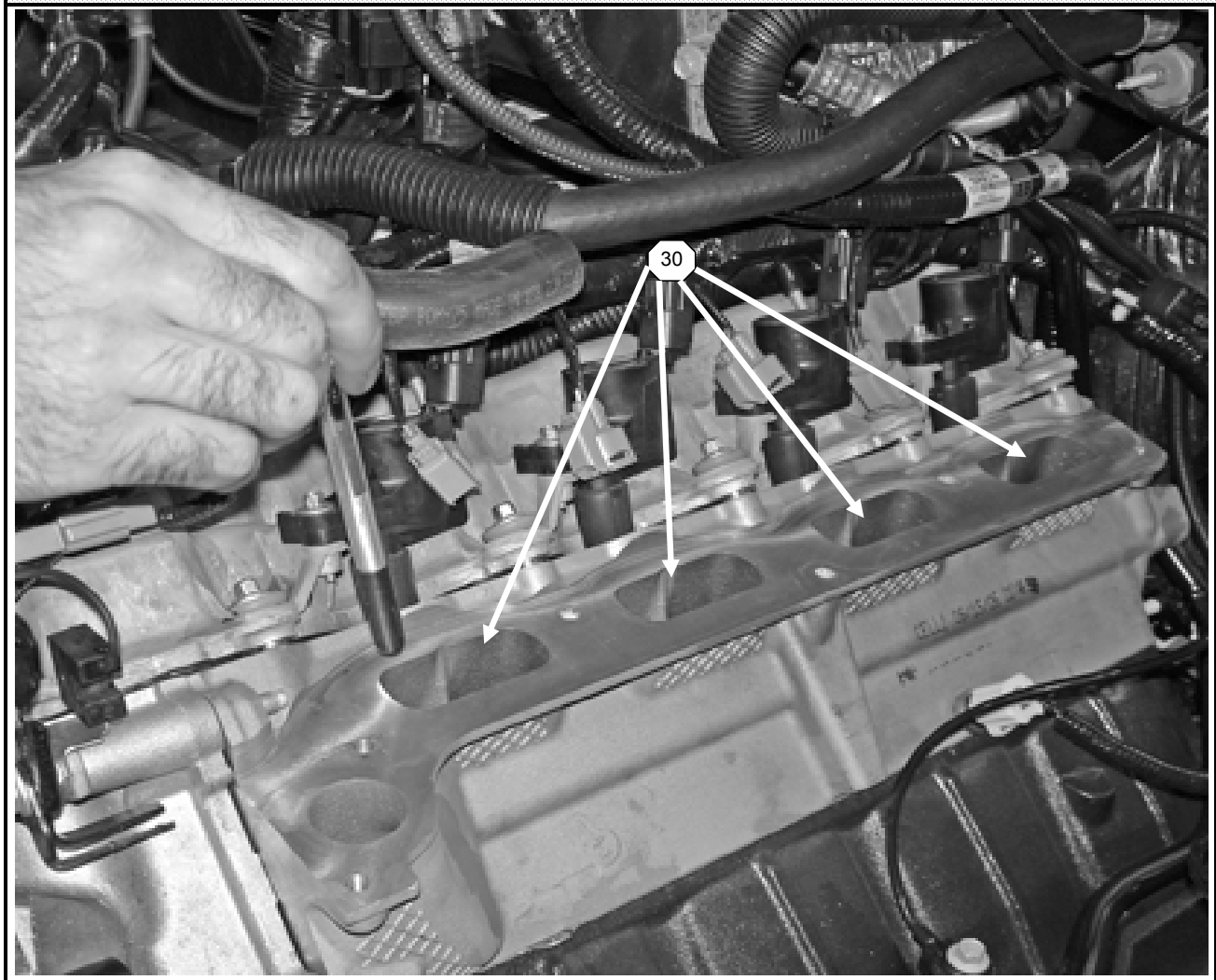
SALEEN

PROCESS NAME

TRIM HEAT SHIELD FOR CLEARANCE

PAGE

TORQUE ? ITEM NUMBER OPERATION



10 Uncover head ports.

20 Use brake clean and a lint-free rag to clean the head where the supercharger assembly will mate to the head.

30 Inspect each head port **(with a light and a mechanics magnet)** for debris and other foreign objects before installing the supercharger assembly (RH Shown).

ITEM	PART NUMBER	QTY.	DESCRIPTION

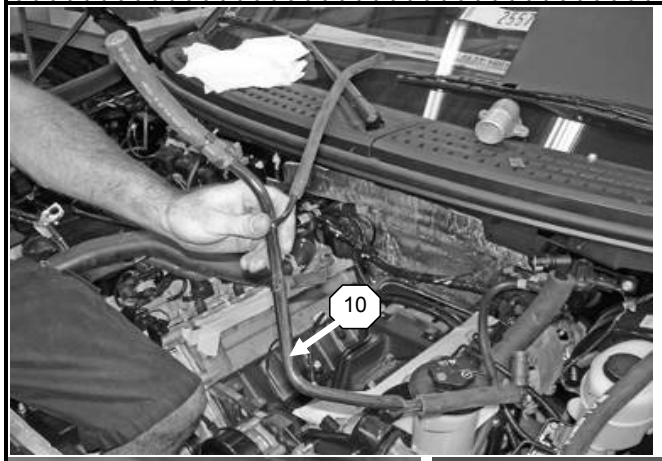
Notes:

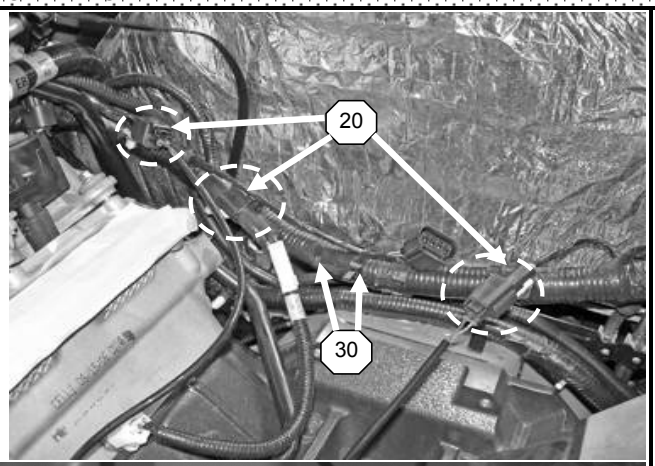
TORQUE	

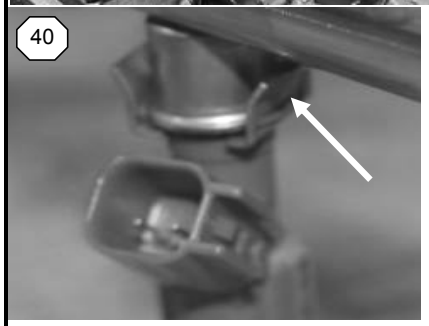
SALEEN

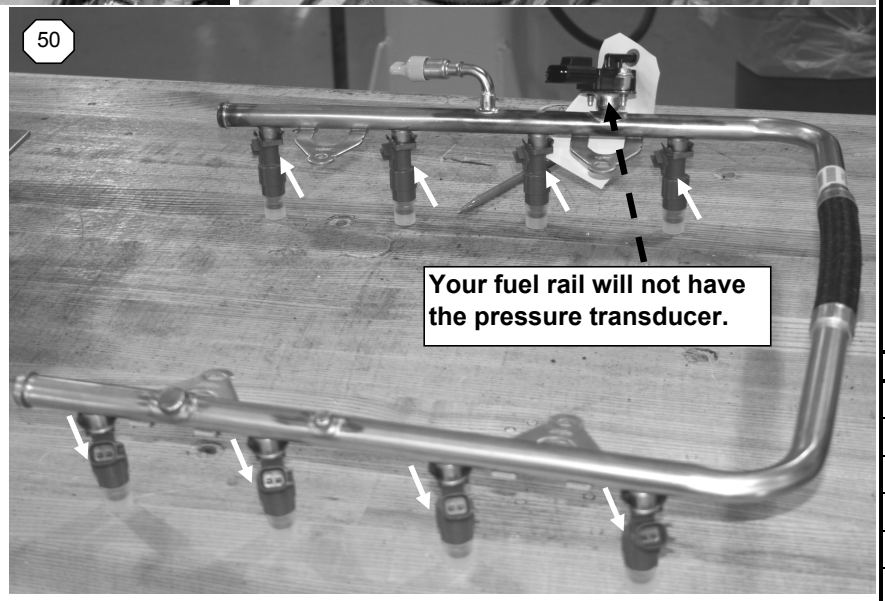
PROCESS NAME	PAGE
PERFORM PORT INSPECTION	36

TORQUE | ? ITEM NUMBER | OPERATION









10 Remove the brake booster vacuum hose/tube assembly (it will not be re-used).

20 Re-connect the knock sensor harness connectors and the cylinder head temp sensor harness connector.

30 Secure the IMRC connector to the main harness with two tie wraps (it will not be re-used).

40 Retrieve the new fuel rail **(A)** and the eight new fuel injectors (blue) **(B)**. Press the fuel injectors into the fuel rail and install the metal retainer clips you removed from the old fuel injectors.

50 The fuel injectors should be oriented as shown.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	08-1903-C18554	1	Fuel Rail
B	00-1701-C12076	8	Fuel Injector
C	06-3001-B12429	2	7" Zip Tie

Notes:

TORQUE

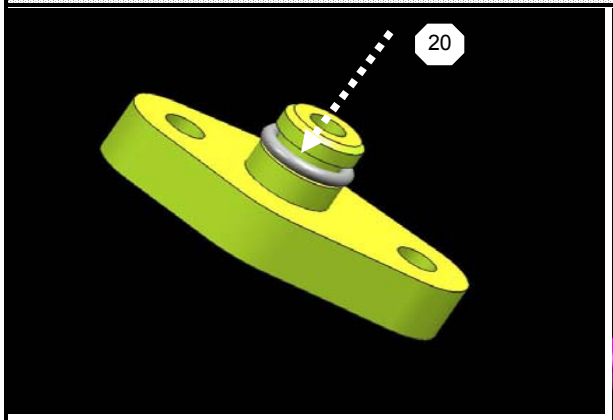
SALEEN

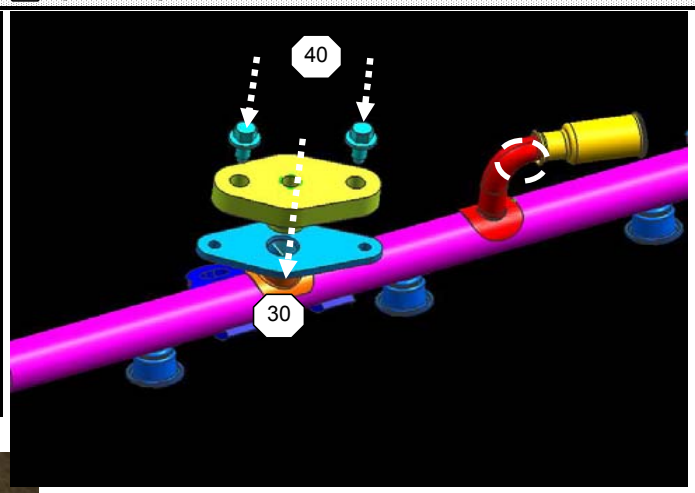
PROCESS NAME

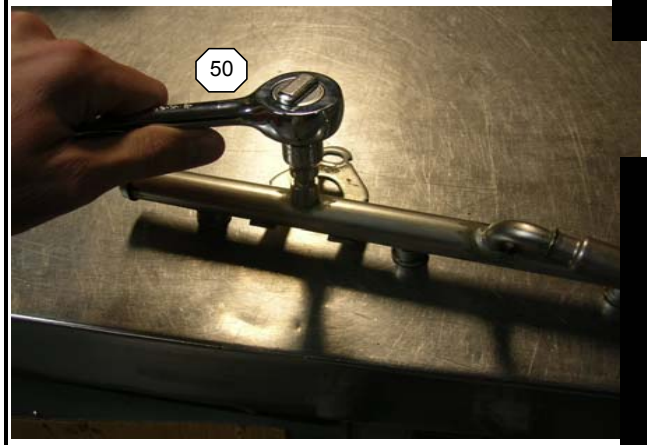
Fuel Rail Subassembly - Part 1

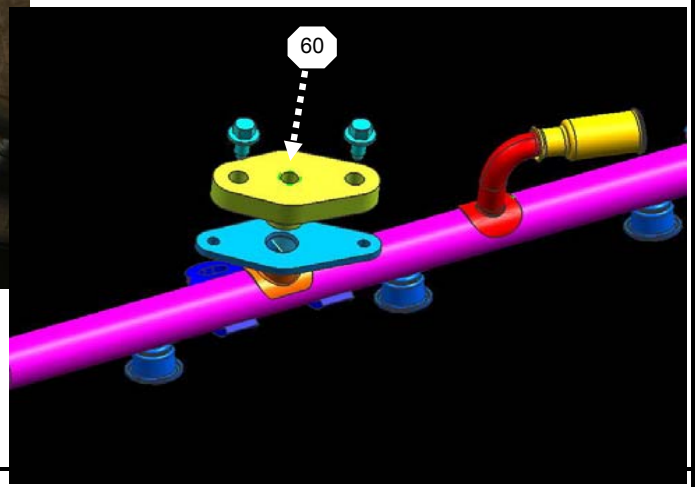
PAGE

TORQUE | ? ITEM NUMBER | OPERATION









10	Locate the fuel pressure sensor plug **(A)** and O-ring **(B)**.
20	Apply silicone grease to the O-ring, and install the O-ring onto the plug as shown. Be careful to stretch the O-ring as little as possible, using small hook shaped pick (plastic only, do not use metal picks on o-rings!) will make installation easier. If you break the O-ring, you will need to order another one.
30	Then install the fuel pressure sensor plug into the fuel rail being careful not to catch the O-ring on the fuel rail opening.
40	Locate the two M5x20 **(C)** bolts and M5 flat washers **(D)**. Install one bolt and washer into each bolt hole on the plug, and thread into the fuel rail boss. Torque the bolts to **4.5 Nm or 40 in-lb**.
50	Remove the fuel pressure diagnostic test fitting from the original fuel rail and wipe the threads off with a clean rag.
60	Apply thread sealant to the threads of the fuel pressure diagnostic test fitting, and install it in the open hole on the fuel pressure sensor plug

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	08-1903-C18548	1	FUEL RAIL PRESS SENSOR PLUG
B	08-1903-C18549	1	FUEL RAIL PRESS SENSOR O-RING
C	00-9001-C15027	2	CAPSCRW, HEX HEAD, M5x0.8, 20m
D	00-9004-C00227	2	WASHER FLAT M5 ST

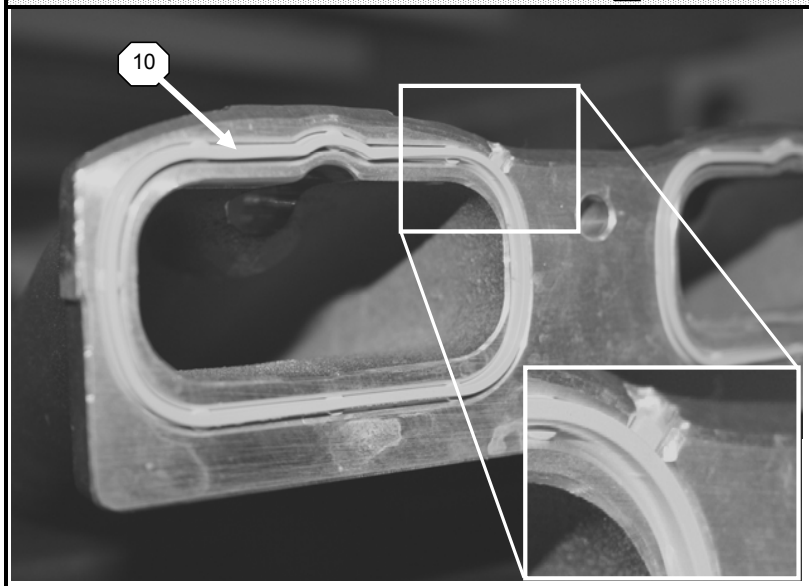
TORQUE	
1	40inlb

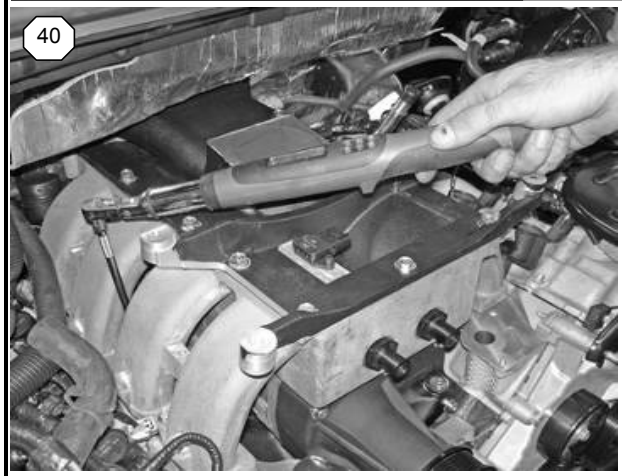
Notes:

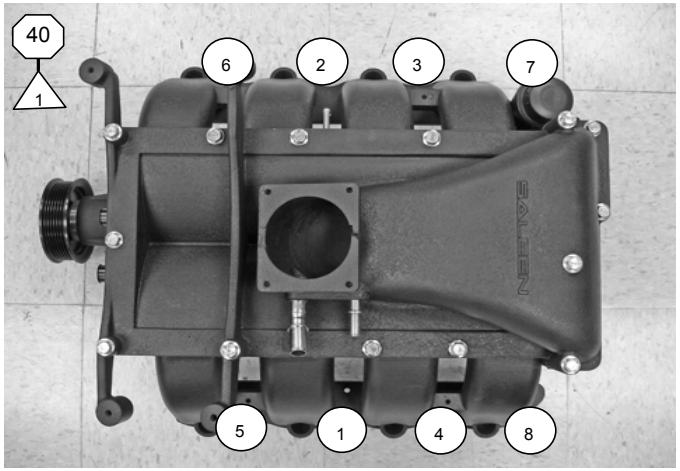
SALEEN

PROCESS NAME: Fuel Rail Subassembly - Part 2

TORQUE | ? ITEM NUMBER | OPERATION







10 Ensure the provided intake manifold gaskets **(A)** are installed into the grooves at the end of each intake runner. Note the nub on the intake gasket, and install the gasket so the nub lines up with the cut-out in the manifold.

20 Carefully lower the supercharger assembly **(B)** onto the engine. **(The assembly is heavy so more than one person is recommended for setting it into place)**.

30 Make sure to line up the injector bores in the manifold with the holes in the cylinder head.

40 Torque each mounting bolt **(C)** in the order shown in the bottom right photo. Work the bolts into place until they are slightly snug, then torque them down.
91 +/- 13.6 Lb-in

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-1607-C14616	8	Intake Manifold Gasket
B	08-1607-B14553	1	Supercharger Assembly
C	00-9001-C10141	8	Capscrw Hex Flng M6x1.0mm 25mm

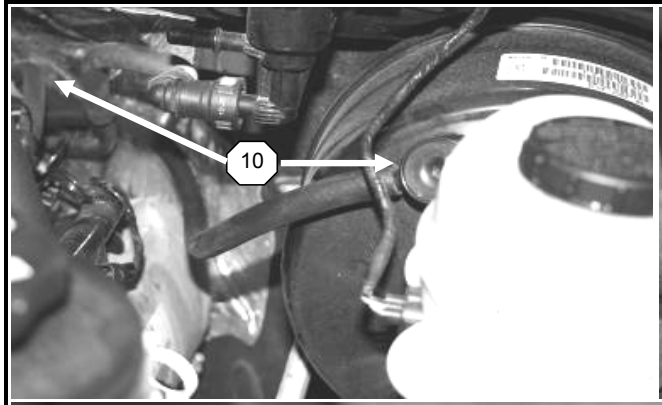
TORQUE	
1	91 +/- 13.6 Lb-in

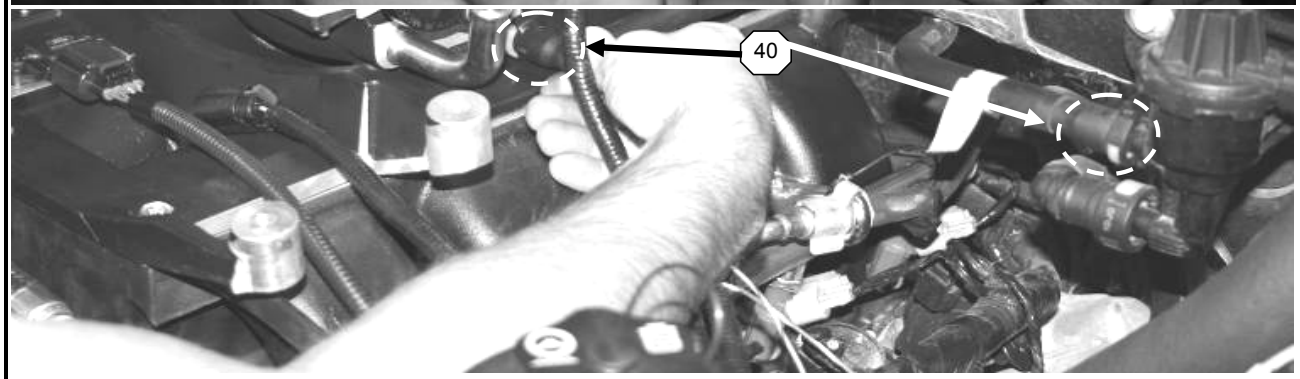
Notes:

SALEEN

PROCESS NAME: INSTALL SUPERCHARGER ASSEMBLY

TORQUE | ? ITEM NUMBER | OPERATION





10 Retrieve the 3/8" vacuum line **(A)** and connect one end to the brake booster and the other end to the fitting on the back of the S/C assembly near the bulkhead.

20 Take the stock EVAP line and cut hose near center.

30 Before discarding the engine side of the EVAP line, remove the elbow and re-install it on the other end of the piece of hose that has the canister connector on it.

40 Re-install the EVAP line to the EVAP canister and S/C assembly below throttle body.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-9010-C07181	1	Vacuum Hose 3/8", 20"

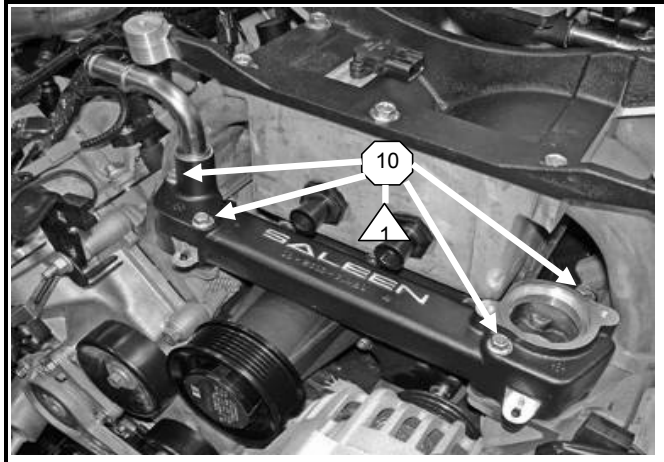
Notes:

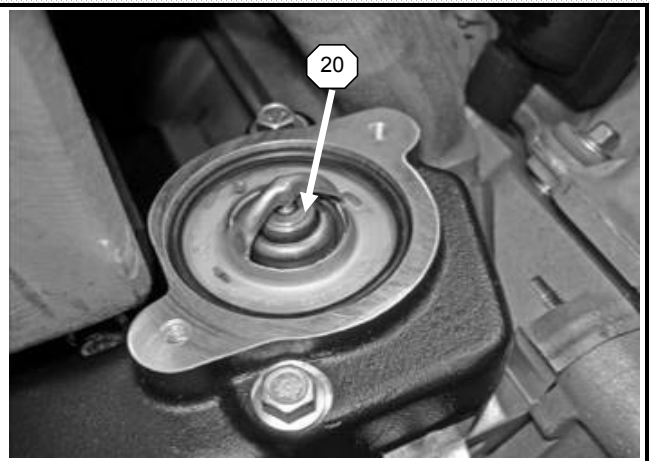
TORQUE

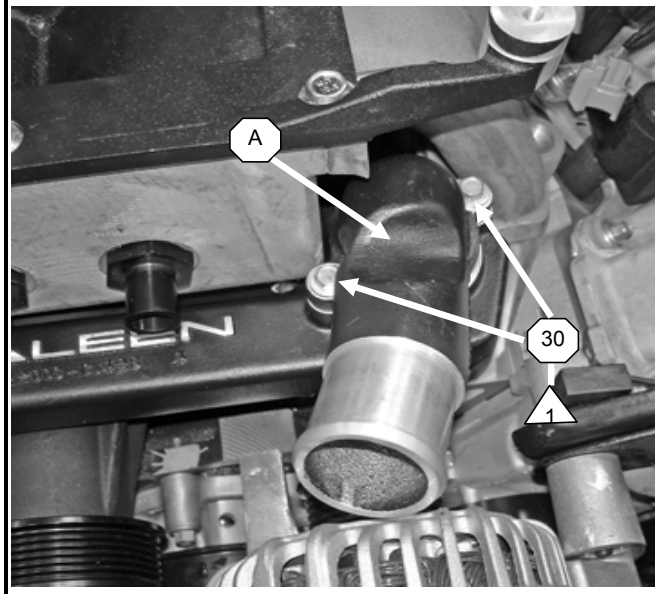
SALEEN

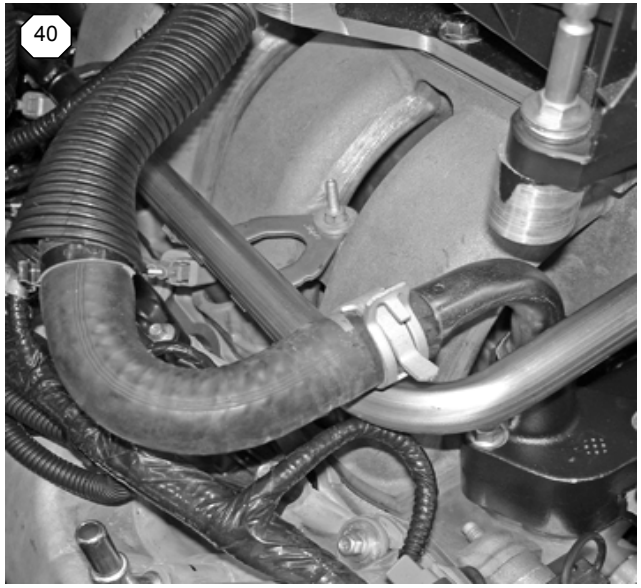
PROCESS NAME	PAGE
INSTALL VACUUM & EVAP HOSES	40

TORQUE ? ITEM NUMBER OPERATION









10 Insert the gaskets into the Saleen water crossover tube. Install the water crossover tube assembly **(A)** with four washers **(B)** and four bolts **(C)**. **91 +/- 13.6 Lb-in**

20 Install the original thermostat and O-ring into the Saleen water crossover

30 Install the new thermostat housing outlet to the water crossover with two bolts **(D)**. **91 +/- 13.6 Lb-in**

40 Re-connect the upper radiator hose to the water crossover.

A **NOTE: Observe the "saddle" in the thermostat housing; you will want to position the fuel rail such that it sits in this saddle.**

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	08-2003-C14284	1	Water Crossover Assembly
B	00-9004-C00296	4	Washer Flat M6
C	00-9001-C15587	4	Capscrw, Hex Head, M6 x 1.0 x 60mm
D	00-9001-C15486	2	Capscrw Hex Flng M6x1.0mm 20mm

TORQUE	
1	91 +/- 13.6 Lb-in

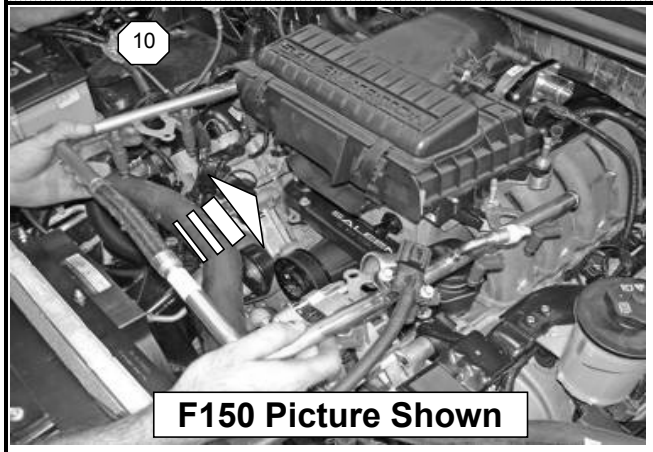
Notes:

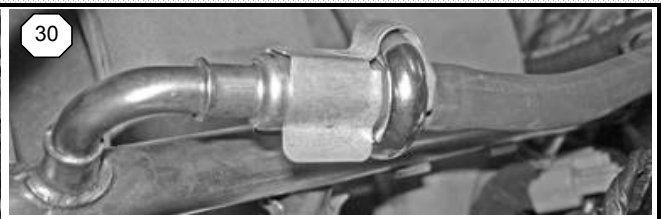
SALEEN

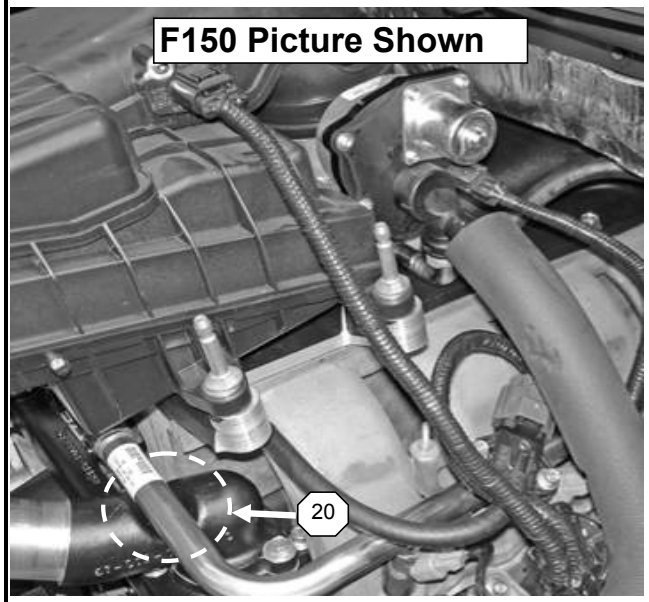
PROCESS NAME: INSTALL WATER CROSSOVER KIT

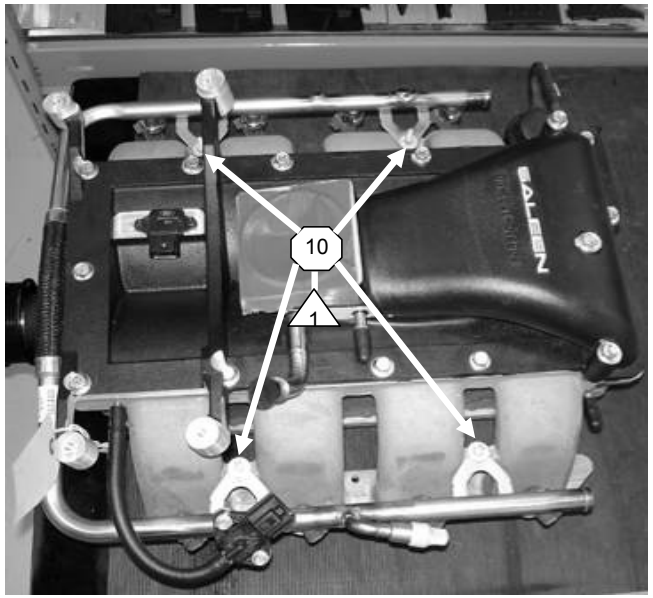
PAGE

TORQUE | ? ITEM NUMBER | OPERATION









10 Install the fuel injector rail assembly **(A)** using 4 bolts **(B)**.
91 +/- 13.6 Lb-in

20 Make sure the fuel rail is centered in the thermostat housing "saddle" (see photo on previous page) and that there is at least 1/8" clearance between the fuel rail and thermostat housing **(NO CONTACT ALLOWED)**.

30 Re-connect the fuel supply hose to the fuel rail, making sure the connection is secure and the retainer clip is fully locked in place.

40 Re-connect all fuel injector connectors, making sure they are fully seated and locked into position.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	08-1903-C13994	1	Fuel Rail Assembly
B	00-9001-C15486	4	Capscrw Hex Flng M6x1.0mm 20mm

TORQUE	
1	91 +/- 13.6 Lb-in

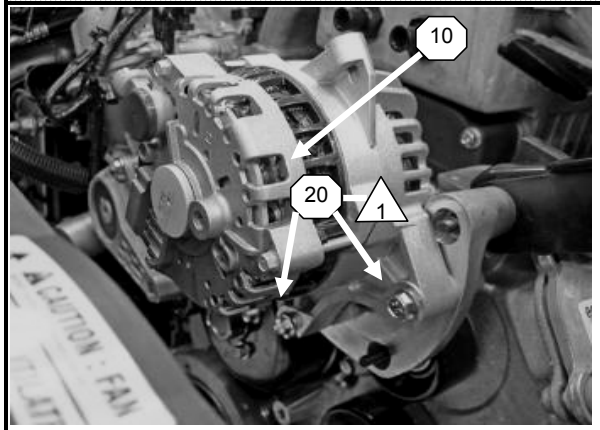
Notes:

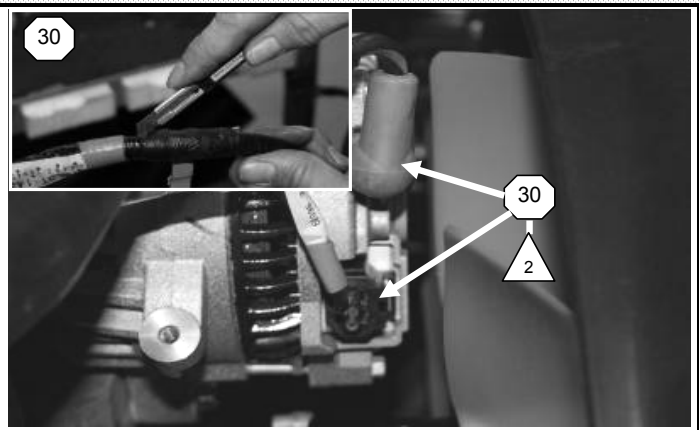
SALEEN

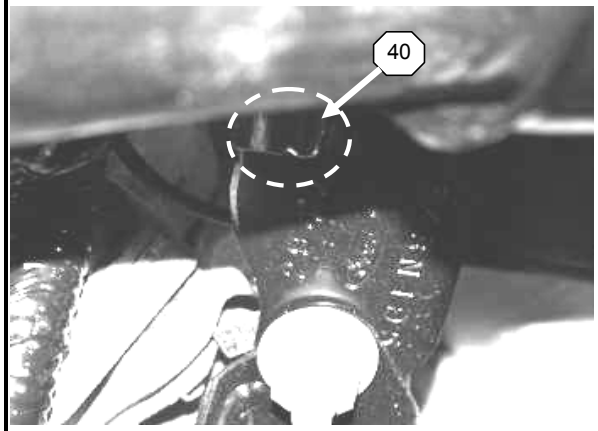
PROCESS NAME: INSTALL MODIFIED FUEL RAIL

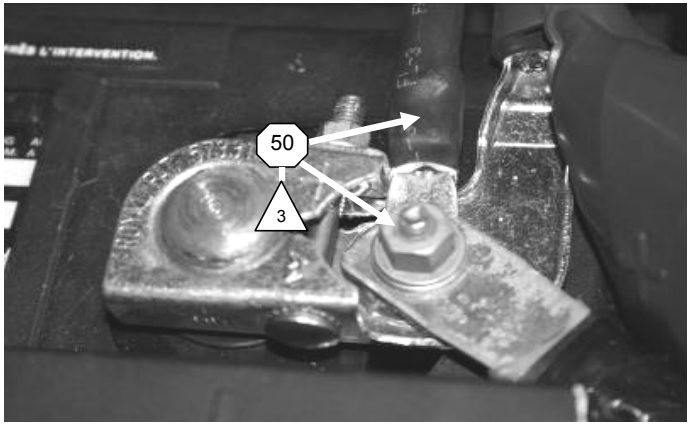
PAGE

TORQUE ? ITEM NUMBER OPERATION









10	Start the two alternator mounting bolts **(A)** and slide alternator into place.
20	Torque both altarnator mounting bolts. **18 +/- 2.7 Lb-ft**
30	Carefully remove the plastic retaining clip on the alternator harness and connect the alternator harness to the alternator with one nut (under grey rubber boot). Torque the nut to **71 +/- 10.7 Lb-in.** Connect the alternator harness electrical connector.
40	Slide the metal clip on the alternator harness onto the upper radiator hose retainer bracket.
50	Attach the end of the alternator harness with a ring terminal to the positive battery cable clamp with one nut. **80 +/- 12 Lb-in**

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-9001-C10665	2	Capscrw Hex Flng M8x1.25mm 40mm

Notes:

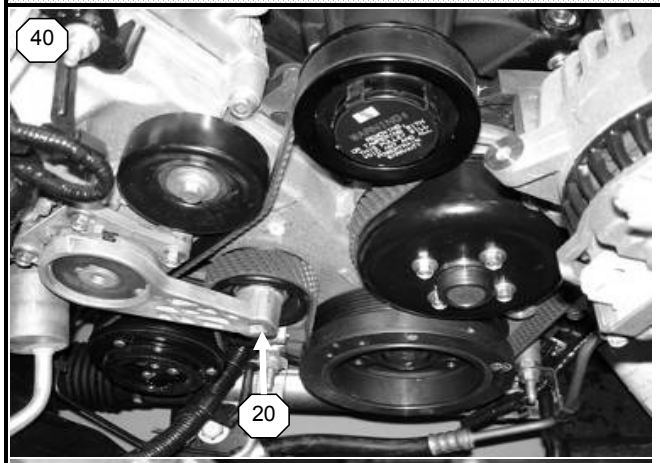
TORQUE	
1	18 +/- 2.7 Lb-ft
2	71 +/- 10.7 Lb-in
3	80 +/- 12 Lb-in

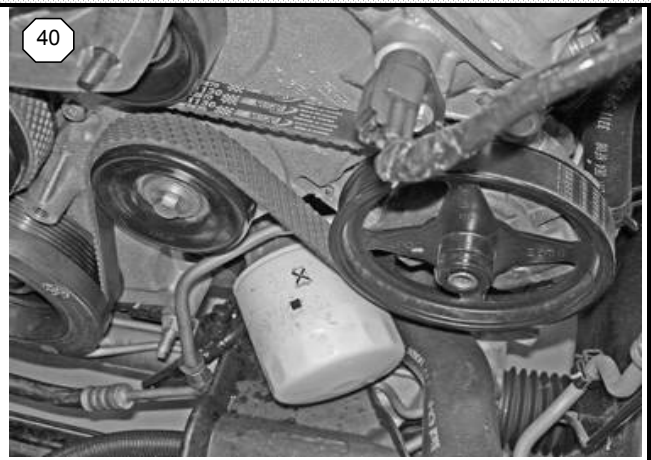
SALEEN

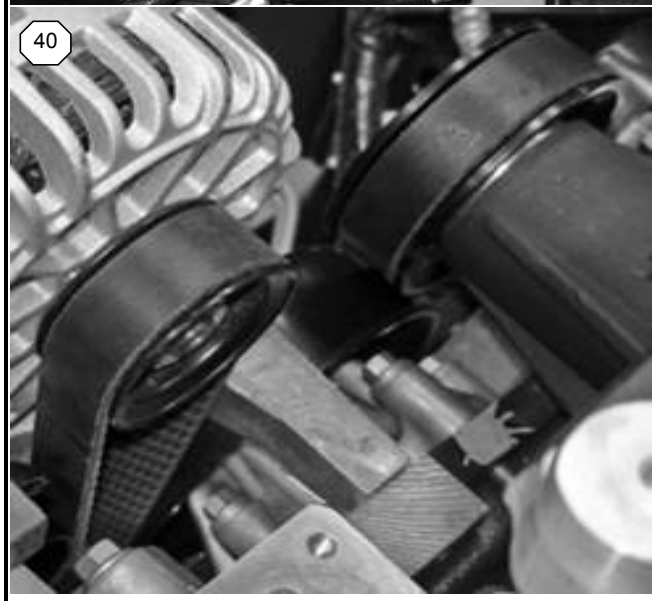
PROCESS NAME: INSTALL ALTERNATOR + HARNESS

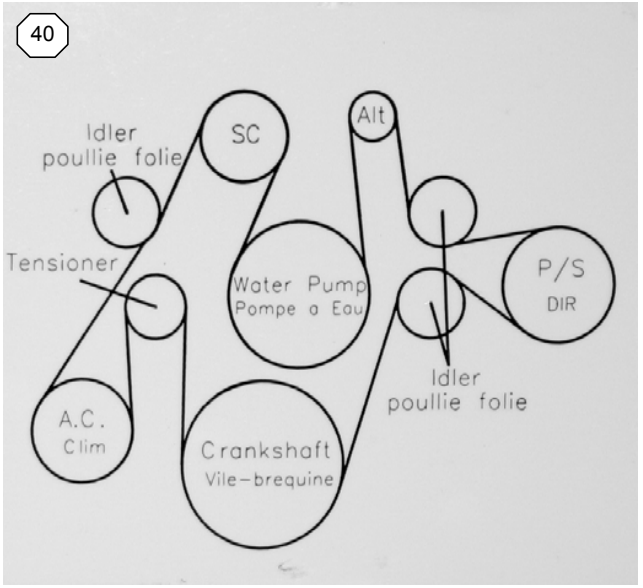
PAGE

TORQUE | ? ITEM NUMBER | OPERATION









10 Route the new belt **(A)** around all the pulleys except the water pump. Refer to the provided belt routing label, which is shown in the lower right image.

20 Using a 1/2” breaker bar, rotate the belt tensioner clockwise until it stops, then slip the belt over the water pump pulley. (this jb is best carried ut by two people)

40 Confirm the belt is properly routed and is fully engaged into the grooves of all pulleys.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-1604-C14814	1	Goodyear Gator 113.0" 6-Rib Belt

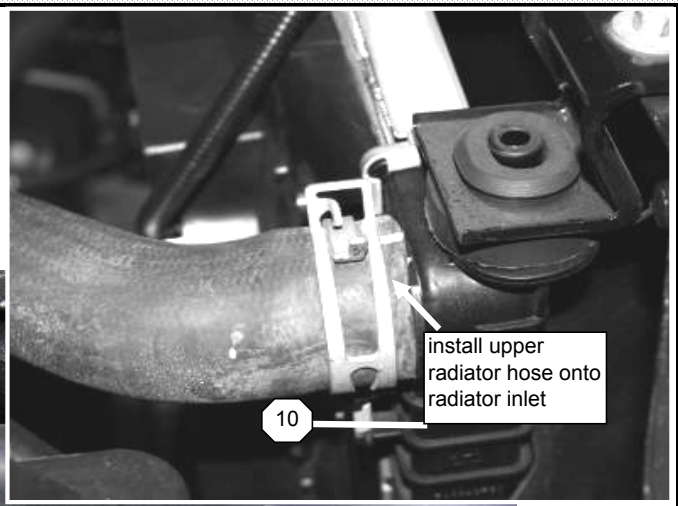
Notes:

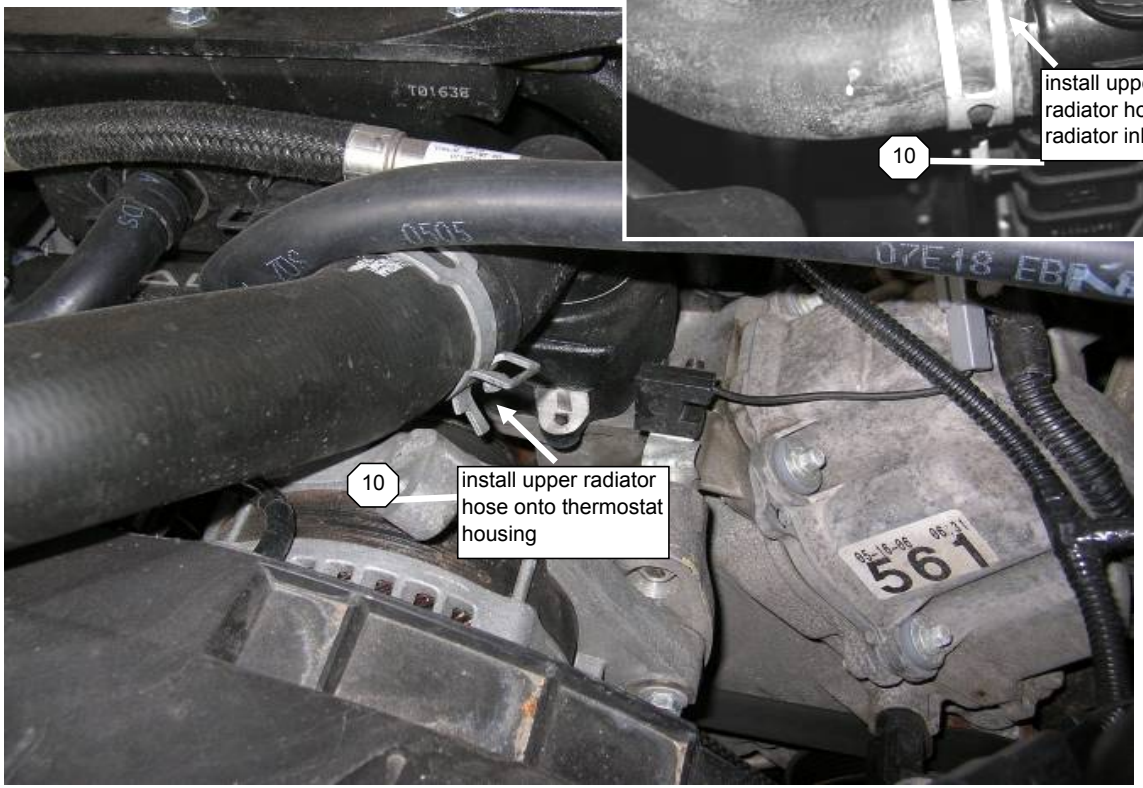
TORQUE

SALEEN

PROCESS NAME	PAGE
INSTALL SERPENTINE BELT	44

TORQUE | ? ITEM NUMBER | OPERATION





10 Re-install the upper radiator hose with one of the original clamps at either end. Be sure to orient the clamps as shown

ITEM	PART NUMBER	QTY.	DESCRIPTION

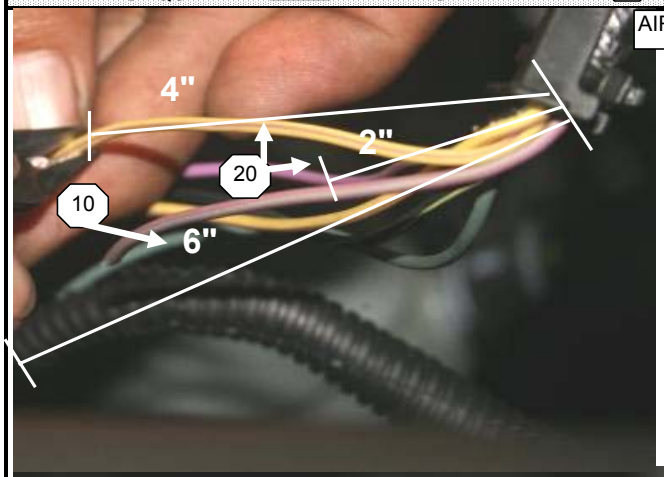
Notes:

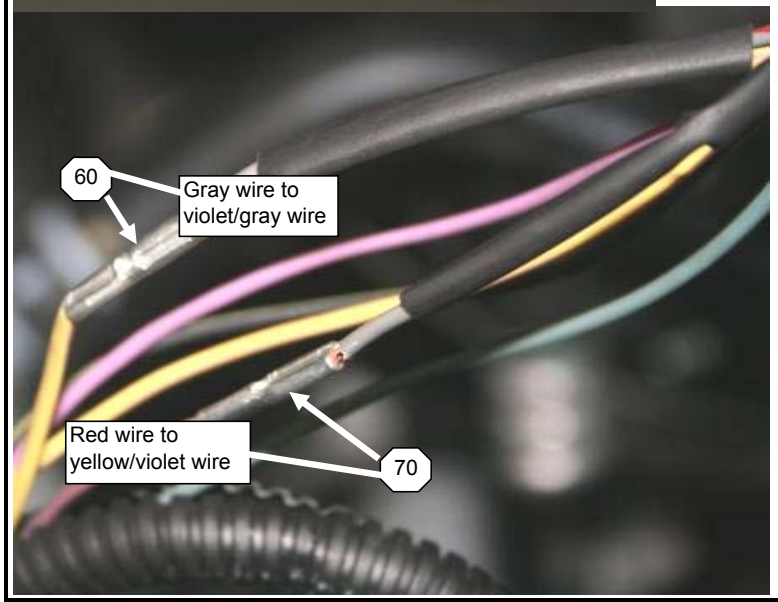
TORQUE

SALEEN

PROCESS NAME	PAGE
INSTALL UPPER RADIATOR HOSE	45

TORQUE | ? ITEM NUMBER | OPERATION





10	Locate the mass air flow sensor connector near the airbox. Open the convoluted sleeving six inches back from the back of the connector.
20	Cut the violet with gray stripe wire about four inches back from the connector, and cut the yellow with violet stripe wire about two inches back from the connector. The cut wires on the stock mass air flow connector side will not be used. Tape over the ends, and tuck them back into the original harness convolute.
30	Slide a piece of heat shrink **(C)** over the harness-side of each of the two cut wires.
40	Locate the 10in long lengh of gray wire**(D)**, and connect it to the gray wire coming from the TMAP harness using a butt connector **(B)**. Cover the connection with a piece of heat shrink **(C)**.
50	Locate the 10in long length of gray with red stripe wire**(E)**, and connect it to the gray with red stripe wire coming from the TMAP harness using a butt connector **(B)**. Cover the connection with a piece of heat shrink**(C)**.
60	Butt connect **(B)** the extended gray wire from the TMAP harness to the violet wire with gray stripe that you cut in the air flow sensor harness. Shrink the heat shrink over the butt connectors **(C)**.
70	Butt connect **(B)** the extended gray with red stripe wire from the TMAP harness to the yellow with violet stripe wire that you cut in the air flow sensor harness. Cover the connection with heat shrink tubing**(C)**.
80	Re-install the convoluted loom on the air flow sensor harness, then wrap it with electrical tape.
90	Install the 15in length of 1/4in convoluted loom**(F)** onto the exposed gray and red wires coming from the TMAP harness, then wrap the ends with electrical tape.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	08-1704-C15501	1	Harness, TMAP Sensor Extension
B	00-1704-C09260	4	18 Gauge, Butt Connector
C	00-1703-C07082	4.5"	Heat Shrink, Dual Wall 1/4" Black
D	00-1704-C09379	10"	WIRE, 20 AWG GRAY
E	00-1704-C09370	10"	WIRE, 20 AWG GRAY/RED
F	00-1704-C15307	15"	SLEEVING, CONVOLUTED 1/4" BLA

Notes:

Each piece of heat shrink should be 1-1/8in long, and cut from the supplied piece.

TORQUE

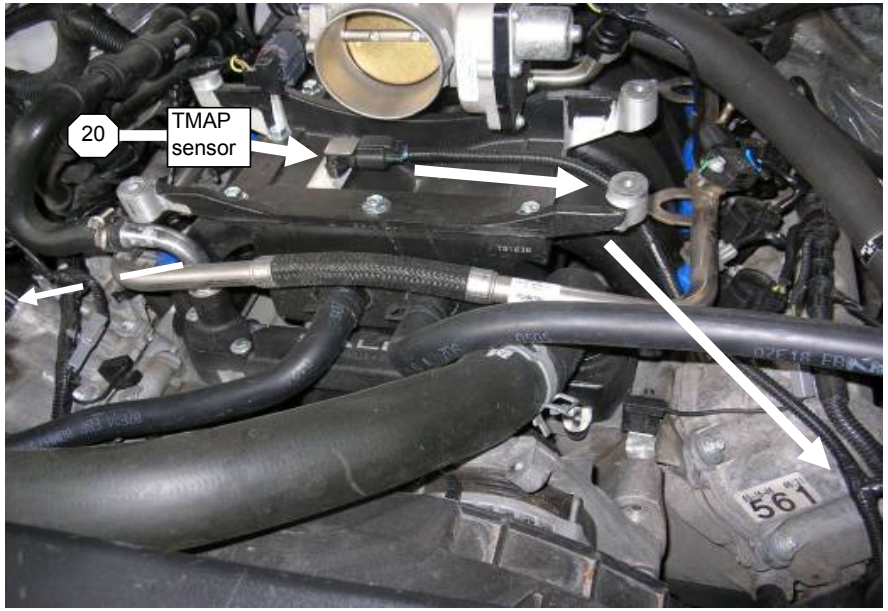
SALEEN

PROCESS NAME

TMAP EXTENSION HARNESS WIRING

PAGE

TORQUE | ? ITEM NUMBER | OPERATION



10 Connect the mass air flow sensor connector back into the mass air flow sensor on the airbox outlet

20 Route the TMAP harness as shown, then connect the harness to the TMAP sensor.

ITEM	PART NUMBER	QTY.	DESCRIPTION

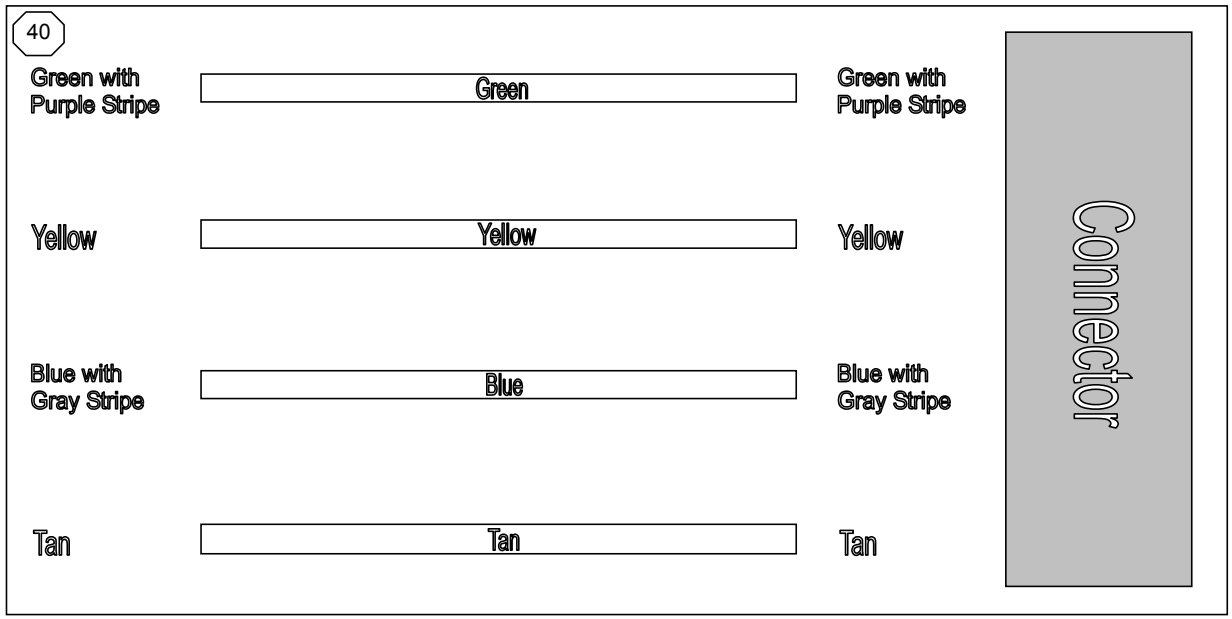
Notes:

TORQUE

SALEEN

PROCESS NAME	PAGE
CONNECT MAF AND TMAP HARNESSES TO SENSORS	47

TORQUE | ? ITEM NUMBER | OPERATION



10 Locate the four pin throttle body connector coming from the wiring harness above the passenger side cylinder head. Open the convolute, and cut the wires approximately 2in from the connector.

20 Locate the green **(A)**, yellow **(B),** blue **(C),** and tan **(D)** wires included with the kit. You will need to cut off a 9 inch length of the blue and yellow wires for this step.

30 Slide two pieces of heat shrink over each of the supplied wires **(F)**.

40 Use the supplied butt connectors **(E)** to extend the wires as shown in the illustration.

50 Slide one piece of heat shrink over each of the butt connectors and shrink the heat shrink to seal the connections.

60 Cover the the extended wires with the piece of 1/2in convoluted wiring loom **(G)**, and tape each end

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-1704-C06435	9in	WIRE 18AWG DARK GREEN
B	00-1704-C06305	9in	WIRE 18 awg YELLOW
C	00-1704-C06464	9in	WIRE 18awg DK BLUE
D	00-1704-C06528	9in	WIRE 18AWG TAN
E	00-1704-C09260	8	18 GAUGE, SEAMLESS BUTT CONNEC
F	00-1703-C07082	9in	HEAT SHRINK, DUAL WALL 1/4" BL
G	00-1704-C11083	11in	SLEEVING, CONVOLUTED 1/2" BLA

Notes:

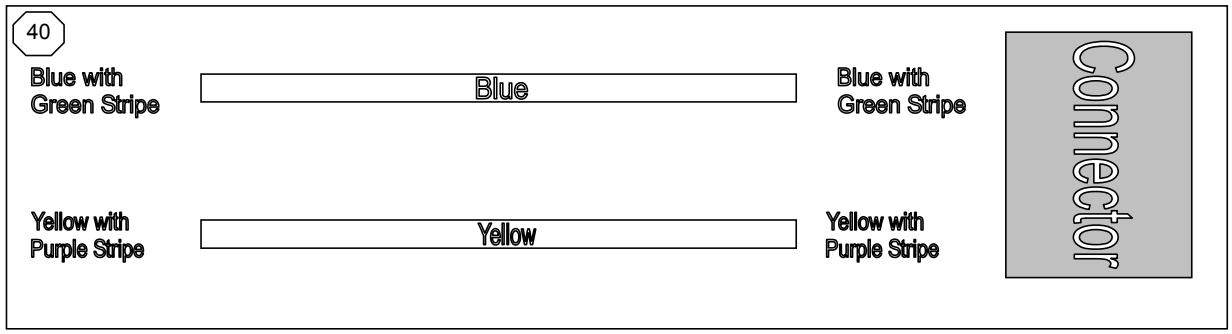
Each piece of heat shrink should be 1-1/8in long, and cut from the supplied piece.

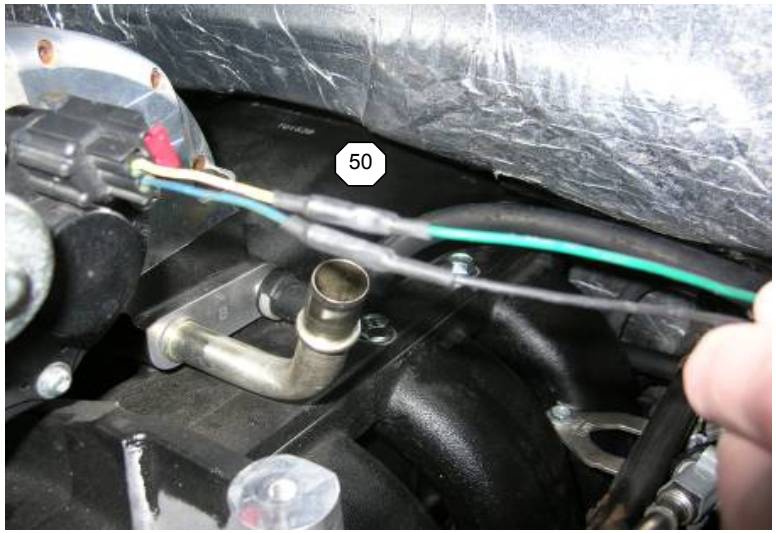
TORQUE

SALEEN

PROCESS NAME	PAGE
THROTTLE POSITION SENSOR WIRING EXTENSION	48

TORQUE | ? ITEM NUMBER | OPERATION





10 Locate the four pin throttle body connector coming from the wiring harness above the passenger side cylinder head. Open the convolute, and cut the wires approximately 2in from the connector.

20 Locate the remaining 9.5in of yellow **(A)**, blue **(B)** wires included with the kit.

30 Slide two pieces of heat shrink over each of the supplied wires **(D)**.

40 Using the supplied butt connectors **(C)** to extend the wires as shown in the illustration.

50 Slide one piece of heat shrink over each of the butt connectors and shrink the heat shrink to seal the connections.

60 Cover the the extended wires with the piece of 1/2 inch convoluted wiring loom **(E)**, and tape each end

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-1704-C06305	9.5in	WIRE 18 awg YELLOW
B	00-1704-C06464	9.5in	WIRE 18awg DK BLUE
C	00-1704-C09260	4	18 GAUGE, SEAMLESS BUTT CONNEC
D	00-1703-C07082	4.5in	HEAT SHRINK, DUAL WALL 1/4" BLACK
E	00-1704-C11083	13in	SLEEVING, CONVOLUTED 1/2" BLACK

Notes:

Each piece of heat shrink should be 1-1/8in long, and cut from the supplied piece.

TORQUE

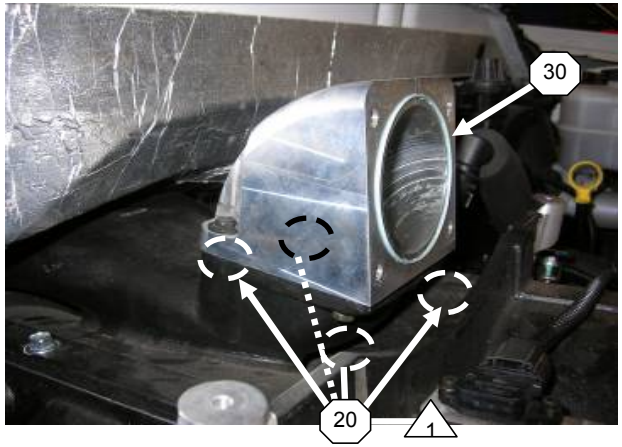
SALEEN

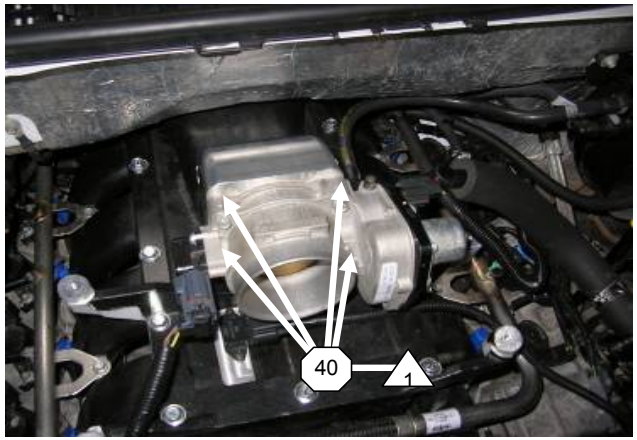
PROCESS NAME

THROTTLE BODY MOTOR WIRING EXTENSION

PAGE

TORQUE | ? ITEM NUMBER | OPERATION





10	Remove the tape from throttle body mounting surface on the inlet tube, and install the supplied throttle body gasket **(A)**.
20	Install the intake elbow **(B)** onto the inlet tube with the four supplied bolts **(C)**. The two rear bolts will thread in from the top, and the two front bolts will thread in from the bottom/ Torque to **91 +/- 13.6inlb**.
30	Install the original throttle body gasket into the exposed intake elbow groove.
40	Install the throttle body with the four original bolts, and torque to **91 +/- 13.6 Lb-in**.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-1607-C18533	1	THROTTLE BODY O-RING, 5.4L TRUCK
B	00-1607-C18532	1	INTAKE ELBOW
C	00-9001-C15486	4	CAPSCRW HEX FLNG M6x1.0mm 20mm

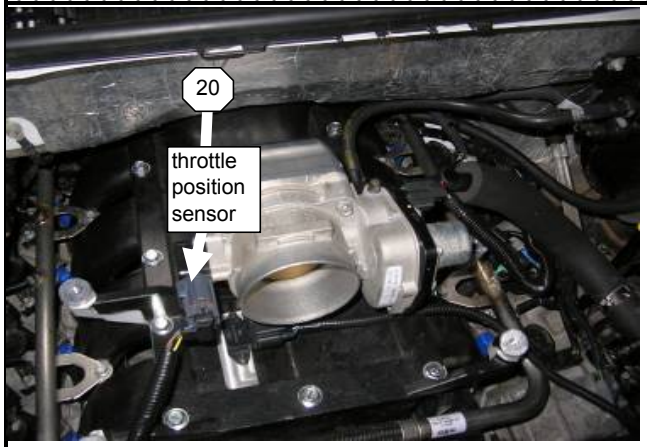
TORQUE	
1	91 +/- 13.6 Lb-in

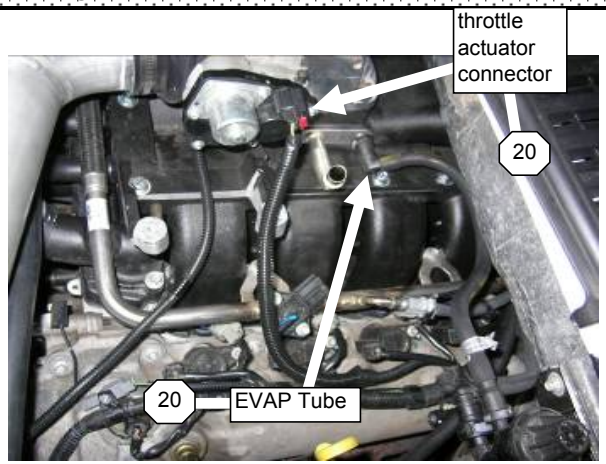
Notes:

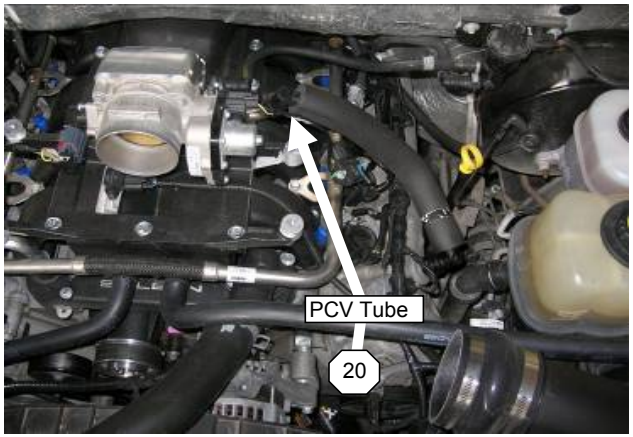
SALEEN

PROCESS NAME	PAGE
Install Intake Elbow and Throttle Body	50

TORQUE | ? ITEM NUMBER | OPERATION







10	Connect the throttle position sensor to passenger side of throttle body.
20	Re-connect throttle actuator harness connector to the throttle body, and the EVAP and PCV tubes to the intake.

ITEM	PART NUMBER	QTY.	DESCRIPTION

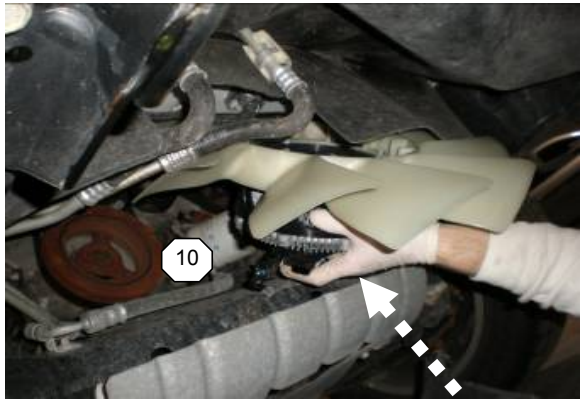
Notes:

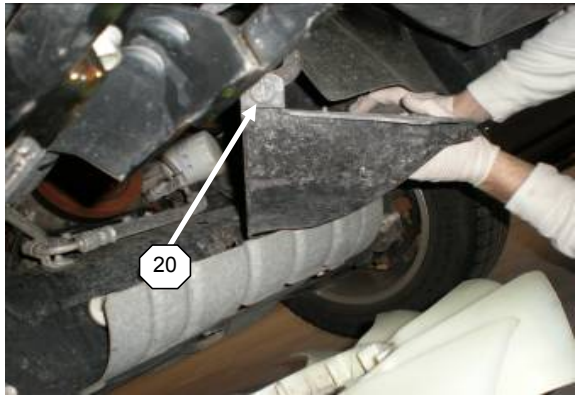
TORQUE

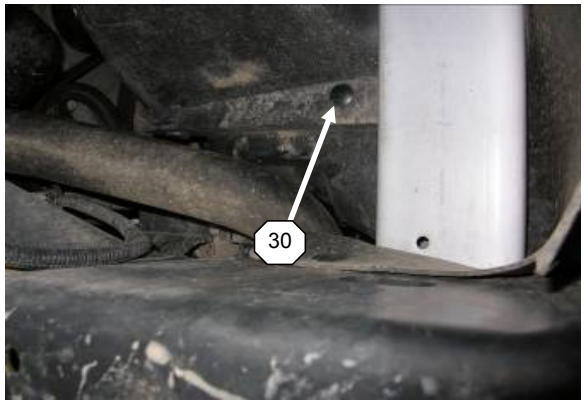
SALEEN

PROCESS NAME	PAGE
CONNECT PCV & EVAP LINES, THROTTLE CONNECTORS.	51

TORQUE ? ITEM NUMBER OPERATION







10 Begin the installation process for the cooling fan by starting to thread it on the water pump shaft.

20 Clip the bottom portion of the fan shroud to the upper portion. There is one clip on either side of the lower shroud.

30 Reinstall one push pin from each side of the fan shroud where the upper and lower halves meet.

ITEM	PART NUMBER	QTY.	DESCRIPTION

Notes:

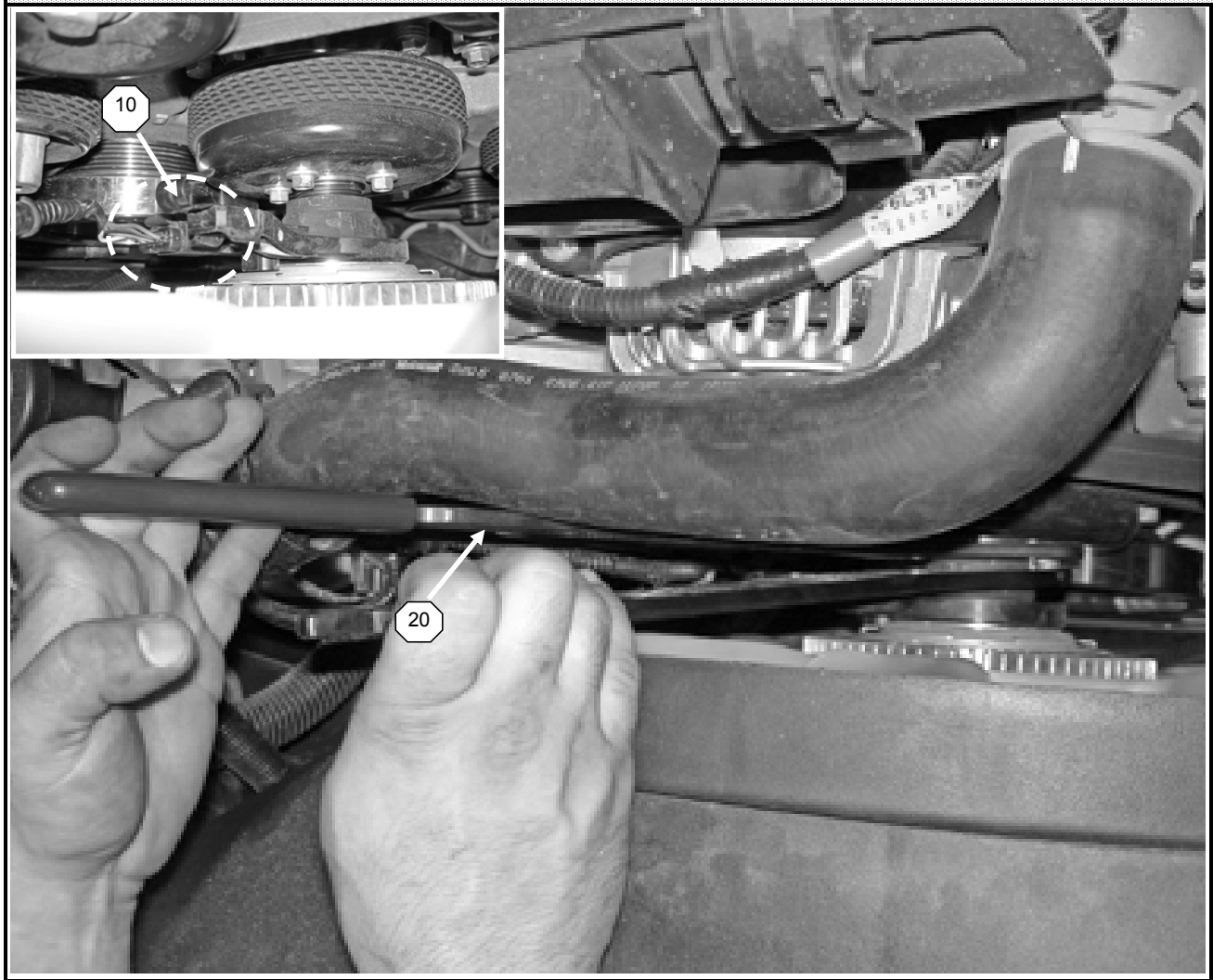
TORQUE

SALEEN

PROCESS NAME: INSTALL FAN & SHROUD

PAGE 52

TORQUE ? ITEM NUMBER OPERATION



10 While holding the water pump steady, place a 48mm Spanner wrench on the fan hub nut. Using the other wrench, tighten the clutch assembly. The calculated torque spec is 98 lb-ft, so the assembly should be firmly tightened.

20 Reconnect the fan clutch harness connector.

***Saleen recommends using the following tools for this process.**

Schley Product Inc. Fan Clutch Wrench, Part #61600

Schley Product Inc. Spanner Wrench 48mm, Part #95210

ITEM	PART NUMBER	QTY.	DESCRIPTION

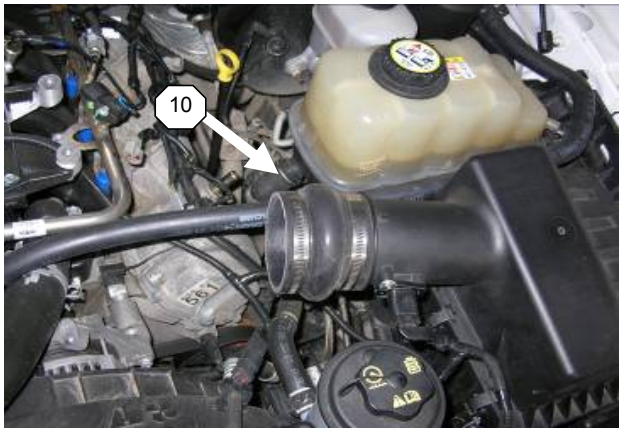
Notes:

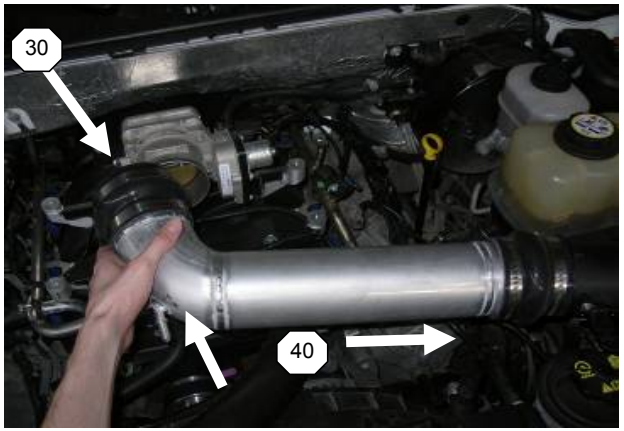
TORQUE

SALEEN

PROCESS NAME	PAGE
TIGHTEN MECHANICAL FAN	53

TORQUE ? ITEM NUMBER OPERATION





10 Install one of the silicone couplers **(A)** onto the airbox outlet using a hose clamp **(B)**. Set another hose clamp **(B)** onto the open end of the silicone coupler, but do not tighten it.

20 Install the other silicone coupler **(B)** onto the end of the zip tube indicated, using one of the hose clamps **(B)**.

30 Install a hose clamp **(B)** onto the open end of the silicone coupler, but do not tighten it.

40 Install the zip tube **(C)** by pushing the straight end into the silicone coupler on the airbox outlet, and then pushing the silicone coupler on the opposite end of the zip tube over the throttle body connection.

50 Install the PCV inlet tube by gently pushing the tube fittings onto the valve cover and zip tube ports until they click. The PCV tube should be oriented as shown for best fitment.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	00-1602-C18368	2	SILICONE HUMP COUPLER - 3.5IN
B	073-709	4	HOSE CLAMP #56 3 1/16"X4"
C	10-1602-C18237	1	ZIP TUBE ASSY - NAVIGATOR / EXPED

Notes:

TORQUE

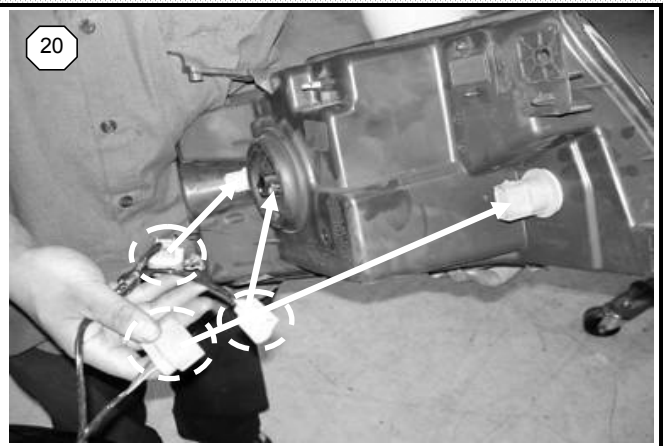
SALEEN

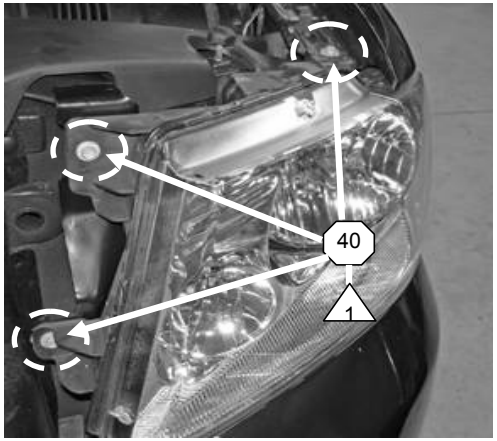
PROCESS NAME

INSTALL ZIP TUBE ASSEMBLY

PAGE

TORQUE ? ITEM NUMBER OPERATION





10	Retrieve Both LH and RH Headlamp Assemblies.
20	Find the three headlamp connectors and plug them into the proper bulbs on the headlamp assembly.
30	While gently pulling up on the tab, slide the headlamps into place.
40	Re-install six headlamp mounting bolts (3 per side) to bolt headlamps into place. Torque the headlamp bolts to **44 Lb-in**

ITEM	PART NUMBER	QTY.	DESCRIPTION

Notes:

TORQUE	
1	44 +/- 6.6 Lb-in

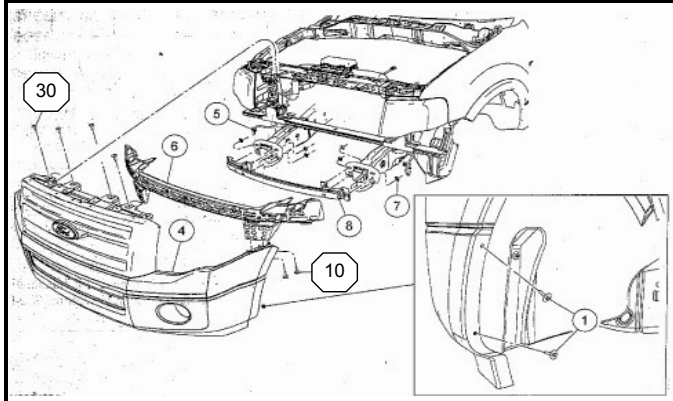
SALEEN

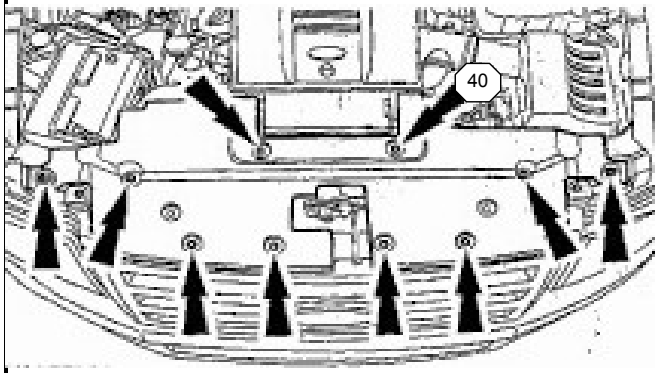
PROCESS NAME

RE-INSTALL HEADLAMPS (LH & RH)

PAGE

TORQUE ? ITEM NUMBER OPERATION





10	Reinstall the four front fascia to fender bolts on each side of the front fascia
20	If equipped, reconnect the fog lamp electrical connectors
30	Re-install the four grille to radiator support bolts
40	Place the upper air deflector in position on top of the front fascia + radiator. Secure with the stock 10 pin-type retainers.

ITEM	PART NUMBER	QTY.	DESCRIPTION

Notes:

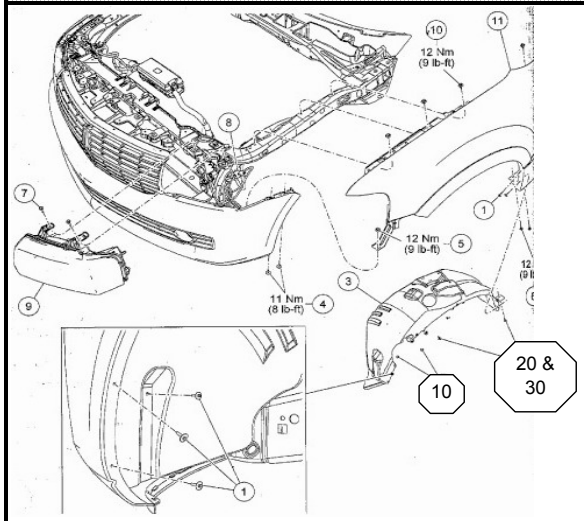
TORQUE	

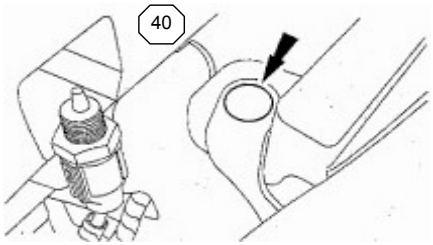
SALEEN

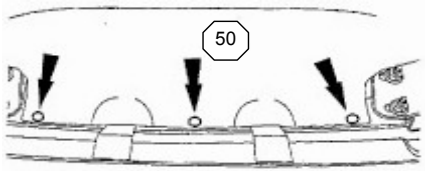
PROCESS NAME: RE-INSTALL FRONT FASCIA

PAGE 56

TORQUE ? ITEM NUMBER OPERATION







10	Put the wheel well liners back into place, and Re-install the 8 wheel well liner plastic screws
20	Re-install the lower pin-type retainer (there are three total, the others to be removed after the wheel well liner) to the fender
30	Re-install the 2 remaining pin-type retainers to the wheel well liner
40	Put the lower air deflector back into place underneath + behind the front fascia. Secure with the stock two upper pin-type retainers
50	Re-install the three lower air deflector pin-type retainers

ITEM	PART NUMBER	QTY.	DESCRIPTION

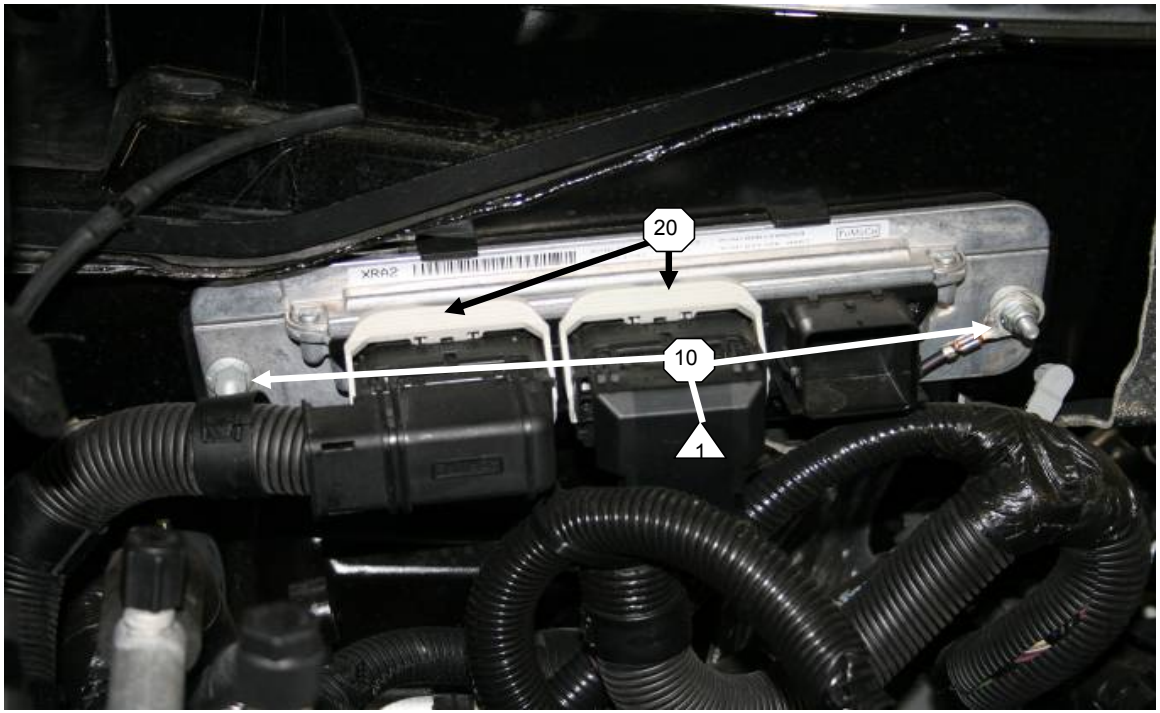
Notes:

TORQUE	

SALEEN

PROCESS NAME	PAGE
RE-INSTALL WHEEL WELL LINERS, AIR DEFLECTORS	57

TORQUE ? ITEM NUMBER OPERATION



10 Re-insert the Saleen-programmed PCM into its slot, and secure with the two stock bolts. Ensure the ring terminal at the end of the stock ground wire shown is on the driver's side bolt before installing. Torque both bolts to **62 Lb-in**

20 Secure the PCM harnesses to the PCM by sliding the connectors into place, then pushing the locking clips into the PCM. **Ensure the battery is disconnected when you do this or you may damage the PCM!**

ITEM	PART NUMBER	QTY.	DESCRIPTION

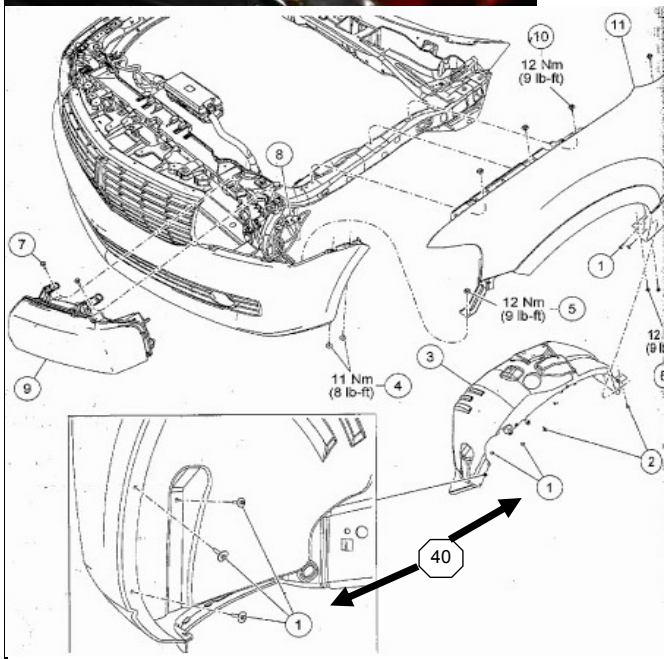
Notes:

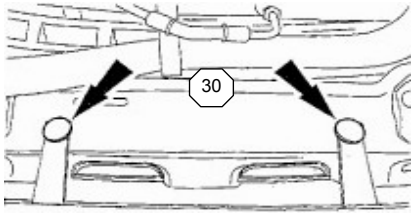
TORQUE	
1	62 Lb-in

SALEEN

PROCESS NAME	PAGE
RE-INSTALL PCM	58

TORQUE ? ITEM NUMBER OPERATION





10	Put the battery back into the tray and secure with the stock strap, and tighten the bolts
20	Reconnect the positive battery cable and secure with the stock hardware, using an 8 mm socket on ¼" drive ratchet. Then reconnect the ground cable.
30	Re-install the 2 front fascia lower pin-type retainers
40	Re-install the four plastic screws to the front of each wheel well liner
60	Raise the running board back into position
70	Re-program in all the radio station presets which you wrote down before the tear-down procedures.

ITEM	PART NUMBER	QTY.	DESCRIPTION

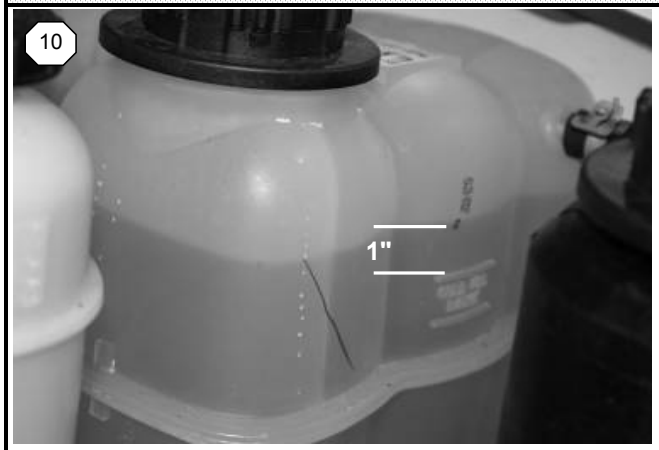
Notes:

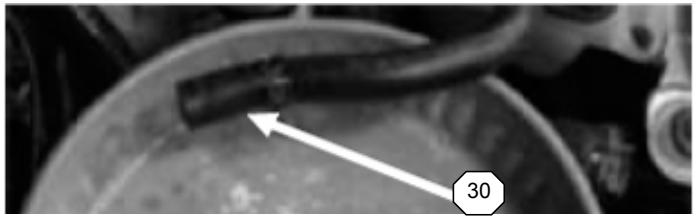
TORQUE	

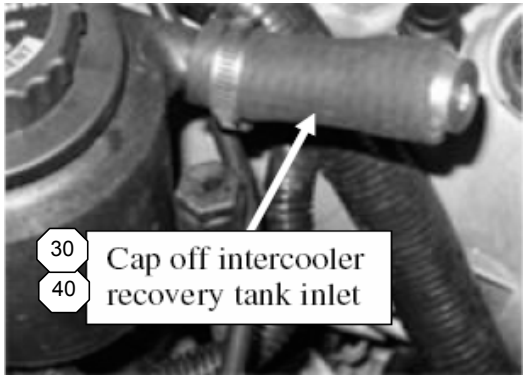
SALEEN

PROCESS NAME	PAGE
REMOVE HEAD LAMPS	59

TORQUE ? ITEM NUMBER OPERATION







10 Fill the engine coolant system with a 50/50 mix of ethylene glycol (anti-freeze) and water, as per the specifications in your owner's manual. The fluid should reach about 1" above the cold fill line in the recovery tank. The coolant level will drop once the vehicle has been run. Fill as needed to maintain level.

20 Fill the intercooler system with an 80/20 mix of water and ethylene glycol. The fluid should reach to 1 inch below the top of the recovery tank.

30 Remove the water pump to recovery tank hose **(A)** at the recovery tank inlet (horizontal tube on the side of the tank) and set into a drain pan.

40 Cap off the inlet to the intercooler recovery tank using a short piece of 3/4" hose that is plugged **securely** at one end. This cap-off assembly should be capable of withstanding 20 psi of pressure.

ITEM	PART NUMBER	QTY.	DESCRIPTION

TORQUE	

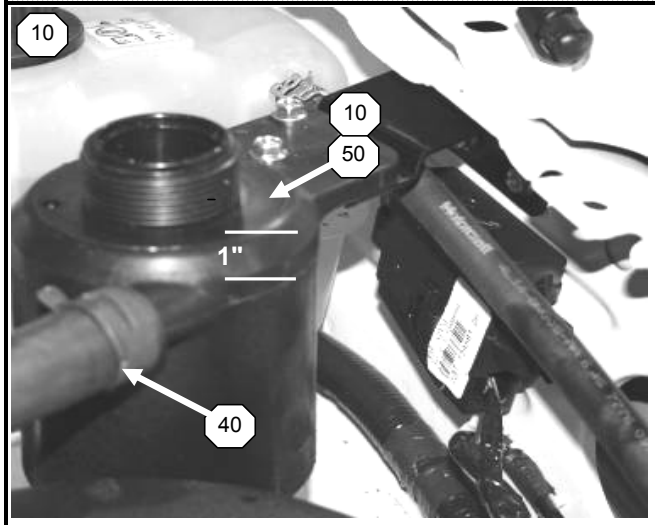
Notes:

SALEEN

PROCESS NAME: INSTALL COOLANT MIXTURE + BLEED INTERCOOLER SYSTEM

PAGE 60

TORQUE | ? ITEM NUMBER | OPERATION



***NOTICE: Refer to your Saleen manual for proper coolant mixture for your climate before proceeding.**

10 Ensure the fluid reaches to 1" from the top of the intercooler recovery tank.

20 Attach the coolant system pressure test tool to the opening of the intercooler recovery tank.

30 Actuate the pressure tool untill coolant flows out of the hose and into the drain pan. **MAKE SURE THE TANK DOES NOT RUN DRY**.

40 Remove the capped hose from the horizontal tube on the side of the recovery tank, and re-attach the water pump to recovery tank hose **(A)** re-installing the designated clamp **(B)** and hose.

50 Remove the pressure tool and fill the intercooler tank 1" from the top. Then re-install the intercooler recovery tank cap **(C)**.

Remove the engine coolant reservoir cap. Start the engine. Check for fuel leaks along the fuel rail and feed hose junction. Check for coolant leaks at all engine coolant hose junctions and at all intercooler hose junctions. Check the accessory drive belt and ensure it is running along all pulleys in the proper place - within the grooves for grooved pulleys.

Do not let the engine coolant reservoir run dry. After shutting off the engine and allowing it to cool completely, ensure the fluid level is up to the top of the cold fill range.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	10-2003-C16888		HOSE I/C TANK TO WATER PUMP,NAV/
B	00-2003-C10068	1	Hose Clamp

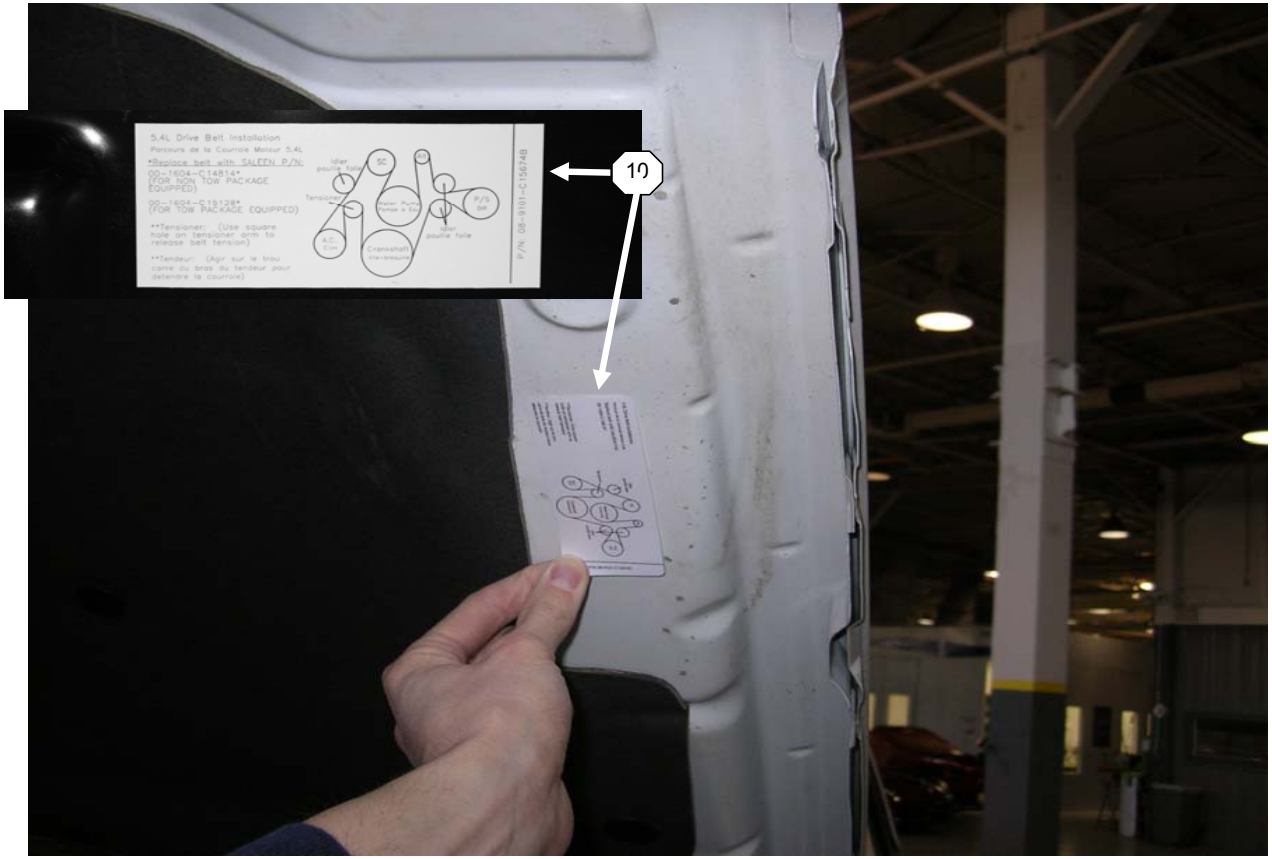
Notes:

TORQUE	

SALEEN

PROCESS NAME	PAGE
BLEED INTERCOOLER SYSTEM	61

TORQUE ? ITEM NUMBER OPERATION



10 Clean the underside of the hood with alcohol or prep solvent, and mount Belt Routing Diagram **(A)** on the inner skin of hood on the driver side of the hood latch.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	08-9101-C15674	1	Label, Belt Diagram S/C

Notes:

TORQUE

SALEEN

PROCESS NAME: INSTALL DECALS

TORQUE ? ITEM NUMBER OPERATION

10 Prep the backside of the fuel door and install the Premium Fuel Only decal **(A)** as shown.

20 Prep the oil filler cap and install the oil filler cap decal **(B)**.

ITEM	PART NUMBER	QTY.	DESCRIPTION
A	06-9101-C10151	1	Premium Fuel Only Decal
B	06-9101-C17108	1	Oil Filler Cap Decal

Notes:

TORQUE

SALEEN

PROCESS NAME

INSTALL DECALS

PAGE