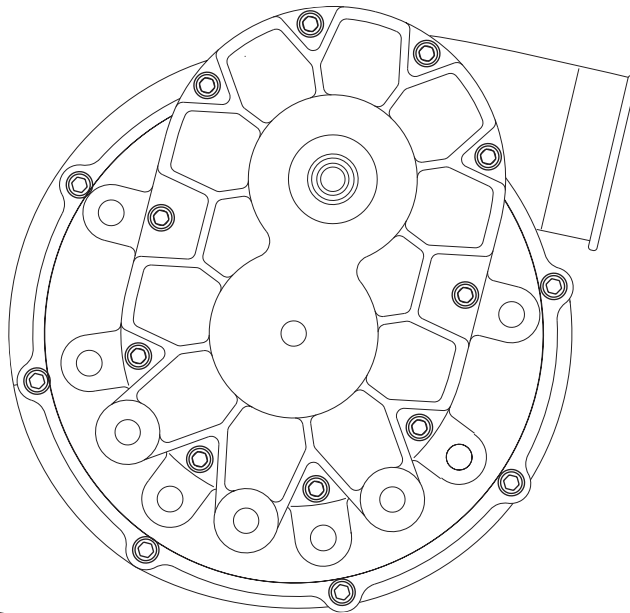


Ford 5.0L Mustang GT Supercharger System Installation Instructions

2024-2026 MUSTANG GT TUNER KIT
NOT LEGAL FOR STREET USE



ENGINEERING, INC

1650 Pacific Avenue, Channel Islands, CA 93033-9901 • Phone (805) 247-0226
Fax: (805) 247-0669 • www.vortechsuperchargers.com • M-F 7:00 AM - 3:30 PM (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 7:00am-3:30pm 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 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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NOTICE

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, Inc. 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, Inc.

2024-2027 Mustang GT

Installation Instructions

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

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

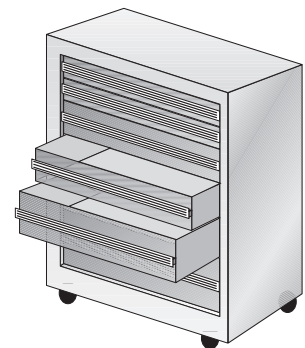
Installation on new vehicles will not harm or adversely affect the break-in period so long as factory break-in procedures are followed.

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

1. Use only premium grade fuel 91 octane or higher (R+M/2).
2. The engine must have stock compression ratio.
3. If the engine has been modified in any way, check with Vortech prior to using this product.
4. Always listen for any sign of detonation (pinging) and discontinue hard use (no boost) until problem is resolved.
5. Before beginning installation, replace all spark plugs that are older than 1-year or 15,000 miles with original heat range plugs as specified by the manufacturer and reset timing to factory specifications (follow the procedures indicated within the factory repair manual and/or as indicated on the factory underhood emissions tag). Do not use platinum spark plugs unless they are original equipment. Change spark plugs every 15,000 miles.
6. **Oil-Fed Units Only:** 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. 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.

Tool and supply requirements:

- 3/8" ratchet and drive set: SAE and metric
- Open end wrenches: SAE and metric
- 3/8" ratchet extensions
- Screwdriver set
- Hose cutters
- Utility knife
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-
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If it has been one year or 15,000 miles or more since your vehicle's last spark plug change, then you will also need:

- Spark plug socket
- NEW spark plugs



2024-2027 FORD MUSTANG GT

Tuner Kit Part No. 4FQ218-820L

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 NUMBER	DESCRIPTION	QTY.
008110	SMALL SILVER DIE CUT DECAL	2	4FQ110-010	WINDSHIELD WASHER ASSEMBLY	
008130	LICENSE PLATE FRAME, VORTECH	1	4GE055-020	CAP, BTTRS THRD UNVENTED 2-1/4	1
008447	1 YR S/C STRT INFO PKG ASY	1	4FQ055-010	2024 MUSTANG WSHR FLD RES	1
009035	S/C LUBE, BOTTLED, 3-PACK	1	4FQ010-310	WINDSHIELD WASHER RES BRACKET	1
2A046-955	BELT, K060956, GATES	1	4FQ010-300	WASHER TANK BRACKET	1
2F329-270	S/C, V-3 JT, 2024 MSTG GT, SAT	1	7P375-020	3/8 NPT X 5/8 HOSE BARB, BEADED	1
5A002-080	MAP SENSOR, GT500	1	7J312-000	5/16 FLAT WASHER-SAE	8
XP-3214	2024 MUSTANG HORN BRACKET	1	7A312-075	5/16-18 X 3/4 HHCS, GR5, ZINC	4
4FQ020-040	INSTR MAN, 2024 MUSTANG	1	7F312-018	5/16-18 NUT USS PLTD	4
4FQ111-031	MNTG BRKT ASY		7R004-004	STEPLESS CLAMP, 25.6 X 7MM WID 1"	2
4FQ010-200	MOUNTING BRACKET FRONT	1	7A250-037	1/4-20 X .375 SHCS PLTD	2
4FQ010-210	MOUNTING BRACKET REAR	1	8N056-060	SURGE TANK, PLASTIC	1
7C080-220	M8X1.25X225MM STUD,	1	7P500-026	1/2NPT X 3/4 BARB 90 BRASS	1
7F008-023	NUT, M8 X 1.25 NYLOCK NUT	2	7P500-078	1/2NPT X 3/4 HOSE FIT STRT	1
2A017-980-203	STNDOF IDLR PLY, 469ID, .980OD, .2036L	2	8N055-050	PLASTIC CAP, SURGE TANK	1
2A017-115	SPACER, .433ID X 1.195L, 2024 MUST, 6 RIB	1	7U033-000	5/8" PCV/EEC RUBBER HOSE	2FT
7C010-185	M10 X 1.50 X 185 STUD	1	4FQ112-200	AIR INLET ASSEMBLY SAT	
7A375-500	3/8-16 X 5" HX HD GRADE 8	1	4FQ012-300	AIR INLET TUBE, 2024 MUSTANG	1
2A017-880-324	STND OFF, .397ID, .880OD, 3.24L	1	8H040-235	AIR FILTER, 4" FLG X 7.0L	1
7GL10-150	NUT, M10 X 1.5 NYLOCK	1	7P625-024	FITTING, PCV, GT500 VTS	1
2A017-875-443	STNDOF, .354ID, .875OD, 4.435L	1	7P625-378	FTG, 3/8 QUICK CONN TO 3/8 NPT	1
7J438-081	7/16 SAE WASHER PLATED	1	7PS400-200	SLEEVE, BLACK 4.0D X 2.0	1
7B437-400	7/16-20 X 3.5" HX HD GR5	1	7R002-064	#64 SAE TYPE F SS HOSE CLAMP	2
7F438-001	7/16-20 JAM NUT, PLATED	1	7R002-072	#72 SAE TYPE F SS HOSE CLAMP	1
2A017-154	SPACER, .154" IDLER PILOT	1	7P625-625	90 DEG 5/8 X 15.82MM QUICK CONNCT	1
7A375-126	3/8-16 X 1.25 HHCS, GR8, PLT	3	7P625-378	FTG, 3/8 QUICK CONN TO 3/8 NPT	1
7K375-040	3/8 AN960 FLAT WASHER PLATED	4	4FQ114-050	COOLANT HOSE MOD ASSY	
7J312-002	WASHER, 8.4MM ID X 17MM OD	4	4FV014-010	Ø1.5" FORD THERMOSTAT HOUSING	1
7J010-002	WASHER, M10 X .06 FLAT, ZN PLT	1	7U133-050	1.5" X 90 HOSE, LONG LEG	2
7C080-115	M8 X 1.25 X 115MM STUD	1	7R002-012	#12 SAE TYPE F SS HOSE CLAMP	2
2A017-980-189	SPCR IDR PLY, .534ID, .980OD, 1.895L	1	7P375-075	3/4" HOSE BARB UNION, BRASS	1
1210517	ASY, IDLER PLY, SMOOTH 6RIB	2	7U038-012	HOSE, 3/4 DIA 90 , 4 X 12 LEGS	1
4FQ212-200	AIR DISCHARGE ASSEMBLY SAT		5W001-082	SLEEVE, FLEX BRAID .75" NOM.	15"
4FQ012-210	2024 MUST DISCHARGE TUBE D	1	4FQ014-010	2024 MSTNG UPPER CLNT HOSE S SHAPE	1
4FQ012-040	DISCH TUBE A, MSTG GT, 3"X90 ,R4.5	1	4FQ010-010	2024 MUSTANG OVRFLW CLNT RES BRKT	1
7PS300-200	SLEEVE, BLACK, 3.00D X 2.00	1	4FQ014-020	2024 COOLANT HOSE TUBE A	1
7PS300-301	BUMP HOSE, 3.00D X 3.00L	1	4FQ139-100	PCV MOD ASSY	
7PS300-300	SLEEVE, BLACK, 3.00D X 3.00	2	7P375-106	PCV VALVE, FORD, 3/8" HOSE	1
7PS350-303	BUMP HOSE, 3.50D X 3.00L	1	7U033-000	5/8" FUEL LINE/PCV/EEC RUBBER HOSE	2.5FT
7R002-056	#56 SAE TYPE F SS HOSE CLAMP	7	7U030-056	3/8" FUEL LINE/PCV/EEC RUBBER HOSE	4.25FT
8D204-064	ASSY, RACE BYPASS VALVE	1	7R004-004	STEPLESS CLAMP, 25.6 X 7MM WID 1"	4
8D006-001	MAXFLOW/ BV57 ADAPTER FLANGE	1	7R004-002	STEPLESS CLAMP, 17.0-70	2
4FQ010-120	MNT TAB, 2024 MSTNG	1	7P625-375	REDUCER, 5/8 BARB TO 3/8 BARB	1
4FQ012-200	2024 MUST DISCH. TUBE C	1	5W001-082	SLEEVE, FLEX BRAID .75" NOM.	1
4FQ101-001	MAF EXTENSION, 2024 MUSTANG	1	5W001-039	1" HEAT SHRINK TUBING	3
7J080-002	WASHER, M8 X 1.8 FLAT, ZN PLT	1			
7F008-021	NUT, M8 X 1.25, SERRATED FLG	1			
7C080-025	M8 X 1.25 X 25 HXHD	1			
7S350-140	2024 MUSTANG, 140 DEG. SLEEVE	2			
4FQ012-220	2024 MUSTANG, DISCH TUBE E 125 DEG.	1			
4GA012-030	DISCH TUBE, SAT BBC V-15,V-17,BLK	1			
7P500-252	VAC TEE 1/2" X 1/2" X 1/4"	1			
7R002-048	#48 SAE TYPE F SS HOSE CLAMP	11			
4FQ112-040	2024 MUSTANG, Y ASSY, DISCH TUBE	1			



2024-2027 FORD MUSTANG GT

Tuner kit Part No. 4FQ218-824L

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 NUMBER	DESCRIPTION	QTY.
008110	SMALL SILVER DIE CUT DECAL	2	4FQ110-010	WINDSHIELD WASHER ASSEMBLY	
008130	LICENSE PLATE FRAME, VORTECH	1	4GE055-020	CAP, BTTRS THRD UNVENTED 2-1/4	1
008447	1 YR S/C STRT INFO PKG ASY	1	4FQ055-010	2024 MUSTANG WSHR FLD RES	1
009035	S/C LUBE, BOTTLED, 3-PACK	1	4FQ010-310	WINDSHIELD WASHER RES BRACKET	1
2A046-955	BELT, K060956, GATES	1	4FQ010-300	WASHER TANK BRACKET	1
2F329-274	S/C, V-3 JT, 2024 MSTG GT, SAT	1	7P375-020	3/8 NPT X 5/8 HOSE BARB, BEADED	1
5A002-080	MAP SENSOR, GT500	1	7J312-000	5/16 FLAT WASHER-SAE	8
XP-3214	2024 MUSTANG HORN BRACKET	1	7A312-075	5/16-18 X 3/4 HHCS, GR5, ZINC	4
8PN101-050	WELDED CORE ASSY, MUST GT	1	7F312-018	5/16-18 NUT USS PLTD	4
4FQ020-040	INSTR MAN, 2024 MUSTANG	1	7R004-004	STEPLESS CLAMP, 25.6 X 7MM WID 1"	2
			7A250-037	1/4-20 X .375 SHCS PLTD	2
			8N056-060	SURGE TANK, PLASTIC	1
			7P500-026	1/2NPT X 3/4 BARB 90 BRASS	1
			7P500-078	1/2NPT X 3/4 HOSE FIT STRT	1
			8N055-050	PLASTIC CAP, SURGE TANK	1
			7U033-000	5/8" PCV/EEC RUBBER HOSE	2FT
4FQ111-031	MNTG BRKT ASY				
4FQ010-200	MOUNTING BRACKET FRONT	1	4FQ112-204	AIR INLET ASSEMBLY BLK	
4FQ010-210	MOUNTING BRACKET REAR	1	4FQ012-304	AIR INLET TUBE, 2024 MUSTANG	1
7C080-220	M8X1.25X225MM STUD,	1	8H040-235	AIR FILTER, 4" FLG X 7.0L	1
7F008-023	NUT, M8 X 1.25 NYLOCK NUT	2	7P625-024	FITTING, PCV, GT500 VTS	1
2A017-980-203	STNDOF IDLR PLY.469ID.,980OD.,2036L	2	7P625-378	FTG, 3/8 QUICK CONN TO 3/8 NPT	1
2A017-115	SPACER .433ID X 1.195L, 2024 MUST, 6 RIB	1	7PS400-200	SLEEVE, BLACK 4.0D X 2.0	1
7C010-185	M10 X 1.50 X 185 STUD	1	7R002-064	#64 SAE TYPE F SS HOSE CLAMP	2
7A375-500	3/8-16 X 5" HX HD GRADE 8	1	7R002-072	#72 SAE TYPE F SS HOSE CLAMP	1
2A017-880-324	STND OFF,.397ID.,880OD, 3.24L	1	7P625-625	90 DEG 5/8 X 15.82MM QUICK CONNCT	1
7GL10-150	NUT, M10 X 1.5 NYLOCK	1	7P625-378	FTG, 3/8 QUICK CONN TO 3/8 NPT	1
2A017-875-443	STNDOF,.354ID.,875OD, 4.435L	1			
7J438-081	7/16 SAE WASHER PLATED	1	4FQ114-050	COOLANT HOSE MOD ASSY	
7B437-400	7/16-20 X 3.5" HX HD GR5	1	4FV014-010	Ø1.5" FORD THERMOSTAT HOUSING	1
7F438-001	7/16-20 JAM NUT, PLATED	1	7U133-050	1.5" X 90 HOSE, LONG LEG	2
2A017-154	SPACER., .154" IDLER PILOT	1	7R002-012	#12 SAE TYPE F SS HOSE CLAMP	2
7A375-126	3/8-16 X 1.25 HHCS, GR8, PLT	3	7P375-075	3/4" HOSE BARB UNION, BRASS	1
7K375-040	3/8 AN960 FLAT WASHER PLATED	4	7U038-012	HOSE, 3/4 DIA 90 , 4 X 12 LEGS	1
7J312-002	WASHER, 8.4MM ID X 17MM OD	4	5W001-082	SLEEVE, FLEX BRAID .75" NOM.	15"
7J010-002	WASHER, M10 X .06 FLAT, ZN PLT	4	4FQ014-010	2024 MSTNG UPPER CLNT HOSE S SHAPE	1
7C080-115	M8 X 1.25 X 115MM STUD	1	4FQ010-010	2024 MUSTANG OVRFLW CLNT RES BRKT	1
2A017-980-189	SPCR IDR PLY.,534ID.,980OD,1.895L	1	4FQ014-020	2024 COOLANT HOSE TUBE A	1
1210517	ASY, IDLER PLY, SMOOTH 6RIB	2			
4FQ212-204	AIR DISCHARGE ASSEMBLY BLK		4FQ139-100	PCV MOD ASSY	
4FQ012-210	2024 MUST DISCHARGE TUBE D	1	7P375-106	PCV VALVE, FORD, 3/8" HOSE	1
4FQ012-044	DISCH TUBE A, MSTG GT, 3"X90 ,R4.5	1	7U033-000	5/8" FUEL LINE/PCV/EEC RUBBER HOSE	.2.7FT
7PS300-200	SLEEVE, BLACK, 3.00D X 2.00	1	7U030-056	3/8" FUEL LINE/PCV/EEC RUBBER HOSE	4.25F
7PS300-301	BUMP HOSE, 3.00D X 3.00L	1	7R004-004	STEPLESS CLAMP, 25.6 X 7MM WID 1"	4
7PS300-300	SLEEVE, BLACK, 3.00D X 3.00	2	7R004-002	STEPLESS CLAMP, 17.0-70	2
7PS350-303	BUMP HOSE, 3.50D X 3.00L	1	7P625-375	REDUCER, 5/8 BARB TO 3/8 BARB	1
7R002-056	#56 SAE TYPE F SS HOSE CLAMP	7	5W001-082	SLEEVE, FLEX BRAID .75" NOM.	1
8D204-064	ASSY, RACE BYPASS VALVE	1	5W001-039	1" HEAT SHRINK TUBING	3
8D006-001	MAXFLOW/ BV57 ADAPTER FLANGE	1			
4FQ010-120	MNT TAB, 2024 MSTNG	1			
4FQ012-200	2024 MUST DISCH. TUBE C	1			
4FQ101-001	MAF EXTENSION, 2024 MUSTANG	1			
7J080-002	WASHER, M8 X 1.8 FLAT, ZN PLT	1			
7F008-021	NUT, M8 X 1.25, SERRATED FLG	1			
7C080-025	M8 X 1.25 X 25 HXHD	1			
7S350-140	2024 MUSTANG, 140 DEG. SLEEVE	2			
4FQ012-224	2024 MUSTANG,DISCH TUBE E 125 DEG.	1			
4GA012-034	DISCH TUBE, SAT BBC V-15,V-17,BLK	1			
7P500-252	VAC TEE 1/2" X 1/2" X 1/4"	1			
7R002-048	#48 SAE TYPE F SS HOSE CLAMP	11			
4FQ112-044	2024 MUSTANG, Y ASSY, DISCH TUBE	1			



2024-2027 FORD MUSTANG GT

Tuner Kit Part No. 4FQ218-828L

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 NUMBER	DESCRIPTION	QTY.
008110	SMALL SILVER DIE CUT DECAL	2	4FQ110-010	WINDSHIELD WASHER ASSEMBLY	
008130	LICENSE PLATE FRAME, VORTECH	1	4GE055-020	CAP, BTTRS THRD UNVENTED 2-1/4	1
008447	1 YR S/C STRT INFO PKG ASY	1	4FQ055-010	2024 MUSTANG WSHR FLD RES	1
009035	S/C LUBE, BOTTLED, 3-PACK	1	4FQ010-310	WINDSHIELD WASHER RES BRACKET	1
2A046-955	BELT, K060956, GATES	1	4FQ010-300	WASHER TANK BRACKET	1
2F329-278	S/C, V-3 JT, 2024 MSTG GT, SAT	1	7P375-020	3/8 NPT X 5/8 HOSE BARB, BEADED	1
5A002-080	MAP SENSOR, GT500	1	7J312-000	5/16 FLAT WASHER-SAE	8
XP-3214	2024 MUSTANG HORN BRACKET	1	7A312-075	5/16-18 X 3/4 HHCS, GR5, ZINC	4
4FQ020-040	INSTR MAN, 2024 MUSTANG	1	7F312-018	5/16-18 NUT USS PLTD	4
4FQ111-031	MNTG BRKT ASY		7R004-004	STEPLESS CLAMP, 25.6 X 7MM WID 1"	2
4FQ010-200	MOUNTING BRACKET FRONT	1	7A250-037	1/4-20 X .375 SHCS PLTD	2
4FQ010-210	MOUNTING BRACKET REAR	1	8N056-060	SURGE TANK, PLASTIC	1
7C080-220	M8X1.25X225MM STUD,	1	7P500-026	1/2NPT X 3/4 BARB 90 BRASS	1
7F008-023	NUT, M8 X 1.25 NYLOCK NUT	2	7P500-078	1/2NPT X 3/4 HOSE FIT STRT	1
2A017-980-203	STNDOF IDLR PLY,469ID,.980OD,.2036L	1	8N055-050	PLASTIC CAP, SURGE TANK	1
2A017-115	SPACER,.433ID X 1.195L, 2024 MUST, 6 RIB	1	7U033-000	5/8" PCV/EEC RUBBER HOSE	2FT
7C010-185	M10 X 1.50 X 185 STUD	1	4FQ112-208	AIR INLET ASSEMBLY POL	
7A375-500	3/8-16 X 5" HX HD GRADE 8	1	4FQ012-308	AIR INLET TUBE, 2024 MUSTANG,POL	1
2A017-880-324	STND OFF,.397ID,.880OD, 3.24L	1	8H040-235	AIR FILTER, 4" FLG X 7.0L	1
7GL10-150	NUT, M10 X 1.5 NYLOCK	1	7P625-024	FITTING, PCV, GT500 VTS	1
2A017-875-443	STNDOF,.354ID,.875OD, 4.435L	1	7P625-378	FTG, 3/8 QUICK CONN TO 3/8 NPT	1
7J438-081	7/16 SAE WASHER PLATED	1	7PS400-200	SLEEVE, BLACK 4.0D X 2.0	1
7B437-400	7/16-20 X 3.5" HX HD GR5	1	7R002-064	#64 SAE TYPE F SS HOSE CLAMP	2
7F438-001	7/16-20 JAM NUT, PLATED	1	7R002-072	#72 SAE TYPE F SS HOSE CLAMP	1
2A017-154	SPACER,.154" IDLER PILOT	1	7P625-625	90 DEG 5/8 X 15.82MM QUICK CONNCT	1
7A375-126	3/8-16 X 1.25 HHCS, GR8, PLT	3	7P625-378	FTG, 3/8 QUICK CONN TO 3/8 NPT	1
7K375-040	3/8 AN960 FLAT WASHER PLATED	4	4FQ114-050	COOLANT HOSE MOD ASSY	
7J312-002	WASHER, 8.4MM ID X 17MM OD	4	4FV014-010	Ø1.5" FORD THERMOSTAT HOUSING	1
7J010-002	WASHER, M10 X .06 FLAT, ZN PLT	1	7U133-050	1.5" X 90 HOSE, LONG LEG	2
7C080-115	M8 X 1.25 X 115MM STUD	1	7R002-012	#12 SAE TYPE F SS HOSE CLAMP	2
2A017-980-189	SPCR IDR PLY,.534ID,.980OD,1.895L	1	7P375-075	3/4" HOSE BARB UNION, BRASS	1
1210517	ASY, IDLER PLY, SMOOTH 6RIB	2	7U038-012	HOSE, 3/4 DIA 90 , 4 X 12 LEGS	1
4FQ212-208	AIR DISCHARGE ASSEMBLY POL		5W001-082	SLEEVE, FLEX BRAID .75" NOM.	15"
4FQ012-210	2024 MUST DISCHARGE TUBE D	1	4FQ014-010	2024 MSTNG UPPER CLNT HOSE S SHAPE	1
4FQ012-048	DISCH TUBE A, MSTG GT, 3"X90 ,R4.5	1	4FQ010-010	2024 MUSTANG OVRFLW CLNT RES BRKT	1
7PS300-200	SLEEVE, BLACK, 3.00D X 2.00	1	4FQ014-020	2024 COOLANT HOSE TUBE A	1
7PS300-301	BUMP HOSE, 3.00D X 3.00L	1	4FQ139-100	PCV MOD ASSY	
7PS300-300	SLEEVE, BLACK, 3.00D X 3.00	2	7P375-106	PCV VALVE, FORD, 3/8" HOSE	1
7PS350-303	BUMP HOSE, 3.50D X 3.00L	1	7U033-000	5/8" FUEL LINE/PCV/EEC RUBBER HOSE	.2.7FT
7R002-056	#56 SAE TYPE F SS HOSE CLAMP	7	7U030-056	3/8" FUEL LINE/PCV/EEC RUBBER HOSE	4.25FT
8D204-064	ASSY, RACE BYPASS VALVE	1	7R004-004	STEPLESS CLAMP, 25.6 X 7MM WID 1"	4
8D006-001	MAXFLOW/ BV57 ADAPTER FLANGE	1	7R004-002	STEPLESS CLAMP, 17.0-70	2
4FQ010-120	MNT TAB, 2024 MSTNG	1	7P625-375	REDUCER, 5/8 BARB TO 3/8 BARB	1
4FQ012-200	2024 MUST DISCH. TUBE C	1	5W001-082	SLEEVE, FLEX BRAID .75" NOM.	1
4FQ101-001	MAF EXTENSION, 2024 MUSTANG	1	5W001-039	1" HEAT SHRINK TUBING	3
7J080-002	WASHER, M8 X 1.8 FLAT, ZN PLT	1			
7F008-021	NUT, M8 X 1.25, SERRATED FLG	1			
7C080-025	M8 X 1.25 X 25 HXHD	1			
7S350-140	2024 MUSTANG, 140 DEG. SLEEVE	2			
4FQ012-228	2024 MUSTANG,DISCH TUBE E 125 DEG.	1			
4GA012-038	DISCH TUBE, SAT BBC V-15,V-17,BLK	1			
7P500-252	VAC TEE 1/2" X 1/2" X 1/4"	1			
7R002-048	#48 SAE TYPE F SS HOSE CLAMP	11			
4FQ112-048	2024 MUSTANG, Y ASSY, DISCH TUBE F	1			

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1. BASIC COMPONENT REMOVAL

A. PRIOR TO UNPLUGGING THE BATTERY, YOU WILL NEED TO ROLL DOWN BOTH WINDOWS AS YOU WILL BE WORKING WITHIN THE VEHICLE IN A LATER STEP. THIS IS DONE TO PREVENT POTENTIAL WINDOW DAMAGE AS BOTH WINDOWS REST WITHIN A CHANNEL IN THE BODY OF THE VEHICLE WHEN THEY ARE ROLLED UP.



B. REMOVE THE BATTERY COVER BY REMOVING THE 3X PLASTIC FASTENERS & PULLING THE BATTERY COVER FORWARD. UNPLUG THE BATTERY LEADS



C. IF YOUR VEHICLE IS EQUIPPED WITH A STRUT TOWER BRACE, REMOVE THE 4X 15MM-HEADED NUTS & REMOVE THE STRUT TOWER BRACE FROM THE VEHICLE

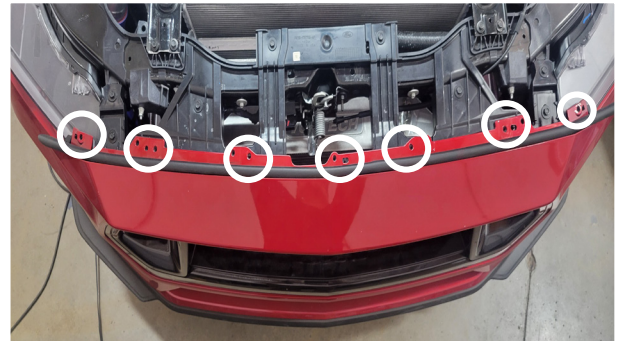


1. BASIC COMPONENT REMOVAL cont'd

D. REMOVE 8X PLASTIC FASTENERS SECURING THE BLACK PLASTIC COVER ABOVE THE GRILLE AND RADIATOR. POP THE CENTER SECTION OF EACH FASTENER UPWARD AND THEN THE LARGER PART OF THE FASTENER WILL LOOSEN. REMOVE THE COVER AND SET ASIDE FOR LATER RE-INSTALLATION.



E. REMOVE THE 7X 8MM-HEADED FASTENERS & 2X 5.5MM-HEADED FASTENERS SECURING THE FRONT BUMPER COVER TO THE UPPER RADIATOR SUPPORT.



F. REMOVE THE 4X PLASTIC FASTENERS SECURING THE FENDER LINERS TO THE FENDERS & LOWER SPLASH GUARD. TO REMOVE THESE FASTENERS, SIMPLY PUSH DOWN ON THE CENTER. DO THIS FOR BOTH SIDES.



1. BASIC COMPONENT REMOVAL cont'd

G. REMOVE THE LOWER SPLASH GUARD BY REMOVING THE 22X7MM-HEADED FASTENERS & 2X PLASTIC FASTENERS. POP THE CENTER SECTION OF EACH PLASTIC FASTENER UPWARD AND THEN THE LARGER PART OF THE FASTENER WILL LOOSEN.

NOTE: Performance-Pack Vehicle splash-guard shown in Fig. 1-g. Base-model vehicle splash guard may vary.

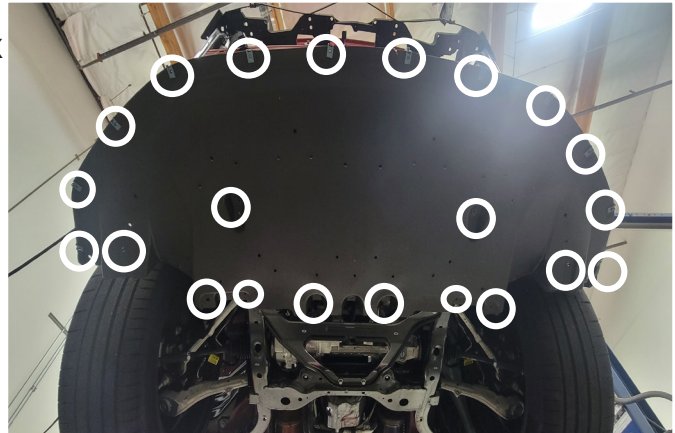


Fig. 1-g

H. REACH UP BEHIND THE FRONT BUMPER COVER & UNPLUG THE FRONT BUMPER ELECTRICAL CONNECTOR



Fig. 1-h

I. ON BOTH SIDES OF THE BUMPER, UNPLUG THE CONNECTORS ATTACHED TO THE SIDE MARKER LIGHTS.



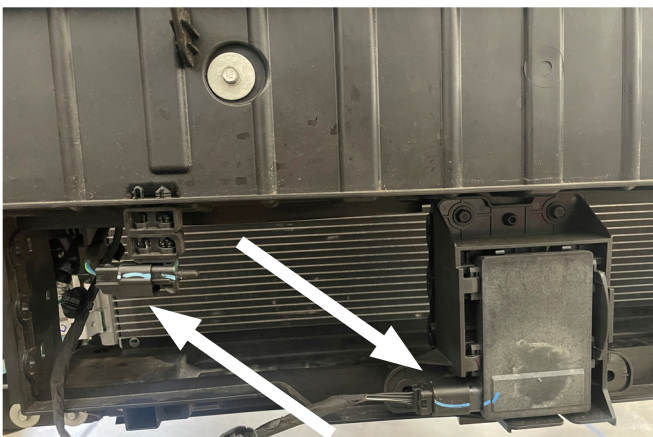
Fig. 1-i

1. BASIC COMPONENT REMOVAL cont'd

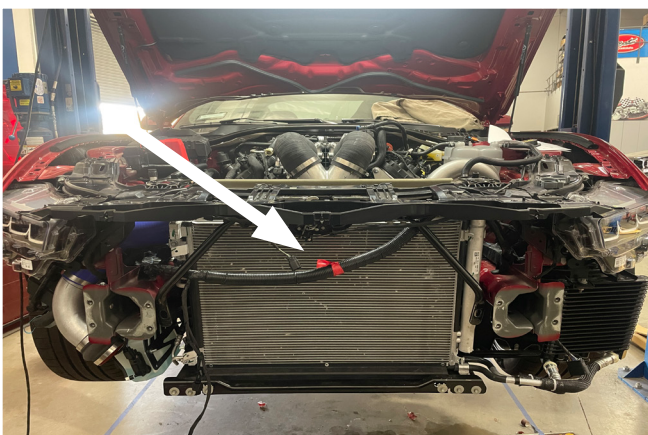
J. PULL THE CORNERS OF THE FRONT BUMPER COVER AWAY FROM THE FENDER. CAREFULLY REMOVE THE FRONT BUMPER COVER FROM THE VEHICLE, EXPOSING THE BUMPER SUPPORT.



K. UNPLUG THE TWO ELECTRICAL CONNECTORS FROM THE AMBIENT AIR TEMPERATURE SENSOR AND THE CCM CONNECTOR, THEN DETACH THE HARNESS FROM THE FRONT BUMPER SUPPORT.



L. YOU WILL NOTICE A WIRE HARNESS RUNNING ALONG THE BACK SIDE OF THE BUMPER SUPPORT SECURED BY 2X GRAY CLIPS. FREE THE HARNESS FROM THE BUMPER SUPPORT BY RELEASING THE GRAY CLIPS FROM THE HARNESS..



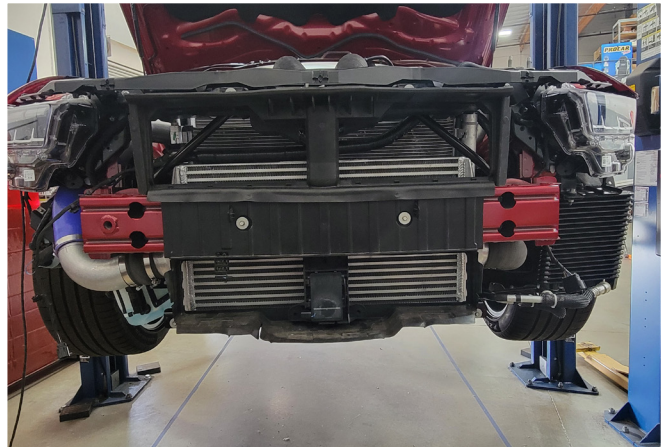
1. BASIC COMPONENT REMOVAL cont'd

M. RELEASE THE GRAY CLIPS FROM THE WIRE HARNESS & SET ASIDE. THESE WILL NOT BE REUSED.



N. REMOVE THE 6X 8MM SCREWS SECURING THE TOP OF THE ACTIVE GRILLE SHUTTERS TO THE UPPER RADIATOR SUPPORT

NOTE: IF EQUIPPED IT WILL BE NECESSARY TO REMOVE THE ACTIVE GRILL SHUTTERS.

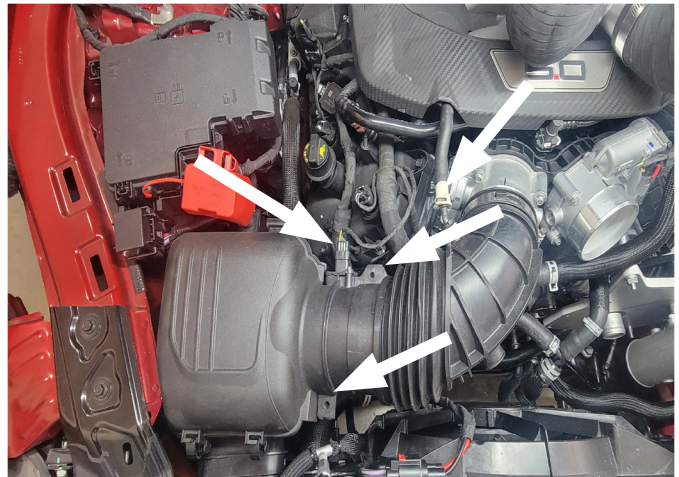


1. BASIC COMPONENT REMOVAL cont'd

P. REMOVE THE ENGINE COVER BY LIFTING IT STRAIGHT UP, DISCONNECT THE HOSES GOING TO THE INTAKE TUBES & PROCEED TO REMOVE THE INTAKE TUBES FROM THE VEHICLE, THEY WILL NOT BE REUSED.



Q. DISCONNECT THE MAF SENSOR CONNECTOR, AND THE HARNESS FROM THE AIR BOX TUBE ON BOTH THE DRIVER AND PASSENGER SIDE OF THE VEHICLE. REMOVE THE BOLTS SECURING THE AIR BOX TO THE VEHICLE. WITH THE FASTENERS REMOVED, PROCEED TO REMOVE THE AIR BOX ASSEMBLY FROM THE VEHICLE INCLUDING THE DUCTING LEADING INTO THE GRILL..

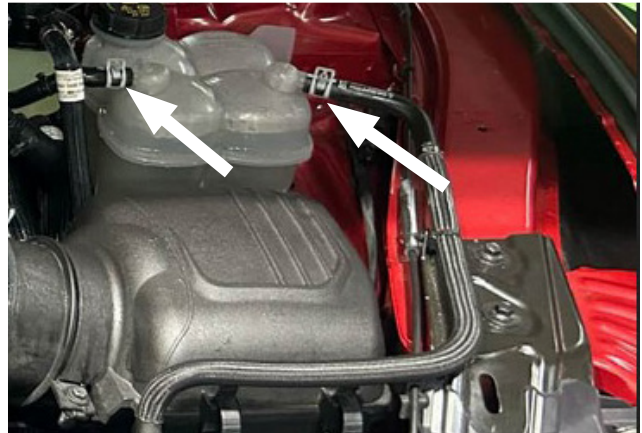


R. REMOVE THE PRESSURE CAP FROM THE ENGINE COOLANT RESERVOIR NEAR THE DRIVERS SIDE FRONT OF THE ENGINE COMPARTMENT. LOCATE THE ENGINE COOLANT DRAIN VALVE AT THE BOTTOM PASSENGER SIDE CORNER OF THE RADIATOR. OPEN THE VALVE AND DRAIN THE COOLANT INTO A CLEAN CONTAINER FOR LATER REUSE. DRAIN ENOUGH TO EMPTY THE RESERVOIR AND BELOW THE LEVEL OF THE UPPER RADIATOR HOSE.

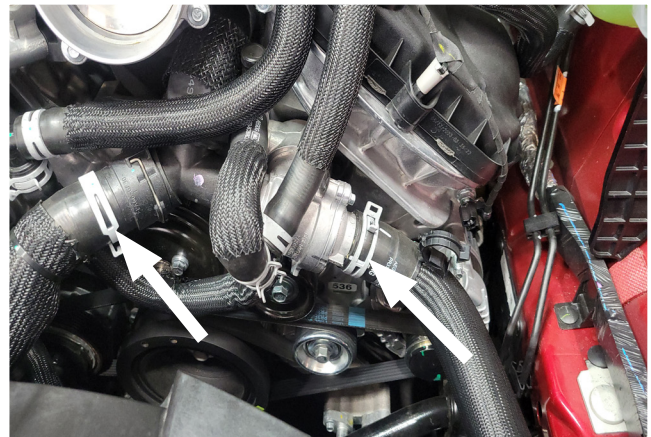


1. BASIC COMPONENT REMOVAL cont'd

S. UNCLAMP AND DISCONNECT THE 2X HOSES FROM THE UPPER PORTION OF THE COOLANT RESERVOIR. DISCONNECT THE LARGER HOSE FROM THE BOTTOM OF THE COOLANT RESERVOIR. BE PREPARED TO CATCH ANY SPILLAGE. REMOVE THE 2X 10MM-HEADED FASTENERS SECURING THE COOLANT RESERVOIR. REMOVE THE RESERVOIR AND SET IT ASIDE. IT WILL BE REUSED.



T. REMOVE THE LEFT SIDE UPPER RADIATOR HOSE CLAMP CONNECTION AND ITS LOWER CONNECTION AT THE T FITTING. REMOVE THE COOLANT HOSE TO THE RIGHT OF THE "Y" FITTING, ABOVE THE THERMOSTAT HOUSING FROM BOTH ENDS & ONCE BOTH HOSES ARE REMOVED, THEY WILL NO LONGER BE USED.

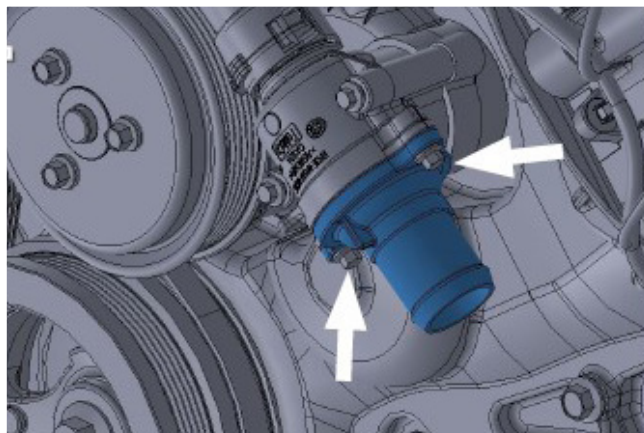


U. USE A 15MM WRENCH TO ROTATE THE BELT TENSIONER COUNTER-CLOCKWISE TO RELEASE TENSION FROM THE OUTER 6-RIB ACCESSORY DRIVE BELT. REMOVE THE BELT AND SET IT ASIDE AS IT WILL NOT BE REUSED.

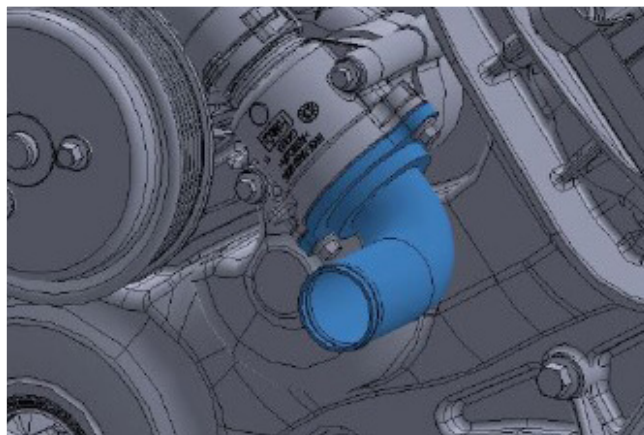


1. BASIC COMPONENT REMOVAL, cont'd

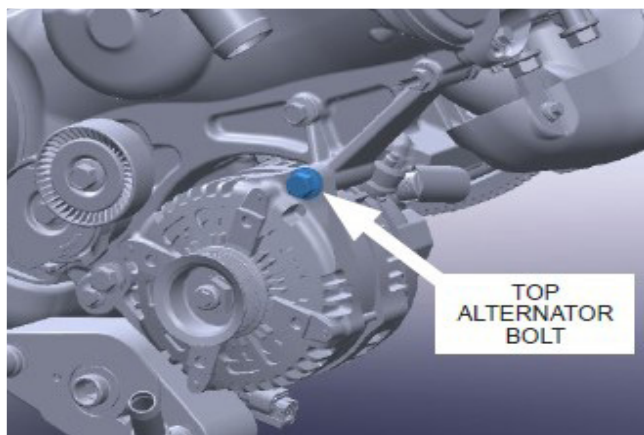
V USING AN 8MM SOCKET, REMOVE THE (X2) SCREWS SECURING THE THERMOSTAT INLET AND REMOVE IT, IT WILL NOT BE REUSED.



W. REPLACE THE THERMOSTAT INLET WITH THE SUPPLIED 90-DEGREE ASSEMBLY. TORQUE TO 85 LB-IN.



X. USING A 15MM SOCKET, REMOVE THE TOP ALTERNATOR MOUNTING BOLT. IT WILL BE REPLACED WITH A LONGER BOLT WHICH WILL SUPPORT THE REAR SUPERCHARGER MOUNTING BRACKET.



2. ENGINE COOLING SYSTEM MODIFICATION

A. IN ORDER TO PROVIDE ADEQUATE SPACE FOR THE DISCHARGE TUBES, THE UPPER RADIATOR BRACKETS WILL NEED TO BE MODIFIED IN ORDER TO TILT THE RADIATOR ASSEMBLY FORWARD. REMOVE THE (X2) 10MM- HEADED FASTENERS & REMOVE BOTH UPPER RADIATOR BRACKETS FROM THE VEHICLE.



B. ON THE UNDERSIDE OF THE RADIATOR BRACKETS, YOU WILL NOTICE 2X PROTRUDING TABS. USING A GRINDING TOOL, REMOVE THE (X2) PROTRUDING TABS.



C. LOCATE THE PROVIDED UPPER RADIATOR MODIFICATION TEMPLATE (ON PAGE 11). USING A RAZOR BLADE, CUT OUT THE 2X HOLES ON THE TEMPLATE WITH THE 2X ARROWS POINTING TOWARDS THEM. LINE UP THE "CUT OUT" HOLES TO THE EXISTING HOLES ON THE UNDERSIDE OF THE UPPER RADIATOR BRACKETS. SECURE THE TEMPLATES TO THE UPPER RADIATOR BRACKETS USING TAPE OR SPRAY-ON ADHESIVE. USE A CENTER PUNCH TO MARK THE CENTERS OF THE HOLES TO BE DRILLED.



2. ENGINE COOLING SYSTEM MODIFICATION CONT'D

D. USING A 9/32" DRILL BIT & DRILL MOTOR, DRILL OUT THE CENTER PUNCHED HOLES. ON THE HOLE THAT NEEDS TO BE SLOTTED, WE SUGGEST DRILLING OUT THE HOLE CLOSEST TO THE EDGE OF THE UPPER RADIATOR BRACKET, THEN USE A SMALL ROUND FILE TO SAFELY SLOT THE HOLE.

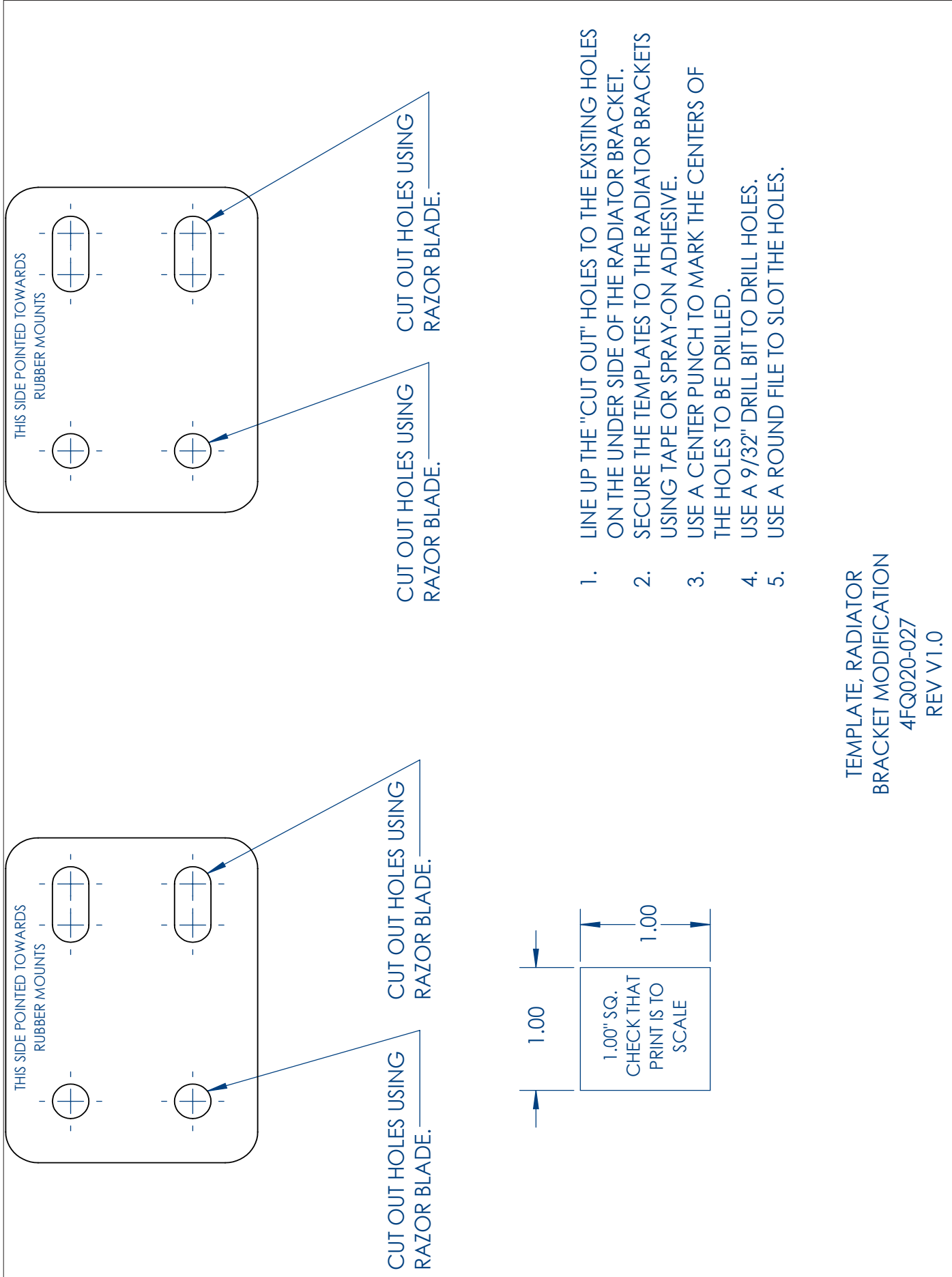


E. USING A CUTTING TOOL, THE ORIGINAL HOLES OF THE UPPER RADIATOR MOUNTING BRACKETS WILL NEED TO BE CUT OFF, JUST IN FRONT OF THE INDENTED SECTION OF THE UPPER RADIATOR BRACKET.



F. USING A GRINDING TOOL, GRIND DOWN THE RAISED EDGES NEAR THE FRONT OF THE UPPER RADIATOR BRACKETS DOWN TO A TAPER.



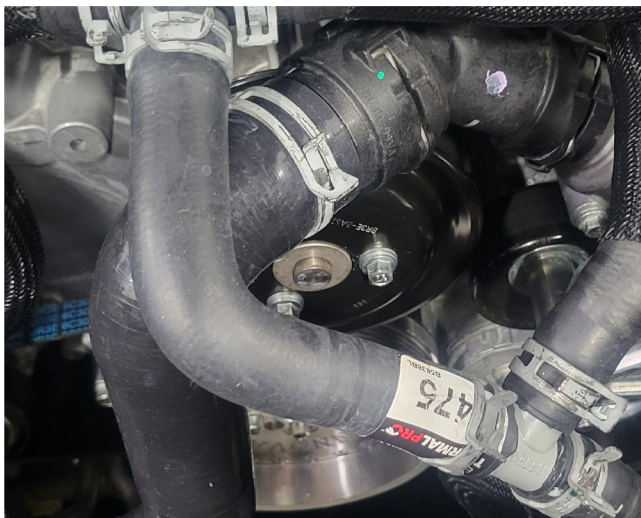


2. ENGINE COOLING SYSTEM MODIFICATION CONT'D

G. NOW THAT THE UPPER RADIATOR BRACKETS ARE MODIFIED, LOOSELY INSTALL THEM TO THE VEHICLE, BUT DO NOT SECURE THEM WITH ANY FASTENERS AT THIS TIME.



J. REPLACE FACTORY COOLANT TANK HOSE WITH THE SUPPLIED 90 DEG ELBOW. REUSE THE FACTORY CLAMPS FROM THE PREVIOUSLY REMOVED HOSE. IT MAY BE NECESSARY TO ADJUST THE ANGLE OF THE TEE FITTING TO MATCH THE 90 DEG. HOSE



K. INSTALL THE PREVIOUSLY ASSEMBLED UPPER RADIATOR HOSE ON TO THE VEHICLE AND TIGHTEN THE SUPPLIED CLAMPS. THE LOWER RADIATOR HOSE WILL BE INSTALLED IN A LATER STEP.



2. ENGINE COOLING SYSTEM MODIFICATON CONT'D

L. USING THE SUPPLIED 3/4" 90 DEG HOSE(7U038-012) BRASS HOSE UNION (7P375-075) AND 2X HOSE CLAMPS AND SHIELDING. ATTACH HOSE TO EXISTING COOLANT TANK HOSE AND ROUTE TO COOLANT TANK DRAIN PORT.



M. REMOVE THE FACTORY COOLANT BRACKET AND SET ASIDE AS IT WILL NOT BE REUSED. TRIT WILL BE NECESSARY TO TRIM THE LEFT MOUNTING TAB FROM THE COOLANT TANK



N. IN ORDER TO MAKE ROOM FOR THE SUPERCHARGER PULLEY, IT WILL BE NECESSARY TO TRIM THE LEFT FRONT EAR FROM THE COOLANT TANK TO CREATE SPACE



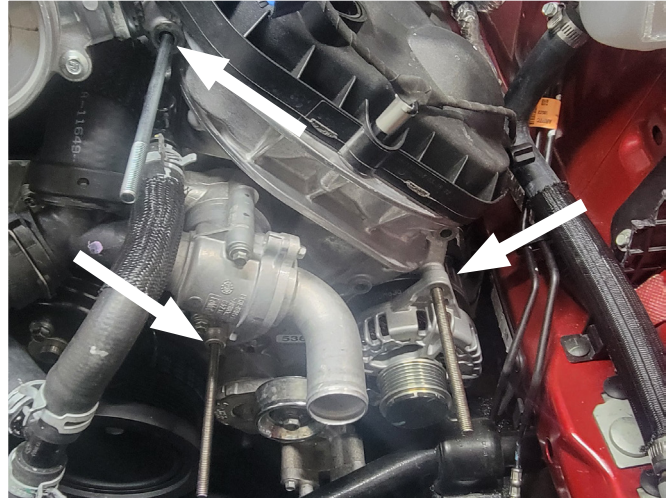
2. ENGINE COOLING SYSTEM MODIFICATON CONT'D

O.. INSTALL THE SUPPLED COOLANT TANK MOUNTING BRACKET USING THE 2 FACTORY BOLTS, DO NOT INSTALL THE COOLANT TANK AT THIS TIME, IT WILL BE INSTALLED IN A LATER STEP



3. SUPERCHARGER ASSEMBLY PREPARATION & INSTALLATION

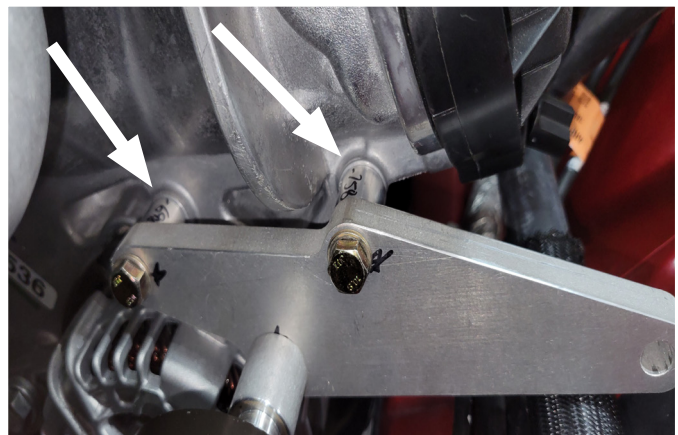
A. USING THE 3 SUPPLIED STUDS INSTALL THEM INTO THERE MOUNTING POSITIONS. (7C010-162) M10 STUD WILL BE POSITIONED IN THE UPPER ALTERNATOR BOLT HOLE. (7C080-100B) M8 STUD WILL GO INTO THE LOWER FACTORY IDLER PULLEY POSITION. (7C080-200) M8 STUD WILL GO INTO THE UPPER MOUNTING POSITION IN THE HEAD TO THE RIGHT OF OF THE THROTTLE BODY.



B. USING THE (X2) 7C080-090 M8 BOLTS AND (X2) 7J080-002 M8 WASHERS PLACE THE BOLTS THRU THE TWO UPPER BOLT HOLES IN THE REAR BRACKET. PLACE THE (X1) 2A017-758 SPACER ON THE RIGHT SIDE BOLT AND THE (X1) 2A017-698 SPACER ON THE LEFT SIDE BOLT.

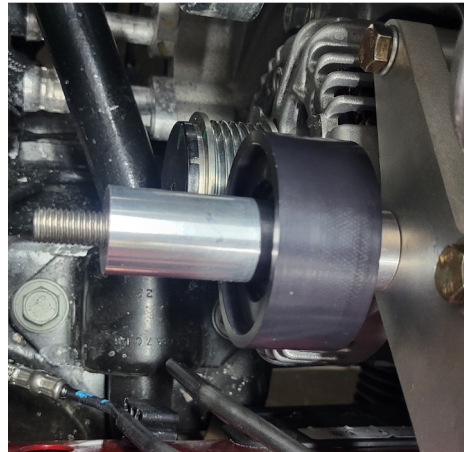


C. USING THE PREVIOUSLY ASSEMBLED REAR BRACKET, INSTALL THE TWO M8 BOLTS INTO THE TWO MOUNTING HOLES IN THE HEAD. MAKE SURE TO USE BLUE LOCTITE TO SECURE THE TWO BOLTS...



3. SUPERCHARGER ASSEMBLY PREPARATION & INSTALLATION, cont'd

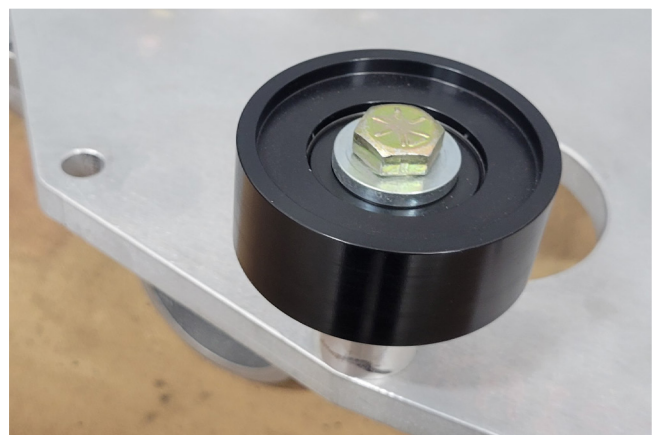
D. SLIDE (X1) 2A017-980-119" SPACER OVER THE STUD ON THE UPPER ALTERNATOR MOUNT.. SLIDE (X1) 1210517 IDLER PULLEY OVER THE STUD AND ONTO THE SPACER. SLIDE THE 2A017-980-208 SPACER OVER THE STUD AND INTO THE IDLER PULLEY..



E. USING THE SUPPLIED 1X 4FR016-150 AND 1X 2A017-980-208 SPACER PLACE THE PULLEY ON TO THE FACTORY SPACER LOCATION. SLIDE THE SPACER ON THE STUD AND INTO THE IDLER PULLEY..

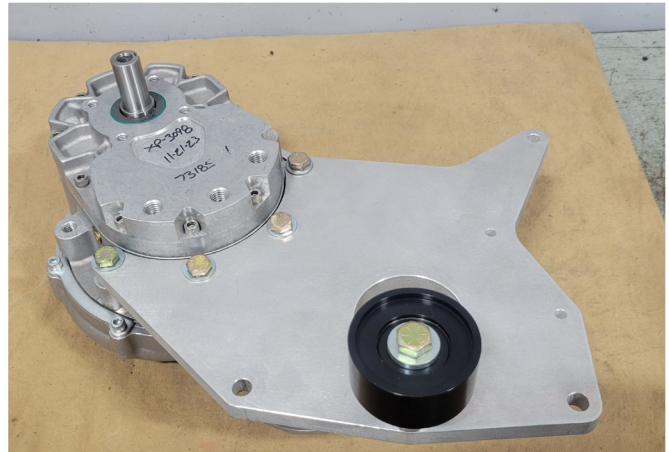


F. POSITION THE MOUNTING BRACKET ASSEMBLY IN THE ENGINE COMPARTMENT, THEN SLIDE THE 2X LOWER MOUNTING HOLES ONTO THE 2X M8 X 200MM STUDS, MAKING SURE THEY PASS THROUGH BOTH MOUNTING PLATES & THE 2X 2.730" SPACERS SANDWICHED IN BETWEEN THE MOUNTING PLATES.

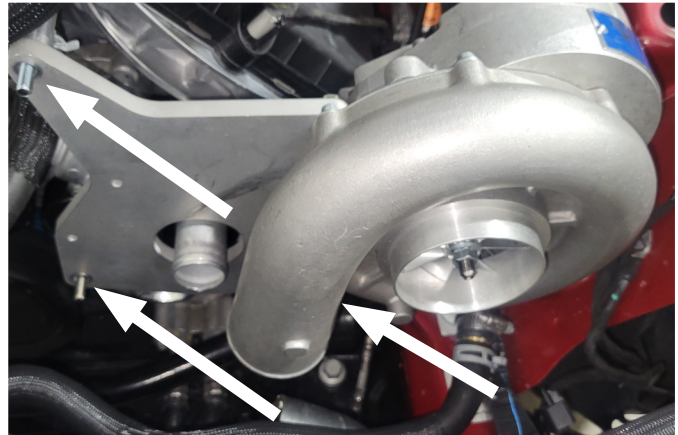


3. SUPERCHARGER ASSEMBLY PREPARATION & INSTALLATION, cont'd

G. MOUNT THE SUPERCHARGER TO THE FRONT MOUNTING PLATE USING THE 4X 7A375-100 BOLTS AND 4X. 7K375-040 3/8 AN WASHERS.



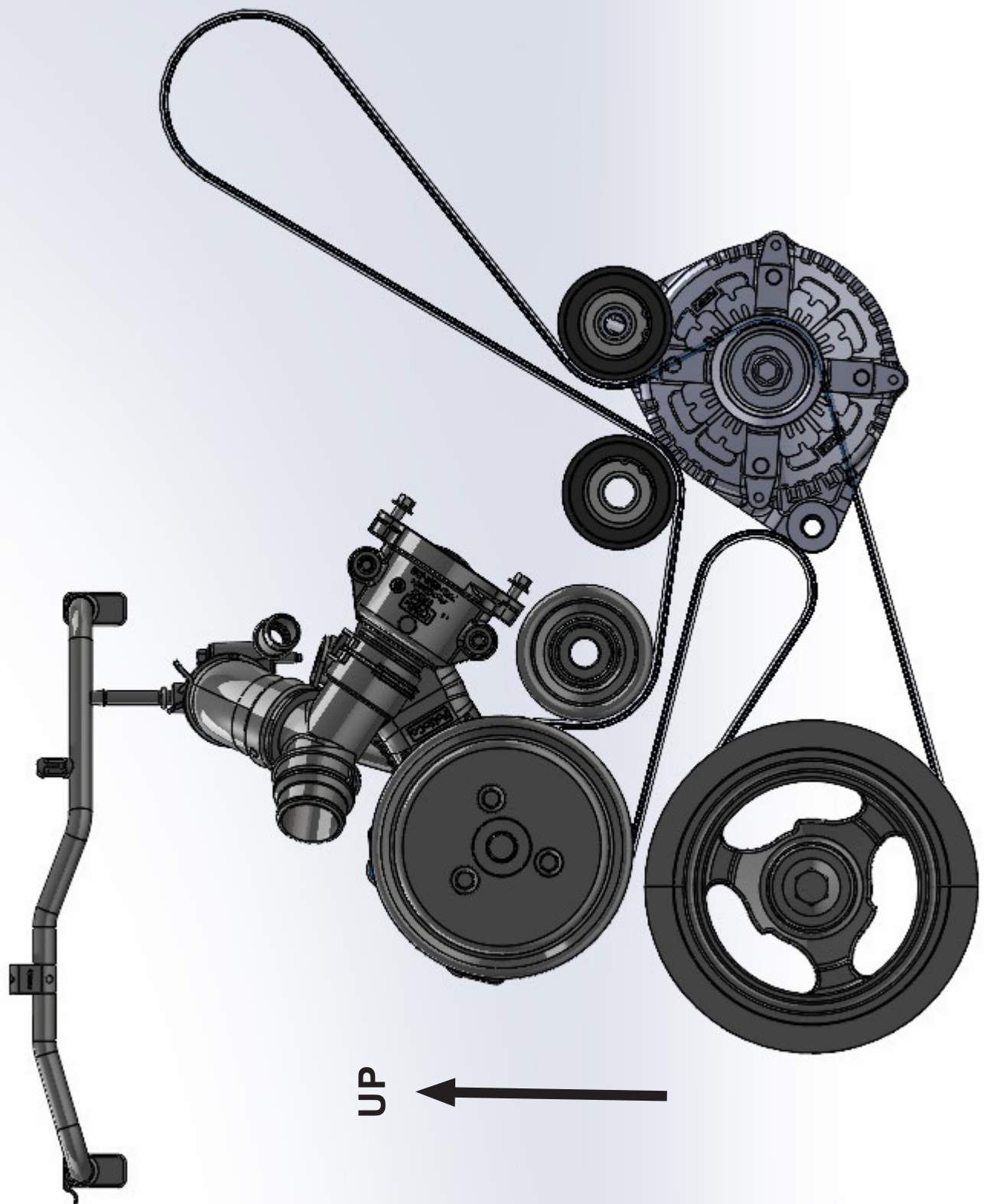
H. PLACE THE SUPERCHARGER AND BRACKET ONTO THE STUDS AND ATTACH USING THE 2X M8 NUTS AND WASHERS AND 1X M10 NUT (7GL10-150) AND WASHER (7J010-002). ONCE THE UNIT IS MOUNTED, INSTALL THE DRIVE BELT.



I. USE THE BELT ROUTING DIAGRAM (FIG. 3.2) ON PG. 18 TO ROUTE THE NEW DRIVE BELT. ONCE IN POSITION, USE A 15MM WRENCH TO ROTATE THE BELT TENSIONER COUNTER-CLOCKWISE, THEN SLIDE THE NEW DRIVE BELT OVER THE SMOOTH IDLER ON THE TENSIONER. ONCE THE BELT IS IN POSITION & PROPERLY ROUTED, RELEASE THE TENSION ON THE BELT TENSIONER.

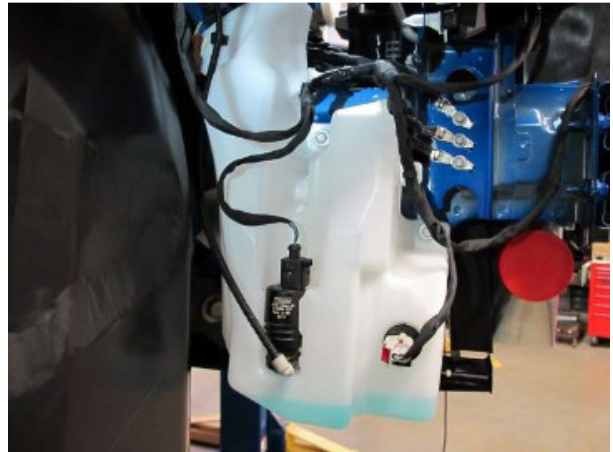
See belt routing Diagram

DIAGRAM, BELT ROUTING FIG 3.2



4. WINDSHIELD WASHER RESERVOIR MODIFICATION.

A. IN ORDER TO PROVIDE ADEQUATE SPACE FOR THE DISCHARGE TUBES, THE WINDSHIELD WASHER FLUID RESERVOIR WILL NEED TO BE REMOVED FROM THE VEHICLE..PROCEED TO REMOVE THE WINDSHIELD WASHER FLUID PUMP AND FLUID LEVEL SENSOR FROM THE WINDSHIELD WASHER RESERVOIR, ALLOWING THE WINDSHIELD WASHER FLUID TO DRAIN. SET THE WINDSHIELD WASHER FLUID PUMP AND SENSOR ASIDE..



B. USING THE SUPPLIED WINDSHIELD WASHER TANK, INSTALL THE FACTORY RUBBER GROMMETS INTO THE TANK. USE SOME LUBRICANT TO MAKE THE PUMP AND SENSOR INSTALLATION A LITTLE EASIER. PUSH THE PUMP AND SENSOR INTO THEIR GROMMETS UNTIL FLUSH WITH THE GROMMETS.

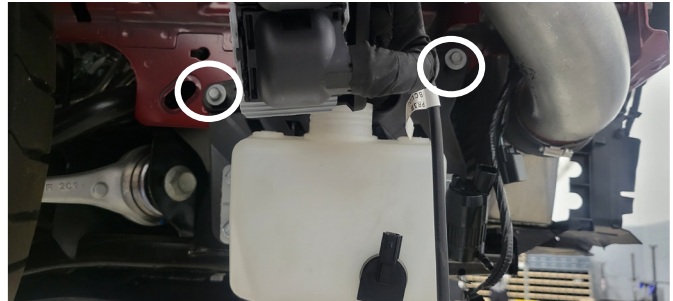


C. USING THE SUPPLIED WASHER TANK BRACKET AND MOUNTING BOLTS, ATTACH THE TANK TO THE BRACKET WITH THE 4 BOLTS NUTS AND WASHERS.



4. WINDSHIELD WASHER MODIFICATION CONT'D

D. POSITION THE MOUNTING BRACKET ASSEMBLY ONTO THE FACTORY WASHER TANK MOUNTING LOCATIONS, USING THE FACTORY BOLTS ATTACH THE BRACKET TO THE VEHICLE. THE REAR BRACKET MOUNT WILL BE SANDWICHED BETWEEN THE VEHICLE COMPUTER BRACKET AND THE FRAME. RECONNECT THE FACTORY PICK UP TUBE AND CONNECTORS



E. MOUNT THE WINDSHIELD WASHER TANK FILL TUBE ONTO THE SUPPLIED BRACKET. USING THE SUPPLIED BOLTS AND WASHERS, THEN MOUNT THE BRACKET ONTO THE TOP OF THE AIR BOX SUPPORT BRACKET.



F. INSTALL THE HOSE FROM THE RESERVOIR CAP TO THE BOTTOM OF THE FILL TUBE AND SECURE WITH THE SUPPLIED CLAMP.

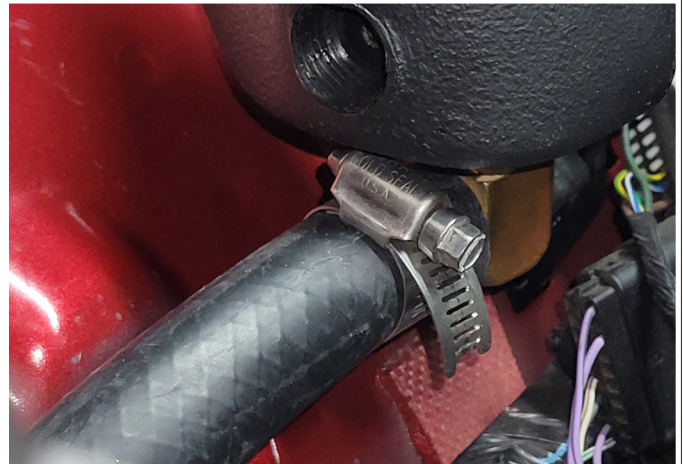


4. WINDSHIELD WASHER MODIFICATION CONT'D

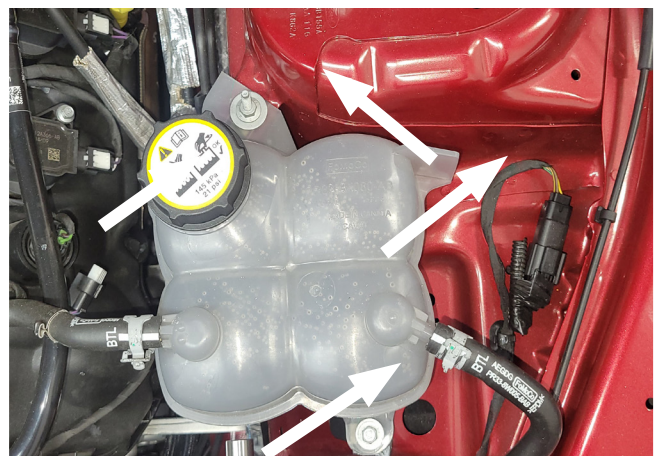
G. ROUTE THE HOSE FROM THE WINDSHIELD WASHER TANK CAP UP THROUGH THE FENDER WELL JUST BEHIND THE WIRING HARNESS, BE SURE TO LEAVE ROOM AS THE DISCHARGE TUBE TO THE THROTTLE BODY WILL ALSO BE FED THROUGH THAT SAME SPACE.



H. INSTALL THE HOSE FROM THE RESERVOIR CAP TO THE BOTTOM OF THE FILL RESERVOIR AND SECURE WITH THE SUPPLIED CLAMP. REFILL RESERVOIR WITH WASHER FLUID



I. AT THIS POINT, IT IS TIME TO REINSTALL THE COOLANT TANK BACK INTO ITS STOCK LOCATION USING THE FACTORY MOUNTING BOLTS. RECONNECT THE UPPER COOLANT LINES TO THE COOLANT TANK USING THE FACTORY HOSE CLAMPS.

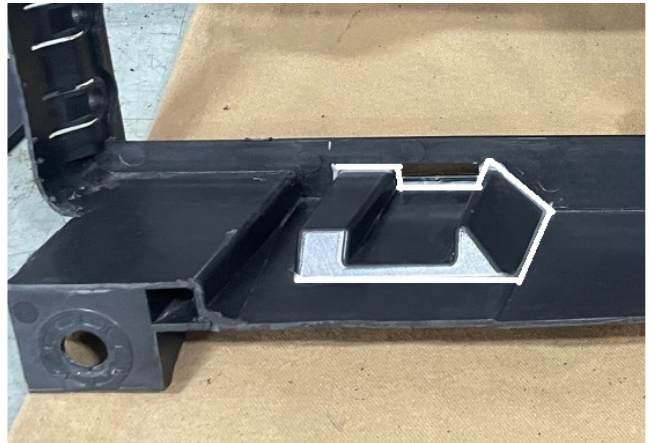


5. SHUTTER CONTROL MODIFICATION

A. IT WILL BE NECESSARY TO MODIFY THE BOTTOM HALF OF THE SHUTTER CONTROL SHROUD. IN ORDER FOR THE SHROUD TO FIT AROUND THE COOLER PROPERLY. FOLLOWING THE EXAMPLE TRIM AWAY THE PLASTIC AND TEST FIT FOR CLEARANCE. ..



B. CUT OUT LEFT AND RIGHT TABS ON THE LOWER HALF OF THE SHUTTER CONTROL SHROUD. THIS WILL BE NECESSARY TO CLEARANCE FOR PROPER COOLER FITMENT...



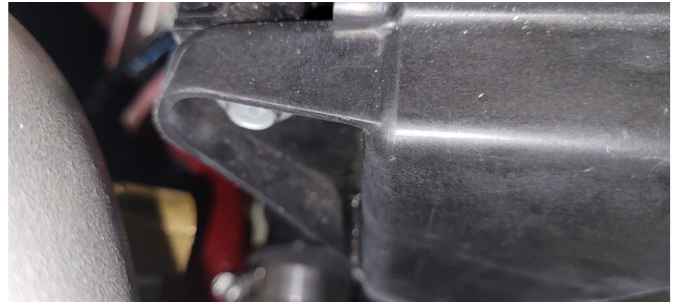
D. ONCE THE SLOTS HAVE BEEN CUT OUT IT SHOULD RESEMBLE THE PICTURE IN **Fig 4-d** ..



Fig 4-d

6. FAN SHROUD MODIFICATION

A. REMOVE THE 2X 10MM-HEADED FASTENERS SECURING THE RADIATOR FAN SHROUD, UNPLUG THE CONNECTOR ON THE LEFT SIDE AND LIFT THE FAN SHROUD OUT OF THE VEHICLE. ..



B. ONCE THE SHROUD IS REMOVED, IT WILL BE NECESSARY TO TRIM THE SHROUD TO ALLOW FOR PROPER DISCHARGE TUBE FITMENT. ..

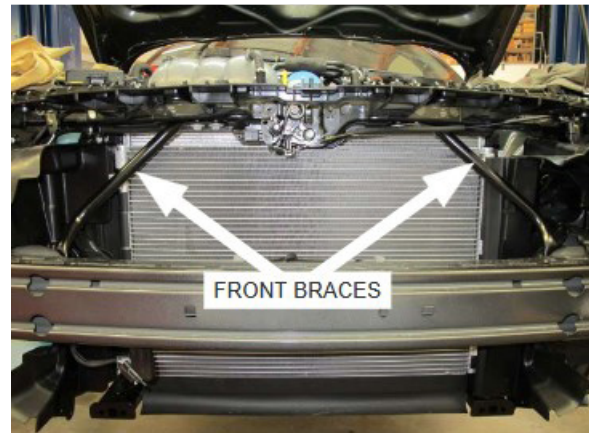


C. ONCE THE SHROUD HAS BEEN TRIMMED IT CAN BE REINSTALLED BACK INTO THE VEHICLE IN REVERSE ORDER..



7. DISCHARGE ASSEMBLY & CHARGE AIR COOLER INSTALLATION

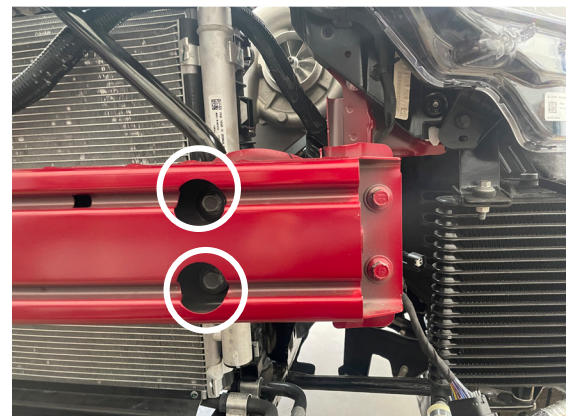
A. REMOVE THE 4X 13MM-HEADED FASTENERS SECURING THE FRONT BRACES TO THE UPPER RADIATOR SUPPORT & FRONT BUMPER SUPPORT, THEN PROCEED TO REMOVE THE FRONT BRACES FROM THE VEHICLE..



B. ONCE THE FRONT BRACES AND AIR FILTER BOXES HAVE BEEN REMOVED REMOVE THE AIR DUCTS AND THE SIDE AIR DEFLECTORS, AS WELL AS THE AC CONDENSOR SHIELDS.



C. BACK OUT THE 4X INNER MOST SCREWS OF THE FRONT BUMPER SUPPORT, LEAVING ABOUT 1/2" OF THE SCREW PROTRUDING FROM THE BACK SIDE. RAISE THE CHARGE AIR COOLER INTO POSITION, MAKING SURE TO ALIGN THE CHARGE AIR COOLER BRACKETS TO THE 4X SCREWS. ONCE ALIGNED, BEGIN TO THREAD THE SCREWS THROUGH THE CHARGE AIR COOLER BRACKETS. ROUTE THE WIRE HARNESS ALONG THE TOP SIDE OF THE FRONT BUMPER SUPPORT. ATTACH THE AMBIENT AIR TEMPERATURE SENSOR BACK INTO ITS ORIGINAL LOCATION & PLUG IN ITS ELECTRICAL CONNECTOR

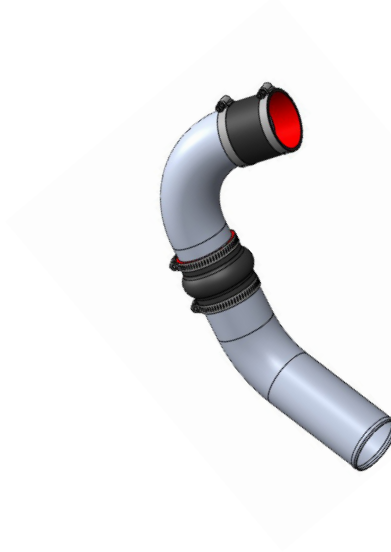


7. DISCHARGE ASSEMBLY & CHARGE AIR COOLER INSTALLATION

D... IF YOUR VEHICLE IS NOT EQUIPPED WITH THE FRONT BRACES, PROCEED TO INSTALL THE CHARGE AIR COOLER AGAINST THE BUMPER SUPPORT, AND SECURE WITH THE PROVIDED M8 X 1.25 FLANGED NUTS & 5/16 WASHERS. FOR VEHICLES EQUIPPED WITH THE FRONT BRACES, REUSE THE FACTORY HARDWARE, MAKING SURE THE CHARGE AIR COOLER BRACKETS ARE SANDWICHED BETWEEN THE LOWER BRACE MOUNTS & FRONT BUMPER SUPPORT.



E. INSTALL 2.75 X 3.00 BUMP SLEEVE ONTO TUBE "A" (IT WILL BE NECESSARY TO CONNECT TUBE "A" AND "B" TOGETHER USING THE 3 X 3 BUMP HOSE). ONCE CONNECTED ROUTE THE TUBES DOWN THROUGH THE HOLE BETWEEN THE RADIATOR AND THE VEHICLE FRAME .

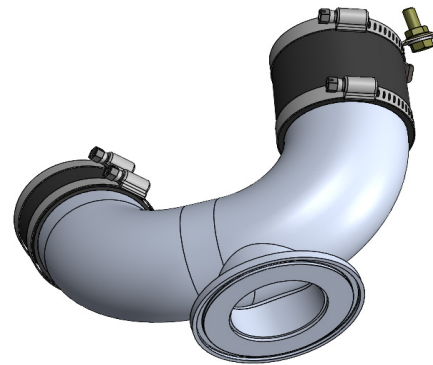


F. INSTALL THE 3 X 3 SLEEVE ONTO THE END OF TUBE B AND USING THE MOUNTING TAB AND BOLT AND WASHER INSTALL THE TAB INTO THE ALREADY EXISTING HOLE ON THE VEHICLE FENDER WELL...

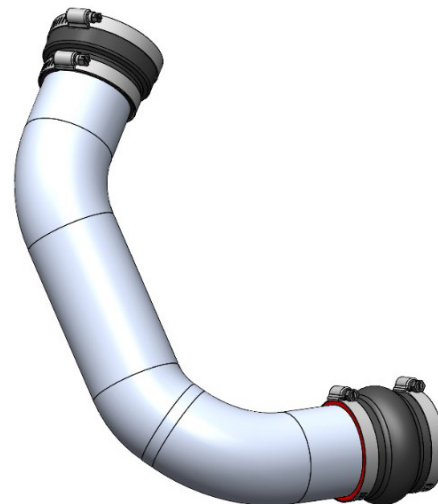


7. DISCHARGE ASSEMBLY & CHARGE AIR COOLER INSTALLATION

G. ONCE YOU HAVE INSTALLED THE TAB ROUTE THE TUBE CLAMP OVER THE TAB TO HOLD THE TUBE IN PLACE, INSTALL TUBE "C" INTO THE SLEEVE WITH THE TAB ATTACHED ROUTE THE OTHER END TO THE INTERCOOLER AND SECURE USING THE 3X3 SLEEVE AND CLAMPS..



H. INSTALL THE 3X3 SLEEVE ONTO DISCHARGE TUBE "D". ROUTING THE TUBE UP THROUGH THE FENDER WELL INTO THE ENGINE COMPARTMENT. ATTACH THE LOWER END TO THE CHARGE AIR COOLER



I. ATTACH THE (2) 3X3 SLEEVE TO EACH END OF TUBE "E". SLIDE THE TUBE ONTO TUBE COMING FROM THE FENDER WELL, LEAVING THE CLAMPS LOOSE FOR ADJUSTMENT.

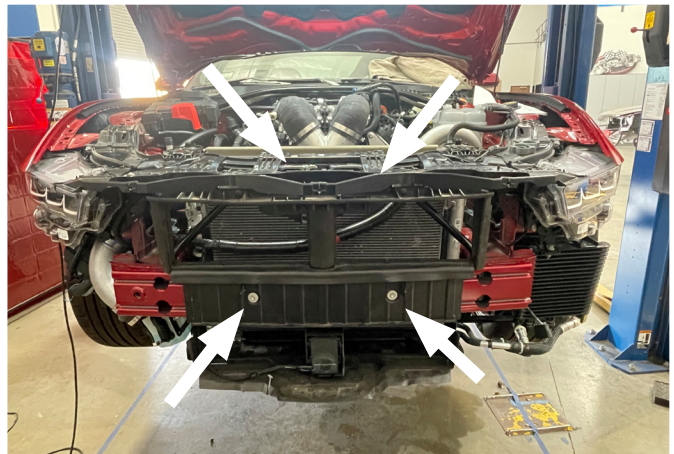


7. DISCHARGE ASSEMBLY & CHARGE AIR COOLER INSTALLATION

J. INSTALL THE TWO ELBOWS ONTO THE DISCHARGE TUBE "F" DO NOT TIGHTEN THE CLAMPS AS OF YET. ADJUST THE ELBOWS TO LINE UP WITH THROTTLE BODY INLET'S.AND INSTALL TUBE "F" ONTO TUBE "E" IT MAY BE NECESSARY TO MAKE ADJUSTMENTS AS YOU ARE INSTALLING THE TUBES. ONCE THEY ARE INSTALLED TIGHTEN ALL CLAMPS.



K. REINSTALL THE FACTORY GRILLE SHUTTER HOUSING USING THE FACTORY BOLTS AND PLUG IN THE AMBIENT AIR TEMP SENSOR AND REINSTALL ALL PREVIOUSLY REMOVED PANELS, ENGINE COVER, STRUT TOWER BRACE, FRONT BUMPER COVER & SPLASH GUARDS. CHECK FOR PROPER FITMENT & CLEARANCE DURING REINSTALLATION. YOU MAY RECONNECT THE BATTERY AT THIS TIME.



8. BYPASS VALVE INSTALLATION

A. INSTALL THE BYPASS VALVE ONTO THE FLANGE ADAPTER USING THE TWO SUPPLIED BOLTS. ONCE MOUNTED TO THE FLANGE ADAPTER MOUNT THE FLANGE TO DISCHARGE TUBE "C" USING THE SUPPLIED BAND CLAMP. **(See Fig. 7-a)**



Fig. 7-a

B. ONCE MOUNTED TO THE FLANGE ADAPTER MOUNT THE FLANGE TO DISCHARGE TUBE "C" USING THE SUPPLIED BAND CLAMP.



C. USING THE SUPPLIED 3/16 VACUUM HOSE, ATTACH ONE END TO THE FITTING ON THE BYPASS VALVE IT WILL BE NECESSARY TO INSTALL A TEE FITTING INTO THE ENGINE CRANK CASE VENT SYSTEM. USING THE 15/32 HOSE FROM THE MANIFOLD TO THE CHECK VALVE INSTALL THE SUPPLIED T FITTING INLINE AND ROUTE THE OTHER END OF THE VACUUM HOSE UP TO THE TEE FITTING INSTALLED INTO THE VENT HOSE FROM BYPASS VALVE TO THE TEE FITTING

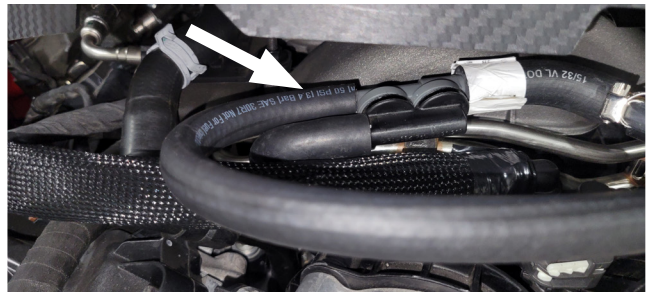


9. AIR INLET ASSY

A. USING THE SUPPLIED QUICK CONNECT FITTINGS, INSTALL EACH INTO OPPOSITE SIDES OF THE 90 DEGREE ELBOW. THE 5/8 FITTING WILL GO IN THE BOTTOM BUNG LOCATION. ONCE THE FITTINGS ARE IN ATTACH THE SLEEVE ON ONE END AND AIR FILTER ON THE OTHER AND SLIDE THE SLEEVE ON THE SUPERCHARGER INLET.



B. REMOVE THE COMPLETE VENT HOSE FROM THE FACTORY CHECK VALVE.. USING THE SUPPLIED 3/8 HOSE, ATTACH ONE HOSE END TO THE FITTING ON THE CHECK VALVE AND ROUTE THE OTHER END UP TO THE INLET TUBE. .



C. USING THE SUPPLIED 90 DEGREE QUICK CONNECT FITTING ON THE TOP OF THE TUBE, CONNECT THE HOSE COMING FROM THE CHECK VALVE TO THE 90 DEGREE QUICK CONNECT FITTING.



9. AIR INLET ASSY (CONT'D)

D. USING THE EXISTING VENT HOSE ON THE DRIVER SIDE VALVE COVER, REMOVE THE 90 DEGREE FITTING ATTACHED TO THE VALVE COVER. THE REST OF THE HOSE WILL NOT BE REUSED. ..



E. USING THE SUPPLIED 5/8 RUBBER HOSE AND 90 DEGREE FITTING AS WELL AS THE OEM 90 DEGREE FITTING ATTACH ONE END TO THE VALVE COVER AND ROUTE THE OTHER END OVER TO THE DRIVER SIDE HEADLIGHT AREA.

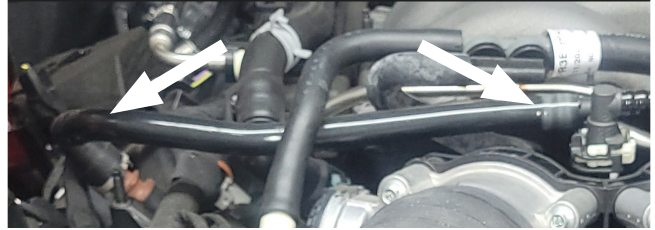


F. USING THE OPEN END OF THE HOSE WITH THE SUPPLIED 90 DEGREE FITTING PLUG THE QUICK CONNECT FITTING ONTO THE PORT ON THE BOTTOM OF THE INLET ELBOW



10.PCV SYSTEM MODIFICATION.

A. USING THE EXISTING VENT HOSE ON THE DRIVER SIDE VALVE COVER, REMOVE THE 90 DEGREE FITTING ATTACHED TO THE VALVE COVER. THE REST OF THE HOSE WILL NOT BE REUSED. ON THE END OF THE DRIVER SIDE BREATHER HOSE AND REPLACE WITH THE SUPPLIED 90 DEGREE QUICK CONNECT FITTING, ONCE REPLACED ATTACH TO THE FITTING ON THE BOTTOM SIDE OF THE INLET ELBOW



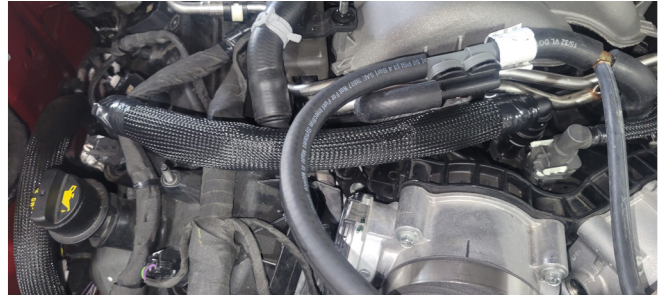
B. USING THE SUPPLIED PCV ASSEMBLY PARTS, ASSEMBLE THE PCV HOSES IN THE SEQUENCE IN **FIG 10-b**



C. ONCE ASSEMBLED IT SHOULD RESEMBLE THE PIC I KEEP ONE 90 DEGREE FITTING LOOSE SO THAT IT CAN BE REMOVED TO SLID THE BRAIDED FLEX SLEEVE AND HEAT SHRINK OVER THE ENTIRE ASSEMBLY BEFORE INSTALLING THE FINAL CLAMP AND 90 DEGREE QUICK CONNECT FITTING.



D. ONCE THE ASSEMBLY IS COMPLETE
REINSTALL THE HOSE BACK ONTO THE PORTS
THEY WERE ORIGINALLY INSTALLED ON.



11. FINAL CHECK

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

- A. If your vehicle has gone over 15,000 miles since its last spark plug change, you will need to change the spark plugs now *before* test driving the vehicle.
- B. Check all fittings, nuts, bolts and clamps for tightness. Pay particular attention to oil and fuel lines around moving parts, sharp edges and exhaust system parts. Make sure all wires and lines are properly secured with clamps or tie-wraps.
- C. Check all fluid levels, making sure that your tank(s) is/are filled with 91 octane or higher fuel before commencing test drive.
- D. Start the engine and allow to idle a few minutes, then shut off.
- E. Recheck to be sure that no hoses, wires, etc. are near exhaust headers or moving parts. Look also for any signs of fluid leakage.
- F. **PLEASE TAKE SPECIAL NOTE:** Operating the vehicle without ALL the subassemblies completely and properly installed may cause **FAILURE OF MAJOR COMPONENTS.**
- G. Test drive the vehicle.
- H. Always listen carefully for engine detonation. Discontinue heavy throttle usage if detonation is heard.
- I. Read the **STREET SUPERCHARGER SYSTEM OWNER'S MANUAL AND RETURN THE WARRANTY REGISTRATION FORM** within thirty (30) days of purchasing your supercharger system to qualify.

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

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

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

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

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



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