



Owner Installation Manual for PAXTON AUTOMOTIVE NOVI 2000 Supercharger Kit

## for the 2004/2005 Dodge SRT-10 Truck

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## FOREWORD

his manual provides information on the installation, maintenance and service of the Paxton supercharger kit expressly designed for the Dodge SRT-10 Truck. Contact Paxton Automotive Corporation for any additional information regarding this kit and any of these modifications at (805) 604-1336 8:00 a.m. - 4:30 p.m. P.S.T..

An understanding of the information contained herein will help novices, as well as experienced technicians, to correctly install and receive the greatest possible benefit from their Paxton supercharger. When reference is made in this manual to a brand name, number, specific tool or technique, an equivalent product may be used in place of the item mentioned. All information, illustrations and specifications contained herein are based on the latest product information available at the time of this publication. All rights reserved to make changes at any time without notice.

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## 2004/2005 Dodge SRT-10 Truck

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

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

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

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

- **1.** Use only premium grade fuel 91 octane or higher (R+M/2).
- **2.** The engine must have stock compression ratio.
- **3.** If the engine has been modified in any way, check with Paxton prior to using this product.
- **4.** Always listen for any sign of detonation (pinging) and discontinue hard use (no boost) until problem is resolved.
- 5. Perform an oil and filter change upon completion of this installation and prior to test driving your vehicle. Thereafter, always use a high grade SF rated engine oil or a high quality synthetic, and change the oil and filter every 3,000 miles or less. Never attempt to extend the oil change interval beyond 3,000 miles, regardless of oil manufacturer's claims as potential damage to the supercharger may result.

### **RECOMMENDED TOOLS FOR INSTALLATION:**

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

#### Prior to installation it will be necessary to replace original spark plugs with spark plugs noted below:

- 25. Spark Plug Socket
- 26. NEW Spark Plugs (NGK ZFR6F-11)

## 2004/2005 Dodge SRT-10 Truck Part No. 1201230-P

### <u>PARTS LIST</u>

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

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PART NO.	DESCRIPTION	QTY.	PART NUMBER	DESCRIPTION	QTY.
4PCV130-026 7P125-004	OIL FEED ASSY 1/8"NPT 90° x -4 JIC FTG STL	<b>1</b> 1	8PN301-068 8PN103-030	CAC, WELDED ASSY INLET DUCT, CAC	1
7P125-005 7P125-034	1/8"NPT STR. x -4 JIC FTG STL 1/8"NPT x 1/8"NPT STRT TEE	1 1	8N003-090 8N201-001	DISCHARGE DUCT, CAC WELDED COOLER CORE	1 1
7U100-055 7U250-000-220	TIE-WRAPS, 7.5" NYLON OIL FEED HOSE, 22" -4	10 1	4PCS112-028 4PCS012-020/21/28	DISCHARGE ASSY DISCHARGE DUCT T-BODY	1
4PCV130-036 7P375-017	OIL DRAIN ASSY 3/8" x 1/2" BEADED HSE BARB FTG	<b>1</b> 1	4PCS012-041/048 4PCS010-040	DISCHARGE DUCT CAC SUPPORT BRKT	1 1
7R001-008 7U030-036	# 8 STNL HOSE CLAMPS 1/2" OIL DRAIN HOSE	2 1.75'	7U250-200 7U038-012	TAPE, FOAM 1/4" x .250 HOSE Ø3/4" x 90° 4-11"	1' 1
7T560-001	CUTTER, 9/16" ROTOBROACH	1	7P500-026	1/2" x 3/4" BARB 90° FTG	1
7T 560- 002 7U100-066	ARBOR, ROTOBROACH TIE-WRAPS, 11" NYLON	2	7P156-082 7P375-250	5/32" VAC TEE 3/8" x 3/8" x 1/4" VAC TEE	3 1
21016430 <b>1016430</b>	SUPERCHARGER ASSY S/C ASSY	1 1	7U100-065 7U030-046	GROMMET .5"ID x .812"OD .187" GRV 5/32" VAC HOSE	1 15.0'
4PCS037-285	2.85" S/C PULLEY	1	8H040-175 7PS300-200	FILTER RACE BYPASS SLEEVES, 3.00" x 2.0"L	1 2
4PCS111-044 4PSC010-044	S/C MTG PLT ASSY S/C MOUNTING PLATE	1	7PS350-200	SLEEVE, 3.5" x 2.0"L	1
4PCS010-034	S/C SUPPORT PLATE	1	7PS400-200 7PS450-200	SLEEVE, 4.0" x 2"L SLEEVE, 4.5" x 2"L	1
4PCS017-011 7A375-166	SPACER IDLER PULLEYS STUD SPACER, SRT10	3 1	7R002-048 7R002-056	CLAMPS CLAMPS	4
7A375-175 7A375-250	3/8-16 x 1.75" HXHD BOLTS 3/8-16 x 2.5" HXHD BOLTS	3 5	7R002-064	CLAMPS	2 2
7A375-276	3/8-16 x 2.75" HXHD BOLTS	2	7R002-072 4PCS212-018	CLAMPS AIR INLET ASSY	2
7A375-278 7A375-451	3/8-16 x 2.75" CSHD 3/8-16 x 4.50" HXHD BOLTS	1 3	4PCS012-011/018 4PCS013-010	CAST ELBOW MODIFIED	1 1
7F375-017 7A375-500	3/8-16 NYLOCK NUT 3/8-16 x 5.0"	1 1	4PCS010-060	AIR FILTER ENCLOSURE AIR FILTER FLANGE	1
7A312-525	5/16-18 x 5.25" HXHD BOLTS	2	4PCS110-060 8H040-400	A/F MOUNTING FLANGE ASSY AIR FILTER	1 1
7A312-500 7K375-030	5/16-18 x 5.00" HXHD BOLTS 3/8"AN WASHERS	18	7R002-060 7R002-064	HOSE CLAMPS #60 HOSE CLAMPS #64	2
7K312-001 2A017-010	5/16"AN WASHERS SPACER	2 1	7U035-003	FLEX HOSE 4.0"	2 2 2' 4
2A017-754-04	1.677" x .75" x .386" SPACERS	6 8	7A250-074 7F250-021	1/4-20 x 0.75" HXHD BOLTS NYLOC NUTS	4
2A017-754-05 2A017-754-03	1.543" x .75" x .386" SPACERS 1.625" x .75" x .328" SPACERS	2	7J006-093 7PS400-200	6mm WASHERS 4.0" SLEEVE	8 1
4FU116-031 4GV016-150	IDLER PULLEY SMOOTH 7-RIB IDLER PULLEY	1 1	7P500-001	1/2" HOSE UNION	1
4PCS116-150 2A040-011	90mm SMOOTH PULLEY IDLER PULLEY RETAINERS	1 3	7U030-050 7P375-055	1/2" FUEL HOSE (12mm) 3/8" x 90° x 1/2" HOSE BARB	2' 1
2A040-011 2A047-110	GATES	1	7P375-113 7P???-???	PVC 1/2" x 3/8" REDUCER	1 1
8PN105-060 8N055-030	WATER TANK MTG ASSY SURGE TANK	1	7U030-056	3/8" PVC/VAC HOSE	6"
8N055-050	SURGE TANK CAP	1	5A001-071	ECU	1
4PCS010-110 7P375-075	BKT MTG COOLANT RES 3/4" HOSE BARB UNION BRASS	1 1	8D204-010 4PCV101-001	RACE BYPASS ASSY FUEL SYSTEM	1 1
7P500-026 7R007-001	1/2" x 3/4" BARB 90° FITTING NYLON RATCHET CLAMP 1-1/8"	4 8	5W001-005	3/8" WIRE LOOM	6'
7U038-000	3/4" HEATER HOSE	17'	5W001-011 5W014-030	16-14 GA RING TERMINAL 14GA STRDWIRE BLACK	2 8"
7U133-060 7U038-012	3/4" HOSE (TANK-PUMP) HOSE Ø3/4" x 90°	1 1	7E010-075 7P312-005	# 12 x 3/4" SHT METL SCRW HEX 5/16" FEM FUEL CNCT STEEL	4 1
7A250-050 7A250-051	1/4-20 .75" HXHD 1/4-20 x .50" SCHDCP SCREW	2 1	7P312-007	FUEL FTG 5/16" GM x 5/16" HSE	1
7E010-075	12 x 3/4" SHT MTL SCREWS HXHD	2 5	7P312-017 7P312-082	5/16" HOSE BARB TO M10 x 1.0" 5/16" TEE HOSE BARB	2 4
7J006-093 7U100-066	6mm WASHERS TIE-WRAPS, 11" NYLON	5 5	7R003-027 7R004-001	ADEL CLAMP 1-11/16" STEPLESS CLAMP 15.77.70	1 22
8PN106-060	WATER COOLER ASSY	1	7U031-018	5/16" EFI FUEL HOSE	8'
8N006-010 7P500-026	SINGLE PASS HT EXC 1/2" x 3/4" BARB 90° FITTINGS	1 2 2	7U100-044 7U100-055	TIE-WRAP, 4" NYLON TIE-WRAP, 7.5" NYLON	10 5
7R007-001 4PCS010-010	NYLON RATCHET CLAMPS, 1-1/8" HEAT EXCH MOUNTING BRKT "R"	2 1	8F001-002	WALBRO IN-LINE F/P w/FTG	2
4PCS010-020 4PCS010-030	HEAT EXCH MOUNTING BRKT "L" HEAT EXCH BRKT SPACERS	1	4PCS238-068 6Z001-001	FMU ASSY SRT10 TRUCK DECAL PAXTON	<b>1</b> 1
7A250-126	1/4-20 x 1.25" HXHD	2 5	6Z010-101 6Z010-111	FMU HOUSING FMU VALVE BODY	1 1
7F250-021 7J006-093	1/4-20 NYLOC PLT 6mm WASHERS	5 16	6Z010-132	COVER w/SPRING	1
8N107-150	WATER PUMP ASSY C5	1	6Z020-130 6Z020-140	SML DIAPHRAGM LG DIAPHRAGM	1



## 2004/2005 Dodge SRT-10 Truck Part No. 1201230-P

### PARTS LIST

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

PART NO.	DESCRIPTION	QTY.
6Z030-150 6Z040-160 6Z050-191 6Z060-181 6Z070-030 6Z080-011 6Z090-010 7C010-050 7C010-075 7C024-025	DESCRIPTION BRKT, FMU PISTON, FMU FMU WASHER 8:1 PLTD SHIM, FMU RING, FMU 8:1 RETAINER, FMU SPRINGS SPRING FMU 10-24 x .50° SHCS GR8 PLT 10-24 x .25° PHIL HEADS 1/8°NPT x 5/32° HOSE 90° 1/8°NPT x 5/32° HOSE 90° 1/8°NPT x 5/32° HOSE 90° 1/8°NPT sRT x 5/16° BARB 5/32° TEE 5/32° VACUUM HOSE O-RING, FMU SUPPORT PARTS ASSY FIRE SLEEVE 3/8° FEMALE FUEL FTG STEEL 3/8° GM F/FTG TO 5/16° BARB FTG 12-10 GA RED WIRE #12 x .75° SHT MTL SCREWS, HEX	1 1 1 2 1 6 4 3 1
7P125-025 7P125-025 7P125-031 7P125-032 7P156-082 7U030-046 7U100-030	1/8"NPT x 5/32" HOSE 90° 1/8"NPT x 90° 5/16" BARB 1/8"NPT SRT x 5/16" BARB 5/32" TEE 5/32" VACUUM HOSE 0-RING, FMU	1 1 2 8' 1
4PCS101-010 7S625-000 7P375-072 7P375-006 5W012-000 7E010-075 5W001-037 5W001-032 5W014-030 4PCV110-010 7T100-120 7T110-125 7U250-023	SUPPORT PARTS ASSY FIRE SLEEVE 3/8" FEMALE FUEL FTG STEEL 3/8" GM F/FTG TO 5/16" BARB FTG 12-10 GA RED WIRE #12 x .75" SHT MTL SCREWS, HEX 12-10 INSUL BUTT CONNECTORS 1/4" SPLIT LOOM 14GA WIRE BLACK FIXTURE WIGUIDE DRILL BIT, #31 + .120 HSS REAMER, .124" DOWEL PINS, 1/8" x 1.25"L	4' 1 20' 4 2 15' 4' 1 1 1 2

### 2004/2005 Dodge SRT-10 Truck Part No. 1201230

### PARTS LIST

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

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PART NO.	DESCRIPTION	QTY.	PART NUMBER	DESCRIPTION	QTY.
4PCV130-026		1	8PN301-060	CAC, WELDED ASSY	1
7P125-004 7P125-005	1/8"NPT 90° x -4 JIC FTG STL 1/8"NPT STR x -4 JIC FTG STL	1 1	8PN103-030 8N003-090	INLET DUCT, CAC DISCHARGE DUCT, CAC	1
7P125-036	1/8"NPT x 1/8"NPT STRT TEE	1	8N201-001	WELDED COOLER CORE	1
7P125-108	1/8"NPT x 1.5" NIPPLE	1	4PCS112-020	DISCHARGE ASSY	
70100-055	TIE-WRAPS 7.5" NYLON	10	4PCS012-020/21/28	DISCHARGE DUCT T-BODY	1
7U250-000-220	OIL FEED HOSE, 22" -4	1	4PCS012-041/048	DISCHARGE DUCT	1
4PCV130-036		<b>1</b> 1	4PCS010-040	CAC SUPPORT BRKT	1 1'
7P375-017 7R001-008	3/8" x 1/2" BEADED HSE BARB FTG #8 STNL HOSE CLAMPS	2	7U250-200 7U038-012	TAPE, FOAM 1/4" x .250" HOSE Ø3/4" x 90° 4-11"	1
7U030-036	1/2" OIL DRAIN HOSE	1.75	7P500-026	1/2" x 3/4" BARB 90° FTG	1
7T560-001	CUTTER, 9/16" ROTOBROACH	1	7P156-082	5/32" VAC TEE	3
7T 560- 002 7U100-066	ARBOR, ROTOBROACH	1	7P375-250	3/8" x 3/8" x 1/4" VAC TEE	1 1
21016430	TIE-WRAP, 11" NYLON SUPERCHARGER ASSY	1	7U100-065 7U030-046	GROMMET .5"ID x .812"OD .187" GRV 5/32" VAC HOSE	15.0'
1016430	S/C ASSY	1	8H040-175	FILTER RACE BYPASS	1
4PCS037-285	2.85" S/C PULLEY	1	7PS300-200	SLEEVES 3.0" x 2.0"L	2
4PCS111-044	S/C MTG PLT ASSY		7PS350-200	SLEEVE 3.5" x 2.0"L SLEEVE 4.0" x 2"L	1 1
4PSC010-044	S/C MOUNTING PLATE	1	7PS400-200 7PS450-200	SLEEVE 4.0 X 2 L SLEEVE 4.5" X 2"L	1
4PCS010-034	S/C SUPPORT PLATE	1	7R002-052	CLAMPS	4
4PCS017-011	SPACER IDLER PULLEYS	3	7R002-056	CLAMPS	2 2 2
7A375-166 7A375-175	STUD SPACER, SRT10 3/8-16 x 1.75" HXHD BOLTS	1 3	7R002-064 7R002-072	CLAMPS CLAMPS	2
7A375-250	3/8" x 16 x 2.5" HXHD BOLTS	5			Z
7A375-276	3/8" x 16 x 2.75" HXHD BOLTS	2	4PCS212-010		1
7A375-278	3/8" x 16 x 2.75" CSHD	1	4PCS012-011/018 4PCS013-010	CAST ELBOW MODIFIED AIR FILTER ENCLOSURE	1
7A375-451 7F375-017	3/8" x 16 x 4.50" HXHD BOLTS	3 1	4PCS010-060	AIR FILTER FLANGE	1
7A375-500	3/8-16 NYLOCK NUT 3/8-16 x 5.00" HXHD BOLT	1	4PCS110-060	A/F MOUNTING FLANGE ASSY	1
7A312-525	5/16" x 18 x 5.25" HXHD BOLTS	2	8H040-400 7R002-060	AIR FILTER HOSE CLAMPS # 60	1
7A312-500	5/16-18 x 5.0" HXHD BOLT	2	7R002-060 7R002-064	HOSE CLAMPS # 60 HOSE CLAMPS # 64	2 2 2' 4
7K375-030	3/8"AN WASHERS 5/16"AN WASHERS	18	7U035-003	FLEX HOSE 4.0"	2'
7K312-001 2A017-010	SPACER	2 1	7A250-126	1/4" x 20 x 1.0" HXHD BOLTS	
2A017-754-04	1.677" x .75" x .386" SPACERS	6	7F250-021	NYLOC NUTS	4 8
2A017-754-05	1.543" x .75" x .386" SPACERS	8	7J006-093 7PS400-200	6mm WASHERS 4.0" SLEEVE	8 1
2A017-754-03	1.625" x .75" x .328" SPACERS IDLER PULLEY SMOOTH	2	7P500-001	1/2" HOSE UNION	1
4FU116-031 4GV016-150	7-RIB IDLER PULLEY	1	7U030-050	1/2" FUEL HOSE (12mm)	2' 1
4PCS116-150	90mm SMOOTH PULLEY	1	7P375-055	3/8" x 90° x 1/2" HOSE BARB PVC	1
2A040-011	IDLER PULLEY RETAINERS	3	7P375-113 7P500-003	1/2" x 3/8" REDUCER	1
2A047-110	GATES 8PK2800 BELT	1	7U030-056	3/8" PVC/VAC HOSE	6"
8PN105-060 8N055-030	WATER TANK MTG ASSY SURGE TANK	1	5A001-071(-070)	ECU	1
8N055-050	SURGE TANK CAP	1	8D204-010	RACE BYPASS ASSY	1
4PCS010-110	BKT MTG COOLANT RES	1	4PCV101-001	FUEL SYSTEM	1
7P375-075	3/4" HOSE-BARB UNION, BRASS	1	5W001-005	3/8" WIRE LOOM	6'
7P500-026 7R007-001	1/2" x 3/4"BARB x 90° FITTINGS NYLON RATCHET CLAMPS 1-1/8"	4 8	5W001-011	16-14GA RING TERMINALS	2 8"
7U038-000	3/4" HEATER HOSE	17'	5W014-030 7E010-075	14GA STRDWIRE BLACK #12 x 3/4" SHT METL SCRW HEX	8" 4
7U133-060	3/4" HOSE (TANK-PUMP)	1	7P312-005	5/16" FEM FUEL CNCT STEEL	4
70038-012	HOSE Ø3/4" x 90°	1	7P312-007	FUEL FTG 5/16" GM x 5/16" HSE	1
7A250-050 7A250-051	1/4-20 .75" HXHD 1/4-20 x .50" SCHDCP SCREW	2 1	7P312-017	5/16" HOSE BARBS TO M10 x 1.0"	2 4
7E010-075	12 x 3/4" SHT-MTL SCREWS HXHD	2	7P312-082	5/16" TEE HOSE BARBS	4 1
7J006-093	6mm WASHERS	2 5	7R003-027 7R004-001	ADEL CLAMP 1-11/16" STEPLESS CLAMPS, 15.77.70	22
7U100-066	TIE-WRAPS, 11" NYLON	5	7U031-018	5/16" EFI FUEL HOSE	8'
8PN106-060	WATER COOLER ASSY		7U100-044	TIE-WRAPS, 4" NYLON	10
8N006-010	SINGLE PASS HT EXC	1	7U100-055	TIE-WRAPS, 7.5" NYLON	5
7P500-026 7R007-001	1/2" x 3/4" BARB 90° FITTINGS NYLON RATCHET CLAMPS 1-1/8"	2 2	8F001-002	WALBRO INLINE F/P w/FTGS	2
4PCS010-010	HEAT EXCH MOUNTING BRKT "R"	1	4PCS238-068	FMU ASSY SRT10 TRUCK	1
4PCS010-020	HEAT EXCH MOUNTING BRKT "L"	1	6Z001-001 6Z010-101	DECAL PAXTON FMU HOUSING	1 1
4PCS010-030	HEAT EXCH BRKT SPACERS	2 5	6Z010-111	FMU VALVE BODY	1
7A250-126 7F250-021	1/4-20 x 1.25" HXHD 1/4-20 NYLOC PLT	5 5	6Z010-132	COVER w/SPRING	1
7J006-093	6mm WASHERS	5 16	6Z020-130	SML DIAPHRAGM	1
8N107-150	WATER PUMP ASSY C5	1			
0.1107 100		•			



### 2004/2005 Dodge SRT-10 Truck

Part No. 1201230

### <u>PARTS LIST</u>

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

#### parts immediately. PART NO. DESCRIPTION QTY. 6Z020-140 LG DIAPHRAGM 1 BRKT, FMU PISTON, FMU 6Z030-150 1 6Z040-160 1 6Z050-191 FMU WASHER 8:1 PLTD 1 6Z060-181 SHIM, FMU 1 RING, FMU 8:1 RETAINER, FMU SPRING 6Z070-030 1 6Z080-011 2 1 6Z090-010 SPRING FMU 10-24 x .50" SHCS GR8 PLT 10-24 x .3/4" SHCS GR8 PLT 10-24 x .25" PHIL HEADS 1/8"NPT x 5/32" HOSE 90° 7C010-050 6 4 3 1 7C010-075 7C024-025 7P125-025 1/8"NPT - 90° 5/16" BARB 1/8"NPT SRT - 5/16" BARB 5/32" TEES 7P125-031 1 7P125-032 1 2 7P156-082 7U030-046 5/32" VACUUM HOSE 8' O-RING, FMU 7U100-030 1 4PCS101-010 SUPPORT PARTS ASSY 7S625-000 7P375-072 FIRE SLEEVE 3/8" FEMALE FUEL FTG STEEL 4' 1 7P375-006 3/8" GM F/FTG TO 5/16" BARB FTG 1 12-10 GA RED WIRE #12 x .75" SHT MTL SCREWS HEX 5W012-000 20' 4 7E010-075 5W001-037 12-10 INSUL BUTT CONNECTORS 15' 4' 5W001-032 1/4" SPLIT LOOM 14GA WIRE BLACK 5W014-030 4PCV110-010 FIXTURE w/GUIDE 1 DRILL BIT, #31 + .120 HSS REAMER, .124" 7T100-120 1 7T110-125 1 7U250-023 DOWEL PINS, 1/8" x 1.25"L 2



#### 1.1 AIR INTAKE ASSEMBLY REMOVAL

(Please note that before any work is performed, disconnect the battery positive and negative terminals)

> **Before beginning installation, replace all** <u>spark plugs with NGKZFR6F</u>-11 (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.** Change spark plugs at least every 15,000 miles and spark plug wires at least every 50,000 miles.

A. Using a 5/16" nut driver or a flat blade screw driver, loosen the hose clamp securing the inlet duct to the throttle body. (See *Fig.* 1-a.)



Fig. 1-a

**B.** Locate the intake air temp sensor on the side of the intake air duct and remove the plug. (See *Fig. 1-b.*)

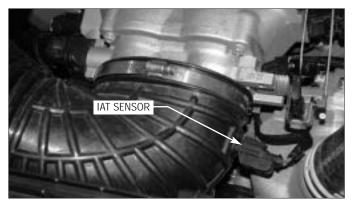


Fig. 1-b

**C.** After removing the air inlet duct, remove the two spring clips retaining the air filter cover housing. Remove the air filter from the housing. (See *Fig. 1-c.*)

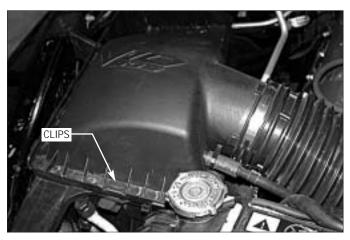


Fig. 1-c

**D.** Remove the small clip retaining the crank case breather hose to the upper air filter housing and remove the hose. (See *Fig. 1-d.*)

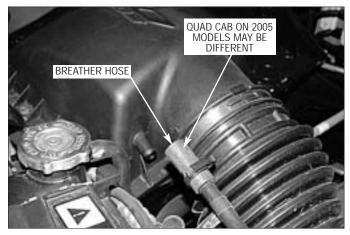


Fig. 1-d

**E.** Remove the rubber inlet duct from the throttle body. Lift the duct and upper portion of the air-filter cover out of the vehicle and set aside. It will not be reused.

- **F.** Remove the idle air control hose from the IAC. Set the hose aside as it will not be reused.
- **G.** Remove the one 10mm nut located at the front of the lower air box enclosure. (See *Fig. 1-e.*)

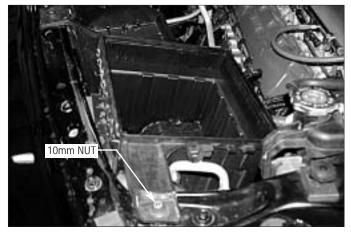


Fig. 1-e

- **H.** Lift up on the lower portion of the air filter enclosure removing it from the rubber grommets that secure the back portion of the air filter enclosure. Once removed from the vehicle, set the enclosure aside. It will not be reused.
- I. Remove the crank case breather hose located under the throttle body and set aside to be modified and reinstalled in a later step.

*\*\*\* NOTE \*\*\** 2005 6-speed and Quad Cab trucks may be different.

- **J.** Remove the four 13mm headed bolts that secure the top portion of the extra battery box and set aside as they will not be reused. (See *Fig. 1-f* for location.)
- **K.** Remove the 10mm bolt that secures the heater hoses to the battery box. (See *Fig.* 1-f.)
- L. Remove the passenger's side front tire and remove the 8mm headed screw that retains the inner fender liner. Remove the liner and set aside to be reinstalled in a later step.
- **M.** Locate the two bolts that secure the battery box from inside the fender well. Remove and set aside. (See *Fig. 1-f.*)

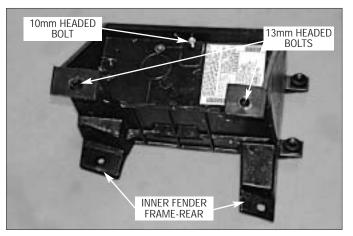


Fig. 1-f

- **N.** From inside the engine compartment, remove the battery box and set aside. It will not be reused.
- **O.** In preparation for removing the plastic air deflector shield that attaches to the inner fender, remove the two 13mm headed bolts securing the engine oil cooler in place. Set the cooler aside to be reinstalled in a later step.
- **P.** Remove the plastic clips that retain the plastic air deflector. (See *Fig. 1-g.*)



Fig. 1-g

- **Q.** Remove the deflector and set aside, it will not be reused.
- **R.** Reinstall the inner fender liner in the reverse order removed. Reinstall the passenger's side tire.

#### \*\*\* NOTE \*\*\*

Two of the 8mm headed bolts that secure the inner fender liner will not be reinstalled. Their location was in the bottom of the battery cover.

**S.** Reinstall the factory oil cooler in its original location using the factory hardware.

#### 1.2 ACCESSORY BELT AND ALTERNA-TOR REMOVAL

- **A.** Locate the factory belt tensioner on the passenger side of the vehicle.
- **B.** Using a 15mm box end wrench, rotate the tensioner counter clockwise to release the accessory belt. Once the belt has been loosened, remove the belt from the vehicle. It will not be reused.
- **C.** Locate and remove the 9/16" headed bolt retaining the top of the alternator. Remove the 5/8" headed bolt and nut that secures the lower mount of the alternator.

\*\*\* **NOTE** \*\*\* If you have not already disconnected the Positive and the Negative battery cables you should do so now.

- **D.** Remove the electrical connectors from the alternator to be reinstalled at a later stage of the installation.
- **E.** Remove the alternator. It may be necessary to move the alternator toward the front of the vehicle to release the bushing located in the lower alternator mounting boss. Remove the alternator and set aside to be reinstalled in a later step. (See *Fig. 1-h.*)





- **F.** Remove the factory idler pulley and set aside to be reinstalled in a later step.
- **G.** With the alternator removed and set aside, remove the two 1/2"-headed bolts located next to the alternator. Set these bolts aside-they will not be reused. (See *Fig. 1-i.*)

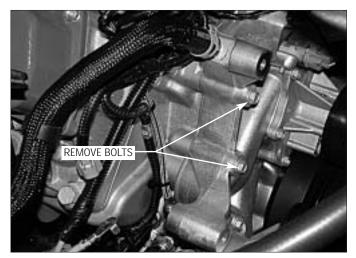


Fig. 1-i

#### 1.3 CRANK PIN INSTALLATION

- **PLEASE NOTE:** Because there is not a keyway securing the crank pulley from the factory, there is the possibility of the crank pulley spinning on the crankshaft. This section will guide you throught the procedure of installing dowel pins to secure the crank pulley to the crankshaft.
- **A.** Remove the lines from the power steering pump. These are the lines that drive the fan.
- **B.** It has been found that a crow-foot type wrench works best. But other types of wrenches may work as well.
- **C.** Drain the engine coolant into a suitable container.
- **D.** Remove the upper and lower radiator hoses from the radiator.
- **E.** Remove the two 10mm headed bolts that secure the radiator to the front core support.
- **F.** Remove the nylon clips that retain the wire leading to the connector on the fan motor. Remove the nylon clips retaining the wire to the fan motor.
- **G.** Remove the radiator and fan assembly from the truck and set aside.
- **H.** Remove the bolts that retain the crank pulley to the factory harmonic damper.
- **I.** Remove the factory bolt that secures the damper. (See *Fig. 1-j.*)



Fig.1-j

- **J.** Install the supplied guide fixture using two of the factory pulley retaining bolts.
- **K.** Using the supplied drill bit and with the drill fixture installed drill through the damper in to the end of the crankshaft.



It is recommended that you measure the length of the dowel pin and the drill fixture and mark the drill bit for quick reference.

- **L.** Drill one hole, rotate the fixture 180° and drill the second hole.
- **M.** Remove the drill fixture and confirm depth of the drilled hole.
- **N.** After both dowel pin holes have been drilled, ream the holes to size using the supplied reamer.
- **O.** Install the supplied dowel pins. Confirm that the dowel pins are flush with the surface of the damper.
- **P.** Reinstall the factory damper bolt and torque to factory specs.
- **Q.** Reinstall the radiator in the reverse order of its removal. Install the coolant hoses and refill the radiator with coolant.



#### 2.1 SUPERCHARGER OIL FEED INSTALLATION

**A.** Locate the oil-sending unit on the passenger's side of the vehicle. Remove the sending unit connector. (See *Fig. 2-a.*)



Fig. 2-a

- **B.** Using a 1-1/8" socket, remove the sending unit and set aside to be reinstalled in a later step.
- **C.** Locate the nylon-retaining clip located just above the factory-sending unit that secures the factory oil sending sensor wire. This clip will have to be removed to gain clearance for the 1/8" x -4 fitting. (See *Fig. 2-b.*)
- **D.** Install the street TEE in the same location as the factory-sending unit. (See *Fig. 2-b.*)

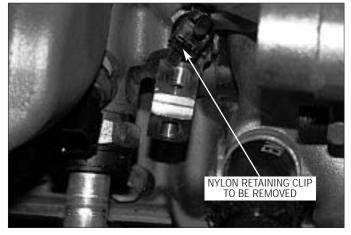


Fig. 2-b

#### \*\*\* NOTE \*\*\*

It is not recommended to use anything other than engine oil on the threads. If Teflon paste or tape is used, a piece could be dislodged and pass through the oil feed jet clogging the oil feed jet. This will cause severe damage to the supercharger.

**E.** Install the straight  $1/8" \times -4$  JIC fitting (supplied in assembly 4PCS130-026) into the outlet facing toward the top of the engine.

#### \*\*\* NOTE \*\*\*

It maybe easier to install this fitting from the top of the engine compartment. With the alternator out of the way it is a straight shot to the top of the fitting installed in an earlier step.

**F.** Re-Install the Factory oil-sending unit. (See *Fig. 2-c.*)



Fig. 2-c

**G.** Locate the supplied 22" long stainless steel braided oil feed line and attach it to the fitting that was installed in *Step E*. (See *Fig. 2-d.*)



Fig. 2-d



## 3.1 SUPERCHARGER OIL DRAIN INSTALLATION.

- A. Locate the oil drain assembly 4PCV130-036 that is supplied in the supercharger kit
- **B.** Locate the supplied 9/16" Rotobroach and arbor. You will need a 3/8" electric or air drill motor for this procedure.
- **C.** Because the supercharger is oil fed, it requires a provision for drainage. On the passenger's side of the vehicle there is a small pad machined on the rail of the oil pan. Just below this pad will be the location for the oil drain fitting. (See *Fig. 3-a.*)

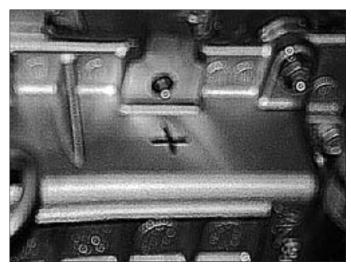


Fig. 3-a

- **D.** Measure down from the center of this machined pad 3/4" and put a scribe mark. This will be the location that will be drilled and tapped for the oil drain fitting.
- **E.** Drill a 3/16" pilot hole for the Rotobroach this is necessary to keep the small piece that is cut by the Rotobroach from falling into the oil pan.
- **F.** Using the Rotobroach that is supplied, slowly drill into the cast oil pan. Be careful not to drop the small piece of aluminum into the pan once you have gone all the way through. (See *Fig. 3-b.*)



Fig. 3-b

- **G.** Thread the hole using a 3/8"-18 NPT tap (not provided). Make sure that the threads are square to the face of the oil pan mounting surface. Do not thread any deeper than half the length of the tap.
- **H.** Locate the 3/8" x 1/2" barbed NPT fitting that is supplied in the oil drain assembly. Use some form of sealant such as RTV silicone to seal the threads and tighten the fitting into place. (See *Fig. 3-c.*)



Fig. 3-c

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## Section 4 Supercharger mounting bracket assembly

#### 4-1. SUPERCHARGER MOUNTING BRACKET INSTALLATION

- **A.** Remove the factory idler from the tensioner and replace with the supplied large-diameter idler using the factory hardware.
- **B.** Please refer to the mounting bracket assembly 4PCS111-044 parts list in the front of this manual to confirm that you have the correct mounting hardware. Also see assembly drawing 4PCS111-044 (Appendix "A") for bolt and spacer locations.
- **C.** In preparation for the supercharger mounting plate to be installed, you will need to reinstall the alternator previously removed.
- **D.** When installing the alternator you will not be reusing the factory fasteners.
- **E.** Locate the large 1/2" thick aluminum mounting plate in the supercharger mounting plate assembly, and the appropriate mounting hardware. (See *Fig. 4-a.*)





\*\*\* **NOTE** \*\*\* For ease of installation, all of the supercharger mounting plate bolts will be left loose until later in the installation of the mounting bracket.

**F.** Locate the two 5/16-18 x 5.25" inch long bolts and two 5/16"AN washers along with two Ø1.625" x Ø.75" x .328" spacers. Install the bolts, washers and spacers at the location noted. (See *Fig. 4-b.*)

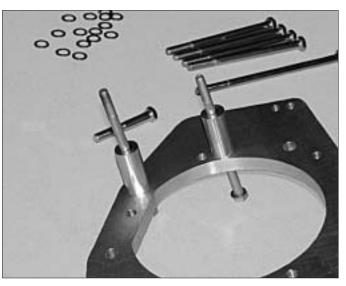


Fig. 4-b

*\*\*\* NOTE \*\*\** It has been found that some vehicles have different depth holes. We provide 2-5/16-18 x 5.00" bolts in this case.

- **G.** Install the supercharger mounting plate with the two  $5/16-18 \ge 5.25$ " bolts, washers and spacers as an assembly.
- **H.** Insert the 3/8-16 x 5.00" long bolt with washer through the mounting bracket and lower alternator mounting hole. Secure with a 3/8" washer and Nyloc nut. (See *Fig. 4-c.*)

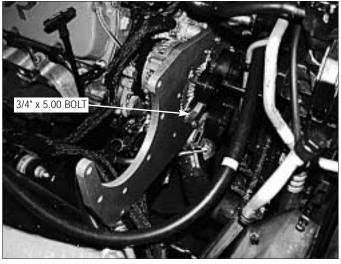


Fig. 4-c

I. Locate the .335" x 1.0" x .484" spacer and the 3/8" x 16 x 2.75" bolt and 3/8"AN flat washer. Install the spacer and the bolt in the upper alternator mounting location. (See *Fig. 4-d.*)

\*\*\* **NOTE** \*\*\* The spacer goes between the supercharger mounting plate and the alternator. (See Fig. 4-d.)

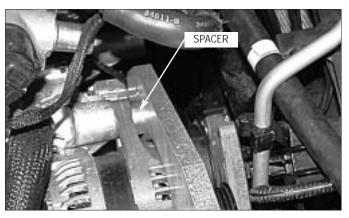


Fig. 4-d

- **J.** With the supercharger mounting plate, spacers and bolts installed, start tightening the 1/2" headed bolt going into the front cover of the engine. Next tighten the lower alternator through-bolt and then the upper alternator bolt.
- **K.** Reinstall the factory idler pulley using the stud spacer provided in place of the factory retaining bolt. (See *Fig. 4-e.*)

\*\*\* **NOTE** \*\*\* The photo shows the Factory fastener for reference and will not be reused. (See Fig. 4-e.)

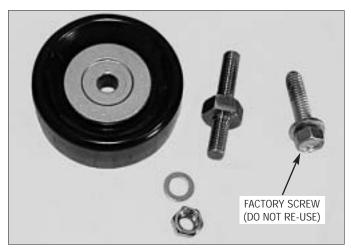


Fig. 4-e

L. Locate the three supplied accessory idler pulleys with their proper spacers and two 3/8" x 16 x 1.75" bolts and washers. Install the smooth 90mm idler at the 3/8"-16 tapped hole location next to the alternator. Install the plastic 7-rib grooved idler just above the smooth idler using the provided fasteners. (See *Fig. 4-f.*) See assembly drawing *4PCS111-044* in *Appendix A* for these locations.

\*\*\* NOTE \*\*\*

In Fig. 4-f, the upper A/C line will have to be removed from its original location to gain clearance for the S/C mounting plate.

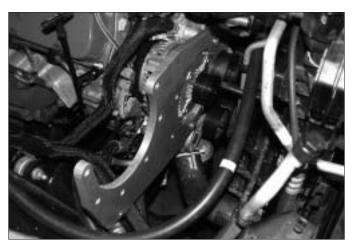


Fig. 4-f

- **M.** Locate the supercharger support plate with the seven 1.543" x .390" x Ø.750" spacers and its mounting hardware.
- **N.** Install the support plate over the stud bolt that was installed in the factory idler location using the 3/8" –16 nyloc nut and washer leave these fasteners loose until all of the spacers and bolts are installed.
- **O.** Please check the mounting hardware against the bill of materials in the front of the manual for the lengths and quantities.
- **P.** Install the 6-1.543" long spacer between the supercharger support plate and the super-charger mounting plate with the bolts provided.
- **Q.** There are three bolts that are 2.5" in length. One will be located just above the alternator and the other two are installed between the supercharger mounting holes and the alternator.



#### 5.1 SUPERCHARGER INSTALLATION

- **A.** Attach the 1/2" oil drain hose to the supercharger using the hose provided and one #8 hose clamp.
- **B.** Lower the supercharger into place. Guide the oil drain hose so there are no kinks or dips in the hose.
- **C.** Loosely install the 3/8-16 counter-sunk bolt in the supercharger mounting plate (located just below the tapped hole). Install this spacer between the supercharger and the plate.

\*\*\* **NOTE** \*\*\* This bolt must be installed before the Idler pulley is installed. (See Fig. 5-a.)

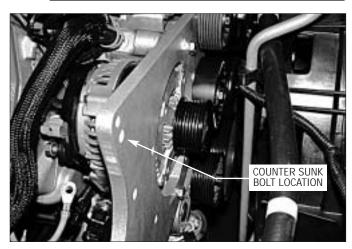


Fig. 5-a

**D.** Install the two supercharger mounting bolts with their spacers in the outer most mounting holes of the supercharger mounting plate. Loosely tighten these bolts. (See *Fig.* 5-b.)

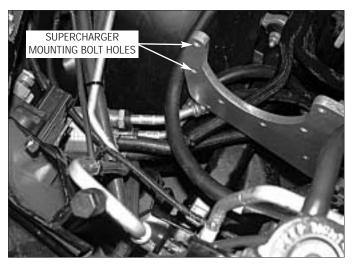


Fig. 5-b

- **E.** When all of the supercharger mounting bolts are installed, evenly tighten all supercharger mounting bolts.
- **F.** Using one #8 hose clamp, attach the oil drain hose to the 1/2" barbed fitting that was installed in *Section 3* (oil drain installation).
- **G.** Install the 90° x 1/4" x –4 fitting into the supercharger oil feed jet. Use only oil on this fitting rather then teflon paste or teflon tape. Either of which may become dislodged and enter the jet clogging the small orifice of the oil feed jet. Attach the 22" long –4 stainless steel braided hose installed in an earlier step. (See *Fig. 5-c.*)

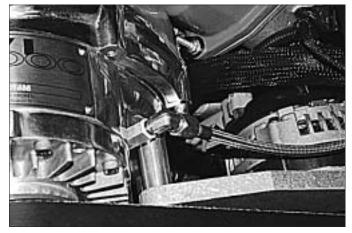


Fig. 5-c

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## Section 6 AIR INTAKE ASSEMBLY INSTALLATION

#### 6.1 AIR INTAKE DUCT INSTALLATION

- A. Locate air intake assembly *4PCS212-010* (*4PCS212-018* if polished).
- **B.** Install the 4" sleeve and two #64 hose clamps to the inlet of the supercharger leaving the clamps loose. They will be tightened in a later step.
- C. Locate the 4" cast duct and 3/8"NPT x 1/2" x 90° barbed fitting.
- **D.** Install the fitting into the cast duct using a small amount of teflon sealant. (See *Fig. 6-a.*)





- **E** Install the cast duct into the 4" sleeve previously installed to the inlet of the supercharger.
- **F.** Orient the barbed fitting so it points to the passenger's side valve cover. (See *Fig. 6–b.*)



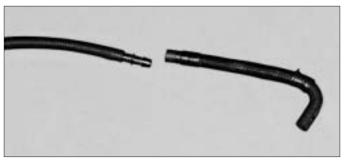
Fig. 6-b

**G.** Attach a length of 1/2" fuel hose to the barbed fitting and route towards the crank case vent hose located at the front of the engine. (This vent hose was previously removed in the disassembly of the factory air intake system.) (See *Fig. 6-c.*)



Fig. 6-c

**H. 2004 Model 6-Speed:** This hose needs to be oriented in reverse of the factory orientation. Install the 1/2" hose union into the end of the hose previously installed to the 1/2" barbed fitting in the 4" cast duct. Attach the hose union to the factory vent hose. (See *Fig. 6-d.*)



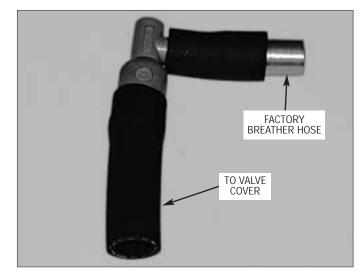


**I.** Locate the small rubber 90° fitting on the passenger's side valve cover. Remove the fitting and set aside as it will not be reused. (See *Fig. 6-e.*)



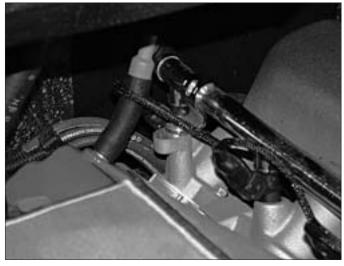


J Assemble the new PCV valve assembly (See *Fig. 6-f.*)





**K.** Install the PCV valve in the location of the factory breather on the passenger's side of the vehicle. (See *Fig. 6-g.*)





**L.** Connect the PCV valve to the factory hard plastic line.

**M. 2005 6-Speed Quad Cab:** The PCV valve will be installed at the front of the driver's side valve cover. You will need to remove the factory crank case breather hose from under the throttle body. Modify the hose to fit with the parts supplied. (See *Fig. 6-h.*)

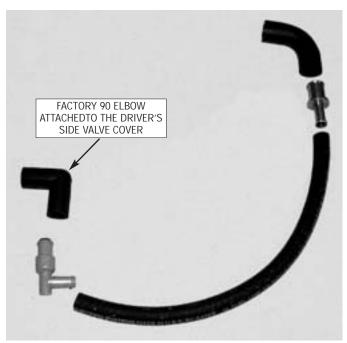


Fig. 6-h



Fig. 6-i

N. Assemble the crank case breather assembly as seen. (See *Figs. 6-j, 6-k*.)

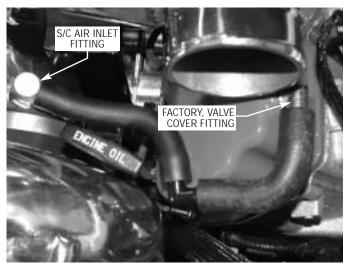


Fig. 6-j



Fig. 6-k

#### 6.2 AIR FILTER ENCLOSURE

- **A.** In assembly *4PCS212-020* (or *4PCS212-028* if you have purchased a polished kit). Locate the air filter, air-filter enclosure, nuts, bolts and air-filter flange.
- **B.** Attach the air filter flange to the formed air filter enclosure with the fasteners that are provided in the assembly. Secure the air filter to the flange.
- **C.** Have the filter enclosure as far forward as possible when mounting it to the passenger's side fender well. Mark and drill the holes. Use the supplied sheet metal screws. Make sure nothing is rubbing on the filter enclosure.
- **D** Secure the air-filter enclosure with the provided self tapping fasteners. (See *Figs. 6-l*, *6-m*.)



Fig. 6-I

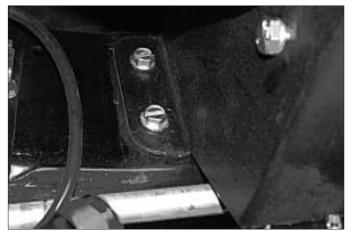


Fig. 6-m

**E.** Attach the supplied flex hose to the air filter and the 4" cast inlet duct with the hose clamps that are provided.

## **Section 7** CHARGE AIR COOLER ASSEMBLY INSTALLATION

#### 7.1 CHARGE AIR COOLER INSTALLATION

**A.** Locate the Charge Air Cooler. Install the 90°  $\times$  1/2"NPT  $\times$  3/4" barbed fittings in the charge cooler. Use teflon paste on these fittings to prevent leakage. (See *Fig. 7-a.*)

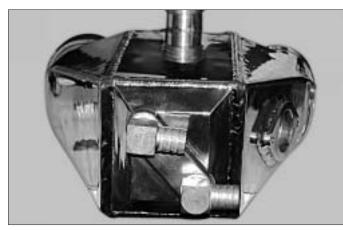


Fig. 7-a

**B.** Locate the charge air support bracket and install it on two of the exhaust shield mounting bolts. Install the supplied foam padding onto the support bracket. (See *Fig. 7-b.*)

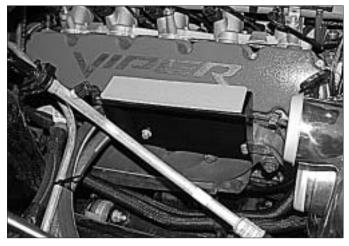


Fig. 7-b

- **C.** Install the 3" silicone sleeves and clamps to the inlet and discharge of the charge air cooler.
- **D.** Install the compressor bypass valve with the gasket and fastener provided (See *Fig. 7-c.*)
- E. Install the compressor bypass filter to the

bypass valve. You will need to move the A.C. line to gain clearance for the charge cooler bypass valve.



Fig. 7-c

- **F.** Install the charge cooler to the discharge of the supercharger. Tighten the hose clamps.
- **G.** Install the discharge duct "A" (Viper Head) to the Charge Air Cooler outlet and secure with the hose clamp previously installed.
- **H.** Attach the 4.5" sleeve to the throttle body. Using two #67 clamps, secure the discharge tube "B" onto the throttle body. Install the factory air intake temperature sensor into discharge tube "B".
- I. Check discharge ducts for proper fitment and recheck all hose clamps.



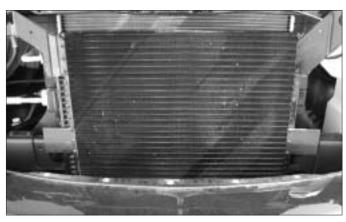
Fig. 7-d

**J.** You will need to mark/drill in the brackets that are in front of A.C.. Use the 1/4-20 bolts/nylock.

#### 7.2 WATER COOLER ASSEMBLY INSTALLATION.

- **A.** Attach the right and the left heat exchanger bracket to the heat exchanger using the 1/4-20 x 1-1/4" bolts, nuts and washers provided in the heat exchanger assembly.
- **B.** Install the two 90° x 1/2"NPT x 3/4" fittings into the heat exchanger using teflon paste on the threads. These fittings, when installed, should face the passenger's side of the vehicle.
- **C.** Attach the heat exchanger to the front of the air conditioning condenser mounting brackets using the fasteners that are provided. (See *Figs. 7–e, 7-f.*)

\*\*\* **NOTE** \*\*\* After the installation of the hoses from the heat exchanger to the CAC and the water reservoir, the air deflectors on the hood will need to be trimmed for clearance.





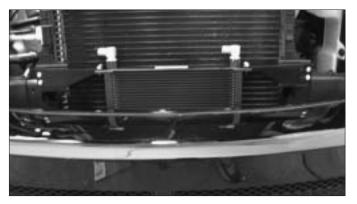


Fig. 7-f

#### 7.3 WATER PUMP INSTALLATION

- **A.** Locate the water pump assembly. The water pump will be attached to the triangular shaped water tank supplied in the kit.
- **B.** Attach the water pump to the reservoir using one 1-1/8" insulated clamp and a 1/4-20 x 1/2" socket head bolt and one 1/4"AN washer. (See *Fig.* 7-g.)
- **C.** Attach the Ø3/4" x 4 x 12" "L" shaped hose to the 1/2"NPT x 3/4" x 90° barbed fitting located at the bottom of the triangle water reservoir (*NOTE the 90° hose attached to the water pump and the fitting at the bottom of the water tank will need to be trimmed to fit)* and secure with the provided nylon clamps. (See Figs. 7-f, 7-g.)

#### \*\*\* NOTE \*\*\*

The angled bracket that is attached to the water tank is in place just to show its orientation to the water pump. This bracket will be installed in a later step of the installation.



Fig. 7-g

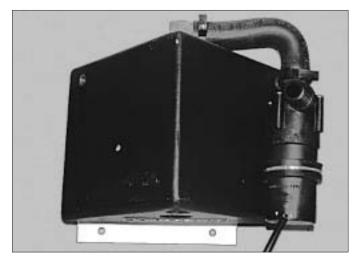


Fig. 7-h

- **D.** For ease of installing the water tank, remove the lower panel that is attached to the front air dam.
- **E.** Locate the small angled bracket and the selftapping sheet metal screws that are provided in the water tank mounting assembly. This bracket will be attach to the passenger's side inner fender between the front radiator core supports. (See *Fig. 7-i.*)

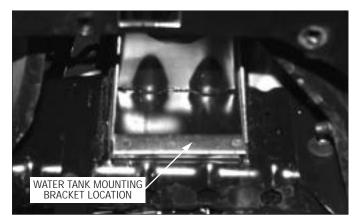


Fig. 7-i

- F. Attach the triangle water tank to the bracket that was installed in the last step using the 1/4" x 1/2" bolts and washers that are provided.
- **G.** Install one of the provided 4" x 12" x 90° long hoses to the water pump using a nylon clamp. (See *Appendix A-5*.)

*** NOTE ***							
This formed hose may need to be trimmed to fit.							

**H.** Attach a length of 3/4" hose to the 90° barbed fitting located on the farthest side of the heat exchanger. (See *Fig.* 7-*j*.)

**H.** Attach a length of 3/4" hose to the 90° barbed fitting located on the farthest side of the heat exchanger. (See *Fig.* 7-*j*.)

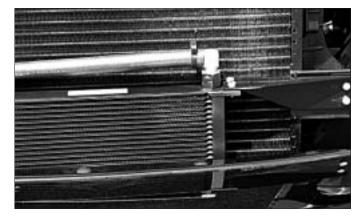


Fig. 7-j

- **I.** Route the hose to the outlet of the water pump. This hose should be approximately 42" in length. (Check its fitment *before* cutting to length.) In one end of the hose coming from the heat exchanger, install one 3/4" hose mender and secure with a nylon clamp.
- **J.** Install the hose to the 90° that was attached to the water pump in an earlier step. Secure the hose with a nylon clamp.
- **K.** At the heat exchanger, attach a length of 3/4" hose with a clamp to the 90° barbed fitting closest to the passenger's side of the vehicle. This hose should be approximately 86" in length. (See *Fig. 7-k.*)





- **L.** Attach the other end of the hose to the 90° barbed fitting located on the charge air cooler. It should be attached to the fitting located closest to the intake manifold. Secure with a nylon clamp.
- **M.** These hoses should be routed *away* from any hot or sharp objects.

#### 7.4 WATER PUMP RELAY INSTALLATION

- **A.** Locate the group of wires next to the fire wall. Attach the relay with the fastener provided. (See *Fig. 7-l.*)
- **B.** Route the long red wire #87 on the relay to the water pump and attach to the green wire with the blue stripe using a solderless connector.
- **C.** Attach the black wire #85 (relay ground) to the screw securing the factory ground wires in place. (See *Fig. 7-l.*)

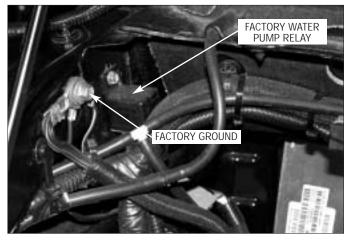


Fig. 7-I

**D.** Locate the red wire at terminal # 30 on the relay (12V power). Route this wire through the factory wire loom that is running across the fire wall. (See *Fig. 7-m.*) Attach the fuse link with a butt connector and ring terminal to the 12V terminal at the fuse box. (See *Fig. 7-n.*)

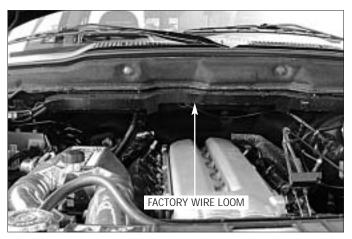


Fig. 7-m



Fig. 7-n

- **E.** The wire at terminal #86 (relay trigger) will be attached in a later step of the installation. (See *Fig. 7-o* and *Appendix A-4*. for reference)
- **F.** Attach the ground wire at the charge cooler water pump to one of the screws that retain the water reservoir to the chassis.

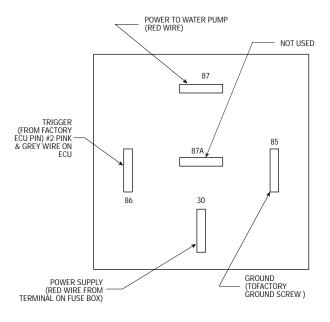
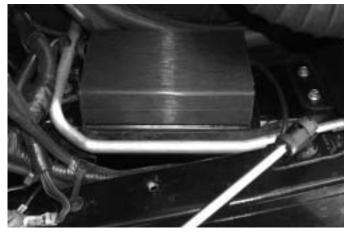


Fig. 7-0



#### 8.1 ENGINE CONTROL UNIT ASSEMBLY

- **A.** Locate the engine control assembly *5A001-077*. (See *Appendix A-4* for reference.) It is recommended that you refer to a factory manual to confirm wire colors and pin locations.
- **B.** Attach the Paxton ECU to the passenger side inner frame rail in the engine compartment using the fasteners that are provided. (See *Fig. 8-a.*)





**C.** Install the 3/8" x 3/8" x 1/4" brass vacuum TEE with a short piece of 3/8" EFI fuel hose between the brake master cylinder and the vacuum source from the intake manifold. (See *Fig. 8-b.*)





- **D.** Attach a length of 5/32" vacuum hose to the 1/4" outlet of the vacuum TEE and one 5/32" vacuum TEE.
- **E.** Attach a length of 5/32" vacuum hose to the 5/32" vacuum TEE and route down the inner fender well and secure with nylon ties this vacuum hose will be attach to the FMU in a later step.
- **F.** At the other end of the vacuum TEE, attach a length of hose and route through the factory wire loom running across the firewall. (See *Fig. 8-c.*)

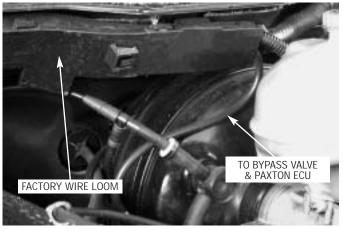


Fig. 8-c

- **G.** Install one 5/32" vacuum TEE in the vacuum hose coming out of the Paxton ECU attach the hose coming from the  $3/8" \ge 3/8"$  $\ge 1/4"$  fitting installed earlier.
- **H.** Install a piece of 5/32" hose to the compressor bypass valve and secure to the vacuum TEE installed in the Paxton ECU in an earlier step. (See *Fig. 8-d.*)

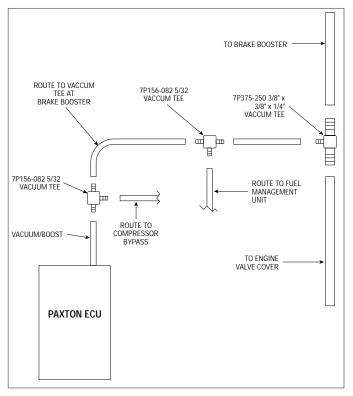


Fig. 8-d

- I. Follow the wiring schematic for factory ECU pin location. (See *Appendix A-4* for Paxton ECU wiring diagram.)
- **J.** Connect the 20GA red wire to the battery positive switched ignition (black PCM connector # 32 pin #2 pink with a gray striped wire). Use the supplied T-tap and spade connector. The yellow water pump trigger wire (installed in *Section 7.4*) should also be connected to the same power source use the supplied T-tap and spade connector.
- **K.** Connect the black wire to the signal ground at the (PCM connector #32 pin #4 dark blue and green). Use the supplied T-Tap and spade connector.
- **L.** Cut the crank signal wire black PCM connector #32 pin #8 (brown and light blue).
- **M.** Connect the gray wire leading to the crank sensor
- **N.** Connect the gray/black wire to the wire leading to the PCM crank sensor input.
- **O.** Cut the cam sensor wire pin #18 (dark blue/gray).
- **P.** Connect the tan wire leading to the cam sensor.
- **Q.** Connect the tan/yellow wire leading to the PCM cam signal input.

**R.** Connect the large 12GA red wire to the battery (+) positive terminal located at the front of the fuse box using a 3/8" ring terminal connector. (See *Fig. 8-e.*)

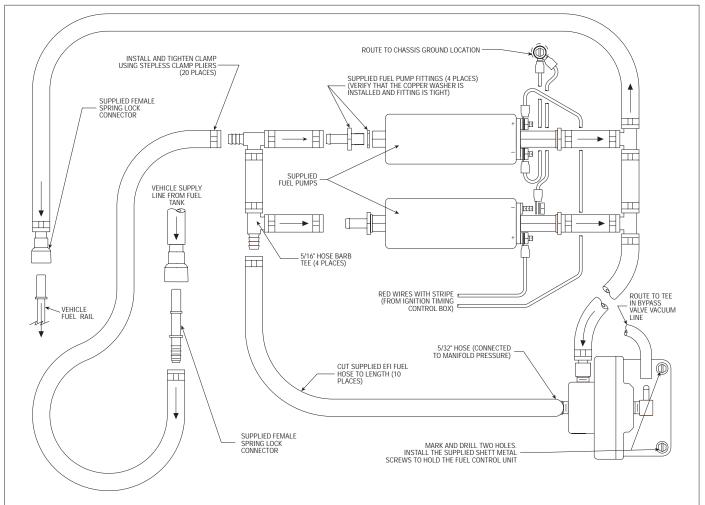


Fig. 8-e

- **S.** Please note that the assembly provides solder-less connectors but is recommended that the wires be soldered.
- **T.** Locate the two large gauge red/stripped wires with the fuses coming out of the Paxton ECU and route these wires down the inner fender well.
- **U.** Route these wires across the vehicle to the driver's side. They will be attached to the fuel pumps in a later stage of the installation.



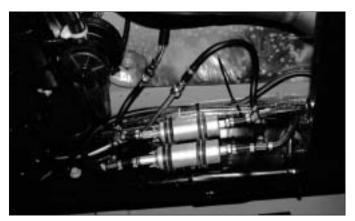
9.1 FUEL PUMP FMU ASSEMBLY INSTALLATION





\*\*\* NOTE \*\*\* Because of the close proximity to the exhaust system, the fuel lines need to be shielded. Install the supplied heat resistant covering to all of the fuel lines leading to the fuel management unit and the feed and supply lines.

A. Plumb the supplied fuel pumps in parallel by connecting the pump outlets. The pumps are now configured so that one TEE feeds both pump inlets and another TEE draws from both pump outlets. In back of the manual (See *Appendix A-3*) as a reference to assemble the pump assembly.





- **B.** Loosen the heat shields on the underside of the vehicle and route the wire across the top of the transmission to the fuel pumps. (See *Figs. 9-b, 9-c.*)
- **C.** Route the fuel pump control wires (red with inline fuses) from the Paxton supplied ECU controller across the vehicle. Remove the two 10mm headed nuts retaining the heat shield and route the wires across to the supplied fuel pumps. (See *Figs. 9-c, 9-d.*)



Fig. 9-c



Fig. 9-d

- **D.** Using the supplied self-tapping screw provided, drill a .190" hole in the frame rail. Connect the ground wire to the self-tapping screw with the provided ring terminal.
- **E.** Compress the plastic ring or use a spring lock disconnect tool to disconnect the fuel lines.
- **F.** Connect the supplied spring lock connector to the factory fuel line running to the intake manifold



- **G.** Connect the other supplied spring lock fitting to the factory fuel supply line.
- **H.** Install the Fuel Management Unit just in front of the transmission cross-member with the fittings facing the rear of the vehicle and toward the fuel pumps.
- I. Attach the fuel lines as seen in *Appendix A3* in back of this manual.
- **J.** Attach the vacuum/boost line that was run down from the vacuum source at the brake master cylinder in an earlier step.
- **K.** Route all of the fuel lines as far away from heat and or sharp edges and in as smooth a fashion as possible.
- L. The photos at the beginning of this section do not show the installation of the fire sleeve covering. It is very important that the lines that run close to the exhaust be covered.
- **M.** All of the hose connections should have stepless clamps installed on them and secured with nylon ties, away from any heat source.

## Section 10 Final Check-out and Start-up

This section covers pre-start checks and inspections, as well as initial start-up. Your vehicle is now a high performance truck. Be sure to use only premium high octane fuel from now on.

#### **10.1 INSPECT THE FOLLOWING:**

- A. Wires, harnesses and electrical connections. See that all items are properly dressed, connected and secured.
- **B.** Hoses, lines and fittings. See that all items are properly dressed, connected, and secured.
- **C.** Fasteners, brackets, and clamps. See that all items are properly installed and tightened.
- **D.** Fluid levels. Fill the radiator coolant and engine oil to their proper levels. Check carefully for fluid leaks.
- E. Belt(s). The serpentine drive belt (or accessory drive and supercharger drive belts, depending on requirement of your vehicle) must be properly installed, aligned and tensioned.

#### **10.2 PERFORM THE FOLLOWING:**

- **A.** Cycle the ignition key from "OFF" to "ON" position three (3) times at fifteen (15) second intervals. Afterwards, check the entire fuel system for any leaks.
- **B.** Start the car. Verify that the oil pressure is within the normal operating range. Listen closely. The engine should idle and sound the same as it did before you began the installation.
- **C.** Allow the engine to come up to normal operating temperature. Bleed the cooling system and top off as necessary.

#### 10.3 CHECK FOR THE FOLLOWING:

- A. FLUID LEAKS.
- **B.** FLUID LEVELS.
- C. BELT SLIPPAGE.
- **D.** THROTTLE RESPONSE.

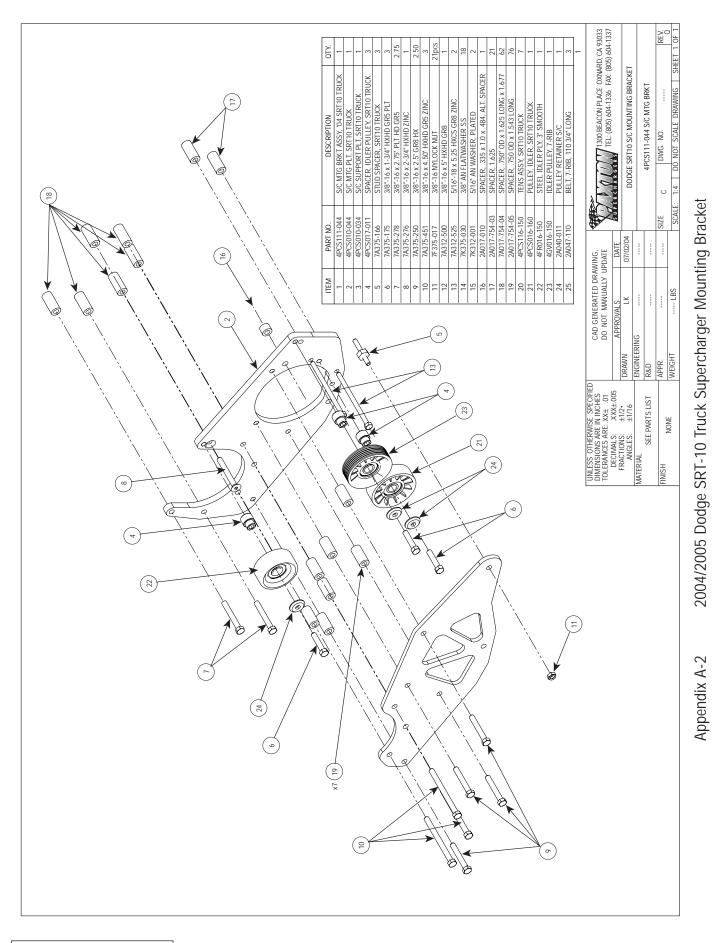
#### \*\*\*CAUTION\*\*\*

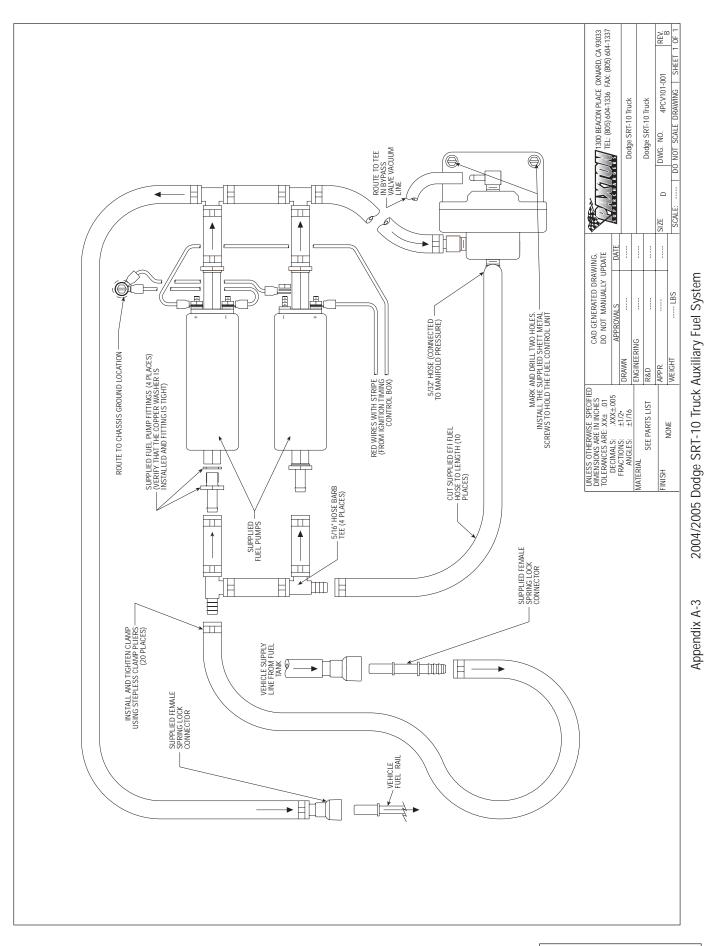
See the supercharger service manual included in your kit for information on supercharger servicing and maintenance, belt tightening, troubleshooting, special tuning, and warranty information.

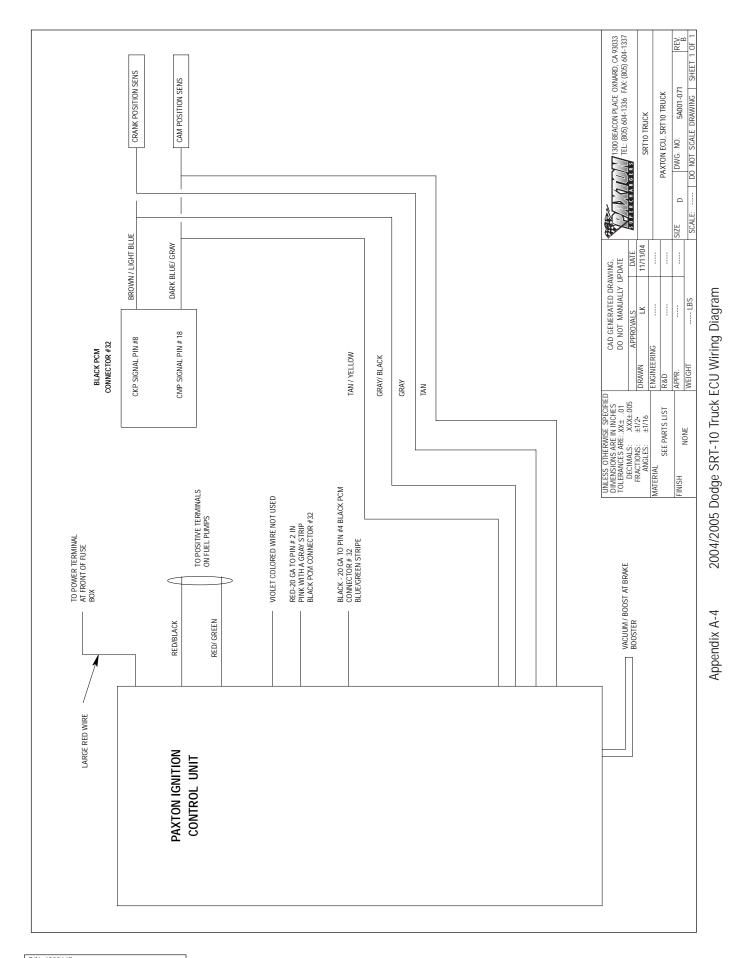
Now that the work is done, remember, the response and performance will now be different from that to which you have been accustomed. *Have fun!* 

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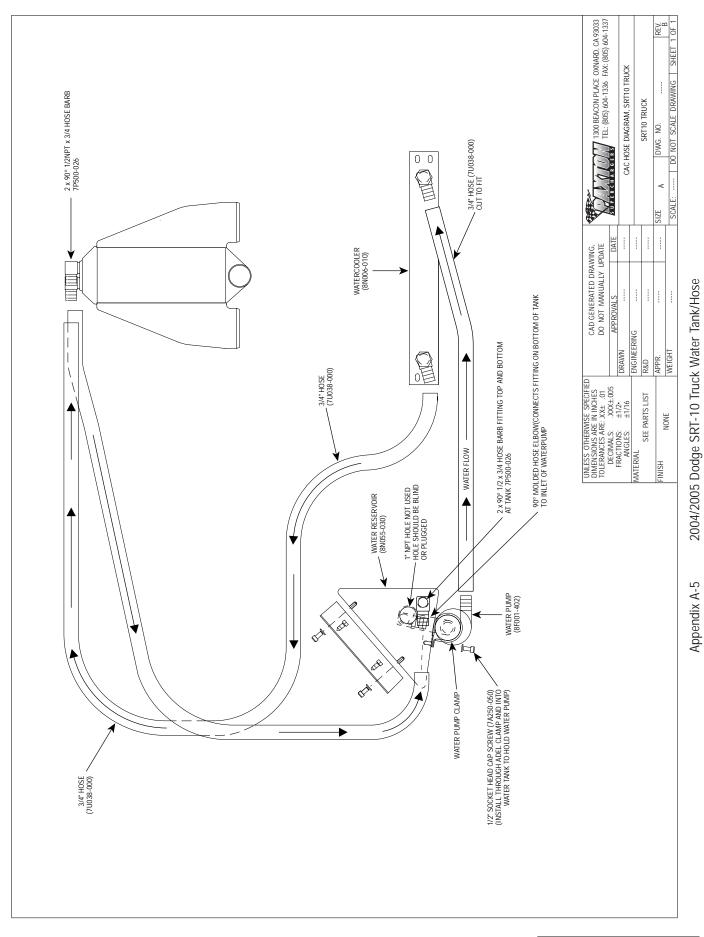
# Appendices

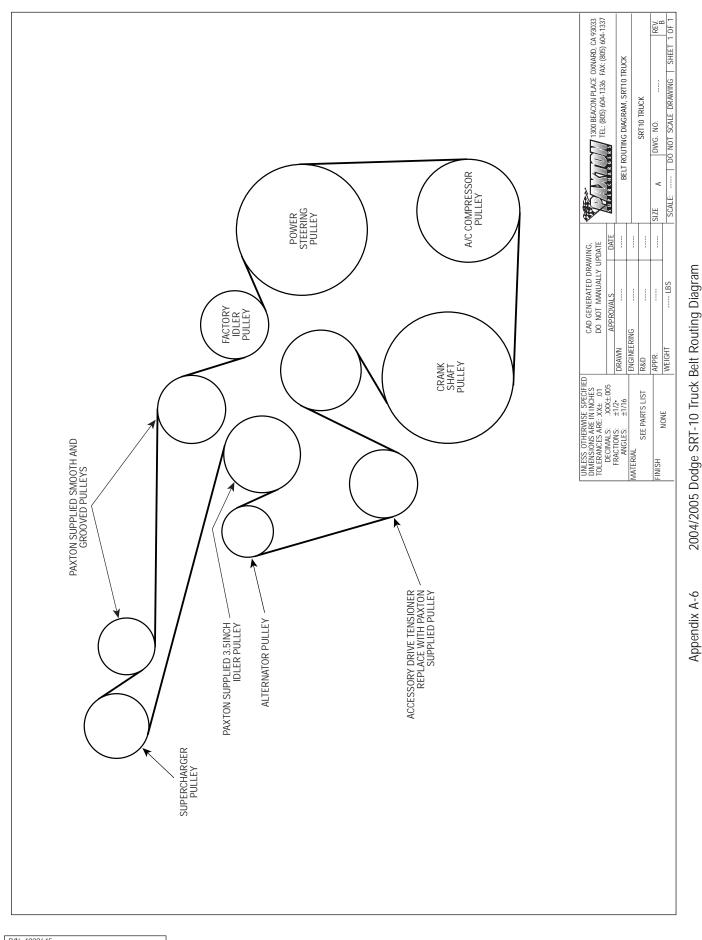






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