



INSTALLATION INSTRUCTIONS

SUPERCHARGER SYSTEM | 2020-21 KAWASAKI | #150-18-1000



**2020-21 KAWASAKI
TERYX KRX 1000**

INTRODUCTION

The Kraftwerks Supercharger kit for the 2020-21 Kawasaki KRX was designed for easy installation. Competent mechanics with the appropriate tools will find the process to be relatively simple. This is a GENERAL installation guide; the installation and vehicle may vary slightly and some parts may not reflect current production pieces. PLEASE BE AWARE THAT SOME PARTS MAY COME PRE-ASSEMBLED BUT ARE NOT TORQUED TO SPEC. Review the installations in its entirety before beginning the installation. If you have any questions about your ability to perform the installation, take your vehicle to a qualified installer. If you cannot find an installer, please contact the seller or Kraftwerks directly for a referral. If you will be using a floor jack, be sure to have properly rated jack stands to safely keep the vehicle in the air while it is being worked on. NEVER WORK UNDER A VEHICLE WITHOUT APPROPRIATE JACK STANDS.

GENERAL DISCLAIMER

- Engine Rev Limiter must be set below 9,000 RPM. Any higher RPM will OVER-SPIN the Rotrex Supercharger head unit and WILL void its warranty.
- Kraftwerks Supercharger Kits do not require break-in or warm-up periods. However, always warm your engine up properly before operating at full boost.
- If an engine oil and filter change has not been performed recently, do so now using a high quality oil and filter.
- A minimum of 91 OCTANE fuel must be used.
- Fuel Filters with more than 50,000 miles of use must be replaced prior to operating engine under boost (this is critical to proper fuel flow and engine performance).
- Vehicles with more than 100,000 miles of use, consider installing a new radiator and thermostat (coolant/water with high calcium content can leave deposits over time that can inhibit proper cooling).

ROTREX DISCLAIMER

- Only use genuine Rotrex SX150 Traction Oil for supercharger lubrication. The proprietary traction formula protects the supercharger where other oils would fail, and is what allows its high-RPM operating levels. Use of Non-Genuine Rotrex SX150 Traction Oil WILL void the warranty of the Rotrex Supercharger.
- Keep all Pipes and Hoses sealed and clean until ready for installation. The Rotrex Supercharger operates at speeds as high as 120,000 RPM on this application. ANY debris that inadvertently enters the inlet pipes or becomes stuck to the silicone hoses can enter the Rotrex Supercharger and damage its compressor blades. Compressor blade damage is NOT covered by the Rotrex two-year warranty.
- NEVER rotate the Rotrex Supercharger counter-clockwise. Rotating the Rotrex Supercharger counter-clockwise will void the warranty.

TUNING DISCLAIMER

ECU TUNING IS REQUIRED once the Kraftwerks Supercharger Kit has been installed. We recommend that the ECU Tuning Device (with proper base map uploaded) be ready to go PRIOR to installing the Supercharger Kit itself; this will reduce time that your vehicle is down.

***DISCLAIMER: KraftwerksUSA is not responsible for any direct or incidental tuning related engine or vehicle damage.**

Unlocked/open base tune file supplied by Kraftwerks are intended to get KW Supercharger and Turbo Kit owners going, but are not optimized. Factors including variations in vehicle condition, optional original equipment, aftermarket parts, and operating environments make it impossible to develop a one-size fits all optimized base tune. Additional tuning will be required to optimize the performance of the engine and transmission beyond what the base map provides. We recommend seeking tuning support from the tuner listed below or from you preferred tuner of choice. If you choose to further optimize your vehicles tune, we recommend the addition of a Dynojet Wideband Sensor Kit for AFR measurement and data logging purposes.

Option 1: Engine Tuning using DynoJet Tuning Device

Required: Laptop (Windows 7 or newer), Dyno Jet PV3 programming device, Internet Access*

Step 1: Purchase DynoJet PV3

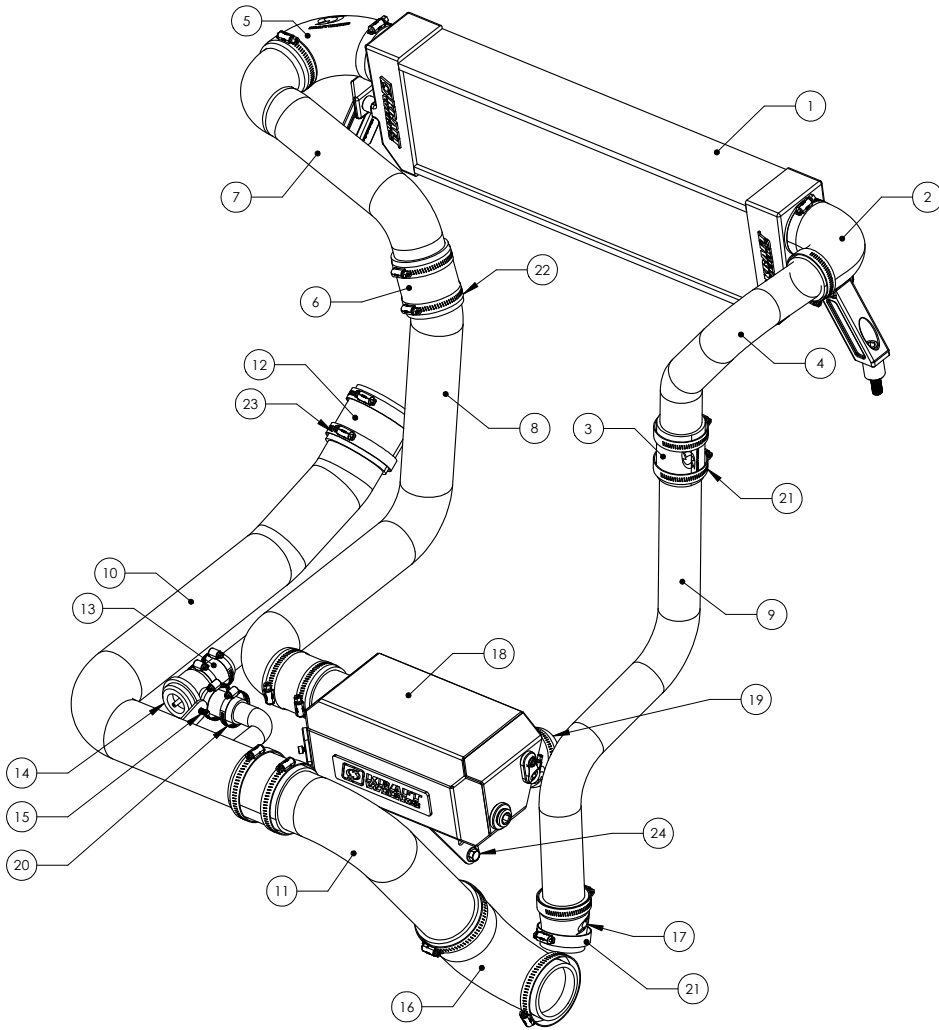
Order Dynojet PV3 from the vendor of your choice OR from our preferred tuning partner- who developed the KW PV3 tune - at DMT-performance.com or call 850-7-TUNING. DMT Performance maintains a good stock of PV3 inventory.

Step 2: Upload Kraftwerks Tune

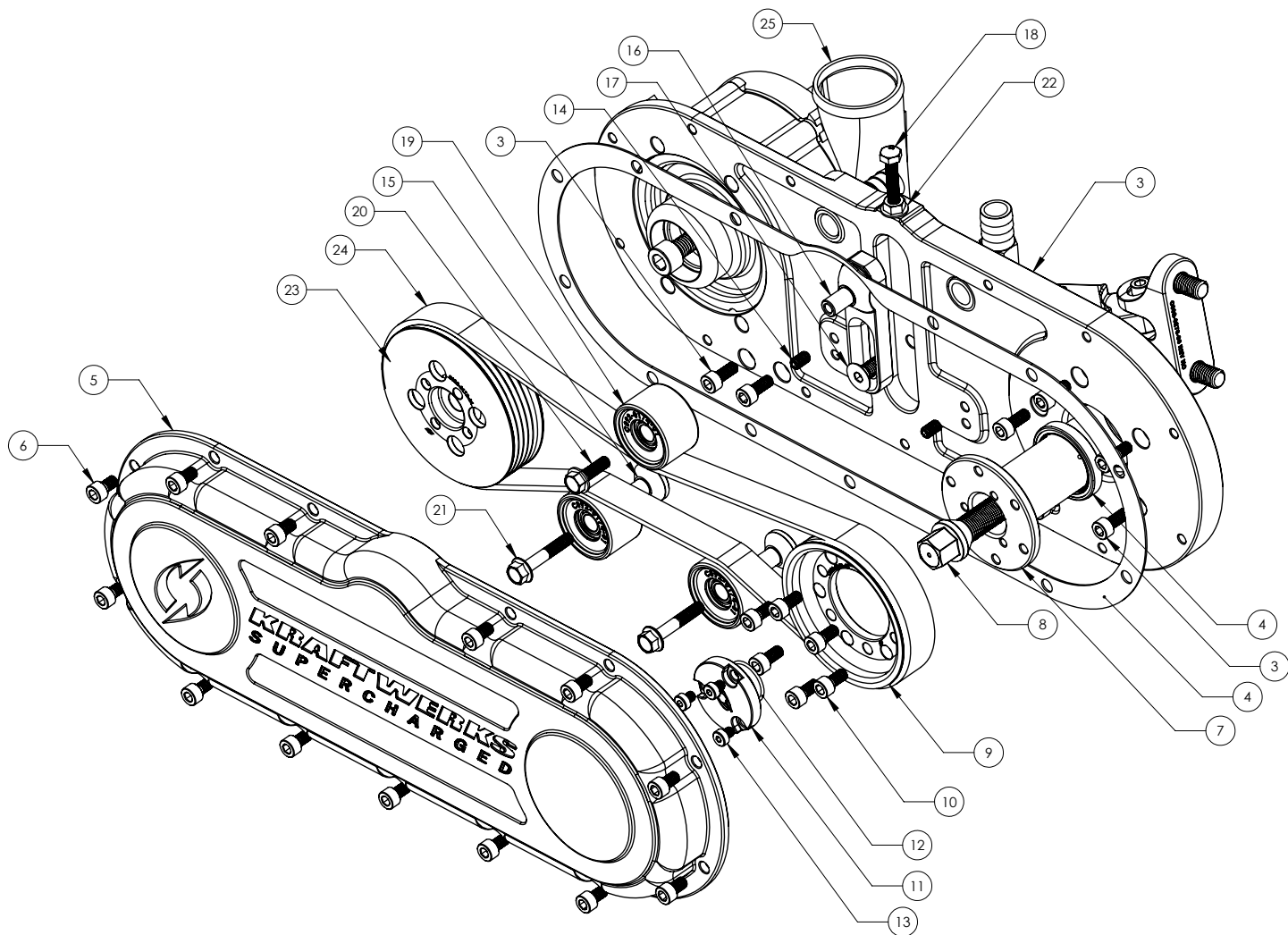
Once you have received and installed the PV3 programming device, upload the base tune found on DMT-performance.com or the Tuning Solutions section on the Kraftwerksusa.com site and enjoy the new found power your Kraftwerks Supercharger System provides.

*Recommendation: We advise you to seek the help of a qualified local tuner if you are not comfortable installing and using the Dynojet PV3!

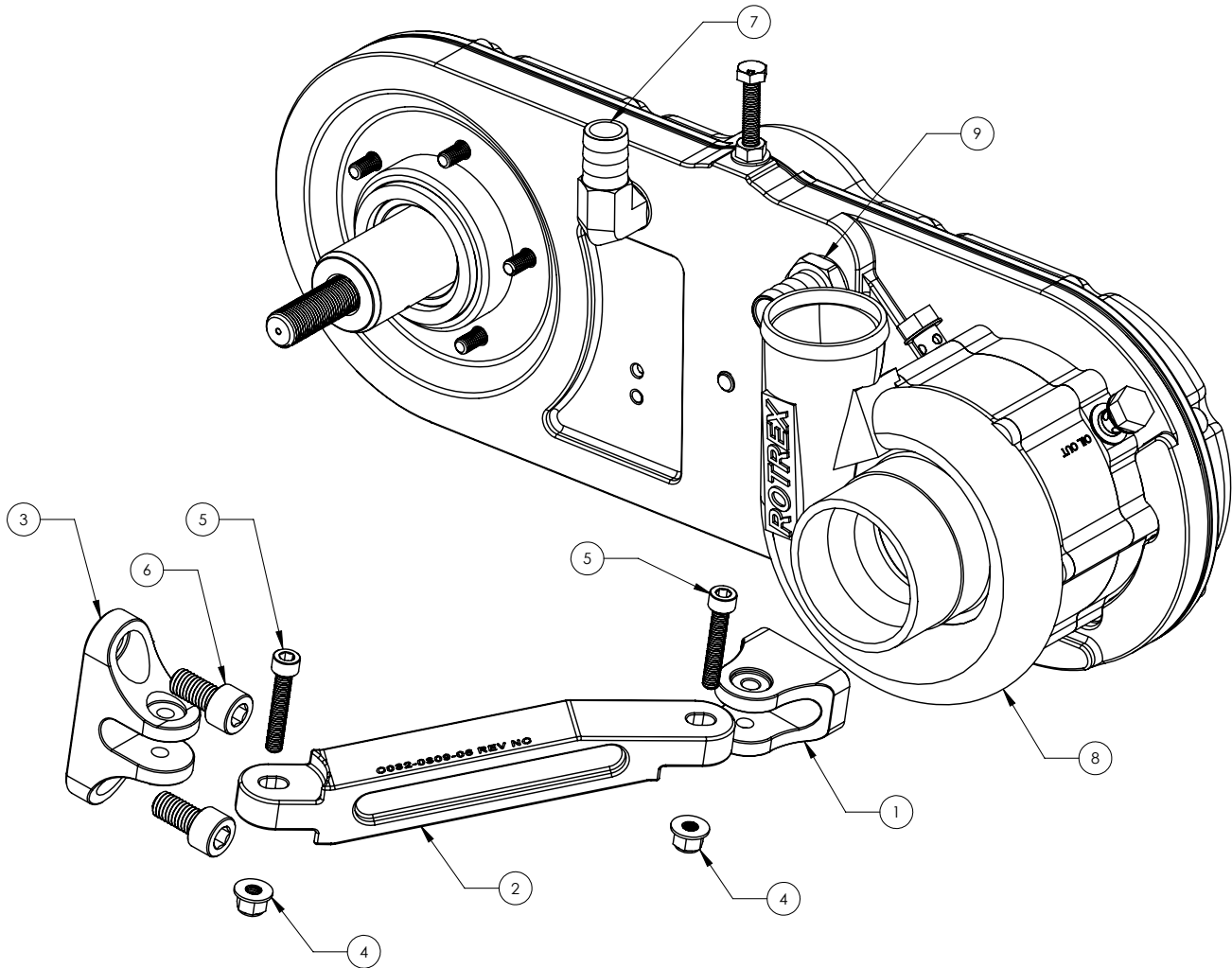
WARNING: THIS SUPERCHARGER KIT MAY NOT BE LEGAL FOR USE ON PUBLIC ROADS OR POLLUTION CONTROLLED ENVIRONMENTS. PLEASE CHECK YOUR LOCAL REGULATIONS BEFORE INSTALLING THIS SUPERCHARGER KIT.



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	S03-KAW-IC1	INTERCOOLER KIT, 20+ KRX1000	1
2	C7SL-2025-90D REV 1	SILICONE, 90° RDCR, 2.5"-2.0"	1
3	C7SL-2020-SS REV NR	HOSE, SILICONE, STRAIGHT, 2.0" ID	1
4	C056-0118-03 REV 000	TUBE, HOT SIDE, TOP, KRX1000	1
5	C7SL-2525-90D REV B	HOSE, SILICONE, 2.5" ID X 90°	1
6	C7SL-2525-SS REV NR	HOSE, SILICONE, STRAIGHT, 2.5", HTCH	2
7	C056-0120-03 REV 000	TUBE, COLD SIDE, TOP, KRX1000	1
8	C056-0121-03 REV 000	TUBE, COLD SIDE, LOWER, KRX1000	1
9	C056-0131-03 REV 000	TUBE, HOT SIDE, KRX 1000 LOWER ROTATION, RAW	1
10	C056-0122-03 REV 000	TUBE, ROTEX INTAKE, LONG SIDE, KRX1000, RAW	1
11	C056-0123-03 REV 000	TUBE, ROTEX INTAKE, SHORT SIDE, KRX1000	1
12	C7SL-3030-SS REV NR	HOSE, SILICONE, STRAIGHT, 3.0" ID	2
13	C7HT-1000-BU	HOSE, HEATER, 1.0" ID, BULK	2
14	C097-0001-01 REV NR	BYPASS VALVE, STANDARD	1
15	C2FH-0600-16 REV NR	BOLT, FLANGE, M6X1.0X16MM, CLEAR ZINC	1
16	C007-0131-01 REV A	HOSE, SILICONE, ROTEX INTAKE, KRX1000	1
17	C007-0132-01 REV B	HOSE, SILICONE, ROTEX OUTLET, KRX1000	1
18	A071-0049-09 REV 001	INTAKE MANIFOLD ASSEMBLY, KRX1000 SC KIT	1
19	C007-0114-01 REV NC	HOSE, SILICONE, ETB COUPLER, KRX1000 SC KIT	2
20	C067-RCMP-20N REV NR	HOSE CLAMP, #20, 21-44MM, NARROW, 5/16" WIDE	4
21	C067-LIND-32 REV NR	#36 LINED HOSE CLAMP, 40-64MM	5
22	C067-LIND-36 REV NR	#36 LINED HOSE CLAMP, 46-70MM	11
23	C067-LIND-48 REV NR	#48 LINED HOSE CLAMP, 65-89MM	6
24	C2FH-0825-16 REV NR	BOLT, FLANGE, M8X1.25X16mm	1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
3	C032-0308-06 REV A	SC PLATE, KAWASAKI KRX1000 SC KIT, LOWER ROTATION	1
4	C050-0019-00 REV NC	OIL SEAL, YAMAHA YXZ SC KIT	1
3	C2AC-0600-15 REV NR	SCREW, AHCS M6X1.0X15MM	7
4	C022-0096-03 REV A	GASKET, BELT COVER, YXZ SC KIT	1
5	C032-0274-06 REV NC	BELT COVER, YAMAHA YXZ SC KIT	1
6	C2AC-0600-10 REV NR	SCREW, AHCS, M6 X 1.0 X 10	13
7	C014-0205-12 REV B	CRANK ADAPTER, KRX1000 SC KIT	1
8	C002-0204-07 REV A	CRANK BOLT, KAWASAKI KRX1000	1
9	C092-0163-01 REV B	PULLEY, CRANK, 85 ED, 6 RIB K	1
10	C2AC-0600-12 REV NR	BOLT, AHCS, M6 X 1.0 X 12MM, SILVER ZINC	6
11	C030-0140-04 REV NC	CRANK ADAPTER PLUG, KRX1000 SC KIT	1
12	C019-0081-05 REV NR	O-RING, BUNA-N, 1.5MM WIDE, 21MM ID	1
13	C2LH-0508-06 REV NR	SCREW, AHCS, LOW HEAD, M5 X 0.8 X 6MM	3
14	C2SS-0600-10 REV NR	SET SCREW, HEX SOCKET, FLAT TIP, M6 x 1.0 x 10MM	2
15	C014-0160-12 REV A	IDLER PULLEY SPACER, YAMAHA YXZ SC KIT	2
16	C081-0060-05 REV B	TENSIONER, YAMAHA YXZ SC KIT	1
17	C2CS-0825-18 REV NR	SCREW, ALLEN SUNK CAP, M8X1.25X18	1
18	C2HH-0600-50 REV NR	SCREW, CAP, M6 X 1.0 X 50, FULLY THREADED	1
19	A120-SMO-38 REV 000	SMOOTH IDLER ASSY, 38 X 24	3
20	C2FH-0600-20 REV NR	BOLT, FLANGE, M6 X 1.0 X 20MM	1
21	C2FH-0600-35 REV NR	BOLT, FLANGE, M6X1.0X35MM	2
22	C1FN-0600-CZ REV NR	NUT, FLANGE, M6 X 1.0 10AF	1
23	C092-0175-01 REV NC	PULLEY, ROTREX, 92.5 ED, 6 RIB K	1
24	C119-0336-18 REV NR	BELT, 336 RPM, K-BELT, 5 RIB	1
25	A121-1560-000	S/C, Rotrex, C15-60, 0 DEG	1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	C032-0275-06 REV NC	SC PLATE SUPPORT, PLATE SIDE, KRX1000 SC KIT	1
2	C032-0309-06 REV NC	SC PLATE SUPPORT, ARM, KRX1000 SC KIT, LOWER ROTATION	1
3	C032-0276-06 REV NC	SC PLATE SUPPORT, ENGINE SIDE, KRX1000 SC KIT	1
4	C1NF-0600-YZ REV NR	NUT, NYLOC, FLANGE, M6 x 1.0	2
5	C2AC-0600-35 REV NR	SCREW, AHCS, M6 X 1.0 X 35	2
6	C2AC-1025-20 REV NR	Screw, AHCS, M10x1.25x20	2
7	C030-0145-01 REV NR	BRASS FITTING, 90 DEGREE, 5/8" HOSE TO 1/2" NPT	1
8	A121-1560-000	S/C, Rotrex, C15-60, 0 DEG	1
9	C030-0068-01	FITTING, .625IN BARB, .5IN NPT	1

PRE-INSTALLATION

» Tools/Materials Required for Installation:

- Metric Wrench Set
- Screw Driver Set
- Metric Socket Set
- Dremel Tool
- Drill Bit Set
- Drill
- Hole Cutter Set
- Hose Cutter
- Plier Set
- Torque Wrench
- Red Threadlocker
- Blue Threadlocker
- Silicone Sealant
- Scraper Tool
- Quick Snip Tool
- Impact Driver

I PRE-INSTALLATION

» Disconnect the Battery Ground/ Negative Cable Under the Driver Seat.

Drain Engine Oil



2 REMOVE COVERS

» Remove the x2 top covers that expose the motor.



3

MUFFLER

» Remove the Exhaust Muffler



4

AIR BOX

» Remove the Air Box from the throttle body.



5

ENGINE BAY

» This is what the engine bay should look like.



6**REMOVE OEM MAP SENSOR**

» Remove the Factory MAP Sensor

**7****NEW MAP SENSOR**

» Locate the new MAP Sensor and adapter and 1" Vac Hose.

**8****INSTALLING NEW MAP SENSOR**

» Remove the Factory Damper on the stock MAP Sensor and Install it on new MAP sensor.

Next Apply silicone to the O-Ring and the new MAP Sensor.

Next install the adapter and 1" vac hose.



9

VAC HOSE

» Install (x2) zip-ties on the 1" vac hose and install it back to the factory location.

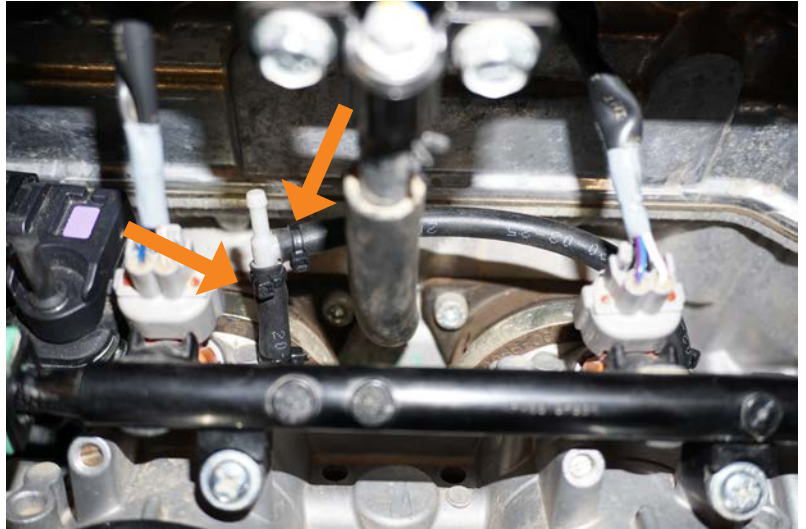


10

VAC LINE

» Remove the Vac Line From The Throttle Body's.

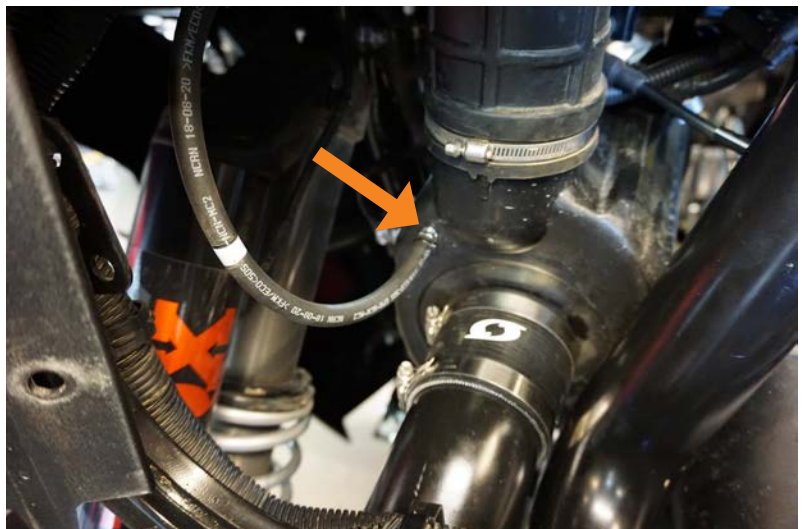
Remove the Factory Clamps and Replace Them With Zip-ties and Re-Install.



11

EMISSIONS HOSE

» On CA emission models drill a 11/32" Hole in The Factory Air Box and Install The 1/8" NPT Barb, Then Install The Emissions Hose and Zip-Tie.



12

FACTORY AIR TEMP SENSOR

» Remove the factory intake air temp sensor from the factor air box.



13

INTAKE PLENUM

» Locate the intake plenum and parts.

- (x1) plenum
- (x2) 2-1/2 X 2-1/2 Length Silicone hoses
- (x4) 46-70mm hose clamps
- (x1) Plug
- (x1) AHCS 6 X 1.0 X 10mm
- (x1) 1/8-27NPT Allen Plug
- (x1) M5 X .08 X 10mm AHCS Bolt
- (x1) M8 X 1.25 X 15mm Flange Bolt
- (x1) 1/2-14 NPT to 5/8 Barb



14

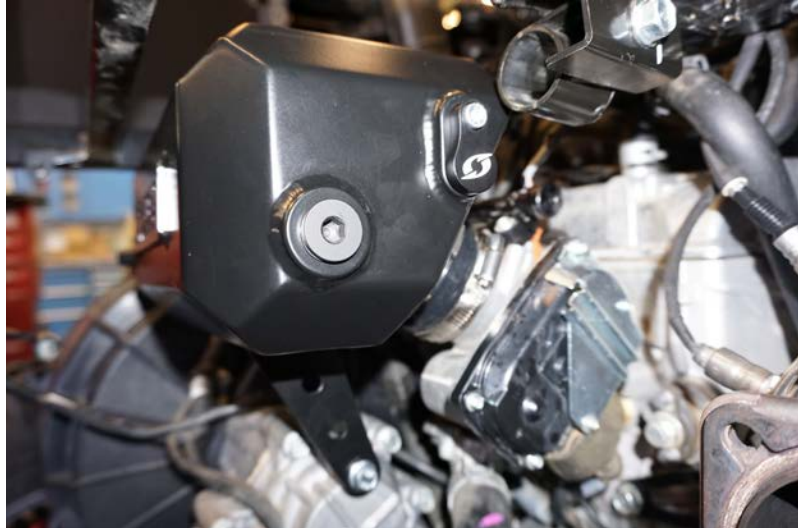
INTAKE AIR TEMP SENSOR

» Install the Intake Air Temp Sensor to the new plenum.



15 INSTALL PLENUM

» Install the plenum to the throttle body's and connect the I.A.T Sensor.

**16** ENGINE BREATHER

» Locate the engine breather parts

- (x1) Breather filter
- (x1) 5/8 to 5/8 union barb
- (x1) 11-20mm hose clamp

**17** ENGINE BREATHER

» Cut the upper section of the engine breather tube.

Next install the clamp, 5/8 union barb, and filter.



18

FACTORY AIR BOX

» Locate the factory air box spacers and hardware.

(x2) 1" Spacers

(x2) M8 X 1.25 X 50mm Bolts



19

FACTORY AIR BOX

» Remove the (x2) factory bolts from the factory air box

Next Install the 1" spacer and new bolts. Bring the air box forward.



20

SIDE COVER

» Remove the Engine side cover. (Be sure the engine oil has been drained beforehand.)

Next remove the crank shaft bolt and washer. Do not allow the engine to spin backward as it may result in jumping timing.

Clean gasket surface on both the block and side cover. Install new gasket and re-install side cover.
Torque to side cover bolts to 7 lb•ft.



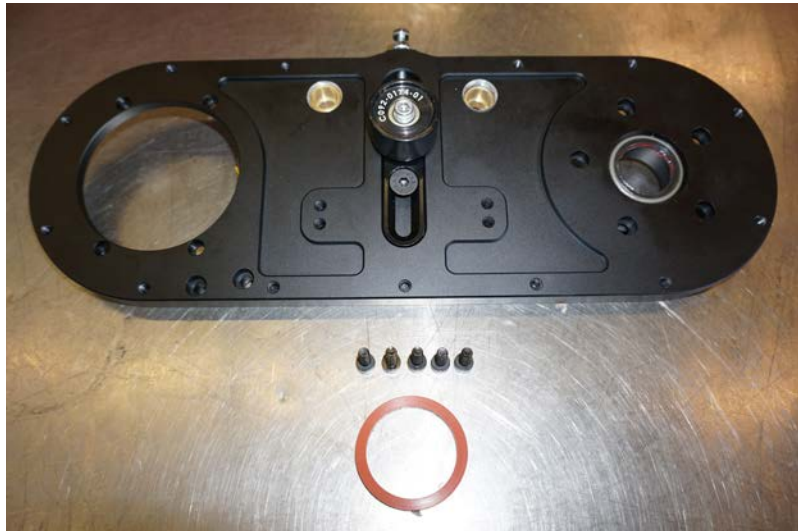
21 INSPECTION PLATE

» Remove the inspection plate and inspection cap.



22 SUPERCHARGER PLATE

» Locate the supercharger bracket, orange seal, and hardware.
(x1) Supercharger bracket
(x1) Orange Seal
(x5) AHCS M6 X 1.0 X 15mm Bolts



23 SUPERCHARGER PLATE

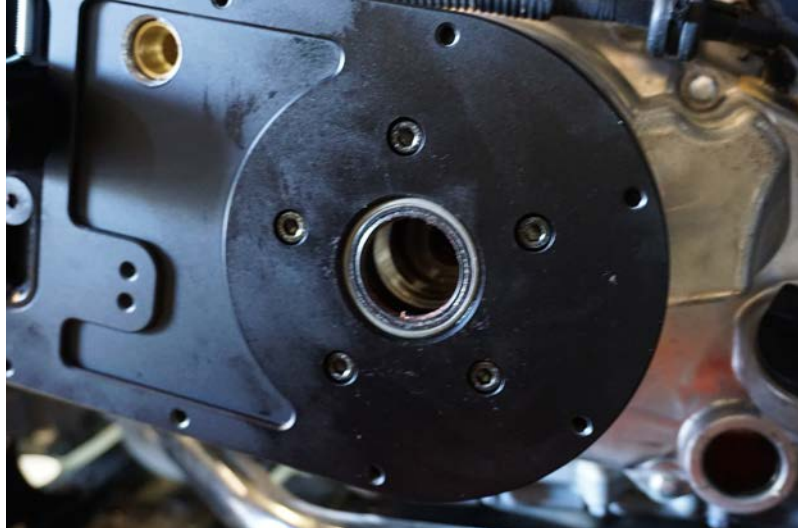
» Apply silicone to both sides of the orange O-ring and install it to the back side of the supercharger plate.



24

SUPERCHARGER PLATE

» Install the supercharger plate to the engine cover, apply red loctite to the (x5) bolts and hand tighten.



25

SUPPORT BRACKETS

» Locate the supercharger plate support arm, bracket and hardware.

- (x1) Engine support bracket
- (x1) Supercharger support bracket
- (x1) Support arm
- (x2) AHCS M6 X 10 X 35mm Bolts
- (x2) Nylock flange nuts 6 X10
- (x2) AHCS M6 X1.0 X 15mm Bolts
- (x2) AHCS M10 X 1.25 X 20mm Bolts



26

SUPPORT BRACKETS

» Install the engine side support bracket to the engine.
Add loctite to the (x2) 10 X 1.25 X 20mm Bolts and hand tighten.



27 SUPPORT BRACKETS

» Install the Supercharger plate side support bracket to the supercharger plate.

Add red loctite to the (x2) M6 X 1.0 X 15mm bolts and hand tighten.

**28 SUPPORT ARM**

» Install the support arm and install the (x2) M6 X 1.0 X 35mm bolts and hand tighten.

**29 TORQUE SPECS**

» Torque all the bolts on the supercharger plate and support bracket.

M6 X 1.0mm bolts = 7 lb•ft.

M10 X 1.25mm bolts = 25 lb•ft.

30

CRANK ADAPTER

» Locate the crank adapter, plug and bolts.

- (x1) Crank adapter
- (x1) Crank adapter plug
- (x1) Crank bolt
- (x3) AHCS low head M5 X .08mm bolts



31

CRANK ADAPTER

» Install the crank adapter, next apply lite amount of red loctite on the crank bolt.

Install the crank bolt and lightly tighten.

Torque the crank bolt to 100 lb•ft.

Note: It is critical that this bolt is properly torqued. If not, it may result in loss of boost and/or crank seal damage that can leak engine oil into the belt housing. Full Access UTV offers a specialty tool to aid in this process if you are finding it difficult get this bolt properly torqued.



32

CRANK ADAPTER

» Apply silicone to the crank adapter Hub O-Ring.

Install the Hub, add red loctite to the (x3) M5 X .08mm Bolts and torque to 5 lb•ft.

At this time add Engine Oil.



33 CRANK PULLEY

» Locate the crank pulley and hardware.

- (x1) 95mm Crank Pulley
- (x6) M6 X 1.0 X 12mm AHCS Bolts

**34 CRANK PULLEY**

» Install the crank pulley to the crank adapter apply red loctite to the (x6) M6 X 1.0 X 12mm Bolts and torque to 7 lb•ft.

**35 SUPER CHARGER**

» Locate the C15 Supercharger and hardware.

- (x2) C15 Rotrex
- (x2) Banjo fittings
- (x4) Copper washer
- (x2) Banjo Bolts
- (x1) 88" 5/16 Oil Cooler hose
- (x1) 16" 5/16 Oil Cooler hose
- (x2) Oil Cooler clamps



36

SUPERCHARGER

» Install the banjo clamps on th the 5/16" hose.

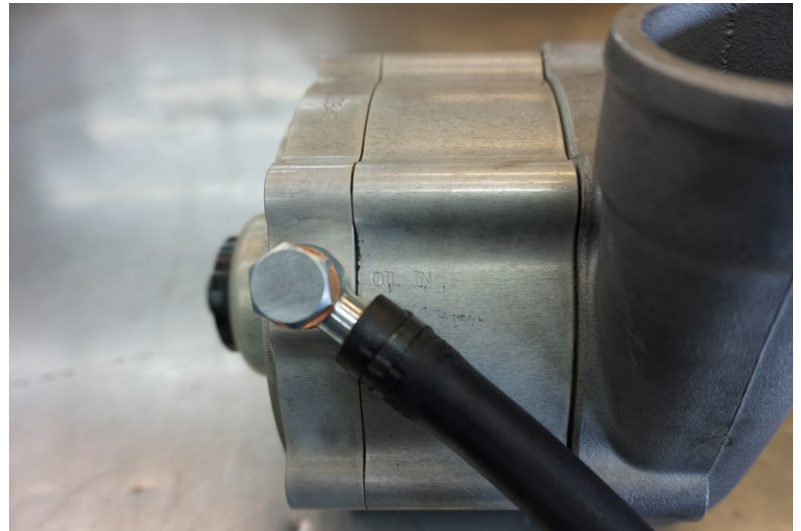
Next install the banjo fittings



37

SUPERCHARGER

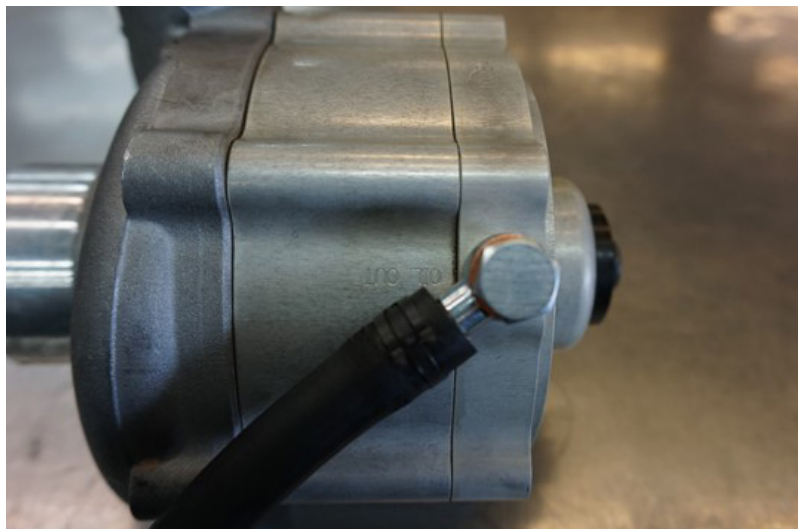
» Install the 16" 5/16 hose to the Rotrex (oil in)



38

SUPERCHARGER

» Install the 88" 5/16 hose to the Rotrex (oil out)



39 SUPERCHARGER

» Install the C15 supercharger to the supercharger plate.

Install the (x4) AHCS bolts that are installed on the charger add red loctite and torque to 3.5 lb-ft.

**40 TOP COVER**

» Locate the top cover, install the left and right templates on Pages 38, 39.

Drill the (x2) holes.

**41 TOP COVER**

» Install the top cover.



42

INTERCOOLER

» Locate the intercooler, brackets and hardware.

- (x1) Intercooler
- (x2) Intercooler Brackets
- (x2) Intercooler Bracket spacers
- (x2) AHCS M12 X 1.25 X 60mm bolts
- (x4) AHCCS M8 X 1.25 x 20mm bolts



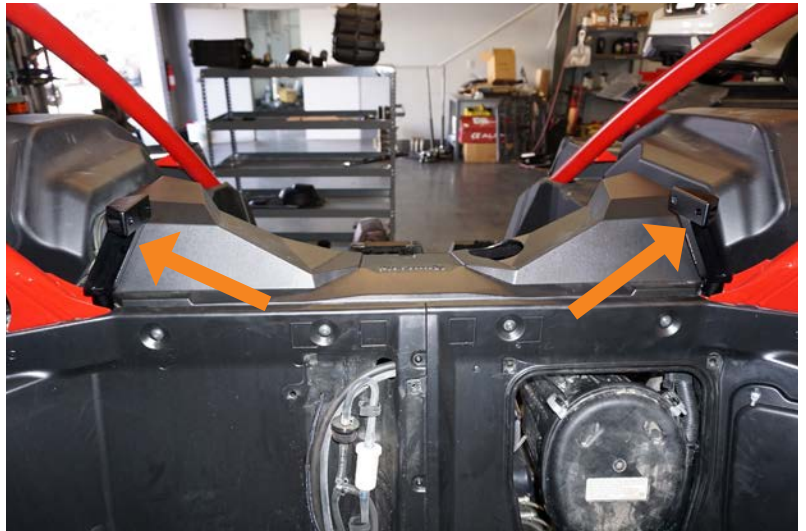
43

INTERCOOLER

» Install the (x2) brackets to the body (hand tighten).

Install the intercooler with the (x4) M8 X 1.25 X 20mm bolts.

Center the intercooler on the brackets and tighten all the bolts.



44

INTERCOOLER PIPING

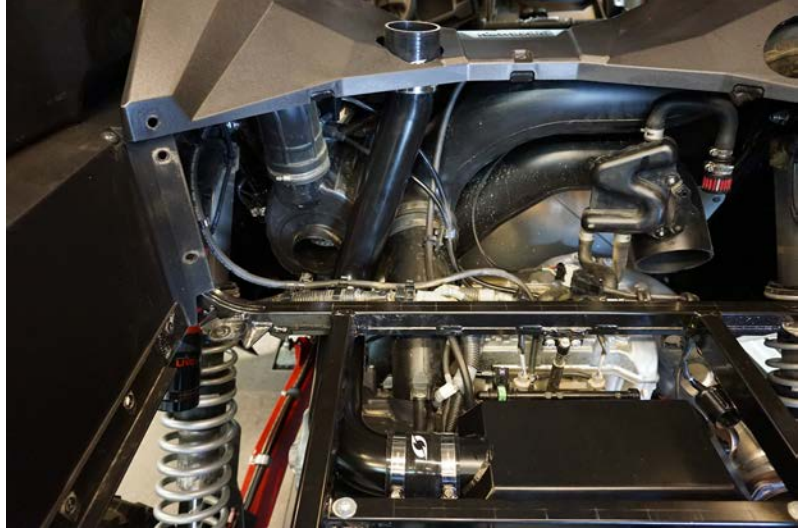
» Locate the cold side intercooler piping and hardware.

- (x1) Lower cold side aluminum pipe
- (x1) Upper cold side aluminum pipe
- (x2) 2-1/2" Silicone Hose
- (x1) 2-1/2" to 90deg Silicone hose
- (x6) 46-70mm Hose clamps



45 INTERCOOLER PIPING

» Install the lower aluminum tubing to the intake plenum.



46 INTERCOOLER PIPING

» Install the upper aluminum tubing to the intercooler.



47 INTERCOOLER PIPING

» Locate the hot side intercooler piping and hardware.

- (x1) Lower hot side aluminum piping
- (x1) Upper hot side aluminum piping
- (x1) 2" silicone hose
- (x1) 2-1/2" to 2" 90 deg. Silicone hose
- (x5) 40-64 Hose clamps
- (x1) 46-70 hose clamps



48

INTERCOOLER PIPING

» Install the lower aluminum tubing to the supercharger.



49

INTERCOOLER PIPING

» Install the upper aluminum tubing to the intercooler.



50

BYPASS VALVE

» Locate the bypass valve, hoses, and hardware.

- (x1) Bypass valve
- (x2) 1" Silicone hose
- (x4) 21-44 Narrow clamps
- (x1) Vac hose
- (x2) Small zip-ties



51 BYPASS VALVE

» Install the (x2) 1" silicone hoses on both sides of the bypass valve.



52 BYPASS VALVE

» Install the hose clamps to the silicone hose.

Install the vac hose and zip-tie it to the bypass valve.



53 AIR FILTER TUBE

» Locate the air filter outlet tube, silicone hose and hardware.

- (x1) M8 X 1.25 X 16mm bolt
- (x1) Aluminum tube
- (x2) 3" Silicone hose
- (x4) 65-89mm Hose clamps



54 AIR FILTER TUBE

» Install the bypass valve to the air filter outlet tube.

Next install the 3" silicone hoses and clamps.



55 AIR FILTER TUBE

» Install the air filter out tube to the intake air box.



56 AIR FILTER TUBE

» Connect the bypass valve vac hose to the vac tee on the throttle body's and zip-tie



57 SUPERCHARGER INLET TUBE

» Locate the supercharger inlet tube 90 Deg. Silicone hose and hardware.

- (x1) Aluminum Tube
- (x1) 3" to 2" 90Deg. Silicone Hose
- (x2) 46-70mm Hose Clamp



58 SUPERCHARGER INLET TUBE

» Trim and install the 90Deg. Silicone hose to The supercharger inlet.

Next install the supercharger inlet tube.

Align tubing and tighten.



59 OIL RESERVOIR

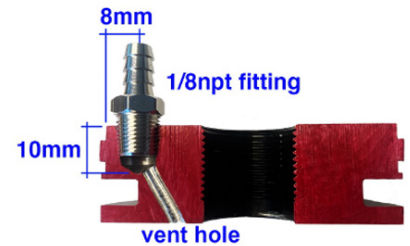
» Locate the Rotrex oil reservoir, brackets and hardware.

- (x1) Oil reservoir
- (x2) Oil reservoir brackets
- (x2) Oil reservoir billet clamps
- (x4) M8 X 1.25 X 16mm bolts
- (x2) M8 X 1.25 nuts

Rotrex Dipstick Modification



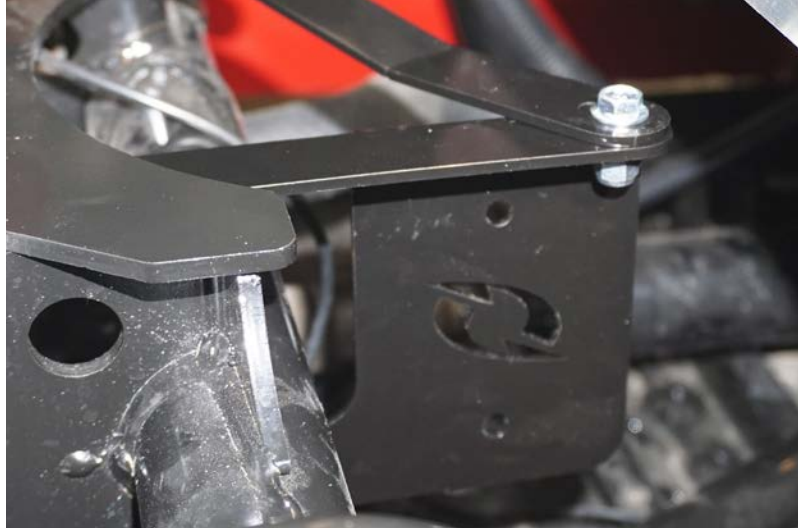
Rotrex Reservoir Modification



CAUTION!: If you plan crossing deep water or mud, YOU MUST MODIFY the Rotrex Oil Reservoir and Dipstick so water does not mix with the Rotrex Traction Oil. See pictures on how to modify the upper reservoir-top and dipstick. After installing the 1/8"NPT fitting you can install/mount a remote vent line and filter at a height that won't get submerged. No parts are included for this modification, parts should readily be available at your local speed shop. As for the dipstick, carefully pry the blue cover off the Rotrex dipstick and fill the inside cavity (both sides) with RTV silicone; replace blue cap after silicone has dried.

60**OIL RESERVOIR**

» Install the Rotrex reservoir brackets to the motor mount under the header.

**61****OIL RESERVOIR**

» Install the Rotrex billet clamps to the reservoir and install it to the reservoir bracket.

**62****OIL FILTER**

» Locate the Rotrex oil filter, clamps, and hardware.

- (x1) Rotrex oil filter
- (x1) 2-1/4" P-Clamps
- (x3) 5/16" Clamps
- (x1) 90Deg. Bracket
- (x2) M6 X 1.0 X 16mm bolts
- (x1) M6 X 10 X Nylock nut
- (x2) Brass washer
- (x1) Banjo barb
- (x1) Banjo bolt
- (x1) 7" Oil hose



63 OIL FILTER

» Install (x2) hose clamps on to the 7" oil line.

Next install the hose on to the inlet side of the oil filter.

Next install the banjo barb fitting on the other side of the hose.
Slide the hose clamps to the ends of the hose.

**64 OIL FILTER**

» Install the p-clamp on to the Rotrex oil filter next install the 90Deg. Bracket (slot facing down) with the bolt and nylock nut.

**65 OIL FILTER**

» Install the Rotrex oil filter outlet to the 18" hose with the 5/16" clamp.

Next install the banjo side to the bottom of the Rotrex oil reservoir using the banjo bolt and (x2) brass washers



66 OIL FILTER

» Install the Rotrex oil filter to the engine.



67 ONEWAY VALVE

» Locate the Rotrex oil oneway valve and hardware.

(x1) Rotrex oil oneway valve
(x2) 5/16 clamps



68 ONEWAY VALVE

» Install the Rotrex oil one way valve 11" from the outlet of the Rotrex
(Arrow facing outwards away from the supercharger)



69 OIL HOSE

» Locate the The 74" -5/16 oil hose and hardware.

- (x1) 74" - 5/16 oil hose
- (x1) 5/16 clamp
- (x1) Banjo barb
- (x2) Brass washers
- (x1) Banjo bolt



70 OIL HOSE

» Install the clamp and banjo barb to the 5/16 hose.

Next install it to the top of the oil reservoir.



71 OIL HOSE

» On the passenger side in between the intercooler and intercooler bracket drill (x2) 5/16 holes and trim the center section out as shown.



72

OIL HOSE

» Run the oil lines up the frame and out of the upper panel.

Next install the (x2) P-Clamps.



73

OIL COOLER

» Locate the oil cooler and hardware.

(x1) Rotrex oil cooler

(x2) 5/16 clamps

(x1 set) Nylon mounting rods



74

OIL COOLER

» Center the oil cooler on the intercooler and install using the nylon mounting rods



75 OIL COOLER

» Install the Rotrex oil lines to the oil cooler (trim and zip-tie)



76 BREATHER HOSE/FILTER

» Locate the breather hoses, filter and hardware.

- (x2) Breather hoses
- (x4) 12-27mm clamps
- (x1) 5/8 Union barb
- (x1) Filter
- (x1) 1/2-14 to 5/8 Barb



77 BREATHER HOSE/FILTER

» Using a unibit drill a 45/64 hole in the CVT inlet tube.
Next install the 1/2 -14 to 5/8 Barb.



78

BREATHER HOSE/FILTER

» Install the breather tube (trim to fit)



79

BREATHER HOSE/FILTER

» Install the 5/8 Union barb to the second breather hose install clamps and filter.



80

BREATHER HOSE/FILTER

» Install the second breather hose (trim to fit)



81 BELT/PULLEY/TENSIONER

» Locate the belt, pulley, tensioner and hardware.

- (x1) Belt
- (x1) Pulley tensioner
- (x2) M8 X 1.25 Bolt



82 BELT/PULLEY/TENSIONER

» Install the belt on the pulleys, the belt should be on the inner rib closest to the plate.



83 BELT/PULLEY/TENSIONER

» Install the tensioner.



» GO TO THE APP STORE ON YOUR MOBILE DEVICE AND DOWNLOAD THE "GATES CARBON DRIVE" APP FOR EITHER ANDROID OR IOS

CHECKING BELT TENSION: GATES CARBON DRIVE MOBILE APP [FOR IPHONE & ANDROID]

Gates Carbon Drive Mobile App measures belt tension from the natural frequency (Hz) of the belt span. Using the microphone, the App converts the sound into the primary frequency of the belt.

From the App, click the Tension icon and then click Measure. Hold the device microphone (be sure microphone is 'on') facing the belt. Pluck the belt so that it vibrates similar to a guitar string. Rotate the crank ¼ turn and repeat the frequency measurement. Compare your belt's frequency to the chart pg 44 to review any necessary tension adjustments. The Gates Carbon Drive Mobile App works best in a quiet environment.

- Find key parameters of your drive such as speed ratio and center distance
- Change belt length or sprocket sizes to better suit your riding needs
- Compare two belt drive bikes to each other
- Check out what sprocket sizes, mounting options, and belt lengths are available in our catalog
- Check tension with our frequency measuring tool (iPod Touch needs an external microphone)



» Follow the steps in the Gates app and tension the belt to 105-110Hz

*DO NOT OVERTENSION THE BELT!

Contrary to what one might think, the belt tension gets tighter as the belt heats up. For optimum belt performance, you want the belt to be on the verge of slipping upon cold start up.

A minor amount of slip during initial cold start up is acceptable and often manifests as a single "chirping" sound when the engine first fires.

» Install the muffler

87 LOCATE THE ROTREX TRACTION FLUID

» Locate the included bottle of Rotrex SX-150 Traction Fluid as shown.



88 FILL ROTREX OIL RESERVOIR

» Fill the Rotrex Oil Reservoir using a funnel.

Fill the Reservoir according to the Dipstick Readings.

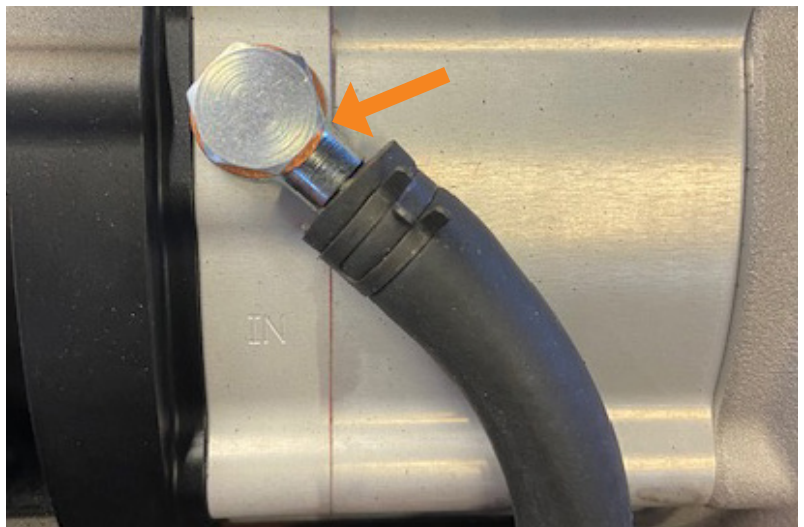
(NOTE: The Oil Level Reading must be taken with the Dipstick Cap completely threaded in).



89 PRIME ROTREX HEAD UNIT

» Locate the "OIL IN" Fitting on the Rotrex Head Unit.

Without taking the Banjo Bolt off completely, slightly loosen the Bolt.

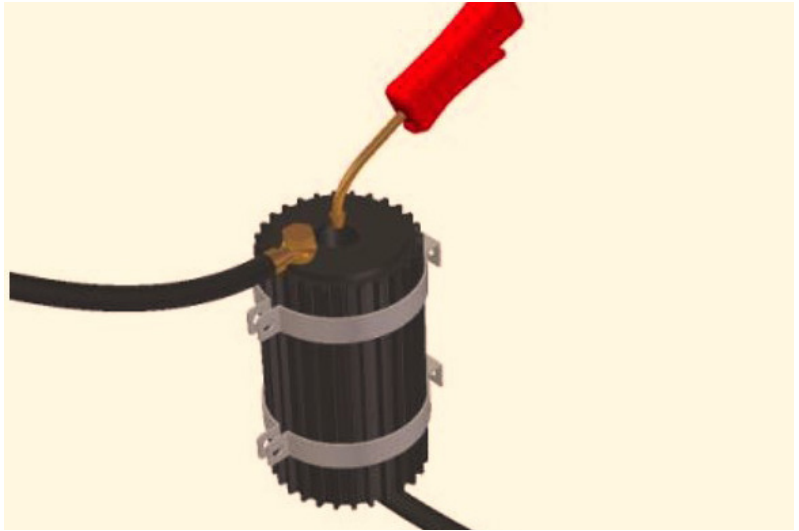


» Remove the Rotrex Oil Reservoir Cap and insert the air nozzle.

Place a rag over the hole to seal it tight.

Use a Low Pressure Pump (about 30psi) to prime the Rotrex Oil Line to the Rotrex Supercharger Head Unit.

Once you see Traction Fluid coming out of the Banjo Fitting at the Rotrex Head Unit, the line has been primed and the Banjo Bolt can be tightened down completely.



» TUNING IS REQUIRED for proper operation of the vehicle after the turbo kit has been installed.

Kraftwerks recommends using the Dynojet PV3 with our kits. Kraftwerks has developed free downloadable locked plug-n-play tuning files for the DynoJet PV3 that are updated as needed.

Follow the DynoJet PV3 installation instructions and install the unit on your vehicle.

Next upload the tune following the instructions on the KraftwerksUSA or DMT-Performance websites.

***If you are not comfortable performing this step on your own, please seek out the help of a qualified professional.**



» Start Up the engine and let idle for 5 minutes. During that time check all fluid levels, charge pipe connections, and hose lines for leaks. Correct issues before proceeding.

Next, after 5 minutes of idling, progressively rev up engine and continue to check for issues.

Correct issues before proceeding.

***If you are not comfortable performing this step on your own, please seek out the help of a qualified professional.**



33**INITIAL TEST DRIVE**

» When performing initial test drive, start by driving around at low gear and low rpms. Gradually increase the rpm range. Continually check for issues during this process.

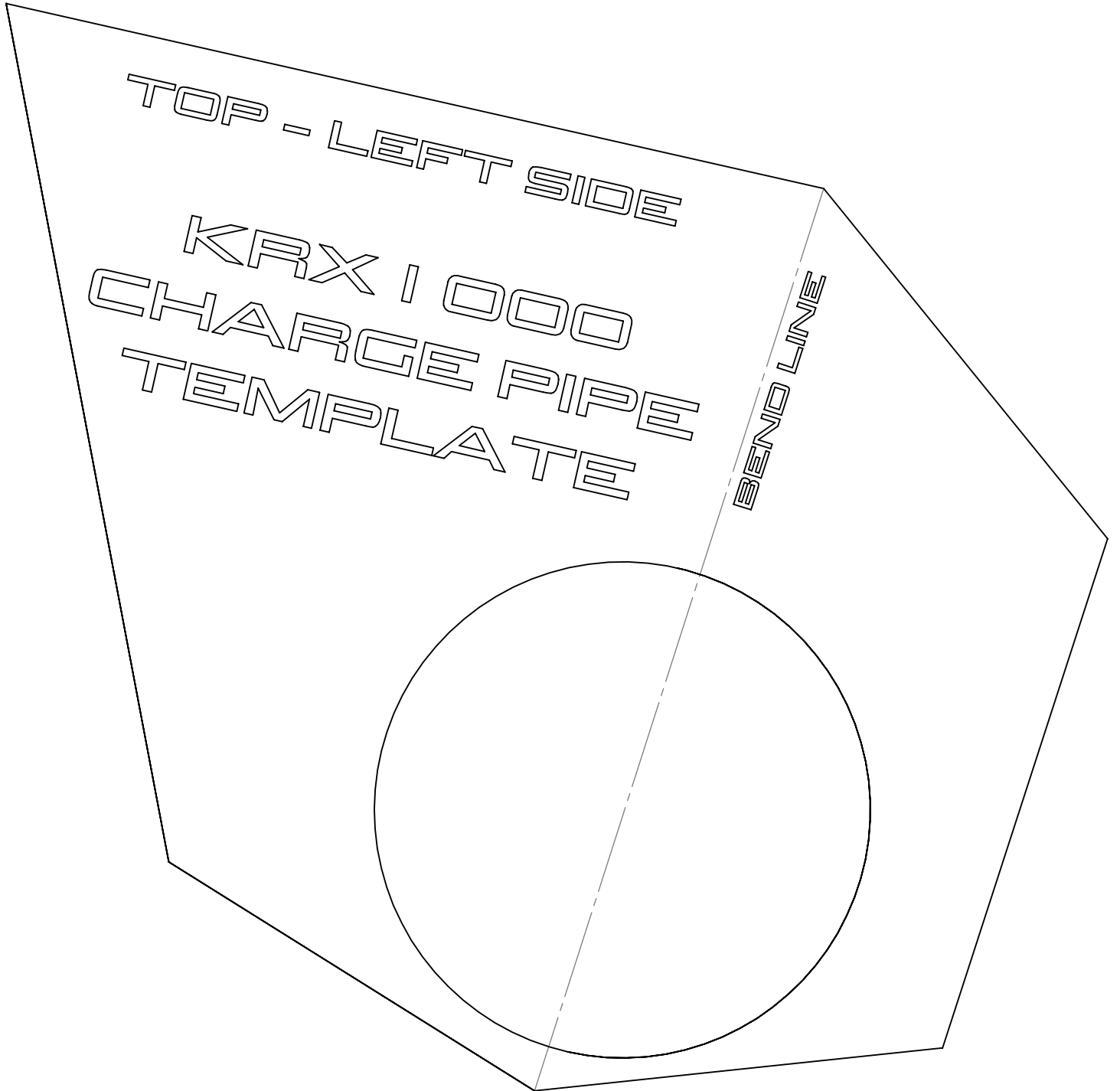
To increase load stop and put into high gear. Make sure the car is running without issues throughout the rpm range in each gear.

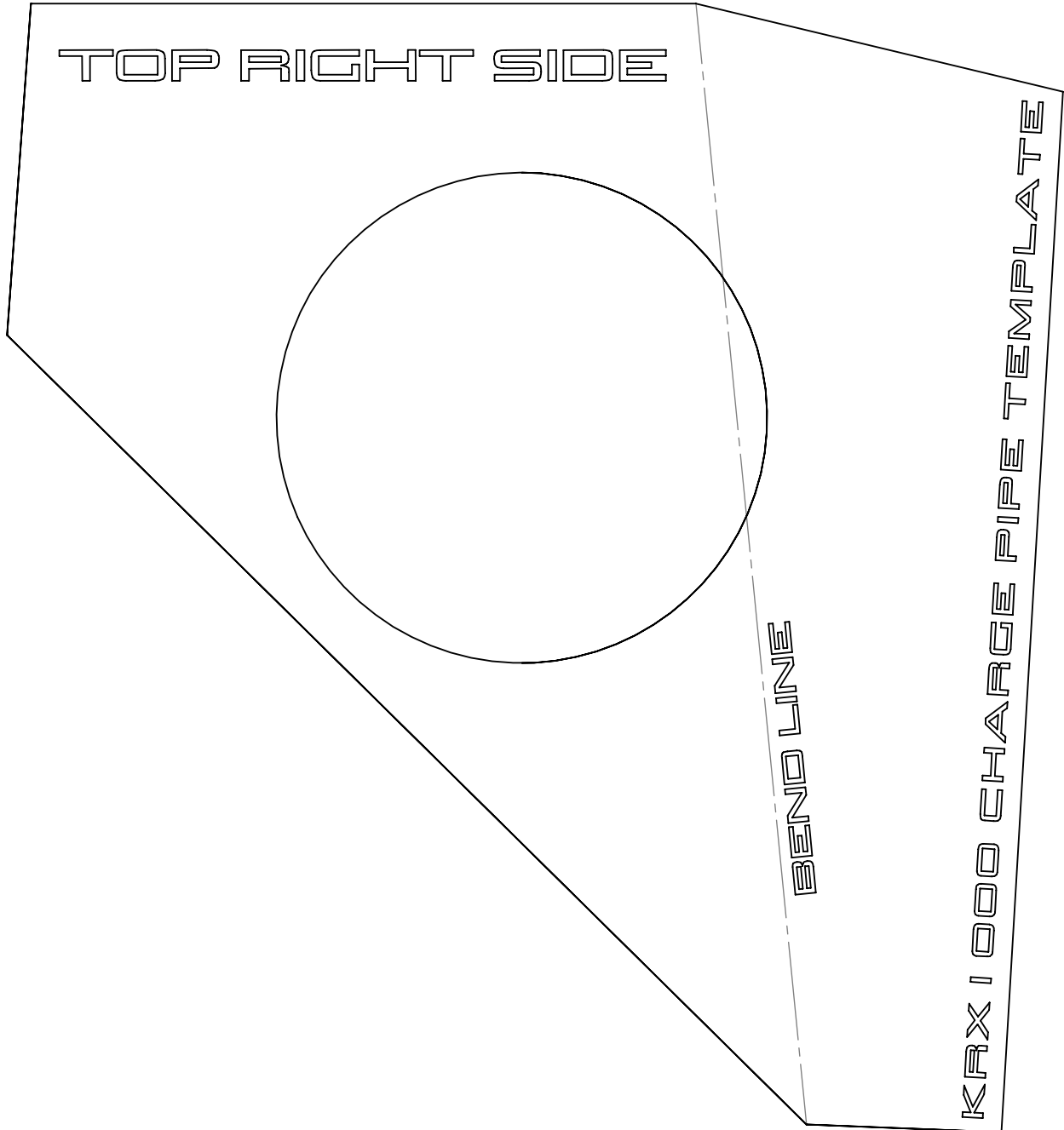
Abort the test drive if the engine runs rough. Rough engine operation is usually a sign of an issue with fueling and could hurt the engine if you continue to operate the engine in that condition.

Also, keep a close eye on engine temperature. If the temperature increases rapidly or hits 250F, abort the test drive and look for the cause of the issue.

***If you are not comfortable performing this step on your own, please seek out the help of a qualified professional.**







LIMITED WARRANTY

KraftwerksUSA offers a 12 MONTH Limited Warranty against defects in materials, components, and workmanship unless specified otherwise. The warranty period starts on the ORIGINAL date of retail purchase directly from Kraftwerks or from your local dealer (Warranty of the Rotrex Supercharger Head Unit is also ONE YEAR from original purchase date). This limited warranty is only offered to the ORIGINAL OWNER (receipt will be required for verification). The warranty excludes any 3rd party electronics devices and also any incidental damage related to improper tuning. IF THE KRAFTWERKS SUPERCHARGER KIT IS ALTERED FROM THE FACTORY SETTINGS, THE WARRANTY MAY BE VOID.

This includes but is not limited to the following:

- Over spinning of the Rotrex supercharger head unit
- Use of non-approved or custom hubs/pulleys
- Alteration of brackets, pulleys, and other drive components
- Modification or re-routing of any charge piping or intake system that is included in the "FULL" Kits

Kraftwerks will honor a warranty claim at its sole discretion after the component in question is inspected at the Kraftwerks facility and/or the Rotrex A/S facility located in Denmark. NO WARRANTY CLAIM WILL BE ACCEPTED IF THE COMPONENT IS FOUND TO HAVE BEEN TAMPERED, MIS-INSTALLED, MISUSED, OR MISHANDLED (I.E. DROPPED) IN ANY WAY. Furthermore, disassembly of the Rotrex Supercharger Head Unit voids ALL warranty claims. No Kraftwerks dealer is authorized to make any warranty claims, repair, or modification. Any claims for freight/shipping damages will need to be directed towards the freight/shipping company.

-If the component in question is covered under the Kraftwerks USA limited warranty, the product will be repaired or replaced at the discretion of KraftwerksUSA.

-If the component in question is not covered by the KraftwerksUSA limited warranty, our Kraftwerks staff will advise you on the specific reason, the cost of replacement/repair, and the estimated time it will take.

TO PROCEED WITH A WARRANTY CLAIM

Contact KraftwerksUSA directly at (951) 808-9888 and be prepared to send the following information to support@kraftwerksusa.com

- 1.) Copy of original receipt or invoice. Please note that PayPal payment verification alone is not accepted
- 2.) Pictures and description of issue. Please limit 1-2 pictures per email or compress images
- 3.) Contact information: Name, address, and phone number
- 4.) Vehicle description: Year, make, model, and any additional/supporting modifications

Once all of the above have been received and the warranty claim has been INITIALLY approved by KraftwerksUSA; you will be contacted with a Return Merchandise Authorization (RMA) number. You will then be directed to package the component(s) in question, write the RMA number (in BOLD) on the outside of the box, and a call tag will be issued to pick up the package from your location.

KraftwerksUSA is located in California. Please be aware that warranty claims will be shipping GROUND (faster shipping available at an additional cost to you) so please allow enough lead time for shipping and inspection of the component(s). Please package components securely as any damage to components due to improper packaging will NOT be covered by the limited warranty. Please note that if a Rotrex supercharger head unit is being sent in for warranty inspection, the lead time will be longer due all head unit warranty inspections are handled by Rotrex in Denmark. Only Rotrex can approve or deny head unit warranty claims (if this is a time sensitive case, we do offer CORE CHARGE options. Please contact a KraftwerksUSA representative for more information).

Please note that KRAFTWERKSUSA is NOT liable for the voiding of your factory warranty nor any damage(s) to clutch, transmission, and/or drive-line components.



