

# KRX TURBO SYSTEM INSTALLATION INSTRUCTIONS

## **ATTENTION:**

This packet includes Pre-Run Instructions (*Steps 10-11*) that show how to bleed the coolant system before machine use. **This step is very important. Do not skip!** 

NEGLECTING TO BLEED THE COOLANT SYSTEM COULD RESULT IN CATASTROPHIC ENGINE DAMAGE!

#### Step 1: Removal Process

Remove passenger seat and seat belt, middle console/cup holders, cover panels from fuel vent lines, unhook all fuel vent lines. Remove passenger firewall/access panel and bed.



Remove exhaust muffler, header/mid-pipe from engine and EGT sensor, air intake tube, and the lower clutch air ducting tube.



Remove the factory plugs and install the oil drain and oil supply in the pictured locations



### Step 3: Installation - Turbo System



Remove the pictured exhaust bracket and install it on the opposite side of its stock location

## Step 4: Installation - Lines from the Turbo (Coolant, Oil Supply, and Oil Drain)

Disconnect the stock black coolant line from the oil cooler. Attach the longer stainless-steel line to it with provided clamp and connect the shorter stainless-steel line to the oil cooler where the stock black line came off.

Connect the oil drain line from the bottom of the turbo to the fitting installed earlier on the side of the motor (*Step 2*). Make sure the line flows straight without any high or low spots for oil to get stuck in.





#### Step 5: Installation - CCV Tube and Expansion Plug

Flip hose around from the diverter and route the line to the CCV port on the cold air intake. Plug the hole on the air box with the supplied expansion plug.



#### Step 6: Installation Process - Charge Tube, Cold Air Intake, and Clutch Ducting

**Cold Air**: Install the 90° silicone boot of the cold air tube (3" dia.) onto the air filter first. Rock the tube into place, then install the straight silicone boot onto the compressor cover of the turbo.

**Charge Tube**: Install the smaller reducing coupler of the charge tube (2.5" dia.) onto the turbo first, then install the bigger coupler onto the airbox.

**Clutch Ducting:** Take previously removed lower clutch air ducting (*Step 1*) and cut it to 1" in length. Reinstall in stock location.



Install supplied heat shield onto factory heat shield. Drill holes as pictured and use provided rivets to connect the two shields together. Be sure to put the button head side of the rivets closest to the firewall (see pictures below).



#### Step 8: Installation - Dynojet Wideband and PV3

Install the two O2 sensors into the turbo manifold and route the wires as shown below.



Connect the corresponding cables to the color coordinated location on the wideband controller. Do not mix the harnesses.





Route wires under the center console and under the dash.

Take off the control panel to finish routing the wideband and PV3.





Route wideband under the dash and connect to the diagnostic port under the driver side dash.

Route the PV3 wiring through the dash and mount where it is visible for the driver.



Check the WBCX light for correct wiring and power:

- Flashing green light after ~5 seconds = Wrong wiring/check wiring for correct hookups.
- Solid green light after ~5 seconds = Correct wiring.



#### Step 9: Installation - 3-Bar MAP Sensor

At the back of the machine, unhook the stock air sensor, peel back the sheath, and cut the exposed wires (leaving enough wire that it could be reattached should that ever be desired). Set aside the stock air sensor. It will not be used. In its place connect the blue- and green-marked wires of the 3-bar MAP sensor to the blue and green wires in the system. Connect the black unmarked wire to the black/green. The 3-bar MAP sensor can now be installed in the same location where the stock air sensor was.



Your installation is complete. Reassemble your machine.

Before the machine is used, the Dynojet gauges must be configured, and the coolant system bled. Those instructions follow.

#### Step 10: Set Up - Configure Dynojet Gauges

On the PV3, flash any tune ending in ".djt" to pair the device to the machine. Turn the key off when prompted to complete the flash.



#### Setting up Dynojet gauges:

- Press center button on Power Vision. Select DEVICE TOOLS, then go to CONFIGURE GAUGES. Select SCREEN 1.
- Channel 1 AFR 1 this will show up once the vehicle has been started and the Wideband has had time to calibrate.
- Channel 2 AFR 2 this will show up once the vehicle has been started and the Wideband has had time to calibrate.
- Channel 3 Barometric pressure or Bap
- Channel 4 Manifold atmospheric pressure or map
- After setting up gauges hit the return arrow until you are back to home screen. Your home screen should be set up with the selected parameters.

## **IMPORTANT!**

## BE SURE TO BLEED AIR POCKETS FROM THE COOLANT SYSTEM BEFORE USE! FAILURE TO DO SO COULD CAUSE IRREPARABLE ENGINE DAMAGE!

Bleeding the air pockets from coolant system may take some time. Have the patience to be thorough.

- Lift the front end of the machine off the ground by 12". Be sure to use correct lift points on the vehicle to avoid frame damage. Chock the wheels and use jack stands for safety.
- Fill radiator with coolant. Leave radiator cap off.
- Start machine. Let engine warm up to 160° F. Add coolant as air bubbles leave the system.
- Open bleed screw on back of engine head. (Be careful not to lose bolt or washer). Let air pockets bleed from the tube. Open and close multiple times.
- Once the air has been bled from the system (no more bubbles, just steady flow of coolant), tighten the bleed screw, install radiator cap, and fill overflow bottle with correct level of antifreeze.
- Return vehicle to level.
- Check oil level in motor once the engine has been up to working temperature (160° F). Fill engine oil if needed.
- Slowly run the machine and check for any oil leaks, or coolant leaks.

#### Work with Force Turbos on setting up fuel mapping and machine first run.

#### Step 12: Enjoy Your New Turbo System!

Take it easy on your first few rides and watch your AFR's when driving the machine. If they exceed the ranges below, shut it off to avoid engine damage:

- Idle = 14.7 14.9 or lower
- Midrange driving = 11.5 12 or lower
- Full throttle = 10.5 11.5 or lower

#### Always follow these good practices:

- For the best results, always use good 91 octane grade fuel or higher.
- Let your machine warm up to 120° F before driving for best operational performance.
- Check turbo system exhaust bolts and charge tube clamps after every ride to make sure that they have not become loose. Tighten if necessary.