

## NISSAN 300ZX TWIN TURBO 90+ DUAL POP-CHARGER AIR INTAKE SYSTEM



## INSTALLATION INSTRUCTIONS

## PLEASE READ:

THIS SYSTEM REQUIRES A NEW PROGRAM TO BE INSTALLED IN THE E.C.U. . IF YOU ALREADY HAVE A JWT CONTROL UNIT IN YOUR CAR, YOU SHOULD HAVE RECEIVED A NEW "DUAL POP-CHARGER" EPROM CHIP. WE STRONGLY RECOMMEND THAT YOUR ECU AND EPROM BE SENT TO US FOR THE CHANGING OF THE EPROM (THE OLD EPROM IS RE-QUIRED TO BE RETURNED TO US TO BE ELIGIBLE FOR THE UPGRADE PRICE ON THIS PACKAGE)

IF YOUR ENGINE CONTROL UNIT IS "STOCK", YOU SHOULD HAVE PURCHASED A JWT CONTROL UNIT WITH THIS PACKAGE THAT HAS A" DUAL POP-CHARGER" PROGRAM AL-READY INSTALLED.

MAKE SURE THAT YOU ORDERED THE PROPER PROGRAM FOR YOUR SPECIFIC APPLICATION (I.E., INJECTOR SIZE, TURBO SIZE, ETC.)

DISCONNECT THE BATTERY TO PREVENT DAMAGE TO THE CONTROL UNIT. REMOVE THE CONTROL UNIT FROM THE CAR. THE CONTROL UNIT IS LOCATED UNDER THE PAS-SENGER SIDE CARPET. PULL THE CARPET BACK AND REMOVE THE WOODEN FLOOR BOARD. THE CONTROL UNIT IS THE 6"X6" GOLD BOX ON THE LEFT. THE LARGE WIRING PLUG IS DISCONNECTED BY CAREFULLY UNSCREWING THE 10M.M. BOLT IN THE CENTER. ON REINSTALLATION BE SURE TO PUS H WIRING PLUG IN BY HAND ON BOTH ENDS WHILE TIGHTENING THE CENTER BOLT. RECONNECT THE BATTERY.

- 1. REMOVE THE BODY PANEL COVERING STOCK AIR CLEANER BOX.
- 2. REMOVE THE FOUR AIR BOX MOUNTING BOLTS (10 M.M. WRENCH) AND THE BOLTS THAT CONNECT THE AIR BOX TO THE PLASTIC AIR DEFLECTOR SHIELD ON THE BOTTOM.
- 3. LOOSEN THE HOSE CLAMP ON THE AIR FLOW METER AND UNPLUG IT'S ELECTRICAL CONNECTER.
- 4. CAREFULLY REMOVE THE STOCK AIR CLEANER BOX UPPER SECTION AND FLOW METER FROM THE CAR.
- 5. HINT: TO EASILY REMOVE THE LOWER AIR BOX SECTION, BEND THE UNIT SLIGHTLY TOWARDS THE MIDDLE.
- 6. UNBOLT THE AIR FLOW METER FROM THE AIR BOX AND REMOVE THE RUBBER "T" HOSE FROM BOTH INLET PIPES.
- 7. OPTIONAL REMOVAL OF THE AIR CONDITIONING CONDENSER FAN ALLOWS FOR EASIER FITTING OF THE SYSTEM, BUT MAY CAUSE THE AIR CONDITIONING TO BE LESS EF-

FECTIVE AT IDLE AND LOW SPEED. THIS STEP IS OPTIONAL.

- 8. LOOSELY INSTALL ELBOWS TO BOTH INLET PIPES.
- 9. ASSEMBLE THE AIR HORN TO THE MAF SENSOR AND CONNECT IT TO THE ELBOW ON THE LEFT SIDE (DRIVER'S SIDE) AND ATTACH THE AIR FILTER ELEMENT TO THE AIR HORN. ASSEMBLE THE REMAINING AIR HORN TO THE "DUMMY" MAF SENSOR, BUT DON'T INSTALL IT UNTIL YOU FINISH THE STEPS ON THE NEXT PAGE.

## LOW SPEED DRIVABILITY UPGRADE (must be installed to idle correctly)

The Dual POP-CHARGER intake system for the 300ZX was designed for all out racing vehicles producing more than 450 horsepower. Due to many requests for a more streetable idle and drivability we have added the following parts. Because the system basically changes the MAF sensor from reading the air intake of all six cylinders to three cylinders, (thus doubling its capacity) the computer must assume that any air being measured at the MAF sensor is now representing only three cylinders. This is not always the case since at idle, air is routed through the idle air control unit which feeds all six cylinders. Unfortunately, this air comes solely from the side that has the MAF sensor attached causing the ECU to read twice the air flow than we want at idle. This upgrade divides the air going to the idle air control unit between both the measured and unmeasured air intakes so the computer sees an accurate air flow sample at idle and small throttle openings (also during warm-up since fast idle air is controlled here).

Included parts:

- 51/2' OF 5/8" HOSE
- 4 HOSE CLAMPS
- FLOW RESTRICTER
- 5/8" TEE FITTING
- 3/8" PIPE \* 90 DEGREE 5/8" FITTING
- 1. Remove the idle air supply tube and cut 4<sup>1</sup>/<sub>4</sub>" off the forward end to make room for the new Tee fitting. (SEE PICTURE #4) Clean and deburr the cut end and reinstall.
- 2. Connect the plastic Tee fitting to the tube you cut in step #1 using a 3<sup>3</sup>/<sub>4</sub>" long piece of the supplied 5/8" rubber hose. On the Tee leg pointing toward the front of the car, install the supplied gold flow restrictor and reconnect it to the original idle air hose (SEE PICTURE #2). IMPORTANT: you <u>must</u> install the supplied restrictor (.300" hole) in the leg of the Tee that is pointing towards the front of the car. (see picture for location)
- 3. Locate and remove the passenger side recirculation valve in the nose of the car. Drill and tap a hole in the bottom of the valve to receive the new 3/8" pipe fitting. The drill size is 37/64" and the tap is a 3/8" NPT tapered pipe tap. Install the fitting and reinstall the recirculation valve (SEE PICTURE #1).
- 4. Install the remaining long 5/8" rubber hose from the center leg of the Tee to the new fitting on the passenger side recirculation valve as shown in (SEE PICTURE #3).
- 5. Reassemble in reverse order and test car.



Tee fitting installed in idle control hose. The flow restrictor goes in the leg that points to the front of the car .



THE SUPPLIED RESTRICTOR GOES IN THIS LEG OF THE TEE FITTING.

