

Nitrous Express 85 mm LS1/LS6 Throttle Body

PN: SPEED10000

NX introduces "Next Generation Technology" 85mm throttle bodies for the LS1/LS6. Guaranteed not to stick or bind, this throttle body had a stainless steel throttle shaft riding on the highest quality sealed roller bearings and precision CNC manufacturing provides a perfect fit that does not allow the throttle blade to contact the throttle body throat. True 85mm knife edged throttle blades, flow improving CNC machined Vortex generators, counter sunk throttle shaft screws, and custom triple 10 million cycle return springs insures that this is the highest flowing, smoothest operating, throttle body on the market today. No OEM parts are reused in NX's throttle body, only the highest quality 6061 T-6 aluminum bodies, stainless steel hardware and black anodizing meet NX's stringent quality standards. Speed 10000 includes, throttle body, gasket, and 90 degree crankcase vent fitting.

Begin the installation by removing all vacuum lines, coolant hoses and throttle cables from the stock throttle body. Save all associated hardware for later use. Now disconnect the wiring harnesses on the IAC sensor and TPS sensor, which are labeled in Illustration 1

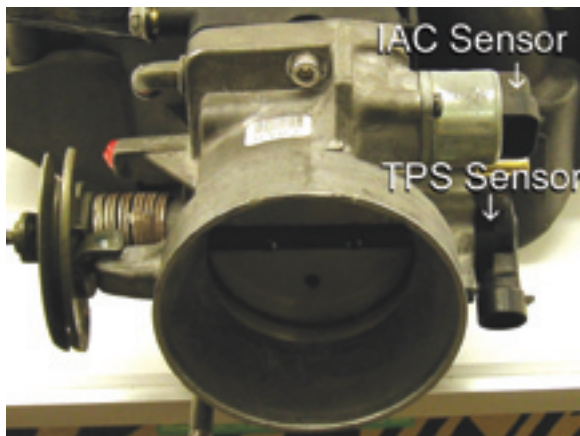


Illustration 1

Next remove the IAC sensor and the TPS sensor. You will need a TORX T-20 driver to remove both of these items. (Illustration 2)



Illustration 2

Using a 10mm socket with extension, remove the three throttle body bolts. (Illustration 3)



Illustration 3

Before installing the new NX throttle body you will need to install all hose fittings. First install the supplied 90 degree fitting into the passenger side upper hole of the throttle body. This fitting connects to the valve cover vent. (Illustration 4)



Illustration 4

Install the 45' degree pipe thread fitting into the lower passenger side of the throttle body. (Illustration 5)

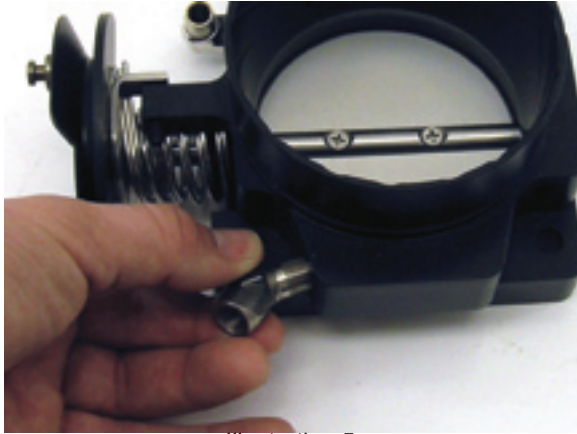


Illustration 5

Thread a 1/8 hose barb fitting into the 45 to complete the passenger side installation*. (Illustration 6)



Illustration 6

Now thread the other 1/8npt hose fitting supplied in the kit to the drivers side of the throttle body.* (Illustration 7)

*Thread sealer must be used on all pipe thread fittings

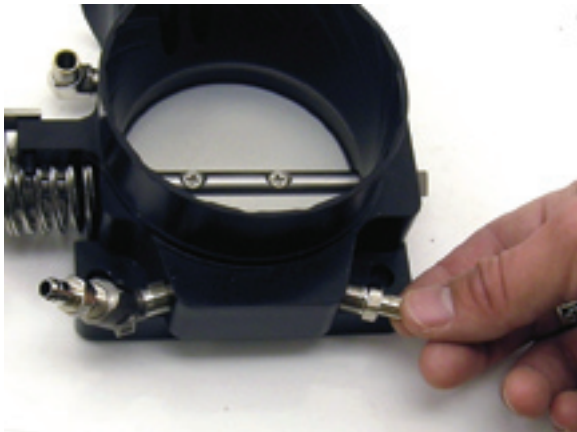


Illustration 7

If you are using the stock intake, the Throttle Body Spacer is required. Three 40mm throttle body bolts are supplied with the spacer to compensate for its thickness. If you are installing the TB on the Nitrous Express intake then stock bolts may be used without the spacer (Illustration 8)



Illustration 8

This spacer allows the 85mm Throttle Body to function properly on a stock intake. When mounting the spacer plate on your intake, make sure the chamfered side is facing the throttle body. (Illustration 9)



Illustration 9

The supplied gasket must be used to ensure a proper seal between the throttle body and the spacer. (Illustration 10) A gasket is not required for the intake manifold side due to the factory o-ring.

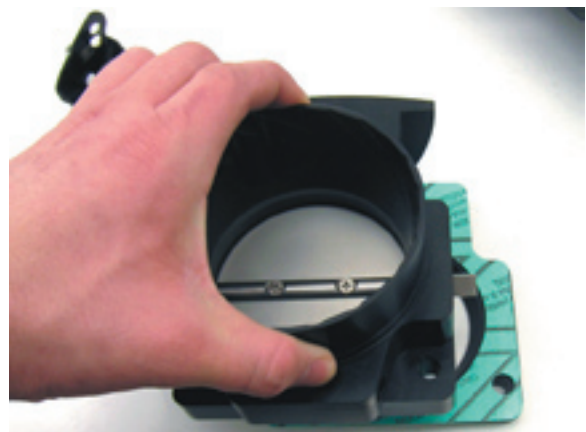


Illustration 10

Using a 3/8 Hex wrench install the throttle body and spacer plate. You MUST leave bolts slightly loose and open butterfly fully to center spacer and TB. After centering the throttle body snug the bolts and check for a proper smooth operation of the throttle blade. If any interference is noted loosen the bolts and realign the throttle body and spacer until a smooth, bind free operation is achieved. (Illustration 11)



Illustration 11

If you are using our Throttle Body Spacer PN:10002, which is required if using the Nitrous Express throttle body with stock intakes, the supplied throttle linkage spacer is required*. Remove the factory linkage bracket and install the linkage adaptor as shown in Illustration 13. Use only the supplied fasteners *Not required for Nitrous Express intake



Illustration 12



Illustration 13

Using the 5/32 Hex wrench reinstall the throttle linkage bracket. Be sure to use the socket head cap screws supplied with the kit. The supplied washers must be used in conjunction with these bracket bolts. (Illustration 14)



Illustration 14

Before reconnecting coolant hoses, re-install your IAC sensor and TPS sensor.* (Illustration 15) Once these sensors are installed you may connect the wiring harness to both sensors.

*Bolts may need minor modifications to properly tighten the sensors. Check to make sure the bolts do not bottom out before the sensors are properly seated. If bolts bottom out before the sensors are tight you *must* grind the tip off of the sensor mounting screws.



Illustration 15

Now reinstall the hoses and throttle cable to the throttle body. Before starting engine once again cycle the throttle body wide open and completely closed several times to check for smooth bind free operation. You installation is now complete. Start the engine and allow it to warm to operating temperature. The idling characteristics of the NX throttle body are different than stock and it may take a short period before your IAC is able to adapt to its new operating parameters. If the engine does not resume stock idling characteristics after a reasonable period re-check your installation.