BBK PERFORMANCE LLC / For any questions, email us: 3060 Performance Circle / TECH@BBKPERFORMANCE.COM Deland, FL 32724 /



# **INSTALLATION INSTRUCTIONS - INSO47**

# 1989-2000 FORD 4.0 L RANGER & EXPLORER THROTTLE BODY

Part # 1580



NEEDED TOOLS: Flat & Phillips Blade Screwdrivers, Metric Sockets & Extensions, Impact Screwdriver & Hammer, Metric Allen Wrenches and American End Wrenches



PARTS INCLUDED: 1 BBK 1580 66mm Throttle Body Assembly, 1 Black Plastic TPS Bushing, 2 M5 x 30mm TPS Screws, 4 - M6 x 35mm Throttle Body Screws



INSTALL TIME: Approximately 1 hour and 30 minutes.



DIFFICULTY: Easy.



IMPORTANT: All appropriate safety equipment and gear must be used during the installation of this or any BBK Performance products or any time you work on a vehicle. BBK Performance accepts no responsibility for injuries or damage caused by or during the installation of this product.

UPDATED LAST: March 2019



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# FOLLOW THESE INSTRUCTIONS CAREFULLY TO ENSURE CORRECT FITMENT AND OPERATION

## STEP 1

Set parking brake on vehicle and disconnect the negative battery terminal.

## STEP 2

Remove flexible inlet hose from throttle body and air box by loosening two hose clamps. Disconnect the tube to the valve cover and the inlet air temperature sensor if applicable.

# STEP 3

Remove plastic cover on the left side of the throttle body. Unhook the throttle cable from the throttle body linkage, disconnect the throttle position sensor and vacuum hose from throttle body.

## STEP 4

Remove the four bolts securing the throttle body to the intake; and remove the factory throttle body.

## STEP 5

Remove the throttle position sensor from the factory throttle body. You must use an impact screwdriver to remove the T.P.S. screws (to avoid rounding off the Phillips head) due to the use of Locktite on the factory fasteners. In the event the factory screws are rounded off and can't be removed, the head of the screws will have to be ground off to remove TPS.

# STEP 6

Install the throttle position sensor on the new throttle body using supplied screws. Be sure the black plastic T.P.S. bushing is in place before securing T.P.S.

#### FOR OPTIMUM PERFORMANCE

Match the intake opening to the new throttle body size. Although, this is not mandatory, it will maximize intake flow.

## STEP 7

Using the supplied screws and gasket, install the new throttle body on intake manifold and secure.

#### STEP 8

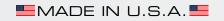
Reattach the throttle cable, T.P.S. sensor connector and vacuum hose to throttle body.

#### NOTE

On some models with black composite intake, a short piece of 5/32" vacuum tubing and Ford part #N802484-5100 will be needed for the emissions/ vacuum connection on the bottom of the Throttle Body. A 1/4" must be trimmed from the non-barbed end to work properly. TO ORDER PART CALL 386-624-0025.

# STEP 9

Reinstall inlet tube between air-box and throttle body. Be sure to reconnect the hose to the valve cover and inlet the air temperature sensor if applicable.



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## STEP 10

Reconnect the negative battery cable.

## STEP 11

Start the engine and run until it is at operating temperature, then turn the engine off.

# STEP 12

Disconnect the idle air control valve. The vehicle should idle at approximately 500 rpm, turn throttle plate hard stop screw to achieve this spec. Reconnect I.A.C. valve and idle speed should return to the computer controlled idle speed.

## STEP 13

Replace the plastic cover on left side of throttle body. Double check all fasteners and clamps to ensure they are secure.

# ENGINE RELEARN PROCESS

Because your vehicles engine is electronically controlled by a computer, some control conditions are maintained by power from the battery. When the battery is disconnected or a new battery is installed, the engine must relearn its idle and fuel trim strategy for optimum drive ability and performance.

# STEP 1

With the vehicle at a complete stop, set the parking break

# STEP 2

Put the gearshift in P (Park) (automatic transmission or the neutral position (manual transmission), turn of all accessories and start the engine.

# STEP 3

Run the engine until it reaches normal operating temperature. Approximately 4-5 minutes.

# STEP 4

Allow the engine to idle for at least one minute.

# STEP 5

Turn the A/C on and allow the engine to idle for at least one minute.

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## STEP 6

Drive the vehicle to complete the relearning process.

The vehicle may need to be driven 10 miles or more to relearn the idle and fuel trim strategy. If you do not allow the engine to relearn its idle trim, the idle quality of your vehicle may be adversely affected until the idle trim is eventually relearned



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