

Installation Instructions for Professional Products POWER Throttle Bodies

Pt. No's. 69220/69221/69222/69223 • Fits 1996-'04 Fords w/4.6L 2V engines

Pt. No's. 69224/69255 • Fits 1997-'04 4.6L & 5.4L Ford F-Series Trucks & Expedition. Also fits 1990-'95 4.6L 2V engines.

REMOVAL OF OLD THROTTLE BODY

- 1. Set parking brake and disconnect the negative battery terminal. Battery must be disconnected.
- 2. The air inlet tube connecting the air cleaner to the throttle body must be removed. Loosen both of the clamps on the air inlet tube and carefully remove it from the vehicle.
- 3. Disconnect the return spring from the throttle linkage and unhook throttle cable by opening the throttle manually and removing the cable from the cam groove. Disconnect the cruise control cable if you have one.
- 4. Disconnect the the throttle position sensor.
- 5. Remove the four bolts that hold the throttle body to the air inlet. Remove the stock unit.

INSTALLATION OF NEW THROTTLE BODY

- 1. For best performance the throttle body bore should match the opening of the air inlet. Note that Professional Products offers a replacement Air Inlet Elbow that has a 75mm inlet opening. You can also grind out the opening on your stock air inlet elbow to match your throttle body.
- 2. Remove the the throttle position sensor from the stock throttle body. We recommend using an impact screwdriver to do this. The stock screws holding the sensor on are secured with thread locking compound and using a conventional screwdriver will most likely round out the Phillips recess in the screw. If this happens you will have to grind off the screw heads.
- 3. Install the throttle position sensor onto the new throttle body. Note that Ford used two different TPS units. If yours does not fit snugly into the new Professional Products throttle body, then you need to use the supplied plastic bushing for a proper fit. It is believed that the bushing is required on 1996-'98 models and not required on '99 and later models.
- 4. Using the supplied screws and gasket, attach the new throttle body to the air inlet elbow and secure.
- Reattach throttle cable, TPS sensor connector, return springs and cruise control cable (if used).
 Reinstall inlet tube between airbox and throttle body. Be sure to reconnect the PCV tube, idle air control tube and inlet air temperature sensor if applicable.
- 7. Reconnect the negative battery cable.

- 8. Start the engine and let idle without interruption until it is at operating temperature. The computer will make adjustments to find the correct idle speed. Then turn engine off.
- 9. Note: The following procedure has already been performed at the factory and is only necessary if the vehicle does not idle properly: Release locknut and turn idle screw counter clockwise until there is light showing between the screw and the throttle linkage lever. There should be .010" gap using a feeler gauge. Then turn clockwise exactly one full turn. Start engine to check idle speed. If still not correct, make very small adjustments to screw until correct idle speed is maintaine. Hold idle screw in position and lockdown with nut. If minor binding occurs at throtte tip-in from idle to a higher engine RPM, a minor adjustment of the stop screw should eliminate binding.
- 10. Check all fasteners and clamps to make sure that everything is tight.



Shown above is our optional Air Inlet Elbow for this application. This Elbow has a 75mm inlet which is optimum for either a 70 or 75 mm throttle body. Part numbers are 54154 for a polished Inlet and 54155 for a satin one.

Throttle Body Kit Contents

- 1 Throttle Body Assembly
- 4 M6 x 30mm T.B. Screws
- 2 M5 x 30mm TPS Screws
- 1 Gasket
- 1 Plastic Bushing

Check to make sure all parts listed are included in your kit.