



## Die Cast Aluminum Four Barrel 4150 Throttle Body P/N 112-587 (Hard Core Gray) & 112-588 (Polished)

### Product Description:

The Holley EFI die cast aluminum four barrel throttle body is designed to fit on any square bore (4150 style) intake manifold. It has four 1-3/4" throttle plates. The unit includes the Throttle Position Sensor (TPS), Intake Air Temperature Sensor (IAT), and Idle Air Control (IAC) motor. It features non-progressive throttle linkage, for quickest throttle response, but can be converted to progressive operation with the purchase of Holley PN 20-122.

### Vacuum Port Information:

The unit features a "timed spark vacuum port" on the front of the throttle body (Figure 1).

It features two 3/16" and two 3/8" full manifold vacuum ports on the back of the throttle body (Figure 2).

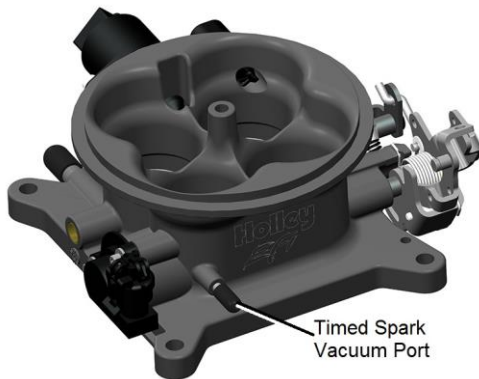


Figure 1

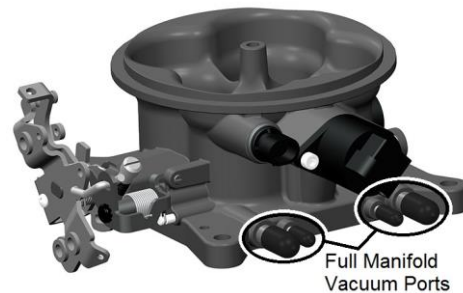


Figure 2

### Sensor, Connector, and Pin-out Information:

The TPS, IAT, and IAC are all plug and play with Holley EFI harness PN 558-104.

A connector and pin kit is available under Holley PN 534-205.

The following reviews the pin-out information, as well as the part numbers of the pins and connectors.

Idle Air Control Motor (IAC) – This is a Chrysler style and must be pinned as below.

A – A Low  
B – B High  
C – B Low  
D – A High  
Connector PN – 12162188  
Pin – 12124076 (20-22ga)

Manifold Air Temp (MAT) – This is a GM style sensor.

A – Signal  
B – Signal Ground  
Connector PN – 12162199  
Pin – 12124076 (20-22ga)

Throttle Position Sensor (TPS) – This is a typical 0-5v sensor.

A – 5 Volt Reference  
B – Signal Ground  
C – Signal  
Connector PN - 12065287  
Pin – 12089290 (20-22ga)

## Throttle Connections:

1. The throttle lever on this throttle body is designed to directly connect to most throttle cables. Several throttle studs are listed below. It is also designed to directly connect up to GM transmissions including TH350, TH200R, and TH700R4.
2. Install the proper throttle and transmission studs (if applicable).



Figure 3

3. There are two throttle cable brackets listed below. One is for engines with no transmission cable, and has a lower profile. The second is for engines that have a transmission kickdown cable.

### Service & Optional Part Numbers:

20-150	Throttle Bracket, Throttle & Transmission	20-36	Stud, Throttle & Cruise Control	20-37	Stud, Throttle Lever
20-151	Throttle Bracket, Throttle Only	20-40	Stud, Transmission Kickdown		

4. Once the throttle linkage is attached, have an assistant get in the vehicle and fully actuate the throttle controls. Make the necessary adjustments to the throttle linkage to ensure that the throttle plates are vertical when the throttle control is wide open. Work the throttle linkage back and forth several times to ensure it operates smoothly with no binding or sticking.

**DANGER!** A sticking throttle may result in uncontrolled engine or vehicle speed. This could cause property damage, personal injury, or death. A sticking throttle may be caused by improperly installed throttle cables, lack of clearance for any of the throttle linkage, or by a binding throttle linkage. Check all throttle cables for proper installation and alignment and actuate the throttle to check for any potential binding or clearance problems. Repair any problems before continuing.

5. If the vehicle is equipped with an automatic transmission, ensure that the transmission kickdown is properly adjusted. Follow the vehicle manufacturer's procedure for the correct adjustment procedure.

**NOTE:** On late model GM and Ford overdrive transmissions with a lockup torque converter, make sure the lockup function is properly retained. Failure to do so will result in premature transmission failure.

**NOTE:** On Chrysler vehicles, a lever extension will be needed, Holley PN 20-7. Van applications may require the use of throttle lever extension Holley PN 20-14.

6. Install external throttle return springs that you previously removed from the carburetor. External springs should be used in addition to the springs on the throttle body itself. Have an assistant get in the vehicle and fully depress the accelerator pedal. Make the necessary adjustments to the throttle linkage to insure that the throttle reaches wide-open position when the accelerator is depressed. Work throttle linkage back and forth several times to ensure that it operates smoothly with no binding or sticking.

**DANGER!** Failure to attach the throttle return spring or a sticking throttle may result in uncontrolled engine or vehicle speed, which could cause personal property damage, serious injury, or death.