



**Fabricated Intake Manifold Throttle Cable Bracket kit
GM LS1/2/6 and LS3/L92 engines**



870016 / 870018



870017 / 870019

870016 – GM LS1/2/6 (Silver Finish)
870017 – GM LS1/2/6 (Black Finish)
870018 – GM LS3/L92 (Silver Finish)
870019 – GM LS3/L92 (Black Finish)

Instruction/Installation Sheet **P/N # 199R11753**

PARTS LIST:

Qty.	Description
1	Fuel Rail Mounting Bracket (attaches to inside passenger's RH side fuel rail)
1	Throttle Cable Bracket (long)
1	Throttle Cable Bracket (short)
2	Fuel Rail Mounting Bracket Bolts
2	Fuel Rail Mounting Bracket Nuts
2	Throttle Cable bracket to Fuel Rail Mounting Bracket Bolts

REQUIRED TOOLS:

4mm T-handle Hex Key	5mm T-handle Hex Key
10mm Open End Wrench	In/lbs. Torque Wrench

APPLICATIONS:

Fits GM LS1/2/6 and LS3/L92 engines.

INSTALLATION INSTRUCTIONS:

1. Loosen and remove the middle and front fuel rail mounting bolts on the passenger side (RH) fuel rail.
2. Loosen and remove the fuel rail mounting brackets attached to the fuel rail. Set the bracket to the side until you are ready to reassemble and install fuel rail bracket.
3. Place the provided long fuel rail bracket to the inside of the passenger side fuel rail lining up the two slots in the bracket with the holes drilled through the lower portion of the fuel rail and fuel rail mounting brackets.
4. Insert the provided longer fuel rail mounting bolt (approximately 1-9/16" long) through the fuel rail, fuel rail mounting bracket, and mounting bracket (**Figure 1**). Make sure the lock washer (1/16" thick) used to attach the fuel rail is placed on the bolt between the fuel rail mounting bracket and the long throttle bracket as this will provide adequate

spacing for proper alignment of the fuel injector openings and proper spacing to attach the fuel crossover line at the front of the fuel rail. Secure with the provide nuts.



Figure 1

NOTE: DO NOT tighten at this point until the throttle cable bracket is attached and positioned to the desired spot.

5. Reattach the fuel rail mounting bracket to the fuel rail mounting pedestals torquing to 36 in/lbs.
6. Now that the fuel rail is secured to the mounting pedestals, you should have some play with the throttle cable brackets that will allow you to slide the bracket as far forward as possible to position the bracket.
7. At this point, take your throttle cable and run the cable along the passenger side of the intake to best determine which bracket will work bet for your needs. The cable bracket edge facing toward the front of the vehicle will be where the cable bracket will attach. Depending on which throttle body you are using, you want to orient the cable in such a manner that the throttle bracket is far enough back to allow for free movement of the throttle cable once installed.
8. Take the forward facing throttle cable bracket (**Figures 2 & 3**) and attach to the fuel rail bracket using the provided shorter screws (approximately 9/16" long).



Figure 2



Figure 3

9. Tighten the provided two screws to 30 in/lbs.
10. Tighten the two fuel rail mounting screws to secure the fuel rail in position.
11. The throttle cable mounting portion of the bracket should be very close to the intake plenum and just behind the leading edge of the intake plenum. If this kit is being used with a low profile intake, the bracket will be sitting higher up.
12. Affix your throttle cable to the bracket and attach the end of the throttle cable to the throttle body lever.
13. At this point, the throttle body cable should be in alignment with the throttle cable bracket and running back along the passenger's side of the intake between the fuel rail and the intake plenum just above the intake runners.
14. The throttle cable should engage freely and not experience any binding during rotation of the throttle lever. If the throttle cable does not operate smoothly, adjust brackets and make sure all hardware is secure.