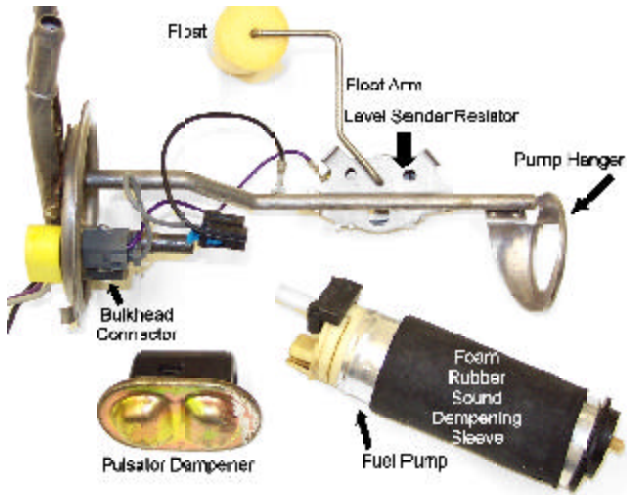


G77 Fuel Sender



1. Gently remove the factory filter sock by placing the blade of flat head screwdriver between the press-on ring and the pump's body as shown in **figure 'A'**. In some cases the filter sock may be tight. If so use the screwdriver to work the ring off by prying from alternate sides back and forth.

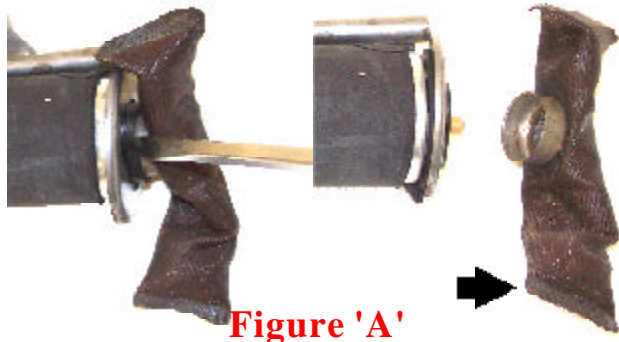


Figure 'A'

2. Place the blade of a flat-head screwdriver under the pump's power connector lock to release it while at the same time prying / pulling the connector out as shown in **figure 'B'**.

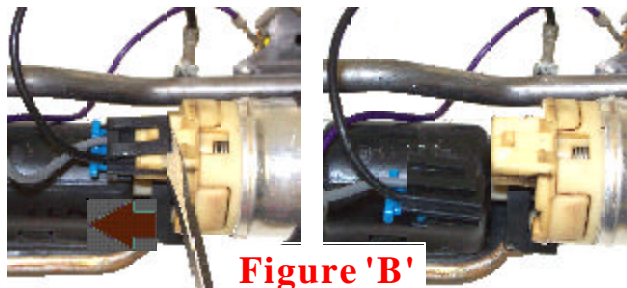


Figure 'B'

3. Lift the pump up and off the hanger to clear the mount and pull sideways as shown in **figure 'C'**.

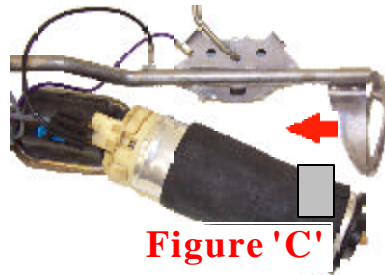


Figure 'C'

4. Remove the pump by pulling it out from the pulsator. It is a press fit so force is not required. Remove the pulsator from the sender's outlet by pulling it off as shown in **figure 'D'**.



Figure 'D'

The pulsator is no longer required and is not compatible with the Walbro pump's outlet stem. Reusing the pulsator is not advised as it may cause a fuel leak in the tank. Place the old fuel pump, filter sock and pulsator dampener in a safe location. The fuel vapours emanating from these components are flammable and very hazardous to people and pets.

5. Gently bend the metal lock away from the body of the factory 4-position power connector while pulling down to unplug it as shown in **figure 'E'**.

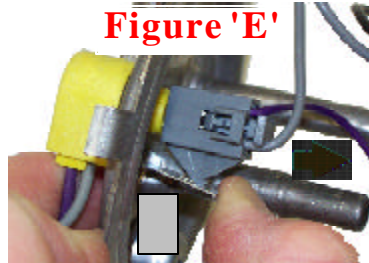


Figure 'E'

6. Using the blade of a small flat screwdriver depress the blue terminal lock's tabs at either side of the black fuel pump connector down and upwards as shown in **figure 'F'**.

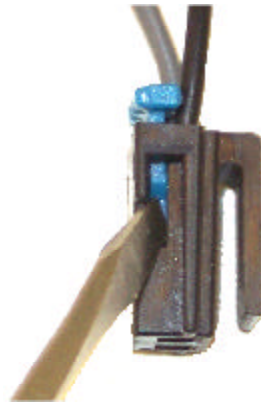


Figure 'F'

7. Remove the blue terminal lock by pulling it out from the top of the black fuel pump connector as shown in **figure 'G'**.

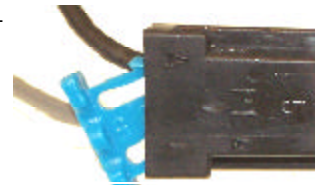


Figure 'G'

8. Insert the supplied paper clip into the front of the black fuel pump connector's terminal release channel 'B' to remove the black wire as shown in **figure 'H'**. Make sure the paper clip bottoms out in order to fully release the terminal's locking tang. Remove the paper clip.

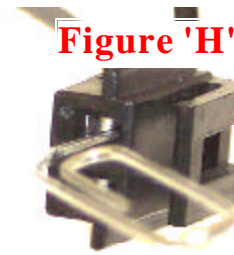


Figure 'H'

9. Gently pull the black wire's terminal from the fuel pump connector as shown in figure 'H'. If the terminal does not release easily repeat step 8 above. **Do not use excessive force as this will damage the terminal which can not be replaced easily.**

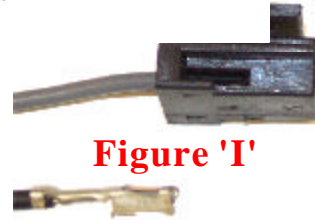


Figure 'I'

10. Using a small utility blade gently bend the locking tang of the black wire's terminal as shown in **figure 'J'**.

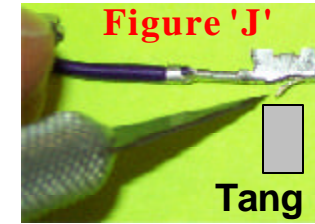


Figure 'J'

Tang

11. Insert the black wire's terminal (removed above) into the supplied single cavity connector as shown in **figure 'K'**. Align the terminal tang with the release channel in the connector body. The terminal should make a 'click' once inserted indicating that the terminal tang has locked into place properly. Give a gentle tug on the wire to confirm a positive lock.



Figure 'K'

12. Using the blade of a small flat head screwdriver depress the locks on either side of the 4-position female bulkhead connector's terminal lock in and upwards as shown in **figure 'L'**.

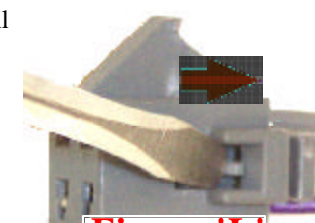


Figure 'L'

13. Remove the gray terminal lock by sliding it out as shown **'M'**.

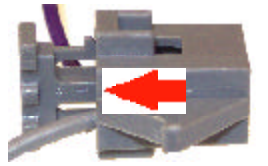


Figure 'M'

WARNING

Some bulkhead connectors are wired differently. In some cases the (grey or red) pump power terminal is inserted into connector cavity 'C' vs. cavity 'E' and the violet level sender wire is inserted into connector cavity 'B' vs. cavity 'D'. If your factory wiring uses cavity 'C' and 'B' you will have to relocate the red or gray pump power wire on your Racetrax in-tank harness using the pin removal, service and insertion procedures outlined in steps 14 to 17 below. Please make sure you alter procedure 17 below to reflect your requirements. Failure to do so will leave your pump and level sender inoperable.



E+D Type



C+B Type

14. Insert the supplied paper clip into the front of the factory 4-position connector's terminal release channel 'D' to remove the violet wire as shown in **figure 'N'**. Make sure the paper clip bottoms out in order to fully release the terminal's locking tang. Remove the paper clip.

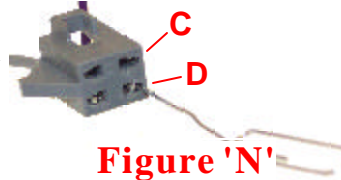


Figure 'N'

15. Gently pull the violet wire's terminal from the 4-position connector. If the terminal does not release easily repeat step 10 above. **Do not use excessive force as this will damage the terminal which can not be replaced easily.**

16. Using a small utility blade gently bend the locking tang of the violet wire's terminal as shown in **figure 'J'**.

17. Insert the violet level sender wire into cavity 'D' of the 4-position Racetrax supplied connector as shown in **figure 'O'**. The terminal should make a 'click' once inserted indicating that the terminal tang has locked into place properly. Give a gentle tug on the wire to confirm a positive lock.

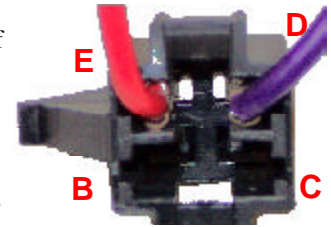


Figure 'O'

CAUTION: SEE BOXED WARNING ABOVE

18. Insert the gray terminal lock into the 4-position Racetronix connector as shown in **figure 'P'**. Make sure the ears lock on either side of the connector.

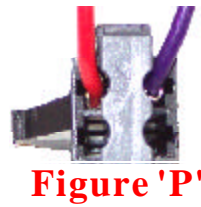


Figure 'P'

19. Slip the foam rubber sleeve over top of the pump as shown in **figure 'Q1'**.



Figure 'Q1'

20. Slip the rubber pump mount over the end of the pump as shown in **figure 'Q2'**. Please note that the narrow part of the teardrop is clocked to be in-line with the pump's electrical connector.



Figure 'Q2'

21. Cut a 3 inch piece off of the supplied rubber hose using a sharp utility knife as shown in **figure 'R'**. Position the knife carefully to ensure a clean flush cut.

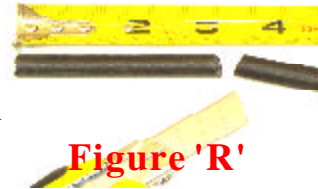


Figure 'R'

22. Slip the 3 inch rubber hose over the outlet end of the pump making sure it bottoms out. Install a supplied hose clamp as shown in **figure 'S'**. Tighten the hose clamp firmly using a flat blade screwdriver or a 1/4" nut driver. **Do not overtighten the clamp causing it to cut into the hose or to strip the clamp.**



Figure 'S'

23. Slip the second gear clamp over the rubber hose. Push the hose with the pump attached onto the sender's metal outlet tube as shown in **figure 'T'**. You may ease insertion by wetting the metal tube with a small amount of the supplied silicon grease. Make sure the hose clamp is above the bulge / barb on the metal tube. Tighten the hose clamp in the position shown in **figure 'T'** firmly using a flat blade screwdriver or a 1/4" nut driver. **Do not overtighten the clamp causing it to cut into the hose or to strip the clamp.**

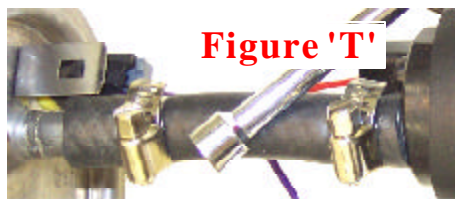


Figure 'T'

23. Place the pump into the hanger with the rubber mount clocked into the teardrop opening as shown in **figure 'U'**.

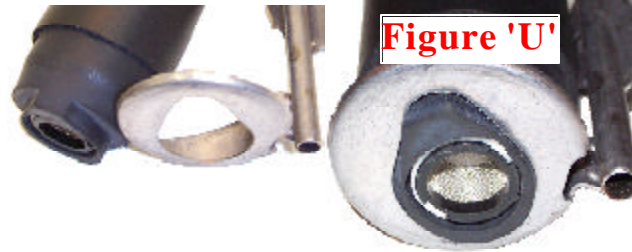


Figure 'U'

25. Plug the Racetronix supplied pump connector into the pump as shown in **figure 'V'**. The connector should lock into place.

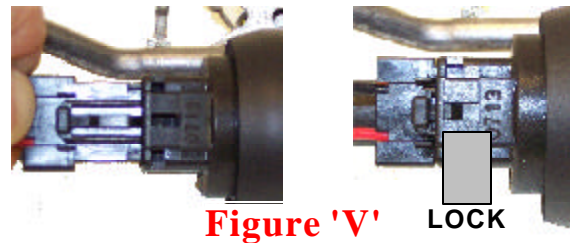


Figure 'V' LOCK

26. Inspect the factory bulkhead connector's male pins for dirt and corrosion. If required clean the pins gently with some fine steel wool or fine grit (400+) sand paper or emery cloth. Plug the Racetronix supplied 4-position connector into the factory bulkhead connector as shown in **figure 'W'**. The connector should lock into place as shown.



Figure 'W'

LOCK

27. Install the Racetronix supplied grounding clamp onto the fuel sender's metal return line as shown in **figure 'X'**. Tighten the hose clamp in the position shown in **figure 'Y'** firmly using a flat blade screwdriver or a 1/4" nut driver. **Do not overtighten the clamp causing it to strip the clamp.**



Figure 'X'

28. Plug the open female terminal on the Racetronix harness's black wire onto the male terminal on the grounding clamp as shown in **figure 'Y'**. Plug the black single conductor connectors together as shown in **figure 'Y'**. Check for a positive lock.

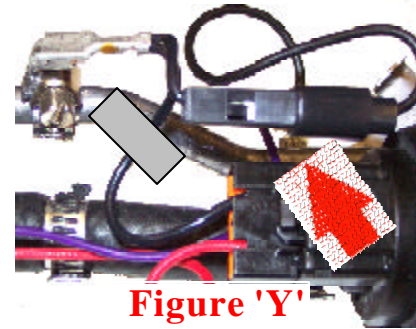


Figure 'Y'

29. Slip the new tank seal o-ring up from the bottom of the sending unit as shown in **figure 'Z'**.

30. Press the Racetronix supplied filter sock onto the bottom of the pump module as shown in **figure 'Z'**. The sock's metal ring should bottom out on the pump's plastic inlet.

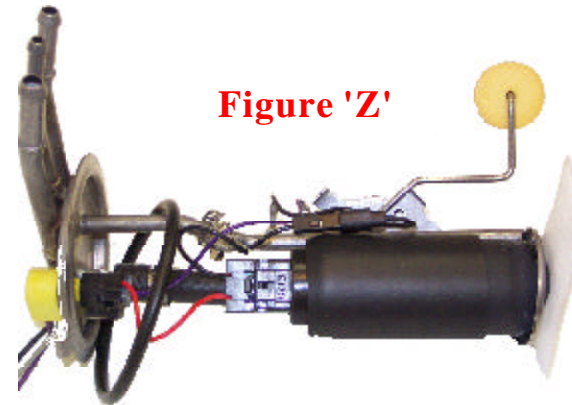


Figure 'Z'

31. **Re-check the pump installation. Replace module as per GM factory manual instructions.**

***** CAUTIONARY NOTES *****

Inspect the gas tank for contamination (i.e. sand rust). A brown / black dirty factory filter sock indicates potential trouble and will cause premature pump failure. G-body metal tanks are very old and usually contain rust. It is recommended that the tank be thoroughly cleaned (flushed numerous times with water and left to dry.) The level of contamination can not be determined by peering into the tank opening.

Thoroughly clean the edge of the sender and the gas tank opening so that the o-ring can seal properly.

Do not use any other filter sock other than the one provided with your kit. Do not use octane boosters which contain solids that will deposit inside the pump's motor and cause failure.

Do not use gas that has been open or sitting for long periods of time. (i.e. winter storage) as it can contain water which will damage the pump.

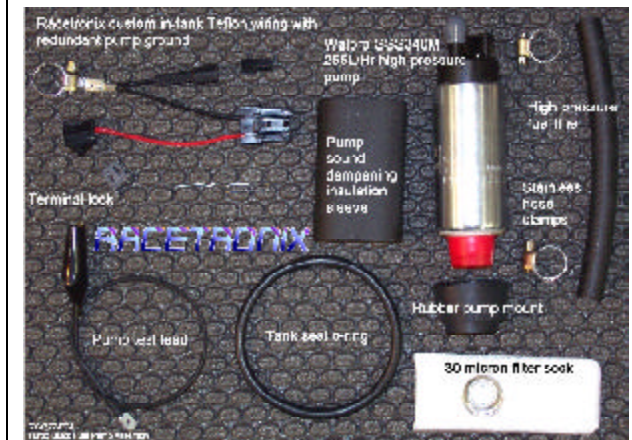
Always top off your tank when the car is left sitting for extended periods with a high grade of gas containing ethanol which helps displace moisture. Run your motor / pump at least once a month.

For support please contact your dealer or support@racetronix.com

RACETRONIX
Research / Design / Manufacturing / Distribution

RX-G77-FPA

1986-1987 Turbo Buick
High-Performance In-tank Fuel Pump
Assembly Manual



CAUTION

This product is intended to be installed by a qualified automotive service technician. Review this entire manual before starting installation. Proper safety precautions must be implemented when working with gasoline.

Please refer to your factory GM manual for gas tank and fuel module installation procedures.

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