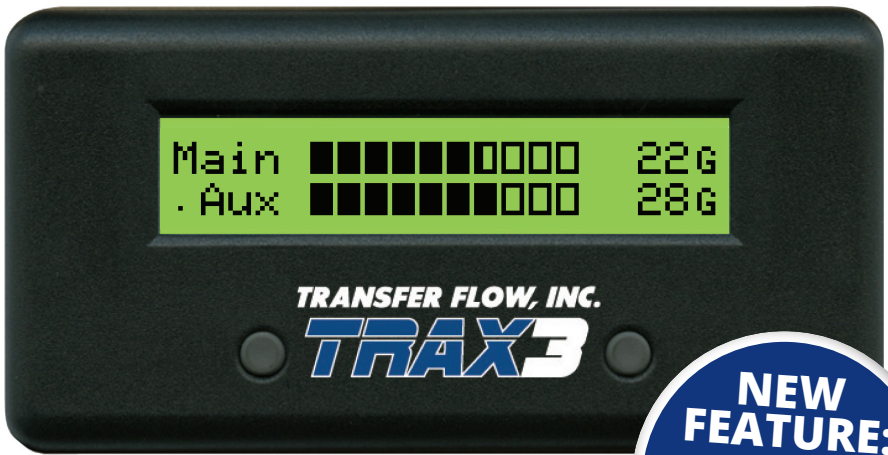


TRAX3™

Owner's Manual

*Fuel Management System for
Transfer Flow Auxiliary Fuel Tanks*



**NEW
FEATURE:**
Display Fuel
Levels in
Gallons
(See Page 5)

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TRAX 3™ Fuel Management System

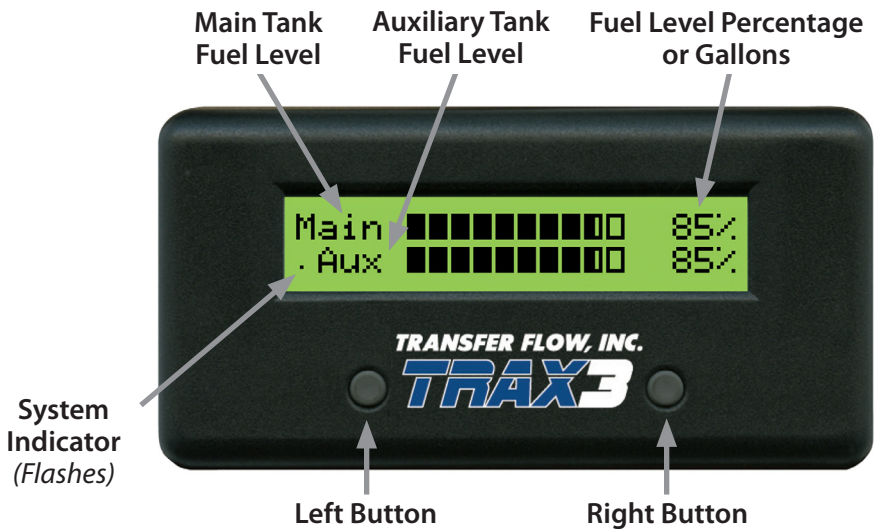
TRAX 3™ is a computer-controlled, self-diagnosing auxiliary fuel system that automatically transfers fuel from the auxiliary tank to the main tank using our exclusive AutoTrans® technology. The TRAX 3™ system also monitors the vehicle's fuel system status and the fuel levels of each tank. TRAX 3™ transfers fuel as needed with an electric fuel pump at a rate of one gallon every three minutes.

Fuel System Overview

The TRAX 3™ system will transfer fuel at predetermined fuel levels while the vehicle is in use, based on the individual vehicle fuel system calibration and size of the Transfer Flow auxiliary fuel tank. The fuel level in the main tank and auxiliary tank will decrease at similar rates and the LCD will display the fuel level percentages or gallons in each tank and the operational status of the system.

When the system is not transferring fuel and all is normal, the System Indicator (in bottom left corner of LCD), will flash on and off. When the fuel system is transferring fuel, the message, "PUMP ON" will flash on the right side of the LCD. If there is an issue with the fuel system, the LCD will display a Diagnostic Trouble Code (DTC). The TRAX 3™ computer module works independent of the LCD. If the LCD is disconnected, the computer module will still monitor and transfer fuel normally.

Liquid Crystal Display Overview



- = Each black bar is equivalent to 10% fuel capacity.
- ▤ = Each 1/2 black bar is equivalent to 5% fuel capacity.

Fuel Transfer Operation



When the main and auxiliary fuel tanks are at or near full, the LCD displays "Full" for both tanks.



When the main tank falls below 85%, the system automatically transfers fuel from the auxiliary to keep the main tank at 85% until both tanks are equal.



During fuel transfers, "PUMP ON" will flash. The system maintains balanced fuel levels in both tanks until each tank reaches 25%.



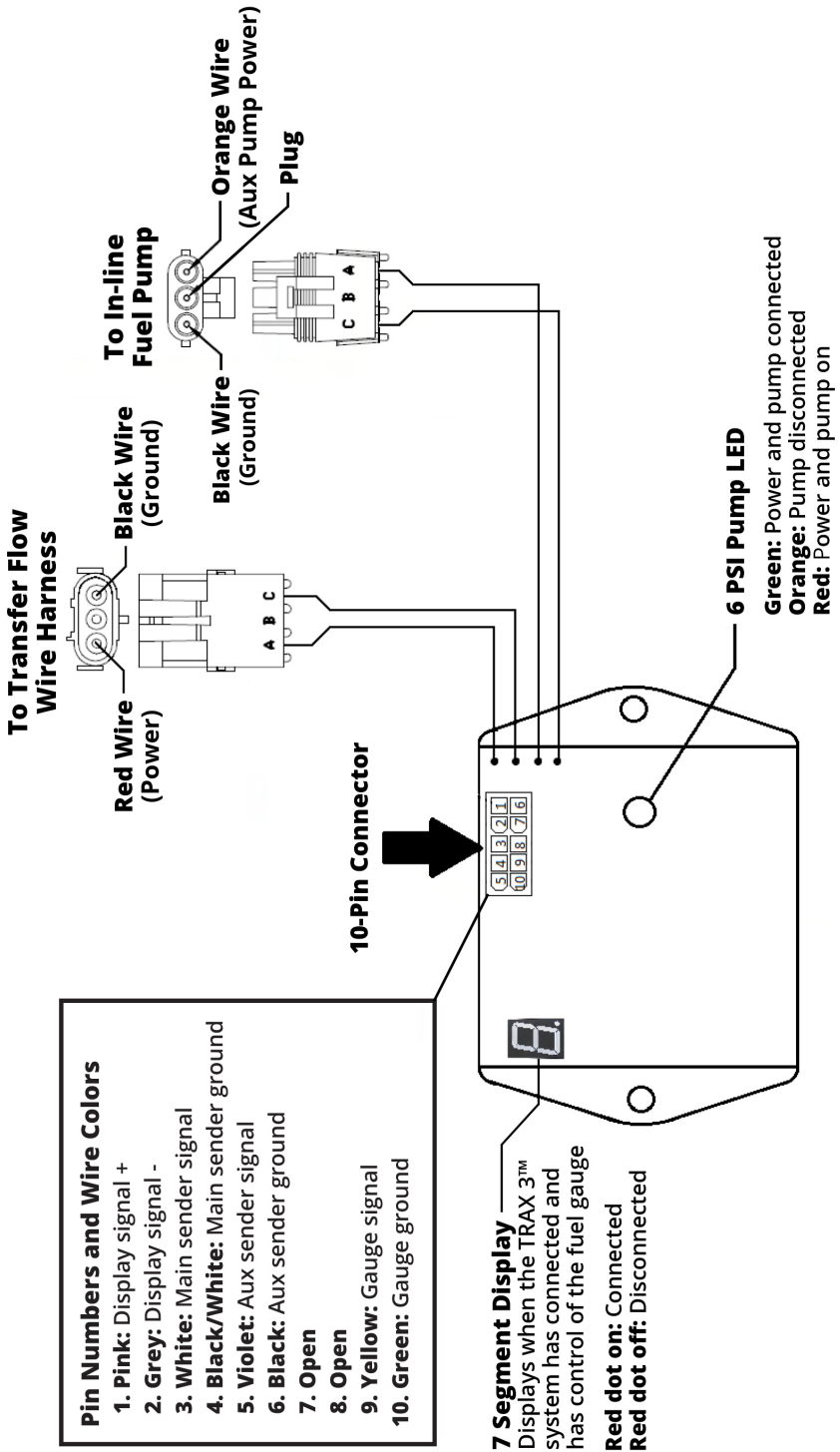
When both tanks reach 25%, fuel is transferred to the main tank, keeping it 25% full until the auxiliary tank is empty.



When either tank falls below 10%, the display will read "LOW".

Note: Once the auxiliary tank reaches its final 1 gallon of remaining fuel, the pump will run for 10. min. consecutively. If the power is disconnected (e.g., the vehicle is shut off) during this period, the 10 min. period will start over when the power is restored.

Computer Module Overview



Frequently Asked Questions

How accurate is my main tank fuel gauge after installing TRAX 3™?

The accuracy of the main fuel gauge will not change. The TRAX 3™ computer module is wired into the truck's main wire harness, in between the main fuel tank and the fuel gauge. The TRAX 3™ module monitors the level of fuel in the main tank, and then sends that same information to the fuel gauge on the dash. The stock in-dash fuel gauge displays the level of fuel in the main tank as it did before installing the TRAX 3™ auxiliary fuel system.

How do I adjust the contrast and brightness of my screen?

The two buttons on the front of the TRAX 3™ LCD module can be used to adjust the contrast and backlight of the LCD display.

Steps to adjust the contrast or backlight setting:

1. With the ignition in the On position, the TRAX 3™ module should be operational. Press the Right button on the front of the display until you reach "Contrast" or "Brightness" screen.
2. Press "OK" to enter, then press the up or down button to adjust the contrast or backlight, respectively.
3. To exit the "LCD Adjust" mode and save your settings, do not press any more buttons; the display will automatically default back to the fuel level screen in approximately 3 to 4 seconds.

I previously bought a Transfer Flow auxiliary tank. Can I transfer it to my new truck?

It depends on the truck you are buying. You may need to purchase a re-installation kit. Call us at (800) 442-0056 x1 or (530) 893-5209 x1 for more information.

Why do I see my fuel level percentage fluctuate $\pm 10\%$ in the first two minutes of operation?

The module is rapidly calculating the fuel level in each tank to determine the most accurate value. Fluctuations should slow after a few minutes of operation.

Why is the TRAX 3™ LCD displaying "CHK FLTR" when my system is brand new or the filter is clean?

This may be due to an individual's driving habits, driving conditions, or fuel sloshing in the main or auxiliary tank. The "Check Filter" condition will reset after 20 minutes or by cycling the ignition (turning it off then on again).

The fuel levels displayed on the LCD change when cornering hard or during other rapid motions. Is this normal?

Yes, your Transfer Flow fuel tank system has been designed to keep fuel sloshing to a minimum. However, it is not possible to completely eliminate all fuel sloshing. Many times, you will find that fuel sloshing will be greater in the main tank compared to the Transfer Flow tank. This is because the Transfer Flow tank is fully baffled while most main tanks are not. In either case, you should not see a fuel level change of more than $\pm 10\%$, except under periods of high cornering, braking, or acceleration loads. If your main tank is close to empty, you may see the low fuel light turn On and Off.

If the TRAX 3™ system develops a problem, what do I do?

Consult the troubleshooting table on Page 7 or deactivate the system by disconnecting the power to the computer module, located on the top or side of the auxiliary tank. Reference the “TRAX 3™ Computer Module Overview” diagram on Page 4; disconnect the three pin connector with the red and black wire that goes to the Transfer Flow wire harness. The LCD will display, “TRAX 3™ Connecting.....” when the power is disconnected and the ignition is cycled. The vehicle will now operate from the main tank only and the main tank gauge will read the fuel level in the main tank just as though the Transfer Flow system was never installed. Please call Technical Support at (800) 442-0056 x2 or (530) 893-5209 x2 if you ever have this issue.

How do I program the LCD to display fuel levels in gallons?

1. Press and hold Right button when turning the system on.
2. Release the button once the serial number is displayed.
3. When system is showing fuel levels, press the Right button until “Show Gallons” is displayed.
4. Press the Left button to turn the “Show Gallons” feature on.
5. Press the Left button for on, and Right button for off.



Note: Fuel level readings are only approximate. To toggle back to percentages, repeat these steps, pressing the Right button to turn “Show Gallons” off.

Maintenance and Troubleshooting

Filter Maintenance

To replace the auxiliary fuel tank filter, remove the cover box to access the in-line filter and fuel hoses. Be certain that the filter is in the right direction. Replace the filter with one listed in *Filter Replacement Options* below.

Replacement after initial installation:

The fuel filter should be replaced within 3 to 6 months after installation. Transfer Flow includes an extra filter with your initial purchase.

Routine filter replacement:

Transfer Flow recommends the filter be replaced every 12 months on vehicles that see normal use. If the vehicle is operated in dusty conditions or driven more than 20,000 miles per year, the filter should be changed every 6 months. Vehicles traveling outside the United States and Canada may be exposed to filling stations containing elevated levels of contaminants. It may be wise to carry spare filters when traveling outside of the country.

Filter Replacement Options:

Use NAPA 3270, WIX 33270 or Transfer Flow part no. 070-FL-33617.

If the LCD still displays “CHK FLTR” after replacing the filter, please call technical support at (800) 442-0056 x2 or (530) 893-5209 x2.

“Critical Failure/Disconnect Power”

If the LCD displays, “CRITICAL FAILURE/DISCONNECT POWER” the user should deactivate the system by disconnecting the power to the computer module, located on the top or side of the auxiliary tank. Reference the “TRAX 3™ Computer Module Overview” diagram on Page 4; disconnect the three pin connector with the red and black wire that goes to the TFI wire harness. The LCD will display, “TRAX 3™ Connecting.....” when the power is disconnected and the ignition is cycled. The vehicle will now operate from the main tank only and the main tank gauge will read the fuel level in the main tank just as though the Transfer Flow system was never installed. Please call technical support at (800) 442-0056 x2 or (530) 893-5209 x2 if you experience this issue.

TRAX 3™ Troubleshooting Table

Symptom	TRAX 3™ Display	DTC Definition/Possible Cause	Possible Remedy/Repair
OEM fuel gauge fluctuates	CRITICAL FAILURE DISCONNECT POWER	Aux pump on, outside of transfer range	Disconnect main power at module/ call Transfer Flow Technical Support
OEM fuel gauge at empty	MSL (MAIN & AUX fuel level at 0%)	Main sender low/sending unit bad or a wire shorted to ground	Call Transfer Flow Technical Support
OEM fuel gauge at empty	MSH (MAIN & AUX fuel level at 0%)	Main sender high/malfunctioning sender	Call Transfer Flow Technical Support
OEM fuel gauge at empty	MSO (MAIN & AUX fuel level at 0%)	Main sender open/severed main sender wire, defective sender, improper electrical connection	Call Transfer Flow Technical Support
Pump not transferring	ASL & AUX fuel level at 0%	Aux sender low/sending unit bad or a wire shorted to ground	Call Transfer Flow Technical Support
Pump not transferring	ASH & AUX fuel level at 0%	Aux sender high/malfunctioning sender	Call Transfer Flow Technical Support
Pump not transferring	ASO & AUX fuel level at 0%	Aux sender open/severed auxiliary sender wire, defective sender, improper electrical connection	Call Transfer Flow Technical Support
Pump not staying on	CHK FLTR	Filter clogged/flow rate not adequate, kinked line, broken electrical connection, or excessive fuel sloshing	Replace filter/call Technical Support
Display not turning on	Blank	Display not getting power	Check for 12V @ TRAX 3™ LCD, check fuse/call Technical Support

Transfer Flow Technical Support: (800) 442-0056 x2 or (530) 893-5209 x2

Important Safety Information



Manual operation of the TRAX 3™ Liquid Crystal Display (LCD) while driving could lead to unsafe driving conditions which can cause an accident or a serious injury. Observing the screen should only be done when it is safe to do so. Mounting the TRAX 3™ LCD and routing the wire harness should be done where the driver's view or operation of the vehicle cannot be obstructed.

Filling Fuel Tank:

- Never fill a fuel tank near a flame or ignition source which might ignite the fuel vapors.
- Never fill the OEM or Transfer Flow auxiliary fuel tank with the engine or ignition turned on.
- Avoid breathing fuel vapors or allowing fuel to contact the skin.
- Always fill fuel tanks while the vehicle is on a flat level surface.
- Always open the fuel cap slowly to allow any pressure to escape.
- Never overfill or "top-off" any fuel tank. Overfilling the fuel tank may cause damage to the emissions system, cause dangerous spills and possibly result in a fire. The Transfer Flow TRAX 3™ system may also shut down in the event of a "top off" condition.
- Never siphon fuel using the mouth, as this practice is dangerous and potentially fatal. Use an appropriate pump.
- Never allow fuel to contaminate soil or waterways. Properly contain and dispose of spilled fuels and cleanup materials.

Other Important Safety Information:

- Use only Transfer Flow replacement parts. Many parts of our fuel system appear common, but are actually special parts which are critical for safe operation. See Page 9 for more information.
- Disconnect the battery before working on Transfer Flow fuel systems.
- Never modify or over-pressurize a fuel tank.
- Do not grind, torch, weld, cut, or modify a fuel tank.
- Do not sleep or let pets stay in a pickup with a camper shell that contains an in-bed fuel tank system.
- Do not smoke near a fuel tank.
- **Never** connect a TRAX 3™ system to a previously modified fuel system.

TRAX 3™ is designed to work only with Transfer Flow auxiliary fuel tanks. Under no circumstance should TRAX 3™ be used in conjunction with a modified fuel tank system or other aftermarket fuel tank systems.

Transfer Flow Replacement Parts

Transfer Flow fuel systems are designed to work only with specific components which have been selected for their unique properties. Years of design work have produced the finest auxiliary fuel system available that relies on relatively few, but critical parts. The components used in Transfer Flow fuel systems are not generic or “off the shelf” parts and cannot be replaced with parts that appear to be similar.

For example, the in-line fuel pump used with our TRAX 3™ system appears to be a normal fuel pump, but it is actually a high-quality solenoid pump with a critical forward and reverse check feature. **Under no condition should any other pump be substituted for the provided pump.**

This auxiliary fuel system has been outfitted with a replaceable fuel filter that requires periodic service. The filter is available through automotive parts retailers and is not covered by Transfer Flow’s warranty. The filter should be inspected/replaced every 3–6 months depending on the conditions that the vehicle is operated in and the quality of fuel purchased. Transfer Flow will not honor warranty claims from diagnosis or replacement of obstructed filters.

24-Hour Emergency Technical Help:

Contact Transfer Flow at (800) 442-0056 x9 or (530) 893-5209 x9 if your Transfer Flow auxiliary fuel system fails to operate properly, or if you have any questions regarding parts replacement.

6 Year, Unlimited Mile Warranty

Transfer Flow fuel systems and vehicle accessories are covered by a six year, unlimited mile warranty against defects in material and workmanship throughout the U.S. and Canada from the unit purchase date by the original purchaser for the original vehicle the unit was installed in.



For specific information regarding part exceptions, exclusions and limitations, warranty claim procedures, and federal regulatory provisions, please see our full warranty details on our website at www.TransferFlow.com/warranty.



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