

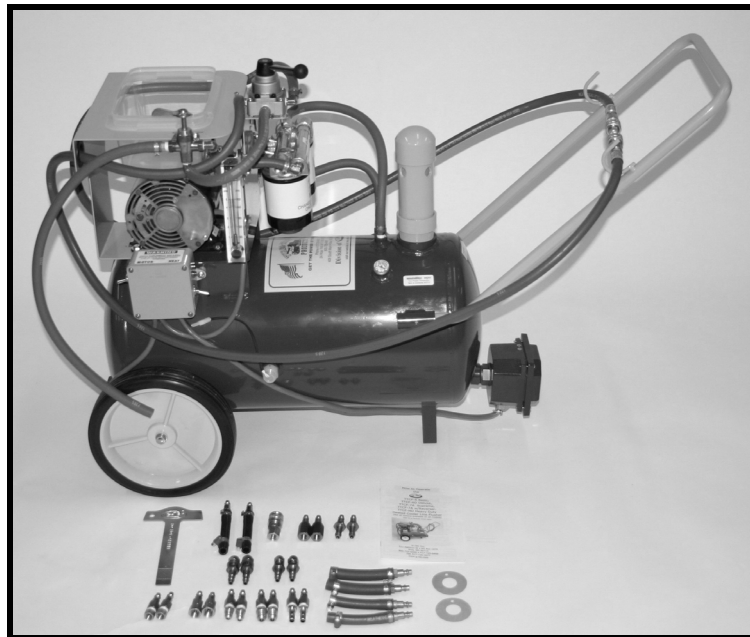
# How to Operate the



## TTCF-6 Basic, TTCF-6D Deluxe, TTCF-7AR Supreme, TTCF-HD Heavy Duty Heated Cooler Line Flusher

(Not all options available on all models)

TTCF-7AR shown below



G-TEC Inc.  
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## This unit will not work...

...unless these instructions are followed.

Your new Turbo Tank Flusher is covered against factory defects by a limited 90-day warranty from the date of invoice. This warranty does not apply to any products damaged by improper installation, shipping accidents, misuse, alteration or repairs not performed or authorized by G-TEC.

### **The following instructions MUST ALWAYS be followed:**

- NEVER plug the flusher into a wall outlet that has any other 110 volt appliances using that circuit including but not limited to light fixtures, drop lights, extensions cords, etc.
- ALWAYS check the position of the fluid purge valve before operating the flusher to prevent fluid spills.
- Before starting or engaging the motor for flushing and purging, be CERTAIN that the ATF in the tank has reached ABOVE 150 degrees.
- If the RED INDICATOR LIGHT is *on*, the ATF level is *too low* in the tank and the heater WILL NOT HEAT. Refill the tank.
- Heater is adjustable; however, doing so is solely at the risk and responsibility of the operator. Adjusting to a higher heat is only recommended on a per need basis. After each high temperature job, the heater should be turned back to the factory setting of approx. 150-160°. Never leave the heater adjusted to a high temperature!
- If the temperature ever exceeds 198 degrees, the float is designed to melt causing permanent loss of power to the heater until the float is replaced.
- The Baldor Motor/Viking Pump is equipped with a Watts Pressure Relief Valve. The factory setting is between 100-125 psi. You must never raise the psi higher than 125 as this will cause damage to the motor and pump.
- G-Tec's complete warranty and all liabilities are VOID if mineral spirits or petroleum-based solvents are used in your Turbo Tank Flusher!

#### **Disclaimer**

G-TEC is not responsible for any damages to the flusher or to the customer's facility or to operators when the instructions and warnings are not followed or heeded. All repairs or replacements will be at the customer's expense.

# Cleaning Procedure

This machine uses hot fluid under pressure. Check the security of all hoses and connections before operation. Always wear safety glasses, gloves, and protective clothing. If you get ATF in your eyes or on your skin, rinse with water immediately. **Please Note: You may not have every option mentioned in the instructions. If you do not, please ignore that step.**

## WARNING

Improper use of this machine can result in burns and other serious injuries.

Always wear eye protection and protective clothing and follow all instructions in this booklet.

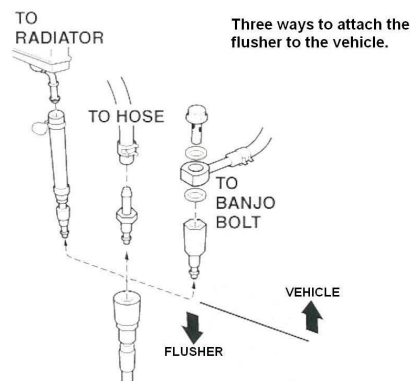
1. Plug the flusher into a 110 V (20 amp) grounded electrical outlet.

## ATTENTION

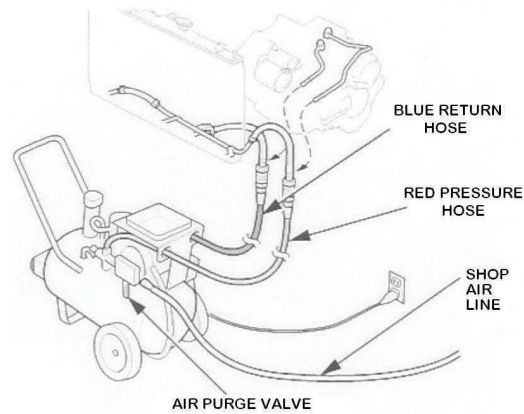
*Make sure the outlet has no other appliances (light fixtures, drop lights, extension cords, etc) plugged into it. Also NEVER plug the flusher into an extension cord or drop light cord; you would damage the unit. Always make sure the fluid purge handle is in the 'flush' position to avoid accidents, and make sure the filter screens are in place.*

2. Always cycle the **heater** toggle to the 'on' position first. The green light will come on. If the red light is lit, then the tank is low on fluid and there will be **NO** power to the heater. Do **NOT** overfill the tank. Allow approximately 15 minutes for the flusher to reach operating temperature of **above 150°** Fahrenheit.
3. Install the appropriate quick disconnect line adapters (imports or domestic) to the ATF cooler inlet and outlet lines using any of the three methods in Picture 1. (To forward flushing only) Connect the red pressure hose to the cooler *inlet* line (the line going to the external filter). Connect the blue return hose to the cooler *outlet* line (the line coming from the vehicle's cooler tank going to the transmission).

Picture 1



Picture 2



4. **(For 7-AR only)** Connect a shop air hose to the air purge valve as seen above in Picture 2.

**ATTENTION**

*The quick connect fitting on the air purge valve has a one-way check valve to keep ATF from entering your shop's air system. Do NOT remove or replace this fitting. Attach the coupler provided with the flusher to your air shop line if YOUR coupler is not compatible.*

5. **(Not included on Basic)** Secure the end of the fluid purge hose into an EPA-approved waste container.

**ATTENTION**

*The pressure is very high and purging takes only a few seconds. Be sure to adequately secure the short hose into a container to prevent spills.*

6. Turn the fluid purge valve handle so that the needle points toward the short purge hose (the 'purge' position). Cycle on the motor toggle and purge the fluid. The amount to purge will vary based on each vehicle and based on operator's discretion (average amount between one pint and one quart). Cycle off the motor toggle. **ALWAYS** turn the fluid purge handle to the 'flush' position (or away from the short purge hose) after each purge.
7. Replenish ATF to the flusher tank, if the low fluid indicator (red) light comes on after purging the fluid.
8. The best method for flushing is to **back-flush** the cooler first.  
If it is possible to back-flush the vehicle \* set the (7AR) reverser lever to the '2' position.  
If not possible, set the (7AR) reverse lever to the '1' position for a forward flush.
9. Cycle on the motor toggle. Let the machine flush for 15 minutes. Regulate air supply to 90-100 psi.
10. While the machine is running, open the air purge valve for 10-15 seconds to cause agitation and improve the flushing process. Then close the air purge valve for 5 minutes. Repeat the opening and closing 3 times.
11. Cycle off the motor toggle.

\*Some vehicles can't be back-flushed due to a directional check valve that makes back-flushing impossible. In some circumstances, it is possible to temporarily remove the check valve which will allow you to back-flush the system.

12. **For Basic & 6D models:** To reverse the cleaning process, disconnect the pressure and return hoses from the ATF cooler. Now connect the pressure hose to the cooler *inlet* line and the return hose to the cooler *outlet* line. Cycle the motor toggle on and let the machine flush for 15 minutes. Regulate the air supply to 90-100 psi. While the machine is running, open the air purge valve for 10-15 seconds. Then close the air purge valve for 5 minutes. Repeat the process 3 times.
  - 12a. **For TTCF-7AR models:**  
To reverse the cleaning process, simply turn the reverser lever to the opposite setting. Cycle the motor toggle on and let the machine flush for 15 minutes. Regulate the air supply to 90-100 psi. While the machine is running, open the air purge valve for 10-15 seconds. Then close the air purge valve for 5 minutes. Repeat the process 3 times. **See Addendum 2** for an explanation of the reverser.
13. Cycle off the motor toggle leaving the air purge valve open for at least 15 seconds to purge the lines of residual ATF, then close the air purge valve.
14. Remove both spin on filters, install the filter screens on top of the filters, and spin the filters back in place on the flusher. Backflush, if possible, the flusher for 5 minutes. Cycle off the motor. Check the filter screens. If no debris is present, toggle off the motor. Then air purge the lines for 15 seconds. Now cycle the heater off. Flushing is complete. Remember to always close the air purge valve.
  - 14a. If debris is present in the filter screens, repeat the flushing process.

**ATTENTION**

*If you feel that you have flushed the vehicle completely and properly, but still see debris in the filter screens, check these areas of the flusher:*

- a. *Non By Pass (NBP) spin on filters - for damage or pollution*
- b. *Severe contamination of the holding tank and/or the flusher hoses*
- c. *Heater - adjust temperature higher*

15. Disconnect the pressure and return hoses from the vehicle cooler lines.
16. Install the test coupling (provided with your domestic adapter kit) to connect the pressure and return hoses to each other for storage.
17. Unplug the flusher from the wall outlet.

## **ADDENDUM 1**

The black heater is located directly below the handle. The heater is adjustable; however, doing so is solely at the risk and responsibility of the operator. Adjusting to a higher heat is only recommended on a per need basis. When completed, the heater should be turned back to the factory setting of 150-160°.

For high heat jobs:

1. Make note of the current fluid temperature using the thermometer on top of the tank.
2. Using your thumb and forefinger grasp the black rubber tip.
3. Slowly turn the adjustment shaft through the black rubber tip clockwise to increase the temperature until desired temperature is reached.
4. Frequently monitor the temperature of the fluid using the thermometer during the high heat job – making sure the temperature does not exceed 199°.
5. After completing the high heat job, the temperature must be returned to factory settings of 150-160° by turning the rubber tip counter-clockwise.
6. NEVER leave the heater in the high heat position - damage may occur to the machine.

## **ADDENDUM 2**

When the white arrow on top of the reverser points toward 1, the fluid flows from the red hose into the cooling system becoming the “pressure” line and making the blue hose the “return” line.

When the lever is turned so that the white arrow on top of the reverser points toward 2, the fluid reverses and flows from the blue hose into the cooling system making it the “pressure” line and making the red hose the “return” line.

# Maintenance

To ensure proper machine operation all of the below maintenance must be carried out.

- **Daily:** Check the ATF level daily by removing the fill cap/grey tower and making sure the ATF stays 3-4" from the top of the fill neck. Do not overfill.
- **Monthly:** It is essential that the spin-on filters be replaced at least once a month (or more with high-volume use) to ensure maximum cleaning effectiveness of the flusher. If you have the silver dual-filter mount, you will use two (2) NBP (Non By Pass Magnetic Filters) on your flusher.
- **Quarterly:** Also essential to the effectiveness of your flusher is to drain and change the ATF in the flusher tank every three months or when the fluid becomes dark. ATF must be cold at the time of fluid change. Take the pressure hose, snap the test coupling into the quick-disconnect in the end of the hose, and secure this end into an EPA-approved waste disposal container. Then cycle on the motor of the flusher and let it pump empty. Clean out the sludge in the bottom of the tank by using the flusher's drain plug. After cleaning, refill the tank with 8-9 gallons of clean ATF and as a option you can add one (11 oz.) bottle of transmission flush.

## ATTENTION

*During the draining and filling process, make sure the heater toggle is turned off.*

# Troubleshooting

Always unplug the flusher before any troubleshooting.

**Problem:** No Heat/Red Light On

- Solution:**
1. Make sure the fluid level is above the float switch or 3-4" from the top of the fill neck.
  2. If you still have no heat, test for 110 V at the heater.
  3. If the heater is not getting power, check continuity at the float switch.
  4. If float switch shows continuity, call G-Tec.

**Problem:** Pump/Motor Not Working/Overheating

- Solution:**
1. Make sure the flusher is plugged into a 110 V (20amp) outlet with NOTHING else plugged into it.
  2. Make sure flusher is not plugged into a drop light, extension cord, etc.
  3. Make sure the white cap on the fill hole (for Basic & Deluxe flushers) has a hole in it or the grey vent tower (for the 7AR Supreme flusher) is in place.
  4. Heater must be at 150-160° before engaging motor (otherwise ATF is too thick).
  5. Carefully remove motor face plate, check that all wires are plugged into terminals tightly, and replace face plate.
  6. Run a volt check on motor. If no power, call G-Tec.

**Problem:** No/Low Fluid Coming From Pressure Line

- Solution:**
1. Using two wrenches unscrew the quick-disconnect coupling from the end of the pressure line hose.
  2. Carefully remove washer and spring, and clean out the hose and parts.
  3. Replace all parts as they were removed, and tighten the connections.

**Problem:** ATF Leak Around Connections/Fittings

- Solution:**
1. Re-tighten or replace the worm/ear clamps.
  2. Check hoses for any pin holes or punctures.

**Problem:** Flusher Does Not Appear To Be Cleaning

- Solution:**
1. Change both spin on filters.
  2. If ATF in the holding tank is black, replace it.
  3. Check the flusher for a restriction by connecting the pressure and return hoses with the provided coupling so that fluid circulates through the flusher only.
  4. Increase the heat slightly.

**Problem:** Shop's Circuit Breaker Tripping / Thermal Switch On Motor Tripping

- Solution:**
1. Clear entire flushing system of debris. Check for restrictions from motor to hoses to connectors, etc.
  2. Make sure the flusher is plugged into a 110 V (20amp) outlet with NOTHING else plugged into it.
  3. Make sure flusher is not plugged into a drop light, extension cord, etc.
  4. Make sure the white cap on the fill hole (for Basic & Deluxe flushers) has a hole in it or the grey vent tower (for the 7AR Supreme flusher) is in place.
  5. Heater must be at 150-160° before engaging motor (otherwise ATF is too thick).
  6. Run a volt check on motor. If no power, call G-Tec.
  7. Reset the thermal switch on the back of the motor.
  8. If problem persists, the motor must be replaced



# Optional/Replacement Equipment

Products available from G-Tec Inc  
1-800-725-6400

- Flowmeter Kit
- Purge Valve Kit
- Attachable Tool Tray
- Domestic Adapter Fittings Kit
- Super Duty Adapters (set of 8)
- Honda Adapters (set of 7)
- Push-On Adapters (set of 8)
- Banjo Adapters (set of 4)
- Complete Electrical Box Harness w/Float
- Remote Spin-On Filter Bracket
- Magnetic Spin-On Non By-Pass Filters
- Heater Kit
- Baldor/Viking Pump & Motor
- Complete Hose Kit for All Flusher Hoses
- Manual Handheld Air Purge w/ Venting Cap
- Long Handle with Hose Hooks
- Hose-Holding and Tool Tray-Holding Bracket

## Spin On Filter Cross Reference Guide \*KEEP FOR FUTURE REFERENCE\*

Filter	G-Tec	AC	Fram	Super Tech	Motorcraft	STP
<b>Non By-Pass</b>	NBP2	PF34/PF1232	PH3682	ST2827	FL13B/FL839	S-2827
<b>By Pass*</b>	BP1	PF2	PH8A	S-01	FL1A	S-01

\*By-Pass filters must always be on the left side of bracket (standing at handle end)

# Return Policy

\*As stated in G-Tec's limited warranty

## 1. Call G-Tec (800.725.6499)

Contact Terri/Steve for an RGA number. Provide the date of purchase and the invoice number (or the company through which the product was purchased).

**Returned defective products will be refused without an RGA number.**

## 2. Ship product back to G-Tec.

Re-package product in the manner in which it was received to prevent damage. To ship by UPS, use the 611 Kathryn St. address. To mail by US Post Office, use the P.O. Box 1079. Include the RGA number on the outside of the package.

## 3. We will repair/replace the product and ship it back.

On items covered under warranty, G-Tec will determine whether to repair or to replace the defective item(s) at no charge. Item(s) will be shipped back to customer at G-Tec's expense. However, if the damage is determined to have been caused by improper installation, misuse, or alterations or repairs not authorized by G-Tec, the customer bears all expense.

See last page for warranty.

**Limited Warranty  
for  
Turbo Tank Products  
A Division of G-Tec Inc.**

The Turbo Tank Products Limited Warranty states parts of the Turbo Tank Products to be free from factory defects in materials and workmanship for a period of 90 days (3 months from the date of purchase) providing:

- **Warranty registration has been completed and returned to G-TEC within 10 days of receipt of product.**
  - **Reasonable and normal usage and operation of said equipment is within appropriate standards and procedures.**
- This warranty does not apply to any product damaged by improper installation, shipping accidents, misuse or alterations and repairs not performed or authorized by G-TEC.**

Filters are covered by manufacturers applied warranty. All electronic components are warranted for 90 days from date of purchase. Some items or components, which are supplied by other vendors for use on the Turbo Tank Products are warranted by those vendors and their warranty will apply. Tanks have a life-time warranty.

If any part(s) shall need repair or replacement under the terms of this warranty, the manufacturer shall repair or replace said part(s) in the manner here stated.

**Return Procedure**

Upon discovery of a defective part(s), the equipment owner shall immediately notify Turbo Tank Products and then the equipment owner shall return said part(s) thereto at owner's expense as instructed by the manufacturer. When determined that said part(s) is guaranteed pursuant hereto, Turbo Tank Products shall repair or replace said part(s) and return it to the equipment owner free of charge.

Nothing contained herein shall create a warranty for customer's items used in conjunction with Turbo Tank Products or for said equipment. \*\*Further, this warranty shall not extend to any normal wear or usage of the equipment, or if the equipment has been improperly installed.

This warranty is in lieu of any other warranty, either expressed or implied. **Neither G-TEC nor Turbo Tank Products is liable for any damage which may be caused by said equipment or by operator, nor will G-TEC or Turbo Tank Products be held liable for any down time, labor expense, damage to equipment, personal property or replacement costs of any kind caused by said equipment or by its operator.**

**Safe Operation Procedure**

The safe operation is the sole responsibility of the owner/operator. The owner of the Turbo Tank Products equipment grants permission of its operation to the owner's selected operator. It is the owner/operator's sole responsibility to maintain said products in a safe operational condition and to train the operator in the safe operation of said equipment. Turbo Tank Products and G-TEC recommend use of protection when operating the Turbo Tank Products equipment due to high temperature of tank and contents.

The safe operation of all said equipment is beyond the control of Turbo Tank Products and G-TEC and therefore neither Turbo Tank Products nor G-TEC can assume responsibility for the safety of the operator or bystanders while said equipment is in operation. However, we have made every possible attempt to insure the safety of the operator. For your own safety do not override, disconnect, or bypass the built-in safety switches, power cut-off, or guards.

U.S. patents and other copyright registrations protect the Turbo Tank Product System, with some patents still pending.