

# **TSD450 BASIC OPERATIONAL OVERVIEW**

**NOTE:** *This machine is fully automatic. Refer to your control panel at all times.*

**Read and understand safety warnings on back of this sheet, hose chart, and machine.**

## **PRIMING THE SYSTEM:**

*(Only necessary when machine is received, before first operation.)*

**The system must be primed before first use!**

1. Insert *master connector* into *service hose*.
2. Connect and fasten two mating adapter hoses together (i.e. #72 & #73).
3. Select "AUTO PRIME" (Option 7) by continually pressing the "OPTION MENU" button. Press "START". The system will prime, and is then ready to begin an exchange.

## **BASIC HOOKUP:**

1. Position the machine in front of vehicle to be serviced.
2. Use the included vehicle adapter hose chart to assist in identifying the specific adapter hose required for each particular vehicle.
3. Locate and disconnect the most easily accessible hose or fitting at the radiator end of the transmission cooler system.
4. Attach the two adapter hoses to the vehicle. Be sure the master connectors are inserted into the adapter hoses.
5. Attach the machine's service hoses to the adapter hoses.

## **BASIC OPERATION:**

### **Setup/Operation-**

1. Check vehicle owner's manual for recommended fluid type.
2. Connect the machine's battery cables to the vehicle's battery (Refer to control panel).
3. Start the vehicle's engine (Vehicle will automatically go into bypass).
  - a. Check transmission fluid level.
  - b. Check for any possible leaks at connection points.
4. Using the "QUANTITY" button, select the amount of fluid required for the particular vehicle (refer to vehicle's owner's manual).
5. Press green "EXCHANGE" button.
6. If the exchange does not begin within 5-10 seconds, and the "Shift to Neutral" light comes on, set the vehicle's emergency brake, and shift the vehicle into Neutral. This will engage the vehicle's transmission pump. Press "EXCHANGE" again.
7. If the exchange does not take place in 5-10 seconds and the "Reverse Machine Hoses" light comes on, simply turn vehicle off and switch the hoses (leave the master connectors on adapter hoses), and then restart the vehicle and press "EXCHANGE" again.
8. After the exchange, the machine will automatically shut off (vehicle will automatically return to bypass) and the counter display will indicate the amount of fluid flushed.
9. Check transmission fluid level.
  - a. If the level is low, push the "ADD ATF" button. This will add two tenths of a quart (approximately 1/8 of an inch on the dipstick).
  - b. If the level is high, push the "REMOVE ATF" button. This will remove two tenths of a quart (approximately 1/8 of an inch on the dipstick).
10. Turn the vehicle's engine off.
11. Disconnect the adapters (leave the master connectors attached to the adapter hoses), and connect the cooler line to the radiator.
12. Start the vehicle for final inspection.
  - a. Check transmission fluid level.
  - b. Check for any possible leaks at connection points.

## **DRAINING THE WASTE ATF FLUID**

With the battery cables connected to a 12-volt battery source, connect an open-end hose (i.e. #55 w/ master connector attached) to the **red service hose**. Place this hose in your *waste fluid receptacle* (be sure black service hose is disconnected from vehicle and is not connected to an adapter hose) and then select "DRAIN WASTE TANK" (Option 4).

*For technical support, call:*

**1-800-303-5874**

## **DIPSTICK EXCHANGE OPERATION:**

1. Use the "OPTION" button to toggle to Option 0.
2. Using the "QUANTITY" button, select the amount of fluid required for the particular vehicle (refer to vehicle's owner's manual).
3. Insert tube to pan down dipstick.
4. Connect Red Service Hose to small adapter with check valve; Connect Grey Service Hose to large adapter without check valve.
5. Press green "EXCHANGE" button.
6. Machine will run and prompt you to start the vehicle's engine.
7. Start the vehicle's engine and press "EXCHANGE".
8. When finished, add or remove fluid as needed.

## **⚠ DANGER**



- Vent vehicle's exhaust away from work area.
- Do not breathe exhaust.
- Wear safety goggles and protective clothing, user and bystander.
- Keep the service hoses away from hot or moving engine parts. Hoses can split or burst causing fluid to be expelled.
- Tighten all connections properly. Insufficient or excessive torque can result in fluid leakage.
- Block drive wheels before starting vehicle's engine to begin an exchange.
- Unless instructed otherwise, set parking brake and put gear selector in park.
- Do not leave a running vehicle unattended.
- Read, understand and follow Safety Instructions in the front pages of this manual and on product safety labels.