

TABLE OF CONTENTS

INTRODUCTION to the DEF-8000	2
SAFETY INFORMATION	3
SYSTEM FEATURES & SPECIFICATIONS	9
MACHINE OVERVIEW	10
OPERATING INSTRUCTIONS	11
REPLACEMENT PARTS	12
MAINTENANCE PROCEDURES	12
CUSTOMER SERVICE CONTACT INFO	12
WARRANTY INFORMATION	13



INTRODUCTION

to the DEF-8000

Congratulations on the purchase of your DEF-8000 Diesel Exhaust Fluid filling station!

The DEF-8000 is the answer for transporting DEF from your bulk tank to a vehicle. The DEF-8000 has all the features you require, including: a small platform size, which allows for easy mobility through doorways and around lifts, an accurate metering device located near the handle for easy visual filling, and an automatic shutoff nozzle for, safe, reliable service. The DEF-8000 has also been engineered with a nozzle “bath holder” which keeps the nozzle tip from crystalizing and keeps the auto shut-off working properly.

Simply put, this machine is the cleanest, safest, easiest, and most cost-efficient method of transferring DEF material ever devised.

Please take time to read through this manual to familiarize yourself with the DEF-8000 before performing your first coolant exchange.

IMPORTANT SAFETY NOTICE

For your safety, read this manual thoroughly before operating this machine. Your DEF-8000 unit is intended for use by properly trained, skilled professional automotive technicians. The safety messages presented below and throughout this user's manual are reminders to the operator to exercise care when using this unit. Before using your DEF-8000 unit, always refer to and follow the safety messages and applicable service procedures provided by the manufacturer of the vehicle being serviced.

• Read All Safety Instructions

Read, understand and follow all safety messages and instructions in this manual. Safety messages in this section of the manual contain a signal word with a three-part message and, in some instances, an icon.

• Signal Words

The signal word indicates the level of the hazard in a situation:

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury to the operator or to bystanders.

IMPORTANT

Indicates a situation which, if not avoided, may result in damage to the machine, or the vehicle being serviced.

• Safety Messages

Safety messages in this section contain three different type styles:

- Normal type states the hazard.
- **Bold type** states how to avoid the hazard.
- *Italic type* states the possible consequences of not avoiding the hazard.

• Safety Symbols

A safety symbol, when present, gives a graphical description of the potential hazard, and how to avoid the hazard:



Risk of Fire



Read Instructions Before Use



Risk of Explosion



Mandatory Eye Protection



Risk of Entanglement



Mandatory Protective Gloves



Dangerous Fumes



Mandatory Protective Clothing



Do Not Pull or Move



Risk of Burns

IMPORTANT SAFETY INSTRUCTIONS

DANGER



Engine exhaust contains toxic gases.

- **Vent vehicle's exhaust away from work area.**
- **Do not breathe exhaust.**

Exhaust gases will cause injury or death.

WARNING



Improper use and operation.

- **Read, understand and follow all safety messages and operational procedures in this manual before operating this machine.**
- **This equipment should be operated only by qualified personnel.**
- **Use this equipment only as described in this manual.**

Improper use and operation of this product can result in injury.

WARNING



Engine systems can malfunction expelling fuel, oil vapors, hot steam, hot toxic exhaust gases and other flying particles.

- **Wear safety goggles and protective clothing, user and bystander. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.**
- **Do not position head directly over or in front of carburetor or throttle body. Engine backfire can occur when air cleaner is out of normal position.**
- **Make sure gauge reads zero before connecting or disconnecting hose connections to adapters.**
- **Make sure cooling system pressure has been relieved before connecting or disconnecting hose connections and adapters.**
- **Keep a dry chemical (Class B) fire extinguisher rated for gasoline, chemical & electric fires in the work area.**

Fire, explosion, or flying particles may cause serious injury.

WARNING



Risk of expelling pressurized fluids.

- **Wear safety goggles and protective clothing, user and bystander.**

- Engine systems can malfunction, expelling fuel, oil vapors, hot steam, hot toxic exhaust gases and other debris.
- Always unplug the machine from its power source when not in use.
- Keep the service hoses away from hot or moving engine parts. Hoses can split or burst causing fluid to be expelled.

- Avoid contact with engine coolant.
- Treatment methods are as follows:

Eyes: Flush eyes with plenty of water.

Skin: Wash with soap and water.

Inhalation: Move to uncontaminated area.

Ingestion: If large amount, get medical attention.

If any irritation persists, get medical attention.

- Dispose of used fluid according to environmental laws and regulations.

Fuel, oil vapors, hot steam, hot toxic exhaust gases, pressurized fluid, and other debris can cause serious injury.

WARNING

Risk of unexpected vehicle movement.

- 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.
- If vehicle has an automatic parking brake release, disconnect release mechanism for testing and reconnect when testing is completed.

A moving vehicle can cause injury.

WARNING



Risk of entanglement. Engine has moving parts.

- Do not place tools on fenders or other places in engine compartment.
- Keep yourself, clothing, battery cables and service hoses clear of moving parts such as fan blades, belts, pulleys, hood and doors.
- Barriers are recommended to help identify danger zones in test area.
- Prevent personnel from walking through immediate test area.

Contact with moving parts can cause injury.

WARNING



Risk of fire or explosion.

- Do not operate in the vicinity of open containers of flammable liquids such as gasoline.
- Keep hoses and jumper cables away from heat sources and sharp edges.
- Do not operate equipment with damaged cords or hoses until they have been examined by a qualified serviceman.

Fire or explosion can cause injury.

WARNING



Risk of fire or explosion. Gases produced by a battery are highly explosive.

- **Wear safety goggles and protective clothing, user and bystander.**
- **Do not smoke, place metal tools on battery or allow a spark or flame in vicinity of battery.**

Battery explosion can cause injury.

WARNING



Risk of burns.

- **Wear gloves when handling hot engine components.**
- **Do not touch hot exhaust systems, manifolds, engines, radiators, etc.**

Hot fluid and engine parts may cause injury.

WARNING



Battery acid is a highly corrosive sulfuric acid.

- **Wear safety goggles and protective gloves, user and bystander.**
- **Have plenty of fresh water and soap nearby. If battery acid contacts skin, clothing, or eyes, flush exposed area with soap and water for 10 minutes.**
- **Do not touch eyes while working near battery.**

Battery acid can burn eyes and skin.

WARNING



Risk of burns.

- **Wear gloves when working near hot engine components.**
- **Do not touch hot exhaust systems, manifolds, engines, radiators, etc.**
- **The fluid coming from the vehicle along with some of the machine's components that the fluid comes into direct contact with (i.e. hoses and fittings) may reach temperatures uncomfortable to the touch. Exercise caution in avoiding contact with these items.**

Hot components can cause injury or discomfort.

CAUTION



Risk of injury.

- **This equipment should be operated by qualified personnel only.**
- **Use this equipment only as described in this manual.**

- Always disconnect the machine from power source when not in use.
- Loop the hose loosely in its proper location when machine is not in use.
- Do not operate equipment with a damaged hoses, or if the equipment has been dropped or damaged, until it has been examined by a qualified service representative.
- Care should be taken to arrange the hoses so that they will not be tripped over or pulled.
- Never pull on the service hoses to transport the machine. Damage may occur to these components, or machine may tip over.
- Keep area of operation clear of unnecessary tools and equipment. Utilize recessed tool storage areas on the top of the machine.
- Never leave the machine running unattended.
- The DEF-8000 is not designed for any other purpose than the filling of diesel exhaust fluid.

Operation of this machine by anyone other than qualified personnel may result in injury.

CAUTION

Misdiagnosis may lead to incorrect or improper repair and/or adjustment.

- **Do not rely on erratic, questionable, or obviously erroneous test information or results. If test information or results are erratic, questionable, or obviously erroneous, make sure that all connections and data entry information are correct and that the test procedure was performed correctly. If test information or results are still suspicious, do not use them for diagnosis.**

Improper repair and/or adjustment may cause vehicle or equipment damage or unsafe operation.

IMPORTANT

Risk of equipment damage.

- **Servicing, transporting, or storing this machine in an attitude other than the normal operating position can result in fluid spillage and/or component damage.**
- **Never pull on the service hoses to transport the unit. Damage may occur to these components, or machine may tip over. Always use the handle to move.**
- **Periodically clean the machine by wiping down with a clean, soft, dry cloth.**

Improper operation of equipment may result in damage to machine or components.

SAVE AND FOLLOW THESE INSTRUCTIONS!

DIMENSIONS & TECHNICAL SPECIFICATIONS

DIMENSIONS:

39" Tall
24 3/4" Wide
25" Deep

Service Hoses:

6' outside of machine

Wheels:

5" locking casters (front)
5" casters (back)

Fluid Tanks:

30 Gallon New Fluid Tank

Weight:

140 lbs

TECHNICAL SPECIFICATIONS:

Power:

12-Volt DC from vehicle battery

Fuse:

15 Amp

Operating Temperature:

60° to 110°F (15° to 43°C)

FEATURES

- Specifically designed to handle DEF material.
- Automatic shut off with non-drip nozzle.
- Water bath nozzle holder ensures proper function of vacuum shutoff.
- Large 3.5GPM pump for fast delivery.
- Small platform for easy mobility around shop.
- Benecor metering device +/- 1% after calibration.
- 18' power cord makes different fill locations easy to reach.
- 6' service hose.
- Easy operation.
- Roto-cast polyethylene non scratch cabinet.

MACHINE OVERVIEW



OPERATING INSTRUCTIONS

SETUP



Connect red and black battery cables to vehicle's battery.



Fill the DEF8000 with new DEF using the cap port on the back of the machine. The tank is capable of holding 30 gallons of new DEF.

OPERATION



Move switch on the front panel of the machine in the "FILL" position. The pump will begin to run in bypass when the switch is actuated.



Using the nozzle, fill the vehicle's DEF reservoir with new DEF fluid. The nozzle has a built in vacuum shut off feature that will shut off the flow of DEF when the vehicle's reservoir is full.



When DEF fill is complete, place the nozzle back into the water bath on the side of the machine to ensure proper function of the vacuum shutoff.



Return switch on the front panel of the machine to the "OFF" position.



Disconnect red and black battery cables from the vehicle's battery.



The water bath can be easily drained and refilled using the ball valve at the bottom of the tube. Simply fill the tube with water and open the ball valve to drain it and periodically change the water in the bath.

REPLACEMENT PARTS LIST

Part #	Description
948000	Pump
948007	Flowmeter
948009	Nozzle
948008	Nozzle Swivel Fitting
948014	Tank Cap
948015W	Control Panel w/ Overlay
948030	Front Label
948031	Measure Strip Label
948020W	Nozzle Holder Assembly
948032W	Battery Cable Assembly

To order replacement parts for the DEF-8000, call:

1-800-303-5874

MAINTENANCE PROCEDURES

To keep your machine working properly...

- Keep debris out of new fluid tank.
- Avoid spilling fluid on the control panel.
- Periodically wipe down exterior using a soft, damp cloth.

CUSTOMER SERVICE CONTACT INFORMATION

If you are experiencing problems with this machine,
call technical support at:

1-800-303-5874

LIMITED ONE (1) YEAR WARRANTY

Flo-Dynamics warrants only to the original Purchaser that under normal use, care and service, the Equipment (except as otherwise provided herein) shall be free from defects in material and workmanship for one year from the date of original invoice. External hoses, remote control modules, adapters and all other attachments, supplies and consumables (except as otherwise provided herein) are warranted for 90 calendar days from the date of original invoice. Filter elements are not warranted. Printed circuit boards purchased from, but not installed by Seller are not warranted.

SELLER'S OBLIGATIONS UNDER THIS WARRANTY ARE LIMITED SOLELY TO THE REPAIR OR, AT SELLER'S OPTION, REPLACEMENT OF EQUIPMENT OR PARTS WHICH TO SELLER'S SATISFACTION ARE DETERMINED TO BE DEFECTIVE AND WHICH ARE NECESSARY, IN SELLER'S JUDGEMENT, TO RETURN THE EQUIPMENT TO GOOD OPERATING CONDITION. NO OTHER WARRANTIES EXPRESS OR IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY AND ALL SUCH WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED.

This warranty does not cover (and separate charges for parts, labor and related expenses shall apply to) any damage to, malfunctioning, inoperability or improper operation of the Equipment caused by, resulting from or attributable to (A) abuse, misuse or tampering; (B) alteration, modification or adjustment of the Equipment by anyone other than Seller's authorized representatives; (D) improper or negligent use, application, operation, care, cleaning, storage or handling; (E) fire, water, wind, lightning or other natural causes; (F) adverse environmental conditions, including, without limitation, excessive heat, moisture, corrosive elements, or dust or other air contaminants, radio frequency interference, electric power failure, power line voltages beyond those specified for the equipment, unusual physical, electrical or electromagnetic stress, and/or any other condition outside of Seller's environmental specifications; (G) use of the Equipment in combination or connection with other equipment, attachments, supplies or consumables not manufactured or supplied by Seller; or (H) failure to comply with any applicable federal, state or local regulation.

Repairs or replacements qualifying under this Warranty will be performed on regular business days during Seller's normal working hours within a reasonable time following Purchaser's request. **All requests for Warranty service must be made during the stated Warranty period.** This warranty is non-transferable.