



#9070A DEF TRANSFER SYSTEM WITH AUTOMATIC SHUT-OFF NOZZLE

USER MANUAL



9 GPM 120V AC Pump for Transferring Diesel
Exhaust Fluid (DEF)

LETTER FROM THE PRESIDENT OF IPA®

My name is Peter Vinci and I am the president of IPA®. I would like to first thank you for your interest in IPA®'s product line and share my commitment to you, our products and our policies. In today's world, we have all experienced the lack of service and consideration demonstrated by many companies after you buy their products. They say whatever they can to make the sale, and then it's like pulling teeth to get any service response out of them. I know this myself first-hand and because of this, I want to be sure that your experience with IPA® meets your expectations and that IPA® never disappoints you with our service or customer response.

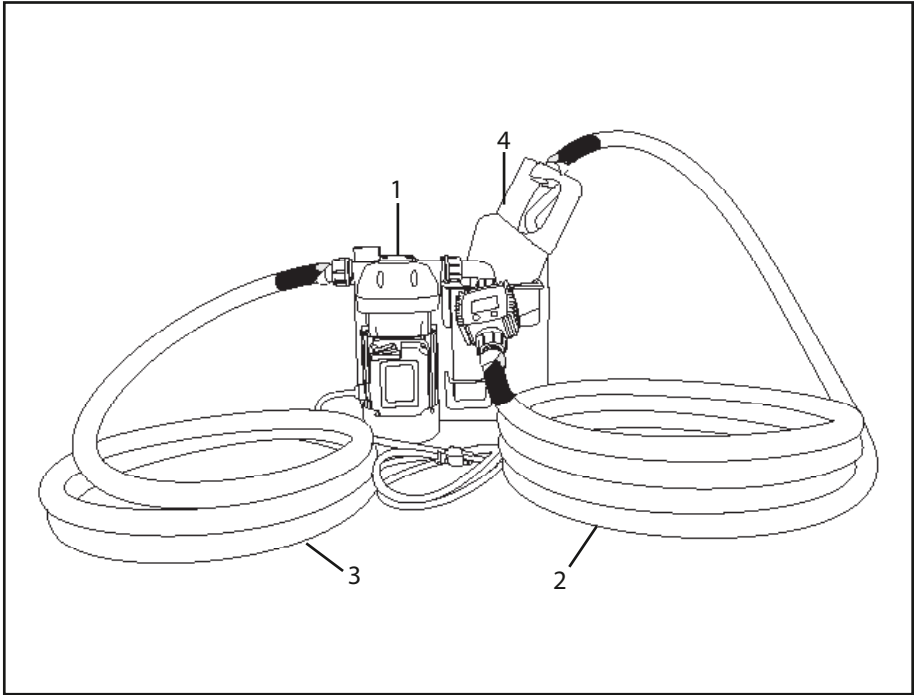
Your satisfaction is more important to me than the sale itself. We will not be in business for long if we don't make you completely happy with our products and service. I want IPA® to be different and to be known for its quality and service.

With that said, please take a look at our product line. You will see innovative first time products that were created to help you do your job faster and better than before. I would also like to invite you to critique our products. If you can think of a better way to make them or changes that will make them better, then again, please contact me directly and I will be sure to look into it. If you have an innovation and would like some feedback, give me a call.

From all of us at IPA®, we thank you for taking the time to review our product line and wish you and your family the very best of everything.

#9070A DEF TRANSFER SYSTEM WITH AUTOMATIC SHUT-OFF NOZZLE PARTS

Fig. 1 - Parts Diagram



#	Part Number	Description
1	PMP00009-1	120V AC Pump
2	HS-DEFCLR-6	6' Input Hose
3	HS-DEFBLK-8	8' Output Hose
4	009070-DEFNOZA	Automatic Nozzle

IMPORTANT SAFETY INSTRUCTIONS

IT IS IMPORTANT TO READ, UNDERSTAND AND FOLLOW ALL SAFETY MESSAGES AND INSTRUCTIONS PRINTED IN THIS MANUAL AND ON THE EQUIPMENT BEFORE OPERATING. IF SAFETY INFORMATION IS NOT HEEDDED, DEATH OR SERIOUS INJURY TO THE OPERATOR OR BYSTANDERS MAY OCCUR.

DANGER

Indicates a hazardous situation that if not avoided, will result in death or serious injury. The possible hazards are shown in the adjoining symbols or explained in the text.

WARNING

Indicates a hazardous situation that if not avoided, could result in death or serious injury. The possible hazards are shown in the adjoining symbols or explained in the text.

CAUTION

Indicates a hazardous situation that if not avoided, may result in minor or major injury. The possible hazards are shown in the adjoining symbols or explained in the text.



POTENTIAL EYE HAZARD: Wear OSHA approved safety glasses.



POTENTIAL SKIN IRRITATION/BURN HAZARD: Wear protective gloves.



POTENTIAL ELECTRIC HAZARD: Electrical energy can cause heat and burn hazards.

OPERATING CONDITIONS

ENVIRONMENTAL CONDITIONS

Temperature: Min. -10°C (14°F) / Max. +60°C (140°F)

Relative Humidity: Max. 90%

ATTENTION! The temperature limits shown apply to the pump components and must be respected to avoid possible damage or malfunction.

ELECTRICAL POWER SUPPLY

The pump must be supplied by a single-phase alternating current line (120V AC at 60 Hz). The maximum acceptable variations from the electrical parameters are:

Voltage: +/-5% of the nominal value; Frequency: +/-2% of the nominal value

ATTENTION! Power from lines with values outside the indicated limits can damage the electrical components.

WORKING CYCLE

The pump is designed for continuous use under maximum back pressure.

ATTENTION! Functioning under bypass conditions is only allowed for brief periods of time (2-3 minutes maximum).

FLUIDS PERMITTED

- Chemical products: diesel exhaust fluid, urea, weak acid and weak alkaline fluid, etc.
- Water

WARNING! For use with permitted fluids only. Do not use to transfer any hard contaminants such as rocks, leaves, etc. This can damage the pump and void the warranty.

WARNING! Do not operate with caps installed or bodily injury can result.

SPECIFICATIONS

Pump Type: Rotary Diaphragm

Pump Req: 120V AC (6.5 Amp)

Flow Rate: 9 GPM

Intake: 6' Long, $\frac{3}{4}$ " Diameter

Outtake: 8' Long, $\frac{3}{4}$ " Diameter

Nozzle Type: Automatic Shutoff

Meter: Digital

Meter Req: CR2 Lithium Battery (Included)

Hanging Bracket: Steel Construction

Weight: 15 lbs.

INSTALLATION

PRELIMINARY INSPECTION

- Check for any damage on the machine that may have occurred during transport.
- Clean the inlet and output openings, removing any dust or residual packing material.
- Make sure that the motor shaft turns freely.
- Check that the electrical specifications correspond to those shown on the identification plate.

ATTENTION! THE MOTORS ARE NOT OF AN ANTI-EXPLOSIVE TYPE. Do not install them where flammable vapors may be present.

CONNECTING

- To ensure leak free connection, please follow these directions:

Step 1: Disassemble barb fitting, removing barb fitting from lock nut.

Step 2: Lubricate O-ring on barb fitting with dielectric grease to ease installation.

Step 3: Re-install barb fitting into female fitting.

Step 4: Secure with locking nut, turning clockwise until hand tight.

Step 5: Install outlet hose to barb fitting using hose clamp (ensure even cut end on hose).

DISPENSING

After installation of the pump system is complete, connect the power supply and start dispensing.

ATTENTION! It is the installer's responsibility to use tubing with adequate characteristics. Loosening of the connections (threaded connections, flanging, gasket seals) can cause serious ecological and safety problems. Check all the connections after the initial installation and continue to check them on a daily basis. Tighten the connections if necessary.

HOW TO USE THE METER

INTRODUCTION

Only low viscosity liquids are compatible with the turbine digital meter, namely: diesel exhaust fluid, water/urea solution.

Use of other fluids may cause inaccurate measurements and can damage the meter. Flow Rate: 3-26 GPM. Flow rates outside of this range may be incorrect.

LCD DISPLAY

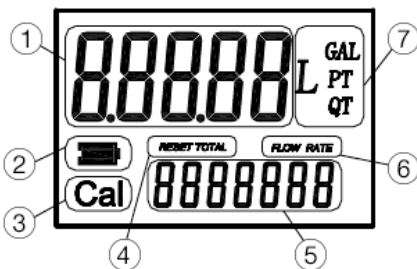
The LCD meter features two numerical registers and various indications displayed to the user only when the applicable function requires.

BATTERY REPLACEMENT

To replace battery, open the cover, remove the plug and replace the battery.

KEY

1. Partial register (four figures with moving comma from 0.1 to 99999) indicates the volume dispensed since the reset button was last pressed.
2. Indication of battery charge.
3. Indication of calibration mode.
4. Indication of resetting present total to zero.
5. Total register.
6. Indication of flow rate mode.
7. Indication of unit of measurement for partial:



(Fig. 2)

USER BUTTONS

The turbine digital meter features two buttons: MENU and RESET. Individually they perform two main functions and together, other secondary functions. The main functions performed are:

RESET key: resetting the partial register and table total.

MENU key: entering instrumental calibration mode.

Used together, the two keys permit entering configuration mode.

CHANGING UNIT OF MEASUREMENT

RESET THE PRESENT TOTAL (Fig. 3)

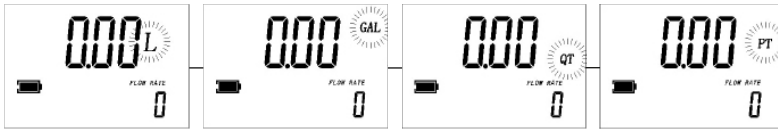
- 1) When the meter is on standby, press the RESET key.
- 2) The display shows all the segments.
- 3) The meter resets the present total.



(Fig. 3)

MEASUREMENT UNIT CHANGE (Fig. 4)

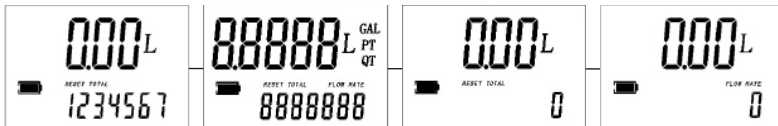
Press MENU and RESET together and hold for five seconds. Zone 7 on the display shows the current unit. Press RESET to chose a different measurement unit and then press MENU to confirm.



(Fig. 4)

RESET THE RESETTABLE TOTAL (Fig. 5)

When the meter is on standby, press the RESET key for two seconds to reset the present total.



(Fig. 5)

DAILY USE

- If using flexible tubing, attach the ends of the tubing to the tanks. In the absence of an appropriate slot, solidly grasp the delivery tube before beginning to dispense.
- Before starting the pump, make sure that the nozzle is closed (dispensing nozzle or line valve).
- Turn the ON/OFF switch to ON. The bypass valve allows functioning with the nozzle closed only for brief periods.
- Open the nozzle, solidly grasping the end of the tubing.
- Close the nozzle to stop dispensing.
- When dispensing is finished, turn off the pump.

ATTENTION! Function with the delivery valve closed is only allowed for brief periods (2-3 minutes maximum). After using, make sure the pump is turned off.

MAINTENANCE

All models are designed and constructed to require minimum maintenance. Always bear in mind the following basic recommendations to ensure proper performance:

- On a weekly basis, check that the tubing joints have not loosened to avoid any leakage.
- On a weekly basis, check and keep clean the line suction filter.
- On a monthly basis, check the pump body and keep it clean of any impurities.
- On a monthly basis, check that the electric power supply cables are in good condition.

DISPOSING OF CONTAMINATED MATERIALS

In the event of maintenance or demolition of the machine, do not disperse contaminated parts into the environment. Refer to local regulations for their proper disposal.

PROBLEMS AND SOLUTIONS

Problem	Possible Cause	Solution
LCD: no indication	Bad battery contact	Check battery contacts
Imprecise measurement	Wrong factor	Contact manufacturer
Reduced or zero flow rate	The meter is working below minimum acceptable flow rate	Increase the flow rate until an acceptable flow rate range has been achieved
	Turbine blocked	Clean the turbine
The meter does not count, but the flow rate is correct	Incorrect installation of gears after cleaning	Repeat the reassembly process
	Possible electronic card problems	Contact manufacturer
Motor is not turning	Lack of electric power	Check the electrical connection
The motor turns slowly when starting	Motor problems	Contact manufacturer

DEF Transfer System Selection Chart

FEATURES	#9070	#9070A	#9070-20	#9070A-20
120V AC Pump	✓	✓	✓	✓
Tote Hang Design	✓	✓	✓	✓
Digital Flow Meter	✓	✓	✓	✓
Manual Transfer Nozzle	✓		✓	
Auto Shut-off Nozzle		✓		✓
20 ft. Output Hose			✓	✓

Related Products

DEF Recovery Wand Kit
#9071



5 ft. flexible wand with quick disconnect fittings designed to reach the bottom of DEF tanks. (Optional accessory for #9070)

Fuel Transfer & Filtration

Fleet Tank Sweeper*
(120V AC)
#9049M



A compact, portable fuel transfer and filtration system includes input and output hoses along with special attachments for accessing saddle tanks and 55 gallon drums.

Fuel Tank Sweeper*
#9040PN



The industry's leading mobile transfer and filtration platform is geared towards oil service professionals, but versatile enough for a variety of uses.

Industrial Fuel Cleaner
and Transfer System
#DTP20C



A DC-powered mobile fuel transfer system provides efficient and accurate diesel fuel transfer and filtration in a highly mobile package.

Learn more about fuel transfer systems and parts we have.