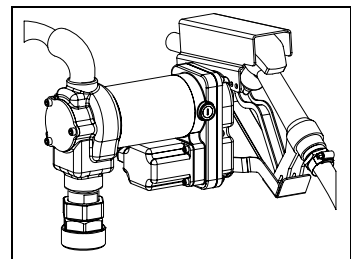




DC Fuel Transfer Pump w/ Meter Owner's Manual



Read carefully and understand **RULES FOR SAFE OPERATION** and instructions before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item #426267

Thank you very much for choosing a NORTHERN TOOL + EQUIPMENT CO., INC., Product!
For future reference, please complete the owner's record below:

Model: _____ Purchase Date: _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This machine is designed for certain applications only. Northern Tool + Equipment strongly recommends this machine is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted Northern Tool + Equipment to determine if it can or should be performed on the product.

For technical questions and replacement parts, please call 1-800-222-5381.

SAFETY INSTRUCTIONS

To ensure safe and efficient operation, it is essential to read and follow each of these warnings and precautions.

1. DO NOT smoke near pump or use pump near an open flame. Fire could result.
2. Disconnect power to pump before servicing pump.
3. Turn off the switch before connecting power.
4. Take motors needing service to an authorized repair shop or return to factory to maintain.
5. A filter should be used on pump outlet to ensure that no foreign material is transferred to fuel tank.
6. Tank or barrel should be anchored to prevent tipping in both the full and empty conditions.



WARNING

1. Electrical wiring should be done a licensed electrician in compliance with local codes. Rigid conduit should be used and proper ground must be provided to avoid the possibility of electrical shock. Failure to comply with this warning could result in serious injury and/or loss of property.
2. This product should not be used for fluid transfer into aircraft. This product is not suited for use with fluids for human consumption or fluids containing water.
3. Extreme operating conditions with working cycles longer than 30 minutes can cause the motor temperature to rise, thus damaging the motor itself. Each 30-minute working cycle should always be followed by a 30-minute power-off cooling phase.

GENERAL DESCRIPTION

These products are positive displacement, rotary vane pumps. Depending on installation and viscosity, these pumps can deliver up to 20 GPM or 76 LPM. Their rugged design makes for a long life of dependability.

TECHNICAL SPECIFICATIONS

- Inlet: 2" male NPT on tank adapter, 1" female NPT on pump
- Outlet: 3/4" female NPT for 15 GPM
- Built-in bypass valve
- Furnished with:
 - 13-ft. delivery rubber hose
 - 1 pc. steel suction pipe
 - 1 pc. aluminum manual nozzle.
 - 2" quick-change coupling
- Electrical Specification

MODEL	ELECTRICAL POWER		CURRENT	Flow Rate (GPM)
	Current	Voltage	Maximum (Amp)	
426267	DC	12	25	15

- Meter Specifications

Model	426267
Meter Mechanism	Nutating disk
Flow Rate Range	5-32 GPM
Operating Pressure	Max. 50 PSI
Storage Humidity	Max. 95%
Working Temperature Range	14-140°F
Accuracy	±1%
Inlet/Outlet Connection	1" NPT
Weight	4.8 LBS.

OPERATING CONDITIONS

Temperature Range: -4°F /+140°F

Relative Humidity: 90% max

FLUID COMPATIBILITY

This pump is compatible with the following fluids:

- Diesel
- Kerosene
- Mineral Spirits



WARNING: Do not use other fluids without first consulting the manufacturer.

INSTALLATION INSTRUCTIONS

1. Tightly screw the suction pipe into the inlet coupling of the pumping unit. Extend the suction pipe into the truck tank or barrel to within 3" of the tank bottom.
2. Screw the inlet coupling of the pump into the 2" tank or barrel opening. The Inlet coupling must be completely and securely threaded into an undamaged tank or barrel bung.
3. During installation and maintenance, make sure that the electrical supply lines are not live.
4. Always turn off the switch before supplying electrical power.
5. Check the rotation direction of the pump. If it is inverted, check the polarity of the connection cable.
 - a) RED cable: positive pole (+)
 - b) BLACK cable: negative pole (-)
6. This pump is designed to require a minimum amount of suction lift. Maximum equivalent feet of lift is 8' for diesel fuel.
7. The tank or barrel must be properly vented. A water separator should be used for pumping diesel fuel.
8. Power to the unit should be supplied from a dedicated 30 amp circuit breaker. No other equipment should be powered from this breaker. If two pumps are supplied from one breaker, that breaker must be capable of handling the load of both motors.

METER CALIBRATION

The meter is pre-calibrated in factory to be used with kerosene.

As specific operating conditions (such as real flow rate, nature and temperature of the measured fluid) may affect the meter accuracy, a recalibration should be carried out after the installation has been completed. A new calibration is necessary each time the meter is disassembled for maintenance or when it is used to measure fluids other than kerosene.

CALIBRATION PROCEDURE

1. Unscrew the plug (see diagram, #54).
2. Purge the system (pump, pipelines & meter) of air by dispensing until the flow stream is full and steady.
3. Stop the flow by shutting off the nozzle, but let the pump continue to run.
4. Reset the batch register with the reset knob (#30).
5. Dispense at the most accurate flow rate, by using a calibrated container with a capacity of 5 gallons or more. Do not reduce the flow in order to reach the graduated zone of the calibrated container. Instead, use a "top-off" method, starting and stopping the full flow repeatedly until the required level is reached.
6. Compare the indication of the calibrated container (real value) with the meter's indicated value.
 - a) If the indicated value is higher than the real value, loosen the screw (#52).
 - b) If the indicated value is lower than the real value, tighten the screw (#52).
7. Repeat the steps 4 to 6 until satisfactory accuracy is achieved.

8. Tighten the plug (#26) again. The O-ring (#23) provided with the calibration screw will hold the new calibration position to avoid accidental loosening of the adjustment screw but does not seal the unit, so it is always necessary to properly fix the plug (#54) with the sealing gasket (#25).

PROBLEMS AND SOLUTIONS

Problem	Possible Cause	Corrective Action
The motor is not turning	Lack of electric power	Check the electrical connections and the safety systems
	Rotor jams	Check for possible damage or obstruction of the rotating components.
	Motor problems	Contact with the service department
Low or no flow rate	Low level in the suction tank	Refill the tank
	Foot valve blocked	Clean and/or replace the valve
	Filter clogged	Clean the filter
	Excessive suction pressure	Lower the pump with respect to the Level
	High loss of head in the circuit (working with the bypass open)	Use shorter tubing or of greater Diameter
	By-pass valve blocked	Dismantle the valve, clean and/or replace it
	Air entering the pump or the suction tubing	Check the seals of the connections
	A narrowing in the suction Tubing	Use tubing suitable for working under suction pressure
	Low rotation speed	Check the voltage at the pump. Adjust the voltage and/or use cables of greater cross-section
	The suction tubing is resting on the bottom of the tank	Raise the tubing
Increased pump noise	Cavitations occurring	Reduce suction pressure
	Irregular functioning of the by-pass	Dispense until the air is purged from the circuit
	Air present in the diesel fuel	Verify the suction connections
Leakage from the pump body	Seal damaged	Check and replace the mechanical seal

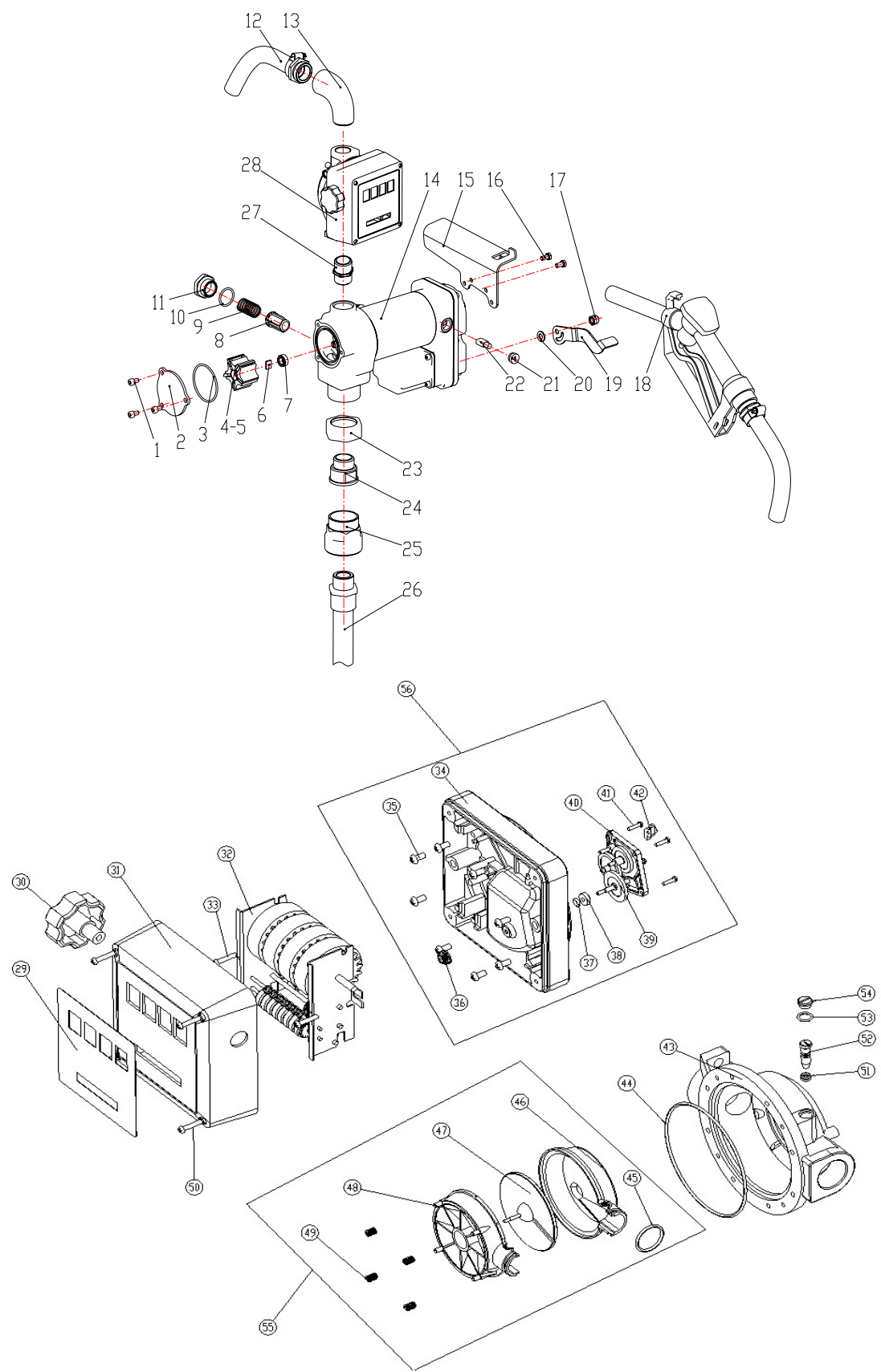
DAILY USE

- 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 dispensing.
- Before starting the pump make sure that the delivery valve is closed (dispensing nozzle or line valve).
- Turn the ON/OFF switch to ON. The bypass valve allows functioning with the delivery closed for only brief periods.
- Open the delivery valve, solidly grasping the end of the tubing.
- Close the delivery valve to stop dispensing.
- When dispensing is finished, turn off the pump.

MAINTENANCE

Under normal working conditions the noise emission from all models does not exceed the value of 80 db at a distance of 1 meter from the electric pump.

DIGRAM AND PARTS LIST



No.	Description	Quantity	No.	Description	Quantity
1	Screw M6×10	3	29	Name plate	1
2	Front Cover	1	30	Reset knob	1
3	O-Ring	1	31	External cover	1
4	Blade	5	32	Meter	1
5	Rotor	1	33	Screws 4x20	2
6	Key	1	34	Body cover	1
7	Seal	1	35	Screw 5x16	8
8	Bypass Valve	1	36	Bevel pinion	1
9	Spring	1	37	O-Ring 3.62x2.62	1
10	O-Ring	1	38	Cover sealing	1
11	Nut of Relief Valve	1	39	Gear kit	1
12	Delivery Pipe	1	40	Gear plate	1
13	Elbow	1	41	Screws 3x10	4
14	Pump	1	42	Driving lever	1
15	Nozzle Cover	1	43	Meter body	1
16	Screw M6×10	2	44	O-Ring 110.72x3.53	1
17	Nut M8	1	45	O-Ring 23.47x2.62	1
18	3/4" Manual Nozzle	1	46	Measuring chamber	1
19	On/Off switch	1	47	Measuring tray	1
20	Washer	1	48	Measuring chamber	1
21	Nut	2	49	Cylinder spring	4
22	Brush	2	50	Screws 4x20	4
23	Nut	1	51	O-Ring 4.47x1.78	2
24	Adapter	1	52	Bypass adjusting screw	1
25	Tank Adapter	1	53	O-Ring 9.25x1.78	1
26	Suction Pipe	1	54	By-pass plug	1
27	Fitting	1	55	Measuring chamber Assy.	1
28	Mechanical Meter	1	56	Body cover Assy.	1

For replacement parts and technical questions, please call **1-800-222-5381**.

WARRANTY

One-Year Limited Warranty



WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.



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