

Fuel Meter

312011 rev.A

For metering fuels.

80 psi (0.55 MPa, 5.5 bar) Maximum Working Pressure

Model 260551, measures in gallons



Important Safety Instructions

Read all warnings and instructions in this manual. Save these instructions.

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Warnings

The following general warnings are for the setup, use, grounding, maintenance, and repair of this equipment. Additional, more specific warnings may be found throughout the body of this manual where applicable. *Symbols appearing in the body of the manual refer to these general warnings. When these symbols appear throughout the manual, refer back to these pages for a description of the specific hazard.*

 WARNING	
	FIRE AND EXPLOSION HAZARD When flammable fluids are present in the work area, such as gasoline and windshield wiper fluid, be aware that flammable fumes can ignite or explode. To help prevent fire and explosion: • Use equipment only in well ventilated area. • Eliminate all ignition sources, such as cigarettes and portable electric lamps. • Keep work area free of debris, including rags and spilled or open containers of solvent and gasoline. • Do not plug or unplug power cords or turn lights on or off when flammable fumes are present. • Ground all equipment in the work area. • Use only grounded hoses. • If there is static sparking or you feel a shock, stop operation immediately. Do not use equipment until you identify and correct the problem. • Keep a fire extinguisher in the work area.
	PERSONAL PROTECTIVE EQUIPMENT You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. This equipment includes but is not limited to: • Protective eyewear • Clothing and respirator as recommended by the fluid and solvent manufacturer • Gloves • Hearing protection
	PRESSURIZED EQUIPMENT HAZARD Fluid from the gun/dispense valve, leaks, or ruptured components can splash in the eyes or on skin and cause serious injury. • Tighten all fluid connections before operating the equipment. • Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately.

**WARNING****EQUIPMENT MISUSE HAZARD**

Misuse can cause death or serious injury.

- Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See **Technical Data** in all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. See **Technical Data** in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS forms from distributor or retailer.
- Check equipment daily. Repair or replace worn or damaged parts immediately with authorized replacement parts only.
- Do not alter or modify equipment.
- Use equipment only for its intended purpose. Call your distributor for information.
- Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not kink or over bend hoses or use hoses to pull equipment.
- Keep children and animals away from work area.
- Comply with all applicable safety regulations.

Installation



Meter

See **Parts**, page 7.

1. When unpacking meter, check for shipping damage. Report any shipping damage to delivering carrier immediately.
2. To install meter on pump, apply PTFE tape or pipe sealer to 3/4 in. npt nipple (20) and screw into meter inlet port. Apply PTFE tape or pipe sealant to opposite end of nipple and screw nipple into pump outlet port by turning the meter assembly clockwise. Do not overtighten.
3. The meter is shipped with the counter assembly positioned so the meter outlet port is in the straight down position, with the hose out the bottom of the meter. To locate the hose on the sides or top, position the meter as desired (see step 2 above).

To rotate the counter assembly (16), see steps 2-3 under **Meter Assembly and Disassembly**, page 5. Rotate the counter assembly so that the number wheels are horizontal. To reassemble meter, install parts in reverse order, making sure all seals are in place.

4. Apply PTFE tape or sealant to all threaded joints, then install hose in meter outlet port.

Meter Calibration

The meter is factory calibrated for use with diesel fuel. To recalibrate meter for different fluids, or to recalibrate meter after service work has been performed, use the following procedure. See **Parts**, page 7.

1. Operate the pump to fill the meter, hose, and system with fluid. Make sure all air is out of system.
2. Reset counter to 000 by turning the reset knob (9) counterclockwise.
3. Fill a measured container to the 5 gallon mark (19.0 liters).
4. Note meter reading. If reading is less than 5.0 gallons (19.0 liters), turn adjustment screw (18) clockwise. If meter reading is more than 5.0 gallons (19.0 liters), turn screw (18) counterclockwise. Repeat above procedure until counter reading agrees with measured amount of fluid.

Operation

The meter registers the fluid in gallons. The top (larger) number wheel can be reset to zero by turning the reset knob (9) counterclockwise. The bottom (smaller) number wheels are a totalizing counter and cannot be reset. The resettable counter registers up to 99.9 gallons. The totalizer registers up to 9999.9 gallons.

Repair

Meter Assembly and Disassembly

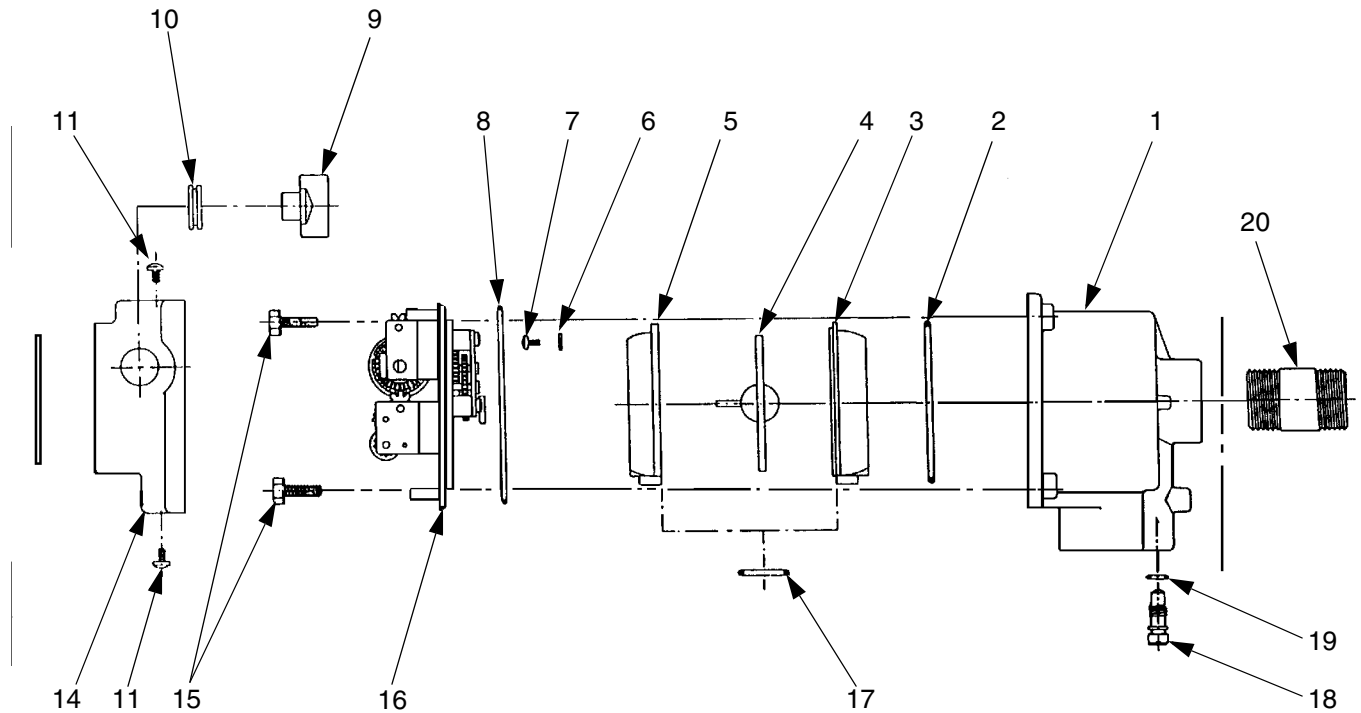
To replace any of the major assemblies, disassemble meter as follows. See **Parts**, page 7.

1. Remove the reset knob (9) by pulling it straight out.
2. Remove two screws (11) and take off counter cover (14).
3. Remove four hex head bolts (15) to remove counter assembly (16).
4. To remove disk assembly (3, 4, 5), remove two screws (7) and washers (6). Disk parts must be replaced as an assembly; order kit number 260429.
5. Reassemble in reverse order of disassembly. Make sure all seals are in place.

Troubleshooting

Problem	Cause	Solution
Meter runs in reverse.	Meter installed backward.	Install meter with port marked "inlet" to pump outlet.
Fluid leakage in counter.	Seal on counter input shaft leaking.	Replace counter assembly.
Dust and dirt in counter cover.	Cover seal (8) or knob seal (10) missing or improperly installed.	Install missing seal, or correct installation.
Meter counter does not operate, fuel delivery normal.	Broken parts in counter assembly.	Replace counter assembly.
	Broken drive pin on disk (4).	Replace disk assembly.
	Foreign material in counter assembly.	Clean or replace counter assembly.
	Misaligned disk assembly.	Check disk assembly and clean; make sure alignment is correct. Make sure outlet is engaged with hole in outlet port, that o-ring seal (17) is installed, and that hold down screw (7) and washer (6) are tight.
	Defective or worn disk assembly.	Replace disk assembly.
Fluid Leaks from meter.	Pipe fitting or hose installed without sealant.	Apply pipe sealant and reinstall.
	O-ring seal (2) worn or improperly installed.	Replace seal.
	Fastener (15) loose.	Tighten fastener.
Low or no outlet flow.	System problem other than meter.	Check other system components for problem.
	Foreign material in disk assembly.	Clean or replace damaged disk assembly.

Parts



Ref.

No. Description

- 1 HOUSING, meter
- 2 SEAL, o-ring
- 3 CHAMBER, lower
- 4 DISK
- 5 CHAMBER, upper
- 6 WASHER
- 7 SCREW; 6-32 x 1/4 in.
- 8 SEAL, o-ring
- 9 KNOB, reset

Qty.

- 1
- 1
- 1
- 1
- 1
- 2
- 2
- 1
- 1

Ref.

No. Description

- 10 SEAL, grommet
- 11 SCREW; 8-32 x 1/4 in.
- 14 HOUSING, counter, cover
- 15 HEX BOLT; 1/4-20 x 3/4 in.
- 16a COUNTER, assembly, gallons
- 16b COUNTER, assembly, liters
- 17 SEAL, o-ring
- 18 SCREW, adjustment
- 19 SEAL, o-ring
- 20 NIPPLE, pipe; 3/4 in. npt x 2.0 in.

Qty.

- 1
- 2
- 1
- 4
- 1
- 1
- 1
- 1
- 1
- 1

Kits

Kit

Number Description

- 260427 KIT, Knob
- 260428 KIT, Air Adjustment
- 260429 KIT, Metering (gallons)

Includes Items

- 9, 10
- 18, 19
- 2, 3, 4, 5, 7, 8, 15, 16a, 17

Technical Data

Working Pressure	50 psi (0.34 MPa, 3.4 bar)
Inlet Size	3/4 in. npt
Outlet Size	3/4 in. npt
Weight	2.5 lb (1.1 kg)
Wetted Parts	diecast aluminum, carbon steel with zinc plating, 12L14 steel with zinc plating, 416 stainless steel, Valox [®] , nylon, fluoroelastomer

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