

RP-10 Rotary Hand Pump for Fuel and Petroleum



`A Great Plains Ventures Subsidiary"
www.gpi.net
1-800-835-0113

Owner's Manual

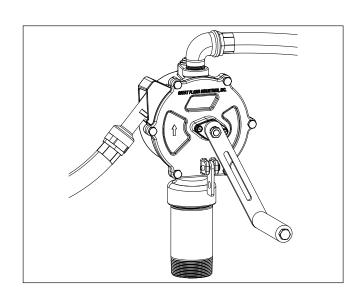


STOP

DO NOT RETURN THIS PRODUCT TO THE STORE!

Please contact GPI before returning any product. If you are missing parts or experience problems with your installation, our Customer Support Department will be happy to assist you.

GPI Customer Support 800-835-0113 or 316-686-7361





GENERAL INFORMATION

The RP-10 Rotary Hand pump is designed for use with gasoline (up to 15% alcohol blends such as E15), diesel fuel (up to 20% biodiesel blends such as B20), kerosene and up to medium weight oils. These self-priming pumps deliver up to 10 gallons (38 litres) per 100 revolutions and are designed for use on a tank with a 2-inch bung. They are equipped with an anti-siphon vent to prevent possible tank siphoning. Do not use the RP-10 pump with chemicals.

Safety Instructions

Observe standard safety precautions when handling fuel.

- Keep away from open flame or spark.
- Do not refuel vehicles or equipment with engines running or while equipment engine is hot.
- · Do not smoke while refueling.

INSTALLATION

Before installation, clean the tank interior of dirt and foreign material. Wrap all threads that are exposed to liquids with 3 to 4 turns of thread tape or a thread-sealing compound approved for use with petroleum fuels. Remove protective covers and plugs.

- 1. Hand-tighten the riser on to the tank bung.
- 2. Assemble the crank and handle. Then snugly tighten the crank on-to the shaft. Reference the Illustrated Parts Drawing for details.
- 3. Screw the suction pipe into the pump inlet.
- 4. Extend the suction pipe to its full length. Insert it through the riser and into the tank. Adjust the suction pipe to the length needed to rest on the tank bottom. If tank debris is a potential problem, raise the end of the suction pipe 2 to 3 inches.
- 5. Screw the pump onto the riser. Tighten until snug.

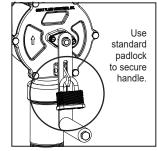
To install the hose and nozzle, thread the elbow fitting into the pump outlet and tighten until snug. Hand-tighten the hose into the elbow until snug. Tighten the nozzle onto the hose fitting. Insert the nozzle into the hanger.

OPERATIONS

To dispense fuel, remove the nozzle from its hanger and insert into a tank. Pump fuel by rotating the crank in the direction of the ar-

row on the housing. After dispensing fuel, drain the hose and replace the nozzle in the hanger.

During daily use, this pump is essentially maintenance free. However, the pump should be inspected periodically for signs of leakage. If leaks are present or other problems occur, refer to the Troubleshooting Section.



06/21/2022 Rev. A 921462-07

SPECIFICATIONS

The Rotary Hand Pump is compatible with gasoline (up to 15% alcohol blends such as E15), diesel fuel (up to 20% biodiesel blends such as B20), kerosene and up to medium weight oils.

Construction: Lightweight, die-cast aluminum housing.

Stainless steel shaft. Nitrile seals. Cast iron rotor and carbon vanes. Built-in

anti-siphon vent.

Pumping Capacity: Up to 10 gallons (38 litres) per 100

revolutions

Inlet: 1-inch NPT female
Outlet: 3/4-inch NPT female

Shipping Weight: 17 lbs. (7.7 kg)

Hose and Nozzle: 3/4-inch x 8 foot (2.4m) Buna-N

statically grounded hose. Aluminum Alloy unleaded nozzle

Suction Pipe: Plastic, adjustable from 22 to 40 inches

(55 to 102cm)

PARTS AND SERVICE

For warranty consideration, parts or other service information, please contact your local distributor or the GPI Customer Service Department, during normal business hours at:

1-800-835-0113

To obtain prompt, efficient service, be prepared with:

- · the model number of your pump
- the serial number or manufacturing date code of your pump, and
- · parts descriptions and numbers

Reference the Illustrated Parts List for specifics on parts. For warranty service, be prepared with your original sales slip or other evidence of purchase date.

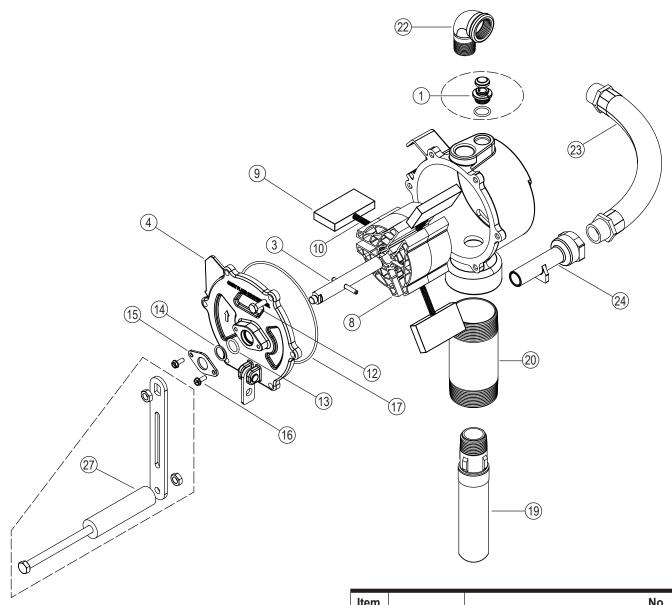
CAUTION

Do not return the pump without specific authority from the GPI Customer Service Department. Due to strict regulations governing transportation, handling, and disposal of hazardous or flammable liquids, GPI will not accept pumps for rework unless they are completely free of liquid residue.

TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION			
A. FLUID LEAKS AROUND	Retainer loose	Tighten retainer screws.			
SHAFT	2. O-ring worn	Check shaft O-ring for excessive wear. Replace Shaft Seal O-ring, if necessary.			
B. FLUID LEAKS AT ANTI- SIPHON VENT	Anti-siphon vent or O-ring damaged	Remove vent cap. Loosen vent by turning counterclockwise. Remove vent and O-ring. Clean. To replace, seat O-ring on vent and screw vent into place until bottomed out. Replace vent cap.			
C. LOW FLOWRATE	Internal parts worn or debris in vane cavity	Remove coverplate and inspect for wear on vanes, coverplate, and all inside housing surfaces. Replace any scored parts.			
	2. Vanes cracked	Remove coverplate and inspect for chips or cracks on vanes. If necessary, replace vanes.			
D. PUMP FAILS TO PUMP	Suction pipe leak	Remove pump from riser. Inspect the suction pipe for wear or damage. Replace, as necessary, and install pump on tank.			
	Internal parts worn or debris in vane cavity	Remove coverplate and inspect for wear on vanes, coverplate, and all inside housing surfaces. Replace any scored parts.			
	3. Vanes cracked	Remove coverplate and inspect for chips or cracks on vanes. If necessary, install Overhaul Kit or replace vanes.			
E. HANDLE TURNS HARD OR PUMP SEIZED	Debris in vane cavity	Remove pump from tank. Remove coverplate and inspect for debris in cavity. Clean cavity, vanes, and rotor. Flush contamination from tank. Assemble and install pump.			
	2. Internal parts worn	Remove pump from tank. Remove coverplate and inspect for damaged necessary, install Overhaul Kit or replace vanes.			
F. VANES STICKING	Debris in vane cavity	Remove coverplate. Use emery cloth to remove debris or corrosion in vane slots. Apply lubricant (WD-40®) if needed.			

ILLUSTRATED PARTS LIST



Kits and Accessories -

A	123501-1	Shaft Seal Kit includes O-ring, back-up ring, and seal
₿	123503-1	Overhaul Kit includes vanes, springs, and Shaft Seal Kit.
	123505-3 115527-2	Hardware Kit Suction Pipe Extension, 15 inches or 38.1cm.

No.	Part No.	Description Req'd.
1	123504-1	Anti-Siphon Vent Kit1
3	123507-1	Shaft Assembly Kit1
4	123008-1	Coverplate1
8	123509-1	Rotor with Springs Kit1
9	123011-1	Vane or (Kit B)3
10	123012-1	Spring or (Kit B)
12	904004-16	Screw, 1/4-20 x 3/4"6
13	901003-63	O-Ring or (Kit A or B)1
14	901002-58	Back-up Ring or (Kit Aor B)1
15	123013-1	Retainer1
16	904004-60	Retainer Screws2
17	901003-64	O-Ring or (Kit A)1
19	110100-1	Suction Pipe Assembly1
20	906006-06	Pipe Nipple, 2" NPT x 5"1
22	904004-73	Elbow Fitting1
23	114045-1	Hose Assembly1
24	114047-1	Metal Nozzle1
	114036-1	Plastic Nozzle1
27	123506-1	Crank Assembly Kit1



Limited Warranty Policy

Great Plains Industries, Inc. (GPI) hereby provides a limited warranty against defects in material and workmanship on all products manufactured by GPI. The warranty period shall begin on the date of purchase confirmed with the original purchase receipt or, if not available, the date of manufacture. Manufacturer's sole obligation under the following warranties will be limited to either, at Manufacturer's option, replacing or repairing defective goods. If the product is no longer available, replacement may be made with a similar product of equal or greater value. Buyer's exclusive remedy for breach of any such warranties will be enforcement of such obligations of Manufacturer. The warranty shall extend to the purchaser of this product and to any person to whom such product is transferred during the warranty period.

Warranty shall not apply if: -

The product has been subjected to neglect, misuse, abuse or damage or has been installed or operated other than in accordance with the manufacturer's operating instructions or the product has been altered or modified outside the warrantor's duly appointed representative.

Product components considered wear items, i.e. vanes, etc., are NOT included within the scope of this warranty.

Charges for shipping and insuring packages to GPI are the customer's responsibility. GPI will ship the warranted product back to the customer via ground shipping free of charge for shipments within the United States. International shipping charges and customs fees to and from GPI are the customer's responsibility.

GREAT PLAINS INDUSTRIES, INC., EXCLUDES LIABILITY UNDER THIS WARRANTY FOR DIRECT, INDIRECT, INCIDENTAL AND CONSEQUENTIAL DAMAGES INCURRED IN THE USE OR LOSS OF USE OF THE PRODUCT WARRANTED HEREUNDER.

THE COMPANY HEREWITH EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OTHER THAN FOR WHICH IT WAS DESIGNED.

THIS WARRANTY GIVES YOU SPECIFIC RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM U.S. STATE TO U.S. STATE.

In compliance with MAGNUSON MOSS CONSUMER WARRANTY ACT - PART 702 (governs the resale availability of the warranty terms)

To obtain warranty service contact the **GPI Product Support Department:**

316-686-7361 or 800-835-0113

GPI will guide you through a product troubleshooting process to determine the appropriate corrective actions.

GPI is a registered trademark of Great Plains Industries, Inc. © 2009 by GREAT PLAINS INDUSTRIES, INC., Wichita, KS

The following respective warranty periods apply:



FIVE-YEAR WARRANTY applies to the following product families:

GPRO® Fluid Transfer Pumps: PRO20-115, PRO20-230, V25-012. V25-024. PRO35-115 **GPRO® Remote Dispensers:** QM240-RD, QM150-RD

GPRO® Fuel Meters: QM40 GPI® Fuel Meters: M30



TWO-YEAR WARRANTY applies to the following product families:

GPI® Fluid Transfer Pumps: G8P, EZ8, M-150S, M-180S, M-240S, G20-012*, M-1115S, P-200, PA-200, P-120H, P-200H, PA-120H, PA-200H, HP-100, HP-90, DP-20, RP-10

GPI® Fluid Meters: 01A, 01N, 03A, 03N, FM-300H, LM51DN, LM-300



ONE-YEAR WARRANTY applies to the following products:

GPI® Oil Transfer Pumps: L 5016, L 5116, L 5132



90-DAY WARRANTY applies to the following products:

GPI® Fluid Transfer Hand Pumps: RP-5, BP-12, CP-5, LP-50

90-DAY WARRANTY applies to Spare Parts, Kits and Accessories including Nozzles*, Hoses, Swivels, Vent Caps, Filter Adapters, etc.

90-DAY WARRANTY applies to Factory Repairs from repair date or the balance of the original warranty whichever is longer.

*Extended warranty coverage available on select products. Requires registration of product with manufacturer. Visit gpi.net/product-registration/





COMPANY HEADOUARTERS: 5252 East 36th Street North Wichita, KS, USA 67220-3205

LEARN MORE: GPIpumps.com

Revision Date: June 29, 2021 CORP-1083 Rev B_Limited Warranty Policy

Printed in U.S.A.

06/21/2022 Rev. A 921462-07

Model 245 Emergency Vents

Application

This lightweight, spring-loaded emergency vent (pressure relief only) is used on aboveground storage tanks, as a code requirement, to help prevent the tank from becoming over-pressurized and possibly rupturing if ever exposed to fire. This vent must be used in conjunction with a "normal vent." Correct application of this vent requires proper vent size and selection for the tank system in order to meet the specific venting capacity.

Materials of Construction

- Body... Aluminum
- Cover... Aluminum
- Seat... FKM
- Bolt... Zinc plated steel

Code Compliance

When properly sized for the tank, this vent will conform to the requirements of the International Fire Code; National Fire Code of Canada; National Fire Protection Agency—NFPA 30, 30A, 31, 37, 110; Petroleum Equipment Institute—PEI RP200, PEI RP800; Underwriters Laboratories Inc.—UL-142, UL-2085, UL-2244; Underwriters Laboratories of Canada—CAN/ULC S601, CAN/ULC S602, CAN/ULC S652

Approvals

Underwriters Laboratories Inc. UL-2583



NOTE

Emergency vent should be set higher than the normal vent so the normal vent operates first.

vacuum and updraft vents for aboveground storage tanks should be sized according to NFPA 30 (2008) 21.4.3

WARNING: DO NOT FILL OR UNLOAD FUEL FROM A STORAGE TANK UNLESS IT IS CERTAIN THAT THE TANK VENTS WILL OPERATE PROPERLY. Morrison tank vents are designed only for use on shop fabricated atmospheric tanks which have been built and tested in accordance with UL 142, NFPA 30 & 30A, and API 650 and in accordance with all applicable local, state and federal laws. In normal operation, dust and debris can accumulate in vent openings and block air passages. Certain atmospheric conditions such as a sudden drop in temperature, below freezing temperatures, and freezing rain can cause moisture to enter the vent and freeze which can restrict internal movement of vent mechanisms and block air passages. All storage tank vent air passages must be completely free of restriction and all vent mechanisms must have free movement in order to insure proper operation. Any restriction of airflow can cause excessive pressure or vacuum to build up in the storage tank, which can result in structural damage to the tank, fuel spillage, property damage, fire, injury, and death. Monthly inspection, and immediate inspection during freezing conditions, by someone familiar with the proper operation of storage tank vents, is required to insure venting devices are functioning properly before filling or unloading a tank. Normal vents such as pressure

SPECIFICATION SHEET



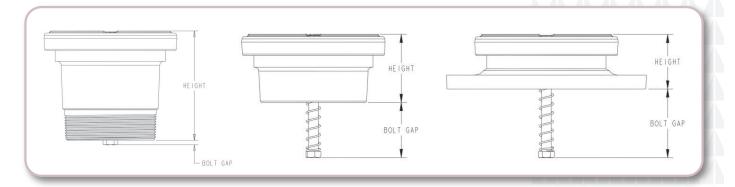




245 part numbers and diagrams on next page...







Item Number	A	В	С	D	Overall Diameter	Height	Bolt Gap	Weight	Screen
245M0200 AV	2"	31,917	М	8	3.00	1.50	1.60	0.50	
245MS-0200 AV	2"	24,069	М	8	3.00	1.50	1.60	0.50	S
2450300 AV	3"	67,162		8	5.00	2.80	0.90	2.80	
245S0300 AV	3"	56,241		8	5.00	2.80	0.90	2.80	S
245M0300 AV	3"	67,162	М	8	5.00	3.60	< 1/4"	2.50	
245MS-0300 AV	3"	56,241	М	8	5.00	3.60	< 1/4"	2.50	S
2450400 AV	4"	129,369		8	6.50	3.10	2.50	3.30	
245S0400 AV	4"	115,086		8	6.50	3.10	2.50	3.30	S
245M0400 AV	4"	129,369	М	8	6.00	5.40	< 1/4"	4.50	
245MS-0400 AV	4"	115,086	М	8	6.50	5.40	< 1/4"	4.50	S
245F0400 AV †	4"	129,369	F	8	9.10	2.50	3.00	6.00	
245FS-0400 AV	4"	115,086	F	8	9.10	2.50	3.00	6.00	S
2450600 AV	6"	331,750		8	8.50	3.40	2.60	5.50	
245S0600 AV	6"	277,011		8	8.50	3.40	2.60	5.50	S
245M0600 AV	6"	331,750	М	8	8.50	5.40	0.20	6.20	
245MS-0600 AV	6"	277,011	М	8	8.50	5.40	0.20	6.20	S
245F0600 AV †	6"	331,750	F	8	11.00	2.90	3.20	9.10	
245FS-0600 AV	6"	277,011	F	8	11.00	2.90	3.20	9.10	S
2450800 AV	8"	527,441		8	10.50	4.50	1.50	9.20	
245M0800 AV	8"	527,441	М	8	10.50	5.70	0.40	10.10	
245F0800 AV †	8"	527,441	F	8	13.50	3.30	2.90	14.50	
245F1000 AV †	10"	972,110	F	8	16.00	2.80	6.00	20.00	

245F--1000 AV | 10" |972,11

^{*}Refer to Price List for BSP options.

† Indicates model is available in a kit.

Size	Item Number	Flanged Kits	Bolt Size	
4"	245F0408 AK	Includes 245F0400 AV vent, flange adaptor, gasket, and (8) nuts/bolts	0.625" dia; 2" length	
6"	245F0608 AK	Includes 245F0600 AV vent, flange adaptor, gasket, and (8) nuts/bolts	0.75" dia; 2.75" length	
8"	245F0808 AK	Includes 245F0800 AV vent, flange adaptor, gasket, and (8) nuts/bolts	0.75" dia; 2.75" length	
		Includes 245F1000 AV vent, flange adaptor, gasket, and (12) nuts/bolts	0.875" dia; 3" length	

SPECIFICATION OPTIONS:

A—Size (inches)

B—Venting capacity/SCFH

C—Mounting connection: Male N.P.T. (M), Female N.P.T. (BLANK), Flanged (F)

D—Pressure settings: 8oz/in² (pressure required to open vent) **Diameter**—Dimension across vent (inches)

Height—Dimension from base to top when closed (inches)

Bolt Gap—Dimension from base to bottom of bolt

Weight—Shipping weight (lbs)

Screen (3 mesh stainless steel)—Yes (S), No (blank)





570 E. 7th Street | Dubuque, IA 52001 t. 563.583.5701 | 800.553.4840 | f. 563.583.5028 www.morbros.com



Model 179 Series Hinged Style Fill Cap

SPECIFICATION SHEET

Designed for tank filling applications where a tight fill connection is not required. Threaded body installs onto riser pipe or directly into tank bung.

Features

- Easy to open and close hinged operation
- Positive stop to prevent cover from contacting tank
- · Lockable with a padlock
- · Integrated venting when closed
- Your company name can be cast into the cover upon request
- 179 and 179CI have female threads
- 179M and 179MCI have male threads

Construction Details

179 & 179M

- Aluminum body
- Aluminum cap
- · Zinc plated steel hinge pin

179CI & 179MCI

- Cast iron (powder coated black) body
- · Cast iron (powder coated black) cap
- Zinc plated steel hinge pin

Item Number	Material	Size	Weight (lbs)	
1790100 AC	Aluminum	2"	0.75	
1790200 AC	Aluminum	21/2"	1.0	
1790300 AC	Aluminum	3"	1.0	
1790400 AC	Aluminum	4"	2.0	
179M0100 AC	Aluminum	2"	0.75	
179M0200 AC	Aluminum	2½"	1.25	
179CI-0100 AC	Cast iron	2"	2.50	
179MCI0100 AC	Cast iron	2"	2.75	



Model 178 Threaded Style Fill Cap

SPECIFICATION SHEET

Application

The 178 series tight seal threaded style fill cap is used for the fill port of small storage tanks. It is lockable with a padlock. The 178 iron caps are powder coated for a more durable finish.

The 178DT is made for a drop tube with 2" straight pipe threads and Buna-N gasket. The 178GSP is labeled "Gauge Stick Port."

Item Number	Α	В	С	Weight
1780100 AC	2"	IR	IR	2.0
1780200 AC	2"	IR	BR	2.0
1780300 AC	2"	BR	IR	2.0
1780400 AC	2"	BR	BR	2.25
1781200 AC	3"	BR	BR	4.25
1781600 AC	4"	BR	BR	7.0
178AL-0900 AC	3"	AL	AL	1.54
178AL-1300 AC	4"	AL	AL	2.44
470DT 0000 4 0	0"			
178DT-0300 AC	2"	BR	IR	2.0
178DT-0400 AC	2"	BR	BR	2.25
	1			
178GSP0100 AC	2"	BR	AL	1.0

SPECIFICATION OPTIONS:

A-Size (inches)

B—Body: Brass (BR), Iron (IR), AL (Aluminum) C—Cap: Brass (BR), Iron (IR), AL (Aluminum) Weight—Shipping weight (lbs)



Fig. 178 (2")



Fig. 178 (2")



Fig. 178AL (4")