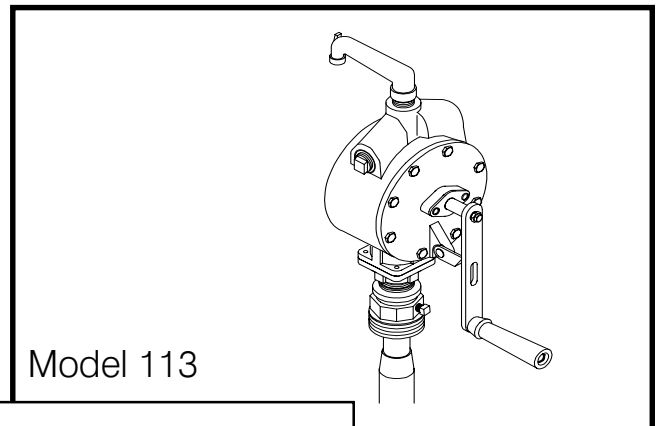
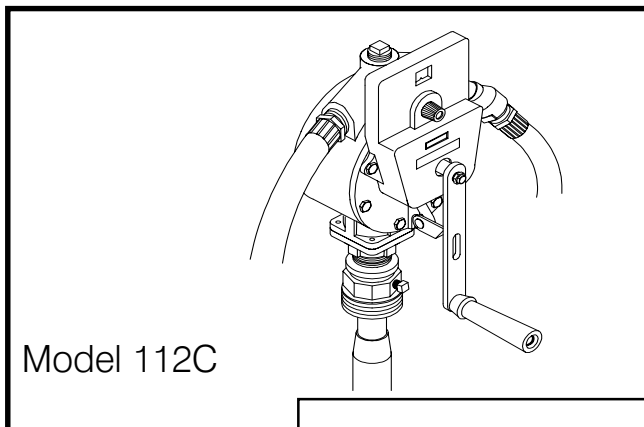


FILL-RITE

Parts and Technical Service Guide

**SERIES 100 PUMP
&
SERIES 111 COUNTER**

For models 110, 111, 112, 113, 114, 116, 120, 122, 123, 124 & 126



OUTSTANDING FEATURES

- 10 GPM / 38 LPM in 100 revolutions
- Counter totalizer to 10,000 units
- Built-in strainer and check valve
- Equipped with vacuum breaker
- Easily accessible operating mechanism for cleaning



TUTHILL CORPORATION | **Fill-Rite Division**

8625 Aviation Drive
Fort Wayne, Indiana USA 46809
Tel 219 747-7524 Fax 219 747-3159

Dear Fill-Rite Customer,

Congratulations on your purchase of Fill-Rite's Series 100 Rotary Hand Pump or Model 111 Counter. We at Fill-Rite have built our worldwide reputation by designing the finest and most reliable products available in today's market.

The fluid control experts at Fill-Rite have come up with this rugged, yet lightweight pump, designed for years of trouble-free operation. The superiority of our hand pump and counter combination has been proven by its many years of exemplary service in the field. We have used the most advanced technology possible to give you a pump with the excellence you deserve, along with the quality you've come to expect from Fill-Rite products.

George P. Jenkins
President

GENERAL DESCRIPTION

The Fill-Rite Series 100 hand operated rotary transfer pump design provides for maximum protection against the elements. The pump, with its smooth and easy turning handle, can deliver approximately 10 gallons of fluid per minute (100 revolutions). Its durable carbon composition vanes are spring loaded to compensate for wear and to prevent freezing or sticking.

The Model 111 Counter has also been safeguarded against the weather, and can be easily field mounted on any Series 100 pump. Counters come equipped with totalizers for counting up to 10,000 gallons of fluid.

OPTIONS

- UL listed models
- Cast aluminum drip pans
- Discharge spouts
- Flow meters in U.S. gallons or liters
- 20 gallon (76 liter) counter
- Hoses
- Nozzles



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

1. **Improper use or installation of this product can cause serious bodily injury or death.**
2. Do NOT smoke near pump or use pump near an open flame when pumping flammable fluids. Fire could result.
3. A filter should be used on pump outlet to ensure that no foreign material is transferred to fuel tank.

TECHNICAL INFORMATION

Design Features

- 1" NPT inlet, 3/4" NPT outlet
- Lightweight aluminum die cast body
- Built-in stainless steel strainer and check valve
- Operating mechanism easily accessible for cleaning
- Equipped with vacuum breaker (anti-siphoning device)
- Security - crank equipped with bracket for padlocking

Fluid Compatibility

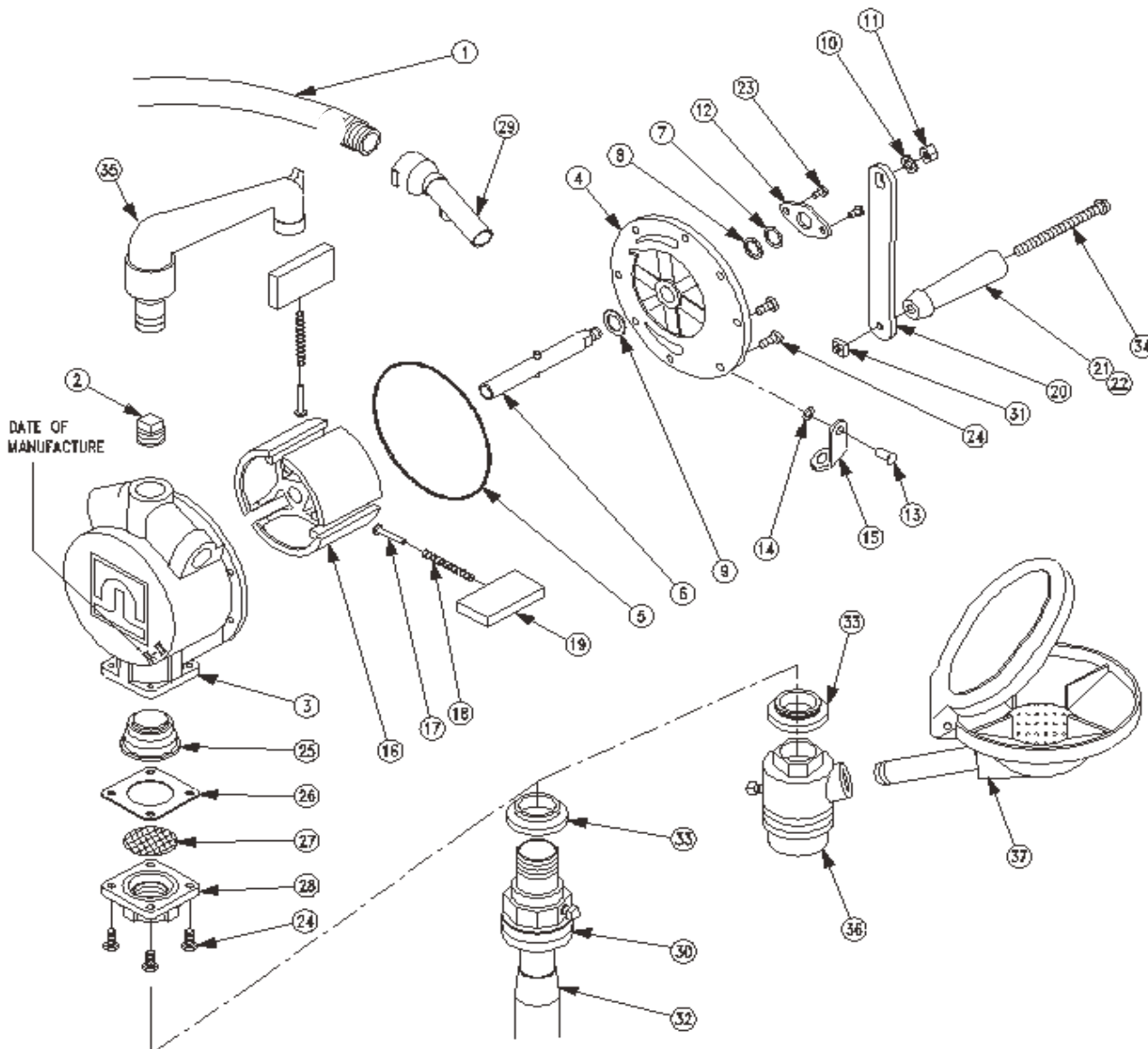
If in doubt about compatibility of a specific fluid, contact supplier of fluid to check for any adverse reactions to the following wetted materials.

All Series 100 Pumps

Cast Iron	Steel	Carbon	Cork
300S Stn. Stl.	Aluminum	Zinc Pltd. Steel	
Acetal	Fluorocarbon	Buna N	
Also			
Nylon - 110, 120, 112 & 122 Only			
Ryton - 116 & 126 Only			
400 Series Stainless Steel - 116 & 126 Only			

100 SERIES PUMP PARTS LIST

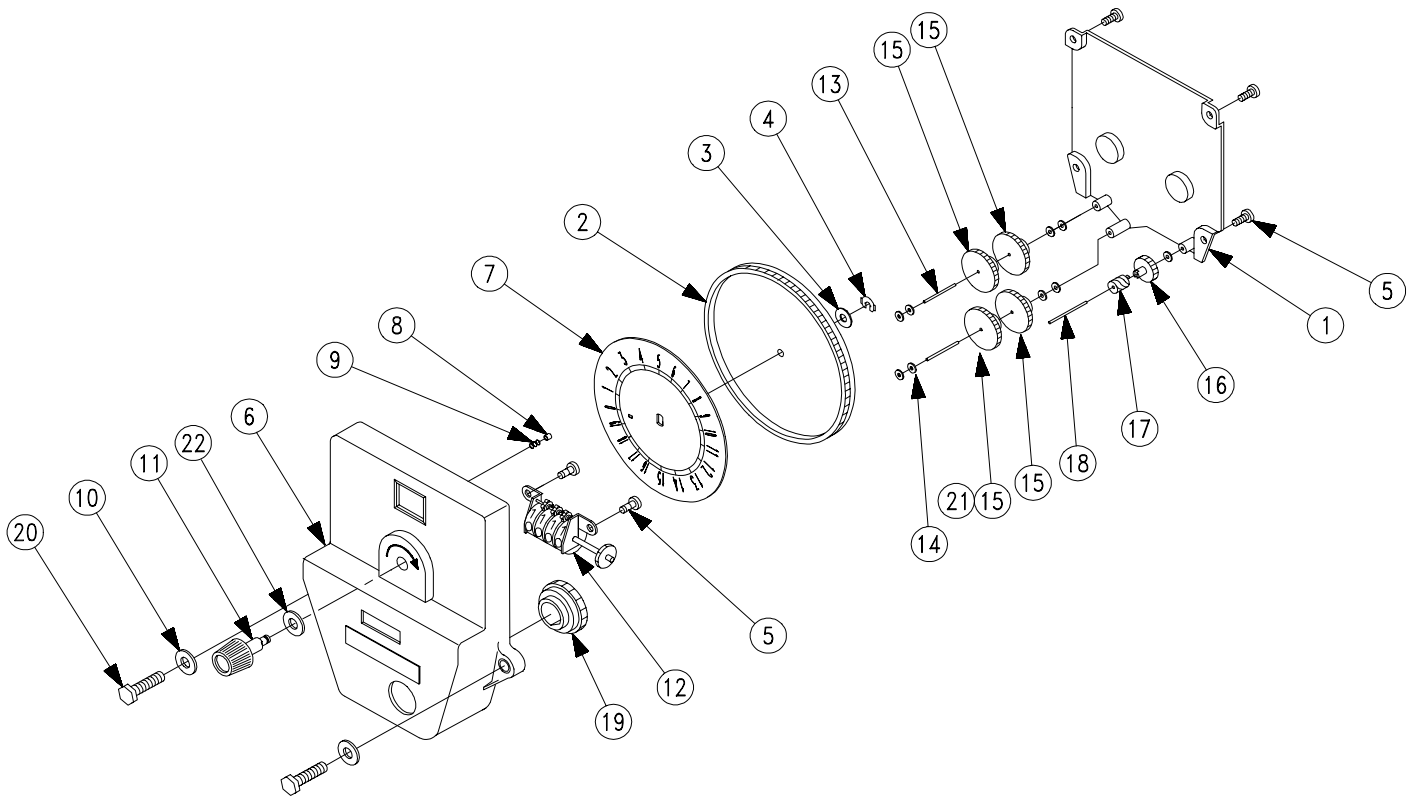
.TM. NO.	PART NO.	PROC. NO.	DESCRIPTION	QTY.	.TM. NO.	PART NO.	PROC. NO.	DESCRIPTION	QTY.
1	151-35	F1750	8' Hose	1	21	100-52	F1085	Wood Grip	1
	151-113	F1752	8' Hose, UL Listed	Opt.	22	100-52A	F1086	Wood Grip Assy. (Incl. items 30&33)	
2	151-109	F1869	Vacuum Breaker	1	23	100-17	F0830	#10-24 x 3/8 PHMS	2
3	100-2	F0640	Pump Body	1	24	100-50	F1080	1/4-20 x 5/8 HHM	12
4	100-3	F0660	Cover	1	25	100-9A	F0741	Check Valve Assembly	1
5	F0801	F0801	O-ring (-159)	1	26	100-13	F0790	Inlet Gasket	1
6	100-5A	F0701	Shaft	1	27	100-11	F0760	Screen	1
7	100-16	F0820	Seal Washer	1	28	100-12	F0770	Inlet Flange	1
8	110F2062	F2062	O-ring (-114)	1	29	151-114	F1790	Nozzle	1
9	P1-530	F4660	Washer	1	30	100-18A	F0841	Barrel Bung	1
10	704-20	F3720	3/8 Lockwasher	1	31	SU-105	F5760	Square Nut	1
11	704-19	F3710	3/8-16 Hex Nut	1	32	100-64S	F1189	Suction Pipe, Telescoping: 22"-40" (56cm-102cm)	1
12	150-24	F1360	Bearing Plate	1	33	100-57	F1140	Water Deflector	1
13	150-31	F1410	5/16 x 5/8 Rivet	1	34	100-53	F1090	5/16-18 x 4 RHMS	1
14	150-36	F1440	1/4 Spring Washer	1	35	151-12A	F1619	Discharge Spout Assembly	Opt.
15	100-62	F1180	Locking Link	1	36	100-63A	F1185	Barrel Bung for Drip Pan Assembly	Opt.
16	100-4	F0680	Rotor	1	37	P2-626A	F5622	Drip Pan Assembly	Opt.
17	100-60	F1170	Spring Pin	3		F1214	F1214	Series 100 Repair Kit (Includes items 2,5,7,8,17,18,19, 25,26 & F0800 Cover Gasket)	Opt.
18	100-7	F0720	Vane Spring	3					
19	100-6	F0710	Vane	3					
20	P1-515-1	F4540	Crank	1					



WHEN ORDERING REPAIR PARTS, BE SURE TO GIVE REPLACEMENT PART NUMBER, DATE OF MANUFACTURE, AND PUMP SERIES NUMBER. THIS WILL ENSURE THAT THE CORRECT REPLACEMENT PART IS SUPPLIED.

MODEL 111 COUNTER PARTS LIST

ITM. NO.	PART NO.	PROCESS NO.	DESCRIPTION	QTY.
1	100-23	F0890	Counter Back	1
2	100-24	F0900	Dial Wheel	1
3	100-44	F1040	#10L Washer	1
4	100-45	F1050	3/16 Prong-Lock Retainer	1
5	100-46	F1060	#8 x 3/8 PHMS (Type B)	6
6	100-22	F0880	Counter Cover	1
7	100-25	F0910	Dial - 20 Gallon	1
	100-26	F0915	Dial - Liter	1 Opt.
8	100-41	F1010	Reset Stop Pin	1
9	100-42	F1020	Reset Stop Spring	1
10	704-33	F3811	1/4 Washer	2
11	100-27-A	F0921	Reset Knob	1
12	100-34	F0960	Totalizer Assembly - U.S. Gallon	1
	100-34L	F0961	Totalizer Assembly - Liter	1 Opt.
13	100-33	F0950	Cluster Gear Shaft	2
14	800-18	F3830	#2S Washer	9
15	100-30	F0940	Cluster Gear (12T/33T) - U.S. Gallon	4
16	100-35	F0970	Drive Gear - Totalizer	1
17	100-37	F0990	Worm Gear (5T) - U.S. Gallon	1
	100-39	F1001	Worm Gear (2T) - Liter	1 Opt.
18	100-36	F0980	Totalizer Shaft	1
19	100-28	F0930	Drive Gear (41T)	1
	100-29	F0935	Drive Gear (40T) - Liter	1 Opt.
20	100-47	F1070	1/4-20 x 1 HHMS	2
21	100-32	F0945	Cluster Gear (12T/34T) - Liter	1 Opt.
22	1200-34	F6565	Washer - Brass	1



INSTALLATION

Use gasoline and oil resistant pipe compound on all threaded joints.

Pumps with Nozzle

1. Assemble grip (F1085) to crank (F4540) using screw (F1090) and square nut (F5760).
2. Slip barrel bung (F1185) and water deflector (F1140) over telescoping suction pipe (F1189).
3. Screw suction pipe into pump inlet flange.
4. Slide suction pipe into tank or barrel.
5. Tighten barrel bung onto tank or barrel.
6. Adjust pump height by tightening set screw in barrel.

Pumps with Discharge Spout or Drip Pan

1. Assemble grip (F1085) to crank (F4540) using screw (F1090) and square nut (F5760).
2. Screw discharge spout assembly (F1619) into top of pump.
3. Install barrel bung (F1185) and drip pan assembly (F5622) on upper section of telescoping suction pipe (F1189).
4. Push water deflector (F1140) onto suction pipe until it sits tightly against top of barrel bung.
5. Screw barrel bung (with drip pan and suction pipe) into tank or barrel.
6. Screw pump onto suction pipe.
7. Align discharge spout outlet over drip pan assembly.

INSTALLATION (Cont.)

Counter Installation

1. Remove crank (F4540) from shaft (F0701).
2. Remove two screws (F1080) directly above horizontal pump centerline.
3. Push drive gear (F1070) onto shaft with flat in gear hole located on longer flat of shaft.
4. Position counter on pump and attach with two screws (F1125) and two washers (F3811).
5. Reattach crank.

OPERATING INSTRUCTIONS

1. Reset counter to "0" (if applicable).
2. Insert nozzle into tank.
3. Crank pump in clockwise rotation.
4. When finished pumping, allow hose to drain and return nozzle to nozzle boot.

MAINTENANCE

Flush pump regularly when pumping corrosive fluids.

REPAIR

Pumps needing repair should be taken to an authorized repair shop or returned to factory for service. Pumps must be thoroughly flushed before being taken in for repair.

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTION
Pump will not prime	<ul style="list-style-type: none"> • Suction line problem • Vanes sticking • Gasket leakage • Excessive rotor or vane wear 	<ul style="list-style-type: none"> • Check for leaks in suction line. • Check vanes and slots for nicks, burrs or wear. • Tighten covers and joints. • Check rotor and vanes for excessive wear or damage.
Low pump capacity	<ul style="list-style-type: none"> • Excessive dirt in screen • Suction line problem • Excessive rotor or vane wear 	<ul style="list-style-type: none"> • Remove and clean screen. • Check for leaks in suction line. • Check rotor and vanes for excessive wear or damage.
Pump fluid leakage	<ul style="list-style-type: none"> • Dirty seal • Bad seal • Bad vacuum breaker • Gasket leakage 	<ul style="list-style-type: none"> • Clean O-ring seal and seat area. • Replace seal. • Replace vacuum breaker. • Tighten covers and joints.

Fill-Rite: A Worldwide Reputation for Reliability.

For over 40 years, people all over the world who have needed tough, dependable pumps have insisted on Fill-Rite products. For them, Fill-Rite has been "the reliable red pump" that keeps on working even under the toughest of conditions. We're proud of the reputation our hand pumps, DC and AC pumps and meters have earned. Today they're only a part of the rapidly expanding Fill-Rite line.

Applying the Science of Fluid Transfer.

An active research and development program is the centerpiece of our ongoing commitment to respond to new fluid transfer opportunities. This has led to new products and to new technologies and new facilities to produce these products.

To bring this advanced technology to market, we have invested in precision engineering and testing equipment. This improves our ability to produce fluid handling equipment that meets market demands for quality, performance and price.

A Hard Working Support Network.

Just as important as these capabilities are the people behind them - our design and production personnel. They give you the ability to specify systems that meet the most challenging of applications. With them, you can be assured of prompt, intelligent answers to your fluid transfer questions.

To service customers in the field, we've put together a select, well-monitored team of distributors. Throughout the world, they are ready to help you with technical advice, ordering and delivery.

Fill-Rite will always stand for reliable red pumps and fluid handling equipment. We'll continue to develop new products and production techniques to keep pace with ever changing technologies. Each of our products will always be made with the same care and quality that made our pumps famous.

Fill-Rite Division of Tuthill Corporation (Manufacturer) warrants to each buyer of its products (the Buyer) for a period of 12 months from date of installation **but in no event more than 18 months from date of manufacture** that goods of its manufacture (Goods) will be free from defects of material and workmanship. Manufacturer's sole obligation under the foregoing warranties will be limited to either, at Manufacturer's option, replacing or repairing defective Goods (subject to limitations hereinafter provided) or refunding the purchase price for such Goods theretofore paid by the Buyer, and Buyer's exclusive remedy for breach of any such warranties will be enforcement of such obligations of Manufacturer. If Manufacturer so requests the return of the Goods, the Goods will be redelivered to Manufacturer in accordance with Manufacturer's instructions F.O.B. Factory. If Manufacturer elects to repair defective Goods and written notice of defects is given to Manufacturer during the warranty period specified above **and within 90 days from date of installation**, then Manufacturer will provide at its cost the services of an authorized representative for on-site repair of defective Goods. If such notice shall be given **after such 90 days** all service costs incurred in the repair or replacement of defective Goods shall be the responsibility of the Buyer.

The remedies contained herein shall constitute the sole recourse of the Buyer against Manufacturer for breach of warranty. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR CONSEQUENTIAL DAMAGES NOR SHALL MANUFACTURER'S LIABILITY ON ANY CLAIM FOR DAMAGES ARISING OUT OF THE MANUFACTURE, SALE, DELIVERY OR USE OF THE GOODS EXCEED THE PURCHASE PRICE OF THE GOODS. The foregoing warranties will not extend to Goods subjected to misuse, neglect, accident or improper installation or maintenance or which have been altered or repaired by anyone other than Manufacturer or its authorized representative.

PRODUCT WARRANTY
THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES OF MERCHANTABILITY, FITNESS FOR PURPOSE AND OF ANY OTHER TYPE, WHETHER EXPRESS OR IMPLIED.

No person may vary the foregoing warranties and remedies except in writing signed by a duly authorized officer of Manufacturer. Warranties or remedies that differ from the foregoing shall not otherwise be binding on Manufacturer. The Buyer's acceptance of delivery of the Goods constitutes acceptance of the foregoing warranties and remedies, and all conditions and limitations thereof.

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