

SERIES 800A

METER PARTS AND SERVICE BULLETIN

WHEN ORDERING REPAIR PARTS BE SURE TO GIVE PART NUMBER WANTED AND SERIES NUMBER OF METER. THIS WILL INSURE OUR SUPPLYING THE PROPER PART.

PRODUCT WARRANTY

Fill-Rite Division of Tuthill Corporation ("Manufacturer") warrants to each buyer of its products (the "Buyer") for a period of 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 or refunding the purchase price for such Goods theretofore paid by the Buyer, the Buyer's exclusive remedy for breach of any of 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. 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. 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 a 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.



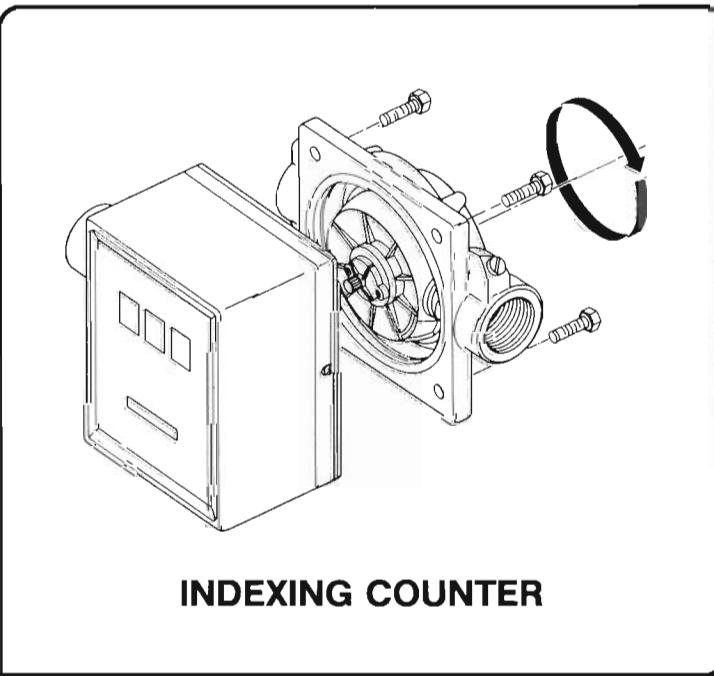
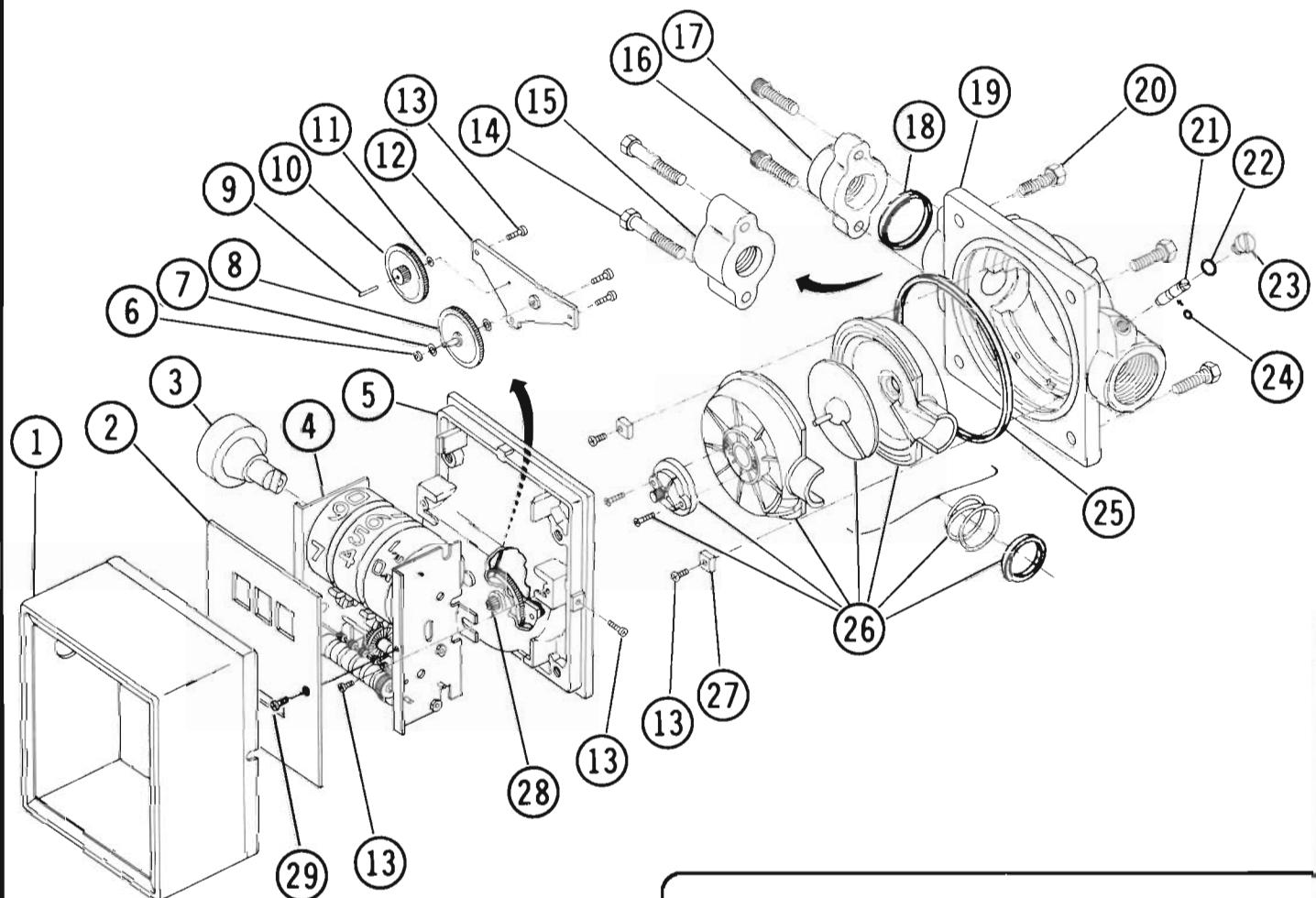
**TUTHILL
CORPORATION**

**Fill-Rite
Division**

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FILL-RITE SERIES 800A METER

MODEL 807A



INDEXING COUNTER

METER DESCRIPTION

The Fill-Rite Series 800A Meter is a nutating-disc-type flowmeter furnished with $\frac{3}{4}$ " female pipe threads, inlet and outlet. It is designed primarily for measuring gasoline, kerosene, diesel oil, and other similar liquids in connection with various types of fuel dispensing pumps. It is designed to operate between 4 and 20 GPM — Max. Press. 50 PSI. This meter is listed by Underwriters' Laboratories, Inc. It is not to be used to measure liquid for resale.

A wheel-type counter is used for registering U.S. gallons or liters. It can be furnished as an enclosed type meter as illustrated or as an open type without counter cover and face. The U.S. gallon counter has two unit wheels and a tenth wheel which can be reset to zero and a totalizer with five unit wheels and a tenth wheel. The liter counter has three unit wheels which can be reset to zero and a totalizer with six unit wheels. Zero-reset unit wheels have $1\frac{1}{16}$ " figures.

SERIES 800 METER

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D.
1	800-88	Counter Cover	1
2	800-100A	Counter Face	1
3	800-105A	Knob Assy.	1
4	800-85A 800-85AL	Counter - U.S. Gallon Counter - Liter	1 As Rqd
5	800-87A 800-87AT 800-87AN	Meter Cover Meter Cover - Teflon Coated Meter Cover - Nickel Plated	1 As Rqd As Rqd
6	800-97V	O-Ring (5-106) Viton	1
7	800-55	Washer	2
8	800-160A 800-162A	Drive Gear (70T) - U.S. Gallon Drive Gear (84T) - Liter	1 As Rqd
9	800-16	Shaft - Cluster Gear	1
10	800-159 800-161	Cluster Gear (22T/67T) - U.S. Gallon Cluster Gear (10T/67T) - Liter	1 As Rqd
11	800-18	Washer	1
12	800-171	Gear Frame	1
13	800-60	#8-32 x 5/16 PHMS	9
14	600-124	5/16-18 x 1 3/4 HHCS	2
15	800-120 800-120T 800-120N	Inlet Fitting 1" Inlet Fitting 1" - Teflon Coated Inlet Fitting 1" - Nickel Plated	1 As Rqd As Rqd
16	800-110	5/16-18 x 7/8 SHCS	2
17	800-109 800-109T 800-190N	Meter Fitting - $\frac{3}{4}$ " Meter Fitting - $\frac{3}{4}$ " Teflon Coated Meter Fitting - $\frac{3}{4}$ " Nickel Plated	1 As Rqd As Rqd
18	700-15 700-15V	O-Ring (-218) O-Ring (-218) - Viton	1 As Rqd
19	800-86 800-86 1" 800-86T 800-86T 1" 800-86N 800-86N 1"	Meter Housing - $\frac{3}{4}$ " Meter Housing Teflon Coated Meter Housing - Teflon Coated Meter Housing - $\frac{3}{4}$ " Nickel Plated Meter Housing - Nickel Plated	1 As Rqd As Rqd As Rqd As Rqd As Rqd As Rqd
20	700-16	5/16-18 x 7/8 HHCS	4
21	800-146A	Calibration Screw (Incl. Item 24)	1
22	800-125V	O-Ring (-012) - Viton	1
23	800-124	Seal Screw	1
24	800-68V	O-Ring (-008) - Viton	1
25	800-65 800-65V	O-Ring (-156) O-Ring (-156) - Viton	1 As Rqd
26	800-175 800-158A	Meter Chamber Assy. Pinion Plate Assy. (Incl. w/Item 26)	1 1
27	800-169	Clamp	2
28	800-172	Pinion Bevel	1
29	800-66	#4-40 x 1/4 PHMS	2

GENERAL INFORMATION

The meter consists of a chamber housing, measuring chamber, gear train, counter assembly and cover. The meter can be completely disassembled without disturbing the piping, or partially disassembled in various manners as required.

For access to the counter assembly, remove reset knob by pulling (knob is held in place by a spring clip). Loosen two screws (item 13) and lift cover off.

Remove two screws (item 29) to detach counter face (item 2). Counter (item 4) can be removed by removing two screws (item 13).

To expose the meter chamber assembly, gear train, and seal, remove four screws (item 20). The meter chamber assembly (item 26) can be removed by removing two clamps (item 27), retained by screws (item 13). The meter chamber consists of an upper and lower chamber half, disc, seal washer, seal spring, pinion, pinion plate, driver, washer, and two screws. If replacement of any components of the meter chamber assembly is required, it is suggested that the complete assembly be replaced as a unit due to close tolerances, gradual wear, etc. These components are carefully assembled at the factory to assure a proper fit and working order and are sold as units only.

To disassemble the gear train and seal, remove three screws (item 13) and gear frame (item 12). Remove cluster gear (item 10) and washer (item 11). Remove drive gear (item 8) and washers (item 7) by rotating and pulling drive gear. O-ring seal (item 6) can now be removed from meter cover.

To reassemble seal, lubricate the O-ring and replace in cover. Place washer on drive gear shaft and rotate and push shaft through O-ring and cover carefully to prevent damage to O-ring. Shaft must be guided into pinion bevel (item 28) if counter has not been removed.

Replace remaining parts to complete assembly by reversing disassembly procedure.

This meter should operate maintenance-free except for periodically flushing out the meter chamber if a sticking occurs due to contaminants being caught in the chamber. If leakage occurs at the seal, the O-ring should be replaced. For accurate measurement, the meter and piping must always be filled with liquid and free of air.

BY-PASS ADJUSTMENT

All Fill-Rite meters are equipped with a by-pass adjustment for calibration. By-pass is required to compensate for loss of flow through the meter chamber. Meters are calibrated at the factory for gasoline. The meter may require adjusting for use with other liquids, to compensate for wear, or if the meter has been disassembled with or without replacement parts being installed. With the calibration screw turned all the way in, the by-pass is blocked. If a meter test shows the counter recording more liquid than is actually being passed, the screw should be turned out, allowing liquid to by-pass the meter chamber, until the counter agrees with a measured amount of liquid.

INDEXING COUNTER

Meters are furnished for horizontal piping, left to right flow, unless otherwise specified. The counter can be located in any of four positions for horizontal or vertical piping and either direction of flow. To change counter position, remove four screws (item 20) and rotate counter to desired position, then replace screws.

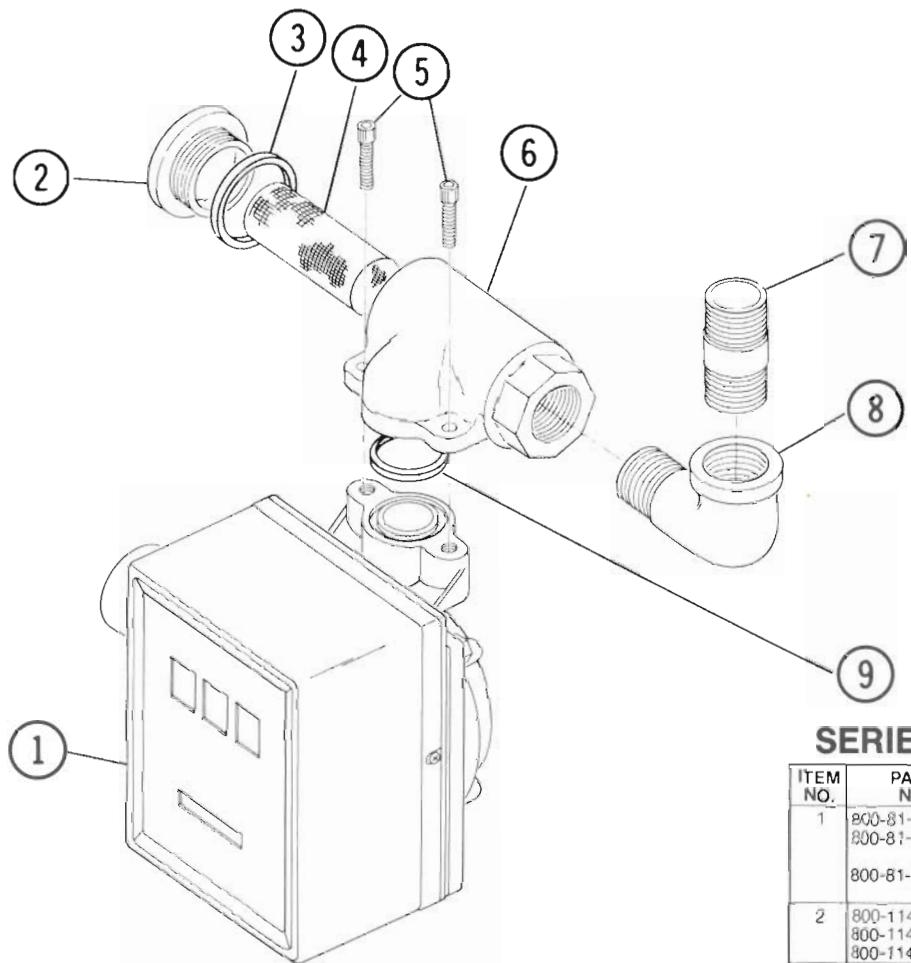
FILL-RITE GRAVITY FLOW METER

METER DESCRIPTION

The Fill-rite Model 806A Meter is a series 800A METER furnished with a special strainer assembly specifically designed for gravity flow applications, to protect the working parts of the meter and also the equipment being serviced. The meter is furnished with fittings for easy installations to any 1" NPT tank discharge connection.

For typical installation, meter should be installed as illustrated. Use approved pipe compound on all threads.

To clean strainer screen, first close tank valve and drain hose to remove liquid from meter. Turn cover (item 2) counter-clockwise to remove cover, gasket (item 3) and screen (item 4). Clean and replace parts.



MODEL 806 A-1"

SERIES 800 STRAINER KIT

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D.
1	800-81-1 800-81-1T 800-81-1N	Series 800-A Meter - 1" Series 800-A Meter - 1" - Teflon Coated Series 800-A Meter - 1" - Nickel Plated	1 As Rqd As Rqd
2	800-114 800-114T 800-114N	Cover Cover - Teflon Coated Cover - Nickel Plated	1 As Rqd As Rqd
3	800-115 800-115V	O-Ring (-131) O-Ring (-131) - Viton	1 As Rqd
4	800-113	Screen	1
5	800-110	5/16-18 x 7/8 SHCS	2
6	800-112 800-112T 800-112N	Strainer Housing Strainer Housing - Teflon Coated Strainer Housing - Nickel Plated	1 As Rqd As Rqd
7	800-118	1" x 2" Pipe Nipple	1
8	800-119	1" Street Elbow	1
9	700-15 700-15V	O-Ring (-218) O-Ring (-218) - Viton	1 As Rqd