

611016 HAND OPERATED PUMP



**READ THIS MANUAL CAREFULLY BEFORE INSTALLING,
OPERATING OR SERVICING THIS EQUIPMENT.**

It is the responsibility of the employer to place this information in the hands of the operator. Keep for future reference.

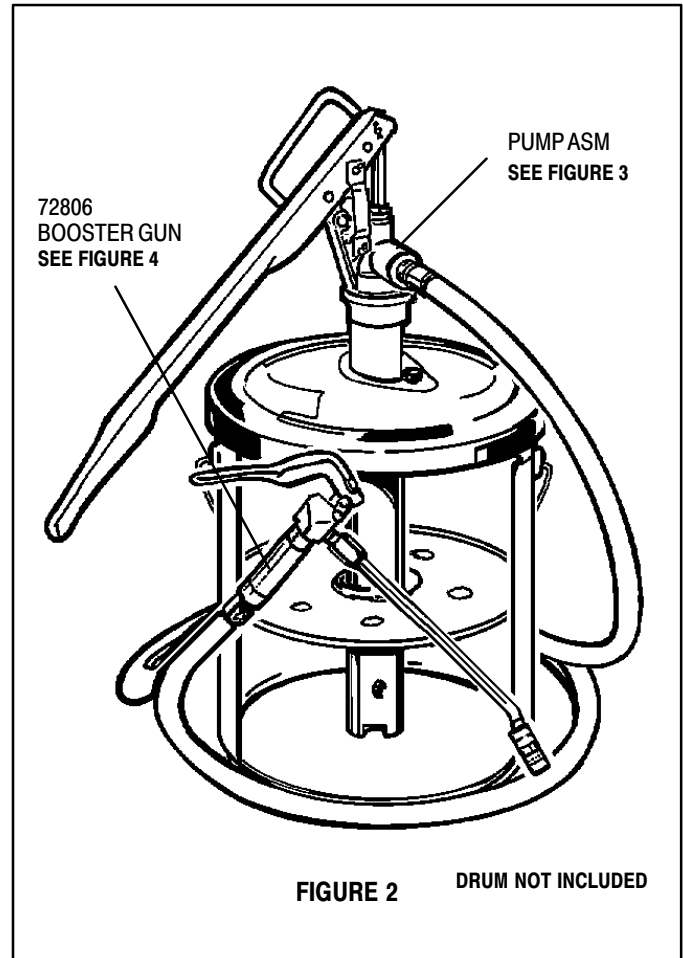
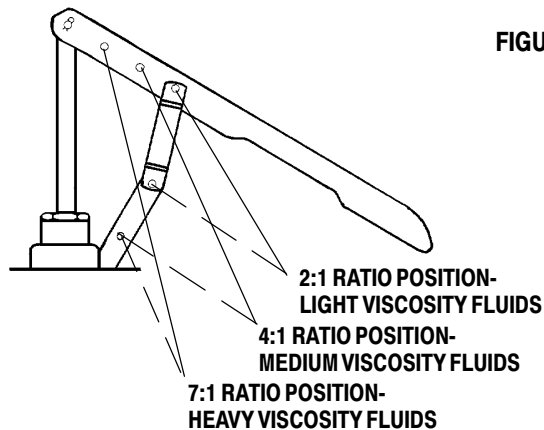
RATIO ADJUSTMENT

The Aro Multi purpose hand operated pumps are designed so the ratio can be easily adjusted to handle any viscosity fluids.

The diagram illustrates the location of the linkage to obtain any one of the three different ratios (see below).

The lower the ratio is set, the more volume of fluid will be dispensed with each stroke. However, the heavier the viscosity of the fluid, the higher the ratio should be and the volume per stroke will be reduced accordingly.

RATIO POSITION OPTIONS



PARTS LIST

Item	Description (Size in inches)	(Qty)	Part No.
1	Hand Lever	(1)	72921
2	Link and Pin Assembly	(1)	72062
2a	Pin (9/32" x 7/8")	(1)	72833
2b	Link Assembly	(1)	72027
2c	Hairpin Retainer	(3)	72835
2d	Pin (9/32" x 1 1/8")	(2)	72834
3a	Gland	(1)	72058
3b	Packing	(2)	72021
3c	Pump Body	(1)	72012
4	Hose Assembly	(1)	622511-10
4a	Body	(1)	71453
4b	Spring	(1)	72792
4c	Ball (5/16" dia.)	(1)	Y16-10
4d	"O" Ring (3/32" x 11/16" o.d.)	(1)	Y325-112
5	Cover Assembly	(1)	72006
5a	Hair Pin Retainer	(1)	72835
5b	Clevis Pin (1/4" x 1/2")	(1)	94926
5c	Grommet	(1)	72047
5d	Pump Holder	(1)	72052
5e	Gasket	(1)	94925

Item	Description (Size in inches)	(Qty)	Part No.
5f	Thumb Screw (1/4" - 20 x 3/4")	(3)	Y66-55-C
6	Follower Plate Assembly	(1)	640095-3-B
7	Spring Retainer	(1)	72909
8	Ball (11/16" dia.)	(1)	Y16-22
9	Screw (#4 - 24 x 3/8")	(1)	Y334-3-C
10	Washer (1 55/64" o.d.)	(1)	72910
11	Spring	(1)	72916
12	Inner Tube	(1)	72917
13	Tube	(1)	72019-8
14a	Piston Rod	(1)	72913
14b	Spring	(1)	F51-58
14c	Ball (5/16" dia.)	(1)	Y16-10
14d	"O" Ring (3/32" x 7/8" o.d.)	(1)	Y325-115
14e	Piston	(1)	72914
15	"O" Ring (1/8" x 1-7/8" o.d.)	(1)	Y325-223
16	Grease Piston	(1)	95130
17	"O" Ring (1/8" x 1-1/4" o.d.)	(1)	Y325-214
18	Tube Adapter	(1)	73296
19	Gasket	(2)	72056

PUMP ASSEMBLY

- Place the follower plate (6) in the grease pail so that the rounded side of the follower plate faces down.
- Install hand lever (1) onto the top of the piston rod (14) using a pin (2d). The last hole in the end of the lever should be used.
- The linkage assembly (2b) attaches to the main pump body and the top end of the linkage connects to setting number 7 on the hand lever as shown in Figure 1.
Always install the link so that the arrow on the side points upward.
- Install the grommet (5c) on the bottom side of the "V" shaped pump holder (5d). Fasten the pump holder to the cover by inserting the pin (5b) and cotter pin (5a).
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- Add the thumb screw (5f) to the outside of the cover.
- Depress the pump holder and slide the tube (13) through the cover and follower plate. Make sure that the follower plate is resting on top of the grease. Adjust cover to fit the top of the grease pail.
- Attach the hose assembly (4) to the outlet of the main pump body, and attach the booster gun to the hose.

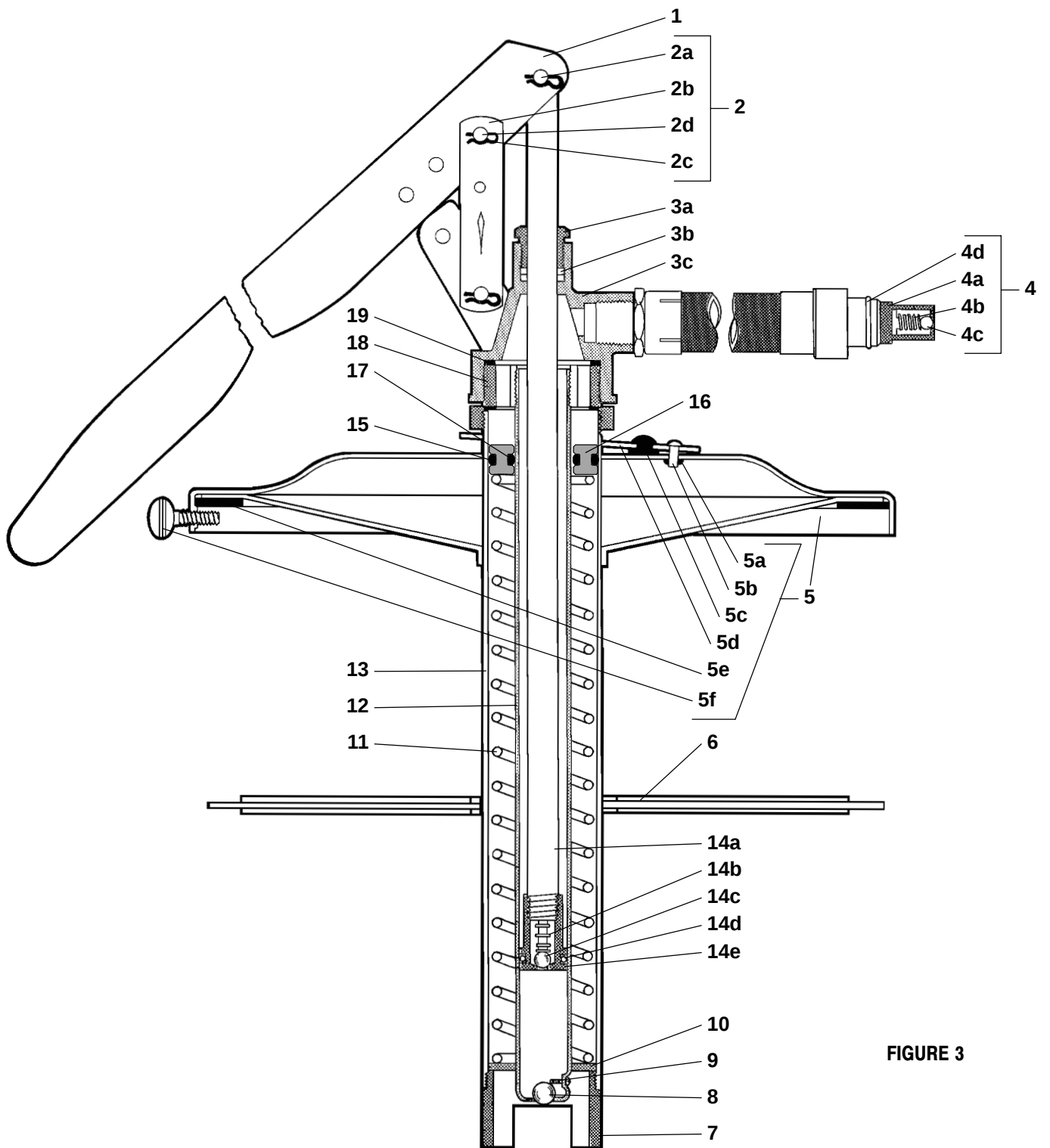


FIGURE 3

OPERATION

- With the unit installed on bucket of grease, press the Booster Gun handle and operate (1) pump hand lever six or eight strokes or until grease flows from control handle outlet.
- The unit is now ready for operation. Place the Booster Gun coupler control onto fitting to be lubricated and squeeze handle a number of times to build pressure. When handle goes slack, it is time to re-change unit.
- If leakage occurs between (14a) piston rod and (3a) nut, tighten nut just enough to stop leakage. **DO NOT OVERTIGHTEN** as this will cause excessive packing wear and increase force required to operate pump.

MAINTENANCE

- Disassembly should be done on a clean work bench with clean cloths to keep parts clean.
- If replacement parts are needed consult parts list for identification. Periodically flush pump with a solvent that is compatible with material being pumped.
- Caution should be used to maintain clean lubricants and fluids to avoid contamination through the foot valve and damage to the piston rod assembly.

TROUBLESHOOTING

- If the pump fails to operate, check the (14) rod and piston assembly and (12) inner tube for damage or obstructions.
- If pump operates, but does not dispense lubricant. Check the (8) ball to see if it is clean of foreign particles that will keep it from seating properly. Also check the ball seat of the (12) tube for damage due to dents or nicks.
- If pump operates and still does not dispense lubricant. Check the (14d) "O" ring for wear notches, or cuts. Also check the (4c) ball for foreign matter keeping it off the (14e) piston seat and the (14b) spring for breakage. Replace badly worn or broken parts.
- If grease leaks from Booster Gun outlet the ball is probably not seating properly. Remove (2) pipe, using a screwdriver remove the (8) retainer, remove the (7) spring and the (6) ball can now be removed. Thoroughly clean the ball and ball seat etc. Reassemble (See figure 4).

BOOSTER GUN PARTS LIST

ITEM	Description	(Qty)	Part No
1	Coupler Assembly	(1)	636027
2	Tube	(1)	70719
3	Pin	(1)	Y15-21
4	Rivet	(2)	70712
5	Link	(2)	70709
6	Ball (1/4" dia)	(1)	Y16-208
7	Spring	(1)	72728
8	Retainer	(1)	126
9	Plunger	(1)	71420
10	Packing	(1)	71421
11	Support	(1)	71424
12	Handle	(1)	71308
13	Needle	(1)	F162-1
14	Body Assembly	(1)	72805
15	Ball (1/4" dia)	(1)	Y16-208
16	Spring	(1)	71306
17	Pin	(1)	71312
18	Body	(1)	71311

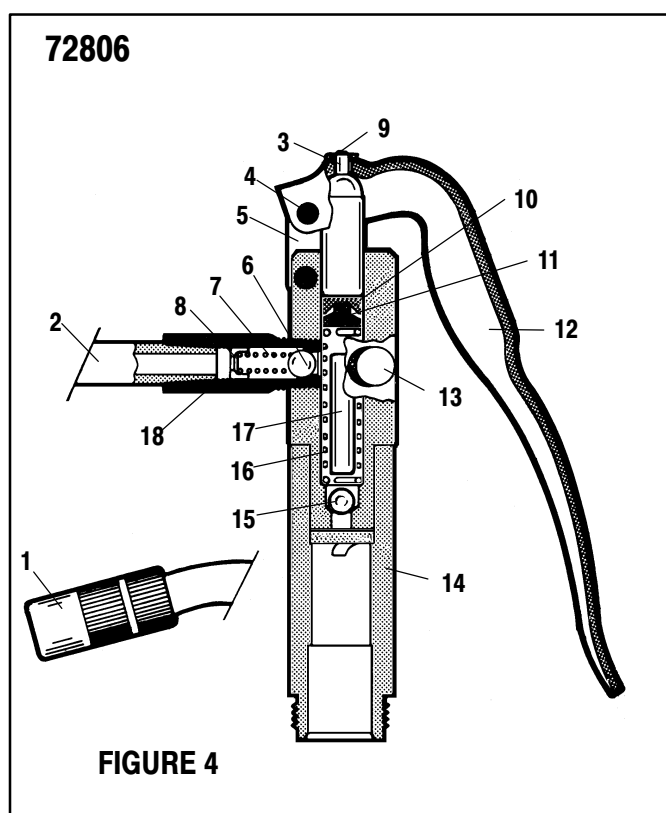


FIGURE 4