

67316 and 67400 AIR MOTOR ALSO COVERS 637377 SERVICE KIT



**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.

AIR MOTOR DISASSEMBLY

NOTE: All threads are right hand. Carefully remove the parts, inspect for damage, nicks or excessive wear and determine if any parts will need replacement.

1. Model 67400: Using a 3/4" wrench, unthread and remove (32) sensor adapter and (31) "O" ring.
2. Using a 7/8" wrench, unthread and remove (11) adapter and (12 and 13) "O" rings, releasing (14) muffler housing, then remove (15) foam liners.
3. Model 67316: Using a 3/8" wrench, unthread (28) tie rods and remove (27) plate.
Model 67400: Using a 7/16" wrench, unthread (35) nuts, remove (33) base assembly.
4. Remove four (1) bolts, (2) upper cap and (3) track gasket.
5. Remove (10) cylinder, containing (4) sleeves and (7) spools.
6. Using (1) bolt, push (7) spools and (4) sleeves out "sleeve" end of (10) cylinder, remove (5) "O" rings from sleeves.
7. Remove (16) retaining ring, (17) washer and (19) piston, remove (18) "U" cups.
8. Remove (22) dowel pin, releasing (20) piston adapter with (29) piston rod.
9. Model 67316: Remove (3) track gasket from (23) lower cap.
Model 67400: Remove (3) track gasket from (33) base asm.
10. Model 67316: Remove (29) piston rod from (26) adapter.
Model 67400: Remove (29) piston rod from (33) base asm.
11. Model 67316: Remove (26) adapter, with (24) "O" ring and (25) "U" cup.
Model 67400: Remove (24) "O" ring from (33) base asm.

AIR MOTOR ASSEMBLY

NOTE: Thoroughly clean and lubricate all seals. Replace all soft parts with new ones included in the repair kit.

1. Model 67316: Assemble (24) "O" ring and (25) "U" cup to (26) adapter and assemble to (23) lower cap.
Model 67400: Assemble (24) "O" ring to (33) base asm.
2. Model 67316: Assemble (29) piston rod up thru (26) adapter.
Model 67400: Assemble (29) piston rod up thru (33) base asm.
3. Model 67316: Assemble (3) track gasket to (23) lower cap.
Model 67400: Assemble (3) track gasket to (33) base assembly.
4. Assemble (21) "O" ring to (20) piston adapter and assemble (20) piston adapter to (29) Piston rod securing with (22) dowel pin.

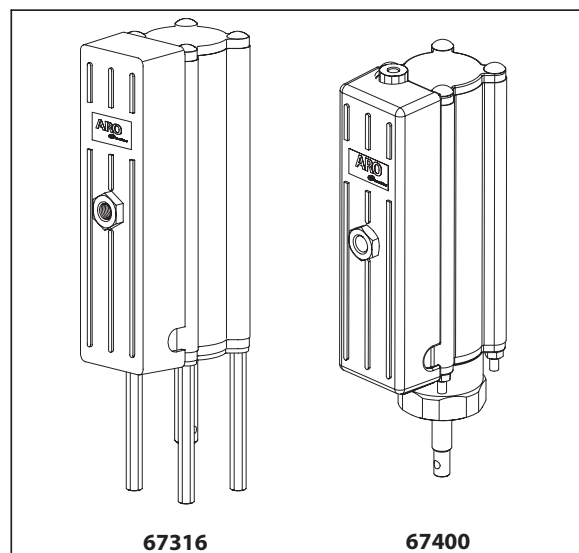


Figure. 1

5. Replace (18) "U" cups on (19) piston and assemble (19) piston onto (20) piston adapter, securing with (17) washer and (16) retaining ring.
6. Replace (5) "O" rings on (4) sleeves and assemble (4) sleeves into (10) cylinder.
NOTE: Assemble each sleeve into the end of the cylinder nearest the exhaust hole.
7. Replace (6 and 9) "O" rings and (8) "U" cups on (7) and (36) spools, press (30) magnet into (36) spool, then assemble (7) and (36) spools into (10) cylinder from the opposite end as the (4) sleeve went in.
8. Assemble (10) cylinder to (23) lower cap, being careful when sliding over the lips of (18) "U" cups.
Model 67400: Assemble (10) cylinder to (33) base asm.
NOTE: Be sure (3) track gasket is seated properly.
9. Replace (3) track gasket, fasten (2) upper cap to air motor using four (1) bolts.
10. Model 67316: Assemble (27) plate to air motor, securing with (28) tie rods.
Model 67400: Assemble (33) base assembly to air motor, securing with (35) nuts.
NOTE: Tighten tie rods to 80 - 90 in. lbs (9.0 - 10.2 Nm).
11. Replace (12 and 13) "O" rings on (11) adapter, assemble (15) foam liners to (14) muffler housing.
12. Assemble (14) muffler housing to (10) cylinder, securing with (11) adapter.
NOTE: Torque (11) adapter to 70 - 80 in. lbs (7.9 - 9.0 Nm).
13. Model 67400: Replace (31) "O" ring, and securing with (32) sensor adapter.
NOTE: Torque (32) adapter to 70 - 80 in. lbs (7.9 - 9.0 Nm).

TROUBLE SHOOTING

If the pump will not cycle or will not deliver material.

- Be certain to check for non-pump problems including kinked, restrictive or plugged inlet / outlet hose or dispensing device. Depressurize the pump system and clean out any obstructions in the inlet / outlet material lines.

- Check all seals, including track gaskets.
- Check the direction of "U" cup lips.

PARTS LIST

Item	Description (size)	Qty	Part No.	Mtl
1	Carriage Bolt (1/4" - 20 x 9")	(4)	94333	[C]
2	Upper Cap (67316)	(1)	94307	[Z]
	(67400)	(1)	96592	[Z]
✓ 3	Track Gasket	(2)	94311	[B]
4	Sleeve	(2)	94316	[Br]
✓ 5	"O" Ring (1/16" x 11/16" o.d.)	(4)	Y325-15	[B]
✓ 6	"O" Ring (1/8" x 3/4" o.d.)	(4)	Y325-206	[B]
7	Spool (67316)	(2)	94310	[D]
	(67400)	(1)	94310	[D]
✓ 8	"U" Cup (1/8" x 3/4" o.d.)	(2)	Y240-7	[B]
✓ 9	"O" Ring (0.106" x 0.587" o.d.)	(2)	15066-PM	[B]
10	Cylinder	(1)	94249	[A]
11	Adapter	(1)	94447	[C]
✓ 12	"O" Ring (1/16" x 3/4" o.d.)	(1)	Y325-16	[B]
✓ 13	"O" Ring (1/16" x 7/16" o.d.)	(1)	Y325-11	[B]
14	Muffler Housing (67316)	(1)	95086	[A]
	(67400)	(1)	96595	[A]
15	Foam Liner	(2)	94402	--
16	Retaining Ring	(1)	94406	[C]
17	Washer	(1)	94515	[C]
✓ 18	"U" Cup (3/16" x 2" o.d.)	(2)	Y240-23	[B]
19	Piston	(1)	94780	[D]
20	Piston Adapter (67316)	(1)	95802	[C]
	(67400)	(1)	94388	[C]
✓ 21	"O" Ring (3/32" x 1" o.d.)	(1)	Y325-117	[B]
22	Dowel Pin (3/16" o.d. x 7/8" long)	(1)	95803	[C]
	(1/4" o.d. x 7/8" long) (67400)	(1)	Y148-37	[C]
23	Lower Cap	(1)	94308	[Z]
✓ 24	"O" Ring (1/8" x 1-3/8" o.d.)	(1)	Y325-216	[B]
	(67316)	(1)	Y325-112	[C]
✓ 25	"U" Cup (1/8" x 7/8" o.d.)	(1)	Y240-9	[B]
26	Adapter (67316)	(1)	96062	[A]
27	Plate (67316)	(1)	96068	[C]
28	Tie Rod (67316)	(4)	96067	[C]
29	Piston Rod (67316)	(1)	96066	[C]
	(67400)	(1)	94385	[C]
30	Magnet (67400)	(1)	95275	--
31	"O" Ring (67400)	(1)	Y325-13	[B]
32	Sensor Adapter (67400)	(1)	96593	[B]
33	Base Assembly (67400)	(1)	67399	--
34	Ground Screw (#10 - 32 x 1/4")	(1)	93005	[C]
35	Nut (1/4" - 20) (67400)	(4)	Y12-4-C	[SS]
36	Spool for magnet (67400)	(1)	96594	[D]

✓ Gadus S2 U1000 Grease Packet (94833), Qty 1

✓ Items included in Service Kit (67377)

Material code	
[A]	Aluminium
[B]	Nitrile
[Br]	Brass
[C]	Carbon Steel
[D]	Acetal
[SS]	Stainless Steel
[Z]	Zinc

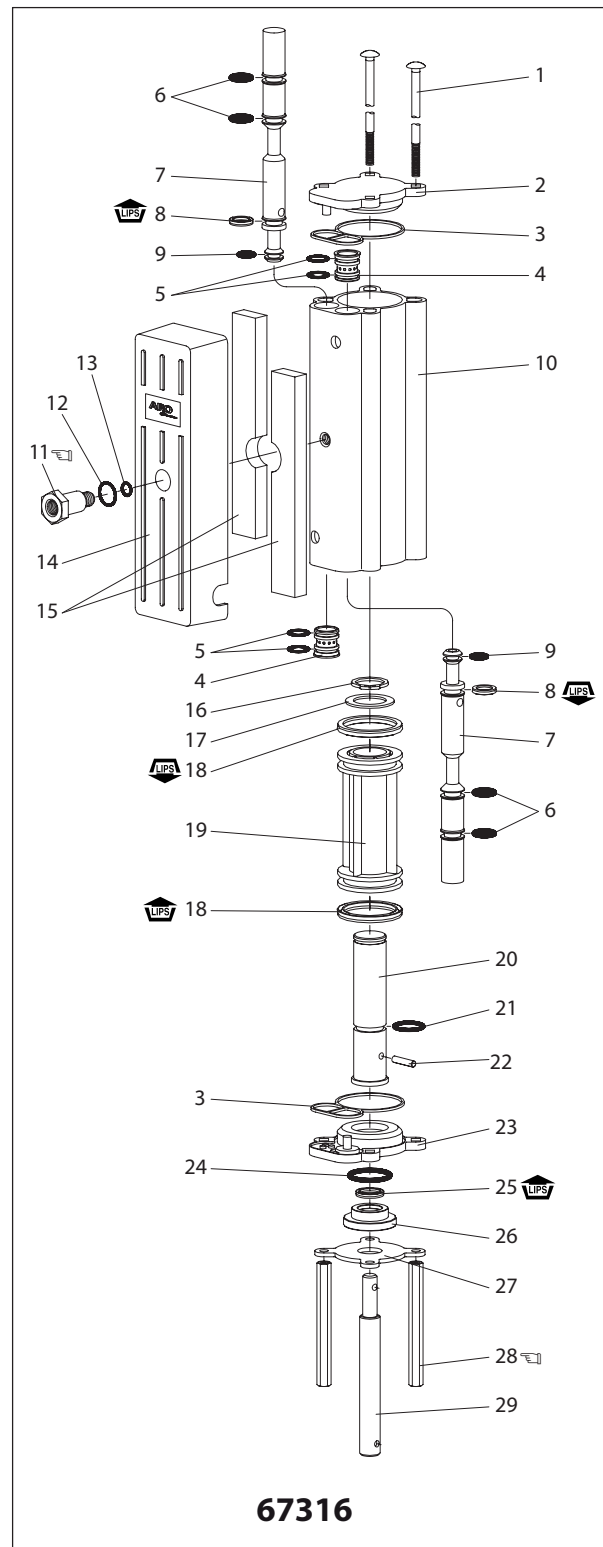


Figure. 2

PARTS LIST

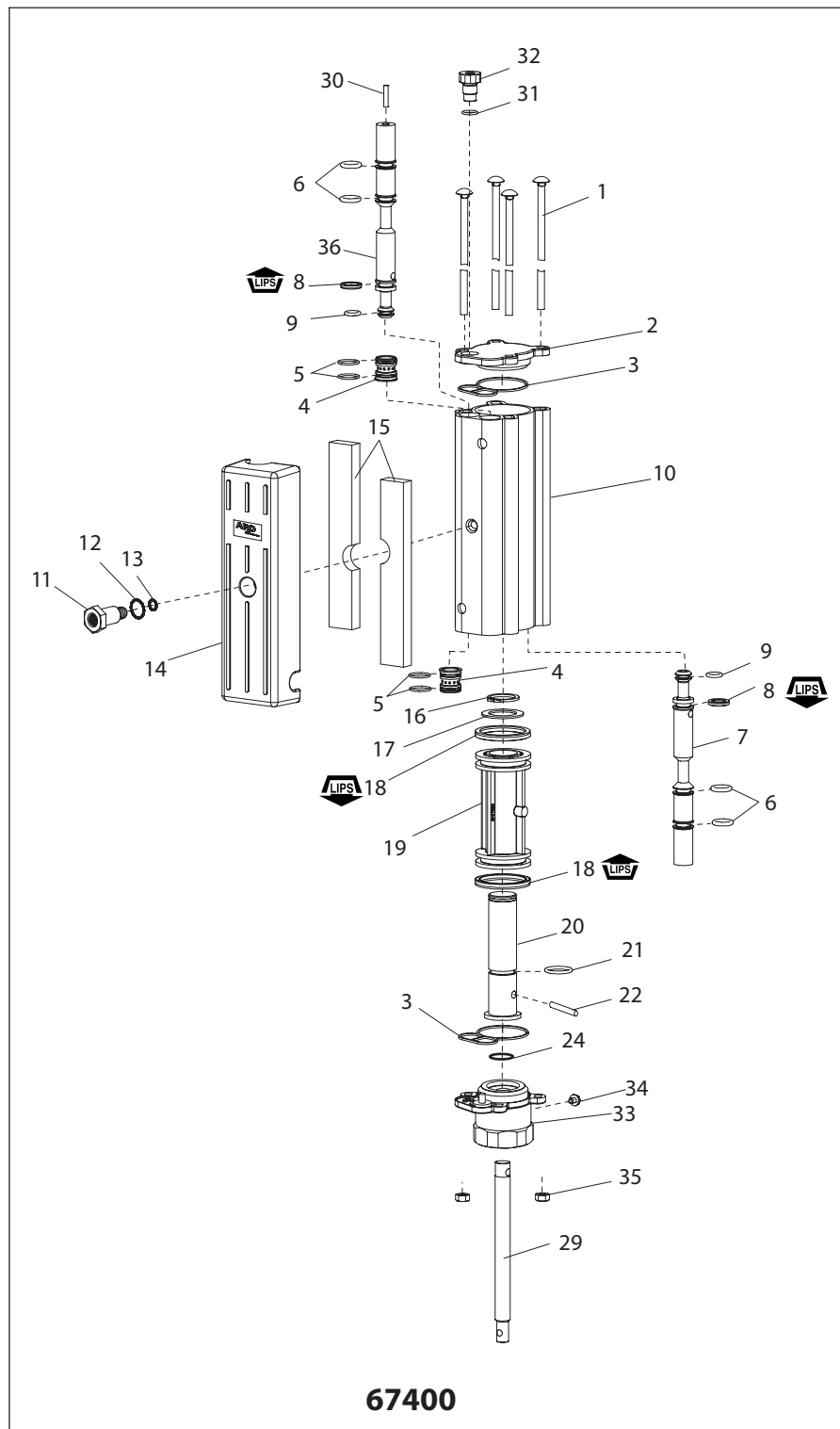


Figure. 3

TORQUE REQUIREMENTS

- (11) adapter, 70 - 80 in. lbs (7.9 - 9.0 Nm).
- (28) tie rods, 80 - 90 in. lbs (9.0 - 10.2 Nm).
- (32) sensor adapter, 70 - 80 in. lbs (7.9 - 9.0 Nm).
- (35) screw, 80 - 90 in. lbs (9.0 - 10.2 Nm).
- (30) Magnet is pressed flush into (36) spool

LUBRICATION / SEALANTS

Apply Shell Gadus S2 U1000 grease (94833) to all "O" rings, "U" cups and mating parts.

Gadus® is a registered trademark of the Shell Oil Company

NOTES
