

COATS®

40-40SA

Center Post Tire Changer

*For servicing single piece
automotive and most light truck
tire/wheel assemblies*



Parts Identification

READ these instructions before placing unit in service KEEP these and other materials delivered with the unit in a binder near the machine for ease of reference by supervisors and operators.

HENNESSY INDUSTRIES, INC.

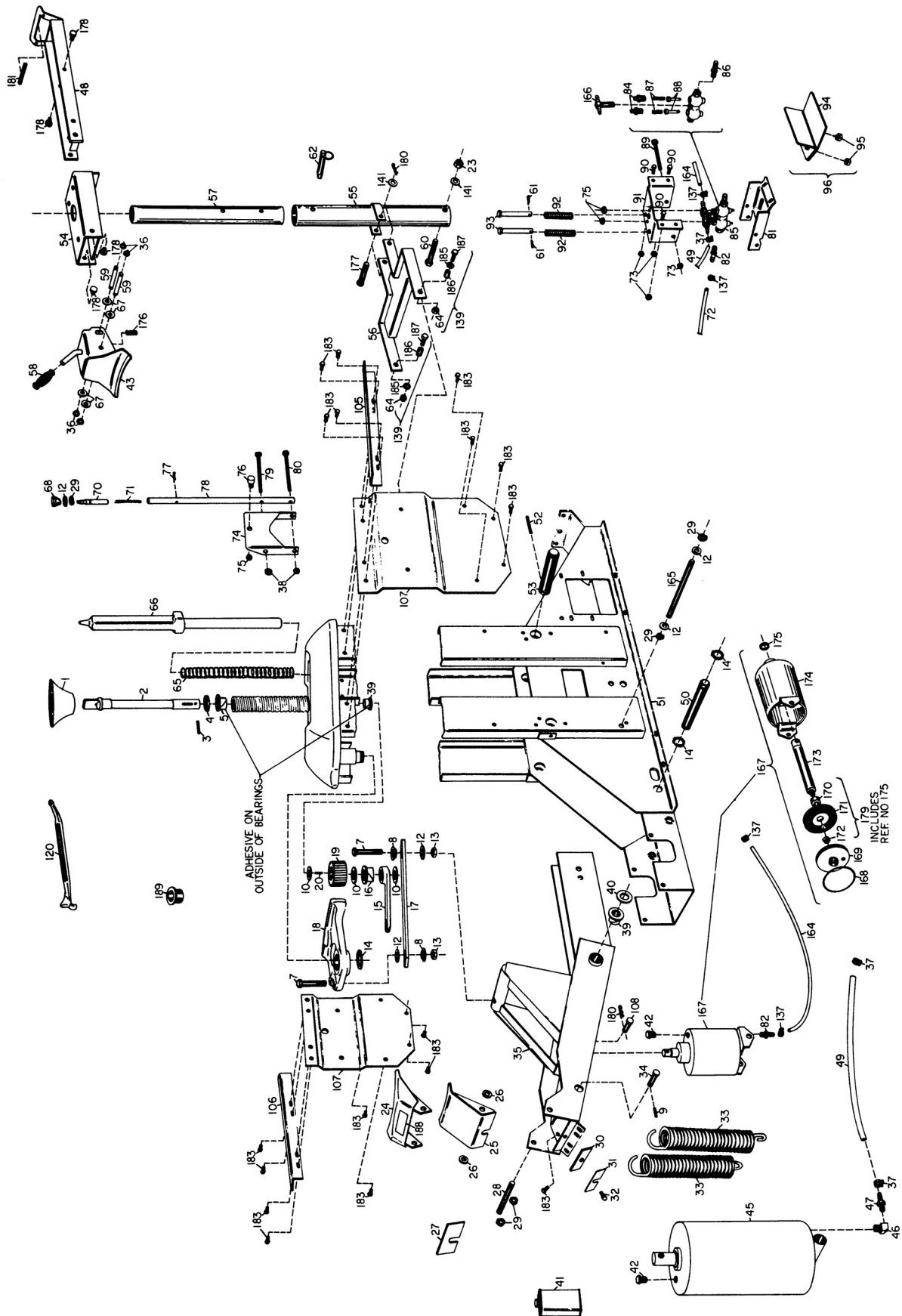
1601 J. P. Hennessy Drive, LaVergne, TN USA 37086-3565 615/641-7533 800/688-6359 www.ammcoats.com
HENNESSY INDUSTRIES INC. Manufacturer of AMMCO®, COATS® and BADA® Automotive Service Equipment and Tools.

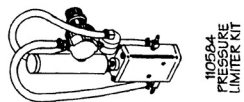
Manual Part No.: 8110825 01
Revision: 11/08

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	108276	Centering Cone	55	107655	Large Tube W/C	109	108319	3/4" Hose 27-1/2"	163	109672	Air Tube Complete
2	108289	Center Shaft	56	107658	Arm Weldment	110	110533	Inflation Limiter Bracket	164	105552	1/4" Hose 28-3/4" L.G.
3	000304	3/8" x 1-3/4" Roll Pin	57	107661	Tube Small	111	106278	Male Branch Tee	165	107207	Lower Pivot Axle
4	108290	Center Post Washer	58	100979	Top Bead Loosener Handle Grip	112	107922	Plastic Top Cover	166	107234	1/4 - 3/4 Brass Tee
5	000510	1-1/4" x 1-1/4" Nylon Bearing	59	108293	U.B.L. Pivot Pin	113	106248	End Panel Right	167	107199	5" Cylinder Assembly Power Boost
6	107139	Hitch Pin	60	107663	1/2" x 4-3/4" H.H.C.S.	114	106572	Bottle - Lube	168	000465	Cap O-Ring
7	101296	3/4" Drive Gear Bolt (Ea.)	61	102278	1/8" x 1 Cotter Pin (Ea.)	115	110536	1/4" Hose 37"	169	106652	5" Cyl. Bottom Cap Weldment ..
8	100958	Self-Aligning Washer	62	107665	Clevis Pin Detent	117	102390	1/4" Push On Fitting	170	107511	Spacer
9	101181	3/8" x 1" Roll Pin	64	000516	3.8" Lock Nut	118	106188	Strainer Screen	171	107576	Piston Cup
10	101651	1-1/4" Machine Bushing (Ea.) ..	65	108292	Positioning Pin Spring	119	000491	Lube Applicator	172	107510	3/4" Jam Nut
11	108593	3/16" Dia. Rivet (Ea.)	66	108291	Positioning Pin	120	000768	Combination Tool	173	107205	Piston Rod
12	108280	3/4" Machine Bushing (Ea.)	67	108265	1/2" Machine Bushing	121	107927	Surge Tank	174	107200	Cylinder Barrel Complete
13	100957	3/4" Lock Nut N.C. (Ea.)	68	104155	Knob	122	000572	3/4" x 90" Street Ell	175	106857	Wiper Seal
14	100964	1-1/4" Snap Ring (Ea.)	70	104262	Push Handle	123	104573	3/4" Straight Fitting (Ea.)	176	102840	Spring
15	101298	Gear Tie Bar	71	104284	Detent Spring	124	101346	Hose Clamp (Ea.)	177	107724	Clevis Pin
16	101352	Tie Bar Nylon Bearing	72	106288	1/4" Hose 16-1/4	126	101312	Reducing Bushing (3/4" - 1/4") ..	178	107717	Slide Button (Ea.)
17	101089	Drive Gear Bar Assembly	73	106303	3/8" Whiz Lock Nut	127	106284	1/4" Tee With 1/8" Port	179	107587	5" Piston Replacement Kit
18	104247	Drive Gear Complete	74	104120	Support Bracket	128	108964	1/4" Tee With 1/8" Port	180	107419	Hitch Pin (Ea.)
19	100951	Pinion	75	103260	1/2" Lock Nut N.F. (Ea.)	129	108968	300 lb. Gauge	181	107732	Handle Pad
20	101091	Shaft Key	76	104354	Stud Kit	130	102390	1/4" Hose Fitting	182	107983	Plastic Fastener Gauge
21	107770	Combo Tool Holder	77	103006	5/32" x 1-1/4" Cotter Pin	131	107768	Rubber Bumper Combo Tool Tube	183	107413	Serrated Washer H.D. Bolt
22	107715	HHCS 3/8 - 16 x 1-1/4" GR.5 ..	78	106230	Arm Detent	132	106871	Inflation Hose Assembly	184	109849	Inflation Warning Decal
23	101039	1/2" Lock Nut N.C.	79	110653	3/8" x 5" Cap Screw	133	104968	Safety Valve 200 PSI	185	101018	Washer
24	101042	Large Lower Shoe	80	108553	3/8" x 5" Cap Screw	134	106570	Inflation Manifold	186	107738	Spacer Bushing
25	101251	Small Lower Shoe	81	104108	Foot Valve Plate	135	103737	Release Valve	187	107715	H.H.C.S. 3/8 - 16 x 1-1/4 GR5 (Ea.)
26	100994	Shoe Spacer	82	000378	1/4" Straight Fitting	136	000745	1/4" Flat Washer	188	108109	Lower Shoe Adj. Decal
27	102927	1/4" Shim	83	108605	Female Coupler Assembly	137	101428	Hose Clamp	189	108147	Hold Down Tube
28	101003	Lower Shoe Shaft	84	104355	Valve Cap (Ea.)	138	410419	Air Chuck	191	106285	1/4" Hose x 18"
29	101001	3/4" Snap Ring (Ea.)	85	104266	Valve Complete	139	107664	Bolt, Nut & Spacer Kit (Ea.)	192	110325	1/4" NPT Male Run Tee
30	105133	1/4" Shoe Adjusting Bar	86	104209	Muffler	141	010027	1/2" Washer	193	101428	1/4" Hose Clamp
31	101506	Shoe Adjusting Shim Kit	87	102468	Poppet Spring (Ea.)	142	107985	Air Gauge Kit Flange Mounting ..	194	109466	Valve
32	105131	3/8" x 1-1/4" Self-Tapping Bolt ..	88	102469	Poppet (Ea.)	143	107517	Gauge Lens Screw On	195	110325	1/4" NPT Male Run Tee
33	104012	Return Spring (Ea.)	89	110653	3/8" x 5" Cap Screw	144	106289	1/4" Hose 22"	196	101428	1/4" Hose Clamp
34	101002	Upper Cylinder Clevis Pin	90	107413	Bolt Serrated W.H. 3/8" x 1" ..	145	106301	1/4 Hex Whiz Lock Self-Tap Screw	197	110496	Volume Chamber
35	107195	Power Arm	91	104110	Valve Bracket	146	107924	3/4" Plastic Elbow	198	109471	1/8" Close Nipple
36	120095	Snap Ring 1/2"	92	104149	Valve Spring	147	105671	End Cap (1/4" Valve)	199	109472	1/8" In-Line Filter
37	101427	Hose Clamp	93	104154	5/8" x 4-1/2" Clevis Pin (Ea.)	148	104596	10-32 Self-Tapping Screw	200	181392	Regulator
38	000516	3/8" Lock Nut	94	106035	Foot Pedal	149	104649	Poppet (1/4" Valve)	201	104844	1/8" Straight Fitting
39	101351	Nylon Bearing (Ea.) w/Flange ..	95	000525	1/16" Lock Nut N.C (Ea.)	150	104600	1/4" Valve Complete	202	101428	1/4" Hose Clamp
40	101651	Machine Bushing (Ea.)	96	106190	Foot Pedal Kit	151	104673	Bushing 1/4" Valve	203	103649	1/4" Hose x 12" L.G.
41	101411	1 QT. Special Hyd. Oil (Ea.)	97	108300	Side Panel Rear Complete	152	104613	5/8" External Lock Washer	204	103649	1/4" Hose x 12" L.G.
42	105678	Plastic Breather Plug	98	106247	End Panel Left	153	104611	5/8" Jam Nut N.F.	205	101428	1/4" Hose Clamp
43	108131	Shoe W/C	99	102459	3/8" Self-Tapping Screw (Ea.) ..	154	106350	End Cap 3/4" Valve	206	110325	1/4" NPT 90° Male Elbow
44	000580	1/4" Close Nipple (Ea.)	100	102459	3/8" Self-Tapping Screw (Ea.) ..	155	104651	Spring 3/4" Valve	207	109468	Pressure Repeater
45	107242	7" Cylinder	101	110824	Warning Decal	156	104652	Poppet 3/4" Valve	208	109769	Decal Tire Bleed Valve
46	000372	1/4" x 90" Street Elbow	102	108298	Side Panel Front Complete	157	106298	3/4" Valve Ported 1/4 - 18 NPT ..	209	109818	Operating Instructions
47	108134	Bar Weldment	103	106301	1/4" Hex Wire Lock Self-Tap Screw (Ea.)	158	104674	Bushing 3/4" Valve	210	120408	1/4" - 20 x 1-3/4" H.H.C.S.
48	107240	3/8" Hose 23-1/2"	104	106304	Skin Fastener Tinnerman (Ea.) ..	159	104612	3/4" Lock Washer	211	143169	1/4" - 20 Whiz Lock Nut
49	101000	Lower Cylinder Shaft	105	108584	Angle Top Support	160	104610	3/4" Jam Nut N.F.	NOTE: This Parts List may not be representative of your machine because of production changes.		
50	108331	Chassis Weld Assembly	106	108584	Angle Top Support	161	106308	Air Flare Pedal			
51	101371	1/4" x 1-3/4" Roll Pin	107	108130	Plate Chassis Stiffener	162	106281	1/4" Hose 20"			
52	100970	Power Arm Axle	108	107238	7/16" x 2" Clevis Pin						
53	100970	Power Arm Axle									
54	108135	Channel W/C									

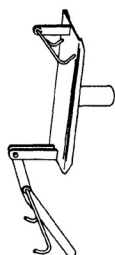
When ordering parts always give the following information:

(1) Part Number (2) Description (3) Serial Number of Your Machine

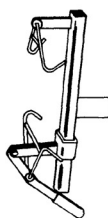




10564
PRESSURE
LIMITER KIT



000347
MANUAL
TIRE SPREADER



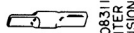
108028
ADJUSTABLE
TIRE SPREADER



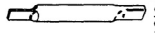
000312
SMALL HOLD
DOWN CONE



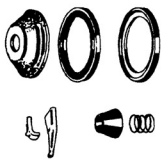
107790
PROTECTOR SET BOOT
SET OF 10



108311
CENTER POST
EXTENSION SHORT



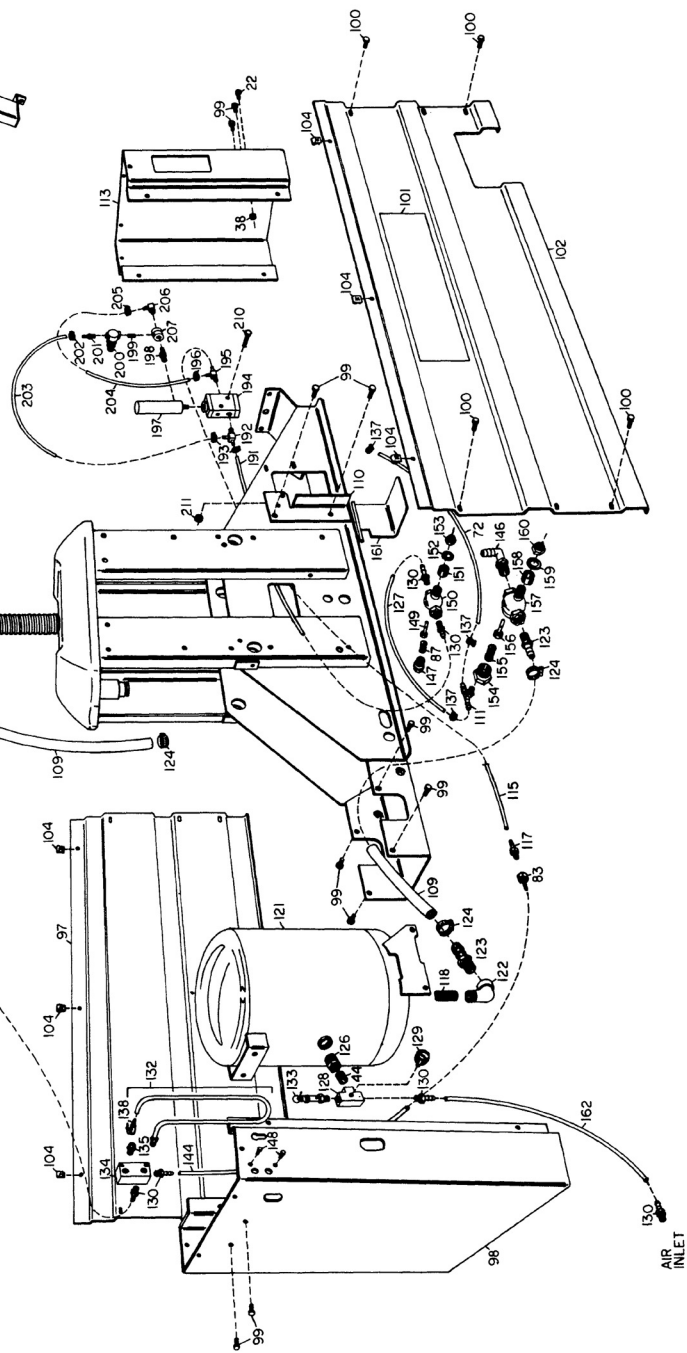
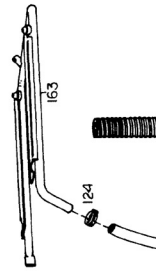
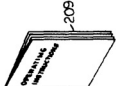
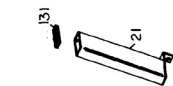
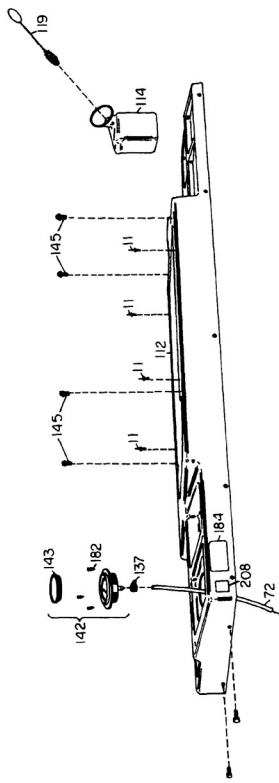
101042
CENTER POST
EXTENSION LONG



10764
SPEED MAG
ADAPTER KIT



102927
ADAPTER 1/4"



Notes

Notes



Read and follow installation and maintenance instructions on this page and in the unit's Operators Manual to help insure proper, safe operation and to obtain the best possible service life from the unit. Correct installation, regular inspections, and proper maintenance are essential to help accidents and injuries.

Installation Instructions

- 1.** The COATS 40-40SA should be securely bolted to the floor using the slotted holes on each side of the frame. Use all four anchor points. Use high strength, corrosion resistant fasteners.
- 2.** The operating pressure range at the machine must be 100 to 175 PSI. DO NOT EXCEED 175 PSI at the machine. Sufficient air pressure is required for good performance. The 40-40SA is supplied with a 1/4" male pipe thread for easy connection. The connection is located at the lower left corner on the operators side. DO NOT HAVE AN UNATTACHED, UNRESTRICTED AIR LINE AVAILABLE AT OR NEAR THE MACHINE. ALL AIR SERVICE/LINES AVAILABLE TO OPERATORS SHOULD BE THROUGH THE TIRE CHANGER.
- 3.** Read and follow additional instructions in the unit's Operators Manual.

General Maintenance

- 1.** The moving parts of the COATS 40-40SA are self-lubricating through the use of powdered metal and nylon bearings for extended trouble-free performance.
- 2.** Lower bead loosener shoe adjustment:
 - A.** Mount a 14" or 15" steel rim without a tire on the table of machine.
 - B.** Cycle the machine and note the clearance between the flange of the steel rim and the small lower shoe (Ref. No. 25). The proper shoe clearance is from 1/16" to 1/8". If clearance is not within these limits, the shoe must be adjusted.
 - C.** To adjust the shoe, loosen 3/8" x 1-1/2" bolt (Ref. No. 32) and add or remove shims (Ref. No. 31) to bring shoe to the correct adjustment.
 - D.** Tighten the bolt (Ref. No. 32) and check adjustment again as described in "A" and "B".
- 3.** Air gauge calibration:
 - A.** Mount a large 15" tire/wheel on the table top of the machine. Pressurize the tire to 32 PSI. Measure the pressure with a high quality pencil extension-type tire gauge. Connect the tire changer's air chuck to the tire valve.
 - B.** If the gauge does not read 32 PSI, remove the screw-on gauge lens and loosen the two screws located at the edge of the dial face. Do not loosen the screws more than three turns.
 - C.** Rotate the dial face until the 32 PSI graduation is in alignment with the pointer.
 - D.** Tighten the dial face screws and clean and replace the screw-on lens.
 - E.** If the gauge is inoperative or defective, replace it immediately. Order part number 8107980 from the COATS Company, phone (615) 641-7533. If your machine is equipped with the optional pressure limiter, the function of the limiter should be checked weekly.

7" Diameter Cylinder Maintenance (Ref. No. 45)

Proper cylinder maintenance is necessary for safety and performance. The design of the hydraulically dampened air cylinder (Ref. No. 45) facilitates smooth, controlled bead loosening, mounting, demounting. Internal sealing surfaces are chrome plated to provide long seal life. A small amount of oil is usually lost after a period of time in lubricating the seals. It is important that the cylinder be filled to the proper level at all times. If the oil becomes low, the machine will surge at the beginning of the stroke. Cylinder oil level should be checked before initial operation and semi-annually thereafter. If fast or jerky motion is noted, cease operation and check oil level immediately. A high quality hydraulic oil must be used. This can be ordered from The COATS Company (Ref. No. 41), phone (615) 641-7533.

- 1.** To add oil: Remove the front panel by removing four 3/8" bolts (Ref. No. 100) and three 1/4" bolts (Ref. No. 104).
- 2.** Depress and hold foot pedal to extend the cylinder to the top of its stroke.
- 3.** Carefully clean around the plastic breather plug (Ref. No. 42), remove it, and place it where it will not pick up any dirt or debris. Fill the cylinder to within 1" to 1-3/16" from access hole in the top. Be careful that no dirt falls in through the access hole.
- 4.** Replace the plastic breather plug and replace the front panel.

5" Diameter Cylinder Maintenance (Ref. No. 167)

The cylinder requires periodic lubrication. This is performed without removing the cylinder from the machine.

- 1.** Remove the front panel by removing four 3/8" bolts (Ref. No. 100) and three 1/4" bolts (Ref. No. 104).
- 2.** Remove the plastic breather plug (Ref. No. 42) on the cylinder. Add 1/2 ounce of 10W-30 motor oil with a spout-type oil can. DO NOT FILL THE 5" CYLINDER WITH OIL.
- 3.** Check by actuating the machine several times to insure proper function. Add more oil if necessary.
- 4.** Replace breather plug and front panel.



Read and follow all safety information on the machine. Always work carefully and safely.