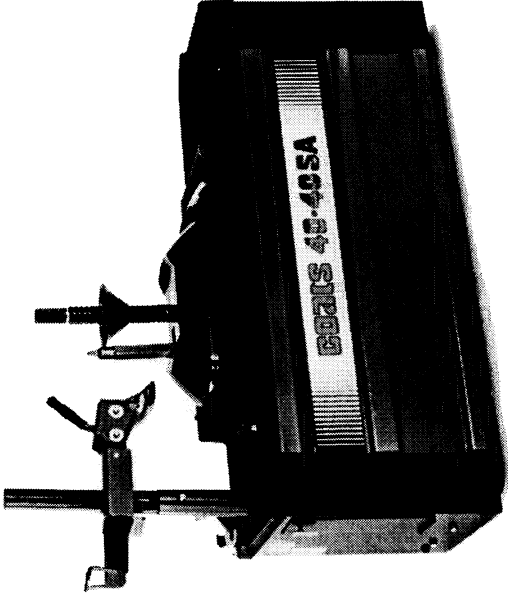


# 40-40SA

## COATS Center Post Tire Changer

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



## Parts List

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.

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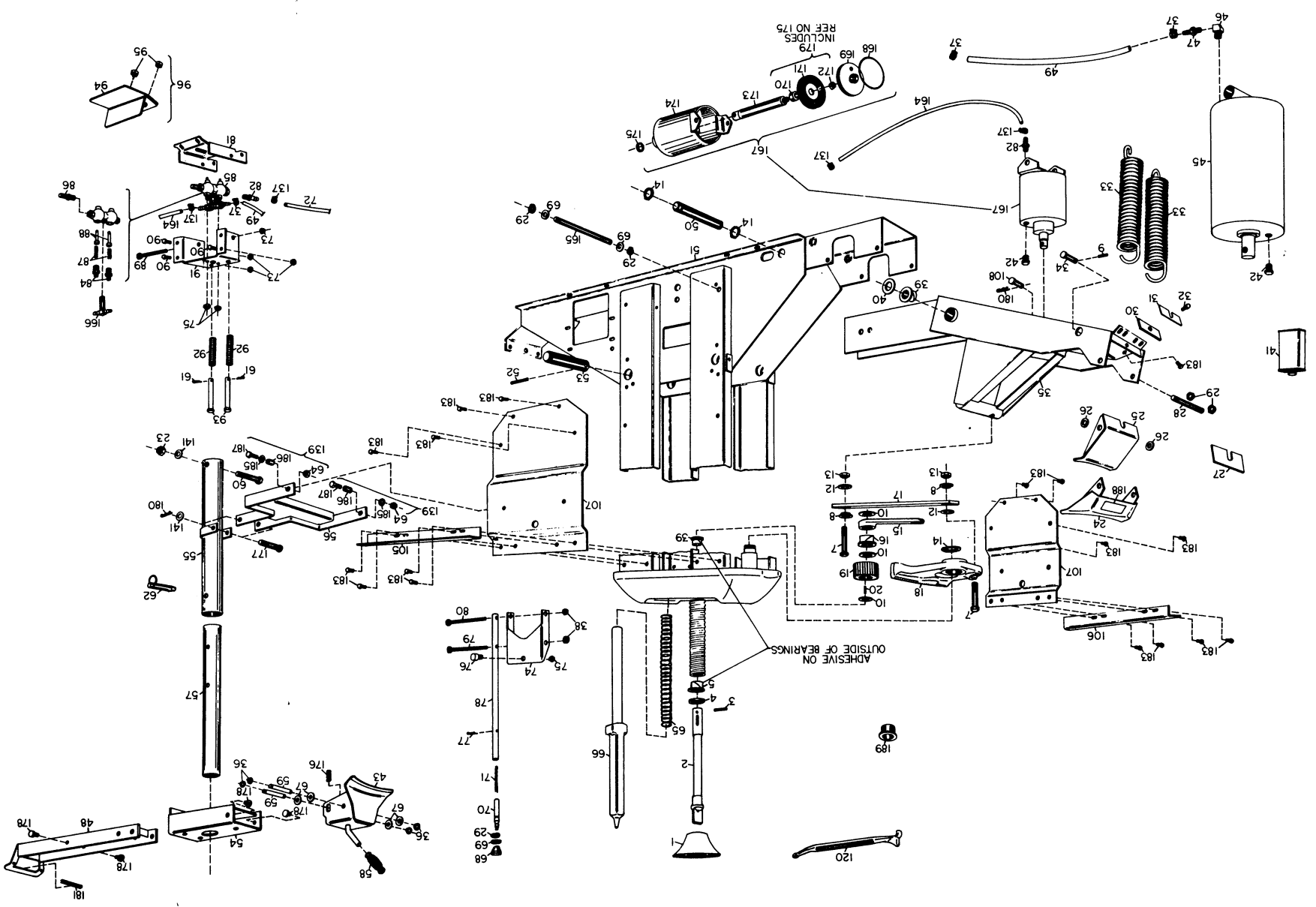


REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
1	108276	Centering Cone	55	107655	Large Tube W/C	109	108319	3/4" Hose 27-1/2"
2	108289	Center Shaft	56	107658	Arm Weldment	110	110533	Inflation Limiter Bracket
3	000304	3/8" x 1-3/4" Roll Pin	57	100769	Tube Small	111	106278	Male Branch Tee
4	108290	Center Post Washer	58	100979	Top Bead Loosener Handle Grip	112	107922	Plastic Top Cover
5	000510	1-1/4" x 1-1/4" Nylon Bearing	59	108293	U.B.L. Pivot Pin	113	106248	End Panel Right
6	107139	Hitch Pin	60	107663	1/2" x 4-3/4" H.H.C.S.	114	106572	Bottle - Lube
7	101296	3/4" Drive Gear Bolt (Ca.)	61	102278	1/8" x 1 Cotter Pin (Ca.)	115	110536	1/4" Hose 37"
8	100958	Self-Aligning Washer	62	107665	Clevis Pin Detent	117	102390	1/4" Push On Fitting
9	101651	1-1/4" Machine Bushing (Ca.)	65	108292	Positioning Pin Spring	118	000491	Lube Applicator
10	101811	3/8" x 1" Roll Pin	64	000516	3.8" Lock Nut	119	106188	Strainer Screen
11	108593	3/16" Dia. Rivet (Ca.)	66	108291	Positioning Pin	120	000768	Combination Tool
12	108280	3/4" Machine Bushing (Ca.)	67	108265	Knob	121	107927	Surge Tank
13	100957	3/4" Lock Nut N.C. (Ca.)	68	104155	Knob	122	000572	3/4" x 90° Street El
14	100964	1-1/4" Snap Ring (Ca.)	69	103264	3/4" x 1-1/4" Machine Bushing	123	104573	3/4" Straight Fitting (Ca.)
15	101298	Gear Tie Bar	70	104262	Push Handle	124	101346	Hose Clamp (Ca.)
16	101352	The Bar Nylon Bearing	71	104284	Detent Spring	126	101312	Reducing Bushing (3/4" - 1/4")
17	101089	Drive Gear Bar Assembly	72	106288	1/4" Hose 16-1/4"	127	106284	1/4" Hose x 13-1/4"
18	104247	Drive Gear Complete	73	106303	3/8" Whiz Lock Nut	128	108964	1/4" Tee With 1/8" Port
19	100951	Pinion	74	104120	Support Bracket	129	108968	300 lb. Gauge
20	101091	Shaft Key	75	103260	1/2" Lock Nut N.F. (Ca.)	130	102390	1/4" Hose Fitting
21	107770	Combo Tool Holder	76	103006	Stud Kit	131	107768	Rubber Bumper Combo Tool
22	107775	H.H.C.S. 3/8 - 16 x 1-1/4" GR.5	77	103006	5/32" x 1-1/4" Cotter Pin	132	106871	Inflation Hose Assembly
23	101039	Large Lock Nut N.C.	78	106230	Arm Detent	133	106570	Safety Valve 200 PSI
24	101042	1/2" Lock Nut N.C.	79	110653	3/8" x 5" Cap Screw	134	105988	Inflation Manifold
25	101251	Small Lower Shoe	80	110653	3/8" x 5" Cap Screw	134	105988	Inflation Manifold
26	100948	Shoe Spacer	81	104108	Foot Valve Plate	135	103737	Release Valve
27	102927	1/4" Shim	82	000078	1/4" Straight Fitting	136	100475	1/4" Flat Washer
28	101003	Lower Shoe Shaft	83	106605	Female Coupler Assembly	137	104288	Hose Clamp
29	101001	1/4" Snap Ring (Ca.)	84	104355	Valve Cap (Ca.)	138	410419	Air Chuck
30	105133	1/4" Shoe Adjusting Bar	85	104266	Valve Complete	139	106649	Bolt, Nut & Spacer Kit (Ca.)
31	101506	Shoe Adjusting Shim Kit	86	104209	Muller	141	070027	1/2" Washer
32	105131	3/8" x 1-1/4" Self-Tapping Bolt	87	102468	Poppet Spring (Ca.)	142	107517	Air Gauge Kit Flange Mounting
33	104012	Return Spring (Ca.)	88	102469	Poppet (Ca.)	143	107517	Gauge Lens Screw On
34	101002	Upper Cylinder Clevis Pin	89	110653	3/8" x 5" Cap Screw	144	106289	1/4" Hose 22"
35	107195	Power Arm	90	104110	Valve Bracket	145	106301	1/4 Hex Whiz Lock Self-Tap
36	120095	Snap Ring 1/2"	91	104149	Valve Spring	146	107924	3/4" Plastic Elbow
37	101427	Hose Clamp	92	104154	5/8" x 4-1/2" Clevis Pin (Ca.)	147	105671	End Cap (1/4" Valve)
38	000516	3/8" Lock Nut	93	106035	Foot Pedal	148	104596	1/0-32 Self-Tapping Screw
39	101351	Nylon Bearing (Ca.) w/Flange	94	106035	Foot Pedal	149	104600	Poppet (1/4" Valve)
40	101651	Machine Bushing (Ca.)	95	000525	5/16" Lock Nut N.C. (Ca.)	149	104600	Poppet (1/4" Valve)
41	101411	1 QT. Special Hyd. Oil (Ca.)	96	108300	Side Panel Rear Complete	150	104600	1/4" Valve Complete
42	105678	Plastic Breather Plug	97	108300	Side Panel Rear Complete	151	104673	Bushing 1/4" Valve
43	108131	Shoe W/C	98	106247	End Panel Left	152	104613	5/8" External Lock Washer
44	000580	1/4" Close Nipple (Ca.)	99	102459	3/8" Self-Tapping Screw (Ca.)	153	104611	5/8" Jam Nut N.F.
45	107242	7" Cylinder	100	102459	3/8" Self-Tapping Screw (Ca.)	154	106350	End Cap 3/4" Valve
46	000372	1/4" x 90° Street Elbow	101	110824	Warning Decal	155	104651	Spring 3/4" Valve
47	101898	3/8" Hose Fitting	102	108298	Side Panel Front Complete	156	104652	Poppet 3/4" Valve
48	108134	Bar Weldment	103	106301	1/4" Hex Wire Lock Self-Tap	157	106298	3/4" Valve Ported 1/4 - 18 NPT
49	107240	3/8" Hose 23-1/2"	104	106304	Skin Fastener Tinnerman (Ca.)	158	104674	Bushing 3/4" Valve
50	101000	Lower Cylinder Shaft	105	108584	Angle Top Support	159	104612	3/4" Lock Washer
51	108331	Chassis Weld Assembly	106	108584	Angle Top Support	160	104610	3/4" Jam Nut N.F.
52	101371	1/4" x 1-3/4" Roll Pin	107	108130	Plate Chassis Stiffener	161	106308	Air Flare Pedal
53	100970	Power Arm Axle	108	107238	7/16" x 2" Clevis Pin	162	106281	1/4" Hose 20"
54	108135	Channel W/C						

When ordering parts always give the following information: (1) Part Number (2) Description (3) Serial Number of Your Machine

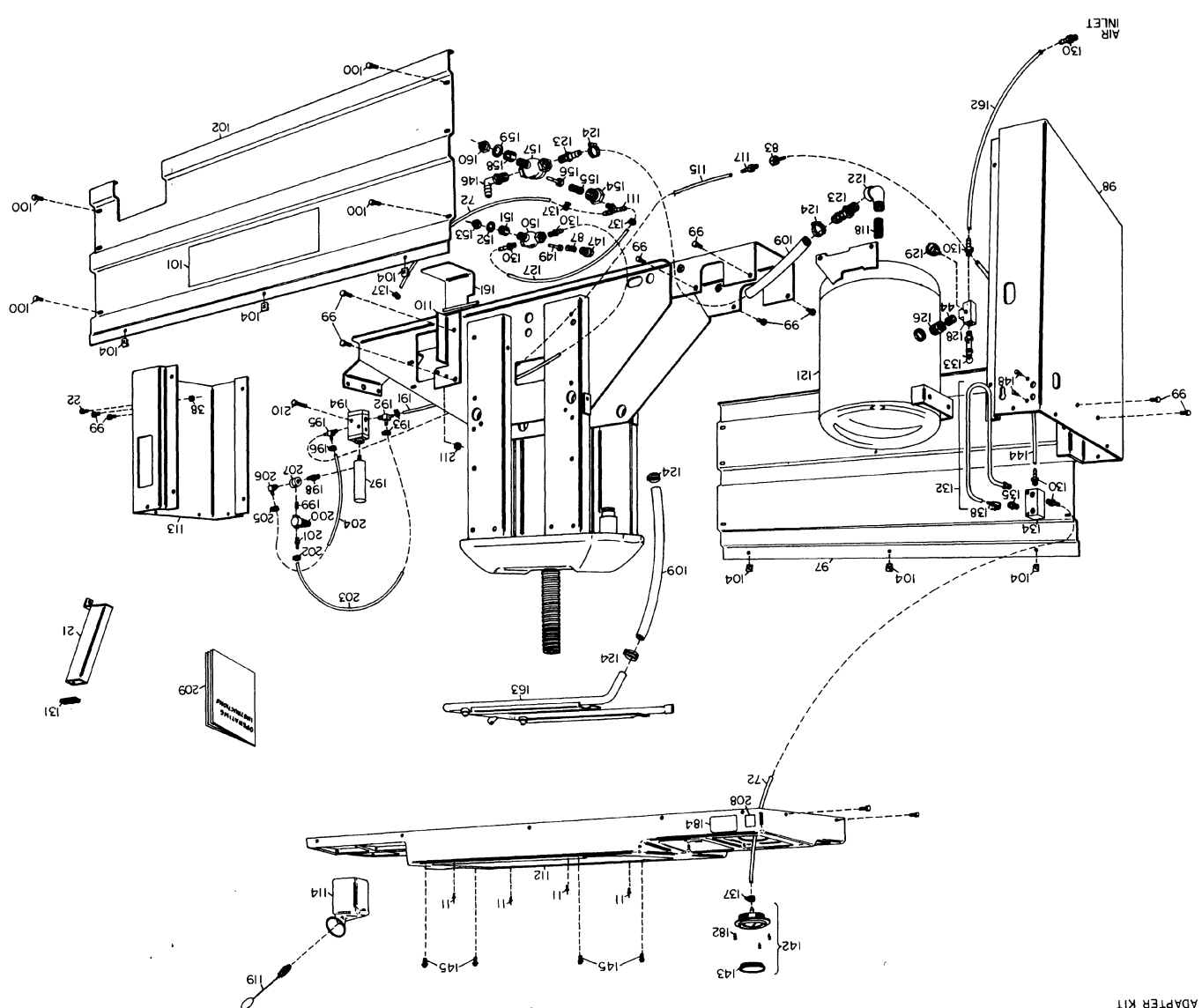
NOTE: This Parts List may not be representative of your machine because of production changes.

REF. NO.	PART NUMBER	DESCRIPTION
163	109672	Air Tube Complete
164	105552	1/4" Hose 28-3/4" LG.
165	107207	Lower Pivot Axle
166	107234	1/4 - 3/4 Brass Tee
167	107199	5" Cylinder Assembly Power
168	000465	Cap O-Ring
169	106652	5" Cyl. Bottom Cap Weldment
170	107511	Spacer
171	107510	3/4" Jam Nut
172	107510	3/4" Jam Nut
173	107205	Piston Rod
174	107200	Cylinder Barrel Complete
175	106657	Wiper Seal
176	102840	Spring
177	107724	Clevis Pin
178	107717	Slide Button (Ca.)
179	107587	5" Piston Replacement Kit
180	107419	Hitch Pin (Ca.)
181	107732	Handle Pad
182	107983	Plastic Fastener Gauge
183	107413	Serrated Washer H.D. Bolt
184	109849	Inflation Warning Decal
185	101018	Washer
186	107738	Spacer Bushing
187	107715	H.H.C.S. 3/8 - 16 x 1-1/4
188	108109	GHS (Ca.)
189	108147	Lower Shoe Adj. Decal
191	106285	1/4" Hose x 18"
192	110325	1/4" NPT Male Run Tee
193	101428	1/4" Hose Clamp
194	109466	Valve
195	110325	1/4" NPT Male Run Tee
196	101428	1/4" Hose Clamp
197	109471	1/8" Close Nipple
198	109471	1/8" In-Line Filter
199	109472	1/8" In-Line Filter
200	181332	Regulator
201	104844	1/8" Straight Fitting
202	101428	1/4" Hose Clamp
203	103649	1/4" Hose x 12" LG.
204	103649	1/4" Hose x 12" LG.
205	101428	1/4" Hose Clamp
206	110325	1/4" NPT 90° Male Elbow
207	109468	Pressure Repeater
208	109769	Decal Tire Bleed Valve
209	109818	Operating Instructions
210	120408	1/4" - 20 x 1-3/4" H.H.C.S.
211	143169	1/4" - 20 Whiz Lock Nut



INCLUDES  
 REF NO 175

ADHESIVE ON  
 OUTSIDE OF BEARINGS



102927 SHIM ADAPTER 1/4"

10764 SPEED MAG ADAPTER KIT

101042 CENTER POST EXTENSION LONG

108311 CENTER POST EXTENSION SHORT

107790 PROTECTOR SET BOOT SET OF 10

000312 SMALL HOLD DOWN CONE

108028 ADJUSTABLE TIRE SPREADER

000347 TIRE SPREADER MANUAL

10504 PRESSURE LIMITER KIT







**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 prevent 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 industrial 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.
  - 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"x1-1/2" 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 107980 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.**