

COATS®

Model 4070

Center Post Tire Changer

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



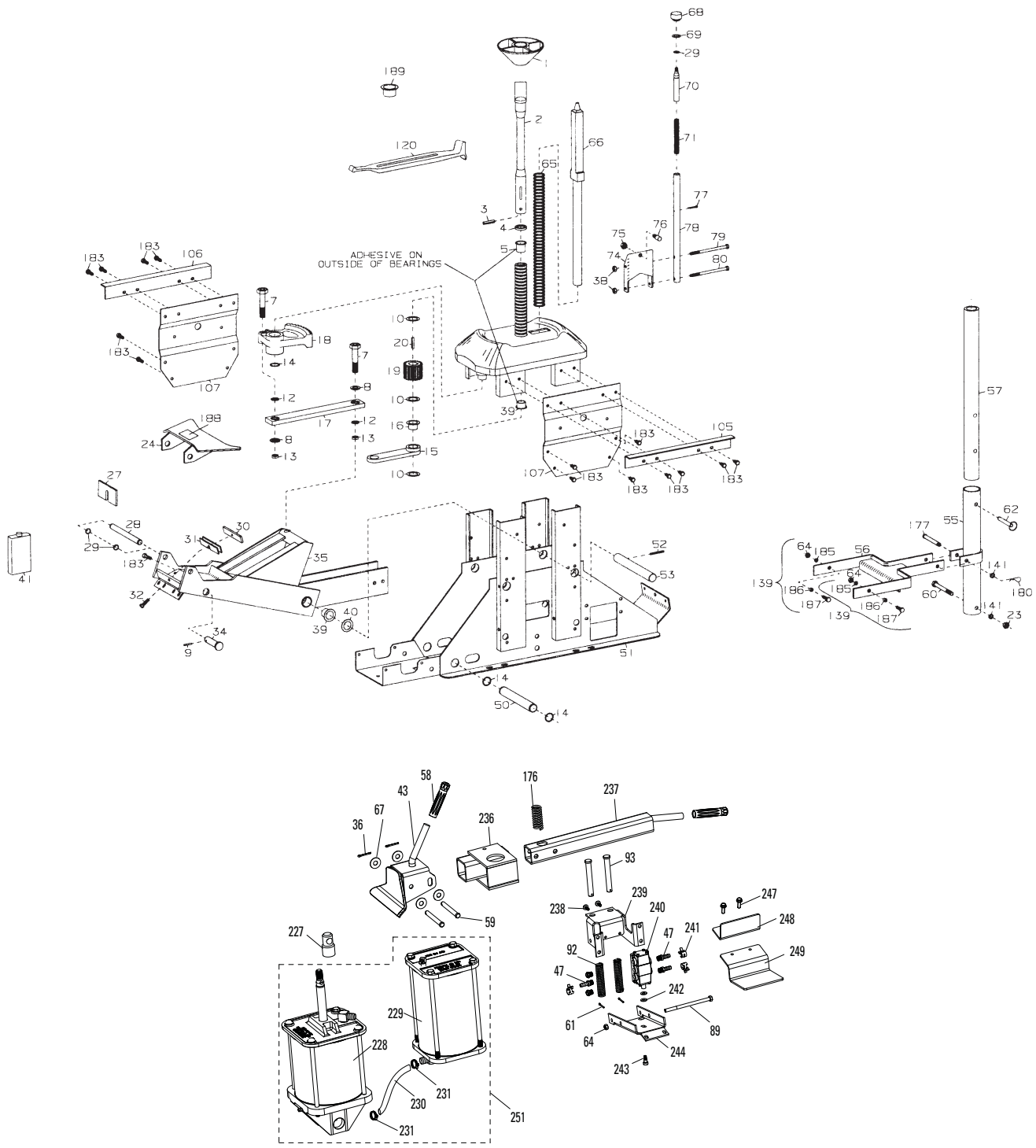
Parts Identification

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.

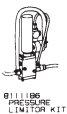
HENNESSY INDUSTRIES, INC.

1601 J. P. Hennessy Drive, LaVergne, TN USA 37086 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.: 85608977 04
Revision: 09/14



ACCESSORIES



811106 PRESSURE LIMITER KIT



810007 SHIM



810779D PROTECTOR SET (SET OF TWO)



8000512 SMALL HOLD DOWN CLAMP



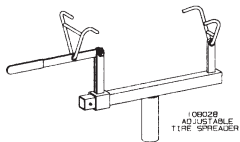
8108311 CENTER POST EXTENSION SHORT



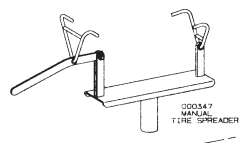
8101042 CENTER POST EXTENSION LONG



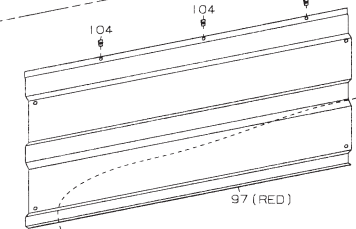
8107764 SPEED MAG ADAPTER KIT



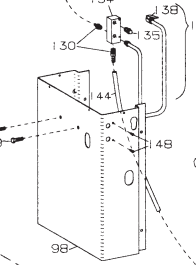
108029 ADJUSTABLE FIRE SPREADER



000047 MANUAL FIRE SPREADER



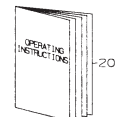
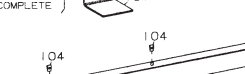
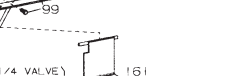
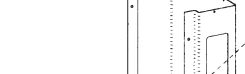
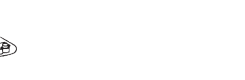
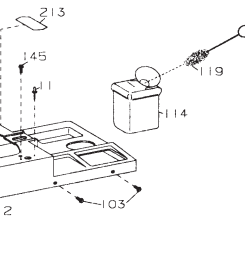
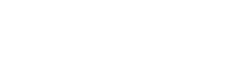
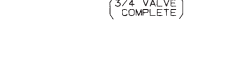
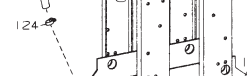
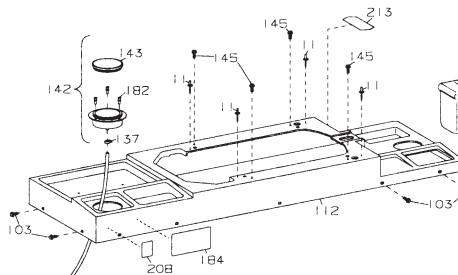
97 (RED)



98



AIR INLET



209



131



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5N11145C

| Item | Part No. | Description | Item | Part No. | Description |
|-------------|-----------------|--|-------------|-----------------|--|
| 1 | 8108276 | Centering Cone | 64 | 8000516 | 3/8" Lock Nut, Gr.5 |
| 2 | 8108289 | Center Shaft | 65 | 8108292 | Positioning Pin Spring |
| 3 | 8000304 | 3/8" x 1-3/4" Roll Pin | 66 | 85608916 | Positioning Pin |
| 4 | 8108290 | Center Post Washer | * | 85608915 | Shaft Stop |
| 5 | 8000510 | 1-1/4" x 1-1/4" Nylon Bearing | * | 8181674 | Screws |
| 7 | 8101296 | 3/4" Drive Gear Bolt, Gr.5 | 67 | 8108265 | 1/2" Machine Bushing |
| 8 | 8100958 | Self-Aligning Washer | 68 | 8104155 | Knob |
| 9 | 8100602 | 3/16" x 1-1/4" Roll Pin | 69 | 8103264 | 3/4" x 1-1/4" Machine Bushing |
| 10 | 8101651 | 1-1/4" Machine Bushing (Ea.) | 70 | 8104262 | Push Handle |
| 11 | 8108593 | 3/16" Dia. Rivet (Ea.) | 71 | 8104284 | Detent Spring |
| 12 | 8108280 | 3/4" Machine Bushing (Ea.) | 72 | 8099050 | 3/8" Hose 14" Long |
| 13 | 8100957 | 3/4" Lock Nut N.C. (Ea.) | 74 | 8104120 | Support Bracket |
| 14 | 8100964 | 1-1/4" Snap Ring (Ea.) | 76 | 8104354 | Stud Kit |
| 15 | 8101298 | Gear Tie Bar | 77 | 8103006 | 5/32" x 1-1/4" Cotter Pin |
| 16 | 8101352 | Tie Bar Nylon Bearing | 78 | 8106230 | Arm Detent |
| 17 | 8101089 | Drive Gear Bar Assembly | 79 | 8110653 | 3/8" x 6" Cap Screw, Gr.5 |
| 18 | 8104247 | Drive Gear Complete | 80 | 8110653 | 3/8" x 6" Cap Screw, Gr.5 |
| 19 | 8100951 | Pinion | 83 | 8108605 | Female Coupler Assembly |
| 20 | 8101091 | Shaft Key | 87 | 8102468 | Poppet String (Ea.) |
| 21 | 8107770 | Combo Tool Holder | 89 | 8110653 | 3/8" x 6" Cap Screw, Gr.5 |
| 22 | 8107715 | HHCS 3/8 - 16 x 1-1/4" Gr.5 | 92 | 8104149 | Valve Spring |
| 23 | 8101039 | 1/2" Lock Nut N.C., Gr.5 | 93 | 8104154 | 5/8" x 4-1/2" Clevis Pin (Ea.) |
| 24 | 85608955 | Large Lower Shoe | 97 | 85609521 | Side Panel Rear Complete |
| 27 | 8102927 | 1/4" Shim | 98 | 8106247 | End Panel Left |
| 28 | 8101003 | Lower Shoe Shaft | 99 | 8102459 | 3/8" Self-Tapping Screw, Gr.5 |
| 29 | 8101001 | 3/4" Snap Ring (Ea.) | 100 | 8102459 | 3/8" Self-Tapping Screw, Gr.5 |
| 30 | 8105133 | 1/4" Shoe Adjusting Bar | 101 | 8110824 | Warning Decal |
| 31 | 8101506 | Shoe Adjusting Shim Kit | 102 | 8108298 | Side Panel Front Complete |
| 32 | 8105131 | 3/8" x 1-1/4" Self Tapping Bolt, Gr.5 | 103 | 8106301 | 1/4" Hex Whiz Lock Self-Tapping Screw, Gr.5 |
| 34 | 8101002 | Upper Cylinder Clevis Pin | 104 | 8106304 | Skin Fastener Tinnerman |
| 35 | 8107195 | Power Arm | 105 | 8108584 | Angle Top Support |
| 36 | 8103006 | 5/32" x 1-1/4" Cotter Pin | 106 | 8108584 | Angle Top Support |
| 38 | 8000516 | 3/8" Lock Nut, Gr.5 | 107 | 8108130 | Plate Chassis Stiffener |
| 39 | 8101351 | Nylon Bearing (Ea.) w/Flange | 109 | 8108319 | 3/4" Hose 27-1/2" |
| 40 | 8101651 | Machine Bushing (Ea.) | 110 | 8110533 | Inflation Limiter Bracket |
| 41 | 8101411 | Quart Special Hyd. Oil (Unit Capacity – 5 Quarts) | 111 | 8184469 | Male Branch Tee |
| 43 | 8108131 | Shoe W/C | 112 | 8107922 | Plastic Top Cover |
| 46 | 8000372 | 1/4" x 90° Street Elbow | 113 | 8106248 | End Panel Right |
| 47 | 8101898 | 3/8" Hose Fitting | 114 | 8106572 | Bottle - Lube |
| 49 | 8107240 | 3/8" Hose 23-1/2" | 115 | 8106289 | 1/4" Hose 22" |
| 50 | 8101000 | Lower Cylinder Shaft | 117 | 8102390 | 1/4" Push On Fitting |
| 51 | 8108331 | Chassis Weld Assembly | 118 | 8106188 | Strainer Screen |
| 52 | 8101371 | 1/4" x 2-1/4" Roll Pin | 119 | 8000491 | Lube Applicator |
| 53 | 8100970 | Power Arm Axle | 120 | 85609418 | Combination Tool |
| 55 | 8107655 | Large Tube W/C | 121 | 8107927 | Surge Tank |
| 56 | 85608928 | Arm Weldment | 122 | 8000572 | 3/4" x 90° Street Elbow |
| 57 | 8107661 | Tube Small | 123 | 8104573 | 3/4" Straight Fitting (Ea.) |
| 58 | 8100979 | Top Bead Loosener Handle Grip | 124 | 8101346 | Hose Clamp (Ea.) |
| 59 | 8111148 | Clevis Pin | 127 | 8099053 | 1/4" Hose 6" |
| 60 | 8107663 | HHCS 1/2" x 4-3/4", Gr.5 | 128 | 8183434 | 1/4" Tee with 1/8" Port |
| 61 | 8102278 | 1/8" x 1 Cotter Pin (Ea.) | 129 | 8108968 | 300 Lb. Gauge |
| 62 | 8107665 | Clevis Pin Detent | 130 | 8000376 | 1/4" Hose Fitting |

* Not Shown

| Item | Part No. | Description | Item | Part No. | Description |
|-------------|-----------------|--|-------------|-----------------|--|
| 131 | 8107768 | Rubber Bumper Combo Tool Tube | 201 | 8182035 | St. Fitting 1/4" Tube x 1/8 NPT |
| 132 | 8106871 | Inflation Hose Assembly | 202 | 8101428 | 1/4" Hose Clamp |
| 133 | 8104968 | Safety Valve 200 PSI | 203 | 8103649 | 1/4" Hose 12" |
| 134 | 8106270 | Inflation Manifold | 204 | 8182037 | 1/4" OD Nylon Tube 10" |
| 135 | 8103737 | Release Valve | 205 | 8101428 | 1/4" Hose Clamp |
| 136 | 8108589 | 3/4" Hose 31" | 206 | 8110497 | Fitting 90° Male Elbow |
| 138 | 8410419 | Air Chuck | 207 | 8109468 | Pressure Regulator |
| 139 | 8107664 | Bolt, Nut & Spacer Kit (Ea.) | 208 | 8109769 | Decal Tire Bead Valve |
| 141 | 8010027 | 1/2" Washer | 209 | 8111144 | Operating Instructions |
| 142 | 8107985 | Air Guage Kit Flange Mounting | 210 | 8120408 | HHCS 1/4"-20 x 1-3/4", Gr. 5 |
| 143 | 8107517 | Gauge Lens, Screw On | 211 | 8143169 | 1/4"-20 Whiz Lock Nut, Gr. 5 |
| 144 | 8106289 | 1/4" Hose 22" | 212 | 8181998 | St. Fitting 3/8" Tube x 1/4 NPT |
| 145 | 8106301 | 1/4" Hex Whiz Lock Self-Tapping Screw, Gr.5 | 213 | 8108842 | Detent Label |
| 146 | 85009959 | 3/4" Elbow | 214 | 8107637 | Spring |
| 147 | 8105671 | End Cap (1/4" Valve) | 215 | 8107636 | Positioning Cone |
| 148 | 8104596 | 10-32 Self-Tapping Screw | 216 | 8107790 | Protector Set Boot, Set of 10 |
| 149 | 8104649 | Poppet (1/4" Valve) | 218 | 8107641 | Adapter Plate |
| 150 | 8104600 | 1/4" Valve Complete | 219 | 8107634 | Cushion Thin |
| 151 | 8104673 | Bushing 1/4" Valve | 220 | 8107734 | Spacer Cushion |
| 152 | 8104613 | 5/8" External Lock Washer | 223 | 8107662 | HHCS 1/2" x 5" |
| 153 | 8104611 | 5/8" Jam Nut N.F. | 227 | 85608906 | Rod End Shaft |
| 154 | 8106350 | End Cap 3/4" Valve | 228 | 85608715 | 8" Cylinder Assembly |
| 155 | 8104651 | Spring 3/4" Valve | 229 | 85608739 | 7" Cylinder Assembly |
| 156 | 8104652 | Poppet 3/4" Valve | 230 | 8108319 | 3/4 x 27-1/2" Hose |
| 157 | 8106298 | 3/4" Valve Ported 1/4-18 NPT | 231 | 8101346 | 1/2 x 1-1/4" Hose Clamp |
| 158 | 8104674 | Bushing 3/4" Valve | * | 85606363 | 16mm Hose Clamp |
| 159 | 8104612 | 3/4" Lock Washer | * | 8099050 | 3/8" ID x 5/8" OD Black Hose, 54" L |
| 160 | 8104610 | 3/4" Jam Nut N.F. | * | 85608994 | 8" Cylinder Seal Kit |
| 161 | 85608918 | Air Flate Pedal | * | 85608995 | 7" Cylinder Seal Kit |
| 162 | 8106281 | 1/4" Hose 20" | 236 | 85608922 | Upper Bead Loosener Mount |
| 163 | 8109672 | Air Tube Complete | 237 | 85608921 | Upper Bead Loosener Tube Adjustment |
| 176 | 8102840 | Spring | 238 | 8143168 | 1/4-20 x 3/4 HHCS Whiz Lock Screw |
| 177 | 8107724 | Clevis Pin | 239 | 85608932 | Valve Bracket |
| 182 | 8107983 | Plastic Fastener Gauge Mounting | 240 | 8184878 | Pedal Valve |
| 183 | 8107413 | Serrated Washer H.D. Bolt 3/8" x 1", Gr.5 | 241 | 85606363 | 16mm Hose Clamp |
| 184 | 8109849 | Inflation Warning Decal | 242 | 8000745 | Plain Washer |
| 185 | 8101018 | Washer | 243 | 8301016 | 3/8 x 3/8 x 5/16-18 SHSS Screw |
| 186 | 8107738 | Spacer Bushing | 244 | 85608931 | Valve Plate |
| 187 | 8107715 | HHCS 3/8"-16 x 1-1/4", Gr.5 (Ea.) | * | 8106303 | 3/8" Whiz Lock Nut |
| 188 | 8108109 | Lower Shoe Adjustment Decal | * | 8107413 | 3/8-16 x 1 SHWH Screw, Zinc |
| 189 | 8108147 | Hold Down Tube | 247 | 8184388 | 5/16-18 x 1 HWHTCS Screw, Typ 23 |
| 191 | 8111185 | Nylon Tube 3/8" OD x 24" | 248 | 8106032 | Foot Pedal Guard |
| 192 | 8110325 | 1/4" NPT Male Run Tee | 249 | 85608917 | Pedal Rotate |
| 193 | 8101428 | 1/4" Hose Clamp | * | 8000525 | 5/16-18 Hex Lock Nut |
| 194 | 8109466 | Valve | 251 | 85609673 | Cylinder Service Kit w/Oil |
| 195 | 8111255 | Spl. Tee, 1/4 NPT x 1/4 x 3/8 | | | |
| 197 | 8110496 | Volumn Chamber | | | |
| 198 | 8109471 | 1/8" Close Nipple | | | |
| 199 | 8109472 | 1/8" In-Line Filter | | | |
| 200 | 8111083 | Regulator | | | |

* Not Shown



Read and follow installation and maintenance instructions on this page and in the unit's Operation Instructions 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. As Hennessy can not be certain of the environment and conditions of the locations where the equipment will be installed, it is recommended that the safety manager review the shop floor conditions and local regulatory practices to determine if bolting of the equipment to the shop floor is necessary or advisable.

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 4070 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 machines Operating Instructions manual.

General Maintenance

1. The moving parts of the COATS 4070 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 15" or 16" steel wheel without a tire on the machine table top.

B. Cycle the machine and note the clearance between the flange of the wheel and the lower shoe (ref. 24). 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. 32) and add or remove shims (ref. 31) to bring shoe to the correct adjustment.

D. Tighten the bolt (ref. 32) and check adjustment again as described in steps A and B above. Bolt can be replaced with thumb screw 8110817 and washer 8000240 for quick shim change. Note 1/4" shim is recommended for 18" or custom wheels.

3. Air gauge calibration.

A. Mount a large 15" tire/wheel assembly on the machine table top. Pressurize the tire to 32 PSI. Measure the pressure with a high quality stick-typetire gauge. Connect the machine'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 3 turns.

C. Rotate the dial face until the 32 PSI graduation mark is aligned with the gauge 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 8107985 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.

8" Cylinder Maintenance (85608715)

Proper cylinder maintenance is necessary for safety and performance. The design of the hydraulically dampened 8" air cylinder (85608715) facilitates smooth, controlled bead loosening, mounting, and demounting. 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. If fast or jerky motion is noted, cease operation; then remove cylinder (85608715) and slave cylinder (85608739). Remove plug from slave cylinder and fill with oil until there is no air in either cylinder or connecting hose. A high quality hydraulic oil must be used (ref. 41). This can be ordered from COATS®, (615) 641-7533.



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

