

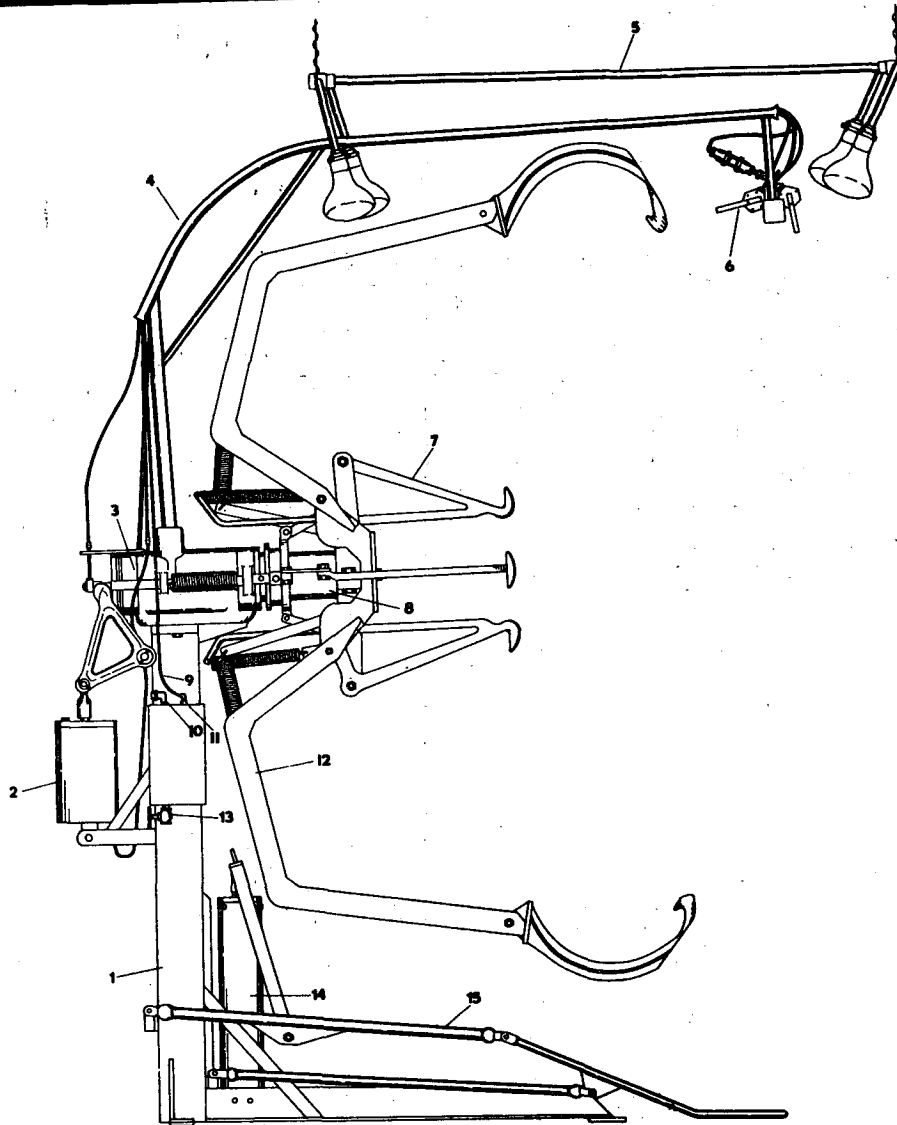
Branick

Tire Handling Equipment

Repair Parts Information

Full Circle Type Tire Spreader

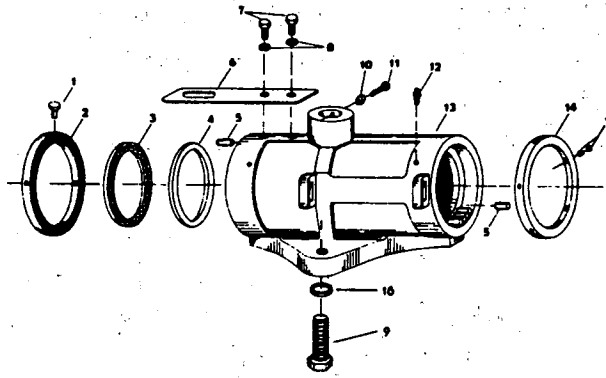
MODEL EF



MODEL "EF" GENERAL ASSEMBLY

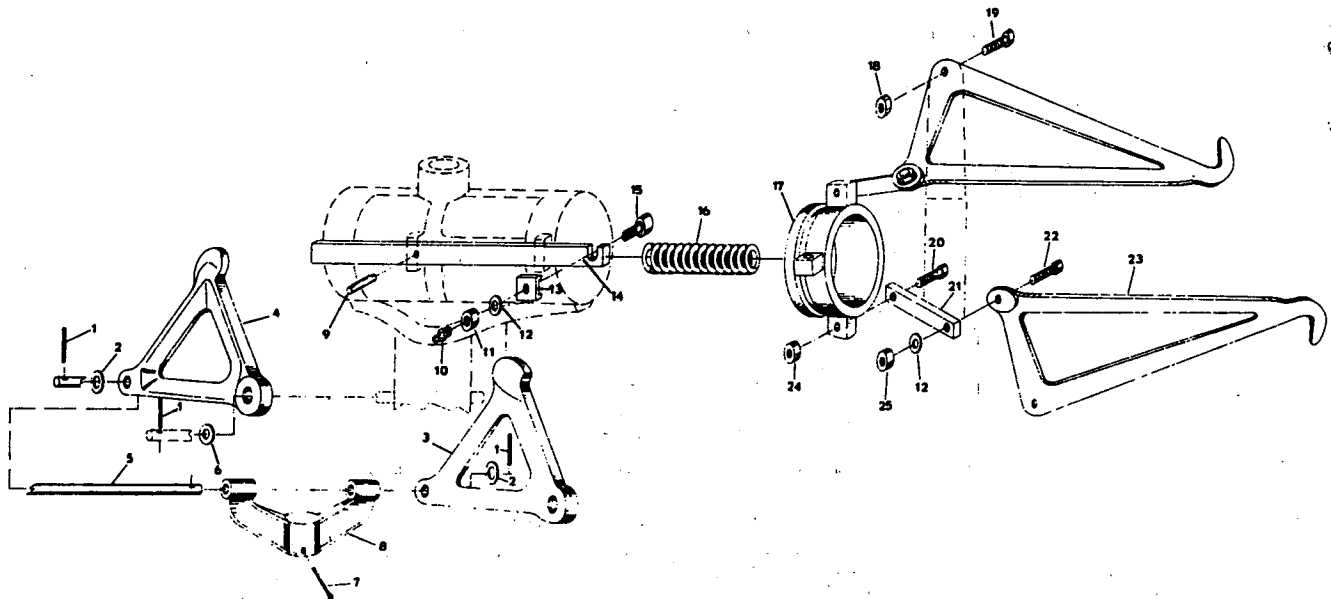
| ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION | PAGE NO. |
|----------|------------|--------------|------------|------------------------------|----------|
| 1 | ND 3.900 | EF-50 | 1 | Base & Column | PG. 1 |
| 2 | | | 1 | Dia. Arm Cylinder Assy. | PG. 3 |
| 3 | ND 476.900 | | 1 | Housing Assembly | PG. 2 |
| 4 | | | 1 | Valve Post Assy. | PG. 6 |
| 5 | ND 14.900 | | 1 | Light Fixture Assembly | PG. 6 |
| 6 | ND 12.900 | | 1 | Valve Assembly | PG. 7 |
| 7 | | | 1 | Dia Arm & Linkage | PG. 2 |
| 8 | | | 1 | Spread Cylinder Assy. | PG. 3 |
| 9 | ND 11.268 | 1571 | 1 | 1/4" x 26" Impolene Air Line | PG. 1 |
| 10 | ND 38.096 | 216 | 1 | 1/4"-90° St. Ell. | PG. 1 |
| 11 | ND 34.096 | 3480 | 1 | 1/4 - 1/4 Male Elbow | PG. 1 |
| 12 | | | 1 | Spread Arm Components | PG. 4 |
| 13 | ND 5.190 | 151 | 1 | 1/4 NPT Drain Cock | PG. 1 |
| 14 | | | 1 | Lift Cylinder Assembly | PG. 5 |
| 15 | | | 1 | Lift Cradle & Linkage | PG. 5 |

REPAIR PARTS LIST FOR MODEL EF SPREADER



ND 476.900 HOUSING ASSEMBLY

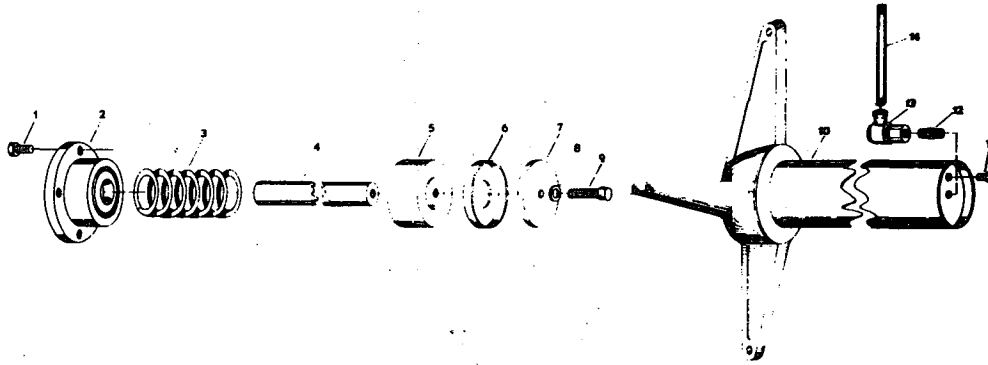
| ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION | ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION |
|----------|-----------|--------------|------------|-----------------------------|----------|------------|--------------|------------|-------------------------------|
| 1 | ND 46.028 | | 4 | 3/8" x 1 1/4" H.H.C.S. | 10 | ND 2.055 | 311 | 1 | 5/16" N.C. H.H. Jam Nut |
| 2 | ND 1.107 | 77 | 1 | Rear Collar | 11 | ND 3.028 | 383 | 1 | 5/16" x 1 1/4" Set Screw |
| 3 | ND 4.107 | 122F | 1 | Ball Thrust Bearing | 12 | ND 8.096 | 123 | 2 | 1/4" Grease Zerk |
| 4 | ND 2.107 | 121 | 1 | Inner Ball Race | 13 | ND 27.950 | A52 | 1 | Housing |
| 5 | ND 1.281 | 120 | 80 | Bearing Roller | 14 | ND 3.107 | 76F | 1 | Front Collar |
| 6 | ND 15.111 | | 1 | Air Line Bracket | 15 | ND 4.028 | 380 | 10 | 5/16" x 1/4" Socket Set Screw |
| 7 | ND 2.028 | 326 | 2 | 5/16" x 5/8" N.C. H.H.C.S. | 16 | ND 26.108 | | 2 | 5/8" Shakeproof Washer |
| 8 | ND 67.108 | | 2 | 5/16" Shakeproof Washer | 17 | ND 210.055 | | 4 | 3/8" N.C. Hex Locknut |
| 9 | ND 16.028 | 356 | 2 | 5/8" x 1 3/4" N.C. H.H.C.S. | | | | | |



DIAMETER ARMS & LINKAGE

| ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION | ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION |
|----------|------------|--------------|------------|-------------------------|----------|-----------|--------------|------------|-------------------------------|
| 1 | ND 5.061 | 378 | 4 | 1/8" x 1" Drive Pin | 14 | ND 3.104 | 69F | 2 | Slide Bar |
| 2 | ND 3.039 | 296 | 2 | 7/16" Machine Bushing | 15 | ND 2.281 | 70F | 2 | 1" Cam Roller |
| 3 | ND 1.157 | 58R | 1 | Bell Crank R. H. | 16 | ND 2.110 | 101 | 2 | Spring |
| 4 | ND 2.157 | 58L | 1 | Bell Crank L. H. | 17 | ND 1.489 | 55 | 1 | Sliding Collar |
| 5 | ND 14.149 | 108FR | 1 | Pivot Shaft | 18 | ND 58.055 | | 4 | 1/2" N. C. H.H. Lock Nut |
| 6 | ND 2.039 | 298 | 2 | 3/4" Machine Bushing | 19 | ND 23.028 | 345 | 4 | 1/2" x 2 1/2" N. C. H.H.C.S. |
| 7 | ND 166.061 | | 1 | 3/16 x 2 1/2 Cotter Pin | 20 | ND 8.028 | 339 | 4 | 7/16" x 1-1/2" N. C. H.H.C.S. |
| 8 | ND 1.267 | 108FC | 1 | Diameter Cylinder Yoke | 21 | ND 1.062 | | 4 | Sliding Collar Link |
| 9 | ND 4.061 | 109 | 2 | Slide Bar Pin | 22 | ND 7.028 | 338 | 4 | 7/16" x 1-1/4" N. C. H.H.C.S. |
| 10 | ND 10.096 | 110 | 2 | 3/16" Grease Zerk | 23 | ND 7.103 | 59 | 4 | Diameter Arm |
| 11 | ND 5.055 | 314 | 2 | 7/16" N.F. H.H. Jam Nut | 24 | ND 21.055 | | 4 | 7/16" N. C. H.H. Lock Nut |
| 12 | ND 38.108 | | 6 | 7/16" Shakeproof Washer | 25 | ND 3.055 | 313 | 4 | 7/16" N. C. H.H. Jam Nut |
| 13 | ND 14.111 | 129F | 2 | Slide Bar Clip | | | | | |

REPAIR PARTS LIST FOR MODEL EF SPREADER

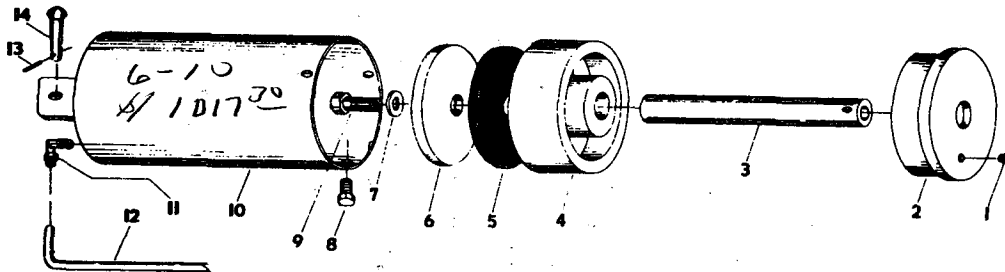


ND 20.900 SPREAD CYLINDER ASSEMBLY

| ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION |
|----------|------------|--------------|------------|-------------------------------|
| 1 | ND 14.028 | 327 | 4 | 5/16" x 1" N. C. H.H.C.S. |
| 2 | ND 29.950 | 56AR | 1 | Cover Plate |
| 3 | ND 3.110 | 104F | 1 | Spring |
| 4 | ND 5.149 | 67F | 1 | Piston Rod |
| 5 | ND 5.051 | | 1 | 4" Dia. Spread Piston |
| 6 | ND 7.041 | | 1 | Piston Cup |
| 7 | ND 10.108 | 3479 | 1 | Piston Cup Follower |
| 8 | ND 240.167 | G14M | 1 | 14 M.M. Gasket |
| 9 | ND 13.028 | 351 | 1 | 9/16" x 1-3/4" N. C. H.H.C.S. |
| 10 | ND 23.950 | 54S51 | | Spread Arm Cylinder |

RELATED PARTS NOT INCLUDED IN ND 20.900 ASSEMBLY

| | | | | |
|----|------------|------|---|------------------------------|
| 11 | ND 1.006 | 232B | 1 | 1/4" Oil Plug |
| 12 | ND 170.096 | | 1 | 1/4" Trueflute Nipple |
| 13 | ND 27.034 | | 1 | 1/4 - 90° Quick Coupler |
| 14 | ND 14.268 | | | 1/4" x 4" Pipe Nipple |
| | ND 135.643 | | | 1.038 Swivel Replacement Kit |



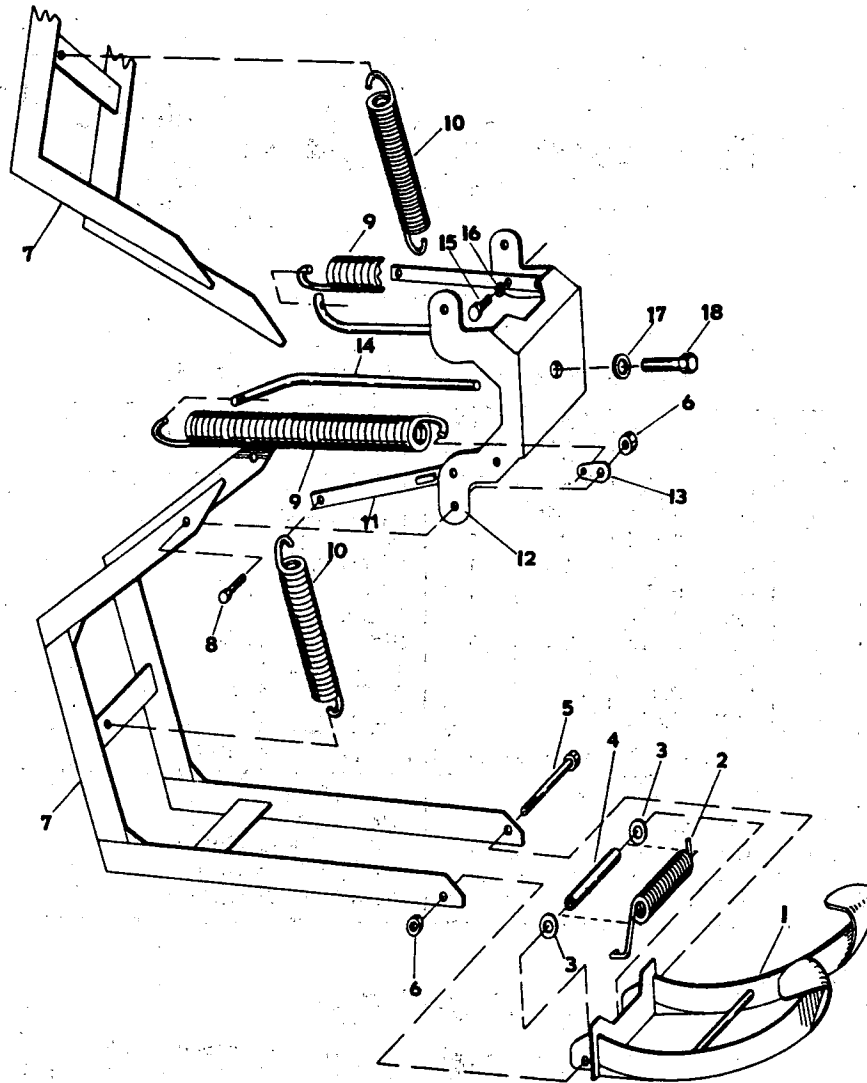
ND 43.900 DIAMETER ARM CYLINDER ASSEMBLY

| ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION |
|----------|------------|--------------|------------|-------------------------------|
| 1 | ND 4.006 | | 1 | #1 Caplug |
| 2 | ND 1.264 | 400M | 1 | Cylinder Head |
| 3 | ND 2.104 | 131 | 1 | Piston Rod |
| 4 | ND 16.051 | | 1 | 5-1/4" Dia. Piston |
| 5 | ND 9.041 | | 1 | Piston Cup |
| 6 | ND 33.101 | | 1 | Piston Cup Follower Plate |
| 7 | ND 240.167 | G14M | 1 | 14 M.M. Gasket |
| 8 | ND 5.028 | 336 | 3 | 7/16" x 3/4" N. C. H.H.C.S. |
| 9 | ND 13.028 | 351 | 1 | 9/16" x 1-3/4" N. C. H.H.C.S. |
| 10 | ND 64.950 | | 1 | Dia. Arm Cylinder |
| 11 | ND 34.096 | 3480 | 1 | 1/4 - 1/4 Male Elbow |

RELATED PARTS NOT INCLUDED IN ND 43.900 ASSEMBLY

| | | | | |
|----|-----------|-----|---|-------------------------------|
| 12 | ND 6.268 | | 1 | 1/4" x 3/4" Impolene Air Line |
| 13 | ND 5.061 | 378 | 2 | 1/8" x 1" Drive Pin |
| 14 | ND 20.149 | | 1 | Diam. Cyl. Pin |

REPAIR PARTS LIST FOR MODEL EF SPREADER



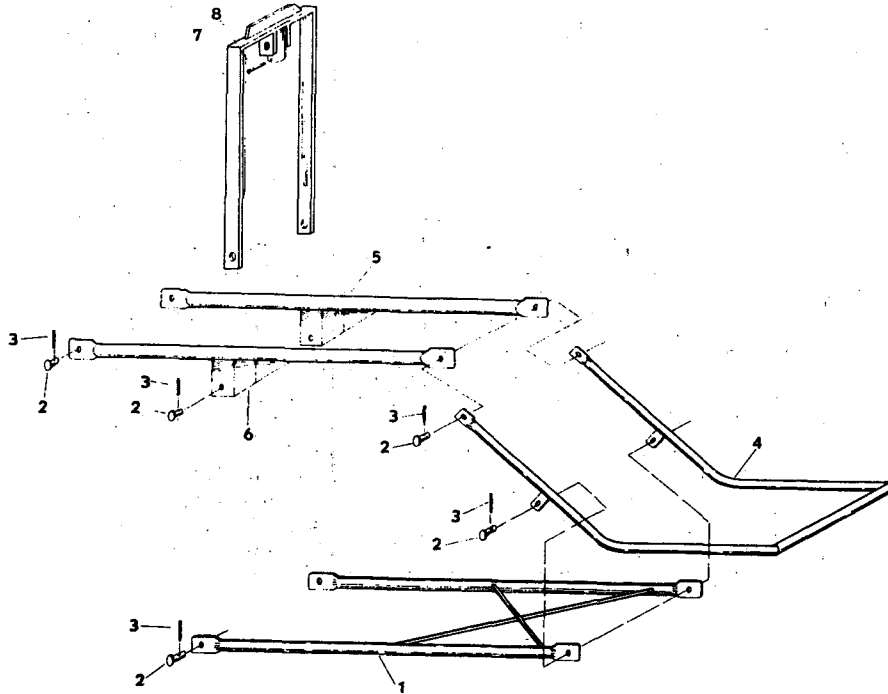
ND 19.900 SPREAD ARM ASSEMBLY (2 REQ'D)

| ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION |
|----------|-----------|--------------|------------|----------------------------------|
| 1 | ND 20.950 | 60R | 1 | Bead Hook |
| 2 | ND 6.110 | 254F | 1 | Bead Hook Spring |
| 3 | ND 9.108 | 194 | 2 | 1/2" Fiber Washer |
| 4 | ND 4.446 | 137 | 1 | Spring Sleeve |
| 5 | ND 3.242 | 375 | 1 | 1/2" x 7-1/2" N. C. Machine Bolt |
| 6 | ND 58.055 | | 1 | 1/2" N. C. H.H. Lock Nut |
| 7 | ND 18.900 | 64 | 1 | Spread Arm |

RELATED PARTS NOT INCLUDED IN ND 19.900 ASSEMBLY

| | | | | |
|----|------------|------|---|--------------------------------------|
| 6 | ND 58.055 | | 4 | 1/2" N. C. H.H. Lock Nut |
| 8 | ND 34.028 | 342 | 4 | 1/2" x 1-1/4" N. C. H.H.C.S. |
| 9 | ND 4.110 | 98 | 2 | Ext. Head Return Spring |
| 10 | ND 5.110 | 100 | 2 | Spread Arm Spring |
| 11 | ND 17.950 | 66FC | 2 | Spring Bar |
| 12 | ND 2.264 | 49FC | 1 | Extension Head |
| 13 | ND 5.017 | 127 | 2 | Return Spring Clip |
| 14 | ND 15.149 | 97 | 2 | Return Spring Rod |
| 15 | ND 10.028 | 275 | 4 | 1/4" x 3/4" N. C. H.H.C.S. |
| 16 | ND 63.108 | | 4 | 1/4" Shakeproof Washer |
| 17 | ND 7.108 | 295 | 1 | 3/4" Shakeproof Washer |
| 18 | ND 9.028 | 361 | 1 | 3/4" x 1-3/4" N. C. H.H.C.S. |
| 19 | ND 19.101 | | 1 | 3/16 x 3/8 x 7/8 Detent Plate)Not |
| 20 | ND 223.028 | | 1 | 3/8 NF x 5/8 Socket Set Screw)Shown |

REPAIR PARTS LIST FOR MODEL EF SPREADER

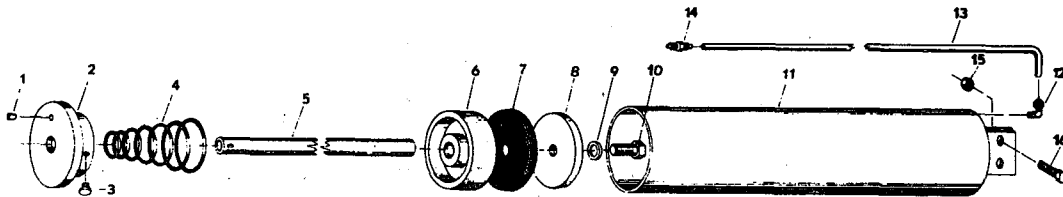


ND 5.900 LIFT ARM & CRADLE ASSEMBLY

| ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION |
|----------|-----------|--------------|------------|----------------------|
| 1 | ND 6.950 | 106 | 1 | Lower Arm Sub-Assy. |
| 2 | ND 1.003 | 1810 | 10 | Button Head Rivet |
| 3 | ND 9.061 | | 10 | 5/32" x 1" Drive Pin |
| 4 | ND 5.950 | 105 | 1 | Lift Cradle |
| 5 | ND 22.950 | 107R | 1 | Upper Arm - R.H. |
| 6 | ND 7.950 | 107L | 1 | Upper Arm - L.H. |

RELATED PARTS NOT INCLUDED IN ND 5.900 ASSEMBLY

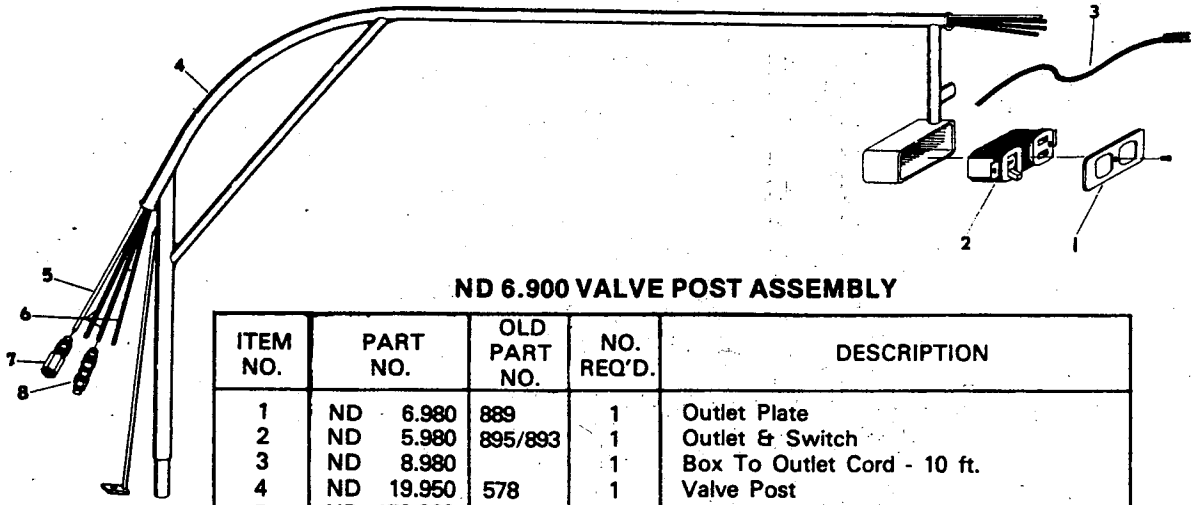
| | | | | |
|---|-----------|-----|---|---------------------------|
| 7 | ND 11.950 | 134 | 1 | Lift Yoke |
| 8 | ND 3.061 | 390 | 1 | 5/32" x 1-1/2" Cotter Pin |



ND 8.900 LIFT CYLINDER ASSEMBLY

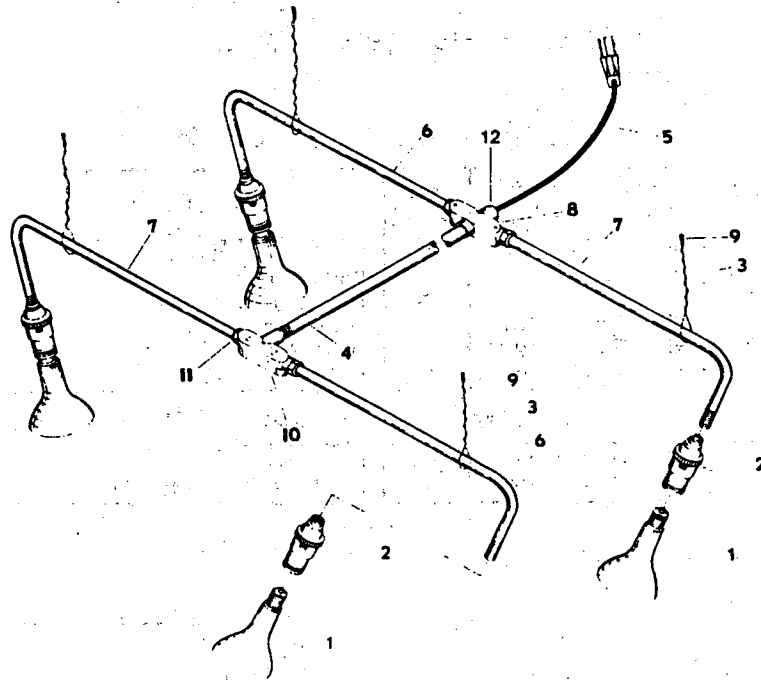
| ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION | ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION |
|----------|------------|--------------|------------|-----------------------------|---|------------|--------------|------------|-------------------------------|
| 1 | ND 4.006 | 1581 | 1 | #1 Caplug | 10 | ND 239.028 | 350 | 1 | 9/16" x 1-1/4" N. C. H.H.C.S. |
| 2 | ND 3.098 | 4 | 1 | Cylinder End Cap | 11 | ND 13.950 | 8 | 1 | Lift Cylinder |
| 3 | ND 2.028 | 326 | 3 | 5/16" x 5/8" N. C. H.H.C.S. | 12 | ND 34.096 | 3480 | 1 | 1/4 - 1/4 Male Elbow |
| 4 | ND 7.110 | 165 | 1 | Lift Cylinder Spring | 13 | ND 5.268 | | 1 | 1/4" x 60" Impolene Air Line |
| 5 | ND 3.149 | 5 | 1 | Piston Rod | 14 | ND 35.096 | 3482 | 1 | 1/4 - 1/4 Tube Union |
| 6 | ND 23.051 | | 1 | 3-1/2" Dia. Lift Piston | RELATED PARTS NOT INCLUDED IN ND 8.900 ASSEMBLY | | | | |
| 7 | ND 15.041 | 10 | 1 | Piston Cup | | | | | |
| 8 | ND 32.108 | | 1 | Piston Cup Washer | 15 | ND 58.055 | | 2 | 1/2" N. C. H.H. Lock Nut |
| 9 | ND 240.167 | G14M | 1 | 14 M.M. Gasket | 16 | ND 25.028 | 343 | 2 | 1/2" x 1-1/2" N. C. H.H.C.S. |

REPAIR PARTS LIST FOR MODEL EF SPREADER



ND 6.900 VALVE POST ASSEMBLY

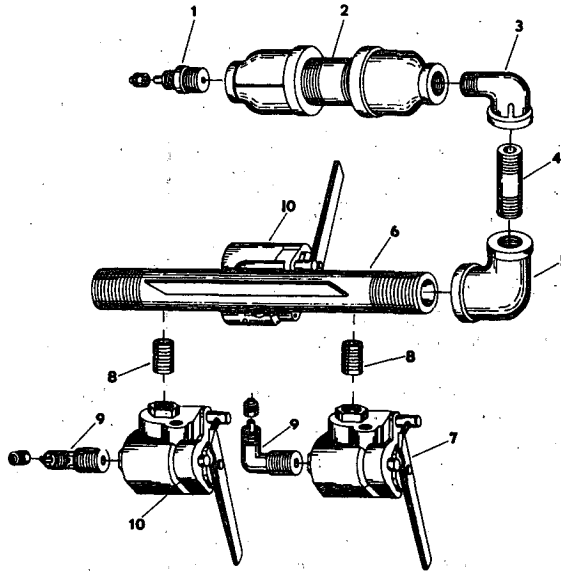
| ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION |
|----------|------------|--------------|------------|------------------------------|
| 1 | ND 6.980 | 889 | 1 | Outlet Plate |
| 2 | ND 5.980 | 895/893 | 1 | Outlet & Switch |
| 3 | ND 8.980 | | 1 | Box To Outlet Cord - 10 ft. |
| 4 | ND 19.950 | 578 | 1 | Valve Post |
| 5 | ND 172.268 | | 1 | 1/4" x 94" Impolene Air Line |
| 6 | ND 173.268 | | 3 | 1/4" x 97" Impolene Air Line |
| 7 | ND 14.096 | 3483 | 1 | 1/4 - 1/4 Female Connector |
| 8 | ND 35.096 | 3482 | 3 | 1/4 - 1/4 Tube Union |



ND 14.900 LIGHT FIXTURE ASSEMBLY

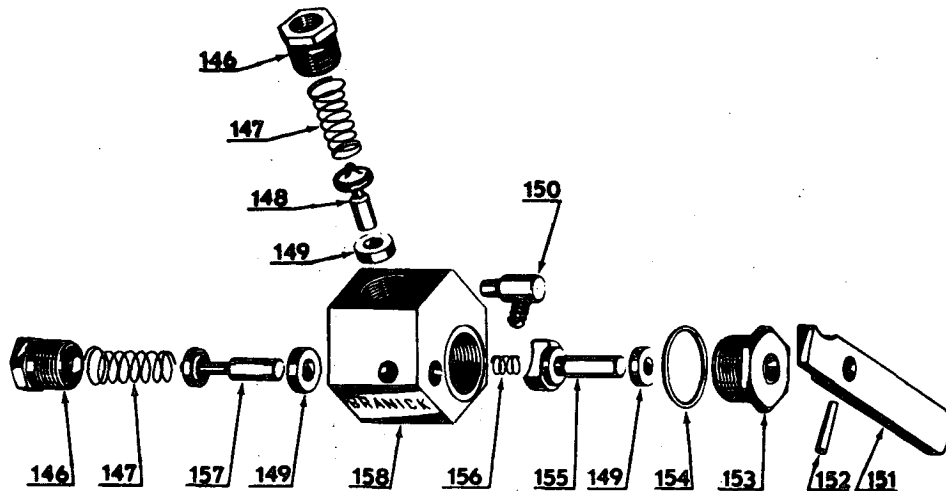
| ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION |
|-----------|------------|--------------|------------|--|
| 1 | ND 7.376 | | 4 | 150W Spot Lamp 110V |
| 2 | ND 56.980 | | 4 | 3/8" Lamp Holders |
| 3 | ND 3.450 | 552 | 4 | Suspending Cable |
| 4 | ND 3.268 | | 1 | Center Bar |
| 5 | ND 2.980 | | 1 | 36" Cord |
| 6 | ND 112.103 | | 2 | Light Fixture Arm - L.H. |
| 7 | ND 6.103 | | 2 | Light Fixture Arm - R.H. |
| 8 | ND 20.980 | 615 | 1 | 1/2" Conduit Cross |
| 9 | ND 3.446 | | 4 | Suspending Cable Clamp |
| 10 | ND 3.980 | 614 | 1 | 1/2" Conduit Tee |
| 11 | ND 1.039 | 229 | 4 | 1/2" to 3/8" Pipe Bushing |
| 12 | ND 27.980 | | 1 | 3/8 Connector |
| Not Shown | | | | |
| | ND 39.298 | | 4 | 16 Gage Electrical Wire Connecting Lamps Plastic Lamp Guard |

REPAIR PARTS LIST FOR MODEL EF SPREADER



ND 12.900 VALVE ASSEMBLY

| ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION |
|----------|------------|--------------|------------|-----------------------------|
| 1 | ND 11.096 | 3481 | 1 | 1/4 - 1/4 Male Connector |
| 2 | ND 1.018 | 88A | 1 | Branick Air Cleaner |
| 3 | ND 38.096 | 216 | 1 | 1/4" - 90° St. Ell. |
| 4 | ND 7.096 | 241 | 1 | 1/4" x 2" Pipe Nipple |
| 5 | ND 3.291 | 225 | 1 | 1/2" to 1/4" Reducing Elbow |
| 6 | ND 334.950 | 26 | 1 | Valve Manifold |
| 7 | ND 279.190 | 87:48 | 1 | Branick #48 3-Way Air Valve |
| 8 | ND 221.096 | 240 | 3 | 1/4" Close Nipple |
| 9 | ND 34.096 | 3480 | 3 | 1/4 - 1/4 Male Elbow |
| 10 | ND 3.190 | 87:30 | 2 | Branick #30 3-Way Air Valve |



BRANICK 3-WAY VALVE

| ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION | ITEM NO. | PART NO. | OLD PART NO. | NO. REQ'D. | DESCRIPTION |
|----------|------------|--------------|------------|-----------------------|----------|------------|--------------|------------|--------------------|
| 146 | ND 4.039 | 87A | 2 | Valve Bushing | 154 | ND 2.167 | 87J | 1 | Gasket |
| 147 | ND 15.110 | 87B | 2 | Spring | 155 | ND 1.350 | 87K | 1 | Valve Cam |
| 148 | ND 189.950 | 87C | 1 | Intake Stem | 156 | ND 14.110 | 87L | 1 | Cam Spring |
| 149 | ND 1.290 | 87D | 3 | Valve Seat | 157 | ND 190.950 | 87N | 1 | Exhaust Stem |
| 150 | ND 193.950 | 87E | 1 | Return Spring & Brkt. | 158 | ND 12.190 | 87M | 1 | Size 30 Valve Body |
| 151 | ND 9.157 | 87F | 1 | Lever | 158 | ND 14.190 | 87P | 1 | Size 48 Valve Body |
| 152 | ND 30.061 | 87G | 1 | 1/8" x 5/8" Drive Pin | | ND 127.643 | | | Repair Kit |
| 153 | ND 24.055 | 87H | 1 | Cam Nut | | | | | |

COMMERCIAL WARRANTY

This product is warranted by BRANICK INDUSTRIES, INC. to the original user-owner against defective materials or workmanship for a period of one year from the date of delivery. During the warranty period, product found to be defective will be repaired or replaced at, BRANICK INDUSTRIES, INC.'s option, without charge. The product must be returned, with prior approval, transportation charges prepaid and with proof of original delivery date, to BRANICK INDUSTRIES, INC., 4245 Main Ave., Fargo, North Dakota 58107. The repaired or replacement product will be returned with transportation charges prepaid by Branick.

This warranty does not cover defects in the product caused by ordinary wear and tear, abuse, misuse, overloading, accident (including shipping damage), improper maintenance, alteration, or any other cause not the result of defective materials or workmanship.

REPAIR OR REPLACEMENT IS THE EXCLUSIVE REMEDY FOR DEFECTIVE PRODUCT UNDER THIS WARRANTY. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OF THIS PRODUCT. BRANICK INDUSTRIES, INC. SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES.

BRANICK INDUSTRIES, INC. reserves the right to make changes in the design or construction of our products without obligation to incorporate such changes in products already sold and without notice.

Service parts, warranty, and regular repair service for products are available from Branick authorized distributors or from:

BRANICK INDUSTRIES, INC.
4245 Main Ave.
Box 1937
Fargo, North Dakota 58107.
701/281-8888

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