

Branick®

Branick

Retread Equipment Automotive Division

Operating Instructions Full Circle Type Tire Spreader MODEL EF

INSTALLATION

Model eF may be put in operation in less than an hour. First unbolt the two spring-support bars and turn them around to extend toward the back of the spreader. Fasten the two springs to the supports and then rebolt the spring-support bars. Place the valve bracket in the socket on top of the cylinder housing and lock in place with the set screw. Hang light fixture assembly above spreader to dimensions shown. Plug into outlet at valve post. Use a piece of ¼" hose from your air supply line. Blow air out of hose to remove any rust particles which may have accumulated in the air line and then connect the hose to air intake of the Air Line Water Trap.

PLACING TIRE ON SPREADER

Models F and FS, tire is placed on the bead hooks by hand. Place both hands under the casing, then stand on the foot pedal with your entire weight. Tip the toe forward on the foot pedal to lock the bead hooks securely in position to hold the casing.

Model eF utilizes an air-operated lift. Roll tire casing onto lift, then balancing the casing with one hand, open the right-hand valve. Allow the casing to raise slightly above the inner bead hooks, then drop it over these hooks. Slowly open the center valve which applies power to the inner bead hooks and moves them laterally outward to engage the inner bead of the casing. Release the air from the lift cylinder to lower the lift.

SPREADING THE CASING

Model eF uses bead hooks which encircle the tire and hook onto the outer bead of the casing. With the inbead hooks holding the tire securely, grasp both outer bead hook arms by the handles and pull to the center of the casing. Push forward and allow the hooks to engage the outer bead of the casing. **MAKE CERTAIN ALL HOOKS ARE SECURE ON THE CASING BEFORE SPREADING TIRE.** Slowly open the valve, controlling the spreading power, until the tire is spread to the desired width. Release the valve handle and the tire will remain open.

MAINTENANCE

Cylinders

Once a month pour about ¼ cup of ordinary cylinder oil into all cylinders. This oil helps to preserve the neoprene piston cup as well as to provide an air seal and lubrication. On the main cylinder there is an oil level plug in the rear of the cylinder.

Pistons

It may be necessary to remove the piston to clean out the sediment, which may accumulate on installations where the air compressor is kept in a damp basement. This may be necessary only when the piston will not go back to starting point.

Moving Parts

Use lubricating oil on all moving parts such as bolts, hinges, piston rods, rollers and the like. Lubricate once a month.

Every six months grease the cylinder bearings through the zerk fittings. Oil the races, on which these bearings revolve, through the narrow joint at the front and rear of the cylinder housing.

Flex-Joint

Older models before Serial No. 7077 October 1964 had the Flexo-Joint with a gasket. On these the large union cover should be tightened when necessary with fingers only. A set screw is provided to hold this cover securely.

From Serial No. 7078 on, the new rotating flex joint does not have a gasket, but uses 'O' ring seals. They can be replaced when necessary.

OPERATION OF 3-WAY AIR VALVE

The compressed air supplied to each cylinder is controlled by a three-way valve. Moving the handle to the 'ON' position against the spring loaded stop allows air to enter the cylinder. The air will remain in the cylinder when the handle is released and until the handle is moved to the 'RELEASE' position.

The air cleaner used on all models contains a small amount of wool waste and copper mesh which traps rust and other sediment. If spreader operation becomes sluggish, replace air cleaner.

HOW TO ORDER

When ordering spare parts for any model, give the Serial No., the complete part name and part number.

Serial Number is found on Name Plate on Extension Head.

Branick®

DIRECTION FOR HANGING THE LIGHT FIXTURE FOR MODEL EF

First: Locate the machine.

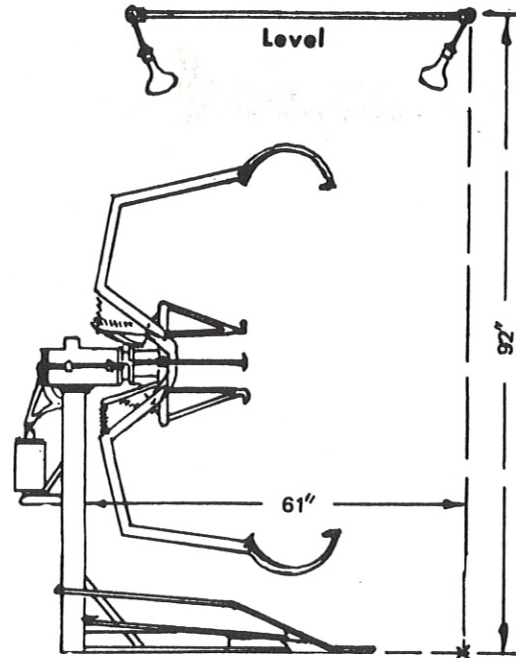
Second: Measure directly out from front of column 61" and make mark on floor.

Third: Hang light fixture with center of front cross 92" from floor and directly over mark on floor. Use plumb bob.

Fourth: Level fixture and have it in line with machine.

INSTALLATION

Place valve Bracket in the socket at the top of the Housing and Bolt. Brace to Housing. Connect light cord from box to your 110 volt circuit. Hang the light fixture, as per instructions above.



COMMERCIAL WARRANTY

This equipment is warranted by Applied Power Inc. to the original commercial user-owner against defective materials or workmanship for a period of one year from the date of delivery, except for Models TJ-20, EL-200, EL-250, EL-500, ALJ, PHJ, BCL, TTC, DWL and RSL, which are warranted for ninety (90) days. During the warranty period, equipment found to be defective will be repaired or replaced (at the warrantor's option) without charge. The equipment must be returned, transportation charges prepaid, with proof of delivery date to Branick, The Retread Equipment Division, Applied Power Inc., Fargo, North Dakota 58102. The repaired or replaced equipment will be returned with transportation charges prepaid by Branick.

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

REPAIR OR REPLACEMENT IS THE EXCLUSIVE REMEDY FOR DEFECTIVE EQUIPMENT 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 ON THIS EQUIPMENT. APPLIED POWER INC. SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS EQUIPMENT.

WHEN THE QUESTION OF WARRANTY CLAIMS ARISE, CONTACT BRANICK FACTORY AT FARGO, NORTH DAKOTA.

Service parts, warranty, and regular repair service for products are available from Branick.

Should you require assistance, please contact:

BRANICK Retread Equipment
Automotive Division
Applied Power Inc.
P.O. Box 1937
Fargo, North Dakota 58102

BRANICK MFG. INC.
Box 1937
2600-3rd Avenue North
Fargo, North Dakota 58107

Branick[®]

Branick®

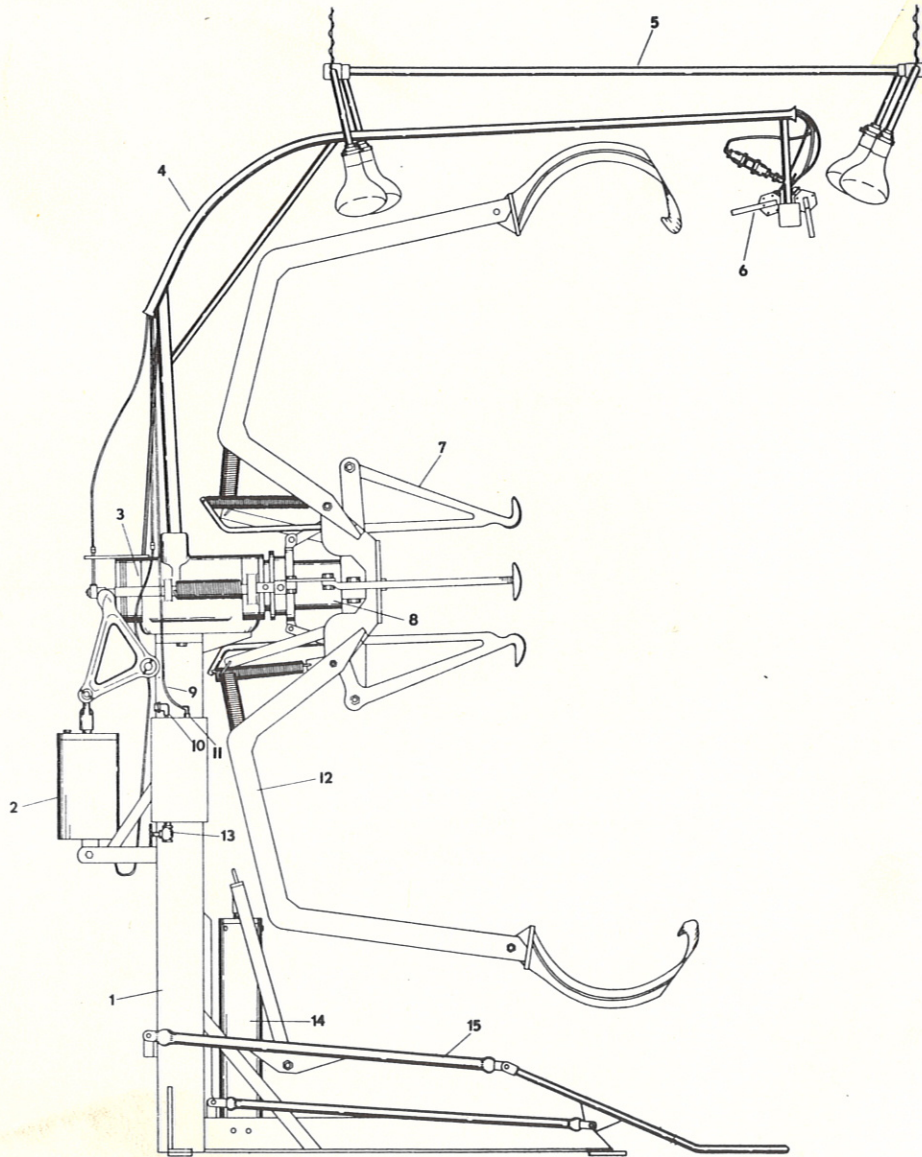
Branick

Retread Equipment Automotive Division

Repair Parts Information

Full Circle Type Tire Spreader

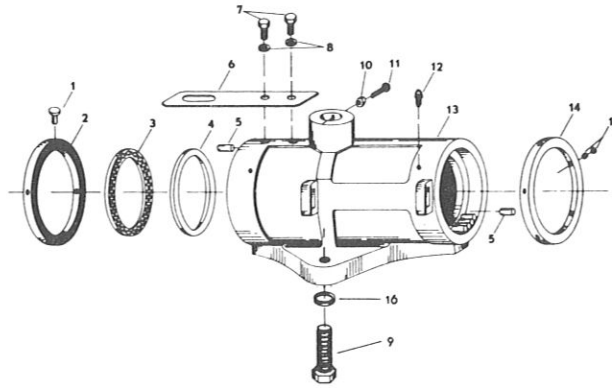
MODEL EF



MODEL "EF" GENERAL ASSEMBLY

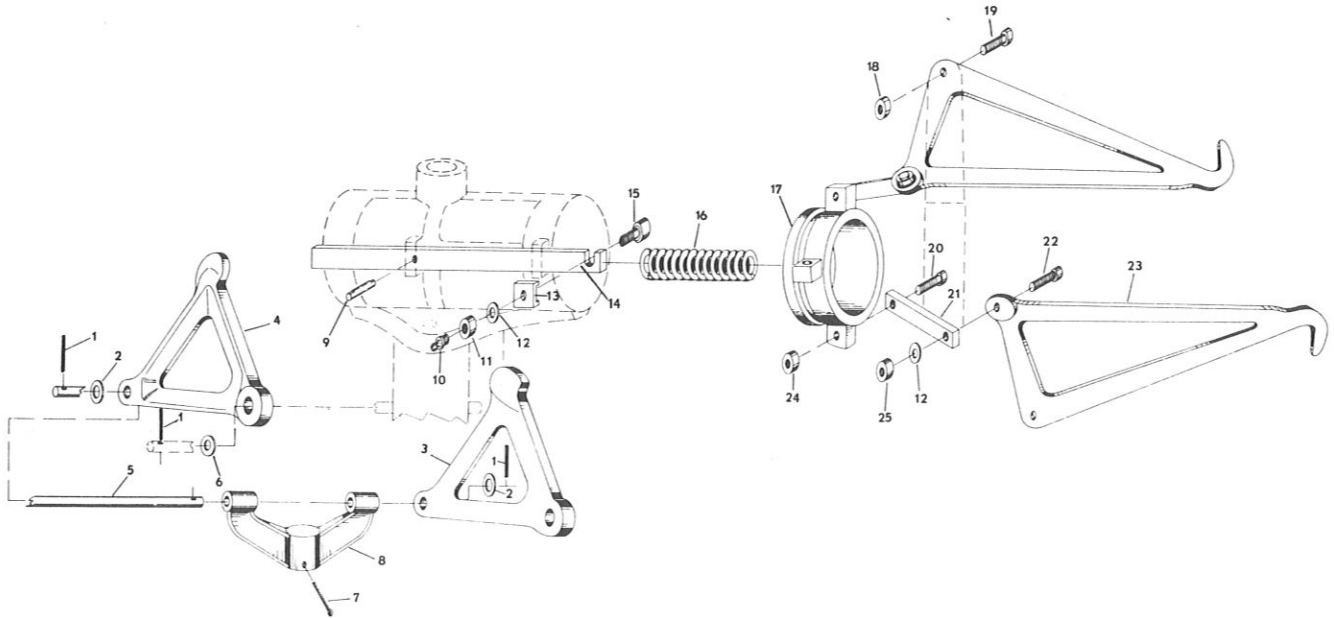
ITEM NO.	PART NO.	OLD PART NO.	NO. REQ'D.	DESCRIPTION	PAGE NO.
1	ND 3.900	EF-50	1	Base & Column	PG. 1
2			1	Dia. Arm Cylinder Assy.	PG. 3
3	ND 476.900		1	Housing Assembly	PG. 2
4			1	Valve Post Assy.	PG. 6
5	ND 14.900		1	Light Fixture Assembly	PG. 6
6	ND 12.900		1	Valve Assembly	PG. 7
7			1	Dia Arm & 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	Globe Valve	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

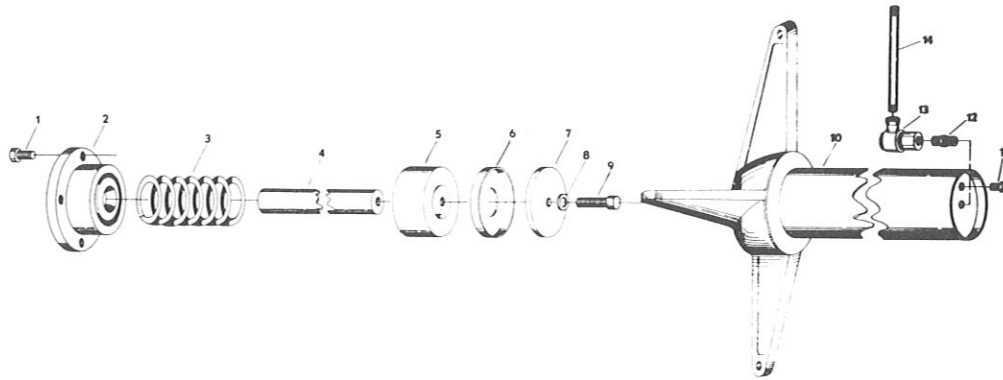
ITEM NO.	PART NO.	OLD PART NO.	NO. REQ'D.	DESCRIPTION	ITEM NO.	PART NO.	OLD PART NO.	NO. REQ'D.	DESCRIPTION
1	ND 46.028		4	3/8" x 1 1/4" H.H.C.S.	10	ND 2.055	311	1	5/16" N.C. H.H. Jam Nut
2	ND 1.107	77	1	Rear Collar	11	ND 3.028	383	1	5/16" x 1 1/4" Set Screw
3	ND 4.107	122F	1	Ball Thrust Bearing	12	ND 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 6.028	345	4	1/2" x 2" N. C. H.H.C.S.
7	ND 13.061		1	5/32" x 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

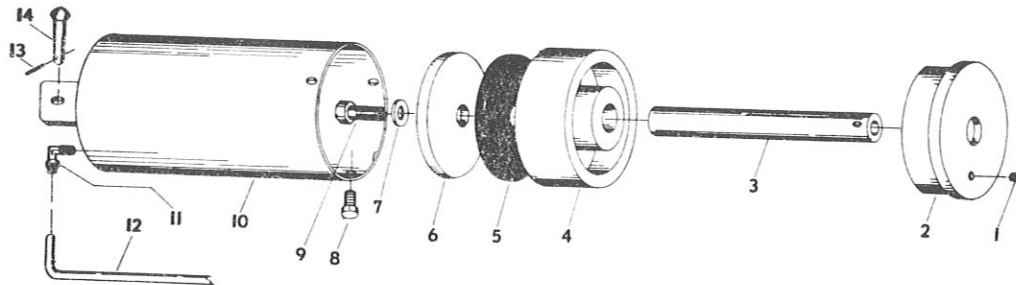


ND 20.900 SPREAD CYLINDER ASSEMBLY

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 13.096		1	1/4" Hex Nipple
13	ND 1.038	1030	1	Swivel Adaptor
14	ND 8.268	761		1/4" x 3" Pipe Nipple



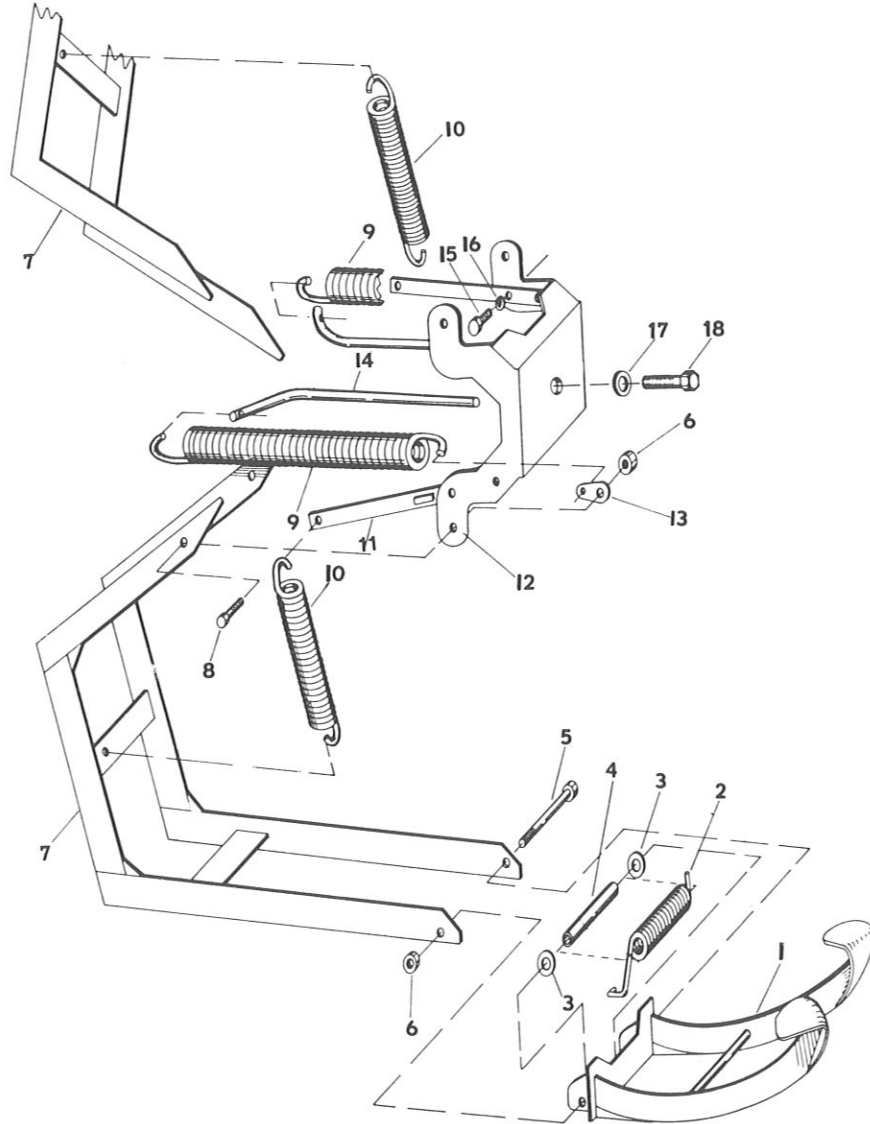
ND 43.900 DIAMETER ARM CYLINDER ASSEMBLY

ITEM NO.	PART NO.	OLD PART NO.	NO. REQ'D.	DESCRIPTION
1	ND 4.006	1581	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 34" Impolene Air Line
13	ND 5.061	378	2	1/8" x 1" Drive Pin
14	ND 20.149	366	1	Diam. Cyl. Pin

REPAIR PARTS LIST FOR MODEL EF SPREADER



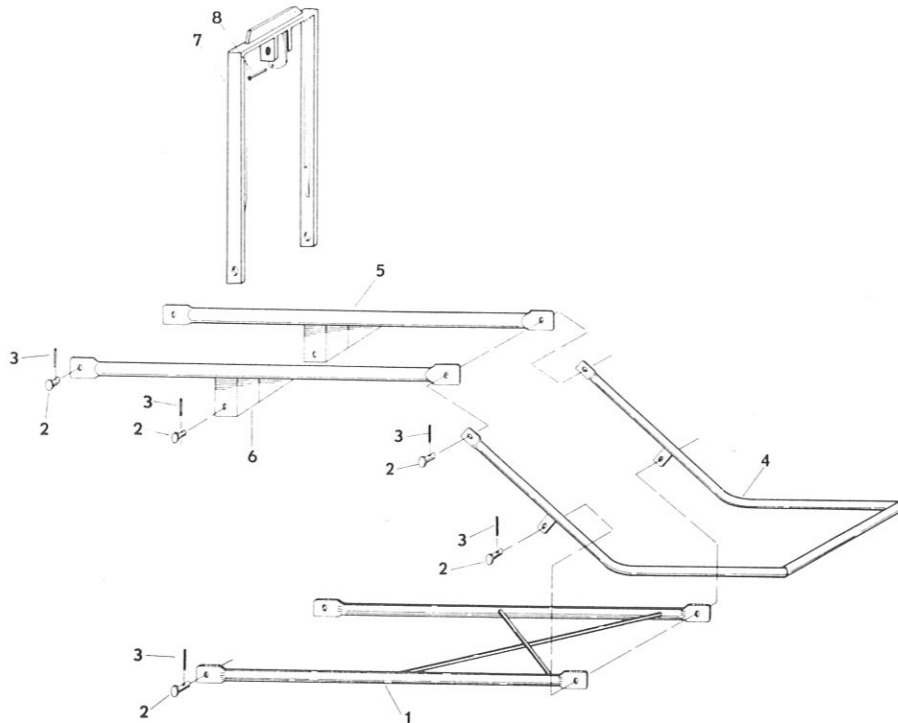
ND 19.900 SPREAD ARM ASSEMBLY (2 REQ'D)

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.

REPAIR PARTS LIST FOR MODEL EF SPREADER

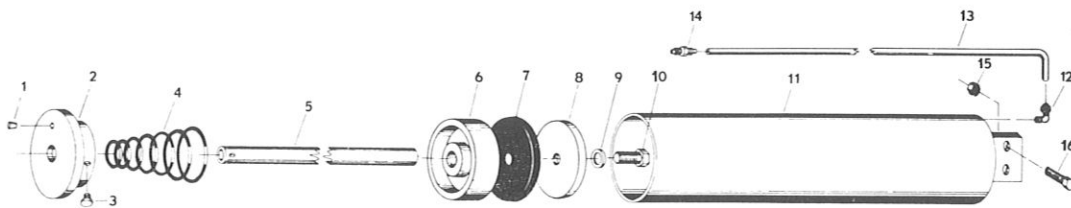


ND 5.900 LIFT ARM & CRADLE ASSEMBLY

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

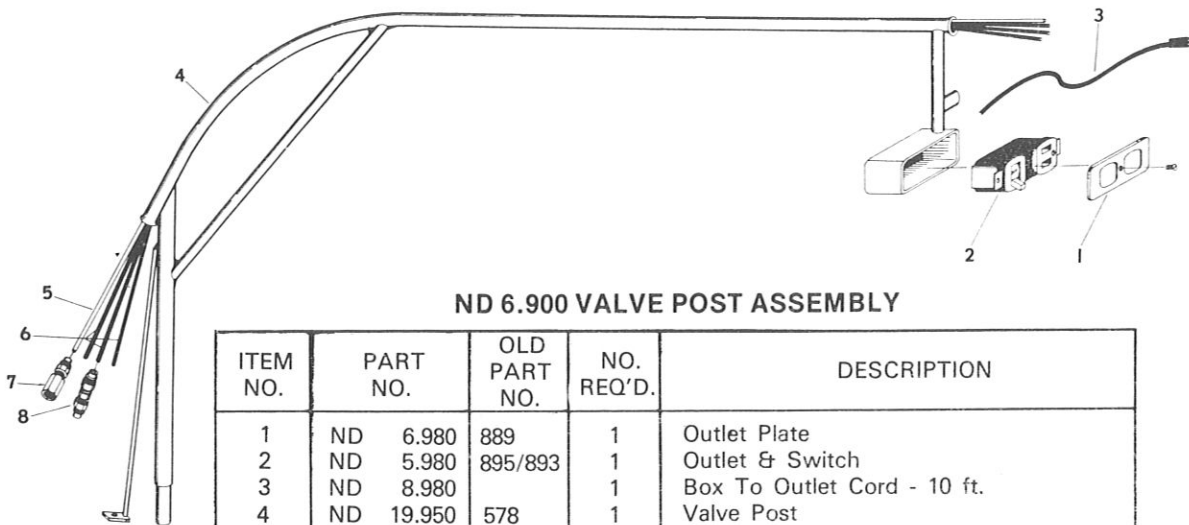
7	ND 11.950	134	1	Lift Yoke
8	ND 3.061	390	1	5/32" x 1-1/2" Cotter Pin



ND 8.900 LIFT CYLINDER ASSEMBLY

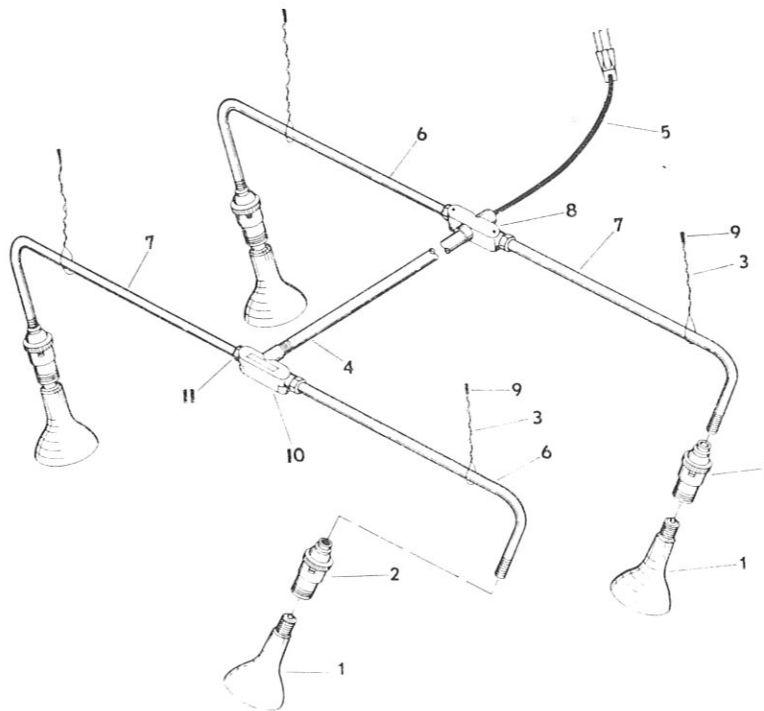
ITEM NO.	PART NO.	OLD PART NO.	NO. REQ'D.	DESCRIPTION	ITEM NO.	PART NO.	OLD PART NO.	NO. REQ'D.	DESCRIPTION
1	ND 4.006	1581	1	#1 Caplug	10	ND 239.028	350	1	9/16" x 1-1/4" N. C. H.H.C.S.
2	ND 3.098	4	1	Cylinder End Cap	11	ND 13.950	8	1	Lift Cylinder
3	ND 2.028	326	3	5/16" x 5/8" N. C. H.H.C.S.	12	ND 34.096	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	15	ND 58.055		2	1/2" N. C. H.H. Lock Nut
8	ND 32.108		1	Piston Cup Washer	16	ND 25.028	343	2	1/2" x 1-1/2" N. C. H.H.C.S.
9	ND 240.167	G14M	1	14 M.M. Gasket					

REPAIR PARTS LIST FOR MODEL EF SPREADER



ND 6.900 VALVE POST ASSEMBLY

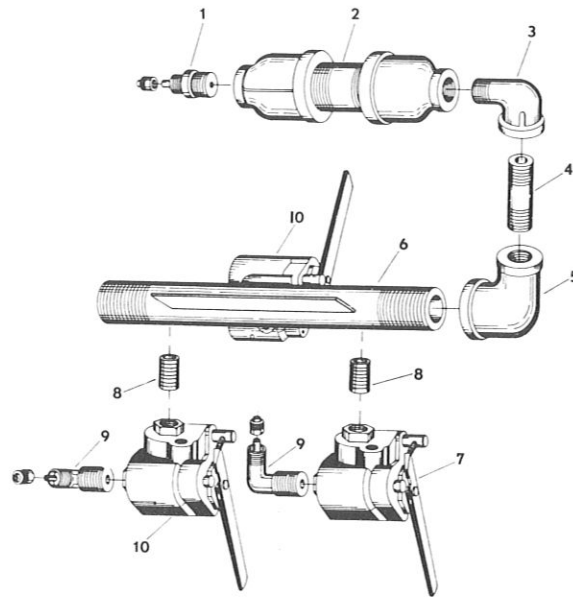
ITEM NO.	PART NO.	OLD PART NO.	NO. REQ'D.	DESCRIPTION
1	ND 6.980	889	1	Outlet Plate
2	ND 5.980	895/893	1	Outlet & Switch
3	ND 8.980		1	Box To Outlet Cord - 10 ft.
4	ND 19.950	578	1	Valve Post
5	ND 172.268		1	1/4" x 94" Impolene Air Line
6	ND 173.268		3	1/4" x 97" Impolene Air Line
7	ND 14.096	3483	1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



ND 14.900 LIGHT FIXTURE ASSEMBLY

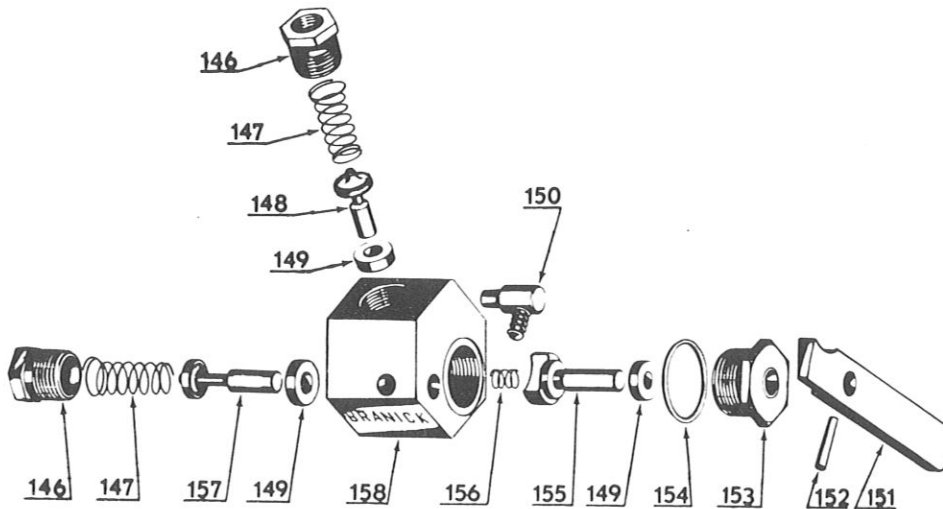
ITEM NO.	PART NO.	OLD PART NO.	NO. REQ'D.	DESCRIPTION
1	ND 1.376	199	4	100W Spot Lamp 110V
2	ND 56.980		4	3/8" Lamp Holders
3	ND 3.450	552	4	Suspending Cable
4	ND 3.268		1	Center Bar
5	ND 2.980		1	36" Cord
6	ND 112.103		2	Light Fixture Arm - L.H.
7	ND 6.103		2	Light Fixture Arm - R.H.
8	ND 20.980	615	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
Not Shown				16 Gage Electrical Wire Connecting Lamps

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 68.096	241	1	1/4" x 1-1/2" 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					
153	ND 24.055	87H	1	Cam Nut					

COMMERCIAL WARRANTY

This equipment is warranted by Applied Power Inc. to the original commercial user-owner against defective materials or workmanship for a period of one year from the date of delivery, except for Models TJ-20, EL-200, EL-250, EL-500, ALJ, PHJ, BCL, TTC, DWL and RSL, which are warranted for ninety (90) days. During the warranty period, equipment found to be defective will be repaired or replaced (at the warrantor's option) without charge. The equipment must be returned, transportation charges prepaid, with proof of delivery date to Branick, The Retread Equipment Division, Applied Power Inc., Fargo, North Dakota 58102. The repaired or replaced equipment will be returned with transportation charges prepaid by Branick.

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

REPAIR OR REPLACEMENT IS THE EXCLUSIVE REMEDY FOR DEFECTIVE EQUIPMENT 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 ON THIS EQUIPMENT. APPLIED POWER INC. SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS EQUIPMENT.

WHEN THE QUESTION OF WARRANTY CLAIMS ARISE, CONTACT BRANICK FACTORY AT FARGO, NORTH DAKOTA.

Service parts, warranty, and regular repair service for products are available from Branick.

Should you require assistance, please contact:

BRANICK Retread Equipment
Automotive Division
Applied Power Inc.
P.O. Box 1937
Fargo, North Dakota 58102

BRANICK MFG. INC.
Box 1937
2600-3rd Avenue North
Fargo, North Dakota 58107

The logo for Branick, featuring the word "Branick" in a large, bold, cursive script font with a registered trademark symbol (®) to the right.