

**TM 9-4910-687-14&P**

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**TECHNICAL MANUAL**

**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT  
AND GENERAL SUPPORT MAINTENANCE MANUAL  
INCLUDING REPAIR PARTS LIST**

**SPREADER, TIRE**

**TYPE I, STYLE A, SIZE I**

**(NSN 4910-00-725-0326)**

**(BRANICK RETREAD DIV., APPLIED POWER, INC.)**

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**

**FEBRUARY 1983**



Technical Manual }  
No. 9-4910-687-14&P }

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
Washington, DC, 4 February 1983

Operator's, Organizational, Direct Support  
And General Support Maintenance Manual  
Including Repair Parts List  
For

**SPREADER, TIRE  
TYPE I, STYLE A, SIZE I  
(NSN 491 0-00-725-0326)**

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2, located in the back of this manual direct to: Commander, US Army Armament Material Readiness Command, ATTN: DR SAR-MAS, Rock Island, IL 61299. A reply will be furnished direct to you.

**NOTE**

This manual is published for the purpose of identifying an authorized commercial manual for the use of the personnel to whom this equipment is issued.

Manufactured by: Branick Retread Division  
Applied Power, Inc.  
2600 3rd Ave. N., P. O. Box 1937  
Fargo, ND 58102

Procured under Contract No. DAAA09-78D-4000

**This technical manual is an authentication of the manufacturers' commercial literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.**

INSTRUCTIONS FOR REQUISITIONING PARTS

NOT IDENTIFIED BY NSN

When requisitioning parts not identified by National Stock Number, it is mandatory that the following information be furnished the supply officer.

- 1 - Manufacturer's Federal Supply Code Number. 71082
- 2 - Manufacturer's Part Number exactly as listed herein.
- 3 - Nomenclature exactly as listed herein, including dimensions, if necessary.
- 4 - Manufacturer's Model Number. Type 1, Style A, Size I
- 5 - Manufacturer's Serial Number (End Item).
- 6 - Any other information such as Type, Frame Number, and Electrical Characteristics, if applicable.
- 7 - If DD Form 1348 is used, fill in all blocks except 4, 5, 6, and Remarks field in accordance with AR 725-50.

Complete Form as Follows:

- (a) In blocks 4, 5, 6, list manufacturer's Federal Supply Code Number - 71082 followed by a colon and manufacturer's Part Number for the repair part.
- (b) Complete Remarks field as follows:  
Noun: (nomenclature of repair part)  
For: NSN: 4910-00-725-0326  
Manufacturer: Branick Retread Division  
Applied Power, Inc.  
Model: 2600 3rd Ave. N., P.O. Box 1937  
Serial: (of end item) Fargo, ND 58102

Any other pertinent information such as Frame Number, Type, Dimensions, etc.

WARRANTY STATEMENT

This product is warranted against defects in workmanship and material for one year from date of delivery to user, except for the following items on which a 90 day warranty applies: Models TJ-20, EL-200, EL-250, EL-500, ALJ, PHJ, BCL, TTC and DWL. Chain is not warranted. Warranty does not cover ordinary wear and tear, abuse, overloading, altered products or use of improper fluid. The above warranty privileges are subject to the standard warranty policies in effect at the time of purchase by user.

REPAIR PARTS WARRANTY STATEMENT

Replacement parts are warranted against defects in workmanship and material for 90 days from date of delivery to user. Chain is not warranted. Warranty does not cover ordinary wear and tear, abuse, misuse, overloading, altered products or use of improper fluid.

WARRANTY RETURN PROCEDURE

When question of warranty claim arises on products under one year warranty, contact the manufacturer. When question of warranty arises on items under 90 day warranty the user should send his unit and/or parts to the nearest manufacturer for inspection, transportation to be prepaid and evidence of purchase date furnished. If the claim comes under the terms of our warranty, the Authorized Service Depot will REPAIR OR REPLACE PARTS AFFECTED and return prepaid.

COMMERCIAL WARRANTY

This equipment is warranted 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, TCC, 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 the manufacturer. The repaired or replaced equipment will be returned with transportation charges prepaid by the manufacturer. 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. THE WARRANTOR 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 THE MANUFACTURER.

Operating Instructions  
Floor Type Tire Spreader  
MODEL S-FLL

OPERATING INSTRUCTIONS

Spreader has been shipped completely assembled.

Remove wrappings and barrier material from air valves.

Place tire roll up plate in center of front and hook over angle base.

Roll tire onto support rollers. Slide hooks up to proper level for tire size. Hooks should slope slightly upward to tire. Insert fast pins in arms. Then swing hooks into tire beads.

Step on spread valve to spread tire. Valve will hold tire at desired spread width. To release spread step on valve marked, "release". When hooks are fully relaxed, swing hooks out of tire.

The spreader will handle the complete range of tires from 7.50-10 four-ply through 16.00-24.5 twenty-ply. Maximum spread is 16 inches.

MAINTENANCE

Oil the pivot points of hook pivot and arm pivot through oil hole in sleeves. The vertical posts may be waxed to make hook assemblies slide easier.

Oil the tire support roller shafts at brackets. Oil pivot points at piston rod and cylinder end connections.

Each six months remove air cylinder cover plate and remove piston and rod. Clean thoroughly. Replace 1/2 cup of oil in rear of cylinder through pipe tee on end of cylinder after cylinder has been reassembled.

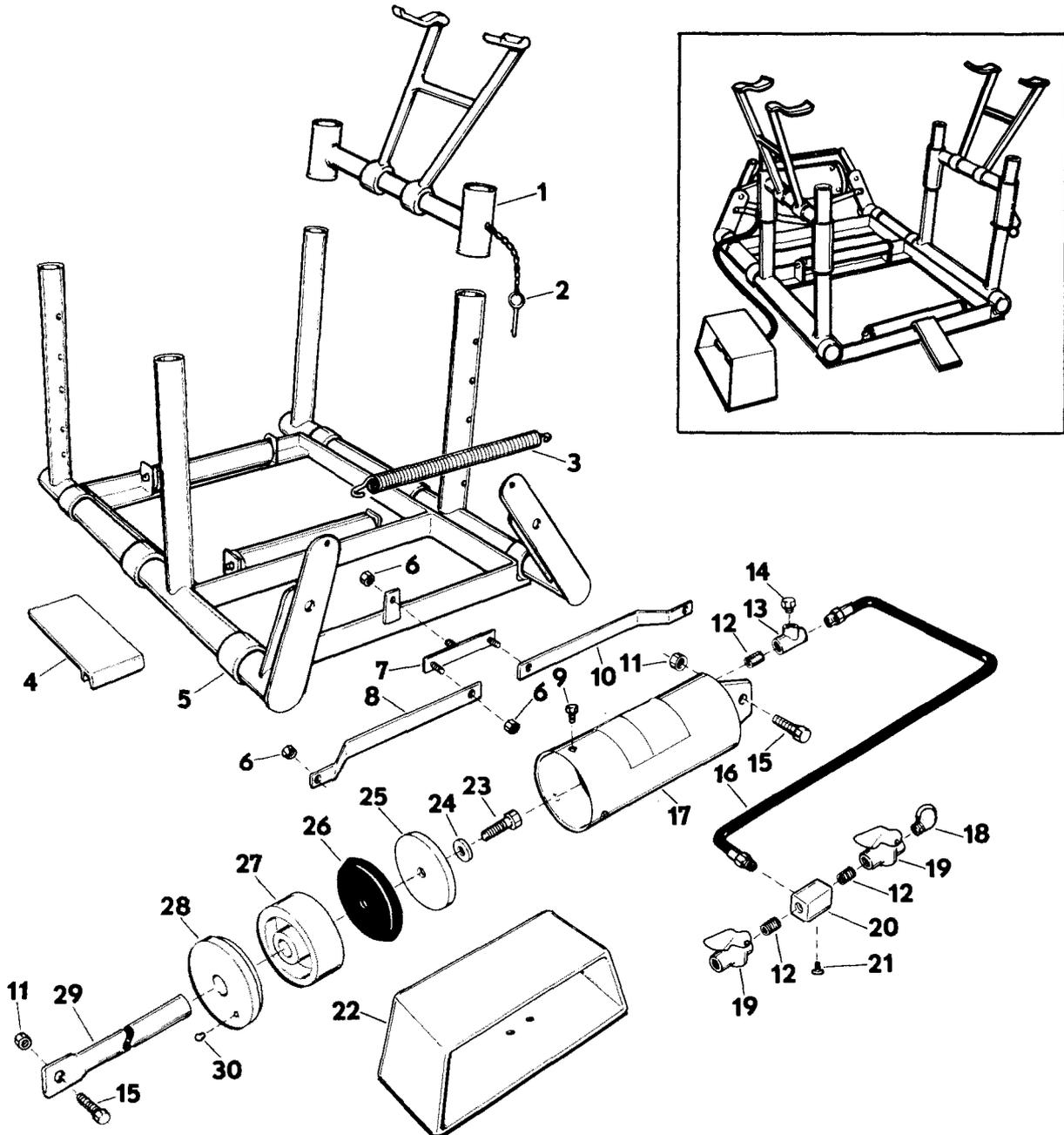
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## Repair Parts Information

Floor Type Tire Spreader

MODEL S-FLL-5 1/4"

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PARTS LIST - MODELS S-FLL 5 1/4

ITEM NO.	PART NO.	NO. REQ'D	DESCRIPTION
1	ND189.900	2	HOOK ASSEMBLY (INCLUDES FASTPIN)
2	ND179.061	2	5/16 X 3-1/2 FASTPIN
3	ND 11.110	1	SPRING
4	ND113.101	1	TIRE RAMP
5	ND184.900	1	BASE ASSEMBLY
6	ND210.055	5	3/8 NC HEX LOCK NUT
7	ND199.950	1	LINK PIVOT
8	ND552.950	1	LONG LINK
9	ND 5.028	3	7/16 X 3/4 H.H. C.S.
10	ND553.950	1	SHORT LINK
11	ND 58.055	2	1/2 NC HEX LOCK NUT
12	ND221.096	3	1/4 CLOSE NIPPLE
13	ND249.096	1	1/4 PIPE TEE
14	ND 1.006	1	1/4 OIL PLUG
15	ND 25.028	2	1/2 X 1-1/2 H.H. C.S.
16	ND193.900	1	AIR HOSE
17	ND554.950	1	CYLINDER
18	ND 38.096	1	1/4 X 90° ST. Ell
19	ND280.950	2	VALVE
20	ND 18.190	1	MANIFOLD
21	ND138.028	2	5/16 X 1/2 FLATHEAD SCREW
22	ND 1.835	1	GUARD
23	ND 13.028	1	9/16 X 1-34 H.H. C.S.
24	ND240.167	1	14 MM GASKET
25	ND 33.101	1	CUP WASHER
26	ND 9.041	1	PISTON CUP
27	ND 16.051	1	PISTON
28	ND 1.264	1	COVER PLATE
29	ND555.950	1	PISTON ROD
30	ND 4.006	1	PLUG

NOTE: ORDERS FOR PARTS CANNOT BE FILLED UNLESS BOTH MODEL AND SERIAL NUMBER WITH PREFIX IMPRINTED ON NAMEPLATE ARE GIVEN.

By Order of the Secretary of the Army:

Official:

**E. C. MEYER**  
*General, United States Army*  
*Chief of Staff*

**ROBERT M. JOYCE**  
*Major General, United States Army*  
*The Adjutant General*

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PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.
15		9	

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Callout number "12" should be callout number "10".

SAMPLE

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

JOHN DOE SP/3 XXX-XXXX

SIGN HERE:

*John Doe*

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TEAR ALONG PERFORATED LINE

## THE METRIC SYSTEM AND EQUIVALENTS

### LINEAR MEASURE

1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches  
 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches  
 1 Kilometer = 1000 Meters = 0.621 Miles

### WEIGHTS

1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces  
 1 Kilogram = 1000 Grams = 2.2 Lb  
 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1 Short Ton

### LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces  
 1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

### SQUARE MEASURE

1 Sq Centimeter = 100 Sq Millimeters = 0.155 Sq Inches  
 1 Sq Meter = 10,000 Sq Centimeters = 10.76 Sq Feet  
 1 Sq Kilometer = 1,000,000 Sq Meters = 0.386 Sq Miles

### CUBIC MEASURE

1 Cu Centimeter = 1000 Cu Millimeters = 0.06 Cu Inches  
 1 Cu Meter = 1,000,000 Cu Centimeters = 35.31 Cu Feet

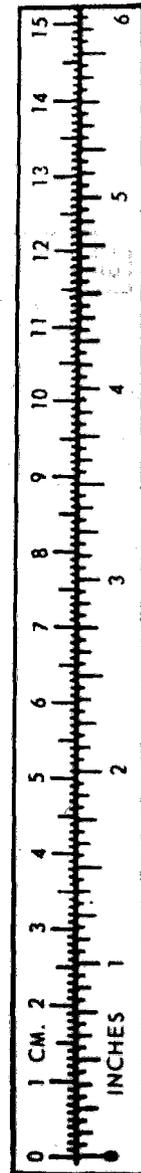
### TEMPERATURE

$5/9 (^{\circ}F - 32) = ^{\circ}C$   
 212<sup>o</sup> Fahrenheit is equivalent to 100<sup>o</sup> Celsius  
 90<sup>o</sup> Fahrenheit is equivalent to 32.2<sup>o</sup> Celsius  
 32<sup>o</sup> Fahrenheit is equivalent to 0<sup>o</sup> Celsius  
 $9/5 C^{\circ} + 32 = F^{\circ}$

### APPROXIMATE CONVERSION FACTORS

<u>TO CHANGE</u>	<u>TO</u>	<u>MULTIPLY BY</u>
Inches . . . . .	Centimeters . . . . .	2.540
Feet . . . . .	Meters . . . . .	0.305
Yards . . . . .	Meters . . . . .	0.914
Miles . . . . .	Kilometers . . . . .	1.609
Square Inches . . . . .	Square Centimeters . . . . .	6.451
Square Feet . . . . .	Square Meters . . . . .	0.093
Square Yards . . . . .	Square Meters . . . . .	0.836
Square Miles . . . . .	Square Kilometers . . . . .	2.590
Acres . . . . .	Square Hectometers . . . . .	0.405
Cubic Feet . . . . .	Cubic Meters . . . . .	0.028
Cubic Yards . . . . .	Cubic Meters . . . . .	0.765
Fluid Ounces . . . . .	Milliliters . . . . .	29.573
Pints . . . . .	Liters . . . . .	0.473
Quarts . . . . .	Liters . . . . .	0.946
Gallons . . . . .	Liters . . . . .	3.785
Ounces . . . . .	Grams . . . . .	28.349
Pounds . . . . .	Kilograms . . . . .	0.454
Short Tons . . . . .	Metric Tons . . . . .	0.907
Pound-Feet . . . . .	Newton-Meters . . . . .	1.356
Pounds per Square Inch . . . . .	Kilopascals . . . . .	6.895
Miles per Gallon . . . . .	Kilometers per Liter . . . . .	0.425
Miles per Hour . . . . .	Kilometers per Hour . . . . .	1.609

<u>TO CHANGE</u>	<u>TO</u>	<u>MULTIPLY BY</u>
Centimeters . . . . .	Inches . . . . .	0.394
Meters . . . . .	Feet . . . . .	3.280
Meters . . . . .	Yards . . . . .	1.094
Kilometers . . . . .	Miles . . . . .	0.621
Square Centimeters . . . . .	Square Inches . . . . .	0.155
Square Meters . . . . .	Square Feet . . . . .	10.764
Square Meters . . . . .	Square Yards . . . . .	1.196
Square Kilometers . . . . .	Square Miles . . . . .	0.386
Square Hectometers . . . . .	Acres . . . . .	2.471
Cubic Meters . . . . .	Cubic Feet . . . . .	35.315
Cubic Meters . . . . .	Cubic Yards . . . . .	1.308
Milliliters . . . . .	Fluid Ounces . . . . .	0.034
Liters . . . . .	Pints . . . . .	2.113
Liters . . . . .	Quarts . . . . .	1.057
Liters . . . . .	Gallons . . . . .	0.264
Grams . . . . .	Ounces . . . . .	0.035
Kilograms . . . . .	Pounds . . . . .	2.205
Metric Tons . . . . .	Short Tons . . . . .	1.102
Newton-Meters . . . . .	Pound-Feet . . . . .	0.738
Kilopascals . . . . .	Pounds per Square Inch . . . . .	0.145
Kilometers per Liter . . . . .	Miles per Gallon . . . . .	2.354
Kilometers per Hour . . . . .	Miles per Hour . . . . .	0.621



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