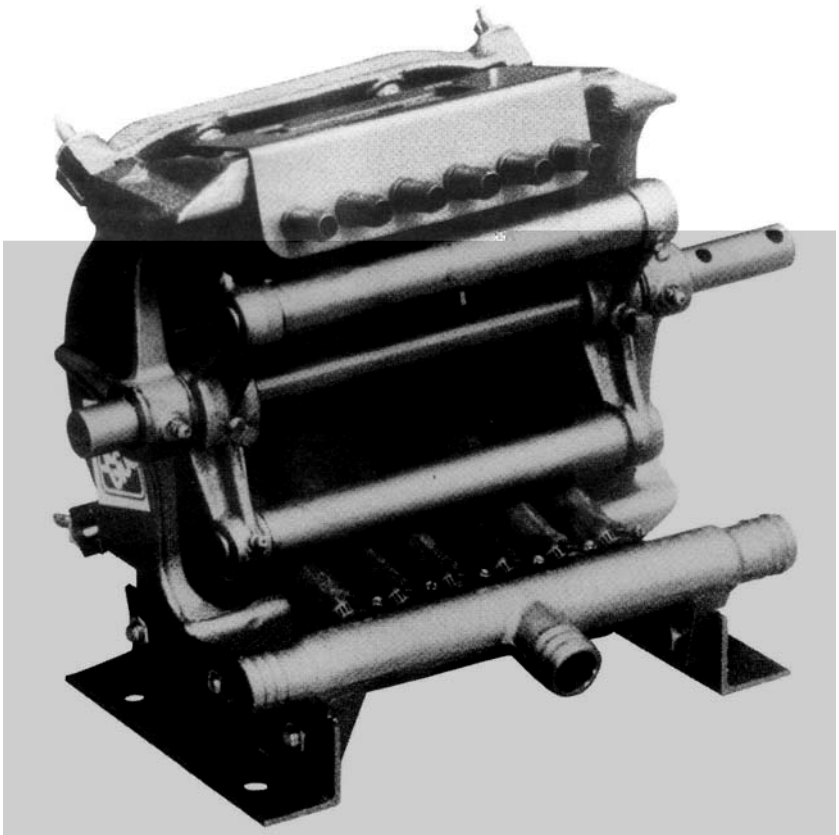
EEZE PUMPS



Price $10.00

CDS-JOHN BLUE COMPANY

DIVISION OF ADVANCED SYSTEMS TECHNOLOGY, INC.

290 Pinehurst Drive • Huntsville, Alabama 35806

P. O. Box 1607 • Huntsville, Alabama 35807

Telephone: (256) 721-9090 • FAX (256) 721-9091 • Toll Free: 1-800-253-2583

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SAFETY PRECAUTIONS

- Equipment should be operated only by trained, responsible people!
- A careful operator is the best insurance against an accident.
- Fill system with WATER first and check output.
- Check all valves, fittings, hose clamps, etc. for tightness and soundness before admitting fluid to system.
- Replace hoses when worn, cracked or if leaking.

THAT ARE NOT COMPATIBLE WITH THE PRODUCT'S COMPONENT M
WITH FLAMMABLE OR COMBUSTIBLE FLUIDS SUCH AS GASOLINE, KEROSENE, DIESEL, ETC…, AND DO NOT USE IN EXPLOSIVE ATMOSPHERES. FAILURE TO FOLLOW THIS NOTICE MAY RESULT IN SERIOUS INJURY AND/OR PROPERTY DAMAGE AND WILL VOID THE PRODUCT WARRANTY. IF IN DOUBT ABOUT YOUR APPLICATION, CONTACT YOUR STOCKING DEALER OR THE CDS-JOHN BLUE TECHNICAL STAFF AT 1-800-253-2583.

TO THE OWNER

This manual has been prepared and illustrated to assist you in the maintenance of your CDS-JOHN BLUE PUMP.

Enter your serial number and date of purchase in the space provided below for future reference in serviceinformation or for ordering parts.

Because our engineering department is constantly improving products, we reserve the right to make design and specification changes without notice.

Serial No. _____ Purchase Date _____

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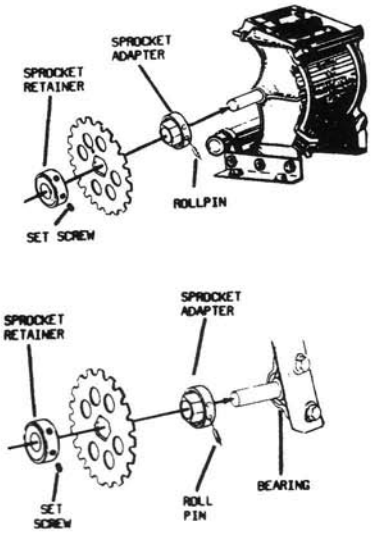


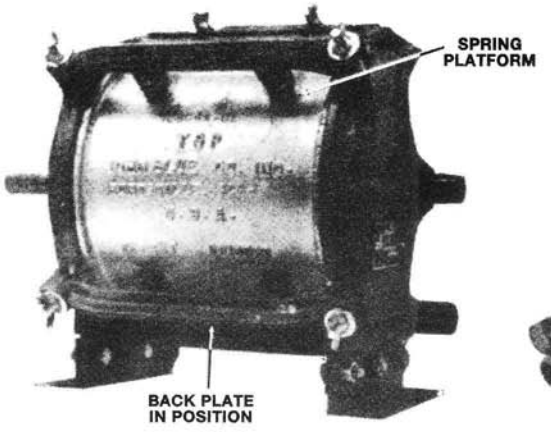


Fig. 1 - Positioning of Back Plate

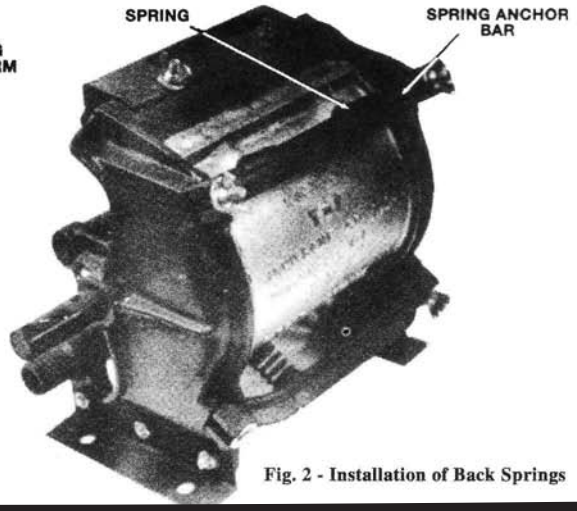


Fig. 2 - Installation of Back Springs

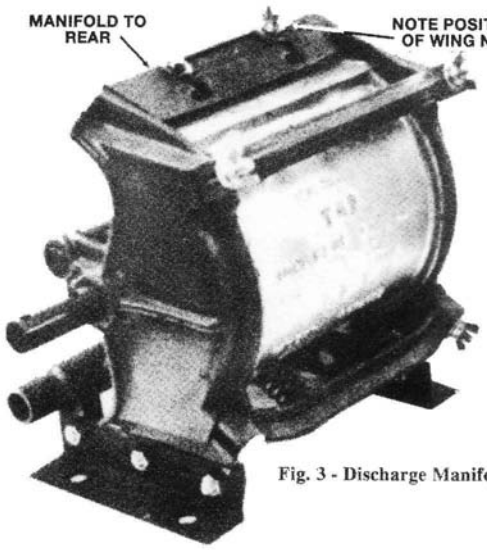


Fig. 3 - Discharge Manifold Rearward

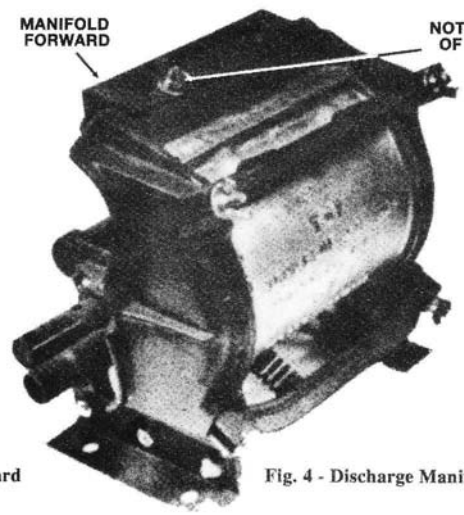


Fig. 4 - Discharge Manifold Forward

Pump Mounting and Hose Arrangement

The pump should always be mounted even with or lower than the fertilizer tank and for accurate metering, the speed should not exceed 125 RPM.

An important consideration for efficient operation of the pump is the hose arrangement. If fewer than the standard number of hoses are to be used, i.e., using 4 or 5 hoses on a 6 hose pump of 10 hoses on a 12 hose pump, the reduction in the number of hoses may be made by:

1. Removing the hoses from near the center of the intake manifold and capping the intake ports.
2. Running the unneeded hoses back into the solution tank or tanks with the hoses still connected to the pump.

Installation

Squeeze Pumps can be installed on a variety of implements too numerous to be covered in this book. The pumps should be positioned so that the suction manifold is lower than the tank bottom.

Maintenance

Lubrication

Grease the pump fittings twice daily. A thin coating of grease on the roller arms and exposed bolts will help prevent corrosion. Grease the pump after each use instead of before, especially "B" series with needle bearings.

When Pump is not in Use

During periods when the pump is not being used, these important steps are recommended to prevent hose deformation and prolong hose life.

1. Unscrew (about 1/2 inch) the wing nuts holding the spring anchor bar to the pump frame (Figure 3). this releases pressure against the hoses.
2. Loosen the wing nuts on the discharge manifold and shift the manifold rearward as shown in Figure 3.
3. Store out of direct sunlight.

Hose Alignment

If "A" or "B" hose (end hoses) should run off the back, realign the hoses as follows:

1. "A" Hose - Loosen hose clamp on intake manifold and twist hose 1/4 turn in a **counter-clockwise** direction.
2. "B" Hose - Loosen hose clamp on intake manifold and twist hose 1/4 turn in a **clockwise** direction.

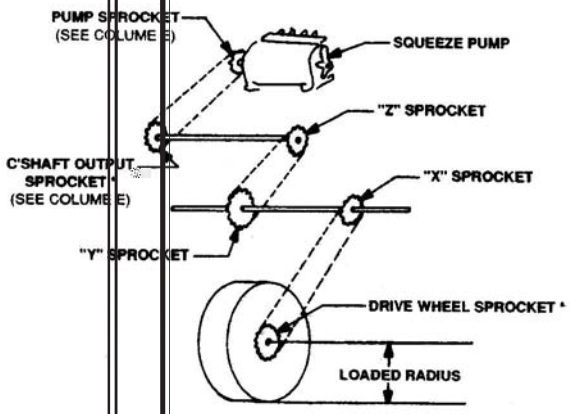
See pages 10 and 11 for a selection of accessories and options for your CDS-John Blue Squeeze Pump

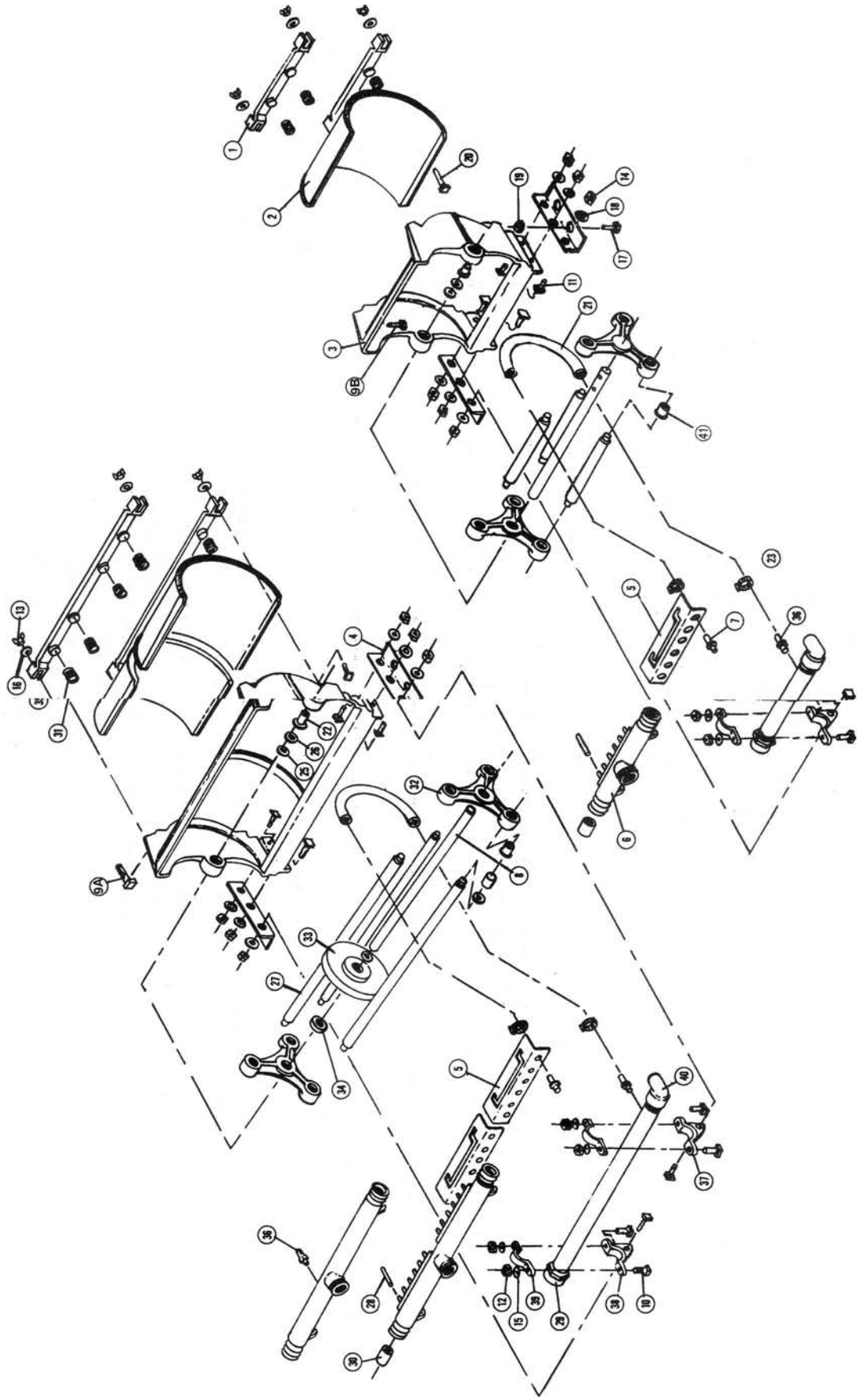
ctor Equations

rocket) x (Number of Teeth, "Y" Sprocket) x 100

f Teeth "X" Sprocket) x (Number of Teeth "Z" Sprocket)

Sprocket) x 100





Parts List

No.	Part #	Description											
1	1080[illegible]5-01	Spring Anchor Bar	2	2				2	2				
1	108499-01	Spring Anchor Bar			2	2	2			2	2	2	2
2	108044-01	Back Plate	1	1	2	2	2	1	1	2	2	2	2
3	108042-91	Frame	1	1				1	1				
3	108498-91	Frame			1	1	1			1	1	1	1
4	L-1259	Base Angle	2	2				2	2				
4	L-1275-L	Base Angle	1			1	1			1	1	1	1
4	L-1275-R	Base Angle	1			1	1			1	1	1	1
5	114372-01	Discharge Manifold Bracket										2	2
5	114369-01	Discharge Manifold Bracket	1			2		1			2		
5	L-1320-1	Discharge Manifold Bracket		1			2		1				
5	113430-01	Discharge Manifold Bracket			2					2			
6	L-1254-A	Intake Manifold	1										
6	L-1267	Intake Manifold			1								
6	L-1273-A	Intake Manifold					1						
6	L-1313-A	Intake Manifold				1							
6	L-1315-A	Intake Manifold		1									
6	113434-01	Intake Manifold									1		
6	113428-01	Intake Manifold								1			
6	113573-01	Intake Manifold							1				
6	113600-01	Intake Manifold						1					
6	114171-01	Intake Manifold											1
6	111045	Intake Manifold										1	
7	114368-01	Hose Coupling	6		8	12		6		8	12		
7	114370-01	Hose Couplings		8			16		8			12	12
8	L-1253	Drive Shaft	1	1				1	1				
8	L-1321	Drive Shaft	1			1	1			1	1	1	1
9A	90554	5/16-18 NC x 1-3/4 Sq HD MB	4	4	4	2	2	4	4	4	2	2	4
9B	90578	5/16-18 NC x 1 Carriage Bolt	2	2	4	4	4	2	2	4	4	4	4
10	90620	1/4 x 20 x 1 Plated						4	4	4	4		4
11	90651	3/8 x 16 x 1 Plated	6	6	6	6	6	6	6	6	6	6	6
12	92015	1/4-20 Hex Nut						4	4	4	4		4
13	92023	5/16-18 Wing Nut	6	4	8	8	8	6	4	8	8	8	8
14	92024	3/8-16 Hex Nut	10	10	10	10	10	10	10	10	10	10	10
15	93005	1/4 Lock Washer						4	4	4	4		4
16	93010	5/16 Flat Washer	6	6	8	8	8	6	6	8	8	8	8

Par

| | | |

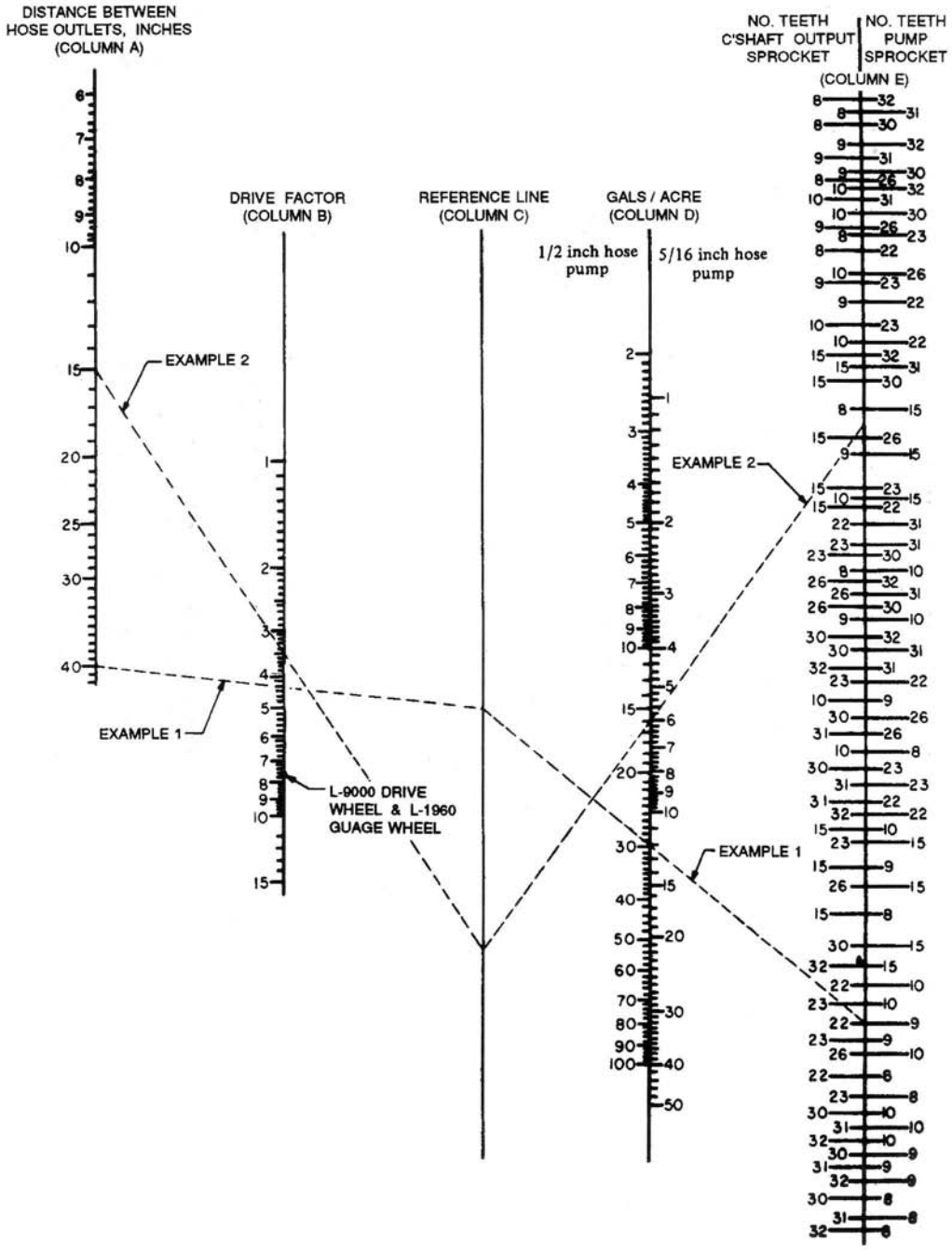
Ground Wheel with 14.6" Loaded Radius, 15 Tooth Drive Wheel Sprocket, 26 Tooth "X" Sprocket, 8 Tooth "Y" Sprocket, Tooth "Z" Sprocket]

Since there are two hose outlets per row, start from point 15 (1/2 the distance of the 30" row) on Column "A". Calculate the drive factor using the formula shown on page 5. In this example, the Drive Factor would be derived as follows:

$$\text{Drive Factor} = \frac{(15) \times (8) \times (100)}{(14.6) \times (26) \times (9)} = 3.5$$

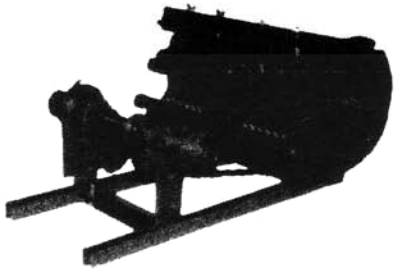
Mark this point at 3.5 on Column "B". Draw a straight line from 15 on Column "A" through the 3.5 point on Column "B", on to Column "C". From this point on Column "C", draw a line through 6 (Output in Gallons per Acre under 5/16" Hose Squeeze Pump Heading) on column "D", on to Column "E". Mark the point where the line meets Column "C". Read to the left of this point to obtain the number of teeth required on the countershaft output sprocket, and to the right of this point to obtain the number of teeth required on the pump sprocket. The nearest set of sprockets would have 15 teeth on the countershaft output sprocket and 26 teeth on the pump sprocket. This example is shown as a dashed line labeled as example 2 on the Output Graph.

Squeeze Pump Output Graph



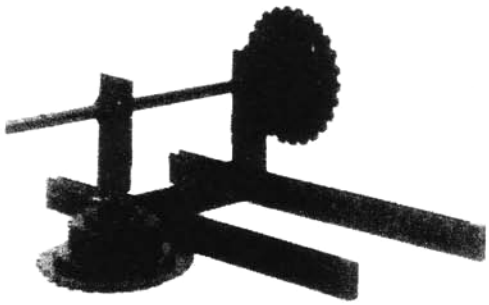
Accessories

CDS-John Blue Company Provides Various Mounting and Drives to Complete Your Liquid Fertilizer Application



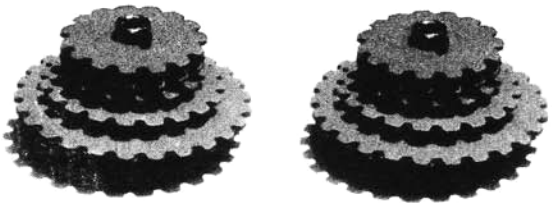
L-1485 Mount & Drive Unit
- Countershaft with Clutch
- Complete Set of Individual Sprockets for 87 Different Rates

114273 Mount & Drive Unit
- Countershaft without Clutch
- Sprocket Cluster Set Allows 6 Different Rates as Shipped
- Because Sprockets are Individual, 14 Additional Rates are Possible



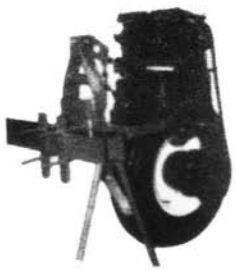
114275 Squeeze Pump Mount
- Includes Countershaft Only with No Sprockets
- Sprockets Can Be Selected Individually or in Clusters to Obtain Specific Application Rates

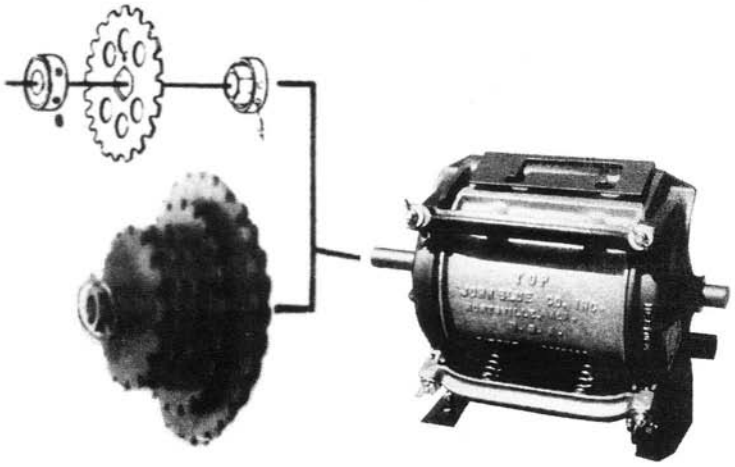
114272 Sprocket Cluster Set
- Can be Purchased as a Kit to be Used on ANY CDS-John Blue Squeeze Pump
- Allows Conversion to Cluster Sprockets in the Field
- Individual Sprockets Means Complete Versatility



114303 Cluster Adaptor Kit
- Includes Adaptors and Spacers
- Allows You to Use Your Existing Sprockets to Make a Sprocket Cluster Kit

Spring Loaded Drive Wheel and Complete with Driv

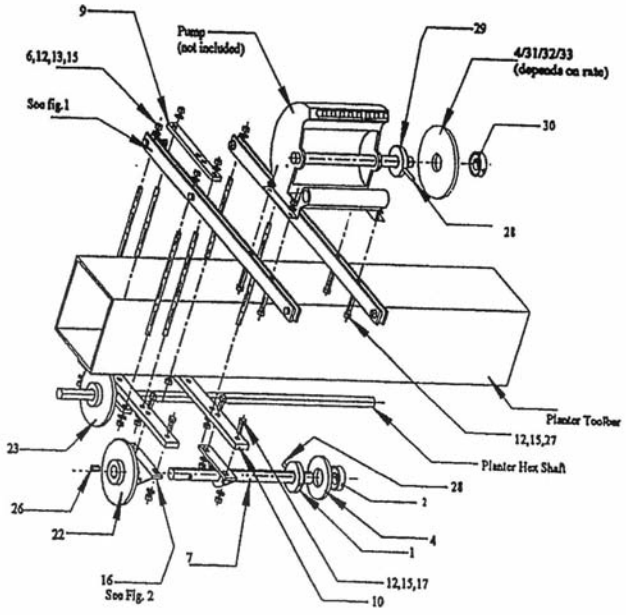




114939 SQUEEZE PUMP MOUNTING KIT

		Sprocket
32	L-1386	Sprocket, 15T (Double Pitch)
33	L-1392	Sprocket, 32T (Double Pitch)
34	114924-01	Chain (7 Links of 20-40 RC)

*** NOT SHOWN**



114939 Parts Schematic
(Suggested Mounting Arrangement)

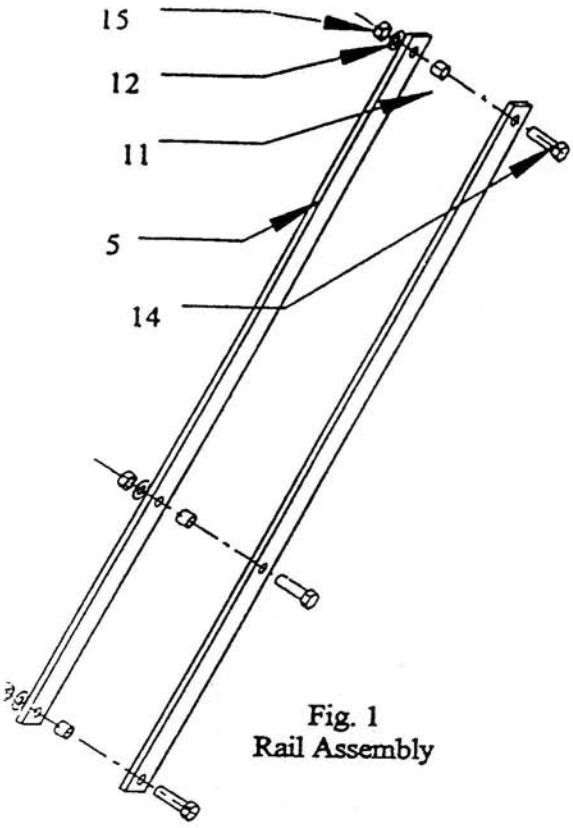


Fig. 1
Rail Assembly

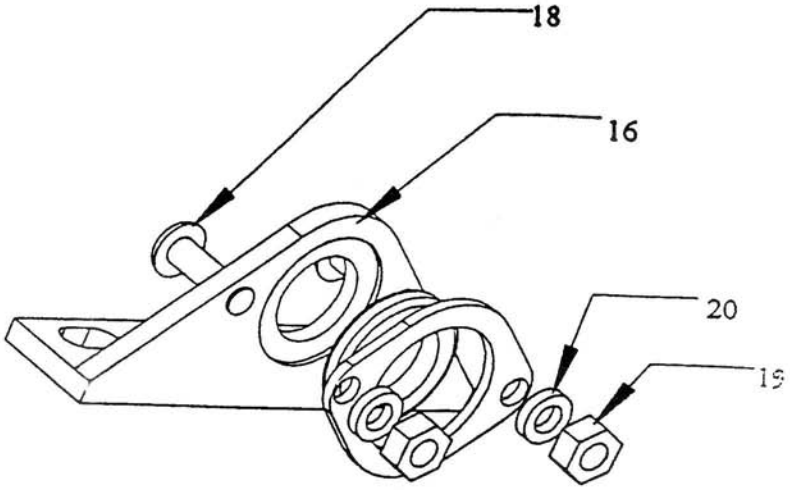


Fig. 2
Bearing Assembly

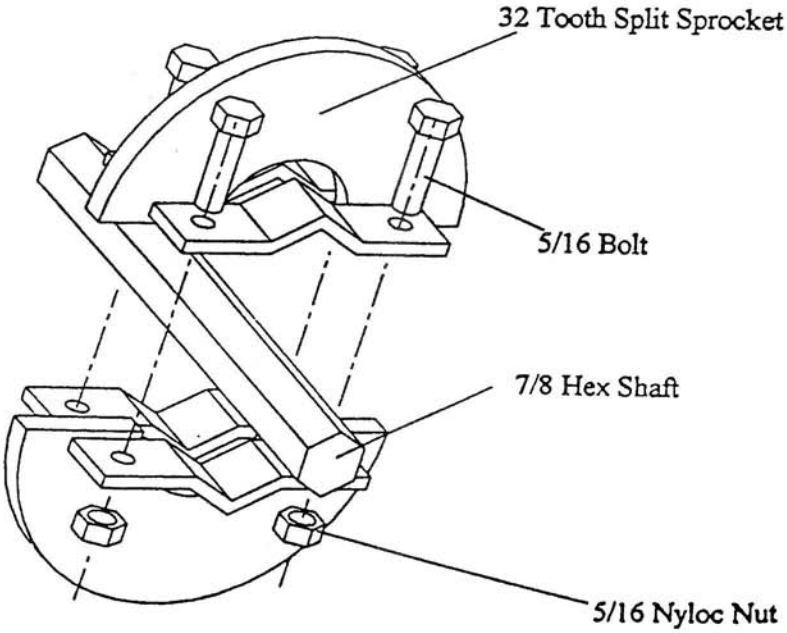


Fig. 3
Split Sprocket Assembly

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