

Nathaniel Lehman 369-3532

TRANSMIX

UTILITY MIXER



INSTALLATION INSTRUCTIONS

&

OPERATORS MANUAL

FERGUSON T035 – MASSEY HARRIS 50

FORD – FERGUSON

UNIVERSAL PULLEYS CO., INC.

330 NORTH MOSLEY • WICHITA, KANSAS

www.ntractorclub.com

UNIVERSAL TRANSMIX

FORD-FERGUSON FORD 1939-1954 Incl. FERGUSON TO 20 & TO 30

FERGUSON TO 35 - MASSEY HARRIS 50

PACKING LIST

1 - Set Instructions

- 1 - Packing Sheet, Form 6, 2 Pages
- 1 - Installation Instructions, Form 7, 5 Pages
- 1 - Photo, Fig. 1, Form 8
- 1 - Photo, Fig. 2, thru 5, Form 9
- 1 - Photo, Fig. 6, Form 10
- 1 - Sheet Adjustments
- 1 - Sheet Mixing Instructions

- | | | |
|---|------|-------------------------------------|
| 1 | 622 | Barrel |
| | | 1 - Transmix Decal |
| | | 1 - Universal Pulleys Company Decal |
| 1 | 613 | Frame Assembly |
| | | 1 - 613 Frame |
| | | 1 - Zerk Fitting |
| | | 2 - 624 Wheels w/Tires and Bearings |
| | | 4 - 774 Cup Washers |
| | | 4 - 775 Felt Washers |
| | | 2 - 1/2 x 3-1/2" Bolts and Nuts |
| | | 2 - 1/2" Lock Washers |
| | | 1 - 1" Flat Washer |
| | | 1 - 1/4 x 2" Cotter Pin |
| | | 1 - Bronze Bushing |
| | | 1 - Name Plate |
| | | 2 - Name Plate Pins |
| 2 | 615 | Dump Links |
| 1 | 912 | Axle Bracket (Left) |
| 1 | 913 | Axle Bracket (Right) |
| 1 | 618R | Lower Main Brace (Right) |
| 1 | 618L | Lower Main Brace (Left) |
| 1 | 619 | Spreader Bar |
| 2 | 620 | Upper Main Braces |
| 1 | 914R | Fender Brace (Right) |
| 1 | 914L | Fender Brace (Left) |

UNIVERSAL TRANSMIX

Packing List - Ford Ferguson Ford 1939-1954 Incl. Ferguson TO 20 & TO 30
Ferguson TO 35 - Massey Harris 50

1 *659 or 871 Power Take Off

- 1 = 660 Housing
- *1 = 834 or 835 PTO Shaft & Spline Assembly
- 1 = 664 Bearing
- 1 = 665 Retainer
- 1 = 3/4" Standard Lock Washer
- 1 = 3/4" - 16 N. F. Hex Nut
- 1 = 614 Pulley
- 1 = 666 Spacer
- 1 = No. 15 Woodruff Key

1 Bag Hardware

- 2 = 911 Spacers (3/4" Pipe x 1" Long)
- 4 = 710 Spacers (7/8" OD x 5/8 ID x 9/16" Long)
- 2 = 711 Spacers (3/4" Pipe 1-5/16" Long)
- 2 = 5/8 x 3-1/2" Bolts and Nuts
- 2 = 5/8" x 3" Cap Screws, No Nuts
- 2 = 5/8 x 2" Bolts and Nuts
- 2 = 5/8 x 1-1/2" Bolts and Nuts
- 2 = 3/8 x 1-3/4" Bolts and Nuts
- 2 = 3/8 x 1-1/2" Bolts and Nuts
- 6 = 5/8" Lock Washers
- 4 = 3/8" Lock Washers
- 2 = 5/8" Flat Washers
- 10 = 3/8" Flat Washers

*No. 659 & 834 Apply to: Ford-Ferguson, Ford 1939 - 1954 Incl.
Ferguson TO 20 & TO 30

*No. 871 & No. 835 Apply to: Ferguson TO 35 & Massey Harris 50.

UNIVERSAL TRANSMIX

INSTALLATION INSTRUCTIONS

FORD-FERGUSON FORD 1939-1954 Incl. FERGUSON TO 20 & TO 30
FERGUSON TO 35 - MASSEY HARRIS 50

PRE-INSTALLATION PROCEDURE

Remove all Transmix parts from bundles or boxes. Remove Frame No. 613 from mixing barrel No. 622. Assemble a standard 6.70 x 15 tire and tube on rim that is attached to the No. 622 mixing barrel. This rim rotates very slowly, therefore you may use any old tire and tube which are unsatisfactory for high speed use on your automobile. Inflate the tire to approximately 30# of air. Do not reassemble the barrel to the frame, as it is installed after all braces and the frame are attached to the tractor.

INSTALLATION PROCEDURE

A. POWER TAKE OFF EXTENSION NO. 659 or 871. Fig. 1.

1. Remove the four bolts holding the chain holder brackets to rear of transmission.
2. Remove the power take off protective covering.
3. Bolt No. 659 or No. 871 power take off extension to rear of transmission using the four chain holder bolts as shown in Fig. 1.

B. AXLE BRACKETS NO. 912 and 913. Fig. 1.

1. Bolt No. 912 to bottom and on left side of rear axle, with the notched leg on No. 912 pointing toward the left rear wheel as shown in Fig. 1. Use fender bolts to hold No. 912 in place, but do not fully tighten.
2. Bolt No. 913 to bottom and on right side of rear axle, with the notched leg on No. 913 pointing toward right rear wheel as shown in Fig. 1. Use fender bolts to hold No. 913 in place, but do not fully tighten.

C. FENDER BRACES NO. 914L and 914R. Fig. 1.

1. Remove tail light and mounting bracket assembly from left rear fender.
2. Put a 3/8" flat washer on a 3/8 x 1-3/4" bolt and insert into the 11/16" hole in center of No. 914L, with head of bolt between the two flanges of the channel iron fender brace No. 914L.

Installation Instructions - Ford-Ferguson Ford 1939-1954 Incl. Ferguson To 20
And TO 30. Ferguson TO 35 - Massey Harris 50.

3. Put three 3/8" flat washers on bolt.
4. Insert bolt with No. 914L and the flat washers on it into the front hole (towards front axle) of the two holes that are towards the bottom and to the rear of the left fender. See Fig. 6 and 1.
5. Put a 3/8" lock washer and nut on bolt but do not fully tighten yet. If No. 914L is installed properly the three 3/8" flat washers will be between it and the fender.
6. Remove the front bolt (towards front axle) of the two bolts that are towards the bottom and to the rear of the right fender. Bolt No. 914R to the right fender at this hole using the same procedure as in steps 2, 3, 4 and 5 above.

D. LOWER MAIN BRACES NO. 618L and 618R. FIG. 1.

1. Bolt No. 618L to No. 912 and 914L using a No. 911 spacer (3/4 pipe x 1" long) and a 5/8 x 2 bolt, nut and lock washer as shown in Fig. 1. Tighten this bolt immediately. These parts must be assembled on the 5/8 x 2 bolt in the following order from the tire inward. First, 618L; 2nd, 912; 3rd, 911 spacer, 4th, 914L. Then a 5/8 lock washer and nut. Be sure that the rub flange on No. 618L is facing inward and is mounted so that it is as far from the axle as possible.
2. Bolt No. 618R to 914R and No. 913 using the same procedure as in step 1 above.
3. Fully tighten the 3/8 x 1-3/4" bolts in center of braces No. 914L and 914R, and the fender bolts that are holding Nos. 913 and 912.

E. UPPER MAIN BRACES NO. 620 FIG. 1.

1. Remove the rear bolt from the top of both rear fenders.
2. Bolt a No. 620 to the top of each fender using 3/8 x 1-1/2" bolts, nuts and lock washers and the holes in the fenders where the bolts were removed in step 1 above. Use the center hole of the three 7/16 holes in the ends of Nos. 620. For uses of the other two holes in 620 see Adjustment No. 1 on Adjustment page.

Installation Instructions- Ford-Ferguson Ford 1939-1954 Incl. Ferguson TO 20 and TO 30. Ferguson TO 35 - Massey Harris 50.

3. It will be necessary to twist Nos. 620 inward until the 11/16" holes in the free ends are vertical and in line with the 11/16" holes in ends of No. 618L and 618R as shown in Figs. 1 and 3.

F. SPREADER BAR NO. 619 DUMP LINKS NO. 615. FIG. 2.

1. Attach No. 619 spreader bar and No. 615 dump links to the ends of the hydraulic lift arms as shown in Fig. 2, using two 5/8 x 3" bolts but no lock washers. Bolt the ends of Nos. 615 that are not square to hydraulic lift arms. Be sure that the flats of the channel iron dump links No. 615 are pointing inward.

G. ASSEMBLING FRAME NO. 613 TO DUMP LINKS NO. 615. Fig. 3.

1. Set frame No. 613 in position on ground, with two rubber wheels pointing toward tractor as shown in Fig. 3.
2. Insert a No. 710 spacer (7/8 OD x 5/8 ID x 9/16" long) into each hole that is near the middle of side members on No. 613 frame.
3. Insert a 5/8 x 1-1/2" bolt into each No. 710 spacer that is in holes in Frame No. 613. Heads of bolts must be on inside of Frame No. 613.
4. Place free ends of Nos. 615 onto the 5/8 x 1-1/2" bolts. Put a lock washer and nut on each bolt and tighten.

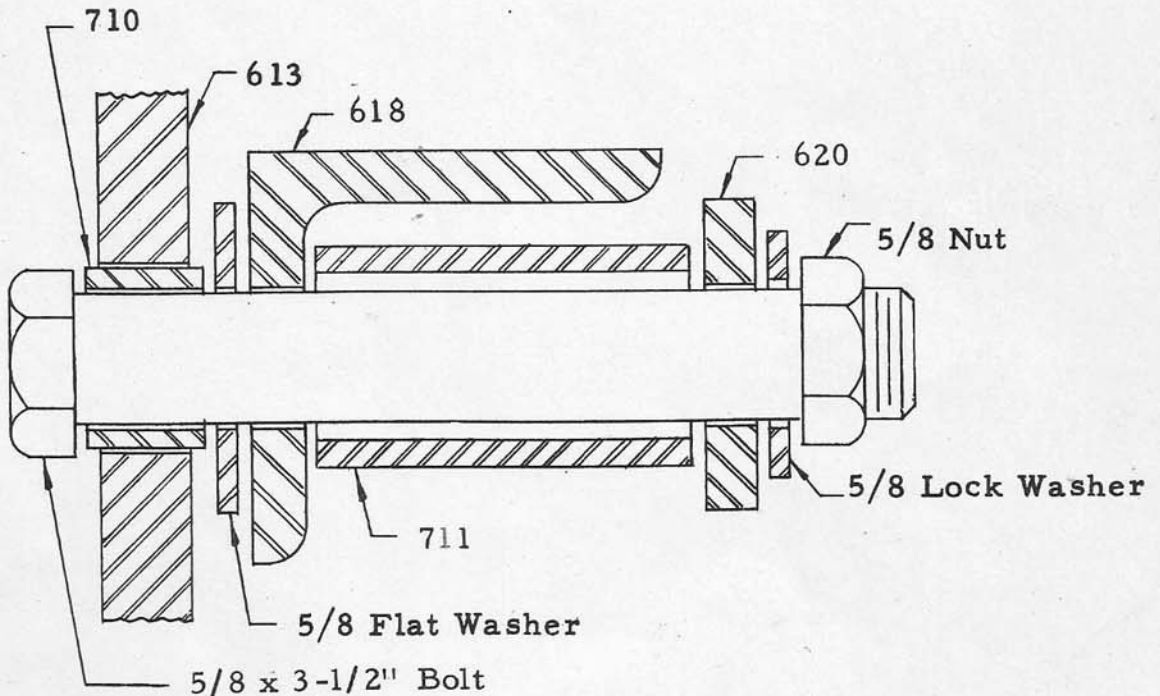
H. ASSEMBLING FRAME NO. 613 TO THE A-FRAME FIGS. 4 & 6.

See Sect. A of Fig. 6, below for a section view of the following procedure.

1. With dump links No. 615 supporting No. 613 frame, raise frame up and set it into position as shown in Fig. 6.
2. Insert a No. 710 spacer (7/8 OD x 5/8 ID x 9/16" long) into each hole that is near each rubber wheel of No. 613.
3. Insert a 5/8 x 3-1/2" bolt through each No. 710 spacer and through a 5/8" flat washer on outside of No. 613 frame. There should be a flat washer on each side of No. 613 frame. Be sure that the heads of the bolts are facing inward.

Installation Instructions - Ford-Ferguson Ford 1939-1954 Incl.
 Ferguson TC 20 and TO 30. Ferguson TO 35 - Massey Harris 50.

4. Pull braces Nos. 618L and 618R up to bolts and slip them on.
5. Put a No. 711 spacer (3/4 pipe 1-5/16" long) on each bolt.
6. Bring braces No. 620 up to bolts and slip them into place.
7. Put a 5/8" lock washer and nut on bolts and tighten.
8. If No. 613 does not slide relatively free between fender braces No. 914L and 914R or fits too loose then see adjustment No. 2 on Adjustment page.



Sect. A Fig. 6

LEVELING HYDRAULIC LIFT ARMS.

The barrel No. 622 and frame No. 613 are raised to the dumping position by the hydraulic lift arms on the tractor. For this dumping operation to be successful, the hydraulic lift arms MUST be leveled. This is performed by the screw crank on one of the lift arms on the tractor.

UNIVERSAL TRANSMIX

Installation Instructions - Ford-Ferguson Ford 1939-1954 Incl.
Ferguson To 20 and TO 30. Ferguson TO 35 - Massey Harris 50.

J. ASSEMBLING MIXER BARREL NO. 622. FIG. 5.

1. Lift barrel No. 622 with 6. 70 x 15 tire and tube attached, into frame No. 613. Then insert spindle on No. 622 into bushing on No. 613.
2. Place a 1" flat washer on the spindle. Insert a 1/4 x 2" cotter key in hole in spindle and spread.

CAUTION: BE SURE TO READ THE REMAINDER OF THE INSTRUCTIONS
BEFORE PUTTING THE TRANSMIX INTO OPERATION.

UNIVERSAL TRANSMIX

FORD-FERGUSON FORD 1939-1954 Incl. FERGUSON TO 20 & TO 30
FERGUSON TO 35 - MASSEY HARRIS 50

ADJUSTMENTS

1. To adjust the mixing angle of barrel No. 622, you will note that the braces No. 620 have three $7/16$ " holes in the ends that are bolted to the fenders. The center hole is used for normal operations. The first hole will decrease the mixing angle while the 3rd hole will increase it.
2. Fender braces No. 914R and 914L are curved to fit the contour of the fender. These braces protect the fenders and also guide frame No. 613 between the fenders when dumping. Frame No. 613 when in mixing position must fit snugly between fender braces No. 914L and 914R. If you have the proper fit between frame No. 613 and braces No. 914L and 914R (Fig. 6) you should be able to move frame No. 613 up and down between braces No. 914L and 914R by hand and there should never be more than $1/4$ " play between frame 613 and braces Nos. 914R and 914L. If frame No. 613 fits too tight between braces No. 914L and 914R it will be necessary to remove some of the $3/8$ " flat washers on the $3/8 \times 1-3/4$ " bolt in order to decrease the distance between the fenders and braces No. 914L and 914R. If frame No. 613 fits too loosely it will be necessary to add $3/8$ " flat washers in order to increase the distance between the fenders and braces No. 914L and 914R.
3. Grease bushing on frame No. 613, the two 624 wheels on frame No. 613 and the power take off extension No. 659. All the above parts should be greased frequently while Transmix is in operation.
4. Run Transmix empty for a few minutes, then stop and **RETIGHTEN ALL BOLTS.**
5. If Transmix is installed properly, barrel No. 622 should be at an angle of 25 degrees off horizontal. This means that the bottom lip of Barrel No. 622 should be approximately 22 inches above the center line of power take off extension No. 659.
6. **YOUR TRANSMIX IS NOW READY FOR USE. SEE MIXING INSTRUCTIONS ON FOLLOWING PAGE.**

Rev. 3/59

UNIVERSAL TRANSMIX

FORD-FERGUSON - FORD 1939-1954 Incl. FERGUSON TO 20 & TO 30
FERGUSON TO 35 - MASSEY HARRIS 50

MIXING INSTRUCTIONS

After you have determined the amount of water necessary to obtain the proper mixture for the job you are doing, we suggest the operation in the following sequence.

1. $3/4$ Water in Mixer Barrel
2. $1/4$ Aggregate
3. All the Cement
4. Last $3/4$ Aggregate
5. Last $1/4$ Water

This formula will insure uniform mixing and speed of the operation.

SUGGESTED AMOUNT OF CEMENT PER BATCH - AVERAGE MIXING AND TRANSPORTING

The TRANSMIX is a full bag capacity at 5 to one ratio. When transporting 20 to 40 feet a full batch at 5 to 1 should be loaded, mixed, transported and dumped in 2 to 3 minutes. An average 5 to 1 mix of sand and cement is approximately 25 average No. 2 scoops of sand and 1 bag of cement. NOTE: One bag of cement is approximately 5 average No. 2 scoops or 1 cubic foot. The mixing barrel will rotate and dump while the tractor is in motion or will rotate and dump while tractor is stationary.

STATIONARY METHOD

The UNIVERSAL TRANSMIX can also be used as a stationary mixer. When used as a stationary mixer, the TRANSMIX will mix ONE bag at 5 to 1 ratio in 1-1/2 minutes.

3/58 Rev. 3/59

UNIVERSAL TRANSMIX
INSTALLATION INSTRUCTIONS

Ford-Ferguson

Ford 1939-1954 Incl.	Ferguson TO 35
Ferguson TO 20 & TO 30	Massey Harris 50



Fig. 1

UNIVERSAL PULLEYS CO., INC., 330 N. Mosley, P. O. Box 1337, Wichita, Kansas

Form 8 11/56 Rev 10/5

UNIVERSAL TRANSMIX
INSTALLATION INSTRUCTIONS

FORD-FERGUSON
FORD 1939-1954 Incl. FERGUSON TO 35
FERGUSON TO 20 & TO 30 MASSEY HARRIS 50

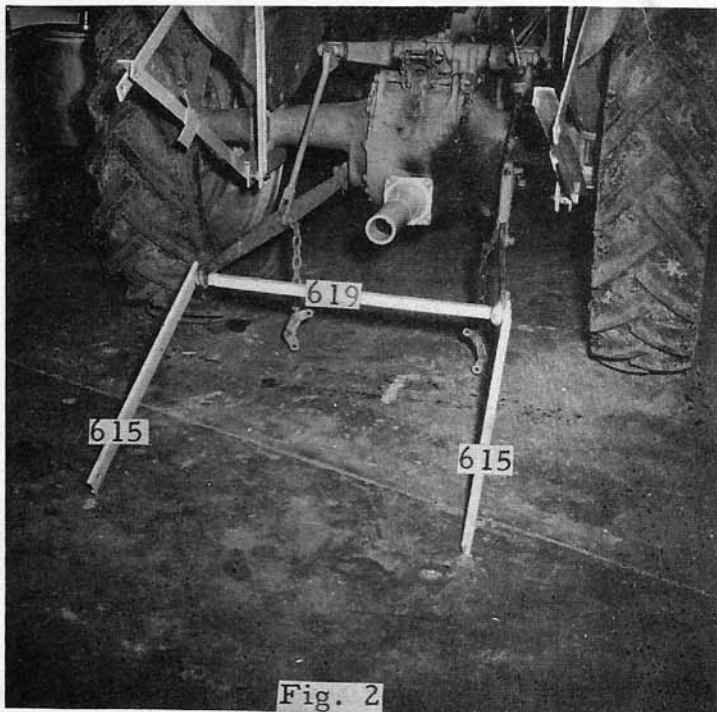


Fig. 2

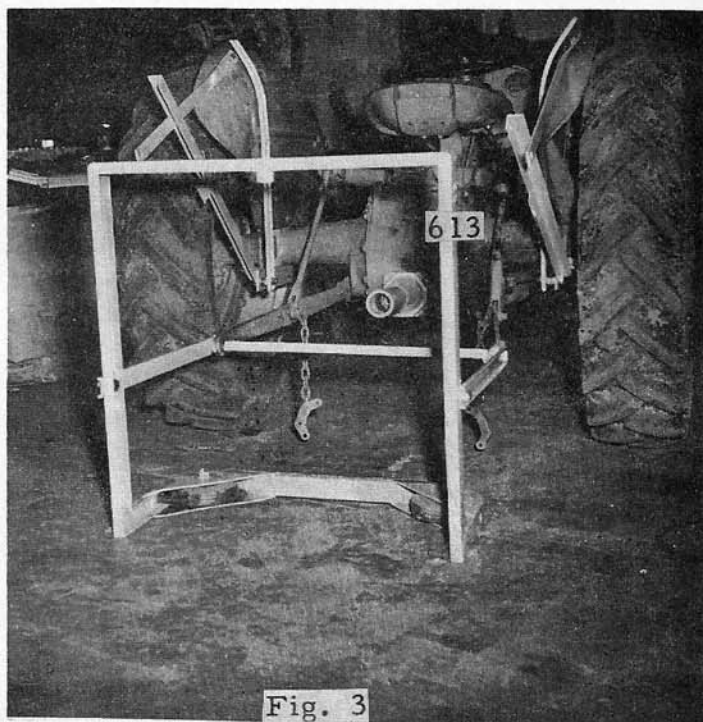


Fig. 3

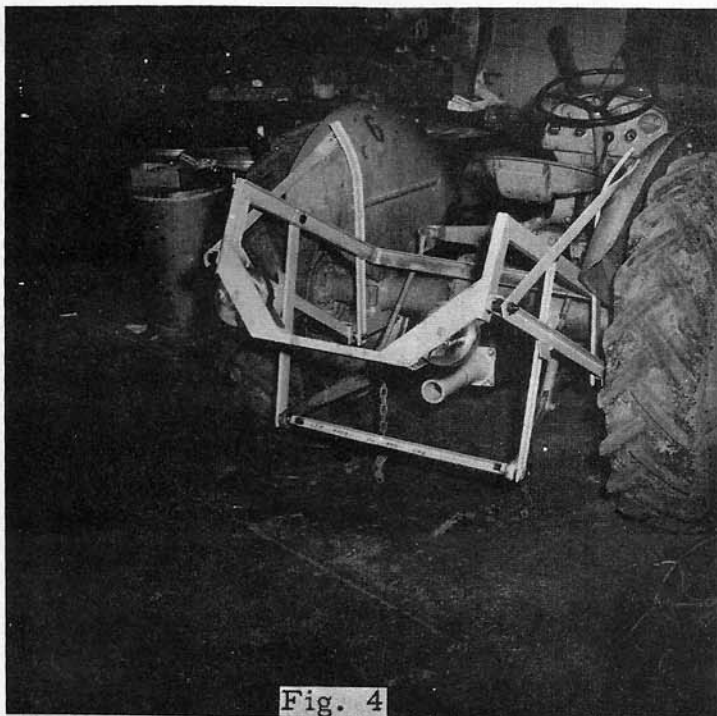


Fig. 4

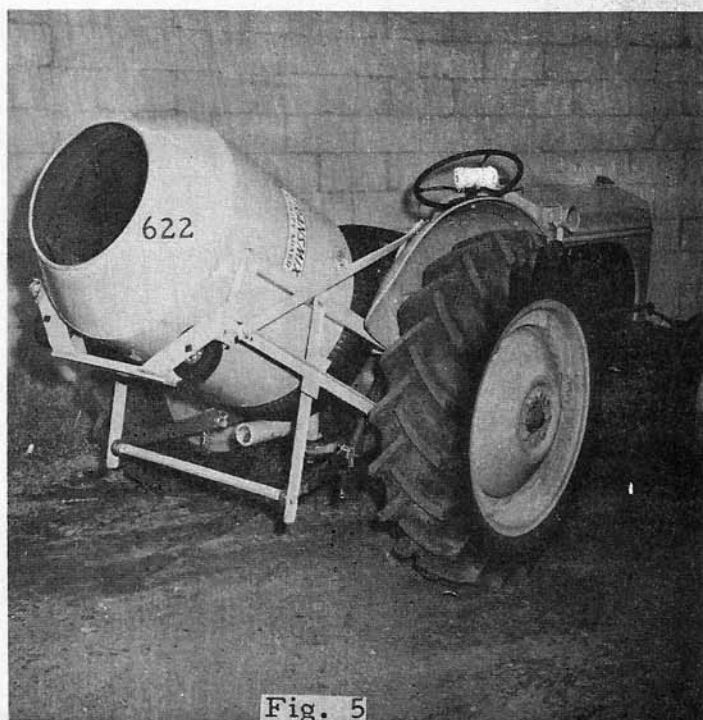
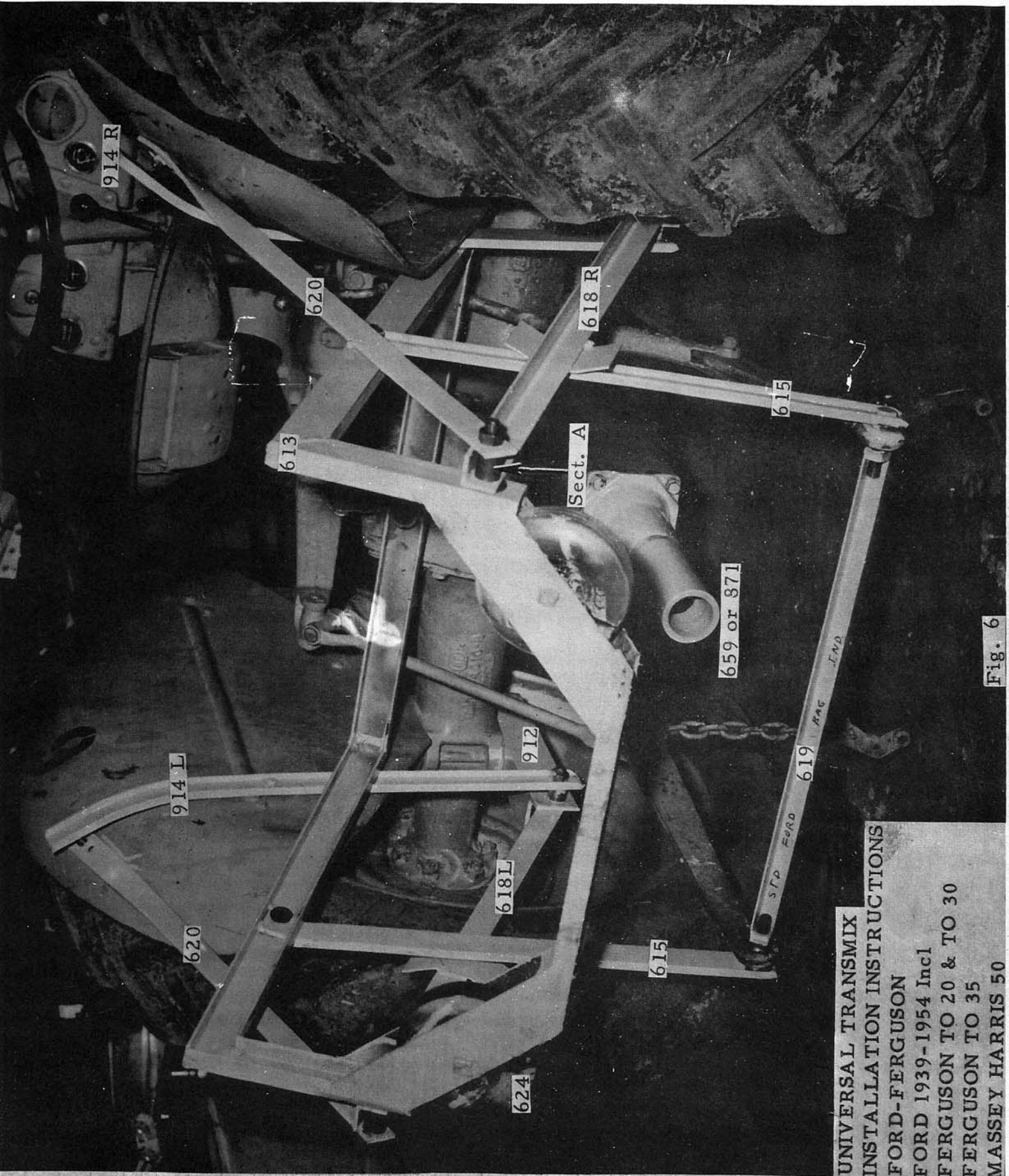


Fig. 5



UNIVERSAL TRANSMIX
 INSTALLATION INSTRUCTIONS
 FORD-FERGUSON
 FORD 1939-1954 Incl
 FERGUSON TO 20 & TO 30
 FERGUSON TO 35
 MASSEY HARRIS 50

Fig. 6

INSTALLATION INSTURCTIONS

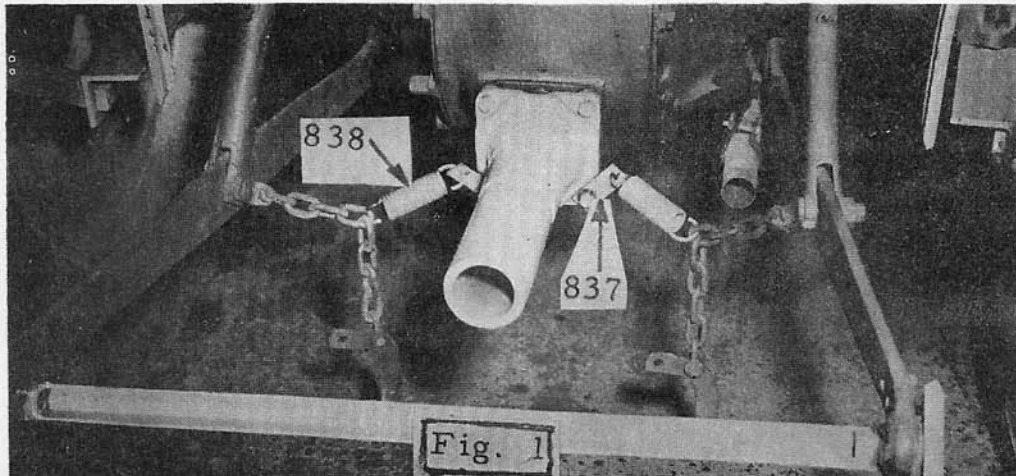
FORD OR FERGUSON

1-1/2 Bag "TRANSMIX"

Follow the one bag installation instructions complete. The only addition is attaching two spring holder clips, drawing #837, to the PTO and two springs, drawing #838, to the clips and to the chains on the dumping arms.

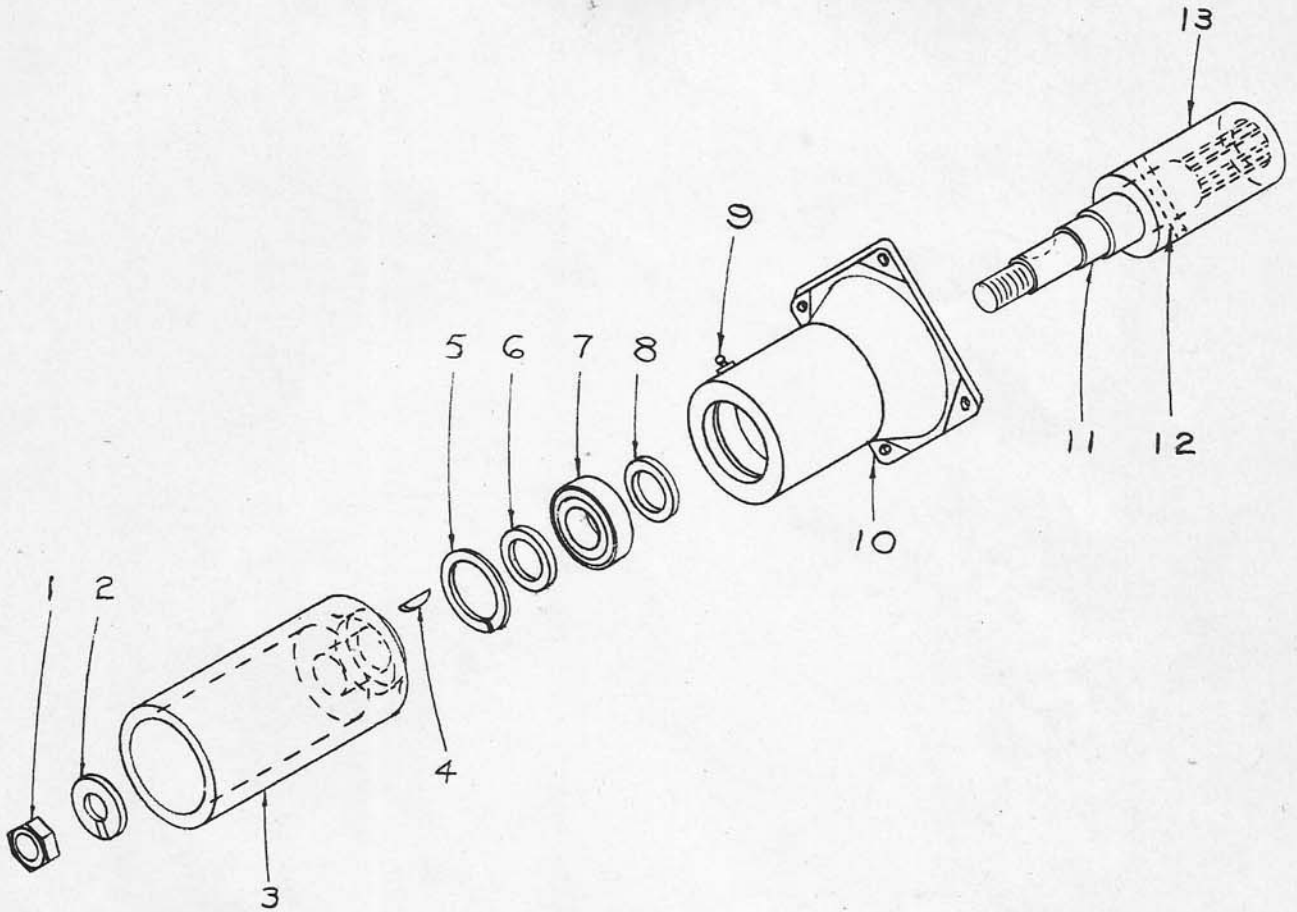
The springs are to pull the barrel back after dumping.

See Figure 1.



UNIVERSAL PULLEYS CO. INC.
Wichita, Kansas

UNIVERSAL TRANSMIX
 POWER TAKE OFF EXTENSION ASSEMBLY NO. 659
 FORD-FERGUSON
 FORD 8N, 9N, NAA up to 600-800 SERIES
 FERGUSON TO 20 & TO 30 up to TO 35



Ref. No.	Part No.	Description
1		3/4-16 N. F. Hex Nut
2		3/4 Std Lock Washer
3	614	Drive Pulley
4		Woodruff Key No. 15
5	665	Retainer
6	666	Spacer
7	664	Bearing
8	948	Felt Washer
9	947	Grease Zerk
10	660	Housing
11	662	Shaft
12	663	Drive Pin
13	661	Spline

UNIVERSAL TRANSMIX
REPLACEMENT PARTS PRICE LIST

Ford-Ferguson
Ford 8N, 9N, NAA up to 600-800 Series
Ferguson TO 20 & TO 30 up to TO 35

Part No.	Description	* Price	* Price
		1 Bag size	1-1/2 Bag size
622	Mixing Drum	\$80.40	\$97.50
613	Frame assembly with wheels, bolts 905 bushing, zerk & washers,	39.60	65.00
613	Frame only	30.00	46.00
905	Bronze Bushing	1.00	1.00
624	Wheel complete w/Tire & Bearing	7.75	7.75
	624 Tire only	4.00	4.00
	Wheel Bearing	.90	.90
	774 Cup Washer	.15	.15
	775 Fiber Washer	.10	.10
	Hub with Zerk included	1.75	1.75
615	Dump Link	2.48	2.48
912	Left Axle Bracket	3.24	3.24
913	Right Axle Bracket	3.24	3.24
618	Lower Main Brace	4.90	4.90
619	Spreader Bar	2.00	2.00
914	Fender Brace	2.11	2.11
620	Upper Main Brace	2.56	2.56
837	Spring Clip		.80
838	Spring		.90
710	Spacer	.15	.15
711	Spacer	.18	.18
911	Spacer	.20	.20
659	Power Take Off Assembly Complete	27.50	27.50
	660 Housing	7.50	7.50
	947 Grease Zerk	.10	.10
	948 Felt Washer	.10	.10
	664 Bearing	4.50	4.50
	665 Retainer	.25	.25
	834 Shaft & Spline Assembly	8.25	8.25
	661 Spline	3.75	3.75
	662 Shaft	4.25	4.25
	663 Pin	.25	.25
	666 Spacer	.10	.10
	614 Pulley	4.50	4.50
	No. 15 Woodruff Key	.20	.20
	3/4" Std Lock Washer	.10	.10
	3/4-16 N.F. Hex Nut	.25	.25

ABOVE PRICES SUBJECT TO CHANGE WITHOUT NOTICE ²³ 8.25

ALL PRICES F.O.B. WICHITA, KANSAS

*SUGGESTED RETAIL PRICE

Universal Pulleys Co., Inc., P.O. Box 1337, 330 N. Mosley, Wichita, Kansas