FERGUSON UTILITY LOADER

MODEL F-32



Owner's Manual



Terguson DIVISION
MASSEY-HARRIS-FERGUSON INC.
RACINE, WISCONSIN

FORM No. 199 076 M91

TABLE OF CONTENTS

												PAGE
Introduction												1
Description												2
Pre-Operatir	ng I	nstr	ucti	ons								3
Attachmen	t.											3
Lubrication	n.											3
Accessorie	s.											3
Operating In	stru	ctic	ons									5
External V	alv	es						٠				5
Operating	Pro	ced	ure									6
Adjustmen	ts.											6
Assembly Ins	truc	tion	15.									7

FERGUSON DIVISION

MASSEY-HARRIS-FERGUSON INC. RACINE, WISCONSIN

All specifications are subject to change without notice.

Your Ferguson Dealer	
Dealer Address	Phone
Loader Serial No	

Copright 1956 Massey-Harris-Ferguson, Inc.

INTRODUCTION

Loading manure from barns, yards and manure piles has been one of the most laborious jobs on the farm. More man hours are consumed in loading than in any other phase of manure handling. Since a good farmer knows the value of using manure for soil building purposes, he will perform the task.

Certain jobs arise which involve the loading of other material also. The handling of sand and gravel, fertilizer, loose soil, silage, ground feed, etc. is common on most farms.

To meet loading problems on the farm, Ferguson has introduced the F-32 Utility Loader. This front-end, tractor-mounted, hydraulically operated implement is designed for loading from any area where the tractor may be driven.

The Ferguson F-32 Utility Loader is a sturdy, powerful, time saving implement. It is designed to assist with many material-handling jobs. The Ferguson Utility Loader is available with either a manure fork or material handling bucket.

The manure fork is designed with open sides for the specific purpose of handling manure. The teeth are rectangular and pointed which allow maximum penetration of the fork into the manure pile with a minimum of thrust. Heat-treating insures you against excessive tooth wear and bending tendencies. The solid back plate also adapts the fork for general purpose work. When the loader is used in combination with the Ferguson Manure Spreader and Lift Hitch, the entire loading and spreading operation can be performed by one man without the operator moving from the tractor seat. The fork has slots for the addition or replacement of tines, and may be converted into a material bucket with the accessory bucket attachment.

Included in this manual is information concerning lubrication and maintenance, operation, adjustments, accessories, assembly instructions, and numerous illustrations of the Ferguson Utility Loader.

Read, study and follow these instructions to get longer life, maximum performance and the utmost satisfaction from your new implement.

Only GENUINE FERGUSON REPAIR PARTS should be used on your FERGUSON UTILITY LOADER. These parts are designed and built to fit correctly and give maximum service. They may be purchased only from your AUTHORIZED FERGUSON DEALER.

All FERGUSON equipment is identified by a FERGUSON name plate. If this name plate is not attached, it is not FERGUSON equipment. Check for the name plate before purchasing the equipment. This name plate, shown below, also supplies the serial number, which should be noted when ordering parts.



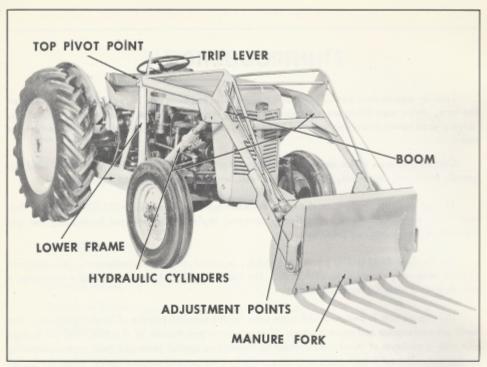


Fig. 1 Ferguson F-32 Utility Loader

DESCRIPTION

The Ferguson F-32 Utility Loader is composed of parts as shown in Fig. 1. Throughout this manual reference will be made to the parts as shown in this figure.

The loader may be attached or detached in a few minutes once the loader mounting supports are installed on your Ferguson Tractor. The loader mounting supports may remain on the tractor without interfering with most farm operations.

The loader is attached to the tractor by means of the lower frame support and the lower frame hanger brackets. The lower frame struts give additional strength to the lower frame.

Hydraulic lift is provided with two cylinders attached from the lower frame to the boom and controlled by an external valve.

The boom is of heavy 2 inch welded tubular construction, reinforced at all stress points for maximum strength.

The fork or bucket attachment will return to position after dumping due to its counterbal-anced construction. The trip lever provides positive dumping action.

The hydraulic hose has great strength and is supplied with easily attached, leakproof fittings.

Variable equipment consists of a material handling bucket. Accessory equipment is a dirt bucket attachment for the fork, rear mounted light kit, and external hydraulic control valves.

PRE-OPERATING INSTRUCTIONS

Before the loader is installed on, and operated with the Ferguson Tractor, the following checks should be performed in order to achieve proper loader operation.

- Check the tractor governor for proper operation. The proper inspecting and adjusting procedure is outlined in the tractor owner's manual.
- Check the tractor hydraulic system oil level. Follow the recommendations in the tractor owner's manual.
- Check to see if the front lights are removed as proper clearance must exist for the loader side frames.

NOTE: It is recommended that tires of at least 5:50 width be used on the tractor front wheels when using the loader. Rims for these tires are available from your Ferguson Dealer.

4. Check the front wheel width and if it is at a wider width than 48 inches, reset the width to the 48 inch width by the method outlined in your tractor manual. In the case of tricycle wheel tractors, no adjustments are needed on the front wheels.

ATTACHMENT

The loader mounts are installed on your tractor as outlined under assembly instructions.

Once the lower frame support, spool valve, lower frame hanger brackets, lower frame struts and the lower frames are attached, they may be left on your Ferguson Tractor without interfering with most farm operations.

The lower frame hanger brackets have drilled holes which are located in position for the attachment of the stabilizer bars. This will permit attachment of such implements as the rear mounted mower with the loader mounts remaining in place.

With the lower frames installed, the loader may be easily attached or detached in a few minutes. To attach, place the loader in front of your tractor with the boom facing the tractor. Raise the boom and attach to the top pivot points with the lift arm pivot pins. Secure lower end of the lift cylinders with pins. Attach hydraulic hoses to the spool valve.

NOTE: Whenever the loader is dismounted from the tractor, the hoses should be properly capped to prevent foreign material from entering the hydraulic system. Push the piston rods as far as possible into the cylinders. DO NOT SCRATCH THE PISTON RODS. Replace any worn or damaged parts. Always clean and paint the loader before storing for long periods.

LUBRICATION

Lubrication of the loader is performed at only two points. Pressure fittings are located at each top pivot point and are easily serviced. These points should be serviced daily.

ACCESSORIES

The following accessories are available for use with the loader:

EXTERNAL CONTROL VALVES

The Ferguson F-32 Utility Loader must be operated with either the Ferguson Single Spool or Double Spool Hydraulic Control Valve in order to receive satisfactory operation. The single spool valve will permit operation of the loader, but will not allow use of the tractor rear links.

By using the double spool valve, the rear links of the tractor may be used. This is desirable when using your Ferguson Manure Spreader or other rear mounted equipment with the loader attached. The double spool valve, therefore, is recommended for operation of the loader.

Since many of these control valves are in use with other Ferguson external hydraulically controlled equipment, the control valve is not included as part of the utility loader standard equipment. If you do not have the control valve necessary at present, you may purchase one from your Ferguson Dealer.

LOADER ATTACHMENTS

A material bucket attachment is available for installation on the loader fork. This attachment is designed to handle fine, loose material such as dry manure, grain, corn cobs, sand, etc. A hardened steel cutting edge will insure against rapid wear and damage.

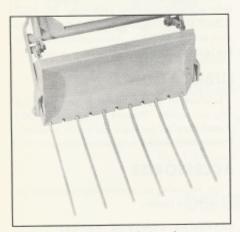


Fig. 2 Manure Fork Attachment

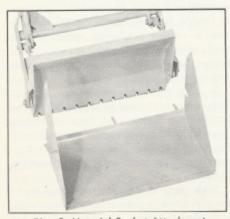


Fig. 3 Material Bucket Attachment

A complete dirt bucket or manure fork attachment is available as variable equipment. See Figs. 2, 3 and 4 for the various attachments available.

FENDER LIGHTING KIT

If it is necessary to use lights while operating the loader, it will be necessary to mount the lights on the fenders. Your Ferguson dealer will have the fender lighting kit instock. See Fig. 5 for the complete assembly of the fender lighting kit.



Fig. 4 Material Handling Bucket

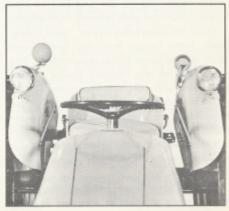


Fig. 5 Fender Lighting Kit

OPERATING INSTRUCTIONS

The Ferguson Utility Loader will lift a 2000 pound load at the start of the lift cycle. The normal capacity of the loader at full height, however, is 1000 pounds. The average weight of a fork full of manure is approximately 500 pounds. The 2000 pound lift capacity at the beginning of the lift cycle permits a "Breakaway" of a fork full of manure from the pile. This feature is important since greater effort is usually required at the start of the lift stroke.

EXTERNAL VALVES

When using your Ferguson Utility Loader, either a single or double spool hydraulic control valve must be used. Figs. 6 and 7 show the two valves mounted in operating position. Either of these valves provide control of the hydraulic cylinders of the loader.

In using either of the spool valves with the utility loader, a "tee" connection as shown in Figs. 6 and 7 is used to attach both hydraulic hoses to one valve outlet. On the double spool valve, the "tee" should be inserted in the right hand valve outlet for operation of the loader.

All spool valve levers have three positions; intake (rear), neutral (center), and exhaust (forward). When attached with the "tee" connection as mentioned above, the right hand valve of the double spool valve and the valve of the single spool valve will operate as follows:

- In the intake position oil is forced under pressure to the hydraulic lift cylinders.
- In the neutral position oil passes through the valve body and returns to the hydraulic oil sump.
- In the exhaust position oil is relieved of pressure and allowed to flow from the lift cylinders back to the oil sump.

No oil will circulate through the spool valve however, unless the hydraulic pump is forcing oil through the standpipe to the valve. To obtain this circulation, it is necessary to raise both the hydralever and draft control lever to the fully raised position.

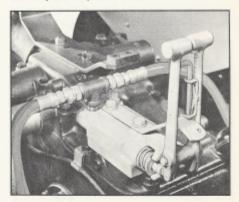


Fig. 6 Double Spool Control Valve

When using the double spool valve, the left hand valve will control the rear links which, therefore may be used to operate other rear mounted implements while the loader is attached. The right hand valve will control the loader operation. During operation of the loader, the left hand valve should be in the neutral position.

To restore hydraulic control to the hydralever and draft control lever, lock the valve control in the intake position with the lock provided on the lever.



Fig. 7 Single Spool Control Valve

When using the single spool valve with the loader, it is necessary to use the drawbar and stay links to position the rear links. If this was not done, the links would raise to their maximum height before pressure needed to operate the loader would be applied, causing delay of operation. See Fig. 8 for the correct mounting of stay links and drawbar.

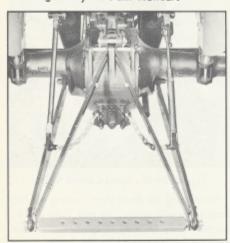


Fig. 8 Stay Links and Drawbar

OPERATING PROCEDURE

The following operating procedures are suggested for use of the Ferguson Utility Loader:

MANURE LOADING

- Shift the tractor to high-range, first gear.
- Advance throttle setting to 1000 1200
 RPM.
- Lower the fork and drive loader firmly into manure.
- Apply brakes while depressing the clutch to stop forward motion.
- Move the spool valve lever to intake position, shift to reverse with left hand, release the clutch and back away as the load is being raised to the desired height.

- 6. Drive toward the spreader with the fork raised high enough to let the load drop free from the fork when tripped. Trip the latch, dump the load and release pressure on the trip handle as the counterbalanced fork swings back into position.
- Move toward manure pile as the loader is being lowered.

SOIL LOADING

This operation is similiar to manure loading except that the force required to load the bucket should be applied slowly and steadily. DO NOT DRIVE INTO THE PILE AT A FAST RATE OF SPEED as serious personal injury may result from the sudden stopping of forward motion.

ADJUSTMENTS

The degree of "suck" of the fork, or the angle the fork is positioned in relation to the ground, is adjustable by repositioning the trip latch height. When the trip latch is raised, the fork tines provide greater digging action. Lowering the trip latch height provides less digging action. The optimum setting for any particular job can be best obtained only by trying various adjustments of the trip latch height. See Fig. 9 for adjusting points.

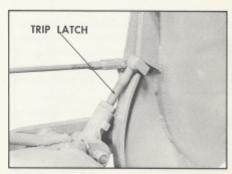


Fig. 9 Loader Adjusting Points

ASSEMBLY INSTRUCTIONS

The Ferguson F-32 Utility Loader will be shipped to the dealer in six packages or units. The loader should be assembled and mounted before delivery to the new owner.

One package should contain the lower frame support, two lower frame brackets and two lower frame struts. The boom, hydraulic cylinders, lower frames, manure fork or material handling bucket and all necessary hardware make up the rest of the shipment.

To assemble the loader:

- Attach the dump rods to the boom and the trip latch.
- Attach the upper end of the lift cylinders to the boom in the hole provided. For low clearance model tractors the rear hole is used for attachment, for high clearance model tractors, the forward hole is used.
- Attach the manure fork or material handling bucket with the linch pins provided,

In mounting the Spool Valve Control to Ferguson "35" and "40" Tractors, the following procedure should be used:

1. Remove the transfer plate as shown in

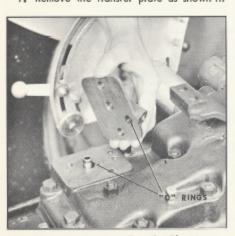


Fig. 10 Removing Transfer Plate

Fig.10. Care must be given not to lose the "O" rings seated in the plate. Store the plate in a clean, covered container. In removing the plate, the hydraulic system standpipe may raise from its housing due to the "O" ring attachment to the transfer plate. This pipe should be kept clean and replaced as soon as it is separated from the plate.

NOTE: Care must be given in replacing the pipe! The lower end fits into a small housing and if care is not given to proper seating in this opening, the pipe may drop into the tractor. If this should happen the dip stick plate must be removed from your tractor and the pipe properly positioned.

 Place the spool valve on the stand pipe and press firmly until the "O" ring on the pipe fits into place and the valve is completely in position. Tighten two cap screws to secure.

NOTE: On single and double spool valves, three "O" rings must be in place in addition to the stand pipe "O" ring. Failure to have these rings in place will result in oil leakage from the valve. For the position of the "O" rings on single and double spool valves, refer to Fig.11.

The lower frame support for mounting the F-32 Utility Loader is attached below the

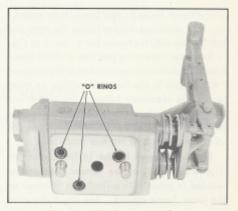


Fig. 11 "O" Rings in Valve

clutch housing of the Ferguson Tractor by four cap screws provided with the loader.

See Fig. 12 for view of proper attachment to the "35" model tractor. On the "35" mounting, the strut attachment hole is to the rear. For mounting on the "40", the support is turned and the hole is to the front.

NOTE: It is of extreme importance that these cap screws are tightened securely and checked regularly as a loose screw may damage the thread in the housing and result in a costly repair job.

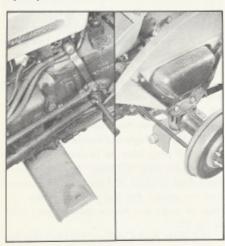


Fig. 12 Loader Mounting Supports

The lower frame hanger brackets for attaching the Loader are secured below the right and left fenders with the fender bolts. Refer to Fig. 12 for correct mounting position of these brackets. Brackets must be attached to the Ferguson "40" Tractor in the forward position in order to provide clearance between the Loader and the Tractor hood. Attachment of the brackets to the "35" model Ferguson Tractors must be with the brackets in the rear position.

The lower frames for the Utility Loader are slipped over nubs of the hanger brackets and secured in place with a linch pin to bosses on the lower frame support. See Fig.13 for view of lower frame attachment. For Ferguson "40"

Tractors, the linch pin will be placed in hole A, for Ferguson "35" model tractors, the pin will be placed in hole B. These frames are also attached to the lower frame support with two lower frame struts.



Fig. 13 Attaching Lower Frame

 Attach the loader and position the trip lever as shown in the complete assembly (Fig. 14).



Fig. 14 Complete Loader Assembly

IMPLEMENT WARRANTY

For a period of ninety (90) days from the date of delivery of a new Ferguson Implement to the original purchaser thereof from a Ferguson Dealer, Massey-Harris-Ferguson Inc. warrants all such parts thereof (except tires) which, under normal use and service, shall appear to Massey-Harris-Ferguson Inc. to have been defective in workmanship or material.

This warranty is limited to shipment to the purchaser, without charge except for transportation costs, of the part or parts intended to replace those acknowledged by Massey-Harris-Ferguson Inc. to be defective.

If the purchaser uses or allows to be used on a Ferguson Implement parts not made or supplied by Massey-Harris-Ferguson Inc. or if any Ferguson Implement has been altered outside of its own factories or sources of supply, or if attachments have been used which were unsuited and harmful to the Ferguson Implement, then this warranty shall immediately become void. Massey-Harris-Ferguson Inc. does not undertake responsibility to any purchaser of a Ferguson Implement for any undertaking, representation, or warranty beyond those herein expressed.

Massey-Harris-Ferguson Inc. reserves the right to make changes in design or changes or improvements upon Ferguson Implements without any obligation upon it to install the same upon Implements theretofore manufactured.

FERGUSON DIVISION

MASSEY-HARRIS-FERGUSON INC.

RACINE, WISCONSIN

See Your Ferguson Dealer for Information

— ON —

THE FERGUSON TRACTOR AND FERGUSON SYSTEM IMPLEMENTS



THE FERGUSON LINE

Of Implements Includes

Moldboard Plows Disc Plows Two-Way Plows Spike Tooth Harrows Spring Tooth Harrows Lift Type Disc Harrows **Tandem Disc Harrows** Heavy Duty Harrows Offset Disc Harrows Spring-Tine Cultivators Rigid-Tine Cultivators Lister Cultivators Agricultural Mowers Industrial Mowers Balers Forage Harvesters Multi-Purpose Blades

Sub Soilers Manure Spreaders Manure Loaders Corn Pickers Corn Planters Lister Planters Side Delivery Rakes Rotary Hoes Cordwood Saws Rear Cranes Disc Tillers Field Tillers **Tool Carriers** Middlebusters Four-Row Weeders Four-Wheel Wagons Soil Scoops

