

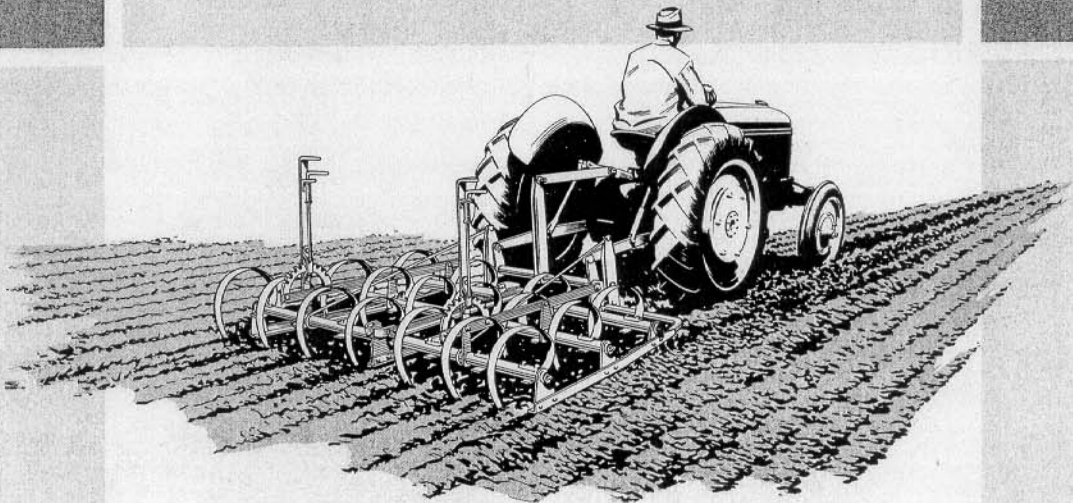


FERGUSON SPRING TOOTH HARROWS

K-BO-A-21 and K-BO-A-31



OPERATING
and ASSEMBLY
INSTRUCTIONS



HARRY FERGUSON, INC. • DETROIT 3, MICHIGAN

OPERATING INSTRUCTIONS

The Ferguson Spring Tooth Harrow is designed and built so that it can be carried on the tractor by the Ferguson linkage.

DEPTH OF PENETRATION

The depth of penetration or working depth is determined by setting the adjusting levers on each section. These levers are set from the ground from back of the harrow. After this setting, check to see that all levers are set in the same position so that all sections will work at a uniform depth.

When the harrow is set for a definite working depth, by the adjusting levers, there are no further adjustments required. The lifting rods and coupling bushings allow flexibility of the sections so that they will follow the contour of the soil.

When the teeth become worn, the adjusting lever may be moved back an additional notch on the quadrant to compensate for wear of the teeth.

Do not attempt to control the working depth of the harrow by the Ferguson Finger Tip Control System.

The control lever should be in the neutral position so that the harrow is free to float. The rear cross bar of each section should be in the center of the lifting rod loop so that the rear of the harrow is not being forced down or being pulled up by the lifting rods.

On the tractor the Ferguson lift type spring tooth harrow can be raised and carried for transporting when crossing sodded waterways, and turning at the end of the field, or it can be lifted for the cleaning of trash from the teeth. All these operations can be performed from the tractor seat while the harrow and tractor are operating by merely operating the Ferguson Finger Tip Control Lever.

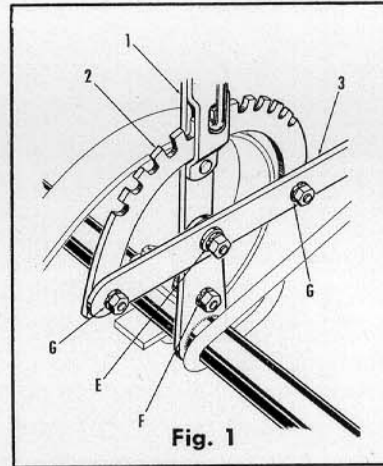
Do not lubricate any points on this harrow.

Check daily when operating for loose nuts and bolts.

See your local Ferguson Dealer for Genuine Ferguson Spring Tooth Harrow Repairs.

ASSEMBLY INSTRUCTIONS

TO ASSEMBLE—Place blocks under each corner of the frame assembly so it will be level and approxi-



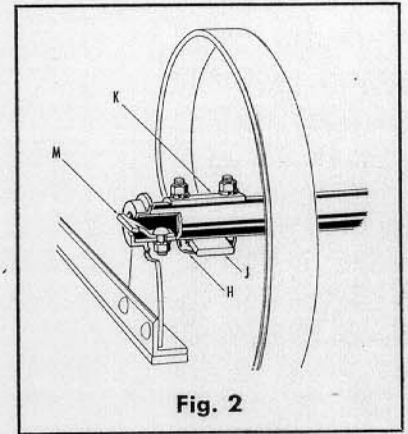
mately 6" from the ground. Cut and remove all binding wires.

Bolt ratchet (2) to shift bar (3) at Point G. Bolt adjusting lever (1) to shift bar and tilting member at E and F, Fig. 1.

Loosen all nuts on U bolts and back them off until the nut is even with the end of the bolt.

Do not remove nuts.

Check tooth bar retainer for position, M, Fig. 2.



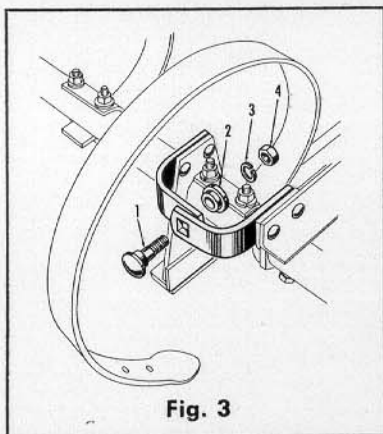
Installing Teeth

The rectangular end of tooth J is placed through retainer K and through U bolt H, Fig. 2, as illustrated. After all the teeth have been inserted on this section, adjust as follows: With the section resting on the blocks, place a flat board under the points of one row of teeth and pull the adjusting lever back until the points rest on the board and the other end of the spring extends through the U bolt approximately 1". Tighten U bolt nuts securely and uniformly. Move the board to the next row and adjust in the same manner. Move the board to the third row to adjust and tighten. Adjust and tighten the teeth of each of the other sections in the same manner.

FERGUSON K-BO-A SPRING TOOTH HARROWS

Place the section with nine teeth on the ground. This will always be the left hand section (from the rear). Place the section with four coupling assemblies on the right of the first section. This is the center section in a three section harrow. In a two section harrow there are only two couplings on one side of each section. Connect the sections at points A, Fig. 4. Check parts 1, 2, 3 and 4, Fig. 3, to be sure that the

bolt, bushing, lockwasher and nut are properly tightened. The bushing is installed to prevent the binding of the two members when the nut is pulled tight. This



allows for flexibility in the harrow by movement on the bushing.

Remove pins B, Fig. 4, from drawbar assembly and attach the drawbar to each section as illustrated. It is usually easier to attach middle section before attaching drawbar at both ends.

Raise the end of the lifting rods and attach to drawbar struts at points C, Fig. 2.

The harrow can then be attached to the tractor in usual manner at points D, Fig. 4.

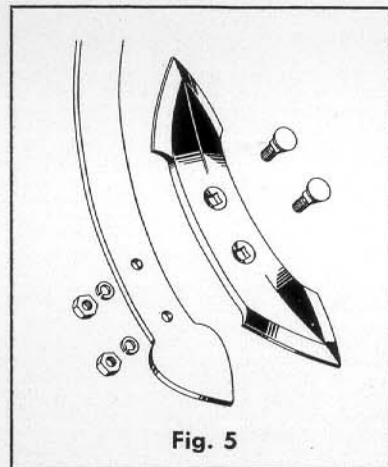
EXTRA EQUIPMENT AT ADDITIONAL COST

Converting from three to two section harrow

This can be accomplished by removing the center section of the harrow and using drawbar 2K-BO-A-5300.

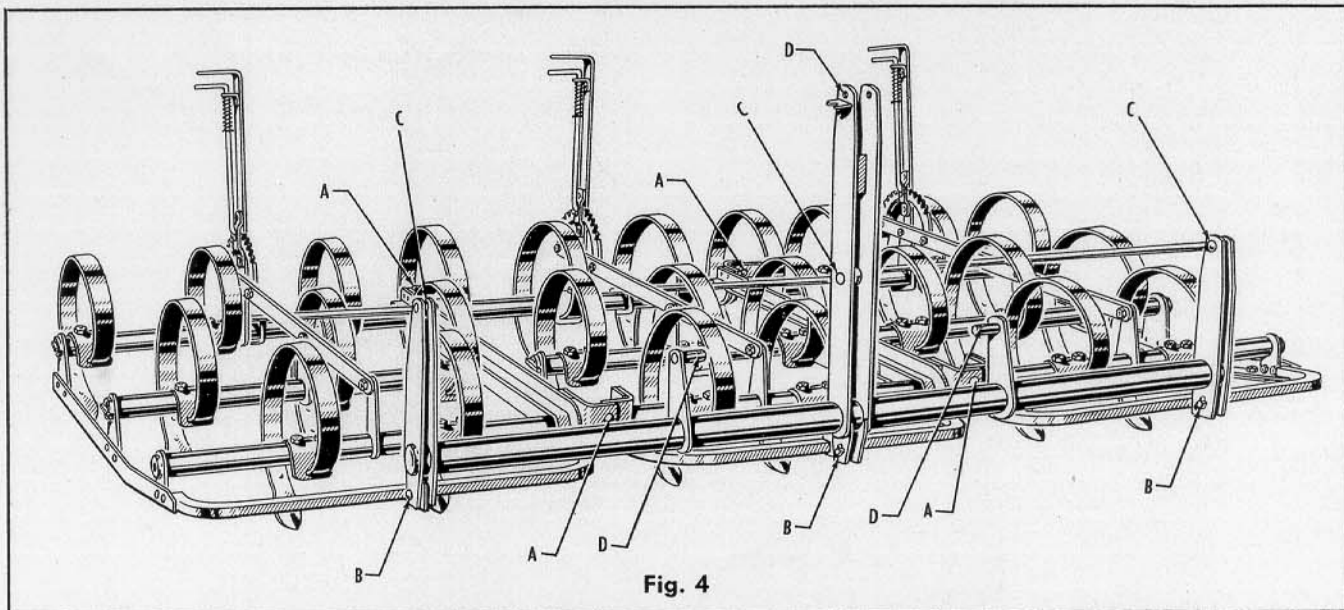
Converting from two section to three section harrow

Add center section K-BO-A-7882. Use drawbar 3K-BO-A-5300.



Removable Tooth Points (Figure 5)

The standard spring tooth harrow is supplied with punched teeth only. Replaceable, reversible points are available for conditions where they are desirable. 17 point assemblies are required for two section. 25 point assemblies are required for three section. (Extra equipment) Assembly K-BO-A-150 includes bolts, lockwasher and nuts complete.



FERGUSON K-BO-A SPRING TOOTH HARROWS

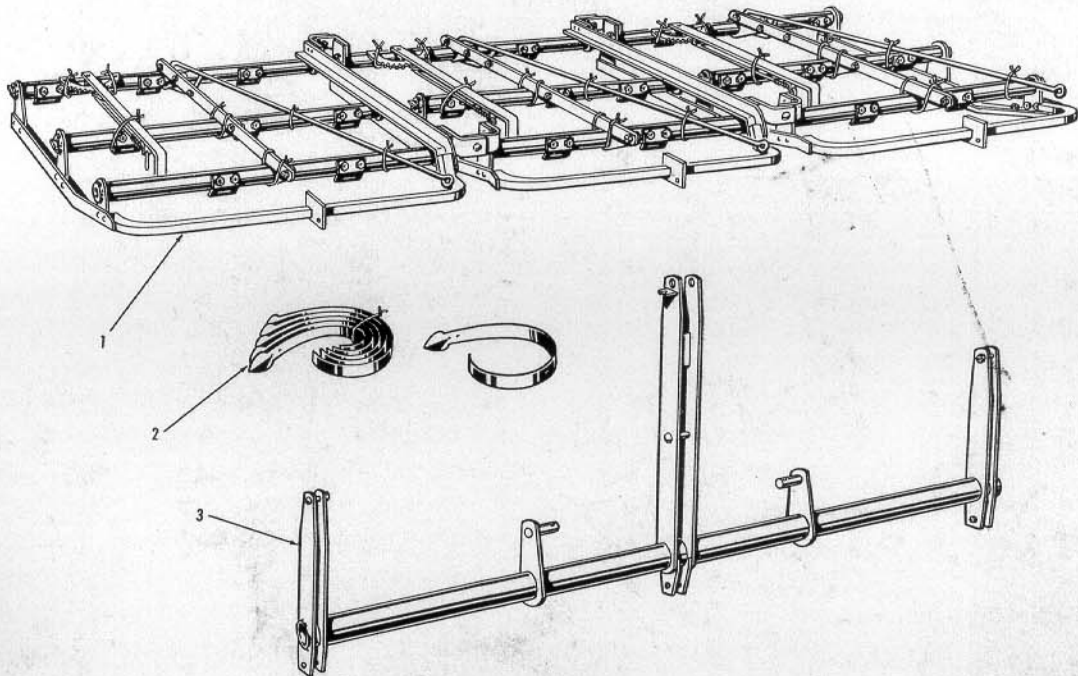


Fig. 6

The three section harrow K-BO-A-31 is shipped as follows:

<u>Item</u>	<u>Description</u>
1.	Frame Assembly 3 pieces. Ratchet and adjusting lever included.
2.	Teeth—25 total—5 bundles of 4 teeth and 1 bundle of 5 teeth.
3.	Drawbar assembly 1 piece—part No. 3K-BO-A-5300. (See Fig. 6).

(See Fig. 6)

The two section harrow K-BO-A-21 is shipped as follows:

<u>Item</u>	<u>Description</u>
1.	Frame Assembly.
2.	Teeth—17 total—3 bundles of 4 teeth and 1 bundle of 5 teeth.
3.	Drawbar assembly 1 piece Part No. 2K-BO-A-5300 (See Fig. 7).

(See Fig. 7)

Fig. 7 shows the two section K-BO-A-21 completely assembled.

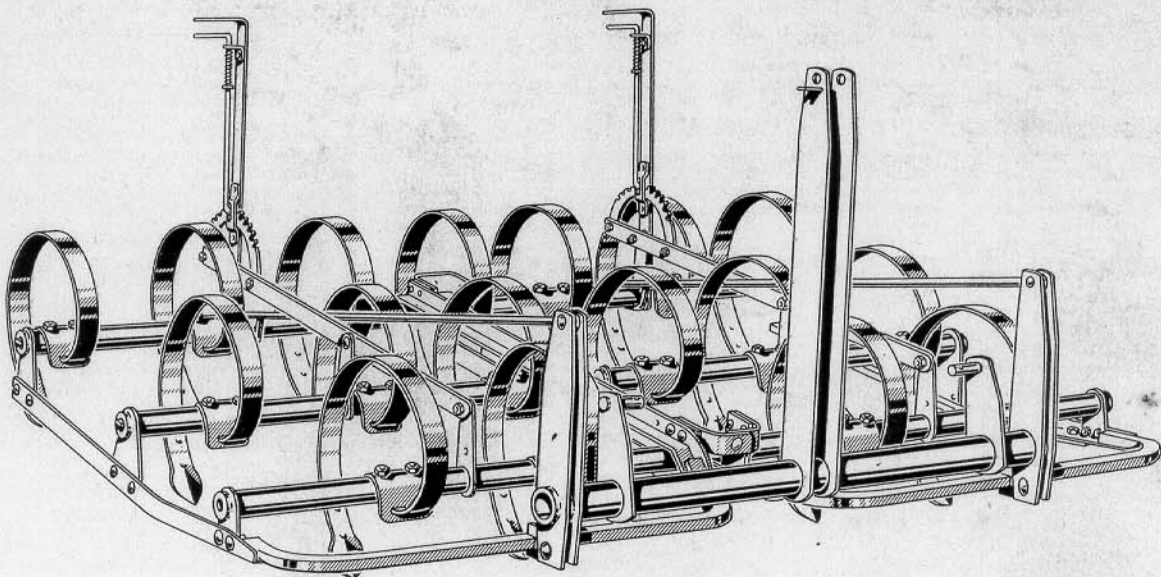


Fig. 7