



**LIFT
TYPE**

DEARBORN

SPRING TOOTH HARROW



MODEL 11-10, 11-11



ASSEMBLY and OPERATING *Instructions*

DEARBORN MOTORS CORPORATION — DETROIT 3, MICHIGAN

www.ntractorclub.com

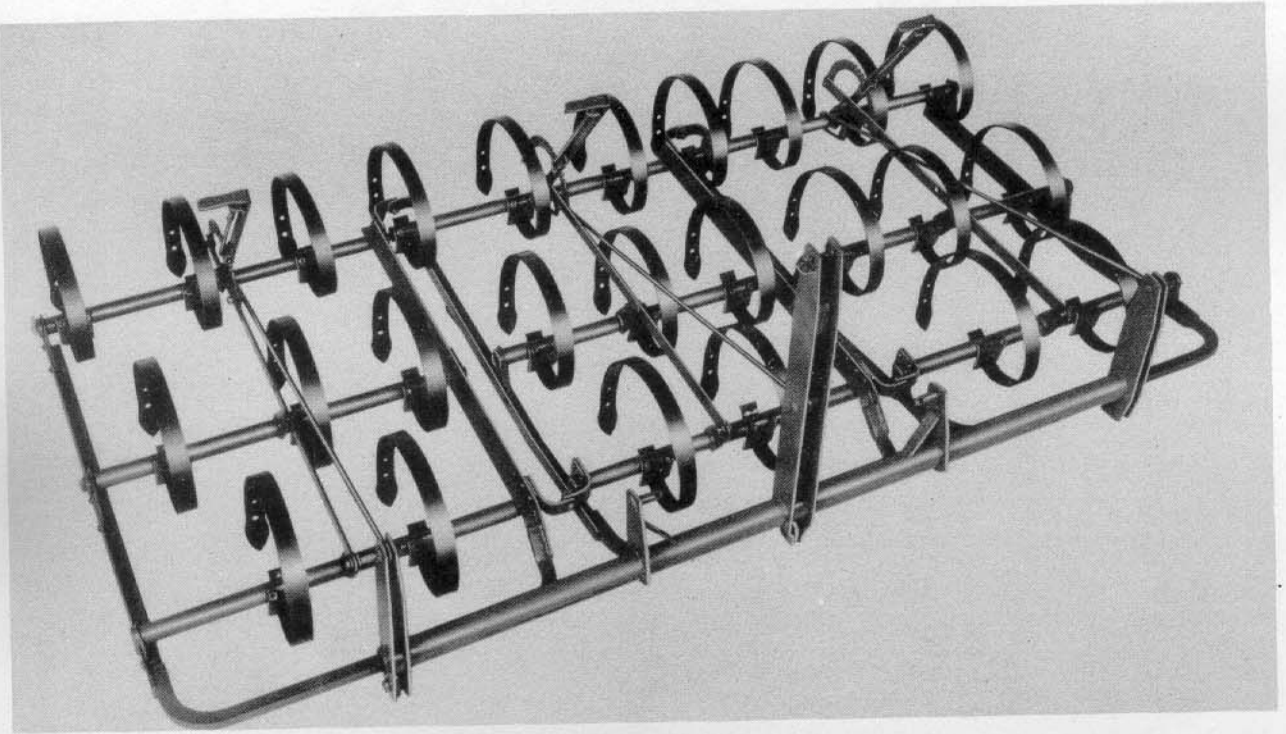


Figure 1

The Dearborn Lift Type Spring Tooth Harrow (Model 11-11)

The Dearborn Lift Type Spring Tooth Harrow pictured above embodies the high quality manufacturing standards required of all Dearborn implements. The sturdy frame sections are equipped with spring steel teeth that are flexible enough to ride over stones or roots in the field and then snap back into working position. The teeth are set to the desired working depth by means of an adjusting lever and ratchet mounted on each section of the harrow.

The Spring Tooth Harrow is designed so that each section frame is connected to the other at pivot points. This construction permits the spring teeth to work the soil with a maximum degree of uniformity. The implement is raised or lowered with the Ford Hydraulic Touch Control lever.

The Dearborn Lift Type Spring Tooth Harrow is available in two models. Model 11-10 is a two section, six foot harrow. Model 11-11 is a three section, nine foot harrow. Information concerning the assembly of both models is provided in the following material.

BUNDLE INFORMATION

Check shipment against the list and the figure for the model concerned, to be sure all parts are received.

Model 11-10 (Two Section)

Bundles 1 & 2

Right and left section frames with lift rods and lever assemblies attached. Tube containing instruction manual is wired to Bundle No. 2

ASSEMBLY

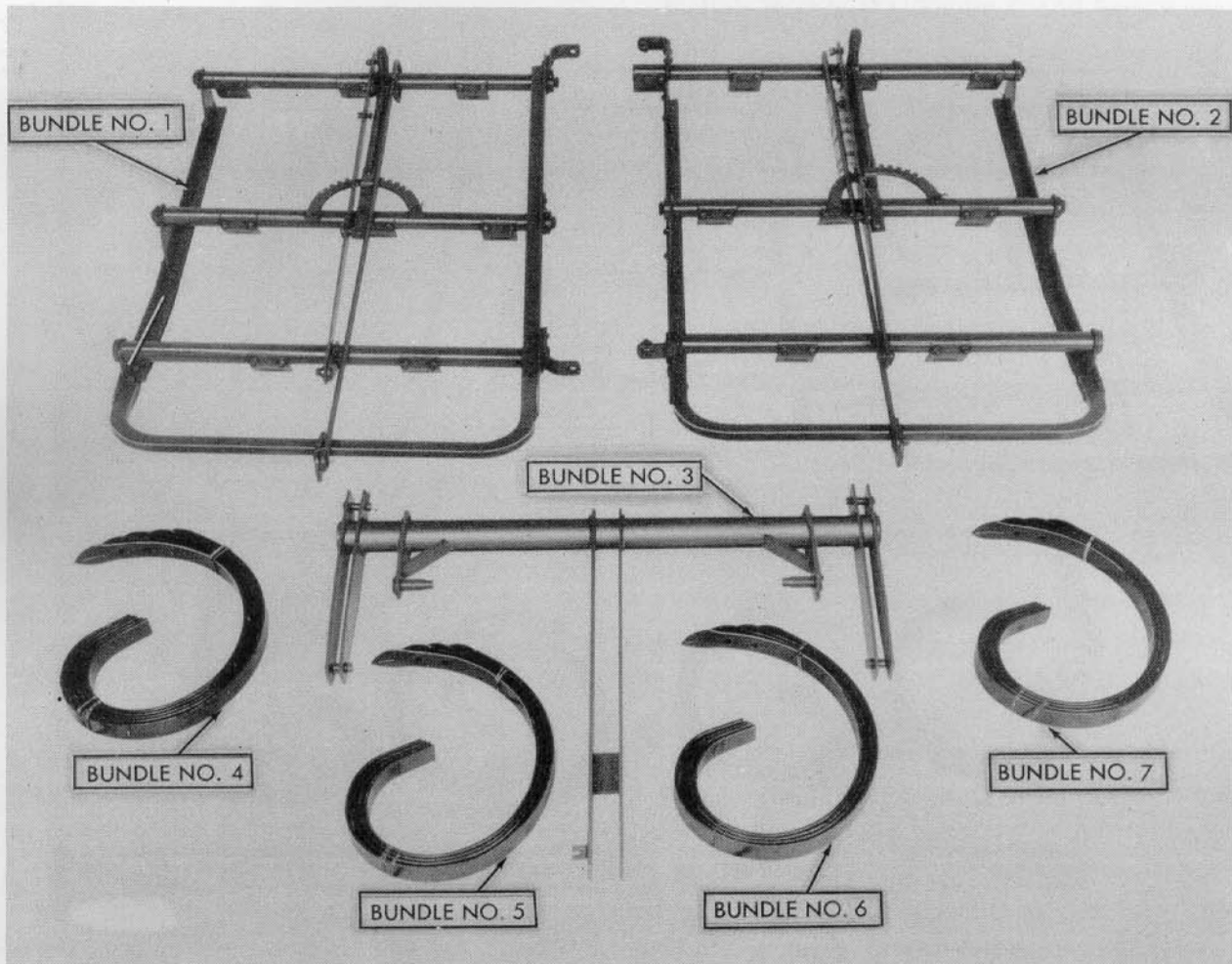


Figure 2

Implement Bundled For Shipment (Model 11-10)

NOTE: Assembly of the Spring Tooth Harrow is the responsibility of the Dearborn Farm Equipment dealer. The implement should be delivered completely assembled. The following instructions are provided in case of need.

Bundle 3

Drawbar Assembly

Bundles 5, 6 & 7

Three bundles of four spring teeth, each

Bundle 4

Five spring teeth

ASSEMBLY

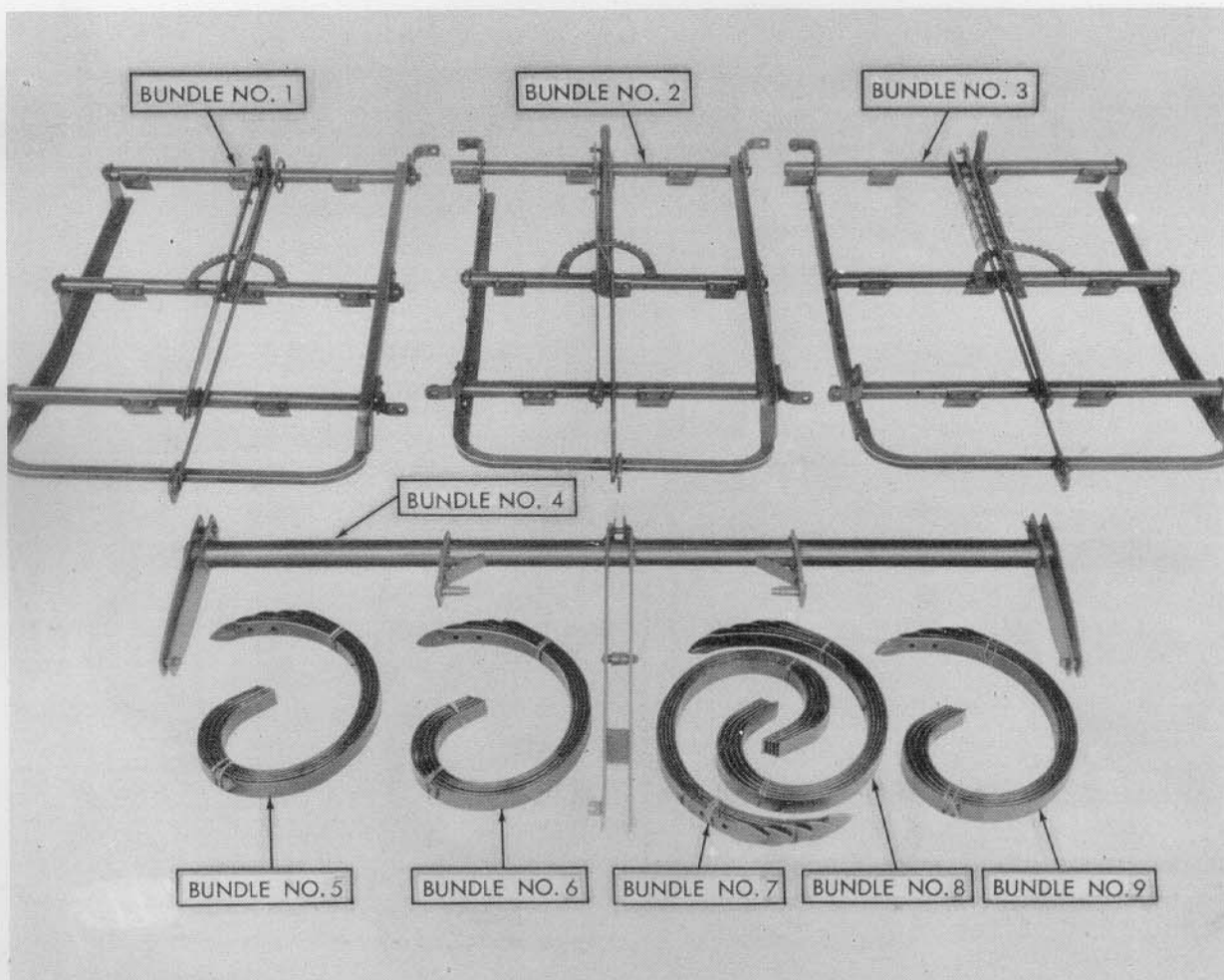


Figure 3

Implement Bundled For Shipment (Model 11-11)

Model 11-11 (Three Section)

Bundles 1, 2 & 3

Right, center and left frames with lift rod and lever assemblies attached. Tube containing instruction manual is wired to Bundle No. 3

Bundle 4

Drawbar Assembly

Bundles 5, 6, 7, 8 & 9

Five spring teeth in each bundle

ASSEMBLY PROCEDURE

Three Section Harrow

1. Attach spring teeth to each section frame as follows:

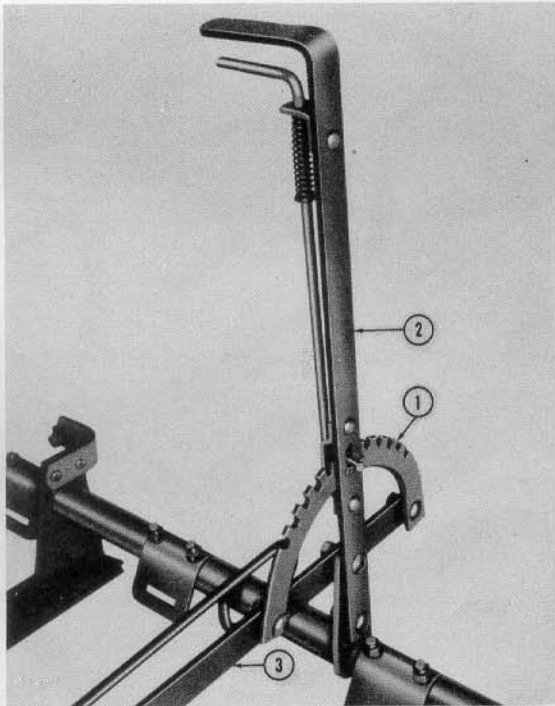


Figure 4

Ratchet And Lever Assembly Attached

- a. Place section on set of saw horses.
- b. Loosen the two nuts (1), Figure 5, on all U-bolts sufficiently to permit square end of spring tooth to pass through tooth clip (2) and through U-bolt (3).
- c. Insert square end of the spring tooth through tooth clip and U-bolt so the end extends approximately one inch past the U-bolt.
- d. Tighten nuts (1) finger tight. This will permit adjustment of teeth later on.
- e. Attach the remaining teeth to each section in the same manner.

2. Bolt ratchet (1), Figure 4, and lever assembly (2) to the *left* side of the shift bar (3), as shown.
3. Place the sections in approximately the position as shown in Figure 1.
4. Attach left hand section to center section.
 - a. Notice position of left hand section couplings (1), Figure 6, in relation to center section couplings (2). Section couplings with square bolt holes in them fit outside of the couplings with round bolt holes.
 - b. Position bushing in hole in inside coupling and insert bolt through square hole in outside coupling.
 - c. Secure with lockwasher and nut.

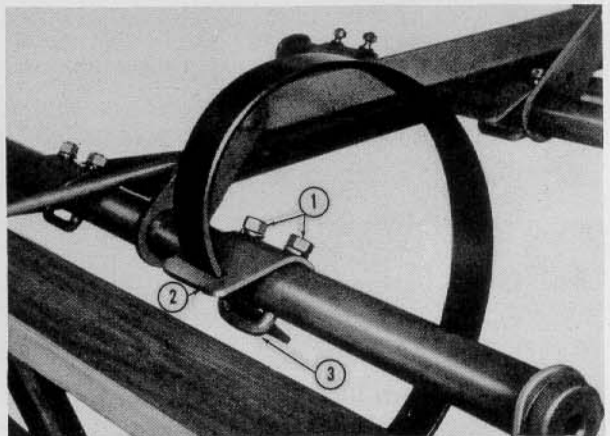


Figure 5

Spring Tooth Attached To Section Frame

ASSEMBLY

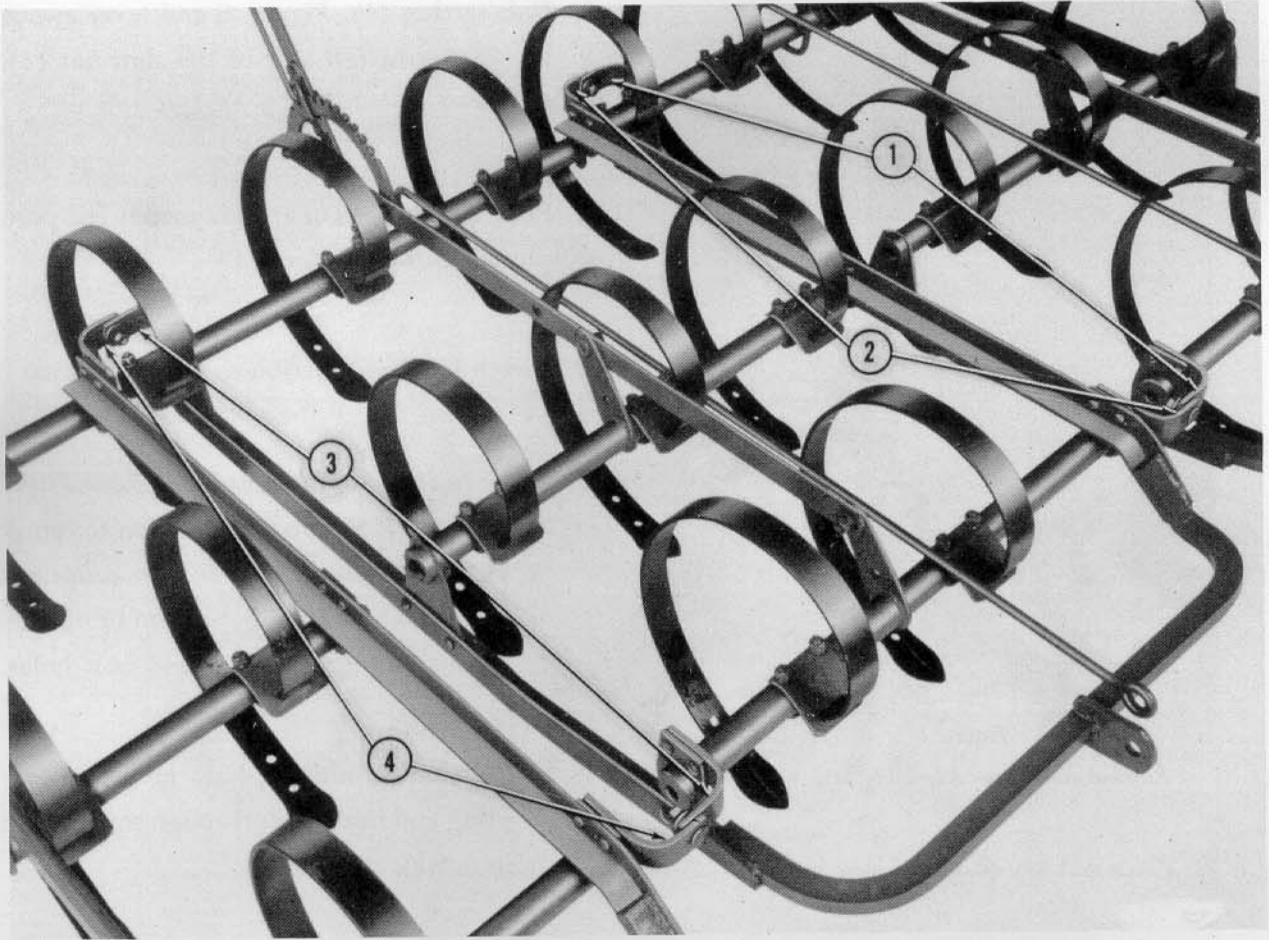


Figure 6

Harrow Sections Assembled

5. Attach right hand section to center section.
 - a. Notice position of center section coupling (3), Figure 6, in relation to right hand section couplings (4).
 - b. Insert bushing and bolt as in (b) of Step 4.
 - c. Secure with lockwasher and nut.
6. Adjust the spring teeth in the clamps as follows:
 - a. Place complete assembly on level floor.
 - b. Set levers of each section in the third notch from the front of the adjusting notches as shown in Figure 7.
 - c. Tap the squared end of each spring tooth with a hammer until the points of all the teeth touch the floor.
 - d. Tighten all U-bolt nuts.

ASSEMBLY

7. Attach the drawbar assembly to each section hitch plate at points (1), (2) and (3), Figure 8, with pins and cotter pins.
8. Raise the drawbar struts to vertical and fasten the front ends of the lift rods (4), Figure 8, at points (5), (6) and (7). Use carriage bolt and one bushing at points (5) and (7) and two spacers on carriage bolt at point (6).

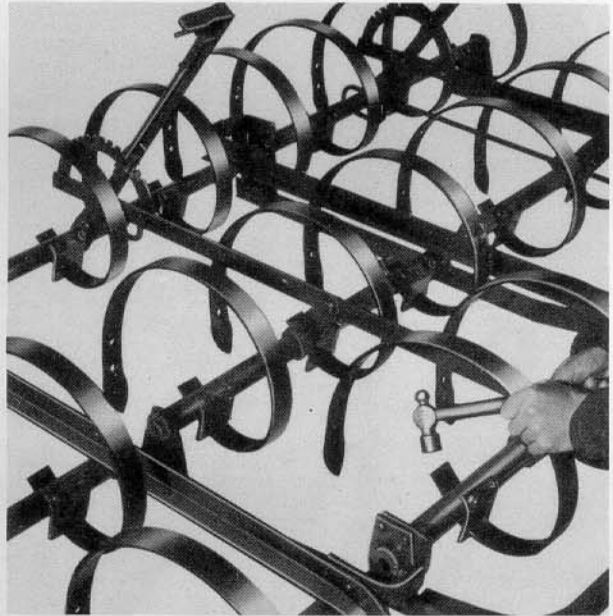


Figure 7
Adjusting Spring Teeth In Clamps

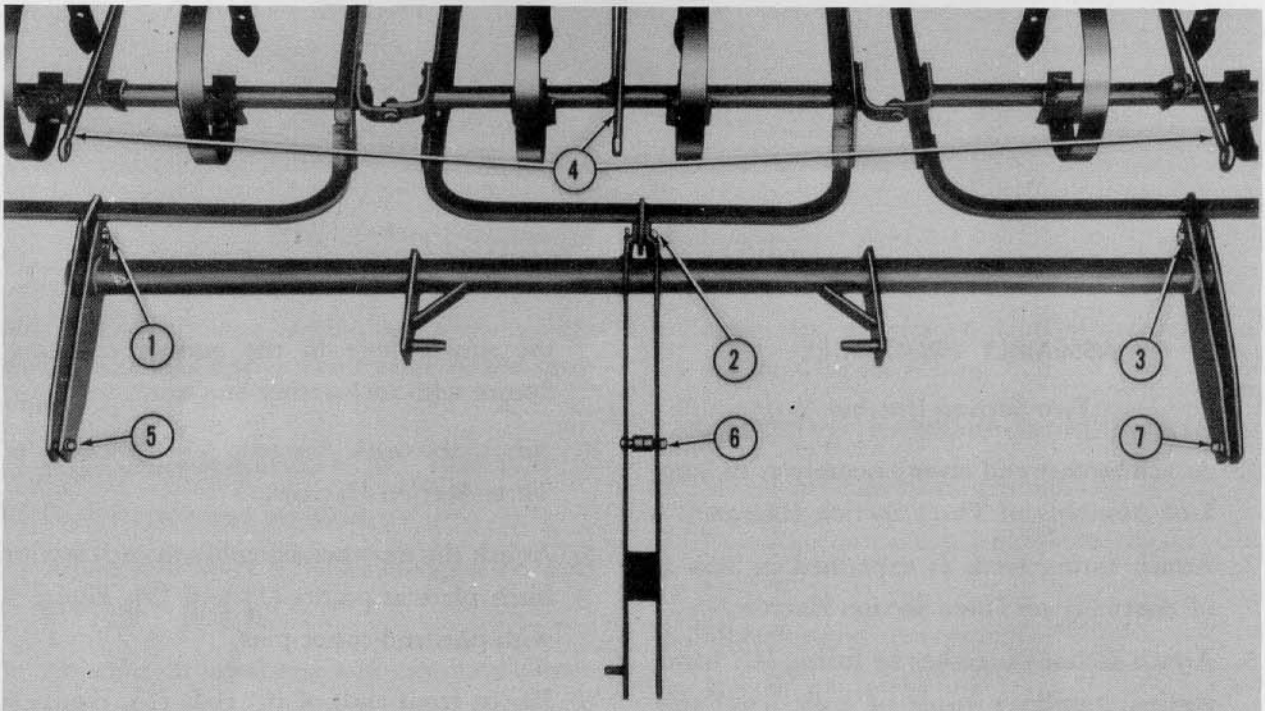


Figure 8
Drawbar Assembly Attached To Harrow Sections

ASSEMBLY

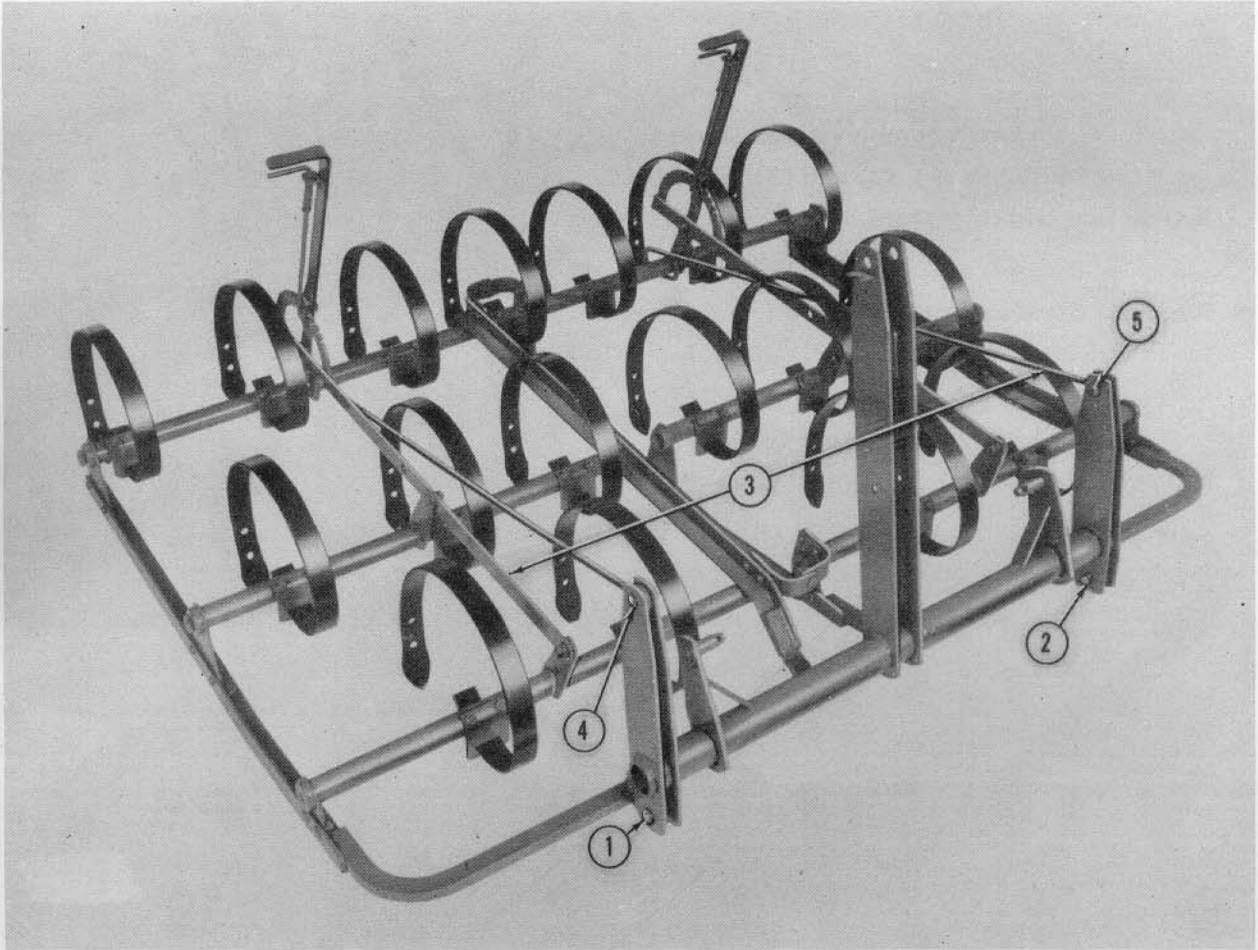


Figure 9

Two Section Harrow Assembled

ASSEMBLY PROCEDURE

Two Section Harrow

1. Attach ratchet and lever assembly as in Step 1 of Assembly of Three Section Harrow.
2. Attach spring teeth as explained in Step 2 of Assembly of Three Section Harrow.
3. Attach sections together by fitting left hand section couplings inside of right hand section couplings. Place bushing in the hole in the inside coupling and insert bolt through the square hole in the outside coupling. Secure with lockwasher and nut.
4. Adjust the teeth. See Step 6 of Assembly of Three Section Harrow.
5. Attach the drawbar assembly to each section hitch plate at points (1) and (2), Figure 9, with pins and cotter pins.
6. Fasten front ends of lift rods (3), Figure 9, at points (4) and (5) with bolts and bushing provided.

ATTACHING AND DETACHING

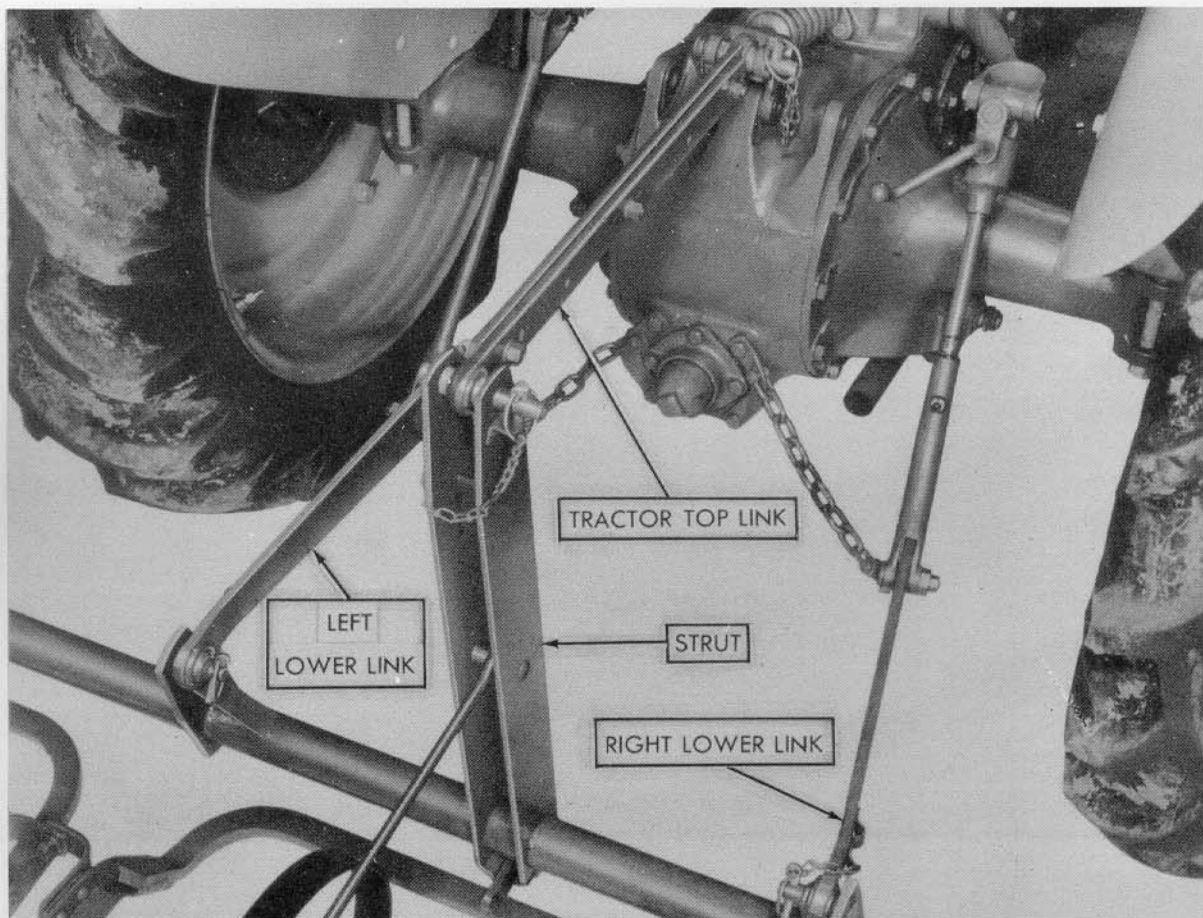


Figure 10

Harrow Attached To Tractor

NOTE: Both the two section and three section harrow are attached to the tractor in the same manner.

ATTACHING HARROW TO TRACTOR

1. Back tractor into position.
2. Attach left lower link and secure with linch pin. See Figure 10.
3. Attach right lower link and secure with linch pin.
4. Attach tractor top link to harrow drawbar

struts and to tractor control spring yoke. Secure with linch pins.

DETACHING HARROW FROM TRACTOR

1. Lower implement to ground.
2. Remove tractor top link from tractor and harrow.
3. Detach right lower link.
4. Detach left lower link.

CAUTION: Make sure harrow is completely detached before attempting to move tractor.



Figure 11

Spring Tooth Harrow At Work (Model 11-11)

The Dearborn Lift Type Spring Tooth Harrow is easy to operate and well suited for a variety of uses about the farm, the orchard and the vineyard. It can be used in the preparation of seed beds, in working fall plowed land for spring planting, in leveling plowed fields, in weed eradication on fallow land and for working the ground in orchards and vineyards. The spring teeth mix and aerate the soil and expose weed roots to the air.

As previously indicated, this harrow is a lift type implement. This "lift" feature simplifies turning and enables the operator to back into

corners and work the ground trim at the end of the field. Further, it makes possible transporting the harrow to and from the field and across grass waterways without dragging the implement.

The following information will aid the operator in getting maximum performance from the Spring Tooth Harrow.

LUBRICATION

There are no lubrication fittings on the Spring Tooth Harrow, however, oil the pivot points occasionally to assure ease of operation.

ADJUSTMENTS

Depth of Penetration: The working depth of the spring teeth is controlled by the lever and ratchet on each section. The steel soles attached to the frame maintain the desired depth once these levers are set.

Leveling: The implement may be leveled by means of the leveling crank on the tractor.

TRANSPORTING

When transporting the Spring Tooth Harrow to and from fields or across grass waterways, raise the implement to the position shown in Figure 12 with the Ford Hydraulic Touch Control lever.

CAUTION: Because of the width of this implement, care must be exercised when traveling on

the open highway or down farm lanes and when passing through gates. Figure 12 shows the three section Spring Tooth Harrow in transport position.

MAINTENANCE SUGGESTIONS

1. Clean the harrow after each use and cover ground engaging surfaces with a good grade of rust preventative.
2. Store harrow in a dry place between operating seasons.
3. Use touch up paint where necessary on painted surfaces-to prevent rust and maintain appearance of implement.
4. Replace worn or damaged parts promptly with genuine Dearborn Farm Equipment replacement parts.

SAFETY PRECAUTIONS

Most farm implement accidents can be prevented by following these simple precautions.

1. Do not permit anyone but the operator to ride tractor at any time.
2. Do not permit anyone to ride on implement.
3. Do not leave tractor while it is in motion.
4. Shut engine off before leaving tractor.
5. Keep tractor keys where they are not available to children when tractor is in the farm yard.



Figure 12

Spring Tooth Harrow In Transport

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DEARBORN SPRING TOOTH Harrows

(LIFT TYPE) MODELS 11-10 AND 11-11

Group 5—DEARBORN SPRING TOOTH HARROWS (Lift Type)—Models 11-10 and 11-11

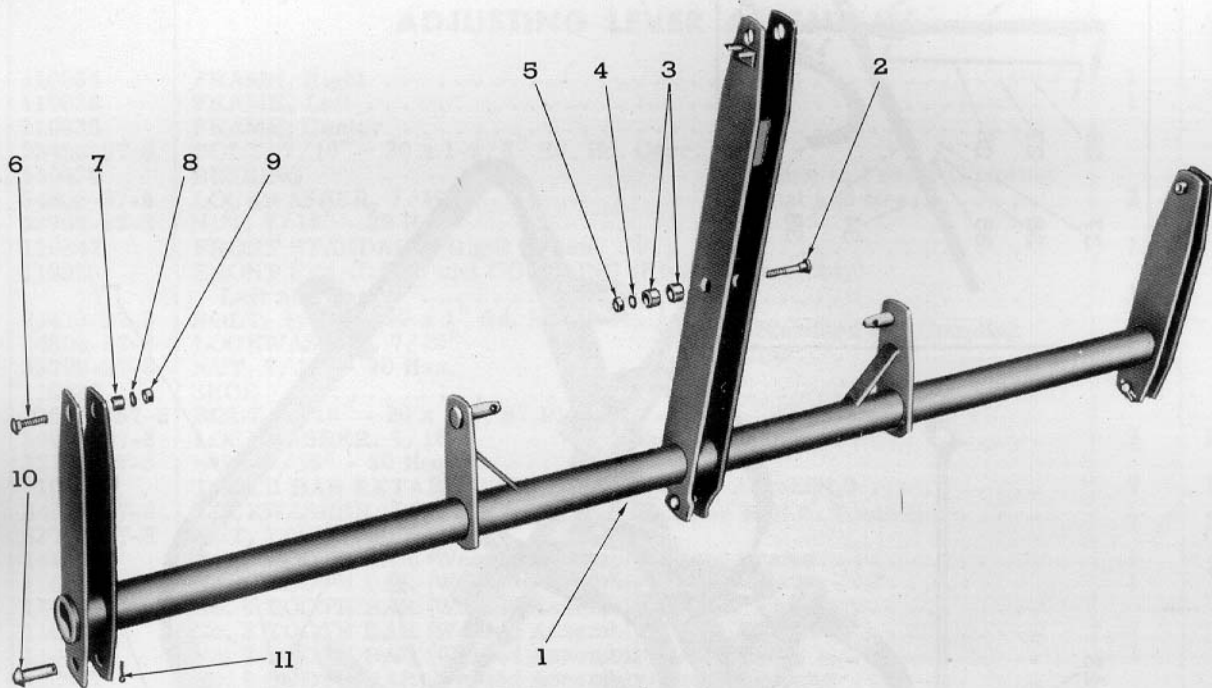


Figure 23 - Drawbar Assembly

| FIG. 23 | PART NO. | NAME AND DESCRIPTION | QTY. REQ. | |
|-------------------------------------|------------|--|-----------|-------|
| | | | 11-10 | 11-11 |
| Group 5-1—DRAWBAR ASSEMBLIES | | | | |
| -- | 110820 | DRAWBAR, Two Section (Welded Assembly) | 1 | |
| 1 | 110821 | DRAWBAR, Three Section (Welded Assembly) | | 1 |
| 2 | 300111 | BOLT, 7/16" - 20 x 2-7/8" Rd. Hd. Carr. | | 1 |
| 3 | 110832 | SPACER | | 2 |
| 4 | 34808-S7-8 | LOCKWASHER, 7/16" | | 1 |
| 5 | 33792-S7-8 | NUT, 7/16" - 20 Hex. | | 1 |
| 6 | 23488-S7-8 | BOLT, 7/16" - 20 x 1-5/8" Rd. Hd. Carr. | | |
| 7 | 110833 | BUSHING | | |
| 8 | 34808-S7-8 | LOCKWASHER, 7/16" | | |
| 9 | 33792-S7-8 | NUT, 7/16" - 20 Hex. | 2 | 2 |
| 10 | 300093 | PIN, 5/8" x 1-3/4" Rd. Hd. Drilled | | |
| 11 | 72037-S7-8 | COTTER PIN, 3/16" x 1" | 2 | 3 |

DEARBORN SPRING TOOTH

Harrow

(LIFT TYPE) MODELS 11-10 AND 11-11

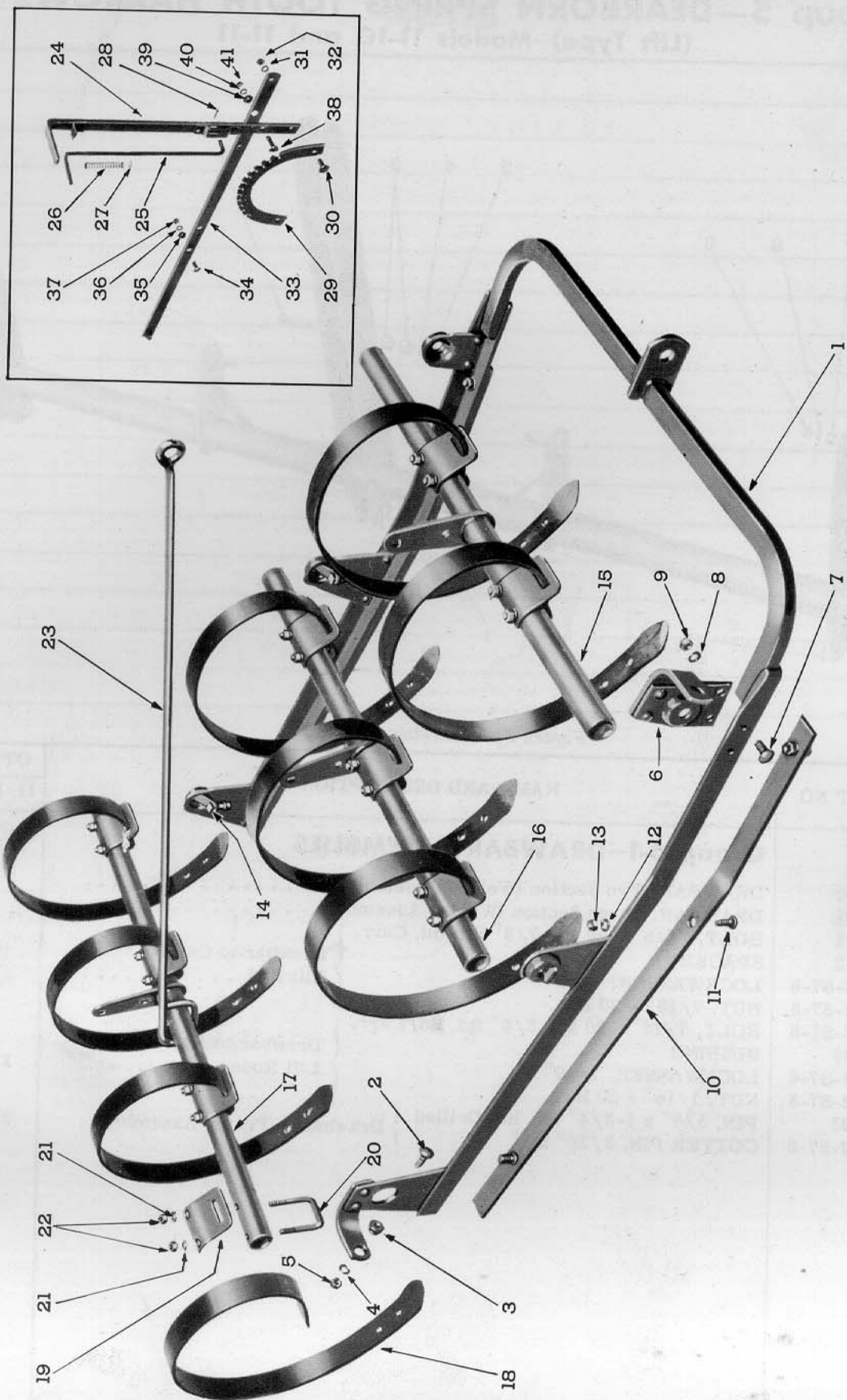


Figure 24 - Spring Tooth Frame and Adjusting Lever Assemblies

DEARBORN SPRING TOOTH *Harrow*

(LIFT TYPE) MODELS 11-10 AND 11-11

| FIG. 24 | PART NO. | NAME AND DESCRIPTION | QTY. REQ. | |
|--|-------------|---|-----------|-------|
| | | | 11-10 | 11-11 |
| Group 5-2—SPRING TOOTH FRAME AND ADJUSTING LEVER ASSEMBLIES | | | | |
| - | 110834 | FRAME, Right | 1 | 1 |
| 1 | 110835 | FRAME, Left | 1 | 1 |
| - | 110836 | FRAME, Center | | 1 |
| 2 | 23458-S7-8 | BOLT, 7/16" - 20 x 1-3/8" Rd. Hd. Carr. } | | |
| 3 | 110439 | BUSHING } Frame to Frame Coupling | | |
| 4 | 34808-S7-8 | LOCKWASHER, 7/16" } Front and Rear..... | 2 | 4 |
| 5 | 33792-S7-8 | NUT, 7/16" - 20 Hex. } | | |
| - | 110847 | FRONT STANDARD, Right Frame | 1 | 1 |
| 6 | 110853 | FRONT STANDARD and COUPLING (Riveted Assembly) Left and Center | 1 | 2 |
| 7 | 23413-S7-8 | BOLT, 7/16" - 20 x 1" Rd. Hd. Carr. } | | |
| 8 | 34808-S7-8 | LOCKWASHER, 7/16" } Front Standard and Coupling | | |
| 9 | 33792-S7-8 | NUT, 7/16" - 20 Hex. } to Frame..... | 4 | 6 |
| 10 | 110887 | SHOE | 3 | 5 |
| 11 | 355613-S7-8 | BOLT, 7/16" - 20 x 1-1/8" Plow } | | |
| 12 | 34808-S7-8 | LOCKWASHER, 7/16" } Shoe to Frame | 9 | 15 |
| 13 | 33792-S7-8 | NUT, 7/16" - 20 Hex. } | | |
| 14 | 110855 | TOOTH BAR RETAINER and BOLT (Welded Assembly) | 7 | 10 |
| 14 | 34808-S7-8 | LOCKWASHER, 7/16" } Tooth Bar Retainer Bolt to Tooth Bar | 7 | 10 |
| 14 | 33792-S7-8 | NUT, 7/16" - 20 Hex. } | | |
| -- | 110868 | No. 1 TOOTH BAR (Welded Assembly) Right Frame | 1 | 1 |
| 15 | 110869 | No. 1 TOOTH BAR (Welded Assembly) Left Frame | 1 | 1 |
| -- | 110879 | No. 1 TOOTH BAR (Welded Assembly) Center Frame | | 1 |
| -- | 110872 | No. 2 TOOTH BAR (Welded Assembly) Right Frame | 1 | 1 |
| 16 | 110873 | No. 2 TOOTH BAR (Welded Assembly) Left Frame | 1 | 1 |
| -- | 110881 | No. 2 TOOTH BAR (Welded Assembly) Center Frame | | 1 |
| -- | 110875 | No. 3 TOOTH BAR (Welded Assembly) Right Frame | 1 | 1 |
| 17 | 110876 | No. 3 TOOTH BAR (Welded Assembly) Left Frame | 1 | 1 |
| -- | 110883 | No. 3 TOOTH BAR (Welded Assembly) Center Frame | | 1 |
| 18 | 110888 | TOOTH, Spring | 17 | 25 |
| 19 | 110889 | CLIP, Spring Tooth | 17 | 25 |
| 20 | 110890 | U-BOLT, 7/16" Dia. } | | |
| 21 | 34808-S7-8 | LOCKWASHER, 7/16" } Spring Tooth and Clip to Tooth Bar | 34 | 50 |
| 22 | 33792-S7-8 | NUT, 7/16" - 20 Hex. } | 34 | 50 |
| 23 | 110891 | ROD, Lift | 2 | 3 |
| 24 | 110857 | LEVER, Guide and Keeper (Riveted Assembly) | 2 | 3 |
| -- | 23428-S7-8 | BOLT, 7/16" - 20 x 1-1/8" Rd. Hd. Carr. } | | |
| -- | 34808-S7-8 | LOCKWASHER, 7/16" } Lever to Tooth Bar | 2 | 3 |
| -- | 33792-S7-8 | NUT, 7/16" - 20 Hex. } | | |
| 25 | 110866 | ROD, Lever | 2 | 3 |
| 26 | 110867 | SPRING, Lever Rod | 2 | 3 |
| 27 | 34747-S7-8 | WASHER, 3/4" x 1-3/32" x .063 - Lever Rod Spring Retaining | 2 | 3 |
| 28 | 72018-S7-8 | COTTER PIN, 5/32" x 3/4" - Lever Rod to Lever | 2 | 3 |
| 29 | 110886 | RATCHET | 2 | 3 |
| 30 | 23428-S7-8 | BOLT, 7/16" - 20 x 1-1/8" Rd. Hd. Carr. } | | |
| 31 | 34808-S7-8 | LOCKWASHER, 7/16" } Ratchet to Shift Bar | 4 | 6 |
| 32 | 33792-S7-8 | NUT, 7/16" - 20 Hex. } | | |
| 33 | 110885 | BAR, Shift | 2 | 3 |
| 34 | 23443-S7-8 | BOLT, 7/16" - 20 x 1-1/4" Rd. Hd. Carr. } | | |
| 35 | 131364 | BUSHING } Shift Bar to Tooth Bar .. | | |
| 36 | 34808-S7-8 | LOCKWASHER, 7/16" } | 4 | 6 |
| 37 | 33792-S7-8 | NUT, 7/16" - 20 Hex. } | | |
| 38 | 23473-S7-8 | BOLT, 7/16" - 20 x 1-1/2" Rd. Hd. Carr. } | | |
| 39 | 131364 | BUSHING } Lever and Shift Bar | | |
| 40 | 34808-S7-8 | LOCKWASHER, 7/16" } to Tooth Bar | 2 | 3 |
| 41 | 33792-S7-8 | NUT, 7/16" - 20 Hex. } | | |