OWNER'S MANUAL

SETTING UP INSTRUCTIONS
PARTS LIST

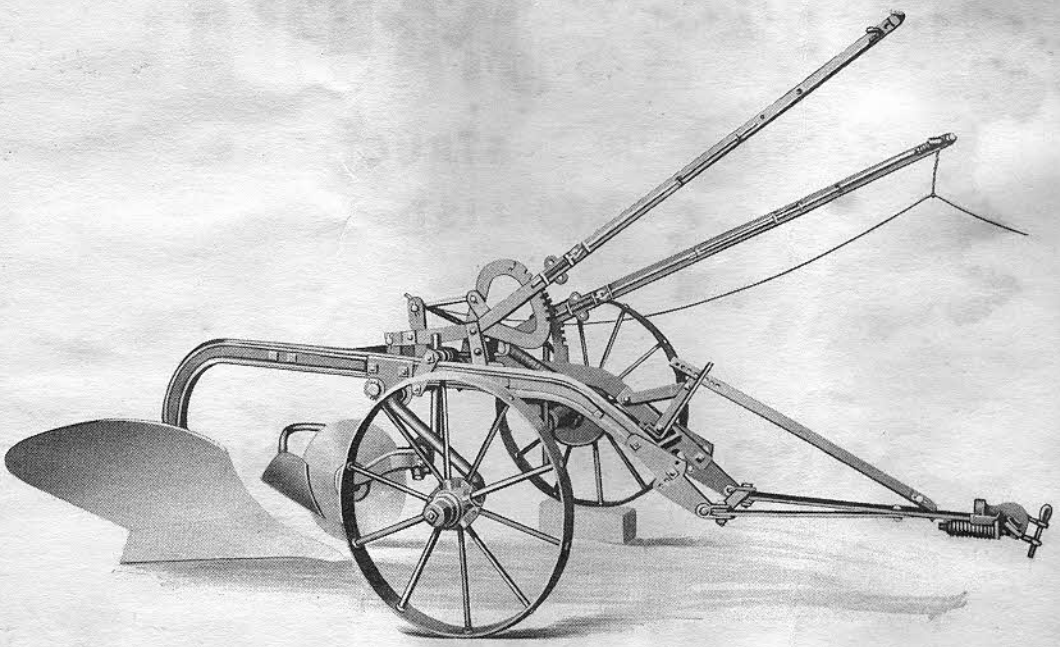
McCORMICK-DEERING

No. 3
Tractor Plow

(One-Furrow—14" or 16" Bottoms)

This manual contains information which will be valuable to you during the entire life of your equipment. Rely on your manual for operating and maintenance information . . . and rely on your International Harvester dealer when in need of skilled mechanical service or IH parts.

INTERNATIONAL HARVESTER COMPANY
180 NORTH MICHIGAN AVE. CHICAGO 1, ILLINOIS, U.S.A.



No. 3 Tractor Plow (One-Furrow).

TO THE OWNER

The No. 3 One-Furrow Tractor Plow is designed to do a workmanlike job under average conditions and is available in either 14" or 16" bottom.

The plow is provided with a pickup-type hitch which is flexible with reference to the up-and-down motion of the rear end of the tractor as it passes over rough ground. When the plow is raised at the end of the furrow, a stop on the hitch raising link holds the rear end of the plow up so that the plow is carried well off the ground.

Special equipment available includes many styles and shapes of bottoms, notched rolling colters, stationary jointers, wheels for pneumatic tires, etc.

A rear wheel attachment, for use where necessary to counteract side draft, can be obtained on special order. A bottom with a shorter landside must be used when the plow is equipped with this attachment.

The Whirlwind Terracer, which is manufactured by the Servis Equipment Company, Dallas, Texas, may be used with this plow. Special parts are required to adapt the Terracer to the plow.

You are urged to consult your International Harvester dealer concerning special plowing problems. Within the International Harvester Company are men who have spent years in research and study of plowing conditions. Let the "know-how" these men have accumulated serve you.

Be sure to read the Instructions for Adjusting and Operating in this manual. Check each item referred to and acquaint yourself with the adjustments required to do a good plowing job and to get maximum trouble-free service.

Remember, a plow which is properly lubricated and adjusted saves time, labor and fuel costs.

INSTRUCTIONS FOR ADJUSTING AND OPERATING

(Setting Up Instructions are on page 10)

LUBRICATION

Use the pressure lubricating gun furnished with the tractor and keep all bearings and working parts well lubricated.

Lubrication fittings are provided for the following places. Check these over, be sure all are in place and lubricate twice daily.

One straight fitting . . . . . In clutch wheel and wheel box.
Two straight fittings. . . . . In wheel caps.
One straight fitting . . . . . In clutch axle bracket.
One straight fitting . . . . . In furrow wheel sand band.
One straight fitting . . . . . In furrow wheel box.

GENERAL

IMPORTANT! Before starting the plow, be sure the bolts which secure the bottoms to the beams are absolutely tight.

Bolts and set screws must be kept perfectly tight; spread all cotters to keep them from falling out.

REMOVE THE VARNISH BEFORE STARTING PLOW

Plow bottoms, rolling colters and other parts of implements finished with a high polish are varnished before leaving the factory to prevent rust. Good work cannot be accomplished until the varnish is removed.

Varnish Remover: For this purpose, use a regular prepared varnish remover which can be obtained from almost any store handling a line of paints.

Concentrated Lye: Another method is to secure ordinary concentrated lye and mix it with water, making liquid strong enough to remove the varnish. One small can of ordinary lye to one quart of water will be sufficient to remove the varnish from one plow bottom. The lye may be applied by attaching cloth or waste on end of a stick. After applying the lye, let it stand for a few minutes, and if necessary repeat the operation. CAUTION! Lye is poisonous and should be kept away from the face, hands and clothing.

Whichever method is followed, be sure that all the varnish is removed before putting the plow into the ground.

SCOURING

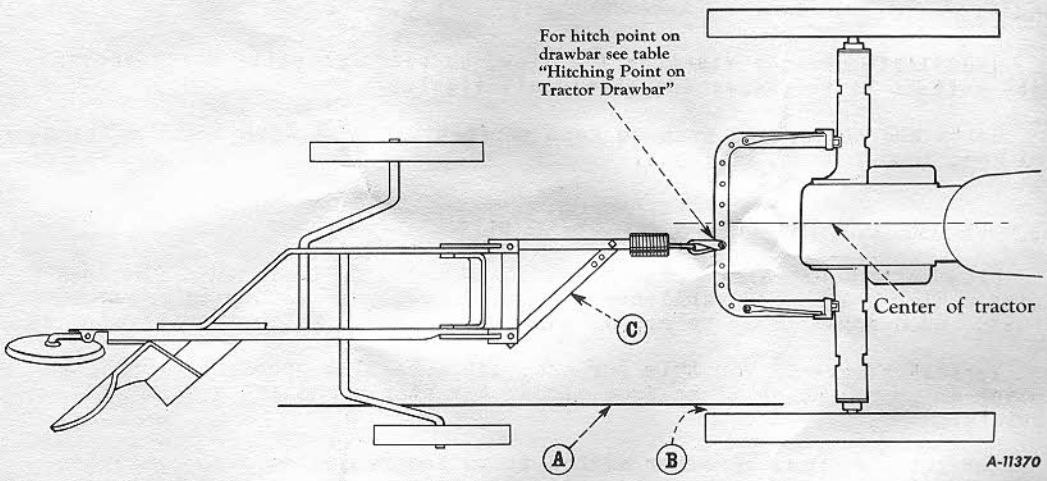
If scouring is difficult, have patience until the bottom receives a land polish which may require a few rounds or possibly a few days. When doing this, run the plow shallow and fast and always set the colter far over the landside edge of the plow and not too deep; often it is necessary to remove the colter entirely until the plow begins to scour.

HORIZONTAL HITCH ADJUSTMENT

The horizontal (sidewise) hitch adjustment makes provision for adjusting the plow sideways in relation to the tractor so the plow bottom takes the correct width of cut to insure plowing even furrows and avoid ridging of the plowed field. This is the only purpose of the horizontal adjustment.

Side draft cannot be reduced by any adjustment or arrangement of the hitch, but can be divided between the tractor and the plow by hitching offside on the tractor drawbar, as described in the following paragraphs:

To set the hitch before starting the plow, scratch a line or place a straight bar on the ground from the wing tip of the share forward, parallel with the plow beam. *See "A", Illust. 1.* Back the tractor into position so that the inside edge of the right hand rear tractor wheel is placed 2" to the right of the scratched line or straight bar, and parallel with it. *See "B", Illust. 1.* The tractor and plow are now placed in the correct sidewise position with relation to each other.



Illust. 1

BE SURE THE PLOW IS IN CORRECT SIDEWISE RELATION TO THE TRACTOR AS DESCRIBED IN THE PRECEDING PARAGRAPHS AND SHOWN IN ILLUST. 1. SELECT THE HITCH POINT CORRESPONDING TO THE REAR WHEEL TREAD OF THE TRACTOR SHOWN IN THE TABLE BELOW.

Hitching Point on Tractor Drawbar

Standard Width Tractors set at 40" to 54" Tread Center to Center	Farmall Type Wheels set at 56" to 68" Tread Center to Center	Farmall Type Wide Wheel set at 70" to 80" Tread Center to Center
2" to 4" to the right	4" to 6" to the right	8" to 12" to the right

When the plow hitch is assembled to connect to the desired hitch point, *as indicated in the above table and Illust. 1,* with the plow in the correct sidewise relation to the tractor, the plow may be connected to the tractor drawbar.

TO CHECK HORIZONTAL HITCH ADJUSTMENT

After the plow is connected to the tractor, open a furrow and on the second round, check the width of the cut, measuring from the rolling colter to the furrow wall. It is very important that the bottom cuts the correct width, i.e., 14" for a 14" bottom, 16" for a 16" bottom. If the cut is too wide uncouple the plow and adjust the diagonal brace *(see "C", Illust. 1)* so the front end of the plow drawbar is moved the same distance to the left if the cut is too wide, or to the right if the cut is too narrow. Recouple the plow hitch to the tractor drawbar using the same location on the tractor drawbar as previously selected according to the table. Then plow another furrow and recheck the width of cut.

HITCH POINT WITH RELATION TO SIDE DRAFT

Hitching points given in the table *on page 4* can only serve as a guide to divide side draft between the tractor and the plow. It is desirable to absorb as much side draft on the plow as possible and still insure efficient operation of the plow. If too much side draft is placed on the plow there will be a tendency for the plow to crush the furrow wall or to kick out of the furrow to the left. In this event it will be necessary to absorb some of the side draft with the tractor.

If there appears to be too much side draft on the tractor and the plow seems to be able to stand more, move the hitching point on the tractor drawbar closer to the center of the drawbar, or vice versa if there is too much side draft on the plow and the tractor seems able to stand more. Remember to adjust the plow drawbar sidewise on the plow the same amount and in the same direction as the hitching point on the tractor drawbar is moved in order to maintain the correct width of cut.

VERTICAL HITCH ADJUSTMENT

It is very important that the plow be properly hitched to the tractor as the proper height of the hitch on the plow affects the wear on the share point and on the axle parts, affects the draft of the plow and also the quality of work done.

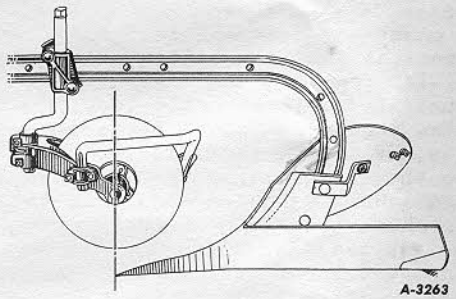
When the plow is in the ground, the plow hitch should run slightly up to the tractor hitch. If the shares are sharp, hitch reasonably low on the plow. Hitching too low takes the weight off the wheels and hitching too high puts unnecessary weight on the wheels and undue strain on the axles, and also causes the plow to run on the share points.

The height of the hitch on the plow depends largely on the condition of the soil. Always hitch the plow so that there is a reasonable but not excessive amount of weight on the wheels.

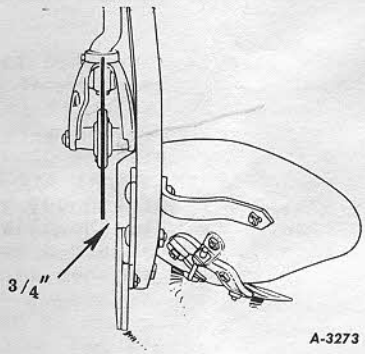
FRONT FURROW WHEEL

Run the front furrow wheel 2" from the furrow bank.

TO ADJUST THE ROLLING COLTERS



Illust. 2



Illust. 3

For plowing in average ground, the rolling colters should be set with the center of the colter over the point of the share, or as near as possible. *See Illust. 2.* In hard ground the center of the colters should be set well back of the point of the share. Do not run the colters too deep in hard ground as they will ride the plow out of the ground and take the weight off the wheels. In trashy ground or in land where the plow scours with difficulty the colters should be set farther ahead. In both cases the blade should be set parallel to the beam and 3/4" out from the landside. *See Illust. 3.* In soft crumbly ground, a little wider setting is necessary in order to get a clean furrow, and in sod or firmer soil the colters can sometimes be set a little narrower.

WHEN COMBINATION COLTERS AND JOINTERS ARE USED

Adjust the colters as described and adjust the jointer blade to run on an average of 2" deep. Adjust the jointer point close to the colter blade and see that the colter turns freely and does not touch the jointer point. The jointer may be adjusted to or from the colter by the adjustable clamp on the left hand side of the colter yoke. To adjust the jointer point towards the colter, loosen the rear bolt in the clamp and tighten slightly on the front bolt. To adjust the jointer away from the colter, loosen the front bolt in the clamp and tighten slightly on the rear bolt.

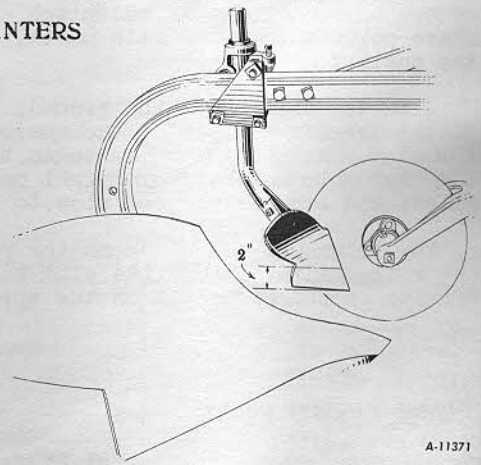
INSTRUCTIONS FOR ADJUSTING PLAIN JOINTERS

The jointer may be pitched forward or back by loosening the nut on the front bolt in the clamp and turning the set screw "A" in the clamp. *See Illust. 19.*

The jointer may be thrown toward or away from the land by turning the eccentric nut "B" on the top of the clamp. *See Illust. 19.*

Whether used in connection with the colter or without the colter, the jointer should be set about 3" back of the point of the share and far enough outside of the landside to leave a clean bank.

The depth of the jointer depends on the plowing depth but the jointer should be set to run about 2" deep. The depth may be changed by loosening the bolts through the clamp cap "C". *See Illust. 19.*



Illust. 4

When used with the rolling colter, the jointer should be set as described above and the rolling colter should be adjusted to run in relation with the jointer *as shown in Illust. 4.*

TO ADJUST THE REAR FURROW WHEEL ATTACHMENT (Special)

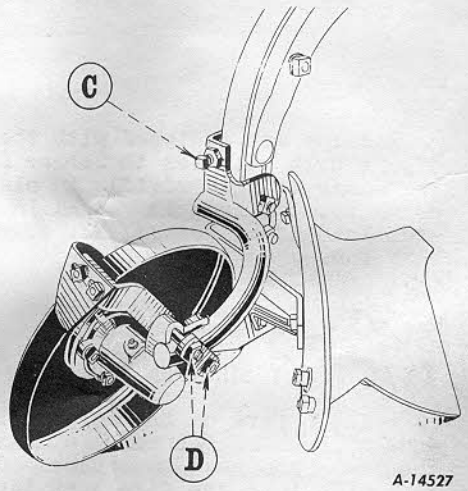
See Illust. 16 also.

The heel of the rear plow bottom should run LIGHTLY on bottom of the furrow and should not carry the full downward pressure from the rear end of the plow. The amount of weight carried on the heel can be determined by observing the bottom of the furrow (in front of rear wheel) to see the impression left by the heel casting. When the rear wheel is set properly the impression left by the heel casting in the bottom of the furrow will be barely visible.

The heel of the plow can be raised or lowered by loosening the upper and lower bolts in rear axle bracket and adjusting the set screw *indicated by "C" in Illust. 5.* Turning the set screw in will raise the heel of the plow and turning the set screw out will lower the heel. Tighten lock nut on the set screw securely after making the adjustment.

The rear wheel should be set so that the heel of the rear plow bottom will run about 1/4" to 3/8" away from the furrow wall. When the rear wheel is set at the proper angle, the landside will not be forced against the furrow wall which causes excessive wear on the plow.

To adjust the landside toward the furrow wall, loosen the top bolt in hub and tighten the bottom bolt. *See "D", Illust. 5.* To throw the landside away from furrow wall, loosen the bottom bolt and tighten the top bolt. Tighten these bolts securely after making the adjustment.



Illust. 5

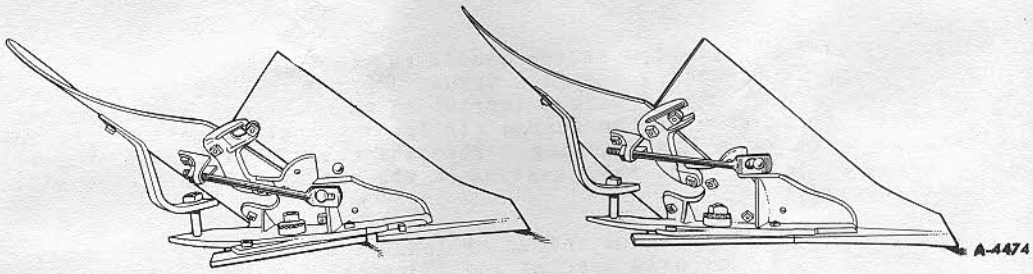
RAISING AND LOWERING

To lower the plow into the ground, pull the trip rope; to raise the plow, pull the same rope. Do not hold the rope after the clutch begins to work or the clutch may repeat its operation.

For any ordinary change in depth, or for opening a new furrow, use the land lever. Level the plow with the furrow lever.

Regulate the tension of the lift spring so that the plow will lift out of the ground without the wheels slipping. Do not have so much spring tension that the wheel will slip when lowering the plow. The proper tension on the lift spring will also make it easy to operate the depth regulating levers. Regulate the tension on the trip lever spring so that the clutch stop roller will engage the clutch with a snap.

QUICK-ATTACHABLE SHARES



Illust. 6

Bottoms are equipped with the Quick-Attachable Shares. The loosening of one bolt releases the share for sharpening or for putting on a new one. The share is held rigidly in place by tightening the one bolt and when drawn up, the frog is wedged in between the share and a steel pin in the stub landside. *See Illust. 6.* This makes it impossible for the share to work loose.

TO PROPERLY SHARPEN THE PLOW SHARE

Build a fire on the forge suitable for this particular work. This is done by banking the fire, allowing only a small opening in the side for the blaze and heat to escape. Commence with the point of the share. Insert this into the fire just far enough to heat the part you wish to draw, never permitting the heat to extend farther back on the share than is absolutely necessary. Draw this down to the proper shape and thickness, which should be as near the original bevel as possible. After the point has been finished, work back toward the wing of the share, never heating more than 1½ inches from the edge and 2½ inches wide. It is important to keep hammering after the steel has changed from a red heat to a black as this makes the edge tough and hard, giving a wearing surface that will last much longer.

If once down the share is not sufficient, reheat; but confine the heated part to the above measurements. In working along the cutting edge, keep it straight. In so doing you will avoid having to go back and reset the edge.

It is impossible to give the exact amount of wing bearing on walking plow shares, but it should be from 1 to 1-3/4 inches, according to the size of the plow. Shares used on wheel plows should have no wing bearing. These instructions refer to both hard and solid steel shares.

DON'TS

DON'T allow the plow to cut more one trip than the other and expect nice level work.

DON'T set the colter where it will not cut the trash or not leave a clean furrow.

DON'T expect the plow to stay down with no suck in the share.

DON'T expect light draft by using a dull share; sharpen it - the plow will pull easier and stick to the ground.

DON'T forget to lubricate the wheels and colter; they will wear out without lubricant.

DON'T hitch so high that the rear wheel jumps, or so low that the front wheel runs light. Balance this by hitching the proper height.

DON'T plow your land too shallow, especially where the soil is good for some depth. Shallow plowing has cost farmers millions of dollars, especially during a dry season.

DON'T plow deep and slow when taking on a land polish in difficult scouring soil.

DON'T expect the plow to raise easily if you do not tension up the lifting springs.

DON'T forget to keep the bolts attaching the bottom to the beam tight at all times.

INSTRUCTIONS FOR SETTING UP

(Operating Instructions are on page 3)

Remove all wires and arrange parts conveniently.

Lubricate all bearings and moving parts as you proceed, and see that they work freely.

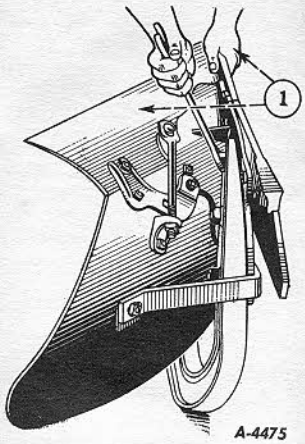
Bolts must be used in the holes in which they are found, or in parts to which they are attached, unless otherwise shown.

Shaded portions in the illustrations show parts to be assembled; these must be placed on the machine in the order numbered.

Wherever the terms "left" and "right" are used, it should be understood to mean from a position behind and facing the machine.

We reserve the right to make changes or improvements in the design or construction of any part without incurring the obligation to install such changes on any machine previously delivered.

The most convenient way to set up this plow is to start with the beam upside down.

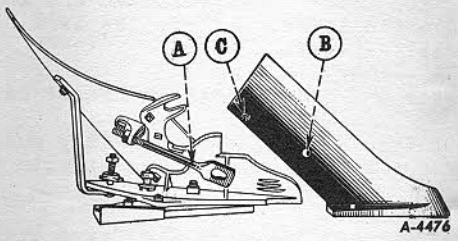


Illust. 7

1. Place the beam upside down and attach the plow bottom, using the fill-up washers in the channel of the beam.

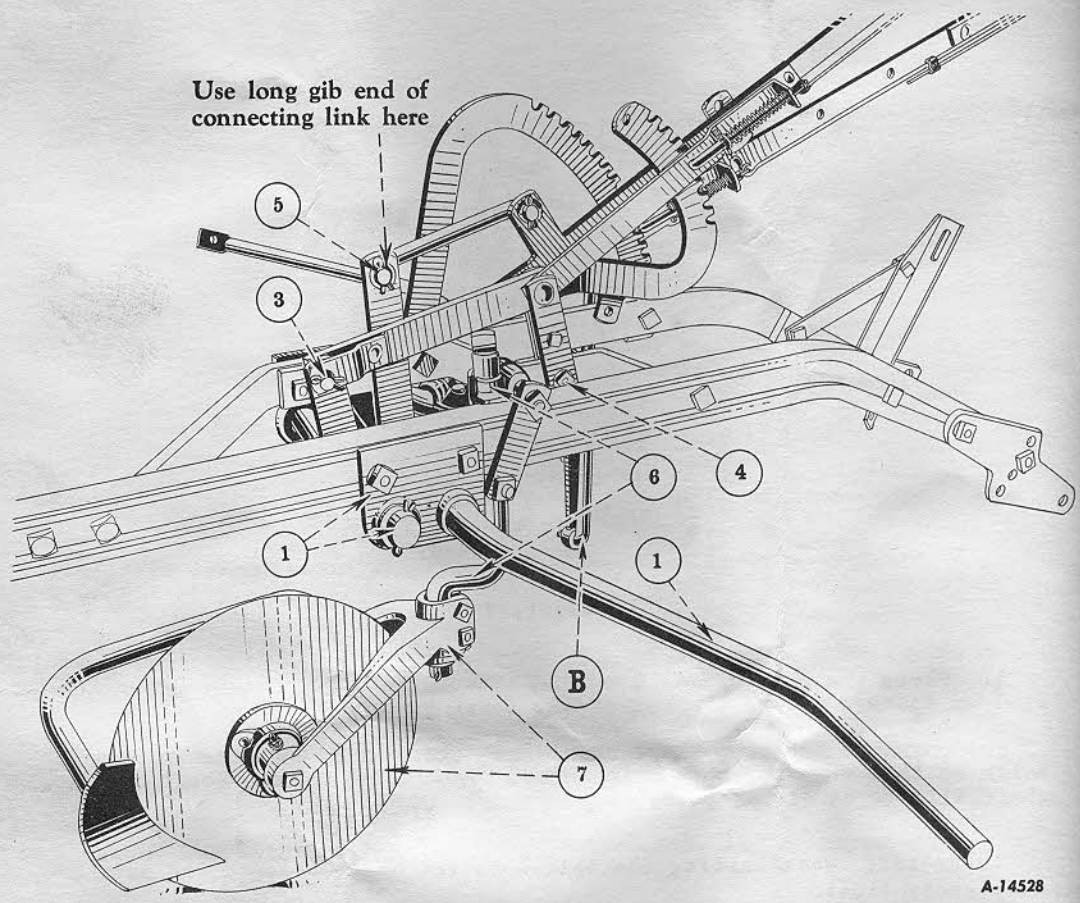
The point of the plow share should be held up while tightening the bolts so that when the bottom is turned right side up, the point of the share will be as low as possible.

IMPORTANT! When bolting the bottom to the beam, be sure the nuts are absolutely tight.



Illust. 8

The share can be removed by loosening the nut on tightening rod "A", unhooking same from stud "B", and loosening bolt "C".



Illust. 9

See Illusts. 9 and 10.

1. Assemble the land and furrow axles in the axle bearing plates. Place the axles in position under the plow frame and bolt the bearing plates to the frame. Use the spacer between the axle bearing plate and beam on the right hand axle plate.

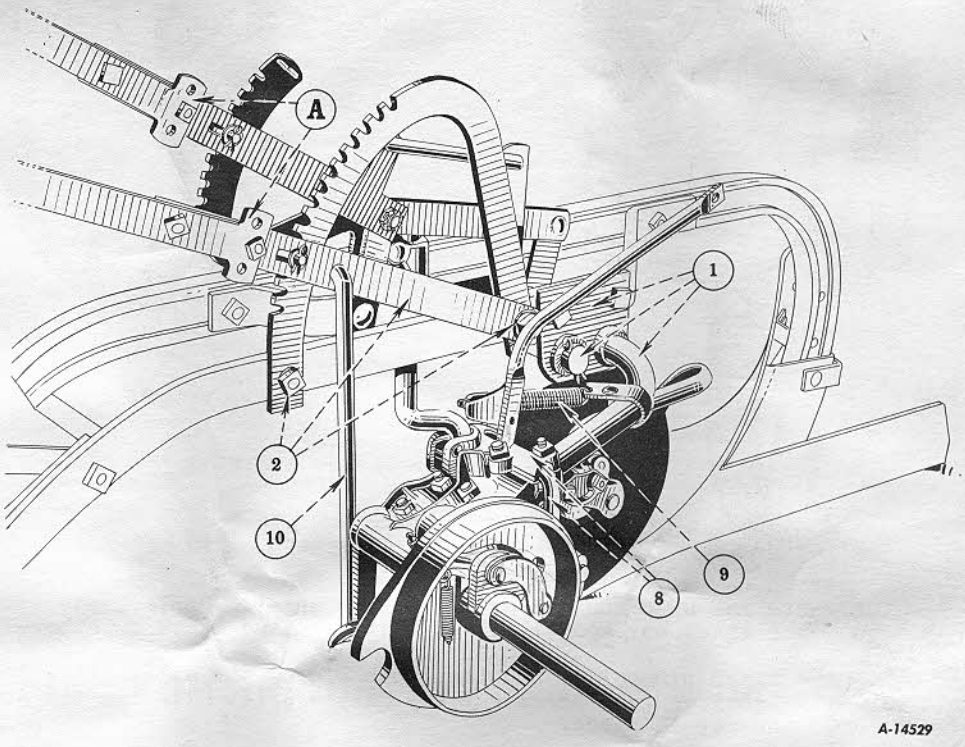
2. Bolt the land lever and quadrant to the frame rail.

3. Attach the end of the furrow lever quadrant, complete with lever assembly, to the arm on the land axle. Secure it with the drilled pin and cotter.

4. Bolt the quadrant support links to the frame brace.

5. Attach the connecting link to the arm on the furrow axle.

(Continued on next page)



Illust. 10

See Illusts. 9 and 10.

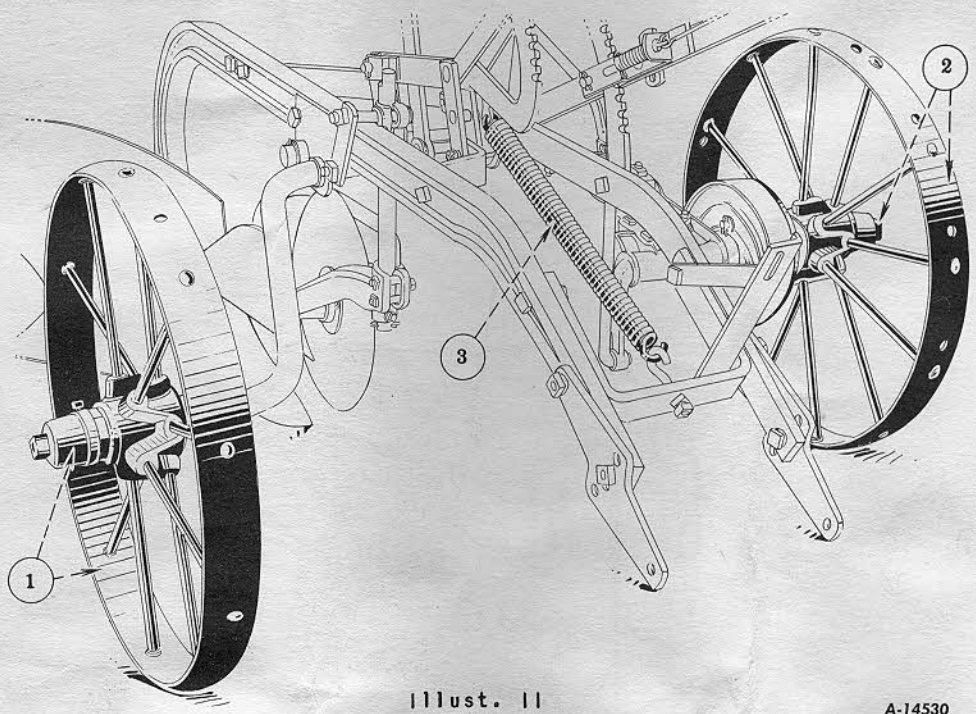
6. Remove the clamp clip from the colter clamp; place the clamp, complete with shank, in position and replace the clamp clip.

7. Attach the colters to the shank; adjust the rolling colter to the desired position and then tighten the bolts in the clamp and the set screw in the set collar securely. See paragraph "TO ADJUST THE ROLLING COLTERS" in the Operating Instructions.

8. Attach the trip lever to the clutch axle bracket and secure with trip lever cap.

9. Connect the trip lever spring to the eyebolt in the spring clip on the axle and to the trip lever spring clip.

10. Connect the clutch connecting link to the land lever and to the clutch shaft and secure with cotters. *See "B", Illust. 9 also.*

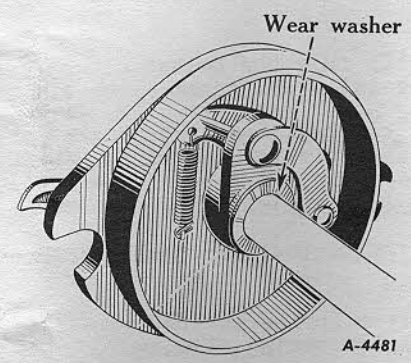


Illust. 11 A-14530

1. Lubricate the axle and put on the furrow wheel. Replace the sand bands around the wheel box and axle, and bolt the sand bands together.

Replace the linch pin collar and the linch pin on the axle. Fill the wheel cap with lubricant and screw the cap on the axle. Tighten the set screw to hold the cap in place.

2. Put on the land wheel; replace the linch pin collar and the linch pin on the axle. Fill the wheel cap with lubricant and screw the cap on the axle. Tighten the set screw to hold the cap in place.

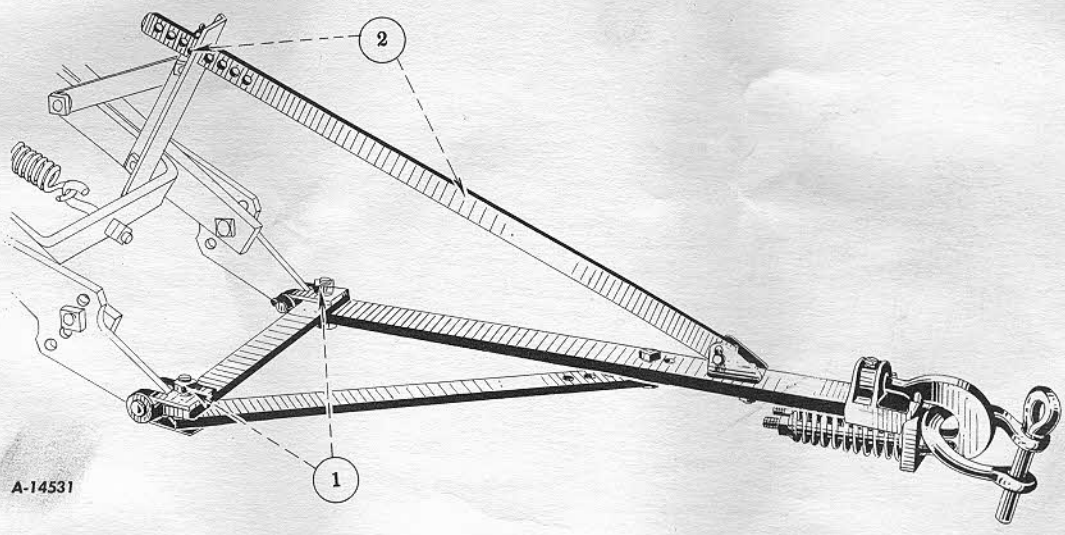


Illust. 12

NOTE! Before putting on the land wheel, be sure the large wear washer packed on clutch axle is in place between the clutch plate and the clutch wheel on the land wheel *as shown in Illust. 12.*

3. Trip the clutch and raise the plow; move the land lever to the lower notch of the ratchet and attach raising spring to the spring anchor eyebolt and to the spring anchor on the furrow lever quadrant.

SPRING RELEASE HITCHES

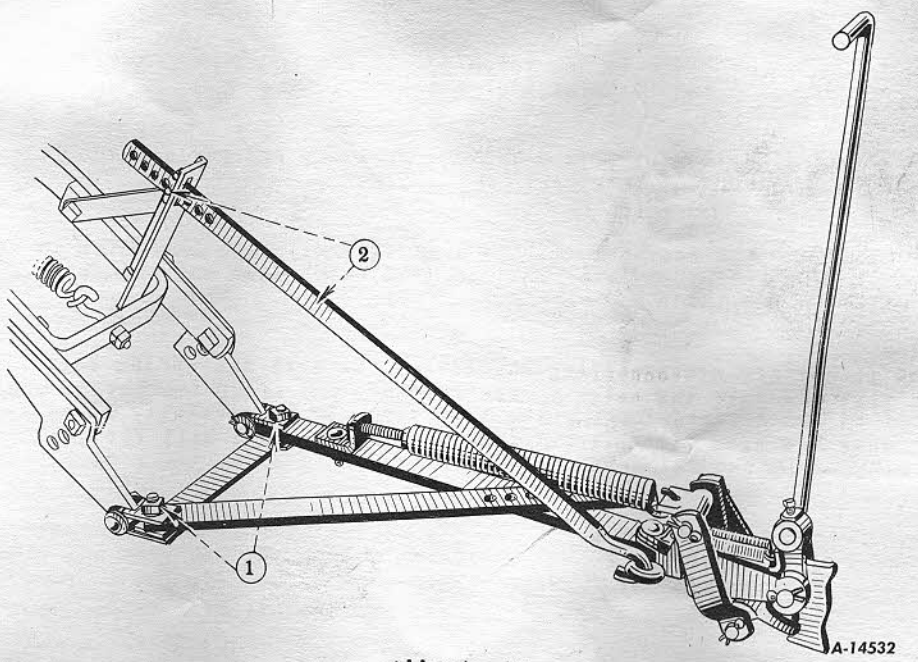


Illust. 13.
POTH-173 Spring Release Hitch (Regular).

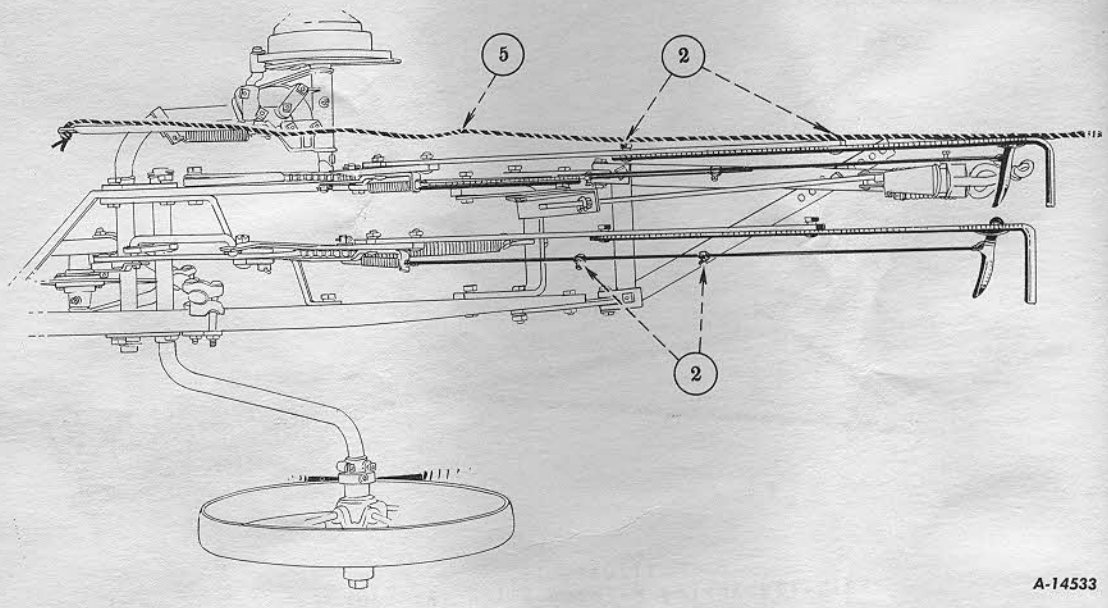
1. Bolt the hitch drawbar and diagonal bar to the cross bar and clevises.

2. Remove the stop pin from the pick-up rod and insert the end of the rod in the pick-up bracket. Replace the stop pin.

IMPORTANT! See "HITCH ADJUSTMENT" in the Operating Instructions.



Illust. 14
POTH-179 Spring Release Hitch (Special).



Illust. 15 - Top view.

1. After the plow is assembled, it should be hitched to the tractor, and the levers should be adjusted until they are within convenient reach of the operator.

NOTE! Adjustments are provided on both the land and furrow levers *(see "A", Illust. 10)* for changing the angle of the levers.

2. Loosen the bolts in the latch rod clamps and remove the bolts through the upper and lower part of the levers.

3. Adjust the levers to the desired position and replace the bolts through the upper and lower part of the levers.

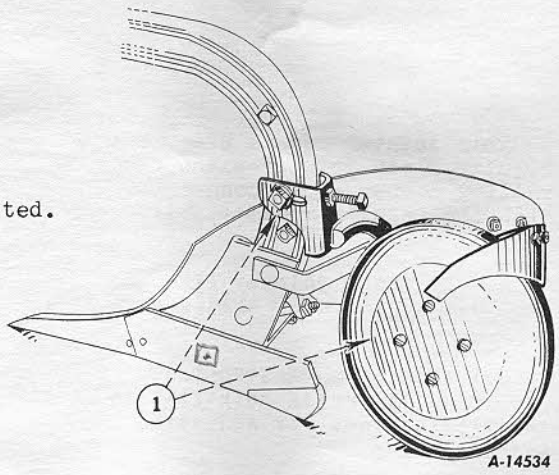
4. Be sure the spring bolt fits down securely into the notch in the ratchet; pull the upper latch rod and hand latch down and then tighten the bolts in the latch rod clamps securely.

NOTE! Before disconnecting the levers, be sure the spring bolt fits down securely into the notch in the ratchet, and after the levers are adjusted to the desired length, the levers should be carefully tried to see that when the hand latch is released, the spring bolt will fit down into the notches in the ratchet.

5. Put on the trip rope.

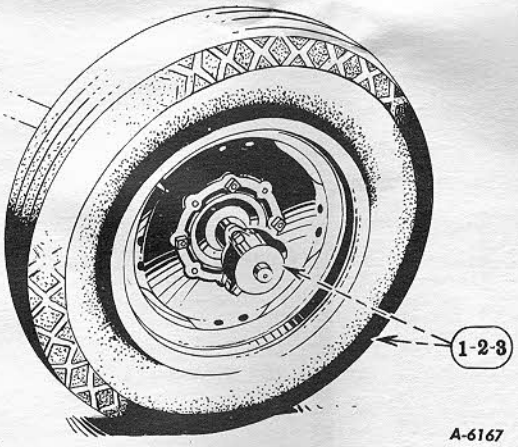
REAR FURROW WHEEL ATTACHMENT (Special)

1. Bolt the Rear Furrow Wheel Attachment to the beam as illustrated. See "REAR FURROW WHEEL ATTACHMENT" in the Operating Instructions.

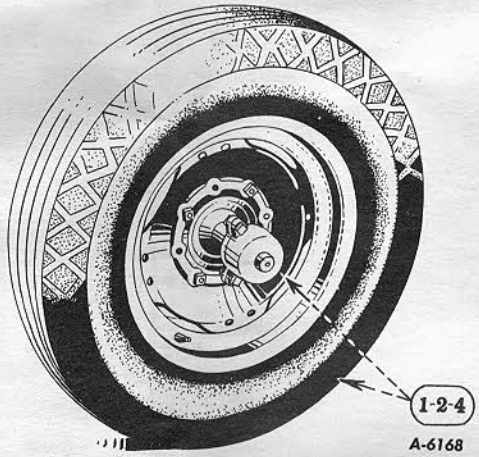


Illust. 16

POW-538 FURROW FOR USE WITH PNEUMATIC TIRE (Special)
POW-539 LAND WHEEL FOR USE WITH PNEUMATIC TIRE (Special)



Illust. 17
POW-538 Furrow Wheel.



Illust. 18
POW-539 Land Wheel.

NOTE: 6.00 x 16" 4-ply tires (with 28 lb. pressure) are recommended for the above wheels.

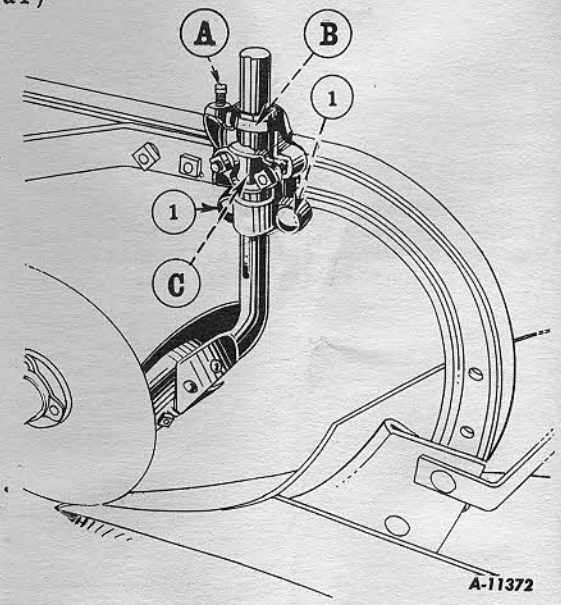
1. Remove the wheel cap, thrust collar and wear washer from the wheel. Lubricate the axle and put on the wheel.
2. Replace the wear washer and thrust collar on the axle and secure the thrust collar with pin through the collar and axle.
3. FURROW WHEEL ONLY: Place the wear washer in the wheel cap and bolt the wheel cap to the wheel box.
4. LAND WHEEL ONLY: Bolt the wheel cap to the wheel box.

POJT-56 STEEL JOINTER (Special)
POJT-256 CHILLED JOINTER (Special)

This jointer can be used as a regular plain jointer without the rolling colter or in connection with the regular rolling colter.

1. Bolt the jointer clamp to the beam *as shown in Illust. 19.*

See paragraph "INSTRUCTIONS FOR ADJUSTING PLAIN JOINTERS" in the Instructions for Adjusting and Operating.



Illust. 19

INTERNATIONAL HARVESTER

Farm Accidents can be prevented with your help

No accident-prevention program can be successful without the whole-hearted co-operation of the person who is directly responsible for the operation of equipment.

To read accident reports from all over the country is to be convinced that a large number of accidents can be prevented only by the operator anticipating the result before the accident is caused and doing something about it. No power-driven equipment, whether it be transportation or processing, whether it be on the highway, in the harvest field or in the industrial plant, can be safer than the man who is at the controls. If farm accidents are to be prevented—and they can be prevented—it will be done by the operators who accept a full measure of their responsibility.

It is true that the designer, the manufacturer, the safety engineer can help; and they will help, but their combined efforts can be wiped out by a single careless act of the operator.

It is said that ***"the best kind of a safety device is a careful operator."*** We ask you to be that kind of an operator.

NATIONAL SAFETY COUNCIL

PARTS LIST AND ILLUSTRATIONS

The following pages contain parts list and illustrations of "exploded" views of the various units disassembled so that parts wanted may be readily located. Reference numbers only are shown in the illustrations and, to avoid errors and delays, when ordering parts always use the regular "Part Number" shown with the "Ref. No.". Do not use reference numbers when ordering parts.

Unnumbered parts in the illustrations are the same as corresponding parts shown with numbers.

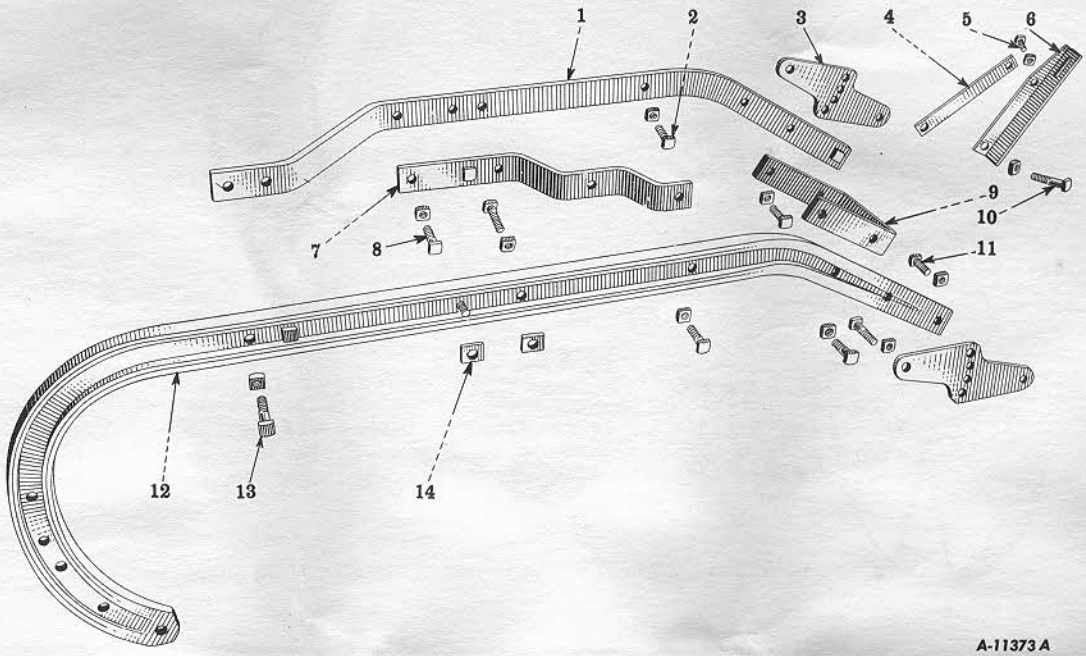
Don't order parts from the illustrations only; refer to the list also.

Bolts with part numbers ending in RII are supplied with one square nut.

INDEX TO UNITS

Numerical Index to Part Numbers will be found on page 35.

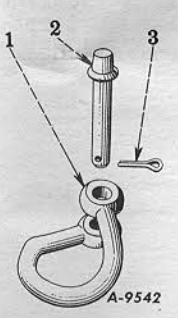
FRAME



A-11373 A

Ref. No.	Part No.	Description
1	PO 23433	Frame rail.
2	13 340 R11	Machine bolt, 5/8 x 2".
3	PO 23407	Hitch plate.
4	PO 23371	Brace.
5	13 257 R11	Machine bolt, 1/2 x 1".
6	PO 23377	Hitch support.
7	PO 23441	Frame brace.
8	13 361 R11	Machine bolt, 5/8 x 2-1/4".
9	PO 23434	Beam spreader.
10	13 400 R11	Machine bolt, 5/8 x 2-3/4".
11	13 319 R11	Machine bolt, 5/8 x 1-3/4".
12	PO 23440A	Beam.
13	13 380 R11	Machine bolt, 5/8 x 2-1/2".
14	PO 23370A	Spacer.

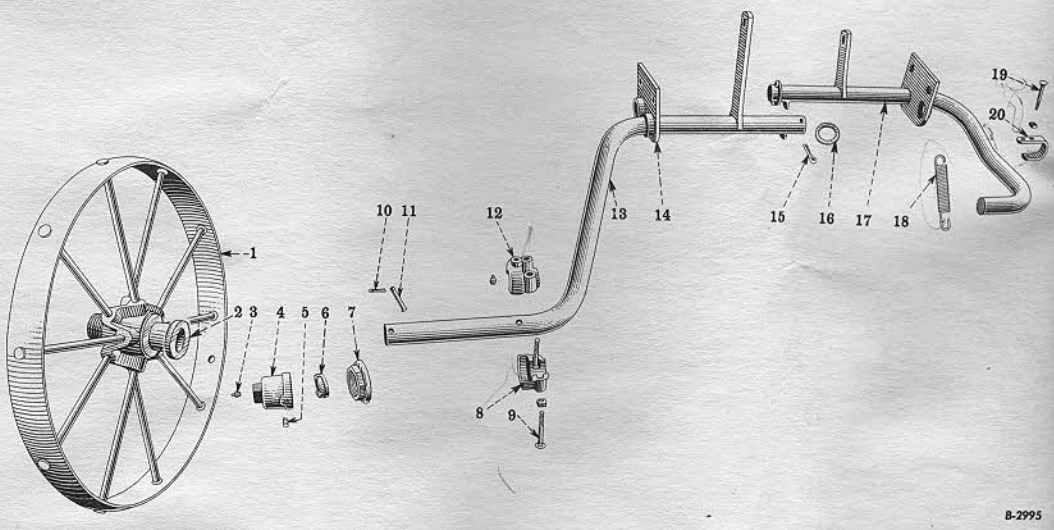
TRACTOR HITCH CLEVIS



A-9542

Ref. No.	Part No.	Description
1	PO 26667	Clevis.
2	SA 3420	Pin.
3	13 095 R1	Cotter, 1/4 x 1-1/4".

FURROW WHEEL AND AXLE



Ref. No.	Part No.	Description
1	POW 534	Wheel, 27" diam., 3" tire (regular).
	POW 535	Wheel, 27" diam., 6" tire (flat tire) (special).
	POW 552	Wheel, 27" diam., 4" tire (special).
2	PO 1057A	Wheel box.
3	119 512	Lubrication fitting, 1/8", straight.
4	SA 1365A	Wheel cap.
5	102 892	Set screw, 3/8 x 1/2".
6	PO 2250A	Linch pin collar.
7	No. 8148	Lock nut.
8	No. 8111	Sand band, lower.
9	15 142 R11	Carriage bolt, 3/8 x 3".
10	13 034 R1	Cotter, 1/8 x 5/8".
11	SA 2601	Linch pin.
12	PO 1258	Sand band, upper.
13	PO 23437	Furrow axle, cp.
14	PO 23385	Axle bracket.
15	13 158 R1	Cotter, 5/16 x 2".
16	Q 3487	Washer, 1-17/32 x 2-1/4" x 11 ga.
17	PO 23420	Land axle, cp.
18	312 X	Spring.
19	15 108 R11	Carriage bolt, 3/8 x 2-1/2".
20	PO 23373	Anchor.

PLOW BOTTOMS

A large variety of plow bottoms is available for this plow. The parts are not listed in this manual because of space limitations. If in need of parts, consult your dealer who is familiar with the plow bottoms used in your territory and who carries an adequate stock of replacement parts.

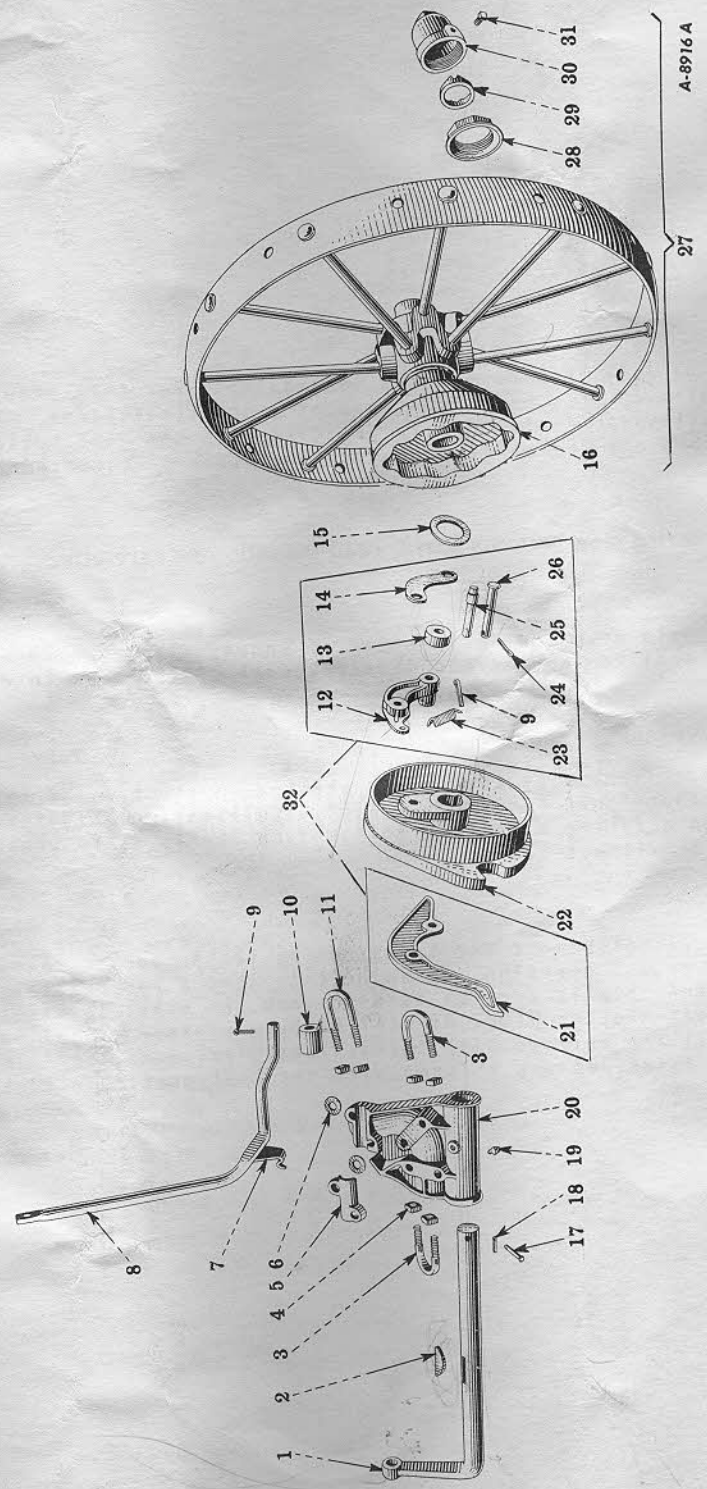
Before ordering plow bottoms parts, read the following carefully.

Orders should give the part number if known, also an accurate description of the part wanted and the name or model of the plow to which the part belongs.

Always order shares by the number stamped on the back of the share and indicate whether "Soft Center", "Solid", "Chilled" or "Steelcast" is wanted. When ordering a chilled bolted-type share, state whether it is wanted with or without bolts.

Always order moldboards and landsides by the number stamped on the back and if there is any question, it is well to send a paper pattern of the old part. When this is done be sure to show the exact location of all bolt holes and state whether RIGHT OR LEFT HAND is wanted. Steel landsides and all moldboards are shipped with bolts. Cast landsides are shipped less bolts. Rear landsides are shipped with the heel casting attached.

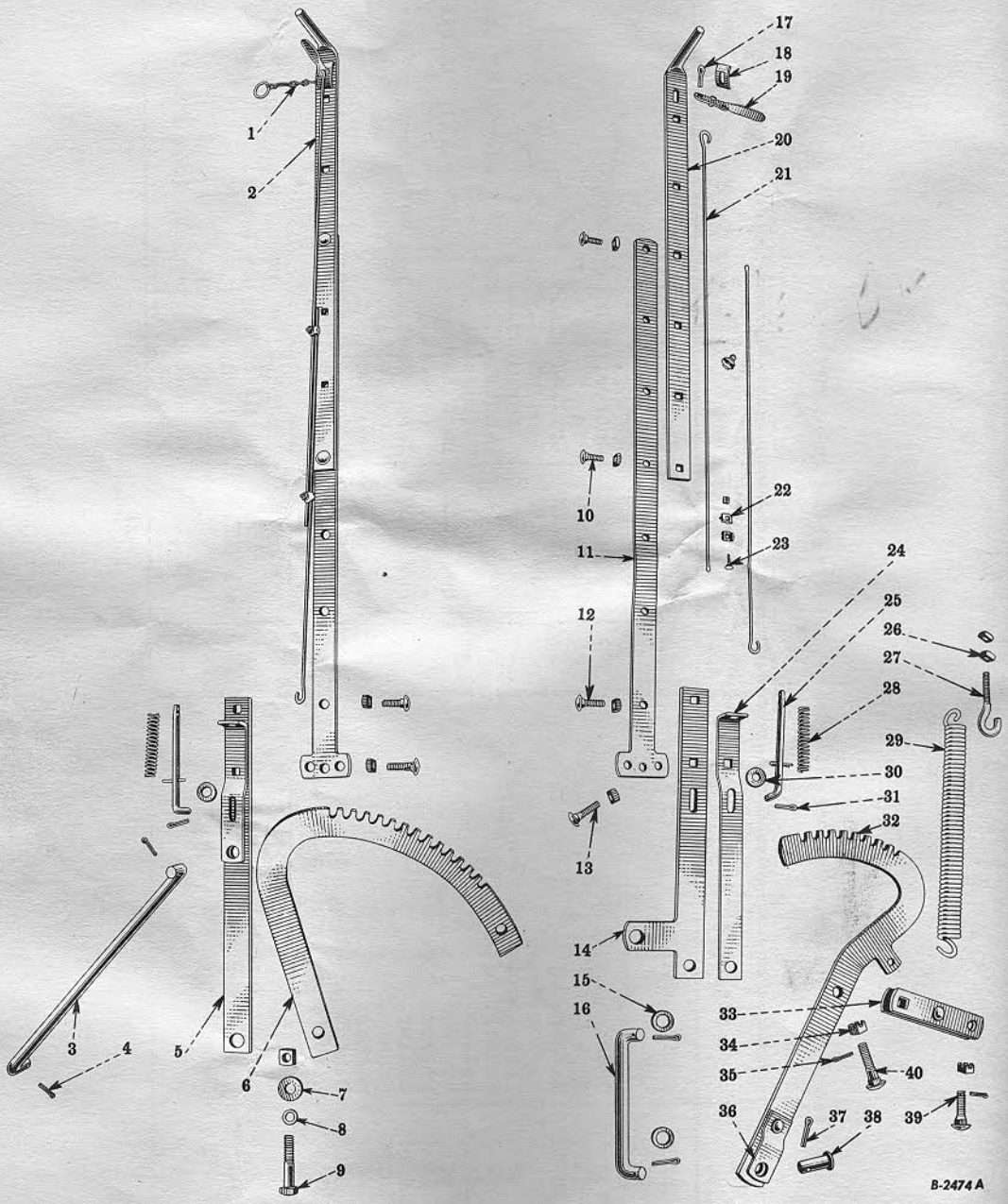
CLUTCH AND LAND WHEEL



Index to Reference Numbers shown in illustration on opposite page.

Ref. No.	Part No.	Description
1	PO 15787	Clutch shaft.
2	PO 15457	Key.
3	PO 14031	"U" bolt.
4	105 608	Square nut, 1/2".
5	PO 1422	Cap.
6	PO 17793	Washer.
7	PO 14022C	Spring clip.
8	SA 4773B	Trip lever, cp.
9	13 068 R1	Cotter, 3/16 x 1".
10	PO 14589	Roller.
11	PO 14030	"U" bolt.
12	PO 1239	Driving dog.
13	PO 14586	Roller.
14	PO 14588	Brace.
15	PO 14652	Washer.
16	PO 1618	Clutch wheel and box.
17	S 7395	Linch pin.
18	13 034 R1	Cotter, 1/8 x 5/8".
19	119 512	Lubrication fitting, 1/8", straight.
20	PO 1413C	Shaft bracket.
21	PO 1408A	Outside clutch dog.
22	PO 1405	Clutch plate.
	PO 1405	Clutch plate, cp.
23	PO 38	Spring.
24	13 044 R1	Cotter, 3/16 x 3/4".
25	PO 14590	Pin.
26	Q 1194	Drilled pin.
27	POW 533	Land wheel, cp., 27" diam., 3" tire (regular).
	POW 536	Land wheel, cp., 27" diam., 6" tire (special).
	POW 553	Land wheel, cp., 27" diam., 4" tire (special).
	POW 537	Land wheel, cp., 27" diam., 6" tire (special).
28	NO. 8642	Lock nut.
29	PO 2249A	Linch pin collar.
30	SA 1367A	Wheel cap.
31	102 892	Set screw, 3/8 x 1/2".
32	PO 28922	Clutch with brace, dogs, pins, roller and spring assembly, less plate.
...	590 266 R11	Trip rope.
...	S 7394	Trip rope hook.
...	PO 13196	Wheel lug (special) (for POW 533 and POW 553 only).

LEVERS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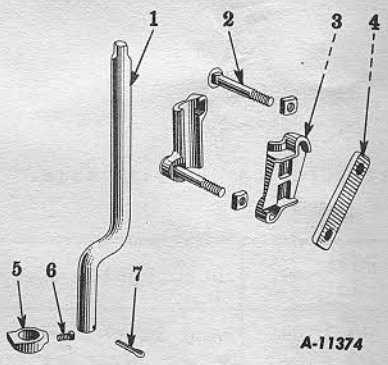
B-2474 A

LEVERS - Continued

Index to Reference Numbers shown in illustration on opposite page.

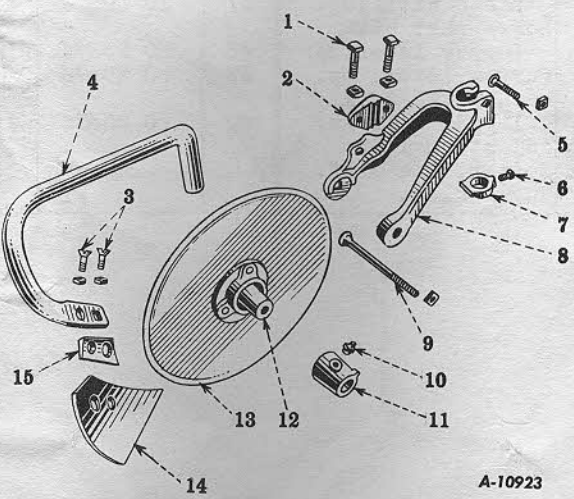
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	PO 10836	Rope guide chain.	19	PO 15296	Hand latch.
2	PO 23429	Land lever, cp.	20	PO 21230	Upper lever extension.
3	PO 23389	Raising link.	21	PO 23391	Latch rod.
4	13 094 R1	Cotter, 3/16 x 1-1/4".	22	PO 2193	Clamp.
5	PO 23428	Lower part of land lever, with bolt and spring.	23	15 000 R11	Carriage bolt, 1/4 x 7/8".
6	PO 23406B	Quadrant.	24	PO 23412	Spring box.
7	575 810 R1	Washer, 21/32 x 1-1/2" x 11 ga.	25	PO 23378	Spring bolt.
8	PO 17728	Bushing.	26	105 608	Square nut, 1/2".
9	13 418 R11	Machine bolt, 5/8 x 3".	27	PO 14033	Hook bolt.
10	15 024 R11	Carriage bolt, 7/16 x 1-1/4".	28	PO 4	Spring.
11	PO 23418	Lower lever extension, cp.	29	PO 99	Spring.
12	15 041 R11	Carriage bolt, 1/2 x 1-1/2".	30	W 6552	Washer, 15/32 x 1" x 16 ga.
13	15 056 R11	Carriage bolt, 1/2 x 1-3/4".	31	13 044 R1	Cotter, 3/16 x 3/4".
14	PO 23394	Furrow lever, complete with lug.	32	511 876 R91	Quadrant with hammer strap, cp.
	PO 23430	Lower part of furrow lever, cp.	33	PO 23386	Support link.
	PO 23431	Furrow lever, cp.	34	127 630	Hexagon slotted nut, 5/8".
15	Q 3501	Washer, 25/32 x 1-1/4" x 16 ga.	35	13 066 R1	Cotter, 1/8 x 1".
16	PO 23369A	Adjusting link.	36	PO 23372	Hammer strap.
17	13 069 R1	Cotter, 1/4 x 1".	37	13 095 R1	Cotter, 1/4 x 1-1/4".
18	PO 18454	Rub washer.	38	PO 23374	Pin.
			39	PO 23376	Carriage bolt, 5/8 x 2" (drilled).
			40	PO 23375	Carriage bolt, 5/8 x 2-1/2" (drilled).

COLTER SHANK AND CLAMP



Ref. No.	Part No.	Description
1	PO 23395	Shank.
2	15 288 R11	Carriage bolt, 5/8 x 5-1/4".
3	PO 2687	Outside clamp.
	PO 2688	Inside clamp.
4	PO 23367	Clip.
5	513 209 R11	Set collar with set screw.
6	102 905	Set screw, 7/16 x 3/4".
7	13 139 R1	Cotter, 1/4 x 1-3/4".

PORC- 95 PLAIN ROLLING COLTER, 16", Plain Blade (Special)
PORC-226 COMBINATION ROLLING COLTER, 18", Plain Blade (Special)
PORC-228 COMBINATION ROLLING COLTER, 18", Notched Blade (Special)
PORC-251 PLAIN ROLLING COLTER, 18", Plain Blade (Special)
PORC-252 PLAIN ROLLING COLTER, 18", Notched Blade (Special)
PORC-256 PLAIN ROLLING COLTER, 16", Plain Blade (Special)
PORC-257 COMBINATION ROLLING COLTER, 16", Plain Blade (Regular)
PORC-258 PLAIN ROLLING COLTER, 16", Notched Blade (Special)
PORC-259 COMBINATION ROLLING COLTER, 16", Notched Blade (Special)



ROLLING COLTERS - Continued

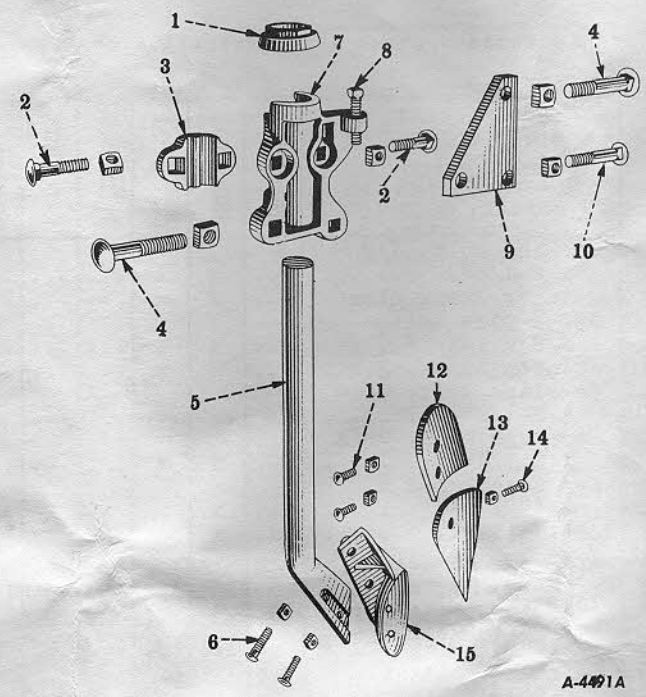
Index to Reference Numbers shown in illustration on opposite page.

Ref. No.	Part No.	Description	PORC-95	PORC-226	PORC-228	PORC-251	PORC-252	PORC-256	PORC-257	PORC-258	PORC-259
1	13 359 R11	Machine bolt, 1/2 x 2-1/4".	...	x	x	...	...	...	x	...	x
2	No. 8490	Jointer shank clamp.	...	x	x	...	...	...	x	...	x
3	15 585 R11	No. 3 plow bolt, 3/8 x 1-1/2" . . .	...	x	x	...	...	...	x	...	x
4	510 574 R1	Jointer shank, R.H..	...	x	x	...	...	...	x	...	x
5	15 109 R11	Carriage bolt, 7/16 x 2-1/2"	x	...	...	...	...	x	x	x	x
	15 125 R11	Carriage bolt, 7/16 x 2-3/4"	...	x	x	...	...	...	...	...	...
6	110 448	†Set screw, 1/2 x 3/4"	...	x	x	x	x	...	...	...	...
7	SA 585	†Set collar	...	x	x	x	x	...	...	...	...
8	No. 8489A	Yoke	...	...	...	...	...	x	x	x	x
	PO 1001	Yoke	x	...	...	...	...	...	...	...	...
	PO 2564	Yoke	...	x	x	x	x	...	...	...	...
9	15 353 R11	Carriage bolt, 1/2 x 7"	x	...	...	...	...	x	x	x	x
	15 360 R11	Carriage bolt, 1/2 x 7-1/4"	...	x	x	x	x	...	...	...	...
10	119 512	Lubrication fitting, 1/8", straight . .	...	x	x	x	x	x	x	x	x
11	9010 A	Bushing, R.H. . . .	x	...	...	...	...	...	...	...	...
	9011 A	Bushing, L.H. . . .	x	...	...	...	...	...	...	...	...
	SA 1347	Bushing, R.H. . . .	...	x	x	x	x	x	x	x	x
	SA 1348	Bushing, L.H. . . .	...	x	x	x	x	x	x	x	x
12	No. 211	Hub.	x	...	...	...	...	...	...	...	...
	SA 1346	Hub.	...	x	x	x	x	x	x	x	x
13	PO 19619	Colter blade	...	...	...	...	...	...	...	x	x
	PO 20280	Colter blade, cp. .	...	...	...	...	...	...	...	x	x
	PO 11601	Colter blade	x	...	...	...	...	x	x	...	...
	PO 20274	Colter blade, cp.. .	...	...	...	...	...	x	x	...	...
	PO 10401	Colter blade, cp. .	x	...	...	...	...	...	...	...	...
	PO 15788	Colter blade	...	...	x	...	x	...	...	...	...
	PO 15789	Colter blade, cp.. .	...	...	x	...	x	...	...	...	...
	S 4228	Colter blade	...	x	...	x	...	...	...	...	...
	PO 14912	Colter blade, cp.. .	...	x	...	x	...	...	...	...	...
14	510 576 R1	Jointer blade, R.H..	...	x	x	...	...	...	x	...	x
	POJT 68	*Jointer, cp., R.H. .	...	x	x	x	x	x	x	x	x
15	510 572 R1	Adjusting block, R.H.	...	x	x	...	...	...	x	...	x

* Special when used with PORC-251, PORC-252, PORC-256, PORC-258.

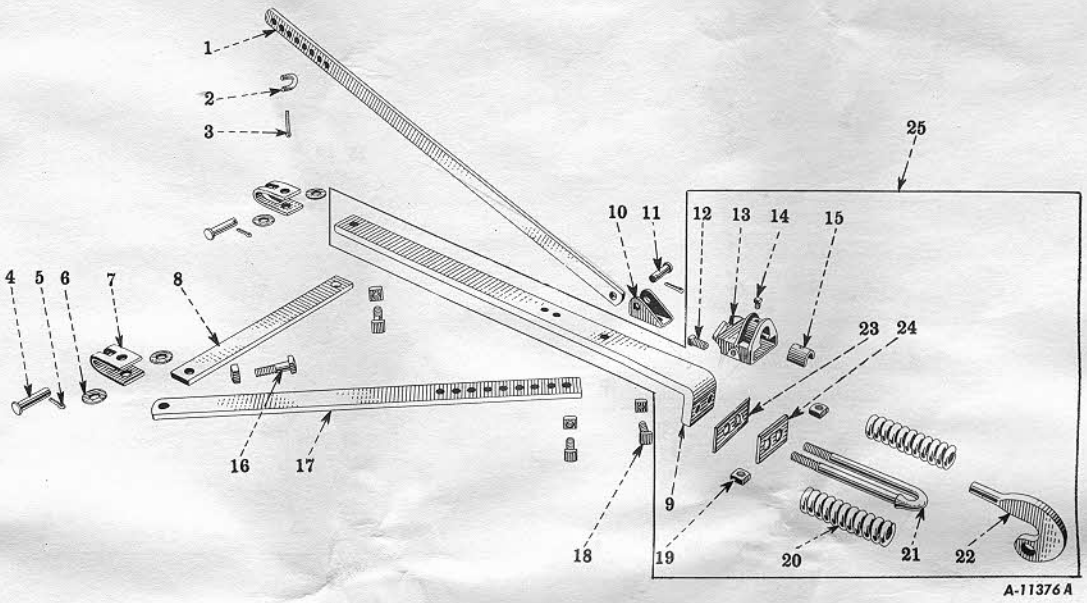
† Used with 18" Rolling Colters only.

POJT- 56 STEEL JOINTER (Special)
POJT-256 CHILLED JOINTER (Special)



Ref. No.	Part No.	Description
1	PO 1285	Washer.
2	15 091 R11	Carriage bolt, 1/2 x 2-1/4".
3	No. 8267	Clamp cap.
4	15 238 R11	Carriage bolt, 5/8 x 4-1/2".
5	PO 23508	Shank.
6	15 023 R11	Carriage bolt, 3/8 x 1-1/4".
7	PO 1800A	Jointer clamp.
8	110 454	Set screw, 1/2 x 2".
9	PO 17025	Clamp plate.
10	15 190 R11	Carriage bolt, 1/2 x 3-3/4".
11	15 815 R11	No. 7 plow bolt, 3/8 x 1-1/8".
12	PO 1186	Mold (for POJT-256).
	S 7408	Mold (for POJT-56).
13	PO 2226	Share (for POJT-256).
	PO 20092	Share (for POJT-56).
14	15 822 R11	No. 7 plow bolt, 3/8 x 1-1/4".
15	PO 1564	Frog.

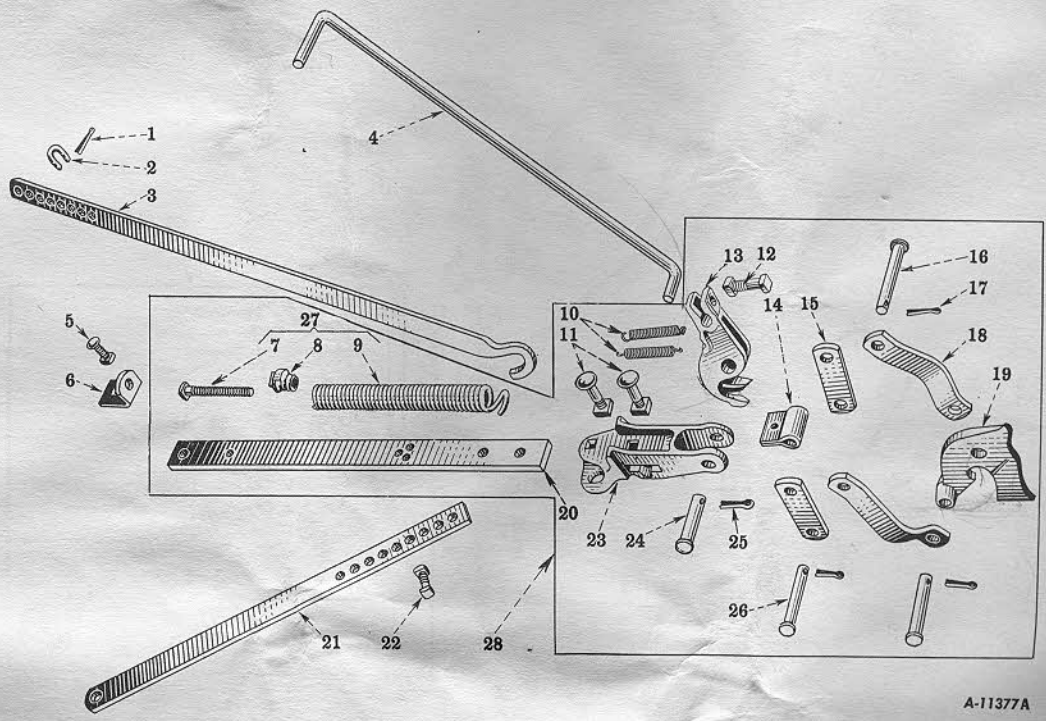
POTH-173 SPRING RELEASE HITCH (Regular)



Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	PO 23444	Pickup bar.	14	105 112	Set screw, 3/8 x 3/8".
2	PO 23442	Adjusting loop.	15	PO 12200	Wear plate.
3	13 120 R1	Cotter, 3/16 x 1-1/2".	16	13 361 R11	Machine bolt, 5/8 x 2-1/4".
4	H 2811	*Drilled pin in clevis.	17	PO 23446	Diagonal bar.
5	13 068 R1	*Cotter, 3/16 x 1".	18	13 293 R11	Machine bolt, 1/2 x 1-1/2".
6	12 258 R1	*Washer, 21/32 x 1-1/4" x 11 ga.	19	105 609	Square nut, 9/16".
7	PO 23366	*Clevis.	20	PO 151	Release spring.
8	PO 23432	*Cross bar.	21	PO 9689	Spring bolt.
9	PO 23445	Drawbar.	22	PO 9692	Draft hook.
10	PO 23443	Anchor.	23	PO 28636	Locking clip.
11	Q 1270	Drilled pin.	24	PO 28635	Clip.
12	110 450	Set screw, 1/2 x 1".	25	PO 23447	Drawbar, cp. with spring release.
13	PO 795	Hitch block.			

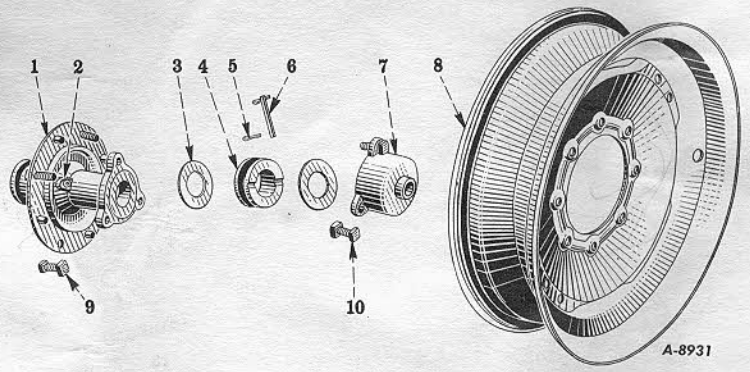
* Not part of POTH-173 Hitch.

POTH-179 SPRING RELEASE HITCH (Special)



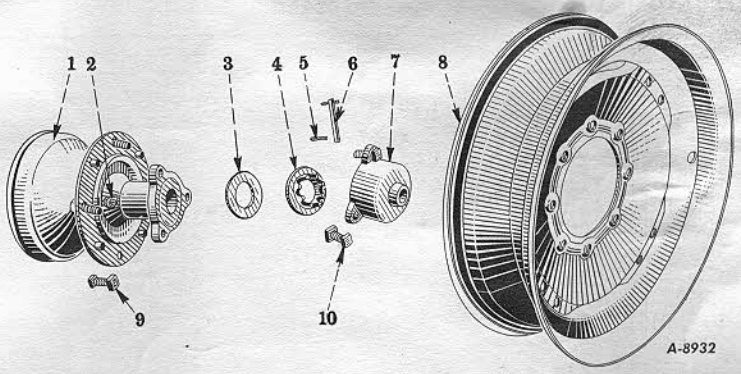
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	13 120 R1	Cotter, 3/16 x 1-1/2".	17	13 095 R1	Cotter, 1/4 x 1-1/4".
2	PO 23442	Adjusting loop.	18	PO 16457	Long toggle link.
3	PO 25293	Pick-up bar.	19	PO 16459A	Draft hook.
4	SA 10080A	Hitch handle.	20	PO 25292	Straight drawbar.
5	15 056 R11	Carriage bolt, 1/2 x 1-3/4".	21	PO 23446	Diagonal hitch bar.
6	PO 16573	Rear spring anchor.	22	13 293 R11	Machine bolt, 1/2 x 1-1/2".
7	SA 5233	Machine bolt.	23	SA 1668	Toggle head.
8	SA 1378A	Spring plug.	24	PO 25862	Pin.
9	M 1430	Spring.	25	13 096 R1	Cotter, 5/16 x 1-1/4".
10	2705 N	Spring.	26	PO 12095	Pin.
11	15 128 R11	Carriage bolt, 5/8 x 2-3/4".	27	SA 5361	Trip spring, cp. (consists of M 1430, SA 1378A and SA 5233).
12	13 316 R11	Machine bolt, 7/16 x 1-3/4".	28	PO 25294	Straight drawbar, cp. with spring release.
13	SA 1667	Retaining hook.			
14	SA 4864	Front spring anchor.			
15	PO 16458	Short toggle link.			
16	SA 4852	Pin.			

POW-538 FURROW WHEEL FOR USE WITH PNEUMATIC TIRE (Special)



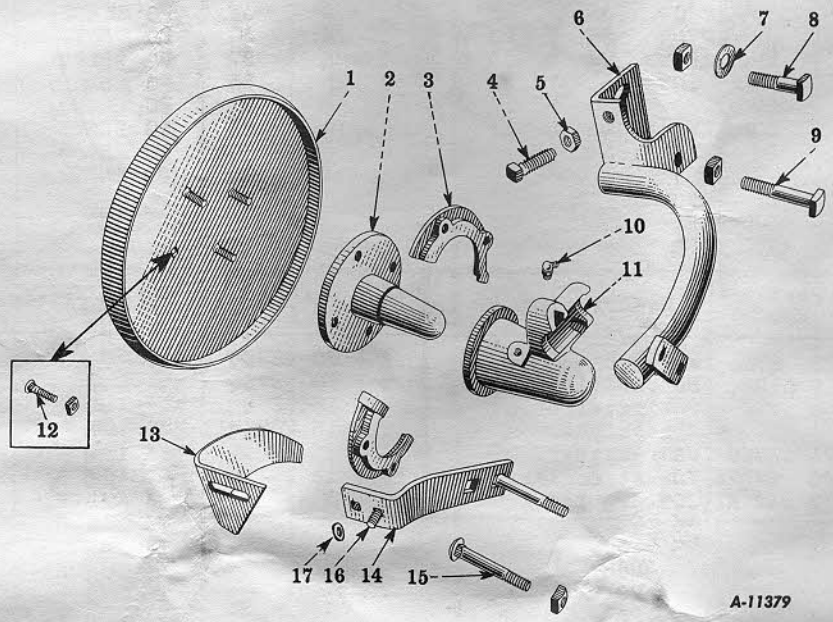
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	PO 2734	Wheel box.	6	PO 23760	Pin.
2	119 512	Lubrication fitting, 1/8", straight.	7	PO 2736	Wheel cap.
			8	16632 W	Wheel and rim, cp.
			9	13 292 R11	Machine bolt, 7/16 x 1-1/2".
3	PO 23759	Wear washer.			
4	PO 2732A	Thrust collar.	10	13 292 R11	Machine bolt, 7/16 x 1-1/2".
5	13 042 R1	Cotter, 1/8 x 3/4".			

POW-539 LAND WHEEL FOR USE WITH PNEUMATIC TIRE (Special)



Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	PO 2735	Clutch wheel and box.	6	PO 23761	Pin.
			7	PO 2736	Wheel cap.
2	119 512	Lubrication fitting, 1/8", straight.	8	16632 W	Wheel and rim, cp.
			9	13 292 R11	Machine bolt, 7/16 x 1-1/2".
3	PO 23758	Wear washer.	10	13 292 R11	Machine bolt, 7/16 x 1-1/2".
4	PO 2733A	Thrust collar.			
5	13 042 R1	Cotter, 1/8 x 3/4".			

REAR WHEEL ATTACHMENT (Special)



Ref. No.	Part No.	Description
1	PO 23448	Wheel.
2	PO 2693	Hub.
3	PO 2692	Retaining washer.
4	137 810	Set screw, 5/8 x 3".
5	218 442	Hexagon jam nut, 5/8".
6	PO 23452	Axle, cp.
7	12 258 R1	Washer, 21/32 x 1-1/4" x 11 ga.
8	13 380 R11	Machine bolt, 5/8 x 2-1/2".
9	13 380 R11	Machine bolt, 5/8 x 2-1/2".
10	119 512	Lubrication fitting, 1/8", straight.
11	PO 2694	Bearing.
12	15 609 R11	No. 3 plow bolt, 7/16 x 1-7/8".
13	PO 23453	Scraper.
14	PO 23454	Scraper bracket.
15	15 160 R11	Carriage bolt, 1/2 x 3-1/4".
16	15 008 R11	Carriage bolt, 3/8 x 1".
17	Q 108	Washer, 7/16 x 1" x 16 ga.

NUMERICAL INDEX

NUMERICAL INDEX - Continued

I 006 611 R3. 7-14-48--12A. Printed in United States of America. (Domestic)