

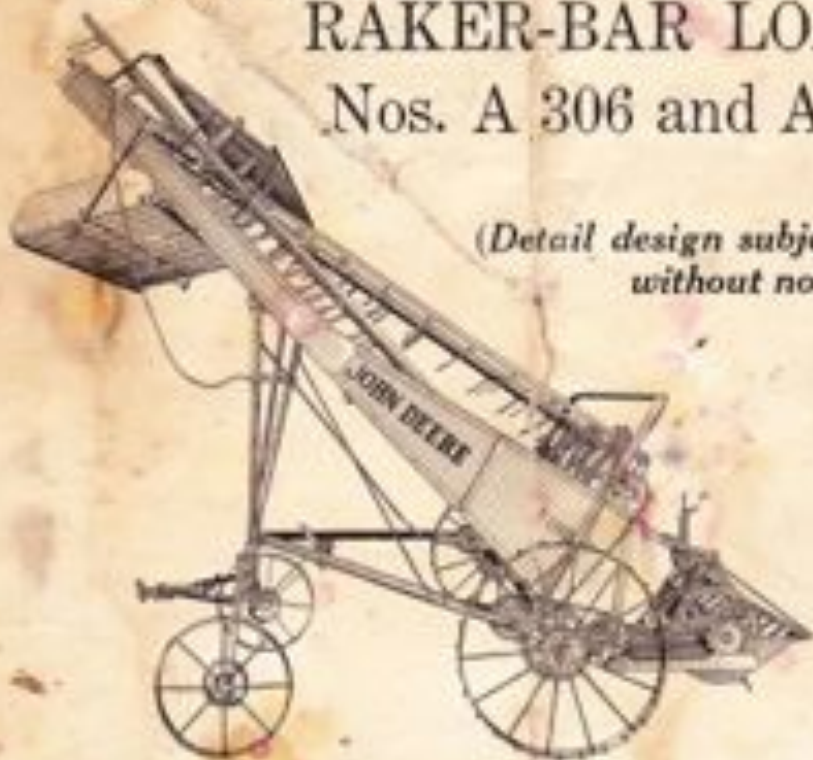
READ
Carefully
SAVE!

Directions

For Setting Up
and Operating

JOHN DEERE COMBINATION
RAKER-BAR LOADERS
Nos. A 306 and A 306 G

*(Detail design subject to change
without notice)*



MADE BY
DAIN MANUFACTURING COMPANY
OTTUMWA, IOWA, U. S. A.

IMPORTANCE OF PROPERLY SETTING UP MACHINES

The John Deere Combination Raker-Bar Leader is set up as illustrated in the following pages. The darkened portions in the progressive illustrations show clearly the parts to be assembled and attached in proper order. Where the instructions or the connecting points are numbered, follow closely the order in which they are numbered. Arrows are also used to point out important adjustments or parts that need special attention in setting up.

After unpacking and placing all parts where they will be most handy, follow all of the Directions carefully.

Practically all the trouble with new machines is due to improper or careless setting up and lack of oil.

These A's are
used on
A 300 G. leaders.

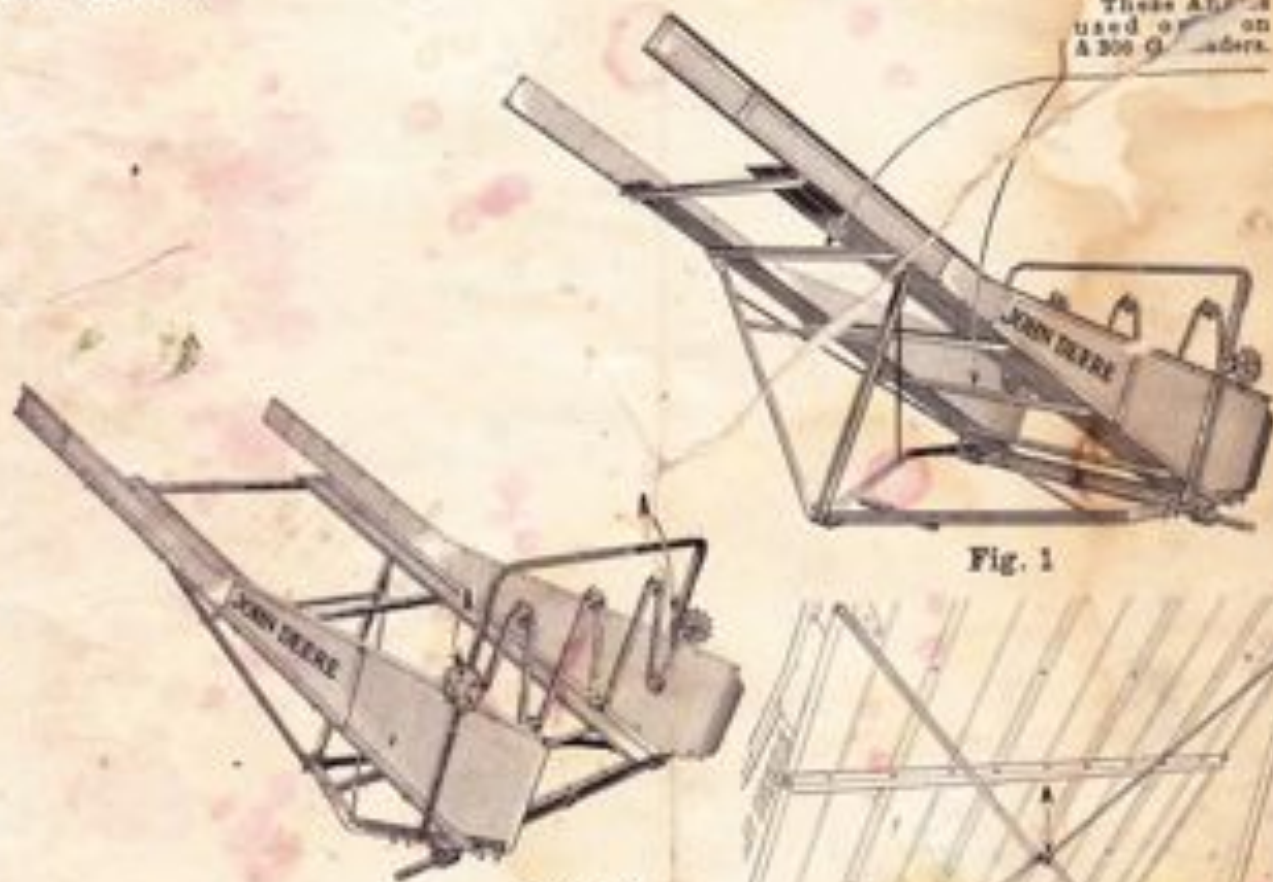


Fig. 1

Fig. 1-A

1. Fig. 1, Fig. 1-A — Assemble frame as shown. Assemble cross braces on machine as shown in Fig. 1-B before tightening frame bolts. Use flat washers at "A" as required to make braces flat when center bolt is screwed up tight.

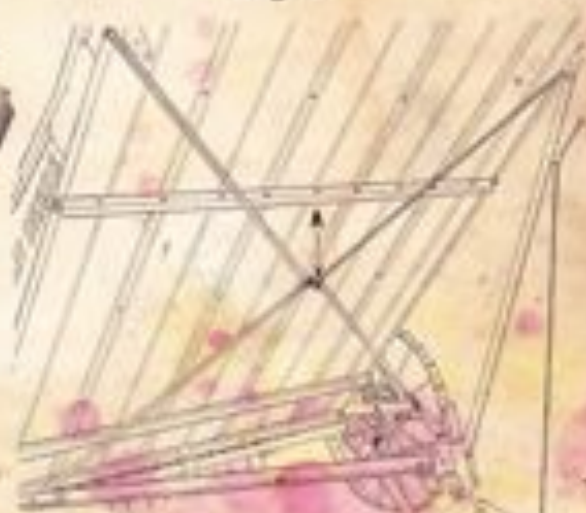


Fig. 1-B



Fig. 2

Be sure Short Tooth on Geared sprocket meshes between shrouded teeth on drive gear. See Fig. 2-C.



Fig. 2-C



Fig. 2-B

Be sure Short Tooth on Geared sprocket meshes between shrouded teeth on drive gear. See Fig. 2-C.



Fig. 2-A

2. Fig. 2, Fig. 2-A, Fig. 2-B, Fig. 2-C—Assemble gears and parts as shown.



Fig. 3

3. Fig. 3—Put wheels and ratchet plates on axle.



Fig. 4-A



Fig. 4



Fig. 4-B

4. Fig. 4, Fig. 4-A, Fig. 4-B—Put in deck sheets and assemble raker bars as shown. Fig. 4 and Fig. 4-A show A 306 Loader. Fig. 4-B shows A 306 G Loader. Deck extension and hay retainers are regular equipment on the A 306 G Loader.

If it is necessary to adjust the distance of the raker bars from the deck sheets, the crank can be raised or lowered on the arch angle as shown at "A", Fig. 1-A.



Fig. 5



Fig. 5-A

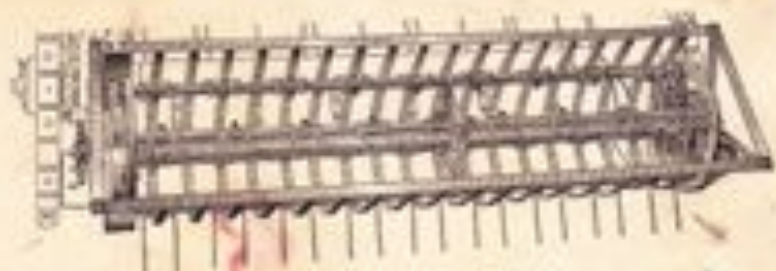


Fig. 5-B

5. Fig. 5, Fig. 5-A, Fig. 5-B—Assemble gathering drum as shown. Fig. 5-B shows A 306 G Loader. Turn the teeth in the drum out by removing the bolts from the followers B, Fig. 5-A and turning on the tooth pipe a half-turn, then replace the bolts and be sure they are tightened.

6. Fig. 6, Fig. 6-A—Attach chains and idler brackets as shown. Note: (MAKE SURE THERE ARE THE SAME NUMBER OF LINKS ON THE TIGHT SIDE ON THE CHAINS THAT RUN THE CRANK. Five (5) more chain links are used in the chain that runs the crank when the crank is in the highest position. On the loader with crank in lowest position there are 48 links in the chain that runs the crank and 37 links in the chain that runs the gathering drum.)

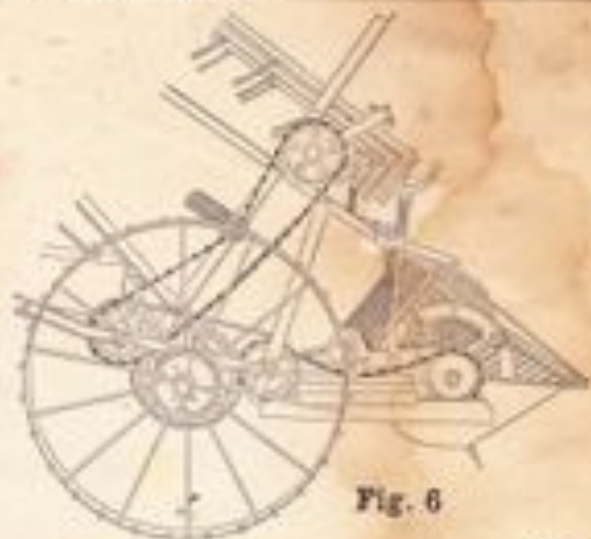


Fig. 6



Fig. 7

7. Fig. 7—Assemble gate as shown. To raise gate, push up on center of gate. To lower gate, release the lever shown on the near side.



Fig. 6-A



Fig. 8-A

8. Fig. 8, Fig. 8-A—Assemble tongue truck trip rope and shields as shown. Fig. 8-A—to attach shield to wheel, grasp clamp with pliers as shown and bend around spoke. BE SURE SHIELD IS CLAMPED TIGHT TO WHEEL.

Adjust distance between angle and king pin to a minimum and still allow free movement of the axle. This can be done by loosening bolts in angle and sliding angle in or out and then tightening bolts.



Fig. 8



Fig. 9

A 306 Loader complete.



Fig. 10

When lowering Loader
release Foretruck by pulling
out on Foretruck Latch Pin.



Fig. 10-A

9. Fig. 10 and Fig. 10-A shows loader in lowered position. When in position, as shown in Fig. 10, the loader can be pulled thru a door that is 7 feet 4 inches high.

10. WHEN HAULING THE LOADER ON A TRUCK OR TRAILER BE SURE THAT TONGUE ON FORETRUCK IS FORWARD AS SHOWN IN FIG. 10-A. THIS SUPPORTS THE LOADER MORE RIGIDLY.

EXTRA EQUIPMENT

11. Fig. 11—Loader equipped with pneumatic tires.



Fig. 11

12. Fig. 12—Loader equipped with Double Cylinder Drive. Bdle. No. 1676-E.



Fig. 12

13. Fig. 13—Deck extension for picking up short hay. Bdle. No. 1602-E.

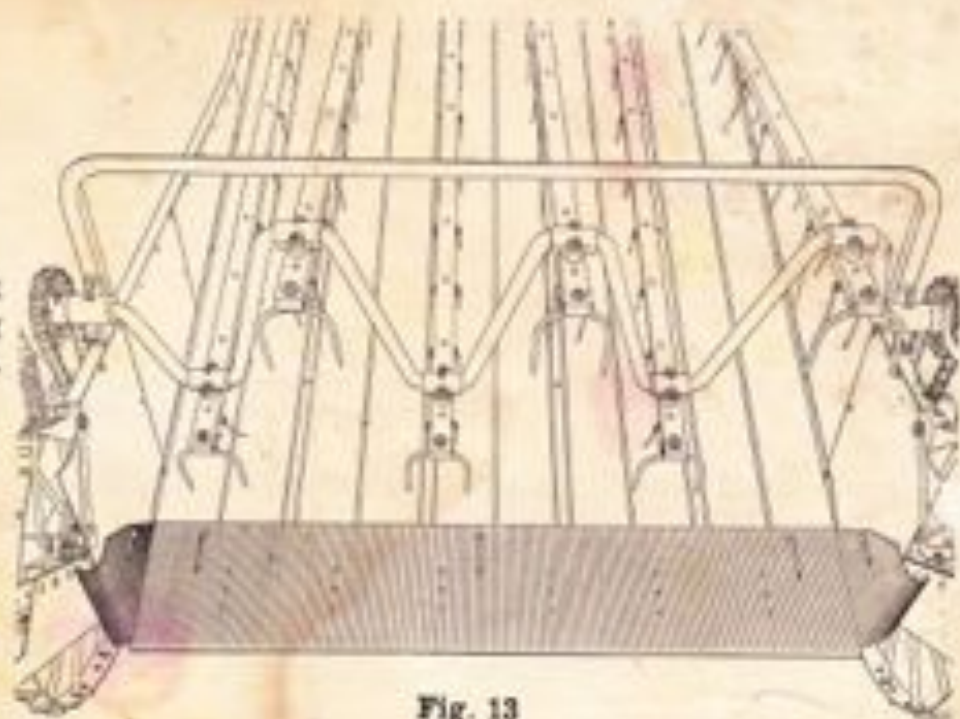


Fig. 13



Fig. 14

14. Fig. 14—Showing hay retainers assembled on the deck for keeping extremely light or heavy material from sliding down the deck. Bdl. No. 1664-E.



Fig. 15

Shows double wheel.
Bdl. No. 1690-E.



Fig. 16

Shows wheel equipped with wheel lugs.
Bdl. No. 1694-E.

TO OPERATE LOADER

Oil all working parts thoroughly. Plenty of oil will greatly prolong the life of the loader and insure easy running.

Keep bolts tight.

Bolt eyebolt and ring to center on rear sill on hayrack. The hook on the loader hooks into the large ring, and may be uncoupled from the load by pulling on the hitch rope. If the rear end of the wagon reach projects out even with the rear of the rack, the hitch may be bolted to the reach if desired.

The gathering drum should be set in the highest position in which it will do good raking, usually not lower than to touch the stubble.

Transportation. In moving from field to field, lift the gathering drum up by running down hand nuts on the adjusting rods.

When hauling by trailer or truck see page 8 for instructions.

Front of Loader can be lowered to 7 feet 4 inches. See page 8 for instructions.

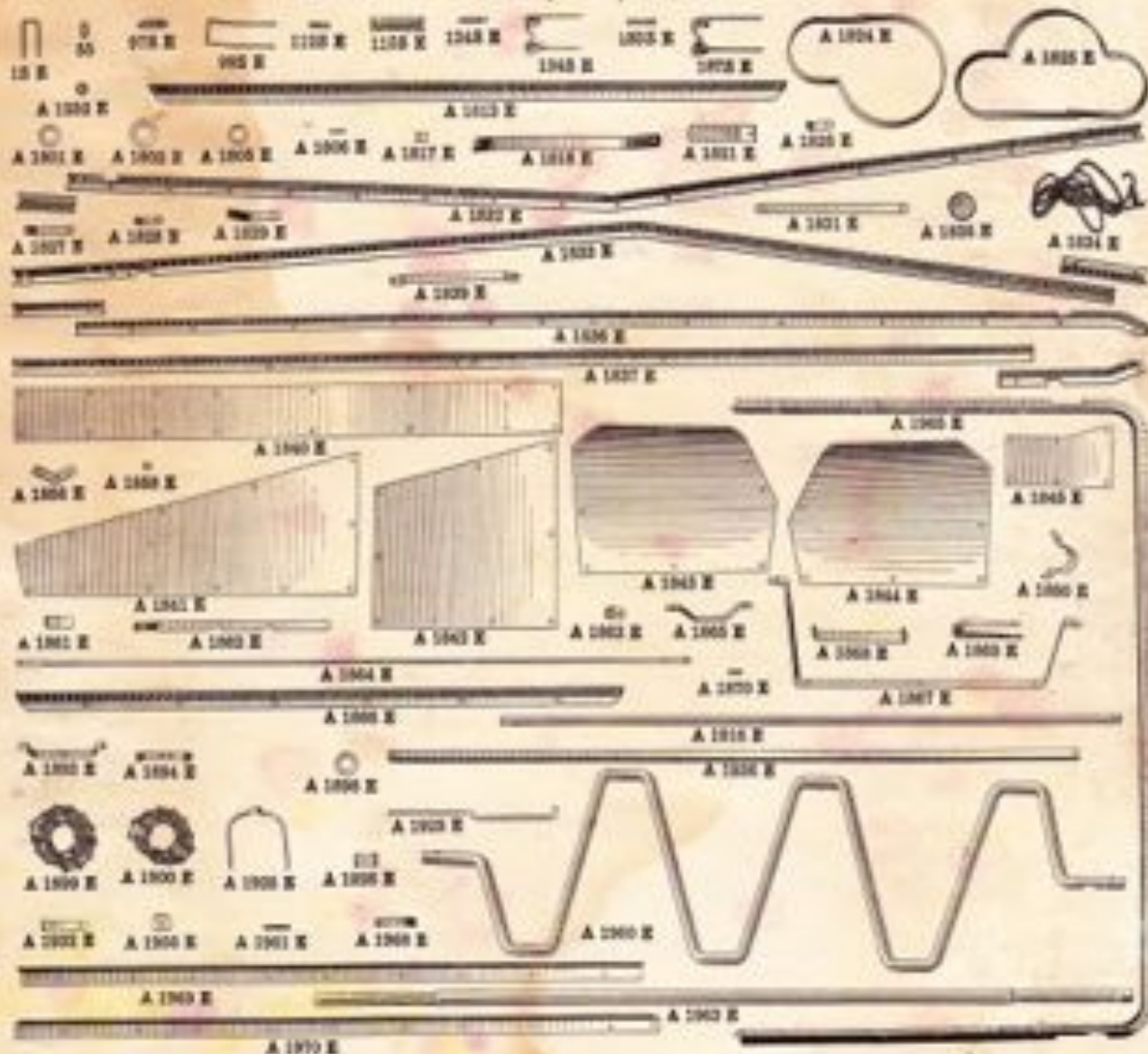
Part Number	Description	Part Number	Description
MALLEABLE AND GREY IRON PARTS			
A 874 E	Clamp hub, 1/2 pair (4 used)	A 1806 E	Crankshaft key (2 used)
A 1102 E	Rope guide (2 used)	A 1813 E	Lower deck reinforcing angle (2 on A306G)
A 1465 E	Tongue hook	A 1817 E	Channel filer
A 1548 E	Ratchet pawl (2 used)	A 1818 E	Rear-geared sprocket brace
A 1556 E	Lever for ratchet pawl (2 used)	A 1821 E	Idler bracket (2 used)
A 1647 E	Flinger for ratchet pawl (2 used)	A 1824 E	Gear guard, R. H.
A 1643 E	Patrol washer (2 used)	A 1825 E	Gear guard, L. H.
A 1648 E	Handle nut (2 used)	A 1826 E	Rear brace on R. H. guard
A 1650 E	Wheel nut (2 used)	A 1827 E	Front brace on guards (2 used)
A 1775 E	(See A A1172)	A 1828 E	Top brace on guards (2 used)
A 1780 E	(See A A2122 or A A2162)	A 1829 E	Rear brace on L. H. guard
A 1781 E	Geared sprocket bearing (2 used)	A 1831 E	Geared sprocket strap brace
A 1782 E	Spacer washer (2 used)	A 1832 E	Top side angle, R. H.
A 1784 E	Floating frame bearing, R. H.	A 1833 E	Top side angle, L. H.
A 1785 E	Drum head (2 used)	A 1834 E	Hitch rope, 1/4" x 1' 4"
A 1786 E	Cap follower cutting (4 used)	A 1835 E	Cup washer (2 used)
A 1787 E	Release lever	A 1836 E	Bottom side angle, R. H.
A 1788 E	Adjusting rod support, L. H.	A 1837 E	Bottom side angle, L. H.
A 1789 E	Adjusting rod support, R. H.	A 1838 E	Strap on bottom side sheet (2 used)
A 1797 E	Raker bar bearing (4 used)	A 1840 E	Upper side sheet (2 used)
A 1798 E	(See A A3172)	A 1841 E	Upper center side sheet (2 used)
A 1799 E	Raker bar roller (6 used)	A 1842 E	Lower center side sheet (2 used)
A 1800 E	Hinge bearing (2 used)	A 1843 E	Bottom side sheet, L. H.
A 1802 E	Sleeve journal	A 1844 E	Bottom side sheet, R. H.
A 1804 E	(See A A3182)	A 1845 E	Side reinforcing sheet (2 used)
A 1805 E	(See A A3192)	A 1846 E	Gate hinge (2 used)
A 1806 E	Drive gear (2 used)	A 1848 E	Gate hinge bushing (2 used)
A 1808 E	Adjustable crankshaft bearings (2 used)	A 1851 E	Release plate (2 used)
A 4004 E	Wheel weight (Special for A306G) (2 used)	A 1852 E	Notched gate latch (2 used)
A 4005 E	Wheel lug (Special for A306G) (25 used)	A 1853 E	Latch bracket (2 used)
A 4011 E	Crankshaft sprocket, 18 tooth (2 used)	A 1854 E	Release rod
A 4012 E	Foretruck hitch fitting	A 1855 E	Release rod support
A 4037 E	(See A A3142)	A 1856 E	Raker bar ring angle (2 used)
A 4038 E	Chain guide	A 1857 E	Ring angle support (2 used)
A 4041 E	Wide tooth holders (A306G) (20 used)	A 1858 E	Ring angle support brace (2 used)
A 4042 E	Narrow tooth holders (A306G) (48 used)	A 1859 E	Raker bar stop (6 used)
A 4043 E	Stationary tooth holders (A306G) (6 used)	A 1870 E	Bushing for roller (6 used)
A 4046 E	Crank chain guide (2 used)	A 1876 E	Stripper frame end clip (2 used)
A 4048 E	Wheel hub for disk wheel (2 used)	A 1881 E	Center drum support (A306G) (4 used)
A 4049 E	Drum sprocket	A 1894 E	Drum support brace (A306G)
L 71 E	Long staple tooth holder (6 used)	A 1898 E	Thrust washer, No. 16 x 1-15/32" x 2-1/2" (3 used)
STEEL PIPE, ETC.			
18 E	Short staple tooth (72 used)	A 1899 E	Crankshaft drive chain, No. 55, 48 links steel chain (2 used)
65	Steel link (Repair link for 55 drive chain)	A 1900 E	Drum drive chain, No. 68, 37 links steel chain
975 E	Hitch spring	A 1916 E	Tooth pipe (4 used)
895 E	Long staple tooth, dished (12 used)	A 1925 E	Double spike tooth (6 used)
1125 E	Paul plate spring (2 used)	A 1926 E	Spike tooth clip (6 used)
1155 E	Floating frame adjusting spring (2 used)	A 1929 E	Adjusting rod (2 used)
1245 E	Gate latch spring (2 used)	A 1932 E	Side bar link (2 used)
1345 E	Tooth pipe spring (36 used)	A 1936 E	Drum shaft
1425 E	Spring on latch pin	A 1950 E	Raker bar skin (6 used)
1475 E	Tooth pipe spring (A306G) (24 used)	A 1960 E	Crankshaft
A 1250 E	Cap washer (36 used)	A 1961 E	Pin through axle and drive gear (2 used)
A 1801 E	Washer in main bearing, No. 12 x 1-15/32" x 2-9/32" (2 used)	A 1962 E	Main axle
A 1802 E	Thrust washer on axle, No. 16 x 1-15/32" x 2-15/16" (2 used)	A 1963 E	Arch angle
A 1803 E	Washer in crank bearing, No. 12 x 1-15/32" x 2" (2 used)	A 1965 E	Corner brace (2 used)
		A 1969 E	Lower deck angle
		A 1970 E	Deck cross angle (2 used)
		A 1971 E	Deck sheet (2 used)
		A 1972 E	Deck sheet, R. H.
		A 1973 E	Deck sheet, L. H.
		A 2071 E	Wheel washer (2 used) (No Cut)

Part Number	Description	Part Number	Description
	STEEL, PIPE, ETC.—Continued		
A 2139 E	Wheel weight hook bolt (Special A306G) (3 used)	JD 7778	1/8", 90° Alemite hydraulic fitting (No. 1411) (2 used)
A 2146 E	Gate sheet (2 used)	JD 7781	1/8", 90° Alemite hydraulic fitting (No. 1413) (2 used)
A 2147 E	Gate angle (2 used)	OH 3230 E	Washer on foretrack bolt
A 2148 E	Gate center cross angle (3 used)		
A 2195 E	Foretrack hitch pin		WOOD PARTS
A 2196 E	Center support for axle	AW 377 E	Raker bar, 1-1/8" x 2" x 121" (6 used)
A 2245 E	Tongue tie angle	AW 378 E	Rungs, 1-1/4" diameter x 28-3/4" (6 used)
A 2247 E	L. H. tongue angle	AW 421 E	Raker bar, 1-1/2" x 2-1/8" x 135" (A306G) (6 used)
A 2248 E	R. H. tongue angle		
A 2264 E	R. H. upright frame angle		ASSEMBLIES
A 2265 E	L. H. upright frame angle	1600 E	Double wheel (Special A306G) (2 used)
A 2266 E	Upright frame angle tie	1606 E	Main wheel (JD621E) (2 used)
A 2268 E	R. H. gusset plate	1607 E	Truck wheel (JD626E) (2 used) (No. Cut)
A 2269 E	L. H. gusset plate	AA 2 E	Wagon hitch ring and eyebolt with nut and washer (2 used)
A 2270 E	R. H. lower main frame angle	AA 165 E	Axle clip (A306G)
A 2271 E	L. H. lower main frame angle	AA 167 E	Roller bearing for crank and geared sprocket bearing (4 used)
A 2351 E	Front geared sprocket brace (2 used)	AA 168 E	Roller bearing for main axle (2 used)
A 2359 E	Gate side angle, L. H.	AA 169 E	Latch plate with clip (2 used)
A 2360 E	Gate side angle, R. H.	AA 170 E	Cant infollower and stop (4 used)
A 2381 E	Gate end (2 used)	AA 172 E	Main axle bearing with fitting (2 used)
A 2386 E	Shield clamp (8 used)	AA 215 E	Ratchet plate, L. H., complete (A1780E)
A 2388 E	Truck shield on wheel (2 used)	AA 216 E	Ratchet plate, R. H., complete (A1780E)
A 2400 E	Double spike tooth (A306G) (8 used)	AA 234 E	Floating frame side bar, R. H.
A 2401 E	Wide tooth (A306G) (36 used)	AA 235 E	Floating frame side bar, L. H.
A 2403 E	Double spike tooth clip (A306G) (8 used)	AA 236 E	Floating guard and cover, R. H.
A 2406 E	Narrow tooth (A306G) (48 used)	AA 237 E	Floating guard and cover, L. H.
A 2410 E	Strippers (17 used)	AA 314 E	Geared sprocket and fitting (A408TE) (3 used)
A 2411 E	Stripper frame end (2 used)	AA 317 E	Bearing cap and fitting (A1786E) (8 used)
A 2412 E	Stripper frame brace (2 used)	AA 318 E	R. H. drum sleeve and fitting (A1904E)
A 2413 E	Upper stripper angle	AA 319 E	L. H. drum sleeve and fitting (A1905E)
A 2414 E	Lower stripper angle	AA 430 E	R. H. end band
A 2415 E	Link bracket, L. H.	AA 431 E	L. H. end band
A 2416 E	Link bracket, R. H.	AA 432 E	King pin brace
A 2417 E	Stripper frame link (2 used)	AA 433 E	Foretrack brace latch
A 2429 E	King pin handle	AA 434 E	King pin
A 2430 E	King pin brace pin	AA 435 E	Foretrack stabilizer
A 2431 E	Foretrack latch pin	AA 438 E	Foretrack axle and stubs
A 2432 E	Lower frame angle tie	AA 439 E	Truck wheel for tire (Tire equipment) (3 used)
A 2433 E	Angle tie plate	AD 80 E	Lockpin with cotter (2 used)
A 2434 E	Hinge bracket, R. H.	AG 125 E	Lockpin for ratchet plates and cotter (2 used)
A 2435 E	Hinge bracket, L. H.		
A 2436 E	Tongue clip (2 used)		DECK EXTENSION—REGULAR ON A306G, SPECIAL ON A306
A 2437 E	Foretrack cross angle	A 2292 E	Deck extension
A 2438 E	Foretrack wearing angle	A 2293 E	L. H. deck extension end shield
A 2439 E	Stub axle (2 used)	A 2294 E	R. H. deck extension end shield
A 2441 E	Foretrack bearing spacer	A 2491 E	Hay retainers (12 used)
A 2442 E	Chain tightener bracket	A 2494 E	Hay retainer for deck extension (8 used)
A 2443 E	R. H. rear sprocket brace (Special) (No. Cut)	HP 5200 E	Spacer (3 used)
A 2452 E	Bottom squaring brace (2 used)	HP 9211 E	Washer on 1/4" bolts, No. 16 x 9/32" x 1-1/4" (3 used)
A 2453 E	Top squaring brace (2 used)		
A 2454 E	Squaring brace bracket (2 used)		
A 2456 E	Strap on upper side sheet (4 used)		
A 2457 E	Short staple tooth holder (78 used) (No. Cut)		
BF 7675 E	Steel bushing, 3/32" long (4 used)		
JD 621 E	Main wheel, 34" diameter (Sub. 1466E)		
JD 645 E	Drive wheel (Rubber tire equipment) (2 used)		
JD 736 E	(Sub. 1667E)		
JD 7789	1/8" straight Alemite hydraulic fitting (No. 1410) (2 used)		
JD 7760	1/8", 45-1/2" Alemite hydraulic fitting (No. 1412) (2 used)		

MALLEABLE AND GREY IRON PARTS



STEEL, PIPE, ETC.





Farm Accidents Can Be Prevented with Your Help

No accident prevention program can be successful without the whole-hearted cooperation 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