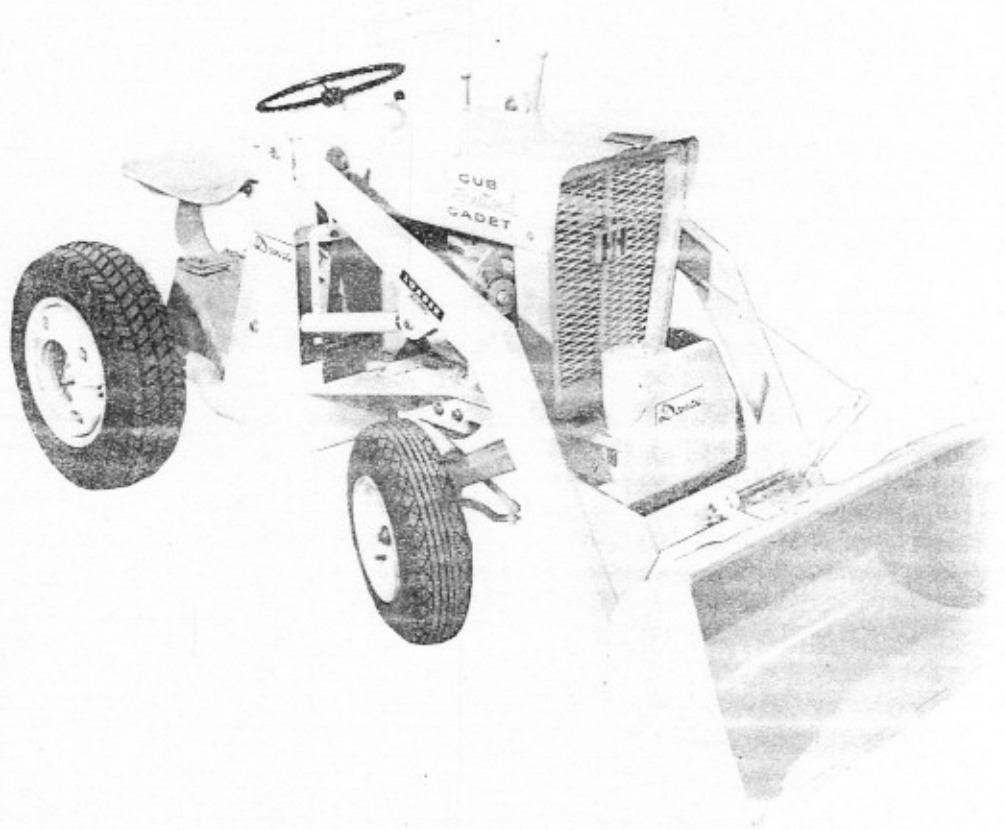


DANCO LOADER

MODEL RD-300

Operators Manual

SETTING UP INSTRUCTIONS
PARTS LIST



For International Cub Cadet Tractor

JOHN HAMILTON CO.
104 GRANBY STREET
BLOOMFIELD, CONN.
PHONE CH 2-5784

DANUSER MACHINE WORKS, INC.

P. O. BOX 15310 TULSA, OKLA.

INTRODUCTION

The Danco Loader Model RD-300 with Work Bucket has a clearing width of 34 inches and is designed for front mounting on the International Cub Cadet Tractor. The Loader Bucket has a lift capacity of 300 lbs. and is raised and lowered by means of front mounted hydraulic pump with two lift cylinders. Lift height is 52 inches for loading into pickup truck. The Work Bucket has hand lever trip device for dumping; Work Bucket will re-lock when lowered to ground.

INSTRUCTIONS FOR ADJUSTING AND OPERATING (REFER TO ILLUSTRATION 1 AND 2)

OPERATING

To raise the Danco Loader, pull lift lever handle. To lower the Bucket, push the handle to a forward position. To dump load, push dump lever control forward. To relock, lower Bucket to ground, back up tractor slightly.

LOADING CONDITIONS

When loading dirt, gravel, heavy materials, use low gear when approaching materials. Speeds may be increased when moving load to dump. Bucket may also be used as scraper in std. position.

CAUTION: Exercise extreme care when operating loader at high speeds. Loads when transported should be carried at lower position.

HYDRAULIC SYSTEM

The Danco Loader has full hydraulic control with front mounted pump belt driven from engine PTO. Two single acting hydraulic cylinders with quick positive lift control. For Belt Adjustment, loosen the four nuts and adjust pump bracket downward until proper belt tension is obtained.

ATTACHMENTS:

Extra attachments, Crane Boom, Fork Lift, Material Bucket, are easily mounted to front lift arms by removing Bucket Bar and Bucket. Replace bar in holes provided on attaching tool.

A Careful Operator

IS THE BEST INSURANCE

AGAINST AN ACCIDENT

— National Safety Council.

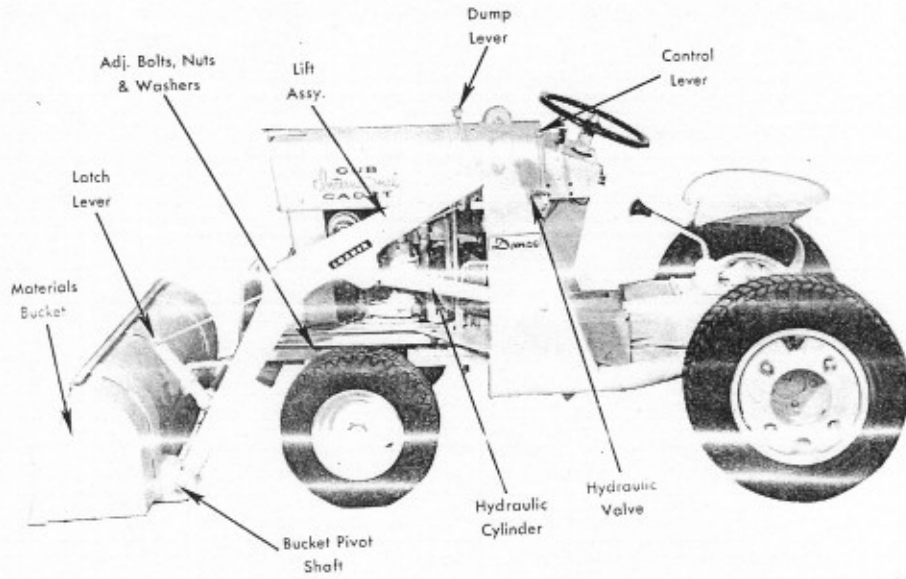


ILLUSTRATION 1

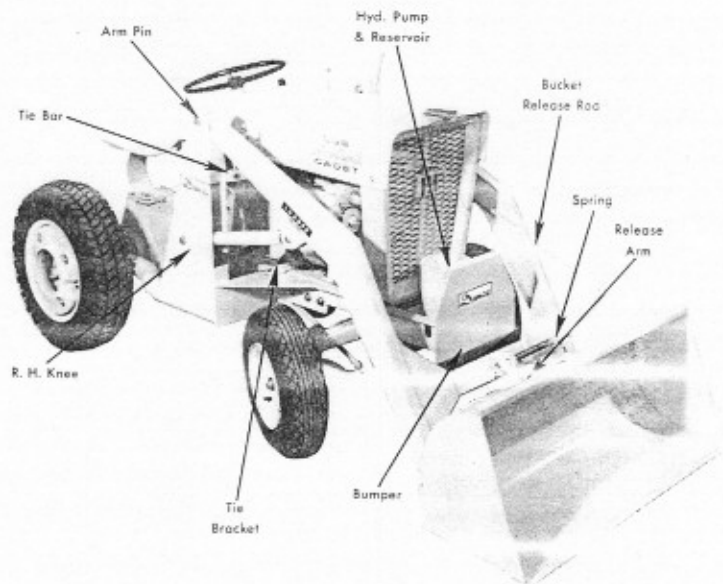


ILLUSTRATION 2

LUBRICATION

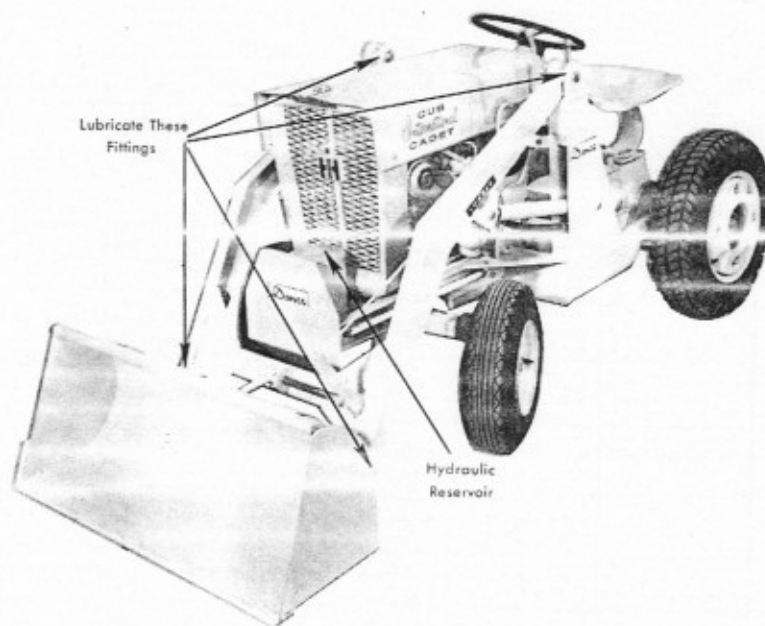


ILLUSTRATION 3



Lubricate and check hydraulic oil level after each 20 hours of operation, or if unit has not been operated for a long period of time, thoroughly check before using.

When using a pressure lubricating gun, be sure all of the fittings are free from dirt and paint so the lubricant is certain to enter the bearing.

The RD-300 Loader has only four lubrication points, where the lift arm assembly attaches to the side frames and to the bucket. Use pressure-gun grease (chassis lubricant) and apply two or three strokes of the lubricator, or sufficient grease to flush out old grease and dirt.

To check hydraulic oil level, push hydraulic valve lever forward to retract lift cylinders; remove reservoir cap. Oil level should be $\frac{3}{4}$ " from top. If it is necessary to add fluid, use IH Touch-Control fluid. It is essential that the fluid be absolutely clean and free from water and all foreign matter when placed in the system.

CAUTION: Never operate the tractor without having sufficient fluid in the reservoir. Insufficient fluid may cause damage to the hydraulic system.

Proper lubrication is the best method of keeping operation expense to a minimum.

MOUNTING INSTRUCTIONS FOR RD-300 LOADER

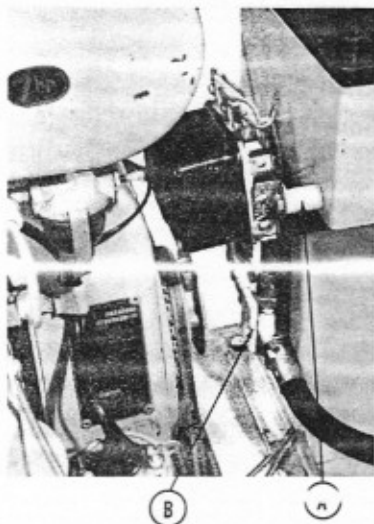


ILLUSTRATION 4

Position the LH Side Frame (Fig. C) with the pipe yoke resting on the tractor rear axle and secure with two $\frac{1}{2}$ x 1 bolts and lockwashers (Fig. D). Proceed with the RH Side Frame in the same manner.

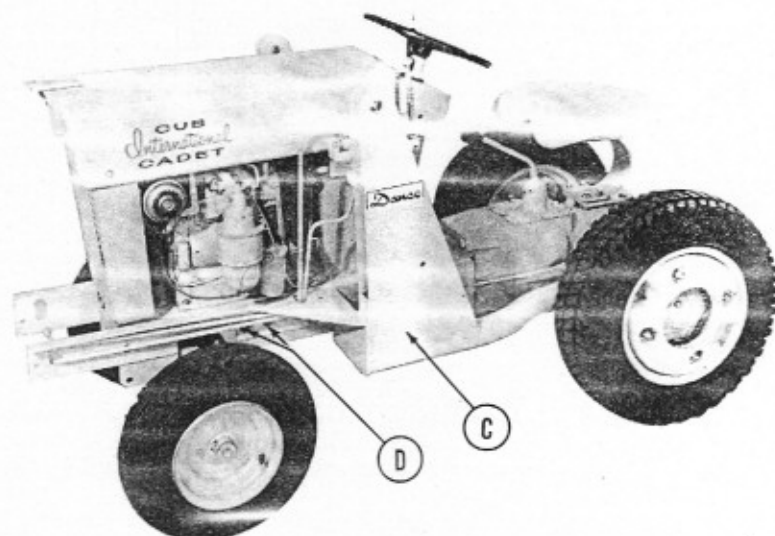


ILLUSTRATION 5

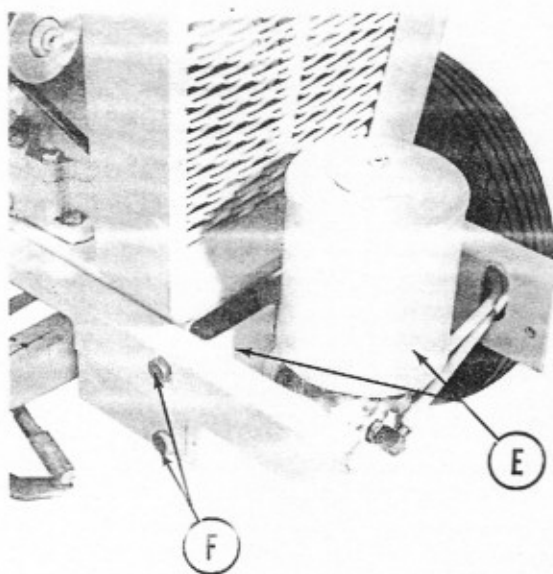


ILLUSTRATION 6

For necessary clearance, spacers must be placed behind the Voltage Regulator (Fig. A). Use two spacers and two $\frac{1}{4}$ x $1\frac{1}{2}$ bolts. This is much easier accomplished if the battery is removed to allow access to mounting nuts.

The two part Hose Bracket (Fig. B) is bolted together with one $\frac{3}{16}$ x 1 bolt and lockwasher. Then when the bracket is positioned as shown, it will form a clamp which will hold the hydraulic hose in the proper location.

The Hydraulic Pump and Pump Mounting Bracket (Fig. E) are preassembled at the factory. Position this assembly inside the Tractor Frame and secure with four $\frac{1}{2}$ x $1\frac{1}{2}$ bolts, nuts, flat washers and lockwashers (Fig. F). Do not tighten these bolts at this time.

Position Drive Sheave on Engine Shaft and align with the Sheave mounted on the Hydraulic Pump, then tighten set screw in the Drive Sheave.

Place drive belt around both sheaves and pry Hydraulic Pump Bracket downward until the correct belt tension is obtained. Tighten the four $\frac{1}{2}$ x $1\frac{1}{2}$ bolts (Fig. F) that had previously been left loose.

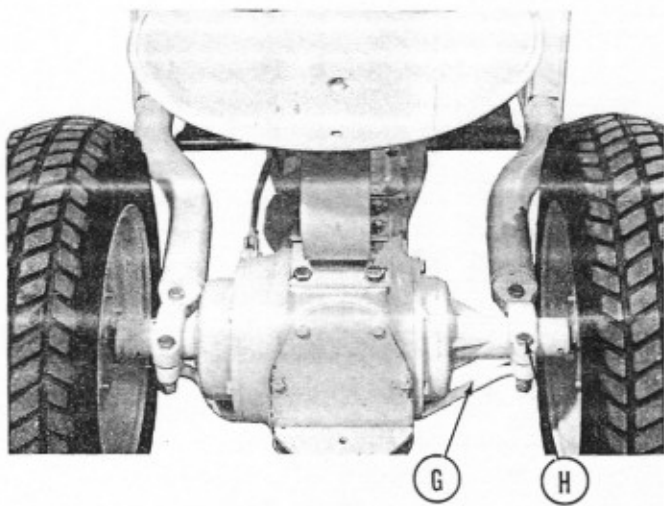


ILLUSTRATION 7

Secure the Rear Stability Rod (Fig. G) to the Side Frames with four $\frac{1}{2}$ x $2\frac{1}{2}$ bolts, nuts and lockwashers (Fig. H).

The two Tie Bars (Fig. I and Fig. J) are secured to the Side Frames with four $\frac{3}{8}$ x 1 bolts, nuts and lockwashers.

Place the Tubing Clamp (Fig. K) around both Hydraulic Lines. Then bolt it to the Left Side Frame with one $\frac{1}{4}$ x $\frac{3}{4}$ bolt, nut and lockwasher.

Tighten Hydraulic Tube Fittings at Pump and Valve (Fig. L).

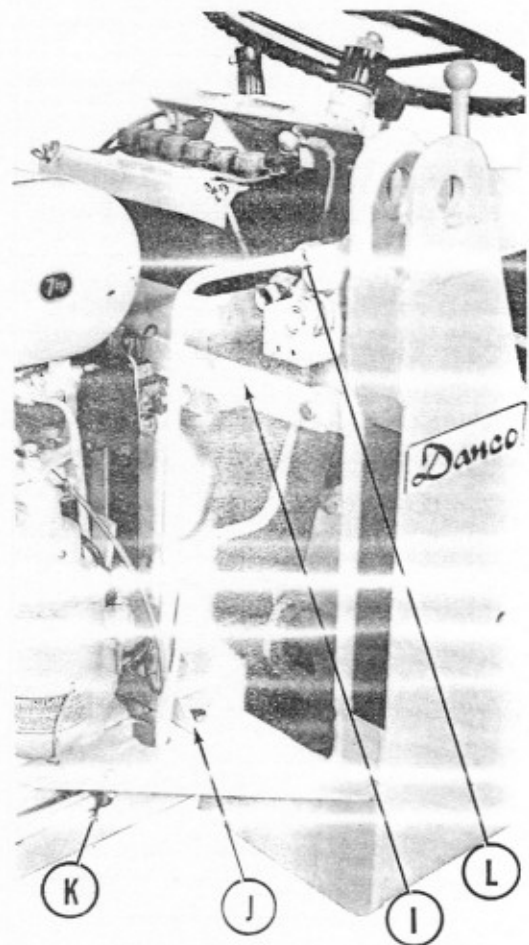


ILLUSTRATION 8

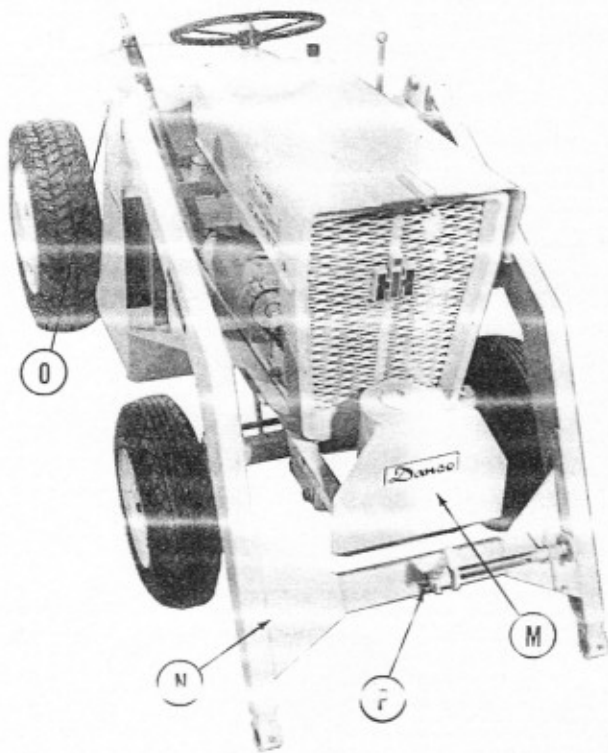


ILLUSTRATION 9

The Bumper (Fig. M) is positioned in front of the Hydraulic Pump and secured to the Side Frames with two $\frac{9}{16}$ x $\frac{3}{4}$ bolts, nuts and lockwashers.

Mount the Lift Assembly (Fig. N) to the Side Frames with two 1" pins, washers, and corner pins (Fig. O).

Insert the $\frac{3}{8}$ x $2\frac{1}{2}$ bolt (Fig. P) up through the Cross Bar of the Lift Assembly, then tighten a $\frac{3}{8}$ nut on the exposed threads. Final adjustment is made after Bucket is mounted to the Lift Assembly.

Hook Tension Spring over lever as shown (Fig. Q). The Latch Lever (Fig. R) is slipped over the pin on the Lift Assembly and held in place with one $\frac{3}{8}$ Flat Washer and cotter pin.

The Bucket Release Rod (Fig. S) is attached to the Latch Lever and Release Lever with two $\frac{1}{4}$ flat washers and cotter pins.

Secure the three pieces of Hydraulic Hose (Fig. T) together with the $\frac{3}{8}$ High Pressure Tee. Position this Hose Assembly as shown in Illust. 1, Fig. B, then tighten clamp to lock in place.

Before mounting Cylinders (Fig. U), attach Hydraulic Hose to the 90-degree fittings on Cylinders, making certain that all connections are tight.

Insert Cylinders (Fig. U) into the Side Frame Knees. (The hose must be on the bottom of the cylinder.) Secure with $\frac{1}{2} \times 2\frac{3}{4}$ bolt and flex nut (Fig. V). Then attach cylinder rods to the Lift Assembly Arm with $\frac{1}{2} \times 2\frac{1}{4}$ bolt and flex nut (Fig. W). Connect free end of hose to work port on Hydraulic Valve (Fig. X).

Work Bucket (Fig. Y) or other attachment is positioned on Lift Assembly and fastened in place with the Pivot Shaft (Fig. Z). Each end of the Pivot Shaft is held with a flat washer and cotter pin.

Thoroughly check to see that all bolts and Hydraulic fitting connections are tight.

Remove Hydraulic Reservoir Cap and add two quarts of IH Touch-Control Fluid. Start the engine, raise and lower the Loader several times. This will bleed the air out of the Hydraulic system. Lower the Loader and refill Reservoir to $\frac{3}{4}$ " from the top.

When checking Hydraulic Fluid, Cylinders should always be retracted.

Never operate the tractor without having sufficient fluid in the reservoir. Insufficient fluid may cause damage to the hydraulic system.

Final adjustment of the release arm (Illust. 6, Fig. P) can now be made. Adjust bolt until hook properly seats in the Bucket catch.

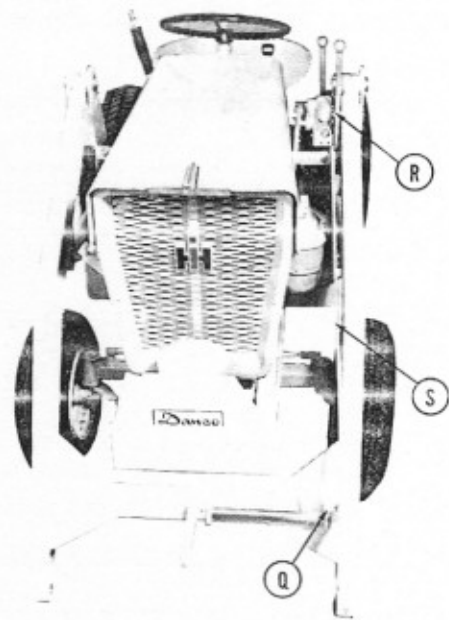


ILLUSTRATION 10

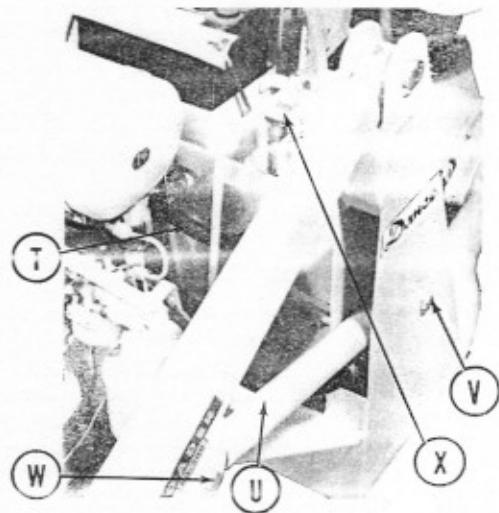


ILLUSTRATION 11

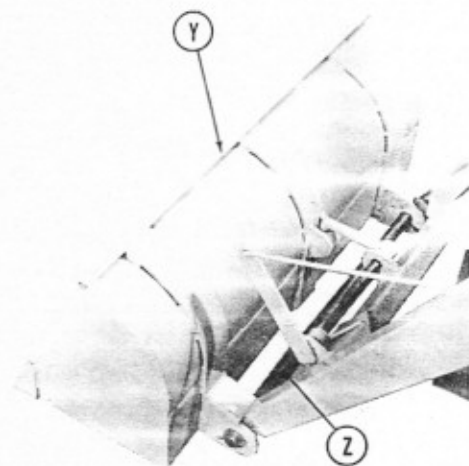


ILLUSTRATION 12

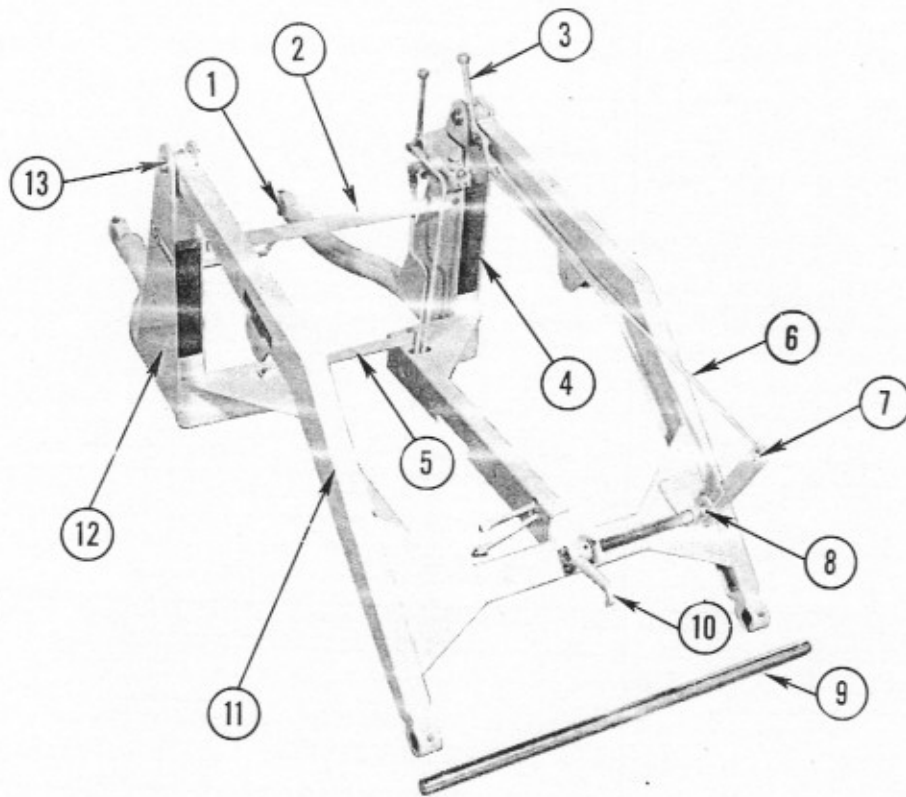


ILLUSTRATION 13

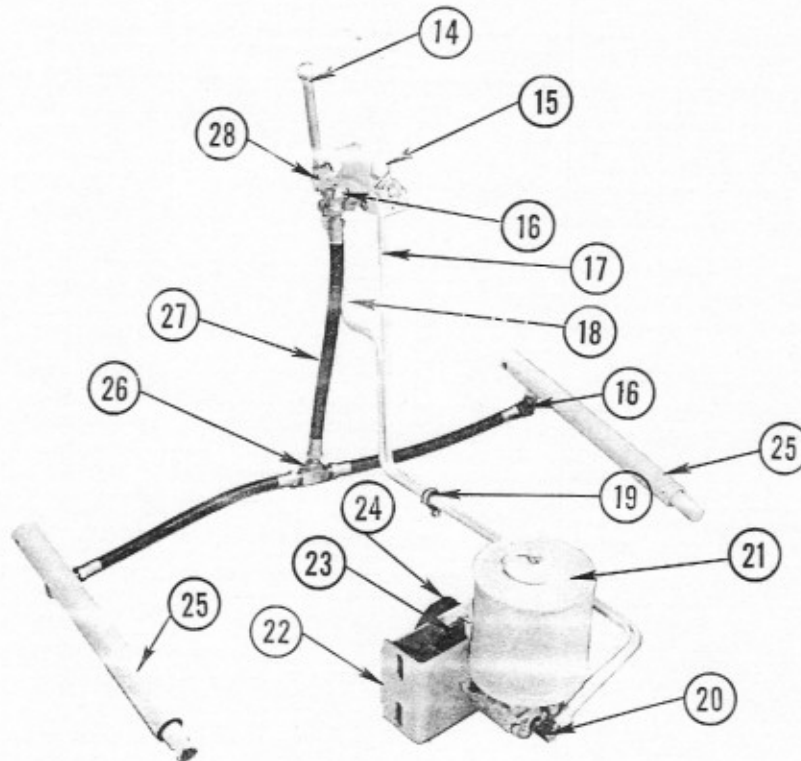


ILLUSTRATION 14

— WHEN ORDERING PARTS —

When ordering parts for your Loader, supply the following information:

1. The Loader model number.
2. Give part number, description, quantity desired.
3. Parts may be secured from your nearest International Harvester dealer. If not available, then:

ADDRESS ALL CORRESPONDENCE TO:
DANUSER MACHINE WORKS, INC.

P. O. BOX 15310

TULSA, OKLAHOMA

WARRANTY

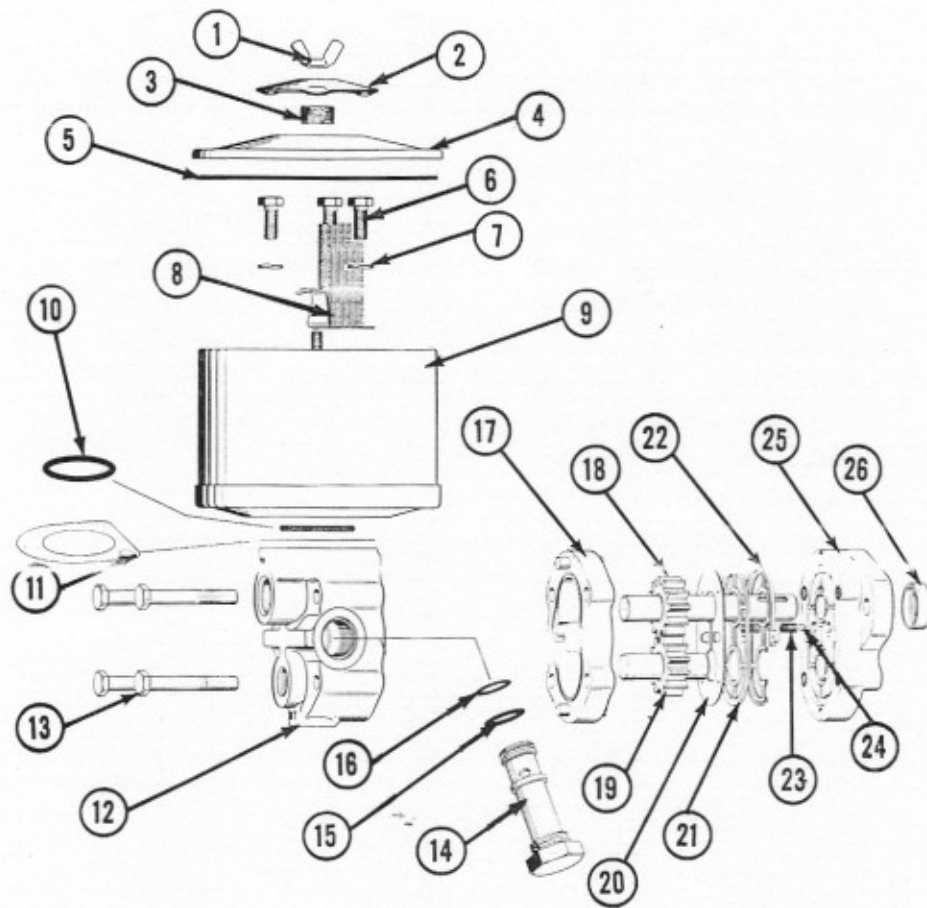
International-Danco loaders and parts are guaranteed for 90 days against defective material and workmanship. Should parts prove defective, new parts will be furnished, no charge, if broken parts are returned prepaid to factory for inspection.

PARTS LIST

Fig. No.	Part No.	Description	Fig. No.	Part No.	Description
1	3068	REAR STABILITY ROD	14	2937	CONTROL LEVER
	1111-22	1/2" x 2 1/2" Capscrew (4)		3087	Chain Link #50
	1112-5	1/2" Nut (4)		1782-10	Spirol Pin
	1113-5	1/2" Lock Washer (4)	15	3072	HYDRAULIC VALVE
2	3067	TIE BAR		1111-38	3/8" x 2 1/2" Capscrew (2)
	1111-20	3/8" x 1" Capscrew (2)		1112-9	3/8" Nut
	1112-7	3/8" Nut (2)		1113-10	3/8" Lock Washer (2)
	1113-8	3/8" Lock Washer (2)	16	3081	ELBOW 90° 3/8" JIC — 3/8" NPT (3)
3	2938	LATCH LEVER	17	3079	PRESSURE LINE
	1113-1	5/8" x 1 3/8" x .085 Washer	18	3080	RETURN LINE
	1124-9	3/2" x 1" Cotter Pin	19	3084	TUBING CLAMP
4	3063	SIDE FRAME L H		1111-128	1/4" x 3/4" Capscrew
	1111-169	1/2" x 1" Capscrew (2)		1112-14	1/4" Nut
	1113-5	1/2" Lock Washer (2)		1113-20	1/4" Lock Washer
5	3061	TIE BAR	20	3082	ELBOW 90° 3/8" JIC — 3/8" Tube (4)
	1111-20	3/8" x 1" Capscrew (2)	21	3069	HYDRAULIC PUMP & RESERVOIR
	1112-7	3/8" Nut (2)		1111-96	3/8" x 1 1/4" Capscrew (2)
	1113-8	3/8" Lock Washer (2)		1112-7	3/8" Nut (2)
6	3060	BUCKET RELEASE ROD		1113-8	3/8" Lock Washer (2)
	1113-18	1/4" SAE Flat Washer (2)	22	2919	HYDRAULIC PUMP MOUNTING BRACKET
	1124-1	1/8" x 3/4" Cotter Pin (2)		1111-29	1/2" x 1 1/4" Capscrew (4)
7	3064	SHAFT AND LEVER RELEASE ARM		1112-5	1/2" Nut (4)
8	3085	SPRING		1113-5	1/2" Lock Washer (4)
9	3065	BUCKET PIVOT SHAFT		1113-4	1/2" SAE Flat Washer (4)
	1113-3	1" x 1 1/2" x 10 ga. Washer (2)	23	1181-11	BEARING — FLANGETTE
	1124-4	3/8" 1 1/2" Cotter Pin (2)		1111-173	1/4" x 3/4" Carriage Bolt (3)
10	3059	RELEASE ARM		1112-14	1/4" Nut (3)
	1782-9	1/4" x 1 1/4" Spirol Pin		1113-20	1/4" Lock Washer (3)
	1111-18	3/8" x 2 1/2" Cap Screw	24	1177-19	SHEAVE 3.5" O.D.
	1112-7	3/8" Nut		2741-208	1/8" x 1/8" x 1/2" Key
11	3057	LIFT ASSEMBLY	25	3071	HYDRAULIC CYLINDER
	1123-3	1/4" x 28" Grease Fitting (4)		1111-177	1/2" x 2 3/4" Capscrew (2)
12	3062	SIDE FRAME R H		1111-6	1/2" x 2 1/4" Capscrew (2)
	1111-169	1/2" x 1" Capscrew (2)		1112-3	1/2" Flex Nut (4)
	1113-5	1/2" Lock Washer (2)	26	3083	TEE 3/8" High Pressure
13	3066	PIVOT PIN (2)	27	1810-25	HYDRAULIC HOSE 3/8" (3)
	1113-3	1" x 1 1/2" x 10 ga. Washer (2)	28	3058	LEVER PIVOT BRACKET
	1124-4	3/8" x 1 1/2" Cotter Pin (2)			

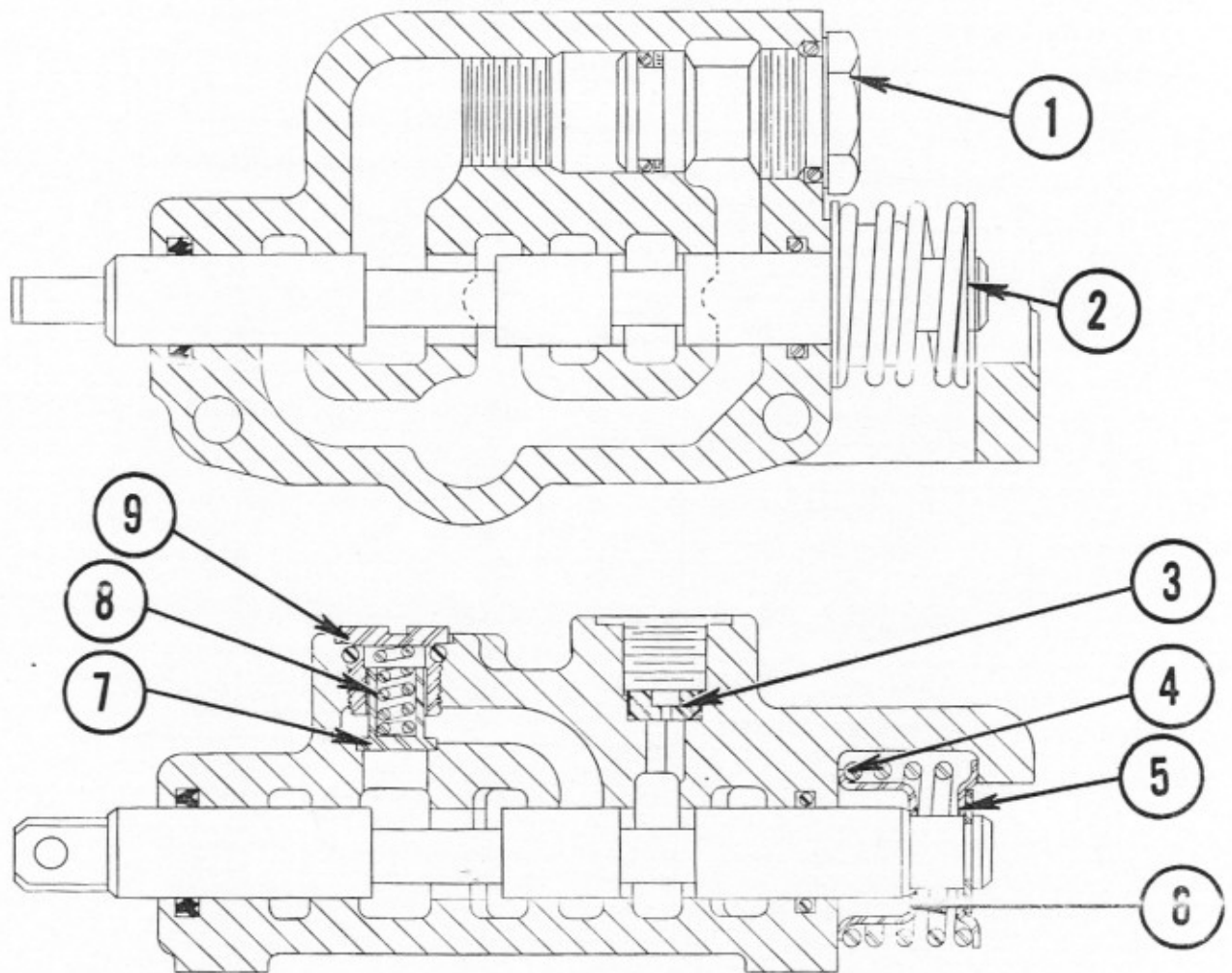
PARTS NOT SHOWN

Part No.	Description	Part No.	Description
1177-18	SHEAVE 3.0" O D (Tractor)	2924	VOLTAGE REGULATOR SPACER (2)
1176-40	DRIVE BELT		1/4" x 1 1/2" Capscrew (2)
2974	FRONT BUMPER	2920	HOSE BRACKET — Rear Tie Bar
1111-150	3/8" x 3/4" Capscrew (2)	2921	HOSE BRACKET — Front Tie Bar
1112-9	3/8" Nut (2)	1111-27	3/8" x 1" Capscrew
1113-10	3/8" Lock Washer (2)	1113-10	3/8" Lock Washer



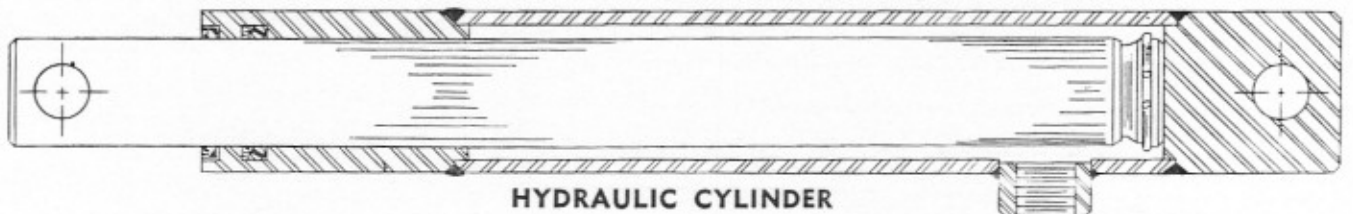
HYDRAULIC PUMP

Fig. No.	No. Req'd	Part No.	Description
		3069	Hydraulic Pump & Reservoir Assembly
		3069-21	Seal Repair Kit
1	1	3069-19	Wing Nut
2	1	3069-17	Breather Cap
3	1	3069-10	Air Filter
4	1	3069-18	Lid
5	1	3069-11	Lid Gasket
6	3	1111-180	Cap Screw
7	3	1113-10	Lock Washer
8	1	3069-14	Filter Assembly
9	1	3069-16	Reservoir Tank
10	1	3014-6	O-Ring
11	1	3069-12	Reservoir Gasket
12	1	3069-13	Back Plate Assembly
13	4	1111-176	Cap Screw
14	1	3069-20	Relief Valve Assembly (Includes Figures 15 & 16)
15	1	3014-7	O-Ring
16	1	3014-8	O-Ring
17	1	3069-4	Body & Dowel Assembly
18	1	3069-9	Drive Gear Assembly
19	1	3069-8	Idle Gear Assembly
20	1	3069-5	Diaphragm
21	1	3069-3	Back Up Gasket
22	1	3069-7	Diaphragm Seal
23	2	3069-1	Spring
24	2	3069-2	Steel Ball
25	1	3069-6	Front Plate Assembly
26	1	2200-26	Shaft Seal



HYDRAULIC VALVE

Fig. No.	No. Req'd	Part No.	Description
1	1	3072	Hydraulic Valve Assembly
2	1	3072-13	Seal Repair Kit
3	1	3072-7	Plug Assembly
4	1	3072-11	Clip Ring
5	1	3072-12	Orifice Plate
6	1	3072-3	Spring
7	1	3072-1	Shallow Washer
8	1	3072-2	Deep Washer
9	1	3072-4	Plunger
		3072-5	Spring
		3072-6	Plug Assembly



HYDRAULIC CYLINDER

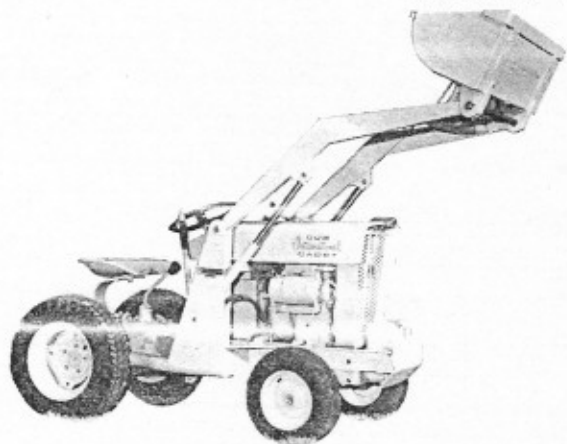
Part Number	Description
3071	Hydraulic Cylinder Assembly
3071-6	Seal Repair Kit

ADDRESS ALL CORRESPONDENCE TO:
DANUSER MACHINE WORKS, INC.

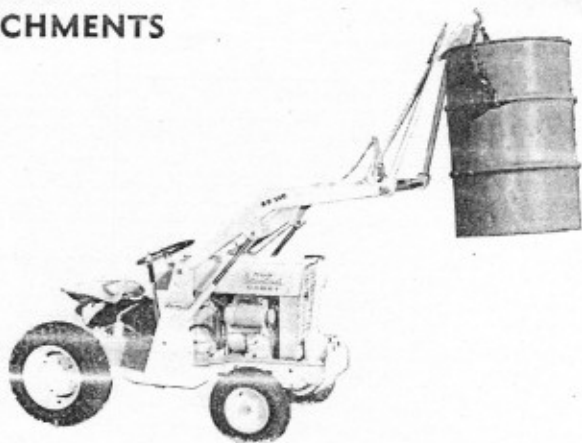
P. O. BOX 15310

TULSA, OKLAHOMA

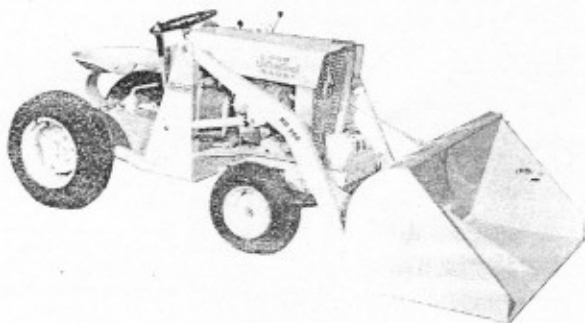
**DANCO RD-300
LOADER ATTACHMENTS**



RD-301 Work Bucket. Capacity (2 cu. ft.) for standard loader applications.



RD-302 Crane Boom. A quick lift for any job.



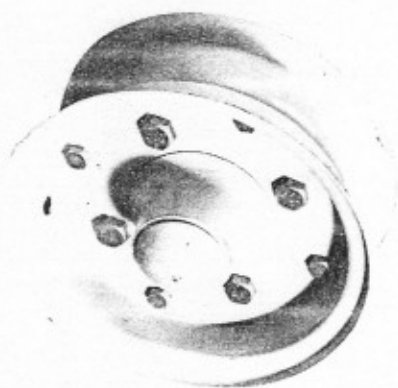
RD-303 Light Material Bucket has big capacity $\frac{1}{3}$ cu. yd. for handling snow, other light materials.



RD-307 Fork Lift attachment is ideal for moving palletized material fast. Level Lift over 4 feet.



RD-304 Rear Weight Box gives 200 lb. counterweight when loaded with sand.



RD-305 Tapered Bearing Hub and Rim Kit allows free wheeling with heavy front load.

Danuser

MACHINE WORKS, Inc.