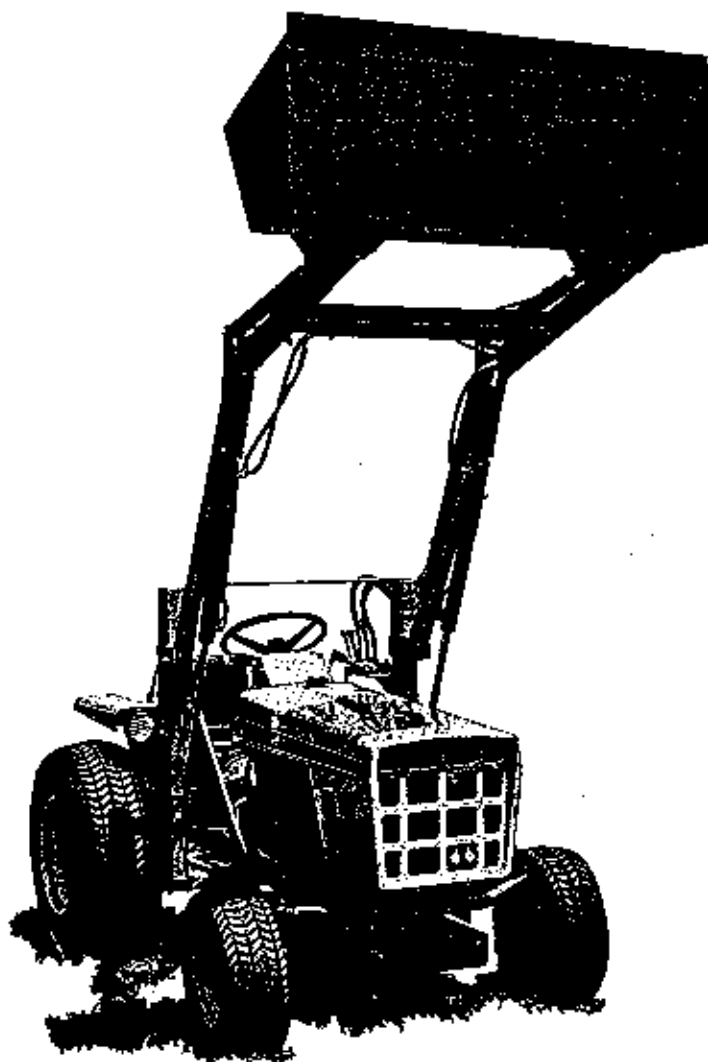


Simplicity®

OPERATOR'S MANUAL MODEL 1690112 LOADER

FOR 4040, 4041, POW'R MAX & SYSTEM 9020 TRACTORS



MANUFACTURED BY ARK MANUFACTURING CO., INC.
P.O. BOX 327 • STERLING, KANSAS 67579 • (316) 278-3641

1979

DEALERS PRE-DELIVERY CHECK LIST

MODEL 169D112 LOADER

OWNERS NAME _____ LOADER SERIAL NO. _____

ADDRESS _____ DELIVERY DATE _____

PHONE _____

The following Pre-Delivery Service has been completed by your Simplicity Dealer. It is his responsibility to perform each item on the Pre-Delivery Check List.

- Tractor hydraulic oil level checked (oil added if necessary.)
Refer to Hydraulic System Oil Level section of this manual.
- High capacity front tires are recommended for the tractor
when a loader is used on it. Inflate the front tires to the
manufacturer's recommended inflation pressure.
- Lubricate all grease fittings.

YOUR LOADER HAS BEEN SET UP, ADJUSTED AND SERVICED BY YOUR DEALER PRIOR TO ITS DELIVERY TO YOU.

DEALERS SIGNATURE _____

0701

DELIVERY RECORD

MODEL 1690112 LOADER

THIS FORM MUST BE FILLED OUT, IN TRIPPLICATE, BY THE DEALER AND SIGNED BY THE CUSTOMER AT THE TIME THE UNIT IS DELIVERED IN ORDER FOR THE WARRANTY TO BE VALID.

DELIVERED TO _____ DEALER _____
ADDRESS _____ TOWN _____
TOWN _____ SERIAL NO. _____
STATE _____ SERVICED BY _____
PHONE _____

EXPLAIN THE FUNCTION, SAFE OPERATION AND ADJUSTMENTS OF THE ITEMS LISTED BELOW TO THE CUSTOMER:

- | | |
|--|---|
| <input type="checkbox"/> Tractor wheel tread - tire inflation pressure | <input type="checkbox"/> Operators Safety Precautions |
| <input type="checkbox"/> Tractor hydraulic system - controls | <input type="checkbox"/> Hydraulic system oil level |
| <input type="checkbox"/> Loader removal | <input type="checkbox"/> Buckets and blades |
| <input type="checkbox"/> Loader Installation | <input type="checkbox"/> Lubrication |
| | <input type="checkbox"/> Storage |

THIS LOADER HAS BEEN DELIVERED TO ME IN GOOD CONDITION AND I HAVE BEEN INSTRUCTED IN THE FUNCTION, SAFE OPERATION AND ADJUSTMENTS OF THE ITEMS LISTED ABOVE.

OWNERS SIGNATURE _____

I HAVE DELIVERED LOADER SERIAL NO. _____ TO THE ABOVE CUSTOMER AND HAVE INSTRUCTED HIM IN THE FUNCTION, SAFE OPERATION AND ADJUSTMENTS OF THE ABOVE ITEMS!

NAME OF DEALERSHIP _____

ADDRESS _____

SIGNATURE OF DEALER _____
(Or Person Delivering Loader)



BE CAREFUL

1. KEEP ALL SHIELDS IN PLACE.
2. STOP MACHINE TO ADJUST AND OIL.
3. WHEN MECHANISM BECOMES CLOGGED, DISENGAGE POWER BEFORE CLEANING.
4. KEEP HANDS, FEET AND CLOTHING AWAY FROM POWER-DRIVEN PARTS.
5. KEEP OFF IMPLEMENT UNLESS SEAT OR PLATFORM IS PROVIDED. KEEP OTHERS OFF.

BE A SAFE OPERATOR

AVOID ACCIDENTS

Most accidents, whether they occur in industry, on the farm, at home, or on the highway, are caused by the failure of some individual to follow simple and fundamental safety rules or precautions. For this reason most accidents can be prevented by recognizing the real cause and doing something about it before the accident occurs.

Regardless of the care used in the design and construction of any type of equipment, there are many conditions that can not be completely safe guarded against without interfering with reasonable accessibility and efficient operation.

A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST AN ACCIDENT.

THE COMPLETE OBSERVANCE OF ONE SIMPLE RULE WOULD PREVENT MANY THOUSAND SERIOUS INJURIES EACH YEAR. THAT RULE IS:

NEVER ATTEMPT TO CLEAN, OIL, OR ADJUST A MACHINE WHILE IT IS IN MOTION!

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**ATTENTION! BECOME ALERT!
YOUR SAFETY IS INVOLVED!**

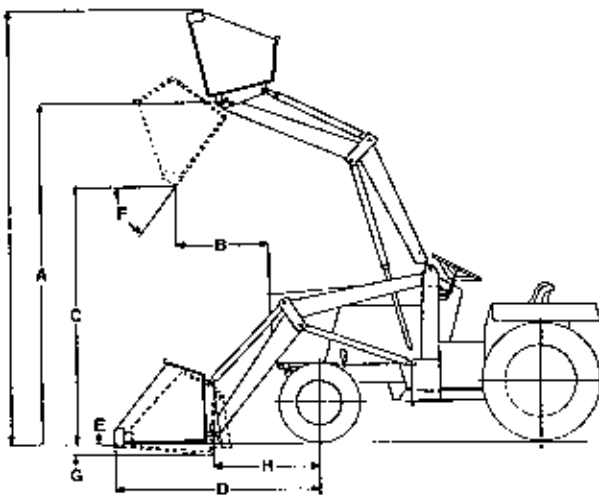


This symbol is used to call your attention to safety precautions that should be followed by the operator to avoid accidents. When you see this emblem - Heed Its Warning.

WARRANTY

ARK warrants its equipment, parts and accessories to be free from defects in material and workmanship under normal use and service for a period of one (1) year from the date of sale to customer, except for commercial use this warranty period shall be for ninety (90) days from the date of sale to such commercial user. This warranty becomes effective only on the date of the sale to the customer provided the warranty registration card is completed, signed by the customer and returned to ARK. This warranty remains valid on the condition that the equipment is at all times used strictly in accordance with ARK recommendations and instructions provided. Hydraulic pumps, control valves, hoses, cylinder and drive belts are not covered by the ARK warranty, but by the warranties of the manufacturers of such product, which is for a period of ninety (90) days from date of sale to customer. ARK reserves the right to inspect all equipment or parts at the factory with all transportation charges to be paid by customer.

All service parts orders and warranty claims should be sent directly to Ark Manufacturing Co., Inc. Simplicity's standard warranty form and labor rates will be honored by Ark Manufacturing Co., Inc.



SPECIFICATIONS for Model 1690112 Loader

A	Height to Bucket Hinge Pin (MAX)	85 Inches
B	Reach @ Maximum Height, Bucket Dumped	24¾ Inches
C	Clearance, Bucket Dumped	66½ Inches
D	Reach Bucket on Ground	52 Inches
E	Bucket Rollback	8 Degrees
F	Maximum Dumping Angle	45 Degrees
G	Digging Depth	3½ Inches
H	Reach from Axle to Bucket Hinge Pin	30 Inches
1	Overall Maximum Height Raised	107 Inches
	Lift Capacity	650 Pounds
	Hydraulic System	1250 PSI
	Dump Bucket to Full Dump	4 Seconds
	Raise Bucket to Full Height	4 Seconds
	40" Material Bucket Capacity	4.9 Cubic Feet
	48" Material Bucket Capacity	5.9 Cubic Feet

Specifications subject to change without notice.



SAFETY PRECAUTIONS



1. Loader may affect the stability of the tractor.
2. Never raise the bucket to extreme height on steep inclines.
3. Do not pivot or turn the tractor sharply at high speed when the bucket is over 20" from the ground.
4. In transport, carry loaded bucket low and accelerate tractor with care.
5. Do not raise the bucket to full height under low clearance barns, sheds, etc.
6. Watch out that bucket does not interfere with low hung power lines, etc.
7. Use care on turns due to the extra length which increases the turning radius needed.
8. When raising the bucket to extreme height with a load in it, tilt the bucket so that the load will not spill on the operator.
9. Keep the tractor on solid footing. Loose fill, rocks, holes, etc., do not permit safe operation.
10. Do not try to load the bucket at high speed or full tractor power.
11. Do not leave the loader in a raised position. The only time the bucket should be raised is when a load is being dumped.
12. High capacity front tires are required. Calcium chloride and water filled high flotation or agricultural rear tires plus two sets of rear wheel weights or ballast box is recommended for proper operation.
13. Do not operate loader unless hydraulic pump is running.
14. Before servicing or adjusting the loader,
 - (A) Lower working unit to the ground,
 - (B) Disengage power and shut off engine, and
 - (C) Relieve hydraulic pressure before disconnecting oil line.

LUBRICATION

Lubricate the two fittings where lift frame pins to the uprights and check hydraulic oil level once a day when loader is in operation. To check oil level, loosen stove bolt just below the control valve on the left upright. If oil seeps out, level is sufficient, if not, fill until oil runs out this hole. When checking fluid level, loader should be down and bucket back.

OPERATION

The tractor front electric clutch must be switched on before the loader will operate, and should be turned off when starting the engine and when loader is not in use.



Bucket height is regulated by the L.H. or outside valve lever. To raise the loader bucket, pull back on the L.H. lever. To lower the bucket, push the L.H. lever forward.

To dump the bucket, push the R.H. or inside valve lever forward. To return the bucket to normal position, pull R.H. lever back.

The hydraulic control valve is equipped with a float position in the left hand spool. To use the float, push L.H. lever all the way forward until spool locks in the detent. This may be used for lowering the bucket to the ground.

Your loader is also equipped with a bucket position indicator located on the left hand tilt cylinder. When the guide rod is level with the stationary indicator, the bucket is level on a smooth surface.

When loading the bucket, approach the material with the tractor in low range. Speed may be increased while moving load to be dumped.

 **CAUTION!** Exercise extreme care when operating the loader at high speeds. 

MOUNTING INSTRUCTIONS

Your new loader has been assembled at the factory as far as it is possible to be assembled so that installation on your tractor will be as quick and easy as possible. Please read the following instructions first, then follow step by step for easy final installations. NOTE: All instructions are based on one man installation, and where reference is made to right or left side, this is determined by sitting on the tractor seat.

Make sure that the loader is in front of the tractor so that at the proper time the tractor can be driven into the lift frame assembly for final installation. You should make sure that ample working area is around your tractor so that you will not be cramped for working space.



Figure 1

1. After the shipping carton and bands have been removed as in Figure 1, remove and lay aside the left and right angle iron braces which will be covered by instructions to follow, then slide lift frame and upright assembly forward until the front lift arms are off of the pallet. At this time remove the bucket from its shipping carton and pin to the lift arms and tilt cylinders. Figure 2.

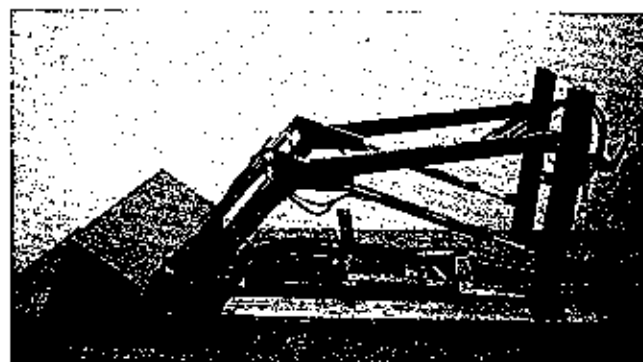


Figure 2

2. Insert dismount stands in the bushing located on the base of each upright. Now lift loader assembly

and position on the dismount stands. Figure 3. Remove the mounting frame assembly with cross member and pump installed from the pallet and remove pallet from work area.

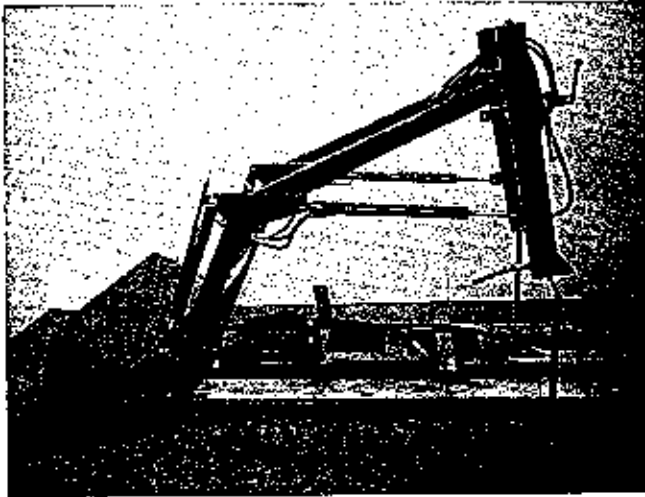


Figure 3

3. To mount the mounting frame assembly, turn the tractor wheels to extreme left and from the right side of the tractor slide front of mounting frame assembly in between the front wheels far enough to clear the rear wheels, then slide back under tractor until rear of mounting frame assembly is located under the rear stationary hitch.

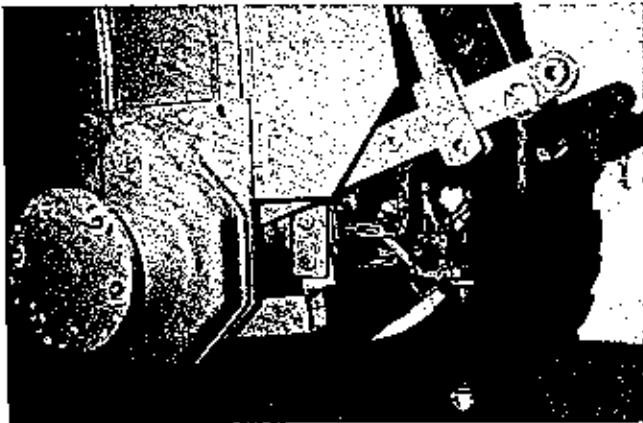


Figure 4

4. At this time, on tractors with three point hitch, it is necessary to remove the restraining chains from the stationary hitch, then remove the lower bolts from each side of the stationary hitch. Remove the two hanger brackets from the mounting frame assembly and install into the bottom holes on each side of hitch with bolts furnished with brackets, leave loose. Figure 4. The pulley guard in front of these mounting holes may have to be tapped forward to allow enough room to mount these brackets. Reinstall the restraining chains. These brackets need never be removed. Raise

rear of mounting frame assembly and attach to hanger brackets with bolts furnished.

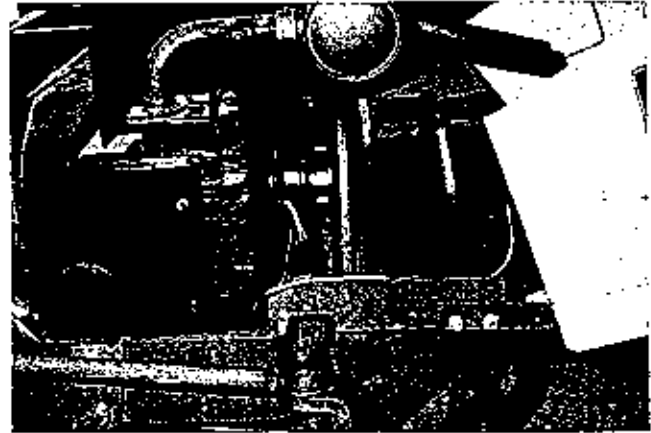


Figure 5

5. Install V-belt over tractor P.T.O. pulley. Figure 5. This belt needs to be positioned in such a way that when mounting frame assembly is raised, the hydraulic pump pulley will be in front of the lower belt loop. With wheels still in extreme left position, and from left front side, raise front of mounting frame assembly, until you can install the two (2) $\frac{1}{2}$ x 1" hex bolts furnished in front hanger on left side, leave loose. Figure 6. Install two (2) $\frac{1}{2}$ x 1" hex bolts in right front hanger mounting bolts securely, then tighten four (4) bolts holding rear hanger brackets and mounting frame securely.

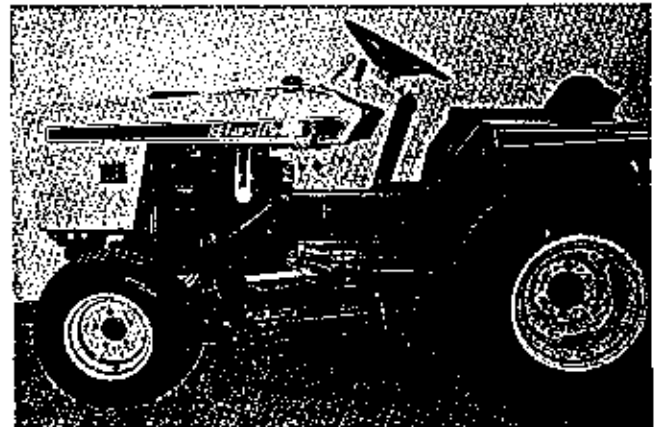


Figure 6

6. Drive or push tractor into loader assembly. Remove right dismount stand. Loader will stand with just the left dismount stand in place, provided the bucket or other attachment is installed to stabilize. Figure 7. Then from left side, remove left dismount stand and lower onto cross member as in Figure 8. Install bolts furnished in left and right uprights, but do not tighten. Install the left and right angle iron braces removed in instruction No. 1 to the uprights and to the mounting

frame assembly. Tighten bolts in left and right braces securely, then tighten the bolts holding uprights to the cross member.

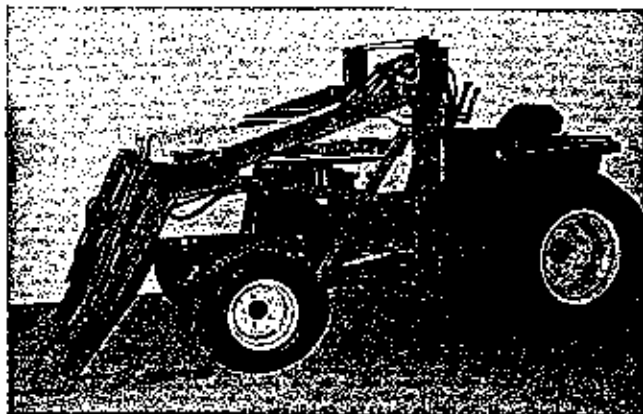


Figure 7

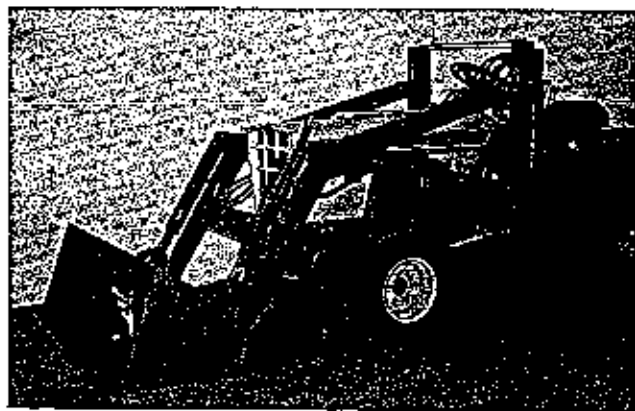


Figure 8

7. Raise hood and slip belt off of pulley towards the rear on engine side to give more slack below, then from back of left front wheel underneath the tractor engage belt into pump pulley by lifting pump. From top side roll belt back into tractor P.T.O. pulley. Tighten belt through opening between pump guard and mounting frame on left front side. Be careful not to over tighten belt. Belt tension should be checked regularly.

8. Connect the two hoses from pump to control valve and reservoir as in Figure 8. These have quick disconnect couplers. At this time all hose connections should be checked for tightness. Fill reservoir in left upright with three (3) quarts of Type A hydraulic oil, then start engine. Engage front P.T.O. clutch and operate lift and tilt cylinders to start filling lines. Add two and one-half (2½) quarts hydraulic oil to complete the system. Operate all cylinders through their full range several times. This will bleed the air from the hydraulic system.

REMOVAL OF LOADER

9. The dismount stands should be stored in some convenient place until ready to remove loader from tractor.

10. Position tractor with loader mounted on level area then install the dismount stands in the same manner as in Instruction 2, with the foot of the stand towards front of the tractor. Remove belt from hydraulic pump. Then disconnect quick couplers on pressure and suction hoses, remove left and right angle braces, remove bolts from left and right uprights. From the left side lift loader assembly so that dismount stand is in position. Check the right stand for proper position. Back out of loader assembly and remove mounting frame assembly. You may leave rear hanger bracket in place.



When leaving loader assembly for any length of time it is recommended that uprights be lowered to ground.



