



STATEMENT OF POLICY

It is the policy of **Worksaver**, **Inc.** to improve its products is possible where it and practical to do so. Worksaver, Inc. reserves the right to make changes or improvements in design and construction at any time without the incurring obligation to make these changes on previously manufactured units.

Packing Assembly & Mounting Operating Instructions

Maintenance Repair Parts



3 PT. HITCH ADAPTER KIT HK-307 For Allis-Chalmers Model CA Tractors

A CAUTION

THE FOLLOWING SAFETY PRECAUTIONS SHOULD BE THOROUGHLY UNDERSTOOD BEFORE ATTEMPTING TO BEGIN ASSEMBLING THIS MACHINE.

- 1. Select an area for assembly that is clean and free of any debris, which might cause persons working on the assembly to trip.
- 2. Do not lift heavy parts or assemblies. Use crane, jack, tackle, fork trucks or other mechanical devices.
- 3. Preview the assembly instructions in your operator's manual before proceeding further.
- 4. If the assembly instructions call for parts or assemblies to be blocked up, use only blocking material that is in good condition and is capable of handling the weight of the assembly to be blocked. Also insure that the blocking material is on a clean, dry surface.
- 5. Never put hands, or any other part of body under blocked up assemblies if at all possible.

- 6. After completing assembly, thoroughly inspect the machine to be sure that all nuts, bolts, hydraulic fittings or any other fastened assemblies have been thoroughly tightened.
- 7. Before operating the machine, thoroughly read the operation section of your operator's manual.
- 8. Before operation, read the maintenance section of your operator's manual to be sure that any parts requiring lubrication such as gearboxes are full to avoid any possible damage.
- 9. Before operating equipment. If you have any questions regarding the proper assembly or operation, contact your Worksaver dealer or representative.

To the Owner/Operator/Dealer

All implements with moving parts are potentially hazardous. There is no substitute for a cautious, safe-minded operator who recognizes the potential hazards and follows reasonable safety practices. The manufacturer has designed this implement to be used with all its safety equipment properly attached, to minimize the chance of accidents.

BEFORE YOU START!! Read the safety messages on the implement and shown in your manual. Observe the rules of safety and common sense!

Instructions

The Model HK-307 hitch adapter kit is designed for the Allis Chalmers Model CA tractors.

This kit uses the existing hydraulic lift on the tractor to raise and lower the 3-pt. Hitch.

PACKING

The adapter kit is shipped in knocked down condition so as to command the lowest freight rates. Shipment consists of **1 cartons and 1 frame assembly.**

TRACTOR PREPARATION

Before installing the adapter kit, it is necessary to remove the existing swinging drawbar assembly.

Check the threaded holes that go into the tractor housing and make sure the threads are in good condition and that the holes are clean.

CAUTION! If an air hose is used to blow any loose fust or dirt from the holes, be sure safety glasses are used to prevent particles from entering an eye.

Be sure tires and rims are in good condition. Inflate tires to the proper recommended air pressure.

Check the tractor's hydraulic system. Refer to your tractor operator's manual or dealer for any adjustments necessary to put the hydraulic system in good working order. (I&T shop manuals will list most specifications and adjustment instructions – available from most farm equipment dealers.)

Check the shield over the PTO stub shaft. Make sure it is in good condition and bolted securely to the tractor. Purchase a new shield if old shield is damaged or missing. (You may have to use a tractor salvage yard for replacement parts on older tractors.)

It is recommended that a ROPS (Roll-Over Protection Structure) be installed on all tractors. Contact your local dealer for a ROPS for your tractor.

ASSEMBLY

In order to mount this kit, it will first be necessary to remove the swinging drawbar and mounting brackets from your tractor. Using the 7/8" x 61/2" draw pin, attach the main frame to support arm on the underside of the tractor and secure it with the hairclip pin provided.

Slide the mainframe braces over the outside pins mounted in the rear axle housings in the position shown on the parts drawing and capture them with the hairpins provided. Pivot the rear of the main frame to the main frame braces. Tighten these bolts securely.

Pin the pivoting ends of the lift arm leveling assemblies to the tractor lift brackets with the 5/8" top link pins and linchpins provided.

On both the outer left-hand and the right-hand ends of the hitch main frame, start the ends of the pull pins (Ref. #5) through the outer pull bracket ears. Position the pull pin so that the end with **NO** hole goes to the inside.

As soon as the end of the pull pin passes through the first outer pull bracket ear, slide the pull pin spacer (Ref #6) on the pin so that it is located between the first and second pull bracket ears. Slide the pull pin in further until the end is just entering the second pull bracket ear.

Then place the forward end of the lift arm between the large side plate on the main hitch frame and the second pull bracket. Slide the pull pin in further so that it goes through the ball end of the lift arm and enters the hole in the large side plate.

Rotate the pull pin so that the holes in the pin are horizontal. Slide the spacer tube and adjust the pull pin so that a large $(5/16^{\circ})$ hairpin clip can be inserted through the center hole of the pull pin. This locks the pull pin in place on each side.

Raise the lift arms, sliding them between the clevis ends of the lift arm leveling assemblies, and pin them in place.

Install the stabilizer stub pins (Ref #19) in the forward holes of each lift arm. Have the large (7/8") diameter of the stub pin to the outside of the lift arm and the threaded nut to the inside. **Do not use a lock washer under the nut**. Place a screwdriver or small bar through the linchpin hole and tighten the nut on the stub pin.

Place one end of the stabilizer bars (Ref #17) over the ends of the pull pins on the outer ends of the frame and secure with linchpins.

The stabilizer bars have threaded ends and can be adjusted to the correct length by turning the center barrel. Adjust the stabilizer bars, then slide the other end over the stabilizer stub pins in the lift arms. Secure in place with linchpins.

NOTE: When connection the hitch to an implement, it will be necessary to remove the lift arm end of the stabilizer bar from the lift arm. This allows the lift arm to swing out and be installed on the pull pin of the

Instructions (Continued from page 1)

implement.

After the lift arms are connected to the implement, the stabilizer bars need to be reconnected and adjusted so that the implement is centered behind the tractor.

Remove the top link bracket from the top link and place it around the rocker shaft of the tractor.

Re-attach the top link to the top link bracket, and tighten the bolt securely. Place the top link clamps, one on each side of the top link bracket and tighten them securely.

NOTE: The top link should be placed at the approximate center of the tractor rocker shaft.

OPERATION

Two (2) holes are provided on the lift arms to connect to the lower ends of the leveling assemblies.

The forward holes will provide the greatest lifting range for the ball ends of the lift arms. The rear holes will allow heavier loads to be handled by the hitch.

The adjustable screw type leveling assemblies will provide additional adjustment in the lifting height of the hitch. NOTE: BE SURE THAT AT LEAST 1-1/4" OF THREAD ON EACH END IS ENGAGED INTO THE THREADED BARREL OF THE LEVELING ASSEMBLIES.

The adjustable screw type top link can also be shortened or lengthened to adapt different implements and can be used to obtain various degrees of pitch on the implements you are using.

The 2-way ball sockets on the end of the lift arms will allow you to connect to either Category I or Category II implements. If the drawbar or implement you mount has Category I (7/8" dia.) pins, then make sure the balls are turned so that the 7/8" dia., holes are used.

IMPORTANT: If the larger 1-1/8" dia., holes are used with the smaller 7/8" dia., pins, the ball holes will wear rapidly in an uneven pattern and make the entire ball socket eventually unusable.

The stabilizer bars should be used whenever possible, as they provide rigidity and stability to the unit – plus added strength. The stabilizer bars have threaded stubs so their length can be adjusted so the spread of the lift arms can be increased or decreased to accommodate the different width of Category I and Category II tools. This kit is designed to lift up to 1600 lbs., but, of course, lifting capacity is dependent on the pressure and condition of the tractors hydraulic system. You will also find that the closer the load is kept to the tractor, the more you will be able to lift.

CAUTION! Be sure your tractor is in good condition and properly equipped with counterweights. Read all the safety precautions and make sure all tractor operators are familiar with the safety rules of tractor operation.

CAUTION! When using a 3-pt. hitch rear blade in a reverse position (bulldozing), use extra care. DO NOT RAM BLADE into dirt or packed snow piles! Tractor lift arms and the blade are not built to take high impact loads in this position. RAMMING backwards can also dislodge operator from seat and/or tractor controls, resulting in possible serious injury or death.

Always ease the tractor into the load. It may be necessary to reposition and take less "bite" on the material to move it safely.

Watch for and avoid hidden obstructions, i.e., buried pipes, rocks, concrete piers, uneven concrete slabs, stumps, etc., when operation. This is especially of concern when removing snow.

MAINTENANCE

Check all bolts and nuts to be sure they are tight. Periodically oil the following:

- a. Top link (upper 3rd link) threads
- b. Cylinder pins
- c. Ball sockets
- d. Leveling assembly threads
- e. Stabilizer bar threads

✓ Keep children away from danger all day, every day.

- Equip tractors with rollover protection (ROPS) and keep all machinery guards in place.
- ✓ Please work, drive, play, and live each day with care and concern for your safety and that of your family and fellow citizens.

EXPLODED PARTS VIEW OF FOR HK-307



REPAIR PARTS FOR HK-307 3-PT. Hitch Adapter Kit

			No.
Ref. No	Part No.	Description	Req'd
1	865302	Main Frame Weldment	1
2	862610	Main Frame Mount	2
3	590038	Swinging Drawbar (AK-67)	1
4	860107	Upper Lift Pin	1
5	865338	Pull Bracket Pin	2
6	865339	Pin Lock Tube	2
7	590014	Hair Clip Pin (AK-36)	3
8	590006	Linch Pin, 7/16" (AK-14)	7
9	2503048	Bolt, 5/8"-11NC x 2" Hex Head	2
10	2502007	Washer, 5/8" Spring Lock	2
11	2500013	Nut, 5/8"-11 NC Full Hex	2
12	590097	Hair Clip Pin, (SC-175)	2
13	862611	Rear Drawpin	1
14	590034	Linch Pin. 1/4" (AK-61)	2
	590317	Stabilizer Assembly (Parts 15-18)	2
15	590406	Barrel, 7/8"-14NF	2
16	590407	Stabilizer End, RH	2
17	590318	Stabilizer End, LH	2
18	2500018	Nut, 7/8"-14NF Jam Hex	2
19	590069	Stabilizer Stub Pin, (AK-378)	2
20	590121	Top Link Pin, Cat. 0 (AK-800)	2
21	590001	Top Link Pin, Cat. I (AK-8)	2
22	2504115	Top Link Clamp, (1-3/4" Std. Muffler Clamp)	2
23	865014	Lift Arm Weldment	2
24	860106	Top Link Clamp	1
25	2503012	Bolt, 1/2"-13NC x 3" Hex Head	1
26	2502002	Washer, 1/2" Spring Lock	3
27	2500003	Nut, 1/2"-13NC Full Hex	3
28	2501003	Wahser, 1/2" Flat	2
29	2503109	Bolt, 1/2"-13NC x 3-1/2" Hex Head	2
	590074	Adjustable Lift Arm Leveling Assembly (Parts 30-34)	2
30	590278	Leveling Barrel (1-7/8"-7NC) Swaged	2
31	861136	Lower Lift Bracket	2
32	590008	Upper Lift Bracket	2
33	2500024	Nut, 1-1/8"-7NC Jam Hex	2
34	590145	Knock-In Handle	2
V T	862616	Top Link Cat. I Complete (Parts 35-39)	1
35	590116	Barrel, Top Link	1
36	590145	Knock-In Handle	1
30	590004	Top Link Repair End (AK-12F)	1
38	862618	Top Link End	1
30	590128	Top Link Barrel Lock	1
39 N/S	101039	Safety Sign - Caution (Stay Clear of Arms)	2
N/S	101039	Safety Sign - Caution (Stay Clear of Arms)	1



Pull from drawbar or 3Pt. lower lift arms only. Failure to hitch properly could cause tractor to Flip over, resulting in serious injury or death.





MOST ACCIDENTS OCCUR BECAUSE OF NEGLECT OR CARELESSNESS, AVOID NEEDLESS ACCIDENTS BY FOLLOWING ALL OF THE SAFETY PRECAUTIONS LISTED BELOW.

- Machinery should be operated only by those who are responsible and are authorized to do so.
- Stop the engine, lower all equipment, lock the brakes, and remove the ignition key before dismounting from the tractor.
- Never stand between tractor and implement while tractor is being backed to hitch.
- Loose fitting clothing should not be worn, to avoid catching on various parts.
- Detach implement in area where children normally do not play.
- When performing adjustments or maintenance on an implement, first lower it to the ground or block it securely at a workable height.
- Only a qualified operator should be permitted on tractor when in operation; no riders allowed.
- Make certain everyone is in the clear before starting tractor or raising or lowering equipment.
- Operate the tractor and implement only while seated in the driver's seat.
- Reduce speed when transporting mounted implement to avoid bouncing and momentary loss of steering control.

- A heavy load can cause instability of the tractor. Use extreme care during road travel. Slow down on turns and watch out for bumps. Tractor may need front counter-weights to counter-balance the weight of the implement.
- Reduce speed on hillsides or curves so there is no danger of tipping.
- Avoid driving too close to the edge of ditches or creeks.
- Do not transport implement on public toads without reflectors and slow moving vehicle emblem in daylight and with approved warning lights at night and other periods of poor visibility.
- Due to the width of some implements, use extra caution on highways, farm roads, and when approaching gates.
- Always be sure the implement is in the proper position for transport.
- Keep alert and watch the front as well as the rear when working with the implement.



Please work, play, and live each day with care and concern for your safety and that of your family and fellow citizens.

MAKE EVERY DAY A HOLIDAY FROM ACCIDENTS

3 PT. HITCH ADAPTER KIT

HK-307 – For A.C. Model CA Tractors

WORKSAVER LIMITED WARRANTY

Worksaver warrants its implements, parts and accessories to be free from defects in materials and workmanship for a period of six (6) months from the date of purchase. Upon written approval, **Worksaver** will repair or exchange without charge any part, which upon examination by **Worksaver** or its authorized agent, shall disclose to be defective.

This does not apply to (1) parts that have worn out in normal use, (2) parts broken because of improper assembly or operation by the customer, (3) parts accidentally damaged, (4) failure of parts traceable to improper care, (5) parts failing through use of implement for purposes other than those for which it was designed.

The obligations assumed by **Worksaver** and the limitations expressed herein are in lieu of all other warranties expressed or implied.

WORKSAVER, INC.

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