

OWNER'S MANUAL MODEL NO.'s

**HK-1678
HK-16782**



CAUTION

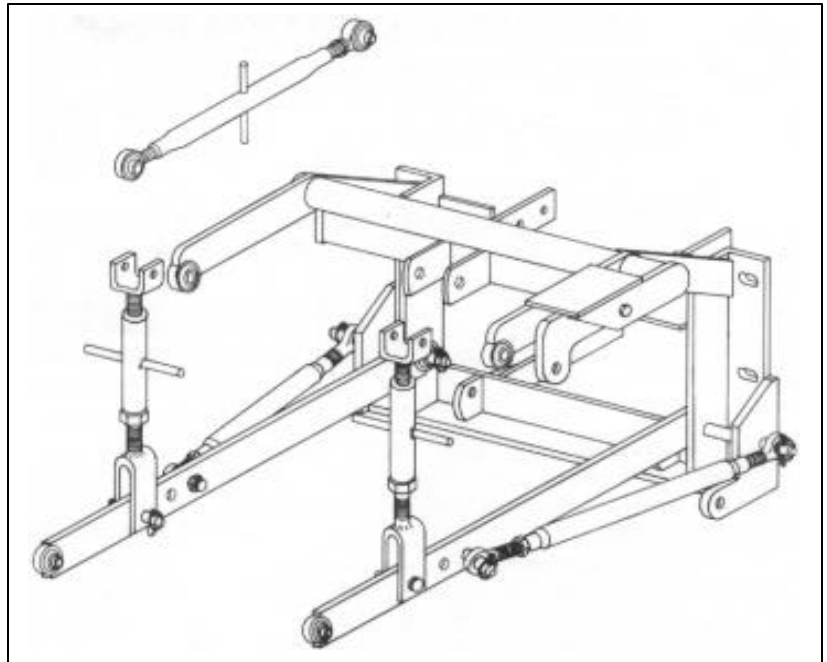
For Operation
Read Rules And
Instructions Carefully

STATEMENT OF POLICY

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

**Packing
Assembly & Mounting
Operating Instructions**

**Maintenance
Repair Parts**



3 PT. HITCH ADAPTER KIT

For Oliver Models

**66, 77, 88, Super 66, Super 77, Super 88
660, 770, 880**



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.**

WORKSAVER, INC.

P.O. BOX 100, LITCHFIELD, IL. 62056-100

Phone: 217-324-5973 Fax: 217-324-3356

E-Mail: sales@worksaver.com

Web Site: www.worksaver.com

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-1678 and HK-16782 hitch adapter kit is designed for a variety of tractor models manufactured by Oliver Corporation. Either kit can be used on any of the tractor models.

The Model HK-1678 uses one hydraulic cylinder and is designed for the small to medium size tractor models (66, Super 66, 660, 77, Super 77, 770).

The Model HK-16782 uses two hydraulic cylinders and is designed for the medium to larger size tractor models (77, Super 77, 770, 88, Super 88, 880). The two hydraulic cylinders provide a greater lift capacity than the one cylinder model.


PACKING

The adapter kit is shipped in knocked down condition so as to command the lowest freight rates. Shipment consists of **1 Bundle, 1 Carton**.

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 rust 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

When the existing drawbar assembly has been

removed, bolt the mainframe assembly in place using the same holes as the tractor drawbar assembly. 5/8" x 1-3/4" hex head bolts are provided for the upper holes, and 3/4" x 2" hex head bolts are provided for the lower holes.

The 3" x 8" hydraulic cylinder (not supplied) should be attached at this time; it will keep the rockershaft in place so that the remainder of the kit may be assembled. The barrel end of the cylinder attaches to the lower lug on the main frame using your cylinder pin. The piston end of the cylinder attaches to the cylinder arm that swings down from the rocker shaft. Using your cylinder pin, attach the piston end of the cylinder to the cylinder arm (Ref. #2); this gives you a floating hitch.

Pin the leveling assemblies to the rocker shaft lift arms (arms with balls welded on), using the 7/8" flat head pins and linchpins.

Place the lift arms between the lower clevises on the leveling assemblies and pin in place with the 3/4" lower lift pins.

Install the stabilizer stub pins (Ref #17) 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 #20) 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 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.

Attach the center link to the main frame using the 3/4" top link pin and linchpin provided.

Continued on page 2

Instructions (Continued from page 1)

This hitch is designed to utilize your existing swinging drawbar. The lower attaching frame bolts to the ears located on the lower cross-angle of the hitch. The upper attaching bars bolt to the upper horizontal mounting brackets on the hitch. Two 3/4" x 2" bolts, lock washers, and nuts and two 5/8" x 1-3/4" bolts, lock washers, and nuts are provided to attach the drawbar to the hitch.

Tighten all bolts before using this kit.

Connect your hoses from the tractor's hydraulic system to the hydraulic cylinder on the hitch kit. Check to make sure that the hoses are located so that they will not be pinched or chafed by any of the moving parts on the hitch. Avoid sharp bends with hydraulic hose.

Use a good quality thread sealant on all connections. **DO NOT USE TEFLON TAPE** (small pieces of tape can get into hydraulic valves and components, causing problems).

Check the hydraulic relief valve setting on the tractor to make sure it is properly set (ref to tractor specifications by Oliver).

When the hydraulic system is connected, cycle the hydraulic cylinder a few times to remove any air bubbles. Check to make sure that the hitch is operating smoothly.

MAINTENANCE

Check all bolts and nuts to be sure they are tight.

Periodically oil the following:

- Top link (upper 3rd link) threads
- Cylinder pins
- Ball sockets
- Leveling assembly threads
- Stabilizer bar threads

Check hydraulic hoses and fittings – make sure the hoses are not rubbing or chafing on any of the moving parts.

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 ball sockets on the lift arms are two-way balls, so they will accommodate both Category II or I lift pins on the implement. If the drawbar or implement has Category I (7/8") pins, make sure the balls are turned so that the 7/8" diameter holes are used.

NOTE: If the larger 1-1/8" diameter holes are used with smaller 7/8" pins, the ball sockets will "hole out", for which Worksaver cannot be responsible. If you do use smaller 7/8" diameter lift pins in the larger 1-1/8" diameter ball holes, be sure to use lift arm adapter bushings to eliminate the excess play or loose fit.

The stabilizer bars should be used whenever possible, as they not only prevent side sway but also provide rigidity and stability to the unit – plus added strength. The stabilizer bars are 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.


The HK-1678 (single hydraulic cylinder) kit is designed to handle up to 1500 lbs. The HK-16782 (double hydraulic cylinder) kit is designed to lift up to 2400 lbs. The lifting capacity is dependent on the pressure and condition of the tractor's hydraulic system. You will also find that the closer the load is to the tractor, the more you will be able to lift.

NOTE: The size of the tractor will be the main determining factor in how much weight you can handle (a Model 77 can handle more than a Model 66 and a Model 880 can handle more than a Model 77).

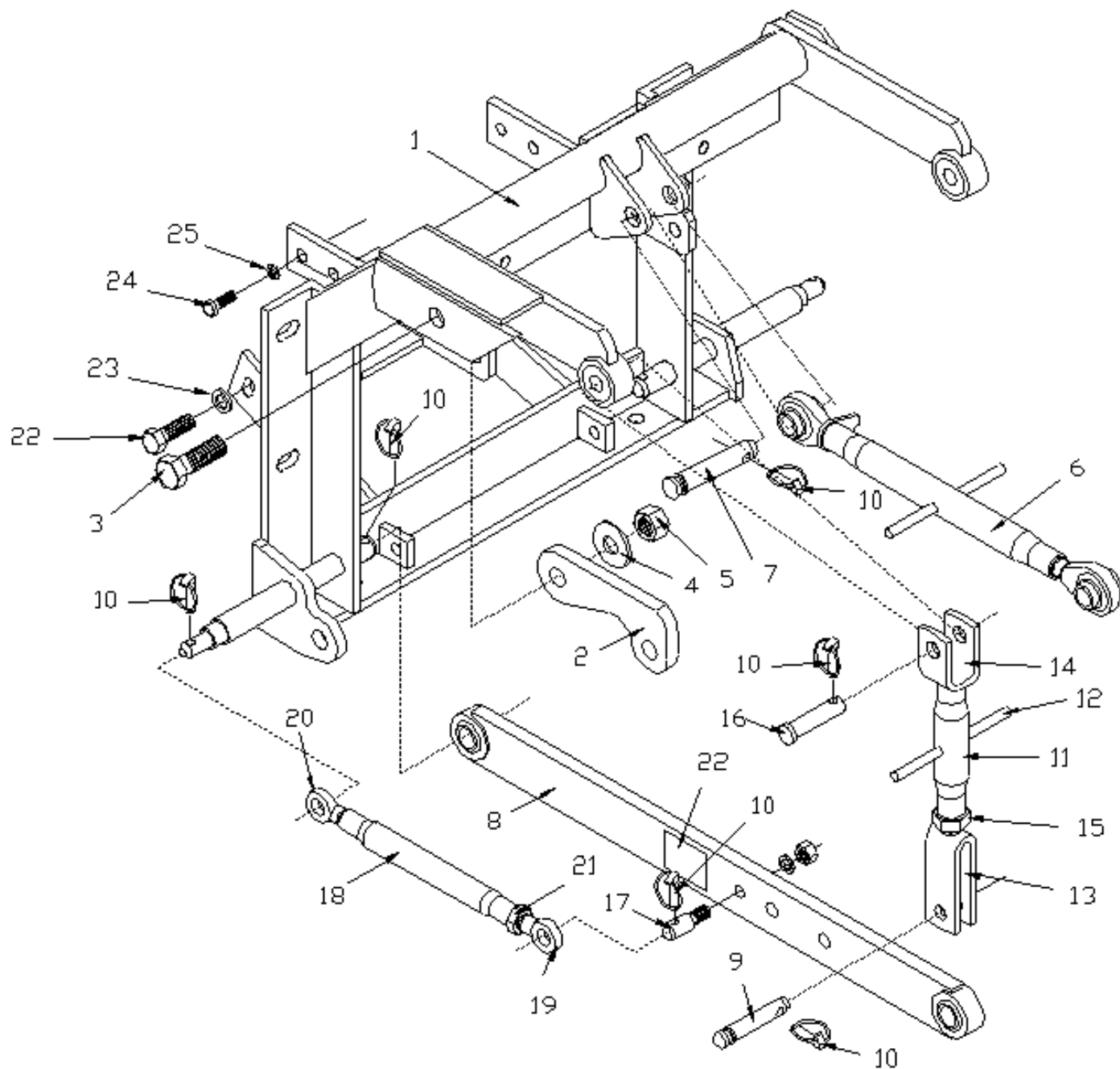
 **CAUTION!** When using a 3 pt. hitch rear blade in a reverse position (bulldozing) use extra care. **DO NOT RAM BLADE** into dirt or packed snow piles! Tractor lift arms and the blade are not built to take high impact loads in this position. **RAMMING** backwards can also dislodge operator from seat 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 operating. This is especially of concern when removing snow.

 **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.

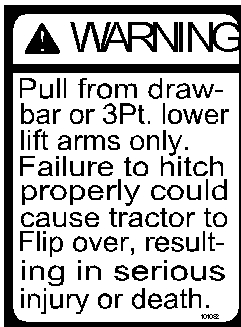
**EXPLODED PARTS VIEW OF
FOR MODEL's HK-1678 & HK-16782**



**Obey All
Safety Warnings**

REPAIR PARTS FOR HK-1678 & HK-16782 3-PT. Hitch Adapter Kit

Ref. No	Part No.	Description	No. Req'd
1	865018	Main Frame Weldment (HK-1678)	1
	865201	Main Frame Weldment (HK-16782)	1
2	865013	Cylinder Arm (HK-1678)	1
		Cylinder Arm (HK-16782)	2
3	2503083	Bolt, 1"-8NC x 3" Hex Head (HK-1678)	1
		Bolt, 1"-8NC x 3" Hex Head (HK-16782)	2
4	2501001	Washer, 1" Flat (HK-1678)	1
		Washer, 1" Flat (HK-16782)	2
5	2500045	Nut, 1"-8NC Hex Nylock (HK-1678)	1
		Nut, 1"-8NC Hex Nylock (HK-16782)	2
6	590076	Top Link, Category II (AK-600)	1
7	590028	Top Link Pin, Category II (AK-56A)	1
8	865014	Lift Arm Weldment	2
9	590001	Lift Pin, Category I (AK-8)	2
10	590006	Linch Pin, 7/16" (AK-14)	11
	861131	Adjustable Lift Arm Leveling Assembly (Parts 11-15)	2
11	590278	Barrel, 1-1/8"-7NC Swaged	2
12	590145	Handle	2
13	861136	Lower Lift Bracket R.H.	2
14	861139	Upper Lift Bracket L.H.	2
15	2500024	Nut, 1-1/8"-7NC Jam Hex	2
16	860107	Upper Lift Pin	2
17	590069	Stabilizer Stub Pin with Nut (AK-378)	2
	590317	Stabilizer Assembly (Parts 18-21)	2
18	590406	Barrel - Stabilizer Assembly	2
19	590407	R.H. End Stabilizer Assembly	2
20	590318	L.H. End Stabilizer Assembly	2
21	2500018	Nut, 7/8"-14NF Jam Hex	2
22	2503002	Bolt, 3/4"-10NC x 2" Hex Head	4
23	2502001	Washer, 3/4" Spring Lock	4
24	2503106	Bolt, 5/8"-11NC x 1-3/4" Hex Head	4
25	2502007	Washer, 5/8" Spring Lock	4



- ✓ 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.

**MAKE EVERY DAY
A HOLIDAY
FROM ACCIDENTS**



SAFETY PRECAUTIONS

MOST ACCIDENTS OCCUR BECAUSE OF NEGLIGENCE 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.

OWNER'S MANUAL

MODEL NO.'s
HK-1678
HK-16782

WHEN ORDERING
REPAIR PARTS, ALWAYS
GIVE THE FOLLOWING
INFORMATION:

1. PART NUMBER
2. PART DESCRIPTION
3. MODEL NUMBER
4. NAME OF ITEM

MARCH 2001

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

3 PT. HITCH ADAPTER KIT HK-1678 & HK-16782

For Oliver Models
66, 77, 88, Super 66, Super 77, Super 88
660, 770, 880 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.

P.O. BOX 100, LITCHFIELD, IL. 62556-0100

Phone: 1-217-324-5973 Fax: 1-217-324-3356

Web Site: www.worksaver.com E-Mail: sales@worksaver.com