

Operators Manual



Document: TD-09-06-1042 Revision: A













INTRODUCTION

Thank you for choosing USC, LLC for your equipment needs. We appreciate your business and will work diligently to ensure that you are satisfied with your choice.

OVERVIEW

The purpose of this manual is to provide you with the basic information needed to operate and maintain the Seed Shuttle. It does not hold USC, LLC liable for any accidents or injuries that may occur.

OPERATOR RESPONSIBILITIES

As the purchaser/owner/operator of this equipment and control system, you have an obligation to install, operate, and maintain the equipment in a manner that minimizes the exposure of people in your care to any potential hazards inherent in using this equipment. It is critical that the owner of this equipment:

- Has a clear and documented understanding of the process this machine is being used in and of any resulting hazards or special requirements arising from this specific application.
- Allow only properly trained and instructed personnel to install, operate or service this equipment.
- Maintain a comprehensive safety program involving all who work with this machine and other associated process equipment.
- Establish clear areas of staff responsibility (e.g. operation, setup, sanitation, maintenance, and repairs).
- Provide all personnel with necessary safety equipment.
- Periodically inspect the equipment to insure that the doors, covers, guards, and safety devices are in place and functioning, that all safety instructions and warning labels are intact and legible, and that the equipment is in good working order.
- In addition to the operating instructions, observe and enforce the applicable legal and other binding regulations, national and local codes.

As the person with the most to gain or lose from working safely, it is important that you work responsibly and stay alert. By following a few simple rules, you can prevent an accident that could injure or kill you or a co-worker.



- Do not operate, clean, or service this equipment until you have read and understood the contents of this manual. If you do not understand the information in this manual, bring it to the attention of your supervisor, or call USC at (785) 431-7900 for assistance.
- Any operator who is known or suspected to be under the influence of alcohol or drugs should not be allowed to operate the equipment.
- Understand and follow the safety practices required by your employer and this manual.
- PAY ATTENTION to what you and other personnel are doing and how these
 activities may affect your safety.
- Failure to follow these instructions may result in serious personal injury or death.

RECEIVING YOUR EQUIPMENT

As soon as the equipment is received, it should be carefully inspected to make certain that it has sustained no damage during shipment and that all items listed on the packing list are accounted for. If there is any damage or shortages, the purchaser must immediately notify USC, LLC. Ownership passes to purchaser when the unit leaves the USC, LLC. premises. The purchaser is responsible for unloading and mounting all components of the equipment.

Document the serial number of the machine for future reference. The serialization label is located on the inside of the gooseneck at the top.



SERIAL NUMBER:



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SAFETY INSTRUCTIONS

SECTION A

Every year accidents in the work place maim, kill and injure people. Although it may be impossible to prevent all accidents, with the right combination of training, operating practices, safety devices, and operator vigilance, the number of accidents can be significantly reduced. The purpose of this section is to educate equipment users about hazards, unsafe practices, and recommended hazard avoidance techniques.

SAFETY WORDS AND SYMBOLS

It is very important that operators and maintenance personnel understand the words and symbols that are used to communicate safety information. Safety words, their meaning and format, have been standardized for U.S. manufacturers and published by the American National Standards Institute (ANSI). The European Community (E.C.) has adopted a different format based on the International Standards Organization (I.S.O.) and applicable machinery directives. Both formats are presented below. Graphic symbols are not standardized, but most manufacturers will use some variation of the ones seen in this manual.



Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **may** result in minor or moderate injury and/or property damage.



Provides additional information that the operator needs to be aware of to avoid a potentially hazardous situation.





Mandatory Lockout Power Symbol. Disconnect, lockout and tagout electrical and other energy sources before inspecting, cleaning or performing maintenance on this panel.



International Safety Alert Symbol. The exclamation point (!) surrounded by a yellow triangle indicates that an injury hazard exists. However, it does not indicate the seriousness of potential injury. The exclamation point (!) is also used with the DANGER, WARNING and CAUTION symbols so the potential injury is indicated.



Electrocution Hazard Symbol. This symbol indicates that an electrocution hazard exists. Serious injury or death could result from contacting high voltage.



International Electrocution Hazard. This symbol indicates that an electrocution hazard exists. Serious injury or death could result from contacting high voltage.



Mandatory Read Manual Action Symbol. (I.S.O. format) This symbol instructs personnel to read the Operators Manual before servicing or operating the equipment.



Mandatory Read Manual Action Symbol. This symbol instructs personnel to read the Operators Manual before servicing or operating the equipment.



Notice is used to notify people of important installation, operation or maintenance information which is not hazard related.



LOCKOUT / TAGOUT PROCEDURES

Lockout/Tagout is the placement of a lock/tag on an energy isolating device in accordance with an established procedure. When taking equipment out of service to perform maintenance or repair work, always follow the lockout/tagout procedures as outlined in ANSI Z344.1 and/or OSHA Standard 1910.147. This standard "requires employers to establish a program and utilize procedures for affixing appropriate lockout devices or tagout devices to energy isolating devices and to otherwise disable machines or equipment to prevent unexpected energizing, start-up, or release of stored energy in order to prevent injury to employees."

HAZARD REVIEW





Electrocution Hazard

Electrocution accidents are most likely to occur during maintenance of the electrical system or when working on or near exposed high voltage wiring. This hazard does not exist when the electrical power has been disconnected, properly locked, and tagged out.





Automatic Start Hazard

This equipment may be controlled by an automated system and may start without warning. Failure to properly disconnect, lockout, and tagout all energy sources of remotely controlled equipment creates a very hazardous situation and could cause injury or even death. PLEASE STAY CLEAR AND BE ALERT.



YOU are responsible for the **SAFE** operation and maintenance of your USC, LLC equipment . **YOU** must ensure that you and anyone else who is going to operate, maintain or work around the equipment be familiar with the operating and maintenance procedures and related **SAFETY** information contained in this manual. This manual will take you step-by-step through your working day and alert you to good safety practices that should be adhered to while operating the equipment

Remember, **YOU** are the key to safety. Good safety practices not only protect you, but also the people around you. Make these practices a working part of your safety program. Be certain that **EVERYONE** operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- Equipment owners must give operating instructions to operators or employees before allowing them to operate the machine, and at least annually thereafter per OSHA (Occupational Safety and Health Administration) regulation 1928.57.
- The most important safety device on this equipment is a SAFE operator. It is the
 operator's responsibility to read and understand ALL Safety and Operating
 instructions in the manual and to follow them. All accidents can be avoided.
- A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.
- Think SAFETY! Work SAFELY!

GENERAL SAFETY

- 1. Read and understand the operator's manual and all safety labels before operating, maintaining, adjusting or unplugging the equipment.
- 2. Only trained persons shall operate the equipment . An untrained operator is not qualified to operate the machine.
- 3. Have a first-aid kit available for use should the need arise, and know how to use it.

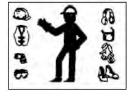






- 4. Provide a fire extinguisher for use in case of an accident. Store in a highly visible place.
- 5. Do not allow children, spectators or bystanders within hazard area of machine.
- 6. Wear appropriate protective gear. This includes but is not limited to:
 - A hard hat
 - Protective shoes with slip resistant soles
 - Protective goggles
 - Heavy gloves
 - Hearing protection
 - Respirator or filter mask
- 7. Place all controls in neutral or off, stop motor, and wait for all moving parts to stop. Then disable power source before servicing, adjusting, repairing, or unplugging.
- 8. Review safety related items annually with all personnel who will be operating or maintaining the equipment.







OPERATING SAFETY:

- 1. Read and understand the operator's manual and all safety labels before using.
- 2. Disconnect and disable electrical supply completely and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
- 3. Clear the area of bystanders, especially children, before starting.
- 4. Be familiar with the machine hazard area. If anyone enters hazard area, shut down machine immediately. Clear the area before restarting.
- 5. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
- 6. Stay away from overhead obstructions and power lines during operation and transporting. Electrocution can occur without direct contact.
- 7. Do not operate machine when any guards are removed.
- 8. Inspect welds and repair if needed.



PLACEMENT SAFETY

- 1. Move only with the appropriate equipment
- 2. Stay away from overhead power lines when moving equipment. Electrocution can occur without direct contact.
- 3. Be familiar with machine hazard area. If anyone enters hazard areas, shut down machine immediately. Clear the area before restarting.
- 4. Operate the equipment on level ground free of debris. Anchor the equipment to prevent tipping or upending.



Before placement of the equipment, be sure that ground is reasonably level. The equipment may topple or work improperly if the ground is too uneven, damaging the equipment and/or causing personal injury.

MAINTENANCE SAFETY

- 1. Review the operator's manual and all safety items before working with, maintaining or operating the equipment.
- 2. Place all controls in neutral or off, stop motors, disable power source, and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
- 3. Follow good shop practices:

Keep service area clean and dry. Be sure electrical outlets and tools are properly grounded. Use adequate light for the job at hand.



- 4. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
- 5. Clear the area of bystanders, especially children, when carrying out any maintenance and repairs or making any adjustments.
- 6. Before resuming work, install and secure all guards when maintenance work is completed.
- 7. Keep safety labels clean. Replace any sign that is damaged or not clearly visible.



SAFETY LABELS

- 1. Keep safety labels clean and legible at all times.
- 2. Replace safety labels that are missing or have become illegible.
- 3. Replaced parts that displayed a safety sign should also display the current sign.
- 4. Replacement safety labels are available. Contact USC at (785) 431-7900.

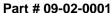
How to Install Safety Labels:

- Be sure that the installation area is clean and dry.
- Be sure temperature is above 50°F (10°C).
- Decide on the exact position before you remove the backing paper.
- Remove the smallest portion of the split backing paper.
- Align the sign over the specified area and carefully press the small portion with the exposed sticky backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the sign in place.
- Small air pockets can be pierced with a pin and smoothed out using the piece of sign backing paper.



Located on the USC equipment you will find safety labels. Always be sure to read and follow all directions on the labels.







Part # 09-02-0002



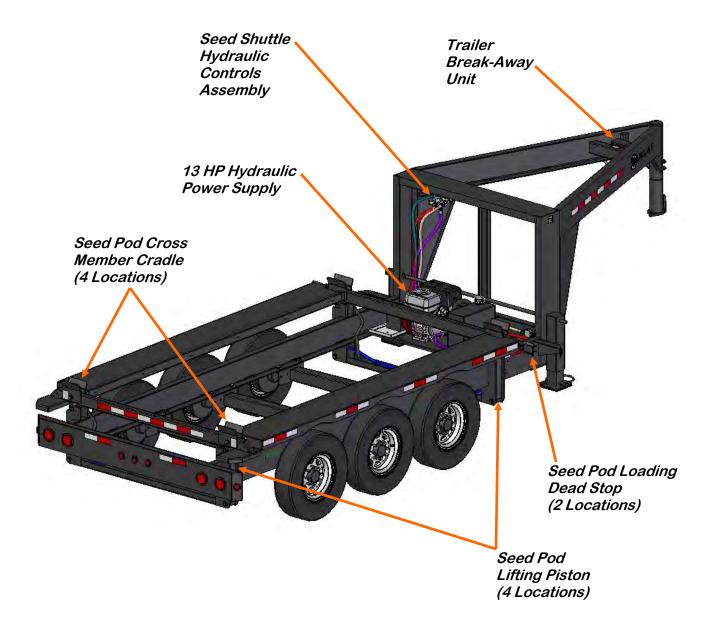
Guards provided with USC equipment are to remain in place during operation.



SECTION B

MECHANICAL OPERATION

SEED SHUTTLE OVERVIEW





PRE-OPERATION CHECKLIST

Efficient and safe operation of the Seed Shuttle requires that each operator reads and understands the operating procedures and all related safety precautions outlined in this section. It is important for both the personal safety and maintaining the good mechanical condition of the seed shuttle that this checklist is followed.

Before operating the seed shuttle and each time thereafter, the following areas should be checked off:

- 1. Service the machine per the schedule outlined in Section D, Maintenance (see page 21).
- 2. Make sure the battery is full charged.
- 3. Check worksite. Clean up working area to prevent slipping or tripping.
- 4. Check that hydraulic fittings are secure and not leaking hydraulic fluid.

SEED SHUTTLE SET-UP

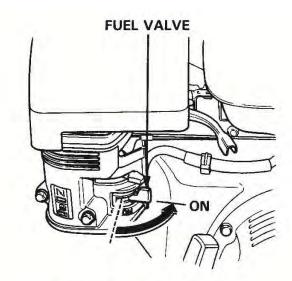
The following steps outline the initial set-up of your Seed Shuttle:

- 1. Clear the area of bystanders, especially small children before starting.
- 2. Attach the Seed Shuttle to an appropriate towing vehicle. Make sure that the safety cables are attached to the tow vehicle and the electric hook-up is fully engaged.
- 3. Check running lights, brake lights and turn signals to be sure they are all functioning properly.
- 4. Remove the wheel chocks. The front and rear wheels should be chocked any time the Seed Shuttle is not attached to a tow vehicle.



STARTING ENGINE

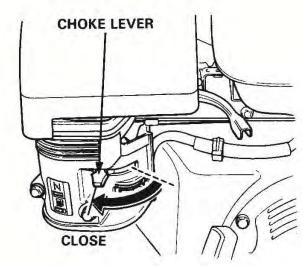
1. Turn the fuel Valve to the ON position.



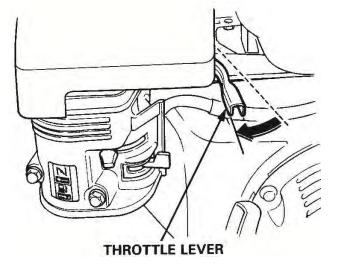
2. Move the choke lever to the CLOSED position.



The choke may not be needed if the engine is warm or the air temperature is high.



3. Move the throttle lever slightly to the left





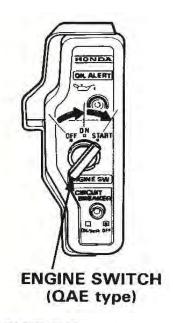
STARTING ENGINE

4. To use the electric start (QAE Type), turn the engine switch to the START position and hold it there until the engine starts.



Do not use the electric starter for more than 5 seconds or starter motor damage may occur. If the engine fails to start, release the switch and wait 10 seconds before operating the starter again.

When the engine starts, allow the engine switch to return to the ON position

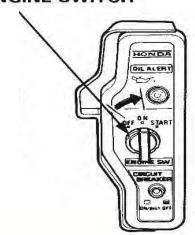


ENGINE SWITCH

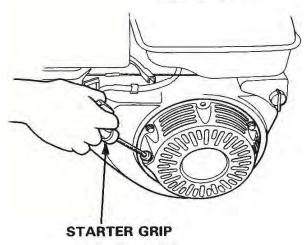
5. To start manually, turn the engine switch to the ON position. Pull the starter grip lightly until resistance is felt, then pull to start.



Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.



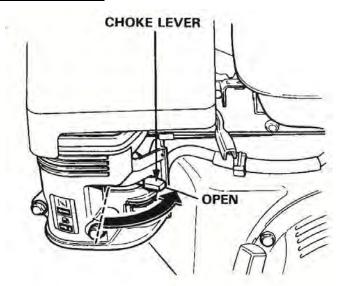
(QAE type)



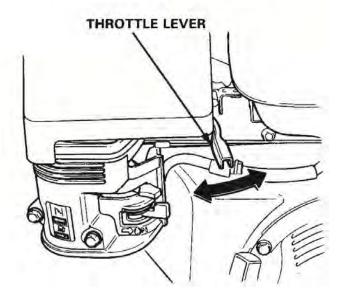


OPERATING ENGINE

1. As the engine warms up, gradually move the choke lever to the OPEN position.



2. Position the throttle lever for the desired engine speed.

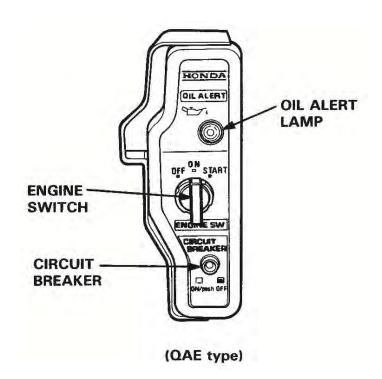




OIL ALERT SYSTEM

The Oil Alert system is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil level in the crankcase can fall below a safe limit, the Oil Alert system will automatically shut down the engine (the engine switch will remain in the ON position).

If the Oil Alert system shuts down the engine, the Oil Alert lamp will flash when you operate the starter, and the engine will not run. If this occurs add engine oil.



CIRCUIT BREAKER (QAE type)

The circuit breaker protects the battery charging circuit. A short circuit or a battery connected in reverse polarity will trip the circuit breaker.

The green indicator inside the circuit breaker will pop out to show that the circuit breaker has switched off. If this occurs, determine the cause of the problem and correct it before resetting the circuit breaker.

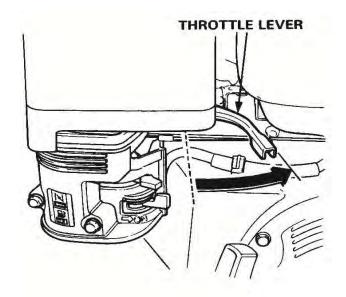
Push the circuit breaker button to reset.



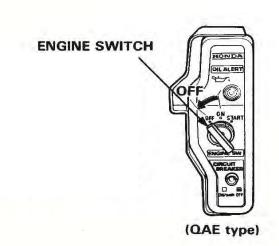
STOPPING ENGINE

To stop the engine in an emergency, turn the engine switch to the OFF position. Under normal conditions use the following procedure.

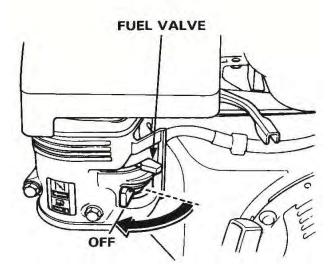
1. Move the throttle lever fully to the right.



2. Turn the engine switch to the OFF position.



3. Turn the fuel valve to the OFF position.





BASIC SYSTEM OPERATION

- 1. Clear the area of bystanders, especially small children before starting.
- 2. Complete the pre-operation checklist and set up (see page 13).
- 3. Back the seed shuttle under the seed pod slowly until the seed pod frame cross member makes contact with the dead stop.
- 4. Start the engine. As the engine warms up, gradually move the choke lever to the OPEN position.
- 5. Position the throttle lever for full power and open choke.



If operating the equipment in cold temperatures, run the engine long enough to heat up the hydraulic fluid so that lifting mechanisms function properly.

- 6. Using the manual control mounted on the inside of the gooseneck, pull the lever outward to raise the seed pod. Stop when the pod is high enough to swivel and secure the legs for transport.
- 7. Transport the seed pod to new location.
- 8. Return the legs to the vertical position and secure them.
- 9. Start the engine. Using the manual control, push the lever inward to lower the seed pod.



SECTION C

TROUBLESHOOTING

TROUBLESHOOTING

Below is a table describing the most frequent problems and solutions with the USC Seed Shuttle . For further assistance, contact the USC Service department at (785) 431-7900.

Problem	Possible Cause	Solution
Engine will not start.	 Battery dead. Fuel valve is closed. Fuel Tank is empty. Engine is already warm and the choke is closed. 	 Use the manual pull start. Open fuel valve. Fill fuel tank. Open choke.
Seed pod will not lift.	 Hydraulic line is leaking. Not enough fluid in system. Object is obstructing travel. 	 Repair or replace hose. Check gauge on front of reservoir. Add fluid. Remove obstruction.



MAINTENANCE

SECTION D

Proper maintenance of the Seed Shuttle is critical for peak performance, reliability and accuracy of this system. The following is a guideline for the type of maintenance and servicing that should be performed on this unit. Your environment and uses may require additional maintenance and service beyond this list to assure a reliable and safe unit. The operator of this unit has ultimate responsibility to identify areas of concern and rectify them before they become a hazard or safety issue. There is no substitute for a trained, alert operator.



Do not put this unit into operation with any questionably maintained parts. Poor performance or a hazard may occur.

FLUIDS AND LUBRICANTS

Grease

Use an SAE multipurpose high temperature grease with extreme pressure (EP) performance. Also acceptable is an SAE multipurpose lithium-based grease.

Hydraulic Oil

Use DTE 25 hydraulic oil for Electric Powered Hydraulic Pack.

Storing Lubricants

Your machine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture and other contaminants.

GREASING

Use a Maintenance Checklist to keep record of all scheduled maintenance.

- 1. Use a hand-held grease gun for all greasing.
- 2. Wipe grease fitting with a clean cloth before greasing to avoid injecting dirt and grit.
- 3. Replace and repair broken fittings immediately.



If fittings will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace fitting if necessary.

For all maintenance information for the 13 HP Honda GX390 motor, refer to the maintenance section on page 20 of the Honda motor manual provided.



SERVICING INTERVALS

Every 40 hours or Weekly

Hydraulic System:

 Check fluid level window on the front of the fluid reservoir (right). It should show fluid half way in the window cold. If it does not, add fluid.



Every 200 hours or Annually

- 1. Repack wheel bearings.
- 2. Wash machine.



STORAGE

SECTION E

When storing the Seed Shuttle for long periods of time, the following procedure must be followed to reduce the chance of rust, corrosion and fatigue of the conveyor. You can also use these steps when storing the machine for the winter.



A dust mask and protective rubber gloves shall be used when cleaning the machine.

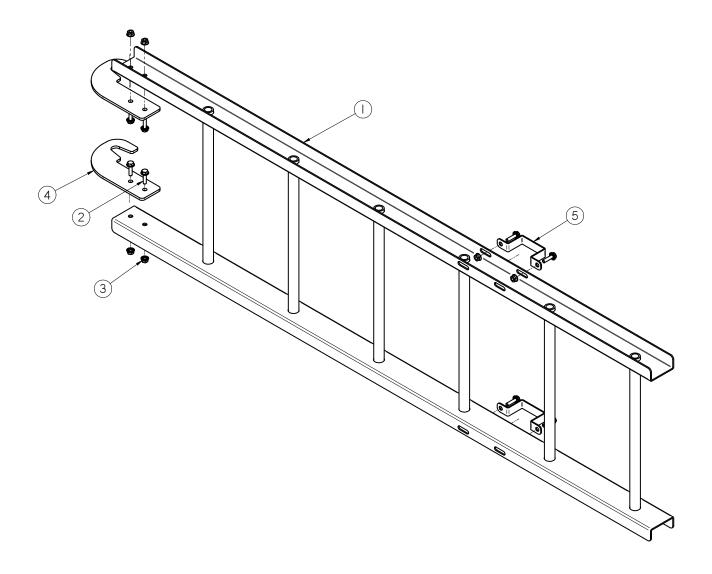
- 1. Clear the area of bystanders, especially small children.
- 2. Thoroughly wash the entire machine to remove all dirt, mud, debris or residue.
- 3. Inspect all moving or rotating parts to see if anything has become entangled in them. Remove the entangled material.
- 4. Touch up all paint nicks and scratches to prevent rusting.
- 5. Store the machine inside a protective building to keep it from being exposed to the weather. Select an area that is dry, level and free of debris. If storing outside, cover with a waterproof tarpaulin.
- 6. Chock the front and back wheels on both sides.
- 7. Unhook from towing vehicle.
- 8. Place blocks under the jack if required.
- 9. Store machine in an area away from human activity.
- 10. Do not allow children to play on or around the stored machine.



SECTION F-1

MECHANICAL DRAWINGS PD350T SEED POD

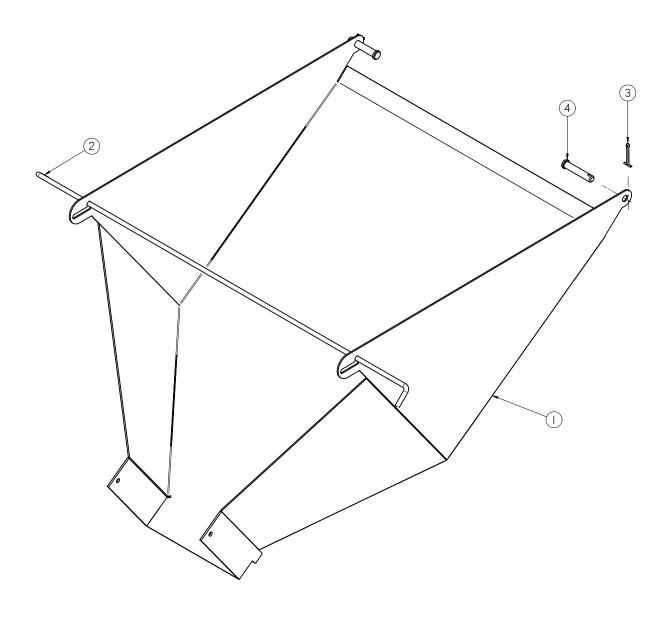
SEED POD LADDER ASSEMBLY (13-05-0277)



Item #	Part #	Description	Qty
1	05-03-1347	WDMT LADDER 350U POD	1
2	06-01-0189	BOLT FLG .375-16 X 1.250 ZP GR5	8
3	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	8
4	102DB8	PLT LDR HNGR SEED POD 350	2
5	102DB9	PLT LRD SUPP SEED POD 350	2



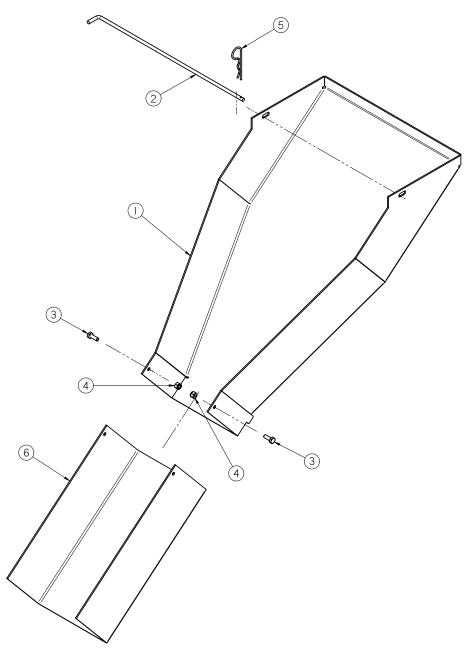
SEED POD DISCHARGE CHUTE ASSEMBLY (05-07-0582)



Item #	Part #	Description	Qty
1	05-07-0581	WDMT SPD DSCHG CHUTE UPPER CS	1
2	05-11-0386	PIN HOPP SELF LOCKING	1
3	06-09-0018	PIN CTTR .125 X 1.50 SS	2
4	06-09-0089	PIN CLVS .375 X 2.00 ZP	2



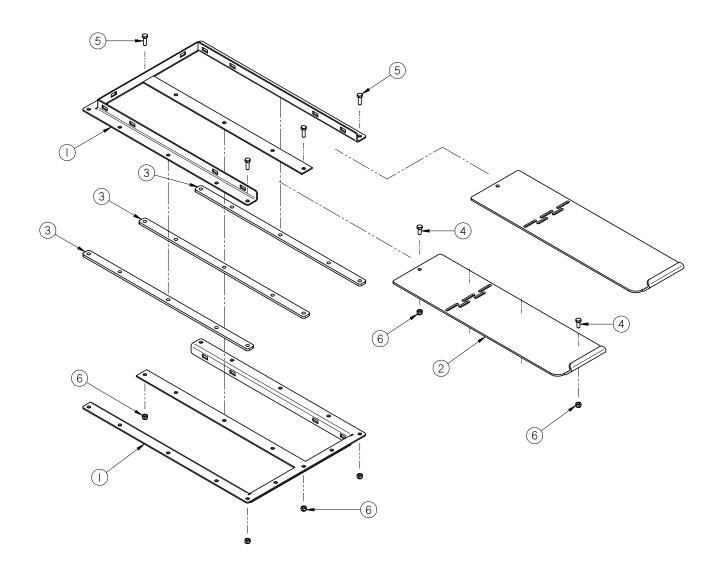
SEED POD DISCHARGE CHUTE ASSEMBLY (05-07-0167)



Item #	Part #	Description	Qty
1	05-07-0577	WDMT SPD DSCHG CHUTE UPPER CS	1
2	05-11-0160	PIN SPD DSCHG CHUTE	1
3	06-01-0006	BOLT, .250-20 X .75 UNC ZP GRADE 5	2
4	06-03-0001	NUT,LOCK, .250-20 ZP G5 NYLON INSERT	2
5	06-09-0029	CLIP, .105 HAIR PIN	1
6	1027AF	СНИТЕ	1



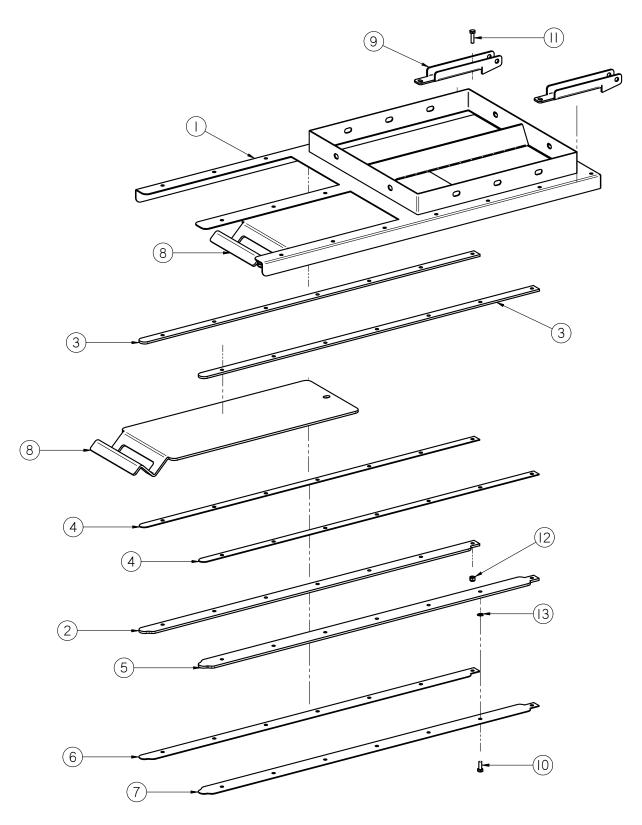
SEED POD DOUBLE SLIDE GATE ASSEMBLY (12-04-0006)



Item #	Part #	Description	Qty
1	05-03-0384	WDMT SLIDE GATE FRM	2
2	05-10-2339	PLT SLIDE GATE DOOR	2
3	05-10-2340	PLT SLIDE GATE SPACER	3
4	06-01-0010	BOLT .313-18 X .750 ZP GR5	4
5	06-01-0012	BOLT .313-18 X 1.00 ZP GR5	15
6	06-03-0002	NUT NYL LOCK .313-18 ZP GR5	19



SEED POD SLIDE GATE ASSEMBLY (12-04-0026)



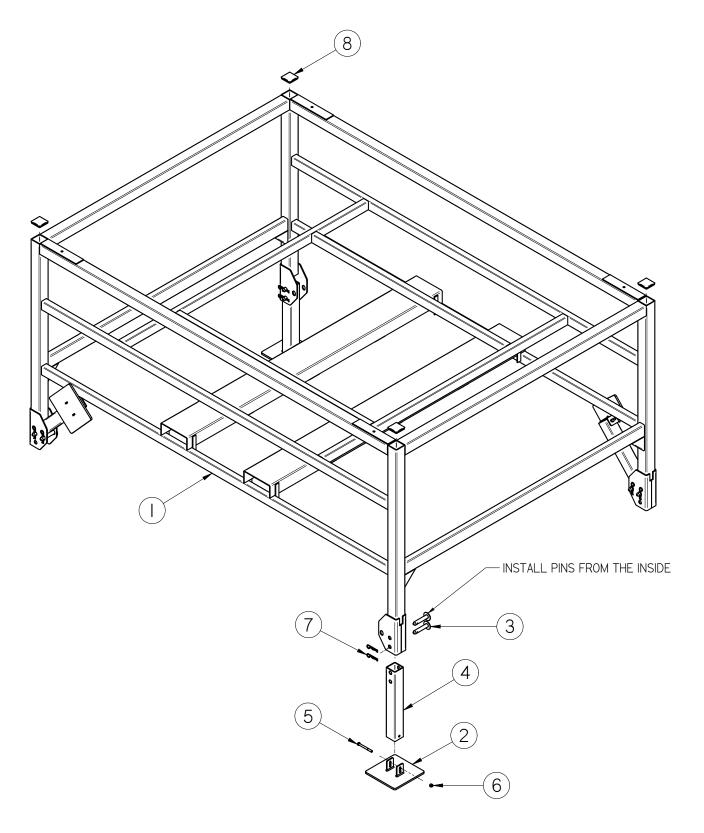


SEED POD SLIDE GATE ASSEMBLY (12-04-0026)

Item #	Part #	Description	Qty
1	05-03-1250	WDMT SLGT SPD SLGT	1
2	05-10-4140	PLT UHMW SPD SLGT GUIDE 3	2
3	05-10-4141	PLT UHMW SPD SLGT GUIDE 1	3
4	05-10-4142	PLT SLD RETAINER	3
5	05-10-4144	PLT UHMW SPD SLGT GUIDE 5	1
6	05-10-4145	PLT SPD SLGT GUIDE 6	2
7	05-10-4146	PLT SPD SLGT GUIDE 7	1
8	05-10-4147	PLT SPD SLGT SLIDE	2
9	05-10-4210	BRKT CHUTE HOLDER	2
10	06-01-0006	BOLT .250-20 X .750 ZP GR5	3
11	06-01-0007	BOLT, .250-20 X 1 UNC ZP GRADE 5	18
12	06-03-0001	NUT,LOCK, .250-20 ZP G5 NYLON INSERT	18
13	06-04-0001	WSHR LOCK SPLT .250 ZP	3



350 UNIT SEED POD FRAME ASSEMBLY (05-03-0897)



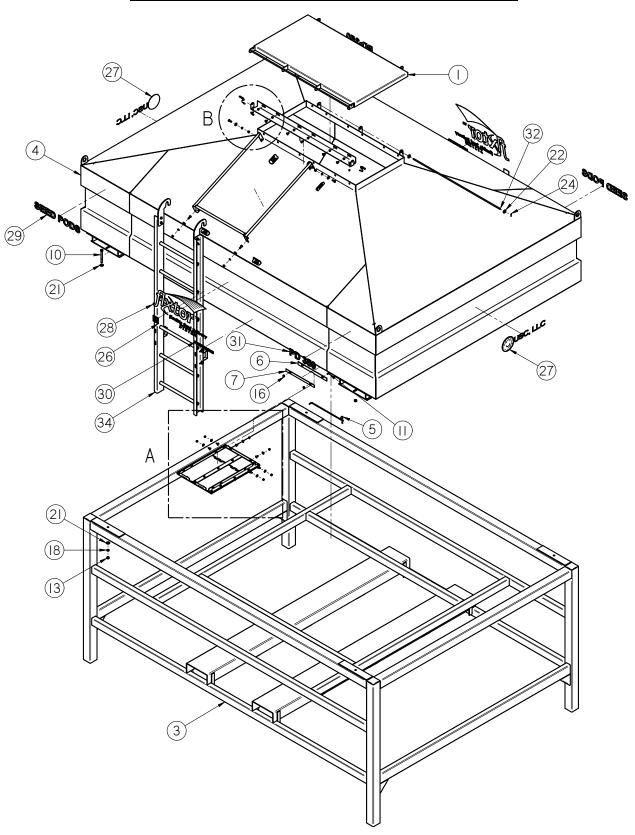


350 UNIT SEED POD FRAME ASSEMBLY (05-03-0897)

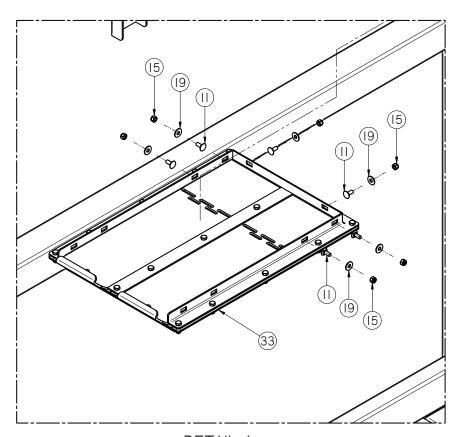
Item #	Part #	Description	Qty
1	05-03-0894	WDMT 350BU SPD FR	1
2	05-03-1214	WDMT SPD FOOT PAD	4
3	05-03-1215	WDMT SPD FOOT PIN	8
4	05-11-0371	LEG SEED POD 350	4
5	06-01-0119	BOLT, .500-13 X 4.750" UNC ZP GRADE 5	4
6	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	4
7	06-09-0078	PIN CLIP HITCH 4.00 #8 .177OD ZP	8
8	06-10-0031	PLUG POLYE RIBBED 3.5 X 3.5 TBG	4



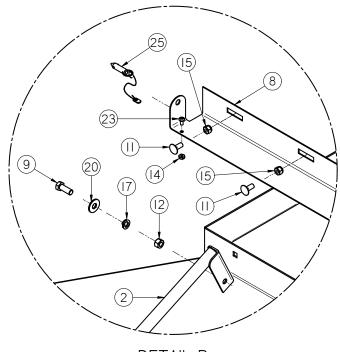
350 UNIT SEED POD TOP ASSEMBLY (13-14-0022)



350 UNIT SEED POD TOP ASSEMBLY (13-14-0022)



DETAIL A



DETAIL B



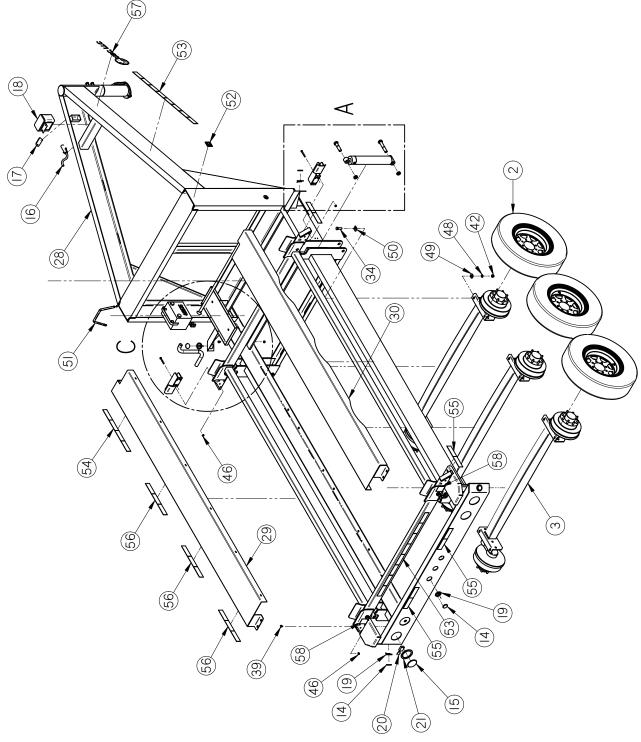
350 UNIT SEED POD TOP ASSEMBLY (13-14-0022)

Item #	Part #	Description	Qty
1	05-03-0470	WDMT LID ASSY SEED POD 350BU	1
2	05-03-0527	WDMT LADDER SUPPORT	1
3	05-03-0897	ASSY 350BU SPD FR COMPLETE	1
4	05-03-0904	WDMT SPD 350BU HOPP INSET SIDES	1
5	05-07-0167	ASSY SPD DSCHG CHUTE CS	1
6	05-10-2297	PLT SEAL TAB 1 SEED POD	1
7	05-10-2298	PLT SEAL TAB 2 SEED POD	1
8	05-10-2785	BRKT LID LOCK SEED POD 350BU	1
9	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	4
10	06-01-0119	BOLT, .500-13 X 5.00" UNC ZP GRADE 5	4
11	06-01-0171	BOLT CRG .3125-18X.750 ZP SHORT NECK	14
12	06-02-0003	NUT FULL .375-16 ZP GR5	4
13	06-02-0004	NUT FULL .500-13 ZP GR5	4
14	06-02-0043	NUT,LOCK, #10-24 ZP NYLON INSERT	2
15	06-03-0002	NUT NYL LOCK .313-18 ZP GR5	12
16	06-03-0019	NUT, FLG .3125-18 UNC ZP GRADE 5	2
17	06-04-0003	WSHR LOCK SPLT .375 ZP	4
18	06-04-0004	WSHR LOCK SPLT .500 ZP	4
19	06-05-0003	WSHR FLAT .313 ZP	6
20	06-05-0004	WSHR FLAT .375 ZP	4
21	06-05-0005	WSHR FLAT .500 ZP	8
22	06-05-0020	WASHER, .4375 FLAT ZP	2
23	06-06-0029	SCRW MACH 10-24 X .375 PHLP PHD ZP	2
24	06-09-0013	1/8" X 3/4" COTTER PIN	2
25	06-09-0040	PIN MMC 94975A524 3/8" DIA 4" USABLE	2
26	09-01-0003	ATWK LBL MADE IN USA YEL 2.50X2.50	2
27	09-01-0043	ATWL LBL USC, LLC 6" X 19" PRO-CUT	2
28	09-01-0057	LBL ATWK FLEXTOR 16 X 28.22	2
29	09-01-0060	LBL ATWK SEED PODS	2
30	09-01-0064	LBL ATWK PAT PEND	2
31	09-01-0084	LBL ATWK PD350	2
32	100D95	HINGE	1
33	12-04-0006	ASSY SEED POD DOUBLE SLIDE GATE	1
34	13-05-0277	ASSY SEED POD LDR	1

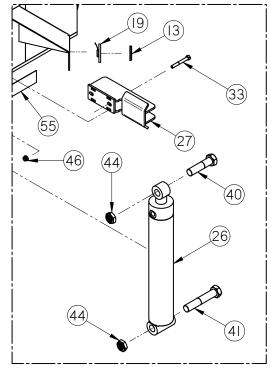


MECHANICAL DRAWINGS SEED POD SHUTTLE

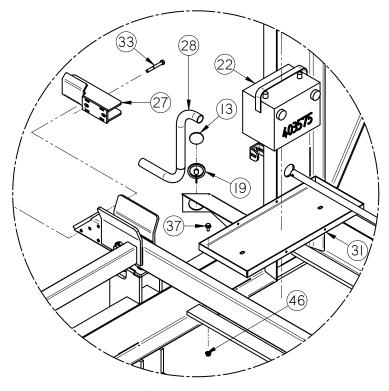
SEED POD SHUTTLE TOP ASSEMBLY (13-14-0016)



SECTION F-2

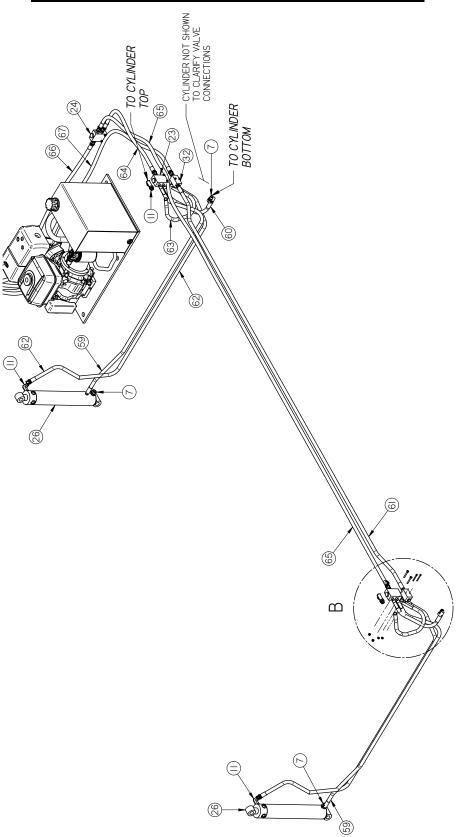


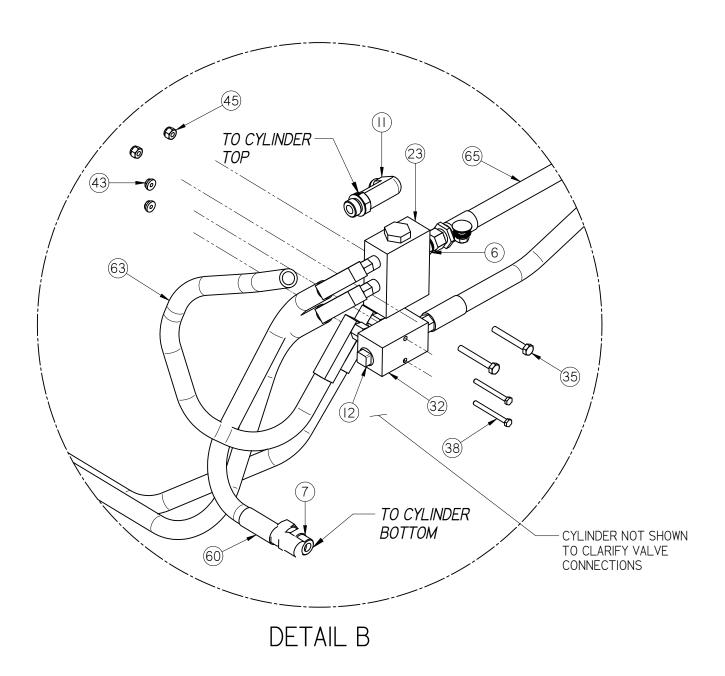
DETAIL A



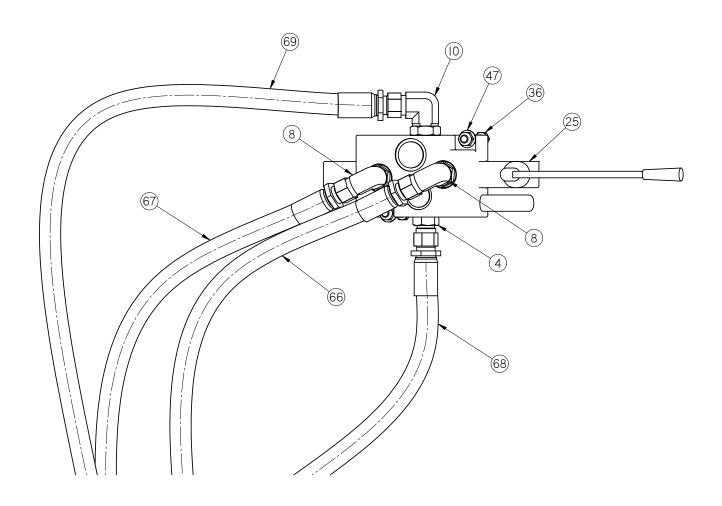
DETAIL C



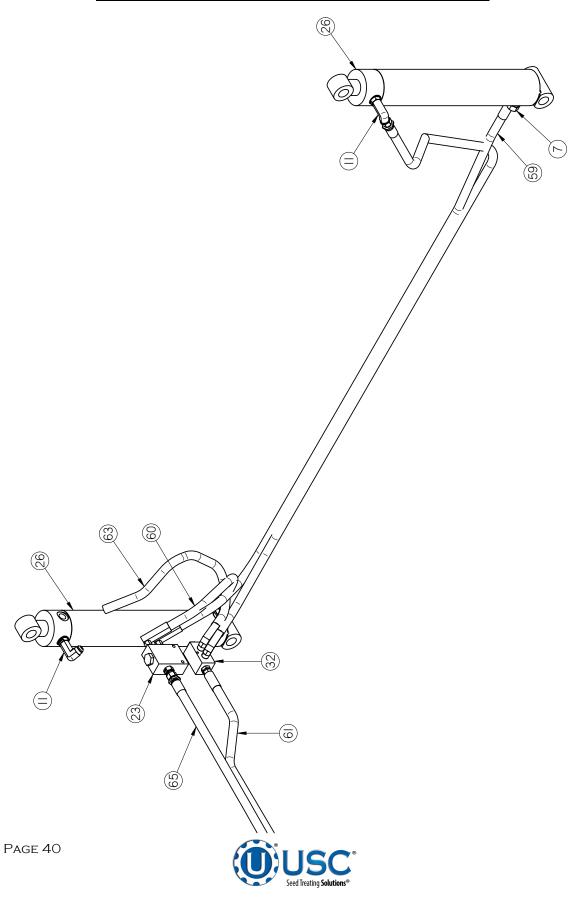


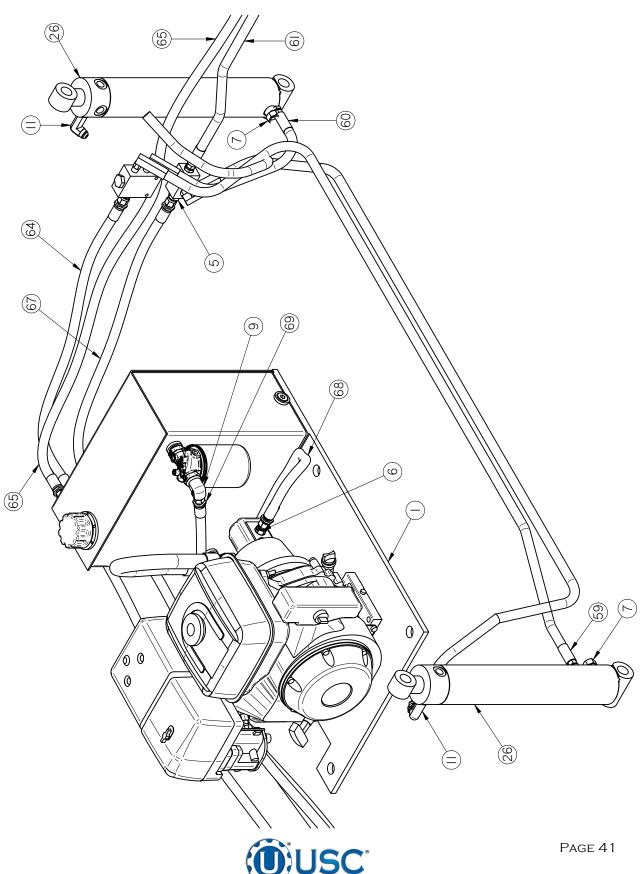












Item#	Part #	Description	Qty
1	01-01-0163	HYD POWER PACK 13HP 5.5GPM 1100PSI	1
2	01-06-0045	WHEEL ASSY ST235-80-R16 0 OFFSET	6
3	01-06-0071	AXLE 13TF80-865E-EZ 92 HBFC 67 FR RL	3
4	02-05-0069	FTTG HYD STGHT 8MJ-8MOR	1
5	02-05-0075	FTTG HYD STGHT 8MJ-8MP	1
6	02-05-0077	FTTG HYD STGHT 8MJ-6MOR	6
7	02-05-0079	FTTG HYD STGHT 8MOR-8FPX	4
8	02-06-0058	FTTG HYD 90 DEG 8MJ-8MOR	2
9	02-06-0064	FTTG HYD 90 DEG 8MJ-12MP	1
10	02-06-0066	FTTG HYD 90 DEG 8MJ-10MOR	1
11	02-06-0067	FTTG HYD 90 DEG 8MJ-8MOR XX-LONG	4
12	02-14-0001	FTTG PLUG SQHD .500 NPT SS	1
13	03-10-0013	2" DIA AMBER LIGHT	2
14	03-10-0014	2" DIA RED LIGHT	5
15	03-10-0015	TRLR LGHT BRAKE RND RED 4.00IN LED	4
16	03-14-0001	TRLR CORD HARNESS 8FT WITH PLUG	1
17	03-14-0002	TRAILER BREAK AWAY SWITCH	1
18	03-14-0002	TRAILER BREAK AWAY CONTROL BOX	1
19	03-14-0005	TRLR LGHT GRMT AND PGTL*	7
20	03-14-0006	TRLR LGHT PGTL FOR 4.00IN RND LED	4
21	03-14-0007	TRLT LGHT GRMT RBBR FOR 4.00 RND	4
22	03-14-0009	12 VOLT BATTERY	1
23	03-17-0034	FD 10GPM HYDRAFORCE FD10-44-6T-N-22	2
24	03-17-0035	FD 5GPM HYDRAFORCE FD10-44-6T-N-44	1
25	03-17-0044	VLV HYD MNL SINGLE	1
26	03-17-0069	CYL HYD WELD 14IN STROKE 3IN ID	4
27	05-03-0401	WDMT SPD TNDR FRNT STOP	2
28	05-03-0478	WDMT 1 SPD TNDR GSNK TRLR	1
29	05-06-0055	WDMT FENDER SPD RT	1
30	05-06-0056	WDMT FENDER SPD LT	1
31	05-10-3065	PLT BTRY TRAY	1
32	05-11-0183	MANIFOLD 2 IN-OUT .50375	2
33	06-01-0021	BOLT .375-16 X 3.00 ZP GR5	8
34	06-01-0032	BOLT, .625 X 11 X 2" UNC ZP GRADE 5	12
35	06-01-0097	BOLT .250-20 X 2.00 ZP GR5	6





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Item #	Part #	Description	Qty
36	06-01-0098	BOLT .313-18 X 2.00 SS 18-8	2
37	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	4
38	06-01-0141	SCRW MACH 10-32 X 2 ZP HEX	4
39	06-01-0153	BOLT CRG .375-16X.750 ZP SHORT NECK	2
40	06-01-0166	BOLT,1.00-8 X 4.00 UNC ZP GRADE 8	4
41	06-01-0168	BOLT, 1.00-8 X 5 1/2 UNC ZP GRADE 8	4
42	06-02-0005	NUT, .625-11 UNC ZP GRADE 5	12
43	06-02-0040	NUT, #10-32 ZP SERRATED FLANGE NUT	4
44	06-02-0049	NUT NYL LOCK 1.00-8 ZP GR5	8
45	06-03-0001	NUT,LOCK, .250-20 ZP G5 NYLON INSERT	6
46	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	14
47	06-03-0019	NUT LOCK FLG .3125-18 ZP GR5	2
48	06-04-0005	WASHER, .625 LOCK ZP	12
49	06-05-0006	WASHER, .625 FLAT ZP	12
50	06-05-0013	WSHR BEVEL .625	12
51	06-09-0084	STRAP RBBR 15IN LG	1
52	09-01-0003	ATWK LBL MADE IN USA YEL 2.50X2.50	2
53	09-01-0012	TRLR TAPE REFLECTIVE RED AND WHITE	3
54	09-01-0012	TRLR TAPE REFLECTIVE RED AND WHITE	2
55	09-01-0012	TRLR TAPE REFLECTIVE RED AND WHITE	6
56	09-01-0012	TRLR TAPE REFLECTIVE RED AND WHITE	6
57	09-01-0043	ATWL LBL USC, LLC 6" X 19" PRO-CUT	2
58	09-02-0011	ATWK LBL WARNING MOVING PARTS	4
59	13-05-0114	SEED TENDER HYD HOSE 2	2
60	13-05-0116	SEED TENDER HYD HOSE 4	2
61	13-05-0117	SEED TENDER HYD HOSE 5	1
62	13-05-0120	SEED TENDER HYD HOSE 8	2
63	13-05-0122	SEED TENDER HYD HOSE 10	2
64	13-05-0142	SEED TENDER HYD HOSE # 21	1
65	13-05-0143	SEED TENDER HYD HOSE # 22	1
66	13-05-0144	SEED TENDER HYD HOSE # 23	1
67	13-05-0146	SEED TENDER HYD HOSE # 24	1
68	13-05-0253	SEED TENDER HYD HOSE # 31	1
69	13-05-0254	SEED TENDER HYD HOSE # 32	1



NOTES:



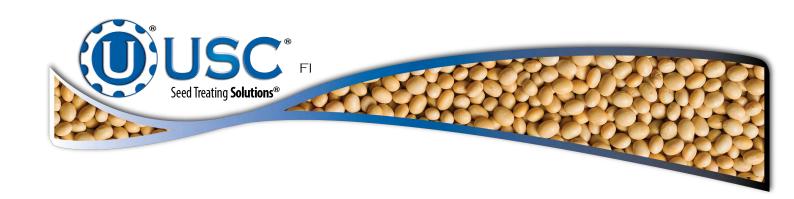
USC LIMITED WARRANTY

SECTION G

USC, LLC, (Manufacturer) warrants its seed treating equipment as follows:

- 1. <u>Limited Warranty</u>: Manufacturer warrants that the Products sold hereunder will be free from defects in material and workmanship for a period of 18 months from date of shipment. If the Products do not conform to this Limited Warranty during the warranty period, Buyer shall notify Manufacturer in writing of the claimed defects and demonstrate to Manufacturer satisfaction that said defects are covered by this Limited Warranty. If the defects are properly reported to Manufacturer within the warranty period, and the defects are of such type and nature as to be covered by this warranty, Manufacturer shall, at its expense, furnish replacement Products or, at Manufacturer's option, replacement parts for the defective products. Shipping and installation of the replacement Products or replacement parts shall be at the Buyer's expense.
- 2. Other Limits: THE FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Manufacturer does not warrant against damages or defects arising from improper installation (where installation is by persons other than Manufacturer), against defects in products or components not manufactured by Manufacturer, or against damages resulting from such non-Manufacturer made products or components. Manufacturer passes on to the Buyer the warranty it received (if any) from the maker of such non-Manufacturer made products or components. This warranty also does not apply to Products upon which repairs and/or modifications have been effected or attempted by persons other than pursuant to written authorization by Manufacturer. Manufacturer does not warrant against casualties or damages resulting from misuse and/or abuse of product(s), acts of nature, effects of weather, including effects of weather due to outside storage, accidents, or damages incurred during transportation by common carrier.
- 3. <u>Exclusive Obligation:</u> THIS WARRANTY IS EXCLUSIVE. The sole and exclusive obligation of Manufacturer shall be to repair or replace the defective Products in the manner and for the period provided above. Manufacturer shall not have any other obligation with respect to the Products or any part thereof, whether based on contract, tort, strict liability or otherwise. Under no circumstances, whether based on this Limited Warranty or otherwise, shall Manufacturer be liable for incidental, special, or consequential damages.
- 4. <u>Other Statements:</u> Manufacturer's employees or representatives' oral or other written statements do not constitute warranties, shall not be relied upon by Buyer, and are not a part of the contract for sale or this limited warranty.
- 5. **Return Policy:** Approval is required prior to returning goods to USC, LLC. A restocking fee will apply.
- 6. <u>Entire Obligation:</u> This Limited Warranty states the entire obligation of Manufacturer with respect to the Products. If any part of this Limited Warranty is determined to be void or illegal, the remainder shall remain in full force and effect.





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