

LPV100 SEED TREATER FOR LOSS-IN-WEIGHT TREATERS. EQUIPMENT REVISION: 03C



PARTS MANUAL

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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 LPV Seed Treater. It does not hold USC, LLC liable for any accidents or injuries that may occur.

The technical information provided in this document is based on extensive testing under controlled conditions at the USC research and development facility.

This information is given without guarantee as the conditions of operation and storage of the equipment are beyond our control. Variables such as temperature, humidity, viscosity of chemical products and changes in seed size or variety may all effect the accuracy of application and seed coverage. Periodically check the equipment calibration while treating and make adjustments as required. This will insure the optimum seed coverage.

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 serial number is located on the right side of the control panel mounting bracket on the treater.





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SECTION SAFETY INSTRUCTIONS

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.

If any of the required regularly scheduled maintenance is located above the reach of the operator, they should follow the companies normal safe practices of reaching that particular height, utilizing the companies specified equipment and following normal safety precautions.

When working with treatment chemicals, operators should always wear protective gloves, safety glasses, and follow the companies safety precautions in the case of any spillage or operator contamination.

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, **may** result in minor or moderate injury and/or property damage.













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

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

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.

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."

EMERGENCY STOP



There is an Emergency Stop push button on all LPV Seed Treaters which is located on the Treater Control Panel. The LPV Automated Treater has an additional Emergency Stop pushbutton on the Main Control Panel. Actuators of emergency stop shall be colored RED. The background immediately around the device actuator shall be colored YELLOW. The actuator pushbutton operated device shall be of the palm or mushroom head type.



CONTROLLED STOP

This is the stopping of machine motion by reducing the electrical command signal to 0 (zero) once the stop signal has been recognized.

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.



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.





AWARNING

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 and 1910-147.
- 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 label should also display the current label.
- 4. Replacement safety labels are available from your authorized dealer.

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.

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



Think SAFETY! Work SAFELY!

REMEMBER—If Safety Labels have been damaged, removed, become illegible, or parts replaced without safety labels, new labels must be applied. New safety labels are available through your authorized dealer.



















Part # 09-02-0001

Part # 09-02-0002



The following pages show the parts of the LPV100 Seed Treaters. Please have the treater serial number and part number ready when ordering parts.

LPV100 TREATER WITHOUT BOX STAND.



PART #		LV06 WITHOUT BOX STAND		
ltem #	Part #	Description	Qty	See Page
1	03-12-0621	PNL CNTL LPV MNL DRUM TILT	1	16
2	ASSORTED	CONTROL PANEL	1	16
3	ASSORTED	DRIVE MOTORS	1	16
4	04-03-0339	ASSY STTC MXR & VLVS 4 PORT LPV100	1	43
5	18-01-0490	ASSY FLOW CHMBR LPV100 CS QD	1	41
6	18-01-0496	ASSY DRUM LPV100	1	36
7	18-01-0535	ASSY LPV COMMON BASE LPV100	1	17
8	18-01-0551	ASSY ATMZR LPV SS QD LPV100	1	37
9	18-01-0562	ASSY INLET HOPP LPV100 W HDWR	1	40





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See

item #	Part #	Description	Qty	Page
1	03-12-0621	PNL CNTL LPV MNL DRUM TILT	1	
2	ASSORTED	CONTROL PANEL	1	16
3	ASSORTED	DRIVE MOTORS	1	16
4	04-03-0339	ASSY STTC MXR & VLVS 4 PORT LPV100	1	43
5	13-04-0311	LIW STAND LV06	1	48
6	18-01-0490	ASSY FLOW CHMBR LPV100 CS QD	1	41
7	18-01-0496	ASSY DRUM LPV100	1	36
8	18-01-0535	ASSY LPV COMMON BASE LPV100	1	17
9	18-01-0551	ASSY ATMZR LPV SS QD LPV100	1	37
10	18-01-0562	ASSY INLET HOPP LPV100 W HDWR	1	40
			PA	AGE 15



LPV100 TREATER WITH BOX STAND.

LPV 100 SEED TREATER

LPV100 TREATER TABLES

	LPV	100 CONTROL PANELS (LIW)
VOLTAGE	PART #	DESCRIPTION
240V / 1PH	03-12-0610	PNL CNTL LPX LITE 240V 1PH LIW
240V / 3PH	03-12-0612	PNL CNTL LPX LITE 240V 3PH LIW
480V /3PH	03-12-0614	PNL CNTL LPX LITE 480V 3PH LIW
575V / 3PH	03-12-0618	PNL CNTL LPX LITE 575V 3PH LIW
380-415V / 3PH	03-12-0620	PNL CNTL LPX LITE 380V 3PH LIW

MOTOR CHART					
VOLTAGE	USE	PART #	DESSCRIPTION		
2401/ 1011	DRUM DRIVE	01-01-0106	MTR IL 1.5HP 1725RPM TEFC 3PH		
240V / 1PH	ATOMIZER DRIVE	01-01-0104	MTR .33HP 1725RPM 56C 1PH TENV		
	DRUM DRIVE	01-01-0106	MTR IL 1.5HP 1725RPM TEFC 3PH		
240V / 480V / 3PH	ATOMIZER DRIVE	01-01-0105	MTR .33HP 1725RPM 56C 3PH TENV		
	DRUM DRIVE	01-01-0210	MTR .33HP 1425RPM S56C 50HZ 102696		
380 - 415 V / 3PH / 50 HZ	ATOMIZER DRIVE	01-01-0208	MTR .33HP 1425RPM S56C 50HZ 102696		
	DRUM DRIVE	01-01-0146	MTR 1.5HP 1740RPM TEFC 56C 575V		
575V / 3PH	ATOMIZER DRIVE	01-01-0144	MTR .5 HP 1725 RPM 56C 575V TENV		



ASSEMBLY LV06 COMMON BASE (18-01-0535 REV A0)





ASSEMBLY LV06 COMMON BASE (18-01-0535 REV A0)





LPV 100 SEED TREATER
ASSEMBLY LV06 COMMON BASE (18-01-0535 REV A0)



DETAIL B



LPV 100 SEED TREATER ASSEMBLY LV06 COMMON BASE (18-01-0535 REV A0)





9 -24) (13) (23)

DETAIL C



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Seed Treating Solutions®

LPV 100 SEED TREATER

ASSEMBLY LV06 COMMON BASE (18-01-0535 REV A0)

PART #		18-01-0535 REV A0		
ltem #	Part #	Description	Qty	See Page
1	01-03-0060	BRG PLW SEALED 1.00ID STSC	2	
2	03-17-0111	ACTR 8"STRK 24VDC LPV TRTR DRUM KIT	1	
3	05-03-1999	WDMT FORK PKT LPV100	2	
4	06-01-0006	BOLT .250-20 X .750 ZP GR5	4	
5	06-01-0025	BOLT .500-13 X 1.50 ZP GR5	4	
6	06-01-0054	BOLT .500-13 X 1.75 ZP GR5	16	
7	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	11	
8	06-01-0171	BOLT CRG .313-18X.750ZP SHORT NECK	4	
9	06-01-0232	BOLT FLG .500-13 X 1.250 ZP GR5	37	
10	06-01-0290	BOLT U SQ .375-16 X 3.00 X 4.00 ZP	2	
11	06-03-0013	NUT LOCK FLG .250-20 ZP GR5	4	
12	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	22	
13	06-03-0015	NUT LOCK FLG .500-13 ZP GR5	57	
14	06-03-0019	NUT LOCK FLG .313-18 ZP GR5	4	
15	06-05-0001	WSHR FLAT .250 ZP	4	
16	06-06-0087	SCRW BTN SCKT HD .375-16X2.75 ZP	6	
17	09-01-0003	ATWK LBL MADE IN USA YEL 2.50X2.50	1	
18	103D3B	UHMW TREATER GUIDE	2	
19	103D3C	BACK PLT	2	
20	106AED	ANGLE CROSS BRACE	2	
21	107242	DRUM TILT PNL BRKT LPV100	1	
22	18-01-0072	ASSY END CHUTE EXT LPX	1	34
23	18-01-0534	WDMT FR STAND LPV100	1	
24	18-01-0536	WDMT LOWER LEG RH LPV100	1	
25	18-01-0537	WDMT LOWER LEG LH LPV100	1	
26	18-01-0538	WDMT LOWER LEG EXT ACTR MNT LPV100	2	
27	18-01-0539	WDMT LOWER LEG LPV100	2	
28	18-01-0540	WDMT ACTUATOR MNT LPV100	1	
29	18-01-0541	ASSY BASE FR LPV100	1	23
30	18-01-0552	KIT LPV DRUM GUARDS LPV100	1	27
31	18-01-0557	ASSY END CHUTE LPV100 CS	1	32
32	18-01-0559	ASSY LPV100 DRM SHIPPING BRKT	4	35











F	PART #	18-01-0541 REV A0		
Item #	Part #	Description	Qty	See
1	01-01-0101	GBOX IL 56C 16.2:1 GR B1 FOOT MOUNT	1	
2	01-02-0001	SPKT 17T 40P .500ID IDLER	2	
3	01-02-0003	SPKT 19T 40P 1.00ID KWY	3	
4	01-02-0065	SPKT 30T 40P 1.00ID KWY TYPE B	1	
5	01-03-0036	BRG PLW SEALED 1.00ID ECLO	6	
6	01-04-0001	CHAIN RLR 40	2	
7	01-04-0001	CHAIN RLR 40	3.7	
8	01-04-0004	CHAIN CTNG LINK 40P	2	
9	01-05-0008	SHAFT CLR 1.00ID SPLT	8	
10	01-06-0002	WHL DRV 6 X 2 X 1.00ID .250KWY	4	
11	01-06-0004	WHL GUIDE .375ID X 2.50 X .875 NPRN	2	
12	01-10-0003	KEY .250 X 2.00 CS	4	
13	01-10-0004	KEY .250 X 1.00 CS	4	
14	05-11-0003	DRUM DRV SHAFT LP2000	1	
15	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	8	
16	06-01-0019	BOLT .375-16 X 1.75 ZP GR5	2	
17	06-01-0027	BOLT .500-13 X 2.00 ZP GR5	1	
18	06-01-0029	BOLT .500-13 X 3.25 ZP GR5	12	
19	06-01-0070	BOLT CRG .500-13 X 2.00 ZP GR5	1	
20	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	6	
21	06-01-0137	BOLT .375-16 X 2.00 ZP GR5 FTH	2	
22	06-01-0172	BOLT CRG .313-18 X 1.75 ZP GR5	4	
23	06-01-0232	BOLT FLG .500-13 X 1.250 ZP GR5	16	
24	06-02-0003	NUT FULL .375-16 ZP GR5	2	
25	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	12	
26	06-03-0015	NUT LOCK FLG .500-13 ZP GR5	30	
27	06-03-0019	NUT LOCK FLG .313-18 ZP GR5	4	
28	06-05-0005	WSHR FLAT .500 ZP	2	
29	06-10-0059	BRSH 3IN EXP 20% COND FLMT 3IN OAL	1	
30	09-02-0001	ATWK LBL DANGER FINGERS	2	
31	103A6F	DRIVE SHAFT 61"	1	
32	103D7E	BRUSH HOLDER	1	
33	1071A8	PLT WHEEL SPACER	1	
34	18-01-0254	WDMT PIVOT PIN AVR	2	



	PART #	18-01-0541 REV A0		
Item #	Part #	Description	Qty	See
35	18-01-0303	WDMT DRUM DRV ADJ PLT	1	
36	18-01-0542	WDMT BASE FR LPV100	1	
37	18-01-0543	WDMT LPV BRG MNT LPV100 RT	1	
38	18-01-0544	WDMT LPV BRG MNT LPV100 LT	1	
39	18-01-0560	WDMT BASE FR BRACE LPV100	1	





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KIT LV06 DRUM GUARDS (18-01-0552 REV A0)







KIT LV06 DRUM GUARDS (18-01-0552 REV A0)

PART #		18-01-0552 REV A0	18-01-0552 REV A0		
ltem #	Part #	Description	Qty	See Page	
1	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	27		
2	06-01-0138	BOLT FLG .3125-18 X .750 ZP GR5	4		
3	06-01-0189	BOLT FLG .375-16 X 1.250 ZP GR5	8		
4	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	15		
5	103A6C	GRD DRUM BTM REAR HALF	1		
6	10724B	GRD DRUM BTM DISCHRG HALF LPV100	1		
7	18-01-0545	WDMT GRD SUPP LPV100 RT	1		
8	18-01-0546	WDMT GRD SUPP LPV100 LT	1		
9	18-01-0547	WDMT GRD END CHUTE MNT LPV100	1		
10	18-01-0548	WDMT GRD END CHUTE MNT LPV100	1		
11	18-01-0553	ASSY GRD DRUM LPV100 RT GALV	1	30	
12	18-01-0554	ASSY GRD DRUM LPV100 LT GALV	1	30	
13	18-01-0555	ASSY GRD DRUM LPV100 TOP GALV	1	31	
14	18-01-0556	ASSY CHAIN GRD LPV100	1	31	



ASSEMBLY GUARD DRUM LV06 RIGHT (18-01-0553 REV A0)



ŀ	PART #	18-01-0553 REV A0		
ltem #	Part #	Description	Qty	See Page
1	09-01-0043	ATWK LBL USC 22.00 X 5.75 PRO-CUT	1	
2	09-01-0199	LBL ATWK LPV	1	
3	09-02-0002	ATWK LBL DANGER GRD	1	
4	1071EF	SIDE GRD LPV RT LPV100	1	
4		SIDE GRD LPV RT LPV100	1	

ASSEMBLY GUARD DRUM LV06 LEFT (18-01-0554 REV A0)



P	ART #	18-01-0554 REV A0		
Item #	Part #	Description	Qty	See Page
1	09-01-0043	ATWK LBL USC 22.00 X 5.75 PRO-CUT	1	
2	09-01-0199	LBL ATWK LPV	1	
3	09-02-0002	ATWK LBL DANGER GRD	1	
4	1071EE	SIDE GRD LPV LT LPV100	1	



ASSEMBLY GUARD DRUM LV06 TOP (18-01-0555 REV A0)



PART #		18-01-0555 REV A0		
Item #	Part #	Description	Qty	See Page
1	05-10-4935	BRKT LIFT LUG 10GA	2	
2	05-10-4936	GRD STIFFENER LPV100	1	
3	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	7	
4	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	7	
5	09-02-0009	ATWK LBL WARNING ROTATING PARTS	2	
6	1071F0	GRD DRUM TOP LT LPV100	1	

ASSEMBLY CHAIN GUARD LV06 (18-01-0556 REV A0)



	PART #	18-01-0556 REV A0		
Item #	Part #	Description	Qty	See Page
1	06-12-0026	RIVET POP .125 X.187 GRIP SS OPEN	2	
2	09-02-0002	ATWK LBL DANGER GRD	1	
3	103A6D	DRUM DRV CHAIN GRD LPV	1	
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ASSEMBLY LV06 END CHUTE (18-01-0557 REV A0)

P	ART #	18-01-0557 REV A0		
Item #	Part #	Description	Qty	See Page
1	09-01-0042	ATWK LBL USC 11.50 X 3.00 PRO-CUT	1	
2	18-01-0300	ASSY DOOR END CHUTE SM	1	33
3	18-01-0549	WDMT END CHUTE LPV100	1	



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ASSEMBLY LV06 DOOR END CHUTE (18-01-0300 REV A1)



PART #		18-01-0300 REV A0		
Item #	Part #	Description	Qty	See Page
1	06-01-0006	BOLT .250-20 X .750 ZP GR5	11	
2	06-02-0033	NUT KLOCK 6-32 ZP	4	
3	06-03-0001	NUT NYL LOCK .250-20 ZP GR5	11	
4	06-06-0032	SCRW MACH 6-32 X .500 PHLP RDHD ZP	4	
5	06-09-0028	LATCH SPRING SOUTHCO 57-10-401-10	2	
6	06-10-0025	EDGING SGRPG .375DP X .281W BLK	2.25	
7	09-02-0002	ATWK LBL DANGER GRD	1	
8	102098	COVER	1	
9	1039EF	PLT DSCHG CHUTE DOOR GALV W LOGO	1	
7 8	09-02-0002 102098	ATWK LBL DANGER GRD COVER	1	



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ASSEMBLY LV06 END CHUTE EXTENSION (18-01-0072 REV A0)



PART #		18-01-0072 REV A0		
				See
Item #	Part #	Description	Qty	Page
1	05-10-3400	PLT DSCHG TRTR	4	
2	05-10-3886	SKIRT DSCHG TRTR LPX2000	1	
3	06-01-0171	BOLT CRG .313-18X.750ZP SHORT NECK	12	
4	06-03-0002	NUT NYL LOCK .313-18 ZP GR5	12	
5	101FB5	ADPT END CHUTE EXT LPX2000	1	
4			12 1	



ASSEMBLY LV06 SHIPPING BRACKET (18-01-0559 REV A0)



P	PART #	18-01-0559 REV 0		
ltem #	Part #	Description	Qty	See Page
1	06-01-0106	BOLT .500-13 X 5.50 ZP GR5	1	
2	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	1	
3	18-01-0558	WDMT FRM CLMP BRKT LPV100	2	
		*	Р	AGE 35



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ASSEMBLY LV06 DRUM (18-01-0496 REV B0)



Item #	Part #	Description	Qty	See Page
1	06-01-0006	BOLT .250-20 X .750 ZP GR5	8	
2	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	12	
3	06-04-0001	WSHR LOCK SPLT .250 ZP	8	
4	06-04-0013	WSHR SS BONDED SEALING .375 ID	12	
5	06-10-0038	DRUM INLET BRUSH	1	
6	09-02-0013	ATWK LBL ROTATION ARROW	4	
7	103CDC	PLT BRUSH HOLDER	1	
8	103CDD	PLT BRUSH HOLDER	1	
9	18-01-0289	WDMT DRUM 6FT X 2FT DIA	1	
10	18-01-0298	WDMT DRUM PDL TALL	2	
11	18-01-0299	WDMT DRUM PDL SHORT	2	


ASSEMBLY LV06 ATOMIZER SS QD (18-01-0551 REV A0)





ASSEMBLY LV06 ATOMIZER SS QD (18-01-0551 REV A0)

P	ART #	18-01-0551 REV A0		
Item #	Part #	Description	Qty	See Page
1	01-03-0002	BRG FLG MNT .625ID 3.875 BASE	1	
2	01-07-0027	CPLG CLPN .625 X .625 SPLT CS	1	
3	02-06-0007	FTTG 45 DEG .375NPT SS	1	
4	02-06-0008	FTTG 90 DEG .375NPT FM SS	1	
5	02-06-0017	FTTG 90 DEG STRT .500NPT PPE BLK	1	
6	02-07-0002	FTTG NIP .375 NPT X 1.50 TBE SS	1	
7	02-07-0003	FTTG NIP .375 NPT X 2.00 TBE SS	1	
8	02-07-0004	FTTG NIP .375 NPT X 2.50 TBE SS	1	
9	02-08-0007	FTTG STGHT .500HB X .500NPT ML NYL	1	
10	02-15-0014	FTTG CPLG .500 NPT QCK DISC INSERT	1	
11	02-15-0037	FTTG CPLG .375 NPT QCK DISC INSERT	1	
12	04-02-0004	ASSY ATMZR HEAD COT	1	39
13	05-10-0360	DISC STD ATMZR HEAD CVR	1	
14	05-10-0805	DISC ATMZR MTR	1	
15	05-10-2462	SEAL RBBR .625 FLG BRG	1	
16	05-10-4937	LPV100 ATMZR DSCHG CVR	1	
17	06-01-0017	BOLT .375-16 X 1.00 SS 18-8	6	
18	06-01-0102	BOLT .313-18 X 1.25 ZP GR5	2	
19	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	4	
20	06-03-0019	NUT LOCK FLG .313-18 ZP GR5	2	
21	06-03-0042	NUT LOCK FLG .375-16 SS 18-8	8	
22	06-05-0009	WSHR FLAT .375 X .875OD SS 18-8	6	
23	09-02-0004	ATWK LBL GRS 40HRS	1	
24	106ADA	SHAFT DRV ATMZR SS LPV100	1	
25	18-01-0489	WDMT ATMZR CONE LPX300 SS	1	
26	18-01-0561	WDMT ATMZR CHUTE LPV100 SS	1	
27	18-01-0563	ATOMIZER MTR GUARD LPV100 W DECALS	1	



ASSEMBLY ATOMIZER HEAD (04-02-0004 REV A0)



PART #		04-02-0004 REV A0		
Item #	Part #	Description	Qty	See Page
1	05-11-0014	PLT ATMZR CAP	2	
2	05-11-0015	SLV ATMZR SPCR	1	
3	05-11-0016	SPUD BTM DRV	1	
4	06-06-0003	SCRW SCKT .375-16 X .500 SS 18-8	1	
5	13-05-0032	SCRN ATMZR COT 1.375 X 12.25	1	



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ASSEMBLY LV06 INLET HOPPER (18-01-0562 REV A0)



PART #		18-01-0562 REVA0		
				See
Item #	Part #	Description	Qty	Page
1	06-01-0189	BOLT FLG .375-16 X 1.250 ZP GR5	10	
2	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	10	
3	18-01-0550	WDMT INLET HOPP LPV100	1	



ASSEMBLY LV06 FLOW CHAMBER CS QD (18-01-0490 REV A0)



ASSEMBLY LV06 FLOW CHAMBER CS QD (18-01-0490 REV A0)

Р	ART #	18-01-0490 REV A0		
Item #	Part #	Description	Qty	See Page
1	05-03-0305	WDMT MAIN CHMBR SUPP BRKT LPV100	1	
2	05-10-1938	BRKT ECCENTRIC CONN LP300	1	
3	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	4	
4	06-01-0081	BOLT SHLD .313SHX.250-20X.375 GR5	2	
5	06-02-0027	NUT FULL .375-24 ZP GR5	4	
6	06-03-0003	NUT NYL LOCK .375-16 ZP GR5	4	
7	06-04-0003	WSHR LOCK SPLT .375 ZP	4	
8	06-05-0004	WSHR FLAT .375 ZP	20	
9	06-06-0087	SCRW BTN SCKT HD .375-16X2.75 ZP	4	
10	06-12-0002	REND .375-24 BALL LH	4	
11	06-12-0003	REND .375-24 BALL RH	4	
12	06-12-0006	ROD CTNG .375-24 X 2.00 LH RH FM	4	
13	06-12-0007	BUSH DRILL.375ID X .625OD X .375	4	
14	18-01-0491	WDMT FLOW CHMBR LPV100 CS	1	



ASSEMBLY STATIC MIXER & VALVES 4 PORT (04-03-0339 REV A0)



PART #		04-03-0399 REV A0		
ltem #	Part #	Description	Qty	See Page
1	02-02-0006	VLV BALL .500 NPT 2WAY BRSS	5	
2	02-03-0005	HOSE RNT .500 CLEAR	0.57	
3	02-03-0005	HOSE RNT .500 CLEAR	2.08	
4	02-05-0005	FTTG CPLG .500 NPT FM SS	1	
5	02-06-0010	FTTG 90 DEG .500HB X .500NPT ML NYL	1	
6	02-06-0012	FTTG 90 DEG .500NPT FM SS	1	
7	02-07-0007	FTTG NIP .500NPTX1.125 TBE SS CLOSE	8	
8	02-08-0007	FTTG STGHT .500HB X .500NPT ML NYL	3	
9	02-09-0003	FTTG TEE .500 NPT FM SS	4	
10	02-15-0013	FTTG CPLG .500 HB QCK DISC BODY	1	
11	02-15-0014	FTTG CPLG .500 NPT QCK DISC INSERT	4	
12	04-03-0030	MXR IL PVC 6ELEMENT .500PIPE X 7.00	1	
13	05-07-1094	WDMT STTC MXR MNT 4 PORT LPV100	1	
14	05-10-4277	SPCR STTC MXR MNT	1	
15	06-01-0037	BOLT U .313-18 X 1.00 X .375 ZP GR5	4	
16	06-01-0189	BOLT FLG .375-16 X 1.250 ZP GR5	3	
17	06-03-0002	NUT NYL LOCK .313-18 ZP GR5	8	
18	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	3	
19	06-05-0003	WSHR FLAT .313 ZP	6	
20	06-07-0006	CLMP HOSE .500 TO .906 X .313W ZP	4	



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ASSEMBLY STATIC MIXER & VALVES 4 ADDON (04-03-0307 REV A0)



	PART #	04-03-0307 REV A A0		
Item #	Part #	Description	Qty	See Page
1	02-02-0006	VLV BALL .500 NPT 2WAY BRSS	4	
2	02-03-0005	HOSE RNT .500 CLEAR	0.58	
3	02-06-0012	FTTG 90 DEG .500NPT FM SS	1	
4	02-07-0007	FTTG NIP .500NPTX1.125 TBE SS CLOSE	7	
5	02-08-0007	FTTG STGHT .500HB X .500NPT ML NYL	1	
6	02-09-0003	FTTG TEE .500 NPT FM SS	3	
7	02-09-0047	FTTG TEE .500HB	1	
8	02-15-0014	FTTG CPLG .500 NPT QCK DISC INSERT	4	
9	06-01-0037	BOLT U .313-18 X 1.00 X .375 ZP GR5	2	
10	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	3	
11	06-03-0002	NUT NYL LOCK .313-18 ZP GR5	4	
12	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	3	
13	06-05-0003	WSHR FLAT .313 ZP	2	
14	06-07-0006	CLMP HOSE .500 TO .906 X .313W ZP	4	
15	105BFE	BRKT STTC MXR ADDON	1	



ASSEMBLY EXTENSION HOPPER 6 INCH (13-04-0121 REV A2)



	PART #	13-04-0121 REV A 002		
ltem #	Part #	Description	Qty	See Page
1	03-08-0130	PLUG STEEL 22MM	1	
2	05-07-0367	WDMT 36ID X 6 INLET HOPP EXT CS	1	
3	05-10-4064	PLT HOPP 6IN EXT VIEW	3	
4	06-01-0006	BOLT .250-20 X .750 ZP GR5	6	
5	06-03-0001	NUT NYL LOCK .250-20 ZP GR5	6	
6	06-05-0001	WSHR FLAT .250 ZP	6	



ASSEMBLY EXTENSION HOPPER 9 INCH (13-04-0204 REV A3)



PART #		13-04-0204 REV A 003		
Item #	Part #	Description	Qty	See Page
1	03-08-0130	PLUG STEEL 22MM	1	
2	05-07-0810	WDMT 36ID X 9 INLET HOPP EXT CS	1	
3	05-10-4064	PLT HOPP 6IN EXT VIEW	3	
4	06-01-0006	BOLT .250-20 X .750 ZP GR5	6	
5	06-03-0001	NUT NYL LOCK .250-20 ZP GR5	6	
6	06-05-0001	WSHR FLAT .250 ZP	6	



ASSEMBLY EXTENSION HOPPER 12 INCH (13-04-0043 REV A3)



PART #		13-04-0043 REV A 003		
ltem #	Part #	Description	Qty	See Page
1	03-08-0130	PLUG STEEL 22MM	1	
2	05-07-0008	WDMT 36ID X 12 INLET HOPP EXT CS	1	
3	05-10-0362	CVR CLEAR VP HOPP EXT	3	
4	06-01-0006	BOLT .250-20 X .750 ZP GR5	9	
5	06-03-0001	NUT NYL LOCK .250-20 ZP GR5	9	
6	06-05-0001	WSHR FLAT .250 ZP	9	







ASSEMBLY LIW STAND (13-04-0311 REV A1)



PART #		13-04-0311 REV A1		
ltem #	Part #	Description	Qty	See Page
1	03-08-0130	PLUG STEEL 22MM	1	
2	03-19-0104	SCL 5X4FT 5K WITH CTR CUTOUT RL	1	
3	05-03-0316	WDMT ADJ LEG	4	
4	05-03-1806	WDMT YOKE LIFT-LOCK HD	4	
5	05-03-1892	WDMT BASE FR LP LIW STAND	1	
6	05-03-1893	WDMT CROSS BACE LP LIW STAND	2	
7	05-10-1925	WDMT INSERT SLD GATE REDUCER	1	
8	05-10-1926	WDMT LIW GATE ADPT 6IN OUTPUT	1	
9	05-07-0994	WDMT HOPP SCALE GUIDE AT500 LIW RCT	1	
10	06-01-0016	BOLT .375-16 X 1.00 ZP GR5	10	
11	06-01-0115	BOLT CRG .375-16 X 1.00 ZP GR5	16	
12	06-01-0119	BOLT .500-13 X 5.00 ZP GR5	4	
13	06-01-0122	BOLT CRG .250-20 X .750 ZP GR5	12	
14	06-01-0189	BOLT FLG .375-16 X 1.250 ZP GR5	6	
15	06-01-0286	BOLT U .375-16 4 X 4.625 SQ	8	
16	06-03-0004	NUT NYL LOCK .500-13 ZP GR5	4	
17	06-03-0005	NUT NYL LOCK .625-11 ZP	4	
18	06-03-0013	NUT LOCK FLG .250-20 ZP GR5	12	
19	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	48	
20	06-03-0015	NUT LOCK FLG .500-13 ZP GR5	4	
21	06-09-0085	CLPSBL HOPP HNDL GRIP	4	
22	06-09-0135	PIN SFTY .500 X 3.0 SQ DBL WIRE	4	
23	105A14	PLT HANDLE LIFT-LOCK	4	
24	105B36	SKIRT BOX SEAL	1	
25	105B37	PLT SKIRT RETAINER	4	
26	10658C	BRG SLEEVE	4	
27	12-04-0084	ASSY LIW GATE	1	50



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ASSEMBLY LIW GATE (12-04-0084 REV A0)



PART #		12-04-0084 REV A0		
Item #	Part #	Description	Qty	See Page
1	03-08-0316	CONN TRCK RK4.4T-8-RS4.4T/S760/S771	1	
2	03-10-0173	SENS PROX 24VDC IFM KG6000	1	
3	05-03-1764	WDMT AT500 LIW GATE RECT	1	
4	05-03-3316	PLT SMW PROX SW MNT	1	
5	06-01-0006	BOLT .250-20 X .750 ZP GR5	2	
6	06-01-0124	BOLT FLG .375-16 X .750 ZP GR5	4	
7	06-03-0013	NUT LOCK FLG .250-20 ZP GR5	4	
8	06-03-0014	NUT LOCK FLG .375-16 ZP GR5	4	
9	06-03-0031	NUT LOCK FLG M5-0.8 GR8.8	4	
10	06-05-0017	WSHR FLAT #10 ZP	4	
11	06-06-0005	SCRW SDST 10-16 X .500 HH WSHR ZP	4	
12	06-06-0083	SCRW SH M5-0.8 X 20MM BO	4	
13	06-12-0043	CLVS 10-1.25 X 10MM	1	
14	06-12-0044	PIN CLIP SPRING 10MM	1	
15	105F4B	LIW GATE SLIDE	1	
16	105F52	ACTR MNT PLT	1	
17	105F85	CVR ACTR LIW ADJ CHMBR AT500	1	
18	106459	ACTR BTM GRD	1	
19	13-05-0741	ASSY DYADIC LIW ACTUATOR	1	51



ASSEMBLY DYADIC LIW ACTURATOR (13-05-0741 REV A0)

PART #		13-05-0741 REV A0		
Item #	Part #	Description	Qty	See Page
1	03-08-0323	CONN TRCK FLD WR M12M BS 8151-0/PG9	1	
2	03-08-0350	CONN TRCK 8PIN FLD-WR MALE 4-6MM	1	
3	03-17-0103	ACTR DYADIC SCN5-010-150AS03A 8M	1	



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NOTES:



SECTION USC LIMITED WARRANTY

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. <u>Other Limits</u>: THE FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES, EX-PRESSED 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. This includes any welding on equipment which could damage electrical components. Manufacturer does not warrant against casualties or damages resulting from misuse and / or abuse of Products, improper storage or handling, 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 lost profits, lost revenue, lost sales (whether direct or indirect damages), incidental, special, punitive, indirect 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. **<u>Return Policy:</u>** Approval is required prior to returning goods to Manufacturer. 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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