

WALLENSTEIN

BY EMB MFG INC.

EMB Manufacturing Inc.
4144 Boomer Line · St. Clements, Ontario · N0B 2M0 · Canada
www.wallensteinequipment.com

TIMBER TALON



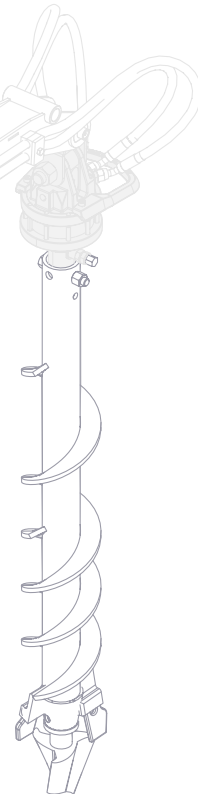
Warning
Underground Utility Hazard

Contacting underground utilities can cause electrocution. You must contact an underground utility locating/marketing service before digging.



Warning
Handling Hazard

Use caution when handling heavy equipment. Objects may fall and cause crushing injury to hands and feet. Lifting heavy objects may cause back or leg strain injuries.



LA610 & LA910

AUGER KIT

Accessory Installation Instructions

See inside cover for grapple compatibility chart

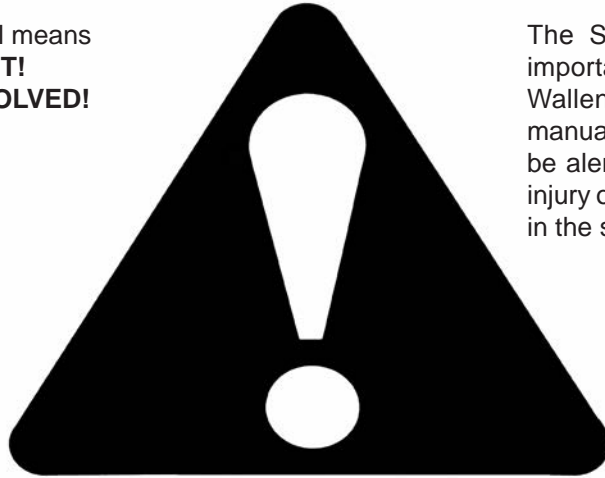


Do not attempt to start or operate the equipment without thoroughly reviewing this manual for safe and proper operation.

**Keep this manual with the
machine at all times**

SAFETY ALERT SYMBOL

This Safety Alert symbol means
ATTENTION! BE ALERT!
YOUR SAFETY IS INVOLVED!



The Safety Alert symbol identifies important safety messages on the Wallenstein Equipment and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

Why is SAFETY important to you?

3 Big Reasons

Accidents Disable and Kill
Accidents Cost
Accidents Can Be Avoided

SIGNAL WORDS:

Note: The use of the signal words **DANGER**, **WARNING**, **CAUTION** and **NOTICE** with the safety messages. The appropriate signal word for each message has been selected using the following guide-lines:

DANGER - Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

WARNING - Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION - Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE - Indicates a situation that could result in damage to the machine or other property.

If you have any questions not answered in this manual or require additional copies or the manual is damaged, please contact your dealer or EMB Mfg, 4144 Boomer Line, St. Clements, ON, N0B 2M0. Phone (519) 699-9283 or Fax (519) 699-4146.

Grapple Compatibility Chart for Auger Kits LA610 & LA910

MODEL	6" Auger	9" Auger
	6089A400	6089A410
Wallenstein	LA610	LA910
LX95 Series	x	
LX115 Series		x

Accessory Installation Instructions

LA610 & LA910 AUGER



Always wear the appropriate safety gear when installing this kit or working around the machine. This includes but is not limited to:

- Hard hat for protection to the head.
- Safety glasses protection for the eyes.
- Gloves for hand protection.
- Safety shoes with slip resistant soles and steel toes.



Caution: this kit is constructed of heavy gauge steel, be sure to use caution moving and installing the kit, avoid dropping or pinching body parts on corners and edges of the kit.

The purpose of the **Auger** kit is to reduce wasted time and get your fence post jobs done quickly and efficiently. Both Auger kits are capable of a 42" (107 cm) hole depth.

There are 2 **Auger Kits**:

LA610 Auger Kit for 2.5" Main Boom Cylinder

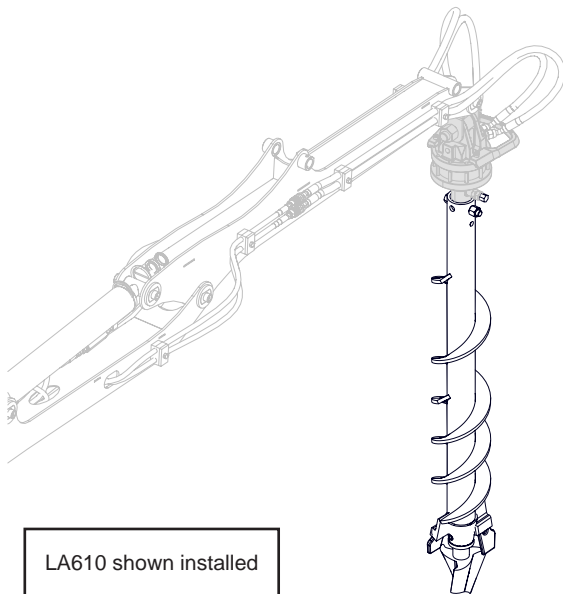
LA910 Auger Kit for 3.0" Main Boom Cylinder

See the chart on page 3 to ensure you have the correct kit for your model grapple.

This manual features LX95 Log Grapple and a LA610 kit installed. Both auger kits install in the same way. Installation and setup instructions apply to both kits unless specified. Please read this manual thoroughly.

To outfit the LX boom for augering, the grapple will need to be removed and the auger installed. Hydraulic lines will have to be removed, so have some rags on hand for fluid drips, and have a container handy to store parts that have been removed. Note: Installation and operation for kits LA610 & LA910 are similar.

The **Auger Kit** comes assembled. Illustrations show typical assembly to the LX Boom. Once assembled, only regular maintenance and minor adjustments are required. Tighten all hardware using the "Bolt Torque" chart at the back of this manual unless otherwise specified.



LA610 shown installed



WARNING

High Pressure Fluid Hazard

To prevent serious injury or death from high pressure fluid:

- receive pressure on the system before repairing or adjusting.
- wear proper hand and eye protection when searching for leaks.
- keep all components in good repair.



CAUTION

Operation Hazard

High Pressure. Review your grapple manual for safe operating and handling procedures before beginning work.

NOTICE

Read and follow installation and setup instructions.

A hazardous condition exists if the unit is improperly installed, or if the kit is modified or changed in any way. Damage to the machine or accessory will result.

INSTALLATION INSTRUCTIONS



Ensure your log grapple trailer and the area around it is clean and free of debris, resting on dry level ground, wheel chock applied and the engine shut off. Have the auger kit and tools close by on a work surface.

Unpack the auger kit. Lay the parts out on the work surface and use the parts list in the back of this manual to check that all parts are included. All hardware and small parts are assembled to the parts.

ASSEMBLY

Basic tools needed:

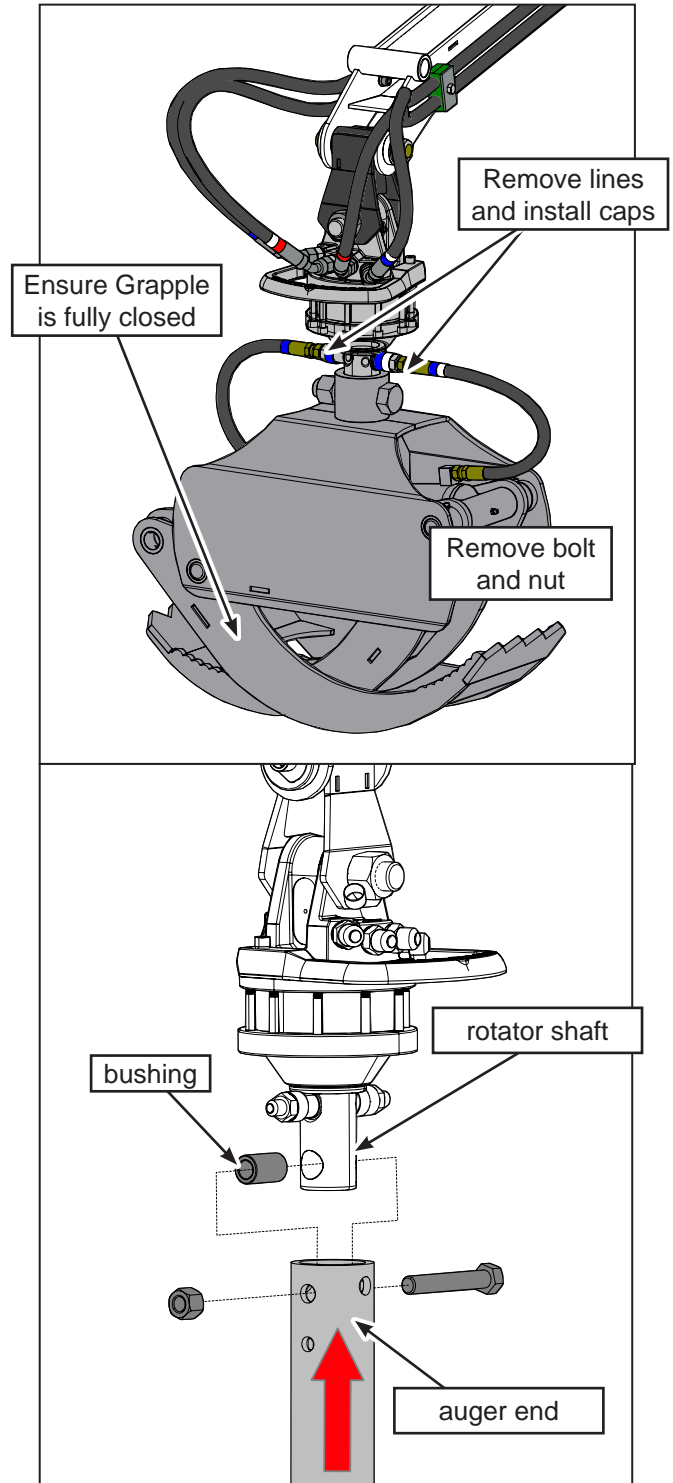
- standard set of wrenches or sockets

Prepare for Installation:

1. Ensure the grapple is fully closed
2. Move the boom/grapple off to the side of the trailer with the grapple sitting on the ground.
3. Power down the boom (shut off the engine and remove the key).
4. Move control levers back and fourth to equalize the pressure in the hydraulic lines.
5. Remove the two hydraulic lines from the rotator that control the grapple jaws (blue colour coded disconnects). Prepare for some dripping of hydraulic fluid. (To prevent fluid contamination, cap off the lines or wrap the ends with a clean cloth.)
6. Find the two JIC 06 caps that came with the kit and install them on the rotator where the hydraulic hoses were. Ensure the caps are on tight.
7. Next remove the grapple hex bolt that fastens the grapple to the rotator, and set the nut and bolt aside.
8. Power up the boom and lift the boom end free of the grapple till it is approximately 55" (145 cm) off the ground
9. Replace the nut and bolt into the grapple.

Install the auger

1. Find the auger bushing, and insert it in the rotator shaft.
2. Find the auger fastening bolt that came with the kit.
3. Lift the auger end to the rotator and align the auger tube with the rotator shaft, move auger so the bolt holes are in alignment.
4. Lift the auger over the rotator shaft and install the auger fastening bolt and locknut.
5. Tighten to proper torque. (Ensure the bolt is tightened according to the torque chart located in this manual.)
6. Auger is ready to use.



OPERATION

It is recommended that the main boom be used to move the auger up or down, instead of the dipper boom. This will keep the auger straighter, but will still require adjustment to keep the auger true. Practice will be required to achieve the best results.

Controls: Auger Rotation & Dipper Boom Up / Down The joy stick located right of centre.

1. This 4 position spring-loaded-to-neutral-center lever (joy stick) controls the hydraulic rotator as well as the up / down position of the dipper.
 - Move and hold the lever to the left to rotate the auger counter clockwise.
 - Move and hold the lever to the right to rotate the auger clockwise.
 - Release the lever to stop the auger rotation.

Begin Augering:

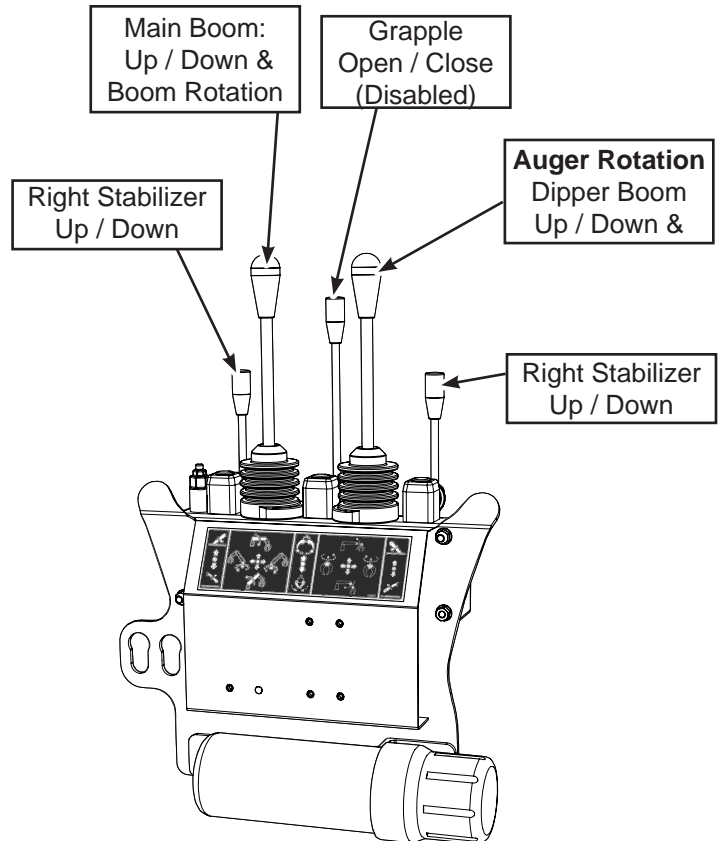
1. Ensure auger rotation is stopped and then lower auger point to the ground.
2. Start auger turning clockwise; apply down pressure to assist ground penetration. If auger speed slows or stops, back off down pressure. Excessive down pressure could stall the auger.
3. Periodically adjust the booms position to keep the auger and hole vertical. Be careful not to damage rotator or auger.
4. After penetrating the ground approximately 24", slowly raise it up to remove soil and debris from the hole. Lower auger back down to continue digging. Dig another 24" or until hole is at its final depth and again raise the auger up as before to clear out the soil and debris.
5. Allow auger to turn several revolutions at final depth. With auger still turning, raise auger up to within 1 to 2 feet of being out of the hole. Stop auger rotation and continue to raise auger out of the hole.
6. Raise auger up to clear obstacles and debris when transporting from one digging site to the next. Be careful to watch out for people, obstructions, and uneven terrain.

IMPORTANT: Avoid side pressure on the auger. This can damage auger and drive components.

IMPORTANT: Stop auger from turning immediately if auger begins to screw itself into the soil, hits a large obstruction or becomes stalled. Slowly reverse and raise auger up to free it and then cautiously continue normal digging operations. If the auger does not penetrate the obstruction, raise auger out of the hole and remove obstruction, or dig a new hole nearby.

Caution: Always have the stabilizers in position when drilling a hole.

Caution: The area in which the holes will be augered should be inspected for underground utilities.



Caution: Carry the auger low to the ground while travelling between drilling positions.

Caution: Keep all bystanders out of the work zone and at least 20 ft (6 m) feet away from the auger work area.

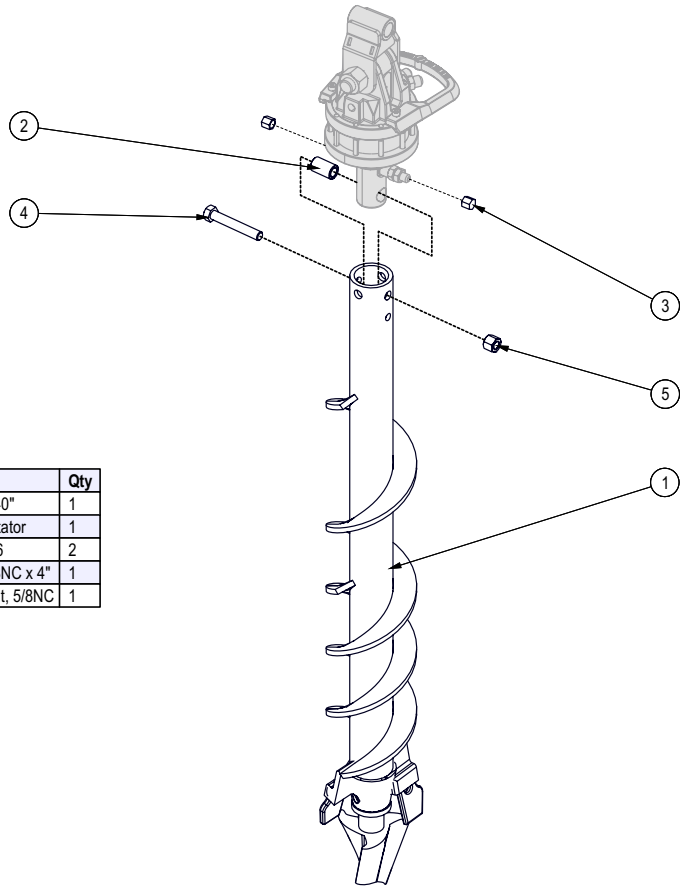
Caution: Ensure the hydraulics are not powered and the engine is off when setting up the auger. Potential injury to the operator or others may result.

Caution: It is best to leave drilling through hard rock to high pressure drilling equipment professionals

LA610 Parts Breakdown

LA610 Auger Kit for LX95 Series

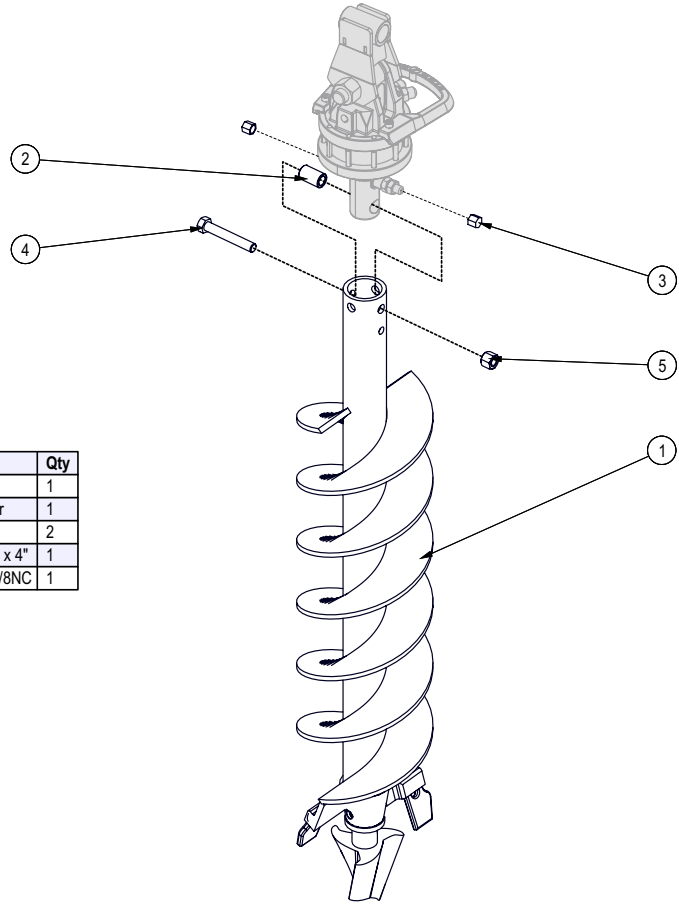
BOM ID	Part No.	Description	Qty
1	Z19912	Auger, 6" x 40"	1
2	6089M401	Bushing, Rotator	1
3	Z51496	Cap, FJIC 06	2
4	Z71640	Hex Bolt, 5/8NC x 4"	1
5	Z72261	Hex Lock Nut, 5/8NC	1



LA910 Parts Breakdown

LA910 Auger Kit for LX115 Series

BOM ID	Part No.	Description	Qty
1	Z19913	Auger, 9" x 40"	1
2	6089M401	Bushing, Rotator	1
3	Z51496	Cap, FJIC 06	2
4	Z71640	Hex Bolt, 5/8NC x 4"	1
5	Z72261	Hex Lock Nut, 5/8NC	1



Bolt Torque

CHECKING BOLT TORQUE

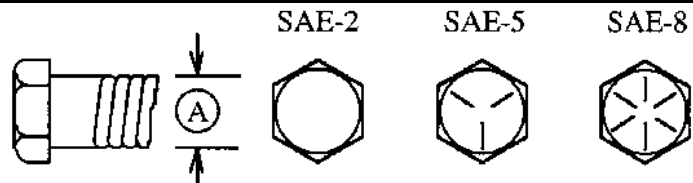
The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

* Torque value for bolts and capscrews are identified by their head markings.

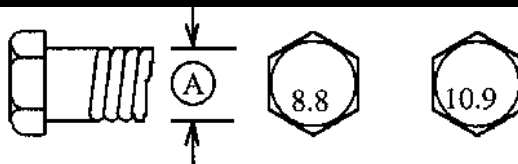
ENGLISH TORQUE SPECIFICATIONS

Bolt Diameter "A"	Bolt Torque*					
	SAE 2 (N.m) (lb-ft)		SAE 5 (N.m) (lb-ft)		SAE 8 (N.m) (lb-ft)	
1/4"	8	6	12	9	17	12
5/16"	13	10	25	19	36	27
3/8"	27	20	45	33	63	45
7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	60	155	115	220	165
5/8"	128	95	215	160	305	220
3/4"	225	165	390	290	540	400
7/8"	230	170	570	420	880	650
1"	345	225	850	630	1320	970



METRIC TORQUE SPECIFICATIONS

Bolt Diameter "A"	Bolt Torque*			
	8.8 (N.m) (lb-ft)		10.9 (N.m) (lb-ft)	
M3	0.5	0.4	1.8	1.3
M4	3	2.2	4.5	3.3
M5	6	4	9	7
M6	10	7	15	11
M8	25	18	35	26
M10	50	37	70	52
M12	90	66	125	92
M14	140	103	200	148
M16	225	166	310	229
M20	435	321	610	450
M24	750	553	1050	774
M30	1495	1103	2100	1550
M36	2600	1917	3675	2710



Tightening Flare Type Tube Fittings *

1. Check flare and flare seat for defects that might cause leakage.
 2. Align tube with fitting before tightening.
 3. Lubricate connection and hand tighten swivel nut until snug.
 4. To prevent twisting the tube(s), use two wrenches. Place one wrench on the connector body and with the second tighten the swivel nut to the torque shown.
- The torque values shown are based on lubricated connections as in reassembly.

HYDRAULIC FITTING TORQUE					
Tube Size OD	Nut Size Across Flats	Torque Value*		Recommended Turns To Tighten (After Finger Tightening)	
		(N.m)	(lb-ft)	(Flats)	(Turn)
(in.)	(in.)				
3/16	7/16	8	6	1	1/6
1/4	9/16	12	9	1	1/6
5/16	5/8	16	12	1	1/6
3/8	11/16	24	18	1	1/6
1/2	7/8	46	34	1	1/6
5/8	1	62	46	1	1/6
3/4	1-1/4	102	75	3/4	1/8
7/8	1-3/8	122	90	3/4	1/8

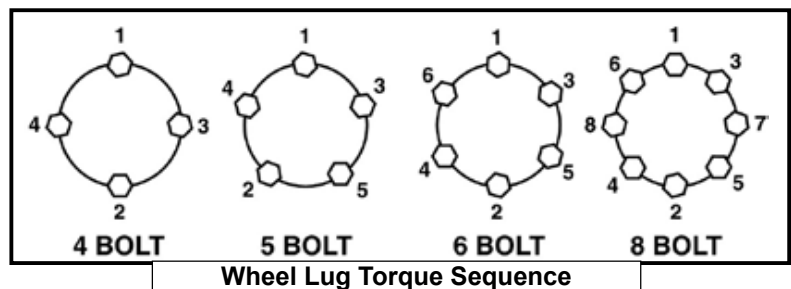
It is extremely important safety procedure to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches are the best method to assure the proper amount of torque is being applied to a fastener.

Wheel lugs should be torqued before first road use and after each wheel removal. Check and re torque after the first 10 miles, 25 miles, and again at 50 miles. Check periodically thereafter.

Note: Wheel lugs must be applied and maintained at the proper torque levels to prevent loose wheels, broken studs, and possible dangerous separation of wheels from your axle.

Wheel Torque Requirements			
Wheel Size	1st Stage	2nd Stage	3rd Stage
8"	12 - 20	30 - 35	45 - 55
12"	20 - 25	35 - 40	50 - 60
13"	20 - 25	35 - 40	50 - 60
14"	20 - 25	50 - 60	90 - 120
15"	20 - 25	50 - 60	90 - 120
16"	20 - 25	50 - 60	90 - 120

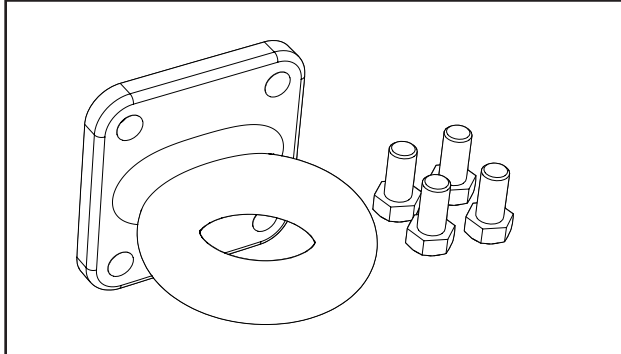
1. Start all lugs by hand to prevent cross threading.
2. Tighten lugs in sequence, per wheel lug torque sequence chart.
3. The tightening of the fasteners should be done in stages. Following the recommended sequence, tighten fasteners per wheel torque requirements chart.



ACCESSORIES

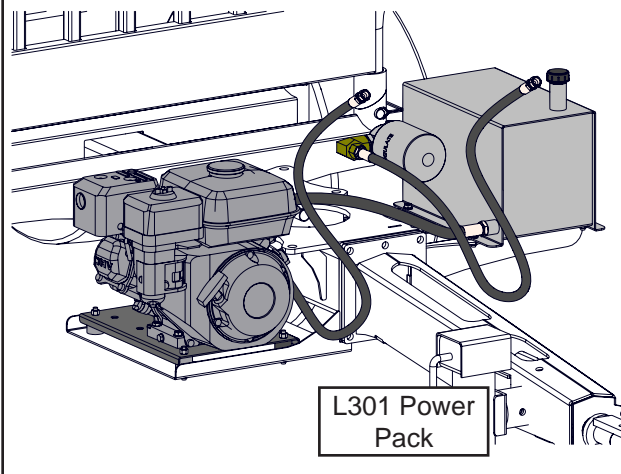
Call your dealer for pricing and availability.

For replacement parts, go to www.wallensteinequipment.com and click on "Parts and Manuals" to download the latest parts manual for your model, then call your dealer to order.



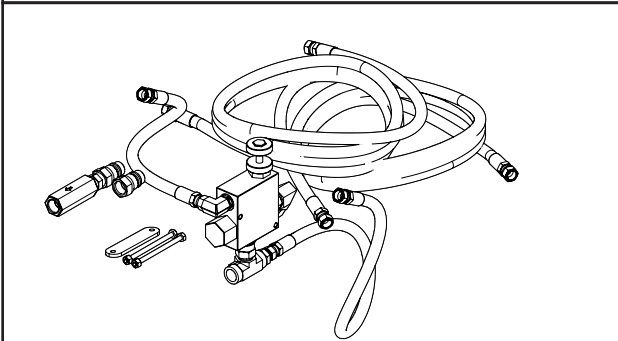
#L640 PINTLE HITCH

For **LT60 trailer only**.
Pintle hitch accessory to match up to your existing pintle hook.



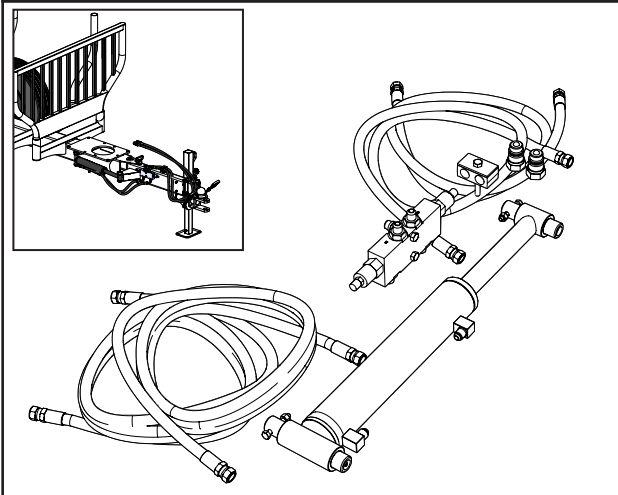
#L601 LX115 POWER PACK #L301 LX95 POWER PACK

Independently power your LX grapple: **L601 for LX115** features a Honda 9 HP engine, and the **L301 for LX95** contains a 6 HP Honda. Both power packs include hydraulic pump and 4.6 US gal (17.5 L) reservoir tank.



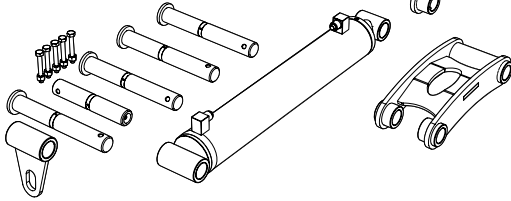
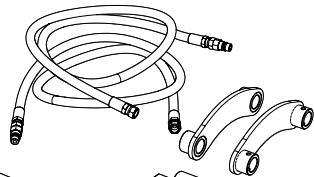
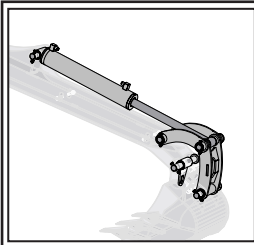
#L101 TRACTOR HYDRAULIC KIT

For **all LX models**
Makes use of your existing tractor remote hydraulic ports. Comes with everything you need to attach and control your hydraulics. Includes: flow control, hoses, and hardware. (L101 included in L400 3 point hitch grapple version.)



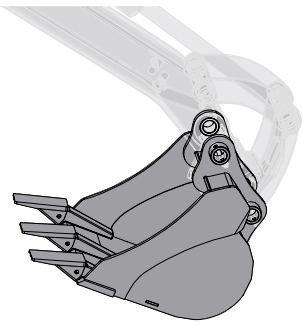
#L650 HYDRAULIC ARTICULATED DRAWBAR (tractor remote required)

For **LT60 trailer only**.
Tight bush trail corner navigation made easy with this handy hydraulic articulating drawbar. Available for off road use only. It is controlled by your tractor's remote.



#BA201 BACK HOE ACCESSORY

For all **LX models**. (Bucket not included)
Trenching made easier with this great accessories, includes: hydraulic cylinder, hoses, bucket linkage, pins & hardware.

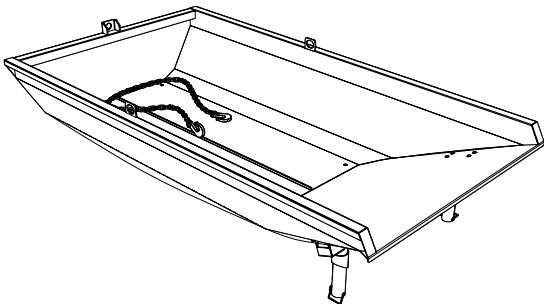


#BACK HOE BUCKET OPTIONS

for #BA201 Back Hoe Kit:

Choose the bucket you need for the job at hand.

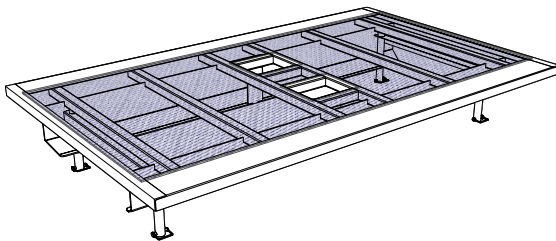
- BK2690** – 9" 3-Tooth Bucket
- BK2612** – 12" 3-Tooth Bucket
- BK2615** – 15" 4-Tooth Bucket
- BK2618** – 18" 4-Tooth Bucket



#L310 LT30 DUMP BOX #L620 LT60 DUMP BOX

One for each **LT trailer**.

Load, transport and easily dump your loads. Made for use with the back hoe kit. For **LT30 trailer the L310** holds 25 ft³ (0.7 m³). For the **LT60 trailer the L620** holds 45 ft³ (1.3 m³). Both dump boxes come complete with a 6 ft (1.8 m) chain used for dumping.



#L330 LT30 EXPANDED METAL FLAT BED #L630 LT60 EXPANDED METAL FLAT BED

One for each **LT trailer**.

Transporting material and equipment made easy. Simply drop on this flat bed and your set to go!

LT30 trailer L330 cargo bed is 9.0' x 5.0' (274 cm x 152 cm).

LT60 trailer the L620 cargo bed is 10'-6" x 5'-8" (321 cm x 179 cm).

