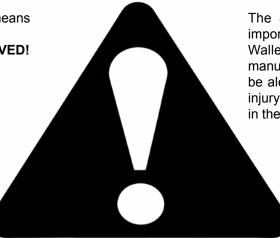


SAFETY ALERT SYMBOL

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.



Warning Underground Utility 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.



Warning Stability Hazard

The tractor must have a front bucket loader installed before installing the subframe and grapple. The front loader is required to offset the weight of the grapple, as well as provide the stability required to operate the grapple safely.

Grapple Compatibility Chart for 3 Point Hitch Adapter Kit L400

MODEL	3 Point Hitch Adapter Kit
	6085A200
Wallenstein	L400
LX95, LX95W	х
LX115, LX115W	х

Accessory Installation Instructions L400 3-POINT HITCH ADAPTER KIT



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 edges of the kit.

The L400 category II three point hitch adaptor is designed to fit either the LX95 or LX115 Log Grapple. The L400 / LX95 combination requires a minimum 40 HP, and the LX115 combination requires a 60 HP Tractor. A front end loader is also required to help counter balance the grapple as well as provide added stability.

LX95 & LX95W - Recommended HP: 40 HP, Maximum Reach: 9' 5", Includes L101 Hydraulic Tractor Kit

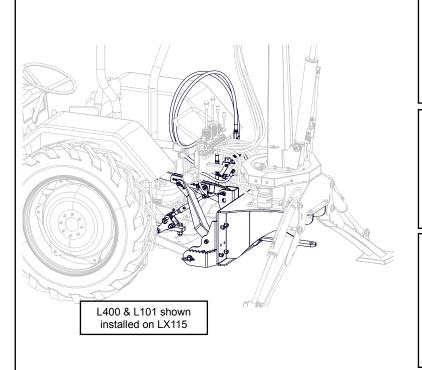
LX115 & LX115W - Recommended HP: 60 HP, Maximum Reach: 11' 6", Includes L101 Hydraulic Tractor Kit

To accommodate the wide variety of 3 point hitch configurations available, the **L400 3 Point Hitch Adapter** features dual height lower link arm brackets as well as fully adjustable top link tie back bars and 4 position tie back bracket. Keeping in mind that the grapple should have at least 33cm (13") clearance from the ground, inspect your particular 3 point hitch and determine which mounting holes to use before starting installation.

An **L101 Tractor Hydraulic Kit** is also included. Installation Instructions for the L101 kit are included with this manual. See the chart on page 3 to ensure you have the correct kit for your model grapple. Please read this manual thoroughly.

Illustrations show typical assembly. The L400/LX grapple requires some initial one time only assembly. Final assembly depends on the 3 point hitch configuration of your tractor. Normal 3 point hook up procedure can be used once your 3 point hitch is set up.

Be sure to read through these instructions before attempting assembly, illustrations show typical assembly. Tighten all hardware using the "Bolt Torque" chart at the back of this manual unless otherwise specified.



WARNING Stability Hazard

For maximum stability the tractor wheels must be resting on the ground during operation, using the backhoe with wheels raised up is dangerous and could result in damage to the machine.

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.

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 tractor and the area around it is clean and free of debris, resting on dry level ground, brake applied and the engine shut off.

Uncrate the L400 3-point hitch and LX Grapple. Leave them on shipping skid. Refer to 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.

WARNING **Operation Hazard**

Keep all bystanders out of the work zone, at least 20 ft (6 m) away from the work area.

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.

3 Point Hitch Adapter Kit Components

Kit includes:

- mount
- mount linkage
- pins, fasteners and hardware .

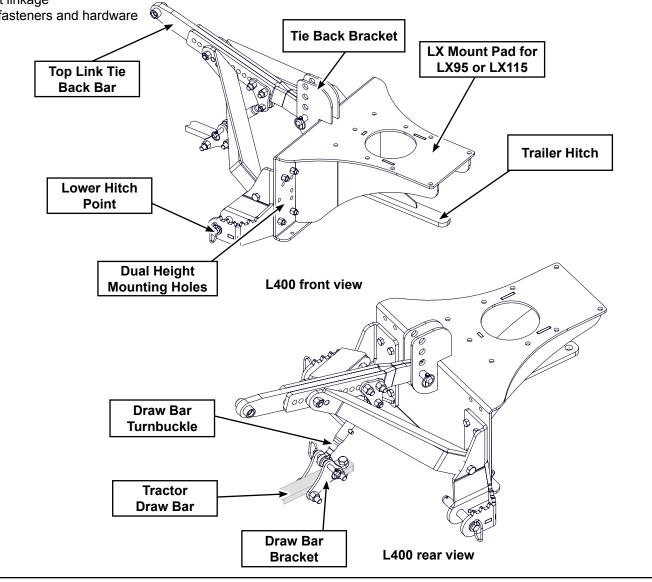


Be aware of potential pinch points when installing 3 point hitch adapter.



CAUTION Operation Hazard

Always use caution when working around running machinery, ensure the brake is applied and the engine is shut off.



Assembly

Ensure the tractor and the area around it is clean and free of debris, resting on dry level ground, tractor brake applied and the engine shut off.

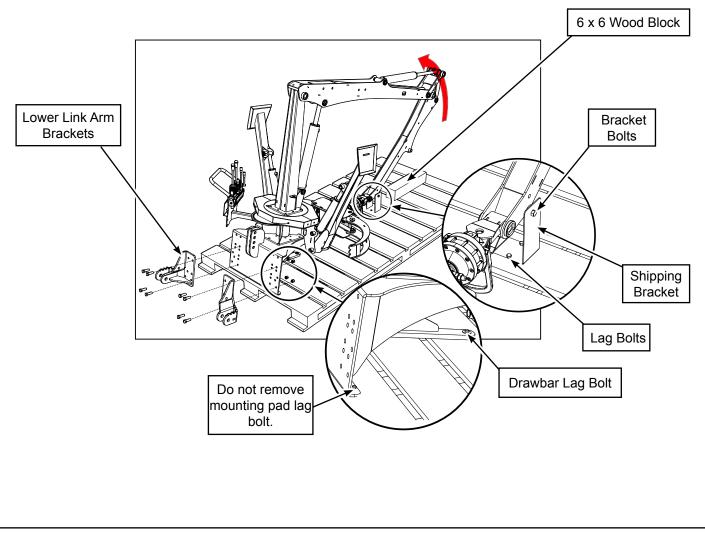
LX95 Grapple weighs 800 lb (363 kg), LX115 weighs 1200 lb (544 kg). Use and appropriate lifting device to prevent injury.

Prepare for Installation:

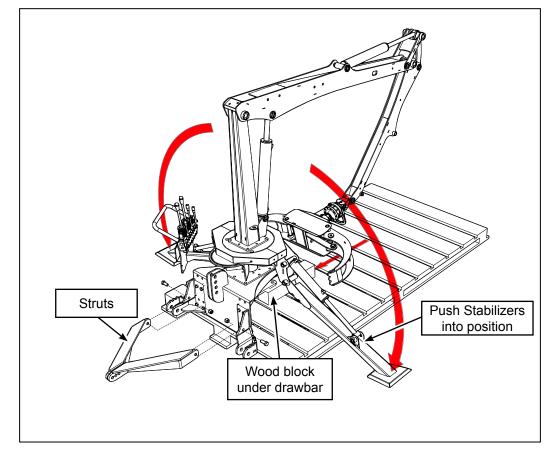
- 1. The tractor must have a front bucket loader installed before installing the L400 3 Point Hitch Adapter Kit.
- 2. You will need 2 people for the installation.
- 3. Move the tractor to a level, open area.
- 4. To avoid tripping hazards, ensure there is no debris or objects in the area.

Install the Kit

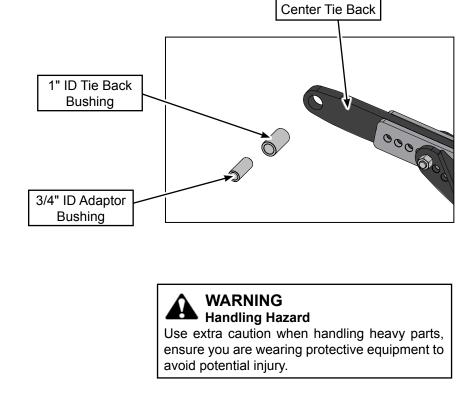
- 1. With the L400/LX Grapple fully assembled, uncrated and still on the shipping skid
 - Remove the shipping bolt from the dipper boom shipping bracket.
 - Remove the lag bolts from the shipping bracket and remove the shipping bracket.
 - Remove the lag bolt from the drawbar.
 - Do not remove the lag bolts from the mounting pad.
- 2. Assemble the 2 lower link arm brackets to the mounting pad (4 bolts each side) and tighten.
- 3. With a helper push up on the dipper arm and lift the grapple high enough to put the 6 x 6 wood block under the draw bar attached to the mounting pad.



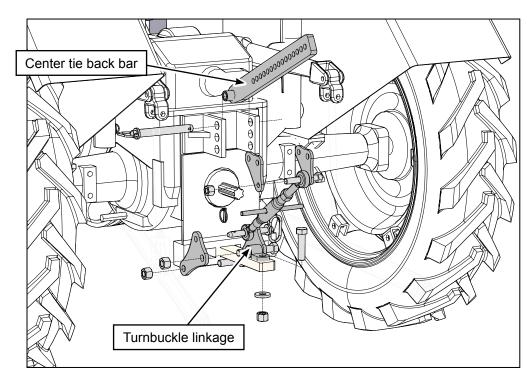
- 4. Once the block is in place, push the stabilizer control forward to release the stabilizer arms, and manually push them down as far as they will go.
- 5. Next loosely bolt on the left and right struts.



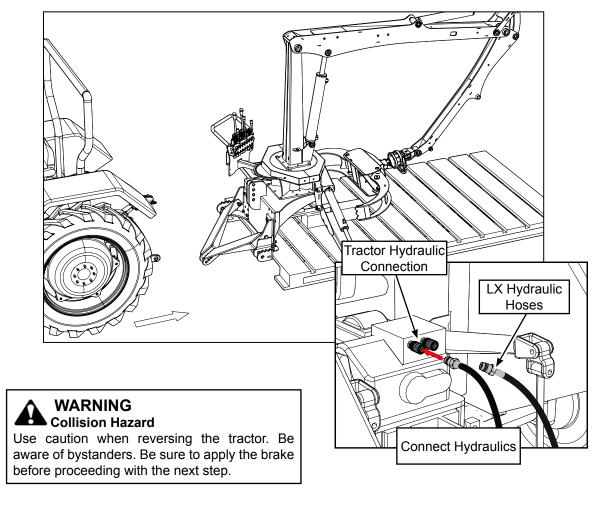
6. Find the center tie back (1" or 3/4" inside diameter) bushing and check that it fits on the tractor's top link. If the bushing is too wide, it will have to be cut to fit.



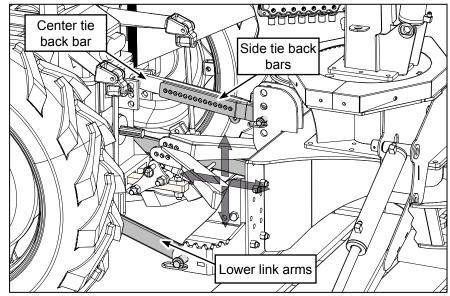
- 7. Using hitch pin, assemble the center tie back bar to the to the tractor.
- 8. Assemble the turnbuckle and brackets to the tractors drawbar, as shown in the diagram.



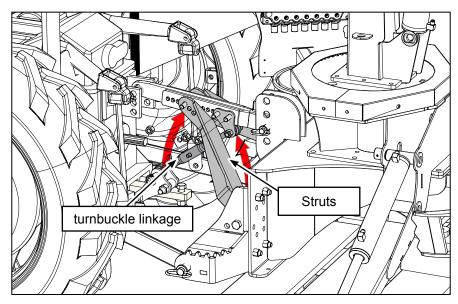
9. Start the tractor and carefully back up to the grapple and attach the tractor lower links to the left and right lower link arm brackets. Connect the grapple hydraulics to the tractor.



- 10. Once the lower links are attached, remove the remaining two lag bolts from the mounting pad.
- 11. Attach the side link arms to the mounting pad tie back bracket.
- 12. Start the tractor and raise the lower link arms so the bottom of the grapple is approximately 13" (33 cm) from the ground. Use the grapple boom and stabilizers to move the mounting pad and align the center and side tie back bars. Ensure the grapple is straight and level.



- 13. Ensure the grapple is at the correct clearance, straight and level and the tie back bars are aligned. Loosely bolt the tie backs together using the left and right struts.
- 14. Attach the turnbuckle linkage to the tie back bars as shown in the drawing.



- 15. Check once more that your grapple is straight and level, adjust if required and snug up the turnbuckle.
- 16. Tighten all the bolts to finalize the assembly.
- 17. Check grapple functions:
 - Start the tractor.
 - Lower the stabilizers.
 - Check all functions of the grapple.
 - Double check all fasteners and three point hitch is solidly attached and secure.

TRANSPORTING

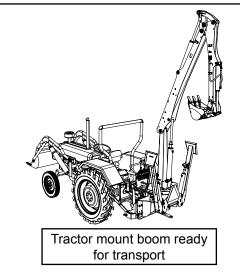
TRANSPORT SAFETY

- Comply with state and local laws governing safety and transporting of machinery on public roads.
- Check that all the lights, reflectors and other lighting requirements are installed and in good working condition.
- Do not exceed a safe travel speed. Slow down for rough terrain and cornering.
- Place the boom and bucket in safe position before moving or transporting.
- Be sure the trailer is hitched positively to the tractor and a retainer is used through the drawbar. Always attach a safety chain between the hitch and the tractor.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc. Watch for traffic when operating near or crossing roadways.
- Never allow riders on the machine.
- Review the transport safety section of the LX / LT owners manual.

Do not drink and drive.

When transporting the machine, review and follow these instructions:

- 1. Be sure the three point hitch connections are secure, and pins are installed in all retainers.
- 2. Raise the main boom to its highest position and curl the in dipper arm and bucket. The main boom features a counter balance valve to prevent the boom from dropping due to cylinder drift.
- 3. Install the boom swing pin and secure with its retainer.
- 4. Be aware of overhead utilities and obstructions in your travel path.
- 5. When transporting by highway, check that a Slow Moving Vehicle (SMV) sign is attached,



Storage

OPERATING SAFETY

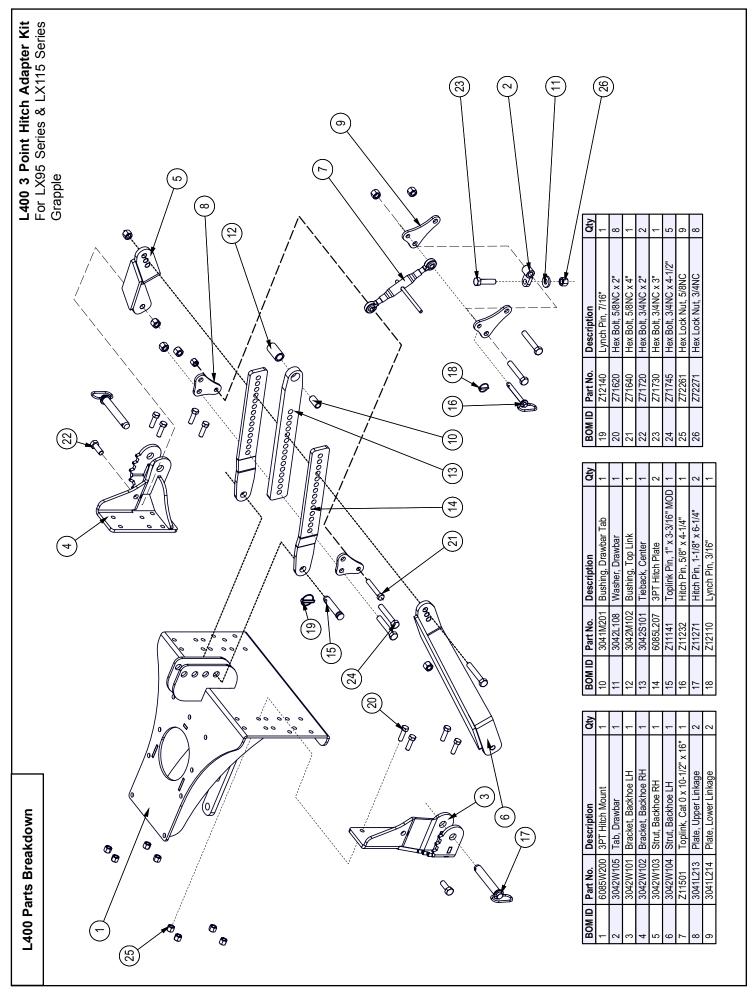
- Store the unit in an area away from human activity.
- Do not permit children to play on or around the stored machine.
- Store the unit in a dry, level area.

Placing in Storage

Follow this procedure for Timber Talon LX grapple / L400 3 point hitch combination before storing:

- 1. Thoroughly wash the machine with a pressure washer or water hose to remove all dirt, mud or debris.
- Lubricate all grease fittings. Make sure all grease cavities have been filled with grease to remove any water residue from washing.
- 3. Touch up all paint nicks and scratches to prevent rusting.
- 4. Swing the boom straight out behind and install the boom lock pin.
- 5. Move to storage area.

- Replace any missing or unreadable safety decals.
- Allow machine to cool before covering or storing in an enclosure.
- 6. Place blocks or planks under the stabilizers and grapple, lower the 3-point hitch.
- 7. Lower the grapple boom and stabilizers
- 8. Stow hydraulic hoses in storage brackets to keep them off the ground.
- 9. Unhook from tractor.
- 10. If the machine cannot be placed inside, cover with a waterproof tarpaulin and tie securely in place.
- 11. Store the machine in an area away from human activity.
- 12. Do not allow children to play on or around the machine.



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.

	ENGLISH TORQUE SPECIFICATIONS						
	Bolt	Bolt Torque*					
	Diamter "A"		E 2 (Ib-ft)		E 5 (lb-ft)		E 8 (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
			J. SA	E-2	SAE-5	SAE-8	}
_							
	METRIC TORQUE SPECIFICATIONS						
	Bolt	Bolt Torque*					
	Diamata	~					

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.

METRIC TORQUE SPECIFICATIONS					
Bolt	Bolt Torque*				
Diameter	8	.8	10.9		
"A"	(N.m)	(lb-ft)	(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)	
(in.)	(in.)	(N.m)	(lb-ft)	(Flats)	(Turn)
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

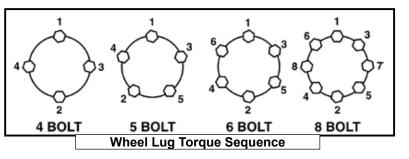
It is extremely important safety procedure to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches are the best method to assure the proper amount of torque is being applied to a fastener.

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.

- 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.

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	



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.

#LA610 6" DIAMETER AUGER KIT #LA910 9" DIAMETER AUGER KIT For all LX models. A great way to get your fence post jobs done quickly and efficiently. Both augers are capable of a 42" (107 cm) hole depth.
#BA201 BACK HOE ACCESSORY For all LX models. (Bucket not included) Trenching made easier with this great accesso- ries, 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