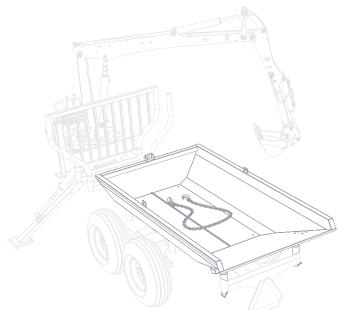


EMB Manufacturing Inc. 4144 Boomer Line · St. Clements, Ontario · N0B 2M0 · Canada www.wallensteinequipment.com





## L310 & L620

**DUMP BOX** 

**Accessory Installation Instructions** 

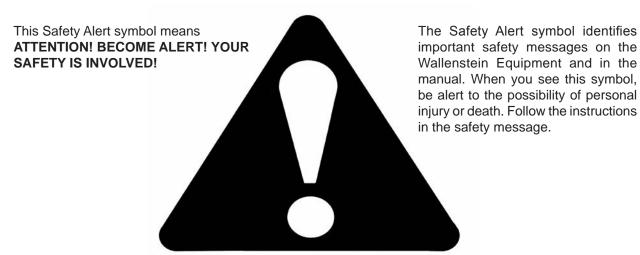
See inside cover for grapple compatibility chart



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



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, NOB 2M0. Phone (519) 699-9283 or Fax (519) 699-4146.



### Warning Operation Hazard

Review your Grapple & Log Trailer Manual for safe operating and handling procedures before beginning work.



### 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.

### Grapple Compatibility Chart for Dump Box L310 & L620

MODEL	25 cu. ft.	45 cu. ft.
	6089A300	6089A320
Wallenstein	L310	L620
LX95 Series - LT30H & LT30HA, LT30 & LT30A	Х	
LX115 Series - LT60 & LT60H		Х

# Accessory Installation Instructions L310 & L620 DUMP BOX

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.

The Wallenstein Timber Talon Dump Box, the perfect match to the BA201 Backhoe Kit, allows you to load up, transport and easily dump your loads. For **LT30 trailer the L310** holds 0.7 cubic meters (25 cu.ft). For the **LT60 trailer the L620** holds 1.3 cubic meters (45 cu.ft), both dump boxes come complete with a 1.8 meter (6 foot) chain used for dumping.

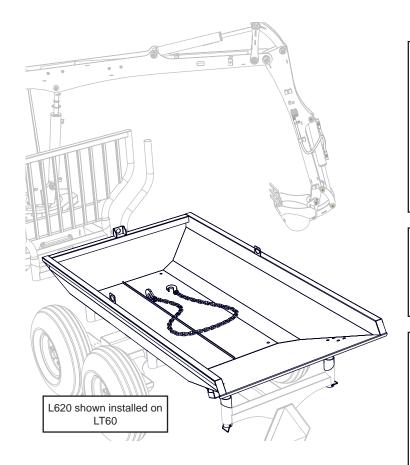
Note: Installation and operation for both L310 & L620 are similar.

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

This manual features the LX115 Log Grapple with a LT60 Trailer and a L620 Dump Box installed. Please read this manual thoroughly.

The dump box must be installed using the LX boom, and the bunk posts will need to be removed from the trailer. Plan a space to keep your bunk posts while using the dump box and have a container handy to store parts that have been removed Note: Installation and operation for both LX95 Series & LX115 Series are similar.

Illustrations show typical assembly. This assembly procedure is one time only. 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.



## 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.



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 **Dump Box** and tools close by on a work surface.

Unpack the Dump Box. 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.



### 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.

## CAUTION Operation Hazard

Be aware of potential pinch points when installing dump box.

### **Dump Box Components**

Kit includes:

- Dump Box
- A 6 ft (1.8 m) chain
- · Fasteners and hardware

### **ASSEMBLY**

Basic tools needed:

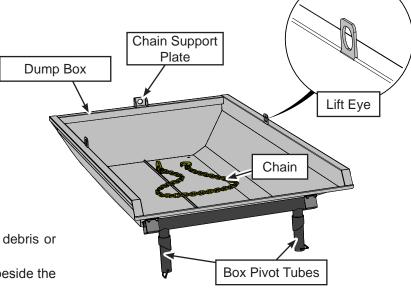
standard set of wrenches or sockets

#### Prepare for Installation:

- 1. Two people are required for the installation.
- 2. Move the trailer to an level, open area.
- 3. To avoid tripping hazards, ensure there is no debris or objects in the area.
- 4. Remove all the bunk posts, have the flat bed beside the trailer.
- Ensure the trailer is clean and clear of debris.

### **Install the Dump Box**

- 1. Start up the LX boom and lower the bucket over the dump box to waist level.
- 2. Slide the 1.8 meter chain through the chain hook located at the main pivot of the bucket.
- 3. Attach the chain to the lift eye tabs on each side of the dump box.
- 4. With one person at the boom controls, take the slack out of the chain and begin to lift the dump box.
- 5. Slowly and carefully continue to lift, ensure the dump box is level from side to side, adjust the chain if necessary.
- 6. The second person must steady and keep the box level from front to back.
- Slowly and carefully move the dump box into position over the trailer.



- 8. Line up the box pivot tubes with the end bunk post sockets
- 9. Slowly and carefully lower the dump box so the pivot tubes insert into the bunk post sockets.
- 10. Use the snap lock pins to secure the pivot tubes in place.
- 11. Lower the boom and disconnect the chain.

### **OPERATION**

The L310 & L620 Dump Box for the LX boom is the perfect match to BA201 Backhoe Kit with the LX boom.

Before beginning work be sure to review the work area and ensure the operator is fully trained in the use and capacity of the dump box, how to load and dump. Practice will be required to achieve the best results.



To prevent serious injury or death from high pressure fluid:

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



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.



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



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



LT 30 5000 lb (2267 kg) LT 60 10,000 lb (4536 kg)

Do not overload, damage may occur.



Be aware of potential pinch points when installing dump box.



Ensure pivot tubes snap lock pins are in place to secure the dump box to the trailer.

#### 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.

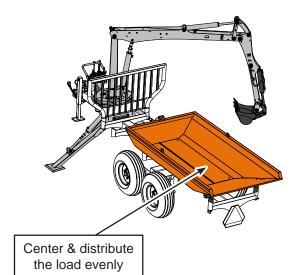
### **OPERATING SAFETY**

- Please remember it is important that you read the operator's manual and heed the safety signs on the Timber Talon. They are there for your safety, as well as the safety of others. The safe use of this machine is strictly up to you, the operator.
- Before moving, making, adjustments or servicing, put the machine in safe condition:
  - Install boom pin lock
  - Shut off the engine
  - Turn fuel valve off
  - Ensure boom is in safe position
  - Secure the tow vehicle / trailer from movement
- Review section on Boom Safety in the operators manual and set up the operator safe zone and work zone.
- Review Operating Safety section of this manual before using the dump box.
- Be aware of potential pinch points when installing and using the dump box. Keep clear and keep bystanders clear during installation and use.
- Do not over load the dump box, too much weight could cause the box to collapse or trailer to tip.

- Be aware and keep clear of overhead utilities and obstructions.
- Stay 50 ft (15 m) away from power lines. Electrocution can occur without direct contact.
- Do not walk or work under a raised machine or attachment. It is potentially hazardous to depend on the hydraulic system to hold the machine or attachment in place.
- Never use alcoholic beverages or drugs which can hinder alertness or coordination while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.
- Keep the working area clean and free of debris to prevent tripping. Operate only on level ground.
- When operating this equipment it is recommended to have at least two operators present and trained in safe operation of the machine. All operators must be completely familiar with all components of the machine and their function.
- Review safety instructions before each use or at least annually.

### Loading

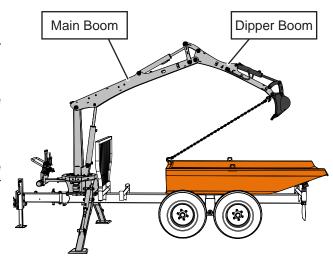
- 1. Load the dump box as required.
- 2. Distribute the load evenly from side to side, avoid overloading one side.
- 3. Distribute the load evenly from front to back.
- 4. Partial loads placed to the rear will make dumping easier.



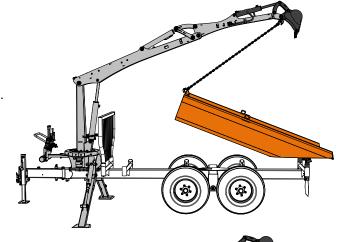
### **Dumping**

Please follow the procedure below to unload the dump box. Failure to follow the procedure could cause damage to the dump box or chain. Take time to practice dumping before proceeding.

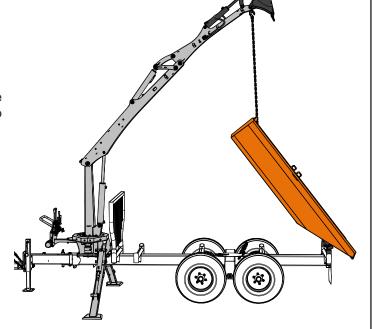
- 1. Swivel the main tower so that it is centered on the trailer / dump box.
- 2. Raise the main boom up past horizontal.
- 3. Move the dipper boom so that you can easily attach the chain:
  - Hook one end of the chain to the chain hook on the bucket.
  - Hook the other end to the chain support plate on the end of the dump box. Partial loads placed to the rear will make dumping easier.
- 4. Carefully move the dipper boom out till the chain is taught.

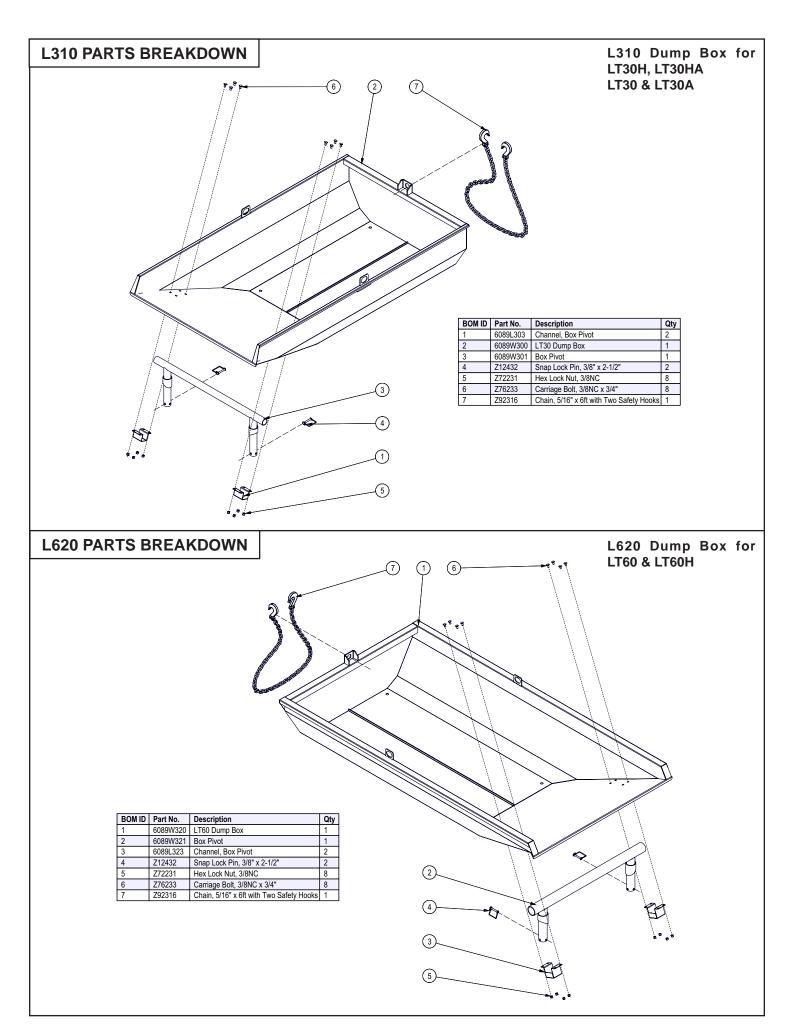


5. Continue to move the dipper boom out as far as it will go.



- 6. Raise the main boom approximately another 20°, until the load dumps. (Do not raise the boom too far or the dump box will be damaged.)
- 7. Reverse the procedure when lowering the dump box.



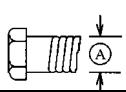


### **Bolt Torque**

### **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"	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





SAE-2



SAE-5

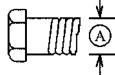


SAE-8

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	Diameter 8.8 (N.m) (lb-ft)		10	).9
"A"			(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

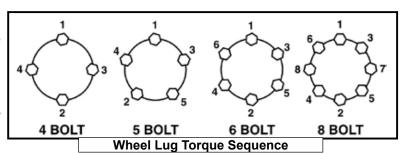
It is extremely important safety procedure to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches are the best method to assure the proper amount of torque is being applied to a fastener.

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.
- The tightening of the fasteners should be done in stages. Following the recommended sequence, tighten fasteners per wheel torque requirements chart.

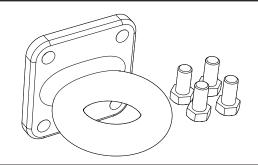
Wheel Torque Requirements				
Wheel Size	1st Stage	2nd Stage	3rd Stage	
8"	12 - 20	30 - 35	45 - 55	
12"	20 - 25	35 - 40	50 - 60	
13"	20 - 25	35 - 40	50 - 60	
14"	20 - 25	50 - 60	90 - 120	
15"	20 - 25	50 - 60	90 - 120	
16"	20 - 25	50 - 60	90 - 120	



### **ACCESSORIES**

Call your dealer for pricing and availability

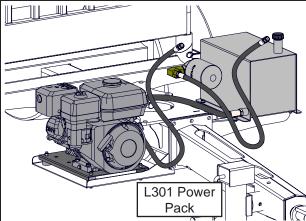
For replacement parts, go to **www.wallensteinequipment.com** and click on "Parts and Manuals" to download the latest parts manual for your model, then call your dealer to order.



### **#L640 PINTLE HITCH**

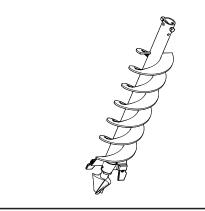
### For LT60 trailer only.

Pintle hitch accessory to match up to your existing pintle hook.



### #L601 LX115 POWER PACK #L301 LX95 POWER PACK

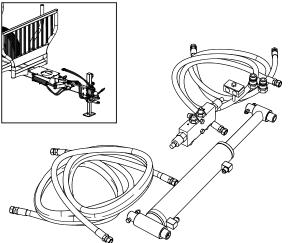
Independently power your LX grapple: **L601 for LX115** features a Honda 9 HP engine, and the **L301 for LX95** contains a 6 HP Honda. Both power packs include hydraulic pump and 4.6 US gal (17.5 L) reservoir tank.



### **#LA610 6" DIAMETER AUGER KIT #LA910 9" DIAMETER AUGER KIT**

### For all LX models.

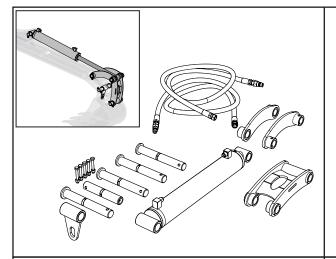
A great way to get your fence post jobs done quickly and efficiently. Both augers are capable of a 42" (107 cm) hole depth.



### #L650 HYDRAULIC ARTICULATED DRAWBAR (Tractor remote hydraulics required)

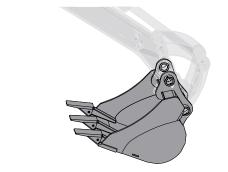
#### For LT60 trailer only.

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 hydraulics.



### **#BA201 BACKHOE ACCESSORY**

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



### **#BACKHOE BUCKET OPTIONS**

for #BA201 Backhoe Kit:

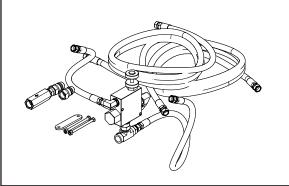
Choose the bucket you need for the job at hand.

**BK2690** – 9" 3-Tooth Bucket

BK2612 - 12" 3-Tooth Bucket

BK2615 - 15" 4-Tooth Bucket

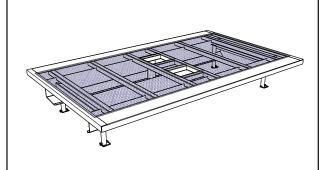
BK2618 - 18" 4-Tooth Bucket



### **#L101 TRACTOR HYDRAULIC KIT**

### For all LX models

Uses the existing tractor remote hydraulic connections. 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.)



### **#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** has a 9 ft x 5 ft (274 cm x 152 cm) cargo bed.

**LT60** trailer the L620 has a  $10.5\,\mathrm{ft}\,\mathrm{x}\,5.9\,\mathrm{ft}\,(321\,\mathrm{cm}\,\mathrm{x}\,179\,\mathrm{cm})$  cargo bed.

