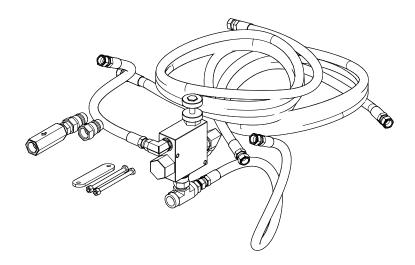


EMB Manufacturing Inc.
4144 Boomer Line · St. Clements, Ontario · N0B 2M0 · Canada
www.wallensteinequipment.com





LA101

TRACTOR HYDRAULIC KIT Accessory Installation Instructions

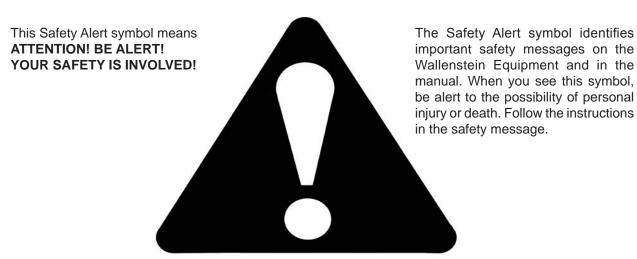
See inside cover for grapple compatibility chart



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



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.

Grapple Compatibility Chart for Tractor Hydraulic Kit LA101

MODEL	Tractor Hydraulic Kit		
	6083A010		
Wallenstein	L101		
LX95 Series	Х		
LX115 Series	Х		

Accessory Installation Instructions L101 TRACTOR HYDRAULIC 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.

The Wallenstein Timber Talon Log Grapple Trailer can be powered by a power pack or existing tractor remotes after adding the L101 **Tractor Hydraulic Kit**. The kit comes with everything needed to attach and control LX boom hydraulics. (L101 included in L400 3 point hitch grapple version)

To outfit the LX boom with the hydraulic kit, the kit needs to be mounted by the grapple console arm. Installation is completed when the hoses are connected to the main control valve.

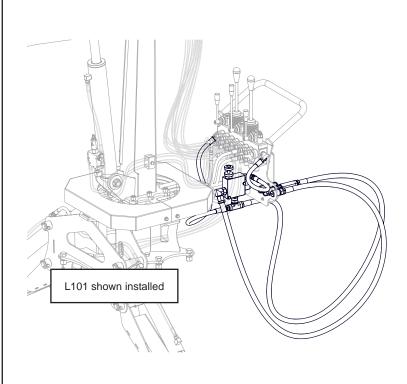
The purpose of the **Tractor Hydraulic kit** is to lower the hydraulic flow to the recommended 1-2 gallons per minute. Once you have made the initial adjustment, no further adjustments need to be made.

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 L101 kit installed. Please read this manual thoroughly.

To outfit the LX boom with the **Tractor Hydraulic kit**, hydraulic lines will need 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 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.



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 **Tractor Hydraulic kit** and tools close by on a work surface.

Unpack the tractor hydraulic 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:

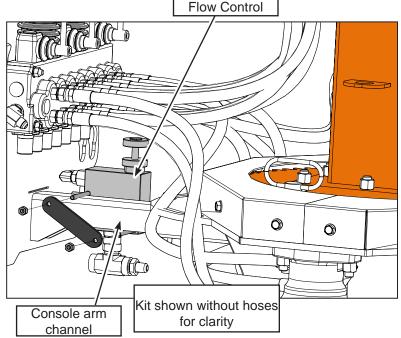
· standard set of wrenches or sockets

Prepare for Installation:

- 1. Lower boom, shut off power supply and remove key.
- Move control levers back and fourth to equalize the pressure in the hydraulic lines.

Install the kit

- The flow control mounts on the console arm channel (behind and under the valves). Position the flow control as shown in the illustration and install two 1/4 x 4.0 hex bolts, bracket, and 1/4 nuts.
- 2. If a winch is installed, see note on hydraulic schematic on Pg. 6. Hose connection is switched at the return port of the winch hydraulic control.

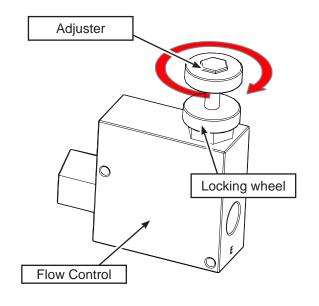


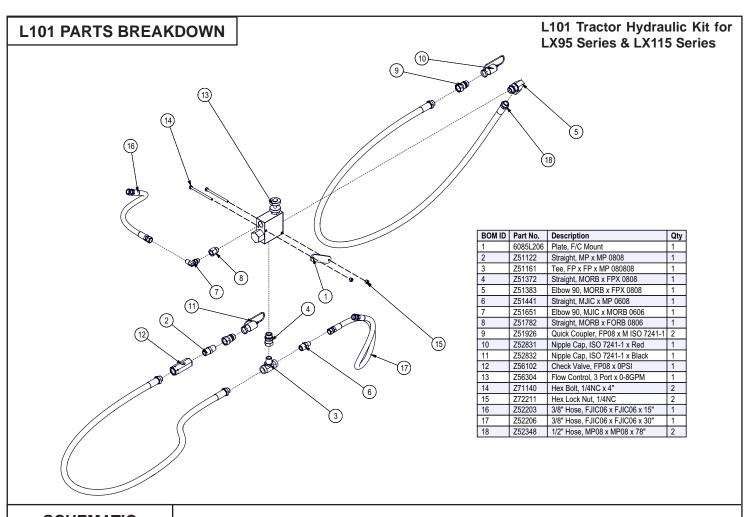
OPERATION

Most tractor remotes have a flow too high for the LX / LT hydraulics to operate properly, resulting in damaged seals and erratic operation. The Wallenstein L101 hydraulic kit provides the ability to lower the flow to the recommended 1-2 gallons per minute. Once you have made the initial adjustment, no further adjustments need to be made.

Adjustment

- 1. Start the tractor.
- 2. Set operating speed: typically 540 RPM.
- 3. Turn the locking wheel up to release the adjustor.
- 4. Turn the adjustor on the flow control clockwise down to the halfway point.
- 5. Operate the controls, boom, turret, and stabilizers:
 - If operation has sudden jerky movements, further adjustment clockwise is required.
 - If operation seems unusually slow, turn the adjuster counterclockwise.
 - If operation is smooth with no sudden jerky movements, and good speed, adjustment is complete.
- 6. Turn the locking wheel to the bottom of the tread and tighten.

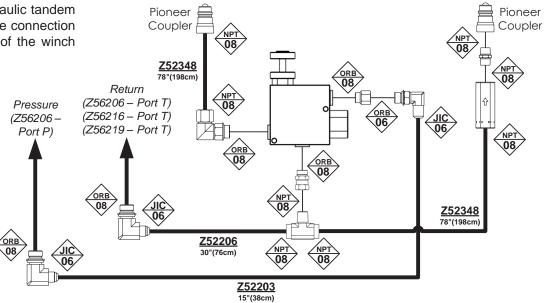




Pressure

SCHEMATIC

Note: For models with hydraulic winch: hose connection is made at the return port of the winch hydraulic control Z56216. **Note**: For models with hydraulic tandem axle & hydraulic winch: hose connection is made at the return port of the winch hydraulic control Z56219.



Return

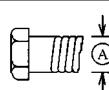
Note: This schematic for all LX95 Series & LX115 Series Log Grapple models

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-5

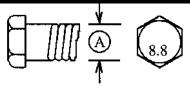


SAE-8

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	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

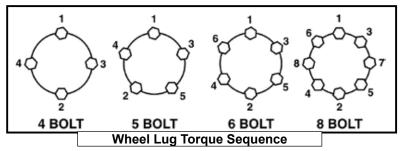
It is extremely important safety procedure to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches are the best method to assure the proper amount of torque is being applied to a fastener.

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

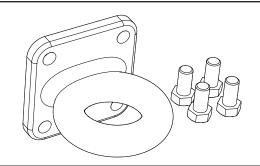
Wheel Torque Requirements				
Wheel Size	1st Stage	2nd Stage	3rd Stage	
8"	12 - 20	30 - 35	45 - 55	
12"	20 - 25	35 - 40	50 - 60	
13"	20 - 25	35 - 40	50 - 60	
14"	20 - 25	50 - 60	90 - 120	
15"	20 - 25	50 - 60	90 - 120	
16"	20 - 25	50 - 60	90 - 120	



ACCESSORIES

Call your dealer for pricing and availability

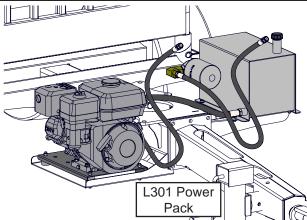
For replacement parts, go to www.wallensteinequipment.com and click on "Parts and Manuals" to download the latest parts manual for your model, then call your dealer to order.



#L640 PINTLE HITCH

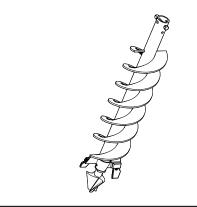
For LT60 trailer only.

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



#L601 LX115 POWER PACK #L301 LX95 POWER PACK

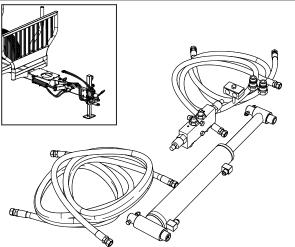
Independently power your LX grapple: L601 for LX115 features a Honda 9 HP engine, and the L301 for LX95 contains a 6 HP Honda. Both power packs include hydraulic pump and 4.6 US gal (17.5 L) reservoir tank.



#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.

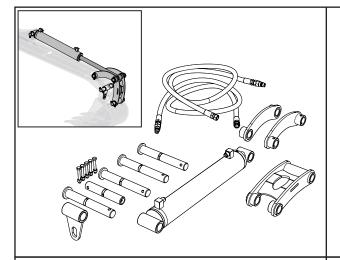


#L650 HYDRAULIC ARTICULATED DRAWBAR (tractor remote hydraulics

required)

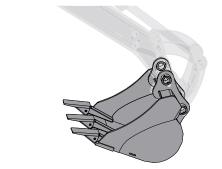
For LT60 trailer only.

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 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:

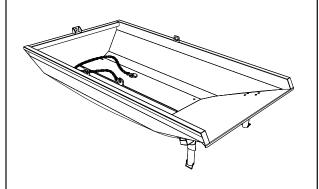
Choose the bucket you need for the job at hand.

BK2690 – 9" 3-Tooth Bucket

BK2612 - 12" 3-Tooth Bucket

BK2615 - 15" 4-Tooth Bucket

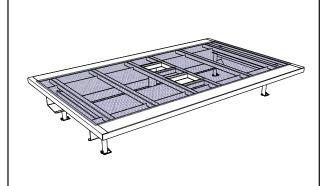
BK2618 - 18" 4-Tooth Bucket



#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** has a 9.0' x 5.0' (274 cm x 152 m) cargo bed. For the **LT60 trailer the L620** has a 10'-6" x 5'-8" (321 cm x 179 cm) cargo bed.