ELECTRO-HYDRAULIC Single Post LIFT

Installation/Operation & Maintenance Manual

MODEL: HSL1010

Please read through this manual before operation. You must read and understand the precautions for safety to protect your safety and any damage to your property.

Version: HR201807.1.0

NOTE TO THE USER

Thank you for purchasing our products.
Please read this instruction carefully for safe and proper use of the car lift, and keep it handy for future reference.

■ This Manual is for model : HSL1010
■ As for the assurance of safety in design and construction of car lift, read this Manual first.
■ Please make sure that this manual is delivered to end users for their implementation of safety.
■ Don't use the car lift in a potentially explosive atmosphere.

Mower Service Lift Assembly Procedure

NOTE: Concrete floor specifications: Level to within 2% with a minimum thickness of 100mm with a concrete pressure larger than 20mpa, Minimum slab size is 2.0 x 2.0 meters of a quality exceeding B25-DIN 1045.

1. Unpack all components from the wooden crate, remove parts from inside the post.

2. Stand post upright in desired location, ensure enough clearance, (Minimum 600mm) is allowed around lift when fully assembled. As per AS2550 .

3. Ensure post is standing level upright on all planes. Use steel shimming material under lift base if required.

4. Drill 16mm holes through concrete floor and drive 16mm Tru-Bolts supplied into place, the masonry anchors must have a minimum embedment in the concrete of 75mm. There must be a minimum of 300mm of concrete surrounding the base of the lift. Ensure the hydraulic lift cylinder spigot is located in the locating hole in the base of the column, and the lift chain is aligned correctly.

5. Install the two height safety lock solenoids into back of threaded holes on post back, from inside post place safety plates on their cross braces, position plate hinge and install socket head cap screws through back of post, adjust safety solenoid plunger nuts to the outer extremity of the centre plunger threads.

6. Install switch box assembly to the 4 threaded holes provided on back of post.

7. Attach the cables with female bullet connectors to male bullet connectors on each height safety lock solenoid.

8. Install lift carriage height adjuster micro switch to two threaded holes top inside column, connect cable with fork terminals through grommet in column, through 4 pipe retainers inside post and connect to N/C terminals in micro switch, take up any slack in this cable to prevent it becoming caught on the lift carriage edges.

9. Lift load carriage one meter off base to engage first height safety lock.

10. Offer white cross lifting beam to lift carriage and insert 2 clevis pins and install their cir clips.

11. Slide two black ramp ways into place, fit two travel stop plates to the top ends of the cross beam. Fit run up/ wheel stop ramps to the ramp way hinges with axle and split pins provided.

12. Level ramp way platforms with a 12mm allen head set screws, use a spirit level and read the bubble just past the centre line so that the ramps are slightly up at the drive on end, turn socket head cap screws fitted clock-wise to raise ramp end.

13. Lubricate and grease parts for ease of adjustment movements.

14. Use general purpose grease to lubricate carriage guide ways where nylon guides travel inside each corner of the post. (Very Important).

15. Bolt electric motor/hydraulic pump to four threaded holes under switch box and fit hydraulic hose banjo fittings to outlet on power pack and outlet on lift cylinder and tighten. Note: Power packs are supplied with either steel or plastic oil reservoirs…….

16. Fill oil reservoir with five litres of ISO#32 grade hydraulic oil.

17. A licensed electrician is required to install the 240 volt power source to the lifts' contactor, T1- positive, 2T - neutral and 7A earth. See wiring diagram inside switch box. (Note: All electrical wiring must be carried out by a licensed electrician)

11. Press up / raise button to operate motor/pump unit. Lift carriage should begin to raise within about 10 seconds of being activated.

12. Raise lift carriage all the way to the top and be careful to ensure the power cut-out micro switch is set and adjusted correctly to cut power off and stop lift from over-stroking the hydraulic cylinder piston.

13. To lower lift, first press up / raise button to lift load off height safety lock, then press Lock button to disengage safety locks, push release valve handle lever located on power pack inwards, the lift will begin to lower. Release lever to stop the lift at any desired work height, releasing the lock button will re engage the height safety locks.

14. Re check oil level and top up if necessary.

15. Lift is now ready for continuous use.

16. Keep lift clean and lubricate moving parts of safety mechanism regularly, keep lift chain clean and lubricated with chain oil, apply general purpose grease to lift carriage guide ways inside post corners when installing lift, and then occasionally as required. Change hydraulic pump oil every twelve months.

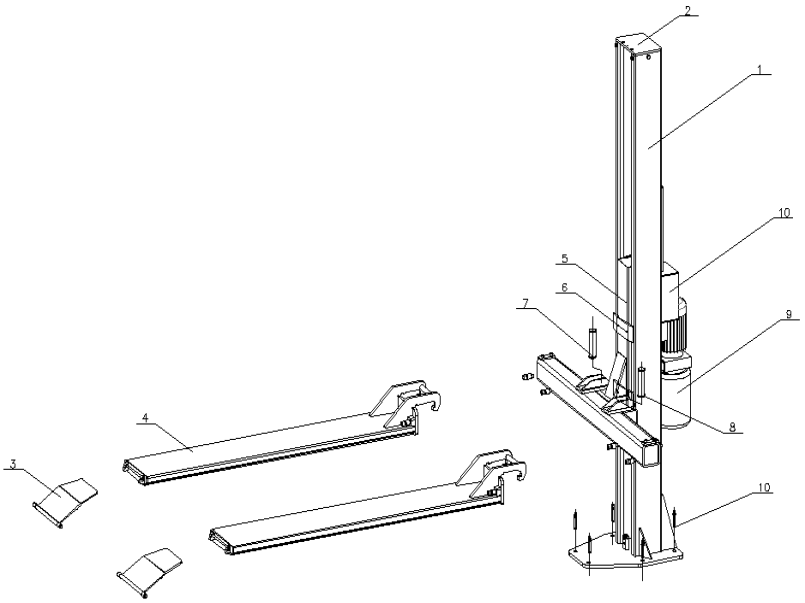
17. Refer to attached maintenance schedule. Phone Paul (02) 9604 9000 for assistance.

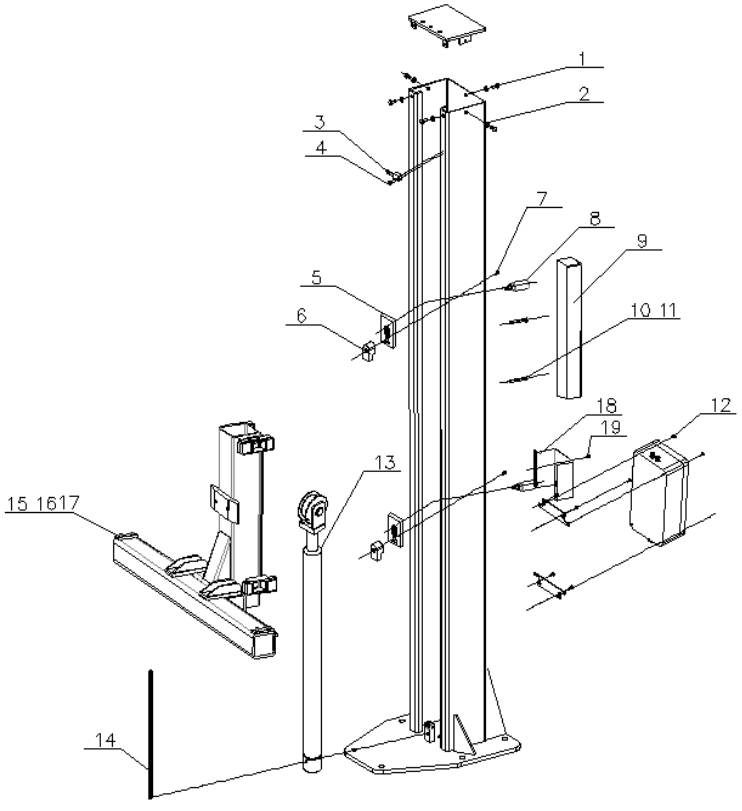
Before operating hoist:

No	Part to be inspected	Location of part	Condition to be observed
1	All electrical connection wiring	Electric switch, motor cut out micros, operating and isolating switch units	All wiring must be in perfect condition with no deterioration or looseness
2	Height safety lock mechanism	Two solenoids on post connected to safety plates inside post	Test safety locks are operational and they reset when lock button is released
3	Run way Ramps	Ensure runway ramps are secure, check for any stress cracking of welds or joints	Operational and secure. Use 12mm allen key to level ramps
4	Run up access ramps	At each end of run way ramp	Check through axle and split pins are in place, ensure unit folds down to form a wheel stop when raised
5	Carriage wear pads	Four per each per carriage, ensure these are lubricated with grease along their travel tracks	Use general purpose grease to lubricate wear pad tracks with a paint brush. Check and repeat regularly, keep tracks clean.
6	Lift cylinders	Inside post carriage	No oil leaks
7	Lift chain	Check all links are in good condition	Clean and use chain oil sparingly regularly
8	Hydraulic pipe system	From power pack to cylinders	No oil leaks
9	Hydraulic oil	In power pack reservoir	Correct fluid level
10	Floor anchor bolts (7)	Around column base plates	Correctly torqued, no corrosion

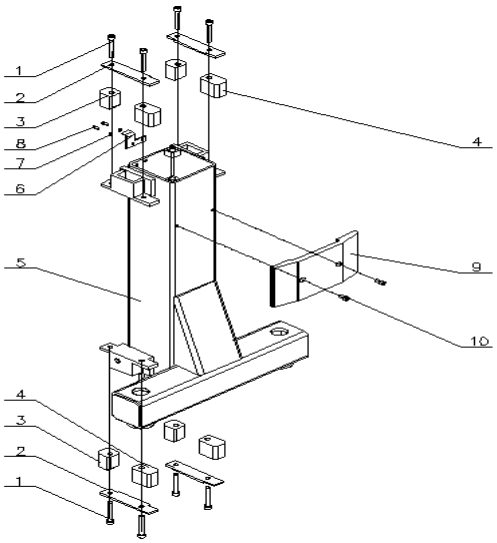
Six monthly and twelve monthly service is required following the above steps,
It is recommended the hydraulic oil be flushed and replaced with new oil – annually,
use only ISO grade #32 hydraulic oil –
use of other oils will damage the cylinder seals and pump seals.

In the event of any component not passing inspection before operating,
the part or fault must be rectified satisfactorily before operating the hoist.
For service assistance

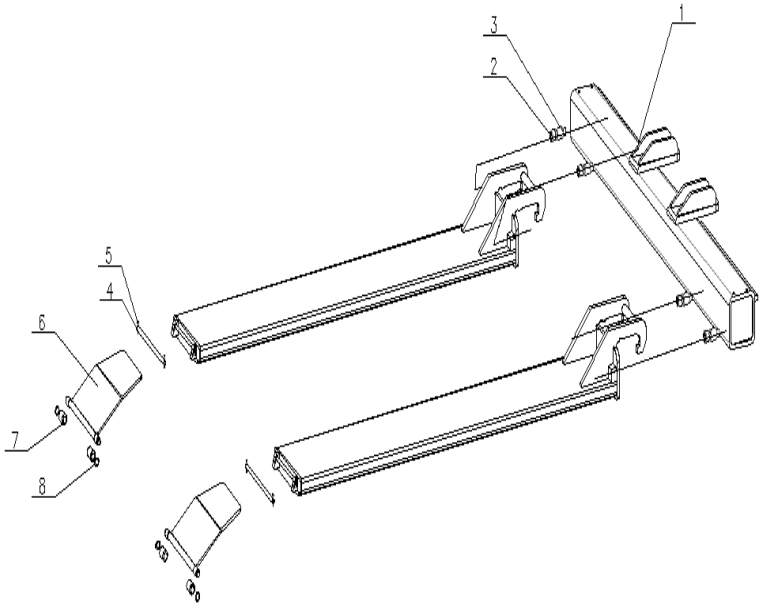
Pos.	Drawing No.	Identification	Drawing
1	QWJ108-100-00-A	column weldment	
2	QWJ108-010-00-A	top cover of column	
3	QWJ108-200-00-A	movable blocking plate	
4	QWJ108-300-00-A	platform	
5	QWJ108-500-00-A	carriage	
6	QWJ209B-000-09-A	door safety guard	
7	QWJ108-000-04-A	shaft	
8	GB/T 894.1	shield ring 40	
9		power unit	
10	QWJ108D-1000-00-A	control box	
11		expansion bolt 16*140	

Pos.	Drawing No.	Identification	Drawing
1	GB/T 5781	bolt M10*20	
2	GB/T 97.1	washer 10	
3	ME-8108	limit switch	
4	GB/T 818	screw M4*25	
5	QWJ209B-000-21-A	locking plate	
6	QWJ209B-000-22-A	self-locking screw	
7	GB/T 70.1	screw M4*25	
		screw M5x16	
8	24V	solenoids	

9	QWJ108-000-07-A	upper cover of main column
10	QWJ203D-000-03-A	bushing
11	GB/T 818	screw M6*60
12	GB/T 818	screw M5*12
13	QWJ203-900-00-A	sub cylinder(assembly)
14	QWJ209B-000-14-A	chain
15	QWJ108-000-06-A	block
16	GB/T 70.1	screw M10*30
17	GB/T 93	spring washer 10
18	QWJ203D-000-02-A	down cover of main column
19	GB/T 818	screw M6*12

Pos.	Drawing No.	Identification	Drawing
1	GB/T 70.1	screw M8*18	
2	QWJ209B-000-12-A	pressing board	
3	QWJ209B-000-13-A	back slider	
4	QWJ209B-000-11-A	front slider	
5	QWJ108-500-00-A	carriage(weldment)	
6	QWJ209B-000-19-A	limit switch board	
7	GB/T 70.1	screw M6*12	
8	GB/T 93	spring washer 6	
9	QWJ209B-000-09-A	door safety guard	

10	GB/T 70.1	screw M8*16

Pos.	Drawing No.	Identification	Drawing
1	QWJ108-400-00-A	crossbeam	
2	QWJ108-000-02-A	adjusting screw	
3	QWJ108-000-03-A	block	
4	QWJ108-000-01-A	long axle	
5	GB/T 91	pin 2.5*20	
6	QWJ108-200-00-A	movable blocking board	
7	QWJ108-000-05-A	wheel	
8	GB/T 894.1	shield ring 16	

Pos.	Drawing No.	Identification	Drawing
1		PG7 wire tightening unit	
2		PG21 wire tightening unit	
3		Electronic installation board	
4		Rail	
5		yellow-green terminal	
6		Grey terminal	
7		Braker site	
8		Breaker	

9		AC contactor
10		Fuse
11		Transformer
12		Cover for opeation box
13		Button
14		Main switch
15		6 digital connection terminal
16		PG7 wire tightening unit