

## Checklist for preventative maintenance and inspection of DH-LM

Client PO#

Client:	Plate: Mileage:
Address:	Model + S/N:
	Date:
City: ST: Zip:	Contact phone:

## When "not OK", liftgate must be serviced or repaired prior to further use!

Before getting started	Frequency	OK?	Corrected
Pressure wash	90 days		
Clean liftgate thoroughly to make it ready for inspection	1750 cycles		

Documentation check, safety markings and decals	Frequency	OK?	Corrected
Operation manual	90 days		
Present in vehicle cab; complete	1750 cycles		
Model ID decal, serial number decal, MAXIMUM RATED CAPACITY decal	90 days		
Present, legible, conspicuous, in good condition	1750 cycles		
Marking of CENTER POINT OF MAXIMUM LOAD on platform	90 days		
Present, legible, conspicuous, in good condition	1750 cycles		
Marking of SAFE OPERATOR POSITION on platform (if no foot controls)	90 days		
Present, in good condition, applied per installation manual	1750 cycles		
Safety and operation decals	90 days		
Present, complete, legible, in good condition	1750 cycles		

Controls and electrical wiring	Frequency	OK?	Corrected
Main external control box, cover, installation to vehicle body	90 days		
Condition and integrity, undamaged	1750 cycles		
Main battery disconnect switch in control box, dashboard switch in truck cabin	90 days		
Condition, operation	1750 cycles		
Switches and buttons, protective rubber covers	90 days		
Condition, operation, automatic return to neutral position	1750 cycles		
Wiring harnesses	90 days		
Condition, secured with clamps and/or cable ties, undamaged	1750 cycles		
Inside of main external control box, 15A fuse, plus spare, electrical switches	90 days		
Condition, dry, corrosion free, all wires secured	1750 cycles		
Mandatory 2-hand operation when using main external control box (if applicable), safety switch	90 days 1750 cycles		
Operation, not tampered with or altered in any way	1,00 0,00		
Safety switch (if applicable), connection of auxiliary controls	90 days		
Operation, correct switching between main external controls and auxiliary controls	1750 cycles		
Foot controls and their rubber buttons	90 days		
Condition, operation, routing, securement and condition of the wiring harness	1750 cycles		
Handheld remote control	90 days		
Condition, operation, condition of holder or magnetic catch, spiral cable and plug(s)	1750 cycles		

Electrical installation	Frequency	OK?	Corrected
Batteries and battery connections	Yearly		
Condition, maintenance of battery, charging system output is sufficient, connections are secure. Apply silicone dielectric grease to all exposed connections.			
Main fuse or circuit breaker in battery box	90 days		
Terminals tight, corrosion free, no signs of overheating, verify operation if manual trip present.	1750 cycles		
(+) Battery and cables, plugs, terminal connections, protective looms	90 days		
Condition, undamaged, secured with clamps and/or cable ties, inspect full length and connection at both ends of the cable	1750 cycles		
(-) Ground cables, plugs, terminal connections, protective looms	90 days		
Condition, undamaged, secured with clamps and/or cable ties, inspect full length and connection at both ends of the cable	1750 cycles		
Wiring harness between control box and pump unit	90 days		
Condition, secured with clamps and/or cable ties, undamaged	1750 cycles		
Cylinder lock valve harnesses	90 days		
Condition, secured with cable ties, undamaged	1750 cycles		
Harness(es) from platform to control box or pump unit (foot controls, platform lights, etc.)	90 days		
Condition, routing, secured with cable ties, undamaged	1750 cycles		
Harnesses for other auxiliary controls	90 days		
Condition, routing, secured with cable ties, undamaged	1750 cycles		
Connections at main external control box	Yearly		
Condition, all connections secured, dry and corrosion free			
Connections in pump unit, electric connection board	90 days		
Condition, all connections tight, dry and corrosion free	1750 cycles		
Limit switches, pressure switches, tilt sensors (optional)	90 days		
Condition, operation, automatic return to the neutral position; tilt sensor works correctly	1750 cycles		

Hydraulic pipes and connections	Frequency	OK?	Corrected
Hydraulic pipes, flexible and rigid  Condition, routing, no damage, leaks or chafing. Replace flexible pipes every 5 years.	90 days 1750 cycles		
Hydraulic fittings, O-ring seals	90 days		
Condition, no leaks	1750 cycles		
Hydraulic circuit general	90 days		
No visible oil leaks during operation and at rest	1750 cycles		

Hydraulic pump unit	Frequency	OK?	Corrected
Pump unit box + cover, outside + inside	90 days		
Condition, undamaged, sealed, dry and corrosion free.	1750 cycles		
Mounting of pump unit to lift frame or vehicle chassis	90 days		
Condition and integrity	1750 cycles		
Oil reservoir, oil filter	Yearly		
Check oil level, clean filter yearly, replace hydraulic oil every 3 years	-		
Bleed hydraulic circuits	As needed		
After replacing oil, or after opening hydraulic circuit for any reason			
Motor, starter solenoid, connection between both	90 days		
Condition inside pump unit, operation, all connections are tight, no signs of overheating	1750 cycles		
Hydraulic circuit general external appearance, valve block and solenoid valves	90 days		
No visible oil leaks during operation and at rest	1750 cycles		

Hydraulic cylinders	Frequency	OK?	Corrected
All hydraulic cylinders	90 days		
Condition, operation, fastening of pivot points and locking bolts	1750 cycles		
Piston rods, rubber protection boots	90 days		
Condition; rod surface free of paint, dirt, scratches and pitting	1750 cycles		
Cylinder lock valves	90 days		
Condition, undamaged, clearance from mounting plates, bumper, other fixed parts	1750 cycles		
Tilt cylinders	Yearly		
Correct adjustment of extension rods, fastening of lock nut of extension rod			
Hydraulic circuits of cylinders, valves and couplings	90 days		
No visible oil leaks in operation and at rest	1750 cycles		

Lift frame		Frequency	OK?	Corrected
Lift frame, lift arms		90 days		
Condition, undamaged (deformation, cracks in material	al or welds), no corrosion	1750 cycles		
Pivot points, pivot pins and bearings		90 days		
Condition, no damage or wear, fastening of locking pi	ns / bolts / nuts	1750 cycles		
Presence and condition of lubrication fittings				
Pivot points, pivot pins and bearings	(*) 90 days, 1750 cycles or after each	90 days		
Pump grease in all lube fittings	pressure wash, whichever comes first	1750 cycles W (*)		
Auto-tilt brackets between lift arms and lift frame (DH-LM	type)	90 days		
Condition, undamaged (deformation, cracks in material of	or welds), lubricated	1750 cycles		
Mounting plates to chassis		90 days		
Condition, undamaged (deformation, cracks in materi installation instructions, torqued to specifications (if bo	al or welds), sufficient bolts per olted).	1750 cycles		

Platform		Frequency	OK?	Corrected
Platform construction		90 days		
Condition, undamaged (deformation, cracks in materi	al or welds), no corrosion	1750 cycles		
Pivot points, pivot pins and bearings		90 days		
Condition, no damage or wear, fastening of locking pi	ns / bolts / nuts	1750 cycles		
Presence and functional condition of lubrication fitting	'S			
Pivot points, pivot pins and bearings	(*) 90 days, 1750 cycles or after each	90 days		
Pump grease in all lubrication fittings	pressure wash, whichever comes first	1750 cycles W (*)		
Platform at loading floor		Yearly		
Presence and functional condition of stop blocks for li platform flush with the loading floor	fting movement. Alignment of the			
Platform rollers		90 days		
Condition, undamaged. Replace when worn or damage	ged	1750 cycles		
Cart-stops (optional)		90 days		
Condition, operation, no debris underneath		1750 cycles		
Flashing platform lights, foot controls, other electric platfo		90 days		
Condition, operation of the device. Condition, routing or pump unit, undamaged	of the harness(es) to the control box	1750 cycles		
Platform flags (optional)		90 days		
Presence, condition, visibility		1750 cycles		
Mechanical platform lock (optional)		90 days		
Condition, operation, lubricate mechanism		1750 cycles		
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Practical tests	Frequency	OK?	Corrected
Functional test with empty platform	90 days		
Perform all movements minimum 3 times with all control units.	1750 cycles		
Liftgate should operate smoothly and quietly through its full range of motion.			
Check condition of pivot points (no excessive play).			
Verify correct auto-tilt function at ground level.			
Regular weight test at 100% of MAXIMUM RATED CAPACITY	Yearly		
Rest platform on ground.			
Position MAX. LOAD on CENTER POINT FOR MAX. LOAD.			
Lift platform. Check if lift capacity is sufficient. Check general operation and stability.			
Check safe working speeds:			
<ul> <li>Lift and lower: max. 6" / sec</li> </ul>			
<ul> <li>Open and close: min. 9 sec to open or close platform</li> </ul>			
Overload test, adjustment of pressure relief valve	Yearly		
Rest platform on ground.			
Position a load = 1.1 x MAXIMUM LOAD on the CENTER POINT OF MAXIMUM LOAD			
Press lift function. Platform should <u>not</u> lift off the ground. Pressure relief valve should open.			
If required, use procedure I-SERV-G-003 to adjust the pressure until platform will NOT lift 1.1 $\times$ MAXIMUM LOAD			
(Note: pressure should never exceed 220 bar / 3190 psi)			
Hydraulic circuit general	90 days		
No visible oil leaks during operation and at rest	1750 cycles		

Notes:	
Maintenance or inspection performed by:	Name of technician:
	Date of next maintenance / inspection (*):
Service Center	(*) erase what is not applicable



Make sure you follow the all instructions and safety precautions at all times. Refer to:

- $\Rightarrow \text{the OPERATION MANUAL}$
- ⇒ the GENERAL SAFETY INSTRUCTIONS FOR REPAIR AND MAINTENANCE (available via www.dhollandia.com or contact the local distributor)