KLETON

Instruction Manual – MP535

Important

Please read, understand and follow these safety rules and operating instructions before operating this machine.

Only trained and authorized personnel should be permitted to operate this lift table.

Assembly Instructions

- No assembly is required for this hydraulic post Lift.
- However, a special shipping and transport threaded plug (Part#2113A) is installed approximately in the middle of the cylinder of the main center hydraulic lifting cylinder. This prevents hydraulic oil from leaking out and the table from moving during shipping transport.
- Remove this temporary shipping plug. This plug has no center hole in it.
- Replace this temporary shipping plug (#2113A) with the Operating Vent Plug (Part#2133). This Operating Vent Plug (#2113) may be identified as containing a through hole for pressure venting down the middle of the plug. Operating Vent Plug (#2113) can be found in a plastic bag affixed to the main hydraulic cylinder.
- Please save the temporary shipping plug (#2113A) for the future in the event that the Lift Table must be shipped or transported elsewhere.

1. Safety Rules

Failure to obey the instructions and safety rules in this manual may result in death or serious injury.

1.1 Do Not Operate Unless:

1) You learn and practice the principles of safe machine operations contained in this operating manual:
   - Avoid Hazardous situations.
   - Always perform a pre-operation inspection.
   - Always perform function tests prior to use.
   - Inspect the workplace.
   - Only use the machine as a material lift.
2) You read, understand and follow:
   - Manufacturer's instructions and safety rules
   - Employee's safety rules and worksite regulations
   - Applicable governmental regulations

1.2 To Avoid Hazardous Situations

1) Fall Hazards
   - Do not use as a personnel lifting platform or step.
   - Do no load unstable or loosely stacked loads.

2) Tip-over Hazards
   - Do not overload the machine.
   - Do not unbalance the loading on the platform, center the load in the middle of the platform.
   - The dimension of the load cannot exceed the size of the table.
   - Prior to use, check the work area for drop-offs, holes, bumps, debris, unstable surfaces or other possible hazardous conditions.

- Do not move the machine with a raised load, except for minor positioning.
- Do not subject the machine to horizontal force by raising or lowering a fixed or overhanging load.

3) Bodily Injury Hazards
   - Check the work area for overhead obstruction or other possible hazards. Check the surface ahead to see whether someone is working when moving the machine, never place hands or feet under the roller.
   - Do not stand under or allow personnel under the machine when the load is raised.
   - Do not lower the load unless the area bellow is clear of personnel and obstructions.
4) Improper Use Hazard
   - Never leave a machine unattended with a load. As unauthorized personnel may attempt to operate the machine without proper instruction, creating an unsafe situation.
5) Damaged Machine Hazards
   - Do not use a damaged or malfunctioning machine.
   - Conduct a thorough pre-operation inspection and a function test prior to each use.
6) Lifting Hazards
   - Do not lift when the load is unstable.
   - Use proper lifting techniques to operate the machine.

2. Pre-operation Inspection

The operator should perform a visual inspection prior to each work shift to discover if anything is wrong with a machine.

2.1 Be sure that the instruction manual is complete, legible and available for reference.

2.2 Checking the following components or areas for damage and improperly installed, lose or missing parts:

- Pump Unit and Related Components
- Load wheels
- Steering wheels
- Brake System
- Nuts, Bolts and other Fasteners

2.3 Check entire machine for:

- Deformation or damage
- Cracks in welds or structural components

3. Function Tests

The operator must follow the step-by-step instructions to test all machine functions.

3.1 Test the brake operation

1) Press down on the foot pedal to lock the machine with the guide column of the brake stretching to the ground freely. Push the machine. The machine should not move.

2) Press down on the discharge lever to release the brake with the guide column returning back. Push the machine. It should now move freely.

3.1 Test the Pump Unit Functions

1) Ascending the table

- Step on the pedal lever, the table should rise to the highest position, free of hesitation and/or binding.

2) Lowering the table

- Step on the discharge pedal, the table should lower by itself smoothly, free of hesitation, binding or sudden descent.

Note:

- A damaged or malfunctioning machine must never be used. If damage or malfunctions are discovered during pre-operation inspection or function tests, the machine must be tagged and removed from service.
- Repairs to the machine may only be made by a qualified service technician and according to the manufacturer's instructions.

4. Workplace Inspection

To operate the machine safely, the operator should inspect the workplace prior to moving the machine.

Be aware of and avoid the following hazardous situations:

1) Drop-offs or holes
2) Bumps and floor obstructions
3) Debris
4) Overhead obstructions and high voltage conductors
5) Hazardous locations
6) Inadequate surface support to withstand all load forces imposed by the machine
7) All other possible unsafe conditions

5. Operating instructions

Using the machine for any purpose other than lifting materials is unsafe.

5.1 Lifting and Lowering the Load

1) The size of the load on the platform cannot exceed the table, center the load in the middle of the table, the placement is stable, no swinging, and the capacity is in the scope of the rated capacity.

2) Lift the load by grasping the handle on the table and step on the pedal lever up and down.

3) Lower the load by stepping on the discharge pedal.

5.2 Moving the Machine under Load

It is best to move the machine without a load. Moving a raised load should be restricted to positioning for loading and unloading. If it is necessary to move the machine with a raised load, understand and obey the following safety rules:

1) Area is level and clear of obstructions.
2) Load is correctly centered on the table, stable and not unbalanced.
3) Avoid sudden starts and stops.
4) Travel with load in the lowest possible position.

5.3 Moving Machine on Small Slopes

The machine shall be avoided to be used on gradients. If it is necessary to navigate up or down small slopes, understand and obey the following safety rules:

1) The machine shall be unloaded or lightly loaded.
2) The table shall be in the lowest height when in light load, the gradient shall be no more than 2°.
3) The operator shall be in the upper position whether upgrade or downgrade.

5.4 Lower the table to the lowest height when the lift table is not being used, the table shall be unloaded, and the brake shall be on.

6. Maintenance

6.1 Periodic Maintenance

Periodic maintenance will prolong the lifespan of the machine. See the table below for recommended maintenance check timelines.

Items	Inspection Content	Cycle		
		1 month	6 months	12 months
Front and Rear Roller	Check wearing, lubrication of bearing and bearing housing	X		
Brake	Check whether, lubrication of bearing and bearing housing	X		
Pump Unit	Oil Lever		X	
	Change Oil			X
	Check function of safety valve			X
	Operating pedal lever system		X	

6.2 Oil

1) Add Oil – If the table cannot lift to maximum height, you should add oil. Restore the fluid level in the reservoir to 2mm below the oiling hole, this must be done with the table in its lowest position.

2) Change Oil – Drain the oil in pump unit off. Then add oil as item 1).

3) Use the hydraulic type oil according to the table below.

Temperature	Oil
-20°~+40°C	L-HV46 Hydraulic Oil

6.3 How to Expel Air from the Pump Unit

Lower the table to the lowest position, open the discharge valve and then step on the pedal lever up and down to expel the air.

7. Troubleshooting

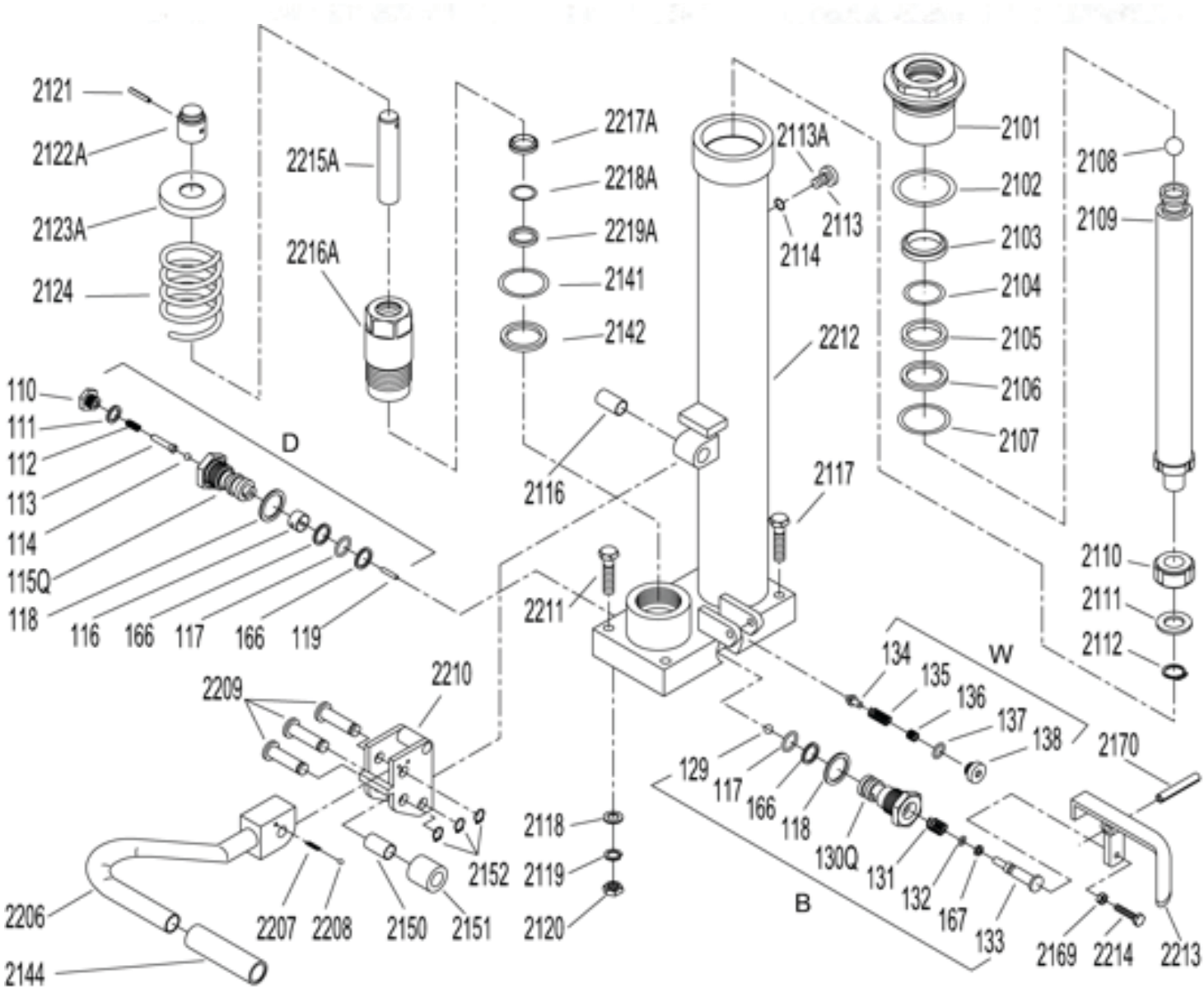
No.	Issue	Cause	Solution
1	The table cannot lift to maximum height.	-Not enough hydraulic oil	-Add more oil.
2	The table cannot lift up.	-Not enough hydraulic oil -The oil has impurities -Discharge valve is out of adjustment. -Air in the hydraulic oil	-Add more oil. -Change the oil. -Adjust the regulating bolt -Expel the air (see item 6.3)
3	The table cannot descend.	-The rod is deformed resulting from seriously unbalanced load. -A part has been broken or been deformed resulting from unbalanced load. -The regulating bolt of the discharge valve is not in the correct position	-Replace the rod. -Repair or replace component. -Adjust the regulating bolt.
4	Leaks	-Seals worn out or damaged. -Some parts may be cracked or worn out.	-Replace seals with new ones. -Check and replace with new ones.
5	The table descends without being lowered	-Impurities in the oil cause the discharge valve to fail to close. -Air in the oil -Seals worn or damaged. -Discharge valve is out of adjustment.	-Replace with filtered oil. -Expel the air (see item 6.3) -Replace with new ones. -Adjust the regulating bolt.

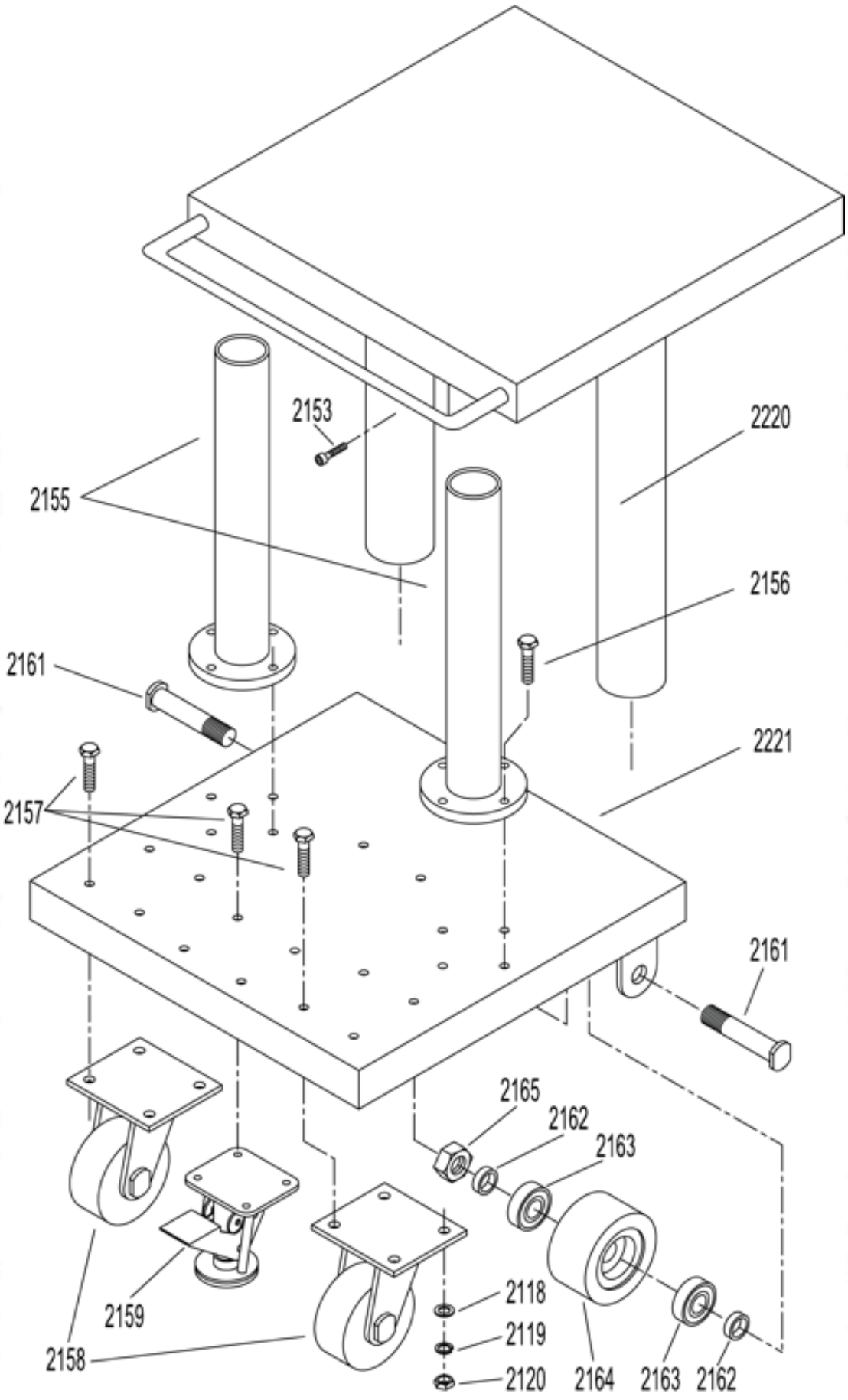
***Note: Do not attempt to repair the lift table unless you are trained and authorized to do so.**

8. Specifications

Model	Capacity (lbs.)	Max. Table Height (mm)	Min. Table Height (mm)	Table Length (mm)	Table Width (mm)	Load Wheel (mm)	Steering Wheel (mm)	Net Weight (kg)
MP535	500	1220	760	460	460	Ø100 x 52	Ø100	69.5

MP535 – Parts List

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No.	Model	Description	Qty	No.	Model	Description	Qty
2101		Big nut	1	2127		Pressure regulating bolt	1
2102		O-ring	1	2133		Y-ring	1
2103		Dust proof ring	1	2134		Pressure spring	1
2104		O-ring	1	2135		Steel ball	2
2105		Y-ring	1	2136		Spring	2
2106		Spacing washer	1	2137		Pressure core rod	1
2107		O-ring	1	2138		Steel ball	1
2108		Steel ball	1	2139		O-ring	1
2109		Piston rod	1	2140		Valve base	1
2110		Guide casing	1	2141		O-ring	1
2111		Washer	1	2142		Red copper washer	1
2112		Retaining ring	1	2144	MP677	Rubber casing	1
2113		Operating Plug Nut	1	2150	MP680	Steel roller bushing	1
2113A		Shipping Plug Nut	1	2151	MP692	Steel roller	1
2114		O-ring	1	2152	MP683	Retaining ring	3
2116		Bushing	1	2153		Hexagon socket screw	1
2117		Hexagon head bolt	2	2155		Guide column	2
2118		Plain washer	22	2156		Hexagon head bolt	8
2119		Spring washer	22	2157	MP687	Hexagon head bolt	10
2120		Hexagon nut	22	2158	MP685	Steering wheel	2
2121		Spring pin	1	2159	MP686	Brake assembly	1
2122		Pressure cap	1	2161	MP688	Load wheel axle	2
2122A		Pressure cap	1	2162	MP689	Axle sleeve	4
2123		Spring cover	1	2163	MP690	Bearing	4
2123A		Spring cover	1	2164	MP693	Load wheel	2
2124		Spring	1	2165	MP691	Hexagon nut	2
2125		Screw	1	2169		Hexagon nut	1
2126		O-ring	1	PUMP-ASSM	MQ066	REPLACEMENT PUMP ASSEMBLY	1

No.	Model	Description	Qty	No.	Model	Description	Qty
2170		Spring pin	1	110		Screw	1
2201		Dust proof ring	1	111		Red copperwasher	1
2202		Cylinder	1	112		Spring	1
2203		O-ring	1	113		Pressure rod	1
2204		Y-ring	1	114		Steel ball	1
2205		Rod	1	115Q		Pressure valve body	1
2206	MP678	Pedal lever	1	116		Split ring	1
2207	MP681	Small spring	1	117		O-ring	2
2208	MP682	Steel ball	1	118		Red copperwasher	2
2209	MP684	Pin	3	119		Steel needle	1
2210	MP679	Pressure base	1	129		Steel ball	1
2211		Hexagon head bolt	2	130Q		Discharge valve body	1
2212		Hydraulic system	1	131		Spring	1
2213		Discharge valve assembly	1	132		O-ring	1
2214		Hexagon head bolt2215A	1	133		Discharge valve shaft	1
2215A		Rod	1	134		Valve taper core	1
2216A		Cylinder	1	135		Spring	1
2217A		A Dust prool ring	1	136		Pressure regulating screw	1
2218A		O-ring	1	137		O-ring	1
2219A		Y-ring	1	138		Scew	1
2220		Table	1	166		Retainer	3
2221		Bottom plate assembly	1	167		Retainer	1