

DELACCO

MATERIAL HANDLING

OPERATION MANUAL

MOBILE SCISSOR LIFT TABLE

MPS500



MPS500

Read this manual completely before first use. The table may only be operated by trained and authorised personnel.

Edition 1.0 | 2026

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About this document

These instructions have been prepared from the supplied manufacturer documentation and adapted to the DELACCO MPS500 product designation. Part numbers used in the maintenance and troubleshooting sections refer to the exploded diagrams in the appendix.

Document	Operation manual and parts reference
Models	DELACCO MPS500
Intended product	Manual mobile hydraulic scissor lift table for goods
Edition	1.0 / 2026

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Note: the identification plate on the actual product and the documentation supplied with the unit take precedence if the delivered version differs.

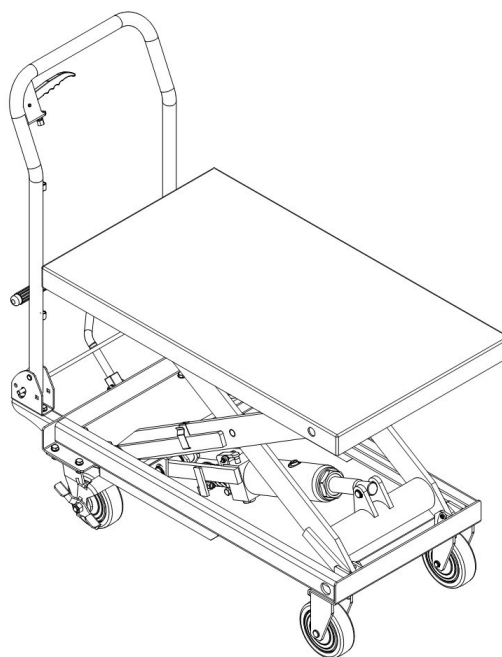
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Description, intended use and construction

The MPS500 mobile scissor lift table is intended for short-distance transport and for lifting and lowering goods. It may also be used as a mobile work surface in workshops, warehouses, production areas and service departments.



MPS500 product image and construction overview.

Main assemblies

- steel load platform
- scissor lifting mechanism
- manual hydraulic pump and cylinder
- foot pedal for lifting
- lowering control lever on the handle
- four wheels including swivel casters with brake
- bolt-on push handle



Intended use

The lift table is designed for goods only. Standing, sitting or carrying people on the platform is prohibited.

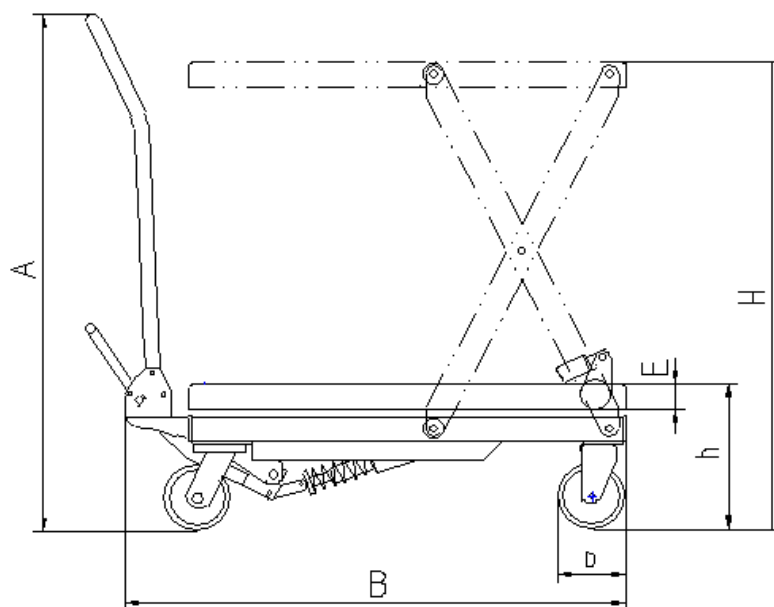
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Technical data

Parameter	MPS500
DELACCO model	MPS500
Rated capacity	500 kg
Maximum height H	900 mm
Minimum height h	340 mm
Platform L x W x H	855 x 500 x 50 mm
Handle height A	970 mm
Overall length B	925 mm
Pedal strokes to maximum height	<= 45
Wheel diameter D	127 mm
Cylinder working volume	164 ml
Oil capacity	250 ml
Service weight	87 kg



Dimensions: H - maximum height, h - minimum height, A - handle height, B - overall length, D - wheel diameter.

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Operating conditions

- The ground must be firm, level and horizontal.
- Permitted working temperature: -20 °C to +40 °C.

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Safety instructions

These rules must be followed before, during and after operation.

1. Read the manual carefully before use and understand the functions, limitations and correct operating method.
2. Wear suitable work clothing, safety footwear and gloves.
3. Use only suitable accessories and replacement parts obtained from an authorised supplier or manufacturer.
4. After major repair or replacement of principal components, the table must be retested and confirmed safe before returning it to service.
5. Only trained, qualified and authorised personnel may operate the table.
6. Do not exceed the rated capacity. Overloading may injure personnel and damage the equipment.
7. Do not stand or sit on the platform.
8. Do not place hands or feet below a lowering platform or inside the scissor mechanism.
9. Apply the brake during loading and unloading to prevent movement.



Crushing hazard

Keep hands, feet, clothing and all other objects clear of the scissor mechanism and the area below the platform during lifting and lowering.

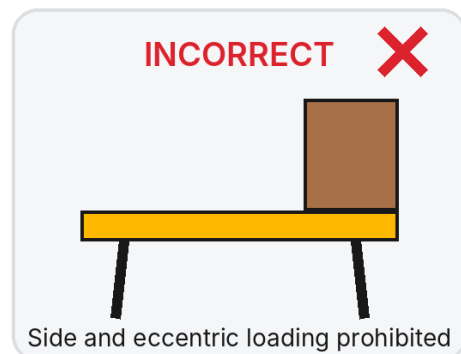
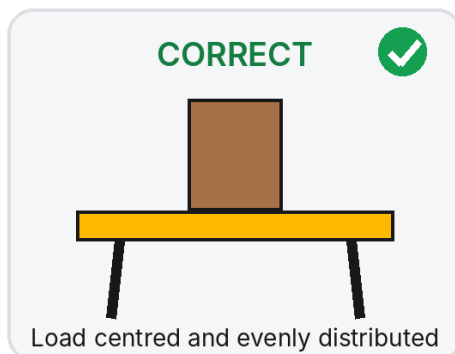
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Safety instructions - continued

10. Distribute the load evenly across the entire platform.
11. Do not lift loose, unstable or inadequately secured loads.
12. Do not leave a load on the platform for an extended period.
13. Do not move the table while a load is raised.
14. Use the table only on hard, level ground. Operation on slopes or uneven surfaces is prohibited.
15. If a load is placed on an already raised platform, keep the total mass within rated capacity and distribute it evenly. The safety valve protects the unit during lifting only; it cannot prevent damage if an excessive load is placed on a raised platform.
16. Do not drag a load sideways on a raised platform. Side loading or an eccentric load can cause the table to tip over.
17. Before repair or maintenance, unload the platform and secure the scissor mechanism with a suitable mechanical support bar.
18. Failure to follow the safety instructions may cause equipment damage, serious injury or death.



Correct loading: centre the load and distribute it evenly across the platform.

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Assembly and pre-use inspection

Assembly after delivery

The push handle and the foot brake lever are removed for transport and must be installed before first use.

19. Fit the push handle to the mounting holes on the chassis using the M12 x 30 bolts, spring washers and flat washers, then tighten the bolts securely with a wrench.
20. Insert the foot brake lever (20) into the hole in the square bar (17).
21. Install screw (19) and tighten it.
22. Fit the plain washer (3) and spring washer (4).
23. Tighten nut (5) securely.
24. Confirm that the pedal and brake lever move freely and do not interfere with the frame.

Pre-use inspection

- Check the frame, platform, handle and scissor arms for deformation, cracks or bending.
- Check the condition and operation of the caster brake and all wheels.
- Inspect the hydraulic system for oil leaks.
- Confirm that all visible fasteners, pins and retaining devices are correctly fitted.
- Raise and lower the unloaded platform once and check for smooth, controlled movement.
- Do not use a faulty table until it has been repaired and tested.



Do not operate damaged equipment

Immediately remove the table from service if it shows structural damage, leakage, defective braking or uncontrolled lifting/lowering.

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Operation

Raising the platform

Press the foot pedal repeatedly until the platform reaches the required height. Approximately 45 pedal strokes are required to reach maximum height under normal conditions.

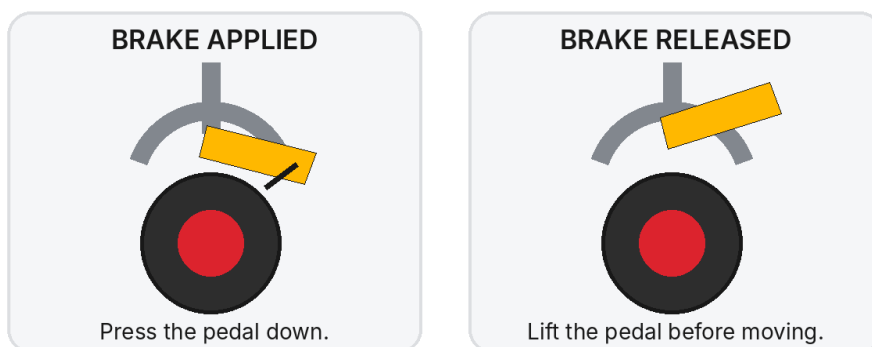
Lowering the platform

Slowly lift the release lever on the handle. The one-way valve opens and the platform lowers. Control the lowering speed with gradual lever movement; do not pull the lever abruptly.

Moving the table

- Fully release the caster brake before moving the table.
- Lower the platform before travelling whenever possible.
- Push the table slowly and maintain a clear view of the route.
- Do not move the table with a raised load.

Brake operation



Press the brake pedal to apply the brake. Lift the pedal to release it.



Keep clear of the brake area

Do not place any part of the foot or body on the caster brake while the platform is being raised or lowered.

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Maintenance

Regular inspection and maintenance are essential for safe operation and long service life. Maintenance work must be performed by competent personnel.

Interval	Maintenance task	Notes
Before each use	Inspect the structure, wheels, brake and hydraulic system.	Do not use if defective.
Daily / before operation	Lubricate friction points and pivot surfaces as required.	Use a suitable machine lubricant.
As required	Tighten loose fasteners and replace worn or damaged parts.	Retest before returning to service.
Every 12 months	Replace the hydraulic oil.	Use the recommended viscosity grade.
Every 2 years	Inspect and replace pump sealing elements as required.	See section 8 and the pump diagram.

Recommended hydraulic oil

Operating temperature	Grade
-10 °C to +40 °C	YBN32
-20 °C to +40 °C	YCN32



Safe maintenance

Before working on the hydraulic or scissor mechanism, unload the platform and secure it with a suitable mechanical support bar.

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Oil and seal replacement

Replacing hydraulic oil

25. Using a suitable wrench, remove sealing screw 11 from the pump (refer to the pump diagram).
26. Lift the lowering control lever.
27. Remove oil filler plug 39.
28. Drain and refill with hydraulic oil of the correct grade.
29. Refit the plug, check for leakage and test lifting and lowering without a load.

Sealing elements

Pump sealing elements numbered 1, 3, 4, 16, 25, 32, 35, 36, 42, 43, 45, 47, 49 and 50 are made from rubber or polyurethane. The manufacturer documentation specifies an inspection/replacement interval of two years. Replace worn seals promptly to prevent leakage and loss of performance.



Qualified service personnel only

The hydraulic system may be pressurised. Have service work performed by competent personnel and use suitable replacement parts.

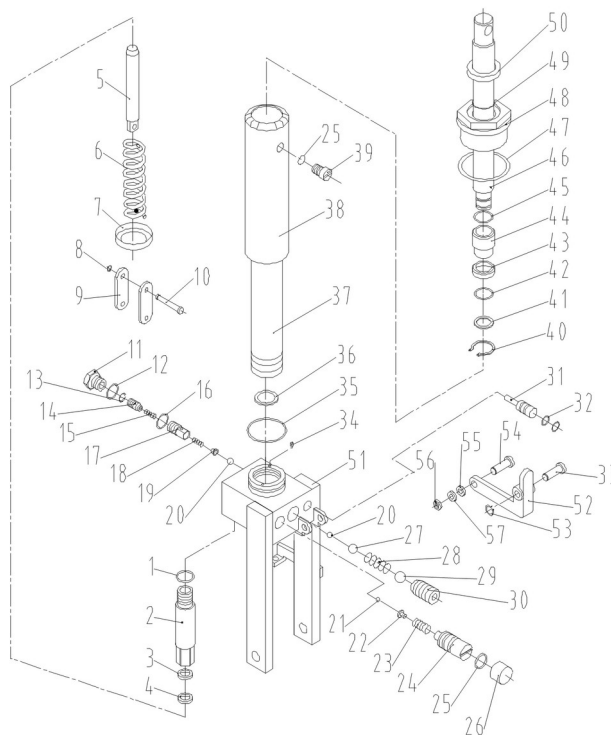


Figure 2 - Pump. Part numbers are used in the maintenance and troubleshooting instructions.

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Troubleshooting

If a fault cannot be corrected safely using the procedures below, stop using the table and contact qualified service personnel.

Fault	Possible cause	Corrective action
Platform does not lift or does not reach full height	Check-valve ball (20) does not close.	Clean the valve seat and replace ball (20) if necessary.
Platform does not lift or does not reach full height	Firing pin (31) holds ball (20) open.	Adjust the steel-wire tension so the pin is correctly positioned; lubricate pin roll (33).
Platform does not lift or does not reach full height	Insufficient hydraulic oil.	Add the correct hydraulic oil to the specified level.
Platform lowers after lifting	Check-valve balls (20), (27) or (21) do not close.	Clean the valve seats and replace balls (20), (27) and (21) if required.
Platform lowers after lifting	Firing pin (31) holds ball (20) open.	Adjust wire tension and lubricate pin roll (33).
Platform does not lower	Travel of firing pin (31) is insufficient to open ball (20).	Adjust wire tension and lubricate pin roll (33).
Oil leakage at the firing pin	O-ring (32) is damaged.	Replace O-ring (32).
Oil leakage at pump (2), pump core (5) or piston rod (44)	Seal rings (1), (3), (47) or (49) are damaged.	Replace the relevant seal rings.

Note: part numbers refer to Figure 2 - Pump.

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Parts reference - main assembly

The exploded view shows the relative positions of the principal components, fasteners, wheels, handle, scissor mechanism and hydraulic assembly. Use the part numbers when requesting service support, subject to confirmation of the exact production version.

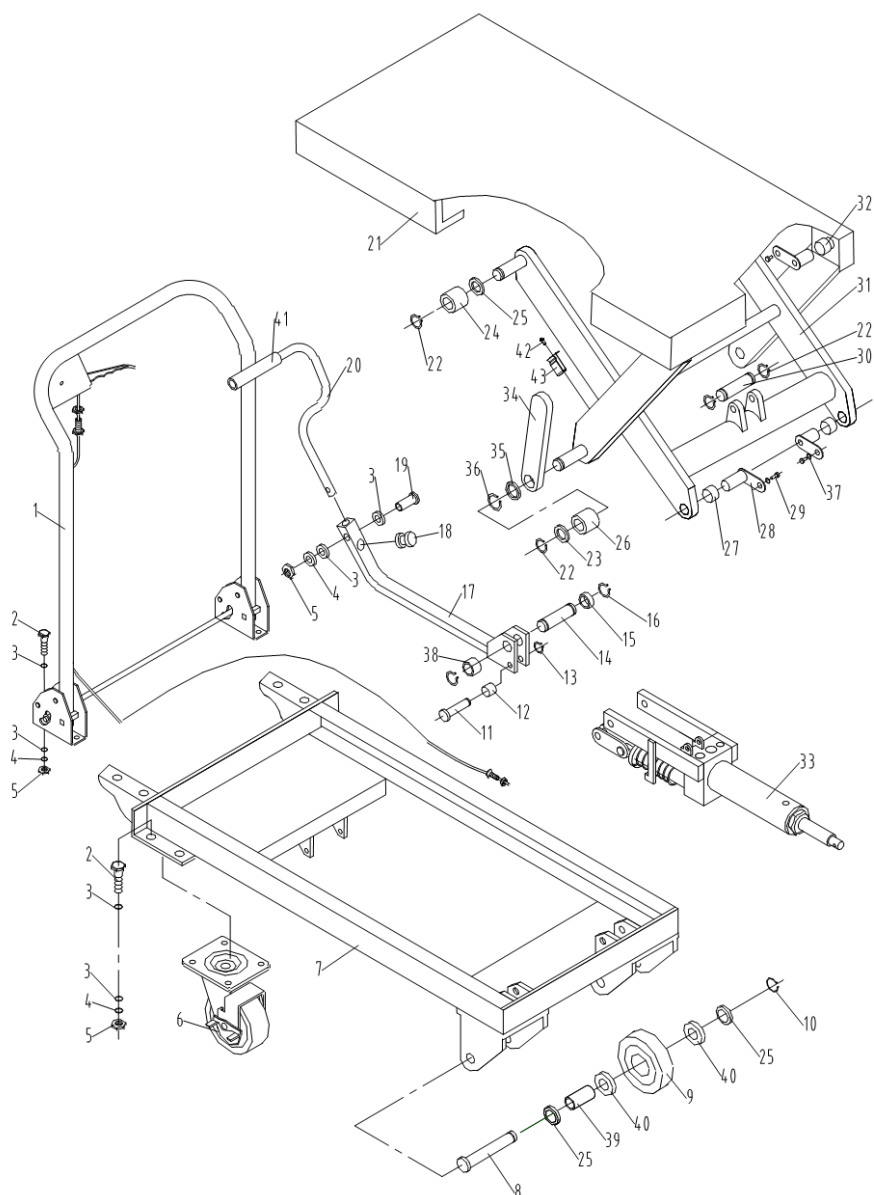


Figure 1 - Main assembly exploded view.

When requesting replacement parts, provide the DELACCO model, product serial number and the part number shown in the diagram. Component design may vary by production series.

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Pump

The pump part numbers shown below are used in the maintenance and troubleshooting sections.

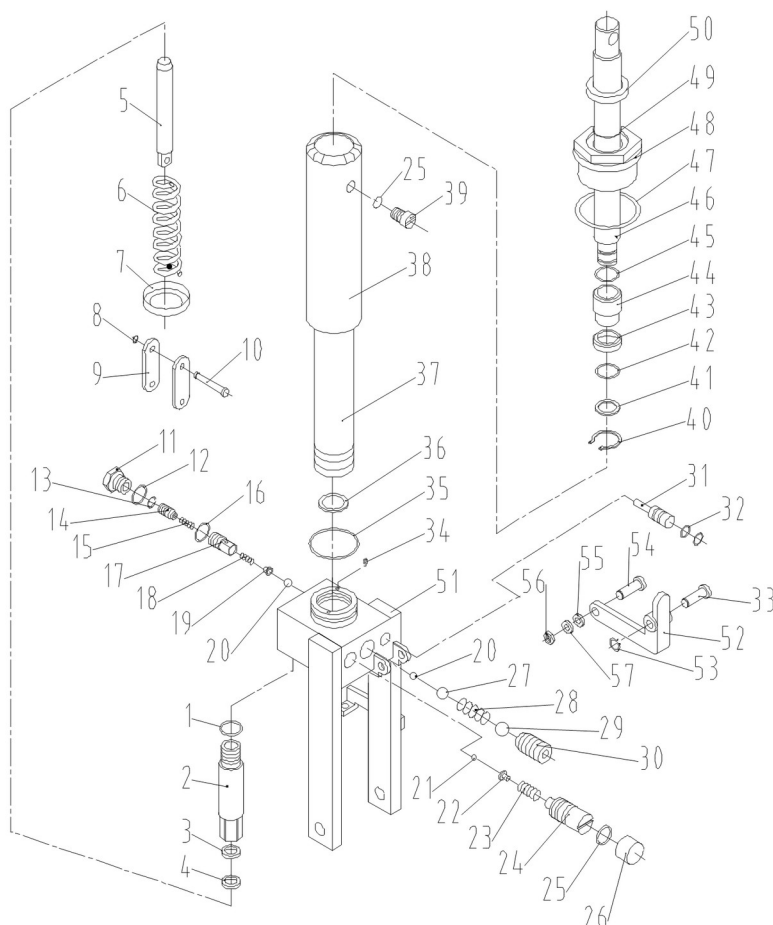


Figure 2 - Pump exploded view.

Important service part numbers

Part number	Description / function in this manual
20, 21, 27	check-valve balls
31	firing pin
32	firing pin O-ring
33	pin roll
39	oil filler plug
44	piston rod
1, 3, 47, 49	seal rings

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Hydraulic diagram and operating principle

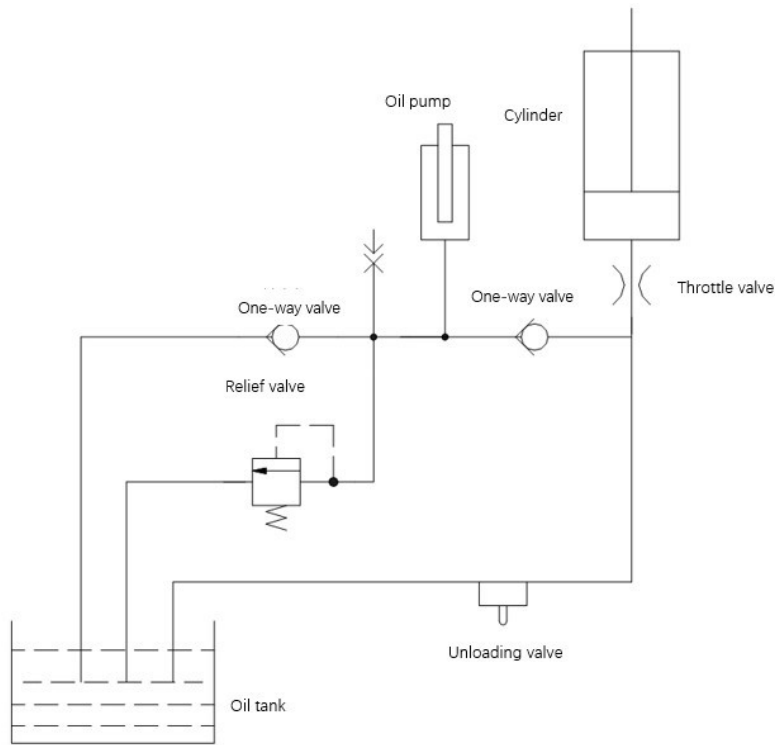


Figure 3 - Hydraulic schematic diagram.

Controlled lowering principle

- When the platform is unloaded, the throttle valve and constant-pressure relief valve discharge oil simultaneously, allowing faster lowering.
- When the load exceeds 50 kg and system pressure exceeds 8 MPa, the constant-pressure relief valve closes automatically. Oil then flows through the throttle valve and the platform lowers more slowly in accordance with safety requirements.



Do not adjust valves without authorisation

Unauthorised adjustment of the safety or throttle valve can cause uncontrolled lowering, equipment failure or injury.

Quick safety reminder

500 kg maximum

Goods only - no persons

Firm and level ground

Brake during loading

Do not move with raised load

Support scissors before service

Technical support, service and replacement parts: delacco.com | sales@delacco.com