

JD SERIES

User Manual



JD301



JD501

CADAVER LIFT SYSTEMS JD SERIES

JD301, JD501, JD5000 & JD5001

Rev. 1.G



JD5000



JD5001

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1 - Introduction

The JD Series Cadaver Scissor Lifts provide a sturdy, safe, and convenient platform for transporting cadavers in morgue, hospital, and research center environments. They feature a rugged and robust frame structure with a white powder-coated finish. Using an integrated hydraulic lift system for its lifting mechanism allows it to outperform any cadaver lift in the industry. The Cadaver Scissor Lifts feature caster wheels for improved maneuverability and a handle that can be placed on two sides of the lift. A digital scale is integrated into the control console on the JD501, JD5000 and JD5001, continuously displaying the weight value in pounds or kilograms. This allows for a seamless weight measurement directly from the lift system.

2 - Descriptions

JD301 – Cadaver lift split roller, end access 23" – 27", (3 tier). Three tier end access only with split rollers, drain plug compatible. No scale. Supports 23" – 27" trays. Capable of pass through transfer at 36" minimum.

JD501 – Cadaver lift split roller end access 23" – 27", (5 tier). Five tier end access only with split rollers. Drain plug compatible. Integrated scale. Supports 23" – 27" trays. Capable of pass through transfer at 36" minimum.

JD5000 – Cadaver lift end access/side access 23" – 30", (5 tier). Five tier end and side access roller ball top, drain plug compatible. Integrated scale. Supports 23" – 30" trays. Capable of end access pass through transfer at 36" minimum. Supports side loading in both directions at minimum or maximum loading heights.

JD5001 – Cadaver lift split roller end access 23" – 32 GA", (5 tier). Five tier end access only with split rollers. Drain plug compatible. Integrated scale. Supports 23" – 32" trays. Capable of pass through transfer at 36" minimum.

3 - Safety

Hydraulic scissor lifts are generally safe to operate, but like all machinery, caution must be used to avoid accidental injury. Although the lifts come with caution labels for safety awareness, it is the responsibility of the purchaser and or end user to comply with all federal, state, and local safety standards which includes, but not limited, the placement of guards and safety labels, in the area where the lifts are used and provide adequate training for those using the lifts. Due to their design, scissor lift injuries can be serious. It is therefore important to properly train those using the equipment on both functionality and safety. The purchaser and/or end user must have procedures in the workplace to prevent non-authorized personnel from using the lifts. The lifts should only be used by trained and authorized personnel. They should only be used to transport loads that are under the designed maximum working weight for both safety and to prevent damage to the lifts.

PINCH POINT WARNING:

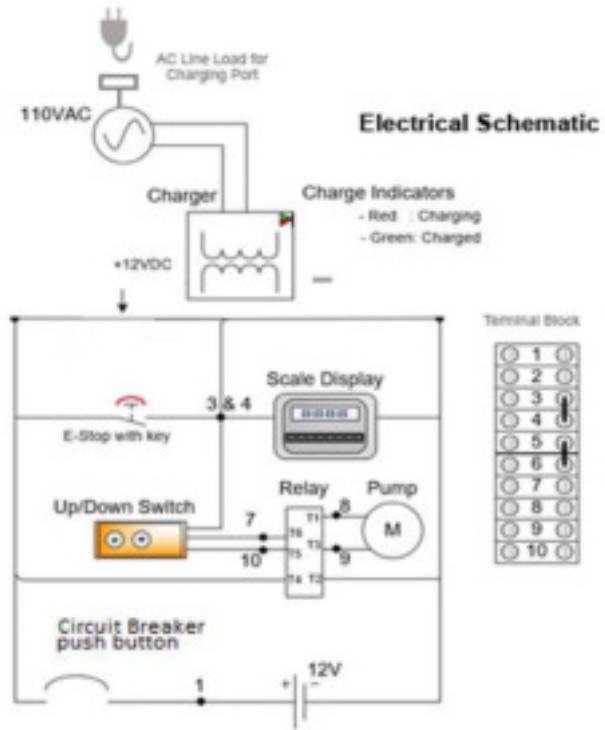
Please note that due to scissor design and conveyor rollers along with other moving parts, the lifts have several pinch point areas that can cause serious injury. All personnel using the lifts must use caution while operating them and must be made aware of the safety risks associated with these units along with their capabilities and limitations.






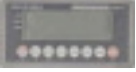




4 – Overview

4.1- Electrical System

The simple schematic shows the reliability and robustness of the JD Series electrical design.



Electrical components and their function are listed below

	Component	Function
	E-stop / keys	Cuts power to the elevation controls
	Push button elevation controls	Elevates up or down
	Charging port	For battery charging
	Weight indicator	Weight readout
	Charge indicator	Indicates charge status: Red - Charging Green - Charged
	Push button breaker	Protects against shorts; allows the system to be shut off
	Internal relays located within console	Power up the pump (lower/raise)
	Batteries	12 VDC sealed deep cycle batteries power up the system

Electrical System Operation

Once the E-stop switch is in the ON position, power is supplied to the elevation controls. These switches power up the relays that supply power to the pump motor. The polarity direction of the power feeding to the pump motor is controlled by the green push buttons. The E-stop also interrupts power to the scale unit if applicable or JD501, JD5000 and JD5001. The main push button breaker switch shuts off the power to all systems when pulled out. The breaker can be reset by pressing the switch inwards to the ON position. Charging system and other features can be found on page 7.

4.2- Mechanical System

The scissor design allows the lift to span (see page 6 for dimensions). It features a handle that can be mounted on two sides to improve maneuverability within most workspaces.

4.3- Hydraulic System

One of the heaviest duty cadaver lifts in its class, the JD Series can elevate over 750 lbs. from the lowest position to the maximum lift height. The push buttons in the control console allow the user to elevate up and down with ease while standing at a safe distance away from the lift while in motion. A Parker 12-volt pump with cross tube welded hydraulic cylinder is included.

4.4- Features

Multiple mechanical and electrical features are included to assist and improve the user's experience while using the unit.

- All four casters swivel
- Two (2) steering casters (end and side)
- Steering wheels have a black "steer" assist caster tab to allow for better control of cart
- Fixed handle with up/down switches located on control console
- Rugged frame structure, white powder-coated finish for easy cleaning
- Integrated 12 VDC hydraulic unit for vertical adjustment
- Vertical adjustment is operated via push button elevation controls on fixed handle control console
- Dual end access allows pass through loading at typical transport cart heights
- Additional push handle can be placed on either side of unit
- On board, single cord battery charger with status indicator (110/220 Volt)
- Updated adjustable roller system accommodates different tray sizes
- Maintenance free 12 VDC sealed deep cycle batteries ensures constant power supply
- Key activated switch prevents unauthorized operation and serves as an emergency OFF switch simultaneously
- Powerful, hydraulic lift system for increased weight capacity of 750 pounds
- Adjustable roller system to accommodate different tray sizes

5 - System Specifications

Product	JD301	JD501	JD5000	JD5001
3 Tier	X			
5 Tier		X	X	X
Access	End	End	End/Side	End
Split Roller	X	X		X
Roller Balls			X	
23" Tray	X	X	X	X
24" Tray	X	X	X	X
27" Tray	X	X	X	X
30" Tray			X	X
32" GA Tray				X
Scale		X	X	X
Min Height	13.4"	13.4"	13.3"	13.4"
Max Height	55.6"	76.8"	76.7"	76.8"
Dimensions	91.8" L x 29.2" W	95.2" L x 29.2" W	95.2" L x 29.2 - 33.2" W*	95.2" L x 34.4" W
Elevating range	13.4" – 55.6"	13.4" – 76.8"	13.3" – 76.7"	13.4" – 76.8"

*Width determined by adjustable tray guide setting

6 - Unpacking and Inspecting

Carefully inspect the exterior of the shipping container before opening. If the crate and the product have sustained damage, please contact Mopec and the freight carrier to inform them about the damage. It is important to take pictures of the shipping container showing the damaged areas and the product for record keeping. Recipient must keep damaged crate and container on hand for further analysis by freight carrier and Mopec.



6.1 - Visual Inspection

After unpacking the lift, please inspect the items in the list below prior to using the unit.

Thoroughly check for loose items, defects, or damage that may have occurred during packaging or shipping.

At this point, the main breaker must be in the OFF position (push button pulled out). Previous models have a self-resetting breaker or toggle switch; in this case, make sure the E-stop is in the OFF position and the key is removed while inspecting the unit for the first time.

Item	Inspection
E-stop / keys	<ul style="list-style-type: none"> ▪ Inspect for damage ▪ Inspect for loose button or housing ▪ Ensure 2 keys are present ▪ Push button and remove key (system locked) ▪ Insert key then twist to unlock (system unlocked)
Control console	<ul style="list-style-type: none"> ▪ Check for damage ▪ Ensure that each button springs back after release

Charging port	<ul style="list-style-type: none"> ▪ Inspect charging port for damage
Battery enclosure	<ul style="list-style-type: none"> ▪ Inspect battery box enclosure for damage (bottom and corners)
Hydraulic cylinder	<ul style="list-style-type: none"> ▪ Visually inspect for leaks. Use a paper towel, rag or rubber gloves to wipe the bottom of the hydraulic cylinder and inspect. (Fluid is red)
Tray support system	<ul style="list-style-type: none"> ▪ Inspect hardware on the lift for loose or damaged components
Scissor lift frame	<ul style="list-style-type: none"> ▪ Inspect frame to insure it was not bent during shipment
Weight indicator	<ul style="list-style-type: none"> ▪ Weight indicator must be inspected for damage if applicable (JD501, 5000 & 5001)
Caster wheels	<ul style="list-style-type: none"> ▪ Caster wheels must be inspected for damage ▪ Ensure brake system works properly

6.2 – First Power Up

If all the inspection points mentioned above are satisfactory, proceed to charge the battery before use. Plug the power cord into wall outlet (110/220VAC) and connect to charging port on the lift for 12 hours.

7 – Charging

Two sealed, deep cycle 12 Volt batteries must be charged on a regular basis to maintain a good battery. A smart multi-stage lead acid battery charger is provided with the unit and must be used when the unit is not in use. Charger can operate on both 110VAC and 220VAC (60/50Hz) and will deliver a variable charge current up to 8 Amps.

7.1 - Charging Procedure







- 1 - Plug the charger into the lift enclosure 12 VDC charging port
- 2 - Plug the charger power cord into the 110/220VAC power outlet
- 3 – Make sure breaker is depressed to the ON position
- 4 – Press E-stop to prevent operation while charging

WARNING: DO NOT USE LIFT WHILE BATTERY IS BEING CHARGED AS THIS CAN CAUSE DAMAGE TO THE BATTERY CHARGER

8 – Operation

The JD Series Lifts are simple to use. The console controls the basic operation of the lift. Pressing the up button raises the lift and pressing the down button lowers the lift.

8.1- Tray Loading/Unloading: Basic Steps:

Step	Description	Visual aid
1	While the freezer door is opened, move the lift as close to the rack/freezer as possible. If transferring to a cart, lock the casters	
2	Using the control console, elevate the lift to the proper height to receive the tray from the rack, freezer or transport cart	
3	Fine tune the position of the lift to ensure a smooth transfer of the tray. TIP: When unloading lift, position slightly above the rack. When loading lift, position slightly below the rack	
4	Lock to prevent the lift from moving while sliding the tray onto the lift. "The brake casters adjacent to the handle"	
5	Slowly manually slide the tray onto the lift and lock tray in place using locking mechanism	
6	Lower the lift to a height or 36" or lower for safe transportation	
7	Unlock the casters and move the lift away from the freezer	
	<i>In case of an emergency, press the E-Stop and turn the breaker to the OFF position. If the lift has an electrical or mechanical issue, remove the key from the unit and place a "DO NOT USE" note indicating that the unit is out of order.</i>	

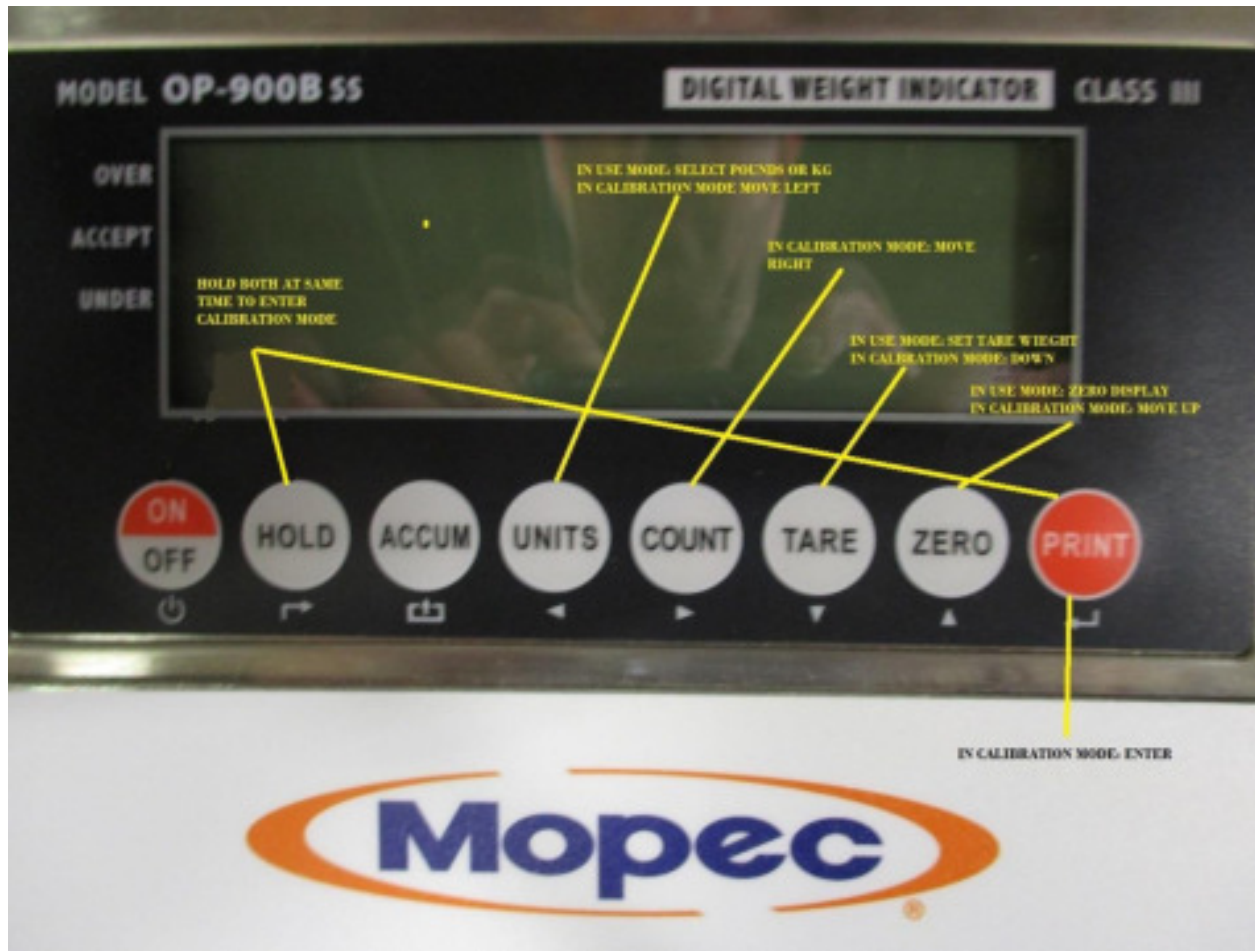
8.2- Pushing the Lift

The lift is equipped with two steering assist black casters for improved steering and maneuverability, one for forward steering and one for side positioning. Braking casters have a steel finish color. When moving the lift, first depress down on the black steer caster with the black pedal then push the unit from the handle. This will provide more control and maneuverability while the lift is in motion. The lift features a removable handle that can be placed on either side of the lift for convenience in any mortuary. To prevent tip over while moving or storing the lift, please note that it must be at a height of 36" or lower.

9- Scale System for JD501, JD5000 & JD5001

The scale system uses four load cells, a summing board and a weight indicator. This system is the same type of system as used in floor industrial scales, providing a robust and repeatable measurement when used properly. The scale system is calibrated prior to shipping. Yearly inspection is recommended, calibrate as needed.

For more information on how to operate and calibrate the scale system, please refer to the corresponding scale user manual.



10- Calibration

1. Press and release HOLD and PRINT button to enter calibration mode.
2. Press ENTER (PRINT), adjust screen to read Co 2 using the arrow keys
3. Press ENTER (PRINT) adjust screen to read C2 0 using the arrow keys
4. Press ENTER (PRINT) 2x, adjust screen to read C3 1, using the arrow keys
5. Press ENTER (PRINT) 2x, adjust screen to read 000750 to set maximum weight using the arrow keys
6. Press ENTER (PRINT) 2x, adjust screen to read C5 1 using the arrow keys
7. Press ENTER (PRINT). scale should go into countdown 10 to 0
8. After countdown press ENTER (PRINT) 2x, adjust screen to read C6 1 using the arrow keys
9. The word "span" will flash across the screen when down. Enter the known weight to be used in calibration (at least 10% of maximum weight) using the arrow keys
10. Place weight on scale and press ENTER (PRINT)
11. Scale will display countdown 10 to 0. After countdown scale will read "CALEnd"
12. Remove weight
13. Press ENTER (PRINT)
14. Press ACCUM button to exit calibration

11- Troubleshooting

Symptom	Possible root cause	Resolution
Can't turn scale on	Battery voltage low	Charge battery
	Defective indicator	Charge indicator
Lift will not go up and/or down	Low battery	Charge battery
	Breaker tripped	Reset breaker
	Pump motor inoperable	Test and replace if needed
E-stop not working	Low hydraulic oil	Check and add if needed
	Defective e-stop button	Replace
	Stuck relay	Replace relays
Breaker tripping	Motor short	Replace motor
	Short in wiring	Troubleshoot and repair
	Defective breaker	Replace breaker
Lift moves very slow	Low hydraulic fluid	Add fluid
	Damaged relays	Replace relays
	Damaged pump	Replace pump
	Damaged pump motor	Replace motor
Scale not accurate (JD501, JD5000 & JD5001)	Damaged load cell	Troubleshoot and replace
	Damaged summing board	Troubleshoot and replace
	Damaged indicator	Troubleshoot and replace
	Needs calibration	Calibrate

12- WARRANTY

MOPEC JD SERIES CADAVER LIFT

THE BODY LIFT EQUIPMENT AND ALL PARTS THEREOF, MANUFACTURED BY MOPEC IS WARRANTED TO OUR CUSTOMERS TO BE FREE FROM DEFECTS IN MATERIAL AND CONSTRUCTION WHEN SUBJECTED TO NORMAL USE AND SERVICE. THIS WARRANTY SHALL NOT APPLY TO ANY EQUIPMENT OR PART THEREOF, WHICH HAS BEEN SUBJECT TO ALTERATIONS, ACCIDENT, MISUSE, OR WHICH HAS BEEN USED MORE THAN ITS PUBLISHED CAPACITY.

MOPEC'S OBLIGATION UNDER THIS WARRANTY IS LIMITED TO REPAIRING OR REPLACING, WITHOUT CHARGE ANY PART OR PARTS OF SAID EQUIPMENT WHICH PROVE DEFECTIVE AND WHICH OUR EXAMINATION SHALL DISCLOSE TO OUR SATISFACTION TO BE THUS DEFECTIVE. WE DO NOT ACCEPT RESPONSIBILITY FOR CONSEQUENTIAL DAMAGE RESULTING FROM SUCH DEFECTIVE PARTS. THE PERIOD OF WARRANTY ON MOPECEQUIPMENT IS AS FOLLOWS:

ALL EQUIPMENT: EQUIPMENT IS WARRANTED IN ITS ENTIRETY FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF SALE. THIS WARRANTY INCLUDES PARTS AND LABOR FOR COVERED REPAIRS.

MOPEC WILL ACCEPT INCOMING DEFECTIVE PARTS, ONLY WHEN SHIPMENT IS PREPAID. THIS WARRANTY CONTRACT IS IN LIEU OF ALL OTHER WARRANTIES, AND RELEASES MOPEC OF ALL OTHER OBLIGATIONS OR LIABILITIES. IT NEITHER ASSUMES NOR AUTHORIZES ANY PERSON OR PERSONS TO ASSUME ANY OBLIGATION OTHER THAN THAT COVERED IN THIS WARRANTY.

EVENTS AND MAINTENANCE LOG

Date/ Name / Problem Description / Corrective Action / Notes

Note: Please follow the battery manufacture's maintenance procedures to insure proper battery health and performance.