QT121A

Mobile Lift Table and Accessories

Start





 Overview
 Safety
 Mobile Lift Table
 Subframe/Differential Adapter Set
 Powertrain Base Attachment Set
 Adjustable Height Adapter Set

OVERVIEW

The purpose of the Mobile Lift Table is to lift, lower, and transport loads, such as a high-voltage/BEV/PHEV battery, engine, transmission, seat, fuel tank, or axle. Before using this Lift Table, study, understand, and follow all operating instructions, safety precautions, and terms of use.

Product Name:	eneral Information roduct Name: Mobile Lift Table		
Product Type:	Lifting Equipment		
Product Number:	01421-00151		
Weight:	1180 lbs (537 kg)		
Maximum Load Capacity:	Complete Lift Table: 3080 lb (1400 kg)		
	Extended Platform: 1540 lb (700 kg)		
Maximum Pneumatic Input Pressure:	140 psi (9.5 bar) 5000 psi		
Maximum Hydraulic Pressure:			
Noise Emission:	86 dB(A)		
Dimensions:	Width: 37 in (940 mm) Overall Length: 79 in (2008 mm)		
	Height (Completely Lowered: 22.2 in (564 mm)		
	Height (Completely Raised: 70.5 in (1791 mm)		
Threaded Holes in	Size: M10 X 1.5		
the Platforms:	Max. Torque: 50 ft lb (68 N•m)		



SAFETY PRECAUTIONS



Overview

Warning!

To prevent personal injury or equipment damage, operator must study, understand, and follow all instructions before operating this device.

- Ensure that each person using the lifting equipment is familiar with these instructions and can access them at all times. If the operator cannot speak English, operating instructions and safety precautions must be read and discussed in the operator's native language.
- Ensure that all users are also familiar with the instructions for additional special tools and equipment that are required for the repair work.
- Refer to the operating instructions for additional equipment service instructions and safety precautions.
- This lifting equipment has been specifically constructed for its intended use. The safety of the lifting equipment can no longer be ensured if it is misused or modified in ways not expressly approved by the manufacturer. Serious personal injuries or severe damage to materials could occur.
- No alterations shall be made to this product as this will void the warranty.
- Use the lifting equipment only for work that has been expressly approved.
- Do not climb on the lifting equipment.
- Do not use the lifting equipment to lift persons or animals.
- Use the lifting equipment only to support and lift vehicle parts, never an entire vehicle.
- Wear eye protection that meets OSHA and ANSI Z87.1 standards.
- Wear safety shoes that meet the OSHA 1910.136 and ISO 20345, S2 standards.
- Use caution when servicing, do not stand or permit any part of the body to be positioned under the load being lifted or suspended.
- Perform work only at an ergonomic height.



Hint!

A complete document of the Mobile Lift Table Parts List and Operating Instructions is available for download in TIS.

- Do not exceed the maximum load capacities specified in these instructions, neither for the entire mobile lift table, nor for the extended platforms.
- To be used only by persons in good physical condition.
- Use only with the help of an assistant.
- To prevent tipping use only on a hard, level surface and ensure the load is centered on the Lift Table. Angled loads on the platform MUST NOT be more than 2 degrees. Tipping can result in personal injury.
- Lower load completely before storage.
- Ensure that the lifting and lowering path remains clear and easily visible.
- Do not move lifting equipment while a load is raised. Move the Lift Table with loads on it only when the platforms are in the lowest possible position and on hard, level surface. Do not move the Lift Table over slopes above 2.0 degrees with a load and 3.5 degrees without a load.
- Do not move the Lift Table at a speed faster than 3 ft/sec (4 km/h).
- Do not raise or move a load having a center of gravity extending beyond the wheels. Tipping can result in personal injury.
- When reinstalling components back into the vehicle, ensure the component is securely attached to the vehicle before lowering the platform.
- Place the forklift forks to lift the Lift Table only between the forklift signs on the bottom frame.
- Inspect the condition of the Lift Adapters and hardware before each use; do not use if damaged, altered, or in poor condition.
- Use only those repair parts called out in the parts list. Items found in the parts list have been carefully tested and selected.



TERMS OF USE

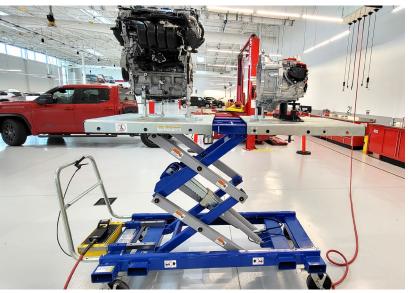
Overview

- To lift, lower, and transport loads, such as a high-voltage/BEV/PHEV battery, engine, transmission, seat, fuel tank, or axle.
- To be used only by personnel who have studied, understood, and followed all operating instructions, safety precautions, and terms of use.
- Use only to lift, lower, and transport loads, such as a high voltage/BEV/PHEV battery, engine, transmission, seat, fuel tank, or axle.
- Use only on level, even, and stable ground.
- Use only indoors.
- Do not use in corrosive environments (e.g. acidic or caustic).

Safety

- Do not use in potentially explosive environments.
- Use only at ambient air temperatures between 40-110°F (5-45°C).
- Use only at a relative humidity between 32% and 86%.
- Use only at a pneumatic input pressure up to **140 psi** (9.5 bar).
- Use for loads only up to **3080 lb** (1400 kg). When extending the platform, ensure that the load on the extendable platform does not exceed 1540 lb (700 kg).
- Do not use to lift persons or animals.
- Use the lifting equipment only with the accessories that have been expressly approved by Toyota/Lexus.





OPERATING INSTRUCTIONS

Operating The Lift Table To Remove Components

- 1. Always follow the vehicle Repair Manual's recommended service procedure for removal of the component.
- 2. Raise the vehicle above the height of the Lift Table.
- 3. Attach any required accessories to the platform and to the vehicle component.
- 4. Position the Lift under the vehicle. Adjust Lift handle and pump supports if the load extends over platform limiting access to handle or pump. Connect the air hose to the air pump.
- 5. Press the end of air pump foot pedal marked to raise the lift to the load. *Note: Pedal may briefly vibrate when pressed. This is normal and presents no danger.*
- 6. Remove any remaining bolts from the vehicle component.
- 7. Press the end of the air pump foot pedal marked to raise the lift platform slightly to remove pressure from the safety latch. Squeeze the safety release lever. Press and hold the end of the air pump foot pedal marked and lower the lift completely.

Operating The Lift Table To Install Components

- 1. Position the Lift with the component under the vehicle chassis. Connect the air hose to the air pump.
- 2. Align the component in the correct position and press the end of the air pump foot pedal marked to raise the lift.
- 3. Always follow the vehicle Repair Manual's recommended service procedure for installing the component.

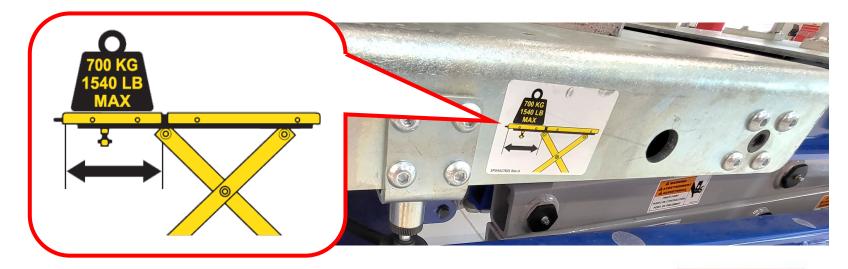


MAXIMUM LOAD CAPACITY

Complete Lift Table: 3080 lbs. (1400 kg)



Extended Platform: **1540 lbs.** (700 kg)



Safety

Mobile Lift Table

Subframe/Differential Adapter Set

MECHANICAL SAFETY LATCH OPERATION

ENGAGED POSITION (Lever Untouched)

When the safety release lever is untouched, it is in the active position. In this position the mechanical safety latch will completely engage after experiencing a minimal downward motion, stopping a full descent from occurring.







DISENGAGED POSITION (Lever Squeezed)

When intentionally (or purposefully) lowering the Lift, first raise the Lift slightly to remove pressure from the safety latch, and then squeeze the safety release lever to allow the Lift to descend.





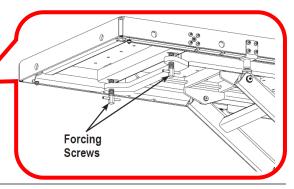


MOBILE LIFT FEATURES

Fine Adjustment Tilting Feature

The **forcing screws** allow the user to finely tilt the platform to help remove or install vehicle components and compensate for uneven shop floors, difficult fastener locations, etc. The forcing screws can be operated either by hand, wrench or socket, depending on the applied load. To prevent tipping, angled loads on the platform MUST NOT be more than 2 degrees.

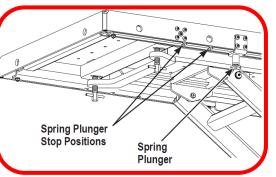




Platform Sliding Extension Feature

Retract **spring plunger** and pull on the underside of table to extend sliding platform to increase the surface area of the platform. To ensure a secure work surface, release the spring plunger and slide platform extension until it locks into one of the three stop positions. Note: If the sliding platform binds, adjustment screws may need to be turned. To prevent damaging threads in the platform, do not torque M10 x 1.5 bolts beyond 50 ft·lbf. (68 N·m).

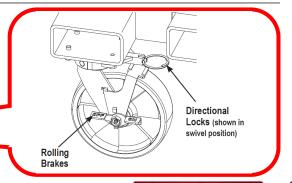




Directional Locks and Rolling Brakes

Each caster on the Mobil Lift Table has a **directional lock** to convert them from a swivel to a rigid caster. Pull on the ring and rotate 90 degrees and release back into the groove. **Rolling brakes** are located on the hub of the caster wheels. Depress the "ON" portion to engage (lock) brakes and "OFF" to release brakes. Always engage (lock) all four brakes before applying a load to the lift or when leaving the lift unattended.





OPERATING INSTRUCTIONS

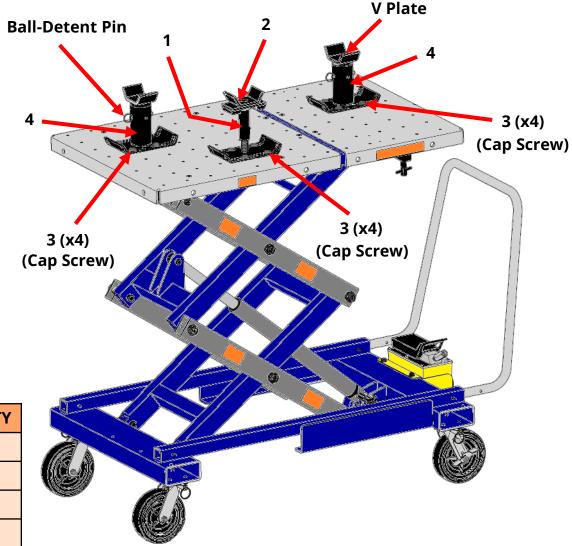
1. Attach the two Axle Assembly Supports (item #4) and Center Differential Support (#1) to the Lift Table within the acceptable mounting area (as shown here), and clamp each of these three supports with four M10x1.5x20 - 8.8 hex head cap screws (#3).

Safety

- 2. Adjust the height of each Axle Assembly Support (#4) as needed. To do this, remove the ball-detent pin, adjust the height up or down, and place pin back into the Axle Assembly Support. NOTE: The axle housing should be stable when resting on the Axle Assembly Supports.
- 3. Adjust the height of the pinion on the Center Differential Support (#1) by threading the extension up or down.
- 4. Position the Cradle Assembly (#2) on top of the Center Differential Support (#1) with the rubber pads facing up, or with the V Plate of the Axle Assembly Support (#4) facing up.

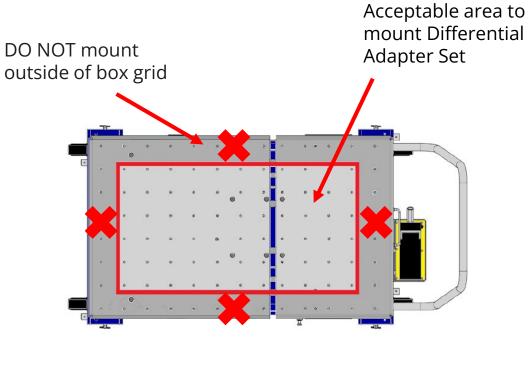
IMPORTANT: Differential Adapter Kit MUST BE secured to the Lift Table with the supplied hardware. Tighten the hexagon cap screw (bolt) with a torque of 22 ft·lbf (30 Nm). Ensure all supports are securely clamped with the cap screws BEFORE loading axle to Lift.

DESIGNATION # PART NAME		QUANTITY
1 Center Differential Support		1
2	2 Cradle Assembly	
3 Hex Head Cap Screw (M10x1.5x20 – 8.8)		20
4	Axle Assembly Support	4
5	Cam Lock Tie-Down Strap	2



MOUNTING AREA

The Axle Housing Supports and Center Differential Support must be installed within the acceptable mounting area on the Lift Table (never on or near edge of table).

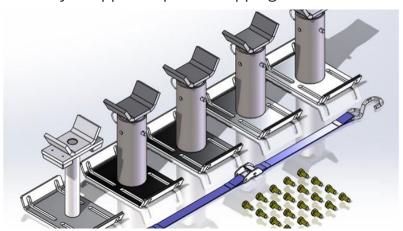


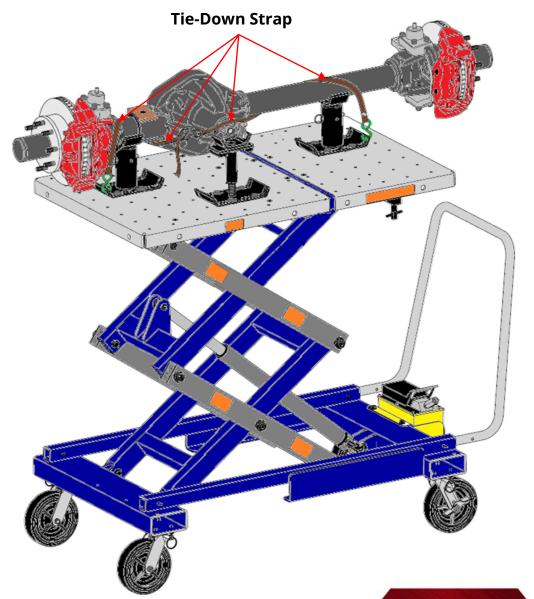
Top View



MOUNTING EXAMPLE

- 1. Before raising the Lift Table to the axle housing, refer to all Powertrain Lift operating instructions to understand the correct procedure. Raise the Lift Table to the axle housing.
- 2. Refer to vehicle's Repair Manual to correctly remove the axle assembly.
- 3. Lower the axle assembly onto the Differential Adapter Kit. Ensure that the Differential Adapter Kit is correctly clamped to the Lift Table before lowering the axle assembly onto the Lift Table.
- 4. Use the supplied Tie-Down Strap (**#5**) to secure the axle assembly to the Lift Table, ensuring that it does not rotate or tip. Depending on the application, there are different ways to strap the equipment. Strapping orientation is determined by the technician to ensure that load is correctly strapped to prevent tipping.



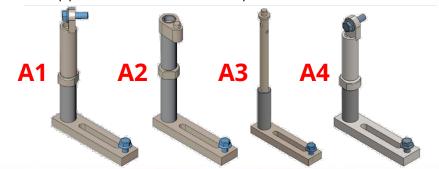


OPERATING INSTRUCTIONS

- 1. Inspect all the parts of the mounting kit for visible damage before each use. Do not use the mounting kit if damaged or in poor condition.
- 2. Perform any necessary preparatory work on the vehicle.
- 3. Ensure that the floor is level, stable, and clear of obstruction.

Safety

- 4. Position the elongated holes in the stand tubes over the threaded holes in the Lift Table.
- 5. Insert the M10x1.5x25 8.8 hexagon cap screw for the stand tube through the elongated hole in the stand tube and into the threaded hole in the Lift Table. Tighten the hexagon cap screw (bolt) with a torque of 22 ft·lbf (30 Nm) on each stand tube.
- 6. Attach any other necessary adapters to the Lift Table.
- 7. Attach the following adapter or adapters to the stand tubes:
 - A1: Support Tube (G/E); Double Spindle (L), Stand tube (A)
 - A2: Flexible Support Tube (J), Double Spindle (L) Stand tube (A)
 - A3: Thread bar (F), Stand tube (A)
 - A4: Support Tube (D), Double Spindle (C), Stand tube (B)

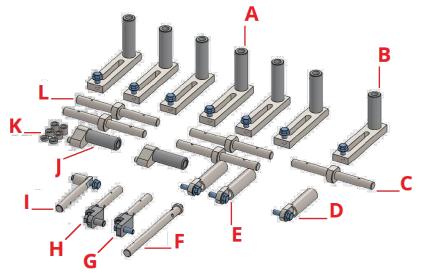


- 8. Adjust the height of the Lift Table.
- 9. Attach the adapter assemblies to the powertrain component. Refer to the table for torque specification.

Adapter (EN-52055-X):	Torque:
Torque Spindle (I) connect with hexagon head screw M10x1.5x50 - 8.8	29 ft-lbf (40 Nm)
Support Tube (E) connect with hexagon head screw M10x1.5x25 - 8.8	
Support Tube (D) connect with hexagon head screw M10x1.5x30 - 8.8	
Torque Support (G) connect with hexagon head screw M10x1.5x25 - 8.8	
Torque Support DW10 (H) connect with hexagon head screw M12x1.5x30 - 8.8	51 ft-lbf (70 Nm)

- 10. If necessary, place the spacers (K) between the powertrain component and the adapter assemblies.
- 11. Adjust the height of the Lift Table with the attached component to a desire working height to perform the service and maintenance work.
- 12. Follow steps 4 through 11 in reverse order to remove the mounting kit from the vehicle.

PARTS NAME AND NUMBER



Callout	Product Number:	Product Name:	Quantity:
Α	EN-52055-1	Stand Tube	6
		Hexagon Head Screw M10x1.5x25 - 8.8	1 per tube
В	EN-52055-10-1	Stand Tube	1
		Hexagon Head Screw M10x1.5x30 - 8.8	1 per tube
С	EN-52055-10-2	Double Spindle	1
		Hexagon Head Screw M10x1.5x30 - 8.8	1 per spindle
D	EN-52055-10-4	Support Tube	1
		Hexagon Head Screw M10x1.5x30 - 8.8	1 per tube
E	EN-52055-4	Support Tube	2
		Hexagon Head Screw M10x1.5x25 - 8.8	1 per tube
F	EN-52055-6	Thread Bar	1
G	EN-52055-8	Torque Support	1
		Hexagon Head Screw M10x1.5x25 - 8.8	
Н	EN-52055-9	Torque Support DW10	1
		Hexagon Head Screw M12x1.5x25 - 8.8	
I	EN-52055-3	Torque Spindle	1
		Hexagon Head Screw M10x1.5x50 - 8.8	
J	EN-52055-5	Flexible Support Tube	2
K	EN-52055-7	Spacer Kit	1
		Spacer size: 5 mm,10 mm, 15 mm	2 each
L	EN-52055-2	Double Spindle	4
		Hexagon Head Screw M10x1.5x25 - 8.8	1 per spindle

Optional Accessories (not included in delivery):

Product Number:	Product Name:	
CH-49290-150	Adapter for the Engine/Transmission Holder	

GENERAL SAFETY INSTRUCTIONS



Warning!

Improper use could cause serious personal injury or severe damage to materials!



Warning!

Disregarding the safety regulations could cause serious personal injury or severe damage to materials!



Warning!

Suspended loads could cause serious personal injury!



Caution!

Crushing Hazard!

The load holding device has been specifically constructed for its intended use. The safety of the load holding device can no longer be ensured if it is misused or modified in ways not expressly approved by the manufacturer. These actions could result in serious personal injury or severe damage to materials. Read and follow these instructions carefully. Ensure that each person using the load holding device is familiar with these instructions and can access them at all times.

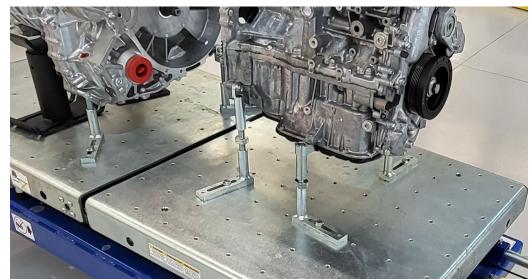
The mounting kit could be damaged or could fail if the user does not follow the safety regulations. These actions could cause serious personal injury or severe damage to materials.

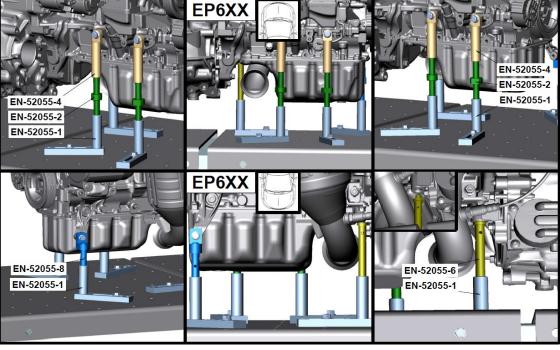
DO NOT exceed the maximum load capacity of 176 lbs. (80 kg) per adapter assembly. Do not exceed the maximum load capacity of the lift table. Do not connect the Powertrain Base Attachments to another lift table than 01421-00151 Mobile Lift Table. Use only for engines with suitable attachment points for the mounting kit. Attach the mounting kit to the lift table and to the engine in exact accordance with these instructions. Do not unscrew the adapters further than the drilled holes in the thread of double spindle.

Handling special tools and vehicle parts carelessly could cause hands or feet to be crushed. Wear safety shoes that meet the OSHA 1910.136 and ISO 20345, S2 standard. Position hands and feet so as to avoid potential crushing hazards.

MOUNTING EXAMPLE



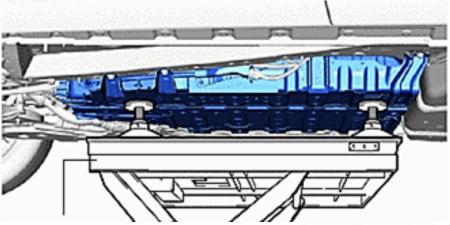




OPERATING INSTRUCTIONS

- 1. Inspect all the parts of the mounting kit for visible damage before each use. Do not use the mounting kit if damaged or in poor condition.
- 2. Perform any necessary preparatory work on the vehicle.
- 3. Ensure that the floor is level, stable, and clear of obstruction.
- 4. Position the elongated holes in the Adjustable Height Adapter over the threaded holes in the Lift Table.
- 5. Insert the M10x1.5x25 8.8 hexagon cap screw for the Adjustable Height Adapter through the elongated hole in the Adjustable Height Adapter into the threaded hole in the Lift Table. Tighten the hexagon cap screw with a torque of 22 ft·lbf (30 Nm) on each Adjustable Height Adapter.
- 6. Adjust the adapter to a desired height by rotating it left or right.
- 7. Adjust the height of the Lift Table with the attached component to a desire working height to perform the service and maintenance work.



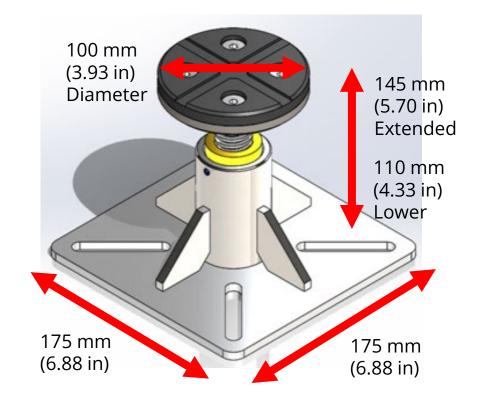


Jumber and Dimensions

General Safety Instructions

PART NAME, NUMBER AND DIMENSIONS

PART NAME	PART NUMBER	QUANTITY	MAXIMUM LOAD CAPACITY
Adjustable Height Adapter	01221-00156-KIT	4	1500 lbs. (680 kg) per adapter assembly





GENERAL SAFETY INSTRUCTIONS



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Warning!

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Caution! Crushing Hazard!

The load holding device has been specifically constructed for its intended use. The safety of the load holding device can no longer be ensured if it is misused or modified in ways not expressly approved by the manufacturer. These actions could result in serious personal injury or severe damage to materials. Read and follow these instructions carefully. Ensure that each person using the load holding device is familiar with these instructions and can access them at all times.

The mounting kit could be damaged or could fail if the user does not follow the safety regulations. These actions could cause serious personal injury or severe damage to materials.

DO NOT exceed the maximum load capacity of 1500 lbs. (680 kg) per adapter assembly. Do not exceed the maximum load capacity of the lift table. Do not connect the Adjustable Height Adapter to another lift table than 01421-00151 Mobile Lift Table. Do not unscrew the adapters further than the drilled holes in the thread of double spindle.

Handling special tools and vehicle parts carelessly could cause hands or feet to be crushed. Wear safety shoes that meet the OSHA 1910.136 and ISO 20345, S2 standard. Position hands and feet so as to avoid potential crushing hazards.