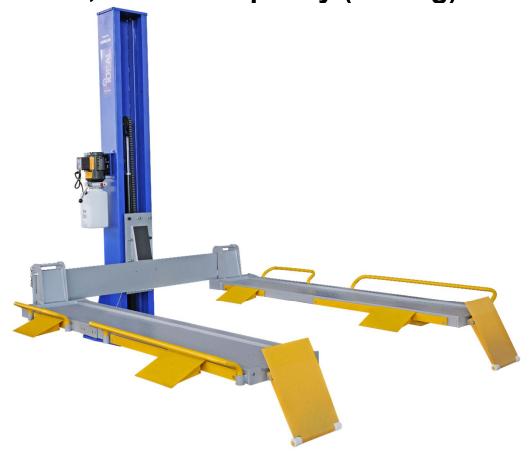


SC-2K-UTV-X SINGLE COLUMN UTV & MOWER STORAGE / SERVICE LIFT

2,000 lbs. Capacity (908 Kg)



INSTALLATION & OPERATION MANUAL

IMPORTANT!!

READ MANUAL THOROUGHLY BEFORE ASSEMBLING, OPERATING, OR MAINTAINING LIFT TABLE. WHEN COMPLETED WITH ASSEMBLY, ENSURE TO RETURN MANUAL & RELATED DOCUMENTS IN PROTECTIVE SLEEVE AND GIVE TO THE OWNER / OPERATOR.

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1. Safety & Cautions

Important Statements:

Please note the max weight capacity noted on the silver ID tag attached to the main post. Do not try to lift any load that exceeds the rated lifting capacity. Please read this manual carefully before installation and use of the lift, to avoid any property loss or personal injury caused by faulty operation. No one is allowed to modify the controls, parts, or other mechanical parts of the machine without the manufacturers permission.

Qualification of Operators and Users:

- Only personnel who have received professional training are allowed to operate and use the lift.
- Non-professionals shall not approach the lifting area.

Cautions:

- Do not install the lift on asphalt or tar ground. Concrete thickness must meet requirement.
- Please read and understand Safety Cautions carefully before operation of the lift.
- The lift shall not be used outdoors if not customized to meet special water proofing requirements.
- Hands and feet shall be kept away from moving parts of the lift at all times.
- Only personnel who have received professional training are allowed to operate and use the lift.
- Operators should not wear loose clothes to avoid being clamped by any moving part when the machine is descending or rising.
- Area around the lift must be kept clean to help avoid accidents and possible lift malfunctions.
- The lift is designed to lift the entire vehicle, not part of it. Do not try to lift any vehicle beyond the lifts rated lifting capacity.
- Make sure the lift is secured on the safety locks before working on a lifted vehicle.
- Always lift vehicle slightly, checking the vehicle is stable without any risk of tipping or falling, before lifting it to the desired height.
- Check for any missing, broken, or seized parts or components that may contribute to improper wear & tear to lift. Once any anomaly is detected, stop use immediately and contact your dealer.
- Always fully lower lift to the lowest position before driving a vehicle On or Off the lift platforms.
- It is not allowed to modify any part of the lift without the manufacturer permission.
- If the machine is to stand idle for a long period of time, the operator / user shall:
 - a. Turn off electrical power.
 - b. Drain hydraulic oil from power unit. (Per local codes, depose of used oil responsibly.)
 - c. Lubricate moving parts with grease.

Training:

• Lift operators must be qualified & trained for safe use and proper operation, as described in Manual.

Owner / Employer Responsibilities:

This is a single post lift installation / operation manual, and no attempt is made or implied herein to instruct the user in lifting methods particular to an individual application. Rather, the contents of this manual are intended as a basis for operation and maintenance of the unit as it stands alone or as it is intended and anticipated to be used in conjunction with other equipment.

Proper application of the equipment described herein is limited to the parameters detailed in the specifications and the usages set forth in the descriptive passages. Any other proposed application of this equipment should be documented and submitted in writing to the factory for examination. The user assumes full responsibility for any equipment damage, personal injury, or alteration of the equipment described in this manual or any subsequent damages.

2. Product Information

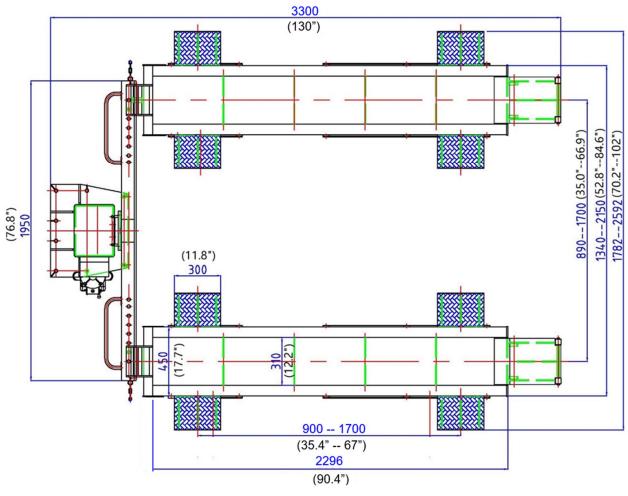
Lift Description: (SC-2K-UTV-X)

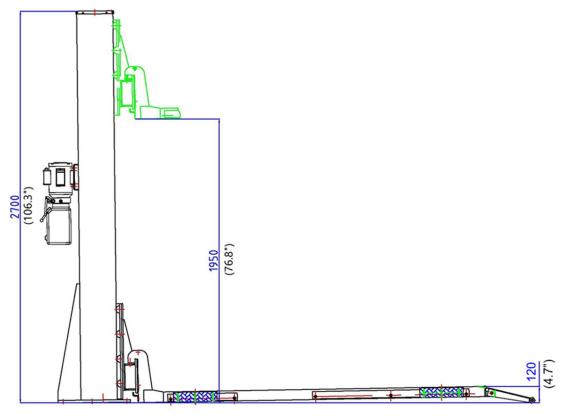
The iDEAL SC-2K-UTV-X is 2,000 lb. single column, high-rise £multi-useq storage & service lift, incorporating £multi-adjustableqplatform design with multi-directional front & side vehicle loading for most ATV¢, UTV¢, Golf Carts & Riding / Zero Turn Mowers. The low-profile multi-adjustable platforms incorporate spring-loaded £quick release / locking nylon rollers & brackets mounted to the underside of each platform, making adjusting the platforms width¢ £quick & easyq Each platform is secured to the bolster via HD lock pins & retainer brackets once the desired platform width is set. For additional space saving benefits, the power unit can be easily mounted to either the front, side, or rear of column providing the best fit in a shop or garage! In addition, iDEAL SC-2K-UTV-X 2,000 lb. Lift comes standard with durable powder-coat finish, 8ea multi-position side ramps, wheel stop £pivotqramps with protective nylon rollers, quick removal tubular wheel stop bars for platform sides. Easy lift operation is provided with high quality electric / hydraulic 115V DURO power unit, HD hydraulic chain-drive cylinder and single point manual lock release with 20 differ locking height positions.

Specifications:

Lift Model	SC-2K-UTV-X
Capacity	2,000 lbs.
Width Overall	102+
Height Overall	106.3+
Depth / Length Overall	130+
Max Clearance Under Platforms	76.8+
Platforms Min Height	4.7+
Platforms Max Height	81.3+
Platform Width	17.7+
Platform Runway Width	12.2+
Platform Length	90.4+
Adjustable Platform Widths (OD)	52.8+to 84.6+
Adjustable Side Ramps Widths (CL)	35.4+to 67+
Locking Positions	20ea
Ship Weight	1,624 lbs.
Power	115V - 20 Amp - 1PH

Dimensions:





Receiving & Handling:

Unloading the Lift: You will need a forklift that can handle a minimum of 2,500 pounds and operates on a smooth surface to unload from freight carrier trailer. The lift packaging weighs close to 1,700 pounds, not including any optional accessories that may be included.

Un-banding the Lift: The steel bands which secure the lift packaging are heavy duty. You will need a pair of metal shears or tin snips to cut the steel banding. Be very careful cutting bands, as they will tend to fly apart when cut, along with possible shifting of heavy lift parts when freed from the bands. Stand to the side of bands when cutting, while using gloves & safety glasses.

Moving Lift Components: Recommend moving larger lift components to the garage or service bay with the forklift, dolly and/or engine hoist. Smaller pieces can typically be moved by one or two people.

Required Tools:

- Fork Lift (Offload lift package upon delivery & installation assist)
- Crow Bar
- Metal Shears
- Rotary Hammer Drill
- ➤ 19mm (3/4+) Masonry Drill Bit
- Hammer
- > #12 Hex Drive Bit
- Metric Socket Set & Ratchet
- Adjustable Wrench
- Medium Flat & Hex Screwdrivers
- Snap Ring Pliers
- Approx 1.5 Gallons (6 Quarts) of *Hydraulic Oil
- Safety Glasses
- Gloves

*Recommended Oil: Non-Detergent / Non-Foaming Hydraulic Oil - SAE-10, AW 32 or Equivalent.

NOTE: Use of ATF is Prohibited, as could damage Power Unit & Void Warranty.

Selecting Site:

NOTE: Before installing your new lift, ensure to check the following:

Overhead Obstructions:

The area where the lift will be located should be free of overhead obstructions such as heaters, building supports, electrical lines, etc.

Floor Requirements:

Visually inspect the site where the lift is to be installed and check for cracked or defective concrete. This lift must be installed on a solid level concrete floor with no more than 2 degrees of slope. A level floor is suggested for proper installation and level lifting. If a floor is of questionable slope, consider a survey of the site and/or the possibility of pouring a new level concrete slab. This lift is designed to be installed on a minimum of 4-1/4" thick, 3000psi, with steel reinforced concrete. Do not install this lift on asphalt, wood, or any other surface other than described. This lift is only as strong as the foundation on which it is installed.

Operating Conditions:

The Lift is not intended for outdoor use and has an operating ambient temperature range of 41° - 104°F (5° - 40°C).

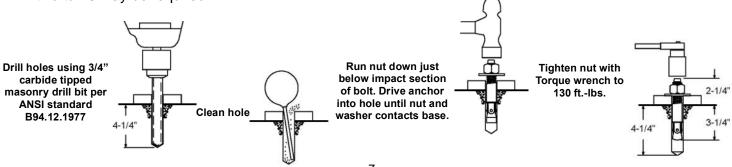
DO NOT install this lift outdoors unless special consideration has been made to protect the power unit from weather conditions. **NOTE: The Power unit is not water proof!**

Foundation & Anchoring Requirements:

- Concrete shall have compression strength of at least 3,000 PSI and a minimum thickness of 4-1/4+in order to achieve a minimum anchor embedment of 3-1/4+ <u>NOTE</u>: When using the standard supplied 3/4+x 5-1/2+ long anchors, if the top of the anchor exceeds 2-1/4+above the floor grade, you DO NOT have enough embedment.
- 2. Maintain a 6+minimum distance from any slab edge or seam. Hole to hole spacing should be a minimum 6-1/2+in any direction. Hole depth should be a minimum of 4-1/4+.
- **3.** <u>DO NOT</u> install on asphalt or other similar unstable surface. Columns are supported only by anchoring to floor.
- **4.** Using the horseshoe shims provided, shim each column base as required until each column is plumb. If one column has to be elevated to match the plane of the other column, full size base shim plates should be used. Torque anchors to 130 ft-lbs. Shim thickness MUST NOT exceed 1/2+when using the 5-1/2+long anchors provided with the lift.
- 5. If anchors do not tighten to 130 ft-lbs. installation torque, replace the concrete pad under pad lift base with a 7½V x 9½ x 6+thick 3,000 PSI minimum concrete pad keyed under and flush with the top of existing floor. Allow concrete to cure before installing lifts and anchors (typically 2 to 3 weeks).

Anchoring Tips

- 1. Use a concrete hammer drill with a carbide tip, solid drill bit the same diameter as the anchors. Do not use excessively worn bits or bits which have been incorrectly sharpened.
- **2.** Keep the drill in a perpendicular line while drilling.
- 3. Let the drill do the work. Do not apply excessive pressure. Lift the drill up and down occasionally to remove residue to reduce binding.
- **4.** Drill the hole to depth of 2+deeper than the length of anchor. <u>NOTE:</u> Drilling thru concrete (recommended) will allow the anchor to be driven thru the bottom of foundation if the threads are damaged or if the lift will need to be relocated.
- **5.** For better anchoring holding power, blow dust from the hole.
- **6.** Place a flat washer and hex nut over threaded end of anchor, leaving the nut almost flush with the top of the anchor bolt. Carefully tap anchor into hole. <u>Do not damage threads</u>. Tap anchor into the concrete until nut and flat washer are against base plate. <u>Do not use an impact wrench to tighten!</u> Tighten the nut, two or three turns on average after the concrete has cured (28-day cure). If the concrete is very hard only one or two turns may be required.



3. Installation Instructions

WARNING!! Improper installation can cause accelerated wear, resulting in catastrophic failure which may cause property damage and / or bodily injury. Manufacturer will assume no liability for loss or damage of any kind, expressed or implied, resulting from improper installation or use of this product. Read this installation manual in its entirety before attempting to install or operate the lift.

Step 1: Lift Location

- 1) If available, use architect plan to locate lift in service area or bay. Ensure the area where the lift will be located is free of any overhead obstructions such as heaters, building supports, electrical lines, etc.
- 2) Determine how the lift will be oriented to best fit the service bay or garage by installing the column to the left, right or front of bay for ease to load & unload vehicles from platforms, while also considering loading / unloading from the platform sides. Ensure to leave adequate clearance around the lifts outer perimeter for safety clearances, plus enough distance for safety loading & unloading vehicles.
- 3) Ensure concrete floor is level & meets **£** oundation & Anchoring Requirementsquoted on **Pages 6 & 7**.

Step 2: Unpackaging Lift

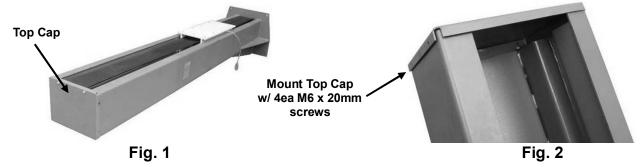
- 1) Carefully cut banding from lift & remove power unit from top of packaging and set aside.
- 2) Using a forklift (recommended), carefully remove the bolster beam, platforms & ramps from top of lift package. Place near intended installation area.

CAUTION: Column, Bolster Beam & Platforms are heavy, use caution when lifting & positioning into place.

- 3) Remove hardware box, safety bars and any other loose items from inside column and set aside.
- **4)** Using a forklift (recommended), carefully remove bolts from shipping brackets connected to column. Place column near intended installation location, considering location information noted in **Step 1**.
- 5) Check for any missing or damaged items.

Step 3: Column Assembly & Anchoring

1) With column in the horizontal position, slightly raise top end section to mount the top cap to top of column, using M6 x 20mm screws, Figs. 1 & 2.



2) With column still in the horizontal position, ensure the lift carriage positioned to base of column. If not, slide carriage to base, while pulling the latch release cable at the same time. This will assist when standing column into position, by lowering the columns center-of-gravity. Fig. 3.

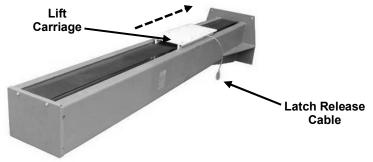


Fig. 3.

- 3) Using a forklift & sling or two to three people, carefully stand the column upright and maneuver to the predetermined location.
- **4)** Before proceeding, double check measurements and make certain that the base of the column is properly aligned and in the desired location before anchoring column to floor.
 - A. Using the base plate on the column as a guide, drill each anchor hole into concrete using a rotary hammer drill and 3/4+concrete drill-bit. To assure full holding power, do not ream the hole or allow the drill to wobble. (See Anchoring Details & Tips on Page 7) Fig. 4.
 - **B.** After drilling, remove dust thoroughly from each hole using compressed air and/or wire brush.
 - **C.** Assemble the washers and nuts on anchors then tap into each hole with a block of wood or rubber hammer until the washer rests against the base plate. If shimming is required, ensure that enough threads are left exposed to properly tighten.
 - **D.** Using a level, check that the column is plumb (sides only). If shimming is required, use supplied Shim stock or 3/4+washers, placing shims as close as possible to the anchor holes locations. This will prevent potential bending for the column base.
 - **E.** With the shims and anchor bolts in place, tighten by securing the nut to the base then turning 2-3 full turns clockwise. Ensure anchor bolts are tightened to a minimum of 130 ft-lbs. of torque. DO NOT use an impact wrench for this procedure.

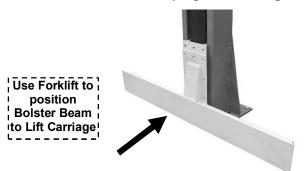


Fig. 4.

Step 4: Bolster Beam Mounting to Column

1) Carefully position the **bolster beam** to **lift carriage** using a forklift or dolly. Align bolster beams mount holes to the lift carriage holes. **First, use the 'shorter' M16 x 30mm socket head bolt, lock washer & flat washer to connect the 'top center' hole position on bolster beam & carriage**, which is required for proper chain clearance. **Fig. 5.** (Next Page)

2) For the remaining 6ea mount holes, use the ±ongerqM16 x 40mm socket head bolts, lock washers & flat washers to finish connecting the bolster beam & carriage together. Ensure all bolts are securely tightened. Fig. 5.
NOTE: apply



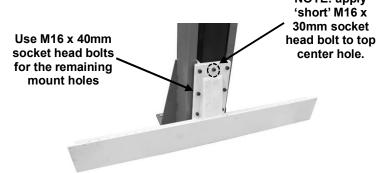
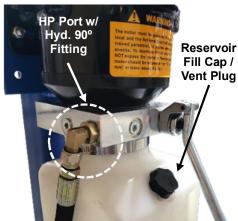


Fig. 5

Step 5: Power Unit Mounting

- 1) Before mounting the power unit, determine which side of column will be the preferred or the best configuration for garage or shop bays, either the <u>right</u>, <u>left</u> or <u>backside</u> of column. Once determined, first install the **power unit mount bracket** to the preferred column side via the threaded mount holes on the column. Install **bracket**, using **4ea M8 x 25mm hex bolts**, **lock washers & flat washers**. Fig. 7.
- 2) Carefully remove 115V Power Unit from cardboard box to mount to the specific column side mount bracket. Use 4ea M8 x 25mm hex bolts, washers, and lock nuts to mount power unit to power unit mount bracket. Fig 7.
- 3) Using the **Hydraulic 90° Fitting** from the hardware box, install to the **HP Port** on power unit. **Fig. 8**.
- 4) Locate the **Hydraulic Hose** from the hardware box and connect one end to the **Hydraulic** 90° Fitting installed on power unit. Fig 8.
- 5) Connect another end of Hydraulic Hose to the Cylinder Hydraulic Fitting located on the lower backside of column. NOTE: Ensure to route Hydraulic Hose through the specific gusset hole that is closest to the selected power unit mounting position. Fig. 9
- 6) Remove Fill Cap / Vent Plug to add **Hydraulic Oil (SAE-10, AW 32)** to **115V** Power Unit Reservoir Tank, Add to Min. Fill line on Drip Stick, approx.**1.5 gallons (6 quarts) Fig. 8. NOTE: Do Not Use ATF!!**





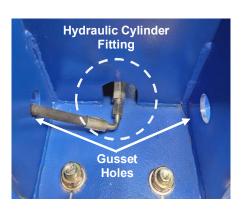


Fig. 8 Fig. 9

CAUTION: Only add hydraulic fluid to the reservoir tank when the lift is lowered.

Step 6: Power Unit Electrical Connection (Standard 115V)

WARNING: Electrical Wiring must comply with local code. Use separate circuit for each power unit and protect each circuit with time delay fuse. For 110V-115V single phase, use 20 amp fuse.

1) Connect 115VAC electrical power to the Power Units three prong electrical plug. Ensure to use proper size extension cord & plug type for 20 Amps. Also ensure power supply incorporates 20 Amp breaker service for safety. If there are any questions on the power source requirements, please consult an electrician. Fig. 10.



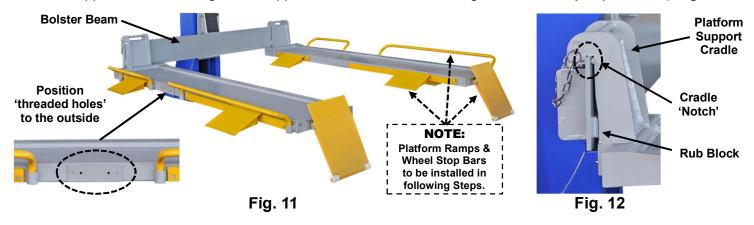
Fig. 10

Step 7: Mounting Platforms to Bolster Beam

1) Select either the **right side or left side platform** to mount onto bolster beam, <u>The platform ±hreaded</u> holesqshould be mounted to the outside. **Fig. 11.**

NOTE: the 'threaded holes' on the 'outside / center' of each platform determine which 'side' to mount onto the bolster beam.

2) Using a forklift, dolly, or pallet jack, position the (right & left) platform to bolster beams specific side and carefully ±nangqonto the bolster beam, ensuring the ±notchqat the top of the platforms support cradle is fully seated onto bolster beam. Fig. 12 (The nylon rub block mounted to the backside of the platform support cradle is designed to support loads, while also allowing the ease to adjust platforms.) Fig. 12.



- 3) Once the platforms are secured onto the bolster beams, install M10 x 25mm 'stop bolts' through ends of bolster beam and secure with M10 nuts. Secure platform position to bolster using lock pins. Fig. 13.
- 4) Secure each platform to bolter beam using the platform retainer bracket; mount using M6 x 15mm hex socket bolts, which maintains platform / bolster beam alignment when fully lowered. Fig. 13.



Step 7-A: Platform 'Angle' Adjustment Tips:

The SC-2K-UTV-X Lift come with the ability to adjust the platform 'deflection' angle, based on the type & weight of vehicle(s) being lifted for storage and/or service, along with the position of the vehicle on the platforms. To adjust the platforms deflection angle, use one or a combination of the 3ea different thickness of platform shim plates, included with Lift. Fig. 14.

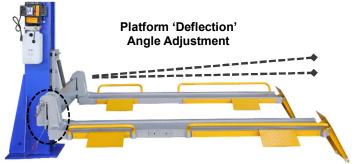
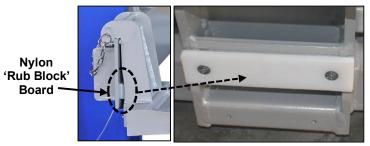


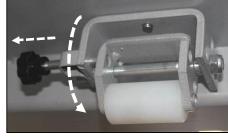


Fig. 14

Platform Shim Plates

- A. To install the platform shim plates, the backside of the platform must be exposed to access the **nylon** 'rub block' board, Fig. 15.
- B. To access the platforms nylon <u>*ub</u> blockqboard, first **raise platforms** and position **all 6ea** of the **retractable nylon wheel dollies** (underside of platforms) to the <u>*down & lockedqposition</u>. With the wheel dollies in the <u>*down & lockedqposition</u>, then fully lower the lift to the ground. **Fig. 16**.





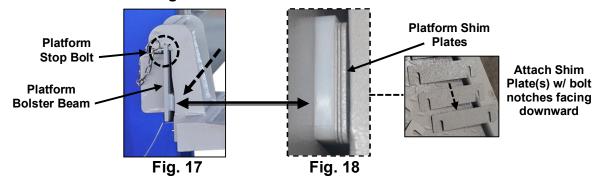
Retractable Nylon Wheel Dolly in the down / locked' position

Fig. 15

Fig. 16

- C. With lift fully lowered & wheel dollies locked into down position, the platforms will automatically rise-up off the bolster beamL remove the platform stop bolts at each end of bolster beam and carefully ±ollgeach platform off the end of bolster beam to expose the backside of platform Fig. 17.
- **D.** Loosen the mount bolts for the **nylon** 'rub block' board to add the preferred platform shim(s) between the platform & **±**ub blockgboard to adjust the platforms deflection angle height. **Fig. 18**.

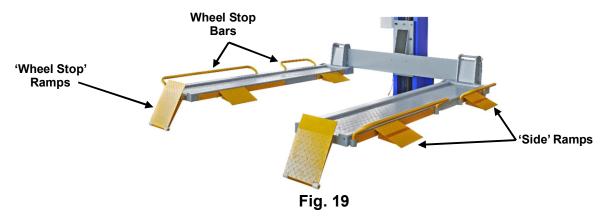
NOTE: If adding platform shims, add the same number & thickness of shims for each platform. Apply shims with 'bolt notches' facing downwards onto the 'rub block' board's mount bolts.



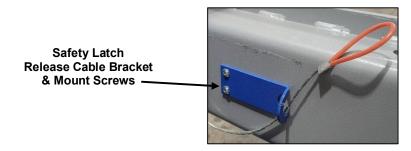
E. Once the platform shims have been installed, ensure the mount bolts are tightened. Repeat above steps B & C in reverse to remount & secure platforms back onto bolster beam or **STEPs 7-2 & 7-3**.

Step 8: Mounting Ramps, Wheel Stop Bars & Latch Cable Bracket

- 1) Mount the pivoting platform wheel stop ramps to each end of platforms. Connect to platforms using the pivot pin, apply snap rings at each end of pivot pin to secure to platforms. Fig. 19.
- 2) Insert side ramps into brackets on each side of platforms, as required. Fig 19.
- 3) Insert wheel stop bars into bracket tubes on the outside of each platform, as required. Fig 19.



4) Install 'safety latch' release bracket to backside of bolster beam, using provided hex screws. Route latch cable through hole in bracket, Fig.20.



END OF INSTALLATION INSTRUCTIONS

4. Starting Up / Testing

NOTE: Do not place any vehicle on the lift platforms at this time.

To Raise, push the power switch button on the power unit and hold while the electric motor turns on. The motor operates an internal pump that forces hydraulic oil into the lift cylinder, which extends the piston rod & roller chain to raise the lift.

As the lift rises, an internal safety latch will pass over the steel latch stops (rectangular blocks which protrude from the back, inside of the lift column), and you will hear %Janks+as it does so. This sound is normal and indicates that the safety latch is passing over the latch stops properly.

The lift is raised to the desired height by holding the power switch button in while it is rising, and releasing the button when the lift has reached the desired position.

IMPORTANT: For safety, it is required to release the hydraulic pressure inside the cylinder to lower the lift to the nearest lower latch stop. To do this, simply press down the release handle on the power unit. The lift will rest on the latch stop inside column.



Power Unit 115VAC, 1Ph, 20 Amp

WARNING: If the Safety Latch Mechanism does not properly engage into the locked position, fully lower lift, and have a qualified service technician immediately repair it.

To Lower, first you need to depress the power switch button a second or two to raise the lift up a little. Then, pull the safety latch release cable to disengage the safety latch to fully lower. After that, press down the release handle again and hold.

NOTE: Once the Safety Latch locks into one of the safety catches, you must slightly raise the lift first to disengage the safety latch to release the safety latch to lower the lift.



The weight of the vehicle will cause the lift to lower by gravity. No power is required to be applied to the power unit while lowering, but the safety latch must be disengaged to allow the lift to lower past the latch stops.

After start-up testing is completed, cycle the lift fully Up & Down 2 to 3 times to ensure all air is removed from the hydraulic system.

IMPORTANT: Cycle lift Up & Down in intervals at 2 mins apart, to NOT overheat the power unit.

THE LIFT IS NOW READY FOR OPERATION

5. Operation Instructions

Vehicle Positioning, Raising & Lowering

VEHICLE POSITIONING:

- ❖ Determine which loading direction the vehicle will be for Front or Side loading.
- For Front Loading, adjust the Platforms width to match the center of vehicles wheels to the center of each platform.
- For Side Loading, determine the approach side and adjust the Platforms width to match the center of vehicles wheels. Remove the wheel stop bars, while adjusting the side ramps to the vehicles wheels, prior to loading vehicle onto platforms.



Front Loading

Carefully drive vehicle onto 'adjusted' platforms, keeping the vehicle parallel with the platforms or bolster beam, based on the selected loading direction.

CAUTION: Before driving a vehicle onto the lift, ensure the lift is fully lowered and platforms are properly adjusted to match vehicle wheels.

NOTE: Refer to Page 15 for Power Unit & Safety Latch component details.



Side Loading

RAISE LIFT:

- **A.** After loading vehicle onto platforms, double-check that the platforms are properly adjusted to vehicle wheels and platform lock pins are applied to holes on the backside on bolster beam to secure platforms in position.
- **B.** After loading vehicle onto platforms, turn off the vehicle's engine and engage the parking brake.
- **C.** If required, reinstall wheel stop bars, after loading vehicle onto platforms.
- **D.** Raise vehicle to desired working height, followed by pressing the release handle on power unit to relieve hydraulic pressure, allowing the lifts safety latch to securely engage into the safety latch brackets, securing the raised vehicle.

NOTE: Be careful when raising vehicle so not to make contact with ceiling or any other overhead obstructions that may damage vehicle or garage or building during lift operation.

LOWER LIFT:

NOTE: It is normal for an unloaded lift to lower slowly, during first lift operations.

- 1. Be sure any obstructions are removed from under or around lift.
- 2. First, raise the lift slightly to release pressure off safety latch, then pull the safety latch release cable to disengage the safety latch.
- 3. Press the release handle on the power unit to lower lift.

CAUTION: Before removing vehicle from lift, ensure to remove wheel stop bars and adjust side ramps, if required.

6. Troubleshooting

Common lift issues may be encountered over time. Please see probable causes & possible solutions covered in the paragraphs below. If the troubleshooting guide does not provide assistance to resolve the lift issue(s), please contact the distributor / manufacturer for help. We will help you solve the problem as soon as possible.

Motor Does Not Operate:

- 1. Breaker or fuse blowno o o o (Contact Electrician)
- 2. Faulty wiring connectionsõ õ ..(Contact Electrician)
- 3. Defective start / up buttonõ õ .(Contact Electrician)

WARNING!! Failure to properly relieve pressure in the following steps can cause injury to personnel.

Motor Functions but Lift Will Not Rise:

- 1. Power Unit is not priming correctly o ... (See Power Unit Prime Procedure on next page.)
- 2. A piece of trash is under release £lownqvalveo ..(Push lowering handle down, while pushing the start / up button at the same time. Hold for 10-15 seconds. This should flush debris from release valve.)
- 3. Motor spins backwardsõ ..(Carefully remove the check valve cover and clean check ball, spring & seat.)
- 4. Oil level too lowo .(Oil level should be at the MAX fill line located on the reservoir tank when lift is <u>fully lowered</u>.) NOTE: Ensure to fully lower lift to relieve all hydraulic pressure before adding oil.

Oil Blows out Breather of Power Unit:

- 1. Oil reservoir tank overfilledo (Relieve all pressure and siphon out hydraulic fluid until at a proper level.)
- 2. Lift lowered too quickly while under a heavy loado .(Lower the lift slowly under heavy loads.)

Motor Hums and Will Not Run:

1. Lift overloadedo ..(Remove excessive weight from lift.)

WARNING!! The voltages used in the lift can cause death or injury. In the following steps, make sure that a qualified electrician is used to perform maintenance.

- 2. Faulty wiring o o o (Contact Electrician)
- 3. Bad capacitorõ õ õ .. (Contact Electrician)
- 4. Low voltageõ õ õ õ ..(Contact Electrician)

Lift Jerks Going Up and Down:

1. If the lift jerks while going up and down, it is usually a sign of air in the hydraulic systemõ ..(Raise lift all the way to top and return to floor. Repeat 4-6 times, ensuring not overheat power unit.)

Oil Leaks:

- 1. Power Unit: If the power unit leaks hydraulic oil around the tank-mount flange, check the oil level in the tankõ ..(The level should be two inches below the flange of the tank when the lift is fully lowered.)
- 2. Cylinder / Piston Rod: The rod seal of the cylinder is defectiveo ...(Rebuild or replace the cylinder.)
- 3. Cylinder / Vent: The piston seal of the cylinder is defective of of (Rebuild or replace the cylinder.)

Lift makes Excessive Noise / Vibrates:

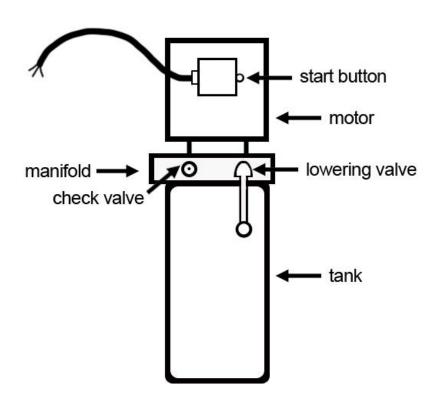
- 1. Carriage rub blocks may need lubricated or wornõõõo.(Inspect, grease column, or replace as needed.)
- 2. Excessive wear on shafts & pins.......(Inspect and replace, as required.)
- 3. Cylinder too tightõ õ ..(Load lift at half capacity, then cycle lift ± p & downga few times to break in seals.)

Power Unit Priming Procedure

THE PROBLEM: Power unit runs fine but will not pump any fluid.

<u>WARNING!!</u> Failure to properly relieve hydraulic pressure in the following steps can cause injury to personnel.

Step 1. Locate the check valve, the flush plug to the left of the lowering valve.



Step 2. Using an Allen wrench and shop towel . with shop towel in place to catch fluid . loosen the check valve plug 2-½ turns to allow it to leak.

<u>Step 3</u>. Push the START button for one second, then release for three seconds. Repeat these steps until unit starts pumping fluid.

Step 4 . Tighten the check valve plug.

THE POWER UNIT SHOULD NOW BE PRIMED & READY TO GO!

7. Preventive Maintenance

The periodic Preventive Maintenance Schedule provided is the suggested minimum requirements at minimum intervals for Daily, Weekly & Yearly periods or accumulated hours, whichever comes sooner.

Periodic maintenance is to be performed on a Daily, Weekly, and Yearly basis as given in the following paragraphs.

NOTE: Do not modify the lift in any manner without the prior written consent of the manufacturer.

WARNING!! Failure to perform the daily pre-operational check can result in expensive property damage, lost production time, serious personal injury, and even death. The safety latch system must be checked and working properly before the lift is put into use.

WARNING!! If you hear a noise not associated with normal lift operation or if there is any indications of impending lift failure CEASE OPERATION IMMEDIATELY! Inspect, correct and/or replace parts as required. Failure to heed this warning can result in death or serious injury, or damage to equipment.

Daily Pre-Operation Check: (Every 8-Hours)

- Check platforms are properly mounted & secured to lift bolster beam.
- > Check safety latch audibly and visually while in operation.
- Check safety latch for free movement and full engagement with latch rack.
- Check lifting chain and cylinder for any defects or leakages
- Check hydraulic connections, and hoses for leakages.
- Check snap rings for all rollers and sheaves.
- Check bolts, nuts, and screws and tighten if needed.
- Check wiring & switch for any damages or malfunctions.
- Check floor for stress cracks near post / column.
- Check for proper lubrication for rollers and shafts.

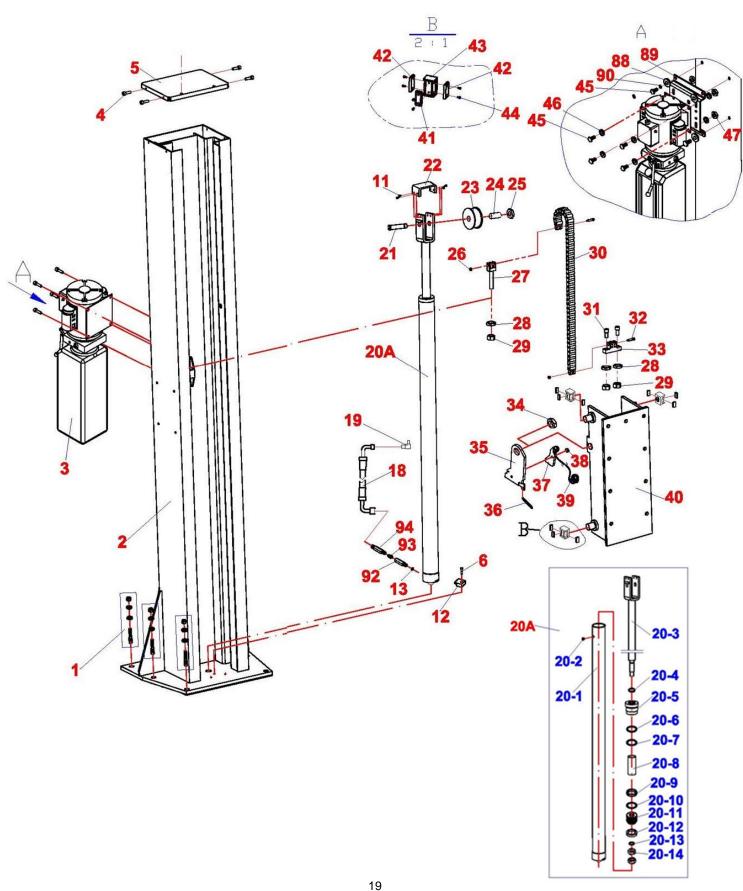
Weekly Maintenance: (Every 40-Hours)

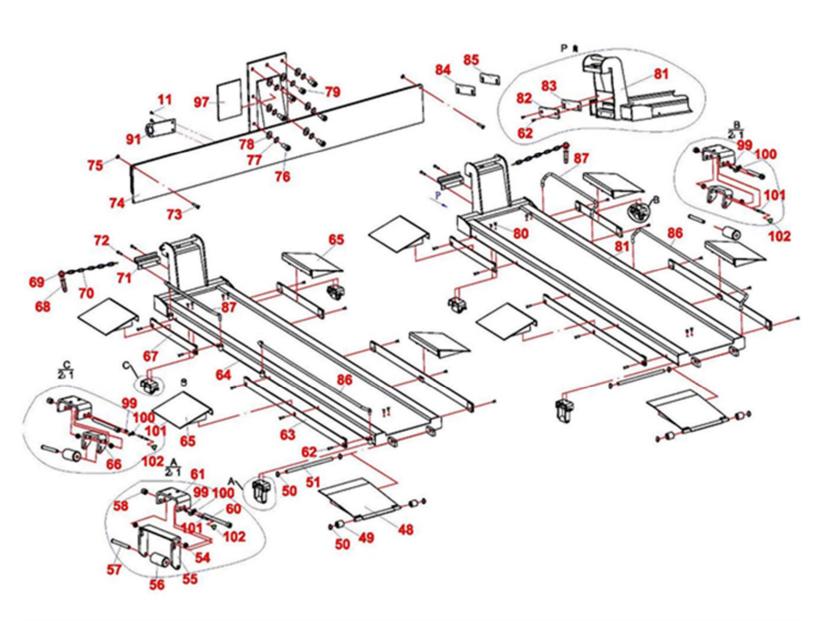
- ➤ Check anchor bolts torque to 130 ft-lbs. for the 3/4 in. anchor bolts. Do not use an impact wrench to tighten anchor bolts.
- Check floor for stress cracks near columns.
- Check hydraulic oil level.
- Check and tighten bolts, nuts, and screws.

Yearly Maintenance: (Annually)

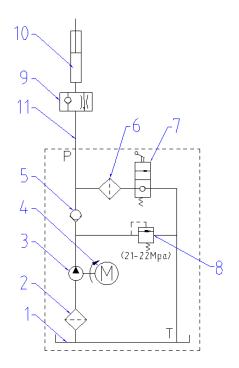
- Lubricate the chain, rollers, and shafts at least once a year, after the lift is in service.
- ➤ Check for excessive wear of lifting chain, platforms, safety latch mechanism, platform roller assemblies, protective rubber pad & lock pins. Replace, if necessary.
- Change the hydraulic fluid, but if operating in dusty environment a shorter interval may be required.
- > Replace all Caution, Warning, or Safety related decals on lift, if unable to read or missing. Reorder, if necessary.

Exploded Views





(Hydraulic Schematic)



1. Reservoir Tank	7. Release Valve (Manual)
2. Steel Mesh Filter	8. Overload Relief Valve
3. Gear Pump	9. Restrictor Valve
4. Motor	10. Hydraulic Cylinder
5. Check Valve	11. Oil Suction Tube
6 Screen Mesh (Release Valve)	

20 SC-2K-UTV-X APR 2024

Parts List

ITEM	TUX P/N	M-REF P/N	DESCRIPTION	QTY.
1	SC-2K-UTVX-001	DJ05-10000-000	Anchor Bolt, 3/4+x 5.5+	8
2	SC-2K-UTVX-002	TC02-01000-000	Column	1
3	PU-110V-S-K	MBZ07	110-115V DURO Power Unit, Short Tank	1
4	SC-2K-UTVX-004	5105-06020-001	Screw, M6 x 20mm	4
5	SC-2K-UTVX-004	DJ01-00005-M00	Top Cap	1
6	SC-2K-UTVX-006	5104-08030-001	Bolt, M8 x 30mm	1
11	SC-2K-UTVX-011		Latch Bracket Screw	2
12	SC-2K-UTVX-012	DJ02-00027-000	Cylinder Fixing Plate	1
13	SC-2K-UTVX-013	5603-00016-000	Combined Washer	1
16	SC-2K-UTVX-016	TC02-00011-000	Straight Connector	1
18	SC-2K-UTVX-018	DJ01-00021-H00	Hose	1
19	SC-2K-UTVX-019	SJ01-12001-000	Elbow Connector	1
20A	SC-2K-UTVX-020A	TC02-08000-000	Hydraulic Cylinder	1
20.1	SC-2K-UTVX-020.1	TC02-08100-000	Cylinder Body	1
20.2	SC-2K-UTVX-020.2	SJ05-03006-000	Ventilating Screw	1
20.3	SC-2K-UTVX-020.3	TC02-08200-000	Piston Rod	1
20.4	SC-2K-UTVX-020.4	5906-00380-000	Dust Ring, D46 x D38.4mm	1
20.5	SC-2K-UTVX-020.5	TC02-08002-000	Guide Ring	1
20.6	SC-2K-UTVX-020.6	TC02-08001-000	Steel Ring	1
20.7	SC-2K-UTVX-020.7	5901-000580-000	O-Ring, D58 x D3mm	1
20.8	SC-2K-UTVX-020.8	TC02-08003-000	Sleeve	1
20.9	SC-2K-UTVX-020.9	TC02-08004-000	Guide Belt, D63 x D58 x 9.6mm	1
20.10	SC-2K-UTVX-020.10	5901-00560-000	O-Ring, D56 x D4mm	1
20.11	SC-2K-UTVX-020.11	TC02-08006-000	Piston	1
20.12	SC-2K-UTVX-020.12	5901-00530-000	U-Seal, D63 x D53.7 x 7.3mm	1
20.13	SC-2K-UTVX-020.13	5901-00200-000	O-Ring, D20 x D2.5mm	1
20.14	SC-2K-UTVX-020.14	TC02-08005-000	Thin Nut	2
21	SC-2K-UTVX-021	TC01-05001-000	Axle	1
22	SC-2K-UTVX-022	TC02-00013-000	Chain Cover	1
23	SC-2K-UTVX-023	SJ05-03010-000	Chain Roller	1
24	SC-2K-UTVX-024	SJ05-03011-000	Chain Roller Bushing	2
25	SC-2K-UTVX-025	5206-00020-001	Thin Lock Nut	1
26	SC-2K-UTVX-026	5206-00006-000	Lock Nut	2
27	SC-2K-UTVX-027	TC02-00008-000	Upper, Chain Block	1
28	SC-2K-UTVX-028	5202-00016-000	Nut	2
29	SC-2K-UTVX-029	5206-00016-000	Lock Nut	3
30	SC-2K-UTVX-030	TC02-00010-000	Lift Chain	1
31	SC-2K-UTVX-031	5105-16070-FH1	Screw	2
32	SC-2K-UTVX-032	TC01-00002-000	Chain Pin	2
33	SC-2K-UTVX-033	TC02-00007-000	Lower, Chain Block	1
34	SC-2K-UTVX-034	5206-00030-000	Thin Lock Nut, M30 x 1.5mm	8
35	SC-2K-UTVX-035	DJ01-13100-M00	Safety Latch	1
36	SC-2K-UTVX-036	SJ01-07007-000	Latch Spring	1

37	SC-2K-UTVX-037	DJ01-13002-M00	Latch Cam	1
38	SC-2K-UTVX-038	5206-00010-000	Thin Lock Nut, M10	1
39	SC-2K-UTVX-039	DJ01-13003-M00	Latch Release Cable	1
40	SC-2K-UTVX-040	TC02-02100-000	Carriage	1
41	SC-2K-UTVX-041	DJ01-00029-M00	Upper, Nylon Block	4
42	SC-2K-UTVX-042	DJ01-00028-M00	Side, Nylon Block	8
43	SC-2K-UTVX-043	DJ01-00027-M00	Nylon Block Frame	4
44	SC-2K-UTVX-044	5110-04010-000	Screw, M4 x 10mm	24
45	SC-2K-UTVX-045	5104-08025-001	Hex Bolt, M8 x 25mm	8
46	SC-2K-UTVX-046	5301-00008-000	Flat Washer, D8	4
47	SC-2K-UTVX-047	5202-00008-000	Hex Nut, M8	4
48	SC-2K-UTVX-048	TC02-11000-000	Platform Pivot Ramp	2
49	SC-2K-UTVX-049	TC02-00009-000	Platform Ramp, Nylon Roller	4
		5304-00016-000		8
50	SC-2K-UTVX-050		Circlips	2
51	SC-2K-UTVX-051	TC02-00014-000	Platform Ramp Pin	
54	SC-2K-UTVX-054	TC02-15005-000	Short Bushing	12
55	SC-2K-UTVX-055	TC02-17001-000	Tall, Platform Roller Pivot Bracket	2
56	SC-2K-UTVX-056	TC02-15003-000	Platform Nylon Roller	6
57	SC-2K-UTVX-057	TC02-15004-000	Split Pin	6
58	SC-2K-UTVX-058	5206-00008-000	Lock Nut, M8	6
60	SC-2K-UTVX-060	5105-08100-001	Bolt, M8 x 100mm	6
61	SC-2K-UTVX-061	TC02-15006-000	Platform Roller Bracket	6
62	SC-2K-UTVX-062	5120-08025-000	Phillips Countersunk Screw, M8 x 25mm	24
63	SC-2K-UTVX-063	TC02-10000-000	Long, Side Ramp Bracket	4
64	SC-2K-UTVX-064	TC02-05000-000	Left Platform	1
65	SC-2K-UTVX-065	TC02-07000-000	Side Ramp	8
66	SC-2K-UTVX-066	TC02-15001-000	Short, Platform Roller Pivot Bracket	4
67	SC-2K-UTVX-067	TC02-09000-000	Short, Side Ramp Bracket	4
68	SC-2K-UTVX-068	TC02-05300-000-A	Platform Lock Pin	2
69	SC-2K-UTVX-069	TC02-05300-000-B	Lock Pin & Chain Ring Connector	8
70	SC-2K-UTVX-070	TC02-05003-000	Lock Pin Chain	2
71	SC-2K-UTVX-071	TC02-00006-000	Platform Retainer Bracket	2
72	SC-2K-UTVX-072	5105-06015-FH1	Bolt, M6 x 15mm	4
73	SC-2K-UTVX-073	5101-10025-001	Bolt, M10 x 25mm	2
74	SC-2K-UTVX-074	TC02-04000-000	Platform Bolster Beam	1
75	SC-2K-UTVX-075	5206-00010-000	Nut, M10	2
76	SC-2K-UTVX-076	5105-16040-FH1	Hex Socket Bolt, M16 x 40mm	6
77	SC-2K-UTVX-077	5303-00016-000	Lock Washer, D16	7
78	SC-2K-UTVX-078	5301-00016-000	Flat Washer, D16	7
79	SC-2K-UTVX-079	5105-16030-FH1	Hex Socket Bolt, M16 x 30mm	1
80	SC-2K-UTVX-080	5120-08012-000	Bolt, M8 x 12mm	12
81	SC-2K-UTVX-080	TC02-06000-000	Right Platform	1
			,	2
82	SC-2K-UTVX-082	TC02-00001-000	Platform Nylon Position Board	
83	SC-2K-UTVX-083	TC02-00002-000	Platform Shim Plate - 1	2
84	SC-2K-UTVX-084	TC02-00003-000	Platform Shim Plate - 2	2
85	SC-2K-UTVX-085	TC02-00004-000	Platform Shim Plate - 3	2
86	SC-2K-UTVX-086	TC02-00014-000	Long, Safety Wheel Stop Bar	2

87	SC-2K-UTVX-087	TC02-00013-000	Short, Safety Wheel Stop Bar	2
88	SC-2K-UTVX-088	5301-00008-000	Large Flat Washer, M8	4
89	SC-2K-UTVX-089	DJ05-00020-000	Power Unit Mount Bracket	1
90	SC-2K-UTVX-090	5301-00008-000	Lock Washer, M8	4
91	SC-2K-UTVX-091	DJ01-00008-000	Latch Release Cable Bracket	1
92	SC-2K-UTVX-092	TC02-00011-000	Hyd. Fitting Connector - 1	1
93	SC-2K-UTVX-093	TC02-00000-000	Hyd. Flow Restrictor Valve	1
94	SC-2K-UTVX-094	TC02-00020-000	Hyd. Fitting Connector - 2	1
97	SC-2K-UTVX-097	TC02-00021-000	Protective Carriage Pad	1
99	SC-2K-UTVX-099	TC02-15006-000	Platform Bracket Spring	6
100	SC-2K-UTVX-100	TC02-15007-000	Platform Bracket Spring Seat	6
101	SC-2K-UTVX-101	TC02-15002-000	Platform Bracket Pin	6
102	SC-2K-UTVX-102	TC02-15009-000	Platform Bracket Pin Knob	6

LIMITED WARRANTY

Structural Warranty:

The following parts and structural components carry a five-year warranty:

Columns Arms Uprights Swivel Pins Legs Carriages Overhead Beam Platforms

Tracks Cross Rails Top Rail Beam

Limited One-Year Warranty:

Tuxedo Distributors, LLC (iDEAL) offers a limited one-year warranty to the original purchaser of Lifts and Wheel Service equipment in the United States and Canada. Tuxedo will replace, without charge, any part found defective in materials or workmanship under normal use, for a period of one year after purchase. The purchaser is responsible for all shipping charges. This warranty does not apply to equipment that has been improperly installed or altered or that has not been operated or maintained according to specifications.

Other Limitations:

This warranty does not cover:

- 1. Parts needed for normal maintenance
- 2. Wear parts, including but not limited to cables, slider blocks, chains, rubber pads and pulleys
- 3. Replacement of lift and tire changer cylinders after the first 30 days. A seal kit and installation instructions will be sent for repairs thereafter.
- 4. On-site labor

Upon receipt, the customer must visually inspect the equipment for any potential freight damage before signing clear on the shipping receipt. Freight damage is not considered a warranty issue and therefore must be noted for any potential recovery with the shipping company.

The customer is required to notify Tuxedo of any missing parts within 72 hours. Timely notification must be received to be covered under warranty.

Tuxedo will replace any defective part under warranty at no charge as soon as such parts become available from the manufacturer. No guarantee is given as to the immediate availability of replacement parts.

Tuxedo reserves the right to make improvements and/or design changes to its lifts without any obligation to previously sold, assembled, or fabricated equipment.

There is no other express warranty on the Tuxedo lifts and this warranty is exclusive of and in lieu of all other warranties, expressed or implied, including all warranties of merchantability and fitness for a particular purpose.

To the fullest extent allowed by law, Tuxedo shall not be liable for loss of use, cost of cover, lost profits, inconvenience, lost time, commercial loss or other incidental or consequential damages.

This Limited Warranty is granted to the original purchaser only and is not transferable or assignable.

Some states do not allow exclusion or limitation of consequential damages or how long an implied warranty lasts, so the above limitations and exclusions may not apply. This warranty gives you specific legal rights and you may have other rights, which may vary from state to state.

8320 E Hwy 67, Alvarado, TX 76009 Ph. 817-558-9337 / Fax 817-558-9740