

S24 Mobile Maintenance Platform Owner's Manual

www.equiptec.co

Equiptec



Squirrel

Own the high ground

Contents

Disclaimer	1
Introduction	1
Compliance	2
Assembly	2
Warranty	2
Safety Requirements	3
Prior to Use	3
Positioning the S24	3
S24 Use	4
S24 Stability	5
Operation	6
Maintenance	7
Six Monthly Service Inspection	7
Annual Service Inspection	8
Bi-Annual Service Inspection	9
Squirrel S24 Parts Diagrams	10
Complete Unit Parts Diagram	10
Upper Unit Parts Diagram	11
Base Unit Parts Diagram	12
Optional Accessories	13

Contents

Go-Base Chassis	13
Four Step Sub Chassis	13
Extended Cantilever	13
All Terrain Kit	13
Transport	14
Notes	15
Contact Details	16

Disclaimer

Recommended Safety Procedures to be employed by all persons using their Equiptec Adjustable Height Platform (AHP):



Before proceeding to use your AHP, you must consult with the designated Safety Professional or other Responsible Party within your organisation prior to attempting any activities contained herein. Your Employer is responsible for your safety at all times and thus all Safety Regulations, Policies and Procedures which have been established by your company take precedence over and supersede any information and guidance contained herein especially as it relates to your personal safety and that of others in proximity to any work being performed. We highly recommend that you review this Owner's Manual with a qualified Safety Professional or any other supervisory staff at your site that are responsible for Safety-related matters.

Working at heights considerations:

Equiptec AHP units are designed to make working at height as safe and easy as possible. However, that does not mitigate the fact that working at height still carries the risk of a fall, no matter how small this may seem. Equiptec strongly recommends that ALL users familiarize themselves with all safety points in this Manual, and in particular, wish to emphasize the following:

Users must NOT

- Intentionally rock the device
- Jump onto or off the device
- Step outside the safety cage (unless there is approved and appropriately certified guarding in place)

Users must ALWAYS

- Consult with their designated safety professional or other responsible party within their organisation as to the suitability of the device for the intended work
- Engage 3 points of contact when ascending or descending the steps on the device

Introduction

The Equiptec Squirrel S24 (S24) is designed to facilitate easy and simple Step type access to a variable height platform. It incorporates a spacious platform that is sturdy, and as ergonomically safe as possible to work from. The S24 has a wide variety of Standard Accessories that can be added to it, and therefore can be Customized in different ways.

A copy of this manual should remain with the S24 at all times. Prior to using the S24, the user should familiarize his/herself fully with the contents, paying particular attention to the safety notes included as it is a mandatory requirement that these are strictly followed.

To avoid confusion, Equiptec stipulates the official orientation of the S24 as follows:

- Front - is the direction you face as you climb the Steps, looking towards the platform
- Rear (or Back) - is the opposite to the Front direction
- Left and Right are defined from looking forward i.e. as you would when you climb the steps

Introduction

Regular maintenance as per the maintenance schedule in this manual is also a necessary requirement. Details from these mandatory checks must be submitted to Equiptec via the service checklist form, this can be accessed by scanning the 'scan to service me' QR code located on the unit near the top of the steps or via the link in the service reminder E-mail. The S24 comes with a 5 year Warranty which can be extended out to a Limited Lifetime Warranty provided every annual and biennial service is done at the required time, and a complete service checklist form submitted to Equiptec.

Should the S24 ever be sold, hired out or handed over to any third party for any reason, it is required that a copy of this manual should also be passed over at the same time to ensure the new owner and/or operator is aware of the operational needs, constraints, safety points, and maintenance requirements of the S24 Platform.

Compliance

The S24 units have been tested and confirmed to meet or exceed the strength, stability and all other applicable requirements for the following standards:

- AS 1657 and AS/NZS 1576 (Australia and New Zealand)
- ANSI-ASC A14.7-2011 (USA)
- CSA Z11-12 (Canada)

Assembly

Your S24 is shipped in a consolidated form to facilitate cost efficient freight. Usually, the Assembly of the unit can be performed by the local Distributor, but if it is more practical, or preferred by the client, it may be done by the end user, provided there are competent personnel on site to perform the task. To assemble it ready for use is about a 15 minute job for Competent Personnel. Full instructions will come with the Unit for this procedure and can also be found on Equiptec's website at www.equiptec.co/instruction-manuals. Equiptec is available to assist via video conference if required (during Business Hours, New Zealand time).

Note: It is a mandatory safety consideration that the S24 is assembled precisely, and when undertaking the assembly procedure, it is the new Owner's responsibility to ensure all appropriate Equiptec assembly instruction resources are made fully available and are followed absolutely correctly. If there is any doubt about any aspect, contact Equiptec for advice before proceeding further. It is also a mandatory requirement to submit the required photos and details of the assembly via the warranty registration form on the website, www.equiptec.co. This allows Equiptec staff to check the correct procedure has been followed, and validate the commencement of the standard Warranty.

Warranty

The standard Warranty for an S24 is 5 years. To ensure this warranty is in place, simply go to the Equiptec website (www.equiptec.co) and complete the warranty registration form including the required photos of the Assembly process as stated above. Equiptec will confirm the correct assembly has been achieved (or contact you if they have any questions), that the Unit is registered for the 5-year warranty and it is good to go! This 5-year warranty can be extended to a "Limited Lifetime Warranty" by ensuring that every mandatory service in this manual is performed correctly, at the correct time and that the required photos and information are submitted to Equiptec via the service checklist form (either scan the QR code on the unit or click the link in the reminder E-mail).

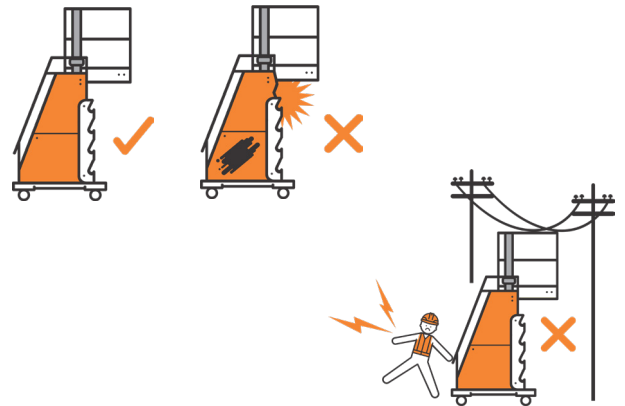
Warranty

Some situations a S24 could be used in are extremely demanding of the structure of any machine. Consequently, it needs to be made clear that the Term "Limited Lifetime Warranty" means the period that the Equipment could reasonably be expected to operate (in the circumstances it is operating in) without fault in material or workmanship if used correctly for its intended purpose and maintained according to the Manufacturers recommendations.

Safety Requirements

Prior to Use

1. **Check the S24 for any damage and/or missing components, and that final site assembly has been correctly completed. Proceed only when the unit is in good and complete condition.**
2. **Warning:** The user must check for all electrical hazards (and contact all appropriate authorities if necessary) in the area before positioning or using the S24. ***The S24 conducts electricity and offers no electrical protection.***



Positioning the S24

1. Check that the ground surface that the S24 is to be used on is capable of supporting 75% of the combined weight of the S24 and its intended load (allow approximately 400kg or 882 lb) on any 2 of the ground contacts.
2. Check that the course to be followed is free from ground or overhead obstructions eg beams, trusses, mezzanine floors, raised manholes, electrical cables, gratings, potholes etc.
3. The standard issue castor wheels are not designed to roll over obstacles. The S24 should not be towed or pushed by mechanical means. An All Terrain option with rubber tyres and Levelling jacks is available for customers with uneven/rough floor conditions, or outdoor applications (see options available on page 13).
4. **Under no circumstances must any personnel or load be allowed on any part of the S24 whilst it is either being moved, repositioned or adjusted for height.**
5. S24 Go-Base units have Castor swivel directional locks fitted to at least one of the 2 front castors (this is not applicable to the All Terrain option). Engaging these will greatly assist correct tracking, particularly if being moved longer distances.
6. The S24 has "pinch points" or areas where crushing could occur. Careful attention must be given to keep clear of these areas.
7. Always check that the deck will not collide with any object as it is being raised or lowered. In particular, ensure all personnel are well clear of the S24 when raising or lowering the deck.

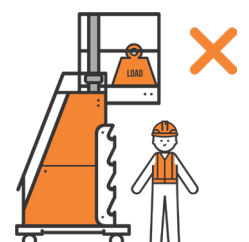
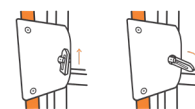
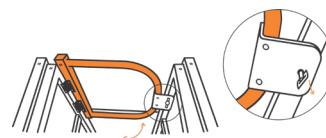
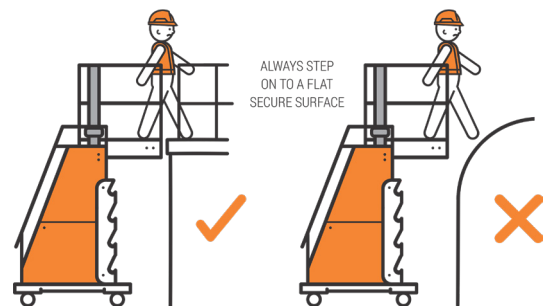
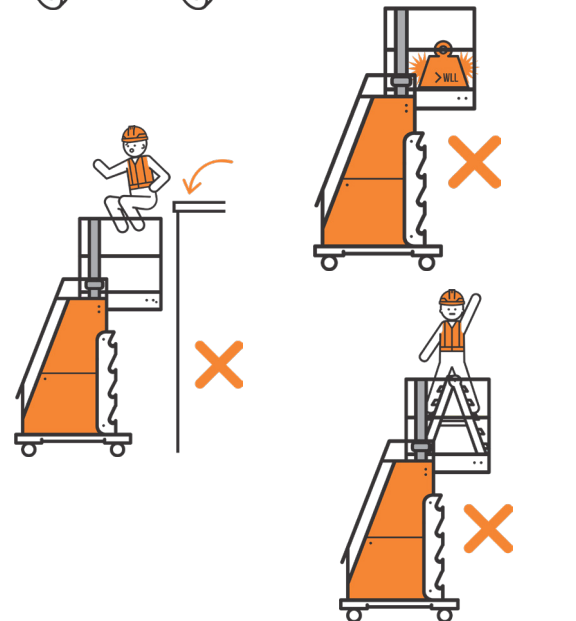
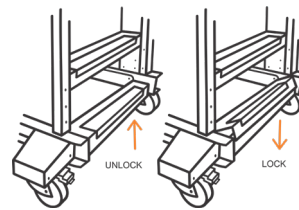


Safety Requirements

S24 Use

(general points - see also 'Operation')

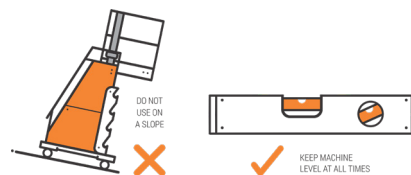
1. On Go-Base variants, **always ensure** that castor brakes are effective and locked on at all times (unless it is being moved), especially before any personnel climb or use the S24. If fitted with the All Terrain option the manual levelling jacks must be wound down on to a solid surface, and under enough pressure to take the weight off the wheels and level the unit.
2. Always respect the safe operating limits of the S24. The design load is 200kg / 440lb, including a point load of 135kg / 295lb, on the platform OR the stair (not concurrently). ***Please note that in the case of the Extended Cantilever deck option or certain other customized options being fitted, the safe operating limit is reduced.***
3. It is forbidden to jump onto the S24 platform.
4. Temporary means of gaining additional height (eg using a stepladder or trestle placed on top of the working deck, or any surface) is strictly prohibited.
5. In its standard configuration, the S24 deck has an access gate to facilitate access to/from a work surface if required. This gate must remain shut except when walking through it. Do not use the gate if there is not a flat surface immediately beyond it that has been certified to be of sufficient strength to support your weight and has sufficient, compliant guard railing in place. The gate must be checked before use. It is spring loaded to shut automatically. Do not use this gate if it does not swing freely throughout its full rotation, and automatically latch securely shut. The gate is lockable, and it is recommended that it remain shut and locked unless "walk through" access is required.
6. The S24 is equipped with a self closing safety gate across the rear of the deck at the top of the steps. To enter the deck simply push the gate open. Once on the deck you can lock the gate in place by flicking the latch into vertical position. Simply reverse the procedure to disengage. Ensure this gate is securely in place and the lock engaged before proceeding with any work.
7. It is prohibited for personnel to be under the S24 work deck when it is loaded and/or elevated or at any time when it is being used.



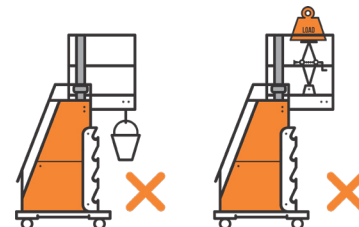
Safety Requirements

S24 Stability

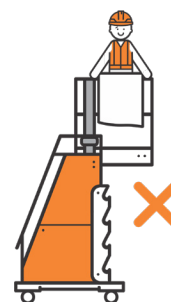
1. If the ground surface is not within 5 degrees of level (or if fitted with the All Terrain option and the Levelling Jacks cannot level the S24) **do not use the S24**. Reposition your work piece on flatter ground.

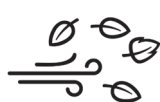




2. The S24 is not designed as a crane. **Do not use the S24 to lift any loads, or as a platform to jack loads off.**



3. The S24 will offer a large area to wind, and so care needs to be taken when using it in windy conditions. The table below gives a good indication of wind conditions the S24 can and cannot be used in. Due regard must be paid to certain circumstances where wind conditions are magnified, eg in long open-ended buildings, between buildings where the wind may have a funnelling effect, or where the S24 is positioned close to the corner of a building. Never attach tarpaulins, flags, banners, signs or other coverings to the S24 as this may seriously increase its susceptibility to wind force.

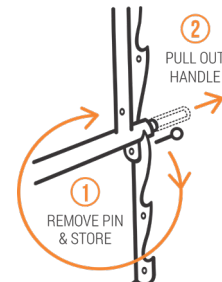


Wind Description	Speed			Visible Indications	Action Required
	MPH	KPH	Metre / Sec		
Moderate Breeze	up to 12	up to 19	up to 5.3	Raises dust and loose paper 	Safe to work on S24
Fresh Breeze	13 - 24	20 - 38	5.4 - 10.8	Small trees in leaf begin to sway 	Cease to work on the S24 Lower platform and secure all loose items
Strong Breeze	25 +	39 +	10.9 +	Large branches in motion, overhead wires whistle 	Move S24 indoors

Operation

The S24 is very simple to operate. In addition to instructions given in the safety section of this manual, the following gives a basic guide to what is required.

1. Move the S24 as close as possible to the work piece without adjusting the deck height. Being closer allows you to more accurately gauge the height you will require the deck to be.
2. When adjusting the height of the S24
 - Remove the Locking Pins from the Ratchet Handle and secure them in storage position. Now slide the extending handle fully out.
 - Lift the Upper Unit slightly to allow the Ratchet Handle to swing out free from the Ratchet
 - With the Ratchet Handle, raise OR lower the Unit until it is just above the desired step height. Now push the Ratchet Handle down into the hollow of the Ratchet Bracket at the desired position.
 - Reinsert the Locking Pins and push the extending handle back in out of the way



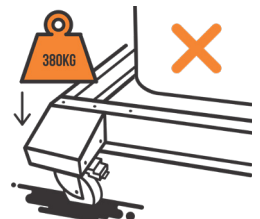
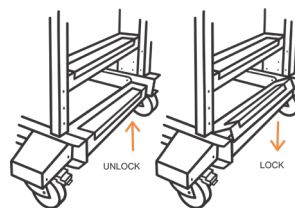
CAUTION! Ensure your hands and all other personnel are kept well clear of the potential pinch points between the ratchet handle and the ratchet brackets on both sides.

Note that the User must ensure the Ratchet Locking Pins are engaged on both sides before using the unit.

3. Move the S24 into the final position. Check it is within 5 degrees of level and on a sufficiently firm base surface.
4. If Go-Base fitted, ensure the base tread is pushed down to lock all 4 wheel-brakes. Or



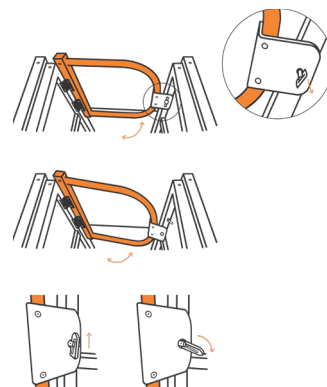
✓ KEEP MACHINE LEVEL AT ALL TIMES



If All Terrain option is installed, ensure the levelling jacks are engaged (taking weight off the wheels), and that the unit is level with the level bubble centered correctly in both directions.

You may now climb the S24, (**WARNING - you MUST always face the Steps when ascending or descending**) push the Safety Gate open, proceed onto the work deck, ensure the rear gate fully shuts over the locking latch, and flick the locking latch into the vertical position to lock the Gate shut.

5. Once your work is finished, reverse the procedure to descend the steps (**WARNING - you MUST always face the Steps when ascending or descending**) and move the S24 out to a clear area to allow the safe lowering of the deck. See point 2 above on how to lower the deck.



Maintenance

As with all machinery, particularly those used to support working personnel, a regular maintenance system is required. In the case of the S24, the Manufacturer approved system is very simple, consisting of 6 Monthly, Annual and Biennial service types.

The responsibility for ensuring these services are done rests with the Owner, however, in conjunction with their Warranty, Equiptec offer a reminder service to help ensure these services are completed in the due times. Mandatory services also need to be submitted to Equiptec via the service checklist form. This form is accessed either by scanning the service QR code on the unit or via the link in the reminder E-mail. Completing all mandatory Annual and Biennial Services, and submitting the required information to Equiptec will upgrade the Warranty to a "Limited Lifetime" Warranty of the Unit (provided that no mandatory services are missed, and that there is no damage etc that adversely affects operation on structural integrity). Equiptec may vet service reports and contact the Owner if they see anything that looks like it needs attention.

While these checks are relatively simple, it is recommended that they are carried out by qualified tradespeople. If the Owner does not wish to carry out any particular service or task themselves, Equiptec may be able to arrange for an authorised Equiptec Distributor to visit the Site and perform these tasks, however, the Distributor may charge for this service.

To assist in identifying Parts, refer to the Exploded Parts drawings on pages 10-12.

Please note that it is essential that only genuine Equiptec parts are used if any replacements are required.

Six Monthly Service Inspection (scan the QR code to complete the service checklist form)

1. Conduct a thorough visual check for any damaged/bent components, or loose fastenings.
 - Upload any photos of any damage

Note: Once photos of any damage are uploaded, check with Equiptec before continuing to operate a damaged unit. It must be ascertained if the damage will compromise safety, strength, or the smooth functioning of the S24.
2. Check all handrails are in place and firm. Ensure any handrail tube components missing/loose are replaced/tightened to 10 Nm (7.5 ft/lbs).
3. Check the self-closing gate moves freely, automatically swings shut and locks, and that the lock is effective. Adjust the Lock system if required. Instructions for the adjustment of the lock system can be found at the manufacturers website www.ddtechglobal.com.
4. Check that the Back Safety Gate locates and closes easily.
5. If fitted with Go Base, check that the bottom step rotates to effectively activate the Castor Brakes. If there are any issues, check that the connecting bolts at either end of each actuating bar are not too tight. These bolts need to be tightened equivalent to hand tight, with the faces of the washers just connecting but do not overtighten them beyond this as these Bolts need to move when the Brakes are locked/unlocked, and having them too tight will inhibit the activating action.
6. Check that the castor brake locks, and directional locks or levelling jacks (if fitted) are functioning correctly. Castor Brakes are occasionally affected by high wear of the Tires. If this is the case, adjust the Brake system by turning the Black Adjusting Nut (indicated by the arrow) with a 19mm Spanner / 3/4" Wrench, to increase the pressure on the Tyre.



Maintenance

Six Monthly Service Inspection (continued)

7. If fitted with All Terrain system, check that the Tyres are in good condition, and that the Jacks all function correctly.
8. Check all floating treads rise/nest correctly and do not catch on anything. Remove/repair any deformation damage that may cause issues.

Annual Service Inspection - Mandatory (scan the QR code to complete the service checklist form)

1. Conduct a thorough clean both inside and out if necessary
2. Attend to all of the 6 Monthly checks plus...
3. Using a Pallet Jack, elevate the unit so that the wheels are just off the ground (say 6mm or 1/4"). Place packing block under Chassis for safety. Check that the rear wheels spin easily (no roughness) and that the swivel turns freely. Remove the Castor Bracket covers (if fitted) and check the Castor mount bolts, and Castor Bracket mounting bolts, are tight (40 Nm or 30ft/lbs) and secure before lowering the Unit. If any issues are identified, contact Equiptec for advice.
4. Check all handrail and handrail post bolts are tightened to a maximum of 10 Nm (7.5 ft/lbs) and any Bolts fitted to captive nuts are tightened to a maximum of 20 Nm (15 ft/lbs).
5. The S23 is not designed for use in corrosive situations. Check all fastenings and all surfaces for any signs of corrosion. If any is found, photograph this and upload the photos to the service checklist form.
6. Check for any excess movement (either fore/aft or lateral) of the deck when fully elevated. Contact Equiptec for advice if any issues are found.
7. As per service checklist form instructions upload photos to show the following details:
 - Upper deck handrailing
 - Upper deck gate(s) including rear safety gate
 - Any damage that has been sustained by the unit and
 - General views from the 4 elevations with the deck at full height

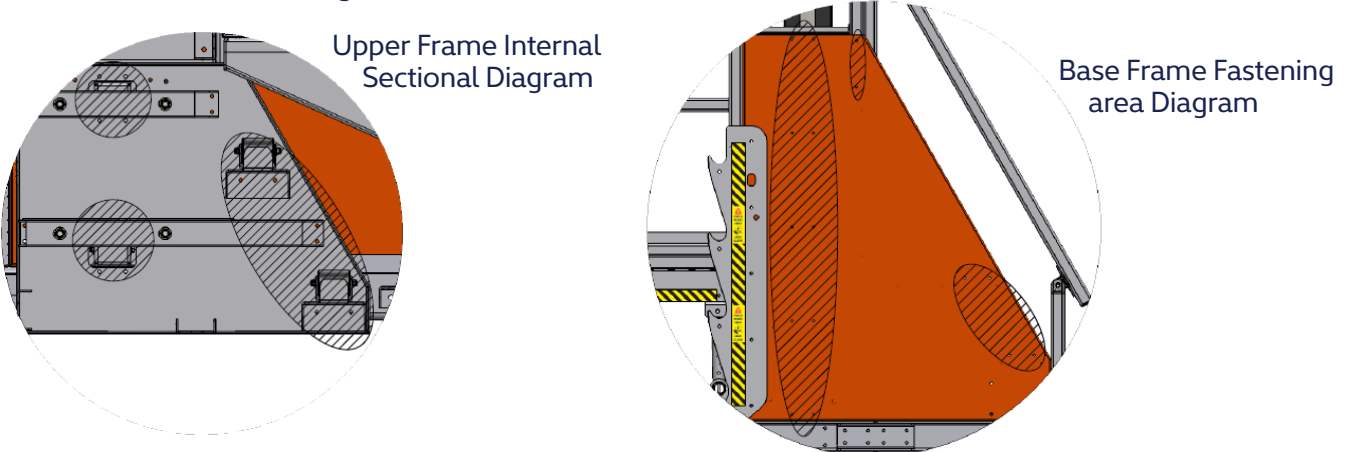
Remember to upload photos of any issues to the service checklist form

Please note that it is essential that only genuine Equiptec parts are used if any replacements are required.

Maintenance

Biennial Service Inspection - Mandatory (scan the QR code to complete the service checklist form)

1. All of the Annual Service checks plus...
2. Check thoroughly for any damage, denting or any other structural issues. Upload photos of any damage to the service checklist.
3. Raise the Deck to full height. Ensure the Height Adjusting handle is locked in place and proceed with a systematic full fastening check both inside and out. This should include checking all Bolts are tight (take care not to overtighten any Bolts going through Handrails – these should be tightened to a maximum of 10Nm or 7.5 ft/lbs) and that there are no loose Rivets. Include any installed accessories and pay particular attention to the shaded areas in the diagrams below:



4. Lower the Deck to just above head height (with Height Adjusting handle in place), and check all fittings and rivet fastenings under the Deck structure are tight. When checking the Ram Top Mount bolt ensure it is tightened to no more than 10Nm (7.5 ft/lbs) to allow the Ram to pivot

Note If you find loose Rivets, or a loose Fastening that you are unsure how to tighten contact Equiptec for advice.
5. Check all Rollers are firm and check the condition of the Rollers. Ensure the **Roller condition is checked carefully especially if the environment the S24 is operating in is dusty or abrasive in any way. Should the Roller surfaces be roughened, they should be replaced. This involves removing of the complete Upper Unit. Contact Equiptec for instructions on how to perform this procedure.**
6. Pull up each Floating Tread and check:
 - For any damage, dirt or debris, clean/remove as necessary
 - All rivet fastenings are tight
 - Rollers on catch brackets spin freely and evenly

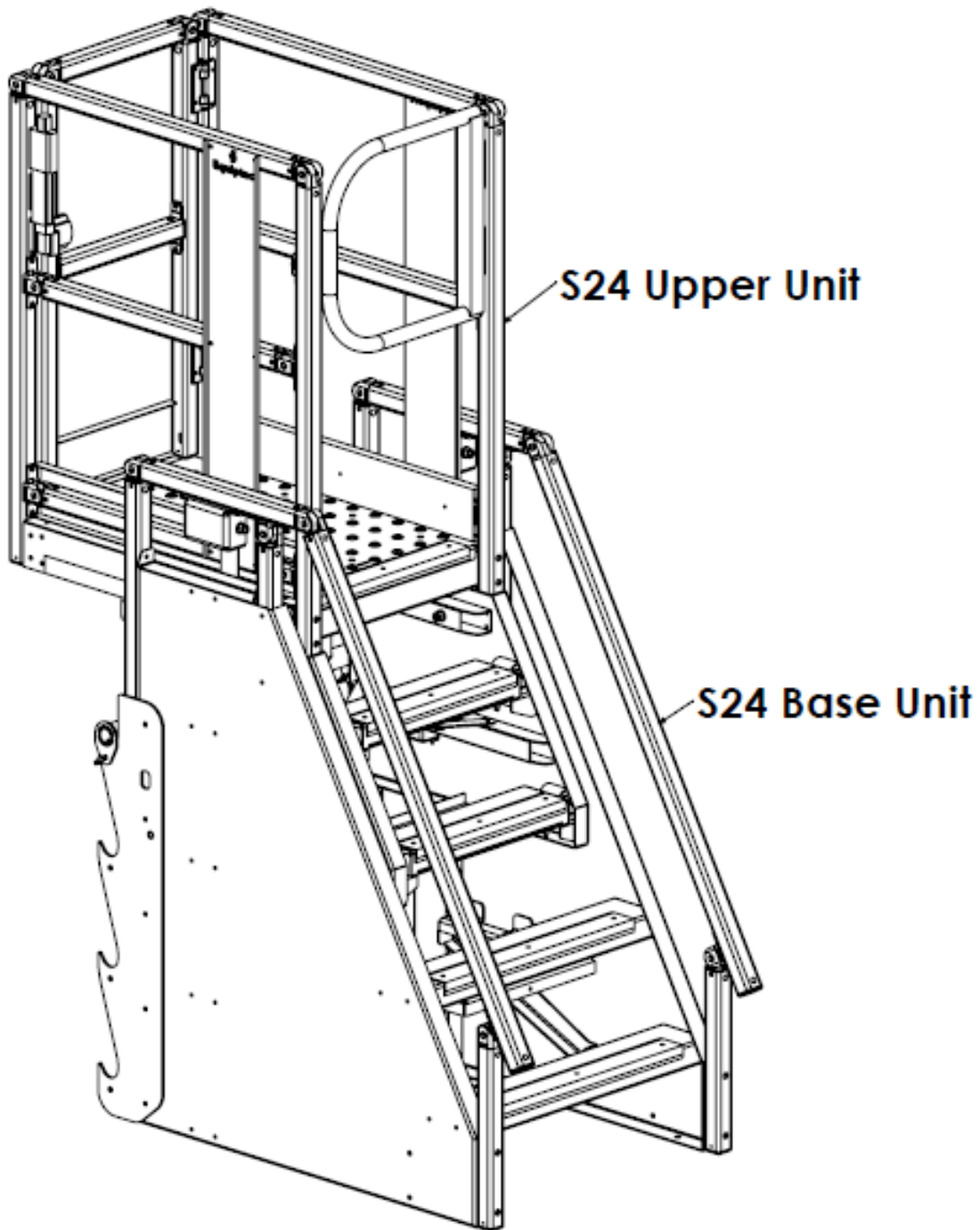
Remember to upload photos of any issues to the service checklist form

Please note that it is essential that only genuine Equiptec parts are used if any replacements are required.

Maintenance

Squirrel S24 Parts Diagrams

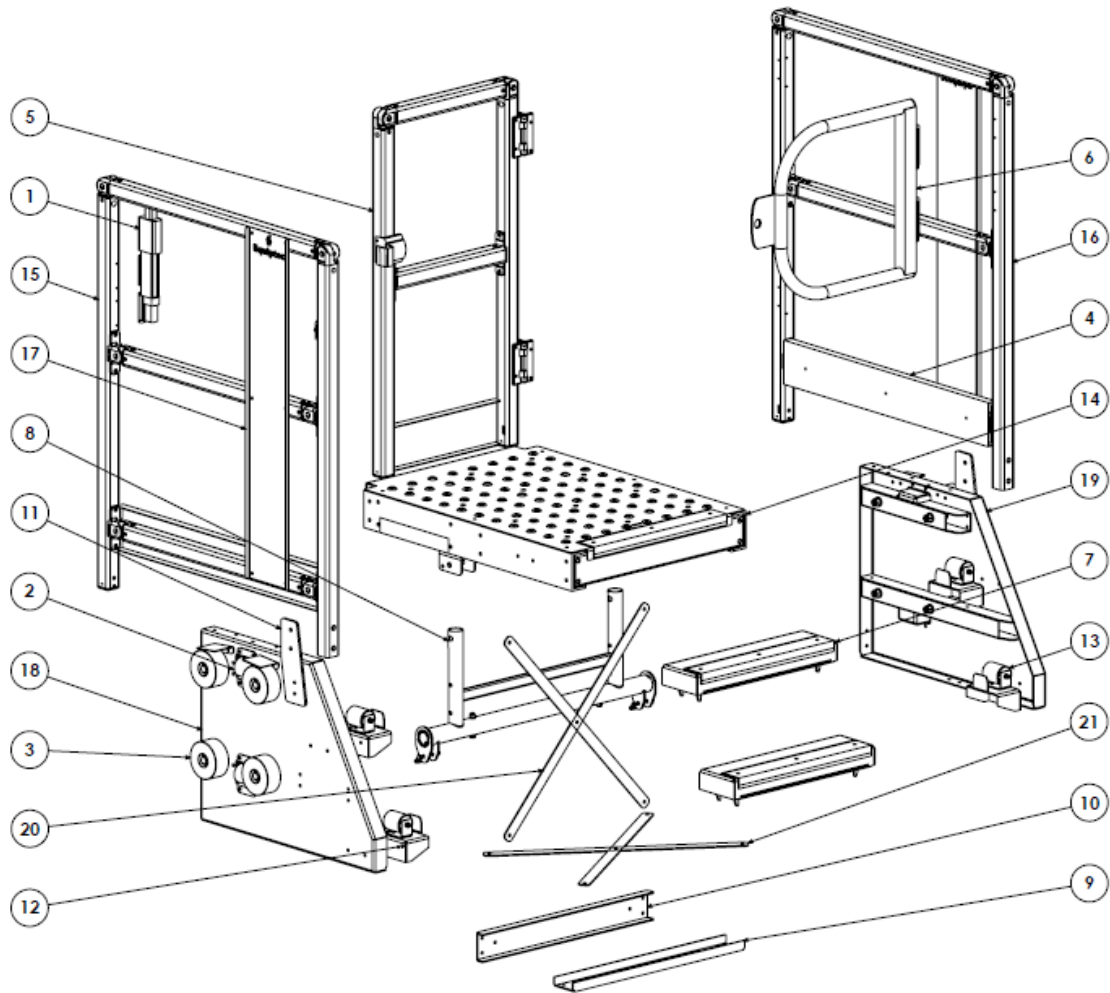
Complete Unit Parts Diagram



Maintenance

Squirrel S24 Parts Diagrams continued

Upper Unit Parts Diagram

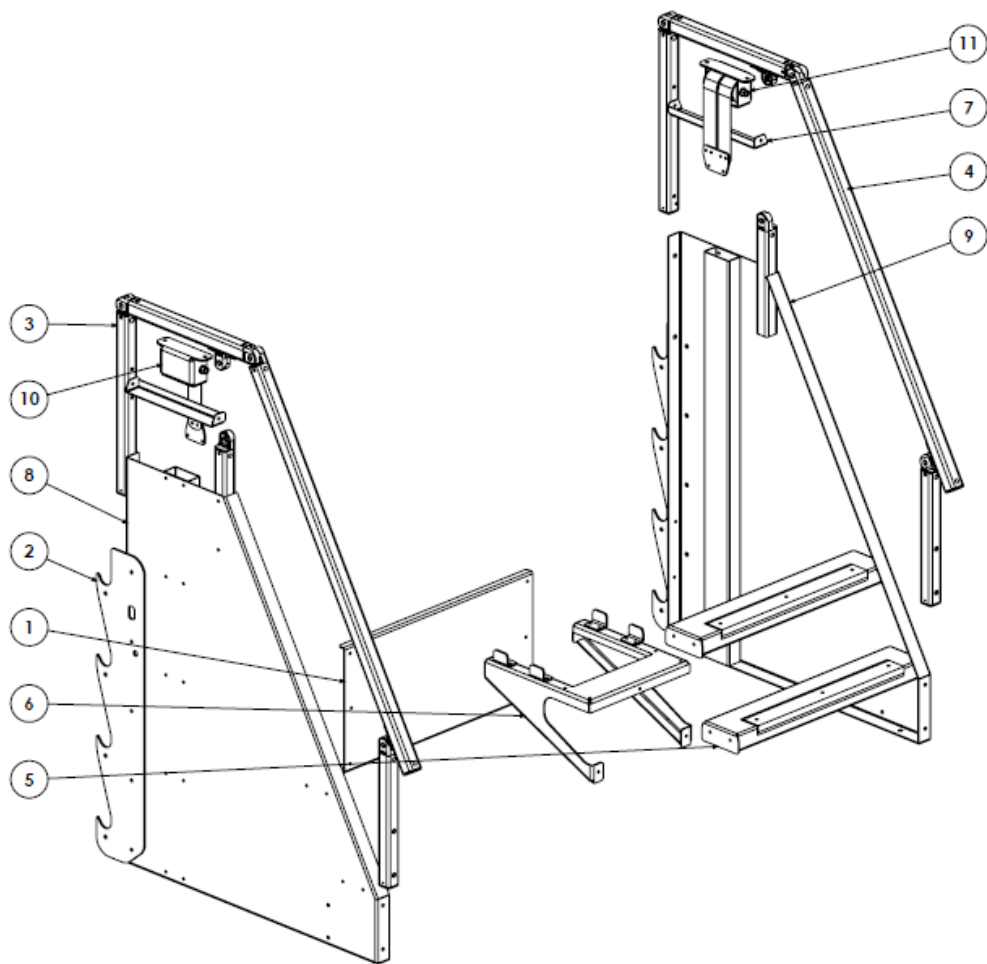


No.	Product Code	Description	No.	Product Code	Description
1	9810233	AHP Gate Lock	12	9880135 - 10	S23 Floating Tread Support Assembly LH
2	9870118 - 11	MX21 Side Roller Assembly	13	9880135 - 10	S23 Floating Tread Support Assembly RH
3	9880103 - 11	S23 Side Roller Assembly	14	9880144 - 10	S23 Platform Deck Assembly
4	9880147 - 10	S23 Toeboard Assembly	15	9880145 - 51	S23 Platform Handrail Assembly LH
5	9880145 - 50	S23 Gate Assembly	16	9880145 - 52	S23 Platform Handrail Assembly RH
6	9880149 - 10	S23 Rear Gate Assembly	17	9880153	S23 Spring Cover
7	9880138 - 10	S23 Floating Tread w Nosing	18	9880103 - 10	S23 Upper Side Panel Assembly LH
8	9880151	S23 Height Adjusting Handle	19	9880104 - 10	S23 Upper Side Panel Assembly RH
9	9880118	S23 Upper Bottom Cross Member	20	9880131	S23 Upper Unit Front Brace
10	9880117	S23 Upper Front Cross Member	21	9880132	S23 Upper Unit Inner Brace
11	9880162	S23 Platform Rear Joint Plate			

Maintenance

Squirrel S24 Parts Diagrams continued

Base Unit Parts Diagram



No.	Product Code	Description	No.	Product Code	Description
1	9880110	S23 Front Panel	7	9880130	S23 Roller Cover
2	9880112	S23 Sawtooth Bracket	8	9880101 - 10	S23 Side Panel Assembly LH
3	9880145 - 50	S23 Base Handrail Assembly LH	9	9880102 - 10	S23 Side Panel Assembly RH
4	9880145 - 51	S23 Base Handrail Assembly RH	10	9880113 - 10	S23 Spring Assembly LH
5	9880111 - 10	S23 Fixed Tread w Nosing	11	9880113 - 11	S23 Spring Assembly RH
6	9880133 - 10	S23 Landing Rail Assembly			

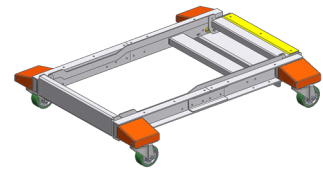
Optional Accessories

Many optional extras are available for the S24. These options can be added as a single option, or combined in various combinations to create various "configurations". Check the assembly instructions to see all of the approved configurations that can be achieved. The options can all be retrofitted relatively simply, but Equiptec recommend these tasks are undertaken by an Engineering Tradesperson. The instructions for fitting each type are in the S24 Assembly Instruction manual which is downloadable from the Equiptec website, and Equiptec remains available to assist via Video Conference if required. If in doubt, do not hesitate to contact Equiptec for advice.

Options available include...

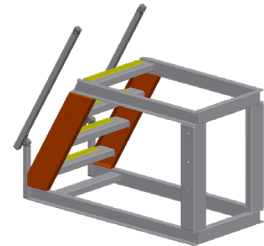
Go-Base

This option provides a 4-wheel subbase that allows easy maneuvering over hard stand floors. The front castors are fitted with directional locks that provide easy guidance over long distances but can be disengaged very quickly if movement in a lateral direction is required. Braking is easily activated by simply standing on the bottom step which pivots down and locks all four wheel brakes simultaneously. This option adds 250mm (9.8") to all platform heights.



Four Step Sub Chassis

A full sub chassis giving the standard S24 a four-step (1000mm or 39.3") addition to all platform heights.



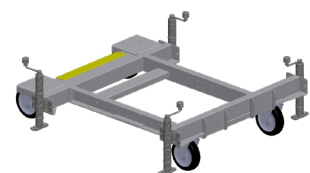
Extended Cantilever

This option gives an extra 400mm (15.7") of cantilever, resulting in a total of 640mm (25.2") cantilever. Note that this option requires the fitting of Counterweights, and that the load capacity of the whole S24 is reduced to 100kg (220lb) when this unit is installed.



All Terrain Kit

This option provides better rolling capability over rough surfaces and higher clearance under the chassis. The JACKS act as a brake and **MUST BE ENGAGED WITH A SOLID SURFACE AND WITH AN ADEQUATE AMOUNT OF PRESURE** to ensure the unit will not move when it is being used. The tires are solid rubber so there is no risk of flat tires. With this option, the front wheels do not turn, they only move straight ahead, so the unit needs more room to maneuver.



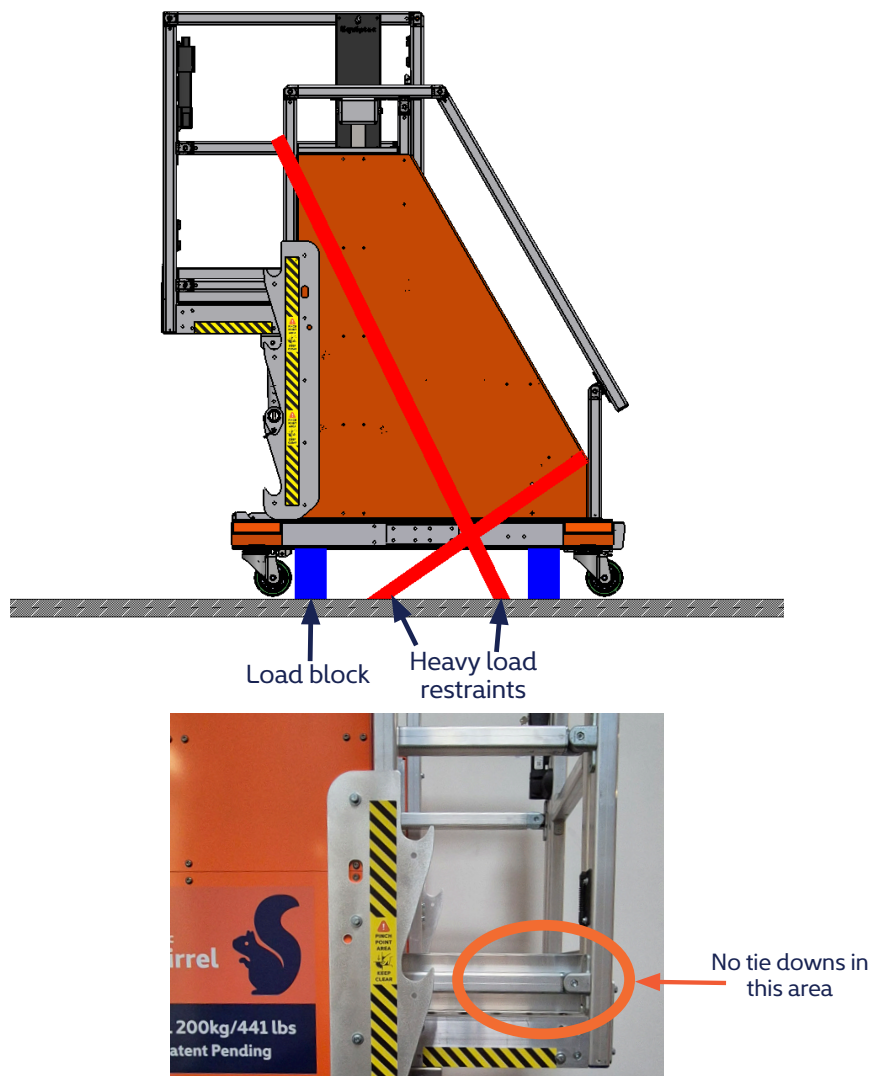
Transport

When transporting the S24 in its fully made up form, it is mandatory to ensure the following:

- The S24 has the first step raised to allow the upper unit to clear the blocks
- The unit is supported under chassis within 100mm (4") in from the Castor Brackets at either end, and at a height that allows the wheels to swivel freely (See blue squares depicting packers in diagram below). ***It is very important that the wheels are not in contact with the transporters deck to avoid any damage to the Chassis or wheel units.***
- The Castor Brakes are activated.
- All the floating treads are removed and packed separately.

Tie the S24 down as per the following diagram. Note that the coloured bands show the recommended path, position and angle of the load restraint.

- ***Do NOT use handrails as tie down anchors***
- ***Corner protectors are recommended to protect tiedown straps from chaffing***



NOTE: If your S24 is fitted with Step Extensions, the same principles are applied, i.e. do not allow the Castors to touch the supporting surface ie 'floor' of trailer or surface of a pallet (use bolsters each end as above), tie the Chassis down on similar angles as shown in the above diagram (to prevent fore/aft movement), and ensure the strops are only putting pressure on strong structural members of the Chassis Extension.

Failure to follow the above steps can result in damage to the unit making it inoperable and is not covered under warranty.

Notes

Contact details

Manufacturer



The Equiptec Squirrel S24 is manufactured in New Zealand by Equiptec. Please contact us and one of our team will be very happy to assist in your inquiry.

Head Office

P: +64 6 842 0222
E: sales@equiptec.co
W: www.equiptec.co

USA Office

P: + 1 888 523 4340
E: sales.usa@equiptec.co
W: www.equiptec.co

Physical address:
144 Taradale Road
Onekawa
Napier 4110
New Zealand

Postal address:
PO Box 3351
HBMC
Napier 4142
New Zealand



www.equiptec.co
Ph: +64 6 842 0222

