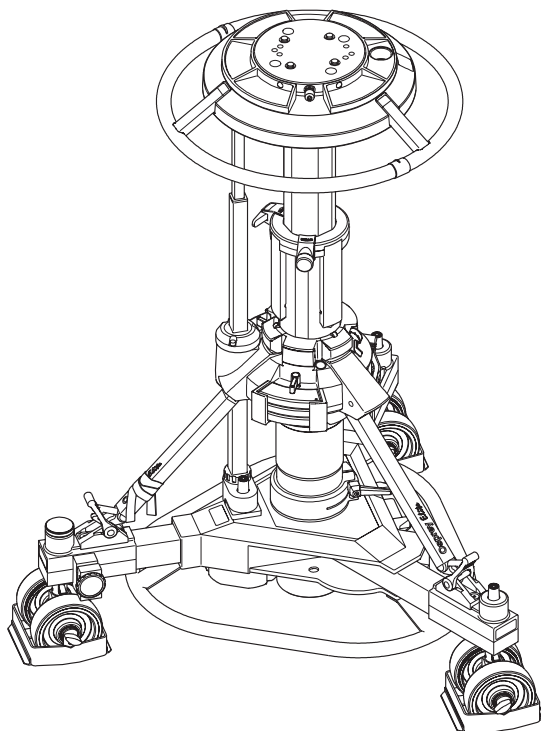


Operators Guide

Osprey Elite



Pedestal



Osprey *Elite* **Pedestal**

Publication Part No. 3574-8 Issue 4

Copyright © Vinten Broadcast Limited 2005

All rights reserved throughout the world. No part of this document may be stored in a retrieval system, transmitted, copied or reproduced in any way including, but not limited to, photocopy, photograph, magnetic or other record without the prior agreement and permission in writing of
Vinten Broadcast Limited.

Vinten is a registered trademarks of Vinten Broadcast Limited.

Safety - read this first

Warning Symbols in this Operators Guide



Where there is a risk of personal injury, injury to others, or damage to the pedestal or associated equipment, comments appear, highlighted by the word **WARNING!** and supported by the warning triangle symbol.

Warning symbols on the pedestal



On encountering the warning triangle and open book symbols it is imperative that you consult this operators guide before using this pedestal or attempting any adjustment or repair.

Critical data

Mass

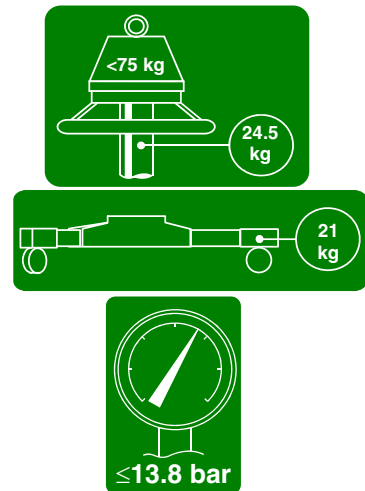
Column (including steering ring)	24.5 kg (54 lb)
Trim weights (six off) total	3 kg (6.6lb)
Skid (including kickbar)	21 kg (46.2 lb)

Load

Maximum load	75 kg (165 lb)
--------------	----------------

Pressure

Maximum pressure	13.8 bar (200 psi)
------------------	--------------------



Usage

The Osprey Elite Pedestal is designed for use in television studios and on location to support and balance a pan and tilt head, camera and ancillary equipment weighing up to 75 kg (165 lb).

The Osprey Elite Pedestal is intended for use by television camera operators.



WARNING! If you do not understand how to operate this pedestal, do not attempt to use it. Maintenance beyond that detailed in this Operators Guide must be performed only by competent personnel in accordance with the procedures laid down in the Maintenance Manual.

Further information

For further information or advice regarding this pedestal, please contact Vinten Broadcast Limited, your local Vinten distributor or visit our website.

For full details on maintenance and spare parts, please refer to the Osprey Elite Pedestal Maintenance Manual and Illustrated Parts List - Publication Part No. 3574-9. These are obtainable from Vinten Broadcast Limited or your local Vinten distributor. For information on-line, visit our website at

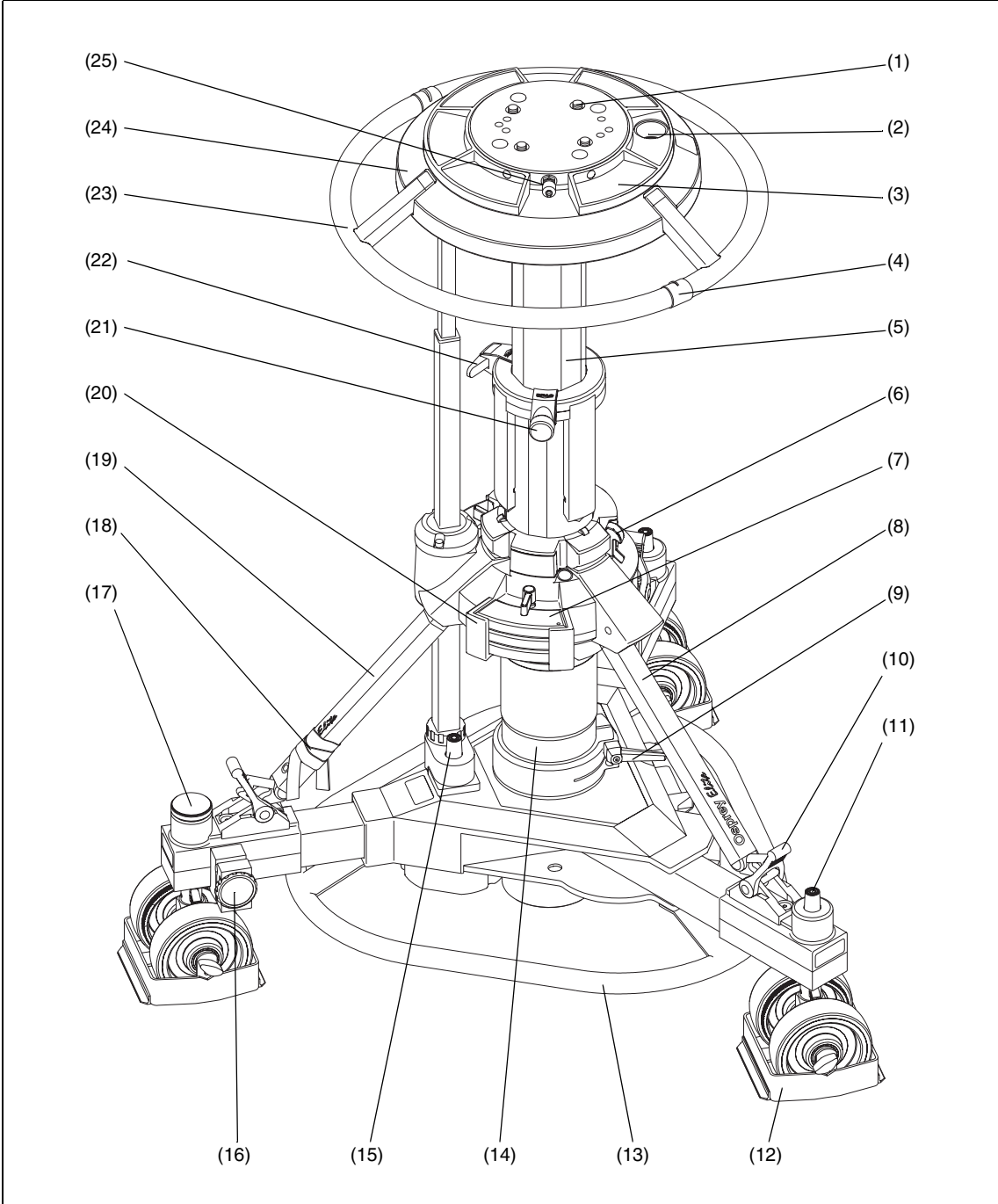
www.vinten.com

Contents

	Page
Safety - read this first	3
Critical data	3
Usage	4
Further information	4
Introduction	8
Operation	
Assembling the pedestal	9
Fitting the load	10
Pressurizing the pedestal	
Pressurizing from an external pressure source	12
Pressurizing the pedestal using the Vinten portable pump	13
Balancing the load	14
Using the Osprey Elite pedestal	
Height adjustment	15
Brakes	15
Cable guards	15
Steering	15
Steering tiller	16
Changing the skid tracking width	17
Optional wheels	18
Transportation and storage	18
Servicing	
General	20
Cleaning	20
Routine checks	20
Adjustments	
Skid clamp adjustment	21
Elimination of radial and side play in the moving column.	21
Routine maintenance	21
Parts list	22
Technical data	23

Associated Publications

Osprey Elite Pedestal
Maintenance Manual
Part No. 3574-9



Osprey Elite Pedestal

Osprey Elite Pedestal

(1)	Four-bolt mounting plate
(2)	Pressure gauge
(3)	Weight tray
(4)	Steering indicator
(5)	Moving column
(6)	Safety catch
(7)	Trim weight
(8)	Short strut
(9)	Skid clamp
(10)	Foot support and strap
(11)	Wheel brake foot-button
(12)	Cable guard
(13)	Kick bar
(14)	Outer Tube
(15)	Crab/steer changeover foot-button
(16)	Cable clamp
(17)	Tiller socket
(18)	Velcro strap
(19)	Long strut
(20)	Trim weight stowage
(21)	Drag control
(22)	On-shot clamp
(23)	Removable steering ring
(24)	Steering ring mounting plate
(25)	Schrader valve and cap

Introduction

The Osprey Elite pedestal comprises a central two-stage telescopic column and a steerable, folding skid assembly. For transport and storage, the steering ring (23) may be removed and the column and skid separated.

The moving column (5) is pressurized from an external pressure source. Trim weights (7) are provided for fine balance.

The skid comprises a centre casting with carrying handle, a fixed leg and two folding legs. Each leg carries twin wheels, with brakes (11) on the folding legs and a tiller socket (17) on the fixed leg.

Two versions of the skid are available. The OB skid has 160mm (6.3in.) wheels. The studio skid has 125mm (5in.) wheels with cable guards (12). The Vinten heavy-duty tracking skid, designed for use on 620mm track, may also be used with the Osprey Elite pedestal.

Operation

Assembling the pedestal

Turn the skid upside-down, depress the leg locking plungers and swing each folding leg out until the plungers lock the legs in the fully open position (See [Changing the skid tracking width](#)).

Fit the kick bar (13), which is secured by three sliding catches on the underside of the centre casting.

Set the skid on the ground on its wheels and apply the brakes (11).

Fit the steering ring to the column as follows:

Position the steering ring (23) in the cut-outs of the mounting plate (24).

From the underside of the mounting plate, tighten the three screws using a suitable screwdriver, coin, or similar tool.

Install the column on the skid as follows:

Ensure that the rubber straps on each foot support (10) are to the outside of the ball joint.

Hold the column upright and release the Velcro retaining strap (18) holding the three struts. Raise the longer strut (19) to about 30° from horizontal. The strut joint is adjusted to retain the strut in this position.

Lift the column, holding the two shorter struts (8) out from the column. Align the long strut with the fixed leg of the skid and carefully lower the column base into the skid centre. Ensure that the struts engage with the ball joints on each foot support and the steering tube locates in its socket.

Secure the struts to the supports with the rubber straps (10).

Tighten the skid clamp (9), using moderate hand pressure only. The clamp lever has a spring-loaded ratchet-type action and is operated as follows:

Turn the clamp lever clockwise as far as possible.

Pull the lever outward against the spring pressure, return it to vertical and release.

Turn lever clockwise again.

Repeat until the skid clamp is sufficiently tightened.

Secure the Velcro retaining strap (18) clear of the skid wheels.

Slide the steering indicator(s) (4) to the desired position (See [Steering](#)).

Fitting the load

Fit the pan and tilt head and payload before pressurizing the pedestal. The Osprey Elite pedestal has the standard four-bolt mounting plate (1) which permits the use of various Vinten camera mounts including pan and tilt heads, Quickfix and Mitchell adapters. The mounting bolts are captive in the pedestal and the bolt heads are accessible from the underside of the mounting plate with the column fully depressed and the safety catch engaged. However, installation of the pan and tilt head is facilitated if the column is extended.



WARNING! A pressurized pedestal will rise rapidly when safety catch is released. Do not lean over the pedestal when releasing the safety catch. Always restrain the pedestal by hand pressure on the steering ring when the safety catch is released.

Fit the pan and tilt head and payload as follows:

Ensure pedestal pressure does not exceed 3.5 bar (50 psi). Reduce as necessary, using the Schrader valve cap (25),

Push down on the steering ring (23) against residual pressure and release the safety catch (6). Allow the column to extend under hand restraint.

Apply the on-shot clamp (22).

Fit the pan and tilt head and tighten the bolts securely using a flat-bladed screwdriver or a spanner of the correct size. A Vinten spanner, Part No. J551-001, is available for this purpose.

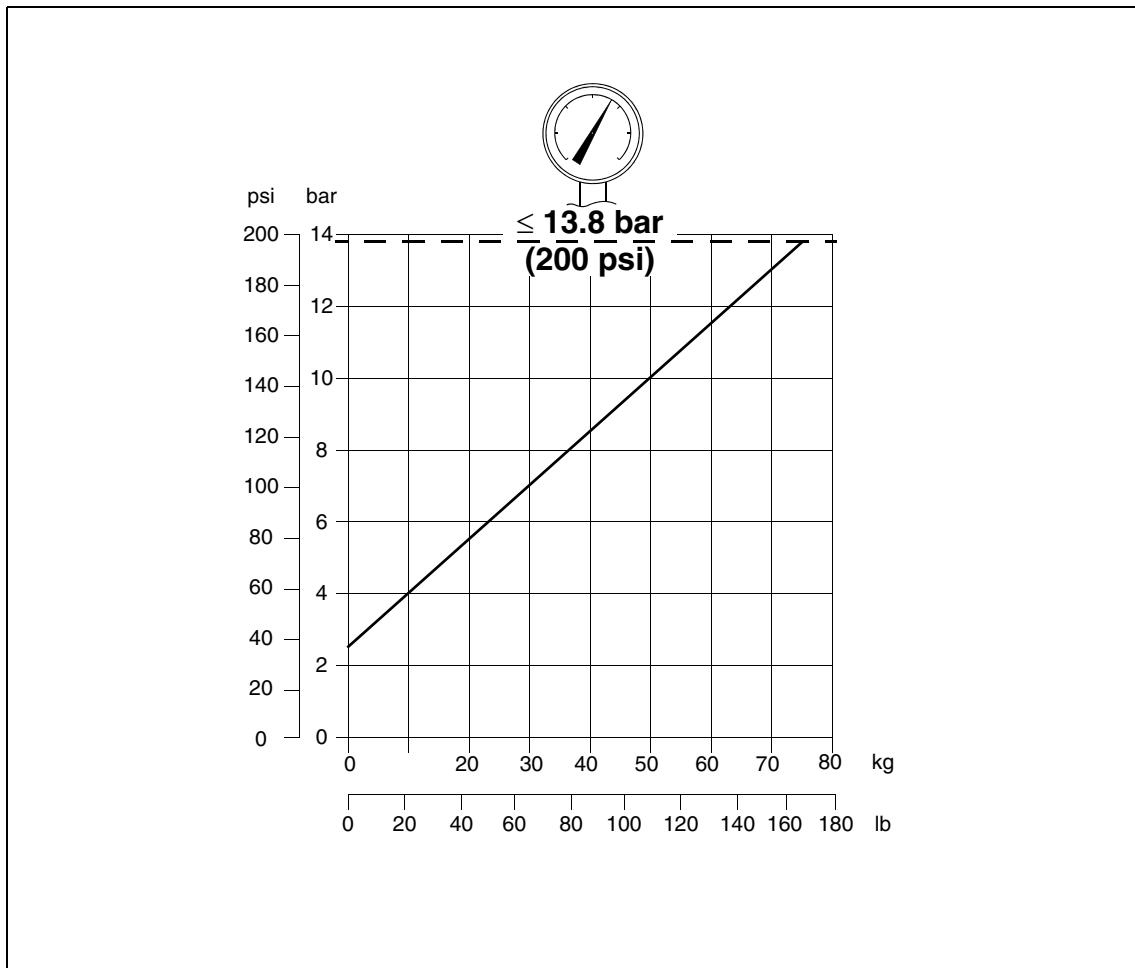
Set the safety catch slide (6) to ON (I), release the on-shot clamp (22) and lower the moving column under hand restraint until the safety catch engages.

Fit the camera and accessories to the mounting, ensuring that all items such as pan bars, prompters, lenses etc, are fitted. Attaching these items at a later stage may upset the pedestal balance. Install three trim weights (7) on the weight tray (3).

Pressurizing the pedestal

The Osprey Elite may be pressurized from an external pressure source or by using the Vinten portable pump (Part No. 3357-3). Trim weights (7) are provided for fine balance.

Ascertain the payload to be fitted to the pedestal (payload = pan and tilt head, camera, lens and all ancillary equipment). Referring to the graph, mark the payload on the horizontal axis then strike a vertical line from the load figure to the balance line. At the intersecting point strike a horizontal line to the vertical axis and read off the required gas pressure.



Pressurization graph

Pressurizing from an external pressure source



WARNING! This pedestal must be pressurized only with clean, dry air or nitrogen. A pressure reducing valve must be fitted to the pressure line between the gas cylinder and the outlet connection of the hose. The reducing valve must be screwed into the gas cylinder outlet. The maximum pressure on the outlet side of the reducing valve must not exceed 13.8 bar (200 psi). Do not pressurize the pedestal beyond the maximum safe working pressure indicated by the leading edge of the red sector on the gauge. The pedestal is fitted with a pressure relief valve as a safeguard against over-pressurization. Do not attempt to adjust the pressure relief valve.

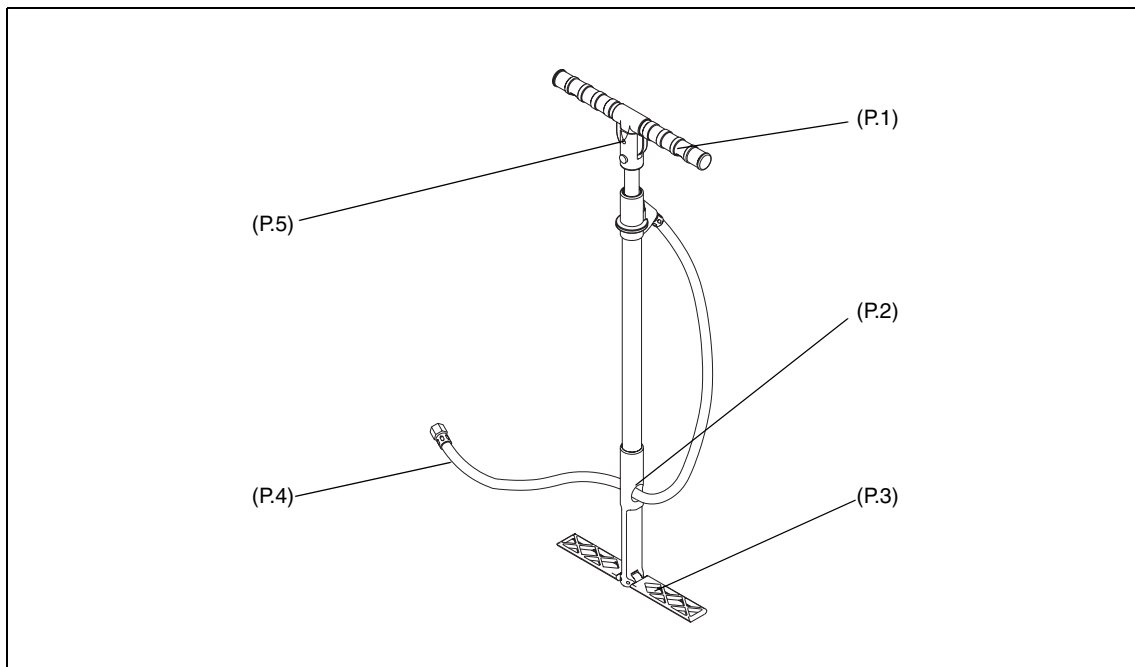
To pressurize the pedestal from an external pressure source, proceed as follows:

Set the safety catch slide (6) to ON (I) and fully depress the moving column (5) until the safety catch engages.

Remove the Schrader valve cap (25) and connect the charging line from the pressure source.

Turn on the pressure supply and slowly increase the pedestal pressure to the required pressure. Do not exceed the maximum working pressure, indicated by the leading edge of the red sector on the gauge (2).

Disconnect the charging line, but do not refit the Schrader valve cap at this stage.



Vinten Portable Pump

Pressurizing the pedestal using the Vinten portable pump



WARNING! Do not pressurize the pedestal beyond the maximum safe working pressure indicated by the leading edge of the red sector on the gauge. The pedestal is fitted with a pressure relief valve as a safeguard against over-pressurization. Do not attempt to adjust the pressure relief valve.

To pressurize the pedestal using the Vinten portable pump, proceed as follows:

Set the safety catch slide (6) to ON (I) and fully depress the moving column (5) until the safety catch engages.

On the pump, fold down both the feet (P.3).

Push in the handle release button (P.5) and move the handle (P.1) to the horizontal position, where it will lock.

Pull the hose (P.4) out of its stowage (P.2). Connect the hose to the pedestal charging valve.

Position the pump between the legs, standing with both feet on the fold-down feet (P.3).

Grip the handle (P.1) with both hands and, using full steady strokes, pressurize the pedestal to the required pressure. Do not exceed the maximum working pressure, indicated by the leading edge of the red sector on the gauge (2).

Disconnect the hose (P.4) from the pedestal charging valve, but do not refit the Schrader valve cap at this stage. Fit the hose in its stowage (P.2).

Push the pump plunger fully down, push in the handle release button (P.5) and move the handle (P.1) to the vertical position, where it will lock the pump plunger in the closed position.

Fold up both the feet (P.3).

Balancing the load

After pressurization of the pedestal, the pan and tilt head and payload can be accurately balanced, as follows:

Push down on the steering ring (23) against residual pressure and release the safety catch (6). Allow the column to extend under hand restraint.

Exercise the moving column (5) over its full travel at least twice, then position the column in the mid-height position.



WARNING! Do not reduce pedestal pressure below 3.5 bar (50 psi). This ensures that the elevating mechanism remains in tension.

If the column tends to fall, remove a trim weight or increase pressure.

If the column tends to rise, reduce the pressure in steps of 0.15-0.20 bar (2-3 psi) using the Schrader valve cap (25).



WARNING! The Schrader valve cap (25) forms a primary pressure seal. Always replace the cap and screw it down finger-tight.

A correctly pressurized pedestal will balance its payload such that it can be moved to any position over the full on-shot stroke of the moving column, with minimum effort, and it will maintain its position when the steering ring is released. Fine balance and temperature correction may be achieved by adding or removing trim weights.

Using the Osprey Elite pedestal

Height adjustment

The column has an on-shot stroke of 770 mm (30 in.) and the load can be moved over this distance, in perfect balance, by raising and lowering the steering ring (23). The movement is adjustable for drag (21) and an on-shot clamp (22) can be used to hold the moving column in position if fixed height operation is required.

Drag control

Column movement is adjustable for drag and this is set according to operator preference by means of the drag control (21) located at the top of the outer tube. Turn the control clockwise to increase the drag setting, and counter-clockwise to decrease it.

On-shot clamp

An on-shot clamp (22) can be used to hold the moving column in position if fixed height operation is required. Move the clamp lever fully to the left to apply the clamp. Move it fully to the right to release the clamp.

Brakes

The skid is fitted with brakes on the wheels on the folding legs. The brakes are operated by pressing on the foot-buttons (11) located above the wheels. Press once to apply the brake and again to release it.

Cable guards

The cable guards (12) fitted to the studio version are height-adjustable and should be set as required. Adjustment is carried out by slackening the knobs, setting the cable guards at the required height and re-tightening the knobs.

Steering

Directional control of the pedestal is achieved by turning the steering ring (23) mounted at the top of the column. The steering system is geared so that the skid wheels turn by the same amount as the steering ring. This ensures, for example, that with the pedestal set to crab, turning the steering ring by 90° will also cause the pedestal to change direction by 90°. The steering ring is fitted with two movable indicators (4) which can be used to mark the straight-ahead position of the ring and will thus provide a reference point when steering.

The skid has a crab/steer arrangement with a foot-operated changeover mechanism, which provides a steer setting i.e. one wheel steering, two fixed; or a crab setting, where all three wheels turn together. Pushing the foot-button (15) operates a changeover mechanism which toggles the pedestal between crab and steer. Although the button can be pressed with the wheels in any position, the changeover will not occur until the wheels are all facing forward, so the steering ring may have to be turned by up to 180° before the changeover mechanism engages. This arrangement ensures that the rear wheels will always lock in the straight-ahead position when changing from crab to steer.

A clutch in each wheel unit disconnects that wheel from the steering in the event of the wheel striking an obstacle. To reconnect the wheel, hold the steering ring stationary and turn the wheel unit until the clutch re-engages.

Steering tiller

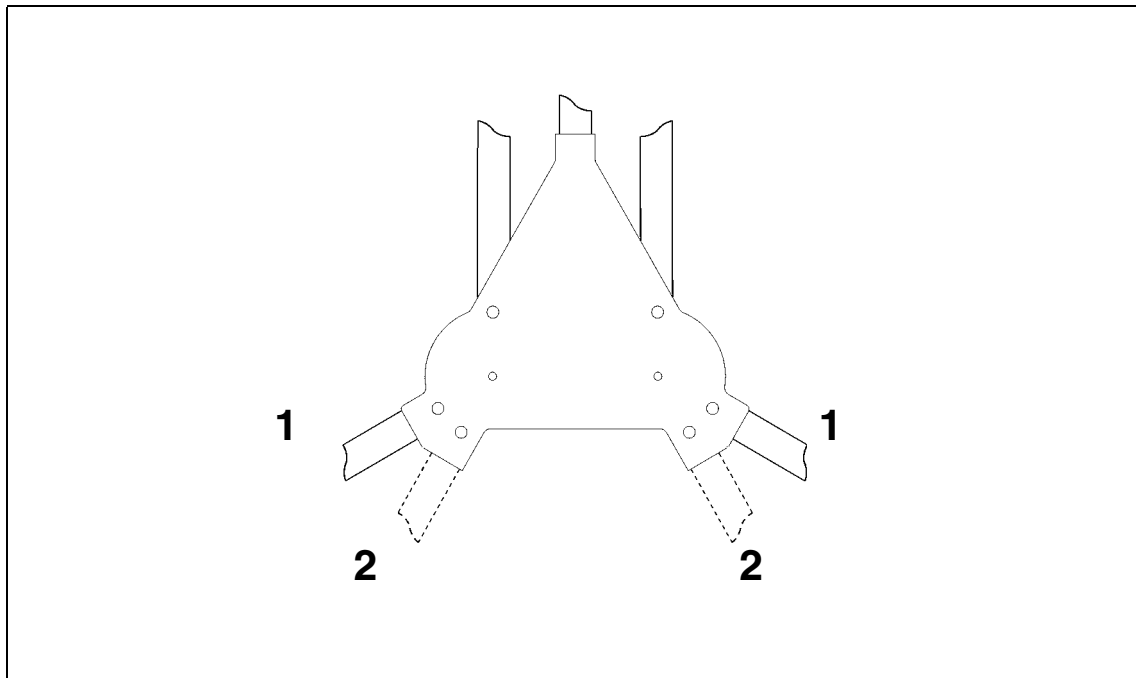
The steering tiller (Part No. 3329-21) provides an alternative means of steering the skid. It is particularly useful when the skid is fitted with a head-to-skid adapter or fixed column, or when a grip or assistant is required to manoeuvre the pedestal.

The tiller is fitted as follows:

Unscrew and remove the round cap (17) which is fitted on the tiller socket on the end of the fixed skid leg. The cap may be used to close the steering tube socket if the skid is used without the column installed.

Fit the tiller bar in the tiller socket and engage it with the drive dog.

The pedestal can now be steered by turning the tiller bar or steering ring. Crab/steer changeover is carried out in the usual manner.



Skid Tracking Width

Changing the skid tracking width

The movable skid legs can be set to either of two positions. Position 1 is for normal use and gives maximum stability. Position 2 provides a reduced width for tracking through narrow doorways etc.



WARNING! To ensure maximum stability when the skid is set to narrow track, particularly when moving over uneven ground, reduce pedestal height to a minimum

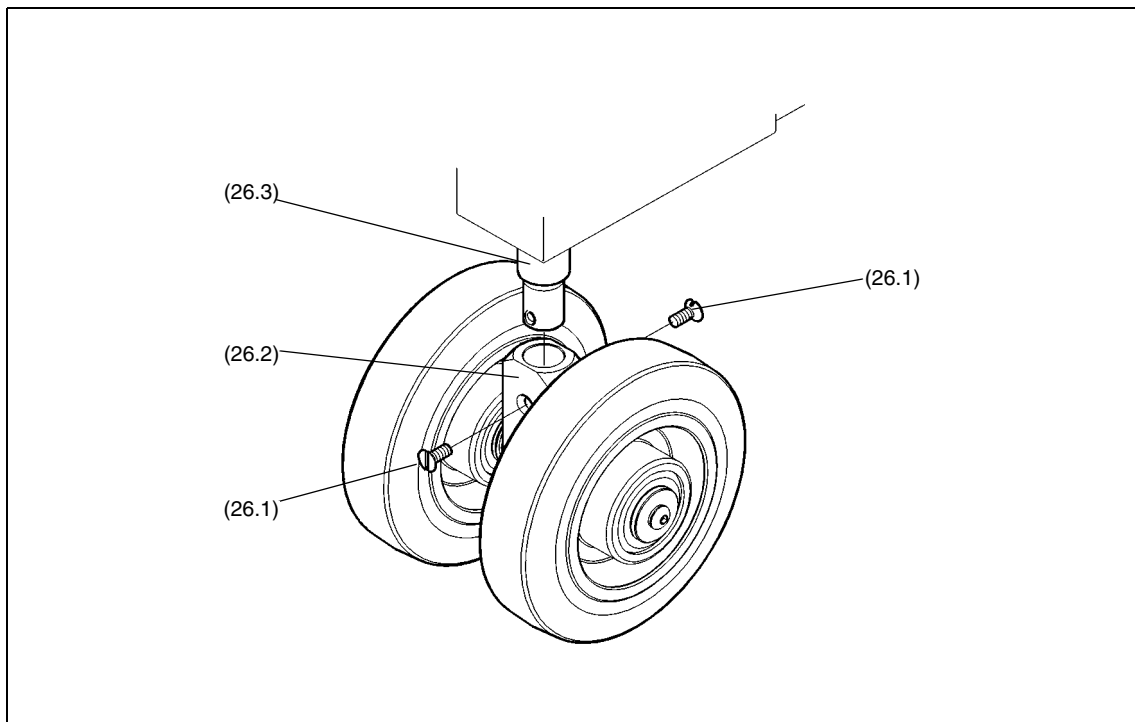
To change the tracking width:

Set the column to its lowest setting and engage the safety catch (6).

Ensure that the brakes (11) are released and then turn the skid wheels so they are pointing at right angles to the skid legs.

Reach under the pedestal, depress one of the spring-loaded locking plungers and move the leg to the required position, ensuring that the plunger has engaged correctly at the new location.

Repeat for the second leg.



Optional Wheels

Optional wheels

A set of 160 mm (6.3 in.) wheels (Part No. 3329-30) is available to convert the skid from studio to OB use. A set of 125 mm (5in.) wheels with cable guards (Part No. 3329-43) is available to convert an OB skid to a studio skid.

To replace the wheels:

Remove the column from the skid and turn the skid upside-down.

Unscrew and remove the countersunk screws (26.1) securing the wheel assembly (26.2) to the shaft (26.3).

Remove the wheel assembly, complete with cable guard.

Repeat for remaining two wheel assemblies. Store the wheels for future use.

Fit the replacement wheel assemblies (26.2) to the shafts (26.3) and secure each wheel assembly to the shaft with the countersunk screws (26.1).

Transportation and storage



WARNING! Local, national or international regulations may apply to the transport and storage of pressurized pedestals.

NOTE: It is not necessary to reduce the pedestal pressure prior to transportation or storage and the pan and tilt head may be removed with the pedestal in the fully depressed and locked position. However, to facilitate removal of the camera and mounting, pressure should be reduced to 3.5 bar (50 psi).

The pedestal may be dismantled for transportation and storage. Proceed as follows:

Apply the brakes (11).

Set the safety catch slide (6) to ON (I) and fully depress the moving column (5) until the safety catch engages.

Remove the camera and accessories.



WARNING! Do not reduce pedestal pressure below 3.5 bar (50 psi). This ensures that the elevating mechanism remains in tension.

Using the Schrader valve cap, reduce pedestal pressure to 3.5 bar (50 psi).



WARNING! Ensure that the payload is removed and trim weights are secured in the trim weight stowage before dismantling the pedestal.

Release the safety catch (6) and allow the column to rise under hand restraint.

Apply the on-shot clamp (22).

Undo the four mounting bolts and remove the pan and tilt head.

To avoid the possibility of dust or abrasive particles collecting on moving components, release the on-shot clamp (22), set the column to minimum height and engage the safety catch (6).

Secure any trim weights (7) in the trim weight stowage (20).

Release the skid clamp (9).

Release the three rubber foot straps (10) from the struts.

Raise the longer strut (19)(on the fixed skid leg), which will remain raised when released. Raise and hold the two shorter struts (8), then lift the complete column vertically off the skid.

Secure the struts with the Velcro strap (18).



WARNING! The column will be unstable if stood on its base.

Remove the steering ring (23) by unscrewing each fastener until it releases. Lift the steering ring off its mounting plate (24).

Remove the kick bar (13) from the skid by releasing the sliding catches.

Depress the locking plungers and fold the skid legs, ensuring that the plungers lock in the fully closed position.

Servicing

General

The Osprey Elite pedestal is robustly made to high engineering standards and little attention is required to maintain serviceability save regular cleaning. Attention to the following points will ensure a long and useful service life with minimum need for repair.

Cleaning

During normal studio use, the only cleaning required should be a regular wipe over with a lint-free cloth. Dirt accumulated during storage or periods of disuse may be removed with a semi-stiff brush. Particular attention should be paid to the flats on the top stage of the column.

NOTE: Do NOT use oil or grease on any exposed part of the column. This is unnecessary and traps dirt which acts as an abrasive.

Use out-of-doors will require special attention, especially in adverse conditions. Salt spray must be washed off with fresh water at the earliest opportunity. Do not allow water to enter the column. Sand and dirt acts as an abrasive and should be removed with a semi-stiff brush or vacuum cleaner.

NOTE: Use only detergent-based cleaners. Do NOT use solvent- or oil-based cleaners, abrasives or wire brushes to remove accumulations of dirt, as these damage the protective surfaces.

Routine checks

Check the following during normal use:

- Check for ageing and cracking of the rubber strut securing straps and renew if necessary.

- Check the effectiveness of the clamps.

- Check for radial or side play in the moving column.

Adjustments

Adjustments that may become necessary after considerable use are as follows:

- Taking up wear in the skid clamp.

- Elimination of radial and side play in the moving column.

Skid clamp adjustment

To adjust the skid clamp:

The skid clamp (9) is applied or released by turning the handle clockwise or counter-clockwise. The handle has a pull-off/push-on ratchet adjustment. To take up wear, pull the handle away from the spindle, rotate counter-clockwise and release.

Repeat the above procedure, as necessary, until the clamp locks when applied but allows free movement when released.

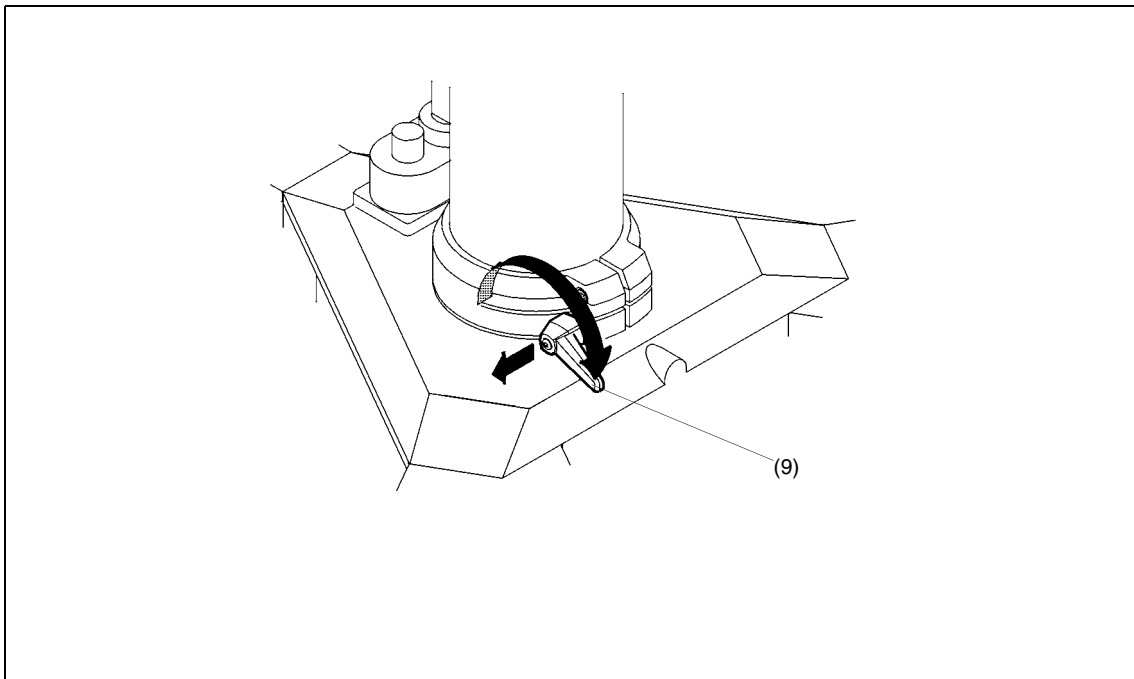
Elimination of radial and side play in the moving column.

If excessive radial or side play is apparent in the moving column, refer to the appropriate section in the Maintenance Manual. This adjustment should be carried out by a competent person.

Routine maintenance

At three-yearly intervals, the three steel wire ropes in the column elevation mechanism should be replaced.

This procedure should be carried out by a competent person in accordance with the appropriate section in the Maintenance Manual.



Skid Clamp Adjustment

Parts list

The following lists include main assemblies, user-replaceable spare parts and optional accessories. For further information regarding repair or spare parts, please contact Vinten Broadcast Ltd or your local distributor.

For information on-line, visit our website at

www.vinten.com.

Item	Part No.
Osprey Elite, OB version (160mm wheels)	3574-3B
Osprey Elite, studio version (125 mm wheels and cable guards)	3574-3C
Column	3574-11
OB skid	3573-3B
Studio skid	3573-3C
Kick bar	3329-32
Trim weight	3329-328
Spanner - for head bolts	J551-001
Steering tiller	3329-21
Column - for fitting to Penguin dolly	3329-20
Fixed column - for use with Dolphin arm	3348-3
Short column assembly	3354-3
Low-level adaptor (four-bolt fixing)	3368-24
Set of three OB wheels	3329-30
Set of three studio wheels with cable guards	3329-43
Vinten portable pump	3357-3

Technical data

	STUDIO	OB
Payload	75 kg (165 lb)	75 kg (165 lb)
Column weight	24.5 kg (54 lb)	24.5 kg (54 lb)
Skid weight	21 kg (46.2 lb)	21 kg (46.2 lb)
Trim weights	3 kg (6.6 lb)	3 kg (6.6 lb)
Total pedestal weight	48.5 kg (106.8 lb)	48.5 kg (106.8 lb)
Minimum height	66 cm (26 in.)	69.5 cm (27.3 in.)
Maximum height	143 cm (56.3 in.)	146.5 cm (57.6 in.)
On-shot stroke	77 cm (30 in.)	77 cm (30 in.)
Skid leg radius	48 cm (19 in.)	48 cm (19 in.)
Doorway tracking width	97 cm (38 in.)	97 cm (38 in.)
Transit doorway width	86 cm (34 in.)	86 cm (34 in.)
Narrow doorway tracking width	70 cm (27.5 in.)	70 cm (27.5 in.)
Wheel diameter	12.5 cm (5 in.)	16 cm (6.3 in.)
Steering ring diameter	53.5 cm (21 in.)	53.5 cm (21 in.)
Max working pressure	13.8 bar (200 psi)	13.8 bar (200 psi)
Relief valve pressure	16.2 bar (235 psi)	16.2 bar (235 psi)