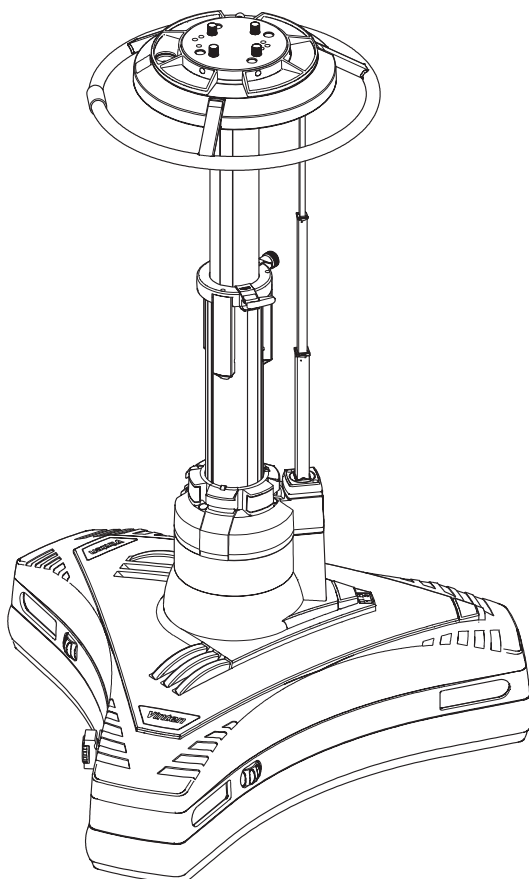


Operators Guide

Quartz Two



Pedestal



Quartz Two Pedestal

Publication Part No. 3826-8 Issue 6

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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

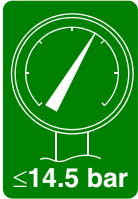
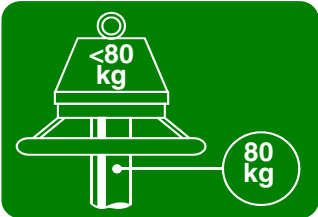
Pedestal 80 kg (176 lb)
Trim weights (six off) total 3 kg (6.6lb)

Load

Maximum load 80 kg (176 lb)

Pressure

Maximum pressure 14.5 bar (210 psi)



Usage

The Quartz Two Pedestal is designed for use in television studios to support and balance a pan and tilt head, camera and ancillary equipment weighing up to 80 kg (176 lb).

The Quartz Two 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 Quartz Two Pedestal Maintenance Manual and Illustrated Parts List - Publication Part No. 3826-9, obtainable from Vinten Broadcast Limited or your local Vinten distributor.

For information on-line, visit our website at

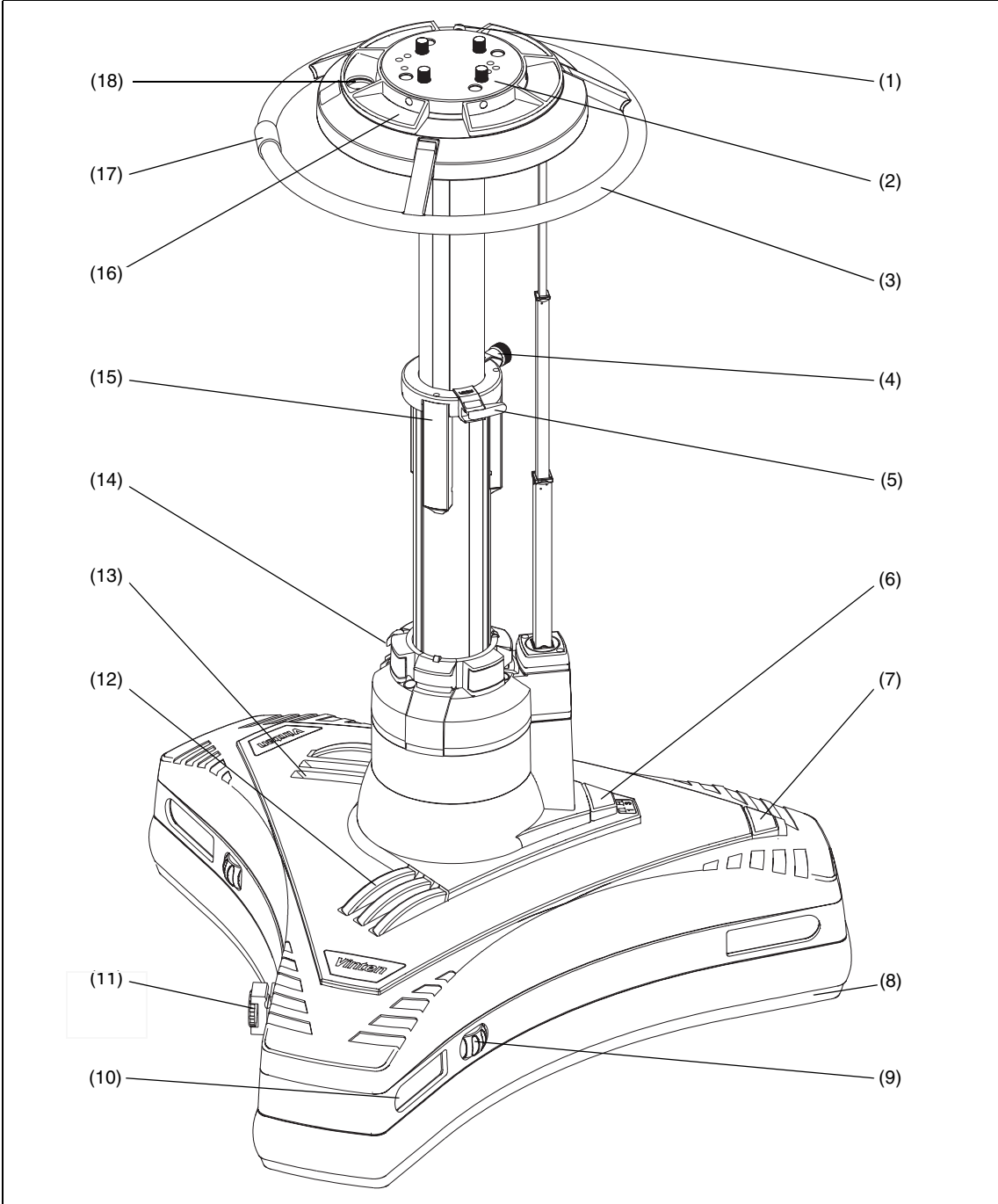
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Associated Publications

Quartz Two Pedestal
Maintenance Manual
Part No. 3826-9



Quartz Two Pedestal

Quartz Two Pedestal

(1)	Schrader valve and cap
(2)	Four-bolt mounting plate
(3)	Steering ring
(4)	Drag control
(5)	On-shot clamp
(6)	Crab/steer changeover pedal
(7)	Wheel brake pedal
(8)	Cable guard
(9)	Cable guard thumb-wheel
(10)	Lifting aperture
(11)	Cable clamp
(12)	Trim weight
(13)	Trim weight stowage
(14)	Safety catch
(15)	Moving column
(16)	Weight tray
(17)	Steering indicator
(18)	Pressure gauge

Introduction

The Quartz Two pedestal comprises a central two-stage telescopic column mounted in a steerable base.

The moving column (15) is pressurized from an external pressure source. Six trim weights (12) are provided for fine balance. Controls on the column comprise a drag control (4), an on-shot clamp (5) and a safety catch (14) which locks the column in the fully-depressed position.

The base is carried on three sets of twin 125 mm (5 in.) wheels. A continuous height-adjustable cable guard (8) is provided, raised and lowered by three thumb-wheels (9). Stowage for the trim weights (13) is provided on the upper surface of the base. A brake pedal (7) controls the wheel brake and a crab/steer pedal (6) allows the operator to switch between conventional and crab steering. Lifting apertures (10) are provided on each face of the base.

Operation

Unpacking

Unpack the pedestal, ensuring that all transport packing and retaining fixings are removed.!



WARNING! The Quartz Two pedestal has a mass of 80 kg (176 lb). Take care when lifting the pedestal. Do not lift the pedestal by the steering ring - use the lifting apertures (10). Do not release the safety catch (14) until the payload has been fitted.

Steering mechanism checks

Align the steering indicator (17) with the brake pedal (7). Press the crab/steer pedal (6) to select CRAB. Turn the steering ring and check that all three wheels turn together and all point in the same direction.

Align the steering indicator (17) with the brake pedal (7) and press the crab/steer pedal (6) to select STEER. Turn the steering ring and check that two of the wheels lock in the straight-ahead position and that the third wheel (below the brake pedal) can be turned by the steering ring.

Fitting the load

Fit the pan and tilt head and payload before pressurizing the pedestal. The Quartz Two pedestal has the standard four-bolt mounting plate (2) 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 (1),

Push down on the steering ring (3) against residual pressure and release the safety catch (14). Allow the column to extend under hand restraint.

Apply the on-shot clamp (5).

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.

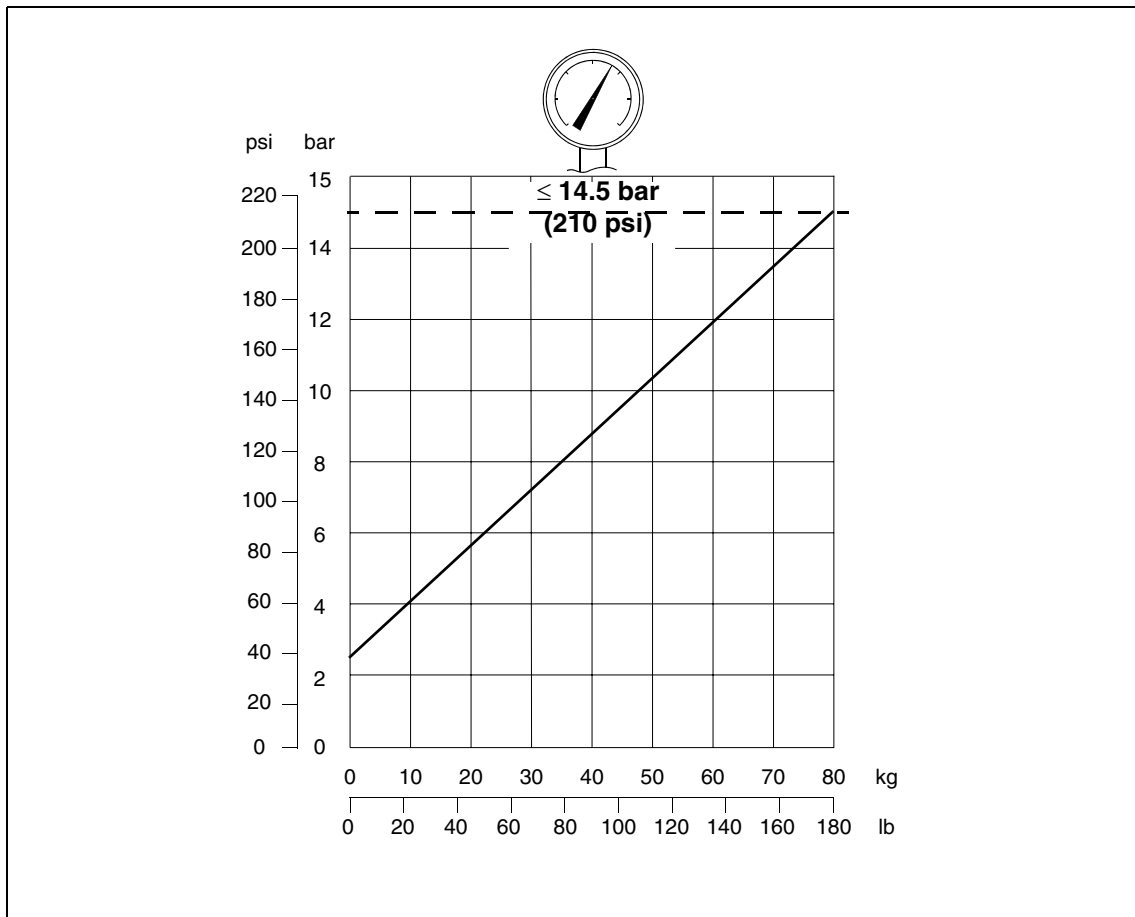
Set the safety catch slide (14) to ON, release the on-shot clamp (5) and lower the moving column under hand restraint until the safety catch engages.

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 (12) on the weight tray (16).

Pressurizing the pedestal

The Quartz Two pedestal may be pressurized from an external pressure source or by using the Vinten portable pump (Part No. 3357-3). Trim weights (12) 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 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 14.5 bar (210 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 (14) to ON and fully depress the moving column (15) until the safety catch engages.

Remove the Schrader valve cap (1) 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 (18).

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

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 (14) to ON and fully depress the moving column (15) until the safety catch engages.

Remove the Schrader valve cap (1).

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 (1).

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

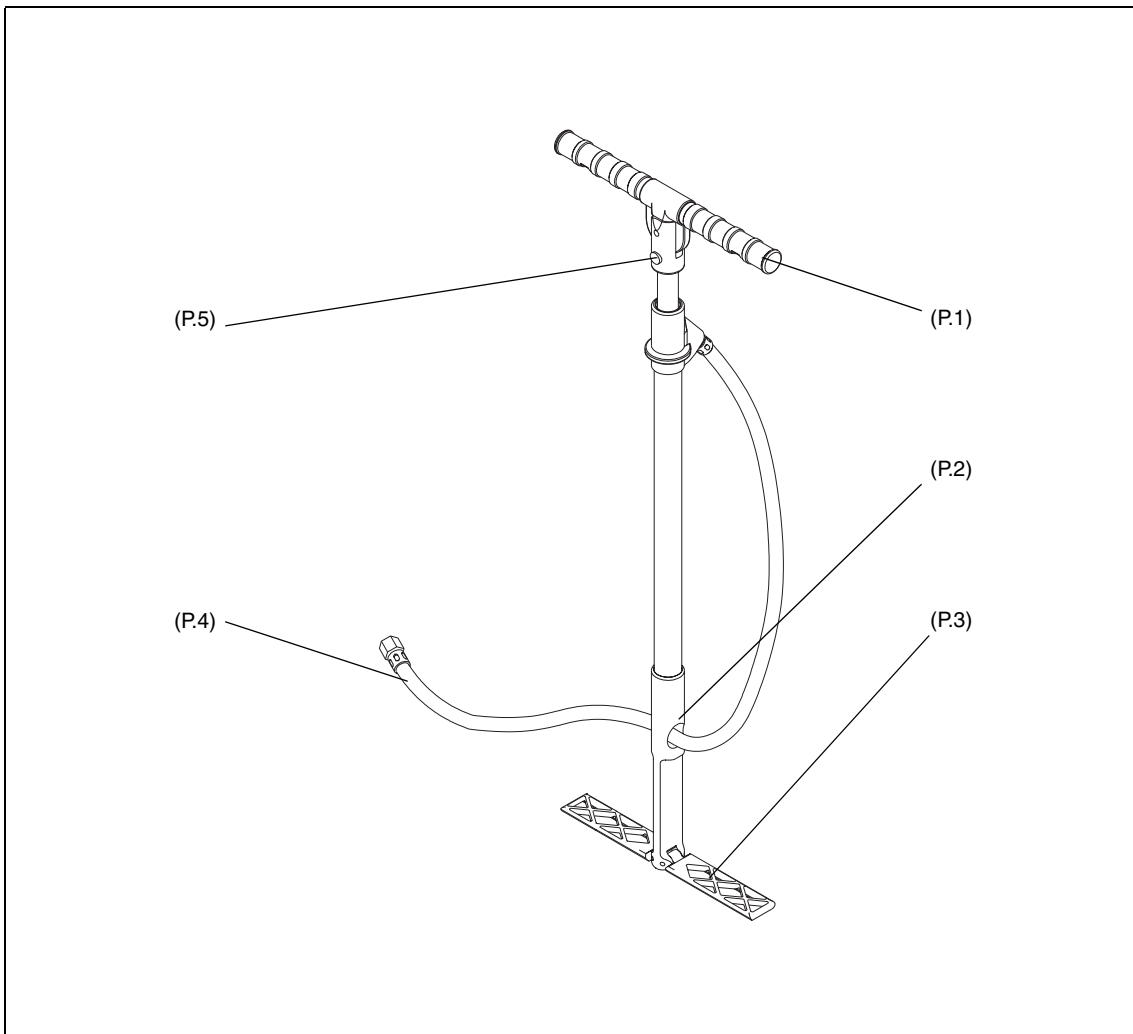
Grip the handle (P.1) with both hands and, using full steady strokes, pressurize the pedestal to the required pressure. Do not exceed the maximum working pressure, indicated by the

leading edge of the red sector on the gauge (18) Approximately 300 strokes will be required to fully charge the pedestal.

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).



Vinten Portable Pump

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 (3) against residual pressure and release the safety catch (14). Allow the column to extend under hand restraint.

Exercise the moving column (15) 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 from the weight tray (16) 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 (1).



WARNING! The Schrader valve cap (1) 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 pedestal

Height adjustment

The column has an on-shot stroke of 77 cm (30 in.) and the load can be moved over this distance, in perfect balance, by raising and lowering the steering ring (3). The movement is adjustable for drag (4) and an on-shot clamp (5) can be used to hold the moving column in position if fixed height operation is required.



WARNING! To ensure maximum stability, particularly when moving over uneven surfaces, reduce pedestal height to a minimum. Take care not to trap fingers under the steering hub or between column elements while pedestal height is being reduced.

Drag control

Column movement is adjustable for drag and this is set according to operator preference by means of the drag control (4) 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 (5) 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.

Parking brake

The skid is provided with a parking brake on one wheel. The brake is not designed to slow the pedestal while in motion.



WARNING! Do not apply the brake while the pedestal is in motion

The brake is operated by pressing on the pedal (7) on the base. Press once to apply the brake and again to release it.

Steering

Directional control of the pedestal is achieved by turning the steering ring (3) 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 an indicator (17) which, when aligned with the brake pedal (7), indicates the straight-ahead position and thus provides a reference point when steering.

The pedestal has a crab/steer arrangement with a foot-operated changeover mechanism, which provides a steer setting - one wheel steering, two fixed; or a crab setting - all three wheels turning together. Pushing the pedal (6) operates the changeover mechanism which toggles the pedestal between crab and steer.

Although the pedal 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 fixed wheels will always lock in the straight-ahead position when changing from crab to steer.

Cable clamp

A cable clamp (11) is provided on the base.

Cable guard

The continuous cable guard (8) is height-adjustable by means of three thumb-wheels (9). These have numbers printed on their upper surfaces.

Rotate each thumb-wheel in turn to set the cable guard to the required height, ensuring that each thumb-wheel is set to the same number.

The cable guard incorporates a spring-loaded mechanism to prevent damage if the pedestal is pulled over an obstacle.

Transportation and storage



WARNING! The Quartz Two pedestal has a mass of 80 kg (176 lb). Take care when lifting the pedestal. Do not lift the pedestal by the steering ring - use the lifting apertures (10). 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).

To prepare the pedestal for transportation and storage, proceed as follows:

Apply the brake (7).

Set the safety catch slide (14) to ON and fully depress the moving column (15) 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 (1), reduce pedestal pressure to 3.5 bar (50 psi).

Release the safety catch (14) and allow the column to rise under hand restraint.

Apply the on-shot clamp (5).

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 (5), set the column to minimum height and engage the safety catch (14).

Place any trim weights (12) in the trim weight stowage (13).

Servicing

General

The Quartz Two 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 and to the wheels, which are accessible for cleaning through the lifting apertures.

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

During normal use, check the effectiveness of the on-shot clamp and check for radial or side play in the moving column.

Refer to the appropriate section in the Maintenance Manual if the on-shot clamp is ineffective, excessive radial or side play is apparent in the moving column, or any other defect is apparent. Adjustments and repairs should be carried out only 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.

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.
Quartz Two pedestal	3826-3
Trim weight	3328-328
Spanner - for head bolts	J551-001
Vinten portable pump	3357-3

Technical data

Payload	80 kg (176 lb)
Pedestal weight	80 kg (176 lb)
Trim weights	3 kg (6.6 lb)
Minimum height	66 cm (26 in.)
Maximum height	143 cm (56 in.)
Ground clearance	2 cm (0.8 in.)
On-shot stroke	77 cm (30 in.)
Doorway tracking width	108 cm (42.5 in.)
Transit doorway width	80 cm (31.5 in.)
Wheel diameter	12.5 cm (5 in.)
Steering ring diameter	63.5 cm (25 in.)
Maximum working pressure	14.5 bar (210 psi)
Relief valve pressure	15.5 bar (225 psi)