

FSB14T *MkII* Fluid Head



Part No. S2077-0002

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Original Instructions: English

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Safety

Important information on the safe installation and operation of this product. Read this information before operating the product. For your personal safety, read these instructions.

Do not operate the product if you do not understand how to use it safely.

Save these instructions for future reference.

Warning Symbols Used in these Instructions

Safety cautions are included in these instructions. These safety instructions must be followed to avoid possible personal injury and avoid possible damage to the product.



WARNING!

Where there is a risk of personal injury or injury to others, comments appear supported by the word 'WARNING'.



CAUTION!

Where there is a risk of damage to the product, associated equipment, process or surroundings, comments appear supported by the word 'CAUTION'.



Refer to the product instruction manual.



WARNING!

Pinch point, injury to fingers or hands, exercise caution.

Health and Safety



WARNING! Risk of personal injury or injury to others. All personnel must be fully trained and adhere to correct manual handling techniques and Health & Safety regulations. It is the responsibility of the local organisation to enforce safe working practices at all times.

Mounting and Installation



WARNING! Do not fit a head to a tripod that cannot support the combined mass of the head and its full payload.



WARNING! Risk of finger entrapment. Do not place fingers between the platform and the body of the fluid head.



CAUTION! Always lock the horizontal and vertical brakes when the camera is mounted but not in use or when levelling the fluid head on the tripod.



CAUTION! Hold the camera securely when mounting or dismounting from the fluid head and when making adjustments to the tripod height or footprint.



CAUTION! Always hold the pan bar when making adjustments to the counterbalance or camera position. **Do not** use the pan bar to lift or move the tripod and fluid head.



CAUTION! Do not attach heavy items to the pan bar.



CAUTION! Always remove the camera before transporting.

Maintenance



WARNING! The fitting of non-approved parts and or accessories or servicing by non-approved personnel could effect the safety of the product. It may also invalidate the terms and conditions of the product warranty.



CAUTION! When replacing the battery, only use the same or an equivalent type of battery recommended for use with this product.

About this Guide

Intended Use

The Sachtler FSB II fluid head range has been developed to enable smooth pan and tilt movement giving the operator total image control through a wide range of angles.

About this User Guide

This user guide has been produced to instruct the user on the correct set-up, operation and maintenance of the fluid head.

Warranty

This product is covered by a one year warranty.

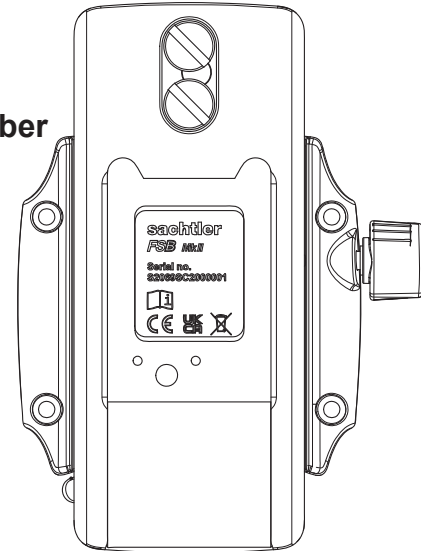
The warranty will be invalidated if:

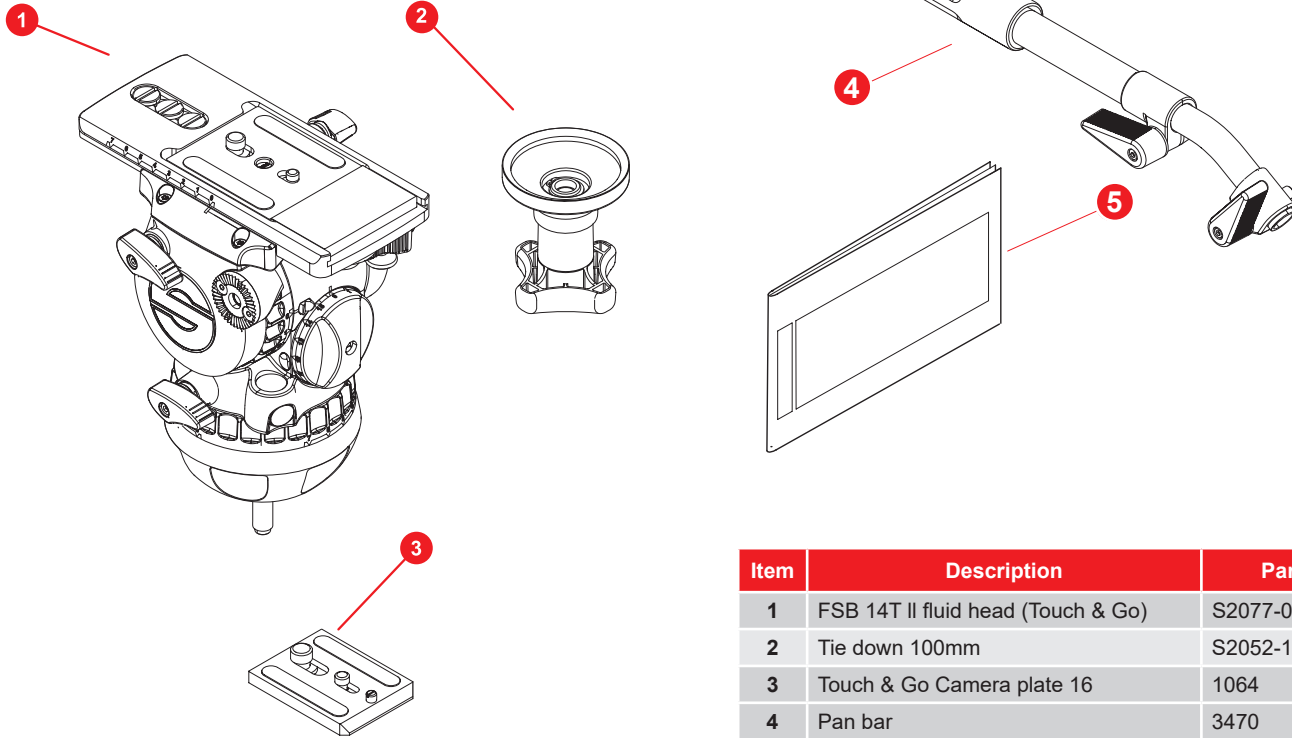
- The head is improperly installed or used in a manner contrary to this user guide.
- The head housing is opened by unauthorised personnel.

Extended Warranty

Please register at www.sachtler.com for an extended warranty period.

Serial Number Location

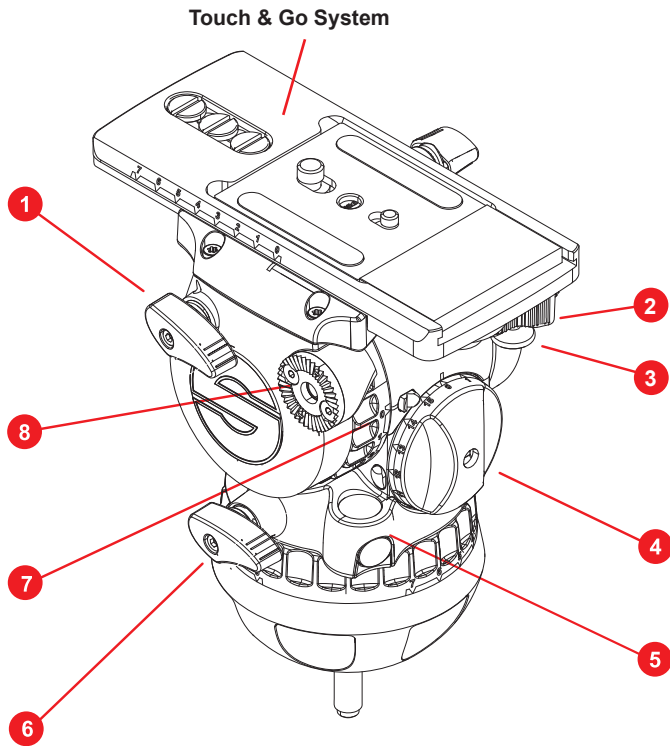




Item	Description	Part No
1	FSB 14T II fluid head (Touch & Go)	S2077-0002
2	Tie down 100mm	S2052-1100
3	Touch & Go Camera plate 16	1064
4	Pan bar	3470
5	User guide	S2077-4980

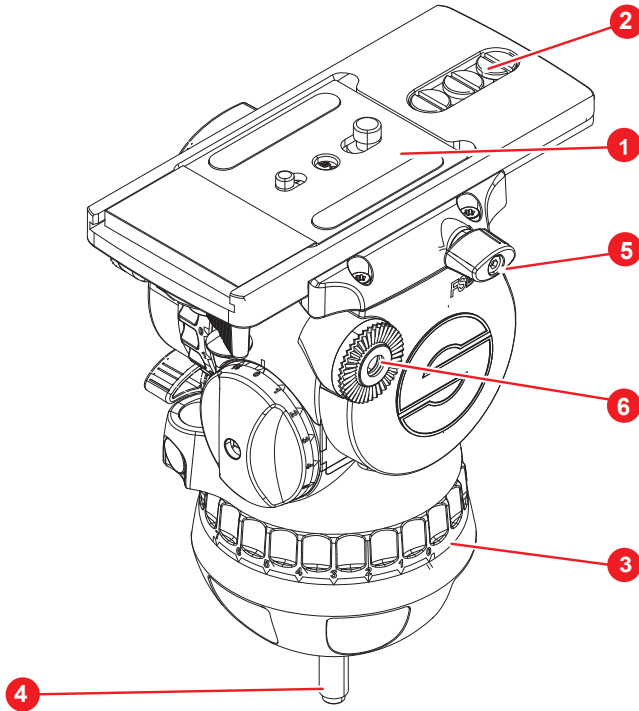
Operating Elements

Left View



1	Vertical brake
2	Touch & Go system lock lever
3	Touch & Go system safety lock
4	Counterbalance adjustment knob
5	Illuminated touch bubble
6	Horizontal brake
7	Vertical drag control
8	Rosette for left pan bar

Right View



1	Touch & Go camera plate
2	Spare camera screws
3	Horizontal drag control
4	Tie down mounting
5	Balance platform clamp knob
6	Rosette for right pan bar

Installation

PrismBubble

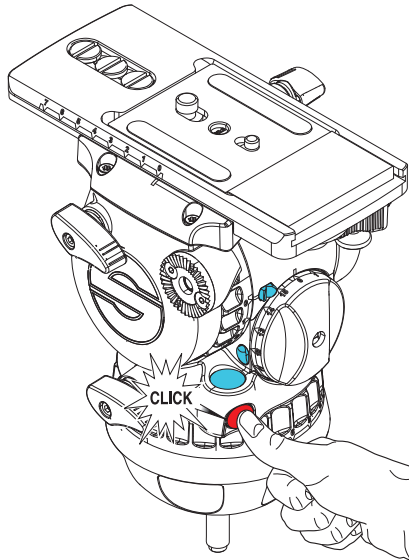
The fluid head is fitted with an illuminating bubble level which allows easy levelling in poor lighting conditions. It also illuminates the drag controls.

The head also features a prism to view the bubble when the head is too high to view from above. This Prism also incorporates the On / Off switch.

In addition the PrismBubble may be lit on its own or with the control LED's to enable setup up in low light conditions.

The illumination will be activated by pushing the bubble prism window.

1. Pressing the window briefly will turn on the level bubble LED for approx. 10s \pm 1s.
2. Pressing and holding the window for >1s will turn on the level bubble LED and all control (drag) LED's for 20s \pm 2s.
3. Pressing the window again when any of the illuminations are on, will turn every LED off.

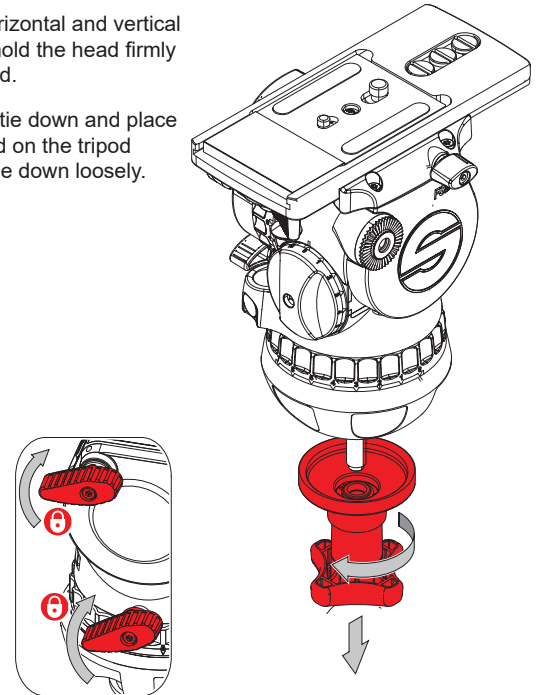


Mounting the Fluid Head

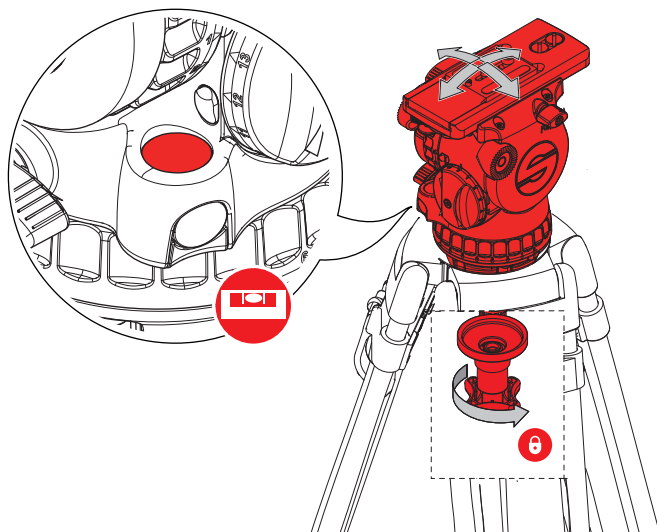
The fluid head is designed to be installed onto Sachtler 100 mm tripod using the tie down.

Mounting to a Tripod

1. Apply the horizontal and vertical brakes and hold the head firmly with one hand.
2. Remove the tie down and place the fluid head on the tripod refitting the tie down loosely.

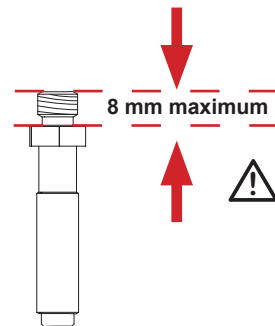


3. Move the head so that the level bubble is central. Tighten the tie down, release the horizontal brake and check the level bubble remains central.



Converting the Head Into a Flat Base

1. Unscrew the centre tie down stud (retain for future use) to make a flat base for a Pedestal or Slider.

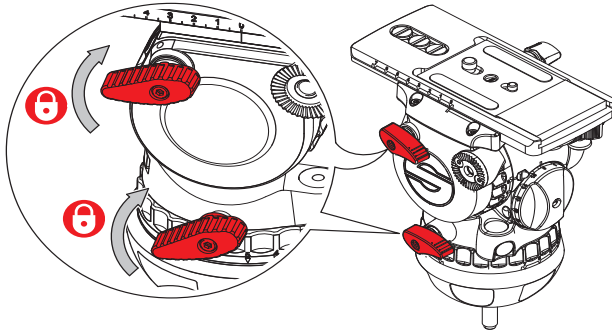


CAUTION! Risk of damage. When fitting Pin, maximum thread length is 8 mm.

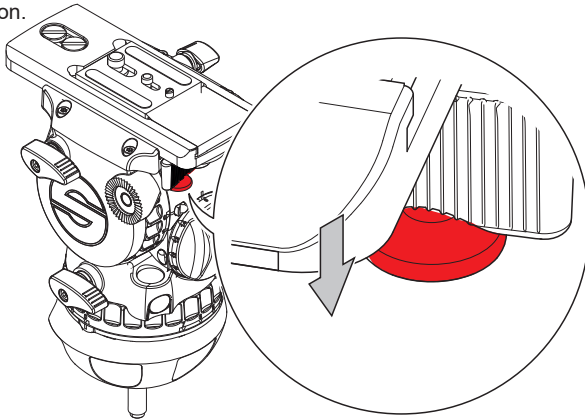
Installation

Mounting and Dismounting the Camera

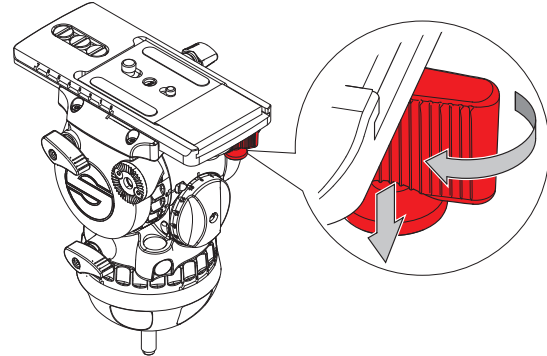
1. Apply the horizontal and vertical brakes.



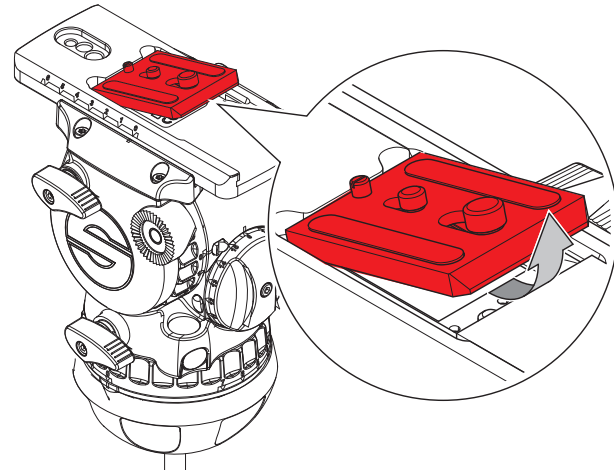
2. Hold the camera plate or camera with one hand. Grasp the locking lever with your thumb and index finger and pull down the safety button.



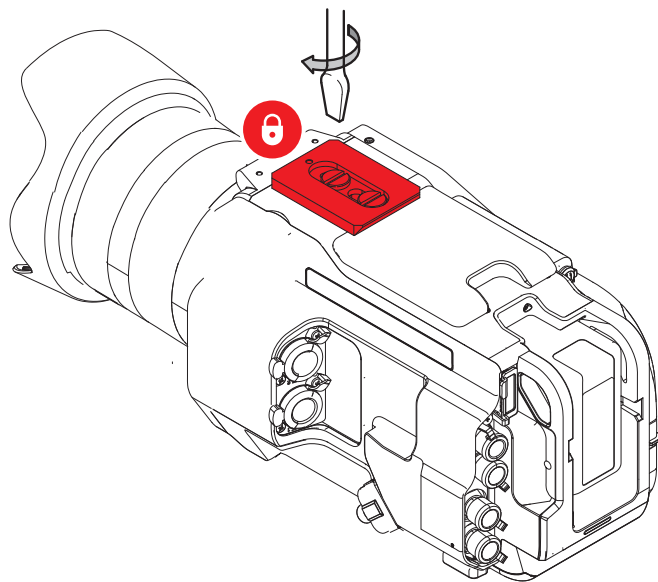
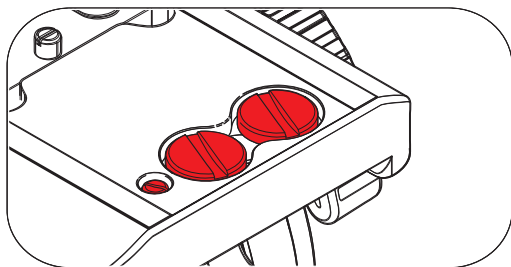
3. With the safety button held down, move the locking lever as far as possible to the left.



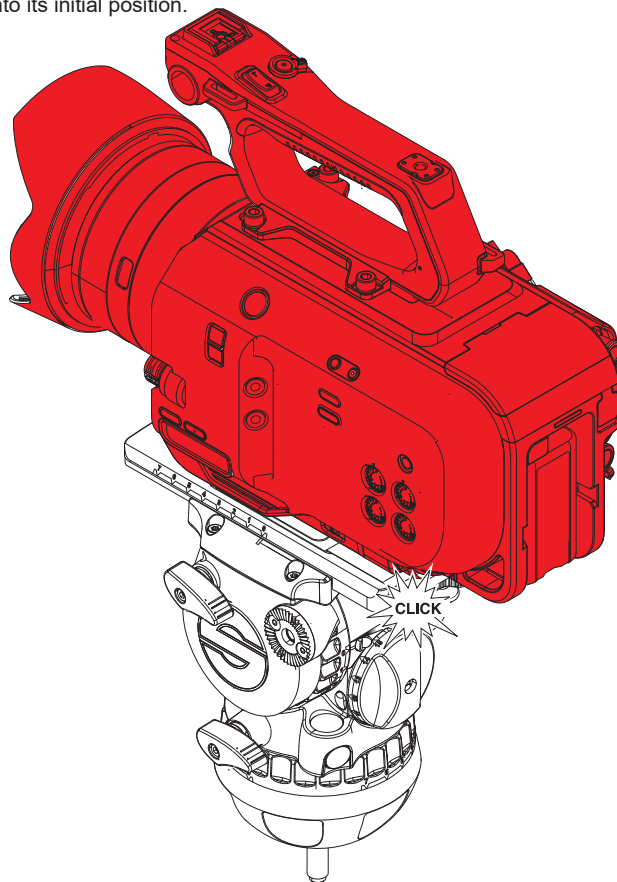
4. The camera plate or camera will be released from the sliding balance plate.



5. Attach the camera plate to the camera around its centre of gravity. Additional screws are stored in the sliding balance plate assembly.



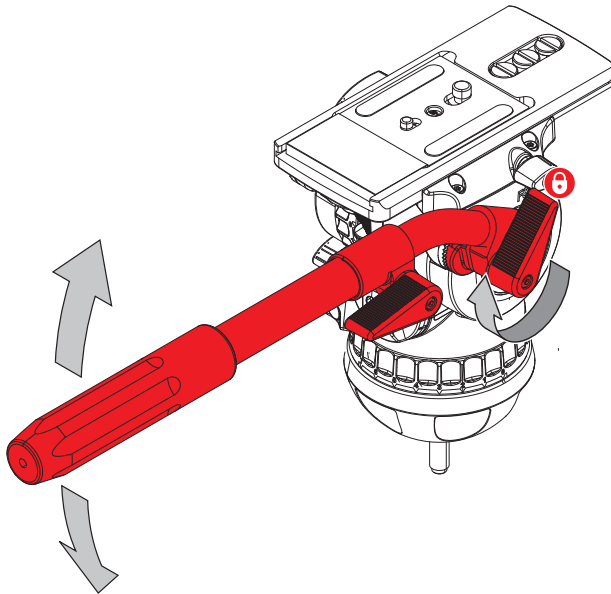
6. Mount the camera plate and camera onto the sliding balance plate. It will lock automatically and the lock lever will click audibly back into its initial position.



Installation

Fitting the Pan Bar

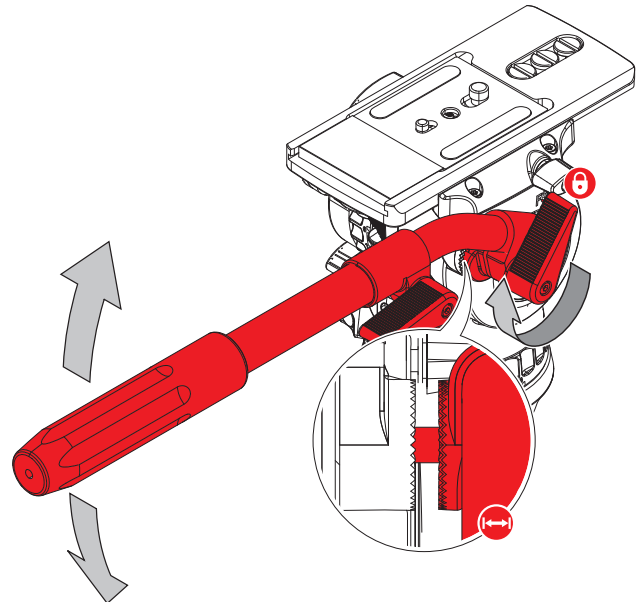
Fit and adjust the pan bar to the desired position, tighten the clamping screw ensuring the rosette teeth mesh fully.



Adjusting the Pan Bar

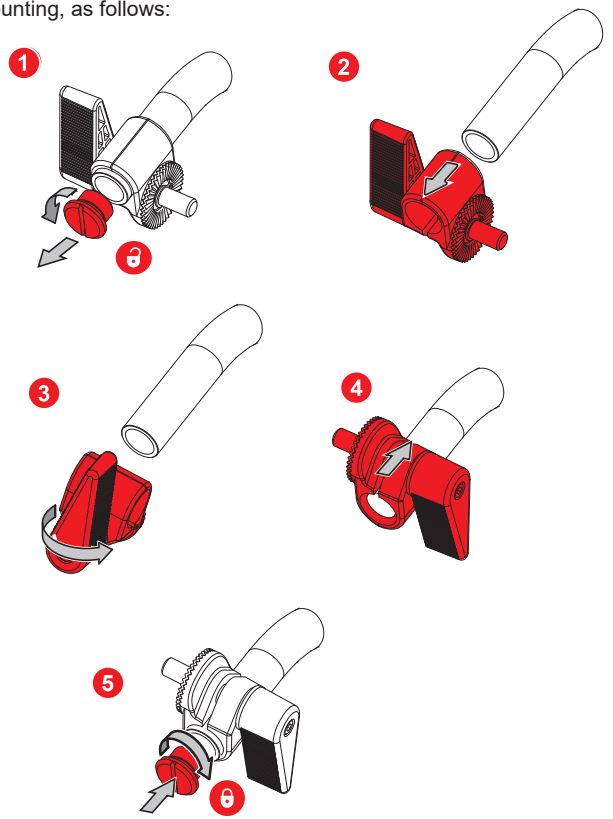
To adjust the position of the pan bar, loosen the clamping screw sufficiently to allow the rosettes to rotate without fowling.

Tighten the clamp when the pan bar is in the required position.

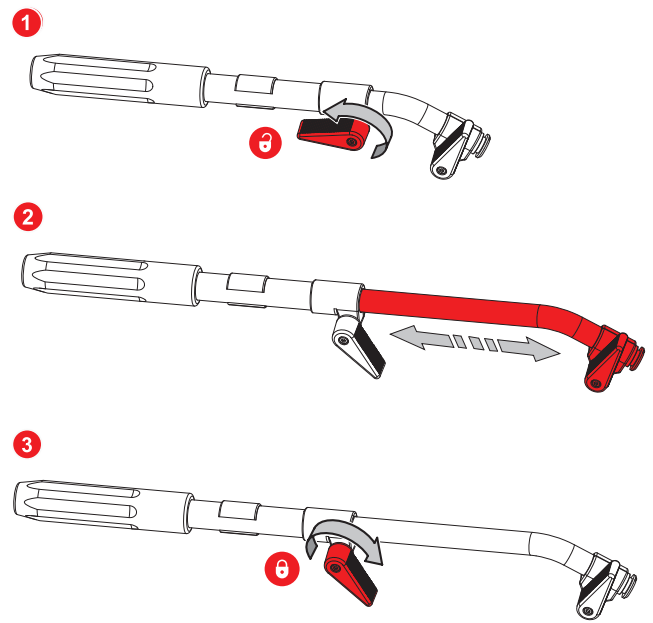


Configuring the Pan Bar

As standard, the pan bar is configured to mount on the right hand side of the fluid head. The pan bar can be configured for left hand mounting, as follows:



The pan bar may be extended, as follows:



Installation

Balancing the Payload

Before operating the fluid head, the payload (camera, lens and any other fitted accessories) must be correctly balanced to ensure safe and reliable operation.

WARNING! When balancing the payload, it is important to be aware of the potential danger that an unbalanced payload will fall away suddenly. Maintain a firm hold on the payload until the balance is set correctly.


WARNING! Risk of finger entrapment. **Do not** place fingers between the platform and the body of the fluid head.

CAUTION! Always hold the pan bar when making adjustments to the counterbalance or camera position.


CAUTION! The camera, pan bars and all accessories must be fitted in their operational position before balancing the head. Any equipment fitted or adjusted later can unbalance the fluid head.

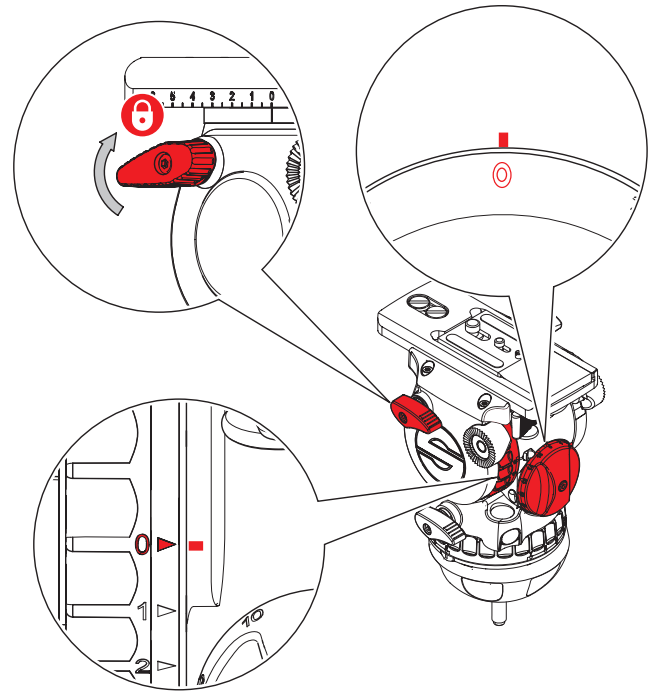
Adjusting the Centre of Gravity (C of G)

Before adjusting the counterbalance, the centre of gravity (C of G) of the payload must be centred precisely over the axis of the fluid head.

 Ensure that the fluid head is level before adjusting the centre of gravity. See "Mounting the Fluid Head" on page 8.

1. Apply the vertical brake and adjust the vertical setting of the fluid drag to "0". Set the counterbalance adjustment knob proportionate to the to the payload fitted.

 Moving the counterbalance from one setting to another requires the head to pass the horizontal position to take affect.



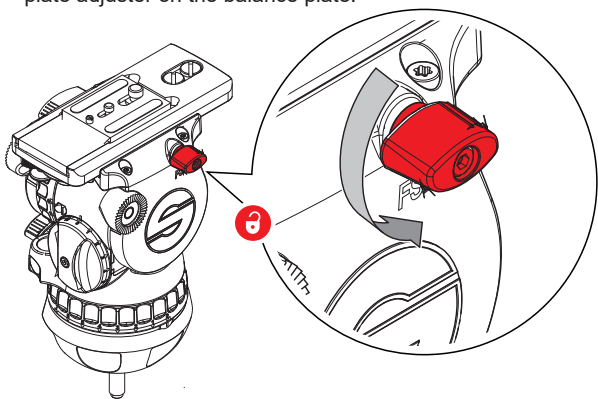
Counterbalance Adjustment

2. If the platform stops in a horizontal position (camera pointing directly forward) or falls away evenly in either direction, the balance is correct. Hold the pan bar firmly, disengage the vertical brake. Observe how the payload moves and where it stops.

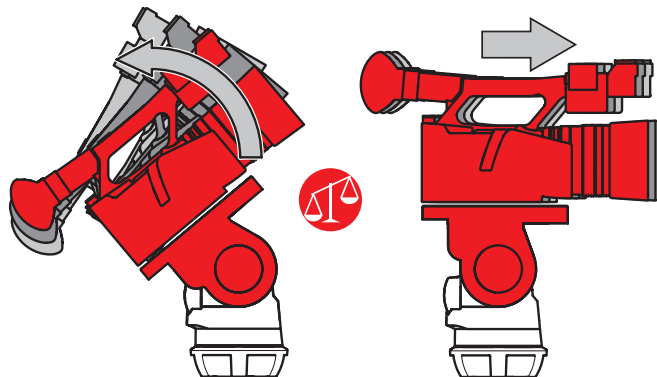


3. If the payload falls away in either direction:

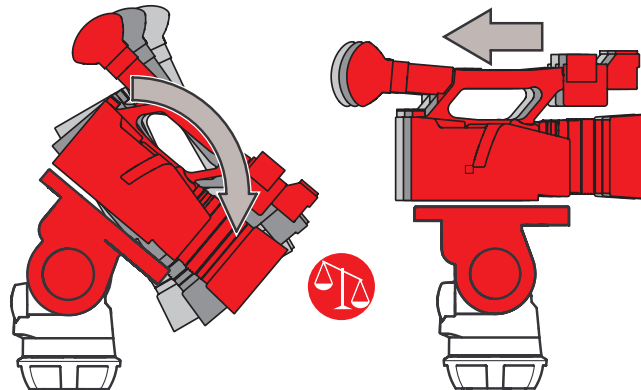
(a) Unlock the sliding balance plate by unscrewing the balance plate adjuster on the balance plate.



(b) If the payload tilts backwards (points up), slide it towards the front of the fluid head. Re-lock the sliding balance plate.



(c) If the payload tilts forwards (points down), slide it towards the rear of the fluid head. Re-lock the sliding balance plate.



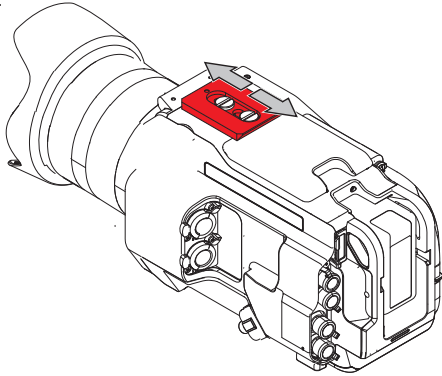
(d) Re-check the movement of the payload. If further adjustments are required, repeat steps 1 to 3.

Installation

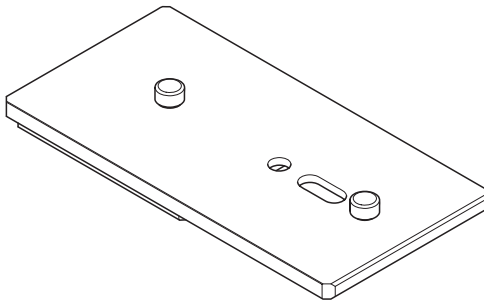
Additional C of G Adjustments

If it is not possible to correctly set the payload C of G using the standard method:

1. Move the camera plate to offset the payload further in the required direction.



2. For Touch & Go: use the c.o.g plate (#1063) which is available as an accessory.

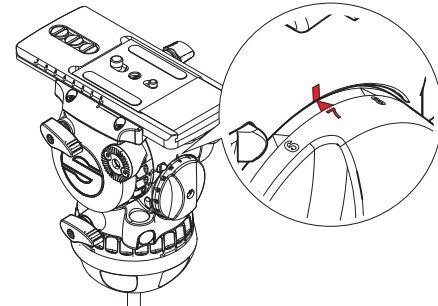


Adjusting the Counterbalance

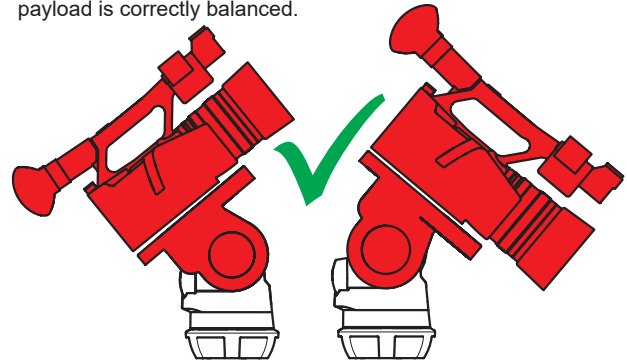
The fluid head is equipped with a 15 step counterbalance adjuster to accurately balance the payload.

Note, moving the counterbalance from one setting to another requires the head to pass the horizontal position to take affect.

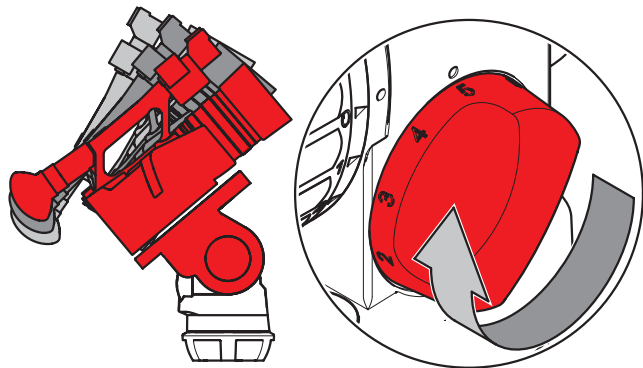
1. Set the counterbalance adjustment knob to a mid-range setting.



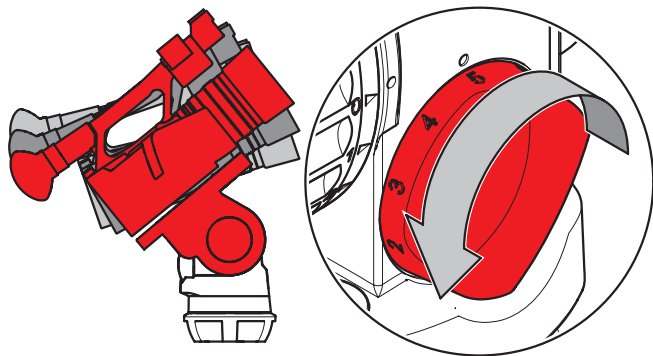
2. Tilt the payload approximately 30° in both directions and release it. If the payload stays in the same position when released, the payload is correctly balanced.



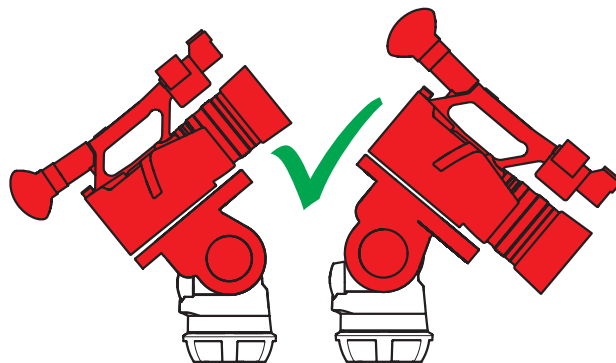
3. If the payload continues to move upwards when released, the balance is set too high. Lower the counterbalance adjuster setting by one increment and retest.



4. If the payload continues to move backwards when released, the balance is set too low. Raise the counterbalance adjuster setting by one increment and retest.



5. Tilt the payload through positive and negative angles of travel, checking that the payload remains at any angle of tilt unsupported.




If the payload angle falls away, repeat the balancing procedure (step 3 or 4) until balance is achieved.

Installation

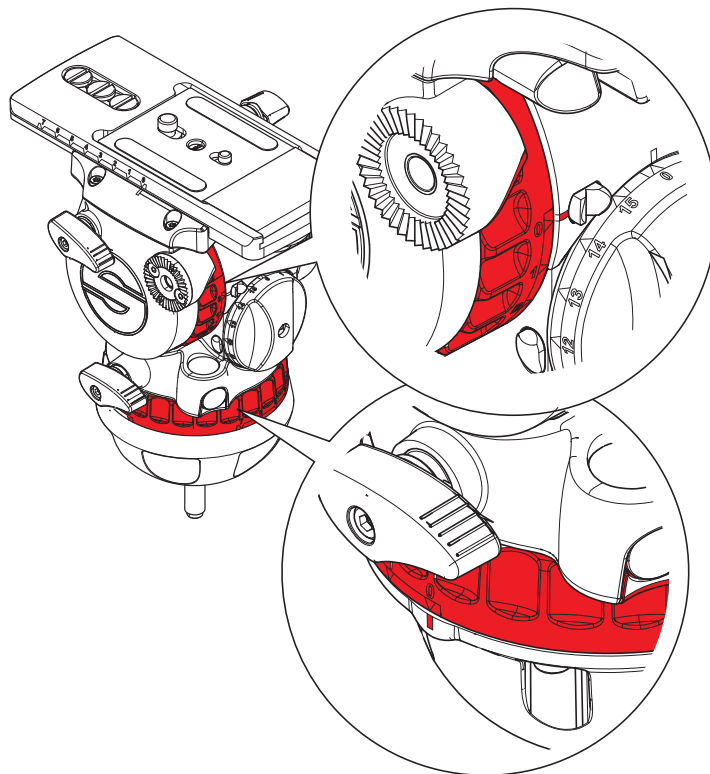
Adjusting the Drags

The fluid head is equipped with horizontal and vertical seven step drag controls. The drags help to eliminate jerks and vibrations when moving the fluid head during filming. The drags can also be fully disengaged.

⚠ CAUTION! Always set the drag adjusters to the index positions. Setting the drag adjusters between index positions can cause serious damage to the fluid head.

 Applying the same drag setting to the horizontal and vertical controls enables precise and even diagonal movement.

1. Turn the horizontal and vertical drag controls to the required index position (1 lowest, 7 highest) by aligning the arrow with the dot marker. Turn the brakes off and engage the drag by slowly panning and tilting the camera.
2. Turn the drag controls to the 0 position to switch off the drag completely.



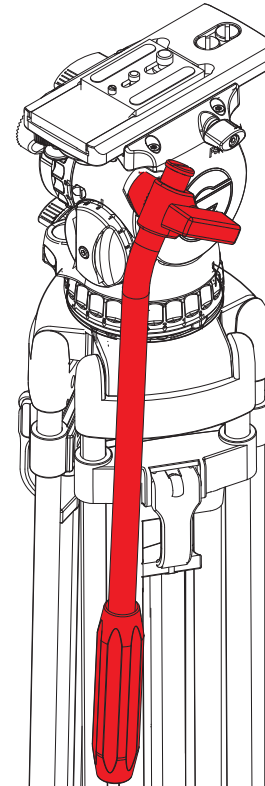
Transportation Head Settings

To ensure smooth and reliable operation over the long life of the fluid head, the following settings should be applied to the controls during transportation or periods of storage:

Brakes	Open (OFF)
Counterbalance	Maximum
Drags	Maximum

Transporting with the Pan Bar

To transport the fluid head with the pan bar attached, stow in the vertical position with the tripod legs to prevent damage.



Maintenance

Cleaning and Inspection

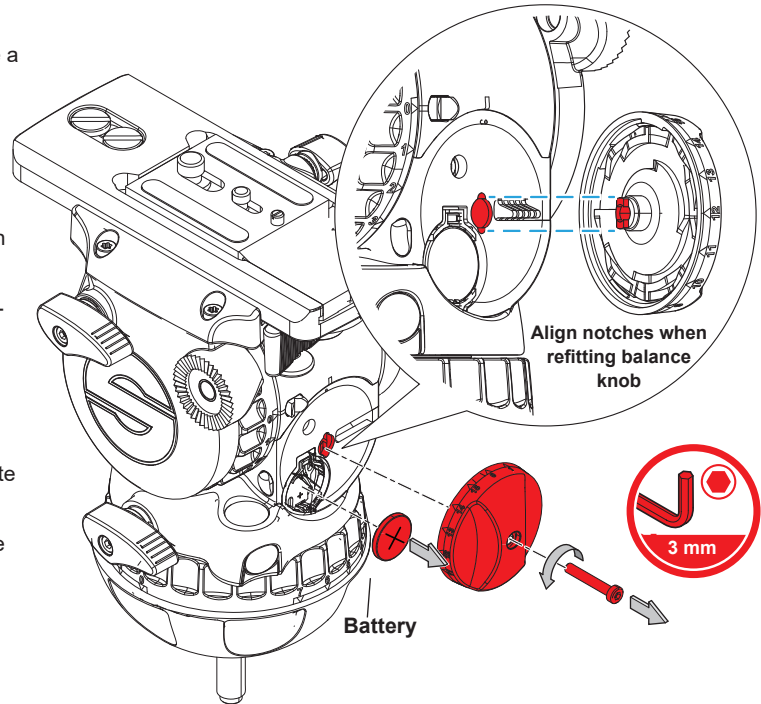
Clean the fluid head regularly using a soft cloth. For heavier dirt use a soft brush and a mild detergent.

Regular inspections are not required.

Changing the Battery

The illuminated bubble level is powered by one standard type button cell (CR2032, 3 V).

1. Using a suitable Hex key 3 mm, remove the Hex bolt (turn anti-clockwise) from the counter balance knob.
2. Remove the counter balance knob assembly to expose the battery.
3. Prise the battery from its location using a finger nail or suitable flat blunt instrument. For battery disposal see "Disposal of waste batteries" on page 22
4. Replace the new battery observing the correct polarity (positive face up). Press the bubble prism to check the light is working.
5. Reassemble the counter balance knob. Note, the knob centrepiece must align with the notches on the head at the 12 o'clock and 6 o'clock positions.
6. Replace the Hex bolt and tighten. Check the operation of the counter balance knob to confirm correct operation.



Routine Maintenance

Periodically operate the horizontal and vertical drags through their full range of indexing to ensure the engaging pins in fluid head stay lubricated.

The battery should last for approximately 2000 illumination cycles.



Weight

FSB 14T II 3.2 kg (7.1 lb)



Max. Payload

FSB 14T II 16 kg (35.3 lb)



Height

FSB 14T II 186 mm (7.3 in)



Drags (horizontal and vertical)

FSB 14T II 7 settings plus 0



Counterbalance steps

FSB 14T II 15 settings plus 0



Tilt range

+90° to -70°



Platform sliding range

Touch & Go - 70 mm / 2.8 in



Temperature range

-40°C (-40°F) to +60°C (+140°F)



Camera fitting

Touch & Go camera plate 16 (#1064)



Pan bar type

Pan bar DV right (telescopic)

Diameter 18/22/32 mm 0.7/0.9/1.3 in

Length 350-520 mm / 13.8 - 20.5 in



Battery

CR 2032, 3 V



Bowl size

FSB 14T II 100 mm

We reserve the right to make changes to the product based on technical advances.

General Notices

UK Declaration of Conformity



Vitec Production Solutions Ltd. declares under our sole responsibility that the product detailed in this manual conforms with all relevant provisions of the following UK Regulations:

The Electromagnetic Compatibility Regulations 2016

The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

A copy of the declaration is available on request.

EU Declaration of Conformity



Vitec Production Solutions Ltd. declares under our sole responsibility, supported by Vitec Product Solutions GmbH - our authorized representative, that the product detailed in this manual conforms with all relevant provisions of the following EU directives:

Electromagnetic Compatibility Directive 2014/30/EU

RoHS 2011/65/EU

A copy of the declaration is available on request.

FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

Vitec Production Solutions Ltd. declares that this product has been manufactured in accordance with BS EN ISO9001.

Environmental considerations

European Union Waste of Electrical and Electronic Equipment (WEEE) Directive (2012/19/EU)



This symbol marked on the product or its packaging indicates that this product must not be disposed of with general household waste. In some countries or European Community regions separate collection systems have been set up to handle the recycling of electrical and electronic waste products.

By ensuring this product is disposed of correctly, you will help prevent potentially negative consequences for the environment and human health. The recycling of materials helps conserve natural resources.

Visit our website for information on how to dispose of this product and its packaging.

In countries outside the EU:

Dispose of this product at a collection point for the recycling of electrical and electronic equipment according to your local government regulations.

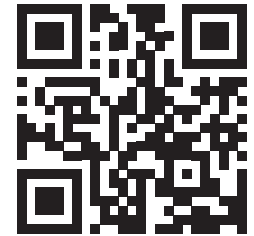
Disposal of waste batteries

Any batteries included with this product must not be treated as household waste. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health, and help conserve natural resources.

Read “Changing the Battery” on page 20 in this user guide for instructions on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for recycling waste batteries.



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