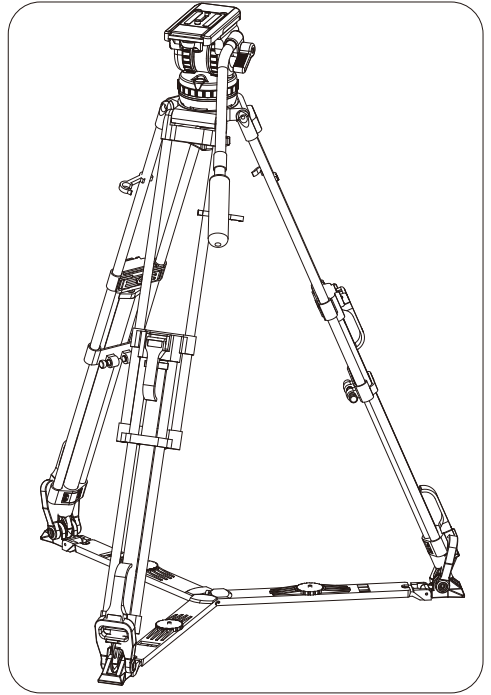
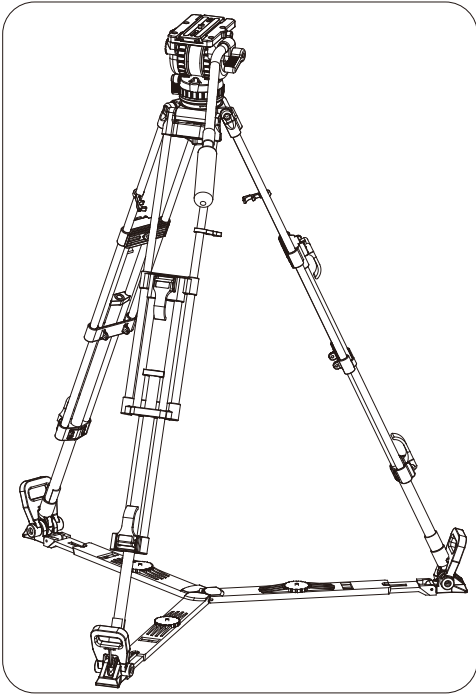


SOLO16
BROADCAST

Operator Manual

Professional Tripod System



Professional Tripod System

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Tripod Page 19

Ground and Off Ground Spreader Page 25

Safety – Read this first

Warning Symbols in this Operator's Manual

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

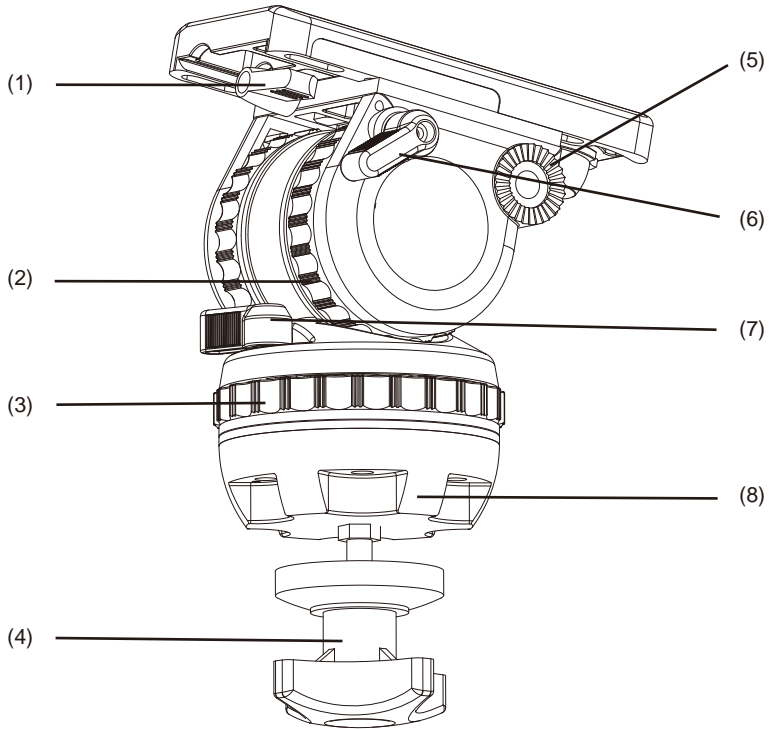


Fluid Head

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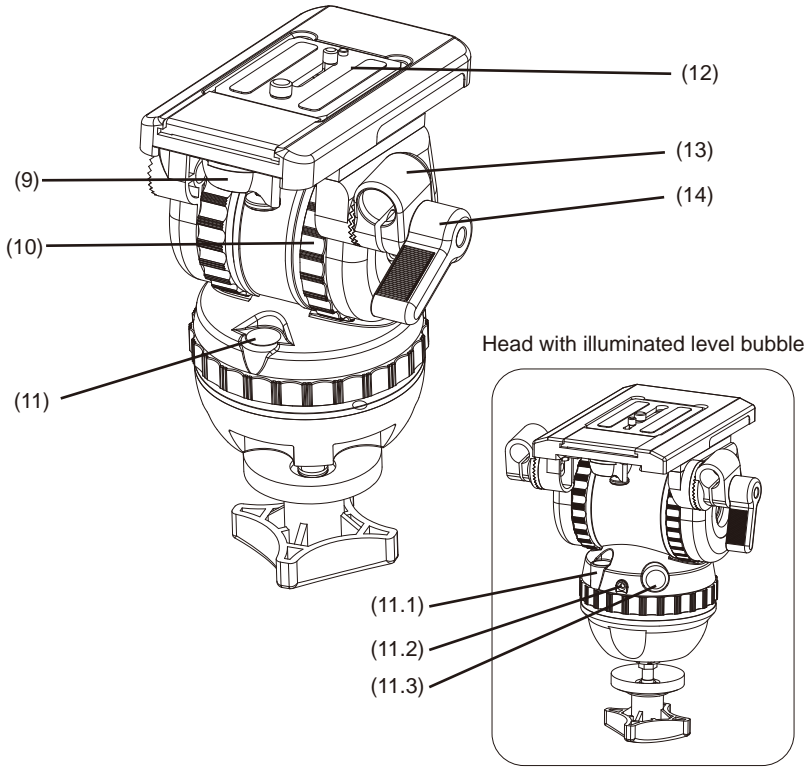
Fig 1



Head with Mini Euro Plate (Left-Hand Side)

- | | |
|-----|---------------------|
| (1) | Slide plate clamp |
| (2) | Tilt drag control |
| (3) | Pan drag control |
| (4) | Bowl clamp |
| (5) | Pan handle mounting |
| (6) | Tilt brake knob |
| (7) | Pan brake knob |
| (8) | Head bowl |

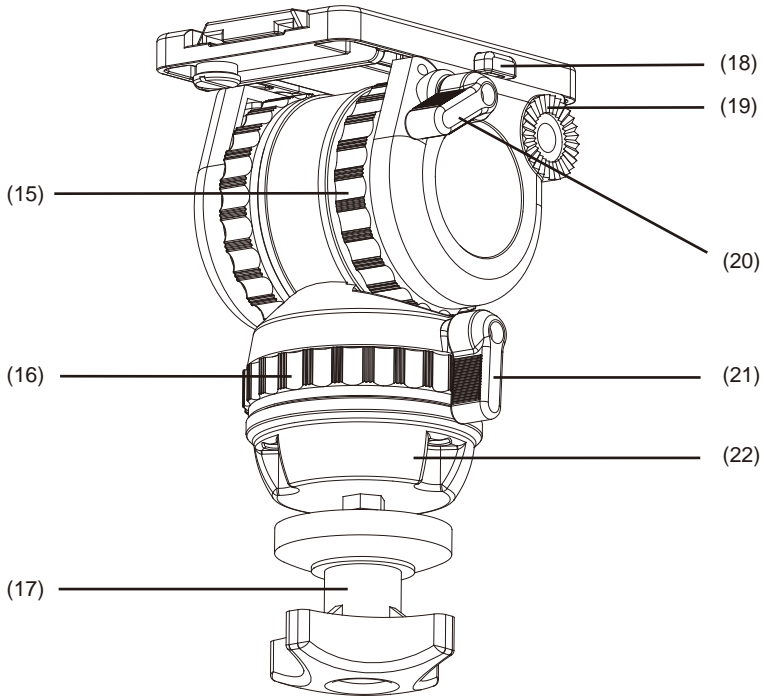
Fig 2



Head with Mini Euro Plate (Right-Hand Side)

- (9) Quick release knob
- (10) Counterbalance control
- (11) Level bubble
- (11.1) Illuminated level bubble
- (11.2) Switch for illuminated level bubble
- (11.3) Battery case
- (12) Quick lock wedge
- (13) Pan handle clamping sleeve
- (14) Pan handle clamping lever

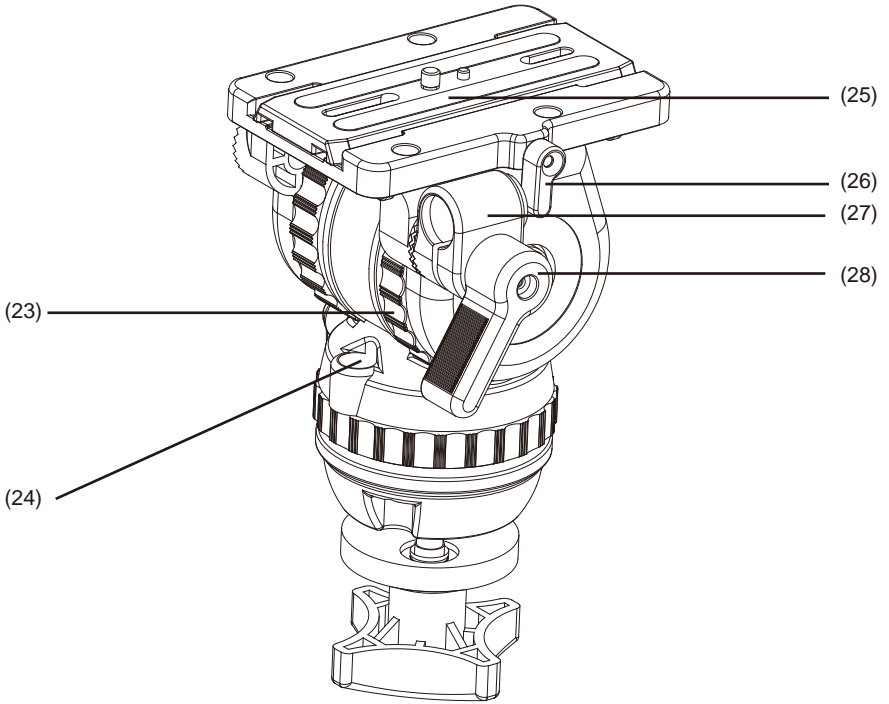
Fig 3



Head with Sliding Camera Plate (Left-Hand Side)

- | | |
|------|---------------------|
| (15) | Tilt drag control |
| (16) | Pan drag control |
| (17) | Bowl clamp |
| (18) | Slide lock release |
| (19) | Pan handle mounting |
| (20) | Tilt brake knob |
| (21) | Pan brake knob |
| (22) | Head bowl |

Fig 4



Head with Sliding Camera Plate (Right-Hand Side)

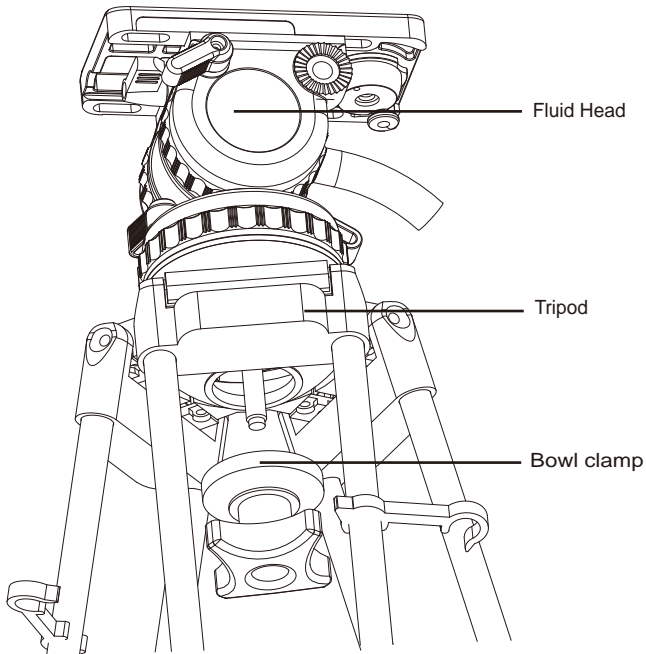
- | | |
|------|-------------------------|
| (23) | Balance knob |
| (24) | Level bubble |
| (25) | Sliding plate |
| (26) | Slide plate clamp |
| (27) | Pan bar clamping sleeve |
| (28) | Pan bar clamping lever |

Operation

Installing the head on a tripod

To install the head, remove the bowl clamp from the head (turn bowl clamp anti-clockwise), position the head on the tripod and refit the bowl clamp from below. Level the head with aid of level bubble and apply the bowl clamp (turn bowl clamp clockwise).

Fig 5



Installing the head on a tripod

Installing the pan handle

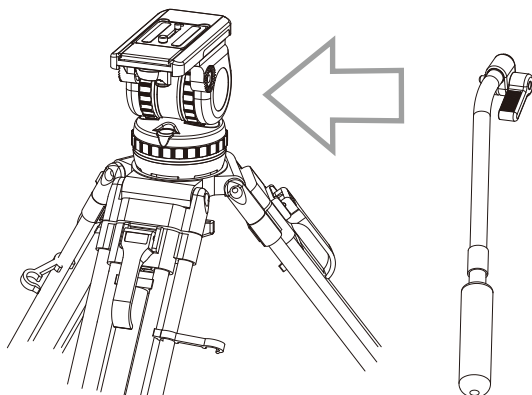
Open the pan handle clamping lever and move the pan handle into the desired position. Apply the clamping lever of the pan handle. During transportation the pan handle can be moved next to the tripod legs.

WARNING!



Open the clamping lever far enough. The teeth of the pan handle clamp should not clatter while moving the pan handle. However, a plastic protector, clamping washer prevents against wear of metal toothed ring. Make sure that the teeth interleave with each other when closing the pan handle clamping lever.

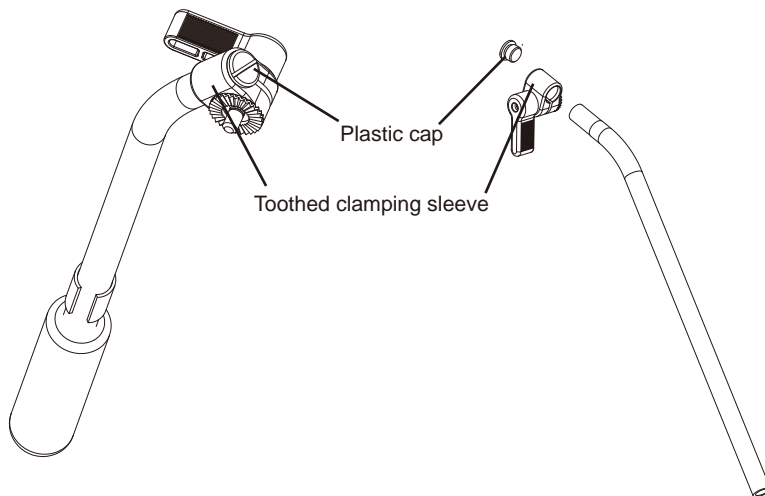
Fig 6



Installing the pan handle on a head

Use of the enclosed pan handle on the left side of the fluid head is also possible. For this, it is advisable to relocate the clamp on the pan handle. The pan handle has to be removed from the head and the black plastic cap (Fig 7) on its top should be opened and removed with a coin or screwdriver. The toothed clamping sleeve (Fig 7) should be removed and relocated as in Figure 7. The plastic screwed cap need to be tightened again.

Fig 7



Left-handed pan handle

Mounting the camera

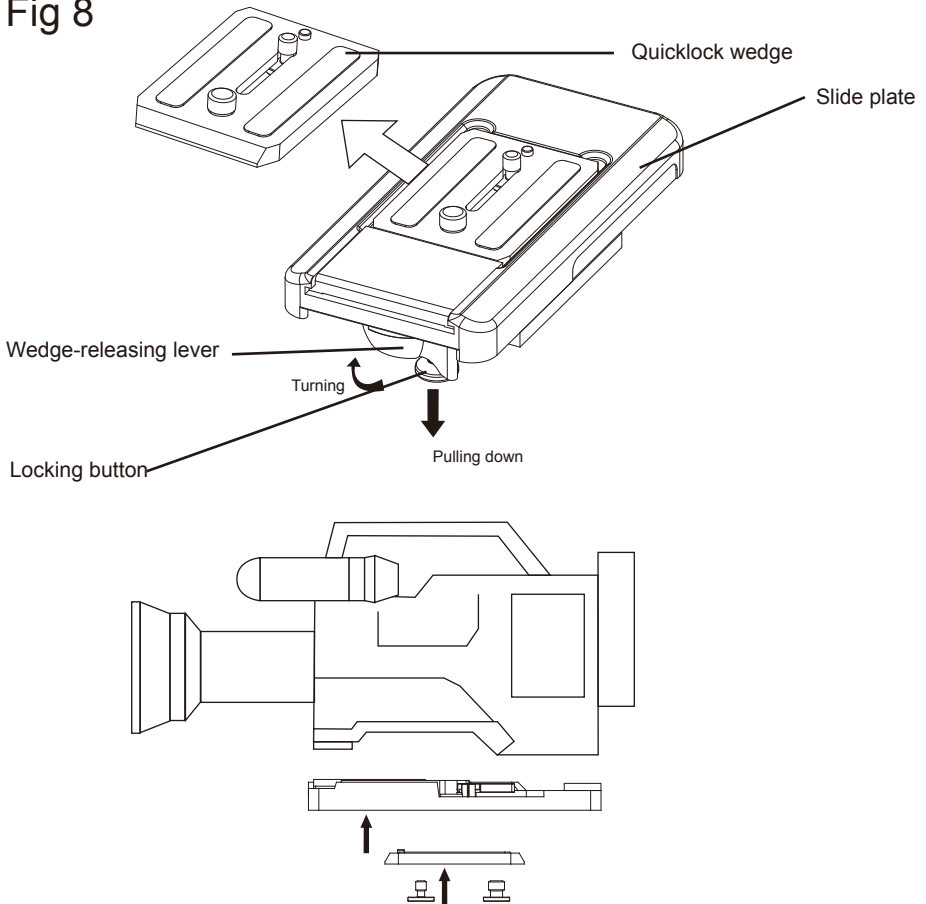
A: With Mini Euro Plate

Tighten the tilt brake before mounting the camera.

Free the Quick lock wedge from slide plate by pulling the locking button down and then operating the wedge-releasing lever to another end.

Fit the wedge either to the camera or the camera adaptor with two screws provided. If using the camera adaptor, just mount the camera on the camera adaptor after the wedge is attached with the camera adaptor.

Fig 8

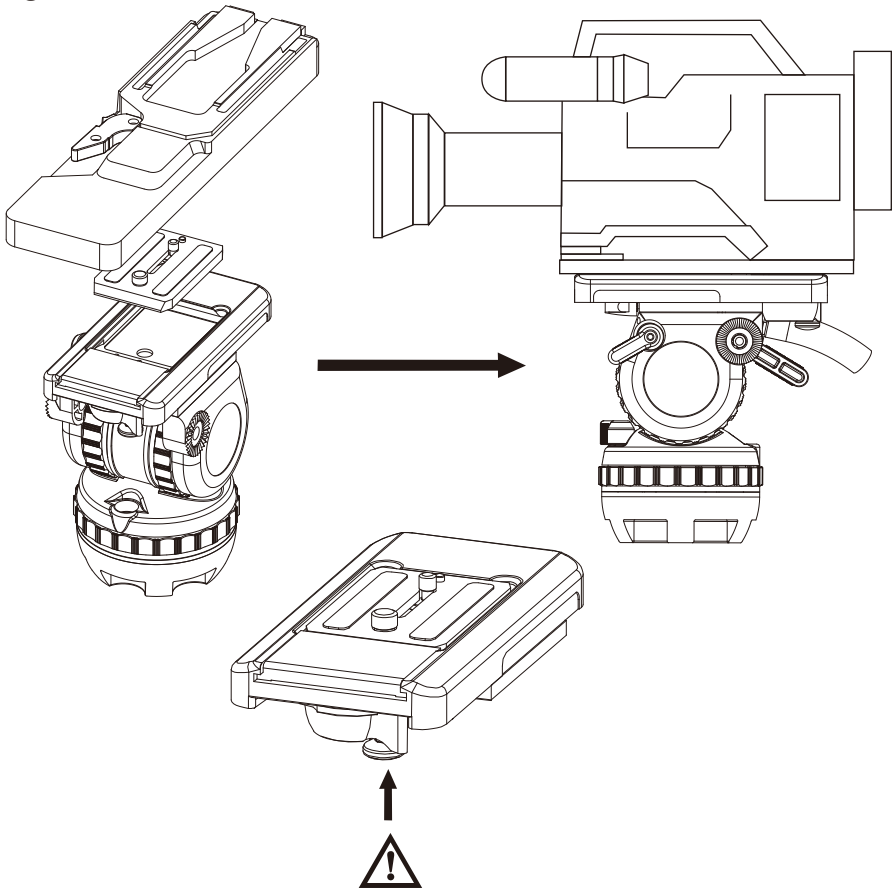


Insert the wedge into the camera plate until an audible click indicates that the Quicklock wedge is locked in position.

WARNING! When mounting the camera/placing the wedge, make sure not to hold fingers within the range of the locking lever and camera plate receptacle, since the lever may snap back. When the camera is mounted, the bowl clamp must only be released if camera and tripod are secured against falling away.



Fig 9



WARNING! No finger allowed here

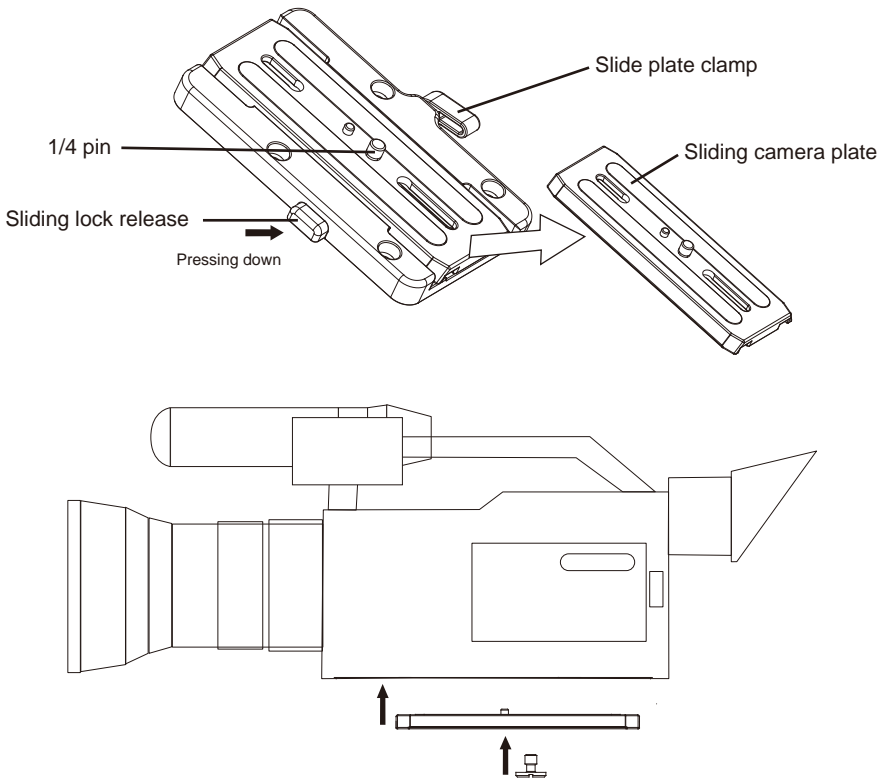
B: With Sliding Camera Plate

Tighten the tilt brake before mounting the camera

Remove the sliding camera plate from the head by releasing the slide plate clamp, pressing the slide lock release and pulling the plate out to the rear.

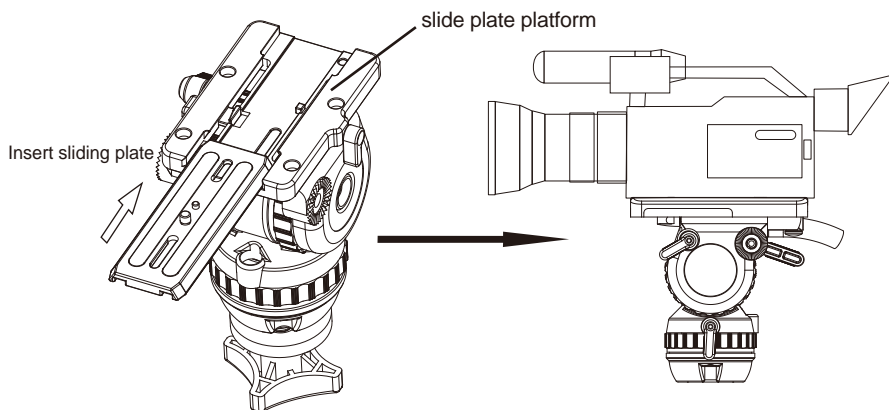
Fit the slide plate to the DV or HDV camera with 1/4 pin provided (as shown below). Tighten the 1/4 pin with a coin or screwdriver to make sure the slide plate attached with camera closely.

Fig 10



Insert the slide plate into the slide plate platform until an audible click indicates that the slide plate is locked in position. Please make sure the whole system to form the appearance as in Fig 11.

Fig 11



Balancing the head

Balancing the head achieves two objectives. Firstly, when the head is correctly balanced the operator will need a minimum amount of effort to move the head. Secondly, once balanced, the head and its payload can be set to any tilt position and the head will maintain this position with 'hand off'.

Prior to balancing the head ensure that the pan handles and ancillary equipment have been fitted in order to prevent upsetting the balance once it has been achieved.

WARNING! Be prepared to prevent the head falling away suddenly.



-
-
- I. Release the tilt brake.
 - II. Turn the balance knob to lowest position and keep holding the camera.
 - III. Turn the tilt drag to lowest position.
 - IV. Hold the camera in the horizontal position by securing the pan handle. Release the slide plate clamp and slide the camera backwards or forward until it balances horizontally. Tighten the slide plate clamp.
 - V. Turn the balance knob to the number which best compensates for the weight of the camera, i.e. for as little movement upward or downward in any position.
 - VI. Select the tilt drag level by turning the tilt drag control. In the correctly chosen position the camera should not perform any tilt movement.

Fig 12

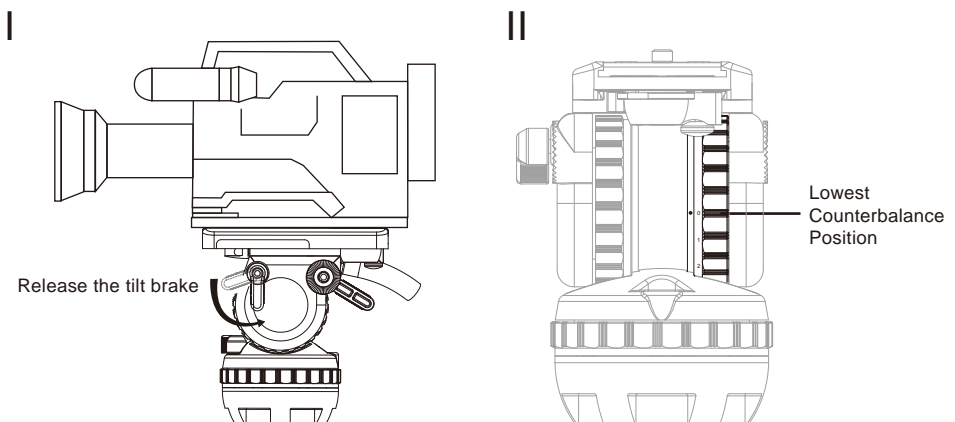
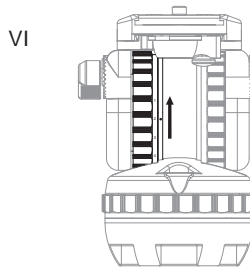
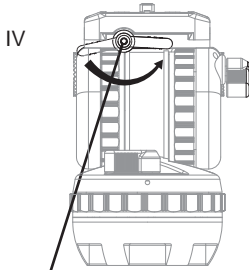
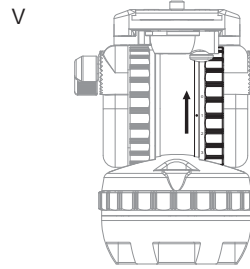
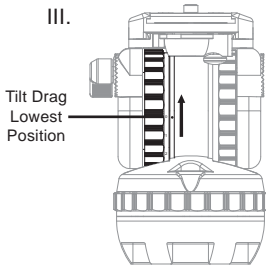
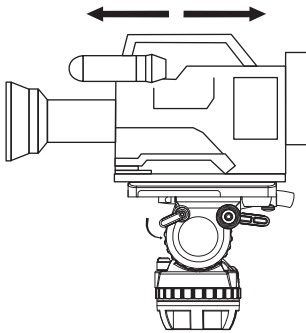


Fig 12 continued (For Mini Euor Plate)



Release slide clamp knob



Tighten slide clamp knob

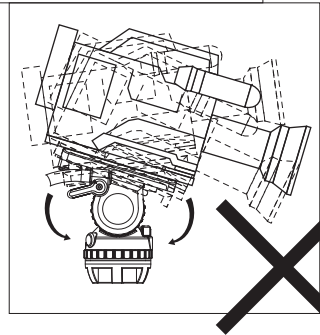
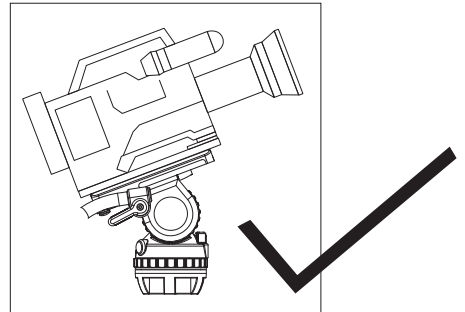
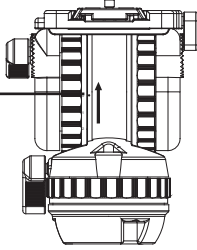


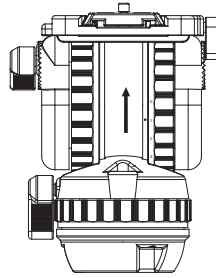
Fig 12 continued (For Sliding Camera Plate)

III

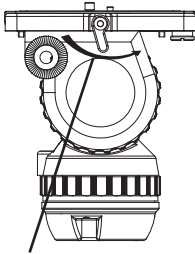
Tilt Drag
Lowest
Position



V

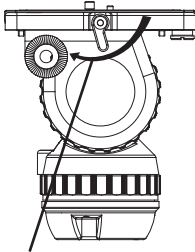
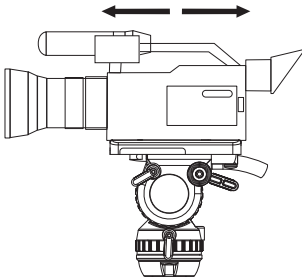
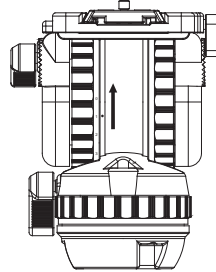


IV

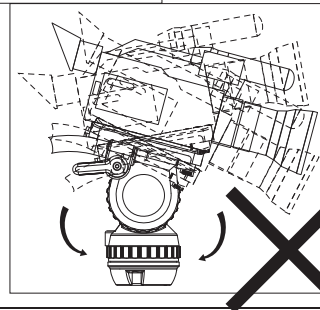
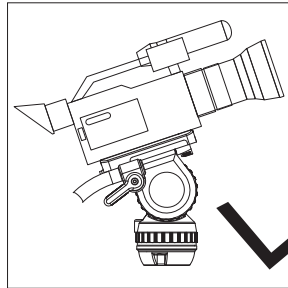


Release slide clamp knob

VI



Tighten slide clamp knob



Pan and tilt brakes

Friction brakes on each axis allow the head to be locked at any chosen position.

WARNING!

When the brakes are not in use, make sure the brakes is at the released status.
DO NOT use the brakes to supplement drag.



Pan and tilt drag

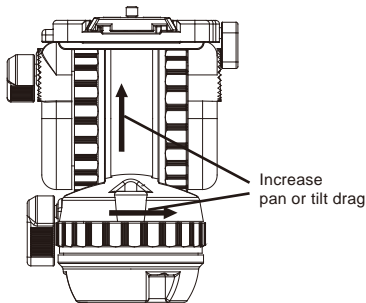
Both drag controls are provided with graduated scales (Fig 13).

By turning the vertical setting and the horizontal setting, selects the desired drag level.

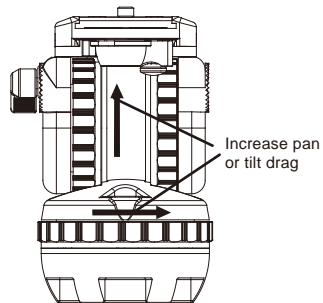
Make sure that you always turn the setting to the next indexed position.

NOTE: Panning or tilting the camera with settings between the indexed positions can damage the locating pillar and/or disks. Reduce drag to a minimum when the head is out of use for long periods.

Fig 13



Head with Sliding Camera Plate



Head with Mini Euro Plate

Servicing

Routine maintenance

During use, check the following

Check the effectiveness of the slide plate, add some grease lubricant onto the slide plate if slide plate do not move when tilting to +45° and -45°.

Check the effectiveness of the pan and tilt drag controls. Repair as necessary.

Check the effectiveness of the pan and tilt brakes. Repair as necessary.

Cleaning

During indoor use the only cleaning required should be a regular wipe over with a lint-free cloth. Dirt accumulated during storage may be removed using a semi-stiff brush. Particular attention should be given to the leveling bowl and mounting face of the head.

Use out-of-doors under adverse condition will require special attention. Salt spray should be washed off with fresh water at the earliest opportunity. Sand and dirt acts as an abrasive and should be removed using a semi-stiff or vacuum cleaner.

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

Tripod

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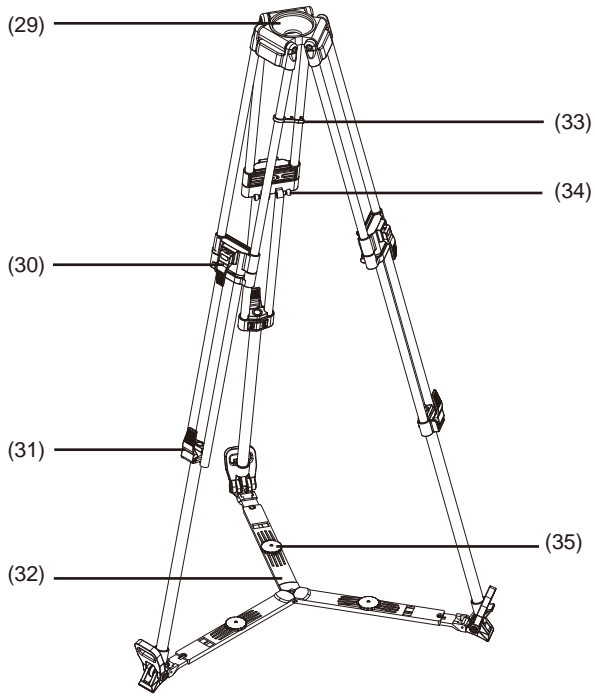
Routine maintenance Page 22

Cleaning Page 22

Adjusting the leg clamps Page 22

Leg to bowl adjustment Page 24

Fig 14



Tripod

- | | |
|------|---|
| (29) | Tripod bowl |
| (30) | Top clamp assembly |
| (31) | Bottom clamp assembly |
| (32) | Ground spreader |
| (33) | Locking clip |
| (34) | Off ground spreader attachment assembly |
| (35) | Clamping knob |

Operation

Lift the complete tripod and head out of the case and keep the floor spreader attached to the tripod.

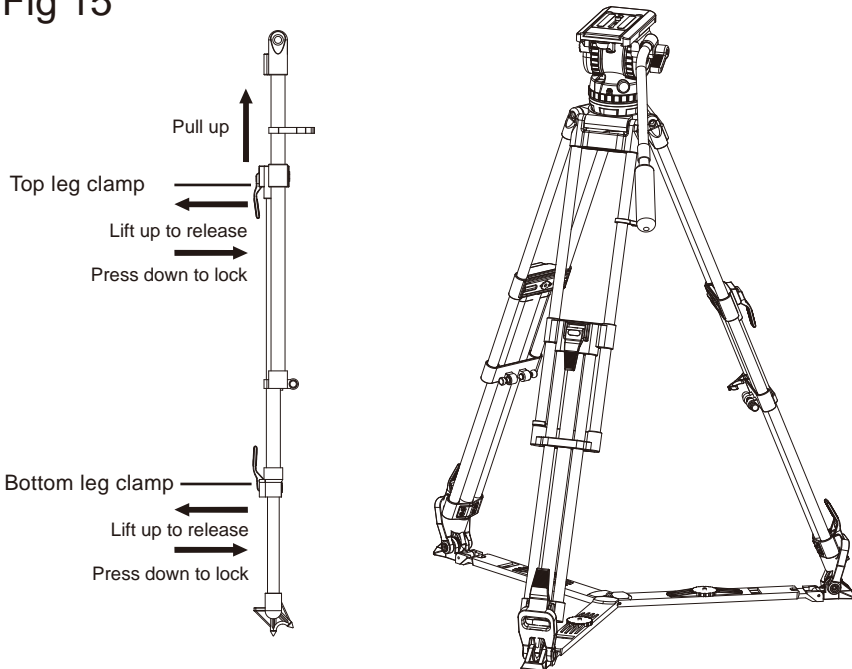
Release the three locking clips, open out the legs while holding the legs. Gentle foot or hand pressure on the spreader will ensure that the legs are fully spread.

NOTE: Always use the spreader where possible as this increases rigidity of the tripod. Being flexible, the spreader compensates for uneven ground. It can be removed and a dolly fitted. At the fullest extension of the spreader and with all legs fully retracted, the tripod can be used at its lowest operating height. Although the tripod can be set up lower than this without the spreader, it is NOT recommended as the tripod geometry becomes unstable.

Adjust the operating height by undoing the leg clamps and pulling the tripod up to the desired height. Adjust the spreader if necessary. Level the head with aid of the level bubble.

Apply the clamps to lock the tripod.

Fig 15



Servicing

Cleaning

During indoor use the only cleaning required should be a regular wipe over with a lint-free cloth. Dirt accumulated during storage may be removed using a semi-stiff brush. Particular attention should be given to the mounting bowl of tripod.

Use out-of-doors under adverse condition will require special attention. Salt spray should be washed off with fresh water at the earliest opportunity. Sand and dirt acts as an abrasive and should be removed using a semi-stiff or vacuum cleaner.

Routine maintenance

During normal use, check the effectiveness of the leg clamps and adjust as necessary.

Adjusting the leg clamps

Bedding-in occurs with leg clamps, which may necessitate resetting the clamp. Check the effectiveness of each leg clamp as follows:

Extend all three tripod legs fully and apply the clamps.

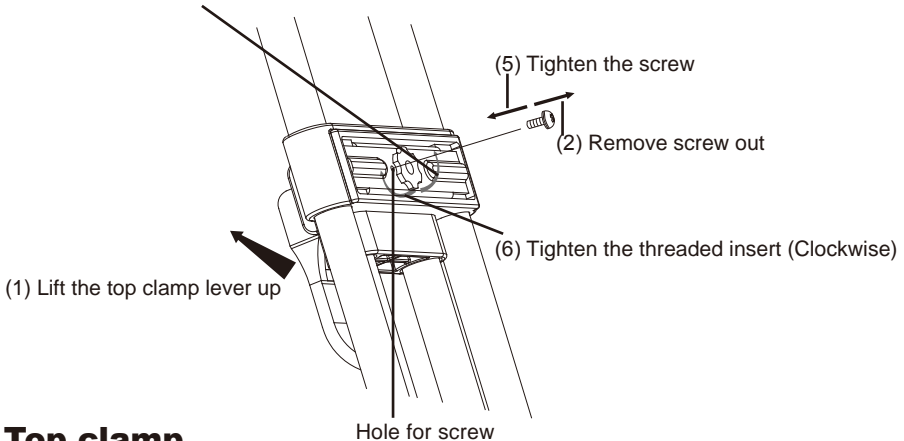
Position each leg in turn vertically on a set of weighting scales.

Gradually apply body weight to the leg until either or both clamps begin to slip. Note the reading on the scales at which this occurs.

A reading of less than 30 kg (66 lb) will necessitate adjustment.

Fig 16

(3) back off the threaded insert (Anti-clockwise)

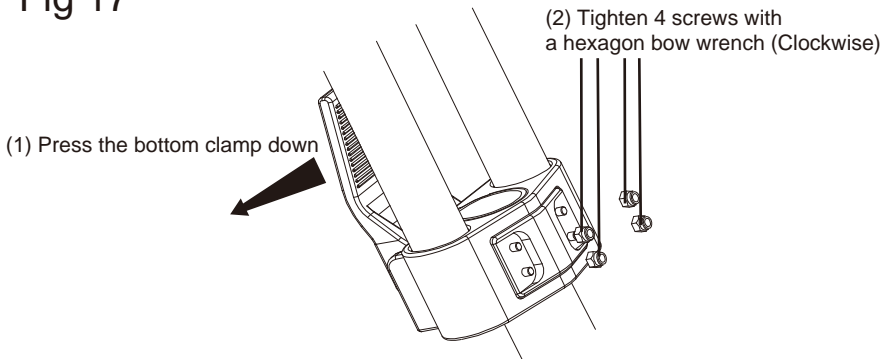


Top clamp

Adjust a top clamp as follows (Fig 16):

- (1) Lift the top clamp lever up.
 - (2) Remove screw.
 - (3) Using a suitable spanner, back off the threaded insert slot by slot until the leg is free to move under its own weight.
 - (4) While sliding the leg up and down, gradually tighten the threaded insert until the clamp begins to grip and till achieving the desired payload.
- If not aligned, back off the threaded insert until a slot align with the hole for screw.
- (5) Install screw to secure the threaded insert.

Fig 17

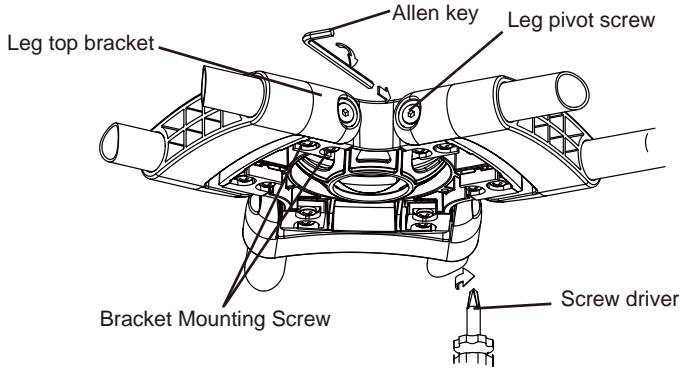


Bottom clamp

Adjust a bottom clamp as follows:

Press the bottom clamp lever down and use the suitable box wrench to tighten the screw as shown in Fig 17.

Fig 18



Leg to bowl adjustment

The leg to bowl pivot joint on the tripod should have no lateral or free play movement and should swing with a firm, smooth resistance. Adjustment is usually not required, however, should it become necessary, the following procedure must be observed as Fig 18.

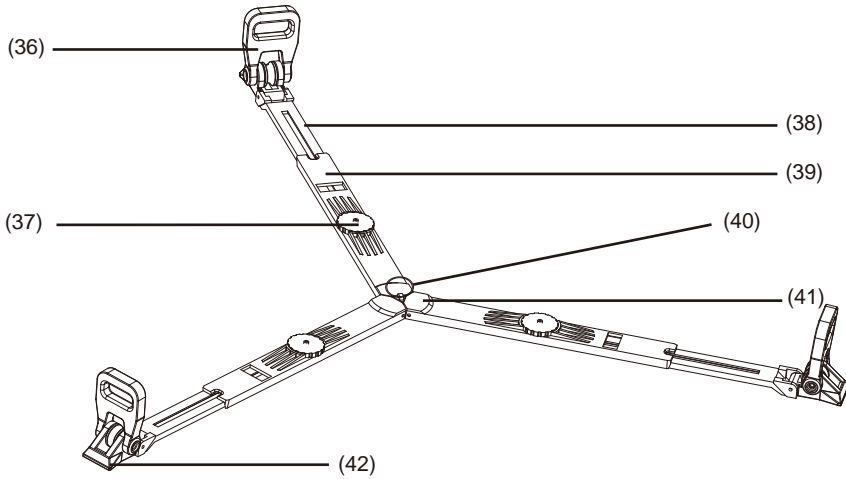
1. Leg to bowl adjustment to reduce lateral, or free play movement: using a screwdriver, ensure bracket mounting screws on both sides of leg bracket are tight. Retighten if necessary. Check all legs.
2. Leg pivot or 'swing' adjustment to ensure firm, smooth resistance. Tighten the leg pivot screws on each side of the leg top bracket using a allen key until a smooth resistance is maintained. Check all legs.

Ground and Off Ground Spreader

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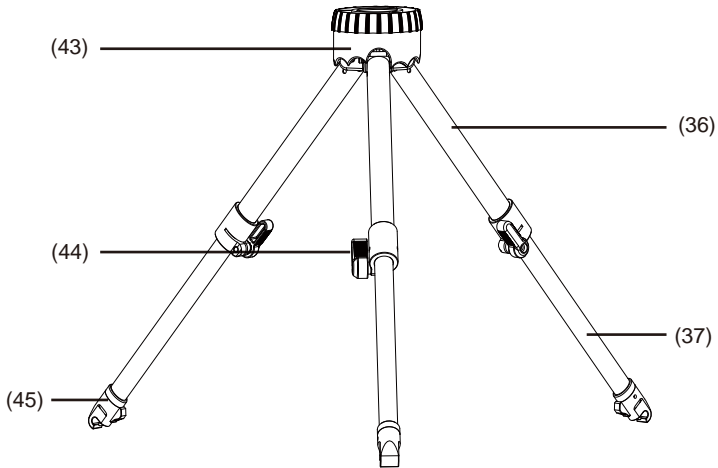
Fig 19



Ground Spreader

| | |
|------|--------------------------|
| (36) | Foot retaining strap |
| (37) | Clamping knob |
| (38) | Inner leg |
| (39) | Outer leg |
| (40) | Lift ring |
| (41) | Core connecting assembly |
| (42) | Foot support |

Fig 20



Off Ground Spreader

- | | |
|------|------------------------|
| (43) | Spread adjusting knob |
| (44) | Extension release knob |
| (45) | Attachment head |
| (46) | Outer arm |
| (47) | Inner arm |

Operation

Installing the ground spreader

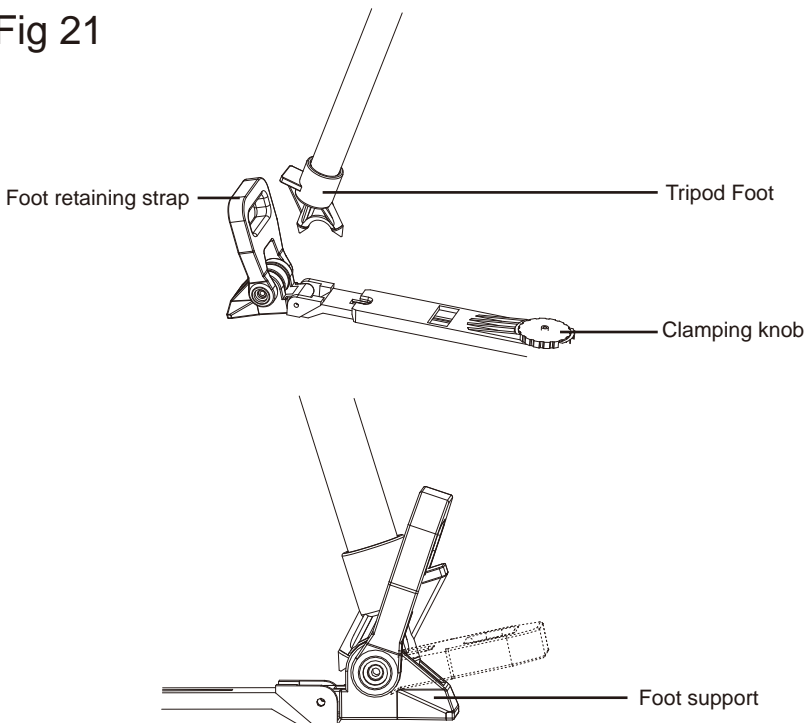
To install a ground spreader onto a tripod proceed as follows:

Unfold legs of spreader and place flat on the ground. Ensure three clamping knobs are engaged.

Lower tripod onto the spreader and locate the tripod feet onto the three foot supports.

Secure tripod onto spreader by engaging three foot retaining straps to each foot of the spreader.

Fig 21



Installing the off ground spreader

The spreader may be installed on any tripod provided with attachment points.

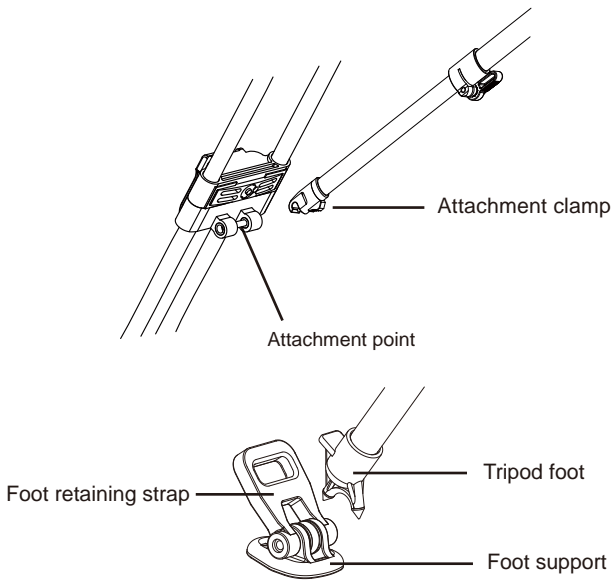
To install the spreader

Grip the ends of each arm in turn and press in the attachment clamp.

Push the arm into the tripod attachment point until the arm engages and then release the attachment clamp

The rubber foot has to be used when adopting the mid-level spreader, just locate the feet onto the three rubber feet and engage the three foot retaining straps to each foot of tripod.

Fig 22



Installing the off ground spreader

Adjusting the off ground spreader

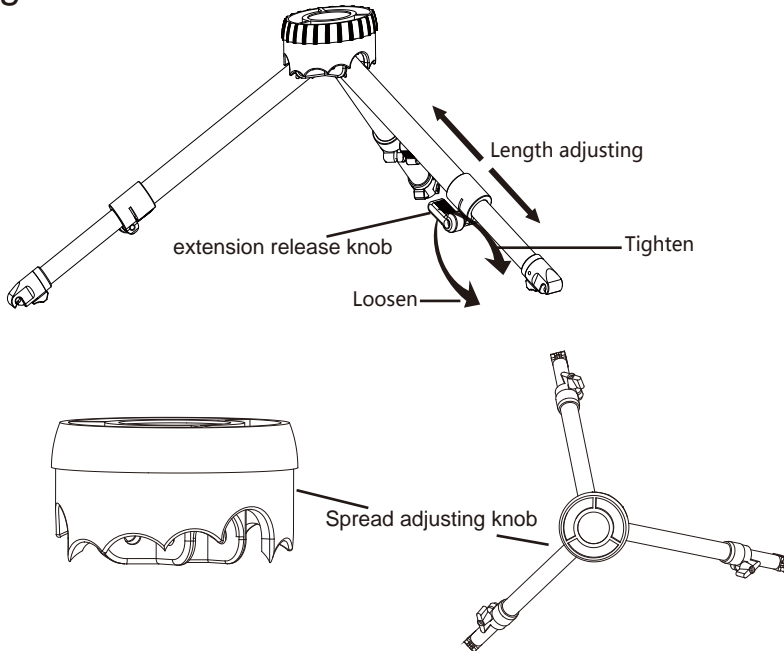
There are two controls on the spreader
Spread adjusting knob and extension release knob

Spread adjusting knob locks the mid-level spreader in position. With the particular length of arm, by turning the spread adjusting knob, the height of the spreader can be adjusted.

The spreading scope of tripod can be adjusted by turning the spread adjusting knob.

Extension release knobs are fitted on each arm of the mid-level spreader. When slackened, the arm can be extended or retracted. This facility is particularly useful when the tripod is in use on

Fig 23



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 solo16 Ltd.

For information on-line, visit our website at www.solo16.co.uk/tripods

Main Assemblies

Fluid head
Tripod
Pan handle
Ground spreader

Optional Accessories

Off ground spreader
Rubber feet
Padded tripod bag

User-replaceable Parts

Quicklock wedge plate
Sliding Camera plate
1/4 pin
3/8 pin
Tripod locking clip
Tilt brake knob
Pan brake knob
Pan handle clamping lever
Tripod top clamp lever
Tripod bottom clamp lever

