



- Mitchell Base Models**  
 #2109/G HDC MB SHORT  
 #2110/G HDC MB  
 #2111/G HDC MB TALL
- 100mm Bowl Models**  
 #2120/G HDC 100 SHORT  
 #2121/G HDC 100  
 #2122/G HDC 100 TALL
- 150mm Bowl Models**  
 #2114/G HDC 150 SHORT  
 #2115/G HDC 150  
 #2116/G HDC 150 TALL

# HDC OPERATOR'S MANUAL

## ACCESSORIES & COMPONENTS

Cat #	Description
#2130	HDC Ground Spreader
#2132	HDC Ground Spreader Short
#478	HD Rubber Feet (set of 3)
#993	Mid Level Spreader
#3222	HD Dolly

## SERVICE, SALES & SUPPORT

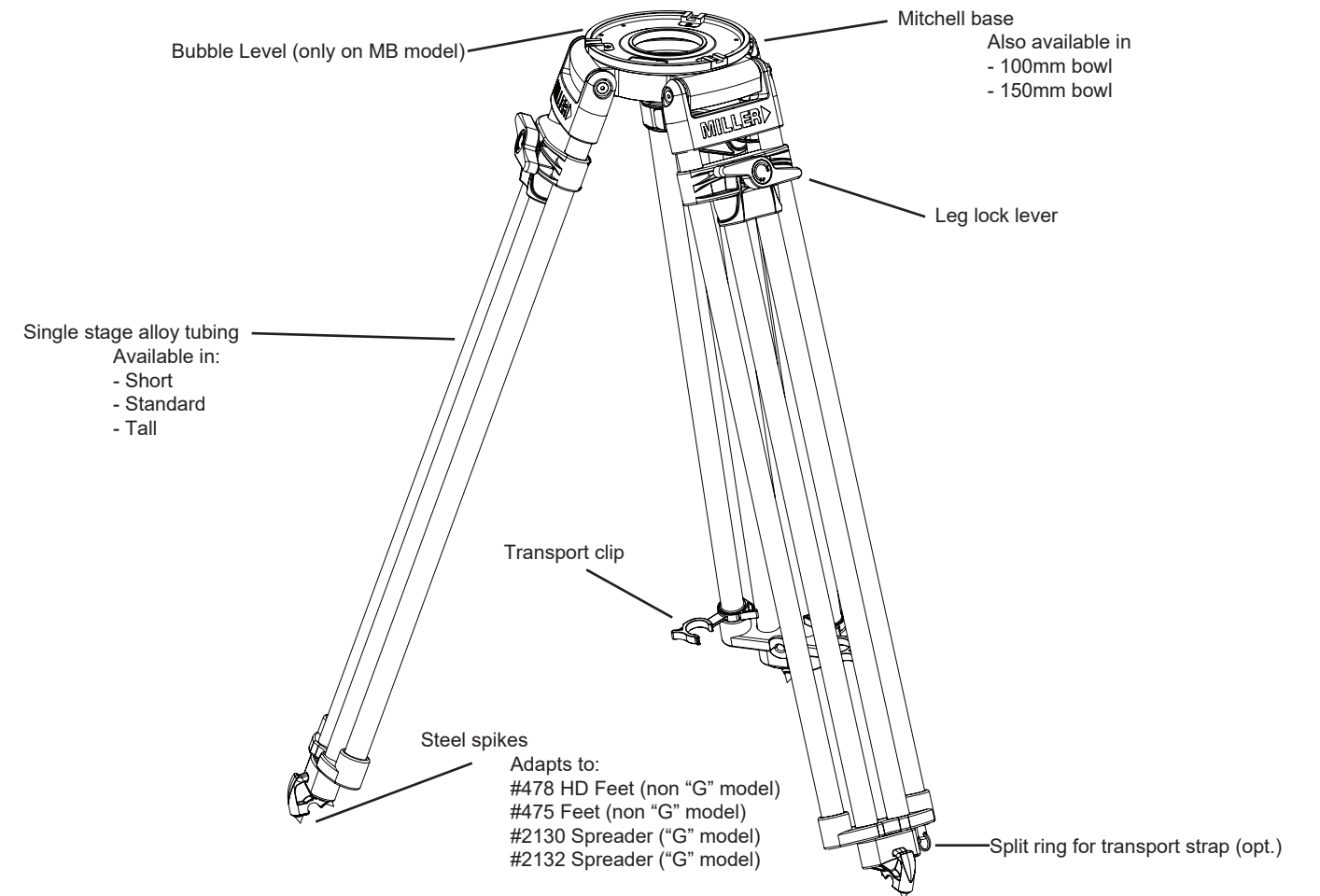
Miller Authorised Service Agents must carry out all service and repair work. Failure to observe this requirement may void warranty. It is advisable to notify Miller or a Miller Authorised Service Agent if a change of performance is observed as a result of dropping or rough usage. For information regarding sales and service of Miller products, or for your nearest Miller representative please contact us via our website or at the following:

<b>MILLER CAMERA SUPPORT EQUIPMENT</b> 30 Hotham Parade Sydney, NSW, 2064, Australia Tel: +61 2 9439 6377 Fax: +61 2 9438 2819 Email: sales@miller.com.au	<b>MILLER CAMERA SUPPORT LLC (USA)</b> 216 Little Falls Road (unit 15 & 16) Cedar Grove, New Jersey, 07009, USA Tel: (973) 857 8300 Fax: (973) 857 8188 Email: sales@millertripods.us
--	--

**MILLER FLUID HEADS (Europe) LTD.**  
 12A Shepperaton Business Park  
 Govett Avenue, Shepparton  
 Middlesex TW17 8BA, United Kingdom  
 Tel: +44 (0)1243 555 255  
 Fax: +44 (0)1243 555 001  
 Email: sales@millertripods-europe.com



## FEATURES AND CONTROLS



## INTRODUCTION

Thank you for purchasing the HDC Tripod.

The HDC tripod range is specifically built for cinematographers and outside broadcasters who demand the highest levels of stability, low torsional distortion, even at maximum drag. The HDC range is differentiated by the mounting base, the height and the spreader type, the quick action rotary screw type leg locks allow for maximum lock off performance without need for maintenance.

No matter where your work takes you, the HDC tripod series performs in extreme environments and terrains every time.

## TECHNICAL DATA

Cat#	2109/G	2110/G	2111/G	2114/G	2115/G	2116/G	2120/G	2121/G	2122/G
Base	MB	MB	MB	150mm	150mm	150mm	100mm	100mm	100mm
Height	Short	Standard	Tall	Short	Standard	Tall	Short	Standard	Tall
Material	Alloy	Alloy	Alloy	Alloy	Alloy	Alloy	Alloy	Alloy	Alloy
Maximum Load kg (lb)	95 (210)	95 (210)	95 (210)	95 (210)	95 (210)	95 (210)	95 (210)	95 (210)	95 (210)
Weight kg (lb)	4.8 (10.6)	5.9 (13.2)	6.4 (14.1)	4.5 (9.9)	5.6 (12.4)	6.2 (13.7)	4.3 (9.5)	5.4 (11.9)	6.0 (13.2)
Max Height mm (in)	900 (35.4)	1549 (61.0)	1764 (69.5)	890 (35.0)	1539 (60.6)	1754 (69.1)	900 (35.4)	1539 (60.6)	1690 (66.5)
Min Height mm (in)	415 (16.4)	737 (29.0)	886 (34.9)	405 (16.0)	727 (28.2)	876 (34.5)	370 (14.6)	710 (28.0)	845 (33.3)
Transport Length mm (in)	610 (24.0)	916 (36.1)	1010 (39.8)	600 (23.6)	906 (35.7)	1000 (39.4)	600 (23.6)	906 (35.7)	1000 (39.4)

Specs based on 'G' variant - 'non-G' variant will have lower Min Height

## TRIPOD SET-UP

1. Before setting-up the tripod, the Mid Level Spreader or HDC Ground spreader should be attached.
2. Remove tripod from the Softcase and unclip the Transport Clips.
3. Place the Tripod Feet on level surface (if possible) and release the rotary Leg Lock Levers.
4. Lift the top of the tripod to a desired height and then tighten Leg Lock Levers (do not over tighten).
5. Spread the Tripod Legs apart, check that the Tripod Bowl is approximately level to the ground (use the bubble level on MB versions).
6. Re-adjust the legs individually if required.
7. Check that the tripod is secure. Place fluid head on tripod base/bowl.

## TRIPOD PULL DOWN

1. Remove the camera from the Fluid Head.
2. Retract the spreader arms fully.
3. Hold and lift off the ground by two legs, then bring the legs inwards.
4. While holding the top of the tripod, release the Leg Lock Levers.
5. While feet are on floor allow base/bowl to fall to stops.
6. Tighten Leg Lock Levers.
7. Attach both Transport Clips.

## TRANSPORT CLIPS

The 2 Transport Clips (Fig.3) are designed to hold the HDC tripod's three legs together during transport. Their spring-loaded design means they

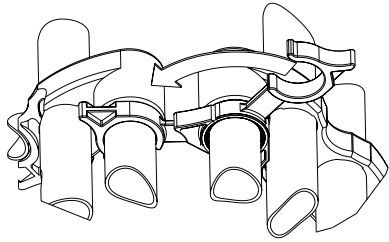


Fig 3.

are easily gripped and detached for set up, and just as easily snapped back on to the legs for transporting tripod. The Transport Clips must be securely attached before transporting the tripod.

## LEG TO BOWL ADJUSTMENT

- The leg to bowl pivot joint on the HDC 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. (Fig 6.)
1. Leg to Bowl Adjustment to eliminate lateral, or free play movement: Using a cross head screwdriver, ensure Bracket Mounting Screws on both sides of the Leg Top 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 4mm allen key until a smooth resistance is maintained. Check all legs.

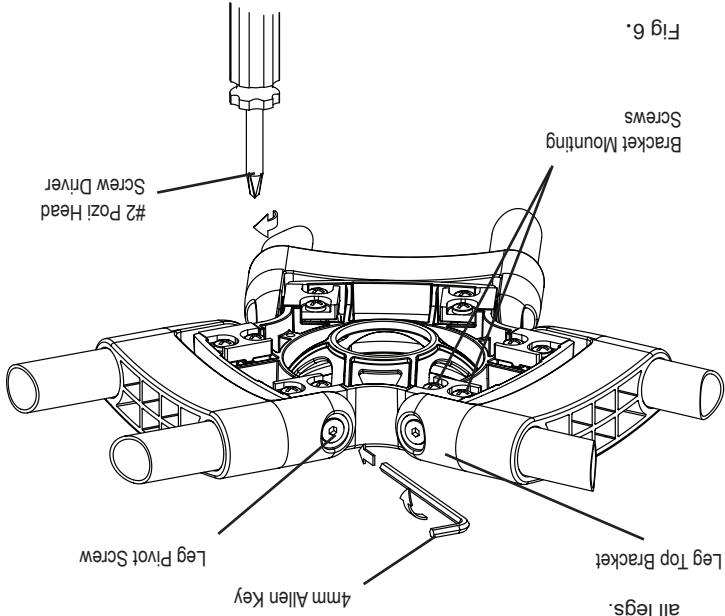


Fig 6.

## SAFETY

Regularly inspect the tripod, paying particular attention to any tube damage, leg lock adjustment, leg top adjustment, condition of the bowl rim, spreader mounting points, carry handle and feet.

Keep grit and dirt away from the locking pads as much as possible, including behind levers. Regularly clean the tripod with a clean damp rag or soft brush. Wipe off all sand, dust and salt spray.

Do not clean with solvents, cleaning fluids, lubricants, polishes, abrasives or wire brushes.

Transport and store the tripod in Miller case wherever possible. Store the tripod in a dry place, away from direct sunlight.

1. Do not exceed the maximum payload capacity of the Tripod.
2. Do not leave the camera unattended on the Fluid Head.
3. Do not adjust the tripod Leg locks whilst the camera is attached to the Fluid Head.
4. Do not move the Tripod whilst the camera is attached to the Fluid Head.
5. Do not remove the Mid Level Spreader or Ground Spreader whilst the camera and fluid head is attached.

## SPREADER

### MID LEVEL SPREADER - Designed for non "G" HDC tripods

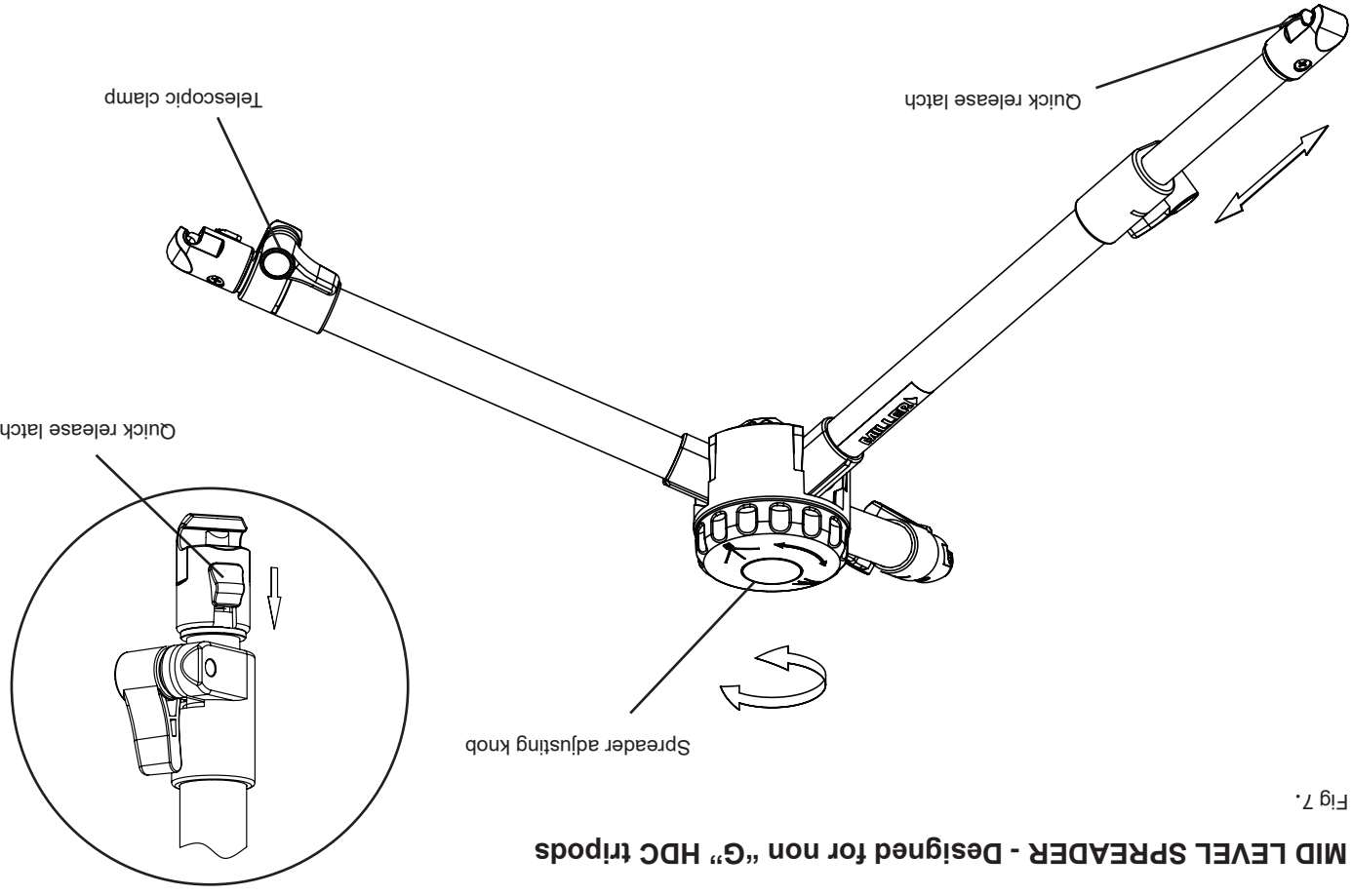
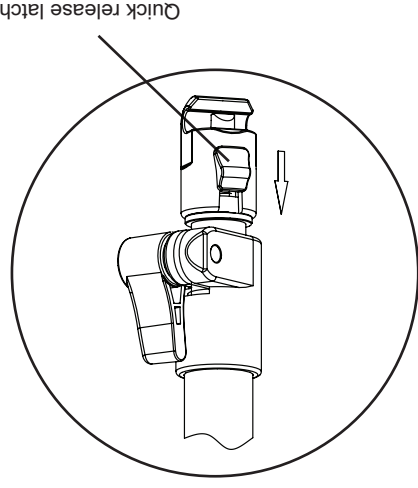
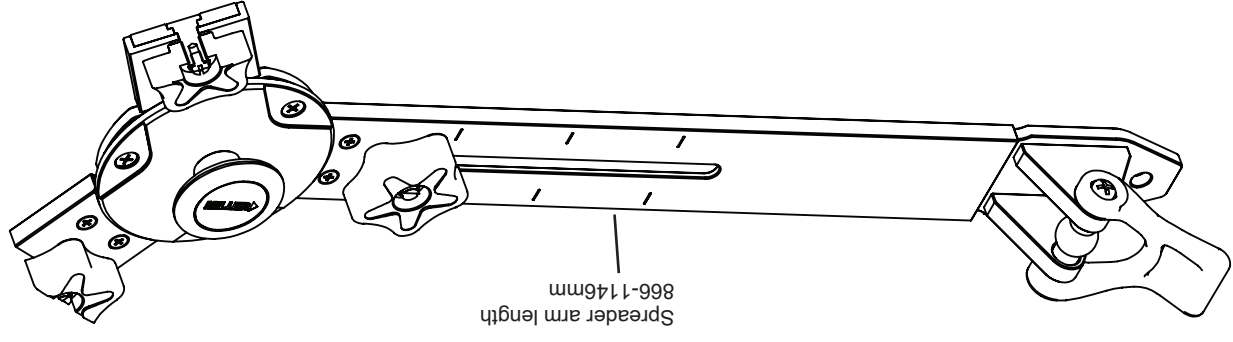


Fig 7.

Fig 8.



### HDC GROUND SPREADER SHORT - Designed for short HDC tripods ("G" versions)



### HDC GROUND SPREADER - Designed for standard and tall HDC tripods ("G" versions)

