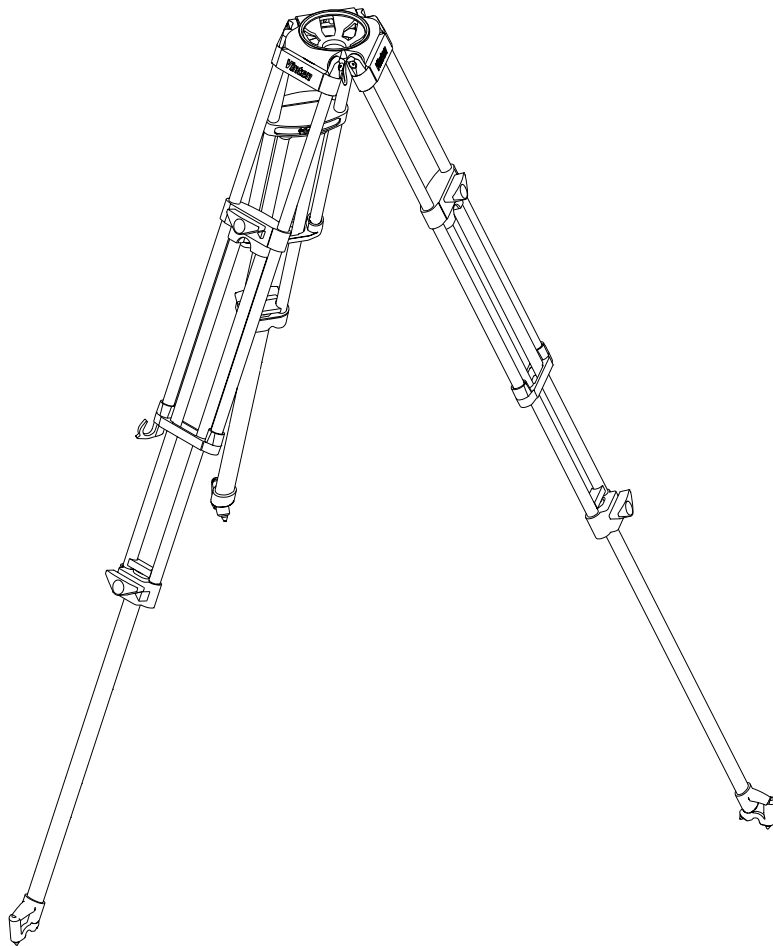


# Maintenance Manual

## Vision Toggle-Clamp Tripods



## Spares & Repairs



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# **VISION TOGGLE-CLAMP TRIPODS**

## **SPARES & REPAIRS**

**PUBLICATION PART No. 3392-9**

**ISSUE 4**

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## Foreword

**Part 1** of this manual provides detailed spare parts information for Vinten Vision toggle clamp tripods. The various products are listed in Part Number order. A list of consumables, such as adhesives and lubricants, appears on [page 6](#).

To order spare parts or to obtain further information, application should be made to Vinten Broadcast Limited or your local distributor.

**Part 2** contains repair procedures.

This manual previously contained details of all Vinten tripods, dollies, skid, spreaders and associated equipment. To make the manual more manageable, it has been sub-divided and renumbered as follows:

**Vision Toggle-Clamp Tripods (this manual) - Publication Part No. 3392-9**

**Vision Torque-Safe Tripods - Publication Part No. 3380-9**

**Heavy-Duty Tripod Range - Publication Part No. 3366-9**

**Spreaders, Dollies and Skids - Publication Part No. 3313-9**

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**NOTE:** Information contained in this document is subject to change.  
Vinten Broadcast Ltd reserves the right, without notice, to make changes in equipment design or performance as progress in engineering, manufacturing or technology may warrant.

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## Notes to readers

This is the on-line version of 'Vision Toggle-Clamp Tripods - Spares and Repairs' (3392-9). Readers should be aware that the pagination differs between on-line and printed versions.

## Navigation

Clicking the mouse on any [blue text](#) will move you around the document. For example, if you click on one of the blue call-outs on an exploded drawing, you will be taken to the appropriate line in the relevant parts list.

**Contents**

Clicking here will take you to the Contents Page.



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## Adhesives and Lubricants

1 Adhesives and lubricants are indicated on each illustration by letter. These letters are standard throughout the manual and refer to the table below.

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**NOTE:** Not all the adhesives and lubricants listed below are required for the equipment in this manual.  
Adhesives and lubricants are not supplied by Vinten Broadcast Ltd and should be obtained under local arrangements.

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LETTER	ITEM
A	Adhesive, Loctite 221 Studlock
B	Adhesive, Loctite 242E Nutlock
C	Adhesive, Loctite 270 Studlock
D	Adhesive, Loctite 380
E	Adhesive, Loctite 406
F	Adhesive, Loctite 409 Superglue Extra
G	Adhesive, Loctite 415 Superbonder
H	Adhesive, Loctite 601 Retainer
J	Adhesive, Loctite 638
K	Adhesive, Permabond Epoxy E31
L	Adhesive, Permabond E38
M	Adhesive, Silcoset 153
N	Grease, Molybdenum Disulphide GP50
P	Grease, white bearing



## Part 1 - Illustrated Parts Lists



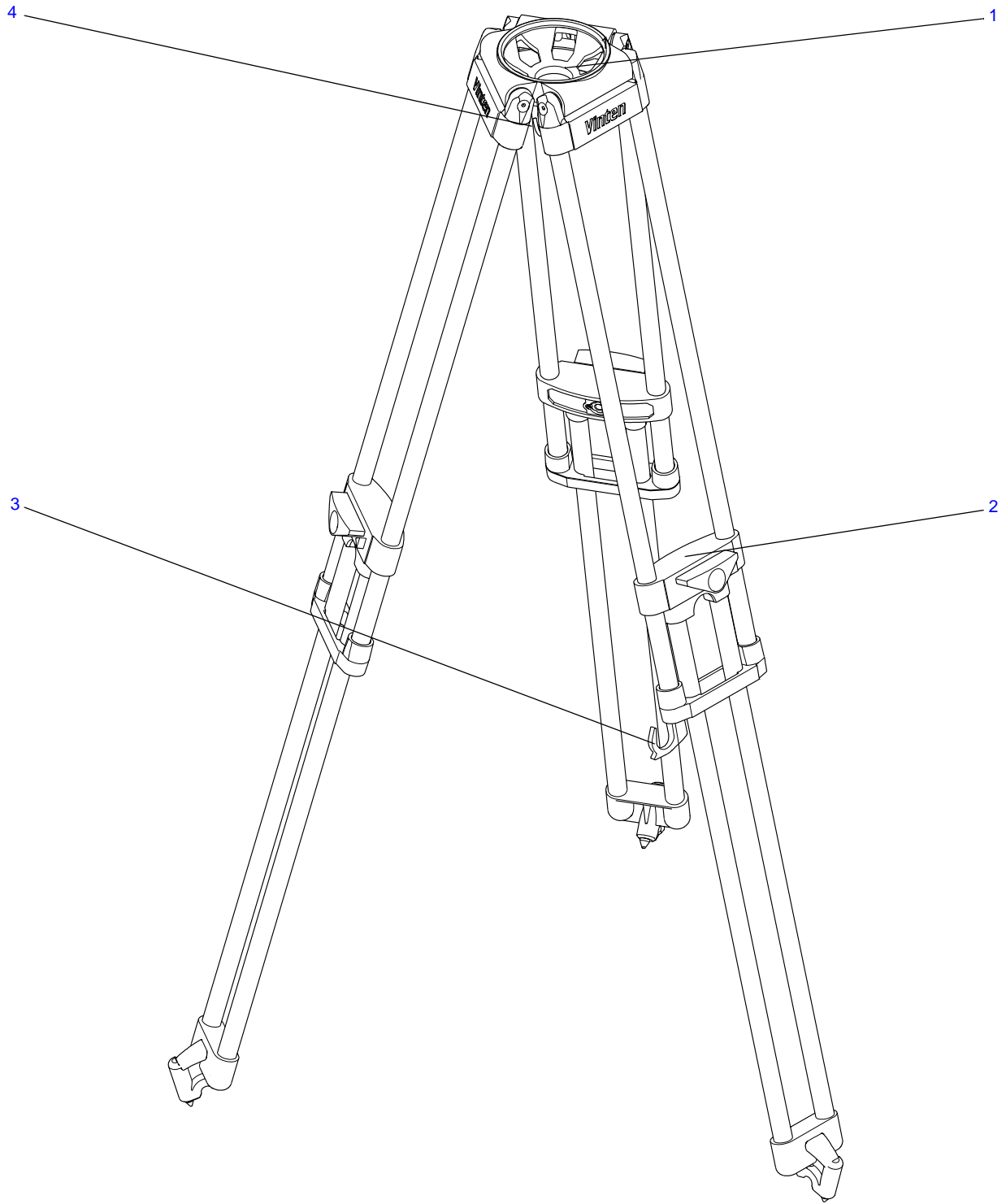




## Floor Spreader - for Aluminium Tripods (3313-3)

Item No.	Part No.	Item	Qty
1	3313-219	Split ring	1
2	3313-201	Centre moulding	1
3	3313-211	Hinge pin	3
4	M701-054	'E'-Clip, crescent ring ("e"-clip variation), 4 mm shaft dia. x 0.40 mm thick	3
5	3394-202	Leg moulding inner (female)	3
6	3313-214	Friction pad	3
7	3313-213	Clamp stud	3
8	3313-203	Leg moulding outer (male)	3
	3313-901SP	Foot assembly (spares), comprising one each of:	
9	3313-218	Foot hinge pin	3
10	3313-212	Foot pad	3
11	3313-215	Foot support moulding	3
12	3313-216	Strap	3
13	L803-002	Pin, mills, 1/16 in. dia. x 1/4 in. long, gp2	6
14	M600-020	Washer, form "c", large, 20.5/21 mm ID x 8.4/8.7 mm OD x 1.4/1.8 mm thick	3
15	3313-204	Clamp knob moulding	3
16	M500-081	Nut, M5, standard (hex), full	3
17	3313-217	Clamp label	3

## Two-Stage LT Carbon Fibre Tripod (3360-3)

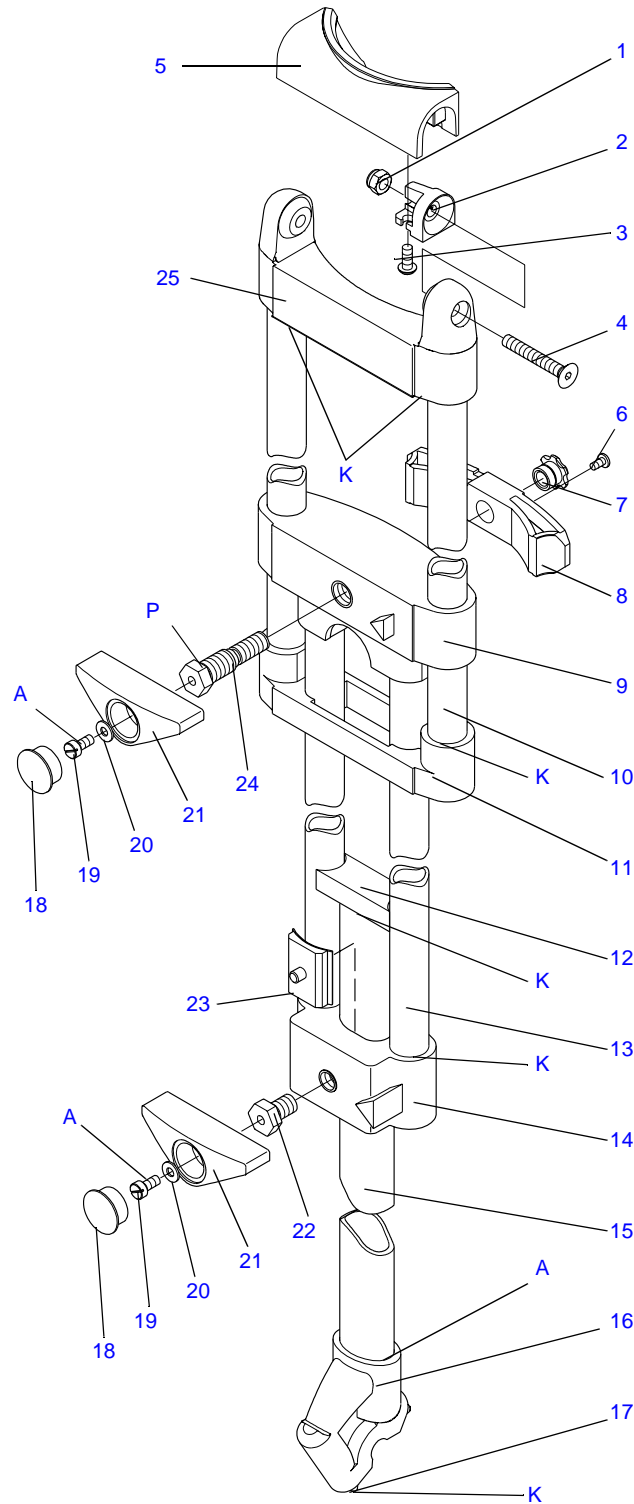




## Two-Stage LT Carbon Fibre Tripod (3360-3)

Item No.	Part No.	Item	Qty
1	3310-201	Tripod head	1
2	3360-11	Leg assembly ( <a href="#">see page 12</a> )	3
3	3310-12	Strap assembly	1
4	3310-227	Hook (ENG.)	1

## Leg Assembly - Two-Stage LT Carbon Fibre Tripod (3360-11)



See [page 6](#) for letter key to adhesives and lubricants



## Leg Assembly - Two-Stage LT Carbon Fibre Tripod (3360-11)

Item No.	Part No.	Item	Qty Per Leg
1	M501-008	Nut, M5, nyloc, full	2
2	3310-211	Leg retainer	2
3	M005-511	Screw, button head, socket, M4 x 8 mm long	4
4	M006-914	Screw, countersunk head, socket, M5 x 35 mm long	2
5	—	Tripod head	-
	3360-11	Leg assembly, comprising:	
6	L101-026	Screw, self-tapping, pan head, pozidrive, M4 x 1/4 in. long	1
7	3392-205	Threaded insert (upper rear)	1
8	3513-13	Upper clamp assembly	1
9	3310-16	Upper clamp moulding assembly	1
10	3360-212	Outer leg tube	2
11	3310-205	Lower moulding	1
12	3310-208	Tube guide moulding	1
13	3360-213	Inner leg tube	2
14	3310-15	Lower clamp moulding assembly [was 3310-206]	1
15	3360-201	Centre leg tube	1
16	3392-201	Foot moulding	1
17	3310-218	Foot spike	1
18	J550-068	Hole-plug, dome head, 15.9 mm hole dia. x 18.2 mm head dia.	2
19	M005-303	Screw, cheese head, pozidrive, M4 x 8 mm long	2
20	M601-006	Washer, shakeproof, internal, M4	2
21	3310-209	Knob	2
22	3392-206	Lower clamp spindle	1
23	3310-14	Lower clamp assembly	1
24	3392-204	Upper clamp spindle	1
25	3310-202	Leg top moulding	1

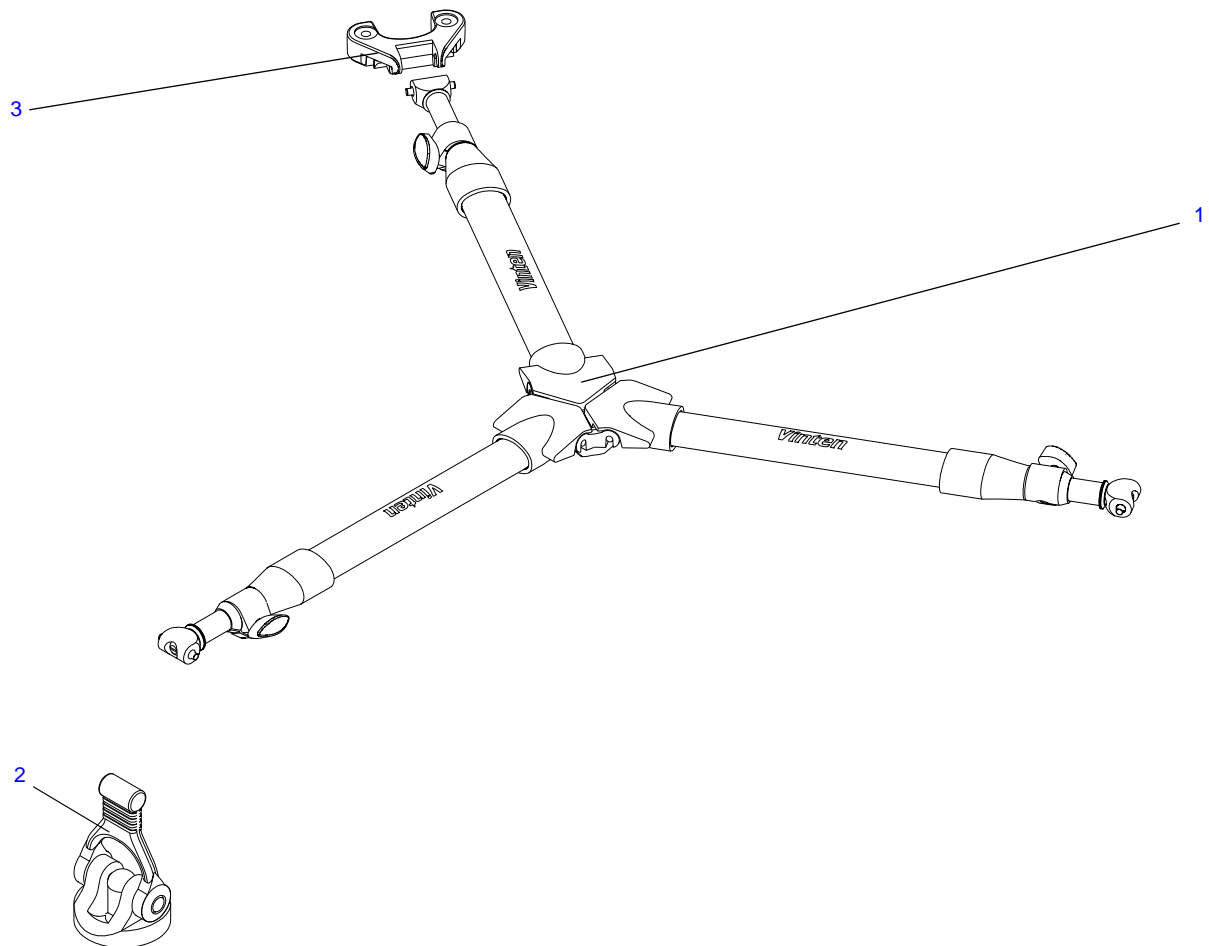




## Floor Spreader - for Carbon Fibre Tripods (3363-3)

Item No.	Part No.	Item	Qty
1	3313-219	Split ring	1
2	3363-201	Centre moulding	1
3	3313-211	Hinge pin	3
4	M701-054	'E'-Clip, crescent ring ("e"-clip variation), 4 mm shaft dia. x 0.40 mm thick	3
5	3363-202	Leg moulding - inner (female)	3
6	3313-214	Friction pad	3
7	3313-213	Clamp stud	3
8	3363-203	Leg moulding - outer (male)	3
	3363-901SP	Foot assembly (spares), comprising one each of:	
9	3313-218	Foot hinge pin	3
10	3313-212	Foot pad	3
11	3363-215	Foot support moulding	3
12	3313-216	Strap	3
13	L803-002	Pin, mills, 1/16 in. dia. x 1/4 in. long, gp2	6
14	M600-020	Washer, form "c", large, 20.5/21 mm ID x 8.4/8.7 mm OD x 1.4/1.8 mm thick	3
15	3313-204	Clamp knob moulding	3
16	M500-081	Nut, M5, standard (hex), full	3
17	3313-217	Clamp label	3

## Mid-Level Spreaders (3378)







## Mid-Level Spreader (ENG) (3378-900SP)

Item No.	Part No.	Item	Qty
1	3378-11	Spreader assembly	1
2	3378-14	Foot assembly	3
3	3378-15	Interface bracket sub-assembly (ENG.)	3
NI	M006-919	Screw, countersink head, socket, M5 x 40 mm long	6
NI	M500-083	Threaded-insert, well-nut, M5	6

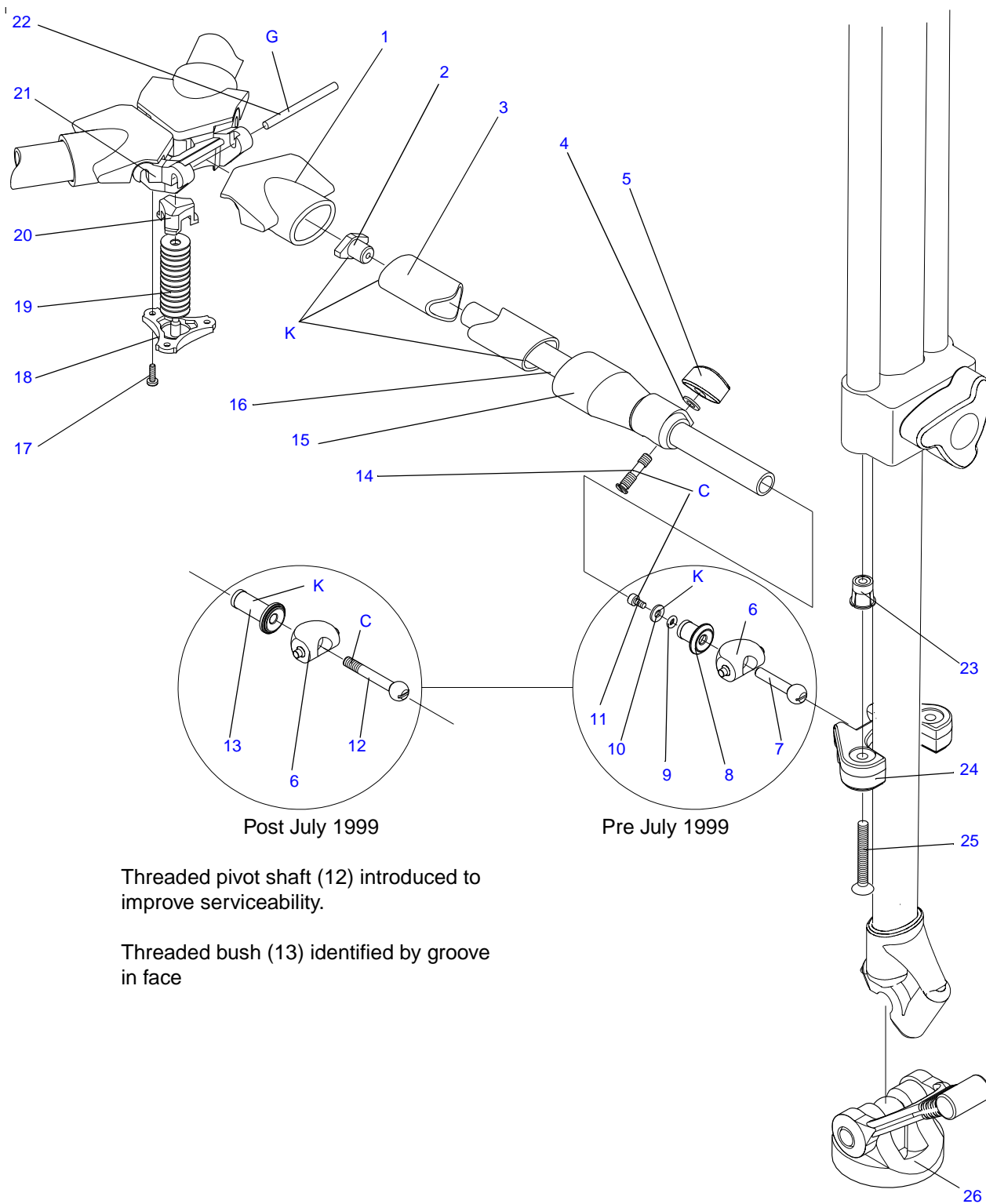
## Mid-Level Spreader (ENG) (Short) (3378-904SP)

Item No.	Part No.	Item	Qty
1	3378-31	Spreader assembly - short	1
2	3378-14	Foot assembly	3
3	3378-15	Interface bracket sub-assembly (ENG.)	3
NI	M006-919	Screw, countersink head, socket, M5 x 40 mm long	6
NI	M500-083	Threaded-insert, well-nut, M5	6

## Set of Three Feet (3378-902SP)

ITEM No.	PART No.	ITEM	QTY
2	3378-14	Foot assembly	3

## Mid-Level Spreaders (3378)



See [page 6](#) for letter key to adhesives and lubricants

## Spreader Assembly (3378-11)

ITEM No.	PART No.	ITEM	QTY
	3378-16	Arm assembly, comprising:	3
1	3378-212	Hinge	1
2	3378-214	Tube guide	1
3	3378-215	Oval tube	1
4	M600-006	Washer, plain, heavy, M5	1
5	K403-013	Knob, locking-key, female, M5 thread, 26 mm wide	1
6	3378-232	Universal joint	1
Pre July 1999			
7	3378-234	Pivot shaft	1
8	3378-233	Bush	1
9	R900H005	'O' ring, 5.1 mm ID x 16 mm section	1
10	M600-004	Washer, plain, heavy, M4	1
11	M004-502	Screw, button head, socket, M3 x 6 mm long	1
Post July 1999			
12	3378-234	Pivot shaft	1
13	3378-233	Bush	1
14	3378-211	Shaft (clamp)	1
15	3378-12	Clamp assembly	1
16	3378-216	Round tube	
17	L101-027	Screw, self-tapping, pan head, pozidrive, M4 x 3/8 mm long, type y	3
18	3378-210	Retainer	1
19	M601-264	Spring, disc, 5.2 mm ID x 15 mm OD x 0.7 mm thick	12
20	3378-249	Spring cap	1
21	3378-213	Spider	1
22	3378-209	Dowel	3

## Spreader Assembly - Short (3378-31)

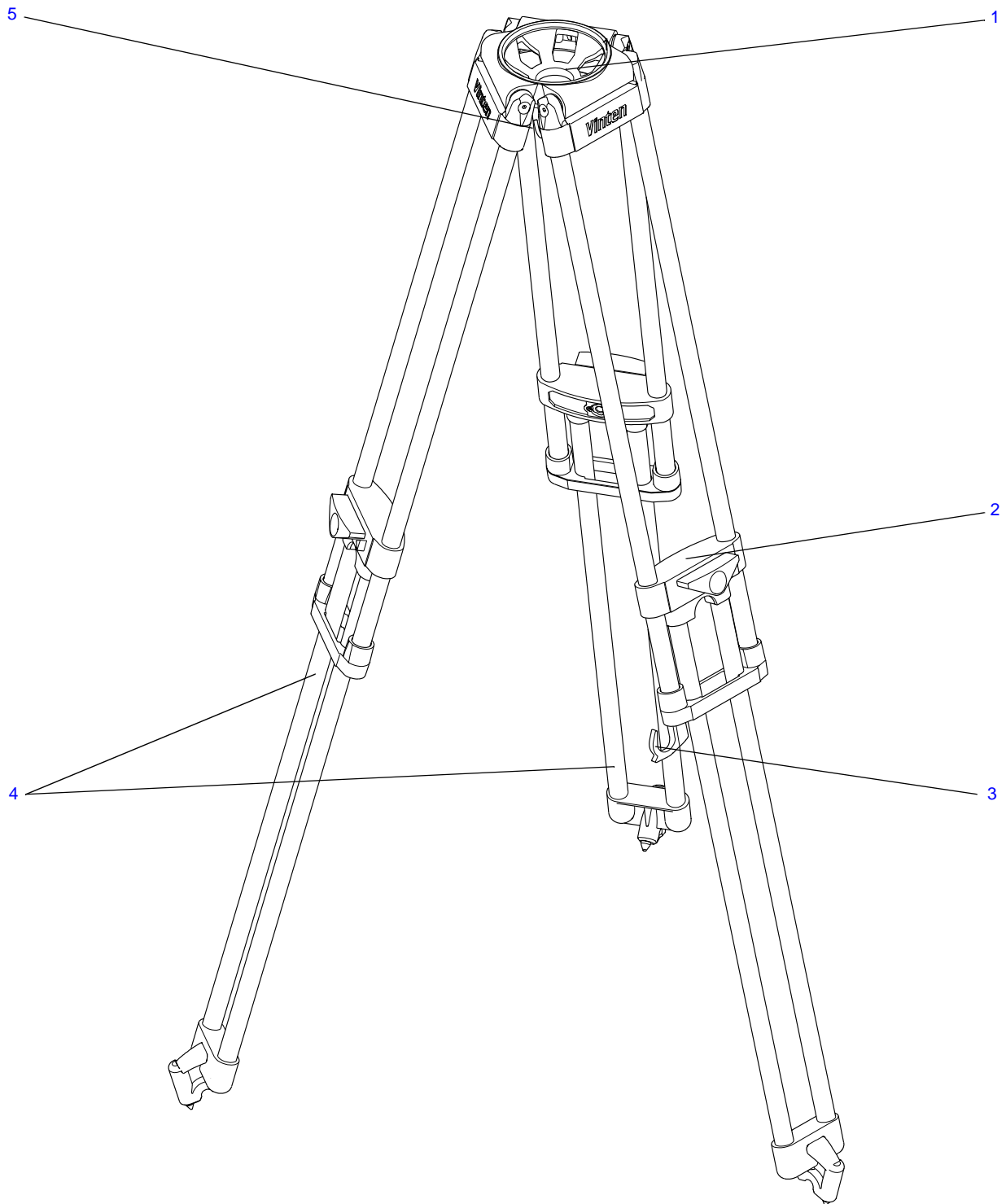
ITEM No.	PART No.	ITEM	QTY
	3378-36	Arm assembly - short, comprising:	3
1	3378-212	Hinge	1
2	3378-214	Tube guide	1
3	3378-220	Oval tube - short	1
4	M600-006	Washer, plain, heavy, M5	1
5	K403-013	Knob, locking-key, female, M5 thread, 26 mm wide	1
6	3378-232	Universal joint	1
Pre July 1999			
7	3378-234	Pivot shaft	1
8	3378-233	Bush	1
9	R900H005	'O' ring, 5.1 mm ID x 16 mm section	1
10	M600-004	Washer, plain, heavy, M4	1
11	M004-502	Screw, button head, socket, M3 x 6 mm long	1
Post July 1999			
12	3378-234	Pivot shaft	1
13	3378-233	Bush	1
12	3378-211	Shaft (clamp)	1
13	3378-12	Clamp assembly	1
16	3378-221	Round tube - short	
17	L101-027	Screw, self-tapping, pan head, pozidrive, M4 x 3/8 mm long, type y	3
18	3378-210	Retainer	1
19	M601-264	Spring, disc, 5.2 mm ID x 15 mm OD x 0.7 mm thick	12
20	3378-249	Spring cap	1
21	3378-213	Spider	1
22	3378-209	Dowel	3



## Fixings, Etc.

ITEM No.	PART No.	ITEM	QTY
23	M500-083	Threaded-insert, well-nut, M5	6
24	3378-15	Interface bracket sub-assembly (ENG.)	3
25	M006-919	Screw, countersink head, socket, M5 x 40 mm long	6
26	3378-14	Foot assembly	3

## Two-Stage Aluminium Tripod (3392-3)

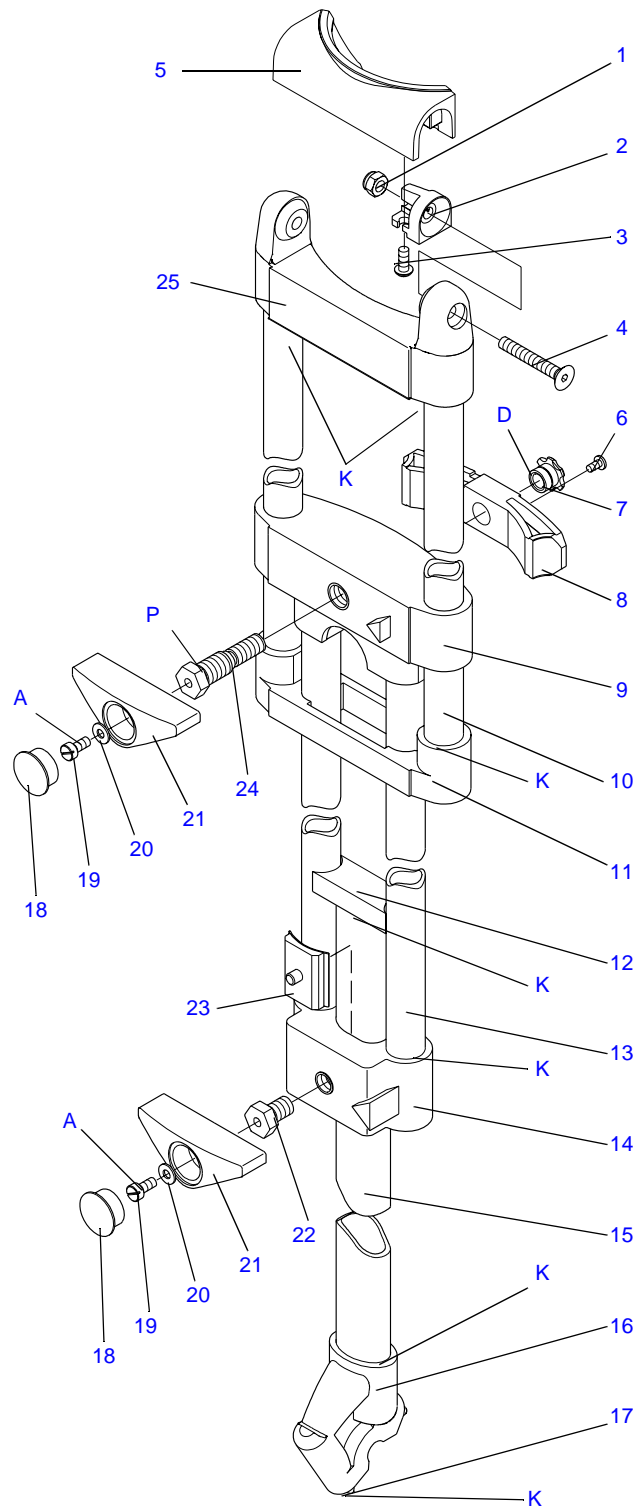




## Two-Stage Aluminium Tripod (3392-3)

Item No.	Part No.	Item	Qty
1	3310-201	Tripod head	1
2	3392-12	Leg assembly (for strap assembly) ( <a href="#">see page 26</a> )	1
3	3310-12	Strap assembly	1
4	3392-11	Leg assembly ( <a href="#">see page 24</a> )	2
5	3310-227	Hook (ENG.)	1

## Leg Assembly - Two-Stage Aluminium Tripod (3392-11)



See [page 6](#) for letter key to adhesives and lubricants

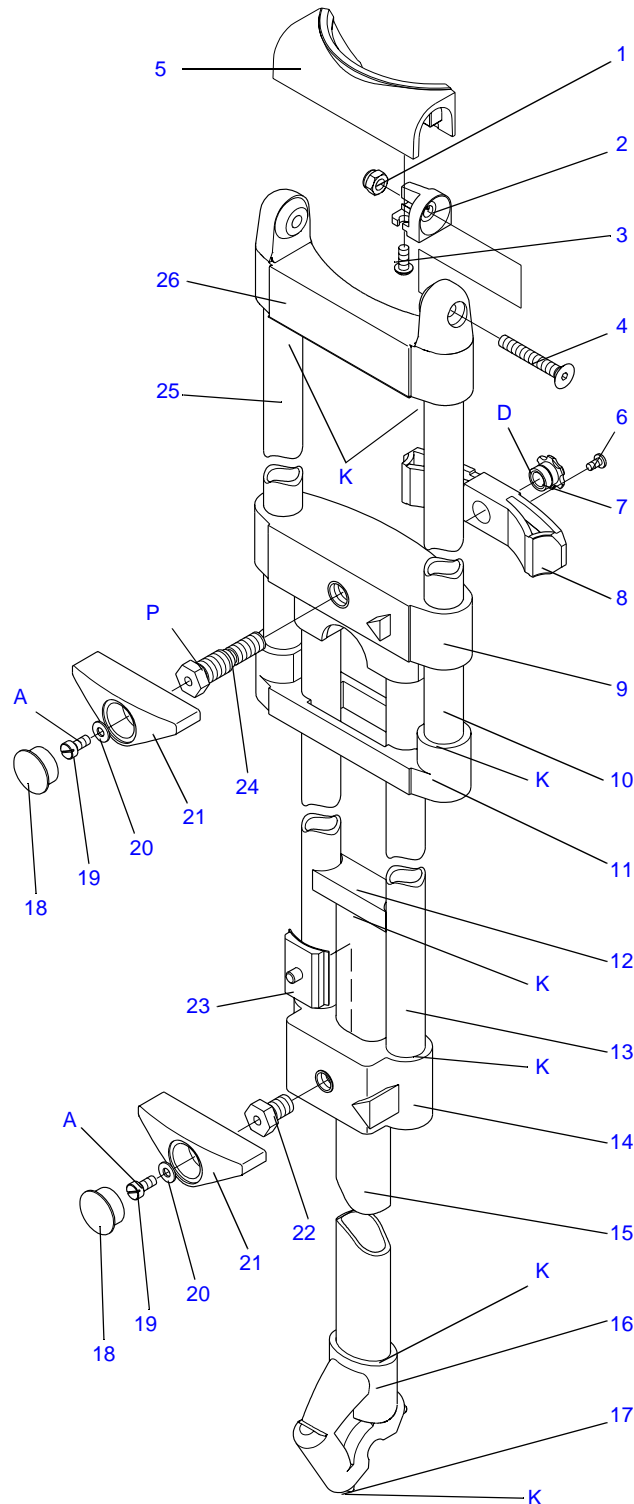




## Leg Assembly - Two-Stage Aluminium Tripod (3392-11)

Item No.	Part No.	Item	Qty Per Leg
1	M501-008	Nut, M5, nyloc, full	2
2	3310-211	Leg retainer	2
3	M005-511	Screw, button head, socket, M4 x 8 mm long	4
4	M006-914	Screw, countersunk head, socket, M5 x 35 mm long	2
5	—	Tripod head	-
	3392-11	Leg assembly, comprising:	
6	L101-026	Screw, self-tapping, pan head, pozidrive, M4 x 1/4 in. long	1
7	3392-205	Threaded insert (upper rear)	1
8	3513-13	Upper clamp assembly	1
9	3310-16	Upper clamp moulding assembly	1
10	3392-202	Outer leg tube	2
11	3310-205	Lower moulding	1
12	3513-210	Tube guide moulding (aluminium tube)	1
13	3392-203	Inner leg tube	2
14	3310-15	Lower clamp moulding assembly [was 3310-206]	1
15	3310-214	Centre leg tube	1
16	3392-201	Foot moulding	1
17	3310-218	Foot spike	1
18	J550-068	Hole-plug, dome head, 15.9 mm hole dia. x 18.2 mm head dia.	2
19	M005-303	Screw, cheese head, pozidrive, M4 x 8 mm long	2
20	M601-006	Washer, shakeproof, internal, M4	2
21	3310-209	Knob	2
22	3392-206	Lower clamp spindle	1
23	3310-14	Lower clamp assembly	1
24	3392-204	Upper clamp spindle	1
25	3310-202	Leg top moulding	1

## Leg Assembly (for Strap Assembly) - Two-Stage Aluminium Tripod (3392-12)



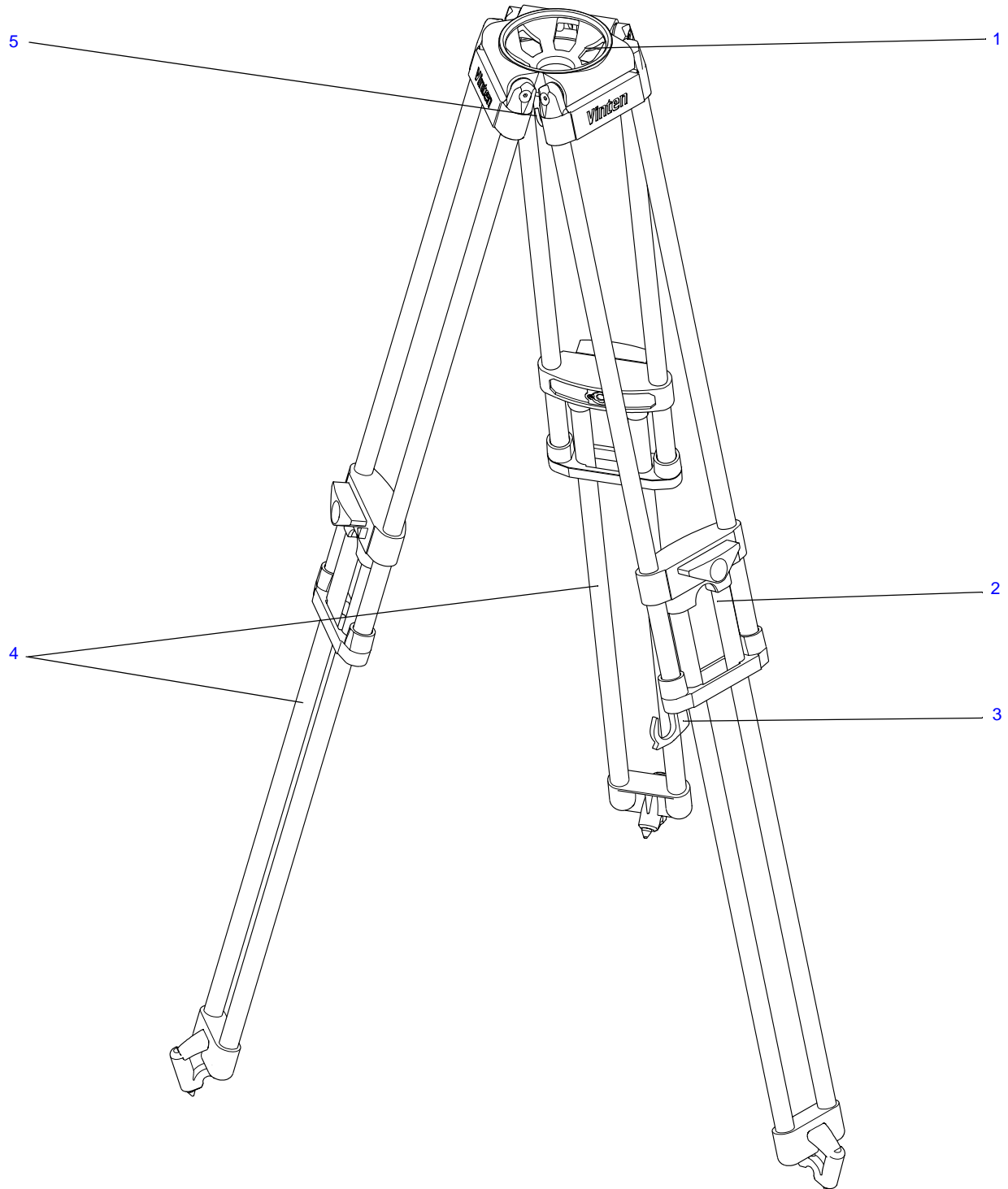
See [page 6](#) for letter key to adhesives and lubricants



## Leg Assembly (for Strap Assembly) - Two-Stage Aluminium Tripod (3392-12)

Item No.	Part No.	Item	Qty Per Leg
1	M501-008	Nut, M5, nyloc, full	2
2	3310-211	Leg retainer	2
3	M005-511	Screw, button head, socket, M4 x 8 mm long	4
4	M006-914	Screw, countersunk head, socket, M5 x 35 mm long	2
5	—	Tripod head	-
	3392-11	Leg assembly, comprising:	
6	L101-026	Screw, self-tapping, pan head, pozidrive, M4 x 1/4 in. long	1
7	3392-205	Threaded insert (upper rear)	1
8	3513-13	Upper clamp assembly	1
9	3310-16	Upper clamp moulding assembly	1
10	3392-202	Outer leg tube	1
11	3310-205	Lower moulding	1
12	3513-210	Tube guide moulding (aluminium tube)	1
13	3392-203	Inner leg tube	2
14	3310-15	Lower clamp moulding assembly [was 3310-206]	1
15	3310-214	Centre leg tube	1
16	3392-201	Foot moulding	1
17	3310-218	Foot spike	1
18	J550-068	Hole-plug, dome head, 15.9 mm hole dia. x 18.2 mm head dia.	2
19	M005-303	Screw, cheese head, pozidrive, M4 x 8 mm long	2
20	M601-006	Washer, shakeproof, internal, M4	2
21	3310-209	Knob	2
22	3392-206	Lower clamp spindle	1
23	3310-14	Lower clamp assembly	1
24	3392-204	Upper clamp spindle	1
25	3513-226	Outer leg tube (for strap assembly)	1
26	3310-202	Leg top moulding	1

## Single-Stage Aluminium Tripod (3393-3)

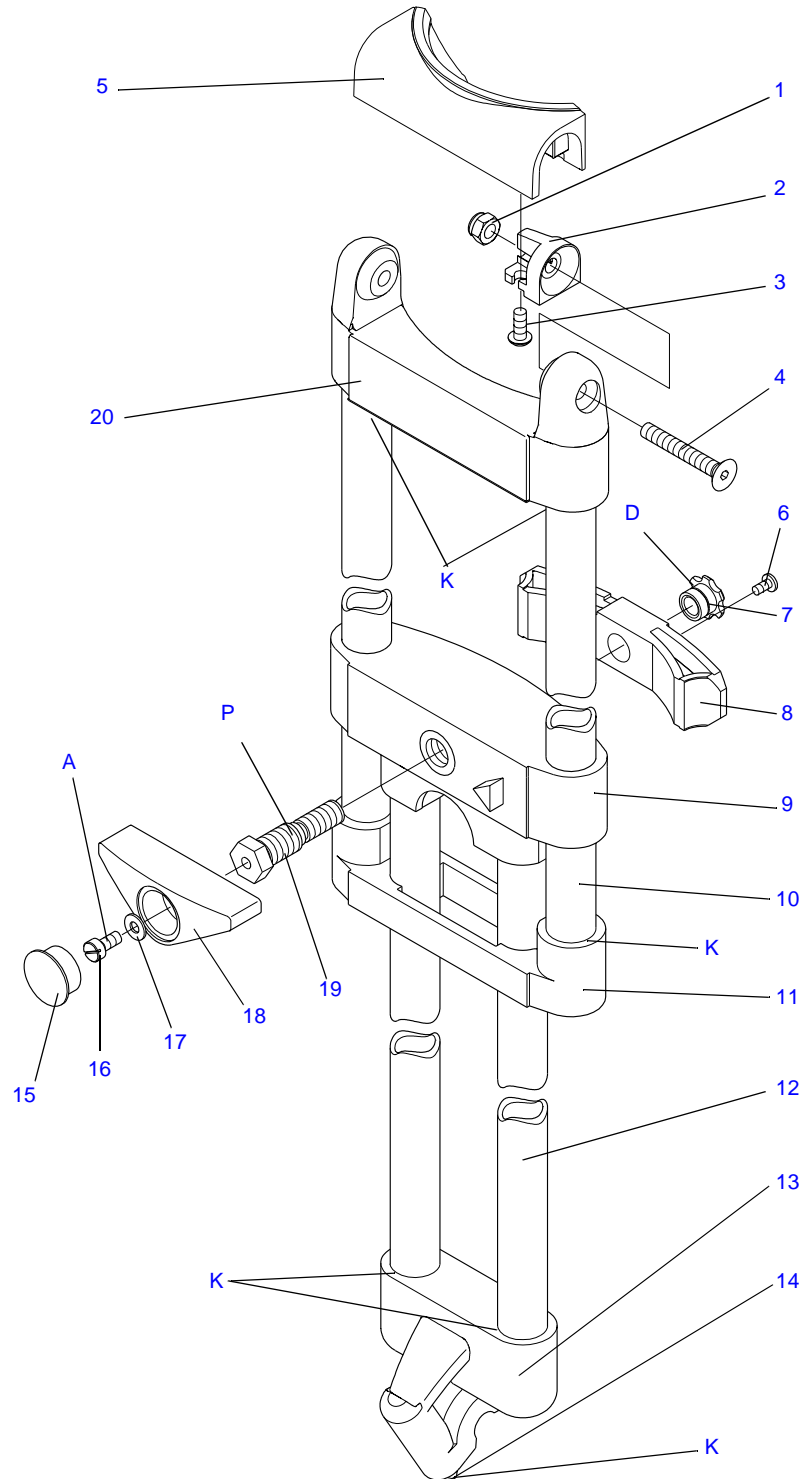




## Single-Stage Aluminium Tripod (3393-3)

Item No.	Part No.	Item	Qty
1	3310-201	Tripod head	1
2	3393-12	Leg assembly (for strap assembly) ( <a href="#">see page 32</a> )	1
3	3310-12	Strap assembly	1
4	3393-11	Leg assembly ( <a href="#">see page 30</a> )	2
5	3310-227	Hook (ENG.)	1

## Leg Assembly - Single-Stage Aluminium Tripod (3393-11)



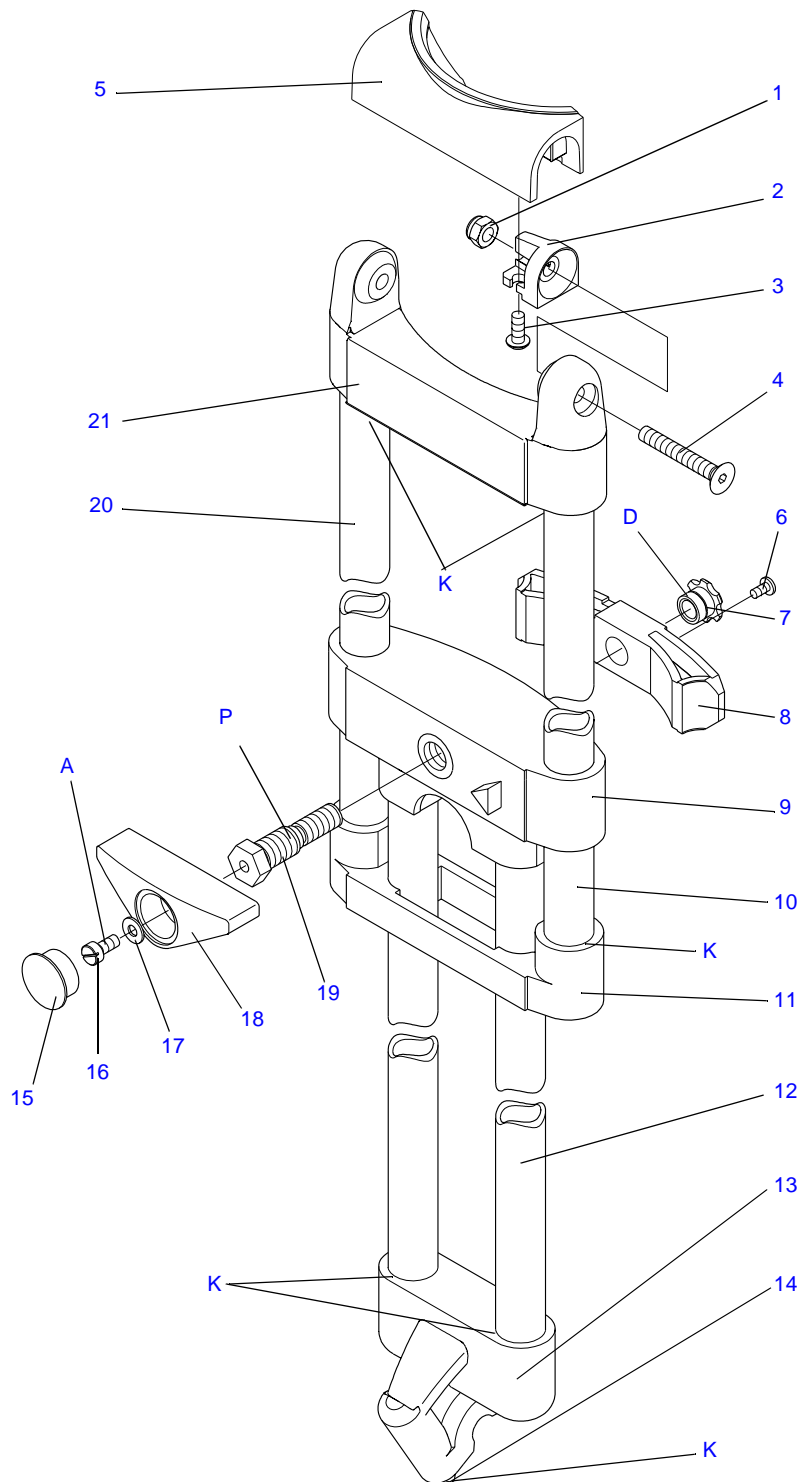
See [page 6](#) for letter key to adhesives and lubricants



## Leg Assembly - Single-Stage Aluminium Tripod (3393-11)

Item No.	Part No.	Item	Qty Per Leg
1	M501-008	Nut, M5, nyloc, full	2
2	3310-211	Leg retainer	2
3	M005-511	Screw, button head, socket, M4 x 8 mm long	4
4	M006-914	Screw, countersunk head, socket, M5 x 35 mm long	2
5	—	Tripod head	-
	3393-11	Leg assembly, comprising:	
6	L101-026	Screw, self-tapping, pan head, pozidrive, M4 x 1/4 in. long	1
7	3392-205	Threaded insert (upper rear)	1
8	3513-13	Upper clamp assembly	1
9	3310-16	Upper clamp moulding assembly	1
10	3393-202	Leg tube outer	2
11	3311-204	Lower moulding	1
12	3393-203	Leg tube inner	2
13	3393-201	Foot moulding	1
14	3310-218	Foot spike	1
15	J550-068	Hole-plug, dome head, 15.9 mm hole dia. x 18.2 mm head dia.	1
16	M005-303	Screw, cheese head, pozidrive, M4 x 8 mm long	1
17	M601-006	Washer, shakeproof, internal, M4	1
18	3310-209	Knob	1
19	3392-204	Upper clamp spindle	1
20	3310-202	Leg top moulding	2

## Leg Assembly (for Strap Assembly) - Single-Stage Aluminium Tripod (3393-12)



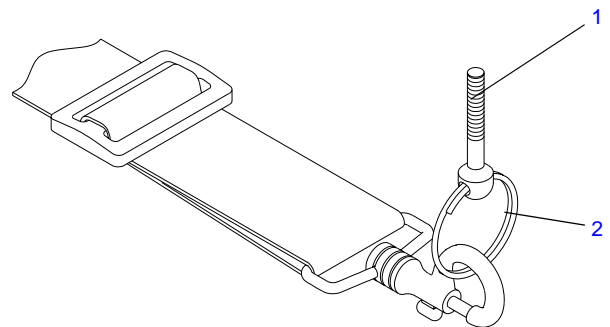
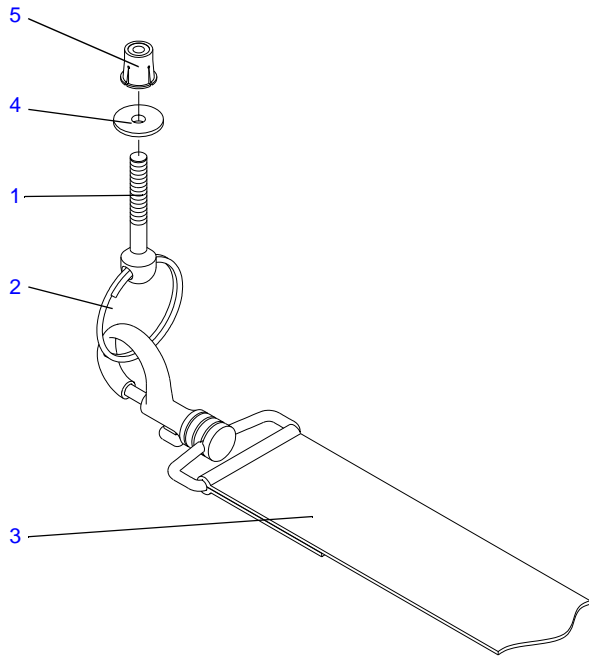
See [page 6](#) for letter key to adhesives and lubricants



## Leg Assembly (for Strap Assembly) - Single-Stage Aluminium Tripod (3393-12)

Item No.	Part No.	Item	Qty Per Leg
1	M501-008	Nut, M5, nyloc, full	2
2	3310-211	Leg retainer	2
3	M005-511	Screw, button head, socket, M4 x 8 mm long	4
4	M006-914	Screw, countersunk head, socket, M5 x 35 mm long	2
5	—	Tripod head	-
	3393-11	Leg assembly, comprising:	
6	L101-026	Screw, self-tapping, pan head, pozidrive, M4 x 1/4 in. long	1
7	3392-205	Threaded insert (upper rear)	1
8	3513-13	Upper clamp assembly	1
9	3310-16	Upper clamp moulding assembly	1
10	3393-202	Leg tube outer	1
11	3311-204	Lower moulding	1
12	3393-203	Leg tube inner	2
13	3393-201	Foot moulding	1
14	3310-218	Foot spike	1
15	J550-068	Hole-plug, dome head, 15.9 mm hole dia. x 18.2 mm head dia.	1
16	M005-303	Screw, cheese head, pozidrive, M4 x 8 mm long	1
17	M601-006	Washer, shakeproof, internal, M4	1
18	3310-209	Knob	1
19	3392-204	Upper clamp spindle	1
20	3513-226	Outer leg tube (for strap assembly)	1
21	3310-202	Leg top moulding	2

## Carrying Strap Assembly - ENG Tripod (3425-3A)

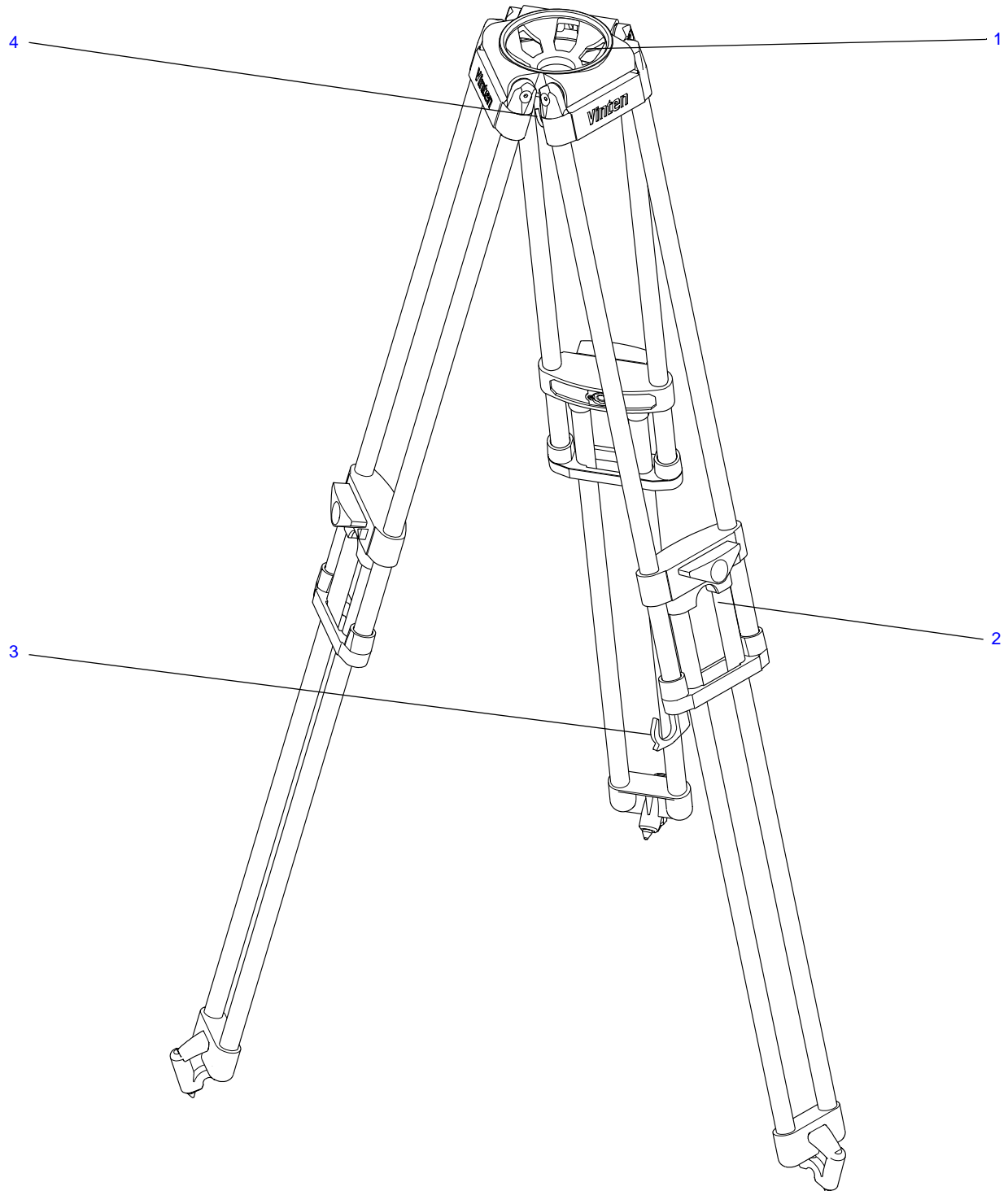




## Carrying Strap Assembly - ENG Tripod (3425-3A)

Item No.	Part No.	Item	Qty
1	3425-201	Strap anchor	2
2	3425-202	Split ring	2
3	3425-11	Strap - Vinten	1
4	M606-001	Washer, skiffy, 07-3-5	1
5	M500-083	Well-nut, M5	1

## Single-Stage LT Carbon Fibre Tripod (3439-3)

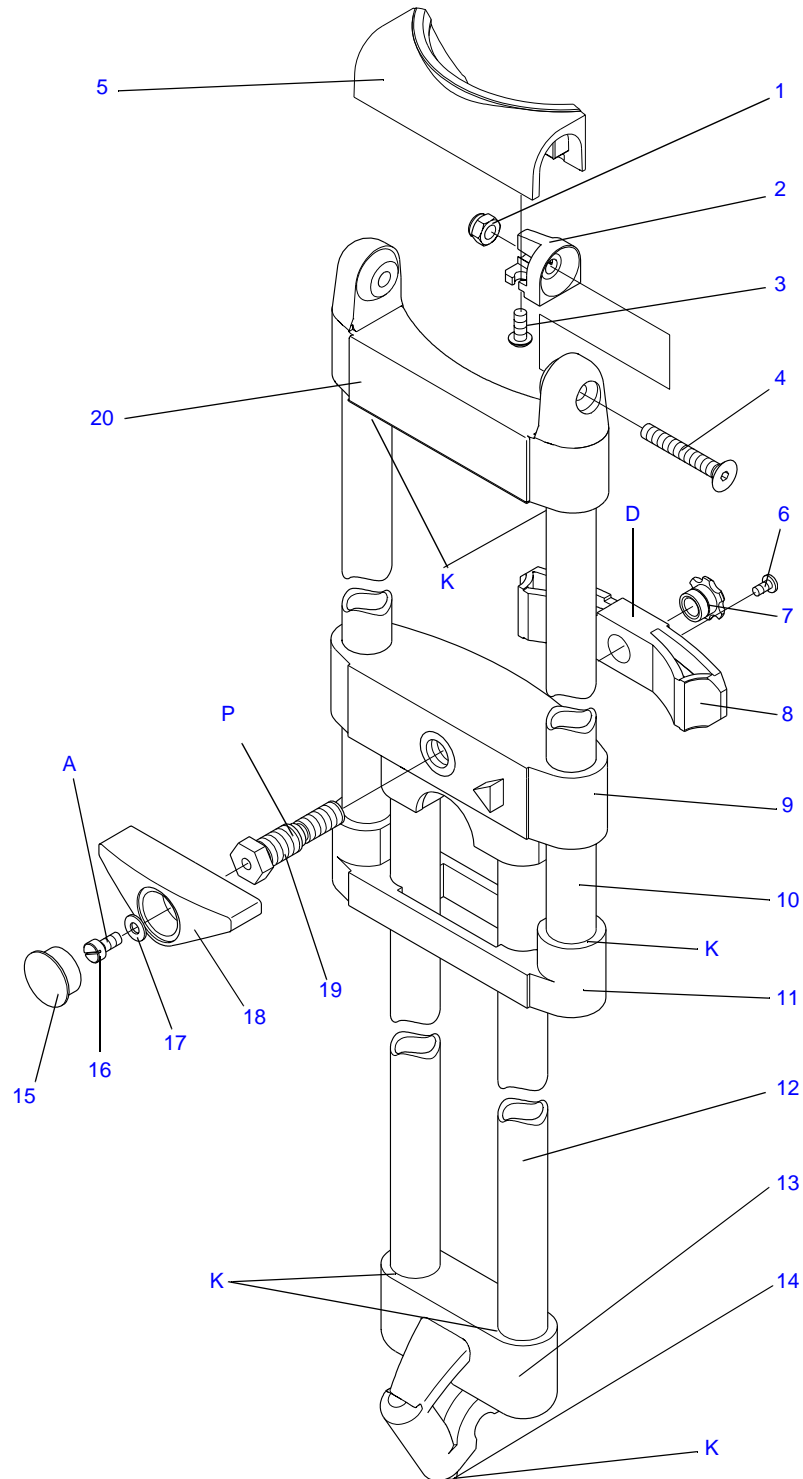




## Single-Stage LT Carbon Fibre Tripod (3439-3)

Item No.	Part No.	Item	Qty
1	3310-201	Tripod head	1
2	3439-11	Leg assembly ( <a href="#">see page 38</a> )	3
3	3310-12	Strap assembly	1
4	3310-227	Hook (ENG.)	1

## Leg Assembly - Single-Stage LT Carbon Fibre Tripod (3439-11)



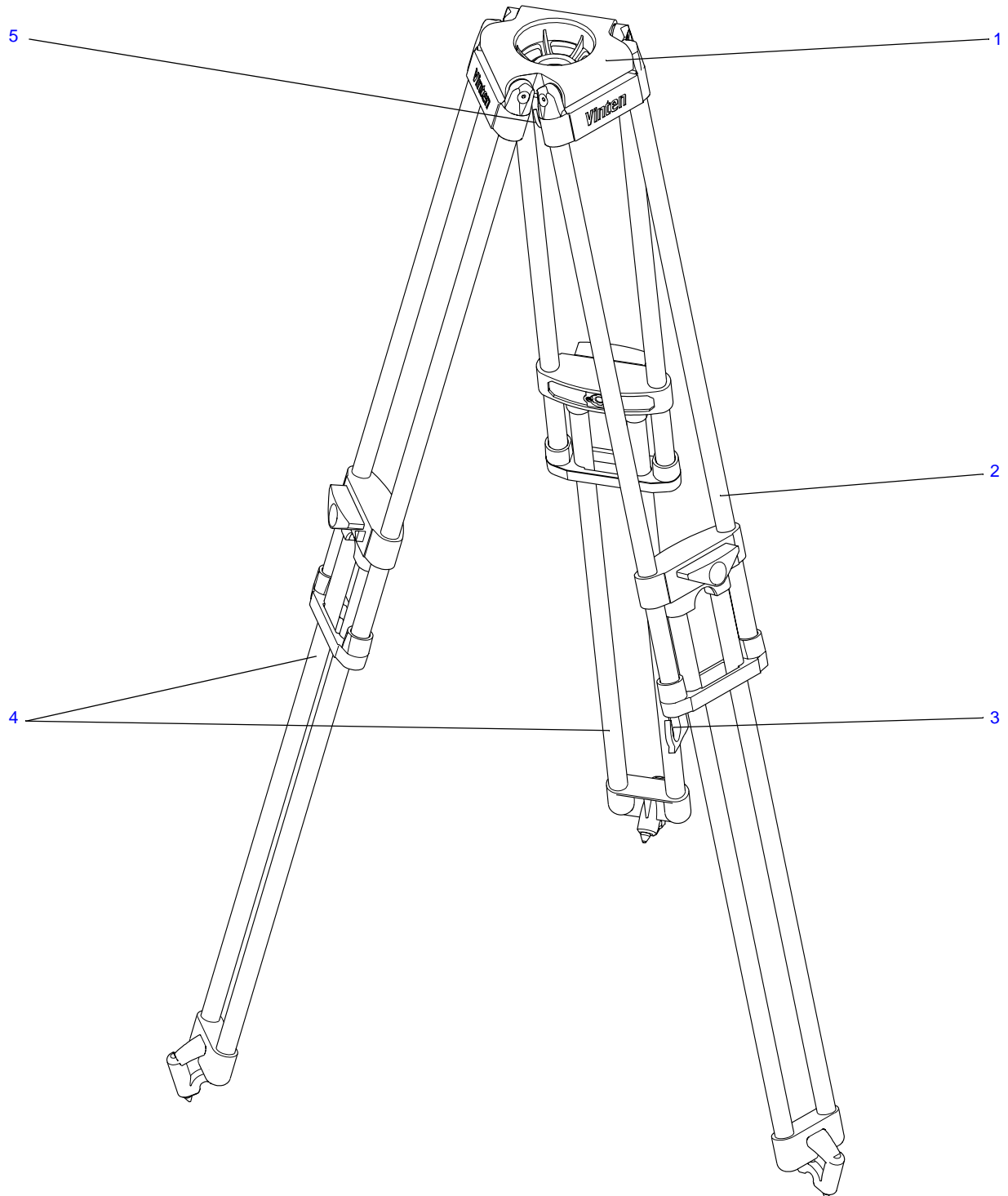
See [page 6](#) for letter key to adhesives and lubricants



## Leg Assembly - Single-Stage LT Carbon Fibre Tripod (3439-11)

Item No.	Part No.	Item	Qty Per Leg
1	M501-008	Nut, M5, nyloc, full	2
2	3310-211	Leg retainer	2
3	M005-511	Screw, button head, socket, M4 x 8 mm long	4
4	M006-914	Screw, countersunk head, socket, M5 x 35 mm long	2
5	—	Tripod head	-
	3439-11	Leg assembly, comprising:	
6	L101-026	Screw, self-tapping, pan head, pozidrive, M4 x 1/4 in. long	1
7	3392-205	Threaded insert (upper rear)	1
8	3513-13	Upper clamp assembly	1
9	3310-16	Upper clamp moulding assembly	1
10	3310-218	Foot spike	1
11	J550-068	Hole-plug, dome head, 15.9 mm hole dia. x 18.2 mm head dia.	1
12	M005-303	Screw, cheese head, pozidrive, M4 x 8 mm long	1
13	M601-006	Washer, shakeproof, internal, M4	1
14	3310-209	Knob	1
15	3392-204	Upper clamp spindle	1
16	3310-202	Leg top moulding	1
17	3517-202	Leg tube (outer)	2
18	3311-204	Lower moulding	1
19	3517-201	Leg tube (inner)	2
20	3393-201	Foot moulding	1

## Single-Stage Aluminium Tripod (75mm Bowl) (3451-3)





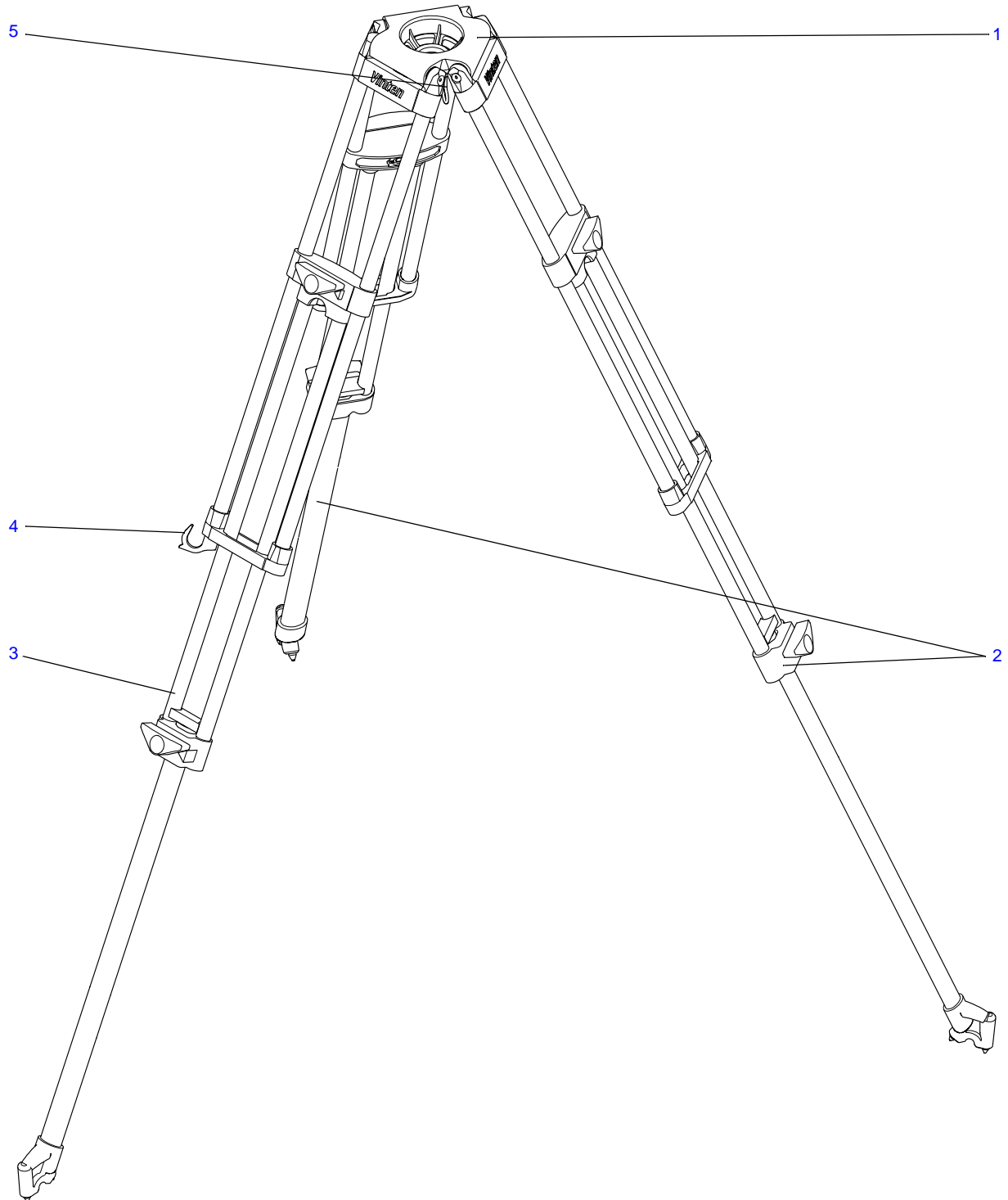


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### Single-Stage Aluminium Tripod (75mm Bowl) (3451-3)

Item No.	Part No.	Item	Qty
1	3451-203	75mm bowl (HPDC)	1
2	3393-12	Leg assembly (for strap assembly) ( <a href="#">see page 32</a> )	1
3	3310-12	Strap assembly	1
4	3393-11	Leg assembly ( <a href="#">see page 30</a> )	2
5	3310-227	Hook (ENG.)	1

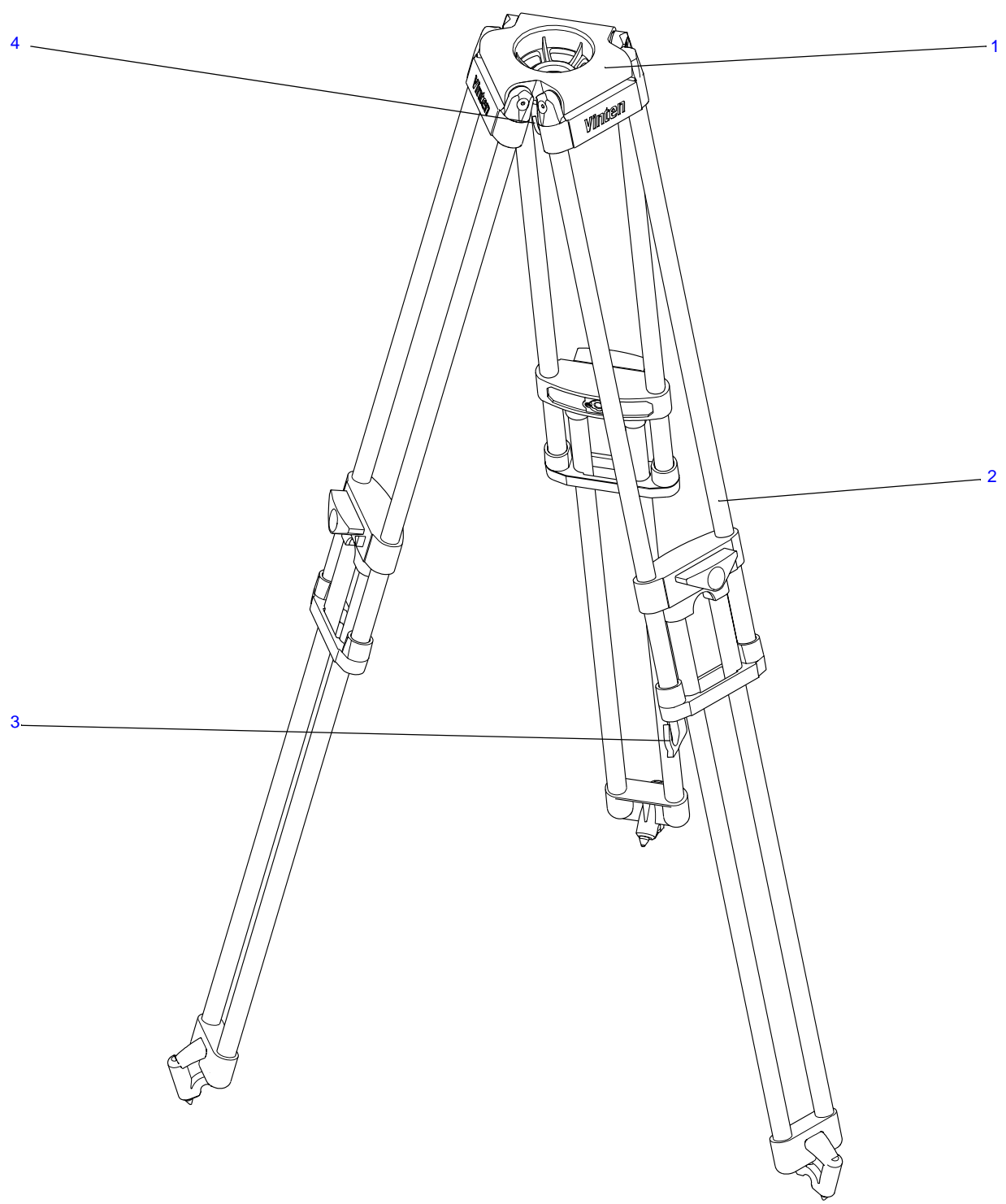
## Two-Stage Aluminium Tripod (75mm Bowl) (3452-3)



## Two-Stage Aluminium Tripod (75mm Bowl) (3452-3)

Item No.	Part No.	Item	Qty
1	3451-203	75mm bowl (HPDC)	1
2	3392-11	Leg assembly ( <a href="#">see page 24</a> )	3
3	3392-12	Leg assembly (for strap assembly) ( <a href="#">see page 26</a> )	1
4	3310-12	Strap assembly	1
5	3310-227	Hook (ENG)	1

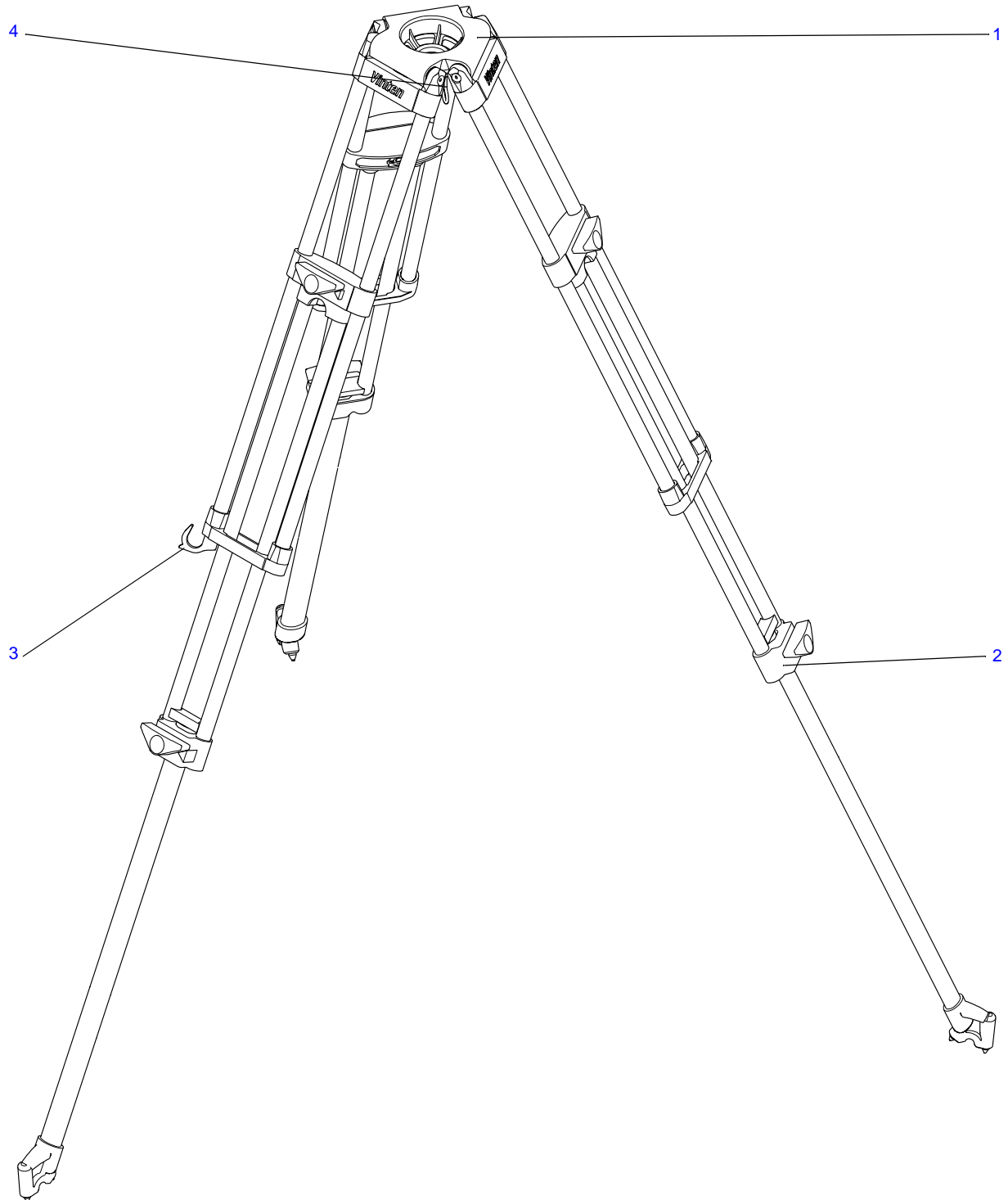
Single-Stage LT Carbon Fibre Tripod (75mm Bowl) (3453-3)



### Single-Stage LT Carbon Fibre Tripod (75mm Bowl) (3453-3)

Item No.	Part No.	Item	Qty
1	3451-203	75mm bowl (HPDC)	1
2	3439-11	Leg assembly ( <a href="#">see page 38</a> )	3
3	3310-12	Strap assembly	1
4	3310-227	Hook (ENG.)	1

## Two-Stage LT Carbon Fibre Tripod (75mm Bowl) (3454-3)





## Two-Stage LT Carbon Fibre Tripod (75mm Bowl) (3454-3)

Item No.	Part No.	Item	Qty
1	3451-203	75mm bowl (HPDC)	1
2	3360-11	Leg assembly ( <a href="#">see page 12</a> )	3
3	3310-12	Strap assembly	1
4	3310-227	Hook (ENG.)	1



## Part 2 - Repairs



## Vision 'Toggle-Clamp' Tripods - Checking and Adjusting Leg Clamps

### Introduction

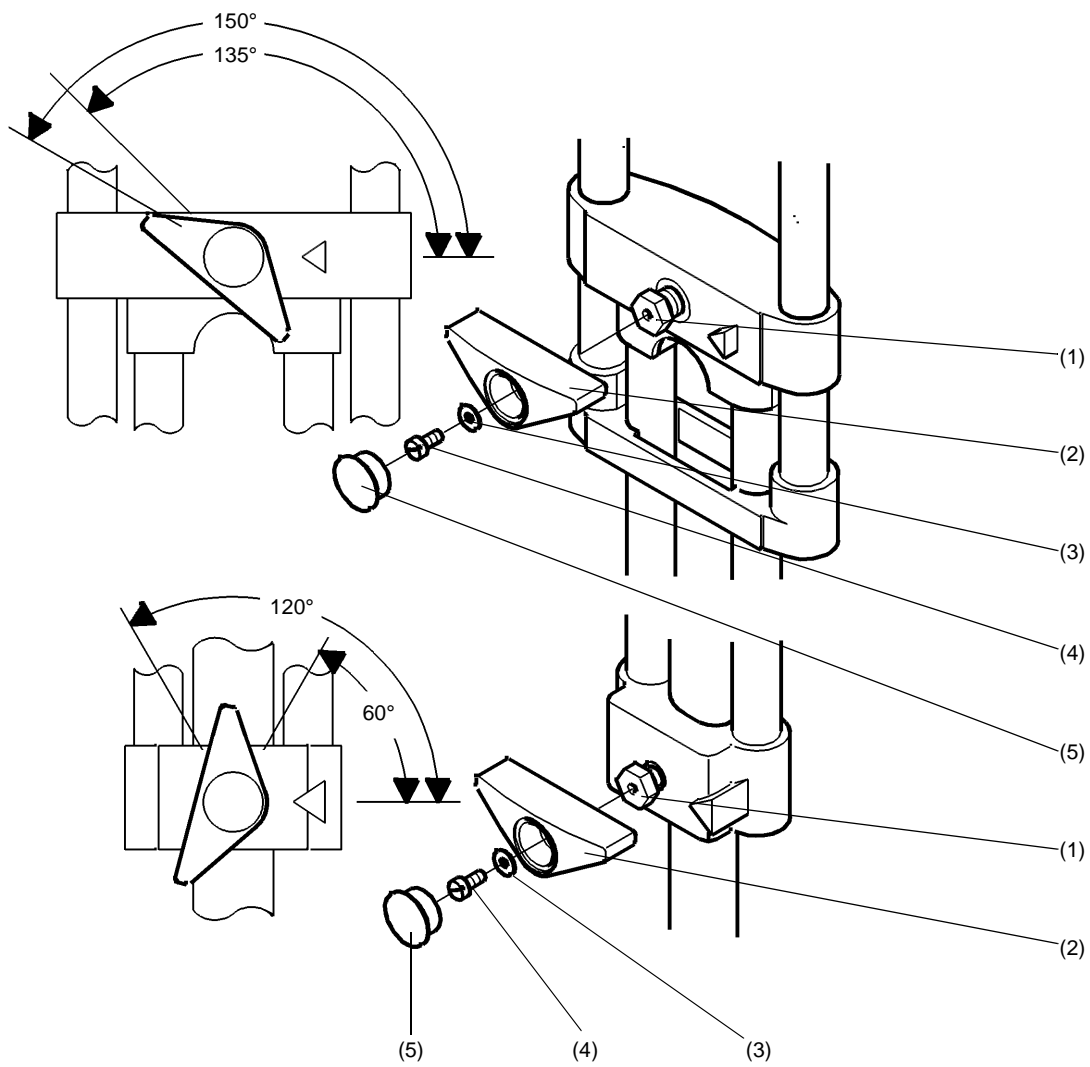
- 1 Bedding-in occurs with 'Toggle clamp' leg clamps, which may necessitate resetting the clamp knob.
- 2 These instructions are applicable to ALL Vision LF or 'Toggle-Clamp' tripods.

### Checking

- 3 Check the effectiveness of each leg clamp as follows:
  - 3.1 Remove any payload from the tripod.
  - 3.2 Turn the leg clamp knob fully counter-clockwise
  - 3.3 Turn the knob clockwise and ensure that the clamp begins to be applied as shown in the illustration and the knob can be turned until it is against its stop.

### Adjustment

- 4 If the leg clamp requires adjustment, proceed as follows:
  - 4.1 Using a suitable instrument, such as a flat-bladed screwdriver, remove the hole plug (5).
  - 4.2 Remove the retaining screw (4) and washer (3).
  - 4.3 Pull the knob (2) off the hexagon head of the shaft (1).
  - 4.4 Using a torque wrench set to 10 lbf in. on the shaft (1), fully tighten the clamp.
  - 4.5 Replace the knob on the shaft at the angle shown in the illustration, ensuring that the knob fits over the hex head.
  - 4.6 Replace washer (3) and screw (4) and tighten securely.
  - 4.7 Check the effectiveness of the leg clamp and repeat the adjustment, if necessary, until it operates satisfactorily.
  - 4.8 Replace the hole plug (5).



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## Vision Tripods - Replacement of Top Clamp Assemblies

### Introduction

- 1 A kit (3513-904SP) is available to replace broken top clamp assemblies on ALL Vision ENG tripods
- 2 The kit contains two threaded inserts. Ensure correct insert is used. The threaded insert for toggle-clamp tripods has a single-start thread and a grooved barrel (1). The threaded insert for Torque-Safe tripods has a two-start thread and a smooth barrel.

### Consumables

- 3 The following adhesive will be required:  
Loctite 221

### Dismantling

- 4 Turn the clamp (5) counter-clockwise to the 'OFF' position
- 5 Remove self-tapping screw (2). Using a pair of long-nosed pliers (or similar), unscrew and remove threaded insert (1). Remove clamp assembly (3).
- 6 Remove the hole plug (8).
- 7 Remove screw (7) and washer (6) and pull off knob (5).

### Cleaning

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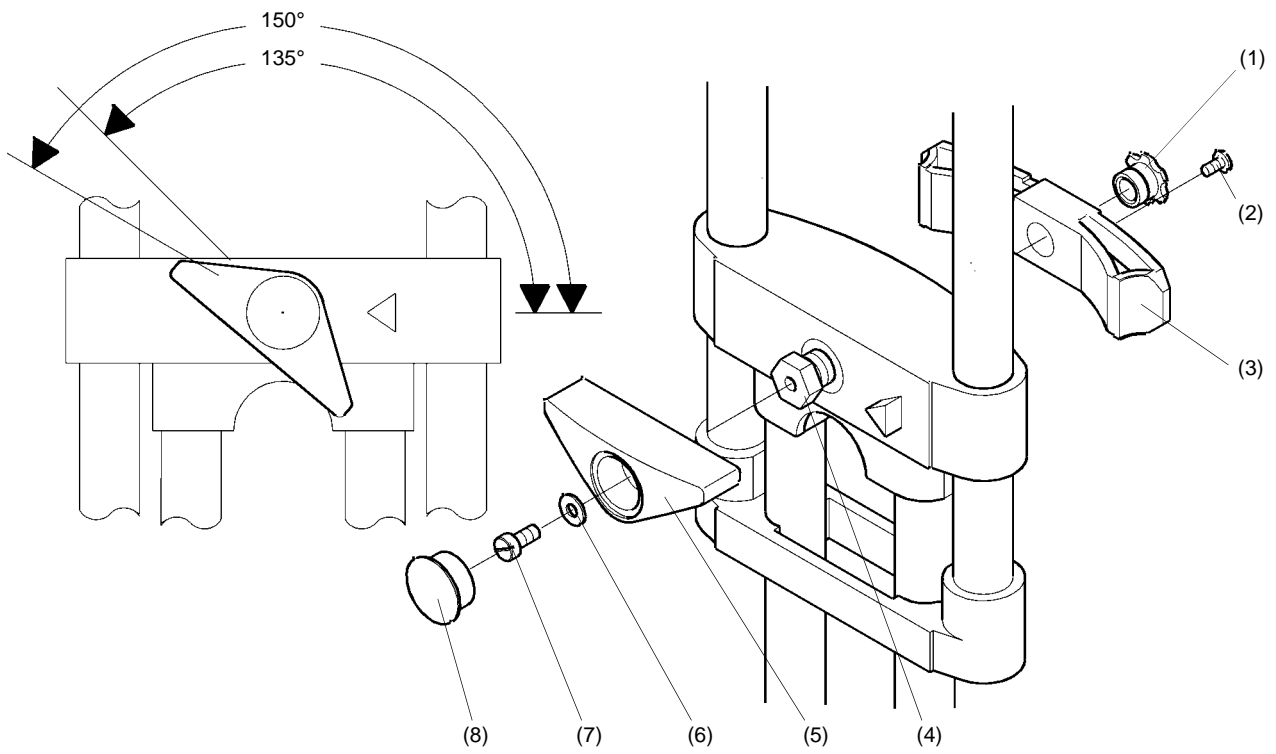
**NOTE: Use only water or detergent-based cleaners. DO NOT use solvent- or oil-based cleaners, abrasives or wire brushes to remove accumulations of dirt as these damage the protective surfaces.**

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- 8 Using water or a detergent-based cleaner and a semi-stiff brush, thoroughly clean the interior of the clamp housing, paying particular attention to the threaded portions, recesses, point of entry of leg and the area around the clamp assembly.
- 9 Using a high-pressure air gun, thoroughly dry the interior of the clamp housing.

### Assembly

- 10 Screw shaft (4) fully in.
- 11 Install the clamp assembly (3) over the shaft. Install the threaded insert (1) and tighten with a pair of long-nosed pliers (or similar) until the end of the shaft is one thread below the top face of the threaded insert. Secure the threaded insert with self-tapping screw (2).
- 12 Using a torque wrench set to 10 lbf in. on the shaft (4), fully tighten the clamp.
- 13 Install the knob (5) at an angle of between 135° and 150° (as shown) and secure with washer (6) and screw (7) using Loctite 221. Fit hole plug (8).



## Vision Two-Stage Tripods - Installing Mid-Level Spreaders

### Introduction

- 1 Mid level spreaders are available for fitting to ENG and EFP two-stage tripods. Each spreader kit comprises a spreader, three interface brackets, three foot assemblies and fixing hardware.
- 2 The interface brackets are secured to the bottom clamp moulding.

### Installing a mid-level spreader

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**NOTE:** Before installing the spreader, it is necessary to identify the type of tripod, as follows:

Early versions of the tripods have no mounting holes in lower mouldings.

Later versions have holes closed by plugs.

Current tripods have 'knock-out' holes, identified by moulded rings.

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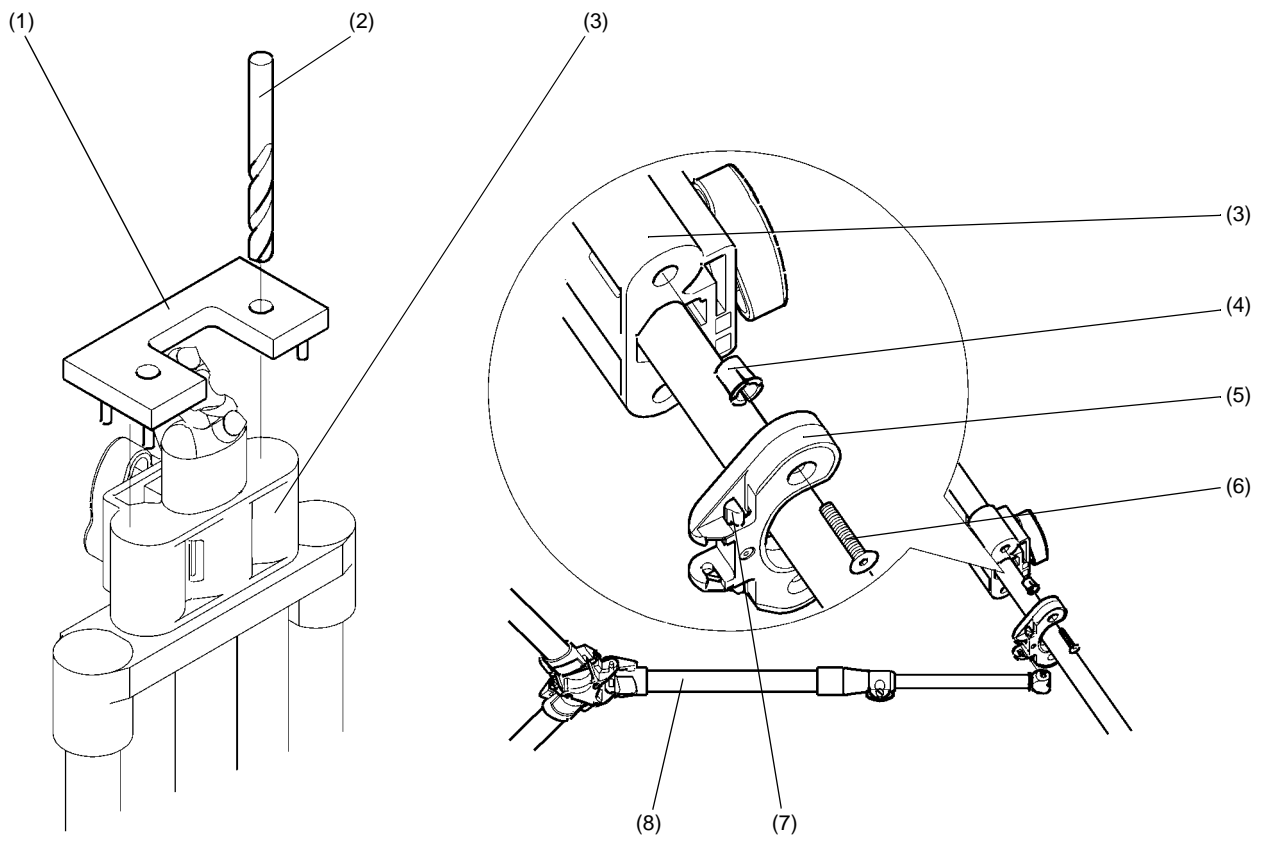
- 3 On early tripods, drill two 9.5mm (3/8in.) hole in each lower moulding as follows:

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**NOTE:** A drill jig (ENG tripods - Part No. 3378-17, EFP tripods - Part No. 3378-20) is available from Vinten Broadcast Ltd or your local distributor.

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- 3.1 Fully retract the tripod legs.
  - 3.2 Install drill jig (1) on lower moulding (3) and drill two holes using a 9.5 mm (3/8 in.) diameter drill (2).
  - 3.3 Remove drill jig.
- 4 On later tripods with plugs, remove the plugs by prising out carefully using a small thin-bladed screwdriver or similar tool.
- 5 On current tripods with 'knock-out' holes, drive in the knock-outs using a suitable tool. If possible, remove blanks from inside the mouldings to prevent subsequent rattle.
- 6 After opening the holes, install the interface brackets as follows:
  - 6.1 Push a blind captive nut (4) into each hole in the lower mouldings (3).
  - 6.2 Position brackets (5) on lower mouldings, noting orientation, and secure each with two screws (6).
  - 6.3 Install spreader (8) on tripod by pushing the universal joints on each leg into brackets until the catches hold. Ensure spreader is oriented so that when the tripod is folded, the spreader folds upwards.
  - 6.4 To remove spreader, press quick-release levers (7) outwards and free each leg in turn.



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## Vision Two-Stage Tripods - Installing Carrying Straps

### Introduction

- 1     Carrying straps are available for fitting to ENG and EFP tripods.

### Consumables

- 2     The following lubricants and adhesives will be required:

Grease, Rocol white bearing

Loctite 221

### Installing a carrying strap

- 3     On early tripods, remove the plug from the lower moulding (4) by prising out carefully using a small thin-bladed screwdriver or similar tool.
- 4     On current tripods with a 'knock-out' hole, drive in the knock-out using a suitable tool. If possible, remove the blank from inside the moulding to prevent subsequent rattle.
- 5     After opening the hole, install the strap as follows:
- 5.1   Push a blind captive nut (5) into the hole in the lower mouldings (4).
- 5.2   Install a washer (6) on a strap anchor (7) and screw into the captive nut (5).

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**NOTE:** On ENG tripods, both strap anchors are the same length. On EFP tripods, the shorter strap anchor should be fitted in the lower moulding and the longer at the leg hinge.

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- 5.3   At the leg hinge, remove screw (1) and replace with a strap anchor (2), using Loctite 221 on the thread and white Rocol grease under the countersink.
- 5.4   Clip the strap (3) to the strap anchors and adjust to length.

