

**SC100 Pole Mount**  
**Installation Instructions**

**Tools Needed**

Posidrive Head Screwdriver  
Flat Head Screwdriver  
2x 10mm Spanners  
1x 13mm Spanner  
Ø8mm Drill  
Ø6mm Drill

**Kit Contents**

**1x Tube 1.8 or 2.4M long**

2 x cover strips

**1x Top casting for**

**Pathfinder<sup>®</sup> for Universal**

**1x Pole Top Fastening Pack**

4x M6 x 20 Hex Head Bolts

4x M6Nyloc Nuts

4x M6 White nut covers

4x M6 Nylon Washers

**1x Adjustable base module**

1x Adjustable Base

Assembly

3x M8 x 60 C/S Bolts

3x M8 x 35 Hex Head Bolts

3x M8 Nyloc Nuts

3x M8 Washer

4x M6 x 16 Pan Head Bolts

4x M6 Nylon washers

3x M8 Nylon Bolt

Insulators

1x Loctite 242 Sachet

**1 x 25mm/1" Rail stand-off**

1x Rail Standoff Plate

1x 3" Tube Clamp

Assembly

2x 25mm/1"Rail Clamp

Assemblies

6x M6 x 20 Hex Head Bolts

6x M6 Nyloc Nuts

12x M6 Nut Covers

2x M6 Nylon Washers

**1 x 1200mm/3'9"Deck**

**Support strut**

1x 1200mm Adjustable

Strut

1x Deck Eye Pad

1x 3" Tube Clamp

Assembly

1x 2mm Allen Key

1x Fastening Pack

4x M6 x 35 C/S Bolt

3x M6 x 20 Hex

Head Bolts

7x M6 Nyloc Nuts

6x M6 Nut Cover

7x M6 NylonWasher

Packed and Checked.....

Identify the top and bottom of the pole. The label is at the top of the pole.

1. Orientate the top casting to face forward lining up the groove in the top with the cable channels. Attach the top casting to the tube using 4 x M6 bolts, washers and Nyloc nuts. Fit white cover caps on the heads of the bolts.

2. Attach the base and spigot part of the adjustable base to the pole using 4 x M6 posidrive and nylon washers. Apply a drop of Loctite to the screw threads before inserting the base into the pole.

3. Assemble the remaining parts of the adjustable base onto the spigot to create a ball joint at the base of the pole using 3 x M8 x 40 bolts and 3 x nylon top hat washers. Tighten bolts to lightly clamp the ball joint.

4. Stand the pole upright in its approximate final position. Attach the rail support to the rail and connect it to the pole using the 3" clamp. We recommend the use of a small G-Clamp to tighten and hold the 3" clamp in place while fitting its bolts and Nylocs. Ensure that the clamp is fully tightened up to hold the fixing without rattle.

5. Orientate the adjustable base so the open slot faces up any slope on the mounting surface. Ensure that the pole is vertical and mark around the base and indicate the position of the open slot.

**6. If you are fitting the SC117 deck flood light to your SC100 pole, an extra operation is required here, please see separate SC117 installation instructions sheet.**

7. With the rail stand-off still attached to the rail, separate it from the 3" tube clamp by removing the M6 x 20 bolt between the two.

8. Separate the two halves of the adjustable base and lower the pole. Use the bottom half as a template to mark the bolt holes for the adjustable base and make sure the open slot still faces up the slope. Drill the mounting holes with 8mm drill through the deck. Attach the base to the deck using 3 x M8 x 60 countersunk bolts, washers and Nyloc nuts.

9. It is recommended that the radome is installed onto the pole at this stage. Bolt the radar to the top casting, laying the cable in the groove of the top casting and feed it down one of the cable channels. You can bring out the cables at the front or back of the pole to suit your deck installation. If the cable has a large plug attached; slide out the cover strip, lay the cable in the channel and slide in the cover strip from the top of the tube. Fig 5. demonstrates typical cable routing.

10. Stand the pole upright and re-attach the rail stand-off to the 3" clamp on the pole.

11. Re-assemble the adjustable base by attaching its top half using 3 x M8 x 40. Apply a drop of Loctite to each thread before assembly

12. Attach the strut to the pole using the 3 inch clamp making sure that the adjustable end (identified by the inset socket headed grub screw) is at the top. Attach the deck eye pad to the bottom of the strut. Unscrew the top eye of the strut by half its thread.

13. Position the deck strut at 90 degrees to the rail strut. Angle the deck strut to between 30 and 45 degrees to the pole by adjusting the height of the 3" clamp on the pole.

14. Line up the link on the deck pad eye as in fig 4, mark drilling holes for the deck strut base and drill 4 x 6 mm holes and attach the base with 4 x M6 countersunk bolts, washers and Nyloc nuts.

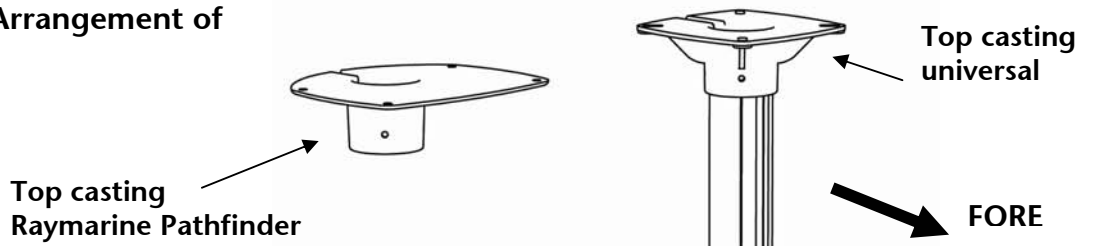
15. If using further deck struts, repeat stages 12 -14, ensuring the struts are at 90° to each other.

16. Check that the pole is vertical. Lock the strut in position using the grub screws at the top end. If you need to adjust the length of the strut, release the strut from the clamp, undo the grub screw and turn the eye. Attach the strut to the clamp and lock it as before.

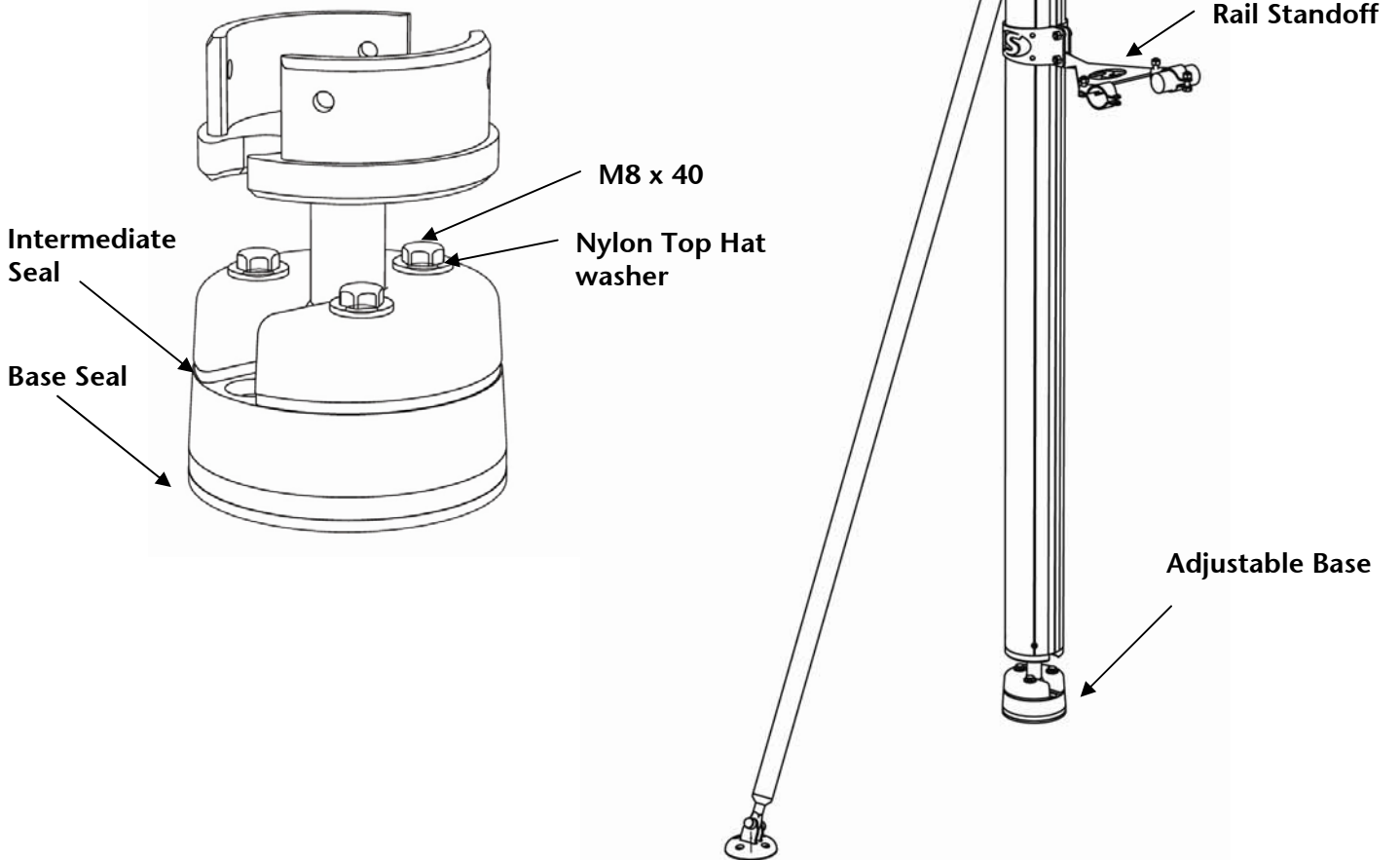
17. Firmly tighten the 3 x M8 x 40 bolts to lock the ball joint in the adjustable base. These bolts must be tight enough to eliminate any movement at the base of the pole.

**18. Installation of the SC117 deck flood light should now be completed. If applicable, go to point 3 on the SC117 instruction sheet.**

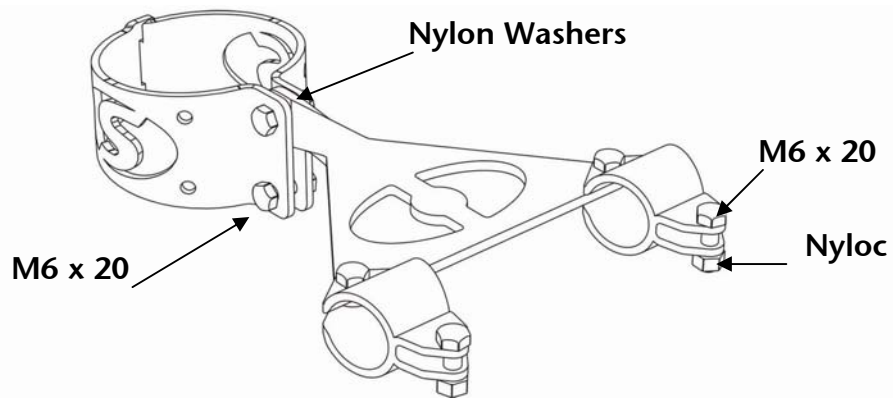
**Fig 1. General Arrangement of**



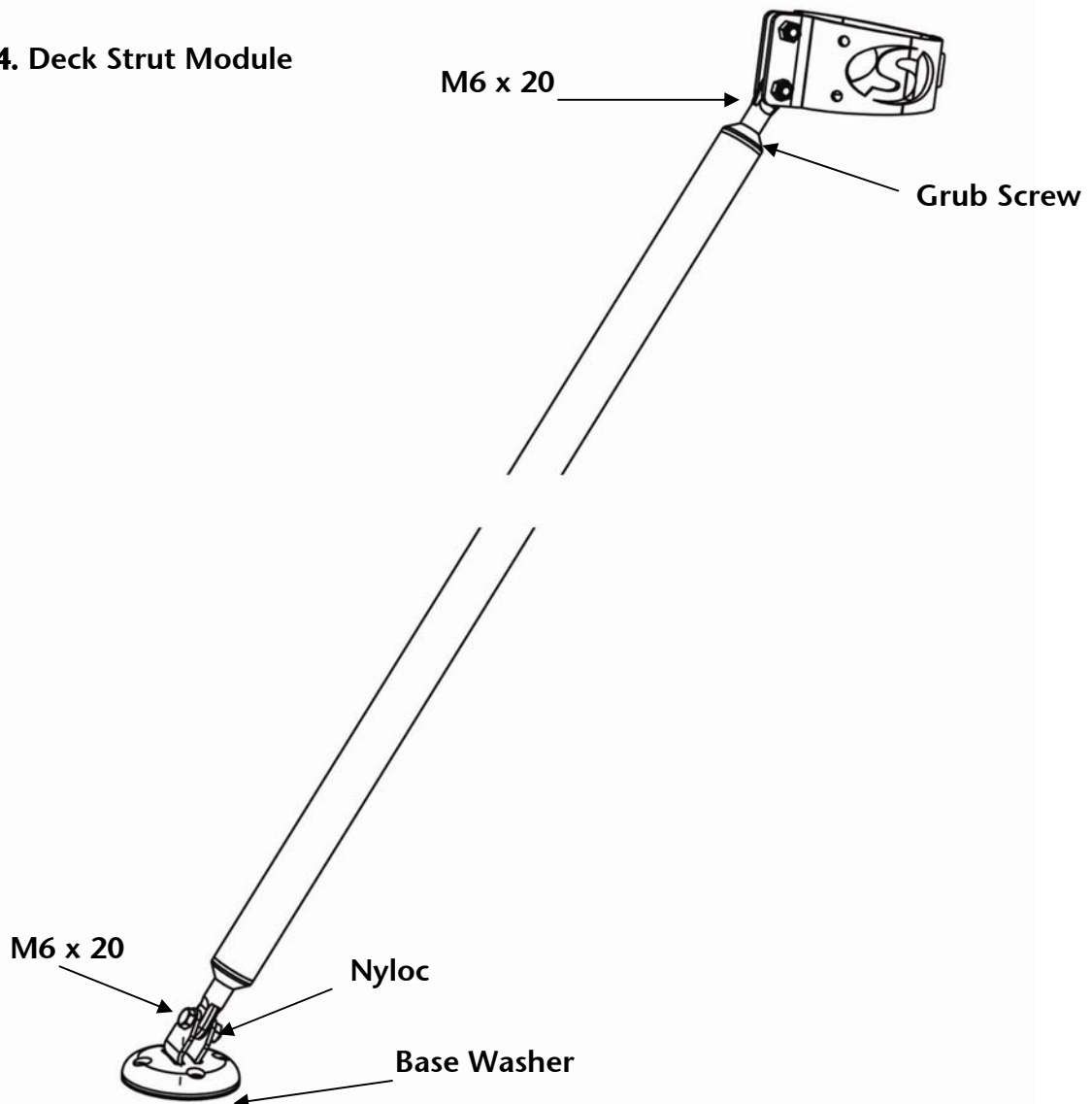
**Fig 2. Adjustable Base Module**



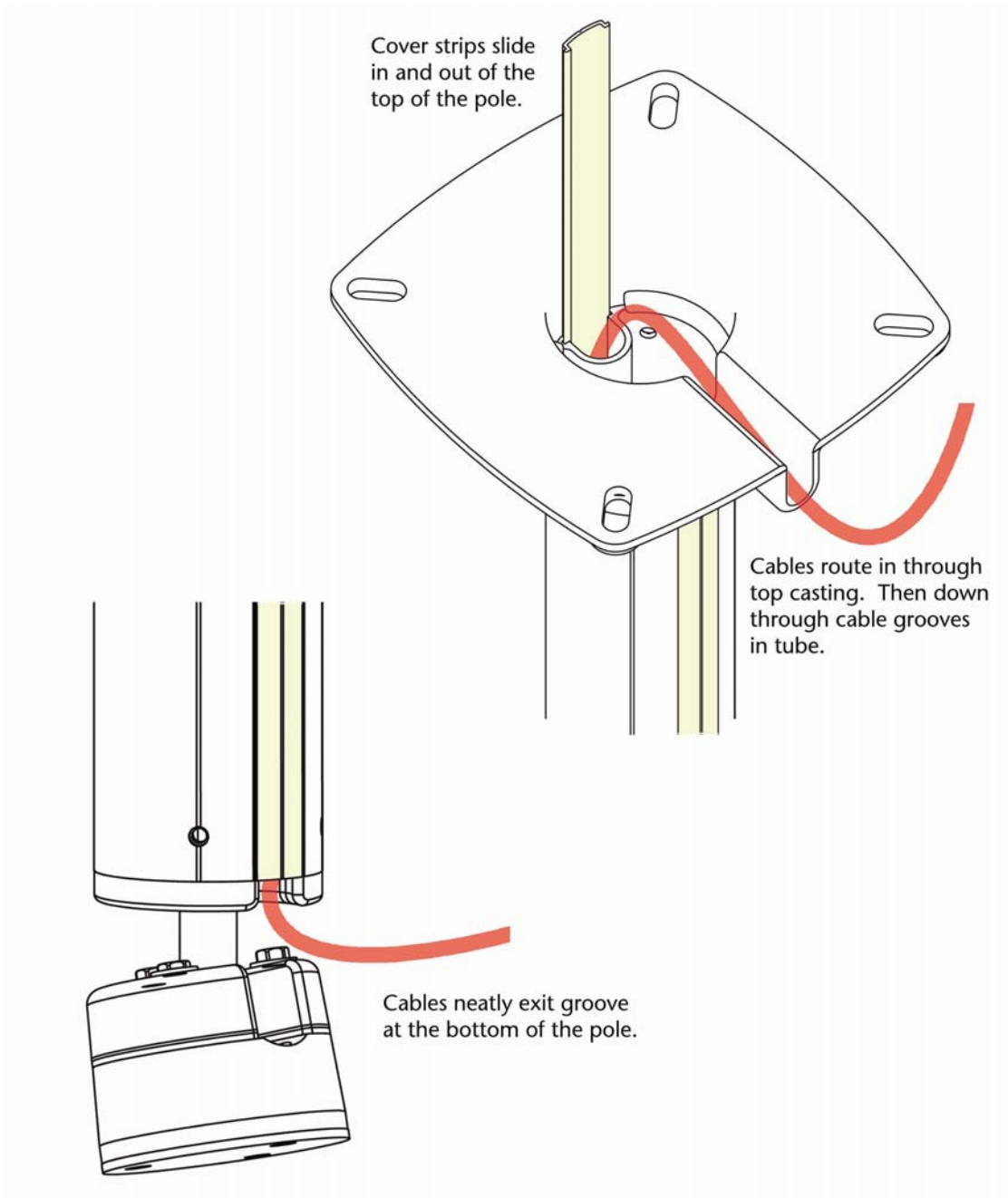
**Fig 3. Standoff Module**



**Fig 4. Deck Strut Module**



**Fig 5. Cable Routing**



**SC105-45, SC105-45R, SC106-45, SC106-45R Pole Mount**  
**Installation Instructions**

**Kit Contents**

|   |                   |
|---|-------------------|
| <b>[ ] 1x Tube 1.9m or 2.5m long</b>                          | <b>17420</b>      |
| [ ] 2 x cover strip   | 19401             |
| <b>[ ] 1x Universal Top Casting - machined for SC45/SC45R</b> | <b>17101</b>      |
| <b>[ ] 1x SC45/SC45R</b>                                      | <b>SC45/SC45R</b> |
| <b>[ ] 1x SC105/6-45/R Fastening Pack</b>                     | <b>600106</b>     |
| [ ] 4x M8 x 30mm Hex Head Bolt                                | 60856             |
| [ ] 4x M8 Nyloc Nut   | 60080             |
| [ ] 4x M8 Stainless Steel washer                              | 60085             |
| [ ] 4x M8 Nylon washer  | 64008             |
| [ ] 4x M8 White Nut Cover                                     | 60857             |
| <b>[ ] 1x Pole Top Fastening Pack</b>                         | <b>60100</b>      |
| [ ] 4x M6 x 20 Hex Head Bolt                                  | 60621             |
| [ ] 4x M6 Nyloc Nut   | 60060             |
| [ ] 4x M6 White nut cover                                     | 60068             |
| [ ] 4x M6 Nylon Washer  | 60702             |
| <b>[ ] 1x Adjustable base module</b>                          | <b>19301</b>      |
| [ ] 1x Adjustable Base Assembly                               | NA                |
| [ ] 3x M8 x 60 C/S Bolt                                       | 60860             |
| [ ] 3x M8 x 35 Hex Head Bolt                                  | 60835             |
| [ ] 3x M8 Nyloc Nut   | 60080             |
| [ ] 3x M8 Washer  | 60085             |
| [ ] 4x M6 x 16 Pan Head Posidrive Bolt                        | 60616             |
| [ ] 4x M6 Nylon washer  | 60702             |
| [ ] 3x M8 Nylon Bolt Insulator                                | 64000             |
| [ ] 1x Loctite 242 Sachet                                     | 10265             |
| <b>[ ] 2 x 1800mm/5'11" Deck Support strut</b>                | <b>19309</b>      |
| [ ] 1x 1800mm Adjustable Strut                                | 10456             |
| [ ] 1x Deck Eye Pad   | 10451             |
| [ ] 1x 3" Tube Clamp Assembly                                 | 104520            |
| [ ] 1x 2mm Allen Key  | 63002             |
| [ ] 1x Fastening Pack   | 60035             |
| [ ] 4x M6 x 35 C/S Bolt                                       | 610635            |
| [ ] 3x M6 x 20 Hex Head Bolt                                  | 60621             |
| [ ] 7x M6 Nyloc Nut   | 60060             |
| [ ] 6x M6 Nut Cover   | 60068             |
| [ ] 7x M6 Nylon Washer  | 60702             |

Packed and Checked.....

### Tools Needed

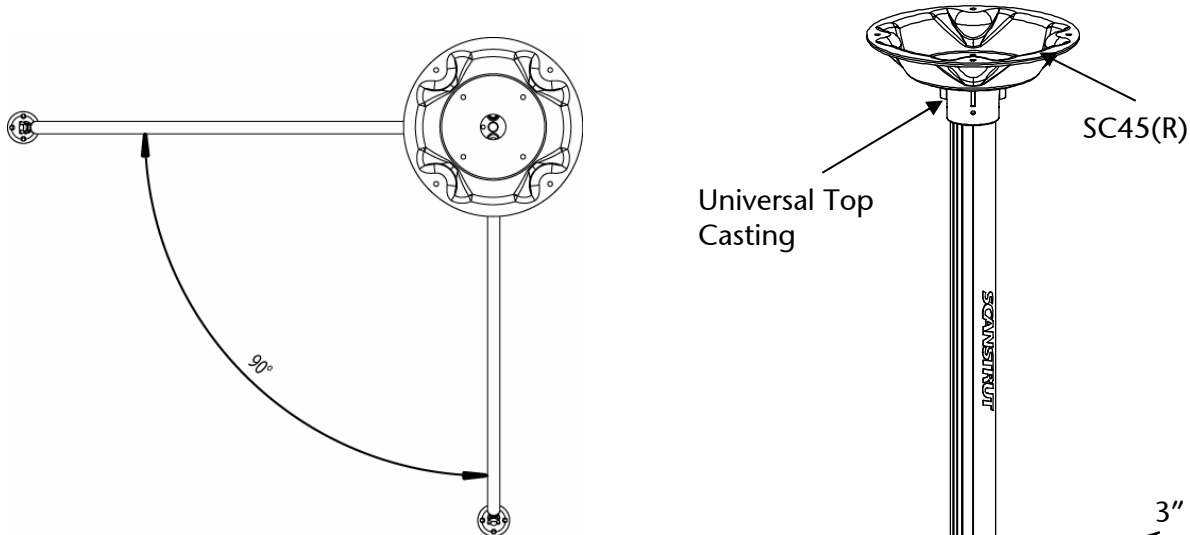
Posidrive No.3 Screwdriver  
Large Flat Head Screwdriver  
2x 10mm Spanner  
2x 13mm Spanner  
Ø8mm Drill  
Ø6mm Drill

Identify the top and bottom of the pole. The label is at the top of the pole.

- 1) Attach the base and spigot part of the adjustable base to the pole using 4 x M6 posidrive bolts and nylon washers. Apply a drop of Loctite to the screw threads before inserting the base into the pole.
- 2) Assemble the remaining parts of the adjustable base onto the spigot to create a ball joint at the base of the pole using 3 x M8 x 40 bolts and 3 x nylon top hat washers. Tighten bolts to lightly clamp the ball joint.
- 3) Orientate the adjustable base so the open slot faces up any slope on the mounting surface.
- 4) **If you are fitting the SC117 deck flood light to your SC100 pole, an extra operation is required here, please see separate SC117 installation instructions sheet.**
- 5) Attach the struts to the pole using the 3 inch clamps making sure that the adjustable ends (identified by the inset socket headed grub screw) are at the top. The struts must be at 90° to each other and at 30°-45° to the SC100 pole (see Fig.1). Attach the deck eye pads to the bottom of each strut. Unscrew the top eye of each strut by half its thread.
- 6) Once you are happy with the position of the pole and the two struts, use the deck eye pads as templates to mark the position of the Ø6mm holes and mark round the adjustable base.
- 7) Separate the two halves of the adjustable base and lower the pole. Use the bottom half as a template to mark the bolt holes for the adjustable base and make sure the open slot still faces up the slope. Drill the mounting holes with 8mm drill for the adjustable base and 6mm for the deck eye pads. Attach the base to the deck using 3 x M8 x 60 countersunk bolts, washers and Nyloc nuts.
- 8) It is recommended that the Satcom dome is installed onto the pole at this stage. If the cable has a large plug attached; slide out the cover strip, lay the cable in the channel and slide in the cover strip from the top of the tube. You will need to release the 3" Clamps to enable you to do this.
- 9) Bolt the Universal Top Casting to the top of the pole using the fasteners in the Pole Top Fastening Pack. Use the fasteners from the SC105/6-45/R Fastening Pack to fit the SC45(R) to the Universal Top Casting (See Fig.3).
- 10) Bolt the Satcom dome to the top of the SC45(R) assembly.

- 11) You can bring out the cables at the front or back of the pole to suit your deck installation. Fig 4. demonstrates typical cable routing.
- 12) Position the bottom of the SC100 pole in the adjustable base again and re-assemble by attaching its top half using 3 x M8 x 40. Apply a drop of Loctite to each thread before assembly.
- 13) Attach the deck eye pads of each strut to the deck using 4 x M6 countersunk bolts, washers and Nyloc nuts.
- 14) Check that the pole is vertical. Lock the strut in position using the grub screws at the top end of each strut. If you need to adjust the length of the strut, release the strut from the clamp, undo the grub screw and turn the eye. Attach the strut to the clamp and lock it as before.
- 15) Firmly tighten the 3 x M8 x 40 bolts to lock the ball joint in the adjustable base. These bolts must be tight enough to eliminate any movement at the base of the pole.
- 16) **Installation of the SC117 deck flood light should now be completed. If applicable, go to point 3 on the SC117 instruction sheet.**

**Fig 1. General Arrangement of Modules**



**Fig 2. Adjustable Base Module**

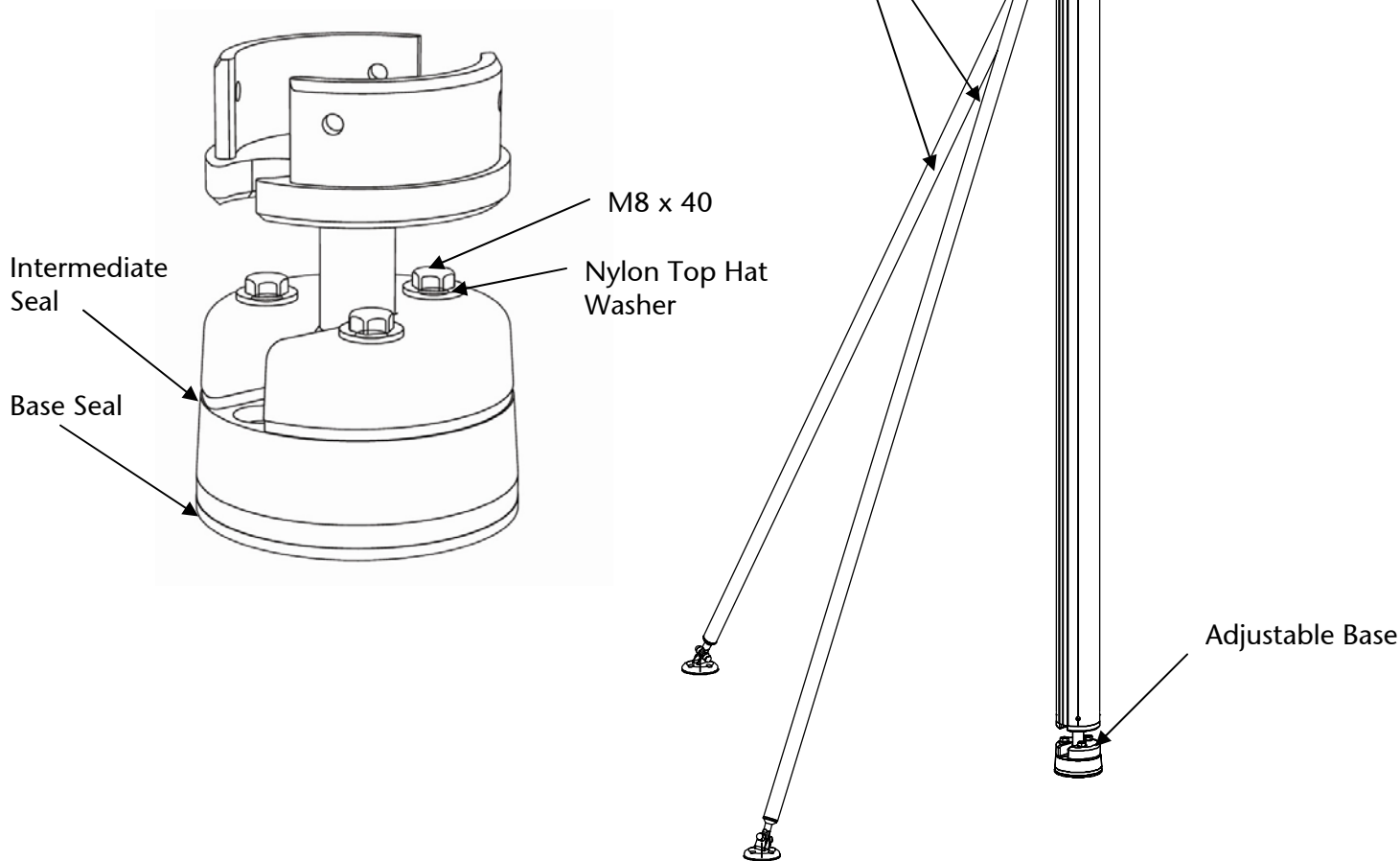


Fig 3. SC45(R) Configurations

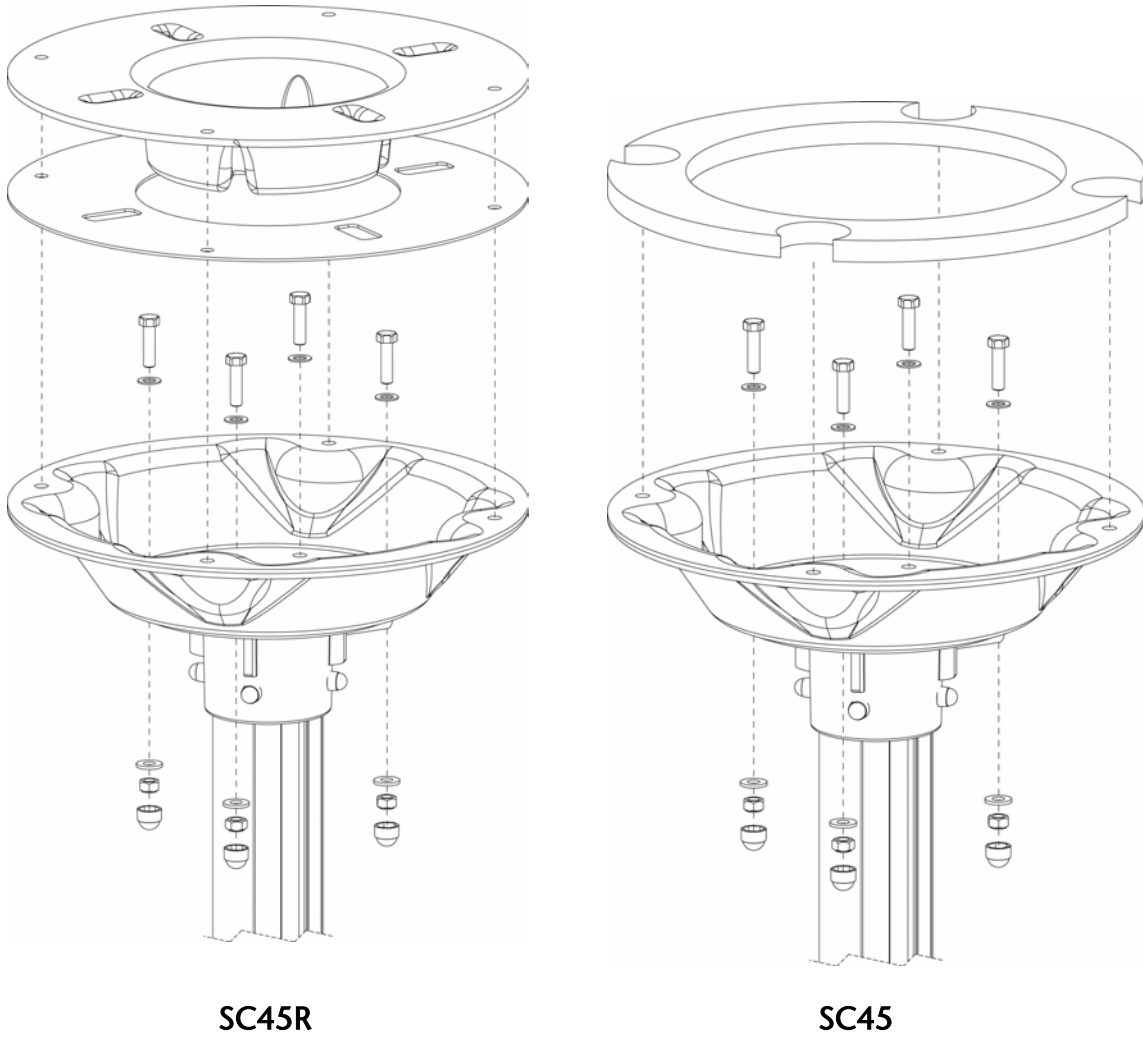


Fig 4. Cable Routing

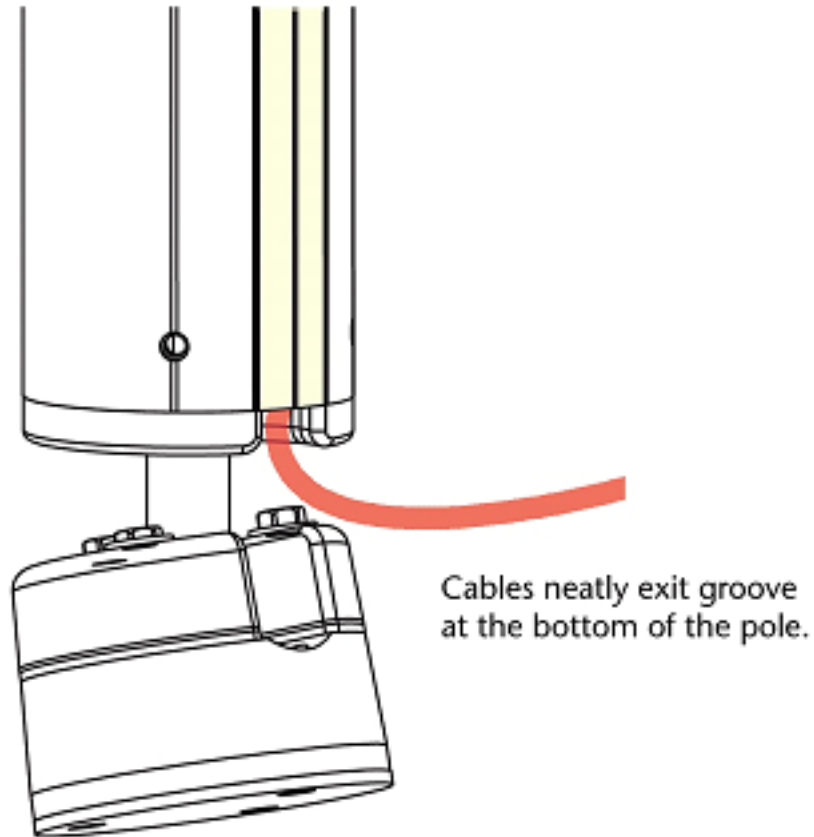


Fig 5. Deck Strut Module

