

12 m Pole Installation Manual

With Lifting Mechanism for CCTV Cameras and Luminaires

Step 1 Prepare the Head Assembly

1. Feed the main cable—the black line indicated by the red arrow in Figure 1—down through the adapter plate by 1.5 m and secure it. Route the other end out through the cable passage, as shown in Figure 2.
2. Feed the main hoisting wire rope—the white line indicated by the yellow arrow in Figure 1—down into the pole shaft from the top.
3. Uncoil the suspension wire ropes indicated by the green arrows in Figure 1. Check that they pass through the pulley channels. Do not allow the ropes to move outside the V-shaped guide circled in red in Figure 3.
4. Pull the suspension wire ropes taut to bring the adapter plate to its uppermost position.

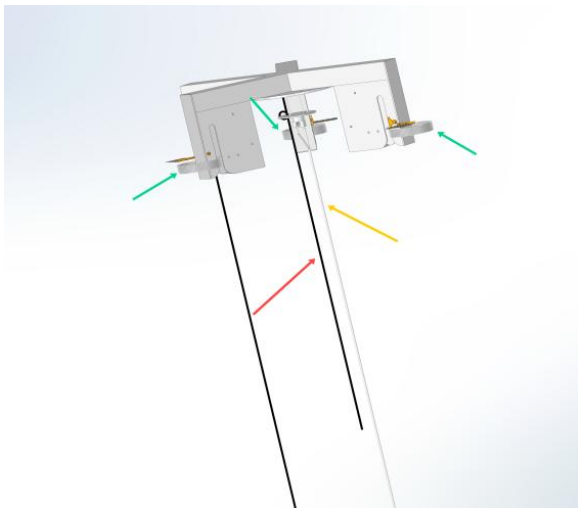


Figure 1

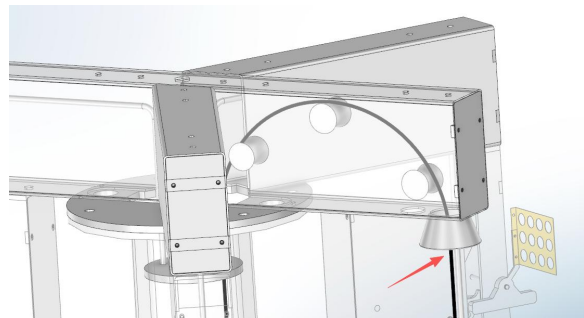


Figure 2

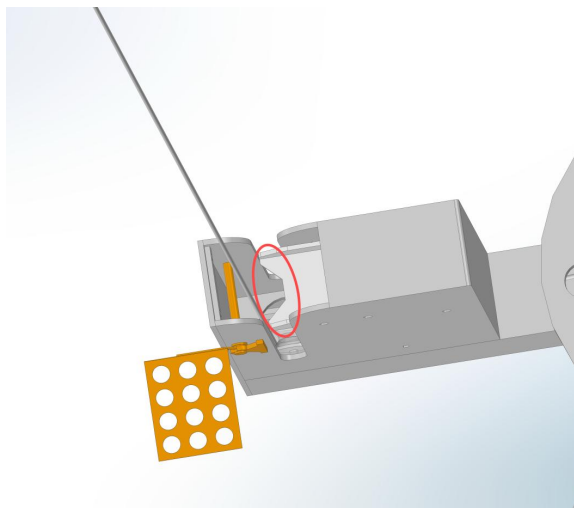


Figure 3

Step 1 Attach the Head Assembly

5. Connect the pole shaft to the top lifting assembly. At the locations indicated by the red arrows in Figure 4, secure the connection using the fastener arrangement shown in Figure 5.

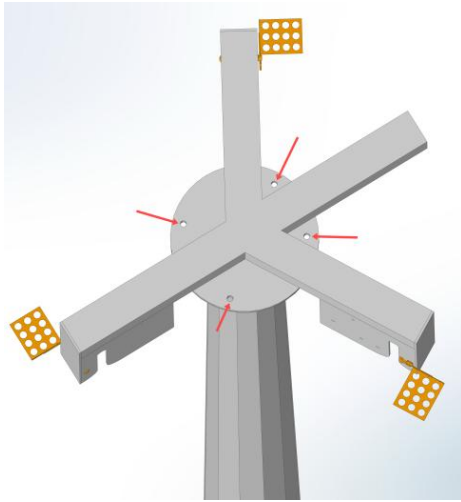


Figure 4

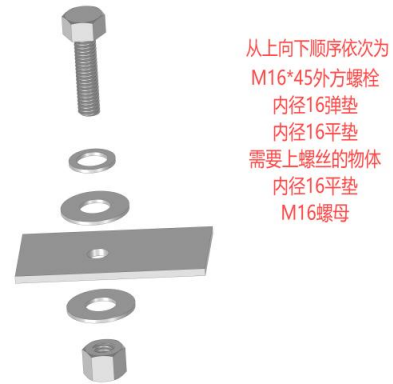


Figure 5

Figure 5 fastener sequence, from top to bottom: M16 × 45 hex-head bolt; spring washer with 16 mm internal diameter; flat washer with 16 mm internal diameter; component being fastened; flat washer with 16 mm internal diameter; M16 nut.

Step 2 Position the Lifting Carriage

1. Position the lifting carriage for the cameras or luminaires over the previously installed anchor bolt cage, as shown in Figure 6.

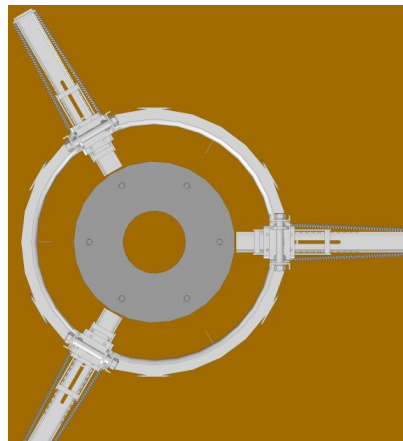


Figure 6

Step 3 Erect and Secure the Pole

1. Lift the assembled pole with a crane and position it over the anchor bolt cage, as shown in Figure 7. Orient the assembly for the required camera view or lighting direction. Fit the nuts and washers, secure the pole and adjust it to vertical. Follow the nut and washer arrangement in Figure 8.

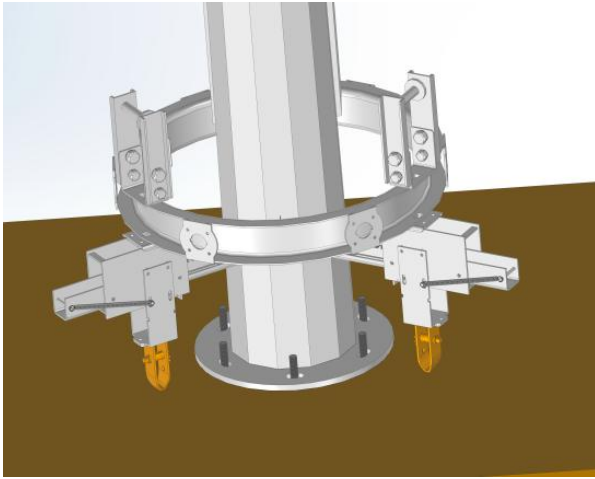


Figure 7



Figure 8

Figure 8 labels, from top to bottom: nut; nut; flat washer.

Step 4 Support the Lifting Carriage

1. Raise the carriage above the access door. Fit the carriage support plates at the three positions indicated by the red arrows in Figure 9. Lower the carriage onto the supports, as shown in Figure 10.

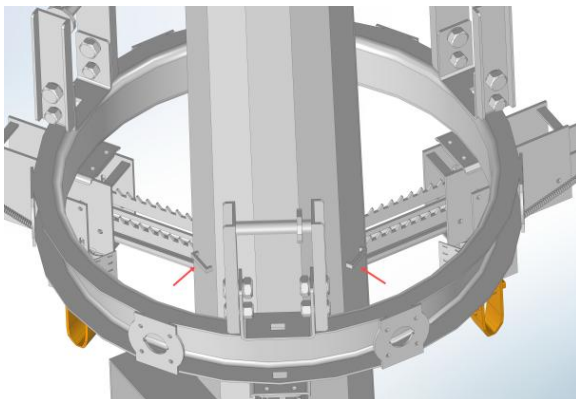


Figure 9

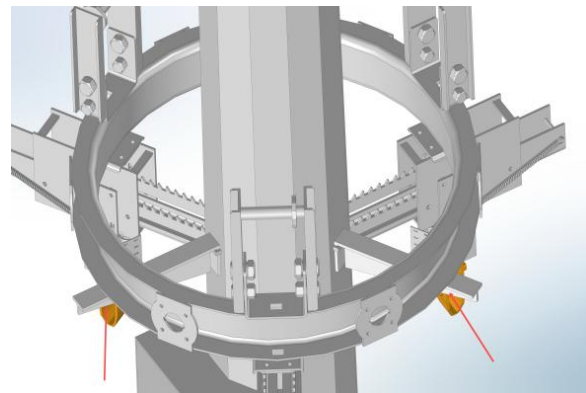


Figure 10

Step 5 Connect the Suspension Wire Ropes

1. Keep each of the three suspension wire ropes aligned with its natural hanging position. Do not cross the ropes. Pass each rope through the centre hole in the carriage hook assembly shown in Figure 11, then down through the anti-fall device shown in Figure 12. Secure it to the carriage adjuster.

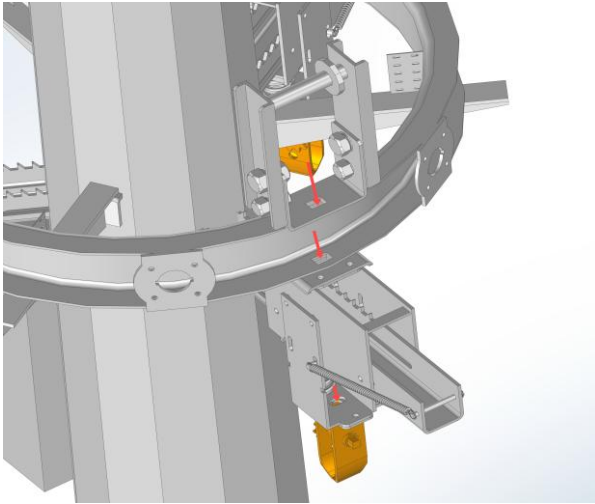


Figure 11

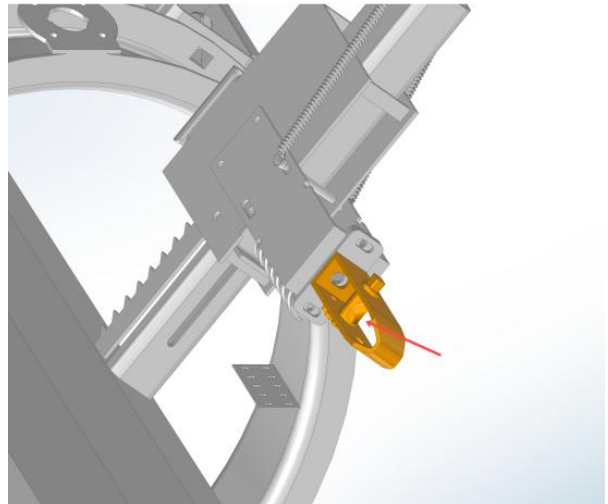


Figure 12

Step 6 Level the Carriage and Secure the Cable

1. Level the carriage using the adjusters underneath it. Use the fitted spirit level indicated by the yellow arrow in Figure 13 to check that the carriage is level. Secure the hanging main cable at the designated point on the carriage inner ring, indicated by the red arrow in Figure 13.

Important: leave slack in the main cable when securing it. Do not pull it taut, as this may damage the cable.

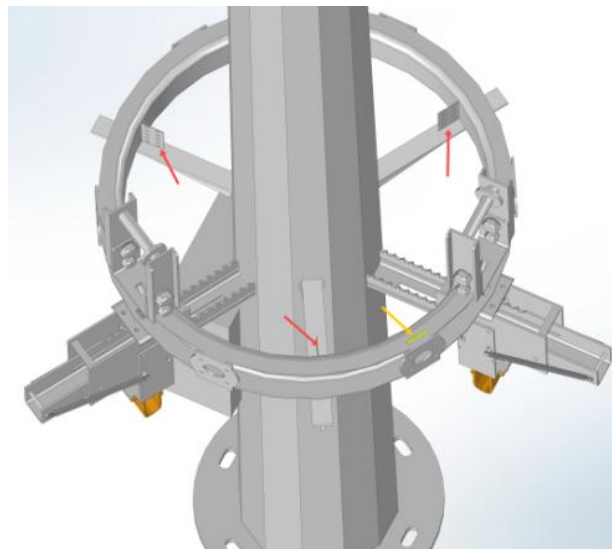


Figure 13

Step 7 Install Cameras or Luminaires

1. After completing the preceding steps, install the cameras or luminaires. Figure 14 shows the six mounting flanges; select the positions required for the equipment orientation.

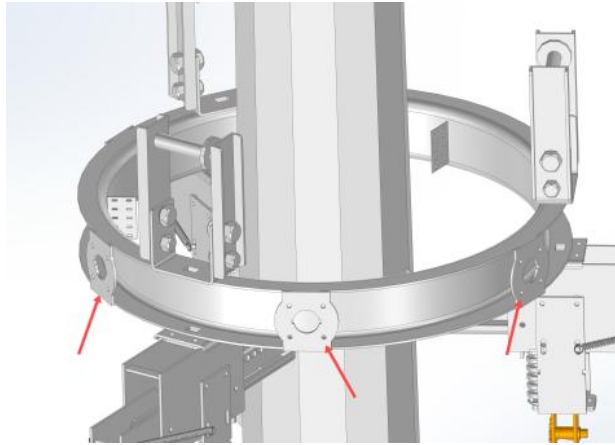


Figure 14

2. Where a counterweight is provided, install it directly opposite the camera. The counterweight is supplied with a safety tether.

Step 8 Connect the Hoisting Wire Rope to the Winch

1. Open the access door. Feed the main hoisting wire rope through the hole in the winch drum and secure it, as shown in Figure 15. For an electrically operated lifting mechanism, add lubricating oil to the gearbox.

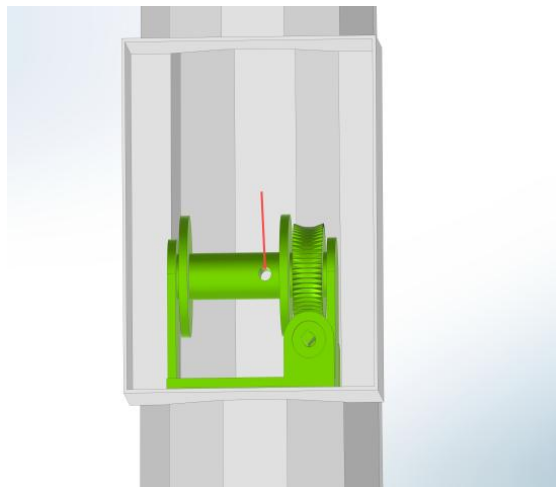


Figure 15

Step 9 Check the Area Before Operation

Before raising or lowering the carriage, check the surrounding area for hazards. Keep all personnel clear of the area directly beneath the carriage.

Step 10 Engage the Carriage Hooks

1. As the carriage approaches the top of the pole, closely observe the indicator flags shown in Figure 16. The yellow or red flags hang vertically in their free position and move to a horizontal position when the carriage reaches the hook engagement area.
2. Once the flags are horizontal, lower the carriage slightly to seat it securely on the hooks. Hook engagement is complete when the carriage is supported by the hooks and the main hoisting wire rope is slack.

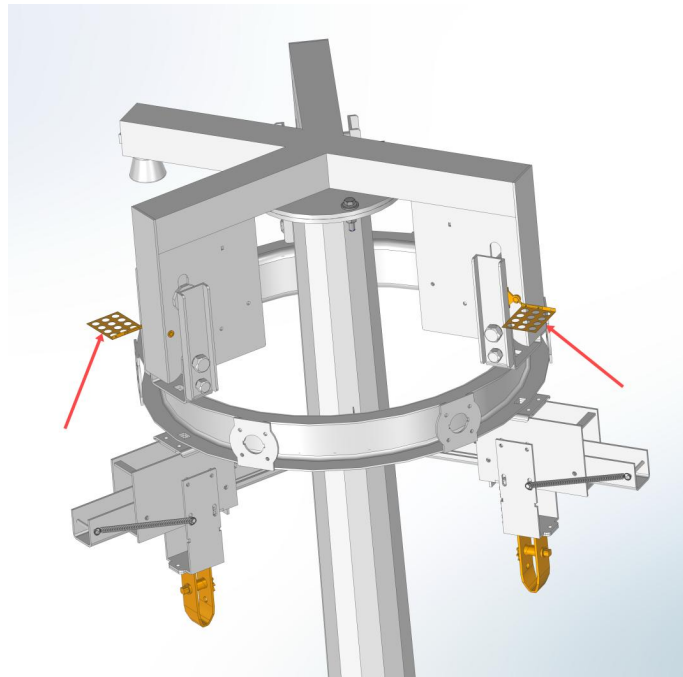


Figure 16

Release the Hooks and Lower the Carriage

1. Raise the carriage until the indicator flags return to their free-hanging vertical position. Then lower the carriage continuously to the carriage support plates to complete the release and lowering sequence.