

# Orion Cooling Fan

#7816

The Orion cooling fan is designed to work with 8", 10" and 12" Orion reflector telescopes. The cooling fan significantly reduces the cooling time of the large mirror, which results in crisp views in a shorter amount of time. It runs safely, silently, and with no vibration imparted to the telescope. These instructions will tell you how to install and use the cooling fan. Please read them thoroughly before installing the fan.

## Parts List

- 1 Fan
- 1 Fan cover
- 1 Battery pack
- 4 Screws
- 4 Washers

## Assembly

1. Place the fan on the rear of the mirror cell of the telescope and line up the holes in the fan with the threaded holes in the mirror cell. Make certain the label on the fan is facing the primary mirror.
2. Place the fan cover over the fan so the holes in its corners line up with the holes in the fan and mirror cell (**Figure 1**). The fan cover should be oriented so that its corners seat flush onto the fan.
3. Thread a screw, with a washer attached, through the fan cover and fan and into the mirror cell (**Figure 2**). Firmly tighten the screw, but be careful not to overtighten and strip the threads. Repeat this for the other three screws (and washers).



**Figure 1.** Line-up the holes in the fan and fan cover with the holes in the rear of the mirror cell.

4. Insert eight D-cell batteries (not included) into the battery pack. Orient the batteries as shown on the white plastic battery holder.
5. Plug the cord from the battery pack into the fan. The fan should begin rotating. If it doesn't, check the connections and orientation of the batteries and try again. To turn the fan off, unplug the cord from the fan.

## Using the Cooling Fan

The cooling fan should be turned on as soon as the telescope is brought outdoors before observing. It should run for approximately 15-30 minutes to properly cool down the telescope. During observing, the fan should be turned off. This is because even though it runs free from vibration, the air currents it generates in the optical tube will degrade image quality. Once the mirror has cooled to the outdoor ambient temperature, the fan will not be needed again until your next observing session.



**Figure 2.** Attaching the fan to the mirror cell.

## One-Year Limited Warranty

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