



Product Installation Instructions

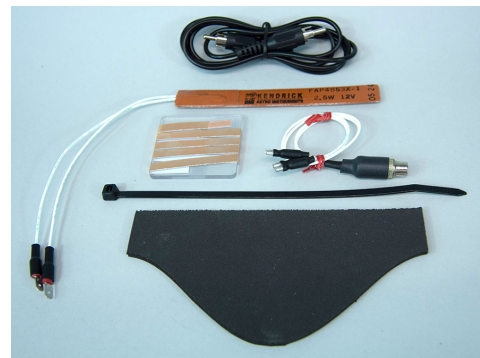
2028-NXT Secondary Mirror Heater Kit

This heater is designed to work with Newtonian/Dobsonian secondary mirrors that are attached to a “stalk”. The heater warms the stalk or mirror housing and that heat is then conducted to the mirror.

There are now so many models and “eras” of these telescopes that we cannot show an exact image of every model, yet the same principals apply, regardless of your specific configuration.

Package Contents:

- Heater with “quick” connectors.
- Spider vane heater extension cable with “quick” connectors and RCA Plug.
- Copper tape to bridge spider vane (optional usage).
- RCA male to RCA male extension cable.
- Neoprene Insulation.
- Template for resizing neoprene insulator material.
- "Zip Tie" to secure heater and Neoprene insulator to mirror stalk or housing.



Supplies Needed

- Scissors
- ++Tape
- Fasteners – read the installation guide to decide how you would like to secure the components. Options include tape, zip-ties, elastic bands. Our recommendation is black fabric tape.

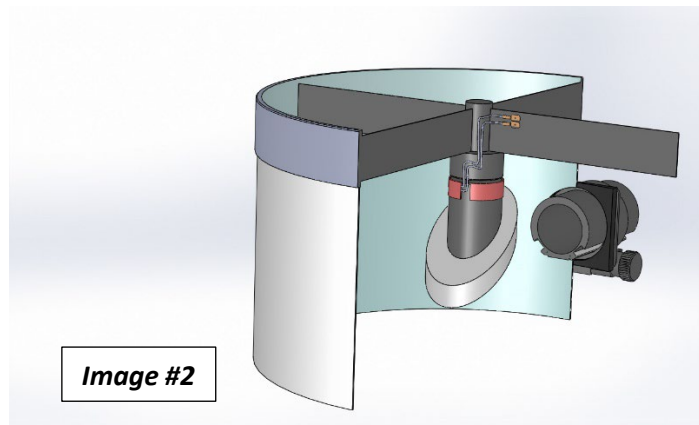
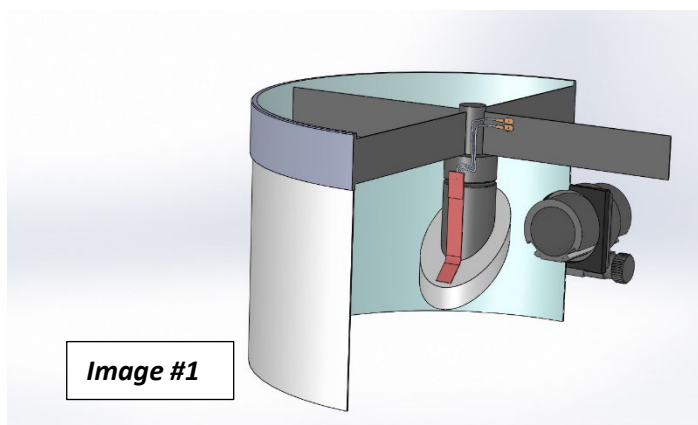
Warnings:

- 1) Heaters CANNOT be trimmed or creased. Doing so will sever the electrical path and the heater will fail.
- 2) The heater must be connected to a proper Dew Controller powered by a proper 12Vdc power source.

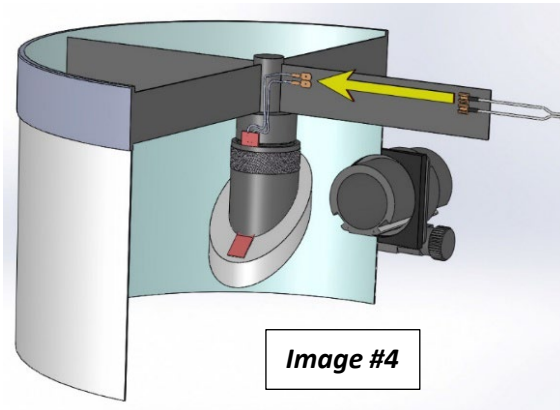
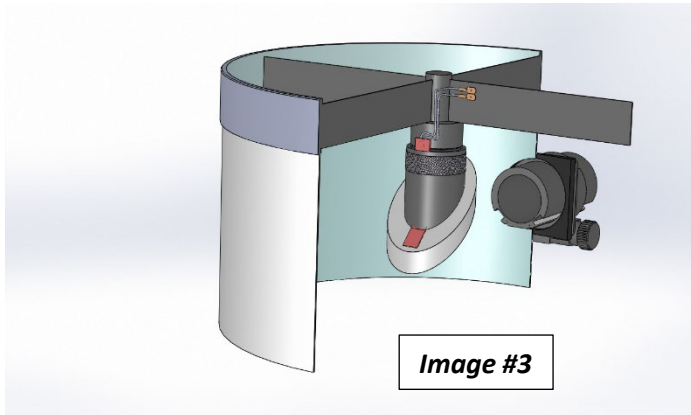
Instructions:

The objective is to get the heater as close as possible to the mirror. The heater can be mounted either horizontally (wrap-around) or vertically. Where possible, the vertical orientation will allow a portion of the heater to be in direct connect with the mirror and will require less heat to be effective. The height/length of your “stalk” will determine which orientation is best for your situation.

1. Using the paper template included with these instructions, cut-out the Neoprene Insulator material. We recommend cutting out a size you believe is the correct size and doing a test fit the paper pattern. If it fits, use that size to cut the Neoprene.
2. Mount the heater. **See Image #1 and #2 below.** Heaters can be mounted vertically OR can “wrap-around” the stalk. The heater is flexible and can be bent gently, but do NOT trim, fold, or crease or the heating element will be damaged.



3. Use a small piece of tape (any kind will do) to secure the heater in place while you are working on the next step.
4. Use small pieces of tape to temporarily route the wire leads to where you would like them to transit the spider vanes. Later you will be securing the wires permanently.
5. **††**The next step is to add the Neoprene Insulator. Use the template on the next page as a trimming guide. Cut out the shapes and test for fit on paper before committing to cutting the Neoprene material. There are several choices of how to affix the Neoprene Insulator. Zip-ties, elastic band, tape. **See Image #3 below.**



6. Now connect the wires. **See image #4 above.**
 - Polarity does not matter for heaters.
 - Simply push the connectors together and cover the connectors with a non-conductive tape**††**.
 - The extension cable needs to transit the spider vane. It is your choice where to place the wires. Either the side surface OR, with a little extra care, you can also place them along the leading edge of the spider vane. **††**Black fabric tape is a good choice to adhere the wires in place.

††We recommend black fabric electrical tape. It is often referred to as “automotive wiring harness cloth tape”. It adheres well, has thermal insulation properties, and has a dull non-reflective surface. ***It is an easy find on-line, but may be hard to find at a retail store.***



Printer must be set to FULL SIZE (do NOT scale / shrink to fit)

Ideal for 2.5"/65mm Stalk

Ideal for 2"/50mm Stalk.

Ideal for 1"/25mm Stalk

Ideal for 1.5"/38mm Stalk

rigid, non-heated area
approx. 1 1/8" (28mm)

208-NXT-1 Non Flexible Area

0.5" X 3.0" (12.7mm X 76mm)

208-NXT-2 Non Flexible Area

0.5" X 5.0" (12.7mm X 102mm)

208-NXT-3 Non Flexible Area

0.5" X 7.0" (12.7mm X 178mm)