

Using the Mirror Tube

Holding the borescope in one hand and the Hawkeye mirror tube in the other, slide the borescope gently into the mirror tube until fully seated. While looking through the scope, use the knurled knob to rotate the direction-of-view 360°. The groove in the knurled knob indicates the direction-of-view.



Borescope Cleaning

Use canned air to blow dust and grit off the objective lens and eyecup window surfaces.



Lightly dampen a cotton swab with Hawkeye lens cleaner, isopropyl alcohol or acetone. Hawkeye lens cleaner works well on fingerprints and dust... use acetone on oil or grease. Gently clean the lens window with the fewest strokes necessary. Lightly wipe with a dry swab to eliminate smearing.



Mirror Tube Cleaning

Turn the light on and pull the scope out of the mirror tube about one inch. Dust, dirt and grease on the mirror surface will be highlighted.



Use canned air to blow dust and grit off the mirror surface, then recheck the mirror.



If the mirror is still soiled, lightly dampen a cotton swab with Hawkeye lens cleaner, isopropyl alcohol, or acetone. Hawkeye lens cleaner works well on fingerprints and dust... use acetone or isopropyl alcohol on oil or grease. Gently clean the mirror with the fewest strokes necessary, taking special care not to drag debris across the mirror surface. Lightly wipe with a dry swab to eliminate smearing.



Connection to Video

Any Hawkeye borescope can be connected to an optional video camera, allowing you to view images on laptop and desktop computers, and video monitors. Still photos, and video footage, can also be documented, stored, and e-mailed. Call your Gradient Lens sales representative for details at 800-536-0790.



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PRECISION BORESCOPIES

User Guide

HAWKEYE® PRO RIGID Precision Borescope



Gradient Lens Corporation® gradientlens.com



Hawkeye® Pro Precision Borescopes

Hawkeye Pro Precision Borescopes are among the finest optical instruments in the world. Proudly made in the USA, Hawkeyes are constructed using the highest quality materials, including our patented endoGRINs e2 relay lenses. The end result is the sharp, bright, clear images Hawkeye Pro's deliver!



Hawkeye® SuperNOVA™ LED Light

The new Hawkeye SuperNOVA LED delivers more light, longer run time, LED longevity, and more convenient intensity control. It is 90% brighter, and runs twice as long as the old Hawkeye SuperNOVA, all in a 25% smaller package. Intensity control is now more convenient and versatile.



Hawkeye Pro Kit

SuperNOVA™ LED Charging

The SuperNOVA™ LED must be fully charged before first use. The charging cradle has contacts that mate with the contacts on the SuperNOVA™ LED.

Plug the charger into a power outlet and slide the SuperNOVA™ LED into the charger until the contacts engage.

The charger indicator light will glow continuously while charging, and blink when the unit is fully charged. A full charge on a completely discharged light takes about 3 hours. A fully charged unit will run continuously for approximately 2 hours.

Charging Cradle Contacts



Setup

Thread the SuperNOVA™ LED onto the borescope's light post, until it contacts the body of the borescope.

DO NOT OVER-TIGHTEN!



Operation

Turn the SuperNOVA™ LED on by pressing the push-button switch in the tailcap.

- Lightly press the push-button for momentary operation.
- Fully press the button until it clicks to turn the light on at full intensity.



Operation (cont'd)

- Fully press and hold the button to cycle through high, medium and low intensity levels. Release the button at the desired level.
- Quickly double-click the button to activate strobe mode.
- Click the button once from any operating mode to turn the light off.



CAUTION: When operated for a long time at the high intensity setting, a non-handheld SuperNOVA™ LED may feel startlingly warm to the touch. This is normal for an LED light of similar size and performance, and NOT a burn hazard. When using the light for extended periods, use the lowest intensity setting that will give a sufficient amount of light for the task.

Inserting the Borescope:

Without bending the borescope tube, carefully insert it into the object to be inspected. Do not strike the tip of the borescope against anything as this may damage the objective lens.



Focusing:

Turn the borescope's focusing ring to create the sharpest image.

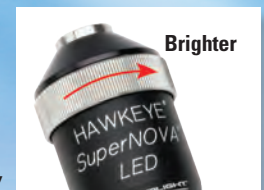
When finished viewing, slowly withdraw the borescope, being careful again to not bend the tube. Remember to turn the light source off.



Light Intensity:

Light intensity can be varied in two ways:

- Press and hold the tailcap button to cycle through high, medium and low intensity levels.
- Turn the knurled ring to adjust the internal, mechanical shutter.



CAUTION: The knurled ring turns through a total of about 20° rotation. Don't try to force it further.