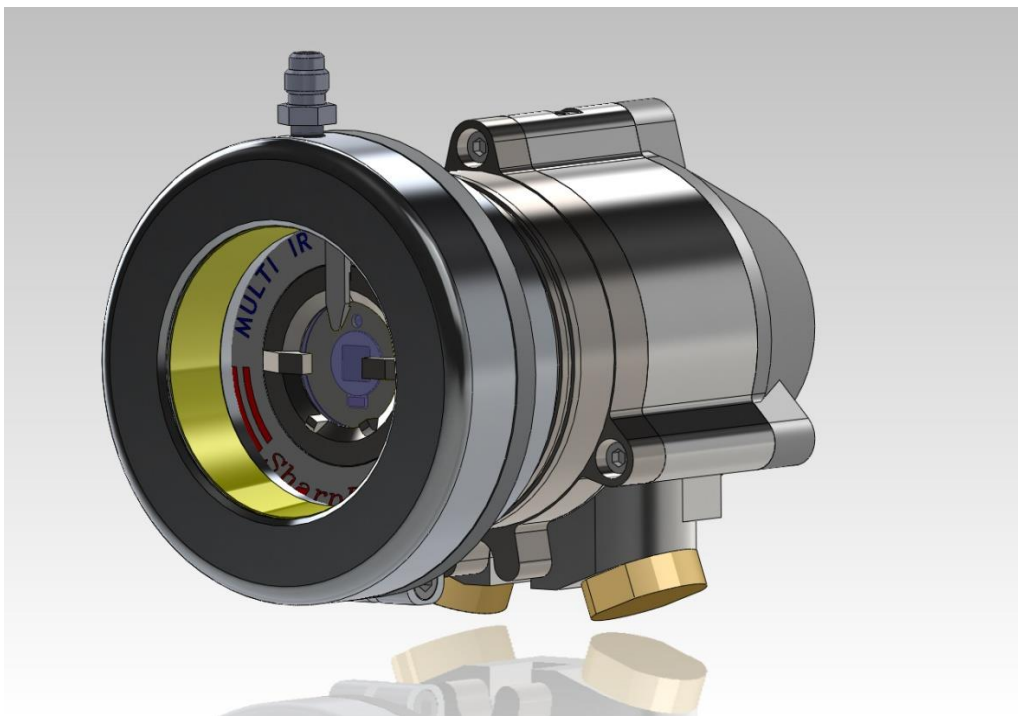




40/40 Air Shield

P/N 777650

Installation Guide



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Warning: This manual should be read carefully by all individuals who have or will have responsibility for using, maintaining or servicing the product.

The detector is not field-repairable due to the meticulous alignment and calibration of the sensors and the respective circuits. Do not attempt to modify or repair the internal circuits or change their settings, as this will impair the system's performance and void the SPECTREX product warranty.

Warranty

SPECTREX agrees to extend to Purchaser/Distributor a warranty on the SPECTREX supplied components of the SharpEye products. SPECTREX warrants to Purchaser/Distributor that the products are free from defects in materials and workmanship for a period of five (5) years, commencing with the date of delivery to Purchaser/Distributor. SPECTREX expressly excludes damage incurred in transit from the factory or other damage due to abuse, misuse, improper installation, or lack of maintenance or "Act of God," which are above and beyond its control. SPECTREX will, upon receipt of any defective product, transportation prepaid, repair or replace it at its sole discretion, if found to have been defective when shipped. Said repair or replacement is SPECTREX'S sole liability under this warranty and SPECTREX'S liability shall be limited to repair or replacement of the component found defective and shall not include any liability for consequential or other damages. The customer is responsible for all freight charges and taxes due on shipments both ways. This warranty is exclusive of all other warranties express or implied.

Release History

Rev	Date	Revision History	Prepared by	Approved by
0	January 2012	First Release	Ian Buchanan	Eric Zinn
1	April 2012	Second Release	Ian Buchanan	Eric Zinn
2	April 2012	Third Release	Ian Buchanan	Eric Zinn
3	August 2013	Fourth Release	Ian Buchanan	Eric Zinn
4	March 2014	Fifth Release	Ian Buchanan	Eric Zinn
5	May 2014	Sixth Release	Ian Buchanan	Eric Zinn
6	March 2016	Seventh Release	Ian Buchanan	Eric Zinn
7	June 2017	Eighth Release	Jay Cooley	Shaul Serero

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1 General Description

This document describes the installation instructions for the Air Shield P/N 777650.

The air shield is suitable for use with the SharpEye 40/40 Series Optical Flame Detectors (40/40I, 40/40R, 40/40L, 40/40LB, 40/40L4, 40/40L4B, 40/40UFL, 40/40U, 40/40UB, and 40/40UFI), for both the aluminum and St.St. enclosures.

Optical flame detectors are often used in highly polluted or dirty areas, where maintenance personnel are forced to access the detector frequently to clean its optical window. The special air shield, developed for SharpEye 40/40 series optical flame detectors, allows detector installation under tough environmental conditions, where they may be exposed to oil vapors, sand, dust, and other particulate matter.

2 Air Shield Installation Instructions

2.1 Surface Preparation

- 1 Verify that all connection surfaces (1) are clean.
- 2 Verify that the lock screw (2) is open.
The screw is a captive screw.

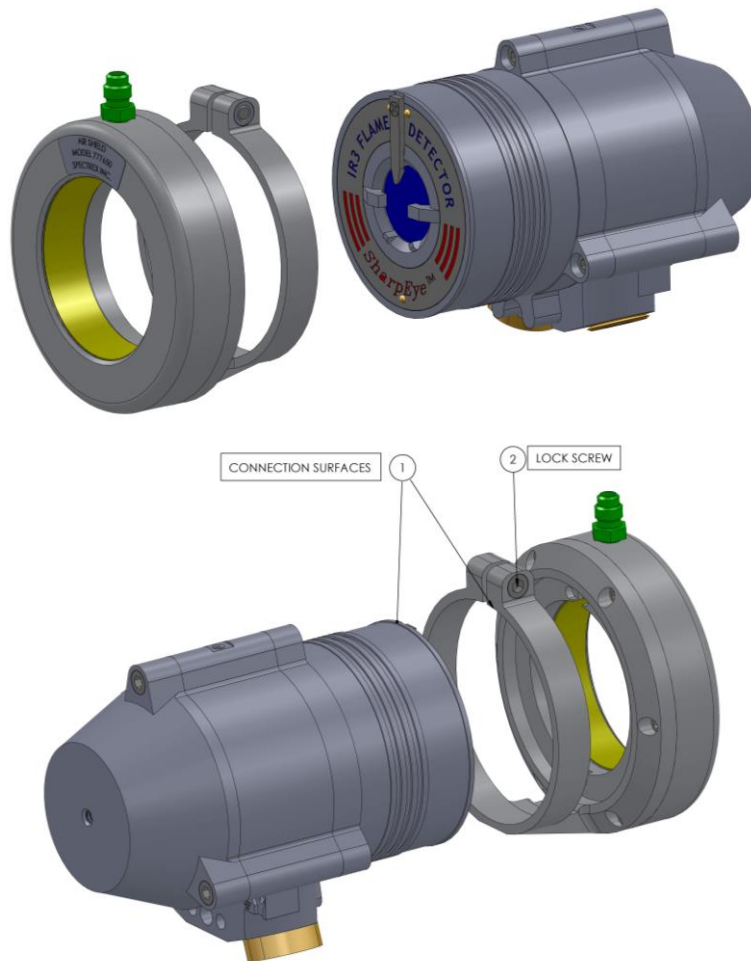


Figure 1: Surface Preparation

2.2 Air Shield Assembly

- 1 Assemble the air shield (3) on the detector (4).
- 2 Verify that the guard (5) fits into the appropriate groove (6).

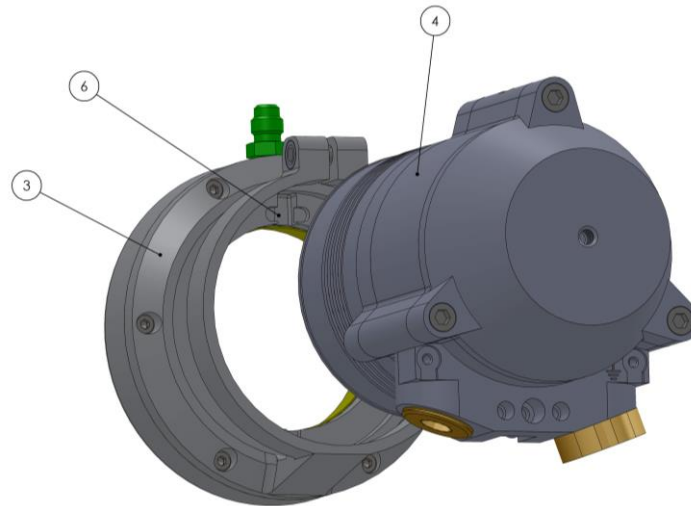


Figure 2: Air Shield Assembly, Rear View

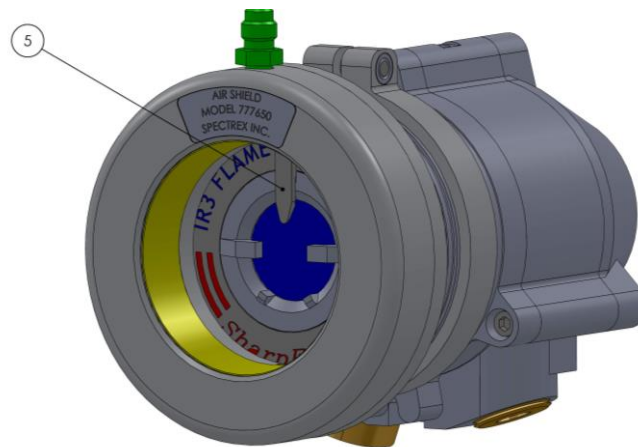


Figure 3: Air Shield Assembly, Front View

- 3 Lock the screw (2).
The air shield is now mounted.

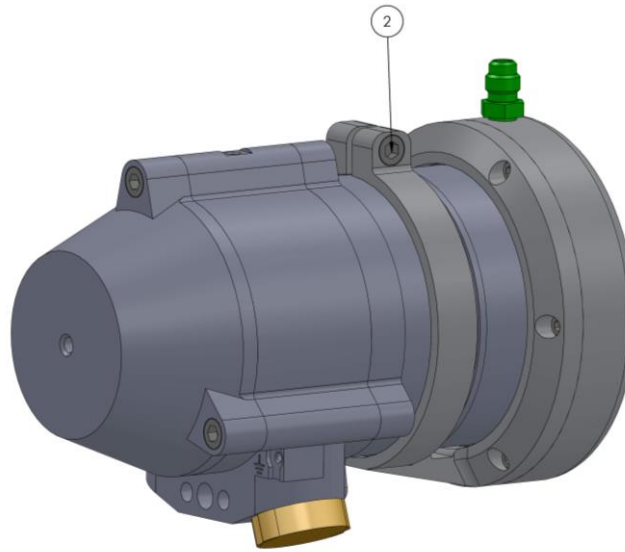


Figure 4: Locking the Screw

- 4 Attach the air pressure hose to the quick-fit air connection (7).

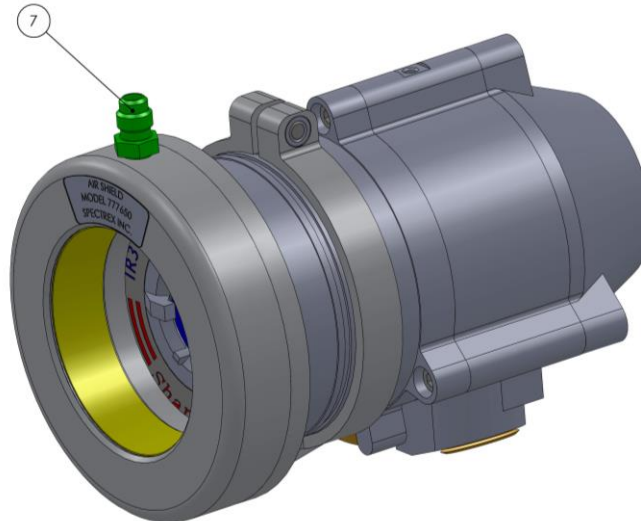


Figure 5: Quick-Fit Air Connection

3 Technical Specifications

- **Air pressure source:** Clean, dry, and oil-free air
- **Pressure:** 2–3bar (30–45psi)
- **Fitting:** 7/16" – 20UNF-2A
- **Operation temperature:** -55°C/85°C / -67°F/185°F

Warning: The temperature of the air supply to the air shield should never exceed 60°C/140°F.

4 Air Shield Filter Replacement

- 1 Remove the 6 rear screws (Item 1 - M4 x 10 A4), and open the air shield.

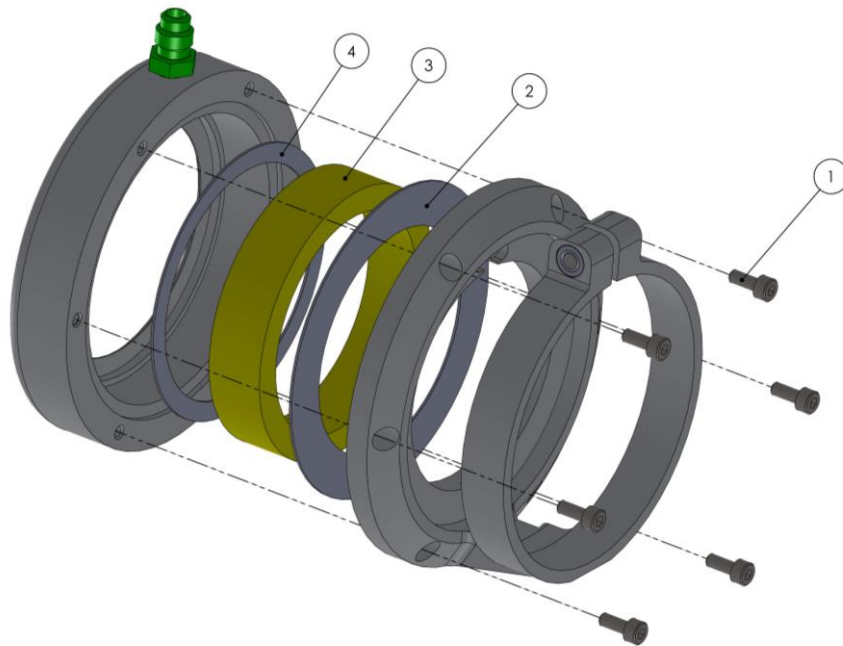


Figure 6: Air Shield Filter Replacement

- 2 Remove the larger gasket (Item 2 - P/N 777657), and then remove the filter (Item 3 - P/N 777654).
- 3 Remove the smaller gasket (Item 4 - P/N 777656), and replace it with a new one.
- 4 Mount the new filter into the air shield.
- 5 Fit the new larger gasket (Item 2).
- 6 Close the air shield and lock the screws (Item 1).

Technical Support

For technical assistance or support, contact:



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