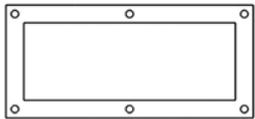
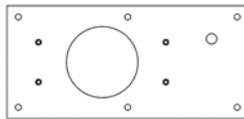


Ultima[®] X5000 Rectangular Duct Mount Kit User Instructions

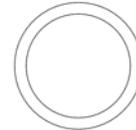
MSA Kit 10176947 - Ultima X5000 316 Stainless Steel Parts List / Instructions



Rectangular Gasket (1)



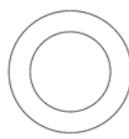
Rectangular Duct Mount Base Plate (1)



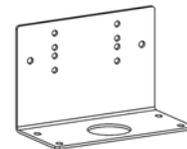
Base Gasket (1)



Gasket Plate (1)



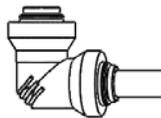
Enclosure Gasket (1)



Bracket (1)



Quick-Connect Fitting (1)



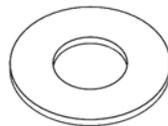
Elbow (1)



Standoff, 1/2" Long (8)



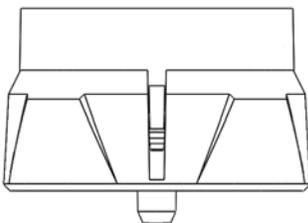
Screw, 3/8" Long (8)



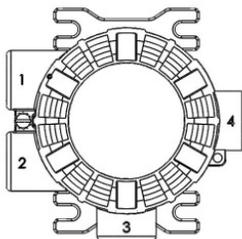
Washer, #10 Screw (8)



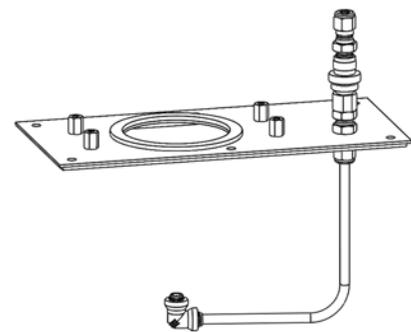
Self-Tapping Screw*



Sensor Guard (1)



Ultima X5000*



Base Assembly (1)

*Parts not provided by MSA within this kit. Ultima X5000 must be bought separately. Self-tapping screw type depends on duct material and thickness.

- (1) Attach the four 1/2" long standoffs from the hardware bag to the back of the Ultima X5000 via the four tapped holes, as shown in Figure 1. Be sure to tighten the standoffs completely to avoid loosening over time.

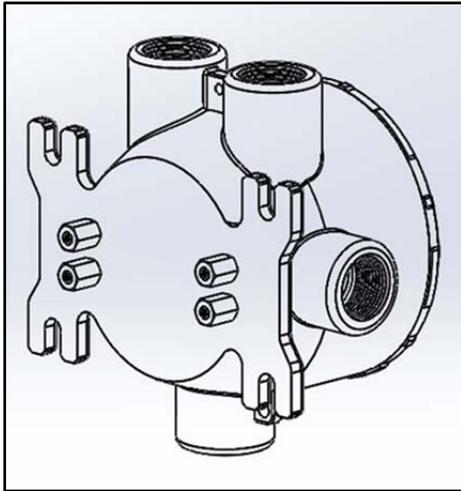


Figure 1

- (2) Slide the bracket up flush against the four standoffs so that the holes are aligned with the threaded standoff holes. Use four 3/8" long screws and four washers from the hardware bag to attach the bracket to the standoffs, as shown in Figures 2-5.

Note: If using an Ultima X5000 with 3/4 NPT ports, align the standoffs with the bottom four bracket holes. If using an Ultima X5000 with M25 ports, align the standoffs with the top four bracket holes.

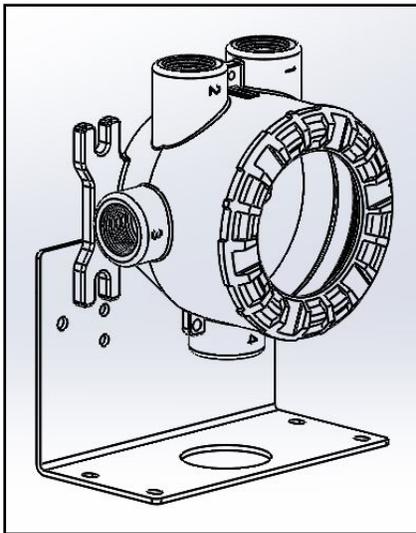


Figure 2

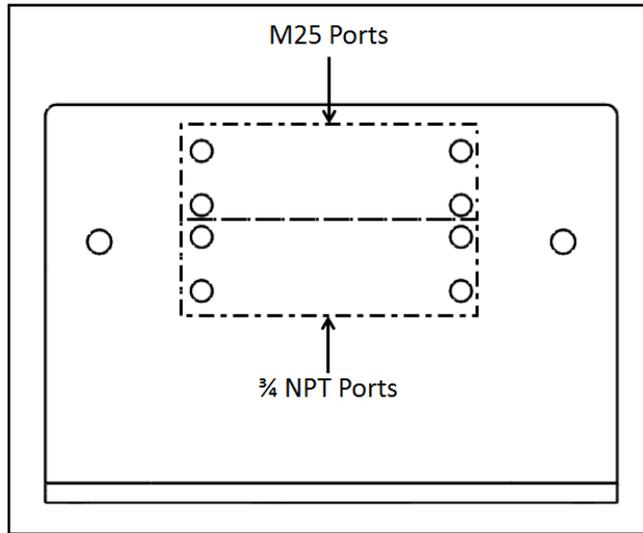


Figure 3

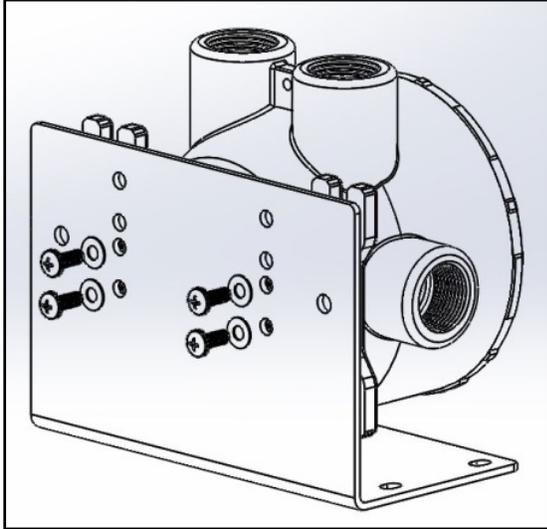


Figure 4

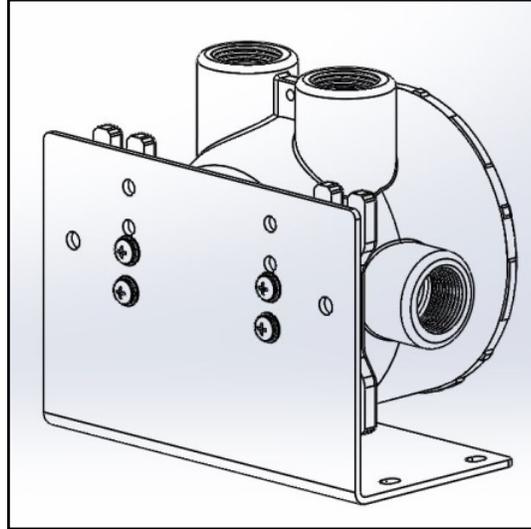


Figure 5

- (3) Take the enclosure gasket and gasket plate out of their bag and place them around the 3/4 NPT thread of the sensor body as shown with a non-IR sensor in Figures 6-7. Be sure to have the enclosure gasket between the gasket plate and the conduit entry on the Ultima X5000 housing. Attach the sensor (and sensor guard, if using a non-IR sensor) that will be mounted in the duct to port 4. If using an XIR Plus, discard the sensor guard given in the kit. Be sure to connect all internal wiring according to the wiring labels on the inside of the transmitter.

Note: If using an M25 housing, use the M25 to 3/4 NPT adapter to connect the Ultima X5000 to the sensor body and ensure the enclosure gasket is between the adapter and the gasket plate.

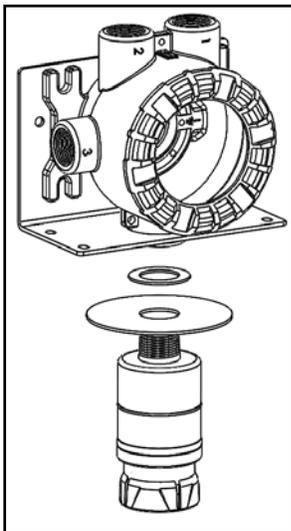


Figure 6

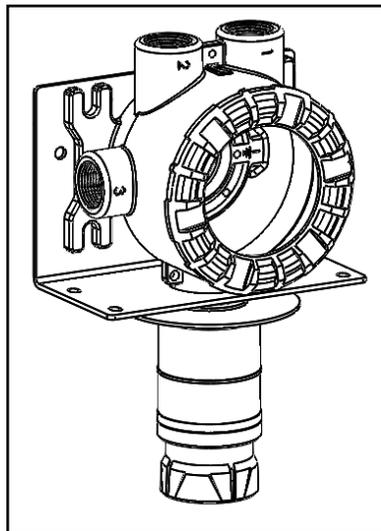


Figure 7

- (4) Use the template provided on the last page of these instructions to trace the required cutout in the location on the duct that the Ultima X5000 will be mounted. Be sure to choose a location that allows enough room for the specific sensor configuration within the duct and is accessible for wiring/conduit. Once a suitable location is selected, cut the duct according to the template.

Note: If using an XIR Plus sensor, the sensor must be oriented in the horizontal direction upon installation. If using a non-IR sensor, the sensor must be oriented in the vertical direction upon installation. Keep this in mind when choosing a mounting location on the duct.

- (5) Remove the base assembly from the carton and align the cut out in the rectangular gasket underneath the base plate with the duct cutout, as shown in Figure 8.

Note: Be sure to keep the tubing accessible so that the elbow can be installed on the sensor for calibration.

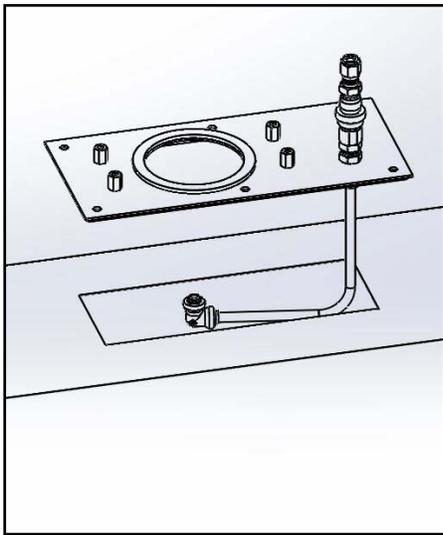


Figure 8

- (6) Once the base assembly is properly aligned, use the holes to mark locations for ¼" self-tapping screw installation. Attach the duct mount assembly to the duct via ¼" self-tapping screws (not provided) as shown in Figure 9.

Note: Be sure to keep the tubing accessible so that the elbow can be installed on the sensor for calibration.

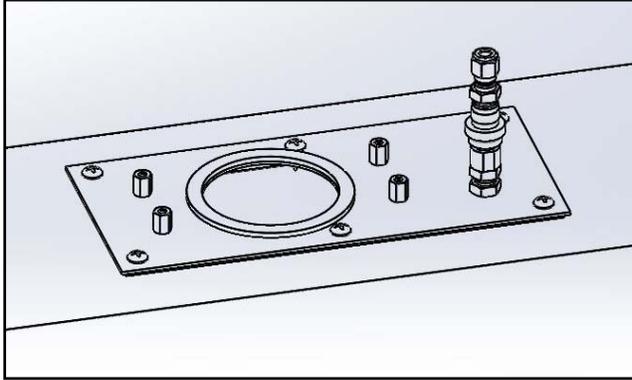


Figure 9

- (7) If using a non-IR sensor, attach the tubing elbow to the sensor guard as shown in Figure 10. If using an XIR Plus sensor, attach the tubing to the sensor as shown in Figure 11.

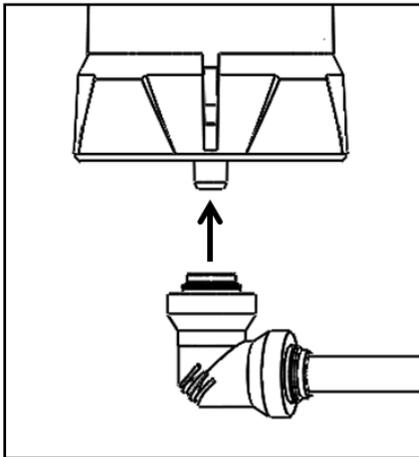


Figure 10

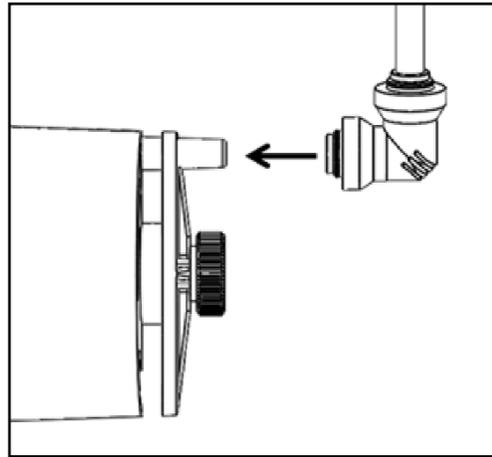


Figure 11

- (8) Attach the Ultima X5000 and bracket assembly from step 3 to the base assembly via the four standoffs on the base plate. Use the remaining four 3/8" long screws and four washers from the hardware bag to attach the bracket to the standoffs, as shown in Figures 12-13. Be sure to tighten screws completely to ensure proper gasket compression.

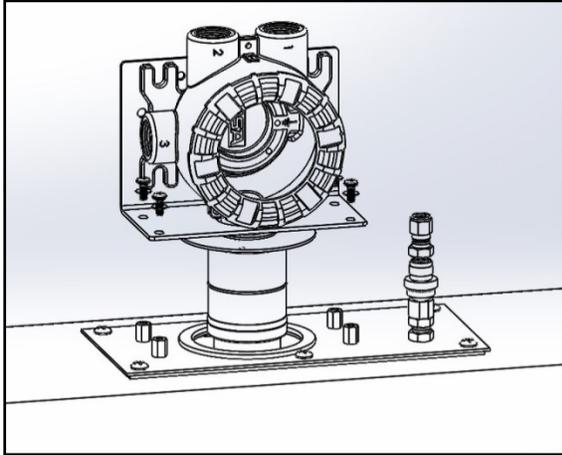


Figure 12

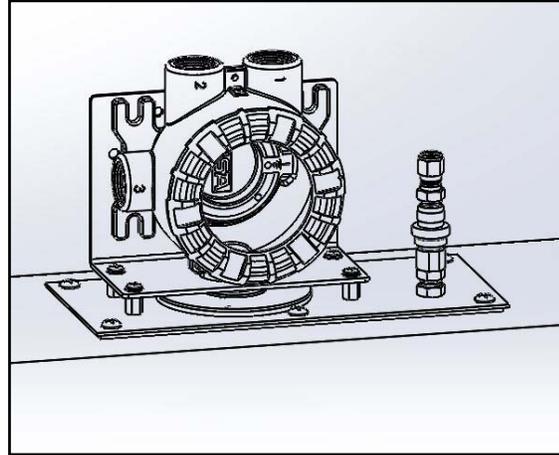


Figure 13

- (9) Check to make sure all gaskets are compressed evenly. If not, repeat steps 6-8 as needed.

**CUTOUT GUIDE
APPROX.
8.875" x 3.25"**