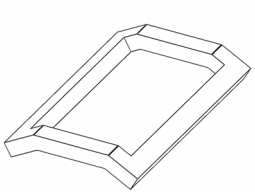
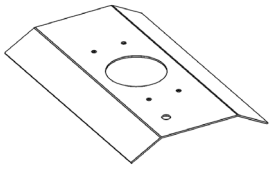
Ultima® X5000 Round Duct Mount Kit User Instructions

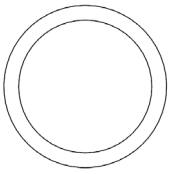
MSA Kit 10179124/10179321 - Ultima X5000 316 Stainless Steel Parts List / Instructions



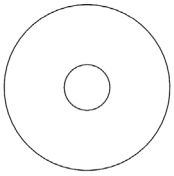
Round Duct Mount Gasket (1)



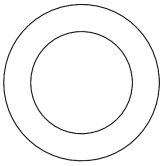
Round Duct Mount Base Plate (1)



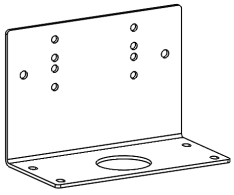
Base Gasket (1)



Gasket Plate (1)

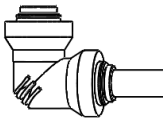


Enclosure Gasket (1)

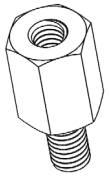


Bracket (1)

Quick-Connect Fitting (1)

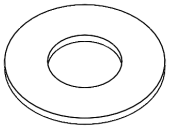


Elbow (1)



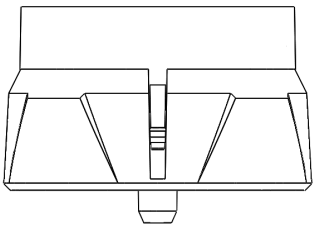
Standoff, 1/2” Long (8)

Screw, 3/8” Long (8)

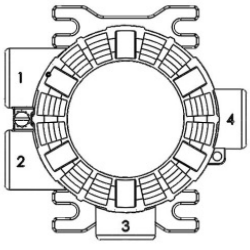


Washer, #10 Screw (8)

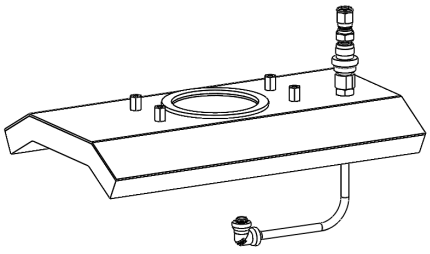
Hose Clamp*



Sensor Guard (1)



Ultima X5000*



Base Assembly (1)

*Parts not provided by MSA within this kit. Ultima X5000 must be bought separately. Hose clamp depends on duct diameter.

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(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.

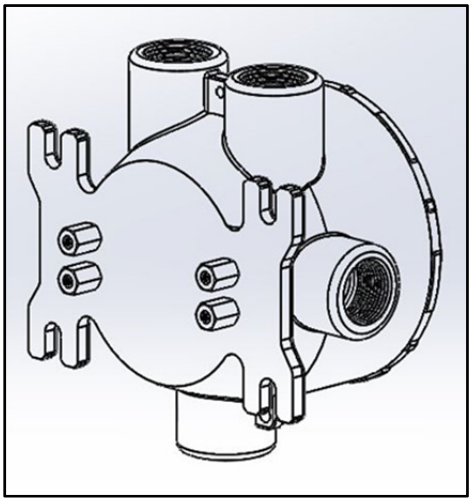

Figure 1

(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 a transmitter with 3/4 NPT ports, align the standoffs with the bottom four bracket holes. If using a transmitter with M25 ports, align the standoffs with the top four bracket holes.

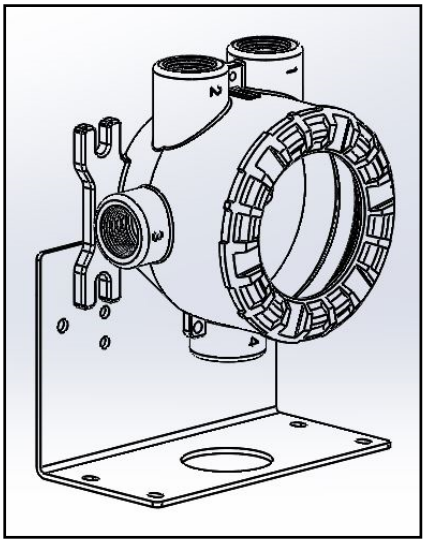

Figure 2

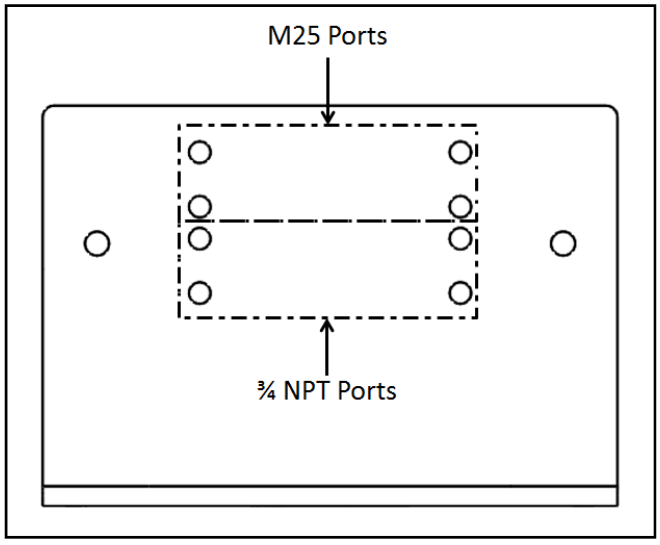

Figure 3

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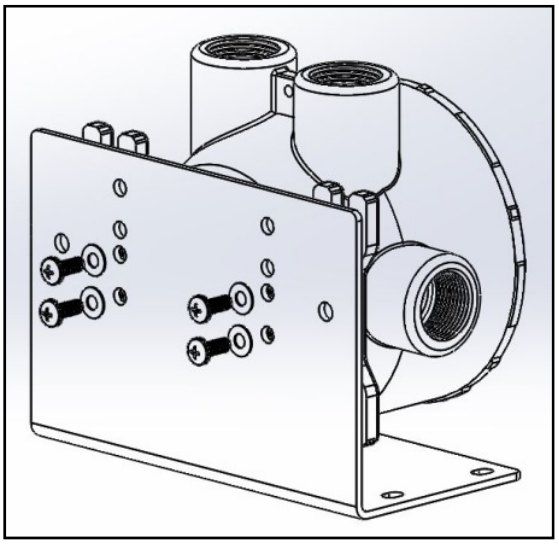

Figure 4

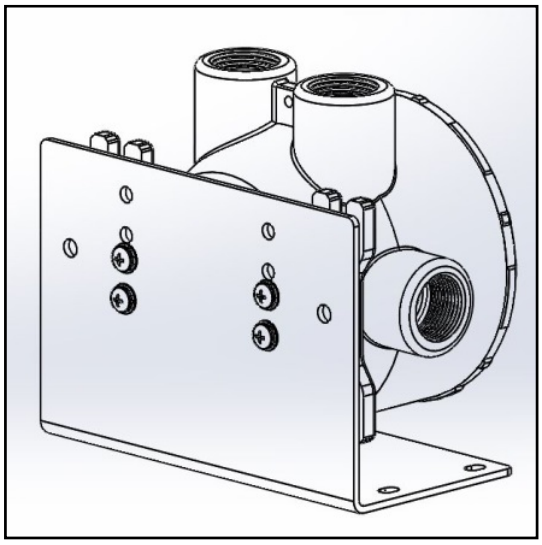

Figure 5

(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. 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.

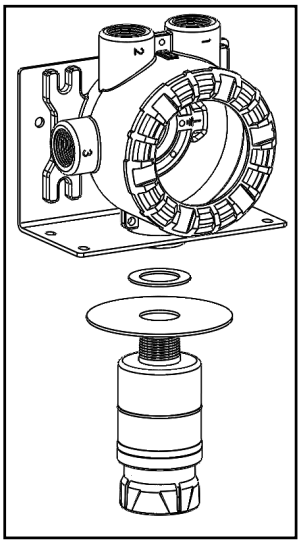

Figure 6

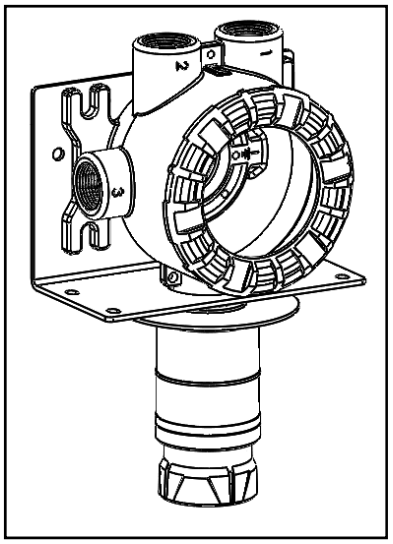

Figure 7

(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.

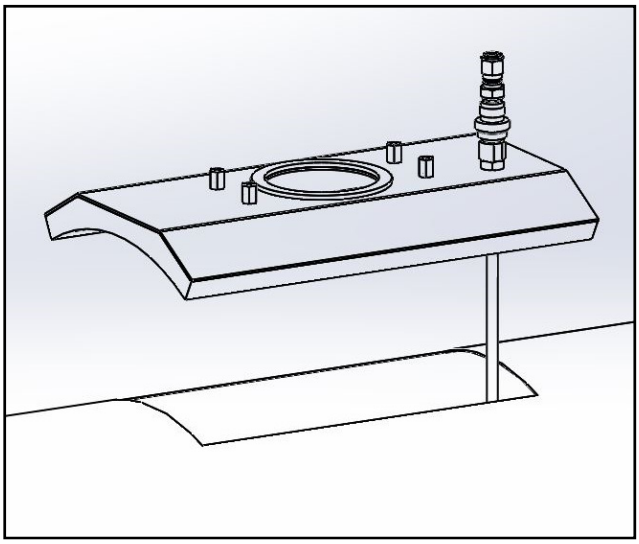

Figure 8

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(6) Once the base assembly is properly aligned, secure it to the duct using large hose clamps (not provided) as shown in Figure 9. When tightening, alternate frequently between the hose clamps to achieve even gasket compression against the duct. Completely tighten down the hose clamps so that the base plate is firmly sealed against the gasket in the bends of the plate. **If there is a gap between the base plate and duct mount gasket anywhere along the perimeter of the plate, untighten the hose clamps and repeat step 6 with more frequent alternating between hose clamps.**

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

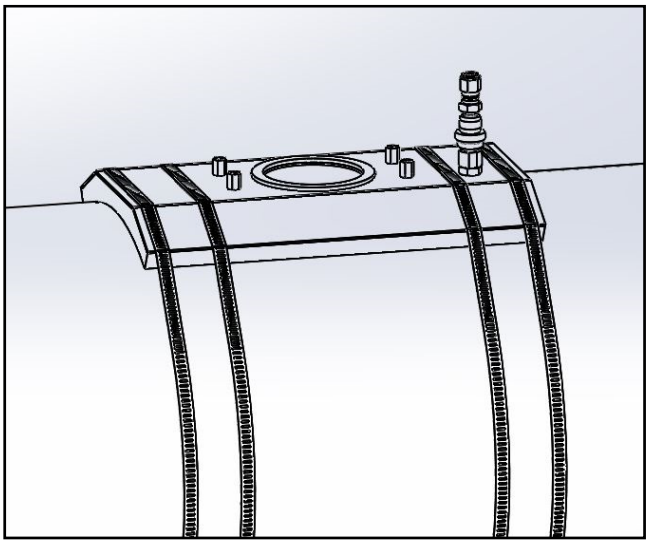

Figure 9

(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.

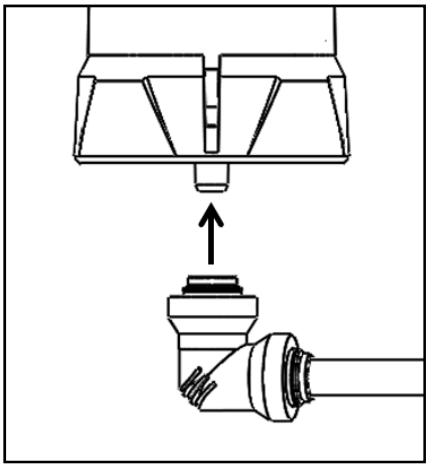

Figure 10

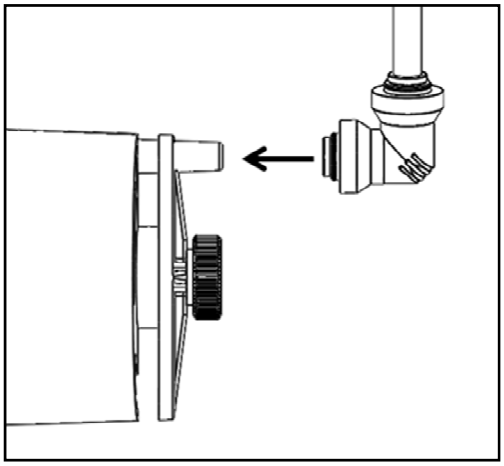

Figure 11

(8) Attach the transmitter 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.

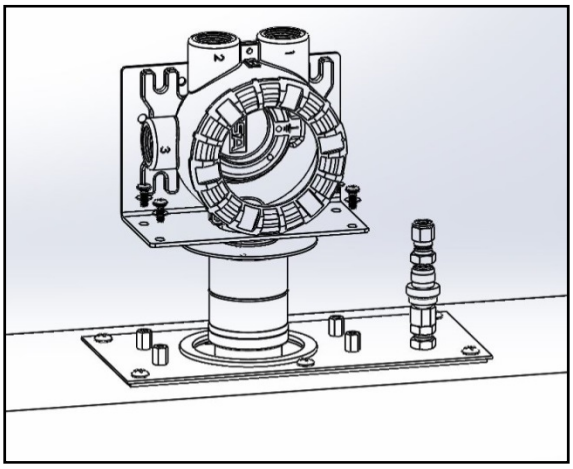

Figure 12

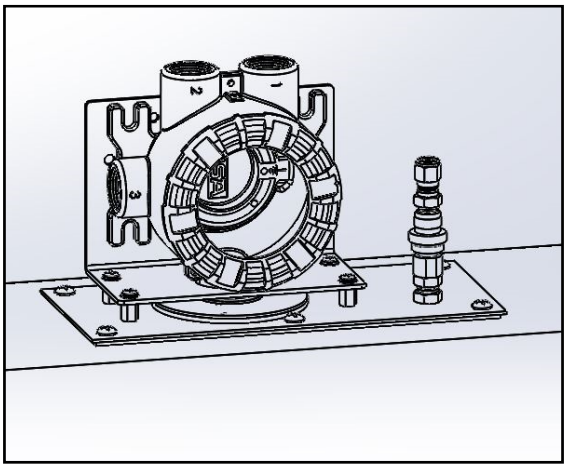

Figure 13

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

CUTOUT GUIDE
APPROX. 10.5” x 5.125”