

SITRANS LR 400 and Easy Aimer LR Retrofit

Objective: The procedure for installing an Easy Aimer LR kit on a SITRANS LR 400.

Equipment:

- SITRANS LR 400
- Easy Aimer LR Kit
- Adjustable wrench
- M8 socket wrench

While every effort was made to verify the following information, no warranty of accuracy or usability is expressed or implied.

Overview:

To retrofit the SITRANS LR 400 with an Easy Aimer LR, please follow the directions below:

For a standard SITRANS LR 400, follow the procedures in *Part One: SITRANS LR 400 Standard Emitter*.

For SITRANS LR 400 units with Zone 0 approvals, follow the procedures in *Part Two: SITRANS LR 400: Zone 0 Emitter Change* on page 5.

Part One: SITRANS LR 400 Standard Emitter

Step One: Remove Housing from Horn Assembly

1. Set the unit upright on a firm and clean surface.
2. Loosen locknut connecting housing and flange assembly.
3. Carefully lift housing from flange assembly, exposing the PTFE emitter.
4. Set housing aside on a secure surface.



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Step Two: Removing the Standard Emitter

NOTE: For Zone 0 approved models, go to *Appendix: Zone 0 Emitter Change* on page 5.

1. Using an adjustable wrench open to 36mm, loosen the PTFE emitter assembly from flange.
2. Lift the emitter assembly from the flange.



CAUTION:

- Be careful not to damage the PTFE emitter!
- If assembly comes apart, see *Appendix: Troubleshooting* on page 9.

Step Three: Separating Flange from Horn

1. Turn flange over so it sits flat on the surface with the horn pointing up
2. Remove the four bolts connecting the flange to the horn using an M8 socket wrench, and then lift the horn from the flange.



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Step Four: Attaching Horn to Easy Aimer LR

1. Set horn into Easy Aimer hub, lining up the screw holes.
2. Fasten the four screws using the 5/32" ball-ended Alan key and screws provided with kit.



Step Five: Inserting the Emitter Assembly

1. Turn horn assembly over and insert emitter assembly.
2. Thread emitter assembly back into place and tighten using the adjustable wrench.



CAUTION: Do not over tighten!

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Step Six: Replacing the Housing

1. Carefully set housing on top of horn assembly.
2. Thread collar back into place and hand tighten.



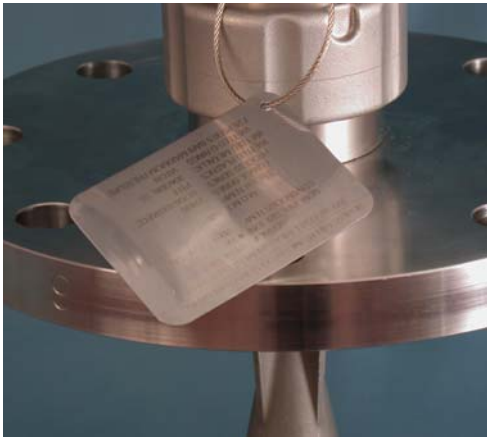
Step Seven: Changing Process Connection Tag

The process connection tag references the process connection specification drawings for the unit. By adding the Easy Aimer LR, the unit's process connection specifications have changed so the old tag must be replaced with the new tag included with the kit.

1. Undo setscrew holding ring in the unit and remove the tag from the ring.
2. Slide new tag onto the ring and reattach to the unit.



CAUTION: Be sure to discard old tag as the process connection information is no longer relevant.



NOTE: Process Connection drawings are available at www.siemens-milltronics.com

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Part Two: Zone 0 Emitter Change

The SITRANS LR 400 with Zone 0 approvals has a specially designed emitter. If the emitter assembly comes apart before reattachment, see *Appendix: Troubleshooting* on page 9.

Zone 0, Step One: Remove Housing from Horn Assembly

1. Set the unit upright on a firm and clean surface.
2. Loosen locknut connecting housing and flange assembly.
3. Carefully lift housing from flange assembly, exposing the PTFE emitter.
4. Set housing aside on a secure surface.



Zone 0, Step Two: Removing Top Emitter Assembly

1. Using an adjustable wrench open to 36mm, loosen the top PTFE emitter assembly from flange.
2. Lift the top emitter assembly out of the flange and set aside for use in *Zone 0, Step Six*.



NOTE: If assembly comes apart, see *Appendix: Troubleshooting* on page 9.

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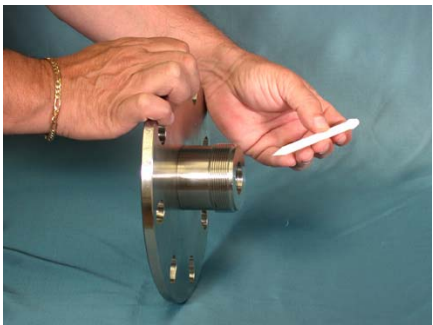
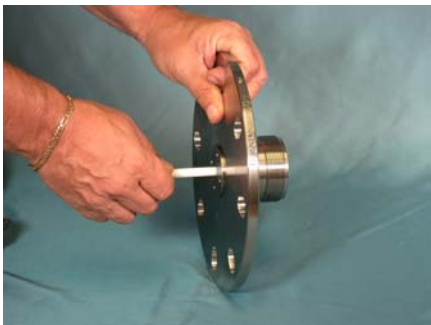
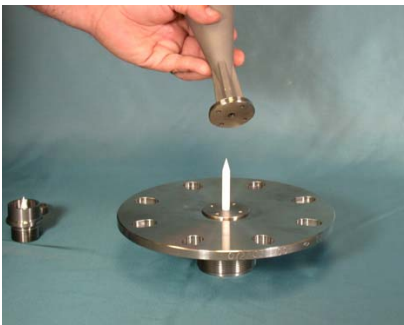
Zone 0, Step Three: Removing Horn

1. Carefully remove Ring # 1 from flange assembly and set aside.
2. Flip flange assembly, and then undo the four bolts connecting horn and flange using an M8 socket wrench.



Zone 0, Step Four: Removing Bottom PTFE Emitter

1. Gently remove horn from bottom emitter.
2. Turn flange on its side and push the bottom emitter out the flange top. Remove flange and set aside.



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Zone 0, Step Five: Attaching Horn to Easy Aimer LR

1. Set horn into Easy Aimer hub, lining up the screw holes.
2. Fasten the four screws using the 5/32" ball-ended Alan key and screws provided with kit.



Zone 0, Step Six: Inserting Bottom PTFE Emitter

1. Flip assembly, setting horn on flat surface and insert bottom PTFE emitter first.
2. Place Ring 1 on top of unit, beveled side up, and push firmly until bottom PTFE emitter and ring are completely inserted.



NOTE: Ensure that O rings are set properly in their grooves. See *Appendix: Troubleshooting* on page 9.

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Zone 0, Step Seven: Replacing Top Emitter Assembly

1. Take the top emitter assembly removed in *Appendix Step Two* and thread into Easy Aimer.
2. Using an adjustable wrench open to 36 mm, tighten the top emitter assembly.



NOTE: If assembly comes apart, see *Appendix: Troubleshooting* on page 9.

Zone 0, Step Eight: Reassembly

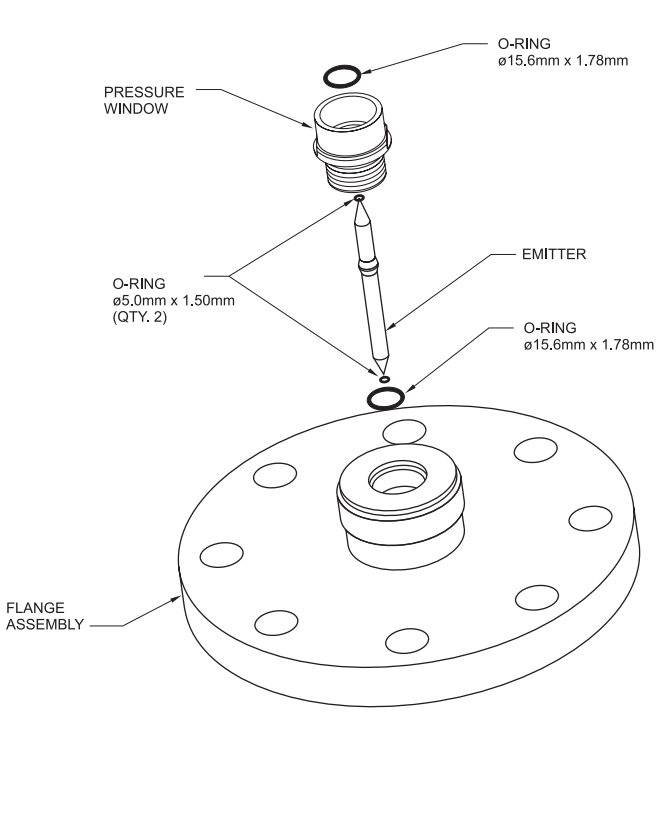
1. Reattach the housing and replace the process connection tag. For more information, see *Steps Six* and *Step Seven* on page 4.



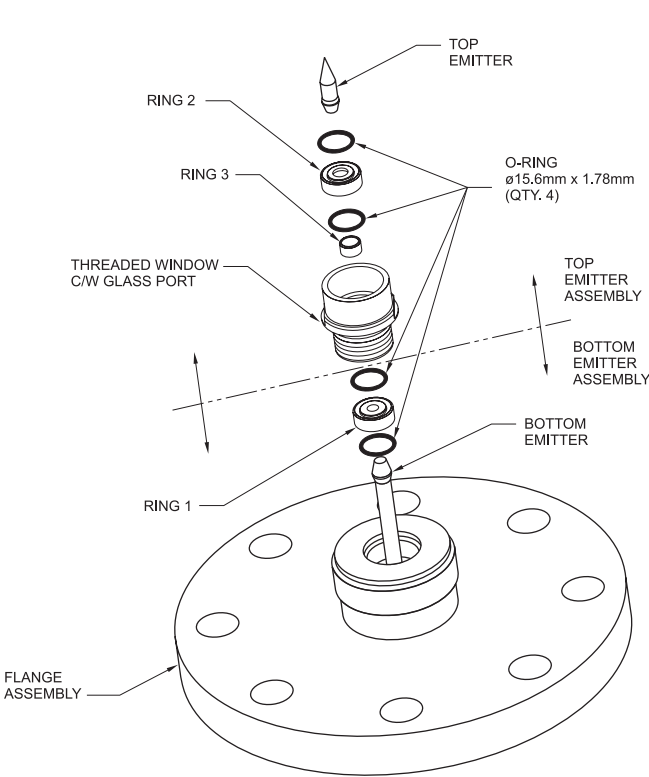
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Appendix: Troubleshooting

Standard Emitter Components and Assembly



Zone 0 Emitter Components and Assembly



NOTE: Rings 1, 2, and 3 are inserted beveled side up.