



# CBT DISCHARGE HOUSING CONVERT KIT #80946309



# Revision History

rev. level 01\_08.24.2012

## PART 1

**Remove the existing CBT Discharge  
Housing Weldment**



### CBT200 REPLACEMENT KIT A424200

Remove the CBT Discharge Housing Convert Kit from shipping crate. Inspect for damaged or missing parts.

- CBT DISCHARGE HOUSING WELDMENT (1)
- DEFLECTOR WELDMENT (1) - the Door
- SPARE PARTS KIT (1) - Imperial replacement kit



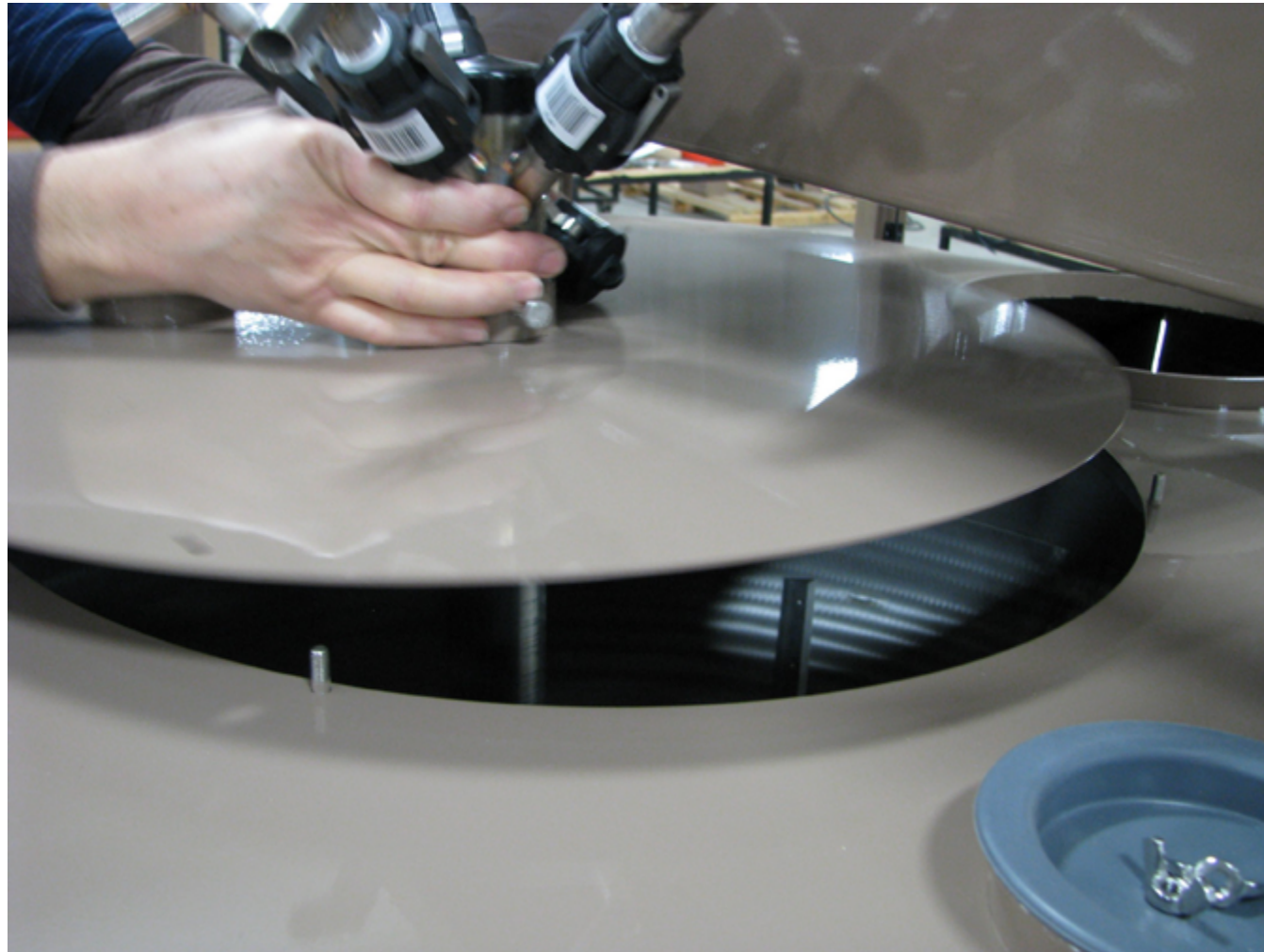
#### Required assembly tools

- RATCHET WRENCH
- 7/16 STANDARD SOCKET HEAD
- 10mm SOCKET HEAD
- 13mm SOCKET HEAD
- SNAP RING PLIERS
- CRESCENT WRENCH (ADJUSTABLE)
- PHILLIPS SCREWDRIVER
- SLOTTED SCREWDRIVER
- PUTTY SCRAPER
- RTV SEALANT (recommend DOW CORNING 742 clear)



### SEED INLET COLLAR

**Step 1:** On the existing machine, loosen and remove the Seed Inlet Collar from the bottom of the Transition.



### CHEMICAL INLET PLATE ASSEMBLY

**Step 1:** Remove the four (4) wing nuts holding the Chemical Inlet Plate on top of the Bowl Cover.

**Step 2:** Remove the Chemical Inlet Plate from top of the Bowl Cover (Chemical Inlet Assembly will stay connected to the Plate).



### BOWL COVER CLAMPS

**Step 1:** Loosen the five (5) clamps that hold down the Bowl Cover onto the Bowl Mid Body Wrap. Ensure they each hang completely down out of the way of the Bowl Cover Clamp Mounts (see insert photo).



### CBT200 ONLY - SWING ARM

**Step 1:** Push in tab on Scale Clamp (see insert photo)..

**Step 2:** Lower Scale Clamp and hook into Bowl Cover (see insert photo) and lift the Scale Clamp in upright position. The Scale Clamp will lock in place. This will lift the Bowl Cover up off the Bowl Mid Body.

**Step 3:** Repeat on both sides of the Swing Arm.



### BOWL COVER

**Step 1:** CAREFULLY swing the Bowl Cover away from the Bowl Mid Body Wrap. Can remove the Bowl Cover from the Swing Arm Hooks until Bowl replacement procedure is complete, to remove it out of your way.



### ACCESS PANELS

**Step 1:** Remove both (R-L) Lower Body Wrap Access Panels & Gaskets from the front of the Lower Body Wrap. Use 10mm socket head to remove four (4) 6mm bolts, washers and lock washers.



### DUST EVACUATION

**Step 1:** Use a slotted screwdriver to disconnect and remove dust exhaust tube from the port on Discharge Assembly.



### DISCHARGE SUPPORT

**Step 1:** Remove both (R-L) Bowl Discharge Supports from the front of the Lower Body Wrap. Reach inside the Lower Body Wrap through the Lower Body Access Panel opening with one hand to catch the nut.

**Step 2:** With the other hand, use a ratchet wrench and 13mm socket head to loosen and remove two (2) 8mm bolts, washers and lock washers.

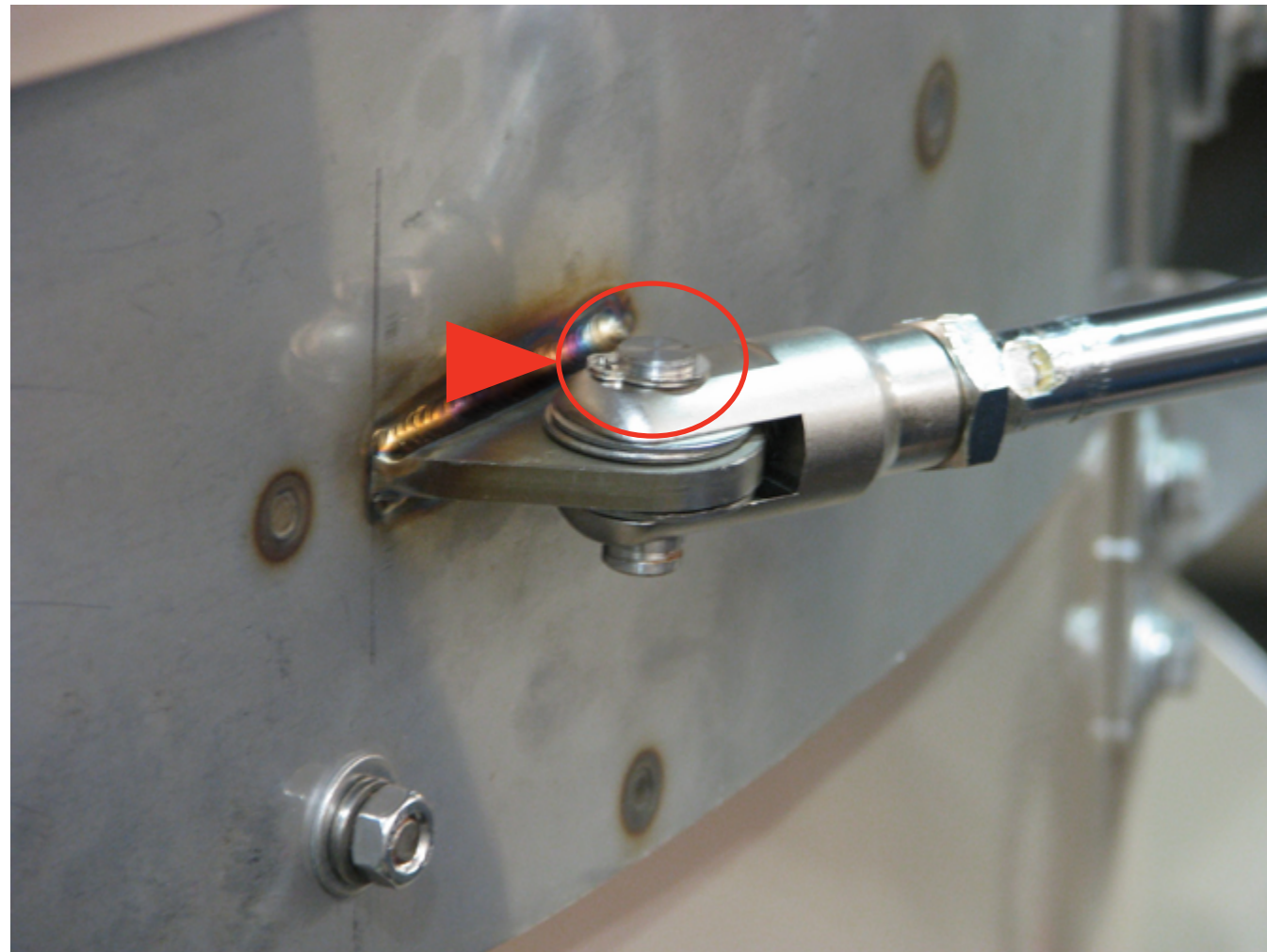


### DISCHARGE ACCESS PANELS

**Step 1:** Remove both the Top and Front Discharge Access Panels.

TOP PANEL: Use 7/16 socket head to remove two (2) 1/4-20 bolts, washers and lock washers.

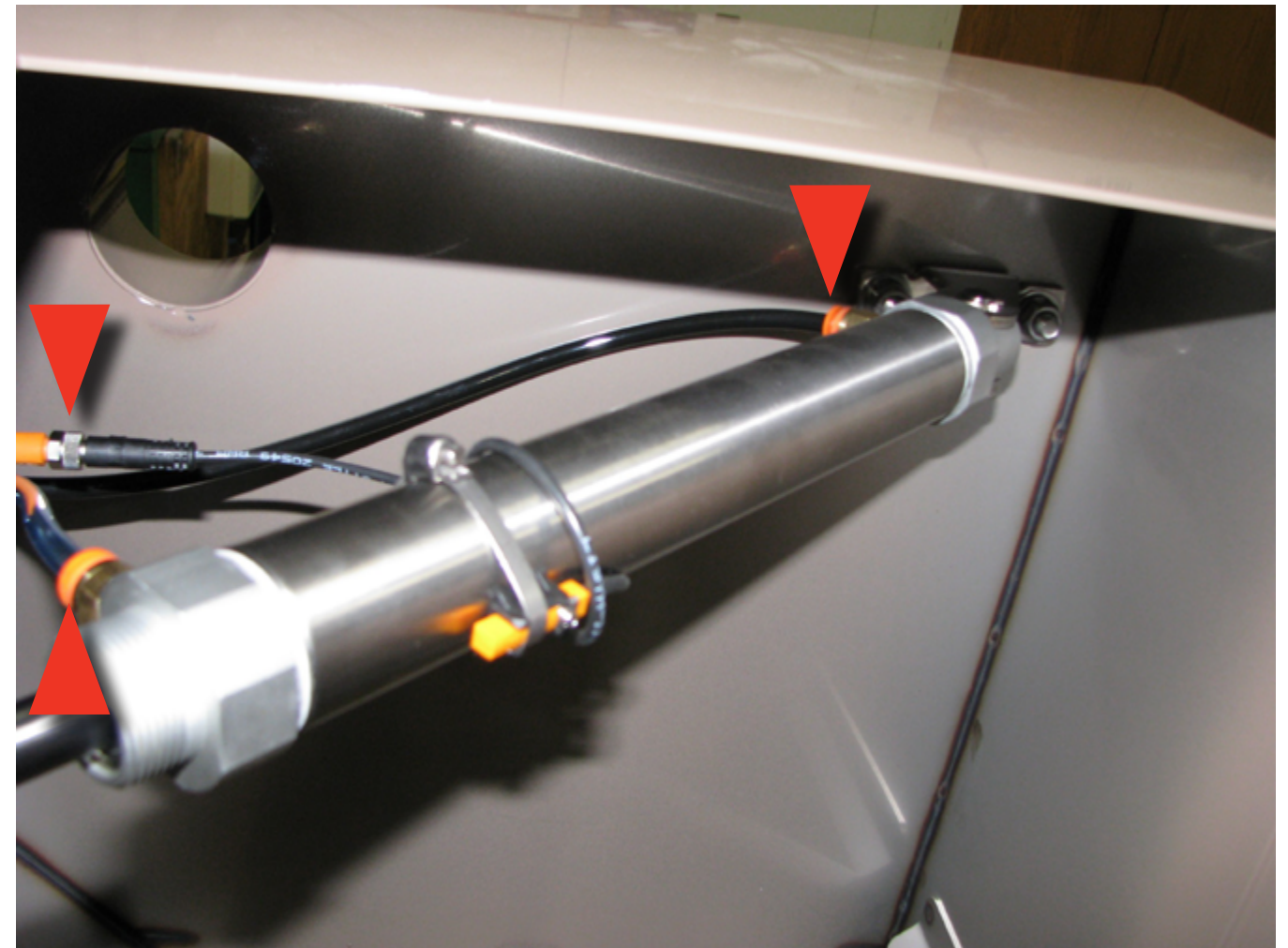
FRONT PANEL: Remove the two (2) 6mm wing nuts.



#### DISCHARGE AIR CYLINDER CLIP

**Step 1:** Use snap ring pliers to remove the Air Cylinder snap ring holding the Air Cylinder to the Discharge Door.

**Step 2:** Reach inside Discharge Top Access Panel and remove the Air Cylinder Assembly. Lay aside on Bowl Lower Body..



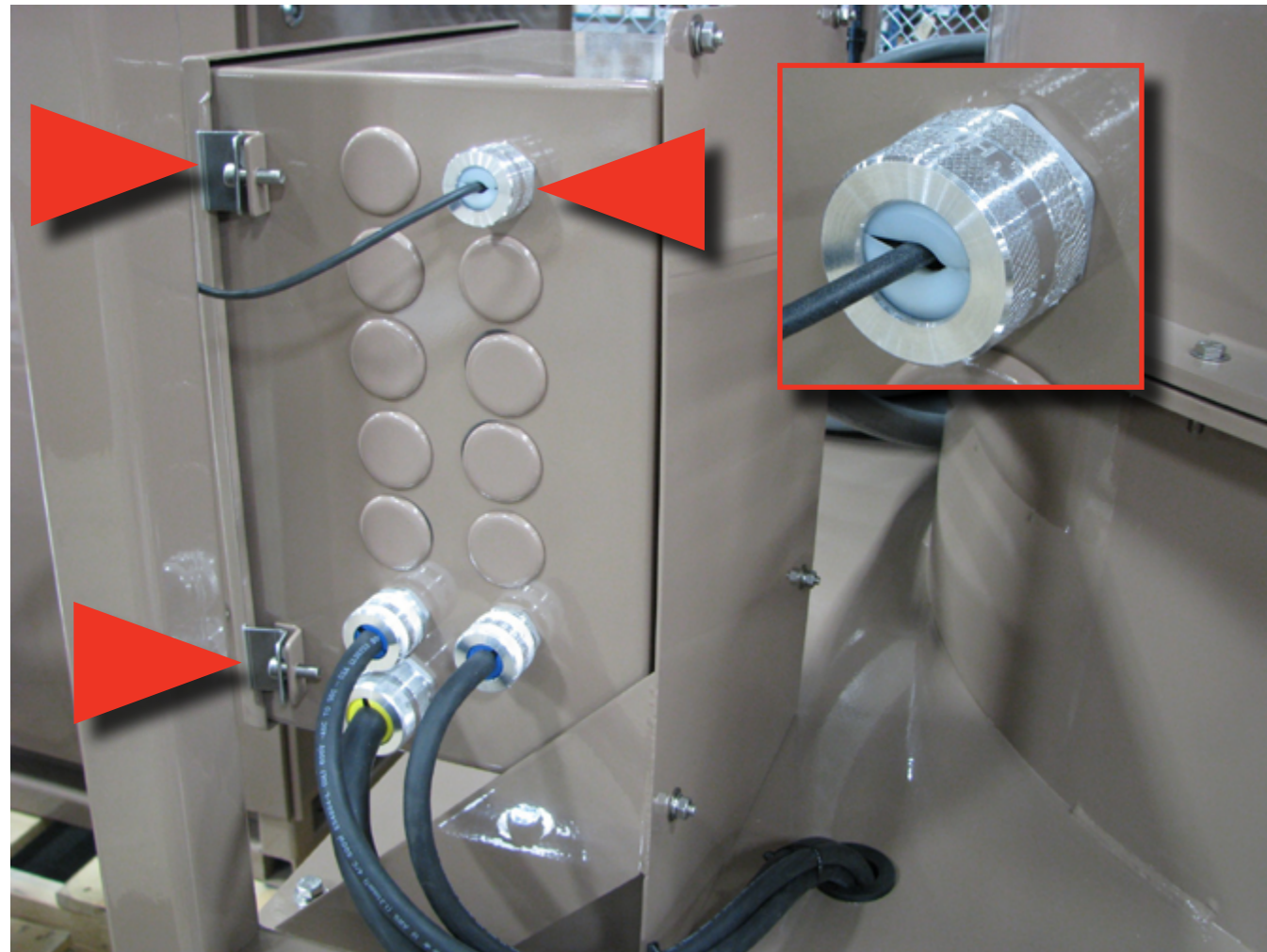
#### DISCONNECT AIR LINES & SENSOR CABLE

**Step 1:** Remove the Blue, Black and White Air Lines from the Air Cylinder inside the Discharge: with one hand push in the orange/gray tab and with the other hand pull each tube out of the fitting. Pull each Tube out through the rubber grommets on the side of the Discharge Housing.

**Step 2:** Unscrew to disconnect the Sensor Cable from the Air Cylinder. The sensor cable will need to be disconnected from the Main Junction Box as well (following page 16) and threaded it out through the rubber grommet.



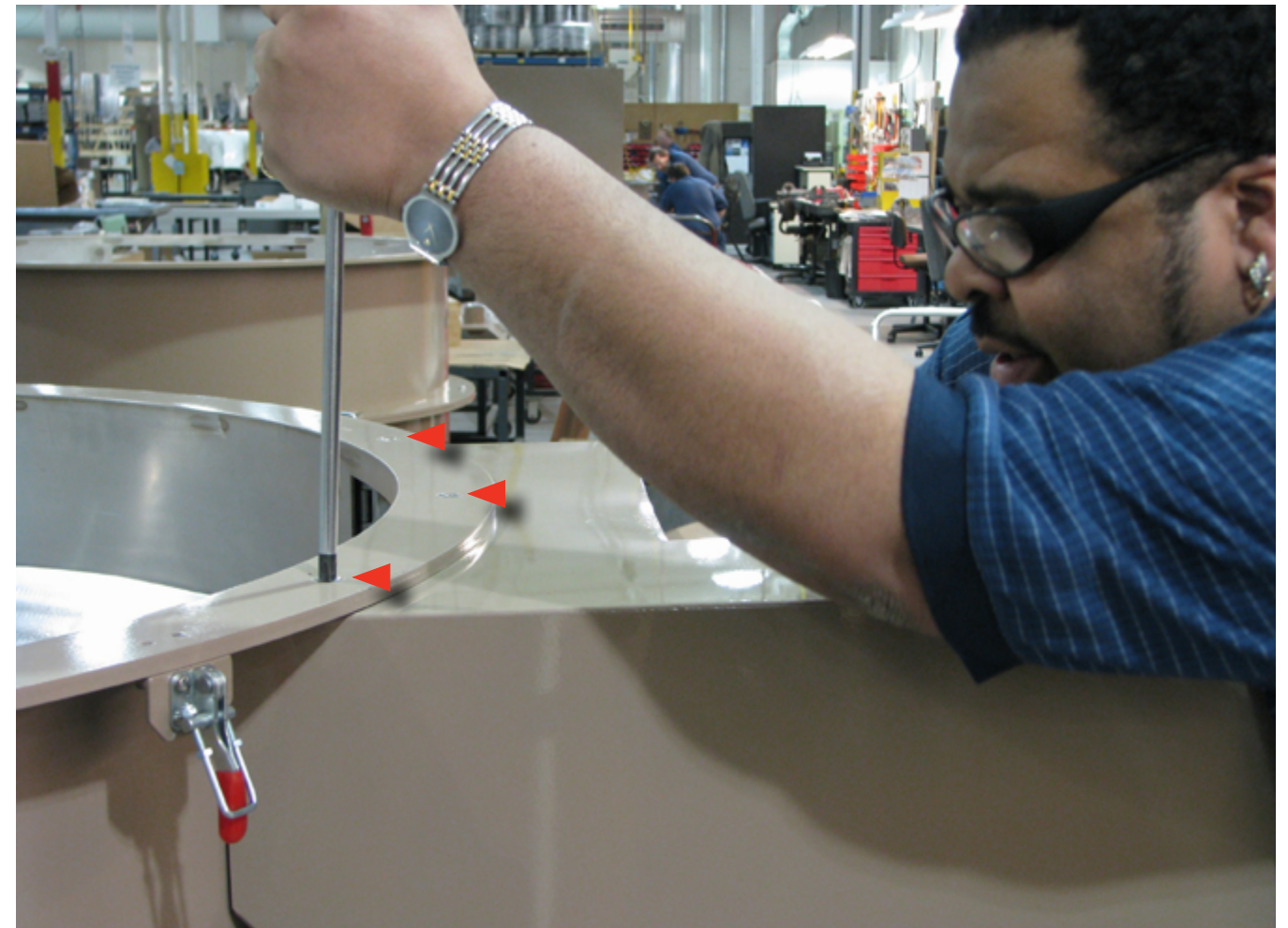
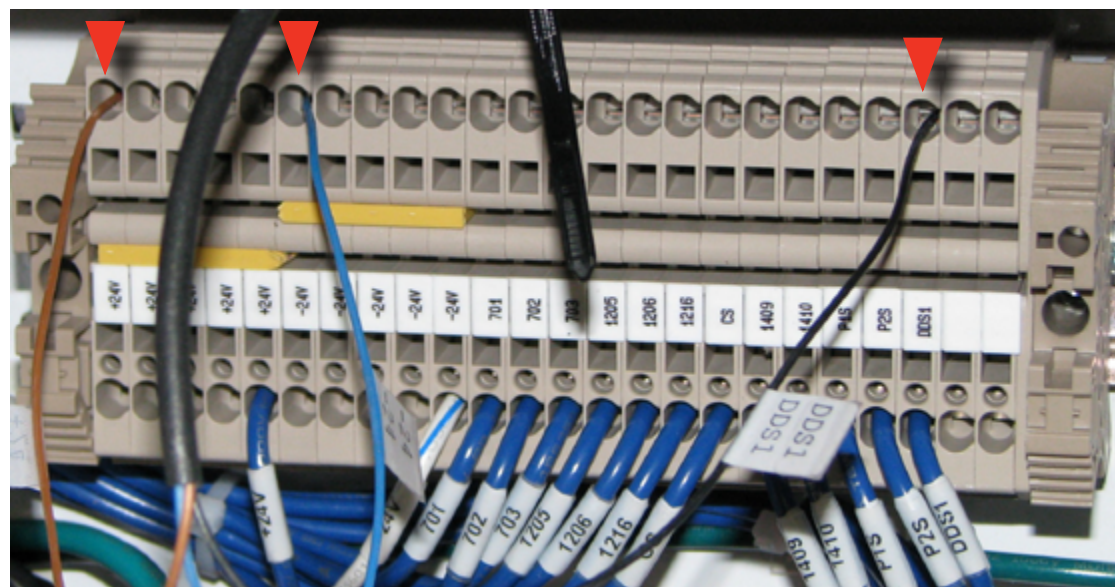




### DISCHARGE SENSOR CABLE

**Step 1:** Use a Phillips screwdriver to loosen the clips and open the Main Junction Box mounted on the Treater Frame.

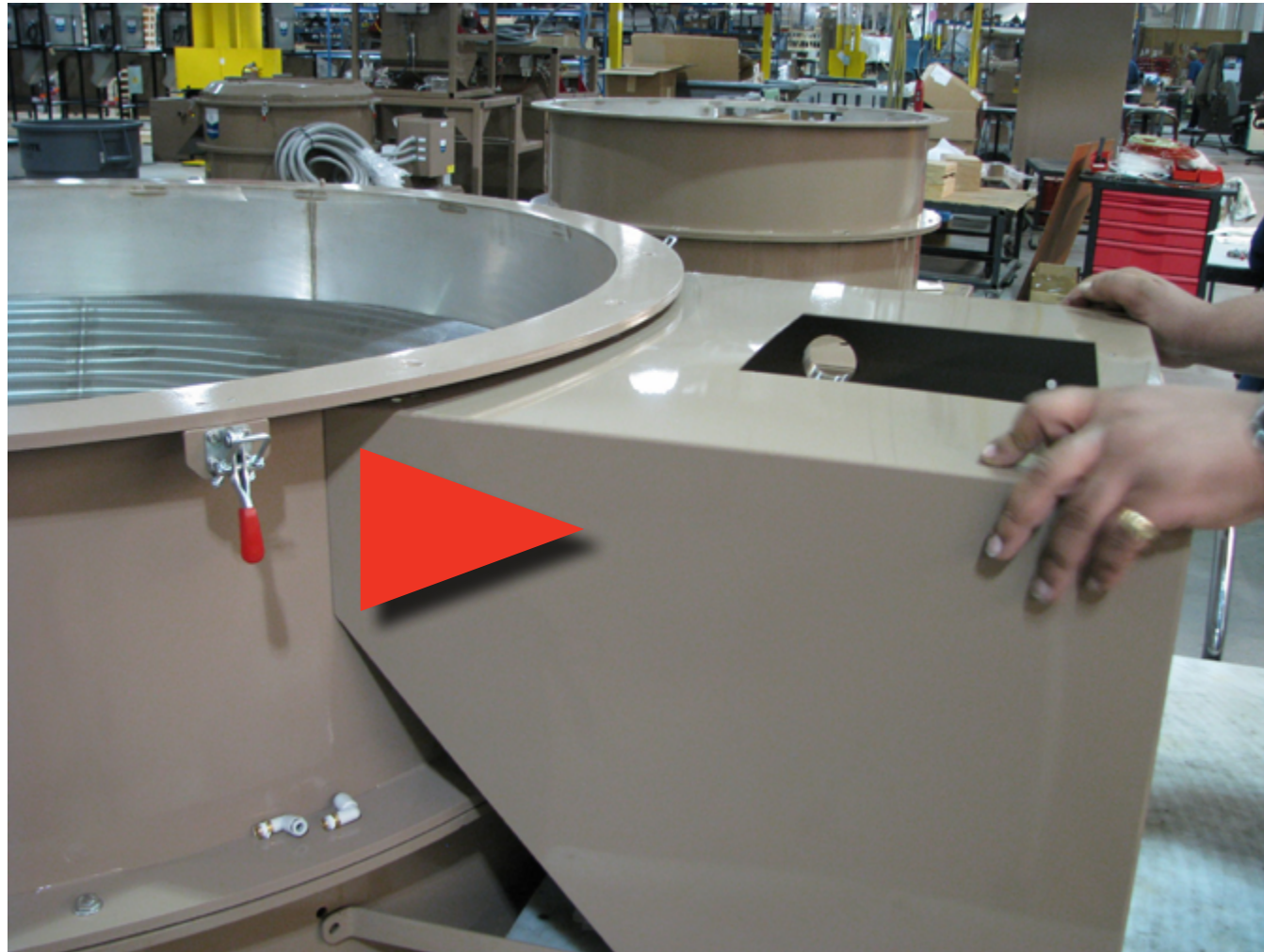
**Step 2:** Disconnect the Sensor cable (black wire) leads: refer to image below - three (3) leads (Brown, Blue and Black) are connected inside Main Junction Box. Each lead is labeled. Recommend removing (unscrew) the top silver connector on the outside of the Main Junction Box, in order to CAREFULLY pull the leads through, without tearing off the labels (see insert photo).



### DISCHARGE ASSEMBLY

**Step 1:** Remove the Discharge Assembly screws on the Bowl Mid Body Wrap. Use one hand to reach inside the Discharge Assembly to catch the nut and lock washer and the other hand to remove the Phillips pan head screws.

**Step 2:** Use Phillips screwdriver to remove three (3) 8mm pan head screws, lock washers and nuts.



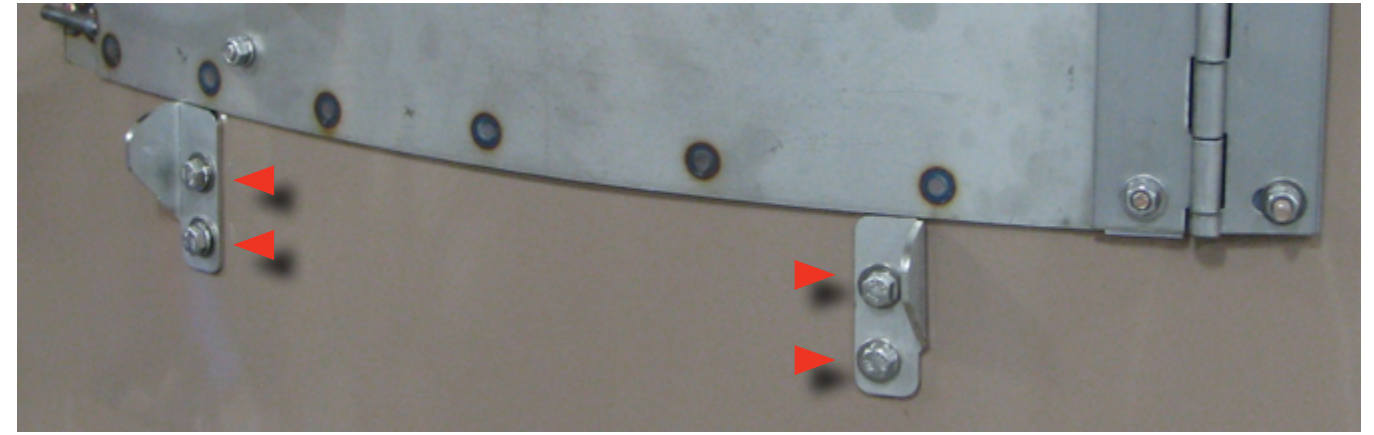
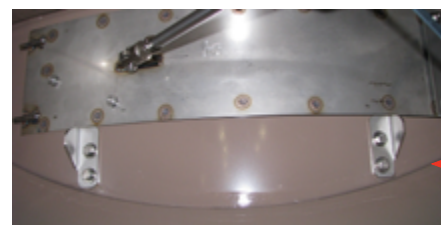
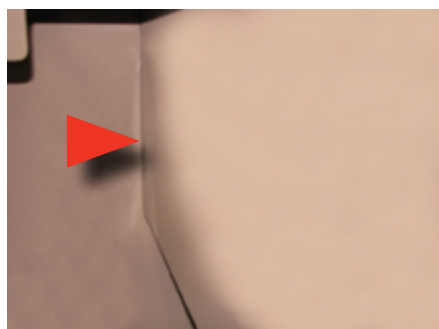
### DISCHARGE HOUSING

**Step 1:** CAREFULLY cut the RTV seal around the outside and inside of the Discharge Assembly (see images below).

**Step 2:** Remove the Discharge Assembly from the Bowl Mid Body Wrap and set aside out of the way.

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This step requires two people.



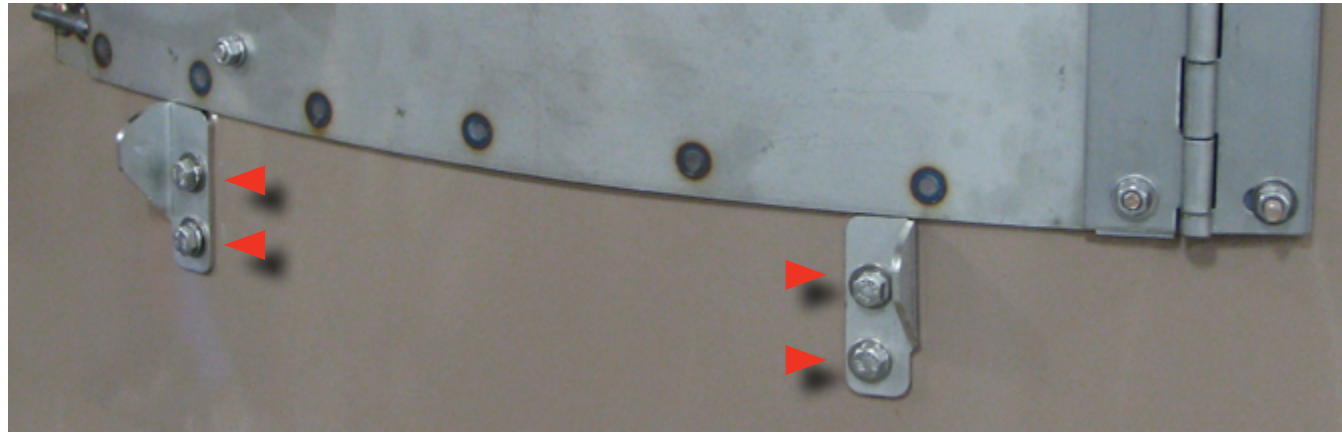
### DISCHARGE DOOR GUIDES

**Step 1:** Remove the two (2) Door Guide bolts from the Bowl Mid Body Wrap: use a ratchet wrench with 10mm socket head to loosen and remove four (4) 6mm bolts, washers and lock washers and guides.

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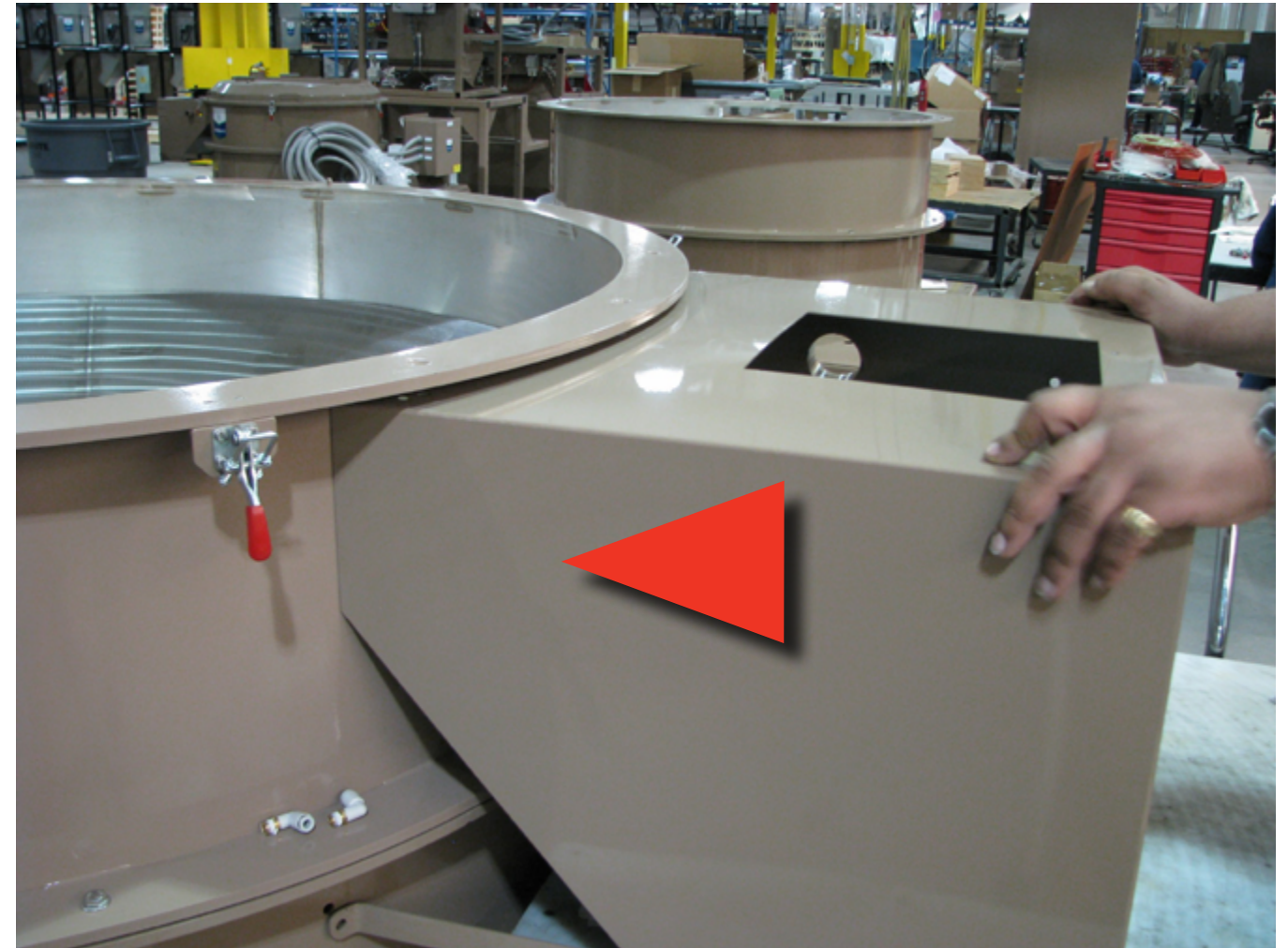
## **PART 2**

**Installing the replacement CBT  
Discharge Housing Weldment**



### DISCHARGE DOOR GUIDES

**Step 1:** Replace the two (2) Door Guide bolts on the Bowl Mid Body Wrap: use a ratchet wrench with 10mm socket head to fasten four (4) 6mm bolts, washers and lock washers and guides in place.

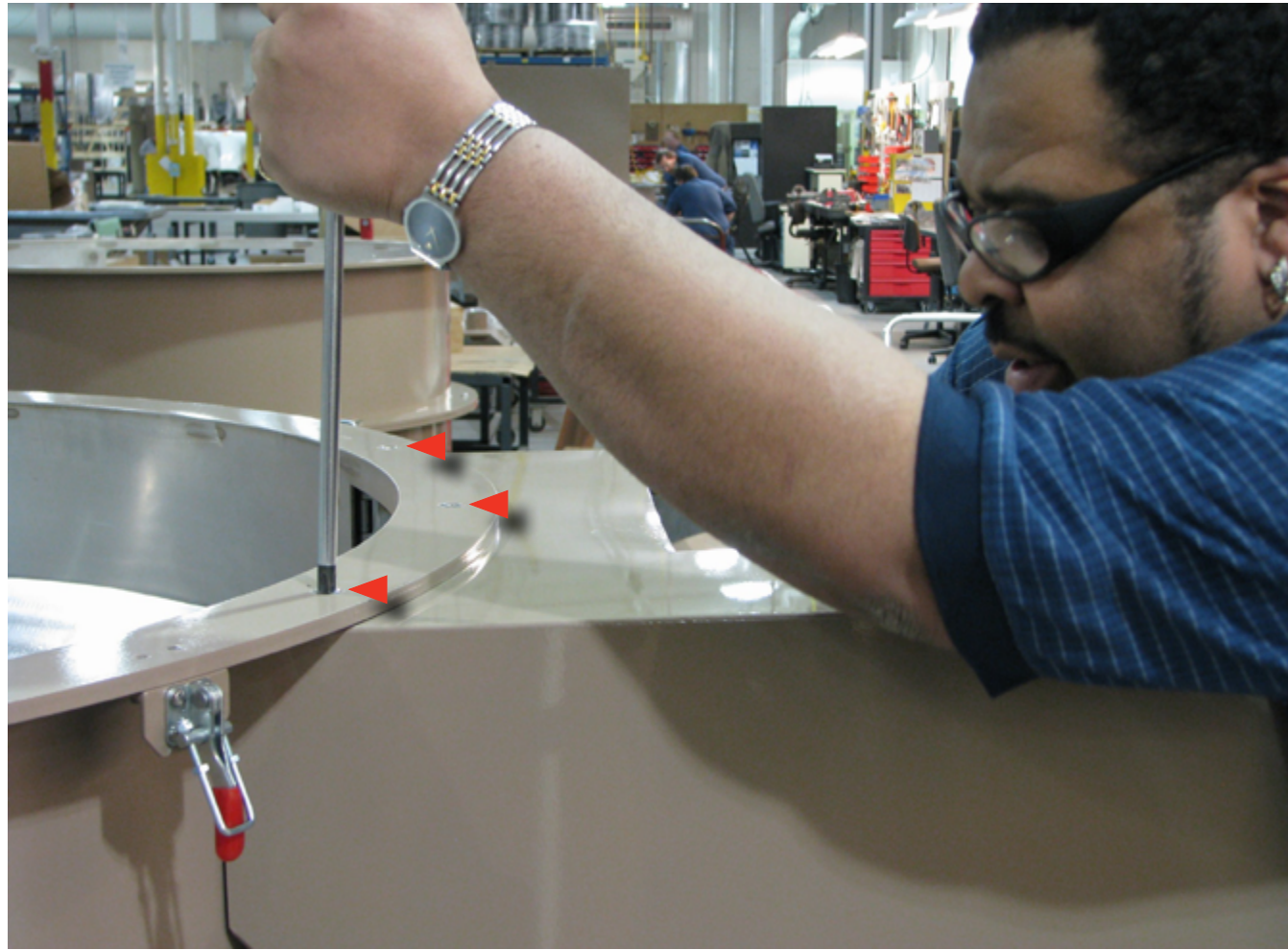


### DISCHARGE HOUSING

**Step 1:** Replace the Discharge Assembly on the Bowl Mid Body Wrap.



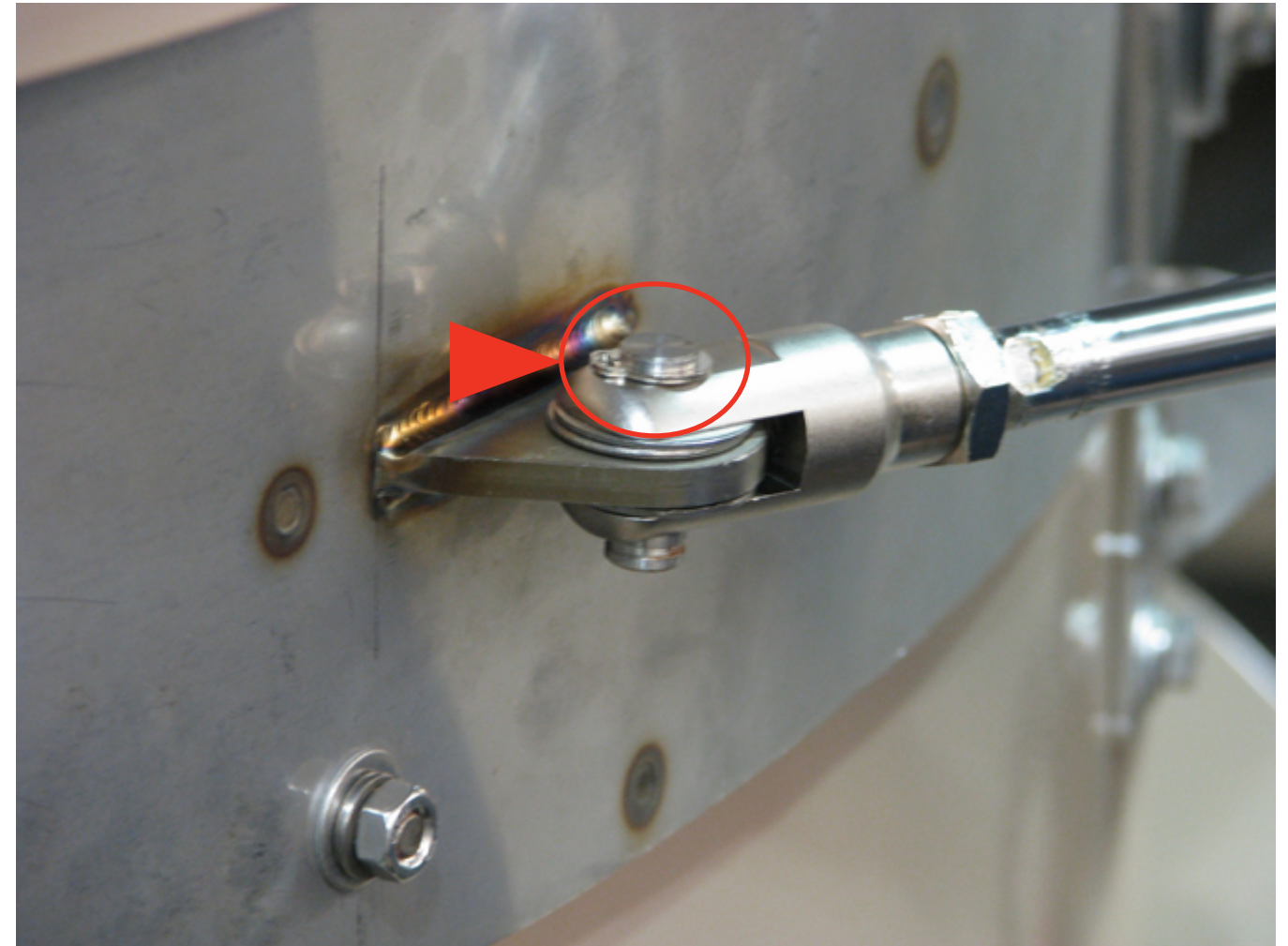
This step requires two people.



### DISCHARGE ASSEMBLY

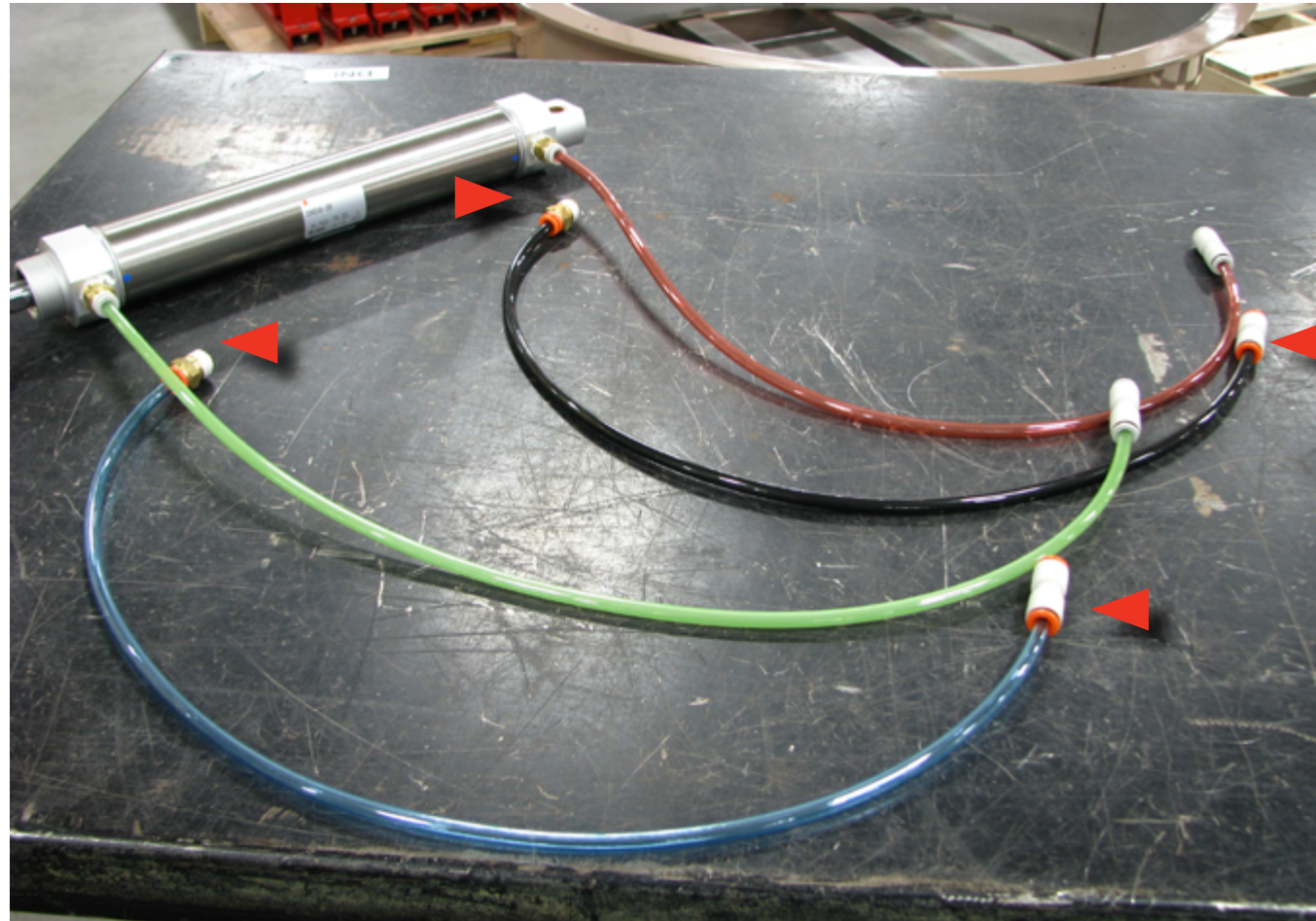
**Step 1:** Align the Discharge Assembly holes on the Bowl Mid Body Wrap. Use one hand to reach inside the Discharge Assembly to fasten the nut and lock washer and the other hand to fasten the Phillips pan head screws.

**Step 2:** Use Phillips screwdriver to fasten three (3) 8mm pan head screws, lock washers and nuts.



### DISCHARGE SENSOR CABLE

**Step 1:** Replace Air Cylinder snap ring that holds the Air Cylinder to the Discharge Door: use snap ring pliers to fasten the Air Cylinder snap ring.



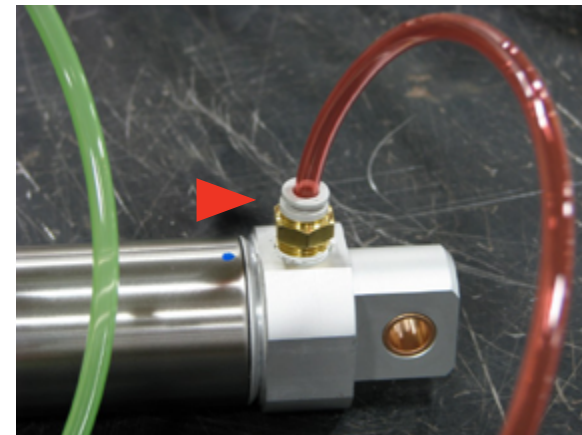
### DISCHARGE AIR CYLINDER

Depending upon which system is currently used, a Spare Parts Kit is provided (image below, left) to convert from Metric (green & red tubing) to Imperial (black & blue tubing).

**Step 1:** Use a crescent wrench to remove each Metric fitting on the Air Cylinder (image below, right) and replace it with the two Imperial fittings provided in the Spare Parts Kit (bagged).

**Step 2:** Insert the new tubing into the fittings on the Air Cylinder.

**Step 3:** Attach Union fittings on each end, as shown above (see image above).



### CONNECT AIR LINES & SENSOR CABLE

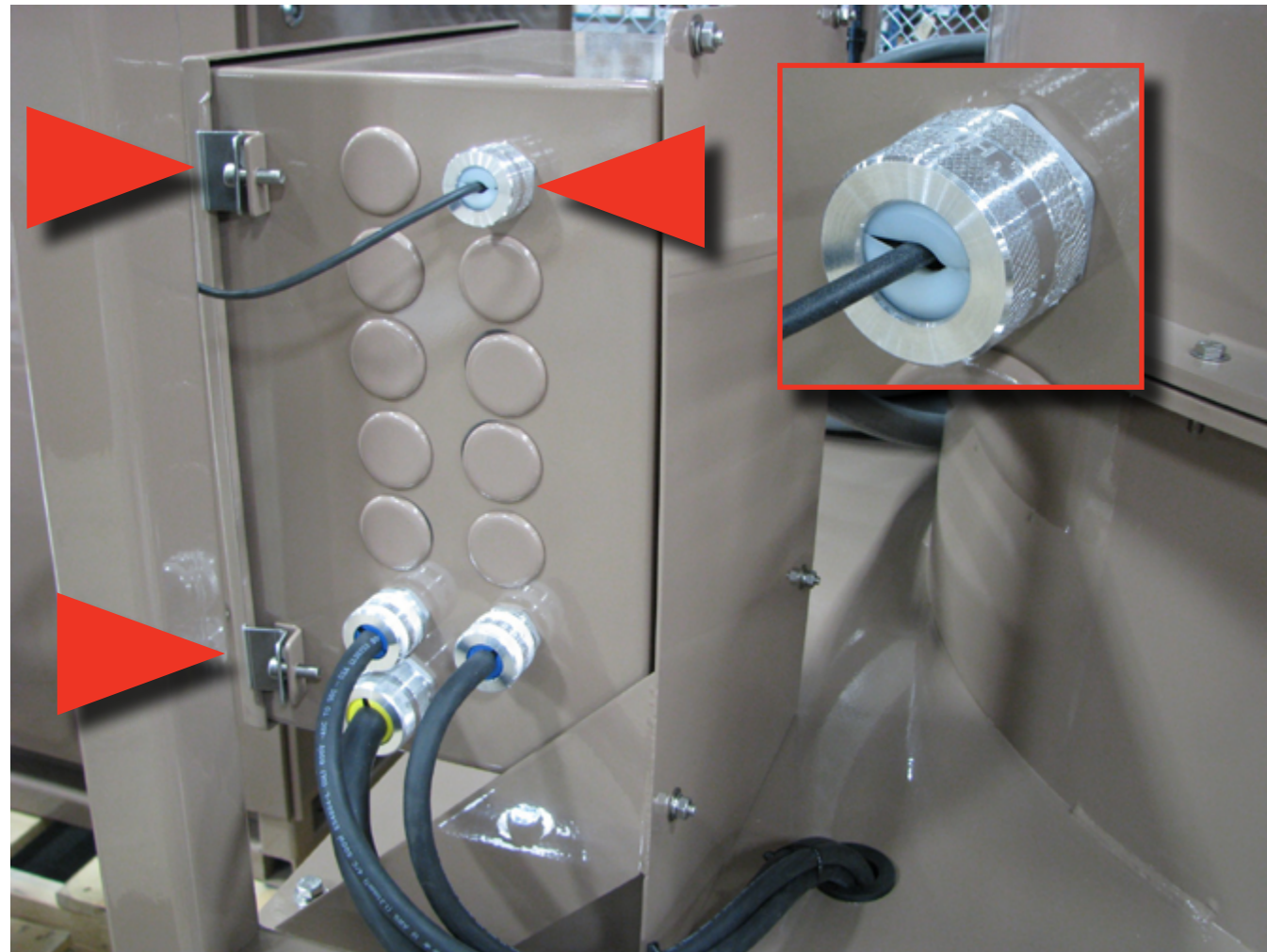
**Step 1:** The Air Cylinder inside the Discharge Housing will be shipped as shown above. Carefully cut the bubble wrap around the Air Cylinder and snip the tie wrap holding the Air Cylinder in place.

**Step 2:** Connect the red air line to the Air Cylinder inside the Discharge and with one hand push in the orange/gray tab and with the other hand pull each tube out of the fitting.

**Step 3:** Connect the Sensor cable to the Main Junction Box (following page 28) and insert the Sensor cable through the rubber grommet on the side of the Discharge Housing. This connects it to the Sensor Cable to the Air Cylinder.

**Step 3:** Insert each Tube through the rubber grommets on the side of the Discharge Housing and connect them to the Union fittings connected to the air lines.





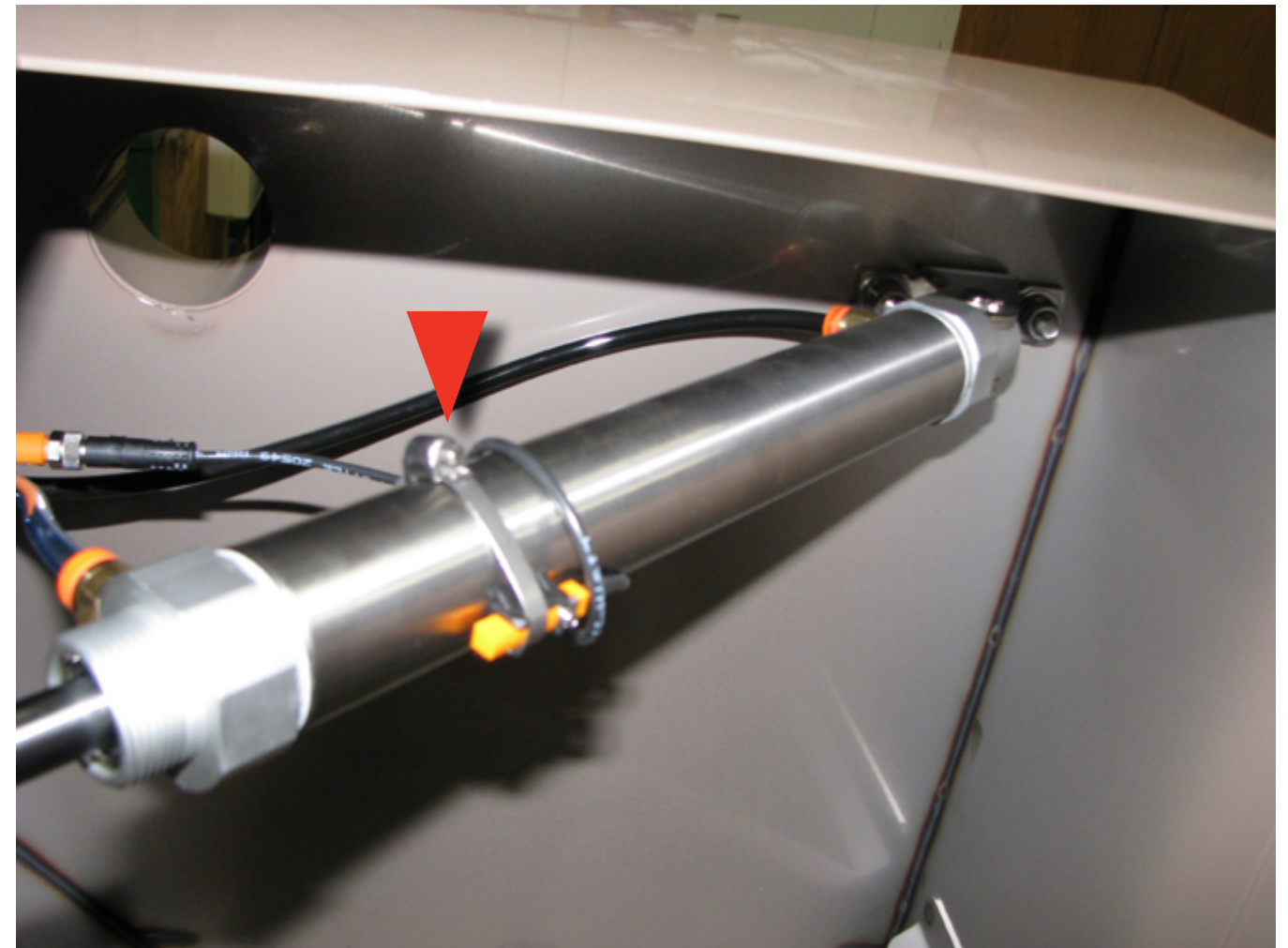
### DISCHARGE SENSOR CABLE

**Step 1:** Use a Phillips screwdriver to loosen the clips and open the Main Junction Box mounted on the Treater Frame.

**Step 2:** CAREFULLY insert the black wire leads through the top silver connector on side of Junction Box: refer to image below - three (3) leads (Brown, Blue and Black) are connected inside Main Junction Box. Each lead is labeled.

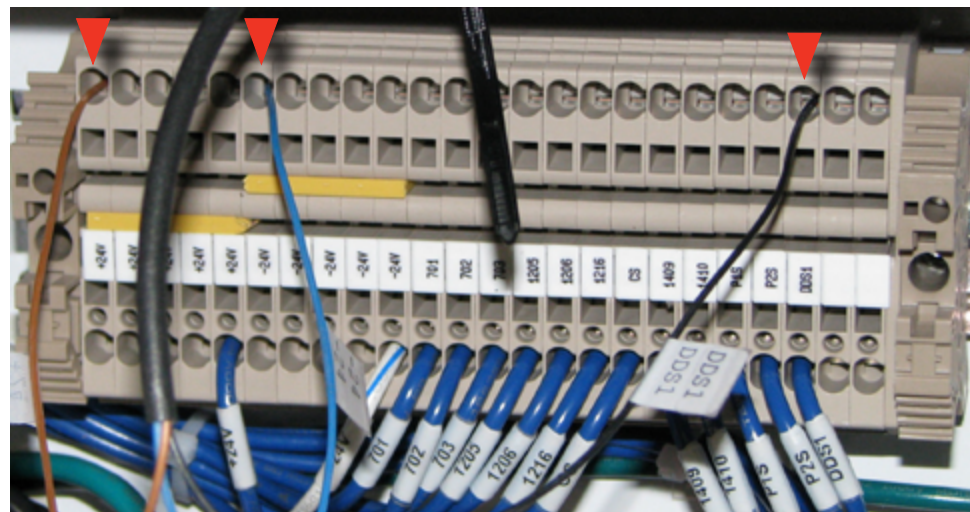
**Step 3:** Once connected, tighten the top silver connector on the side of the Junction Box.

**Step 4:** Use a Phillips screwdriver to tighten the clips on the Main Junction Box.



### AIR CYLINDER SENSOR CABLE

**Step 1:** May need to adjust the position of the Sensor Cable on the Air Cylinder. Use a slot screwdriver to loosen/tighten the band around the Sensor Cable and move the Sensor cable forward or backward to adjust the close/open of the Discharge Deflector Weldment (Door).



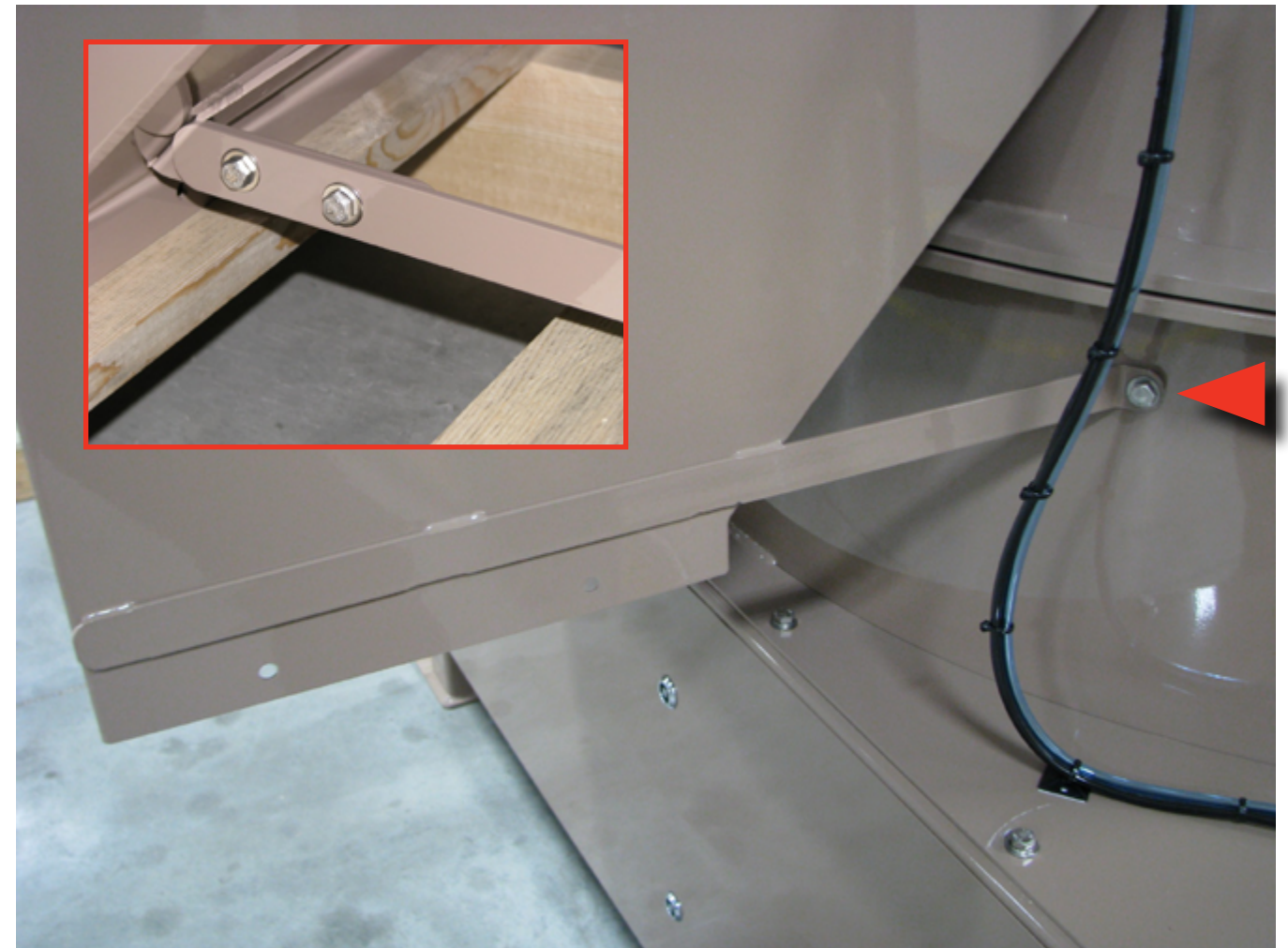


### DISCHARGE ACCESS PANELS

**Step 1:** Replace both the Top and Front Discharge Access Panels.

TOP PANEL: Use 7/16 socket head to fasten two (2) 1/4-20 bolts, washers and lock washers.

FRONT PANEL: Replace the two (2) 6mm wing nuts.



### DISCHARGE SUPPORT

**Step 1:** Connect both (R-L) Bowl Discharge Supports to the front of the Lower Body Wrap: reach inside the Lower Body Wrap through the Lower Body Access Panel opening with one hand to hold the nut. With the other hand, use a ratchet wrench with 13mm socket head to fasten two (2) 8mm bolts, washers and lock washers. Adjust the Discharge Support (arm bar, insert photo): loosen the two bolts and slide the arm forward or back.

**Step 2:** Tighten bolts in place.







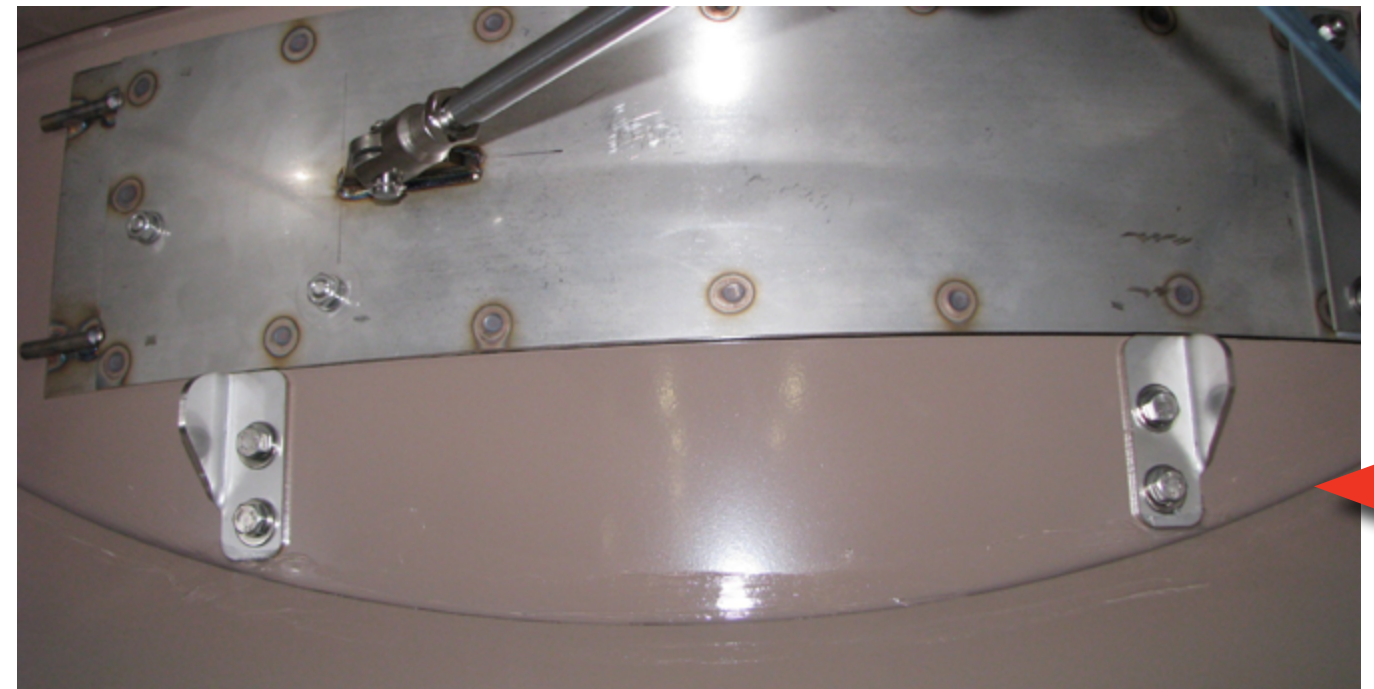
### DUST EVACUATION

**Step 1:** Use a slotted screwdriver to fasten dust exhaust tube to the port on Discharge Assembly.



### DISCHARGE

**Step 1:** Apply RTV sealant around the (R-L) outside edge of the Discharge as well as inside the Discharge (see image below).





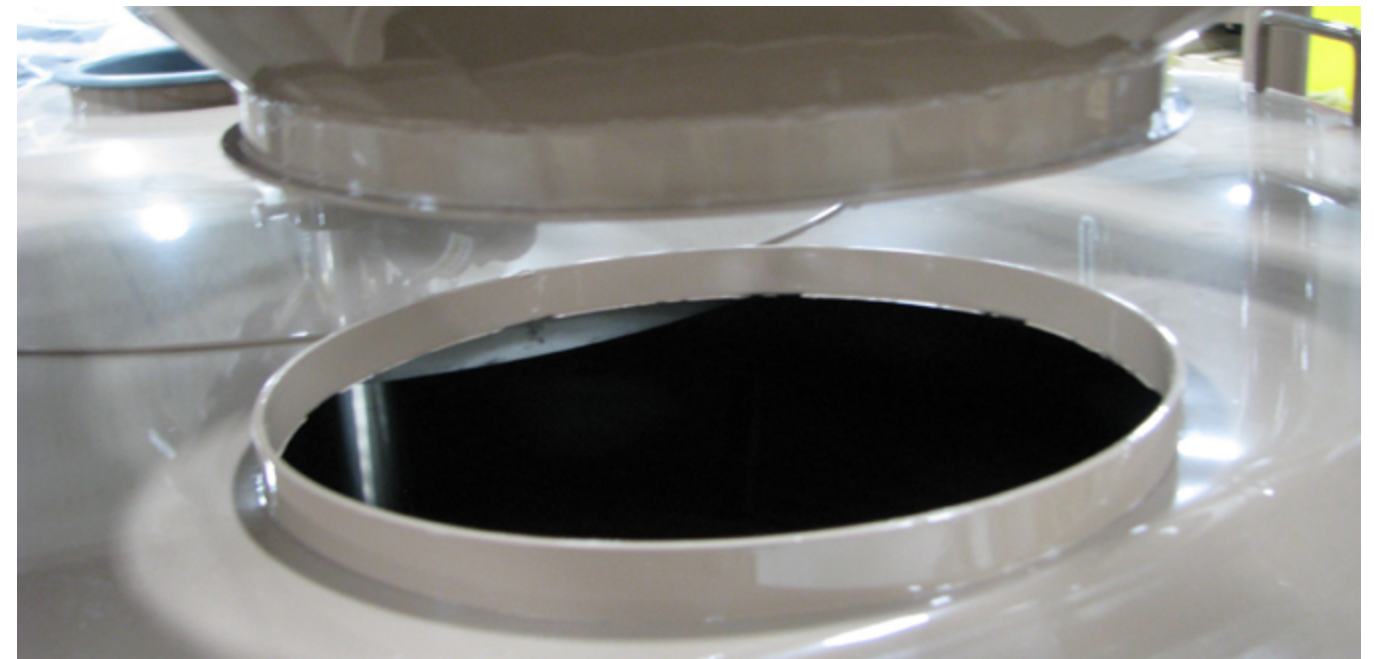
### ACCESS PANELS

**Step 1:** Replace both (R-L) Lower Body Wrap Access Panels & Gaskets on the front of the Lower Body Wrap. Use 10mm socket head to fasten four (4) 6mm bolts, washers and lock washers.



### BOWL COVER

**Step 1:** CAREFULLY swing the Bowl Cover over the Bowl Mid Body Wrap. Ensure the orientation of the Seed Inlet opening is towards the back of the Bowl (aligns underneath the Seed Inlet Transition - see image below).



**SWING ARM**

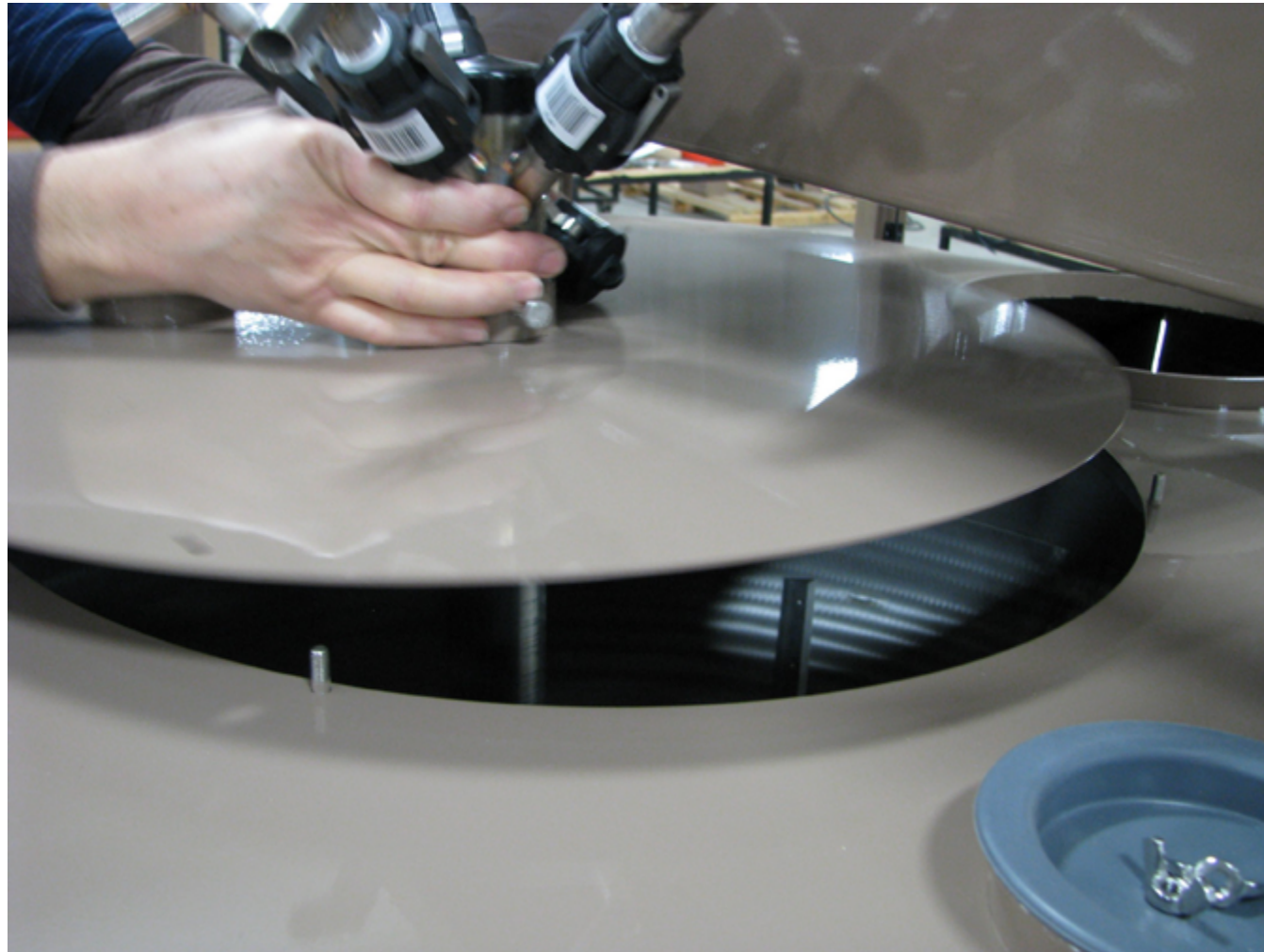
**Step 1:** Push in tab on Scale Clamp (see insert photo) to lower the Cover onto the Bowl Mid Body Wrap.

**Step 2:** Remove the hook from the Bowl Cover (see insert photo).

**Step 3:** Repeat on both sides of the Swing Arm.

**BOWL COVER CLAMPS**

**Step 1:** Latch and lock down the five (5) clamps that hold the Bowl Cover onto the Bowl Mid Body Wrap (see insert photo).



### CHEMICAL INLET PLATE ASSEMBLY

**Step 1:** Replace the Chemical Inlet Plate on top of the Bowl Cover.

**Step 2:** Replace the four (4) wing nuts that fasten the Chemical Inlet Plate on top of the Bowl Cover.



### SEED INLET COLLAR

**Step 1:** Replace the Seed Inlet Collar on the bottom of the Transition. Ensure alignment of transition and Bowl Cover and lock in place.





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