

|                                       |                                             |
|---------------------------------------|---------------------------------------------|
| <b>Subject: Make-Break Body Guide</b> |                                             |
| <b>Model:</b> Camel Max               | <b>Affected Units:</b> 25962963 to 26963043 |
| <b>Date:</b> 5/19/2026                |                                             |

### Description of Issue:

The body pivot bracket may be misaligned causing the make-break to misalign. This may result in damage to the make-break support brackets.

### Parts Required:

Extended Body Guide Field Rework Kit (PN: 0053398)

- (2) New body Guides (PN: 0047187)
- (2) 0.250 Shim (PN: 0048739)
- (2) 0.120 Shim (PN: 0048739-00001)
- (2) 0.060 Shim (PN: 0048739-00002)

### Tools Required:

- 1 5/16 Socket & Wrench
- 1 1/8 Socket & Wrench
- 1 15/16 Socket & Wrench
- Torque Wrench (Must be capable of up to 400 ft/lbs.)

### Instructions:

#### I) Overview of Work

The purpose of this procedure is to properly center the body at the body guides.

Begin by confirming that the body guide shims are adjusted as close to the body as possible. The guides should lightly contact the chassis frame rails without applying clamping force.

- If excessive clearance exists between the guides and frame rails, shims must be removed or replaced with thinner shims to reduce the gap.
- If the guides are clamping against the chassis frame rails, additional shims must be installed to allow the body to raise and lower freely.

The final condition should result in evenly shimmed body guides on both the driver and passenger sides.

If the body guides are already evenly shimmed on both sides and there is minimal clearance (less than 1/16 in.) between the guides and frame rails, no further adjustment is required. In this case, simply install the new body guides using the existing shim configuration.

If shim redistribution is required, the rear body pivot bracket hardware must be loosened to allow the body to self-center using the body guides. Once centered, re-torque all hardware to specification and verify proper make-break alignment.

If the make-break alignment is not correct, refer to Service Bulletin No 146-01.

**NOTE:** This procedure **MUST** be performed on a level surface. Failure to do so may prevent proper completion of this procedure.

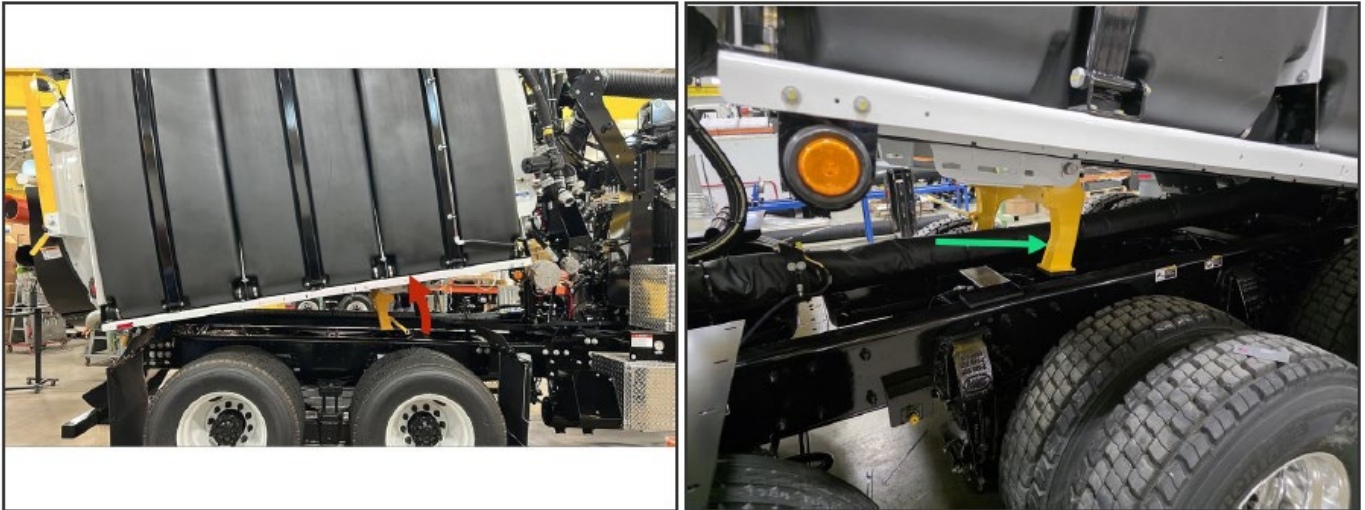
## II) Step by Step Instructions

### Step 1 — Count Body Shims



- Count shims used on the driver side body guide. **The number and type of body guide shims should be equal on the driver and passenger side of the truck.** (Pic 1)
  - This truck has 2 x 1/4" Shims on the drivers side. (Pic 1)
- Count shims used on the passenger side body guides. **The number and type of body guide shims should be equal on the driver and passenger side of the truck.** (Pic 2)
  - This truck has no shims on the passenger side. (Pic 2)
- ☒ **If there is no gap present on both drivers and passenger side, and shims are equal on both sides, no additional rework needs to be completed**

**Step 2 — Lift Body**



- Place truck into work mode and lift the body up. (Pic 1)
- Swing the body prop down before working underneath body. (Pic 2)

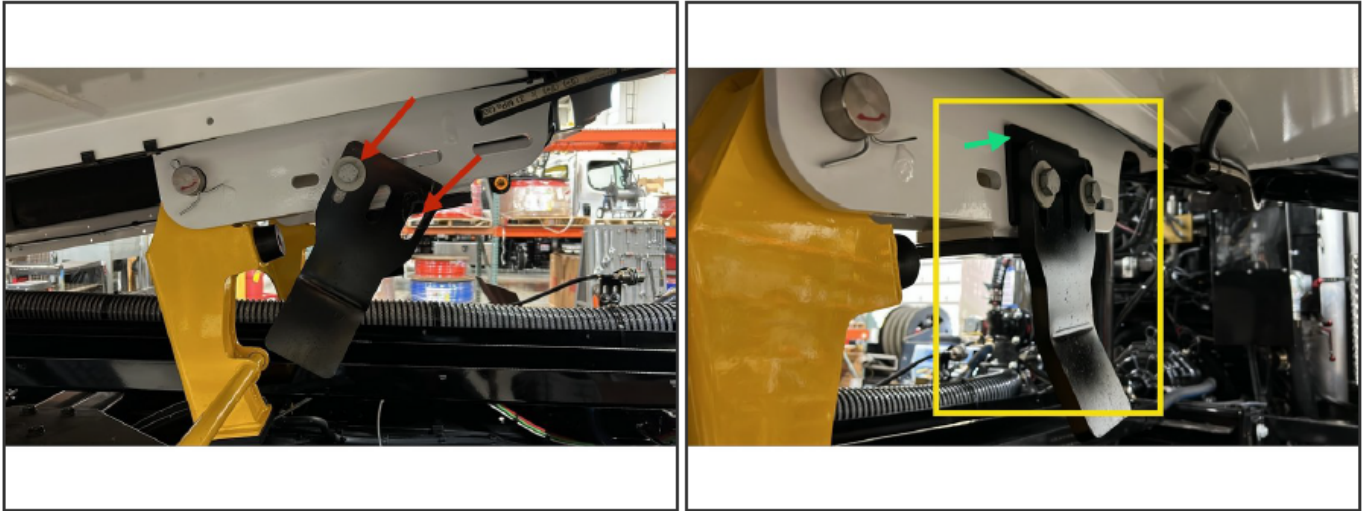
### Step 3 — Install Shims and Guides



- Start at the side that has too many body guide shims. Remove Both bolts and Body Guide from this side fully using a 15/16 impact and wrench. (Pic 1)
  - ① For Example on this truck it is the driver side as it has two shims.
- Remove body shims as required, keeping shims as they will be used on the other side of the truck. (Pic 2)
  - ① For Example on this truck Remove one of the .25" body shims, keep this shim as it will be used on the passenger side of the truck. (Pic 2)
- Reinstall with new longer body guide PN: 0047187 on this side. Use a 15/16 impact and wrench to tighten. Torque to 138 Ft/Lbs. (Pic 2)

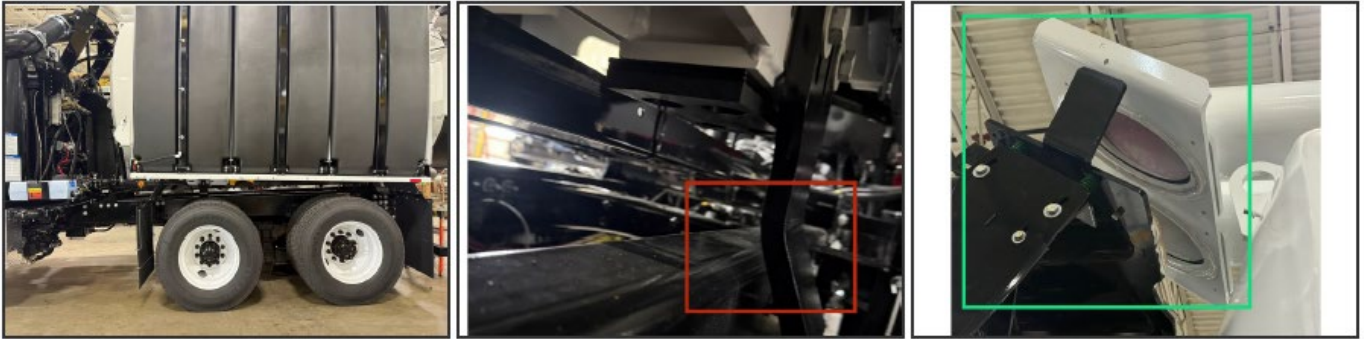
**⚠ SHIMS MUST BE EVEN ON BOTH SIDES OF TRUCK**

**Step 4 — Install Shims and Guides Cont'd.**



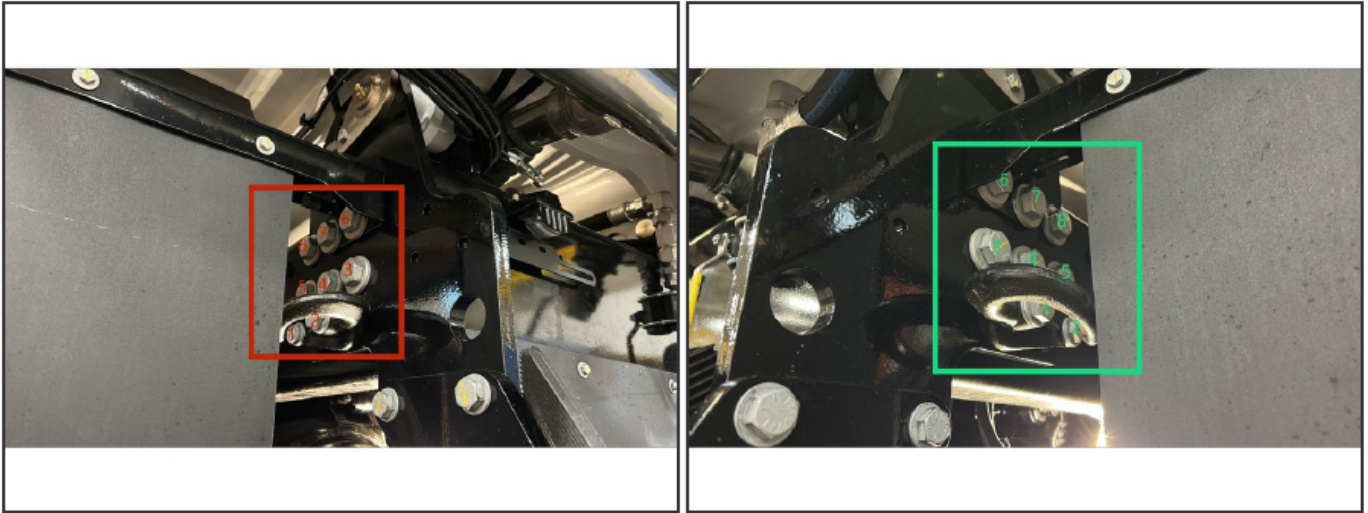
- Now move to the side that has fewer body guide shims. Remove Both bolts and Body Guide from this side fully using a 15/16 impact and wrench. (Pic 1)
    - ① For Example, on this truck it is the passenger side as it has no shims.
  - Add the shims removed from the Opposite side to this side. (Pic 2)
    - ① For Example, on this truck install the .25" shim from Driver side. (Pic 2)
  - Reinstall the new longer body guide PN: 0047187 on the opposite side with shims. Use a 15/16 impact and wrench to tighten. Torque to 138 Ft/Lbs. (Pic 2)
- ⚠ **SHIMS MUST BE EVEN ON BOTH SIDES OF TRUCK**

### Step 5 — Lower Body



- Disengage the body prop, latch prop into position, and drop body until the guide is floating just above the chassis frame rail Approx. 1" (Pic 1 & 2)
- Make Brake must not be contacting power frame. (Pic 3)
- ⚠ Pinch Point Warning - Do not place hands or tools between the body and chassis frame rails. Failure to do so could result in serious injury

### Step 6 — Loosen Hardware



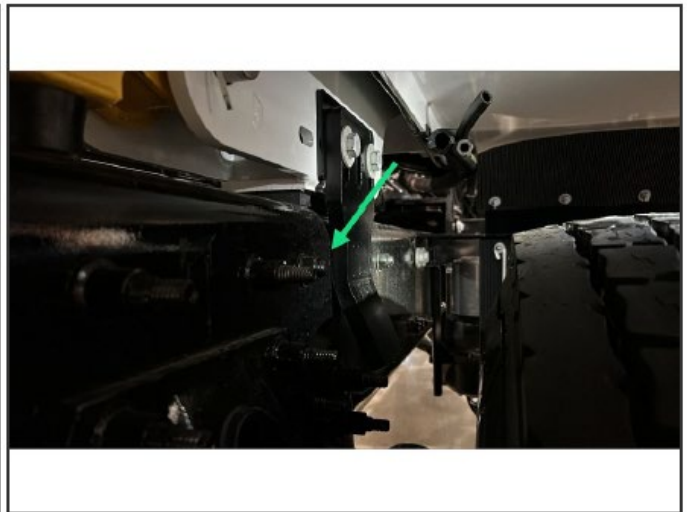
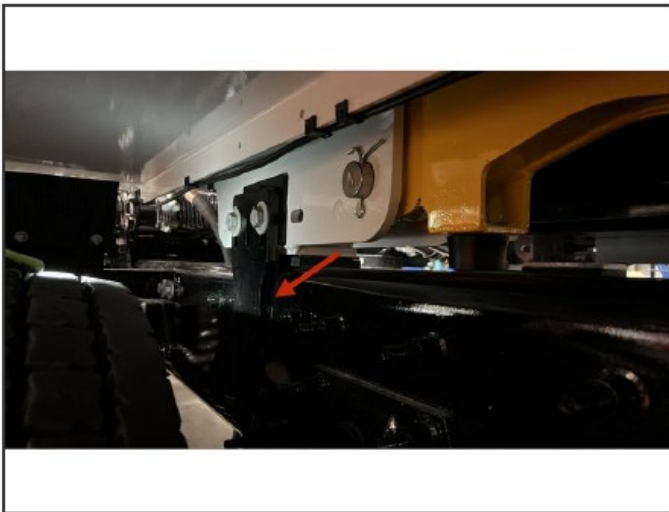
- Loosen all hardware on the driver's side of the rear pivot with an impact gun using 1 5/16, 1 1/8 and 15/16 sockets and wrenches. You will want the nuts to still be on the bolts. 8 bolts in total, including tow hook and mud flap brackets. (Pic 1)
- Loosen all hardware on the passenger's side of the rear pivot with an impact gun using 1 5/16, 1 1/8 and 15/16 sockets and wrenches. You will want the nuts to still be on the bolts. 8 bolts in total, including tow hook and mud flap brackets. (Pic 2)
- ⚠ DO NOT REMOVE LOCK NUTS FROM BOLTS. Loosen just enough to unseat bolt.
- ⚠ BE ADVISED: Loosening the hardware will cause the body to shift slightly at the rear body pivot.

### Step 7 — Body Down



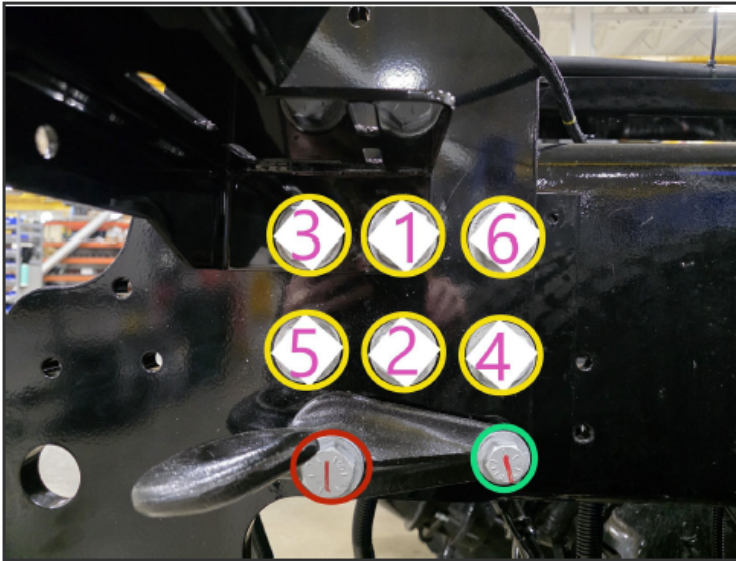
- Run the body all the way down.
  - ⓘ This should center the body.
  - ⚠ Pay special attention to the make break to prevent damage. It may be necessary to loosen the lower make brake assembly.

### Step 8 — Verify Gap between Guide and Chassis



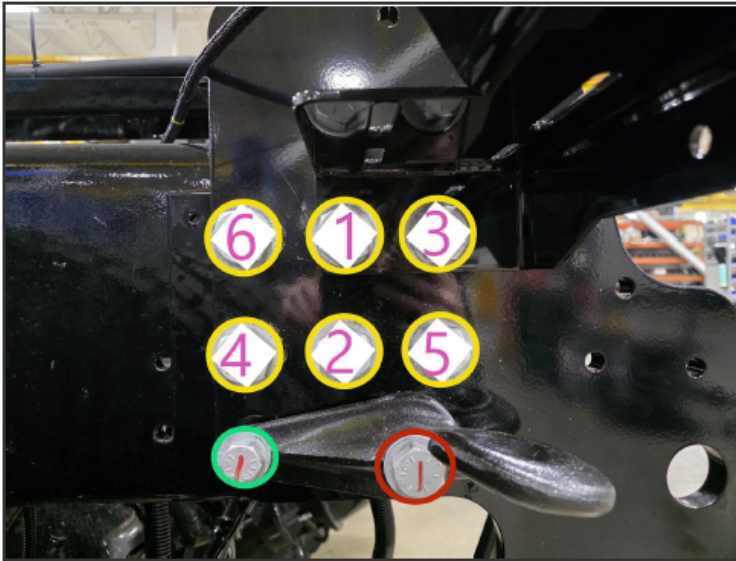
- Once the body is down, check the drivers side to make sure that there is minimal air gap between the body guide and frame rail. (Pic 1)
- Check the passenger side to make sure that there is minimal air gap between body guides and frame rail. (Pic 2)
- ⓘ Minimal Air Gap means  $< 1/16"$

### Step 9 — Torque Passenger Side Rear Pivot



- On the passenger side, use a 1-1/8" socket and an impact gun to fully tighten the indicated 3/4" hex bolt PN: 0057-20450. Have a partner hold the 3/4" hex lock nut PN: 0160-42013 with a 1-1/8" socket and breaker bar. Torque to 245 Ft/Lbs. (Pic 1 Bolt Head Side)
- On the passenger side, use a 15/16" socket and an impact gun to fully tighten the indicated 5/8" hex bolt PN: 0056-20350. Have a partner hold the 5/8" hex lock nut PN: 0160-42012 with a 15/16" socket and breaker bar. Torque to 138 Ft/Lbs (Pic 1)
- On the passenger side, use a 1-5/16" socket and torque wrench to tighten the indicated 7/8" hex bolts PN: 0058-20350 to 394 ft-lbs. Have a partner hold the 7/8" hex lock nuts PN: 0160-42014 with a 1-5/16" socket and breaker bar. (Pic 1 and 2)
- Follow the torque sequence specified in the images (Pic 1)
  - ① Mark all tightened hardware

### Step 10 — Torque Drivers Side Rear Pivot



- On the driver side, use a 1-1/8" socket and an impact gun to fully tighten the indicated 3/4" hex bolt PN: 0057-20450. Have a partner hold the 3/4" hex lock nut PN: 0160-42013 with a 1-1/8" socket and breaker bar. Torque to 245 Ft/Lbs. (Pic 1 Bolt Head Side)
- On the driver side, use a 15/16" socket and an impact gun to fully tighten the indicated 5/8" hex bolt PN: 0056-20350. Have a partner hold the 5/8" hex lock nut PN: 0160-42012 with a 15/16" socket and breaker bar. Torque to 138 Ft/Lbs (Pic 1)
- On the driver side, use a 1-5/16" socket and a torque wrench to tighten the indicated 7/8" hex bolts PN: 0058-20350 to 394 ft-lbs. Have a partner hold the 7/8" hex lock nuts PN: 0160-42014 with a 1-5/16" socket and breaker bar. (Pic 1 and 2)
- Follow the torque sequence specified in the images (Pic 1)
  - ① Mark all tightened hardware

### Notes:

- Verify that the make-break is aligned properly. If not, refer to Service Bulletin #146-01 for instructions.
- This bulletin does **not** imply warranty of any kind. All standard warranty considerations still apply.
- Please refer to all safety warnings prior to proceeding with service repair.

## IMPORTANT EQUIPMENT MAINTENANCE SAFETY INSTRUCTIONS:

### **WARNING**

To avoid death or serious injury from component failure, keep equipment in good operating condition by performing proper service, repairs, and maintenance.

### Before Performing Service, Repairs & Maintenance on the Equipment:

- **Wear safety glasses, protective gloves**, and follow all **safety procedures** described in the product operator's manual when performing service, repairs, and maintenance on the equipment.
- **Securely place** the debris body, tailgate, and boom in lowered position or **securely block up** with support props.
- **Stop engine & PTO**, engage parking brake, lower implement, allow all moving parts to stop and **remove key** before dismounting from truck.
- Allow all **components to cool** before servicing or performing maintenance. **Avoid contact** with hot hydraulic oil tanks, pumps, motors, valves, and hose connection surfaces underneath equipment.

 **WARNING Cancer and Reproductive Harm** [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

 **WARNING Battery posts, terminals and related accessories contain lead** and lead compounds, chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. Wash Hands after handling.

|                                                                                                                                                                         |                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <b>Questions:</b> <i>Contact Technical Support at 1.800.837.9711 (press 4 &amp; then 1) or <a href="mailto:service@superproducts.com">service@superproducts.com</a></i> |                                                   |
| <b>By:</b> <i>Rory Grouse</i>                                                                                                                                           | <b>Title:</b> <i>Technical Service Supervisor</i> |

|                                             |                                                          |
|---------------------------------------------|----------------------------------------------------------|
| <b>Subject: CAMEL MAKE-BREAK ADJUSTMENT</b> |                                                          |
| <b>Model:</b> Camel Max High Dump           | <b>Affected Units:</b> All Camel Max High Dump s/n 2635+ |
| <b>Date:</b> 6/13/2023                      |                                                          |

**Description of Issue:** Make-Break assemblies that are not adjusted properly have the potential to mis-align with the Make-Break guide ears when lowering the body. This can result in the Make-Break supports bottoming out on the springs and bending, preventing a proper seal and, in some extreme cases, cause damage to the Make-Break support arms.

**Parts Required:** Not Applicable

**Tools Required:**

- C-Clamp x4
- 3/4" Socket
- 3/4" Open End Wrench
- Tape Measure or Make-Break go-no-go Gauge

**Instructions:** See attached instruction

**Notes:**

- This bulletin does **not** imply warranty of any kind. All standard warranty considerations still apply.
- Supplemental pages in this communication include images, additional information, and safety warnings.
- Please refer to all safety warnings on page 16 prior to proceeding with service repair.

|                                                                                                                                                              |                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| <b>Questions:</b> Contact Technical Support at 1.800.837.9711 (press 4 & then 1) or <a href="mailto:service@superproducts.com">service@superproducts.com</a> |                            |
| <b>By:</b> Rory Grouse                                                                                                                                       | <b>Title:</b> Service Tech |

## CENTERING THE CAMEL MAKE-BREAK ASSEMBLY

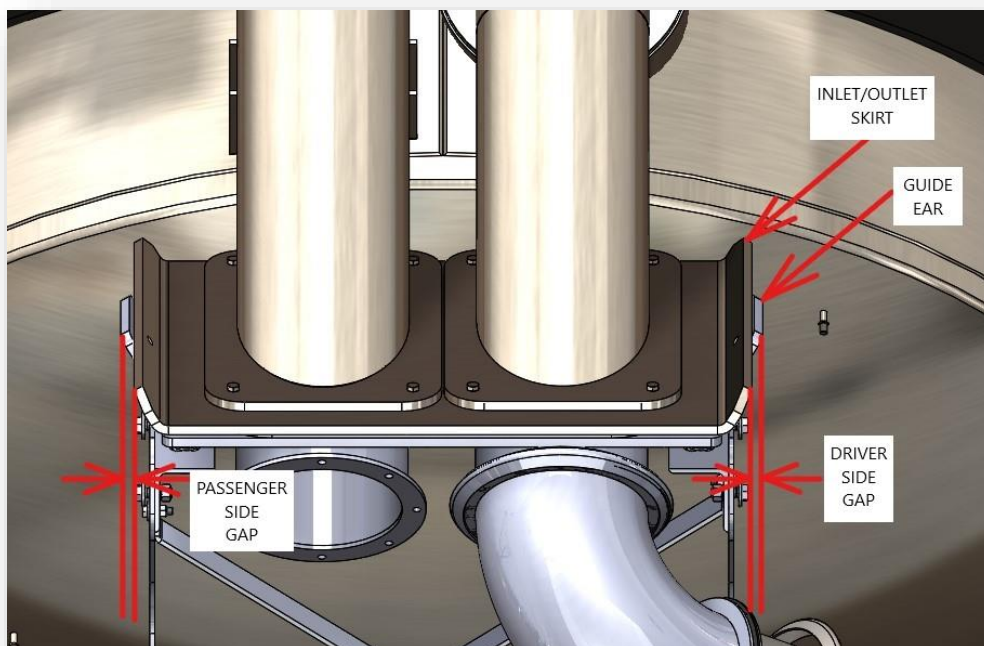
!!MUST BE PERFORMED PRIOR TO SETTING SPRING PRE-LOAD!!

1. With the truck parked on level ground, check the centering of the Body Inlet/Outlet skirt relative to the Make-Break assembly. Lower the body completely onto the Make-Break assembly, compressing the springs to create a good seal between the Inlet/Outlet skirt and the Make-Break gasket. Measure the gap between the Inlet/Outlet skirt and the Make-Break plate guide ears. The skirt should be centered between the guide ears.

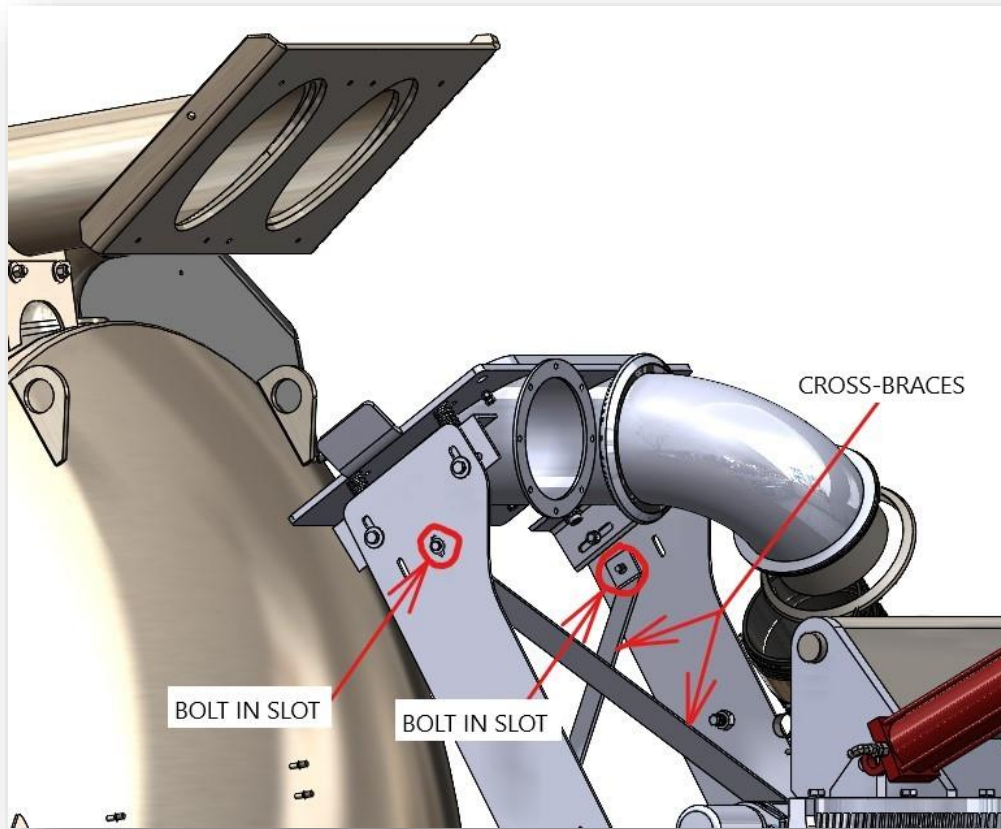
If the measurements of the driver side and passenger side gaps are within  $\frac{1}{4}$ " of each other, the Inlet/Outlet skirt is adequately centered over the Make-Break—proceed with checking the Make-Break spring pre-load per "INSTRUCTIONS FOR RE-SETTING CAMEL MAKE-BREAK SPRING PRE-LOAD."

If the skirt is not centered, --i.e., the difference in gap measurements is greater than  $\frac{1}{4}$ "—the Make-Break will require re-centering.

If the centering difference is greater than  $\frac{1}{4}$ ", the chance of the Inlet/Outlet skirt contacting the Make-Break guide ears and bending the support arms when the body is lowered will be increased—especially when the truck is not parked on even, level ground.

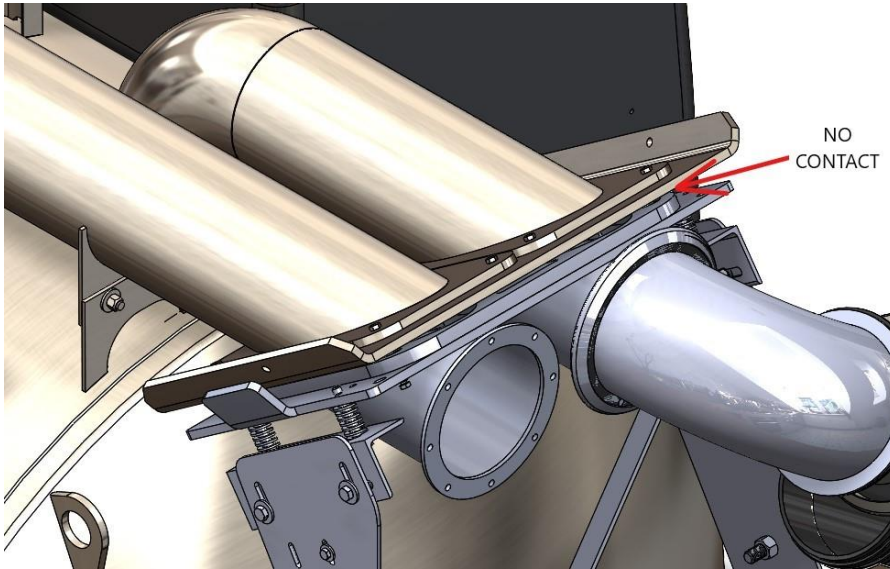


2. To re-center the Make-Break assembly, start by lifting the body up to move the Inlet/Outlet skirt away from the Make-Break, then loosen ONLY the upper bolts of the power frame cross-braces:

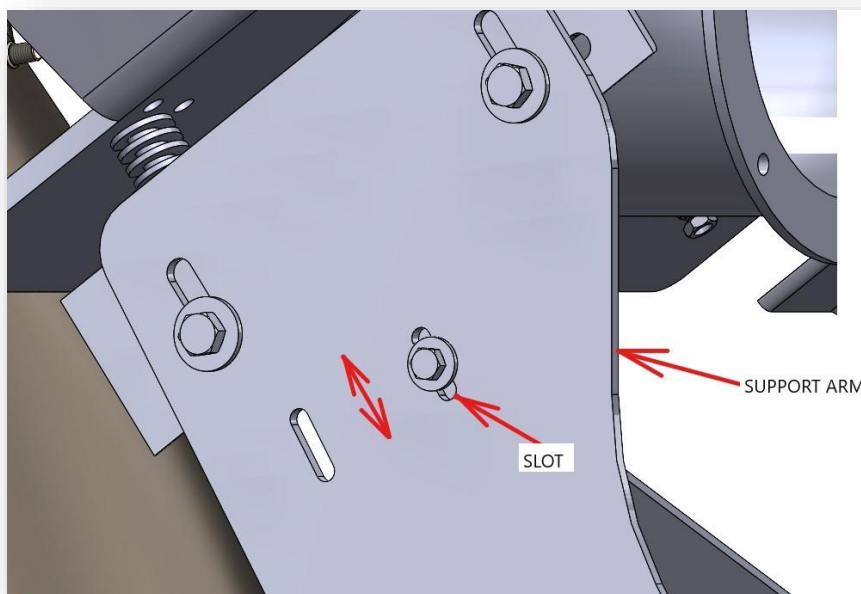


With the upper cross-brace bolts loosened, the Make-Break assembly is now free to move side-to-side so that the centering of the Make-Break assembly may be adjusted.

3. To adjust centering of the Make-Break, lower the body down so that it comes close to the Make-Break assembly, but do not contact the Make-Break assembly—i.e., do not contact the gasket.

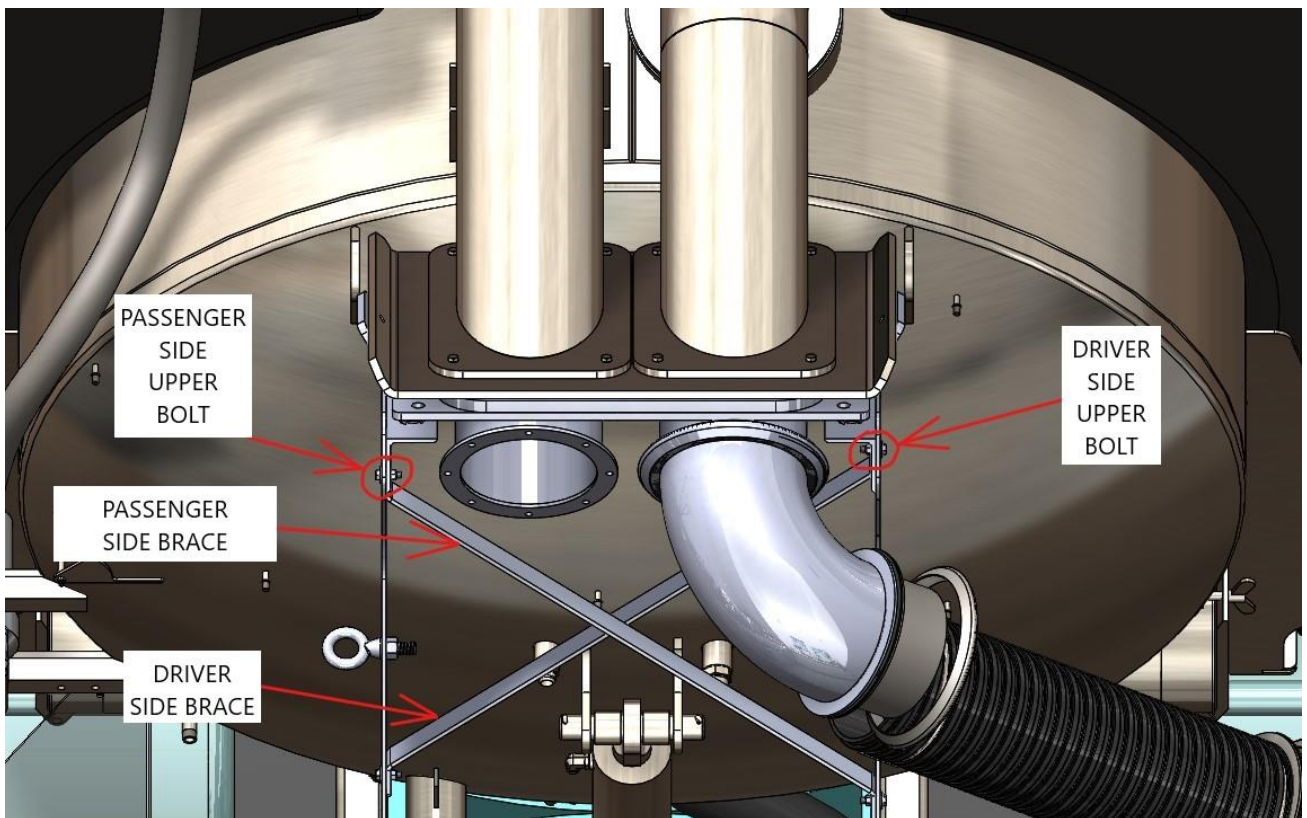


With the Inlet/Outlet skirt near the Make-Break assembly, adjust the side-to-side centering of the Make-Break assembly relative to the Inlet/Outlet skirt. As the Make-Break assembly is adjusted to center, the cross-brace bolts will slide up and down in the slot of the adjacent support arm:

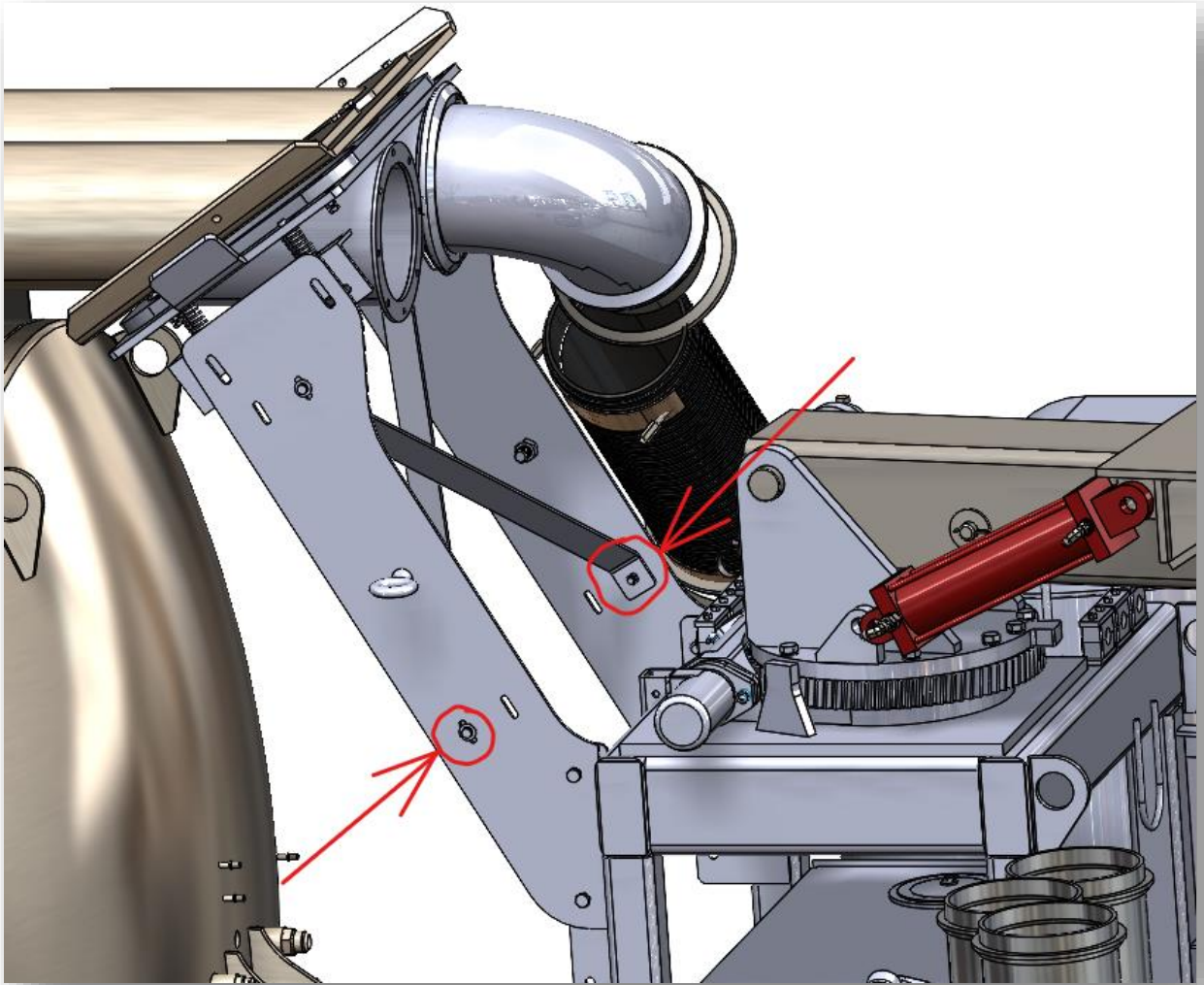


Adjustment of the cross-braces is as follows:

- a. Sliding the Passenger Side brace UP in its slotted hole, while sliding the Driver Side brace DOWN in its corresponding slotted hole will force the Make-Break assembly towards the Driver Side of the truck.
- b. Sliding the Passenger Side brace DOWN in its slotted hole, while sliding the Driver Side brace UP in its corresponding slotted hole will force the Make-Break assembly toward the Passenger Side of the truck.



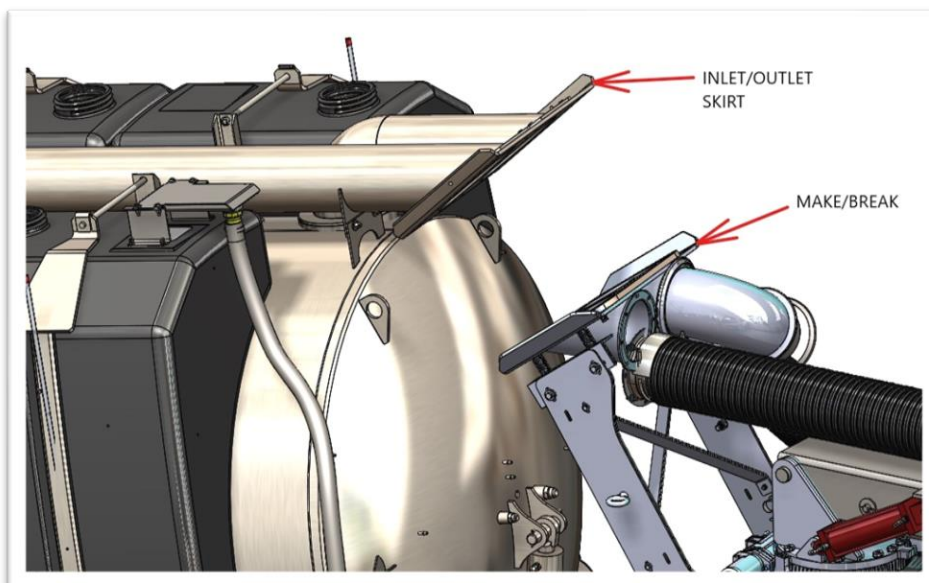
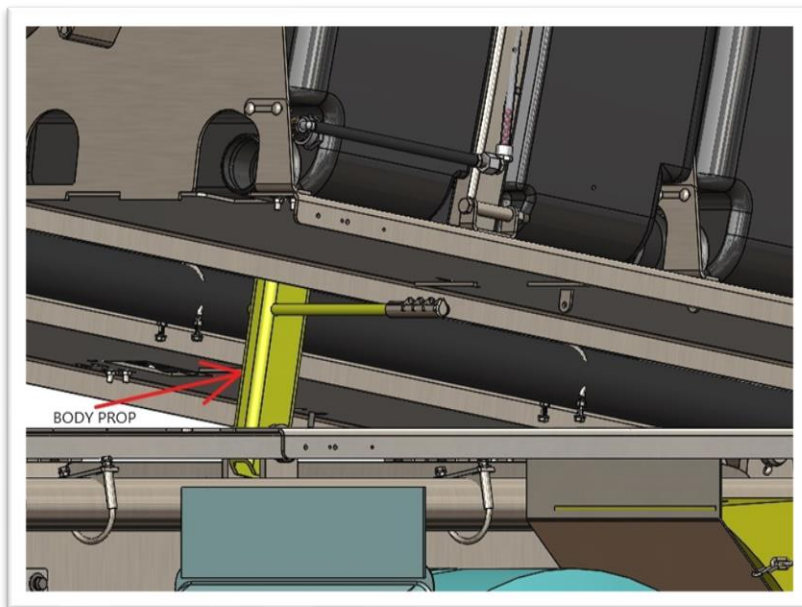
- c. If either brace is moved to the limits of the upper slots in the support arms, and the Make-Break assembly is still not centered, it may be necessary to loosen the lower bolt of the brace so the Make-Break assembly can be further adjusted. The lower bolts of the braces are also located in slots to permit additional adjustment of the cross-braces.



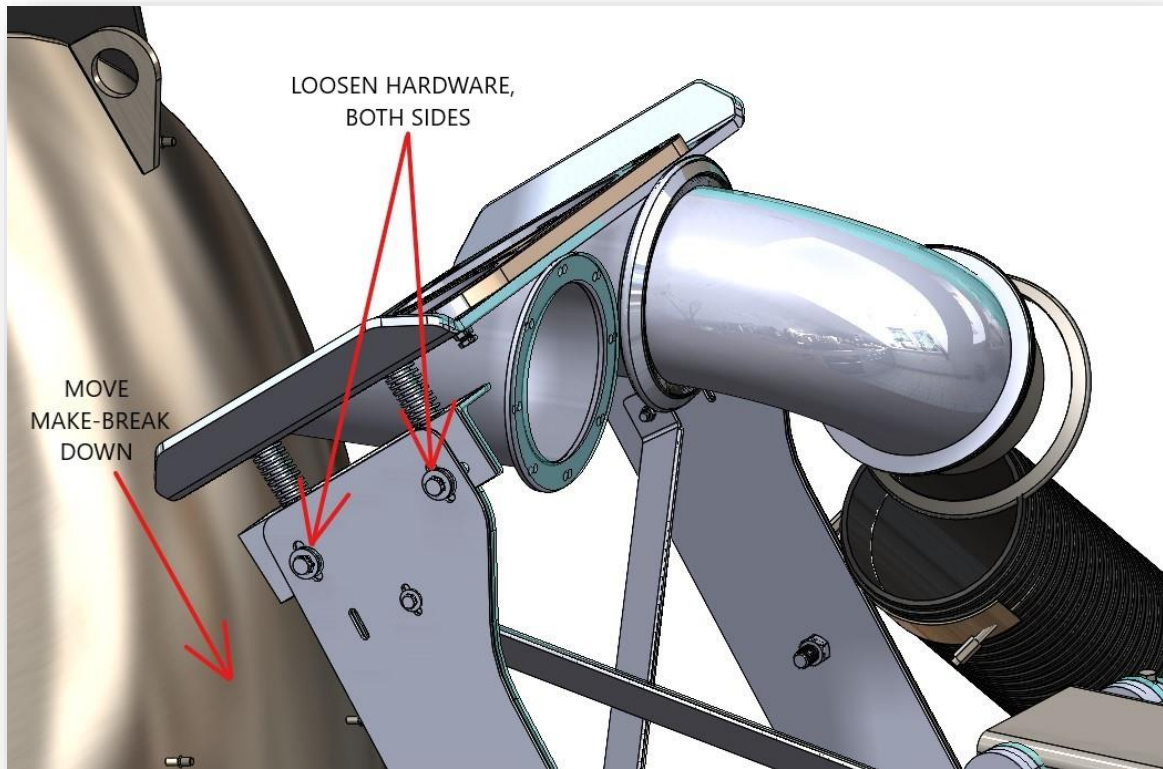
- D. After centering the Make-Break, tighten the cross-brace bolts: lower bolts first (if required), then the upper bolts. After centering of the Make-Break is completed, the spring pre-load of the Make-Break assembly must be checked and/or adjusted. See "INSTRUCTIONS FOR RE-SETTING CAMEL MAKE-BREAK SPRING PRE-LOAD."

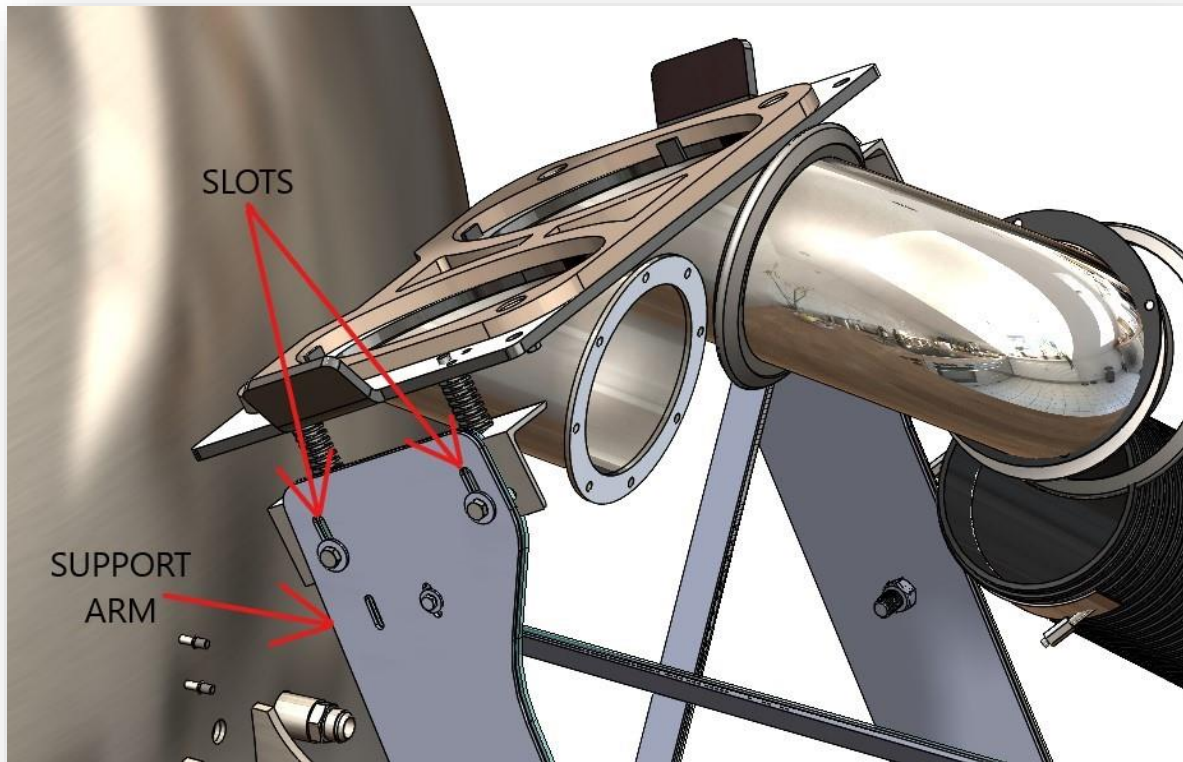
### INSTRUCTIONS FOR RE-SETTING CAMEL MAKE-BREAK SPRING PRE-LOAD

1. Check the centering of the Body Inlet/Outlet skirt relative to the Make-Break assembly.  
The skirt should be evenly centered between the guide ears on the gasket plate of the make-break assembly.
2. After confirming that the inlet-outlet skirt and make-break assembly are centered, raise the Body so that the connection between the make-break and the body inlet/outlet skirt is broken and the skirt is clear of the make-break and deploy the body prop.



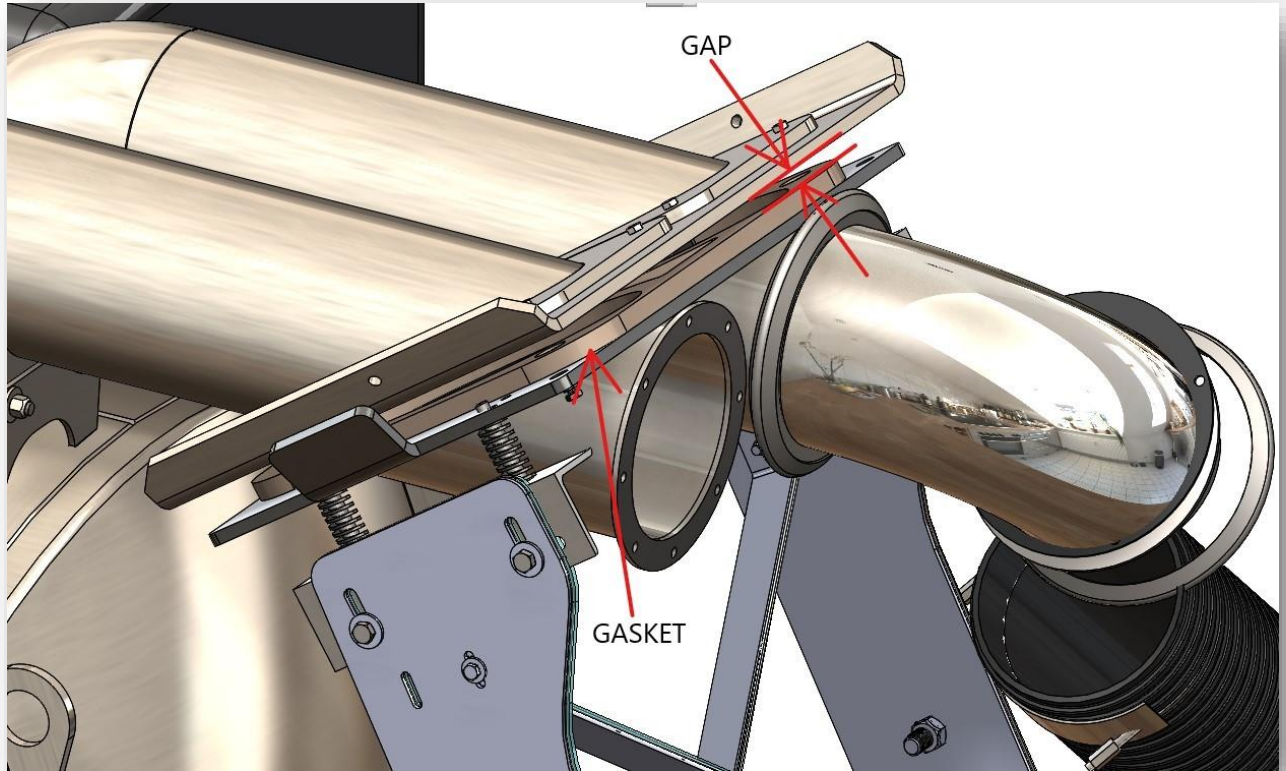
3. Loosen the hardware that holds the make-break assembly into position, and then slide the make-break assembly as far down as possible. The hardware should only be loosened enough for the make-break to slide down the slots in the support arms.



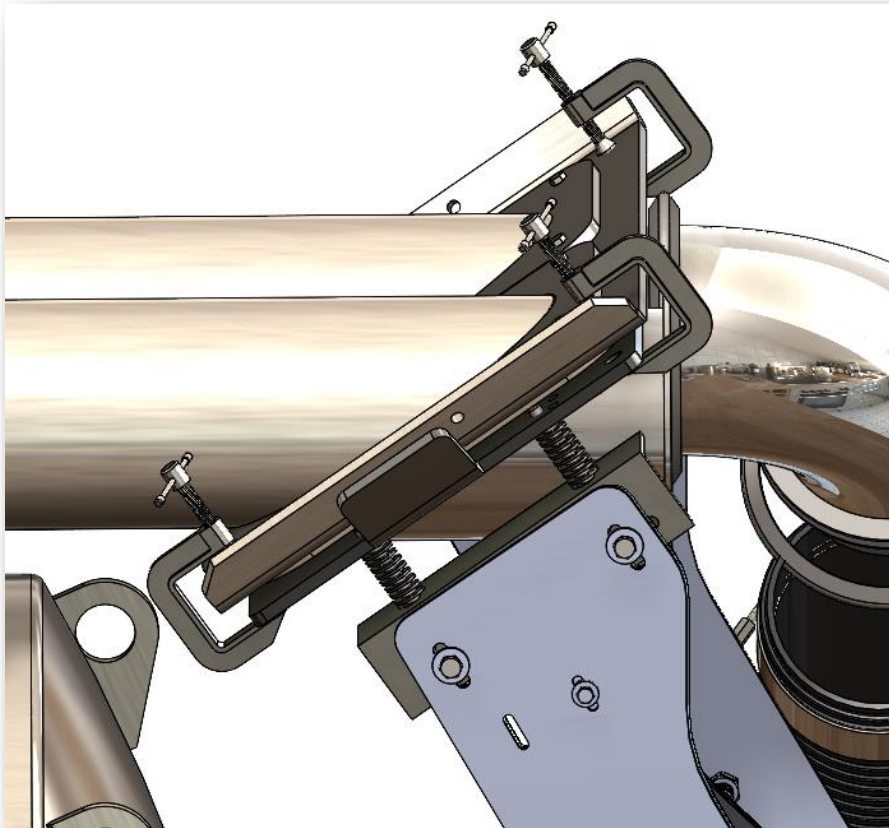
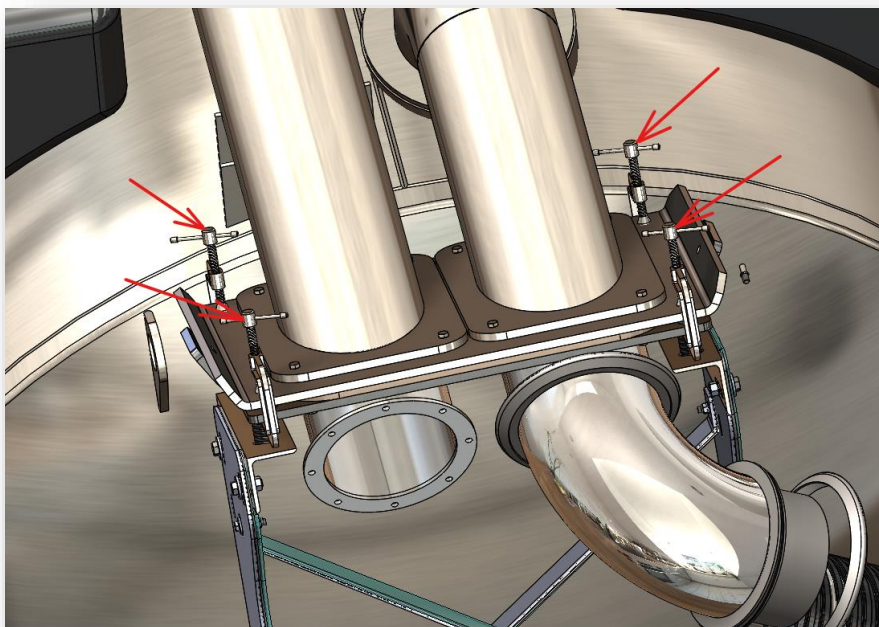


4. After sliding the make-break assembly down, disengage the body prop, then lower the body down completely. With the body completely lowered, there should be clearance between the make-break gasket and the inlet/outlet skirt.

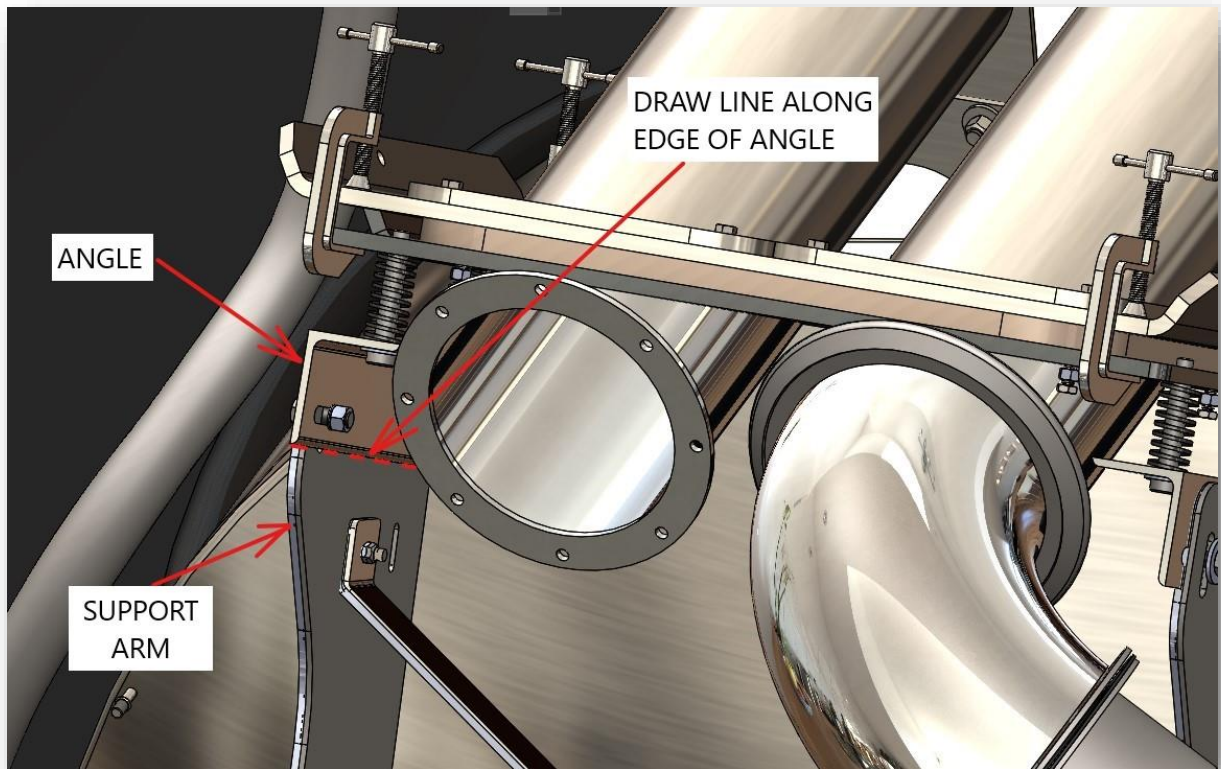
If there is no gap between the make-break gasket and the inlet/outlet skirt, go to Steps 9b & 9c.



5. With the body remaining down, the make-break assembly must now be slid upwards in the support arm slots towards the inlet/outlet skirt. Clamp the make break assembly against the inlet/outlet skirt using a large c-clamp at each corner of the inlet-outlet skirt. Ensure that the skirt is fully seated against the gasket, but avoid compressing the connection beyond what is required to maintain full contact between the gasket and the inlet/outlet skirt.

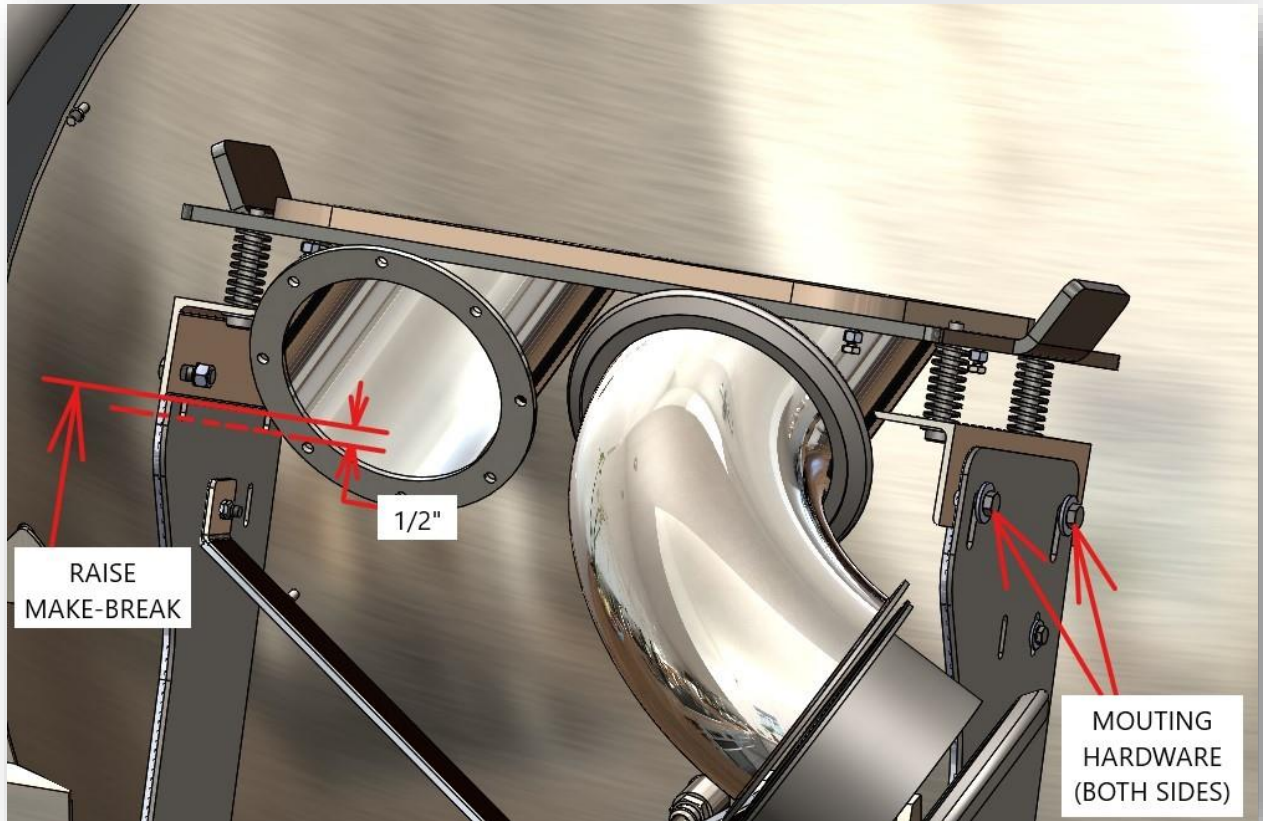


6. Once the make-break and inlet/outlet skirt have been clamped together, draw a line on the inside face of the support arm along the lower edge of the make-break assembly mounting bracket angle. Repeat for the opposite side of the make-break.

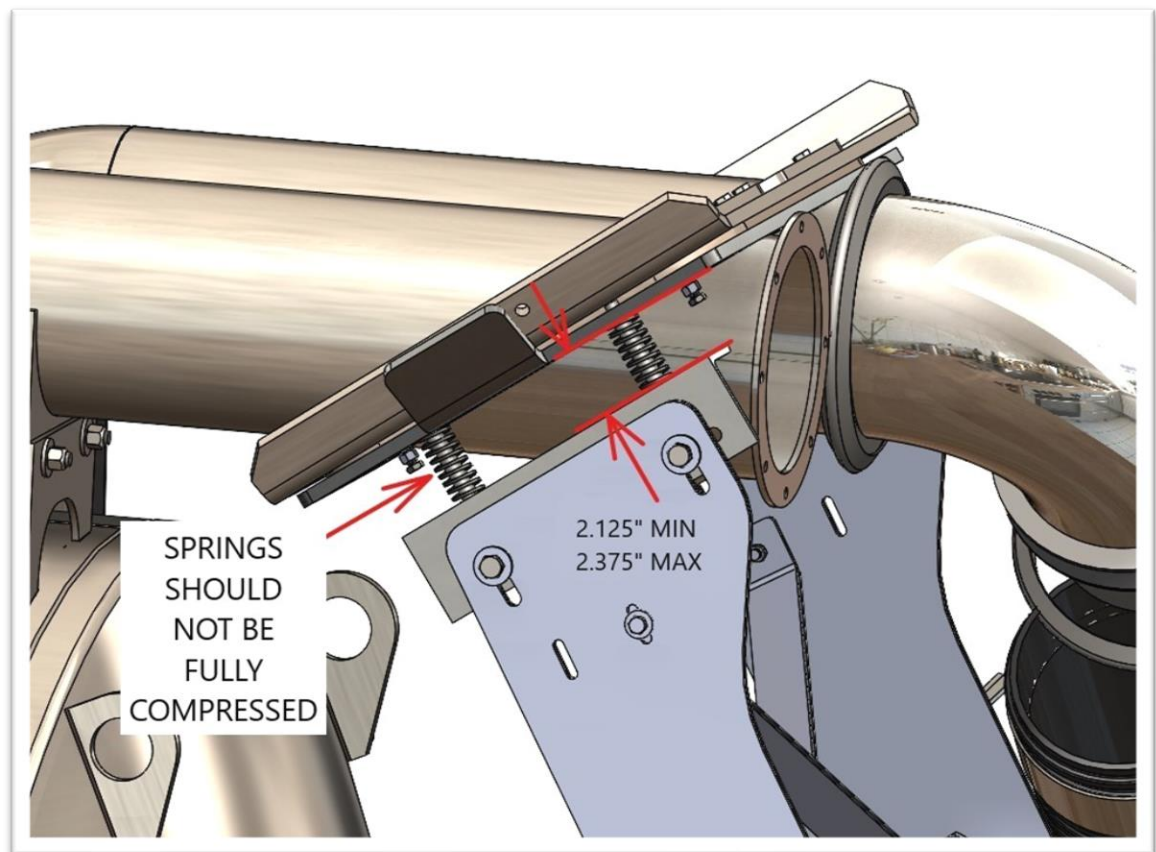


7. After drawing a line on the inside of each support arm, remove the c-clamps. After removing the c-clamps, raise the body and deploy the safety prop.

8. After raising the body, the make-break assembly should be raised  $\frac{1}{2}$ " above the lines that were drawn on the inside face of the support arms. Draw a second line  $\frac{1}{2}$ " above each of the lines drawn in Step 6. Raise the make-break assembly up to the  $\frac{1}{2}$ " spaced lines, then tighten the mounting hardware.



9. Raising the make-break assembly  $\frac{1}{2}$ " will produce the required pre-loading of the make-break springs and result in proper sealing between the inlet/outlet skirt and the make-break gasket. To check if the required pre-load has been realized with the previous adjustments, once again disengage the body prop so that the body may be lowered completely down.
  - a. While lowering the body, observe the moment of contact between the make-break and the inlet/outlet skirt. The skirt should contact the make-break gasket evenly, and the skirt should be relatively centered across the make-break gasket. If the skirt significantly favors contacting one side of the gasket before the opposite side, adjust the make-break assembly mounting hardware so that the make-break gasket is parallel with the inlet/outlet skirt. Observe the amount of compression present in the make-break springs. The springs should not be fully compressed—i.e. "bottomed out". Visible clearance between the spring coils should be observed.



- b. Once the body is completely lowered, measure the space between the mounting angle and the underside of the gasket mounting plate. This space—the "preload measurement"—should measure between 2.125" (2-1/8") and 2.375" (2-3/8") on both the driver side and the curb side of the make-break. If the preload measurement is between 2.125" and 2.375", then adequate spring preload has been applied.

- c. MEASUREMENT <2.125" (2-1/8") If the preload measurement is less than 2.125", then too much pre-load has been applied to the make-break springs. Reduce the spring pre-load by raising the make-break assembly enough so that the preload measurement falls within the 2.125" to 2.375" range.

Raise up the body and deploy the body prop. Loosen the mounting hardware, raise the make-break assembly, then re-torque the mounting hardware. Disengage the body prop and once again fully lower the body and take the verify that the preload measurement is between 2.125" and 2.375".

- d. MEASUREMENT >2.375" (2-3/8") If the measurement is more than 2.375", then there is not adequate pre-load applied to the make-break springs. The pre-load must be increased by raising the make-break assembly enough so that the preload measurement falls within the 2.125" to 2.375" range.

10. Raise the body and deploy the body prop. Loosen the mounting hardware, lower the make-break assembly, then re-torque the mounting hardware. Disengage the body prop and once again fully lower the body and take the verify that the preload measurement is between 2.125" and 2.375".

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- **Stop engine & PTO**, engage parking brake, lower implement, allow all moving parts to stop and **remove key** before dismounting from truck.
- Allow all **components to cool** before servicing or performing maintenance. **Avoid contact** with hot hydraulic oil tanks, pumps, motors, valves, and hose connection surfaces underneath equipment.

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