

# Crank Case Ventilation System Reroute

Effected Engines – PSI HD  
14.6L, 18.3L and 21.9L

3/16/2015

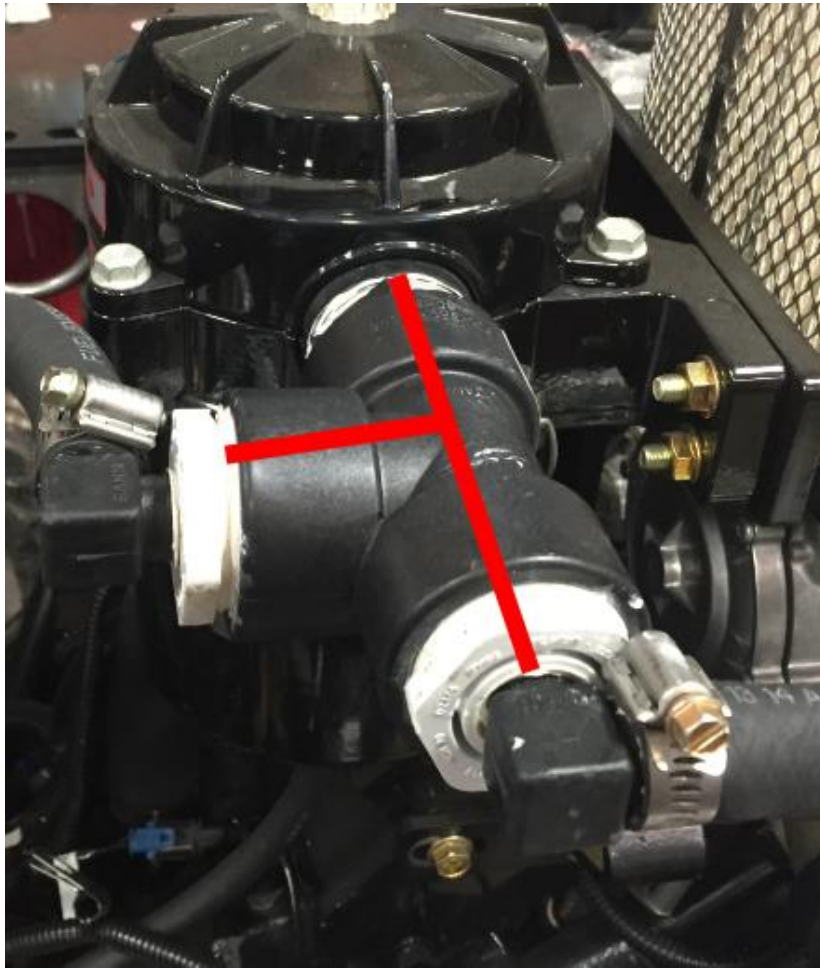
## INSTRUCTIONS

Step 1 –

Determine which “T” setup is present on your engine. If example one is present, continue to **Step 2**.

If example 2 is present, continue to **Step 6**.

Example 1



Example 2





## INSTRUCTIONS

**Step 2 –**

**Remove the hose clamps and hoses from the T assembly.**

**Unscrew the T from the Racor canister.**



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## INSTRUCTIONS

Step 3 –

Disassemble the T as shown.

The white adapter in the base does not need to be removed.



## INSTRUCTIONS

**Step 4 –**

**Reassemble the T as shown.**

**No new parts are needed for this. Only changing the orientation of the T in the Racor canister.**

**Use a small amount of thread sealant on the fittings.**



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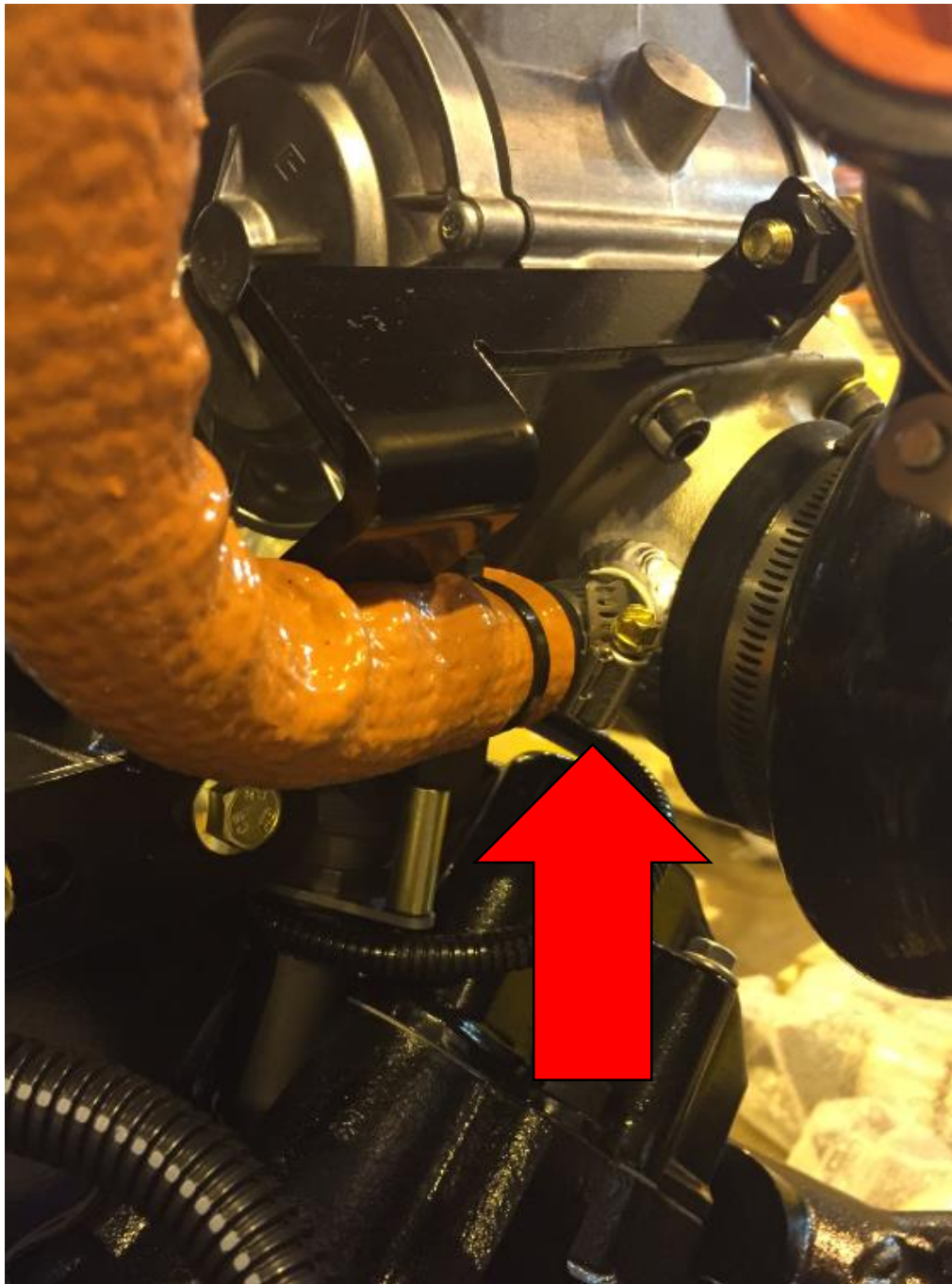
## INSTRUCTIONS

**Step 5 –**

**Install the T into the Racor canister and reconnect the CCV hoses.**

**Tighten the circled fitting another 40° if necessary to prevent hose kink and easier installation.**

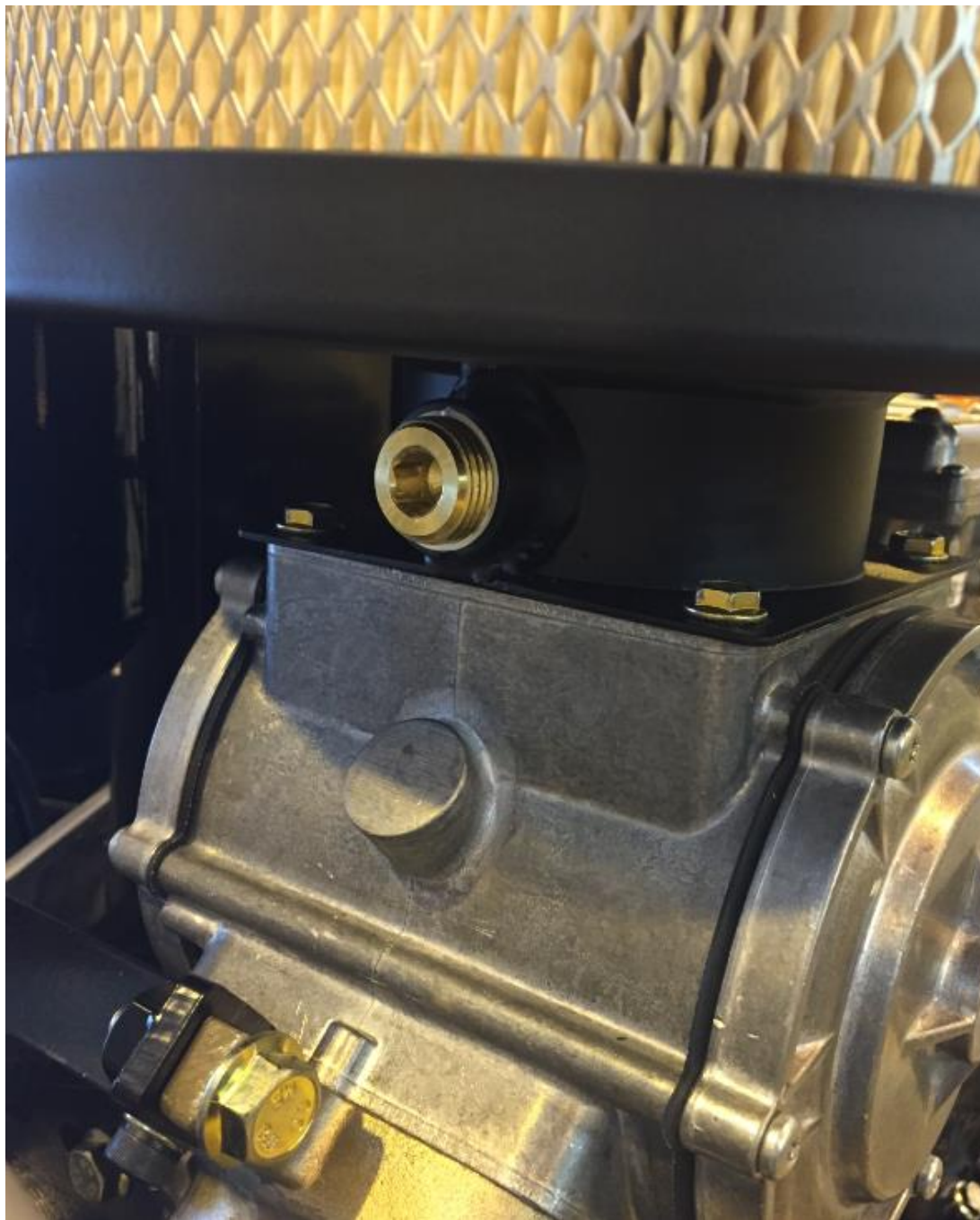




## INSTRUCTIONS

Step 6 –

Loosen the clamp holding both CCV hose to the master and slave bank intake elbows.



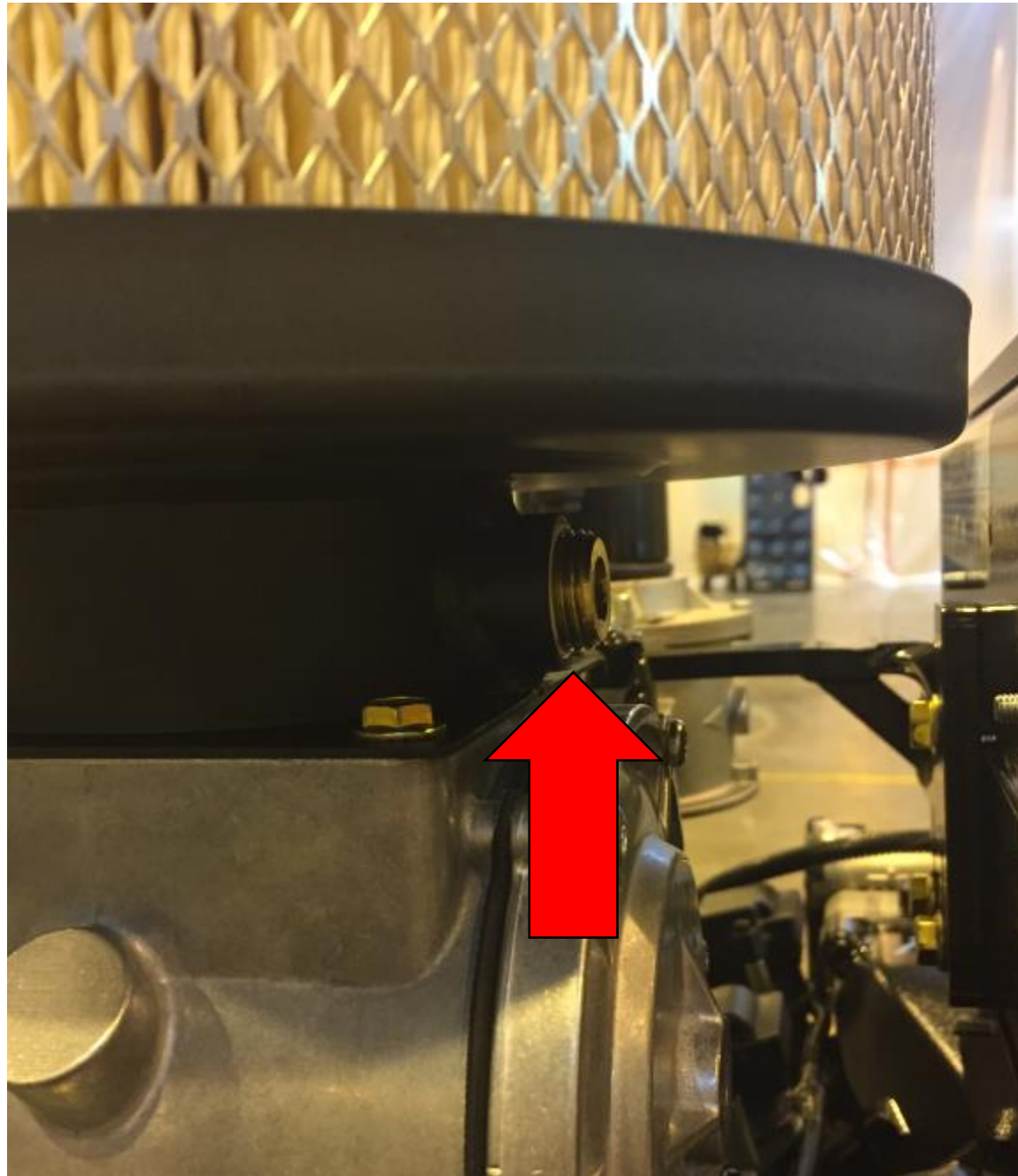
## INSTRUCTIONS

Step 7 –

**MASTER (RIGHT) BANK ONLY**

Remove the (Qty 4) 10mm bolts securing the air filter to the mixer. Rotate the air filter assembly 90° counter clockwise.

Reinstall the four bolts to secure the air filter base.



## INSTRUCTIONS

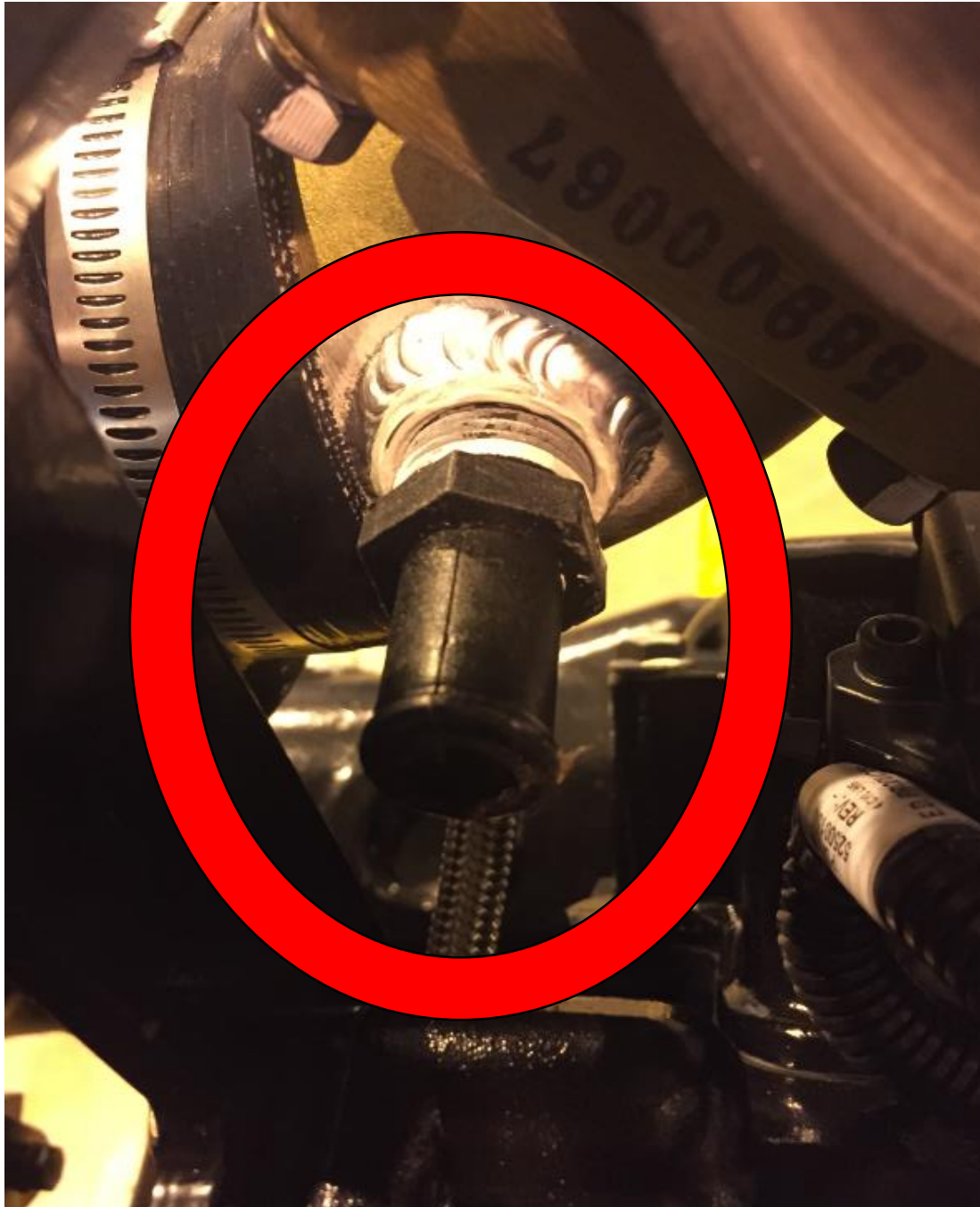
**Step 8 –**

**Remove the plugs from both master and slave air filter bases. Set these aside, they will be needed again.**

**3/8" Allen key will be needed.**



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## INSTRUCTIONS

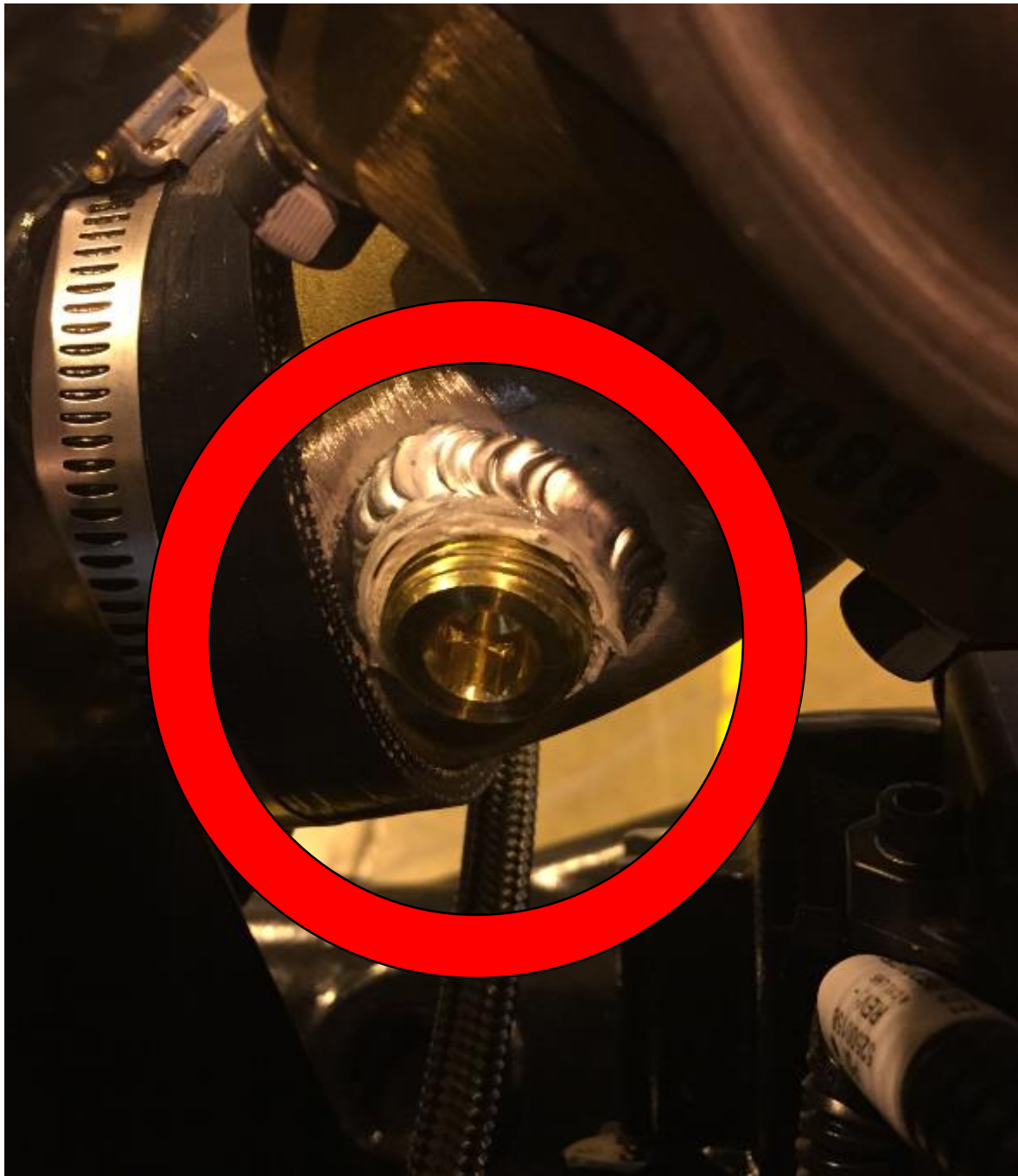
Step 9 –

Remove the straight fittings from both master and slave intake elbows.

7/8" socket will be needed.



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## INSTRUCTIONS

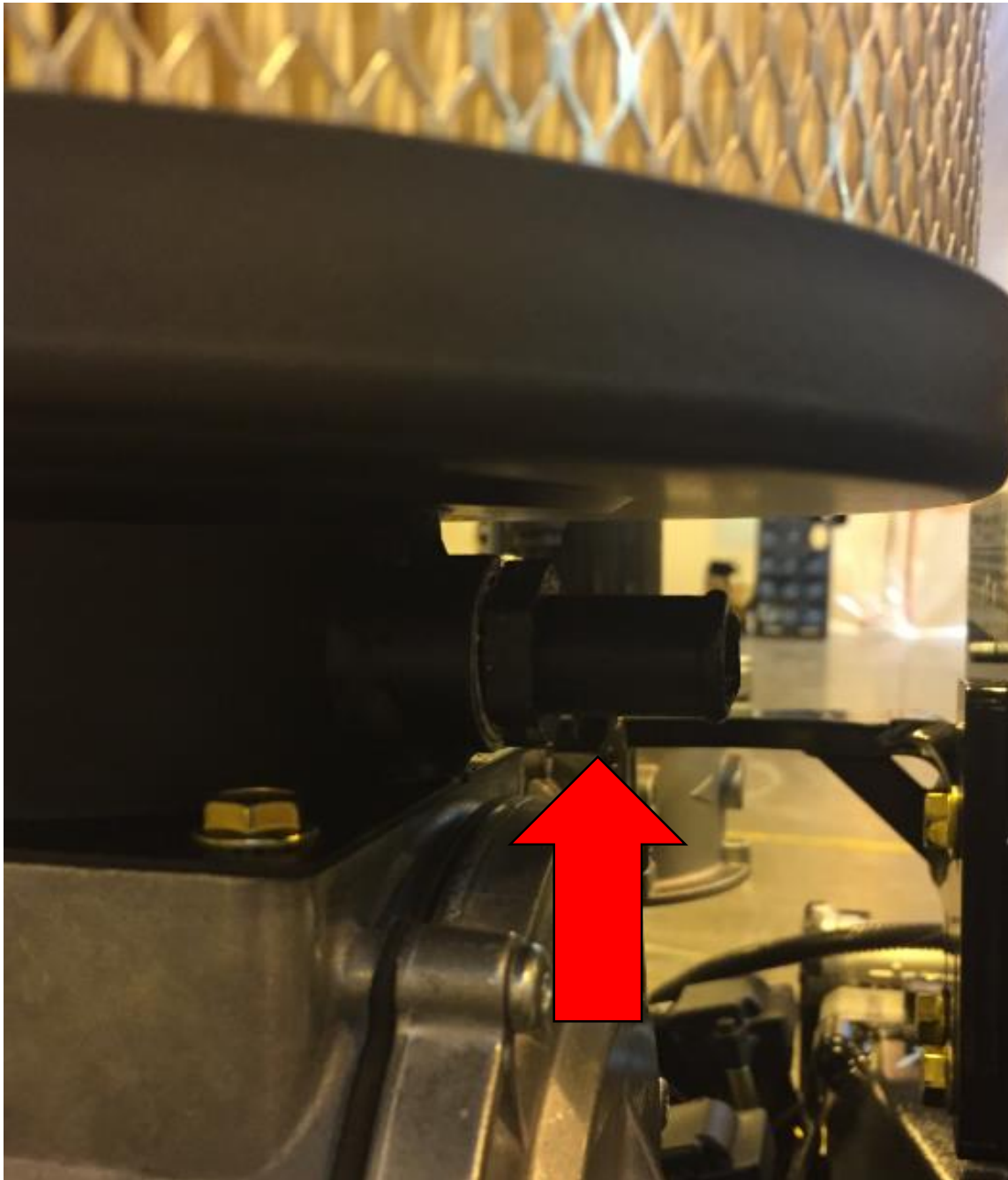
Step 10 –

Install the brass plugs that were previously in the air filter base into the intake elbows.

**DO NOT OVER TORQUE  
THIS PLUG. ELBOW  
DAMAGE CAN OCCUR.**



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## INSTRUCTIONS

Step 11 –

Install the straight fittings into the air filter base.

**DO NOT OVER TORQUE THIS PLUG. FITTING DAMAGE CAN OCCUR.**



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## INSTRUCTIONS

Step 12 –

**MASTER (RIGHT) BANK ONLY**

**Remove FOUR inches of hose and insulation from the master bank**

## INSTRUCTIONS

Step 13 –

**SLAVE (LEFT) BANK ONLY**

**Remove TWO inches of hose and insulation from the master bank**



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## INSTRUCTIONS

Step 14 –

**Verify a droop is not present in the CCV hose.**



## INSTRUCTIONS

**Step 15 –**

**Install the CCV hoses onto the straight fitting previously installed in the air filter base.**

**Tighten the clamp and install a new zip tie to secure the insulation.**



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## INSTRUCTIONS

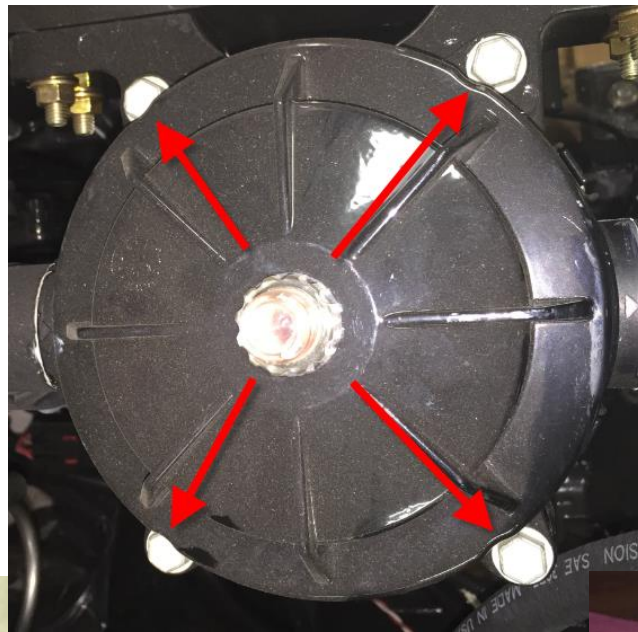
Step 16 –

Remove the four bolts on top of the Racor canister.

Remove the CCV hoses on the T.

Verify the Racor filter integrity.

If oil saturation is present, replacement will be necessary.



**NEEDS REPLACED**



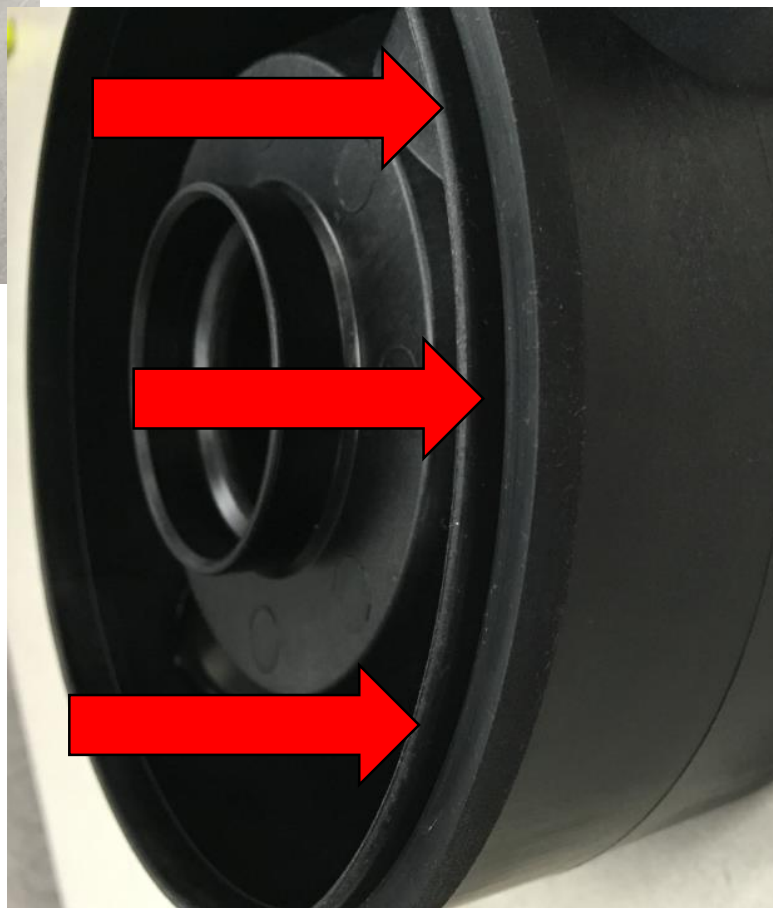
**CAN BE REUSED**



## INSTRUCTIONS

**Step 17 –**

**Before installing the cap and filter, verify the o-ring is present around the cap!**



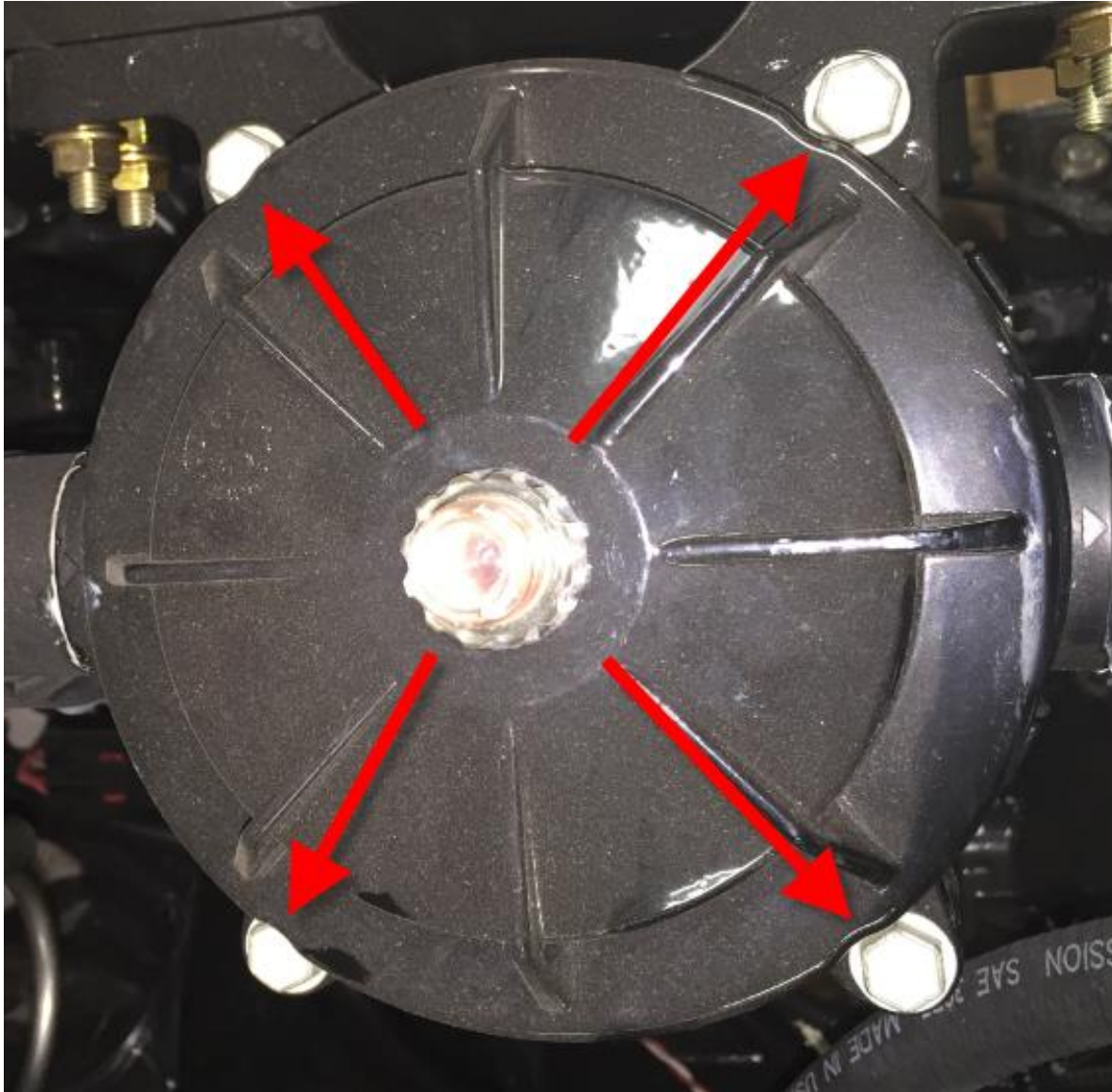
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## INSTRUCTIONS

**Step 18 –**

**Reinstall the cap and the four bolts.**

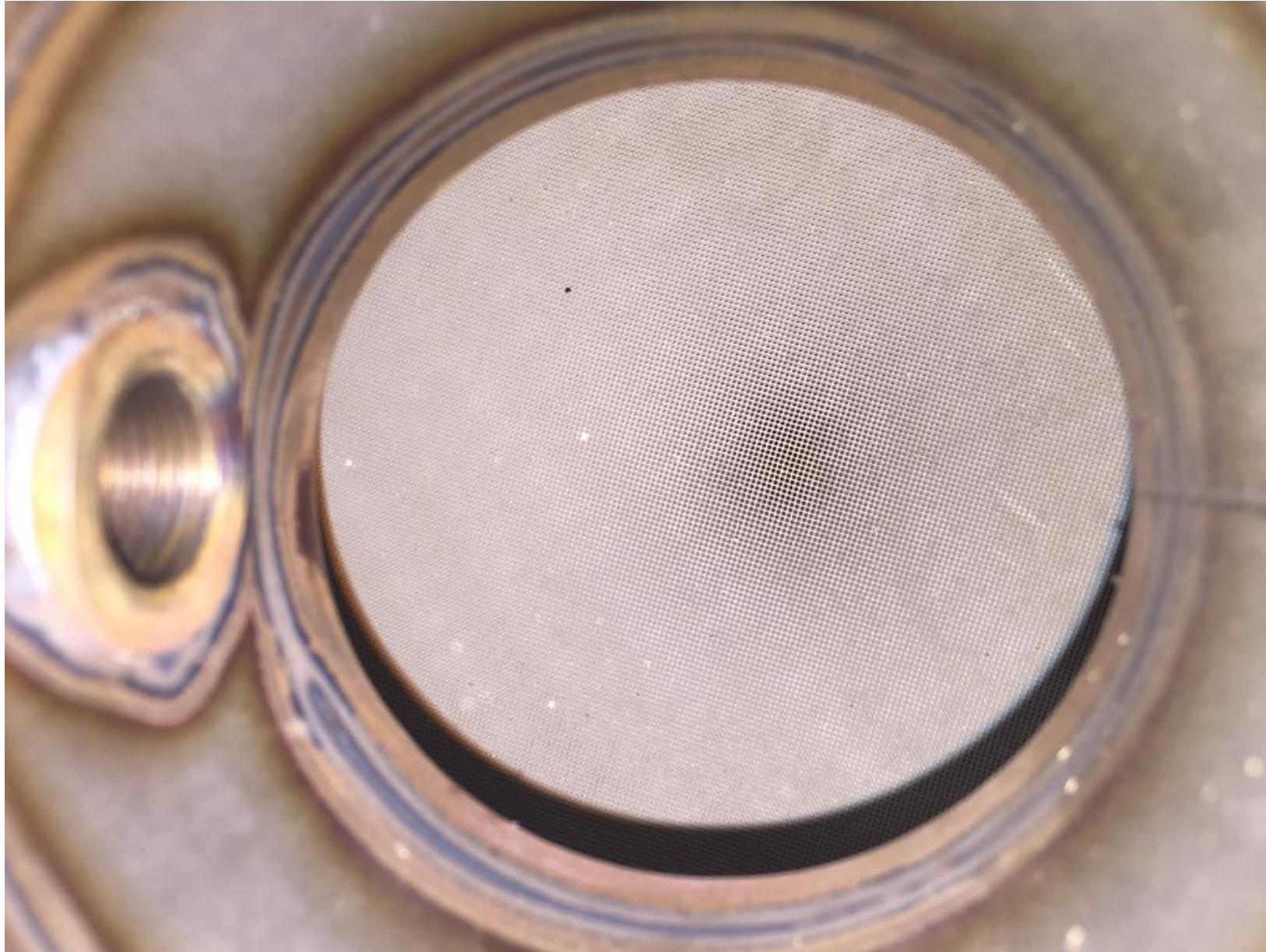
**Install the CCV hoses on the T and tighten the hose clamps.**



## INSTRUCTIONS

**Step 19 –**

**Visually inspect the catalyst substrates for oil saturation. The picture shown is a clean catalyst for reference.**



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## INSTRUCTIONS

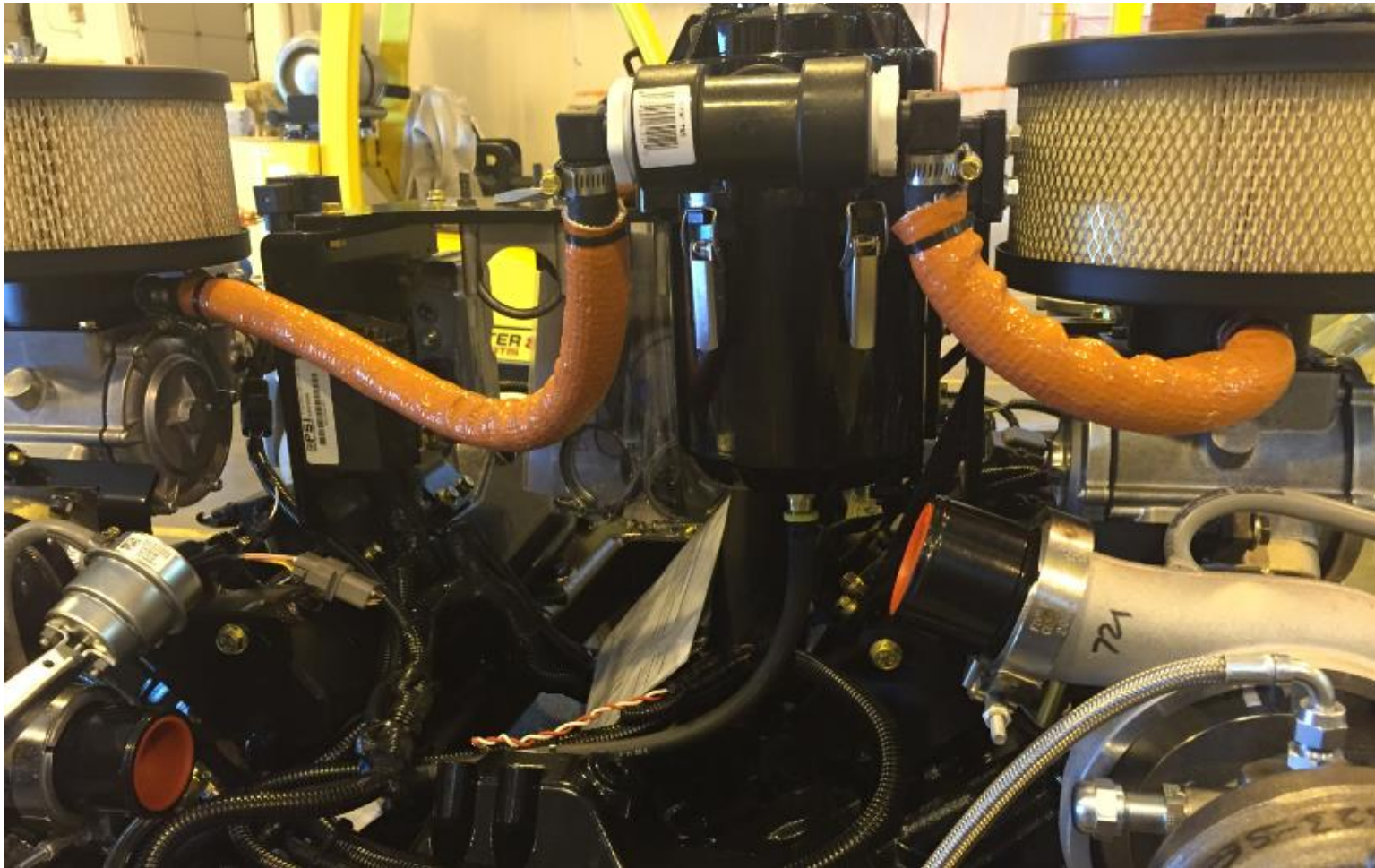
**Step 20 –**

**Verify the oil level is correct. Top off as needed.**



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## INSTRUCTIONS



**The CCV Reroute and necessary inspections are completed!**