
PRODUCT: AUTOMATED CATWALKS

DATE: 07/27/2011

SUBJECT: PC3000 Oil Cooling System Upgrade for Tropical & Desert Climates

SERIAL NUMBERS: ALL

DISCUSSION: In extremely hot climates, both electrical components in the main electrical panel located beneath the deck and the hydraulic cooling oil can see temperatures that are close to or beyond their rated temperatures. The recommended baseline modification is to increase the size of the air intake/exhaust cutout to allow for greater optimization of the cooler. Also, an optional reverse flow fan kit is available to change the direction of airflow; this can help alleviate environmental elements from congesting the heat exchanger of the cooler.

RECOMMENDATION:

Overview: Perform the outlined procedure to increase cooler intake area to 110% larger than original design (Figures 1 & 2). If deemed necessary, replace existing cooler with new fan kit to reverse airflow direction.

Materials Required:

EXPANDED MESH, REGULAR 1 ½" – 10 X 16 ½" X 15 ½"

AY50821 ASSY, COOLER, OIL, C/W 24VDC ELEC MOTOR
(if reversed airflow is desired)

The kit contains:

- Fanblade
- Motor
- Fan shroud incl. protection guard
- Fasteners
- Counter connector

Safety Considerations: Be aware that if the catwalk was recently used, hydraulic components will be hot. Ensure that there is no pressure in hydraulics. Also, beware of spattering from pressure pockets in hydraulic fluid. A fire watch is required for metal working.

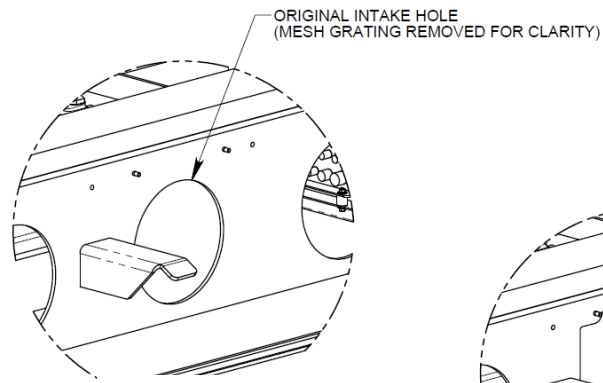


Figure 1

BEFORE MODIFICATION

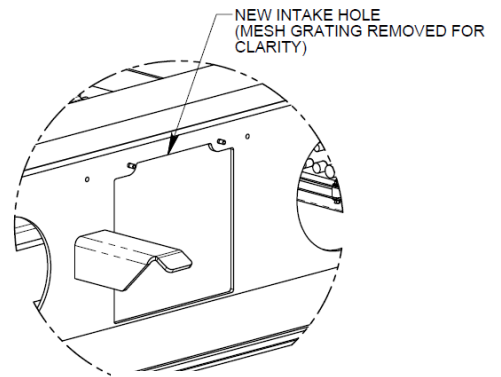


Figure 2

AFTER MODIFICATION

Step 1: Perform Job safety analysis before commencing work. Ensure that proper PPE is worn and catwalk is shutdown. Adhere to local lockout/tagout procedures.

Step 2: Place absorbent blankets underneath catwalk to catch excess fluids.

Step 3: Ensure that there is no pressure in hydraulics. Disconnect hydraulic hoses and cap all openings. This includes hoses and cooler fittings.

** Note: Beware of spattering from pressure pockets in fluid. **

Step 4: Remove the cooler assembly as shown in Figure 3. Once removed, the fan kit can be replaced on the cooler if necessary.

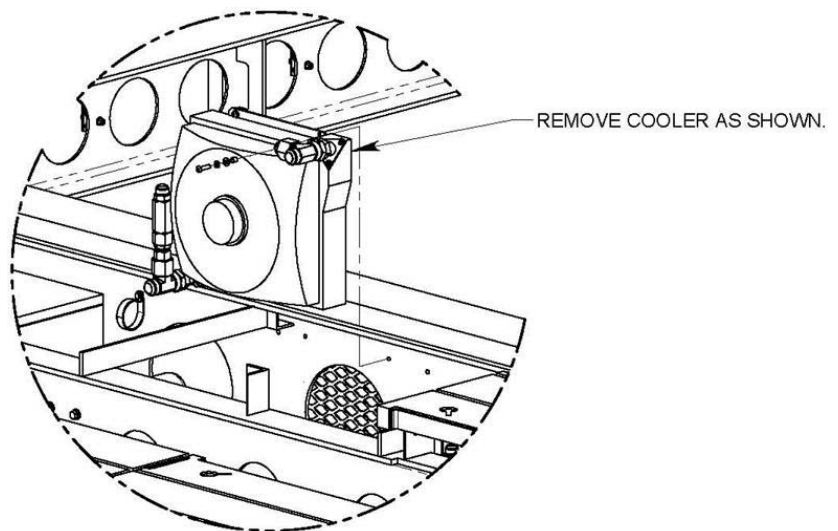


Figure 3

Step 5: Place fire blankets where needed before any metal working. Ensure fire extinguisher is on hand and personnel are assigned for fire watch.

Step 6: All welding shall be carried out to the requirements of CWB-W59 (Latest Edition) for dynamically loaded structures and/or Canrig Document ENG704 as supplied.

Step 7: Remove existing mesh grating.

Step 8: Cut-out cooler intake hole as defined in Figure 4. Measurements below are in (inches [mm]).

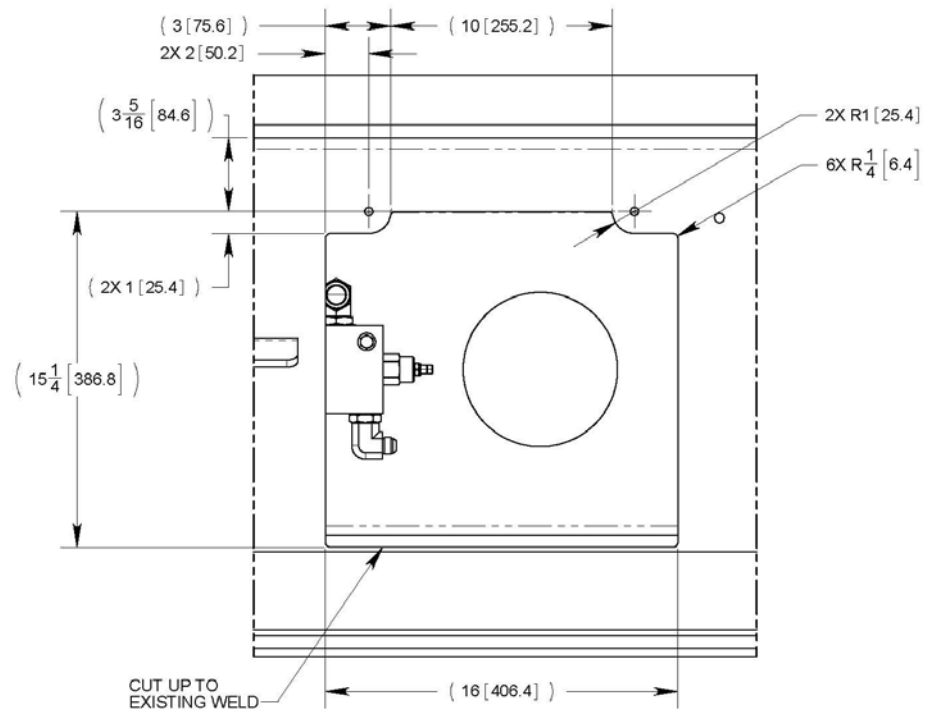


Figure 4

COOLER INTAKE CUT-OUT

Step 9: Weld new mesh grating as defined by Figure 5. Measurements below are in (inches [mm]).

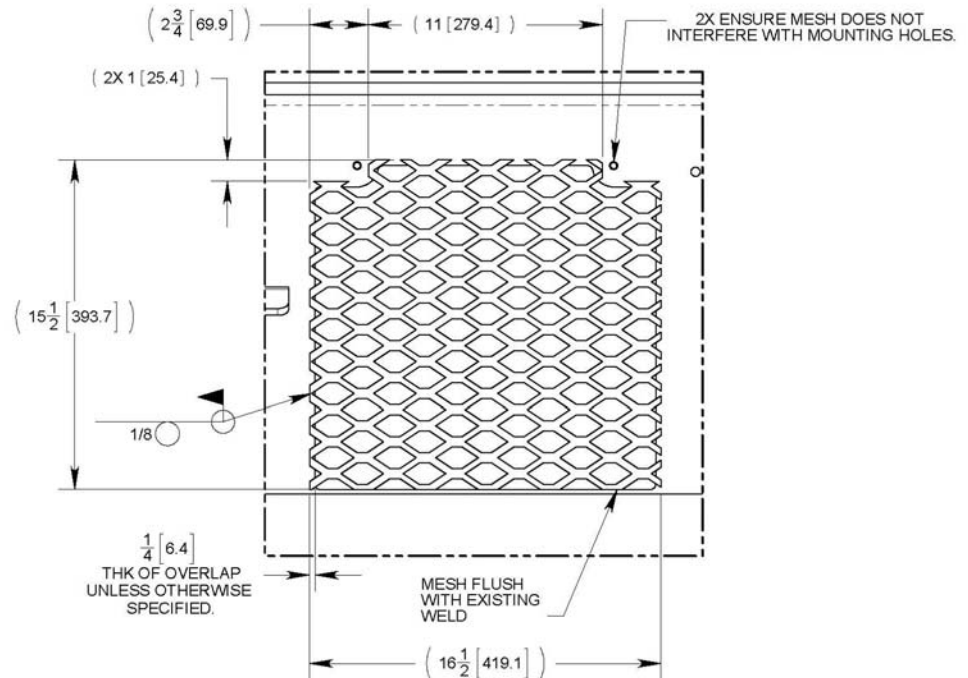


Figure 5

Step 10: Paint exposed metal surfaces.

Step 11: Remount cooler assembly and reattach all hoses.

Step 12: Prior to operating, start the hydraulic pump and inspect cooler system. Eliminate any leaks as required.

Step 13: With hydraulic pump running, start the oil recirculation by pressing F5 on the HMI Screen, located on the control console inside the hydraulic reservoir. Continue the oil recirculation for 10 minutes to charge the cooler with oil and remove any entrapped air.

Step 14: Press F5 again to stop the oil recirculation and resume normal operation.

INFORMATION:

For further information contact:

For a complete list of all bulletins go to www.canrig.com

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