

Hotmail - "Philip"

From: "Hotmail - "Philip"" <philipdybel@hotmail.com>
Date: Fri 20 Jan 2012 11:09
To: "██████████" <██████████@crane1services.com>
Subject: H. A. ██████████ - "██████████" Crane Repairs Progress

Dear ██████████,

Yesterday we found a "smartorque" manual at H.A. ██████████, in the Maintenance Shop. At the Trolley VFD, I found the last four "Stored Fault Codes": all four were "Short Circuit (on Load)". I climbed on the Trolley, opened and checked the Motor splice box ("Pecker Head") and the Trolley junction box. I climbed on the far Bridge, opened and checked that junction box. From there, the Trolley Motor Leads go thru the Main Contactor box, a poorly coupled conduit, the Hoist Control Box, the Bridge Control Box, and end in the Trolley Control Box.

I identified some old type "TW" wires used as the Trolley Motor Leads between the Main Contactor box and the next Control Box, removed them from the conduit, and found a burnt spot on two of the three wires. I replaced all three wires between the Main Contactor box and the Trolley Control Box with new THHN wires, about a 25-foot run. Put everything back together and tested - everything worked fine. Seven hours' work.

In other words, I fixed what most likely was the "Short Circuit" fault on the Trolley VFD. The wires were clearly defective and did need to be replaced. I showed them to ██████████, showed him the two bad spots, and explained why I replaced them.

However, I did not check every inch of the Trolley Motor Leads, or do a "Leakage Current Test" with a Megger (Megohmmeter).

I think I should return there today, and see if my repairs last night, did fix the "Short Circuit" fault on the Trolley, or if we need to trace this further.

Also, on the Hoist VFD, I retrieved the last four "Stored Fault Codes": all four were "Pulse Generator Open 2". This means: either the Hoist Motor Position Sender has an intermittent fault, its wiring has an intermittent fault, or the Hoist Brake isn't releasing on time.

I didn't check this further - I told [REDACTED]: "I need to read the Manual cover-to-cover tonight, and come up with a strategy to repair this tomorrow."

In other words, I should probably return there today, and at least do a quick check on the Hoist Pulse Generator, its wiring, and the Hoist Brake.

This morning, I'm burning a copy of the Manual that [REDACTED] let me keep overnight. As you know, it's difficult to get a copy of this from Kone. I need to return the Manual to H.A. today.

Philip