



**77-28-8872-001**

**(MANUFACTURING DOCUMENT)**

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**TITLE**

**UNLOAD HANDLER BREAKOUT PCB INSTALLATION**

**PREPARED BY**

Josh Beckenhauer

**CHECKED BY**

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<b>REV</b>	<b>DATE</b>	<b>DESCRIPTION</b>	<b>BY</b>	<b>CHECKED</b>
01	03/28/2018	INITIAL RELEASE	JB1	-
02	03/26/2021	UPDATED FORMAT	HMP	GT

## **1.0 Purpose**

The purpose of this document is for replacing the Unload Handler breakout PCB located in the Output Station.

## **2.0 Definitions**

PCB: Printed Circuit Board

BHCS: Button Head Cap Screw

## **3.0 Responsibilities**

- 3.1 Engineering – Engineering will ensure that this procedure remains up to date. No changes will be made to the process without first updating the procedure, either via a temporary change or a change order to the document.
- 3.2 Manufacturing – Manufacturing will ensure that all manufacturing personnel, both permanent and temporary, are trained according to this procedure. Manufacturing will support that only the current procedure is used, and that no changes in the official process of record will be made without a temporary change request or through training to a new process revision.
- 3.3 Quality – Quality will ensure that all material issues are understood. Any questions regarding the issue shall be handled by Quality personnel.

## **4.0 Safety**

- 4.1 Type 1 – Equipment is fully de-energized.

## **5.0 Materials**

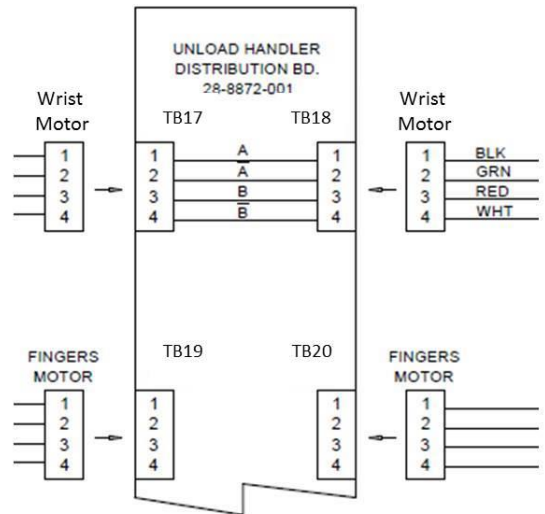
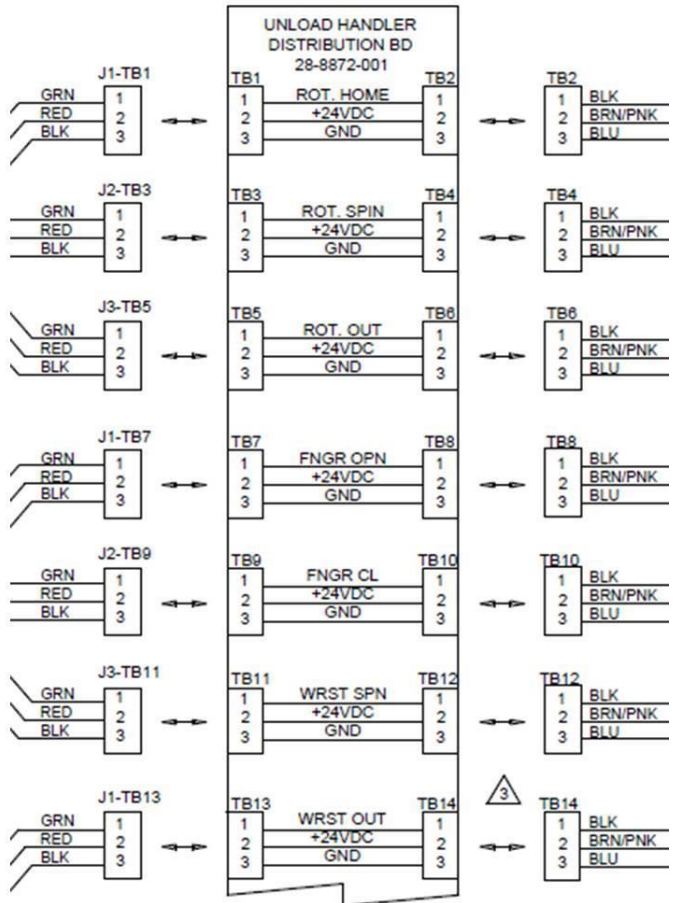
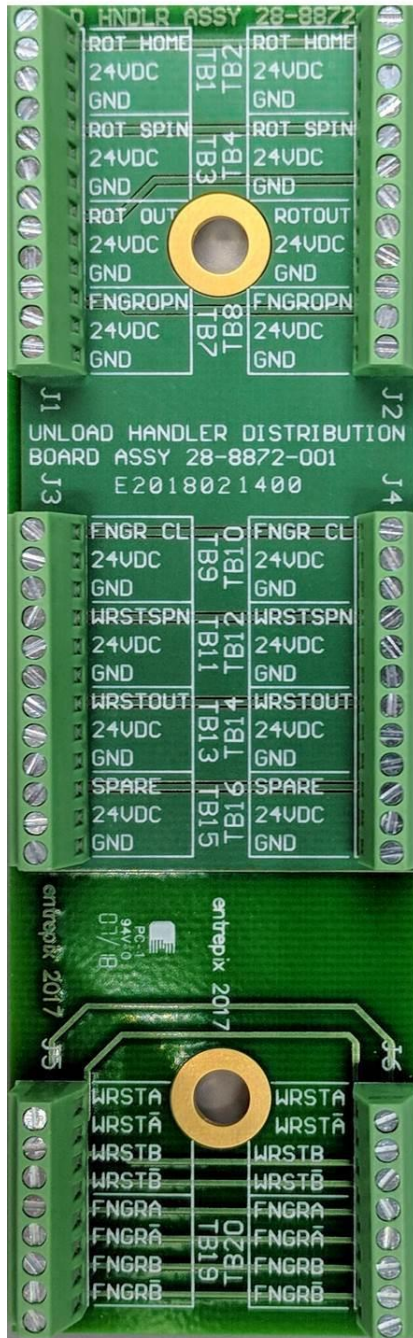
- 5.1 Kit 26-28-8872-001 for first time retrofit, otherwise PCB P/N 28-8872-001 required only.
- 5.2 Small Flat Head Screwdriver
- 5.3 Allen keys

## 6.0 Procedure

- 6.1 Power down tool and ensure it is fully de-energized.
- 6.2 Locate the Unload Handler Breakout PCB located in front of the robot arm in the Output Station.
- 6.3 Remove the PCB by removing the two BHCS and nylon washers. Set hardware aside. Do not disconnect any wires during the removal of the PCB.
- 6.4 Carefully move the PCB and install the new PCB in the original location using the two BHCS and the nylon washers.
- 6.5 Doing one connector at a time, remove the WAGO terminal blocks from each cable and match the wiring to the newly installed PCB. Use the silkscreen on the PCB and Figure 1 to ensure proper connection of the wires.

**NOTE: If installing using kit 26-28-8872-001, ferrules are included with the kit; however, the ferrules are not necessary if the original wiring is tinned with solder.**

**NOTE: If the PCB is installed in a system with a reverse robot, the black and green Wrist Motor wiring may be swapped. Match the existing wiring of the system and DO NOT match the wiring in Figure 1 for the Wrist Motor only.**



**Figure 1: Wiring Connections for Unload Handler Breakout PCB**