INSTALLATION PROCEDURE INSTALLATION PROCEDURE

DATE: 5/24/2021

BOM/MACHINE: 20054-001/20054-002

DESCRIPTION: INFINITY 60 TIMER RELAY BYPASS/HIGH SPEED LOCK

DOC. LOCATION: Engineering Documents/Installation Procedures

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Purpose:

This installation procedure explains how to modify the harness of an Infinity 60 air compressor system to bypass an inoperable timer relay. The manufacturer of the timer relay has ceased production of the relay and thus replacement parts can no longer be provided. For this reason, a bypass of the timer relay must be installed, which allows the engine speed signal to remain "locked" in the high speed setting.

Parts:

Quantity	Part Number	Description
1	N/A	14-16 Gauge Heat Shrink Butt Connector

Required Tools:

Wire Cutter for 14-16 Gauge Wires Wire Crimping Tool for 14-16 Gauge Wires Wire Stripping Tool for 14-16 Gauge Wires Small Torch for Heat Shrinking Wires

Procedure:

Before beginning the procedure, ensure that the system is <u>fully relieved of air pressure</u> and all external hydraulic hoses, air hoses, and wires are disconnected.

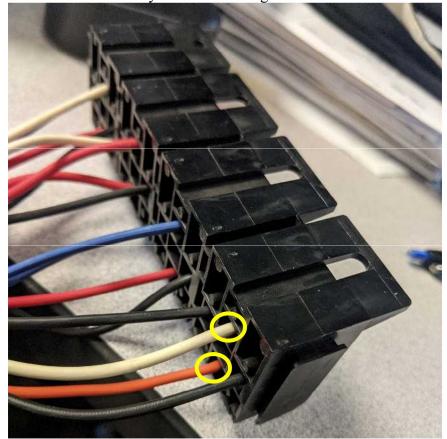
1. Open the service door of the machine. Two latches, identified in the image below with yellow arrows are used to secure the service door.



2. Identify the timer relay. The relay is located on the left side of the machine, above the hydraulic motor. A total of four (4) relays are arranged atop a bracket – the timer relay is the leftmost relay, circled in yellow in the image below.



3. Identify the required wires in the harness that must be modified. A relay socket containing four wires is mated to the timer relay. Inspect this socket and verify that an orange 16 gauge wire is located in the 30 position of the socket and a white 16 gauge wire located in the 87 position of the socket. The two wires are circled in yellow in the image below.



- 4. If necessary, remove tape and loom leading to the socket and expose a sufficient quantity of both the orange and white wires (2-3 inches).
- 5. Cut the white and orange wires flush with the relay socket, taking care not to damage any of the surrounding wiring in the harness.
- 6. Strip both the orange and white wires to expose a sufficient quantity of wire to allow for a butt connection to be installed.
- 7. Place a 14-16 gauge heat shrink butt connector onto the stripped ends of the orange and white wires. Crimp both ends securely onto the wires and verify that the crimp is sufficient by applying a light force in opposing directions on the two wires on opposite ends of the connector.
- 8. Seal the connector by applying heat from a small torch to each end of the connector.
- 9. Reposition the loom and re-tape the wires securely.
- 10. Inspect all surrounding wire connection points to verify that no connections have been compromised as a result of the modification.

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- 11. Inspect all surrounding air lines, hydraulic lines, and hydraulic connections to verify that nothing has been compromised as a result of the modification.
- 12. Close the service door of the machine.
- 13. Reconnect all external hoses and wiring necessary to safely operate the machine.
- 14. Run the compressor to ensure there are no leaks and engine speed signal is being delivered correctly.