GTI SERVICE NOTE

GTI-104 **April, 2010**

The following is a notice to all GTI Distributors and Direct Purchase packagers regarding ***HIGH PRIORITY*** *action required with respect to the CONTROL and FAULT RELAYS in GPN0100, GPN1000, GPN2010V, GPN2012V, GPN2213V and GPN2214V panels shipped since January of 2008.*

PLEASE GIVE THIS MATTER YOUR IMMEDIATE ATTENTION

BACKGROUND

In the recent past, there have been a small number of reports of the control relay in the GPN1000 and GPN2010V panels sticking in either the OPEN or CLOSED position. To date, the observation has been limited to new packages in the commission process, or very shortly following.

A control relay that sticks in the OPEN position results in a disabling of the bi-fuel system, but the engine will continue to operate normally in the 100% diesel mode. A control relay that sticks in the CLOSED position results in the gas train solenoid remaining energized in the OPEN position, **even after the control panel logic has transitioned to the bi-fuel OFF state**. **This is obviously a very undesirable condition that could result in unintended consequences to the engine and engine room environment.**

INVESTIGATION

Altronic has conducted an in-depth investigation of the phenomenon and have concluded that the situation is not a result of any software or firmware flaws, or as a result of any overload of the relay. Examination of relays that have been observed to stick show no sign of damage from electrical stress or overload, and the application is well within their rating. Extensive testing of the relays in question, and of new relays right out of the box from the manufacturer, have resulted in the ability to recreate the phenomenon on only a couple of samples. Even with these, once the initial sticking is cleared, it is almost impossible to recreate again.

Although we suspect that the issue may be limited to a narrow production lot of the relay product, and of this lot, only a very few have displayed this behavior, we are still very concerned about the potential dangers that could result.

NEW PRODUCTION

Altronic is implementing an immediate production design change to all GPN panels to both eliminate the problem and protect against any undesirable condition. In terms of installation, commissioning and usage of the product, the change is invisible.

EXISTING FIELD PANEL PROGRAM

For existing panels, Altronic will provide, free of charge, 4-amp rated solid state relay cartridges to replace the existing electromechanical CONTROL and where applicable, the FAULT relays. This part is a direct replacement, and simply snaps into the existing green relay carrier. The solid state relay has no moving parts, and therefore eliminates the issue of sticking relays.

Clear instructions are provided in this document addressing how to identify and replace the proper relay.

This phenomenon has only been noted and reported in a very small number of recent panels. Altronic is directing its Distributors to supply a replacement control and fault relay for every GPN0100, GPN1000, GPN2010V, GPN2012V, GPN2213V and GPN2214V panel purchased since January of 2008. Altronic will also provide replacement relays for any packager that purchased a panel direct from Altronic during this period.

NOTE: It is the recommendation of Altronic that this directive be carried out for every GTI system sold since January 1, 2008. FAILURE TO DO SO COULD HAVE UNDESIRED CONSEQUENCES. Altronic does not sell GTI systems directly to the end user, and we are therefore relying on all Distributors and Packagers to provide this bulletin, along with the replacement relays and applicable instructions, to the end user operators of the bi-fuel equipment as soon as possible.

Enclosed with this bulletin is a package of solid state replacement relays for every GTI system sold to you within this period, plus 10% in spares. In the event that you or your customer would like to change out the relay in earlier panels, Altronic is also willing to make these available upon request.