Connectors and adapters to convert original LLIDs to global connectors are no longer available.
All LLIDs must be upgraded to accommodate global connectors

Installation Bulletin

Tracer™ CH530

Pluggable Connector System

Introduction

The purpose of this bulletin is to advise field service technicians of a change associated with Tracer™ CH530 chiller controllers. This literature piece provides an overview to the new system and illustrates the various components utilized in a typical system. This new connector system will begin to ship on Pueblo CH530 products in first and second quarter of 2006.

Typical product applications include RTAC, RTHD, CGWF, and CCAF. This bulletin is not being taken to address a safety concern, only a product change. This service bulletin is informational only and does not authorize any parts or labor.

NOTICE: Warnings and Cautions appear at appropriate sections throughout this literature. Read these carefully.

⚠ **WARNING**: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠**CAUTION**: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

CAUTION: Indicates a situation that may result in equipment or property-damage only accidents.

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Discussion

This bulletin will explains product change and identify the various components which make up the new unit wiring system.

The new connector system will be installed on units with the following design sequence. Refer to digit 10 and 11 in the model number for the unit design sequence.

RTAC - N0 and later
RTHD - H0 and later
CGWF/CCAF - D0 and later

This literature piece is informational only and written to inform service personnel of a product change. The only action is to be aware of with this product change is to understand and recognize the new connector system.

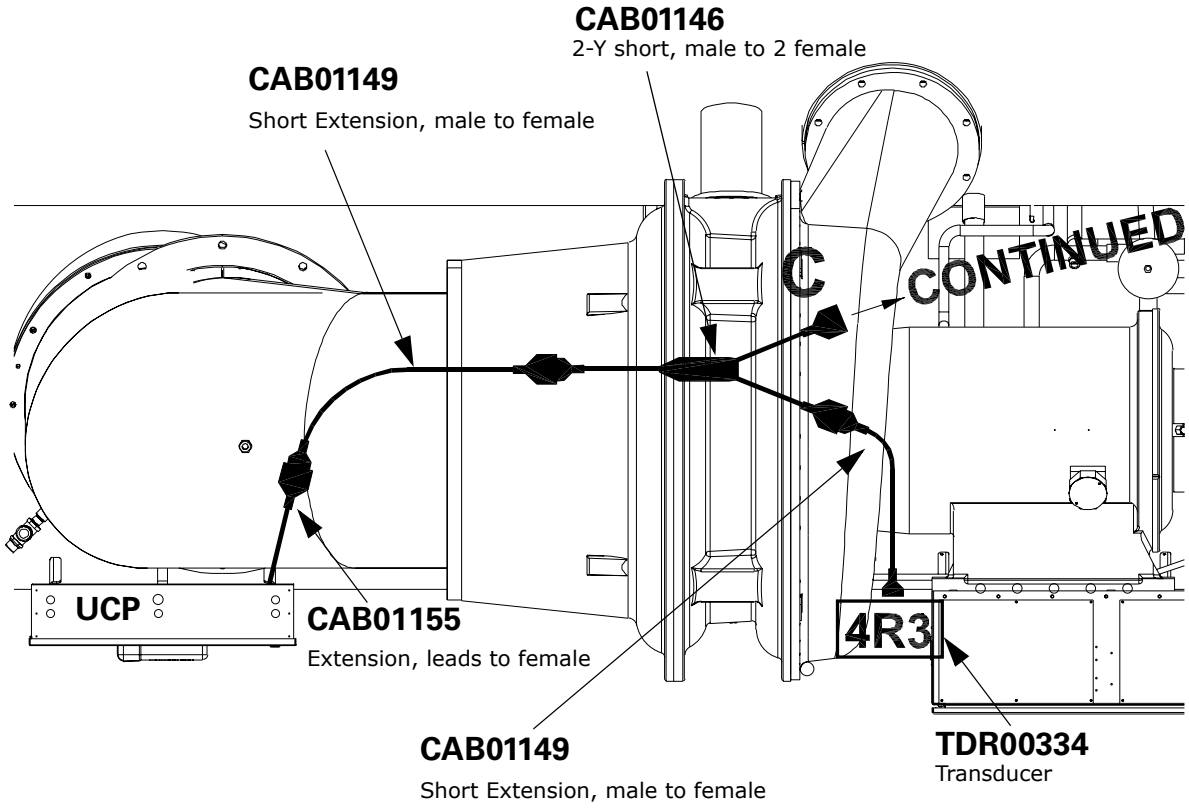

Figure 1. Example of new IPC routing

Parts information

Use the following reference table to familiarize yourself with the various parts of the new unit wiring system.

Table 1. Parts list

Description	Part number
2-Y short, male to 2 female, 19.69 in (500 mm) Figure 2 on page 4	CAB01146
2-Y long, male to 2 female, 39.37 in (1000 mm) Figure 3 on page 4	CAB01147
3-Y, male to 3 female, 19.69 in (500mm) Figure 4 on page 5	CAB01148
Short Extension, male to female, 39.37 in (1000 mm) Figure 5 on page 5	CAB01149
Long Extension, male to female, 78.74 in (2000 mm) Figure 6 on page 5	CAB01150
Extension, male to leads, 39.37 in (1000 mm) Figure 7 on page 6	CAB01152
Extension, female to leads, 39.37in (1000 mm) Figure 8 on page 6	CAB01155
Frame to panel LLID adapter, male to connector, 39.37 in (1000 mm) Figure 9 on page 6	CAB01151
Frame to panel LLID adapter, male to connector, 78.74 in (2000 mm) Figure 9 on page 6	CAB01153
Frame to panel LLID adapter, female to connector, 39.37 in (1000 mm) Figure 10 on page 7	CAB01154
Temperature Sensor - Standard Range, Figure 11 on page 7	SEN01314
Pressure Transducer - Standard Range(0-475 psi), RTAC, RTHD, CGWF, CCAF Figure 12 on page 7	TDR00335
Liquid Level Sensor, RTAC, RTHD, Figure 13 on page 8	SEN01392
EXV, RTHD, RTAC, Figure 14 on page 8	Parts ID[1]
Adapter Kit, four flat wire harness female connector kit, Figure 15 on page 8	KIT12559
Adapter Kit, four flat wire harness male connector kit, Figure 16 on page 9	KIT13723

1 - Contact parts ID with unit model number for EXV part number. Motor and complete assemblies are available.

New connector system:

- Aesthetically pleasing
- Automotive industry grade
- Sealed connector system
- Easier connection for factory and field
- Repeated manual dis-connection and re-connection allowed
- No Service crimp tool required with complete new system
- Supports take apart machines, supports water box removal, supports unit bus troubleshooting circuit breakdown
- Plug to flat wire adapters available for new LLIDS with plugs to connect to old comm bus
- OK to paint

As with the existing IPC system there are proper techniques to follow:

- Do not leave unused female or male plugs on harness; use correct piece.
- Do not cut off unused lugs. An unused plug means you did not select the right parts.
- Do not tie wrap over the plug latch as this could allow plugs to separate.
- Do not attempt to repair a plug, piece parts are not available; only replacement cable assemblies are available, as listed in this literature.

⚠ WARNING
Hazardous Voltage!

Disconnect all electric power, including remote disconnects before servicing. Follow proper lockout/tagout procedures to ensure the power can not be inadvertently energized. Failure to disconnect power before servicing could result in death or serious injury.

Important: Do not disconnect these plugs with the IPC powered up, as this will cause communications diagnostics, and shutdown of an operating chiller.

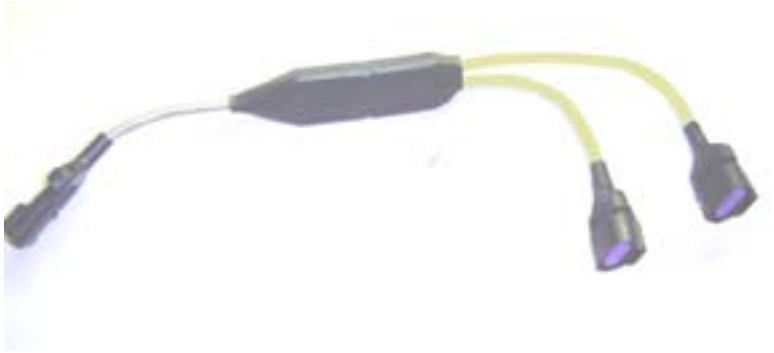

Figure 2. CAB01146 - 2-Y short

Figure 3. CAB01147 - 2-Y long

Figure 4. CAB01148 - 3-Y

Figure 5. CAB01149 - short extension

Figure 6. CAB01150 - long extension

Figure 7. CAB01152 - Extension, leads to male

Figure 8. CAB01155 - Extension, leads to female

Figure 9. CAB01151 or CAB01153- Frame to panel LLID adapter, connector to male

Figure 10. CAB01154 - Frame to panel LLID adapter, connector to female

Note: *Early releases will use flat wire terminated by a male connector but will change to round cable in the future*

Figure 11. SEN01314 Temperature sensor

Note: *Early versions of this sensor will have the flat cable terminated by a male connector as shown but future production will have the male connector incorporated into the housing of the pressure sensor*

Figure 12. TDR00334 orTDR00335- Pressure transducer - low and std range

Figure 13. SEN01219 - Liquid level sensor

Figure 14. EXV

Connect a new sensor to existing four wire bus

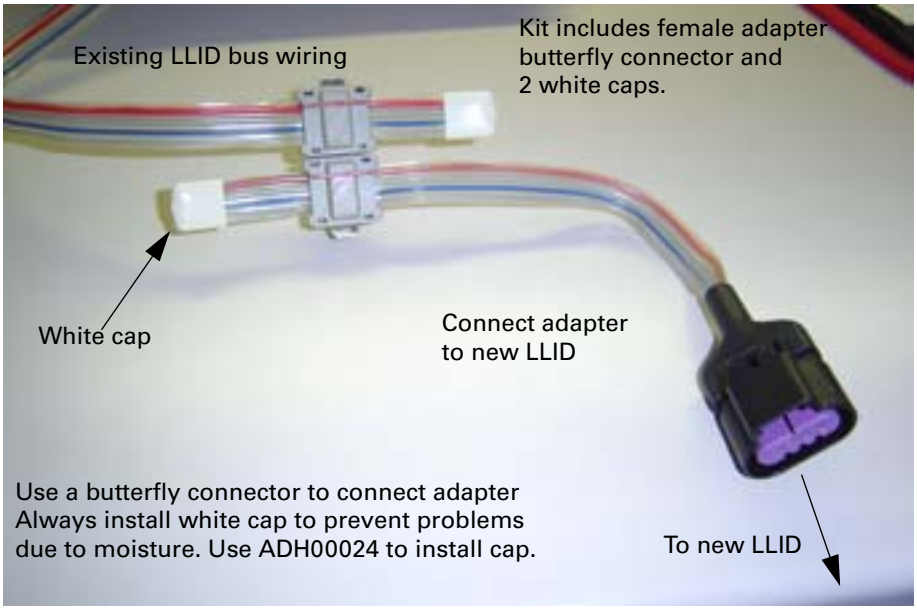

Figure 15. KIT 12559 - Adapter Kit, four flat wire harness female connector kit

Connecting a existing LLID to the pluggable connector system

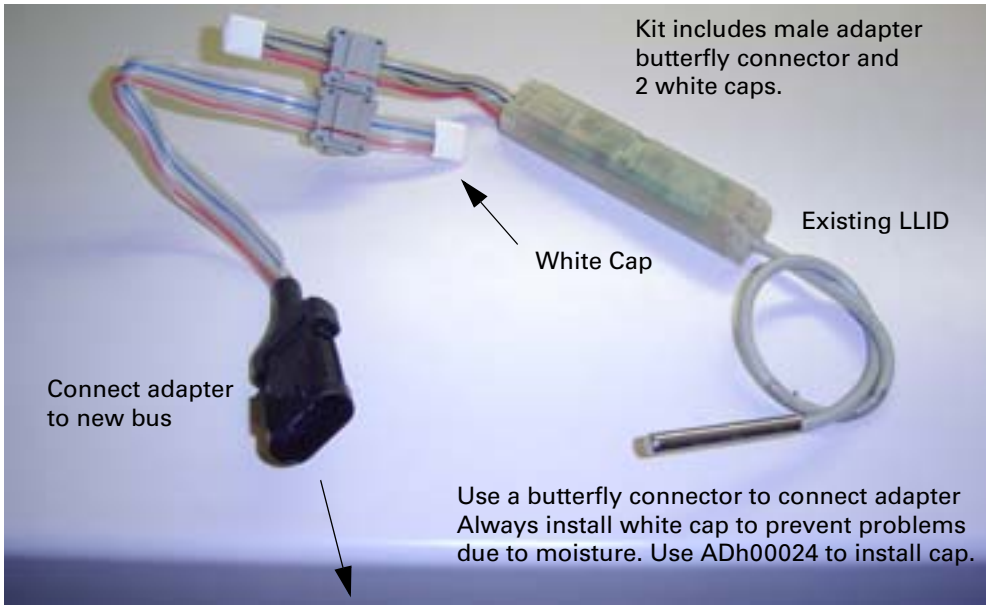

Figure 16. KIT13723 - Adapter Kit, four flat wire harness male connector kit

Plug wire identification

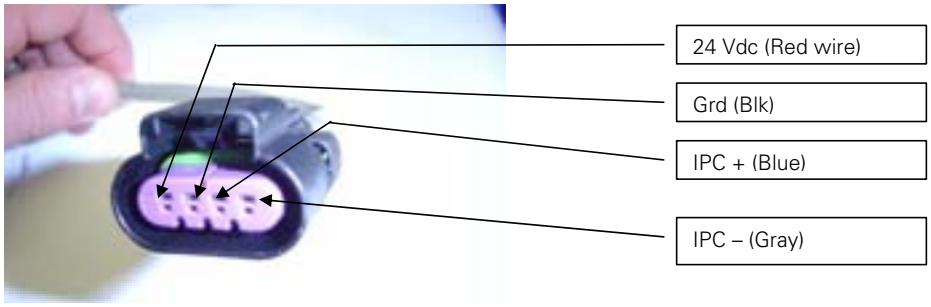

Figure 17. Female Plug wire identification (Wire color referenced to round cable)

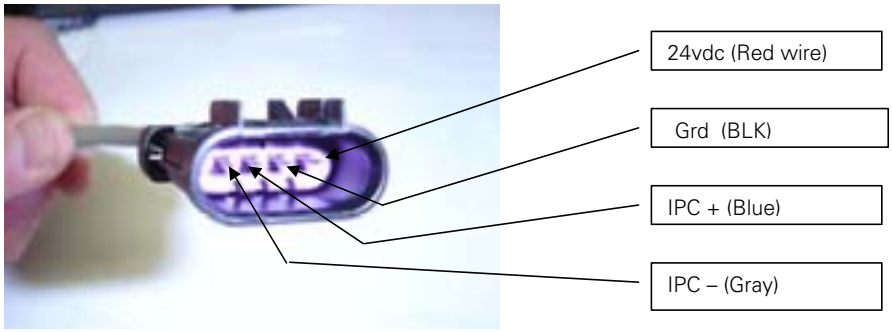

Figure 18. Male Plug wire identification (Wire color referenced to round cable)

Product changes

Units built with the design sequence listed below or later have the new connector system installed. Refer to digit 10-11 of the unit model number.

CGWF/CCAF	D0
RTAC	N0
RTHD	H0

Questions

Contact the PuebloTechnical Service department with questions regarding this Service Bulletin. They can be reached at techservicepueblo@trane.com

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