

### GENERAL

In 1991, all transducers and water temperature sensors will be manufactured with water-tight connectors (See Fig. 1). These connectors are now used on all York chillers. The water-tight connectors will improve reliability by totally sealing out water on connectors exposed to the outside environment. This is always important on chillers located outdoors, but it is of equal significance on indoor units during transport from the factory to the job site. The new connectors will eliminate the need for the connectors to be wrapped with a special tape to provide a water seal as we have done in the past.

Resulting from this change, connector mating problems will arise when replacement parts with water-tight connectors are fitted on old style chillers. To eliminate the mating problem and update the connector to the water-tight version, a kit has been included with each transducer or water temp. sensor. The kit will not be required if water-tight connectors already exist on the chiller.

The kit will contain the following components:

1. Transducer or sensor with water-tight connector.
2. Mating half of item 1 water-tight connector.
3. Ultraviolet-light resistant shrink tubing.

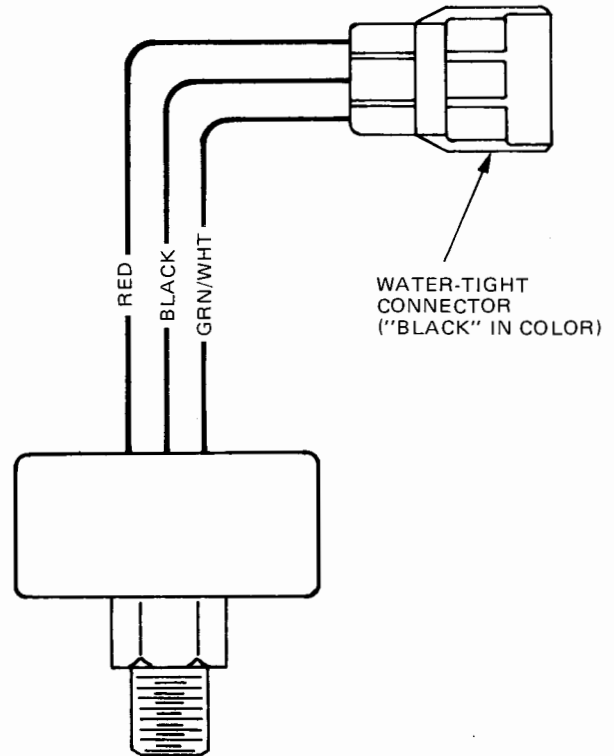


FIG. 1 — WATER-TIGHT CONNECTOR

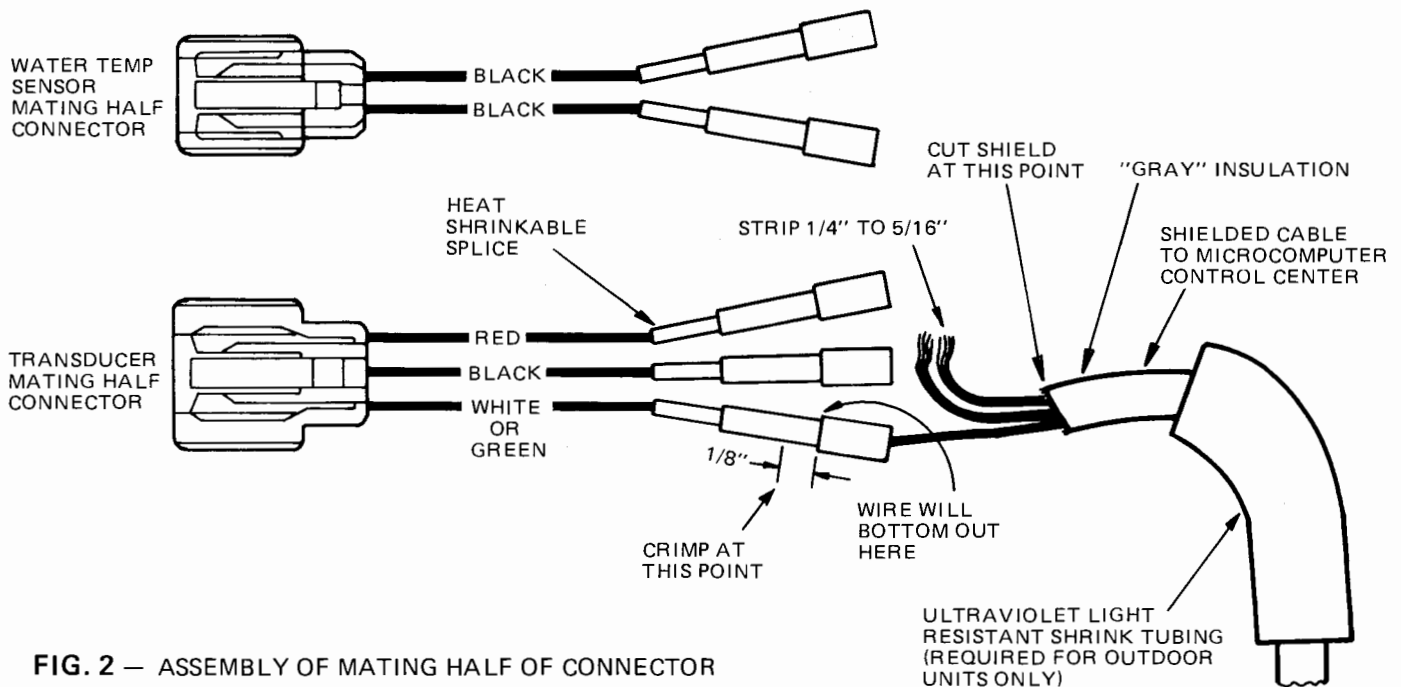


FIG. 2 — ASSEMBLY OF MATING HALF OF CONNECTOR

To convert to water-tight connectors, follow the procedure below:

1. Install the transducer or sensor in place of the defective component.
2. Cut the existing white-in-color AMP connector off of the existing shielded cable coming from the Micro Panel. Cut the wires as close as possible.
3. Slip the black-in-color ultraviolet light resistant shrink tubing onto the shielded cable (See Fig. 2). This must be done before continuing. *NOTE: This is required for outdoor units only.*
4. Strip the wires (3 for a transducer, 2 for a water temp. sensor) so that 1/4" to 5/16" of wire shows (See Fig. 2). Cut the gray insulation back only as far as needed. An inch or two is typical (See Fig. 2). Cut the shield off at the end of the outside gray insulation (See Fig. 2).
5. Match the wire colors to the ones in the mating half of the connector and, one at a time, push the wire in until the insulation bottoms out in the heat shrinkable splice and crimp it where shown in Fig. 2. Use a crimping tool similar to the two shown in Fig. 3 being sure to use the proper "die." Assume that the crimp is tight on the wire without distorting the heat shrinkable splice. Perform this operation for each of the wires.

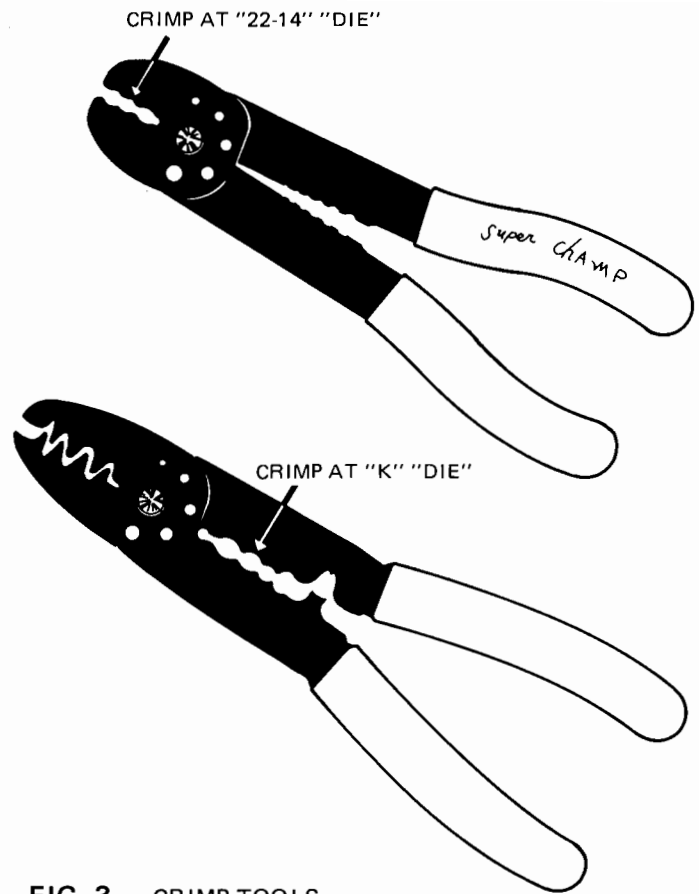


FIG. 3 — CRIMP TOOLS

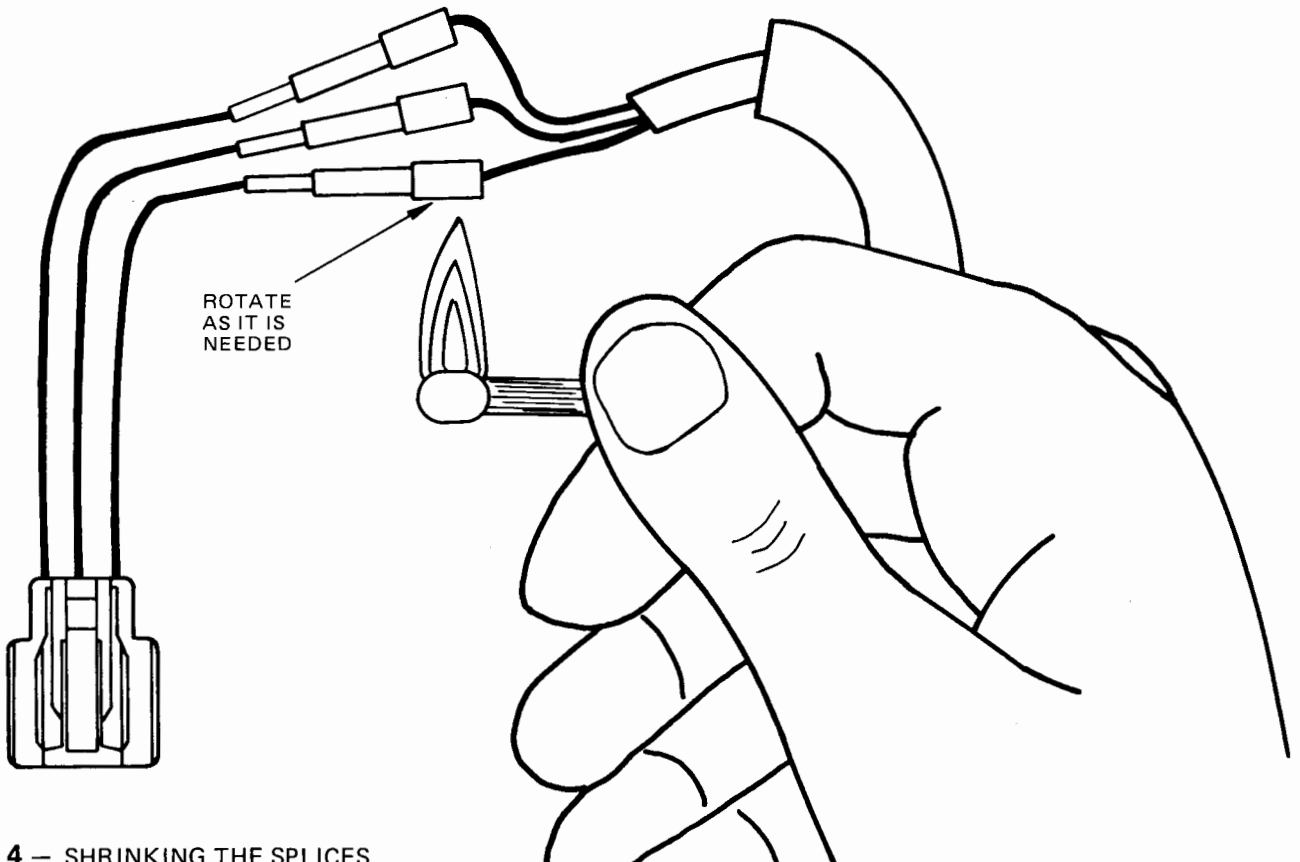


FIG. 4 — SHRINKING THE SPLICES

6. Heat the "Heat Shrinkable Splice" with a match or a lighter. Rotate the splice as you heat it to assure that overheating and damage do not occur. This will also assure that uniform shrinking and nice appearance results (See Fig. 4).

The splice will form a water-tight seal and should appear as in Fig. 5 when done properly. Perform this procedure on each wire.

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A VERY FINE BEAD OF SEALER WILL SHOW AT THE END OF THE SPLICE. THIS ASSURES WATER RESISTANCE.

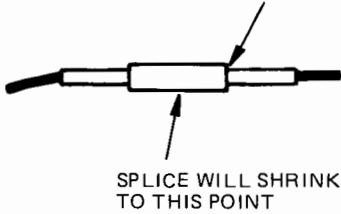


FIG. 5 — FINISHED SPLICE

7. Slide the Ultraviolet-Light Resistant Shrink Tubing over the splices as shown in Fig. 6. *NOTE: REQUIRED FOR OUTDOOR UNITS ONLY.*
8. Heat the shrink tubing with a match or lighter until it conforms to the shape of the splices. Heat the tubing as uniformly as possible, rotating the tubing and moving the heat source back and forth constantly. *NOTE: The shrink tubing is not to be a water-tight seal. It is only to protect the splices from ultraviolet light which will cause the splices to crack. When properly shrunk, the ends of the tubing should be open to allow water to run through.*

When properly shrunk, the connection will appear as shown in Fig. 7.

9. The modification is now complete and the transducer/sensor may now be plugged into the cable connector.

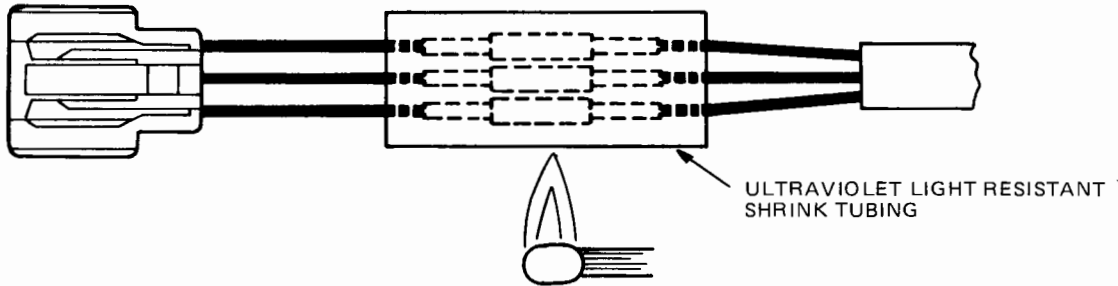


FIG. 6

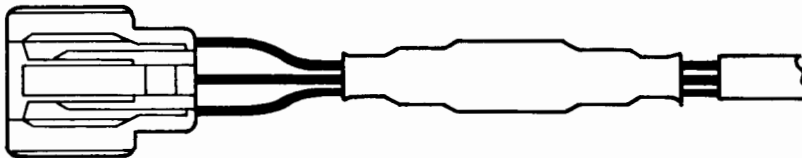


FIG. 7 — PROPERLY PREPARED MATING CONNECTION

## TRANSDUCER AND SENSOR CROSS REFERENCE

In some cases, a transducer or sensor will be ordered and the replacement that is received has a different York Part No. on the device. This will bring up the question of whether a mistake has been made or are the parts compatible? Similar questions may arise if certain parts are out of stock.

On the following pages are cross-reference charts which outline transducer and sensor compatibility. These should be used whenever a question arises on interchangeability of parts.

### CENTRIFUGAL CHILLER TRANSDUCER CROSS REFERENCE

	Original Part No.		New Replacement Part No.
<b>KEY PANEL</b> R-11 12V	025-25127-001	=	025-29151-001 (Cond.)
	025-25127-002	=	025-29151-002 (Evap.)
	025-25127-003	=	025-29151-003 (Oil, low side)
	025-25127-004	=	025-29151-004 (Purge/Oil, high side)
<b>KEYLESS PANEL</b> NARROW RANGE R-11 5V	025-27517-001	=	025-29148-006 (Cond.)
	025-27517-002	=	025-29148-007 (Evap.)
	025-27517-003	=	025-29148-003 (Oil, low side)
	025-27517-004	=	025-29148-004 (Purge/Oil, high side)
<b>*KEYLESS PANEL</b> WIDE RANGE R-11 5V	025-28930-001	=	025-29148-001 (Cond.)
	025-28930-002	=	025-29148-002 (Evap.)
	025-28930-003	=	025-29148-003 (Oil, low side)
	025-28930-004	=	025-29148-004 (Purge/Oil, high side)
	025-28930-005	=	025-29148-005 (Oil, high side, Monoshell retrofits)
<b>*KEYLESS PANEL</b> WIDE RANGE R-123 5V	025-28930-101	=	025-29148-001 (Cond.)
	025-28930-102	=	025-29148-002 (Evap.)
	025-28930-103	=	025-29148-003 (Oil, low side)
	025-28930-104	=	025-29148-004 (Purge/Oil, high side)
<b>*KEY PANEL</b> R-11 12V	025-28963-001	=	025-29151-001 (Cond.)
	025-28963-002	=	025-29151-002 (Evap.)
	025-28963-003	=	025-29151-003 (Oil, low side)
	025-28963-004	=	025-29151-004 (Purge/Oil, high side)
<b>*KEY PANEL</b> R-123 12V	025-28963-101	=	025-29151-001 (Cond.)
	025-28963-102	=	025-29151-002 (Evap.)
	025-28963-103	=	025-29151-003 (Oil, low side)
	025-28963-104	=	025-29151-004 (Purge/Oil, high side)

**\*CAUTION:** IN ALL CASES, THE "NEW REPLACEMENT PART NO." CAN BE SUBSTITUTED FOR THE THE "ORIGINAL PART NO.". HOWEVER, THE "ORIGINAL PART NO." SHOULD NOT BE SUBSTITUTED FOR THE "NEW REPLACEMENT PART NO." DUE TO SOME R-11 TRANSDUCERS NOT BEING COMPATIBLE WITH R-123 AND VICE VERSA.

## TURBO-MODULATOR TRANSDUCER CROSS REFERENCE

	Original Part No.		New Replacement Part No.	
*R-11 12V	025-25127-005	=	025-29151-005	(T-M Evap.)
	025-28963-005	=	025-29151-006	(T-M Cond.)
	025-25127-006	=	025-29151-006	(T-M Cond.)
*R-123 12V	025-28963-105	=	025-29151-005	(T-M Evap.)
	025-28963-106	=	025-29151-006	(T-M Cond.)

\*See CAUTION on Page 4.

## RECIPROCATING CHILLER TRANSDUCER CROSS REFERENCE

	Original Part No.		Intermediate Part No.		New Replacement Part No.	
ROTARY SWITCH CODED PANEL 12V	025-25927-000	=	025-25927-100	=	025-28939-000	(Evap., Oil)
			025-25927-200	=		
	025-25580-000	=	025-28643-000	=	025-28938-000	(Cond.)
TOUCH PAD PANEL 5V	025-29139-002	=	None	=	None	(Evap., Oil)
	025-29139-001	=	None	=	None	(Cond.)

## SCREW CHILLER TRANSDUCER CROSS REFERENCE

	Original Part No.		New Replacement Part No.	
125 - 400 TR	025-28678-001	=	None	(Cond., Oil, Filter Oil)
	025-28678-002	=	None	(Evap. Water)
	025-28678-003	=	None	(Evap. Brine)
1000 - 1250 TR	025-28704-001	=	025-28955-001	(Cond., Oil, Filter Oil)
	025-28704-002	=	025-28955-002	(Evap.)

## WATER TEMP SENSOR CROSS REFERENCE

	Original Part No.		New Replacement Part No.	
ALL CENTRI- FUGAL AND RECIP. PANELS	025-25195-000	=	025-28935-000	(3K $\Omega$ Return and Leaving Water Temp.)
CENTRIFUGAL AND 125 - 400 TR SCREW	025-25163-000	=	025-28936-000	(50K $\Omega$ Oil/Discharge Temp.)
100 - 1250 TR SCREW	025-28723-000	=	025-28956-000	(Non Resistive IC Temp. Sensor for Suction, Discharge, Oil, Sep- erator, and Leaving Water Temp.)







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