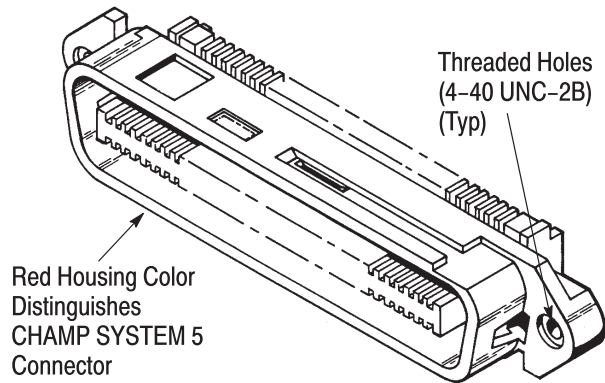


**CHAMP SYSTEM 5\* Connectors**


CONNECTOR PART NO.	CATEGORY 5 CABLE DESCRIPTION
1-558693-1	24 AWG Solid Wire, 24 AWG 7 Strand Wire, or 26 AWG Solid Wire

Figure 1

## 1. INTRODUCTION

This instruction sheet covers the application of the CHAMP SYSTEM 5 connector listed in Figure 1. To ensure proper performance, the connector must be installed on Category 5 cable as described in Tyco Electronics Test Report 501-337.

The CHAMP SYSTEM 5 connector is offered in the cable mounted plug version only. CHAMP SYSTEM 5 plugs provide Category 5 performance when mated to standard CHAMP\* cable mounted or printed circuit board mounted receptacles.

**NOTE**


All dimensions are in millimeters [with inch equivalents in brackets].

Reasons for reissue are provided in Section 4, REVISION SUMMARY.

## 2. TERMINATION OF 25-PAIR CABLE

### 2.1. Wiring Pattern and Placement

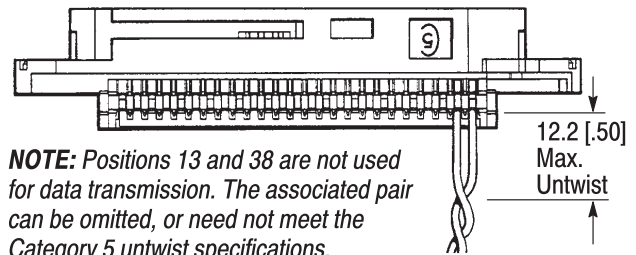
The wiring pattern shown in Figure 2 must be used to ensure Category 5 performance. No more than 12.7 mm [.5 in.] of untwist is allowed in each pair to the termination point.

### 2.2. Tooling

Connectors may be terminated by any of the following tooling:

- CHAMP Portable Hand Operated Tool 229378-1 (Instruction Sheet 408-7559)
- CHAMPOMATOR\* 2.5 Bench Terminating Machine 762734-3 (409-5839)

- Tooling Kit 768900-7 for standard CHAMPOMATOR 2.5 Bench Terminating Machine (408-4249)
- Terminating Head 58585-1 (408-4191) with Pistol Grip Manual Handle Assembly 58074-1 (408-6790)



### Wiring Pattern for 25-Pair Cable

Black/Orange . . . 25	50 . . . Violet/Brown
Orange/Black . . . 24	49 . . . Brown/Violet
Black/Blue . . . . 23	48 . . . Violet/Green
Blue/Black . . . . 22	47 . . . Green/Violet
Red/Gray . . . . . 21	46 . . . Violet/Orange
Gray/Red . . . . . 20	45 . . . Orange/Violet
Red/Brown . . . . . 19	44 . . . Violet/Blue
Brown/Red . . . . . 18	43 . . . Blue/Violet
Red/Green . . . . . 17	42 . . . Yellow/Gray
Green/Red . . . . . 16	41 . . . Gray/Yellow
Red/Orange . . . . 15	40 . . . Yellow/Brown
Orange/Red . . . . 14	39 . . . Brown/Yellow
Gray/Violet . . . . 13	38 . . . Violet/Gray
Red/Blue . . . . . 12	37 . . . Yellow/Green
Blue/Red . . . . . 11	36 . . . Green/Yellow
White/Gray . . . . 10	35 . . . Yellow/Orange
Gray/White . . . . 9	34 . . . Orange/Yellow
White/Brown . . . . 8	33 . . . Yellow/Blue
Brown/White . . . . 7	32 . . . Blue/Yellow
White/Green . . . . 6	31 . . . Black/Gray
Green/White . . . . 5	30 . . . Gray/Black
White/Orange . . . 4	29 . . . Black/Brown
Orange/White . . . 3	28 . . . Brown/Black
White/Blue . . . . 2	27 . . . Black/Green
Blue/White . . . . 1	26 . . . Green/Black

Figure 2

### 2.3. Cable Strain Relief (Figure 3)

Any standard CHAMP strain relief cover is compatible with the CHAMP SYSTEM 5 connector if cable outside diameter guidelines are followed. There are additional covers available which accommodate the larger cable diameters.

#### STRAIN RELIEF COVER

PART NO.	COLOR	CABLE RANGE	CABLE EXIT
552011-5	Almond	10.54-11.81 [.415-.465]	90°
552731-2		12.06-13.72 [.475-.540]	
569335-1		16.51-19.05 [.650-.750]	
569336-1		8.89-17.27 [.350-.680]	120°

Figure 3

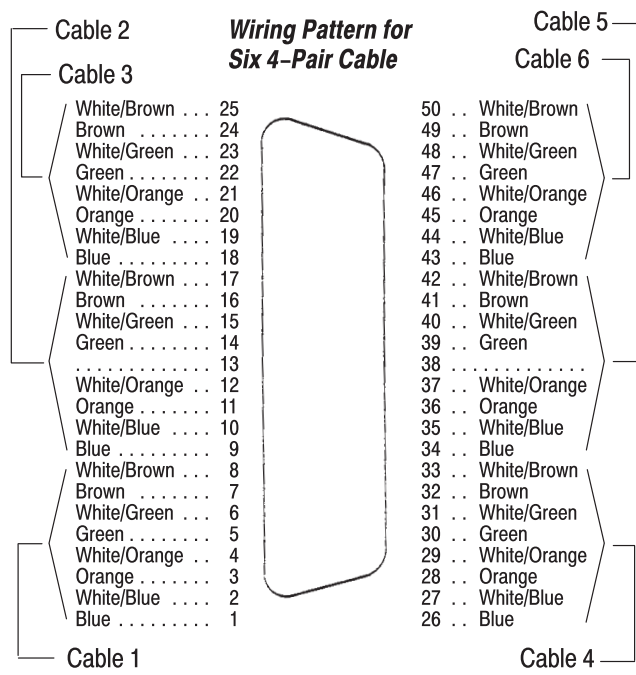


Figure 4

**3. TERMINATION OF SIX 4-PAIR CABLE**

The wiring pattern shown in Figure 4 must be used to ensure Category 5 performance.

Proceed as follows:

1. Strip approximately 203 mm [8 in.] of jacket from the end of each cable.
2. Attach a cable tie approximately 51 mm [2 in.] from the cable jacket ends.
3. Separate each 4-pair wire bundle

**NOTE**



Wrap a piece of wire around each 4-pair bundle to keep the cables separated, see Figure 5.

**CAUTION**



Damaged connectors must not be used. They must be replaced with a new one.

4. Terminate the connector according to the wiring pattern shown in Figure 4 and with any of the tooling referenced in Paragraph 2.2.
5. Label each of the six cables with the appropriate cable numbers (cable 1: pins 1–8; cable 2: pins 9–17; cable 3: pins 18–25; cable 4: pins 26–33; cable 5: pins 34–42; and cable 6: pins 43–50).

6. Wrap approximately 102 mm [4 in.] of Cold Shrink Tape 605980–1 around cable jacket ends. See Figure 5. Heat shrink tubing may be substituted for cold shrink tape.

7. Apply Strain Relief Cover 569335–1 (90° cable exit) or 569336–1 (120° cable exit) so that the cable bundle is clamped over the cold shrink tape.

**NOTE**



A 90° cable dress should be used for 120° cable exit.

**4. REVISION SUMMARY**

Revisions to this instruction sheet include:

- Updated document to corporate requirements.
- Removed logo reference in Figure 1.

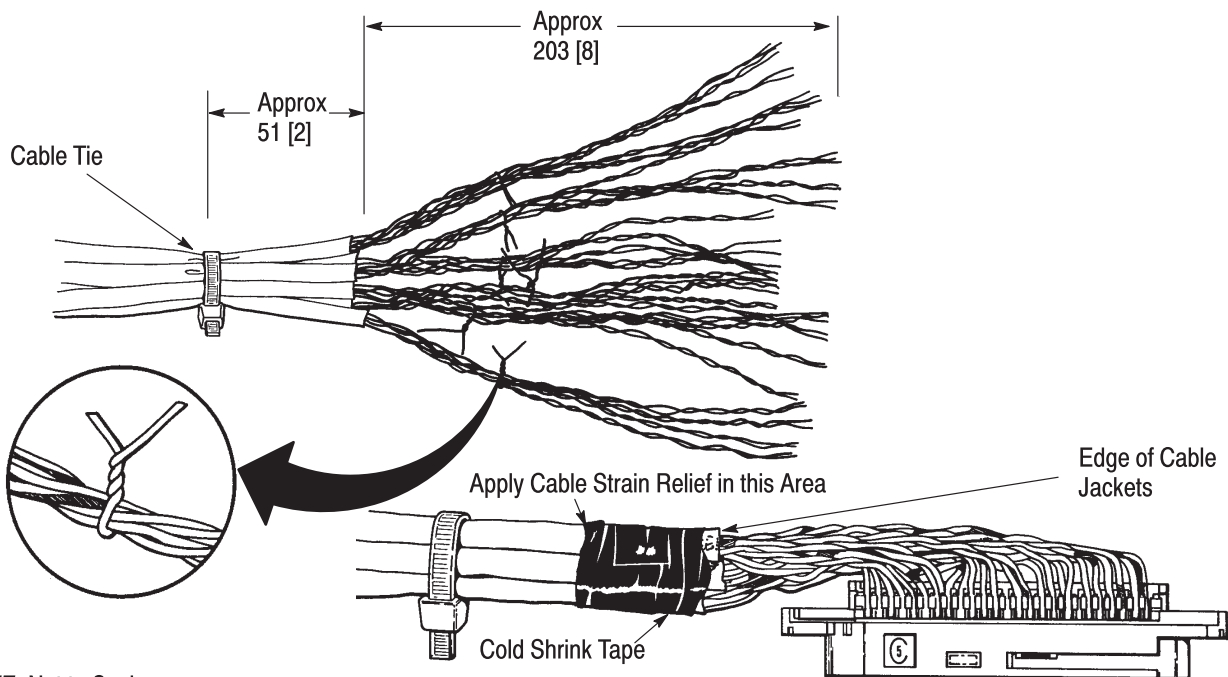


Figure 5

NOTE: Not to Scale