Trident Robotics and Research, Inc.
TRC041
PUMA Cable Card Set

1.0 Introduction

The TRC041 PUMA Cable Card Set provides near "plug-and-play" retrofitting of PUMA manipulators when used in conjunction with the TRC004 PUMA Interface Card. The TRC041 eliminates the need to hand-solder the wiring harnesses of the TRC004. Instead, this set of seven slot-specific cards is plugged into the Unimate backplane of Mark I, II, and III controllers to extract all signals necessary to take over low-level control of the PUMA.

2.0 Installation

Turn off power to the Unimate controller and unplug it from its AC power source. Remove cards from the Unimate controller as described in the TRC004 user's manual, observing appropriate precautions against static discharge. Proceed to install the TRC041 card set in the same orientation as the cards just removed.

2.1 PUMA Mark II, 28-slot Backplane

Install the TRC041 card set in slots in accordance with Table 1.1. Next, connect the P5 and P6 cables to all available mating connectors including P5A on the 041 UT2 card. Connect the Unimate cable marked P28 (coming from Unimate J89) to J28MARK2 on card 041 UT2, as well.

BOARD	SLOT
041 UT2	J39
041 J1	J40
041 J2	J41
041 J3	J42
041 J4	J43
041 J5	J44
041 J6	J45

Table 2.1: 28-slot Unimate Mark II installation.

2.2 PUMA Mark II, 26-slot Backplane

Install the TRC041 card set in slots in accordance with Table 1.2. Next, connect the P5 and P6 cables to all available mating connectors including P5A on the 041 UT2 card. Connect the Unimate cable marked P28 (coming from Unimate J89) to J28MARK2 on card 041 UT2, as well.

2.3 PUMA Mark III

Install the TRC041 card set in slots in accordance with Table 1.3. Next, connect the P5 and P6 cables to all available mating connectors including P5A on the 041 UT3 card. Connect the Unimate cable marked P28 (coming from Unimate J89) to J28MARK3 on card 041 UT3, as well.

BOARD	SLOT
041 UT2	J44
041 J1	J45
041 J2	J46
041 J3	J47
041 J4	J48
041 J5	J49
041 J6	J50

Table 2.2: 26-slot Unimate Mark II installation.

BOARD	SLOT
041 UT3	J44
041 J1	J45
041 J2	J46
041 J3	J47
041 J4	J48
041 J5	J49
041 J6	J50

Table 2.3: Unimate Mark III installation.