

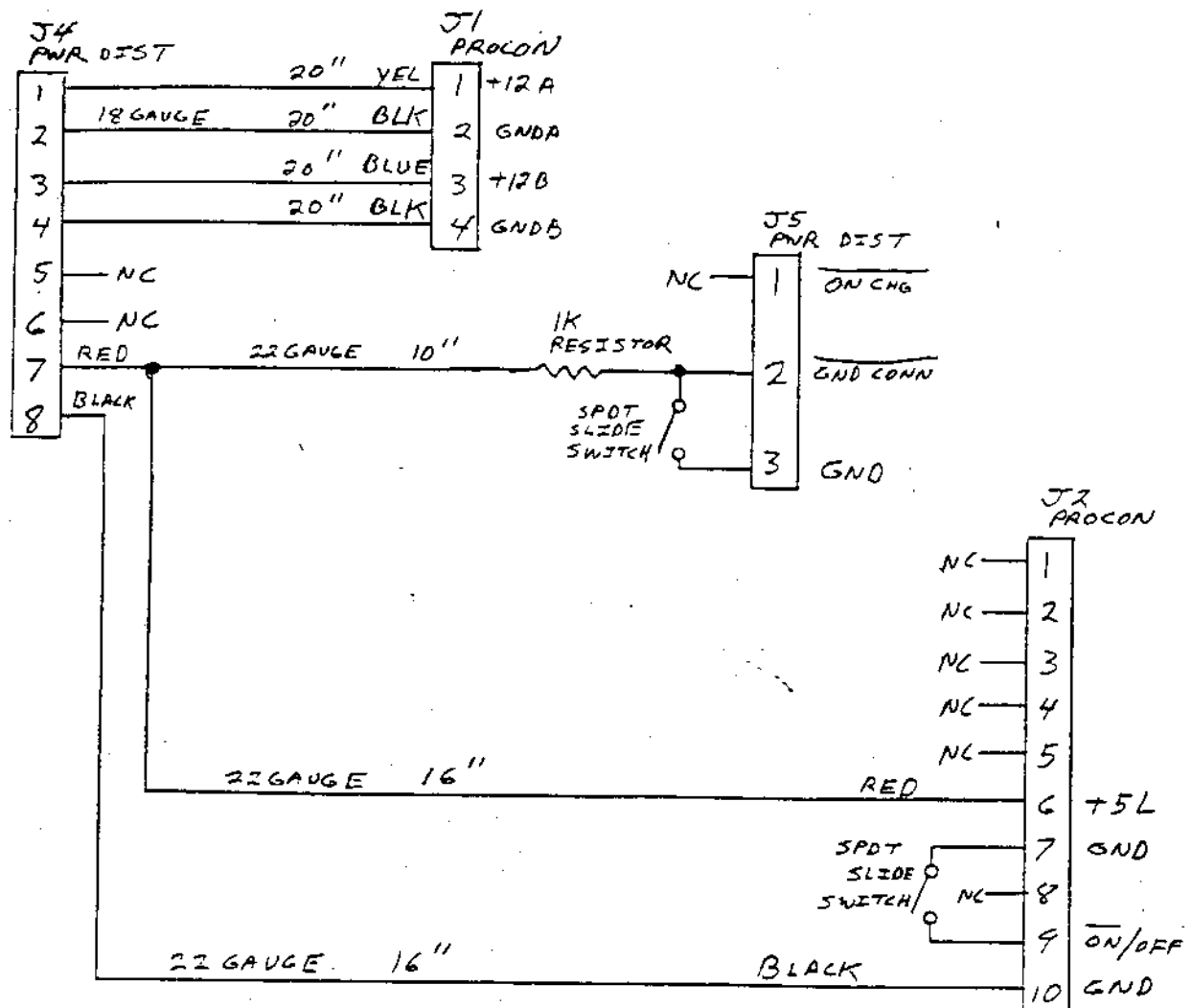
## GEMINI ROBOT KITS

## Torso Cable - Part C Assembly Instructions

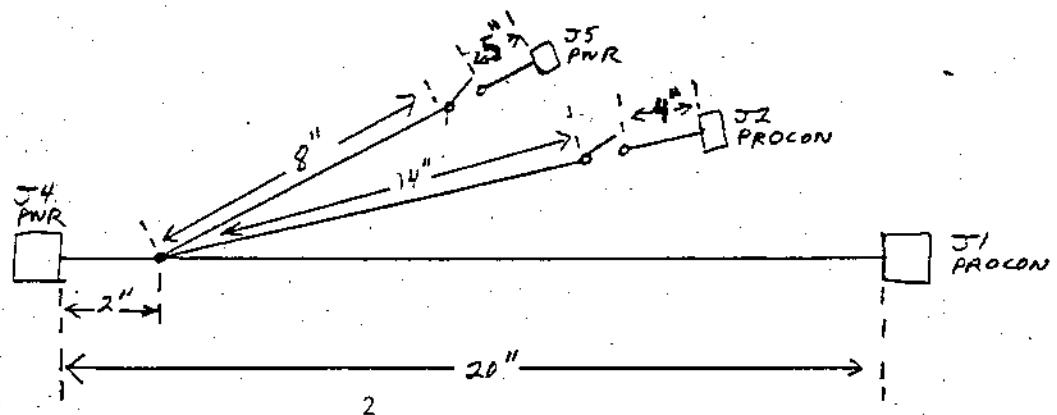
## PARTS LIST

<u>Description</u>	<u>Quantity</u>	<u>Part #</u>
Yel 18 gauge wire	2 ft	7197/19-Y
Blue 18 gauge wire	2 ft	7197/19-BL
Blk 18 gauge wire	3.5 ft.	7197/19-B
Red 22 gauge wire	3 ft.	7195-R
Blk 22 gauge wire	2 ft.	7195-B
10 pin small molex connector	1	22-26-7103
3 pin small molex connector	1	22-26-7033
8 pin molex spring connector	1	09-50-3081
4 pin molex spring connector	1	09-50-3041
Molex spring pin	10	08-50-0106
Small tye wrap	14	TI8S
Cable tie down	5	MB-3A
1K resistor	1	CCF251K
Slide switch	2	576-S-2012SD04-0
Labels	4	- - - -

# Power Supply Wiring Diagram



## Lacing Diagram



1. Refer to the power supply wiring diagram for the following steps.
2. Cut the following lengths of 18 gauge wire (thick wire supplied) as follows:

one 20" length of yellow 18 gauge  
one 20" length of blue 18 gauge  
two 20" length of black 18 gauge

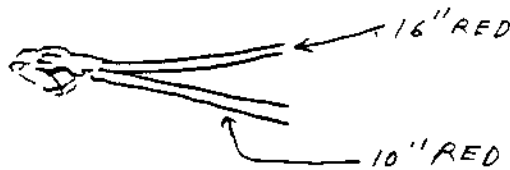
Remove insulation from both ends of these wires.

3. Install one molex spring pin on each end of these wires.
4. Cut the following lengths of 22 gauge wire (thin wire supplied) as follows:

one 10" length of red 22 gauge  
one 16" length of red 22 gauge  
one 16" length of black 22 gauge

Remove insulation from one end of the 16" black and 16" red wires.  
Remove insulation from both ends of the 10" red wire.

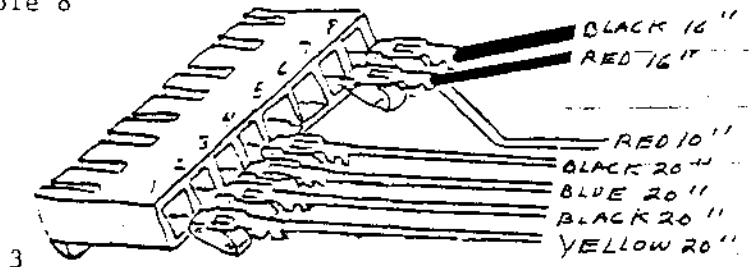
5. Install one molex spring pin on one end of the black 16" wire.
6. Install one molex spring pin on the two red wires as shown below.



7. Install an 8 pin molex spring connector on the spring pins as follows:

20" yellow to hole 1  
20" black to hole 2  
20" blue to hole 3  
20" black to hole 4  
16" and 10" red pair to hole 7  
16" black to hole 8

Label this connector J4 Power.



- |         |                               |              |
|---------|-------------------------------|--------------|
| from J4 | 20" yel from pin 1 to hole 1  |              |
| power   | 20" blk from pin 2 to hole 2  | 4 pin spring |
|         | 20" blue from pin 3 to hole 3 | connector    |
|         | 20" blk from pin 4 to hole 4  |              |




Diagram of a 4-pin connector with the following color coding:

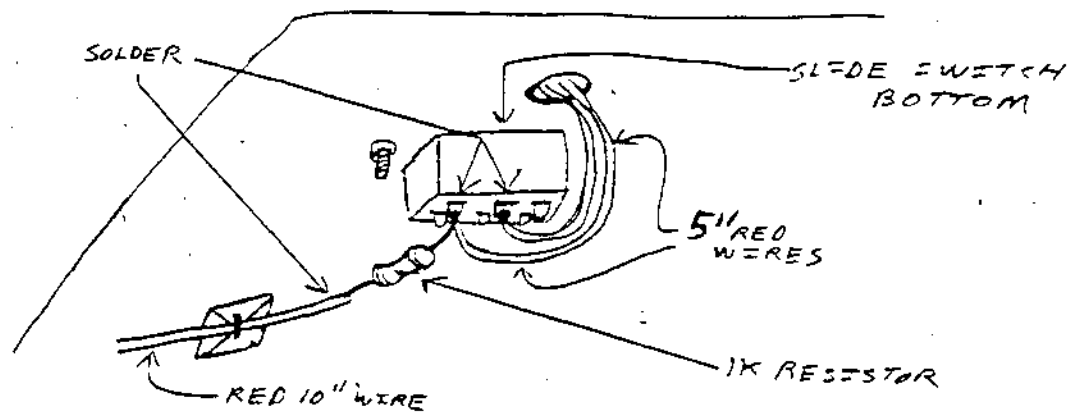
- BLK FROM PIN 4
- BLUE FROM PIN 3
- BLK FROM PIN 2
- YEL FROM PIN 1

-

11. Mount slide switches as shown in previous diagram.
12. Solder the red 10" wire and the 1K resistor as shown. Then cut the following lengths of 22 gauge red wires and remove insulation from both ends of these wires and solder as shown below.

Two 5" Red wire.

Bottom view



13. Install a small 3 pin molex connector on the other ends of the 5" red as follows:

5" red from resistor to pin 2

5" red from other contact on switch to pin 3

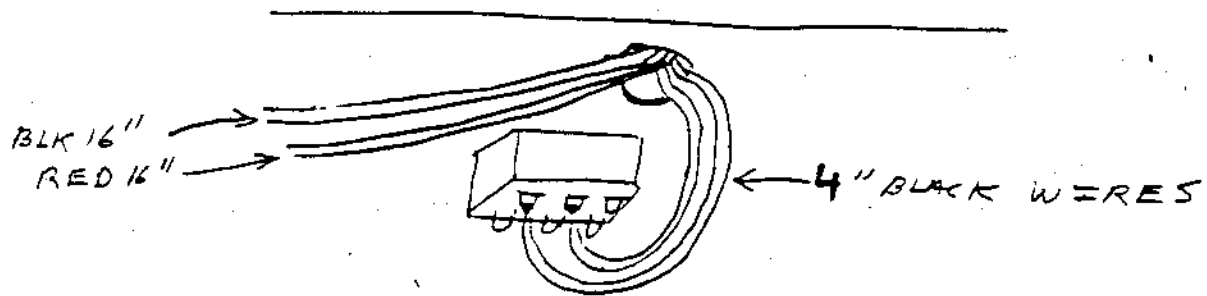
Label this connector J5 Power.

14. Cut the following lengths of black 22 gauge wires and remove insulation from one end.

two 4" black 22 gauge wires

15. Solder the two black 4" wires to the contacts on switch as shown below:

Bottom view



16. Install a small 10 pin molex connector on the other ends of the 4" black wires and the 16" red and 16" black wires as follows:

- 16" red from J4 power to pin 6
- 4" black from one contact on switch to pin 7
- 4" black from other contact on switch to pin 9
- 16" black from J4 power to pin 10

Label this connector J2 procon.