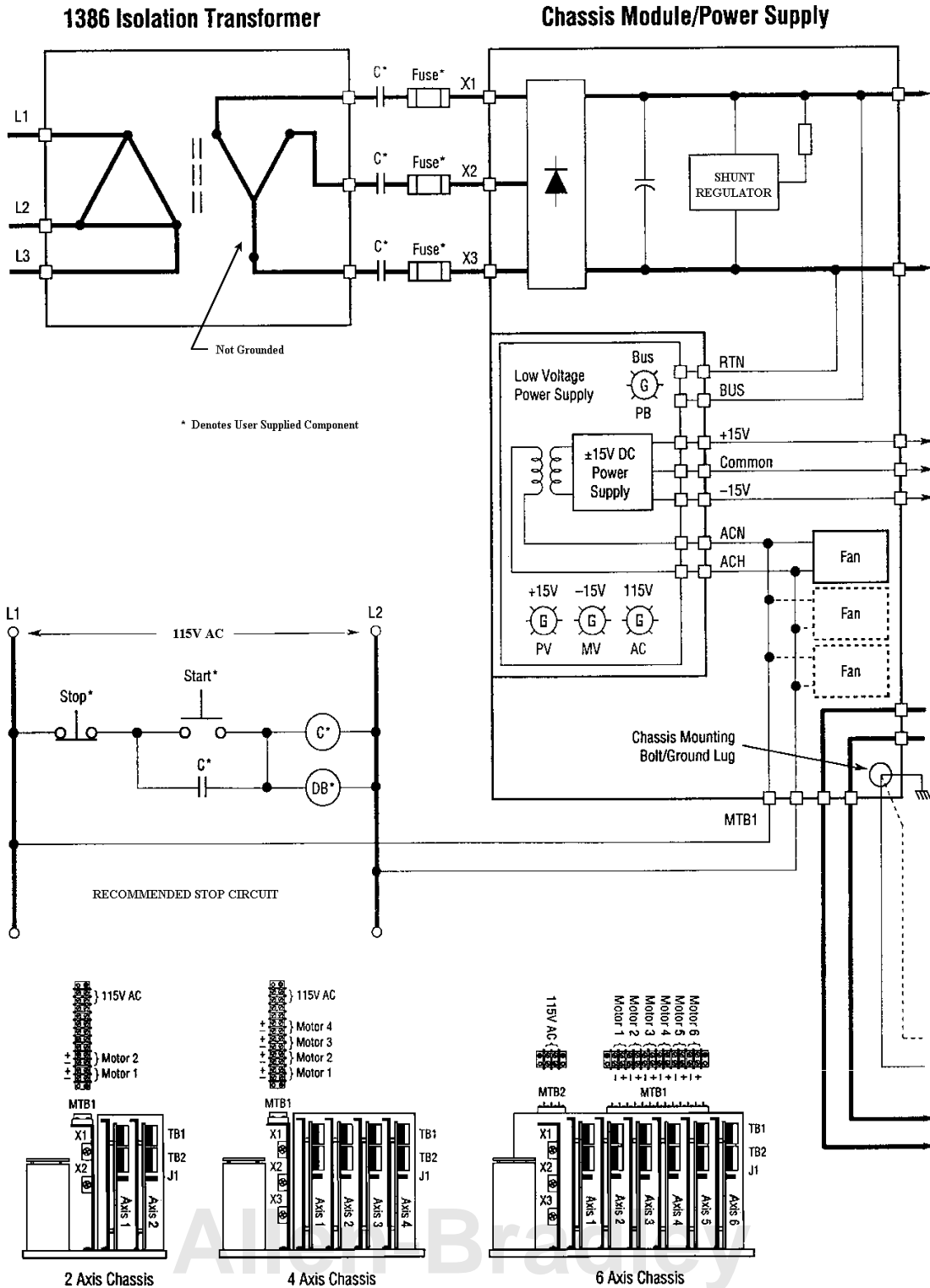


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**1386 CONNECTION GUIDE**

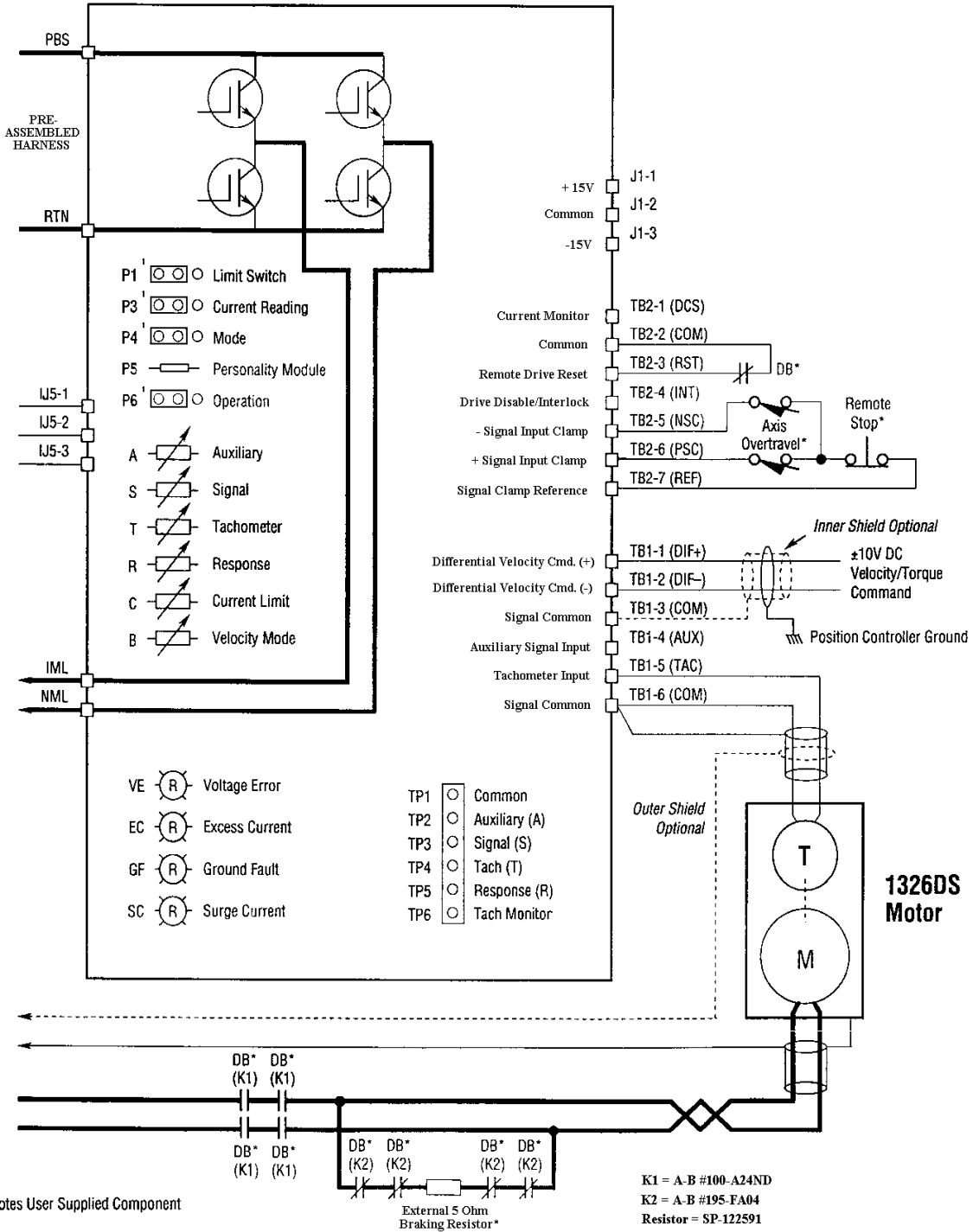
**1386 Interconnect Diagram**

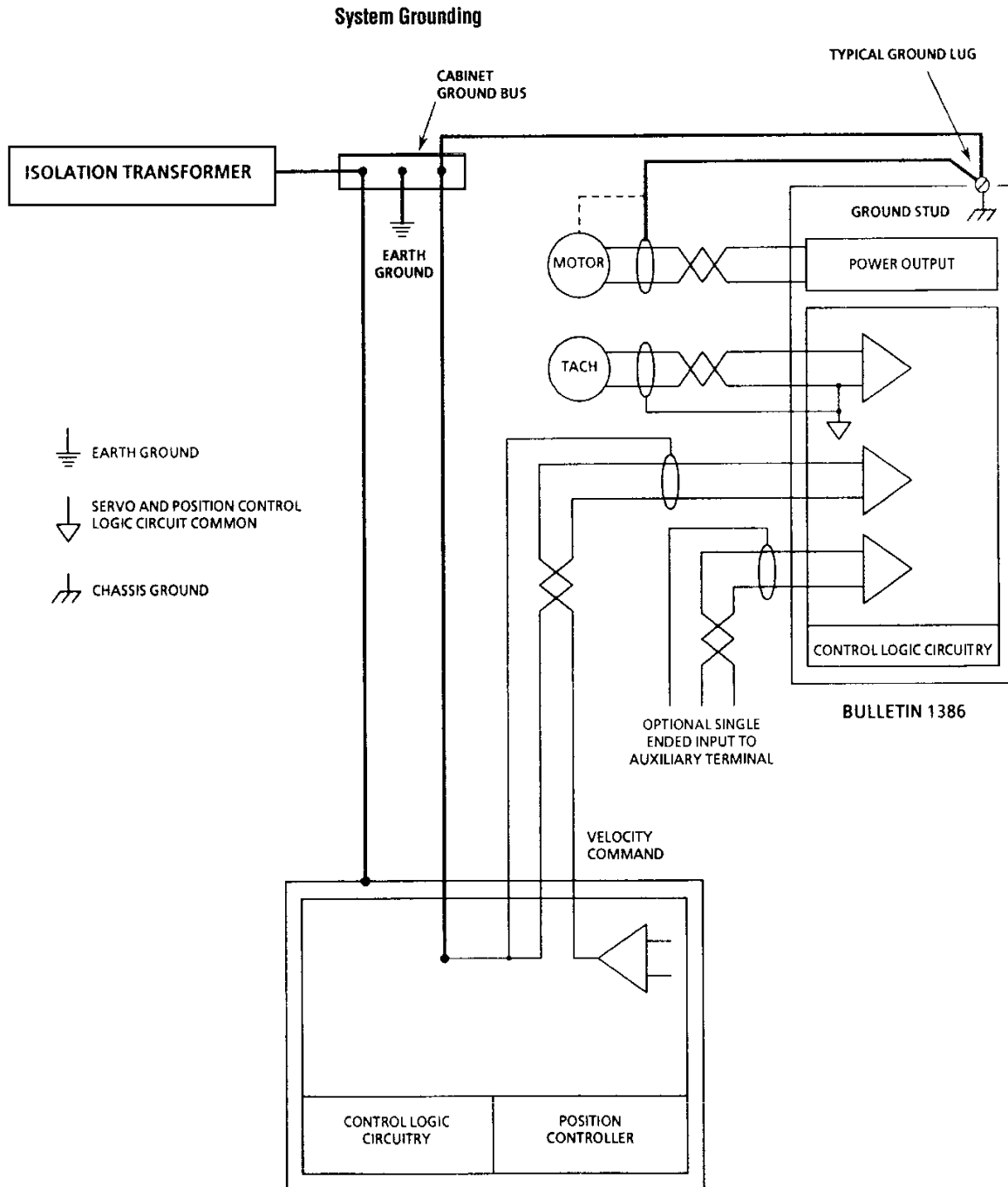


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**Servo Amplifier Module**





**NOTES:**

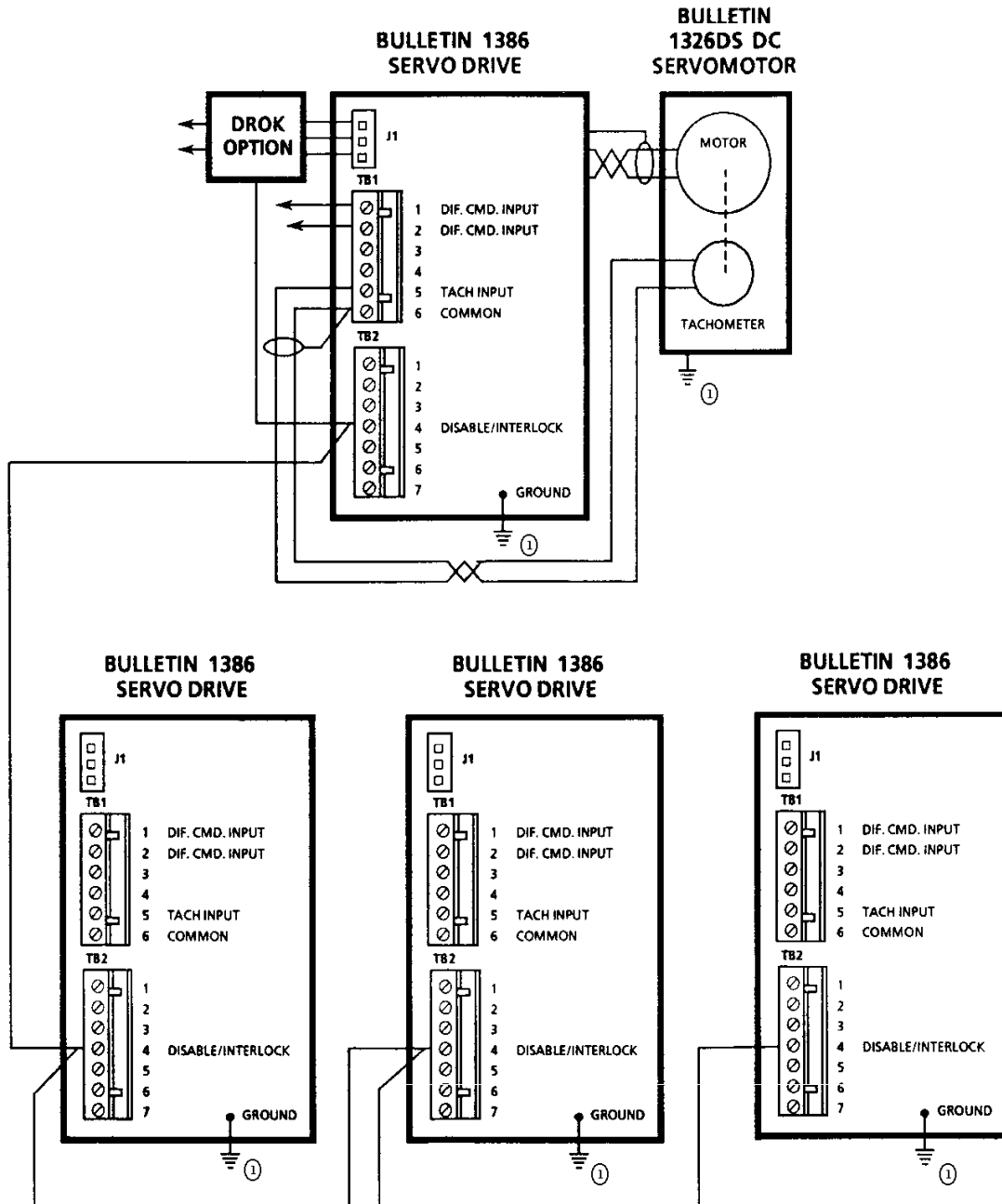
1. EARTH GROUNDS CONNECTED TO THE OUTER EDGE OF THE CHASSIS MODULE AND POSITION CONTROLLER ARE CONNECTED TO THE CHASSIS (METAL ENCLOSURE). THESE ARE THE SAFETY GROUNDS AND UNDER NORMAL CIRCUMSTANCES, DO NOT CARRY CURRENT.
2. THE VELOCITY COMMAND CAN BE CONNECTED IN EITHER A SINGLE-ENDED OR DIFFERENTIAL FASHION (SINGLE-ENDED IS SHOWN). IN BOTH CASES, ONLY ONE CONTROL LOGIC CIRCUIT COMMON IS BROUGHT TO EARTH GROUND.

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**1386 CONNECTION GUIDE**

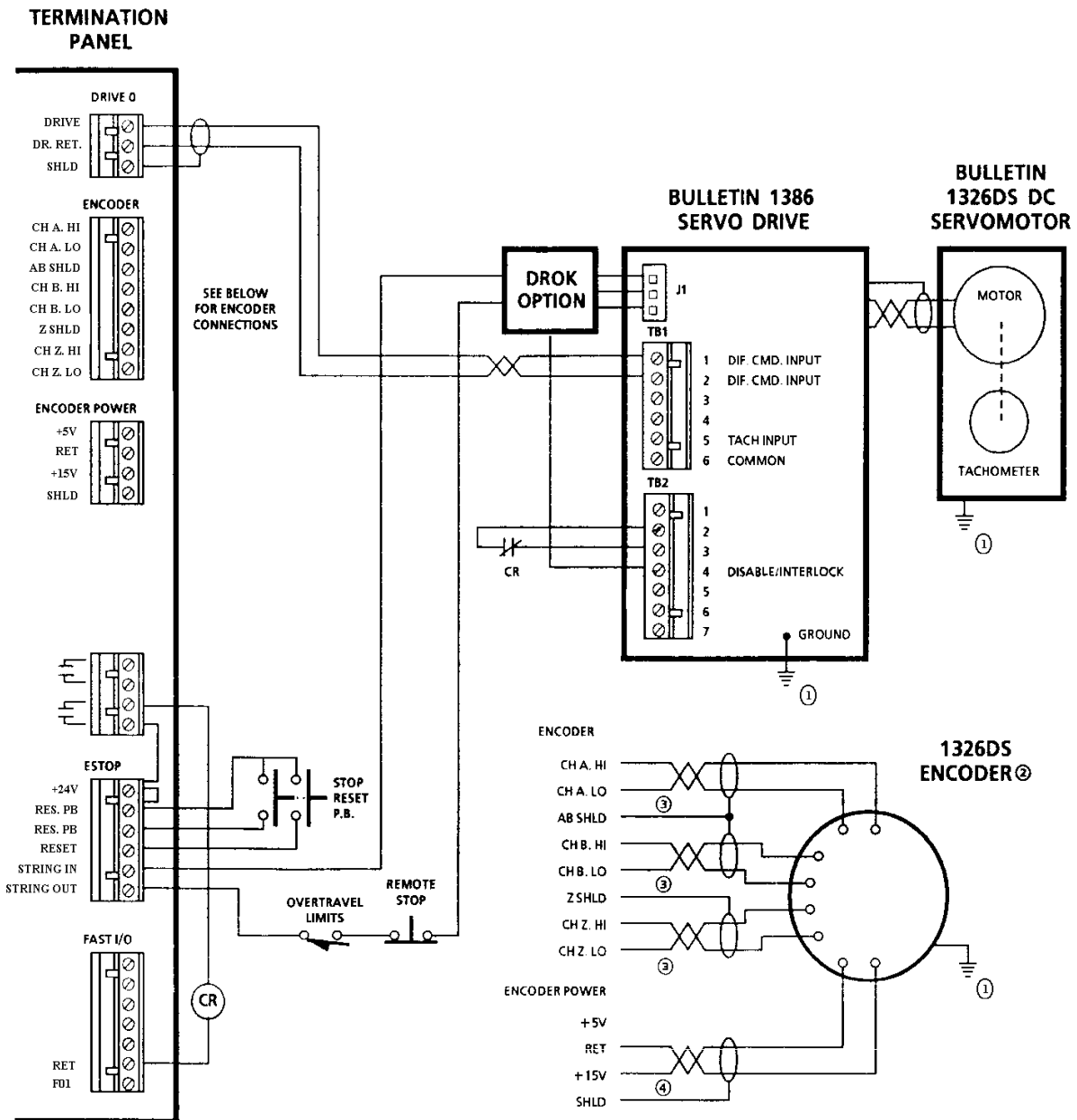
**Multiple Drive Interconnect**

This configuration will disable all axes, if any axis faults.  
For individual axis control, use one DROK Option Board per axis.



① REFER TO THE SYSTEM GROUNDING DIAGRAM FOR GROUNDING DETAILS.

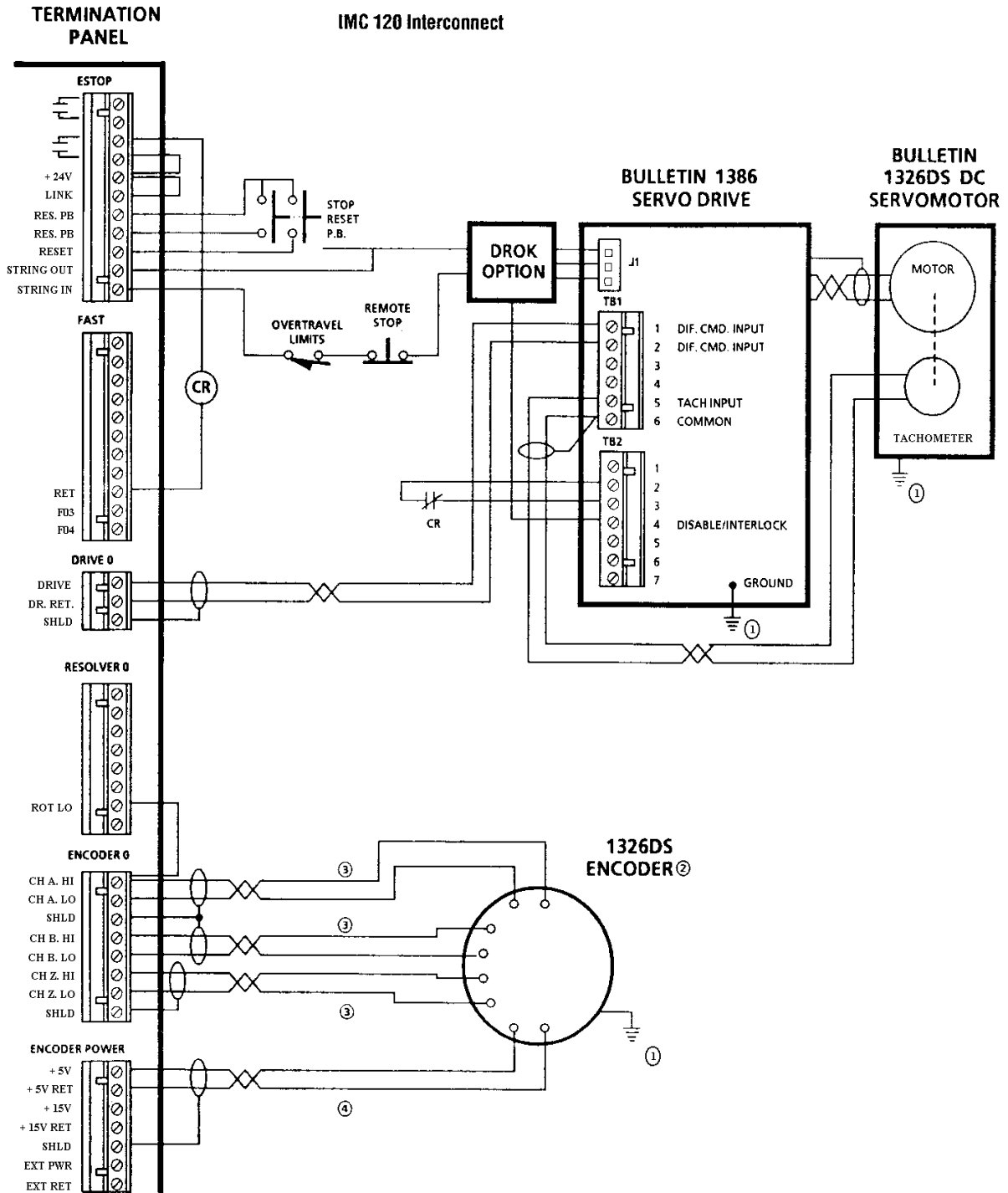
**IMC 110 Interconnect**



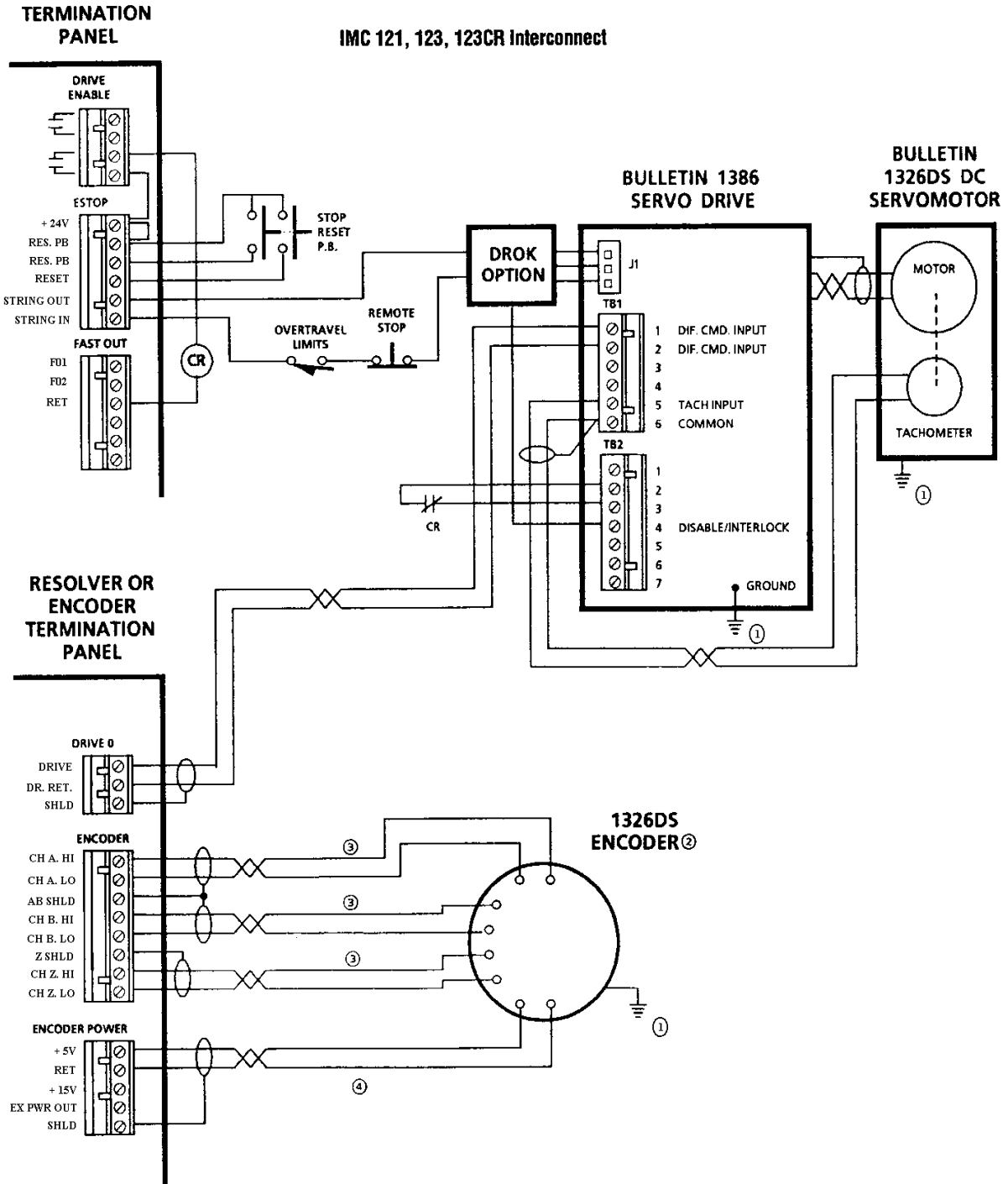
- ① REFER TO THE SYSTEM GROUNDING DIAGRAM FOR GROUNDING DETAILS.
- ② ENCODERS MUST HAVE + 5V COMPATIBLE DIFFERENTIAL LINE DRIVE OUTPUTS ON CHANNELS A, B, & Z (DS 8830 OR EQUIVALENT).
- ③ USE 3 PAIR 22 GAUGE INDIVIDUALLY TWISTED AND SHIELDED CABLE.
- ④ USE 1 PAIR 18 GAUGE TWISTED AND SHIELDED CABLE.

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**1386 CONNECTION GUIDE**



- ① REFER TO THE SYSTEM GROUNDING DIAGRAM FOR GROUNDING DETAILS.
- ② ENCODERS MUST HAVE +5V COMPATIBLE DIFFERENTIAL LINE DRIVE OUTPUTS ON CHANNELS A, B & Z (DS 8830 OR EQUIVALENT).
- ③ USE 3 PAIR 22 GAUGE INDIVIDUALLY TWISTED AND SHIELDED CABLE.
- ④ USE 1 PAIR 18 GAUGE TWISTED AND SHIELDED CABLE.

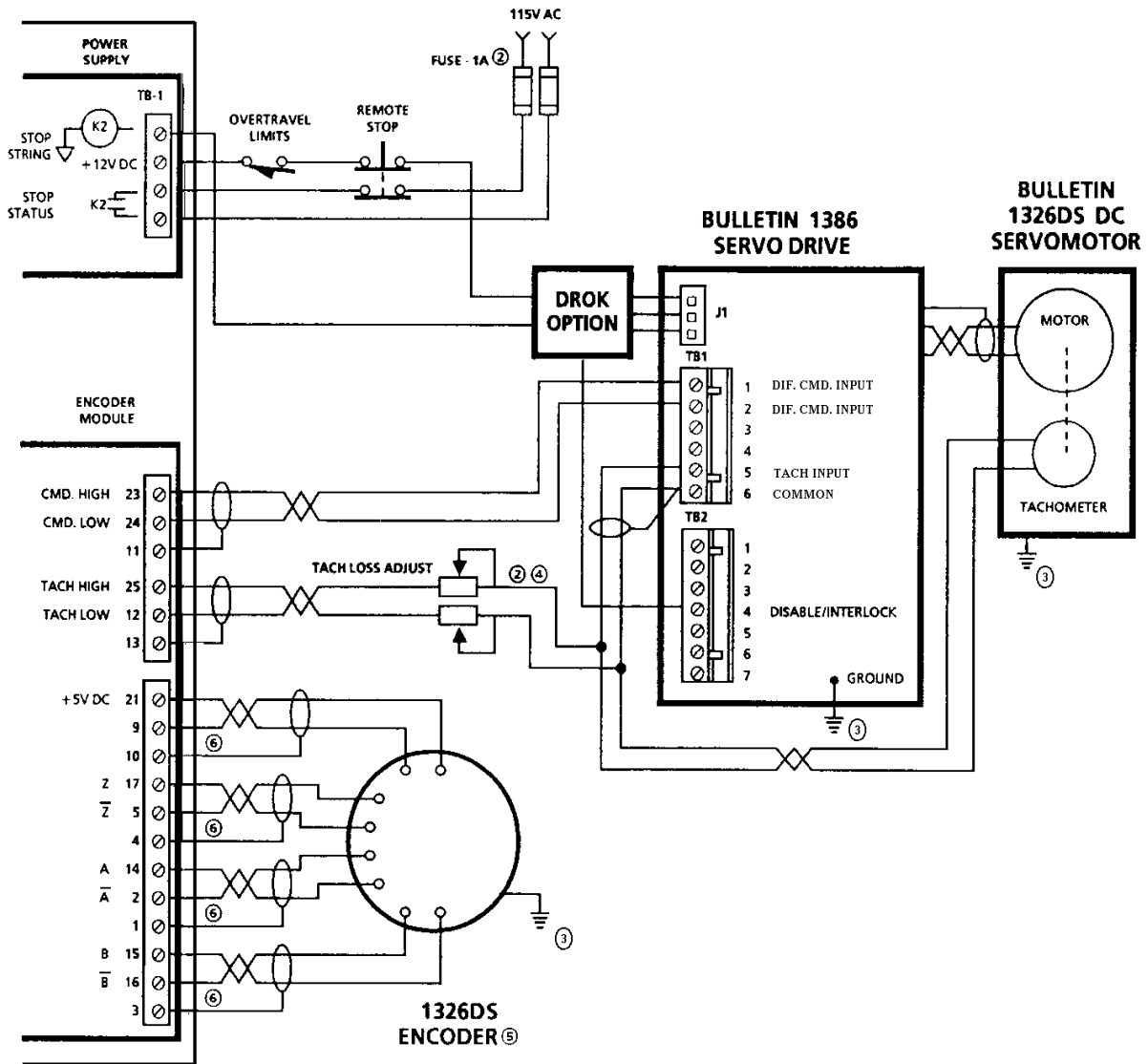


- ① REFER TO THE SYSTEM GROUNDING DIAGRAM FOR GROUNDING DETAILS.
- ② ENCODERS MUST HAVE +5V COMPATIBLE DIFFERENTIAL LINE DRIVE OUTPUTS ON CHANNELS A, B & Z (DS 8830 OR EQUIVALENT).
- ③ USE 3 PAIR 22 GAUGE INDIVIDUALLY TWISTED AND SHIELDED CABLE.
- ④ USE 1 PAIR 18 GAUGE TWISTED AND SHIELDED CABLE.

**Bulletin 8200 Interconnect**

**BULLETIN 8200**

①

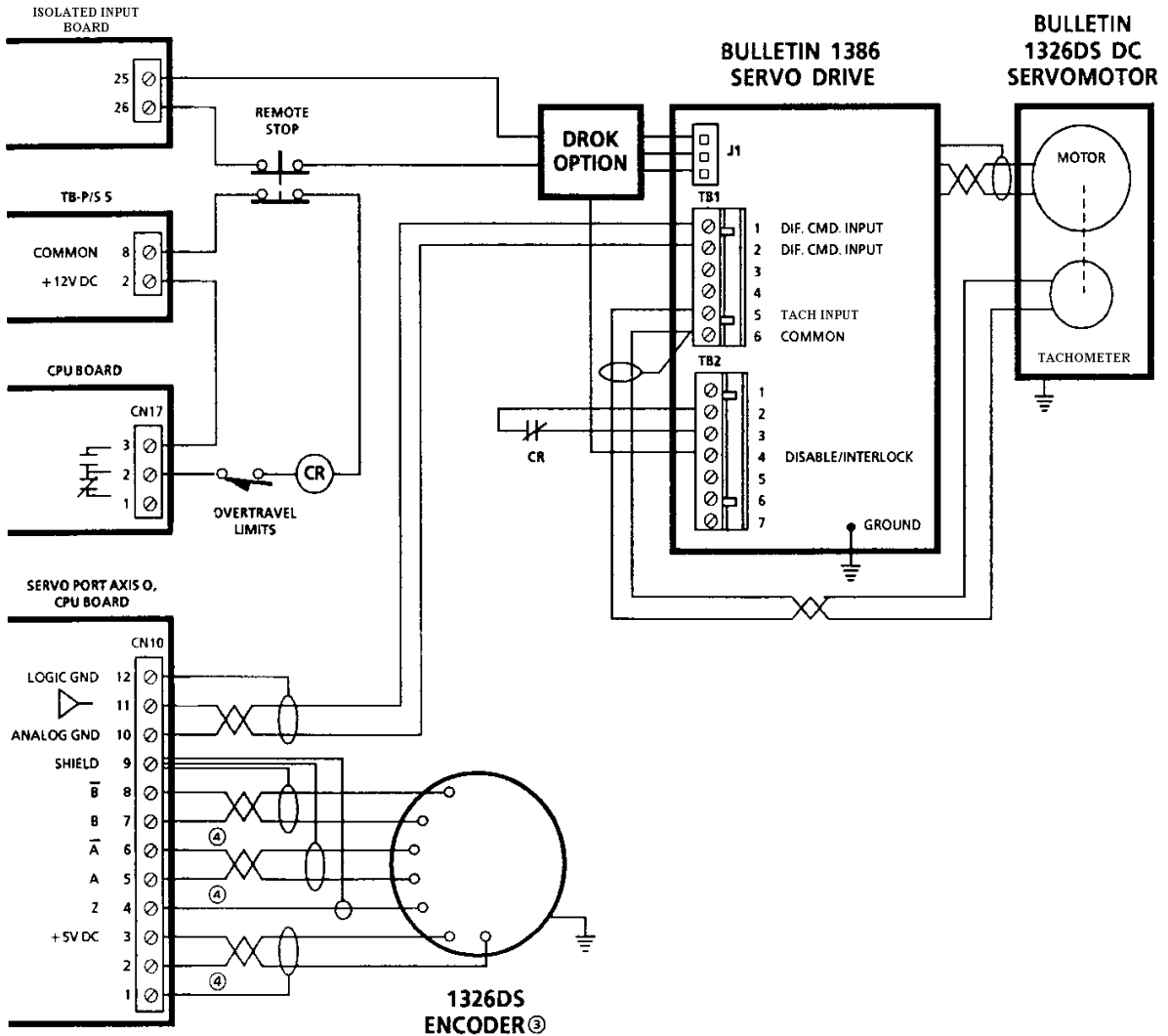


- ① FOR INTERFACE DETAILS, REFER TO A-B PUBLICATION B200-4.1, SERIES B200 CNC INTERFACE DESIGN MANUAL.
- ② USER SUPPLIED COMPONENT.
- ③ REFER TO THE SYSTEM GROUNDING DIAGRAM FOR GROUNDING DETAILS.
- ④ TACH LOSS ADJUSTMENT WOULD TYPICALLY BE A POTENTIOMETER OR FIXED RESISTOR SET TO:  $R(OHMS) = 1800 \times (V_{MAX} - 10)$ . WHERE:  $V_{MAX}$  = MAX TACH VOLTS AT MAX SPEED.
- ⑤ TYPICALLY DIFFERENTIAL LINE DRIVER OUTPUT.
- ⑥ BELDEN 9728 OR EQUIVALENT, 50 FEET (15.2 METERS) MAXIMUM. SHIELDS GROUNDED AT CONTROL ONLY.



Bulletin 8400 Interconnect

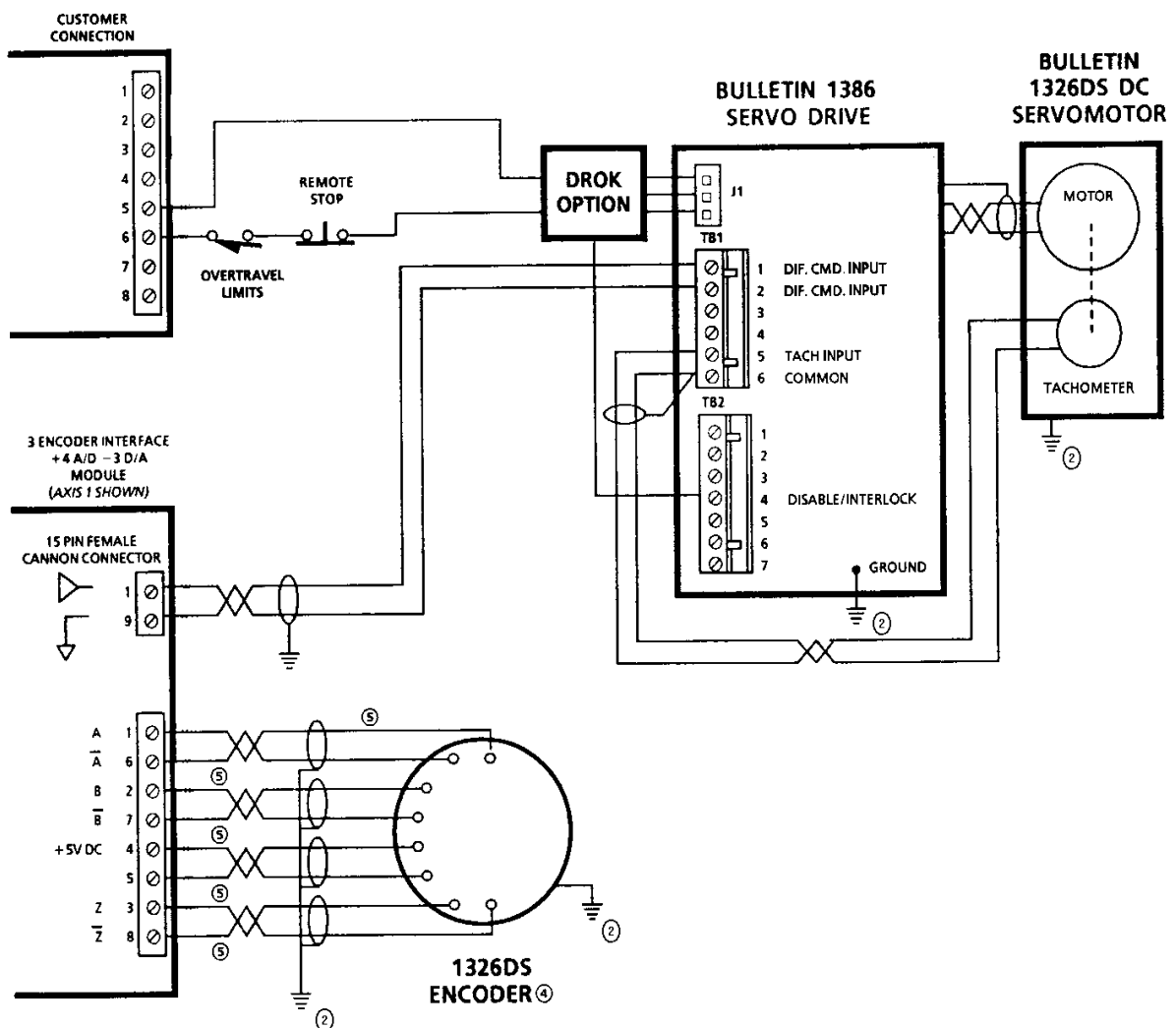
BULLETIN 8400 ① ⑤



- ① FOR INTERFACE DETAILS, REFER TO A-B PUBLICATION 8400-4.1, *SERIES 8400 CNC INTERFACE DESIGN MANUAL*.
- ② REFER TO THE SYSTEM GROUNDING DIAGRAM FOR GROUNDING DETAILS.
- ③ TYPICALLY DIFFERENTIAL LINE DRIVER OUTPUT.
- ④ BELDEN 9728 OR EQUIVALENT, 50 FEET (15.2 METERS) MAXIMUM. SHIELDS GROUNDED AT CONTROL ONLY.
- ⑤ OEM KIT VERSION SHOWN. NO DRIVES VERSION WOULD REQUIRE AXIS INTERCONNECT BOARD.

**Bulletin 8600 Interconnect**

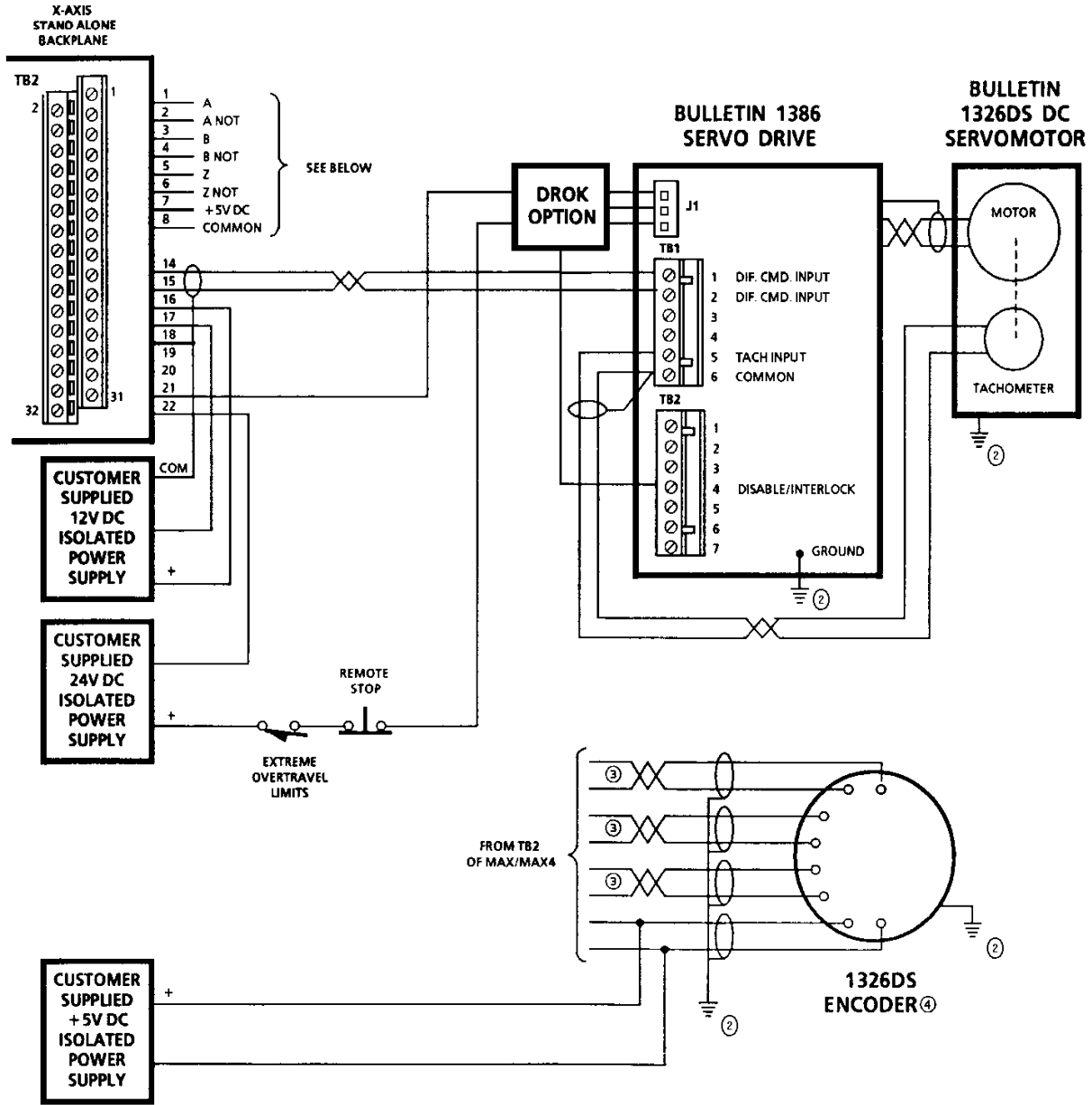
**BULLETIN 8600 ①③**



- ① FOR INTERFACE DETAILS, REFER TO A-B PUBLICATION 8600-4.1, SERIES 8600 CNC INTERFACE DESIGN MANUAL.
- ② REFER TO THE SYSTEM GROUNDING DIAGRAM FOR GROUNDING DETAILS.
- ③ TYPICAL 3 AXIS SYSTEM SHOWN FOR SERIES 8605, 8610 AND 8650 CNC.
- ④ TYPICALLY DIFFERENTIAL LINE DRIVER OUTPUT.
- ⑤ BELDEN 9728 OR EQUIVALENT, 50 FEET (15.2 METERS) MAXIMUM. SHIELDS GROUNDED AT CONTROL ONLY.

**CREONICS MAX & MAX4/CONTROL ①**

**MAX & MAX 4/Control Interconnect**



- ① FOR INTERFACE DETAILS, REFER TO A-B PUBLICATION 8600-4.1, SERIES 8600 CNC INTERFACE DESIGN MANUAL.
- ② REFER TO THE SYSTEM GROUNDING DIAGRAM FOR GROUNDING DETAILS.
- ③ BELDEN 9728 OR EQUIVALENT, 40 FEET (12.2 METERS) MAXIMUM, SHIELDS GROUNDED AT CONTROL ONLY.
- ④ TYPICALLY DIFFERENTIAL LINE DRIVER OUTPUT.