TSP 6000 SERIES
MAINTENANCE MANUAL



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CROWN

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Step 2: Check FU9.

- If: FU9 is open.
  - Then replace FU9.
- If: FU9 is OK.
  - Then proceed to Step 3.

Step 3: Check operation of ED1.

- If: Contacts close.
  - Then check the voltage between CA403-7 and BNEG.
- If: 48 V.
  - Then replace ACCESS 5.
- If: Less than 48 V.
  - Then remove wire #2911 from CA403-7. Check the voltage between wire #2911 and BNEG.
- If: 48 V.
  - Then replace ACCESS 5.
- If: Less than 48 V.
  - Then fault is in ED load buss. Refer to event code 541 trouble shooting procedures.
- If: Greater than 48 V.
  - Then refer to event code 540 trouble shooting procedures.

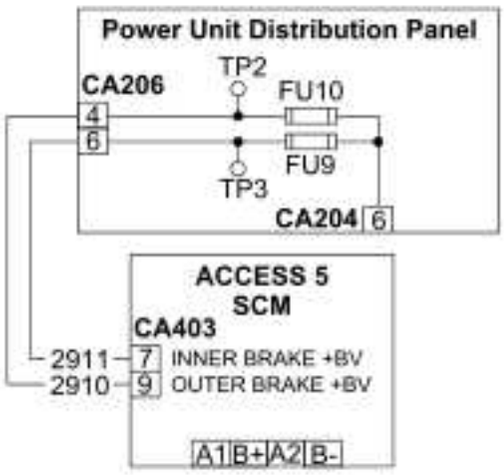


Figure 13119-01

Event Code 530 and 531

ACCESS 5 module outer brake +BV out of range.

Procedures listed apply to event codes 530 and 531.

Event code 530: Outer brake +BV above range: Full traction is disabled.

Event code 531: Outer brake +BV below range: Traction is disabled.

Step 1: Check status of event code 540.

- If: Event code 540 is logged.
  - Then resolve before proceeding with event codes 530 and 531.

Step 2: Check FU10.

- If: FU10 is open
  - Then replace FU10.
- If: FU10 is OK.
  - Then proceed to Step 3.

Step 3: Check operation of ED1.

- If: Contacts close.
  - Then check the voltage between CA403-9 and BNEG.
- If: 48 V.
  - Then replace ACCESS 5.
- If: Less than 48 V.
  - Then remove wire #2910 from CA403-9. Check the voltage between wire #2910 and BNEG.
- If: 48 V.
  - Then replace ACCESS 5.
- If: Less than 48 V.
  - Then the fault is in the ED load buss. Refer to event code 541 trouble shooting procedures.
- If: Greater than 48 V.
  - Then refer to event code 540 trouble shooting procedures.

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Air Gap Adjustment

The air gap, referred to on this truck, is the distance between the brake armature and the electromagnet body with brakes applied. Refer to Figure 20792. As the brake pads and rotor wear normally, the air gap will increase and should be readjusted, or parts checked and replaced, when it exceeds 1.0 mm (0.040 in).

NOTE

If the air gap measures more than 1.0 mm (0.040 in), the brake may not release properly. If the brake pad thickness is less than 2.8 mm (0.110 in), the brake pads and rotor should be replaced.

1. Lower forks completely, chock load wheels, and disconnect the battery.
2. Open power unit doors to access brake assembly.
3. Using low pressure air, remove any dirt between armatures and magnet body.
4. Using a 7/8 inch open end wrench, loosen the top nut.
5. Using a 1-1/8 inch open end wrench, turn the 1-1/8 inch hex nut down until the air gap is 0.25 mm (0.010 in) at its tightest location. One complete turn of the nut will change the gap 1.4 mm (0.056 in) or 1/6 (60 degrees) turn will change gap 0.235 mm (0.009 in).
6. Torque the 7/8 inch hex nut to 122 Nm (90 ft lb).
7. Remove chocks, connect the battery, and check operation.

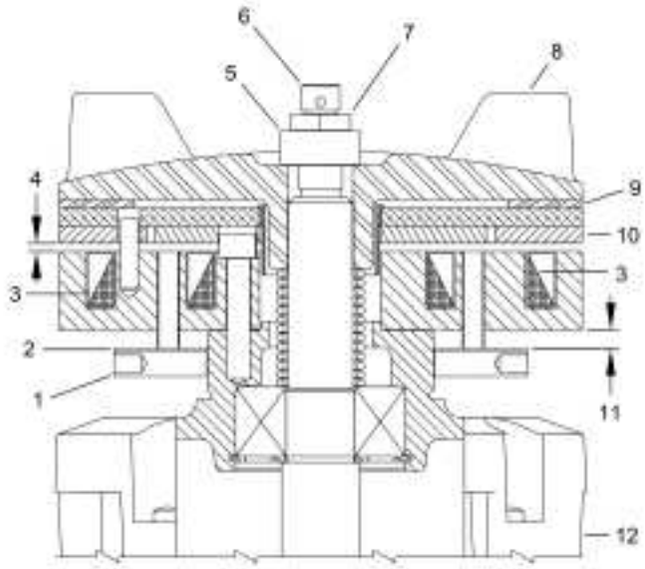
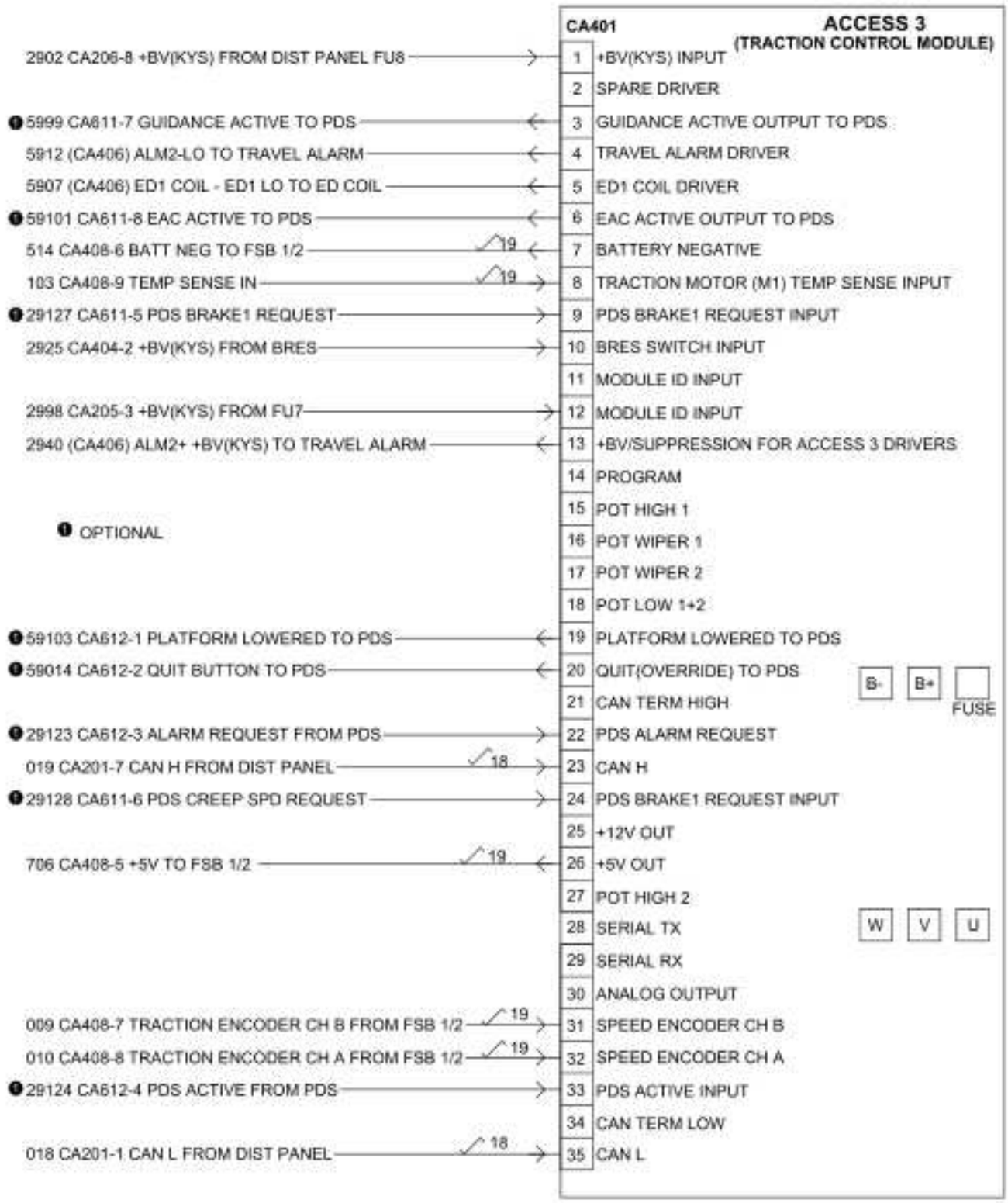


Figure 20792

1	Torque Adjuster Plate	7	7/8 in Hex Nut
2	Adjuster Disk	8	Rotor
3	Electromagnet	9	Brake Pads
4	Air Gap	10	Outer Armature
5	1-1/8 in Hex Nut	11	Torque Adjuster Gap
6	Motor Shaft	12	Drive Motor

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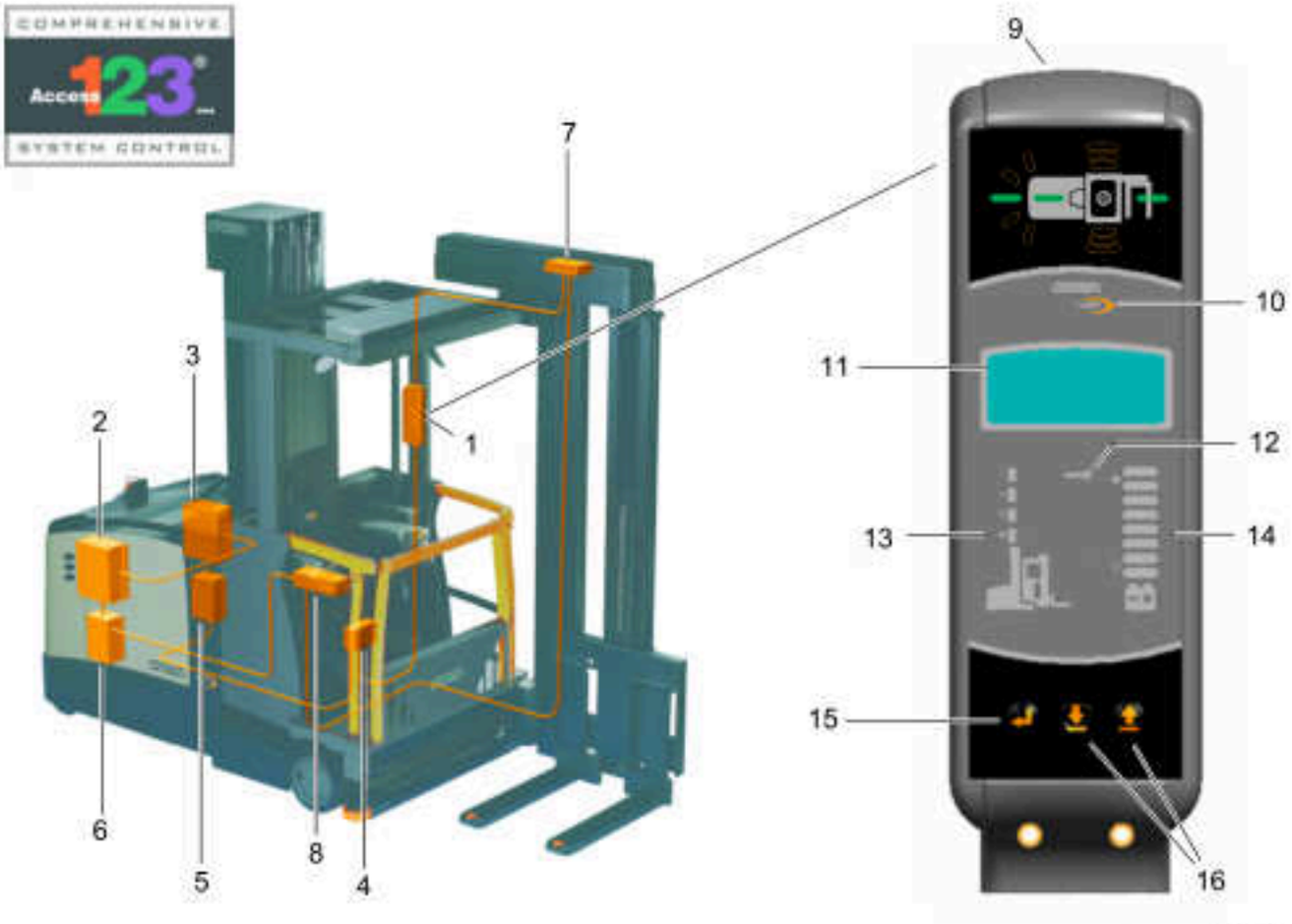


Figure 13919-01

1	DCM - ACCESS 1 Display Control Module	9	ACCESS 1 Display Module (DCM)
2	HCM - ACCESS 2 Hydraulic Control Module	10	Power ON Indicator
3	CM - ACCESS 3 Traction Control Module	11	Display Screen
4	VCM - ACCESS 4 Vehicle Control Module	12	Service Required Indicator
5	SCM - ACCESS 5 Steering Control Module	13	Capacity Data Monitor
6	GCM - ACCESS 6 Guidance Control Module	14	Battery Discharge Indicator
7	ACM - ACCESS 7 Accessory Control Module	15	Enter or Return Key (used to navigate in and out of menus and to accept inputs)
8	OCM - ACCESS 8 Operator Control Module	16	Navigation Keys (used to scroll through menus)

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Hydraulic Hose Fittings



Figure 20990

26. Remove connectors JC412, JC413 and JC414 from connector mount, then remove wire and pins from JC412 and JC413. Record position of wires in both connectors and label control cables. Refer to Figure 20991.

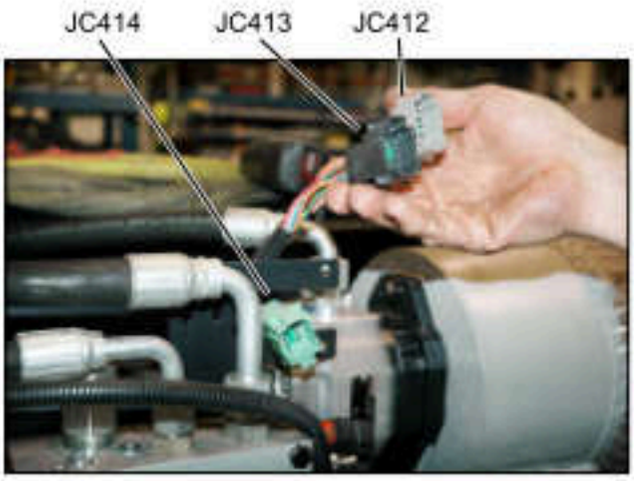


Figure 20991

27. Remove control cables from bracket and drape down at bottom of the mainframe.
28. Remove access cover at top portion of third stage mast, and remove shipping bracket from top of mast.
29. Remove springs on control cables from bracket through access at top of the third stage mast shown in Figure 20992. Then remove springs from cable clamps

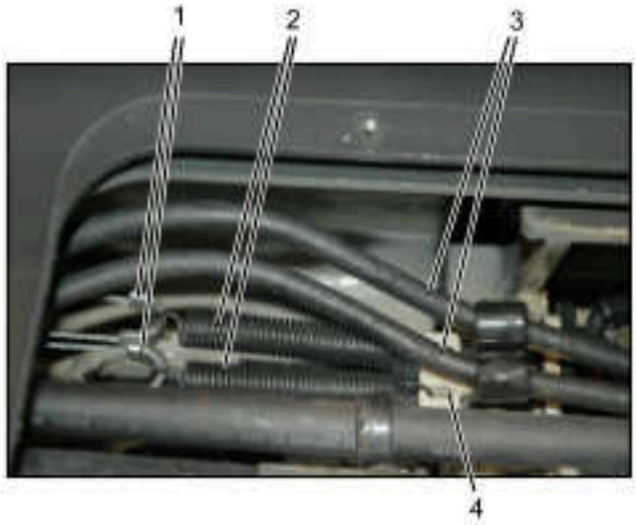


Figure 20992

1 Cable Clamps
2 Springs
3 Control Cables
4 Bracket

30. Mark position of large center hydraulic hose as shown. This mark will be used to line up hydraulic hose at reassembly to prevent twisting the hose. Refer to Figure 20993.

Mark Hydraulic Hose



Figure 20993

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