

PARTS & SERVICE NEWS

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| REF NO. | AA03033 |
| DATE | March 04, 2003 |

SUBJECT: PARK BRAKE SOLENOID WIRING KIT

PURPOSE: To announce to the field a kit for increased park brake reliability.

APPLICATION: All Komatsu Electric Drive Dump Trucks with STATEX III:
 445E: AFE39 - 31223 & UP; AFE41 - 31202 & UP
 510E: AFE40 - 31222 & UP; AFE44 - 31682 & UP
 170D: AFE36 - 30683 & UP
 170E: AFE37 - 30880 & UP
 630E: AFE38 - 30929 & UP; AFE42 - 31678 & UP; AFE46 - 31670 & UP
 685E: AFE43 - 31402 & UP
 730E: AFE47 - 32530 & UP; A30079 through A30224
 830E: AFE32 - 31320 & UP; A30544 through A30565

FAILURE CODE: D100Z9

DESCRIPTION: Kits for all Statex III equipped trucks.

Some trucks in the field may benefit from adding a Park Brake Solenoid Kit. Kit AK4936 is for trucks equipped with relay boards, Kit AK4937 is for trucks that do not have relay boards. The Statex III system controls the application of the park brake based on input from the park brake switch and wheel speed sensors. The Statex III system provides a path to ground for the park brake relay (7, Figure 1) when the park brake switch (6) is in the "OFF" position and ground speed is zero. By adding this relay (1 or 8) to the truck, there is now a second path to ground when the park brake switch is in the "OFF" position.

These kits add reliability to the Statex III system to ensure that the parking brake will not inadvertently "apply" while the park brake switch is in the "OFF" position. These kits can be installed on any Komatsu truck that is equipped with STATEX III, or any truck that has been converted over to STATEX III. Early 830E trucks with Statex III and all trucks that have been converted to Statex III require kit (AK4937).

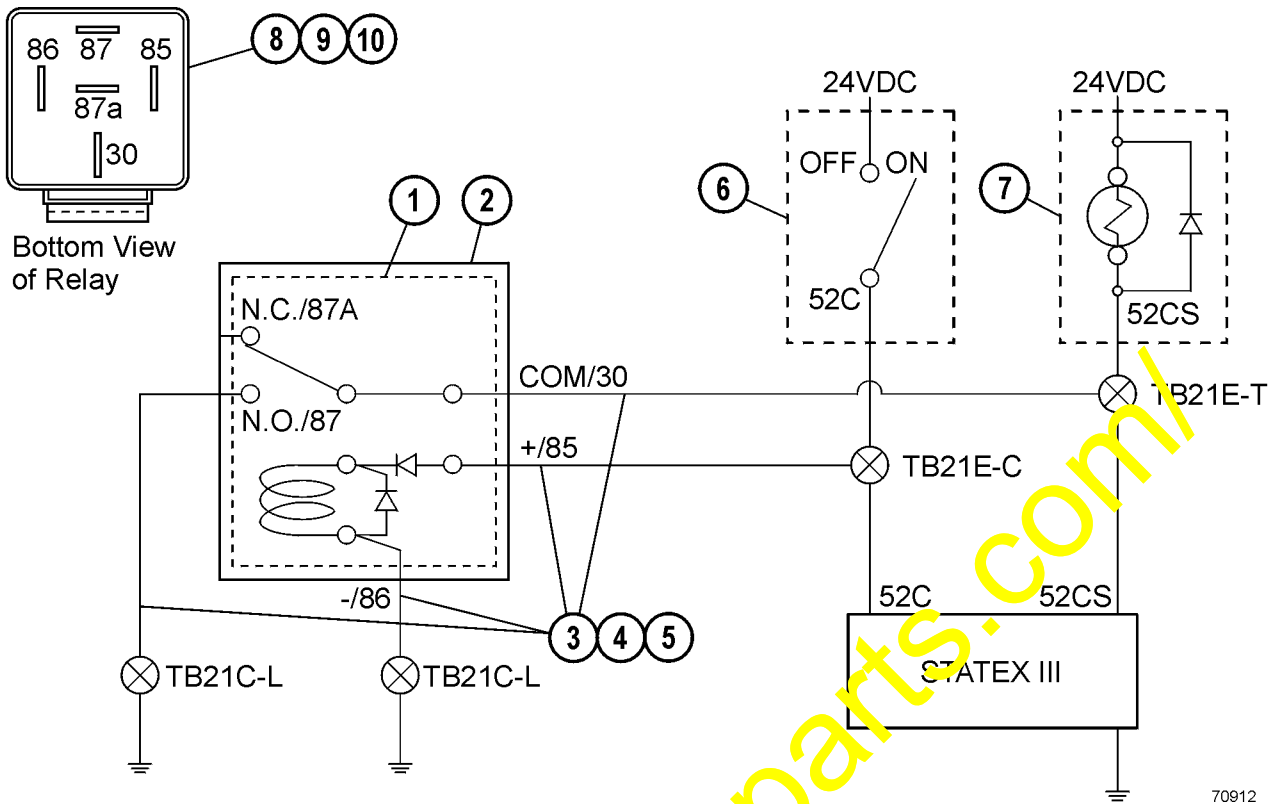
Installation Instructions

NOTE: Each truck will require approximately 12 feet of # 14 AWG wire that is not included in the kit.

1. Place the battery disconnect switch in the "OFF" position.
2. Install relay (3, Figure 2) into an empty socket on Relay Board 6 or 7. If truck is not equipped with a relay board, drill a hole in a convenient location on the left side, inside wall of the control cabinet (the side near the cab) to mount the new relay (8, Figure 1).
3. Connect the relay to the truck with wire and the terminals supplied in the kit as shown in the schematic in Figure 1. If truck is not equipped with relay boards, use the terminals supplied in kit AK4937 to connect the wires to the relay socket (9).
 - a. Connect circuit 52C to the + (85) relay coil terminal.
 - b. Connect circuit 52CS to the com (30) relay terminal.
 - c. Connect the - (86) terminal to ground.
 - d. Connect the N.O. (87) terminal to ground.

| CONTENTS OF KIT AK4936 (WITH RELAY BOARD) | | | |
|--|--------------------|-----------------|---|
| Item | Part Number | Quantity | Description |
| | EH7160 | 1 | Drawing, Park Brake Solenoid Installation |
| 1 | SM3189 | 1 | Relay |
| 3 | VH2583 | 4 | Ring Terminal (14-16) (# 8) |
| 4 | VH2584 | 4 | Ring Terminal (14-16) (# 10) |

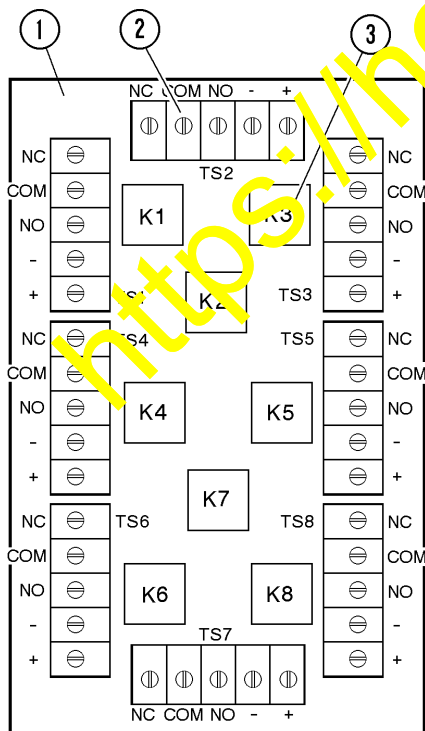
| CONTENTS OF KIT AK4937 (WITHOUT RELAY BOARD) | | | |
|---|--------------------|-----------------|---|
| Item | Part Number | Quantity | Description |
| | EH7160 | 1 | Drawing, Park Brake Solenoid Installation |
| 4 | VH2584 | 4 | Terminal Ring (14-16) (# 10) |
| 8 | PB4767 | 1 | Relay |
| 9 | PB6068 | 1 | Relay Socket |
| 10 | VL0964 | 4 | Terminal (for relay socket) |



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FIGURE 1. PARK BRAKE SOLENOID WIRING SCHEMATIC

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|---------------------------------|------------------------|---------------------------------|
| 1. Relay | 5. Wire (# 14 AWG) | 8. Relay (w/mounting bracket) |
| 2. Relay Board 6 or 7 | 6. Park Brake Switch | 9. Relay Socket |
| 3. Ring Terminal (14-16) (# 8) | 7. Park Brake Solenoid | 10. Terminal (for relay socket) |
| 4. Ring Terminal (14-16) (# 10) | | |



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FIGURE 2. RELAY BOARD

1. Terminal Board
2. Terminal Strips
3. Relays