

**SERVICE BULLETIN**

Original Issue Date: 7/04

Model: **30-200 Amp Model KCT and SCT Automatic Transfer Switches**

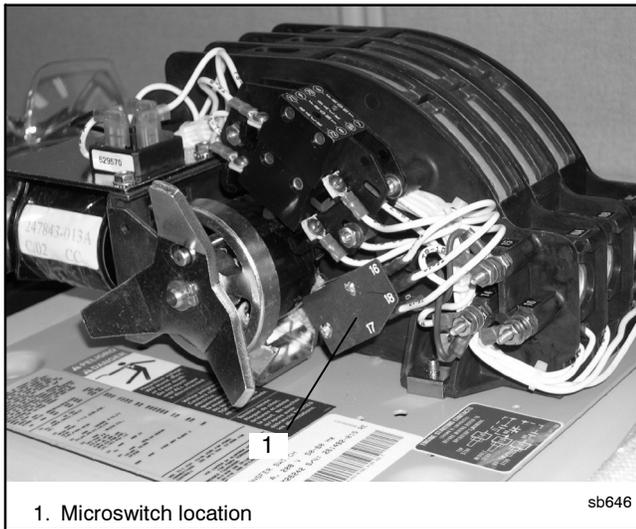
Market: **ATS**

Subject: **Position-Indication Errors**

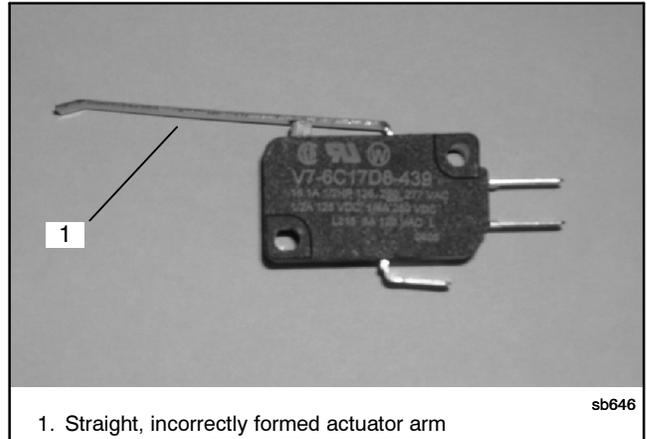
**Introduction**

The transfer switch manufacturer has received field reports of problems with erroneous transfer switch position indication on some 30-200 amp Model KCT and SCT automatic transfer switches equipped with 1000 series transfer switch controls. The controls may indicate that the ATS is in one position but the contactor is actually in the other position. The position-indication errors may lead to failure to shut down the generator set after a loaded exercise. This condition may cause the Service Required LED to light.

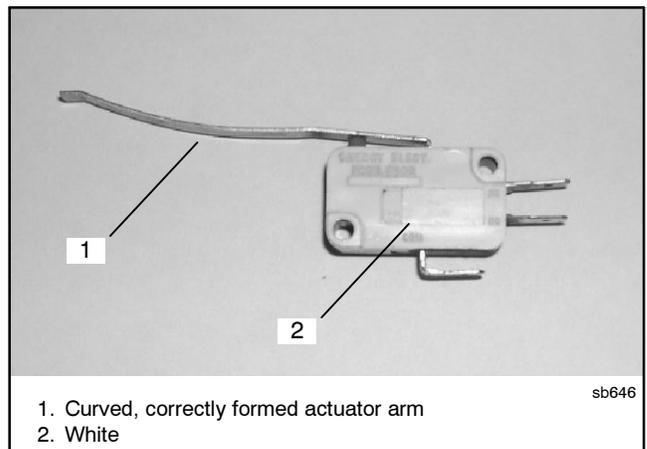
The problem has been identified as incorrectly formed actuator arms on the position-indicating microswitch (see Figure 1 through Figure 4).



**Figure 1** Microswitch Location

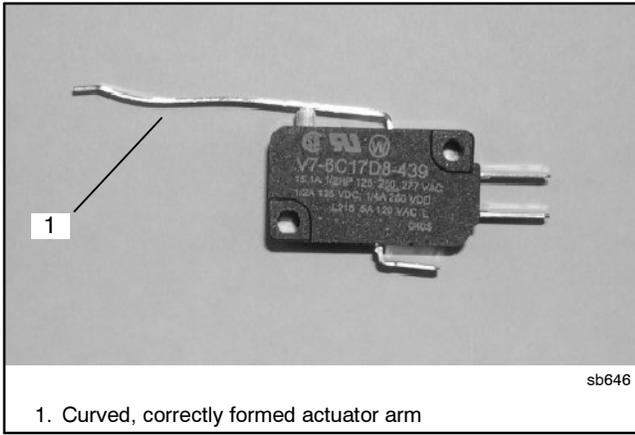


**Figure 2** Microswitch with Incorrectly Formed Straight Actuator Arm (replace this type)



**Figure 3** Original Microswitch (good, do not replace)

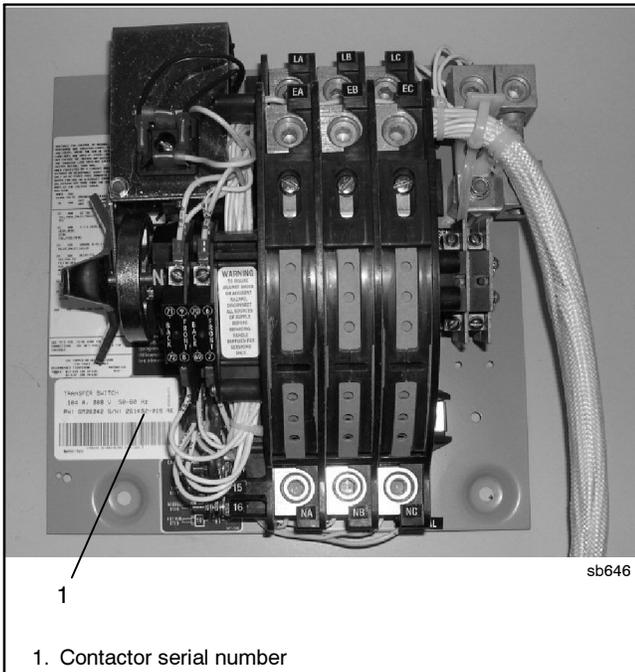
Routing	Service Manager	Sales Manager	Parts Manager	Technician No. 1	Technician No. 2	Technician No. 3	Return This to
Initial Here							



**Figure 4** Good Microswitch (use this type)

## Affected Units

Some 30–200 amp Model KCT and SCT automatic transfer switches manufactured between September 23, 2003 and April 14, 2004 may have the incorrectly formed microswitch arm. Only microswitches with the straight arm shown in Figure 2 need to be replaced. Microswitches with curved arms as shown in Figure 3 and Figure 4 do not need to be replaced. The affected transfer switches have contactor serial numbers 238501 through 256654. See Figure 5 for the contactor serial number location. The affected ATS serial numbers fall between K0770588 and K0796718. The ATS serial number is printed on the transfer switch nameplate. (Other transfer switch models with serial numbers in this range are not affected.)



**Figure 5** Contactor Serial Number Location

## Field Action

Inspect the microswitches on affected units during installation, normal maintenance, or transfer switch service in response to a service call. Replace the microswitch if it is the straight-arm type shown in Figure 2. Order microswitch part number GM24251. Replacement switches should have the curved arm shown in Figure 4.

## Software Update

Version 1.25 of the controller application program provides improved position indication. Install application program version 1.25 or higher on the controller during transfer switch maintenance or service.

Obtain the new controller application program through the KohlerNet. Use your SecurID to access the KOHLERnet, click on the TechTools button, and follow the instructions on the screen to request files.

Use a personal computer running the Program Loader software to load the new program onto the controller. See TT-1285 for instructions to load the program.

## Warranty Coverage

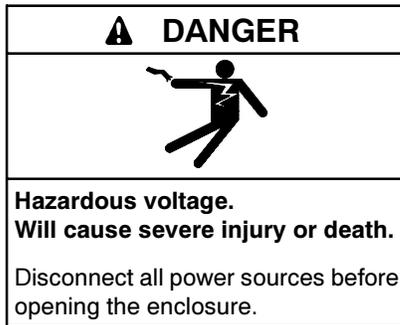
Perform microswitch inspection and replacement at installation, during routine maintenance, or as a result of a service call.

**Replacement of the microswitch during a service call resulting from a customer complaint must be authorized by the factory prior to submitting a warranty claim for the repair.** Call our factory Service Department for authorization. No travel time/mileage will be allowed without prior authorization.

Use failure code SB and flat rate code 5329 for Model KCT switches or 5330 for Model SCT switches when completing the warranty claim form. Warranty will allow 0.5 hours for the microswitch replacement.

Software updates will not be covered under warranty.

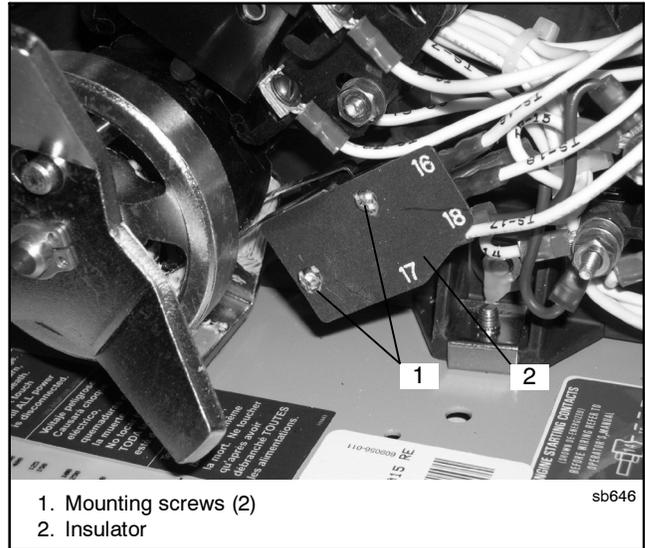
## Switch Replacement Instructions



**Servicing the transfer switch. Hazardous voltage can cause severe injury or death.** Deenergize all power sources before servicing. Open the main circuit breakers of all transfer switch power sources and disable all generator sets as follows: (1) Move all generator set master controller switches to the OFF position. (2) Disconnect power to all battery chargers. (3) Disconnect all battery cables, negative (-) leads first. Reconnect negative (-) leads last when reconnecting the battery cables after servicing. Follow these precautions to prevent the starting of generator sets by an automatic transfer switch, remote start/stop switch, or engine start command from a remote computer. Before servicing any components inside the enclosure: (1) Remove all jewelry. (2) Stand on a dry, approved electrically insulated mat. (3) Test circuits with a voltmeter to verify that they are deenergized.

1. Prevent the generator set from starting by moving the generator set master switch to the OFF position, disconnecting power to the generator engine starting battery charger, if installed, and disconnecting all generator engine start batteries, negative (-) leads first.
2. Disconnect all power to the transfer switch. Then use a voltmeter to verify that no voltage is present at the switch terminal lugs on both power sources.

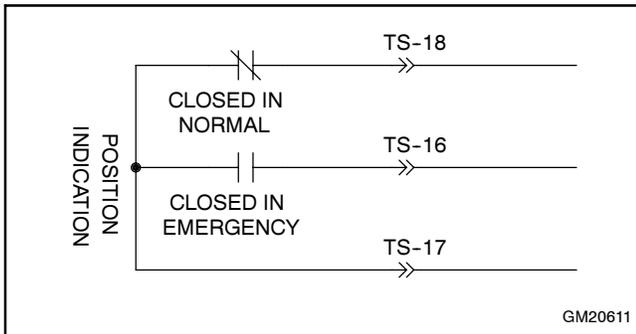
3. See Figure 1 to identify the microswitch location. Check to verify that leads 16, 17, and 18 connected to the microswitches are marked so they can be identified after being disconnected. Add labels if necessary. See Figure 6.



**Figure 6** Microswitch Mounting Screws

4. Disconnect the leads 16, 17, and 18 from the position-indicating microswitch.
5. Remove the two mounting screws. See Figure 6. Two microswitches and the insulator are held in place by the screws.
6. Inspect the microswitch to verify that it is the type shown in Figure 2. Microswitches of the types shown in Figure 3 and Figure 4 do not need to be replaced. Save the bad microswitch for 90 days as required by warranty policy.

7. Install the new microswitch in the same orientation as the old one. Be sure to reinstall the insulator as shown in Figure 6.
8. Manually operate the switch and use an ohmmeter to check the operation of the position-indicating switch. See Figure 7.



**Figure 7** Microswitch Schematic (shown with contactor in Normal position)

9. Connect leads 16, 17, and 18 to the new switch.
10. Follow the instructions in TT-1285 to load the new application program onto the ATS controller.
11. Close and lock the enclosure.
12. Reconnect power to the transfer switch.
13. Reconnect the generator engine start battery, negative (-) lead last. Reconnect the generator set engine starting battery charger, if equipped. Move the generator set master switch to the AUTO position.
14. Press the Test button on the controller's user interface to check the ATS operation. Press the Test button again to end the test.