

Installation Instructions for Re-Calibration of Brasch BGS Model Detectors

This procedure describes the steps required to re-calibrate the Brasch model BGS-CM-STD, BGS-ND-STD and BGS-NCM-STD gas detectors in the field. Re-calibration is performed by disassembling the detector and replacing the main circuit P.C. board with a new board containing new, calibrated sensor(s). The unit is then reassembled and placed back into service.

Before starting the procedure, please make sure that the following parts and equipment are available.

A new main P.C. board assembly with new, calibrated sensor(s) installed. This assembly can be obtained from Brasch Manufacturing by contacting the distributor that originally sold the detector to you.

A 3/64" Allen wrench to remove the cover securing screws.

A #2 Phillips screwdriver to remove the screws that attach the P.C. board assembly to the housing.

A wrench to remove the conduit tubing that is attached to the detector.

A known good voltmeter capable of measuring AC voltage.

Begin by turning off all power to the detector at the power source. Make sure that both the detector power and the relay control power are turned off.

Using the 3/64" Allen wrench, remove the two screws that secure the cover to the housing. The cover is connected to the housing with a short length of grounding wire. Make sure that this wire is not broken when the cover is removed.

Remove the wires from terminal strip TS1, terminals T1, T2 and GND located in the upper, left corner of the main P.C. board. Tape the exposed ends of each wire to prevent any chance of shorting.

Remove all wires that are connected to the display board on the left hand terminal strips. You may want to make a drawing of the location of each wire to make re-connection easier.

Remove all conduit fittings that are connecting the conduit tubing to the housing.

Remove the screws that are attaching the housing to the support structure.

Remove the housing from the wall. **The housing must be removed from the wall in order to reach an attaching screw that is positioned in the back, center of the housing. Do not try to remove the P.C. board assembly until this screw is removed as damage to the display board will result.**

Remove the screw that is in the center, back of the housing.

Lay the housing on its back and remove the five screws that are positioned around the outer edge of the main P.C. board.

Lift the P.C. board assembly out of the housing by tilting the top edge of the main P.C. board upwards until the bottom edge clears the housing. Be careful not to damage the alarm silencing switch at the bottom of the display board.

Lay the P.C. board assembly on a flat surface and remove the five screws that secure the display board to the main board. Remove the display board by lifting upwards. Be careful not to bend the connecting pins that connect the main board to the display board.

Place the display board in position over the connecting pins of the new main board assembly. You may have to take special care to get the pins positioned correctly into the sockets on the display board. Carefully push down on the display board to insert the pins into the sockets.

Replace the five screws that secure the display board to the main P.C. board.

Place the assembly back into the housing by inserting the bottom of the assembly into the housing first and then tilting the top down into the housing.

Align the screw holes around the outer edge of the main board with the spacers in the housing. Replace the five retaining screws that hold the assembly into the housing. Do not over tighten these screws as the spacers are plastic.

Turn the housing over and replace the center, back securing screw.

Replace the housing back on the support surface and securing it with the attaching screws. Re-attach all conduit fittings to the housing.

Re-connect all wiring to the correct terminals.

Using the 3/64" Allen wrench, re-attach the cover to the housing.

Turn on the power. The unit should start up in the PURGE condition in which the sensor failure light will flash for five minutes. At the end of the five minutes, the unit will enter the measure mode and will monitor for any gases that are present.