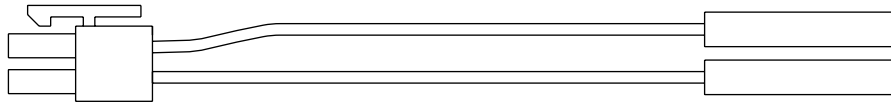


# SERVICE BULLETIN



## 854 BRAKE TERMINAL REPAIR



**Read and understand** this material and the bender instruction manual IM 1301 before servicing this tool. Failure to understand how to safely operate this tool can result in an accident causing severe injury or death.

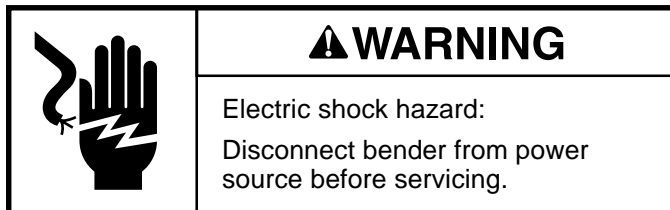
## Purpose

All Model 854 Benders with serial numbers ABT0006PC through ABT0326QB should have the brake connector replaced with part number 5039890.3. The brake connector on these benders may have damaged pins. These pins will cause an intermittent connection which can result in the brake being engaged while the motor is running. This will damage the motor and the control electronics. This service bulletin gives instructions for the installation of the new connector and for testing of the bender to determine if additional parts replacement is required.

All Model 854 Benders with serial numbers ABT0006PC through ABT0229PH should have the I/O Assembly (Part Number 5003050.7) replaced with an upgraded assembly. Instructions for replacing the I/O Assembly are found in SB-277.

It is necessary to complete all steps in this Service Bulletin. If additional repair is necessary, you will be directed to the appropriate sections of SB-277.

## To Replace The Connector:



1. Place the bender in the vertical position.
2. Remove four screws securing the top cover, and remove cover.
3. Unplug the two pin connector from the location marked BRAKE on the I/O board. If desired, tape or other means may be used to prevent the brake wires from falling into the bender while performing the rest of the repair procedure.
4. Remove the old connector by cutting the two wires just behind the connector.
5. Strip 1/4" of insulation from each wire. The wire is 18 AWG. Use the appropriate tool to avoid wire damage.
6. Attach the new connector (Part Number 5039890.3) to the brake wires by crimping the butt splices to the wires. Make sure the wires are fully inserted into the splices before crimping. Use a full cycle crimping tool such as Greenlee 45500.
7. Plug the new connector into the jack marked BRAKE on the I/O board.
8. Installation of the new connector is complete. Proceed with Bender Test.

## Bender Test Procedure:

1. Make sure power is disconnected.
2. Unplug the 6-pin wire unit from the jack marked TO PGU on the I/O board.
3. Plug the bender into a suitable electric outlet and turn it on.
4. Several of the following steps require listening for a click from the brake located on the back of the motor, which is near the bottom of the unit on the side with the 1/2" through 1-1/4" bending shoe. This click must not be confused with the sound from the relay on the I/O board assembly, which operates at the same time.
5. Listen for brake operation and observe bender shoe as you press and hold the pendant in either the BEND or UNLOAD position. There should be an audible click from the brake when the pendant switch is pressed. The bender shoe should not move.
6. Release pendant switch. There should be an audible click as the brake engages.
7. If the bender shoe rotated with the pendant switch depressed, the PGU board must be replaced. Refer to SB-277 for instructions on PGU board replacement.
8. If there were no clicks from the brake as the pendant was pressed and released, the brake is defective. Refer to SB-277 for instructions on brake replacement.
9. Turn off the bender. Wait approximately 10 seconds, until the LEDs on the I/O and PGU boards stop glowing.
10. Reconnect the 6-pin wire unit to the jack marked TO PGU on the I/O board.
11. With the bender in the vertical position, set the cover in place on the bender, but do not attach it yet.
12. Turn the unit on.
13. Using the pendant switch, position the shoe so that one of the pointers (EMT or rigid) aligns with the 0 mark on the bending scale. It does not matter which side of the bender is used for this test.
14. This step requires a stopwatch or a watch with a indication of seconds. Measure the time required for the bender shoe to rotate 1/2 turn (180 degrees), as indicated by the opposite pointer (rigid or EMT) reaching the 0 mark on the scale.
15. The time should be approximately 13 seconds. If the time is less than 10 seconds, the motor has been demagnetized. Refer to SB-277 for instructions on motor housing replacement.
16. If the bender passes these tests, turn off and disconnect power. Replace the four screws securing the cover in place.
17. Record the unit serial number and upgrades performed. Fax this information to the Greenlee Customer Service department at 800/451-2632.

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