

Halo B Circuit Board Replacement Instructions

These instructions apply to Halo B loaders with Z Board and V35 boards.

Please read all directions before starting work. Any damages caused to your new circuit board or to your loader as a result of attempting to install the board are not the responsibility of the manufacturer. If you do not feel comfortable attempting this installation based on these terms, or if you need technical assistance during installation, DO NOT RETURN THE PRODUCT TO WHERE IT WAS PURCHASED. Contact:

Paintball Solutions 570 Mantua Blvd., Sewell NJ 08080
(800) 220-3222 • <http://www.paintballsolutions.com>

If you are not comfortable installing the board, Paintball Solutions will install it into your hopper at no additional charge. Send the board and your hopper to the above address, along with your name, return address, and daytime telephone number.

Tools required for installation:

#1 size Phillips screwdriver, medium size flat head screwdriver and scotch tape.

Getting started:

Step 1) Clear a neat space to work at. If possible, spread out a large light-colored towel or paper towels on a flat surface.

Step 2) Remove any paintballs from your hopper. Remove your hopper from your paintball marker.

Step 3) Remove the battery pack from the hopper. Consult your hopper's owner's manual for help if necessary. Place battery pack aside where it will not come in contact with any liquids or metal objects during installation.

Step 4) Open the hopper's lid.

Step 5) Using a #1 size Phillips screwdriver, loosen and remove the six screws in the right side shell. It may be necessary to use one of the long screws to screw through the nuts in the left side shell in order to push out the screws completely. Pay attention to which screws go into which holes for reassembly. Place screws in a safe place until you are ready to put back in at the end.

WARNING:
DO NOT BREAK THE ON/OFF BUTTON ON THE CONTROL BOARD.
YOU MAY USE THIS BOARD AT A LATER DATE.

Step 6) With all screws now completely removed from the holes, begin just slightly separating the two shell halves. As the two halves are separating, all internal components should remain in the left side shell while the right side shell is removed by itself. If necessary, use a very small screwdriver to push the control board back plate and control board toward the left side shell while removing the right side shell (**photo 6A**). The on/off button of the control board extends through the back plate, so if the control board and back plate are not kept in alignment, the on/off button will snap off and destroy the control board (**photo 6B**). Remove the right side shell completely.



Photo 6A



Photo 6B

Step 7) Remove the lid and lid pin, leaving the lid spring in its groove in the shell.

Step 8) Remove the control board and back plate together now from the left side shell. Unplug the control board from the sensor and motor harnesses.

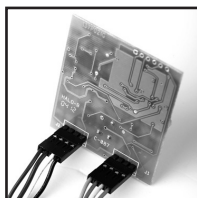


Photo 9A

Step 9) Plug the sensor and motor harnesses onto the new control board as shown (**photo 9A**). Make sure the side of the harnesses with the brass contacts are both facing up.

WARNING:
DO NOT BREAK THE ON/OFF BUTTON ON THE CONTROL BOARD. THE BOARD WILL NOT FUNCTION AND WILL NOT BE REPLACED BY THE MANUFACTURER.

Step 10) Be careful to not break the button on your new control board. Install the new control board and back plate into the left side shell. Start by seating the back plate into the upper and lower grooves in the shell (**photo 10A**).



Photo 10A

Then gently fit the control board in under the back plate so that the button fits into the hole in the back plate (**photo 10B**). Now slide both items in until the circuit board is seated fully into the corner slots in the shell just behind the groove for the back plate (**photo 10C**).

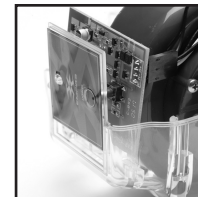


Photo 10B

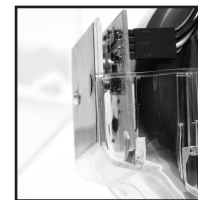


Photo 10C

Step 11) Install the lid and lid pin back into the left side shell.

Step 12) Begin installing the right side shell back onto the left side shell. Holding the left side shell slightly tilted, start by seating the groove of the right side shell onto the back plate (**photo 12A**). Slide about half way on, then seat the hole in the right side shell onto the lid pin. Be sure the right side shell is seating properly onto the drive assembly, and that the back plate is still in the groove in both shell halves. Before joining both halves together completely, when there is just about a quarter-inch gap between the two shell halves, it is necessary to tuck the last coil of the anti-jam spring under the lip of the right side shell that meets the top of the drive assembly. To do this, use a medium-size flat head screwdriver to push on the coil from its right side (**photo 12B**).



Photo 12A



Photo 12B

It should tuck under the lip of the right side shell and stay there when you remove the screwdriver. Now join the two halves together completely, making sure the nut for the battery door screw seats into both shell halves and there are no gaps (**photo 12C**).

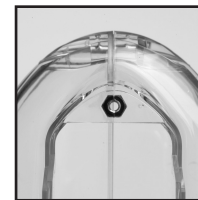


Photo 12C

Step 13) Be sure at this point that the lid spring is acting to keep the lid open with its own force.

Step 14) Insert and tighten just the center screw. The screws do not need to be very tight, just snug enough to join the two shell halves completely in the area around them. At this point, connect the original battery pack to the battery harness. Turn the unit on briefly by pressing the power button, holding it in for a half-second, then releasing. If the LED comes on, the board is operational and you should immediately unplug the battery pack. Now insert and tighten the rest of the shell screws.

Step 15) Plug battery harness into battery pack and insert into loader with wires routed as shown (**photo 15**). Insert battery door so that it aligns tightly to the shell with very little force. Insert screw and tighten. Do not over tighten screw as it can break battery door.



Photo 15

WARNING! PAINTBALL GUNS AND PAINTBALL GUN ACCESSORIES ARE NOT TOYS

- Careless use or misuse may result in serious bodily injury or death!
- Eye protection designed for paintball must be worn by the user and all persons within range.
- Not for sale to persons under 18 years of age.
- Must be 18 years of age or older to operate or handle any paintball gun and paintball gun accessories without adult of parental supervision.
- Read and understand all cautions, warnings, and operating manuals before using any paintball gun or paintball gun accessory.
- Do not aim paintball gun at eyes or head of people or at animals.
- Paintball guns are to be used with .68 caliber Paintballs Only
- To prevent fire or shock hazard, do not expose unit to rain or moisture.
- To prevent fire or shock hazard, do not immerse unit in liquids.
- To prevent fire or shock hazard, do not disassemble any electronic paintball device.
- The disposal of the battery used to power this product may be regulated in your area. Please conform to all local or state regulations with regard to battery disposal.
- Use Common Sense and have fun.

To protect your warranty, do not attempt to disassemble this product. Any tampering with the unit voids your warranty. There are no consumer serviceable parts inside the unit. The use of non factory authorized components within this product may cause a fire or shock hazard. IN NO EVENT SHALL SELLER BE LIABLE FOR ANY DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM ANY DEFECTIVE PRODUCT OR THE USE OF ANY PRODUCT.