



2002 Circuit Board Installation

- Please Read First -

Some of the steps during the installation may require the use of tools that can damage the marker if used incorrectly. Please read all the steps included before starting or have the installation done by a certified Smart Parts technician or at a local certified paintball shop.

- IMPORTANT -

Before beginning, disconnect any air source from the Impulse. Please note that even with the air source removed the Impulse may still have air in the valve. After disconnecting the air source, dry fire the marker to remove any air from the chamber.

Required Tools:

Phillips Screwdriver
1/8" Allen Wrench
Small Hammer
Drill with #26 drill bit

Removing the old board

1. Unscrew the rubber grip cover and carefully disconnect the battery.
2. Remove the two grip frame screws using a 1/8" allen wrench. (See *Diagram 1*)
3. Slowly move the body to the side of the grip frame and disconnect the wire assembly that connects the board to the solenoid. (See *Diagram 2*)
4. Remove the two screws that mount the circuit board to the solenoid housing. (See *Diagram 3*)
5. Remove the protective rubber cover from the side of the solenoid tray.

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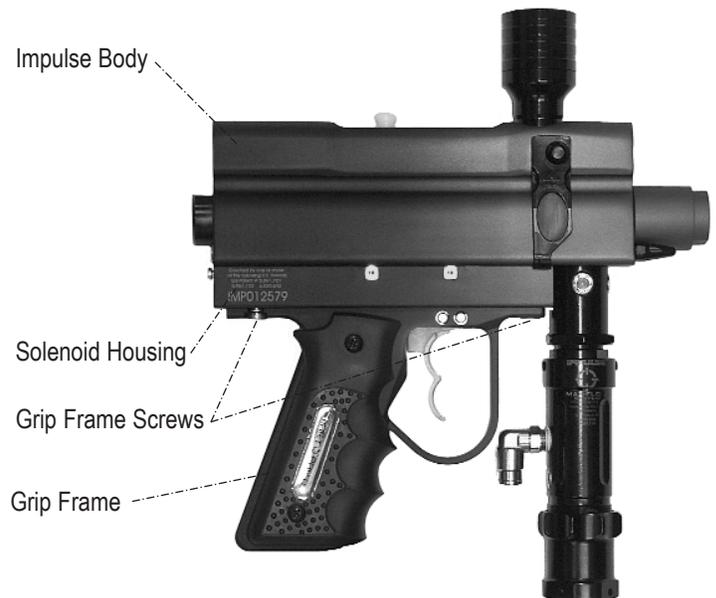


Diagram 1

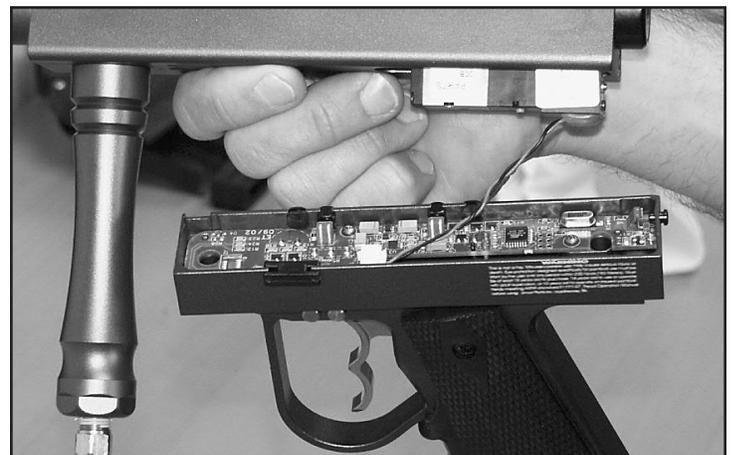


Diagram 2

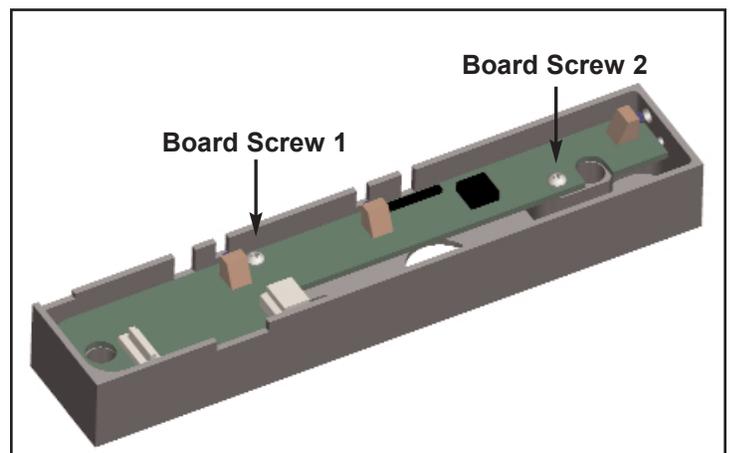


Diagram 3

Installing the new board

1. Using a #26 drill bit, check the diameter of the of the top right hole on the back of the solenoid housing. If the #26 bit does not easily pass through the hole, it will required to drill the hole using the #26 bit.
1. Using a small hammer, or pressing against a hard flat surface, press the power button into the hole on the back of the solenoid housing until the ridge on the button is inside the solenoid housing. (See *Diagram 4*)
2. Using a small hammer, or pressing against a hard flat surface, press the button housings into each of the two slots on the side of the solenoid housing. (See *Diagram 4*)
3. Slide the two slot covers into the two remaining slots on the side of the solenoid housing. (See *Diagram 4*)
4. Insert one dwell button cap into each of the button housings on the side of the solenoid housing, with the indented side facing toward the blue button. (See *Diagram 4*)
5. Rest the new circuit board on top of the solenoid housing and push the 9-volt battery connector down into the grip frame.
6. Slide the circuit board in at a slight angle to correctly align the blue buttons with the button caps on the side of the solenoid housing and the power button on the back.
7. Insert and tighten the two circuit board screws, making sure that the circuit board is correctly positioned over the mounting holes on the solenoid housing.
8. For Vision Eye boards, mount the upper board to the bottom of the Impulse body, using the two plastic screws provided. Turn screws in until snug and then unscrew 1/4 turn to allow adjustment for upper and lower board fit when assembling the body and solenoid housing. (See *Diagram A*)
9. Attach the solenoid wiring assembly to the circuit board.
10. Assemble the grip frame, solenoid housing and body using the two frame screws. **Note:** The lower part of the Vision Eye cover must be fitted into the slot on the solenoid housing before tightening the frame screws.
11. Attach the Vision flex circuit to the body using the small set screw. (See *Diagram A*)
12. Attach the eye ball detent through the Vision Eye cover to the Impulse body.
13. Attach a 9-volt battery to the power supply.
14. Attach the air supply and follow the instructions for firing and adjusting your new Impulse Vision Eye.

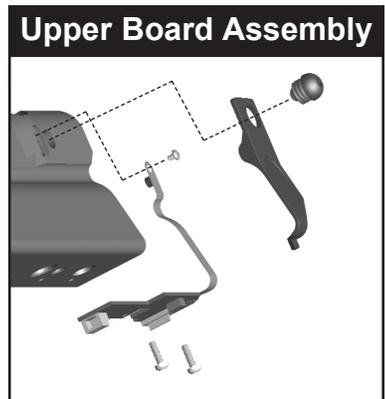


Diagram A

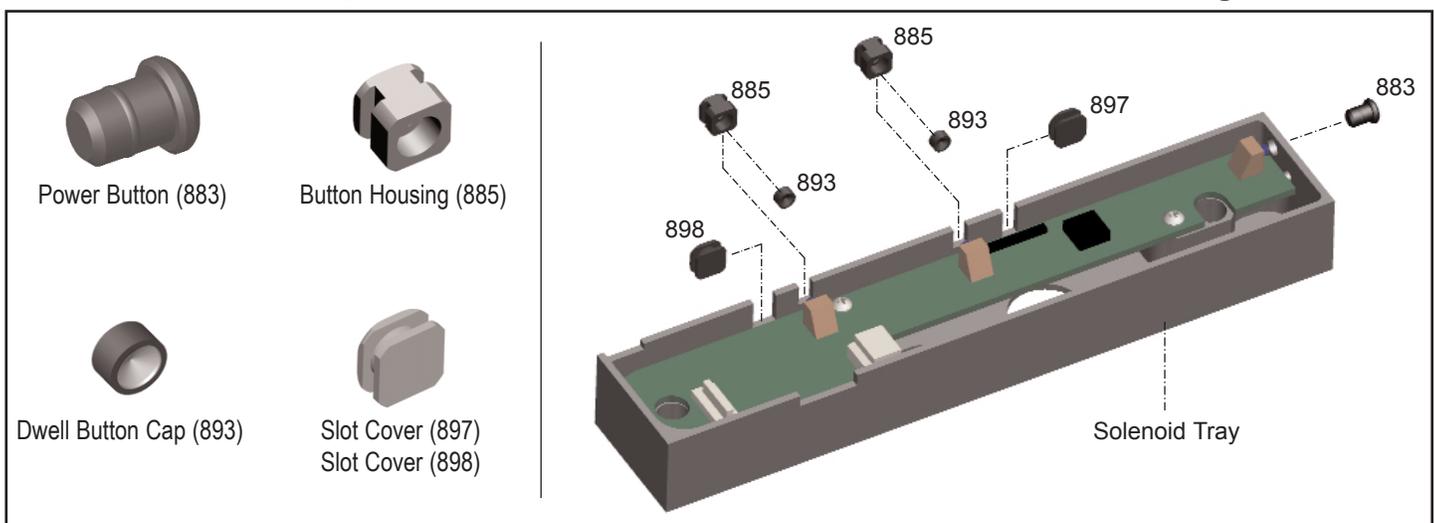


Diagram 4