Pull Cord Construction for Champion Easy Bird Machine

A push button type pull cord can be easily build with basic parts found at most electrical supply stores for under $5.00. The push button type cord can give greater response and is easier to use than the foot pedal type release that comes equipped with the machines. Local electrical supply and hobby supply stores along with many online stores carry basic parts. Radio Shack and www.allelectonics.com and two suppliers where you may find need parts. Local shops in your area may also carry everything you need.

Parts Needed:

1. Small electronics project box that comfortably fits in the hand. A 3"x2"1/12" is a good size. Look for one with a screw on metal cover if available. Part number TB-2 from All Electronics.

2. Strain relief to prevent pulling the cord from the box when installed. Look for a stain relief with a .625 Diameter mounting hole that accommodated 18/2 electrical (extension type) cord. Part number SR-80 from All Electronics.

3. Normally Open push button type switch. The size of switch is personal preference. Part number PB-138 from All Electronics.

4. Two 18 GA Wire Nuts.

5. Two shrink type crimp connectors for 18 GA wire. Shrink connectors help strengthen the splice and prevent the wires from pulling from the crimp connectors.

6. 2 Conductor Water-proof connects. These are commonly used to connect trailer lights and can be found in any auto parts store. Part number CON-320 from All Electronics

7. ½ inch shrink tubing.

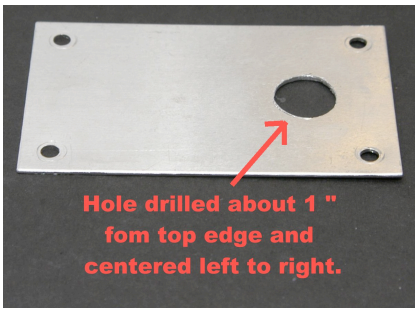
* Parts list 1 -3 can be substituted with Push Button Type Pendant that contains the housing and button as one unit. Pendants are 2 ½ inch long barrel, ¾ inch in diameter. Part number SWC-E903 from All Electronics.

Constructing your own Pull Cord.

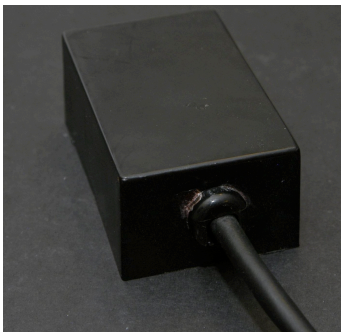
1. Remove the existing pull cord from the machine by cutting the cord from the machine. Leave at least 12" of cord attached to the machine so can add a

connector to plug in your pull cord. Save the cord you cut from the machine so is can be used for your new pull cord.

2. In the cover of the project box, drill a hole to accommodate the push button of your choice. The hole should be centered left to right and toward the top of the cover for easier use.

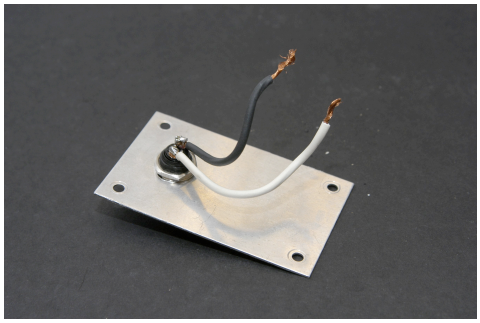


3. Drill hole in bottom edge of project box and install stain relief and cord. Allow 4-6” of cord to go into the box to have enough wire to put together. Use 15-20 feet of cord from the foot pedal switch you removed.

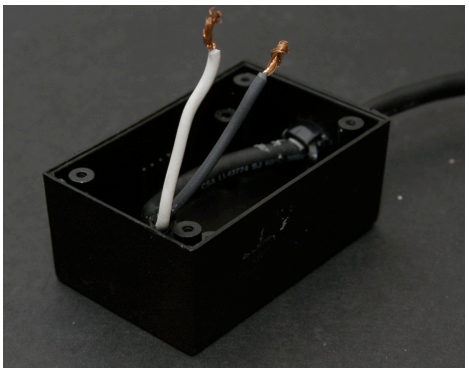


4. Attached two wire leads to push button and solder in place. This allows you to easily change out the push button when it becomes damaged or worn. If button or button housing is made from plastic do not heat for to long of period when soldering to prevent plastic from melting or button from becoming damaged. Strip ¼” of insulation from the end of each wire.

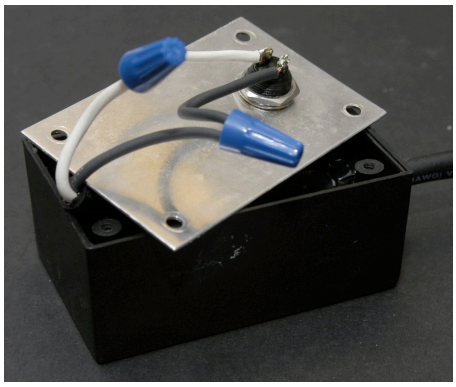
5. Install Button trough project box cover and lighten in place with the lock washer and nut supplied with the button.



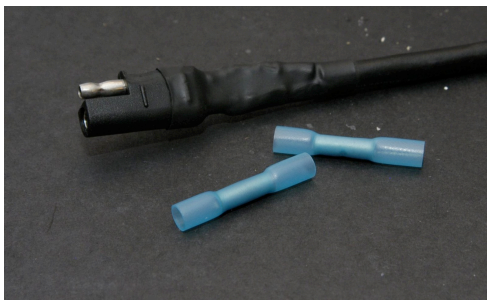
6. Strip outer insulation from cord exposing 3-4” of 18 GA wire. Strip about ¼ “ of insulation from each wire.



7. Attach leads from push button to cord using 18 GA wire nuts. Then secure cover to project box with provided screws.



8. Attach 2 conductor connectors to trap machine and to the pull cord with crimp connectors. Heat connectors with a lighter to shrink insulation down to wire. Slip ½” shrink tubing over the connector and heat to re-enforce the connection.



Notes:

When cutting the cord from the machine, you may leave 15-20 feet of cord attached to the machine rather that installing connectors. The connectors allow you to quickly change to a back up pull cord if one becomes damaged.