

# **Magnetic Remote On/Off Switch for the Powermatic 3520B**

## **Version 2 of the Remote On/Off Switch**

Ray Lanham - Sep 30, 2007

### ***See pictures below:***

I had to cut out the hole in the cover plate and made a cardboard template to get the hole the right size. Then I cut out the plastic with a fine tooth jig saw. Version 1 is tucked away in a safe place because I've heard that paddle switches suffer from exposure to dust. However, the Carlon box & platecover have a foam seal so nothing should be able to enter the box to "infect" the Grizzly #G8988 switch.

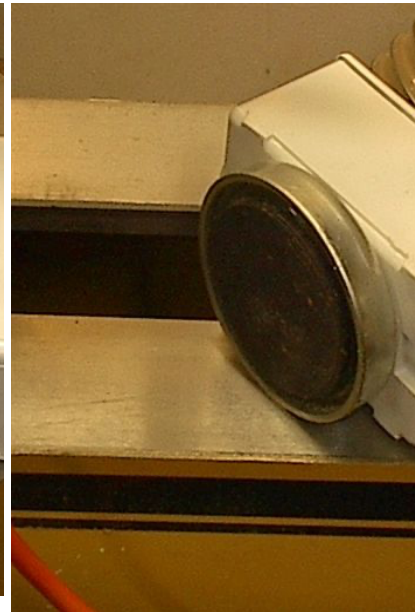
(Note from Jerry Hall: I still think dust can migrate in, but time will tell. It seems to come in through the switch itself, regardless of how well the box is sealed. The PM version of the box actually has a rubber seal all the way around. But mine gets buried in dust and shavings when I do hollow forms at the end of the lathe and I think the action of the switch works dust in. With the screw on Carlon plate it would be easy (if needed) to wrap the switch in a plastic bag and seal the edges. I use ugly tape to seal the plastic on my PM version.)



***I've ... upgraded the switch and used a flat Carlon coverplate with a Grizzly switch #G8988. The coverplate and switch cost less than \$7 and now it looks like the "real thing".***



***The magnetic unit is very powerful. I cut a donut from a piece of thick self adhesive vinyl and "stuck" it to the magnetic so now it can't even scratch the "Mustard Mistress".***



## **Original Article (Version 1)**

Ray Lanham - Sep 19, 2007

Powermatic has a magnetic remote on/off switch that they sell for the 3520B. If you'd like to have one but would rather not pay full price, then here is an idea that you might like if you like to "tinker", and have a little time and some spare parts in your "junk" box. This probably will work for any lathe but you'll have to be the judge of that. Make certain you have a wiring schematic for your particular lathe, just in case.

Home Depot (or any good electrical supply) sells an outdoor non-metallic toggle switch cover plate manufactured by Carlon that fits a Carlon outdoor electrical box. The switch is \$3.48 and the weatherproof box is \$5.83. They are available in grey or white plastic.



The switch is a simple 15 or 20 amp single pole light switch and sells from \$1.50 to \$3.50. A Magnetic Ground Block (used in welding applications) is available at most hardware stores and at Harbor Freight for \$3.50-\$5.00 depending on the current sale price. Total outlay should be less than \$20.00 and an hour of your "tinkering" time.

You'll appreciate not having to reach around a rotating hunk of wood just to shut off your lathe.



Remove the bolt and the two hex nuts from the magnetic ground block and use a hacksaw to cut  $\frac{1}{4}$ " off the length of the solid brass bolt. This will allow clearance for the switch after the block is mounted to the back of the box. Drill appropriately sized holes to fit the bolt and the wire you use to connect to the switch in the lathe headstock. Use only one hex nut to mount the magnetic block to the back of the box and tighten the nut as tight as possible.



Screw a  $\frac{3}{8}$ " electrical clamp connector for NM cable (part #20511) into the threads on the bottom of the box and tighten the two screws on the clamp to secure the wire to the box. (See first photo) 6-8 feet of wire should be enough. I used part of an old extension cord. Grounding is not required because you are simply wiring in the remote switch "before" the switch in the headstock. The headstock switch must be in the on position for the remote

switch to operate.

Remote on/off switch from Powermatic.....\$75.00

Doing it yourself from bits and pieces.....Priceless!