Powermatic 3520A VFD Replacement

https://drive.google.com/open?id=0B213uD6HOiPEbk9iaC1rQk9uNnc

Powermatic 3520 Switch Replacement

http://www.docgreenwoodturner.com/pm3520switch.html

Potentiometer not reading right rpm on 3520

http://www.sawmillcreek.org/showthread.php?181847-Potentiometer-not-reading-right-rpm-on-3520

Speed Stuck on High

http://www.woodcentral.com/woodworking/forum/turning.pl/page/2/md/read/id/446886/sbj/powermatic-3520a-speed-problem/

Braking Mode and Inverter

http://www.aawforum.org/vbforum/showthread.php?t=1966

Inverter

- http://www.aawforum.org/community/threads/917
- http://www.woodcentral.com/cgi-bin/archives_turning.pl?read=79515 * Dealers Electric

Oneway Style Movable Controls

- by Jack Savona. see HERE

- Excellent "How To" Article HERE by Keith Larret from WOW
- Slide show of Phil Stivers variation of this idea HERE.
- Movable and removable remote switch by Larry Marley: "Most of my turnings are 9" in Diameter or less, and most are segmented so they are stable and balanced to start with. I wanted a remote stop switch, just never dedicated any time

to make one until I turned a commissioned piece that measured 22" in diameter and 21" in height. This left me a long way from the stop switch and convinced me that it is time to get this done. ...I used the same $5 paddle switch from Grizzly that many have used, but I wanted to be able to easily remove it. Since the stop circuit is low voltage DC. I opted for a 1/4" phono plug with a normally closed jack. This way, I can just unplug it and the circuit works as usual."

Power Pulsing Problem

http://www.woodcentral.com/cgi-bin/turning.pl/page/1/md/read/id/246403/sbj/3520b-problem/

Power Requirements

Some PM3520 owners report a 15amp 220V single phase circuit is adequate with the breaker tripping more quickly in the case of a problem. Others feel a 20amp circuit gives a good margin. See this link:
http://www.woodcentral.com/cgi-bin/archives_turning.pl/bid/2104/md/read/id/35694

From the AAW Tips Forum: http://aawforum.org/vbforum/showthread.php?t=1839 Message 4
Jerry Hall says 03/28/06: I use a dedicated 20amp, single phase, 220V circuit (12 gauge 3 wire cable) to an outlet near the lathe. I connected a 12 foot 12 gauge cord with plug to the pigtail on the lathe (220v single phase only for the supplied pigtail - see manual.) Many owners unplug the cord when the lathe is not in use for an extended period. I turn off the circuit breaker from inside the shop. This has worked fine and complies with the motor plate and the manual. See link to 3520b manual and go to pages 12 and 13 for details and wire size table.

Radio Interference

- Use a Cell Phone with WiFi to Listen to Any Radio Station!

Peter Haney reports that this is a perfect solution for radio frequency interference:
I too gave up on radio when I got my PM3520. Reception here on Cape Cod is never great, we have homeland security at Otis Air base and Pave Paws radar. So I didn't lose much.
So today to quote Steve Jobs "I cracked it", there is a free App, "Tunein Radio" for my iPhone. Feed it thru the Aux input on my shop radio and there are hundreds of free radio channels. No buzz, no weak reception, just beautiful music.

(I might remind the reader tho that it would be a good idea to have a wireless internet connection so you don't run up your cellular data usage. Also more reliable. The free app Pandora is great too for music. An old Ipod can be recycled and dedicated to the shop, as can an old laptop with a dead battery to reach Pandora and internet radio stations. But you can't beat Tunein for variety and simplicity. You can even pause the broadcast and resume. Now if they would just come up with an app to heat my shop....Jerry Hall)

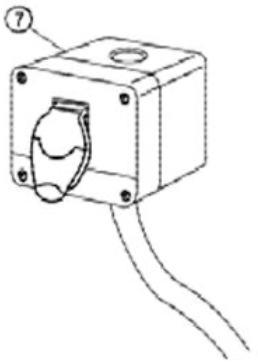
- More Discussion

http://www.woodcentral.com/cgi-bin/archives_turning.pl/bid/2106/md/read/id/127535#127535 *
http://www.woodcentral.com/cgi-bin/archives_turning.pl/bid/2106/md/read/id/127750#127750 *

Chris Barnett on Sawmill Creek Post said: "Check to see if you get the same interference with batteries, i.e. radio disconnected from AC. If you do not still get interference, buy ferrite ring (or several) from Radio Shack, a radio/television supply house, or from the web, and pass the AC power cord through the ring a number of times (again experiment with the number of turns). Alternatively, make coils in the power cord and tape (a number of turns by experiment) which will sometimes block high frequency noise. I assume you have grounded your lathe to an earth ground. If you do still get the interference using batteries, might try to shield (copper screen) around the phase converter

on the rear of the headstock, and ground that shield to the frame which should be grounded to earth. These are all typical methods to attenuate RF interference that we use in ham radio. Are you sure the lathe is causing the noise; fluorescent lamps ballasts are famous for causing such interference. If you still have problems, find a local friend who is a ham radio operator."

Remote Switch (Part # 6294733 Remote On/Off Switch 3520A and 3520B)



- Mike Peace 10/5/12 says:
"HERE is the revised remote switch wiring diagram I got from PM tech support"

- General Discussion HERE

- How to connect HERE

- Build Your Own HERE

- Dust Damage: Enclose your switch in a plastic bag to prevent dust disabling it. Otherwise read below:

http://www.woodcentral.com/cgi-bin/archives_turning.pl/bid/2106/md/read/id/118076 *
http://www.woodcentral.com/cgi-bin/archives_turning.pl/bid/2106/md/read/id/115903 *

Won't start?

- How to bypass remote switch.
From the AAW Tips Forum: http://www.aawforum.org/community/threads/1839
Message 5
Jerry Hall says 10/04/06: I finally got around to installing the remote switch after a year and a half a few weeks ago. In the midst of turning an exciting hollow form, green, thin walls, drying fast and the mustard monster wouldn't start. Recycled power, waited, reset back panel, blew any dust out. No luck. Packed my turning with damp shavings to buy time.

For the electrically challenged such as myself I thought the following would be of interest:

On advice of tech support, and as a first step in diagnosis, I bypassed the remote switch as follows:
1. Unplug lathe from power!
2. Open remote switch box.
3. Mark terminals connecting white and black wires with Sharpie
4. Jumper (join) black and white wires (I used a clipped finish nail inserted into each)
5. Close up switch box
6. Power up and test with main switch.

We have rotation! PM will be sending me a new switch even tho I am out of warrantee. Nice support, thanks PM!

- Repair remote switch
http://www.woodcentral.com/cgi-bin/archives_turning.pl/bid/2106/md/read/id/131690

- Lathe stops when the speed control is first turned down
http://www.woodcentral.com/cgi-bin/archives_turning.pl/bid/2108/md/read/id/184619#184619

Speed Control and On-Off Switch

Thorough description of how the 3 phase electronics works and whether it matters how you use the speed control, on-off switch, and cutting power to the lathe by unplugging power cord or turning circuit breaker off.
http://www.aawforum.org/community/threads/1966

Reducing the lowest speed: http://www.sawmillcreek.org/showthread.php?t=109016