

Air Tools

Use of a Compressor, Hoses and Tools

- Safety

Always use safety glasses and ear protection. Be prepared for loud noises from the compressed air. Also, the compressor starts to refill the tanks automatically. Tools and hoses give a loud report when disconnected. Be kind to your fellow workers and warn them before disconnecting. If things don't seem right, get help. Compressed air can be dangerous in some circumstances. One is high pressure air should not be directed towards the body (i.e.: cleaning your clothes while on your body with an air nozzle). When a compressor runs, it extracts water from the air in surprising amounts. Every day that the compressor is used, it must be drained of all the water in the tanks by opening the pet cocks on the bottom. Tip the compressor so each can drain its charge of air and water. Save enough air from the first side to complete dewatering on the other side. The consequences of not draining out the water are, corrosion leading to tank failure and reduced capacity

- The Compressor

The Bostitch compressor is a portable air supply that uses the voltages that are in some of the outlets in the shop. I tried it out at various locations in the shop, it **does not start properly in most outlets**. The new outlets in the new area seem to be sufficient, but those under the benches do not. This arises because the starting amperage is too low at these locations. The compressor needs a full 15 amps to start properly. If it doesn't start properly, turn it off immediately. Your best indication of power source suitability is the sound it makes on starting. Are the valves closed under the tanks? There is a Pressure control in Metric on the compressor which should not need any adjustment.

- The Tools

Some of the air tools need a drop of oil once a day. **Ours do not!** Types of tools vary from just a straight nozzle to pinners to staplers to nailers to pumping tires, etc. Eye and ear protection is mandatory. In our shop we have 2 pinners, 1 stapler, 2 nozzles and an air chuck. Future shop acquisitions may change this. I have attempted to standardize the connectors to the tools. The pinners and stapler are compatible with one hose end. There are 2 hoses with different ends. Pick the right one for your tool. If you are using the tool in the immediate vicinity of other workers and you don't need the tool but will later, disconnect the tool to avoid accidents. The first thing to look for when you chose a tool is what Gauge fasteners does it use. (this is usually on the Warning label) The gauge is also marked on the fasteners box.

These tools have a capacity range regarding fastener length. We have an assortment in the shop. Most pinners can handle a range of 5/8" to 2-1/8" fasteners. Our stapler is an 18 Gauge with a capacity of 1/2" to 1-1/2" fasteners. Do **not** use 16 gauge or slanted nails.

When using these tools be aware that the fastener in use may go slightly deeper than you think.

This can happen if the wood has voids or splits. Keep your hand away from the danger of being shot. Usually 2 times the length of the fastener is a safe margin. I have seen accidents in this regard before while I was working. The danger in this respect increases with fastener length. Another issue is to be careful not to pin or staple near the edge of your project. Fasteners find the easiest route. That could be air if it can reach it (splits your material) or your finger ouch!

There are optional methods on how the tools can be used, but we will stay with the safest which is called the contact trip method. In this mode the tool must be pressed against the work and then the trigger must be pulled to fire a fastener. Other methods are more automatic. The Loading/unloading of fasteners is different for each tool. Some load from the end, some from side and some from underneath. Look for a spring-loaded pusher to pull back. It probably will lock if pulled fully back. This is to allow easier loading of fasteners.

- **Hoses**

There are several types of hoses. Some are rubber coated with fittings for adapters at each end. This is what we have. There are coiled ones as well, but, they are fragile. The ones we have need to be coiled and put away at the end of the day. Hold on to fitting when you uncouple it. There will be a loud noise while the air escapes from the hose. Warn those who might not expect it, that a loud noise is coming. The connectors on the hoses are removable and can start to leak air. Sometimes it is some gum or dirt that causes air leaks. To reinstall or replace a hose end use Teflon plumbers tape on the threads.

KEY POINTS

1. Safety Glasses, Ear Protection. Read and follow Safety section again.
2. Select a good work area.
3. Check everything, especially power supply.
4. Start compressor sequence.
5. Select hose, tool, and fastener and assemble.
6. Work safely!
7. Disassemble from the tool first to the hose then shut off the compressor.
8. Turn off the compressor and drain the tanks (tilt to remove water).
9. Put everything back where it belongs.

Thanks and good luck!