Air Basics

To optimize compressed air output and delivery:

- 90 psi under load — use your gauge
- 3/8" (10mm) minimum air line inside diameter
- Use minimum length of airline hose necessary; no more than 25 ft. (8m)
- High flow air fittings (3/16" marginal; 7/32" better; 9/32" best)
- Observe compressed air demand throughout the plant
- Maximum working air pressure 6.2 bar (90 psig)

Tool	Airflow Rate	PSI
.3 HP	17 SCFM (481 LPM)	90
.5 HP	23 SCFM (651 LPM)	90
1 HP	35 SCFM (991 LPM)	90

General Sanding Tips

Technical Recommendations for 3M™ Air-Powered Tools

- Use a clean, dry, lubricated air supply that will give a measured air pressure at the tool of 6.2 bar (90 psig) when the tool is running with the lever fully depressed. **Note:** Tools can be run at lower pressures, but should **never be run higher than 6.2 bar (90 psig).** If run at a lower pressure, the performance of the tool is reduced.
- Use an approved 10mm x 8m (3/8" x 25') or 13mm x 8m (1/2" x 25') maximum length air line.
- Connect the tool to the air supply.
- It is strongly recommended that an air filter, regulator and lubricator (FRL) be used to supply clean, lubricated air at the correct pressure to the tool. If such equipment is not used, the tool should be manually lubricated.

To manually lubricate the tool:

- Disconnect the air line and put 2–3 drops of suitable pneumatic motor lubricating oil, such as 3M™ Air Tool Lubricant 20451, into the hose end (inlet) of the tool.
- Reconnect tool to the air supply and tap the lever to allow air to circulate the oil. Lubricate at end of day and allow oil to penetrate over night for best results.
- Lubricate daily if the tool is used frequently or if the tool starts to slow or lose power.

Random Orbital Sanding Tips

Select the orbit that's right for your project

3/8" Diameter Orbit
most aggressive sanding

Gold – 3/8"

3/16" Diameter Orbit
general purpose sanding

Silver – 3/16"

5/16" Diameter Orbit
aggressive sanding

Black – 5/16"

3/32" Diameter Orbit
fine finish sanding

Chrome – 3/32"

Lever indicates orbit diameter.

Basic ROS Techniques

1) Start the tool ON the surface; stop the tool OFF the surface to avoid "swirl marks"
2) Run the tool flat on work piece (no tipping on edge)
3) Light operator hand pressure on the tool handle (let the tool do the work)
4) North, south, east, west sanding pattern for a uniform, quality finish

Troubleshooting Checklist

- ☐ Check for correct PSI and RPM
- ☐ Check airline length, leaks, fitting and inside diameter
- ☐ Check tool lubrication schedule
- ☐ Look for worn bearings
- ☐ Look for damaged disc pad
- ☐ Are the tool and disc pad diameter the same?
- ☐ Is the lever damaged or the muffler clogged?
- ☐ Is the speed control adjuster turned down?

Disc Sander Tips

Pick the Right Disc Pad and Tool Configuration for Best Results

Diameter	Thread Size	Max RPM	Hardness	UPC	Quantity
Roloc TR (Plastic Button)					
1"	1/4–20 INT	30,000	Medium	051144-45101-2	5
1-1/2"	1/4–20 INT	30,000	Soft	051144-45098-5	5
			Medium	051144-45099-2	
			Hard	051144-45100-5	
2"	1/4–20 INT	20,000	Soft	051144-45094-7	5
		25,000	Medium	051144-45095-4	
			Hard	051144-45096-1	
			Extra Hard	051144-45097-8	
3"	1/4–20 INT	15,000	Soft	051144-45090-9	5
		18,000	Medium	051144-45092-3	
		20,000	Hard	051144-45091-6	
			Extra Hard	051144-45093-0	

MOS Speed Ratings

The lowest RPM rating of an abrasive or accessory determines the RPM of the tool it can run on. Be very aware of these ratings.

Unique Factors

Be sure to consider operator preference of tool power, size and weight.

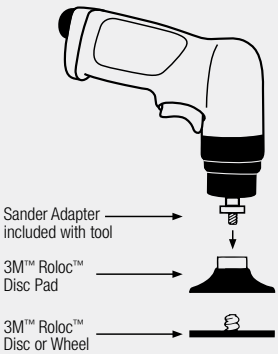
3M™ Roloc™ Disc Pad Assemblies

Diameter	Thread Size	Max RPM	UPC	Quantity
1"	1/4–20 INT	30,000	051131-05538-4	10
2"	1/4–20 INT	25,000	051144-05539-5	10
3"	1/4–20 INT	20,000	051144-05540-5	10

Versatile Attachment System

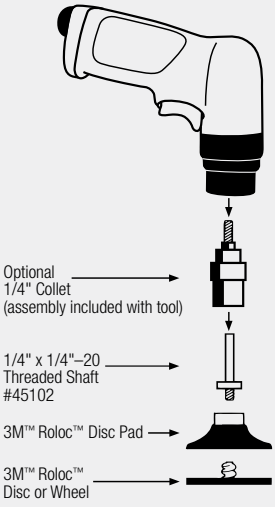
SHORT– "Direct Mount" Backup Pad Attachment

Shorter distance to the work piece generates less vibration and allows for better operator control.



TALL– 1/4" Collet Option

Allows for longer reach and mounting of other abrasives and 1/4" accessories.



*Direct mount to disc pad.

3M™ Roloc™ Attachment Systems