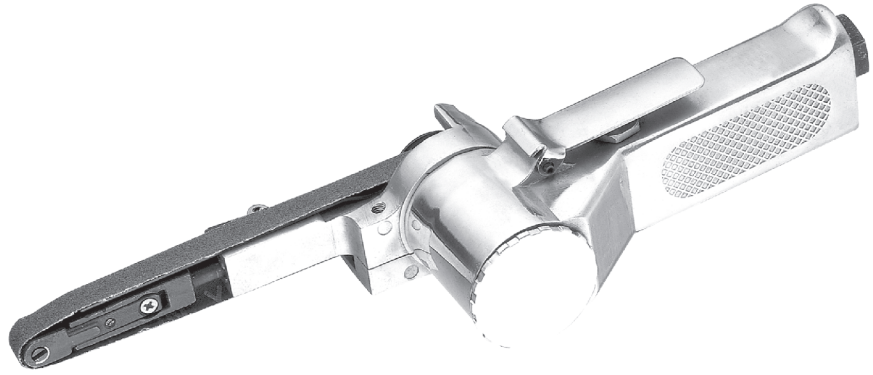
INSTRUCTION MANUAL

10mm Air Belt Sander (Model AT-480)

Thanks for your purchasing our air tools
and please read this Instruction Manual carefully
and thoroughly before operating the tool to do your best jobs.



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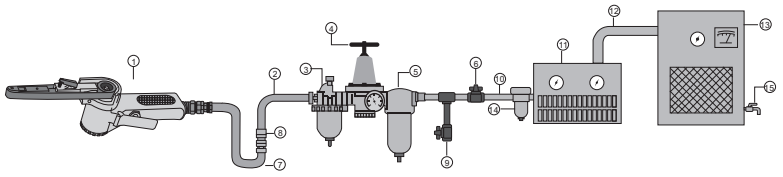
Revision: 01 (2004)

A. Features & Functions

* The smallest handy sander with 10mm wide belt. Lever throttle for featuring control.
* Easy belt replacement. Suitable for jobs in narrow spaces and recessed corners.
* Helps you to do fine sanding jobs like wood-working, furniture-polishing, plastic, aluminum & metal-polishing and even small spot sanding jobs like trims, curves, and other difficult-to-reach spots for common sanding machines.
* 3 different grit sanding belts (60, 80, 120 grit) included for different purpose and function.

B. Air Supply *(please refer to the diagram below)*

1. Make sure that the air compressor being used for the air tool operation supplies the correct output (CFM).
2. Turn the throttle in the "off" position when connecting the tool to the air supply.
3. Use normal 90psi (or ranging from 6.0 to 8.0kg.) air pressure while running the tool. High pressure and unclean air will shorten the tool's life due to faster wear and also may create a hazardous situation.
4. Drain the air tank daily. Water in the air line may enter the tool and damage the tool mechanism at the operation.
5. Clean the air inlet filter cartridge weekly. The recommended hook-up procedure can be viewed in the diagram below.
6. Line pressure should be increased accordingly to make up for extra long air hoses (usually over 8 meters). The minimum hose diameter should be 1/4" I.D. and the fittings should have the same inside dimensions. But usually a 3/8" I.D. air hose is recommended for air supply to get the best function of air tool operation.
7. Use proper hoses and fittings. We do not suggest connecting quick change couplings directly to the tool since they may cause failure due to vibration. Instead, add a leader hose and connect coupling between air supply and hose whip.
8. Keep hoses away from the heat, oil and sharp edges. Check hoses for wear before individual use. Make certain that all connections are in security.



AIR SYSTEM LAYOUT:

1. Air Tool	6. Shut Off Valve	11. Air Dryer
2. Air Hose 3/8"(I.D.)	7. Whip Hose	12. 1" Or Larger Pipe And Fitting
3. Oiler	8. Coupler Body And Connector	13. Air Compressor
4. Pressure Regulator	9. Drain Daily	14. Auto Drain
5. Filter	10. 1/2" Or Larger Pipe And Fitting	15. Drain Daily

C. Safety Instructions

1. Approved eye protector must be worn at all times. Be sure to use a dust mask since the tool operation may creates dust which is harmful to health. If necessary, ear protector and gloves should be used.
2. Always keep good balance of body and footing. Secure work with clamps or vice so both hands can be free to operate the tool.
3. Be sure all clothing is tight to prevent entanglement with running tools. Remove your jewelry and watch for safety purpose.
4. Be sure that working area is clear of foreign objects and that no people are within immediate access of tool operation scope. The working place shall be well ventilated.
5. Disconnect the air hose before changing or adjusting any inserted tools/accessories.
6. Be sure the tool is in "off" position before connecting it to the air hose.
7. Disconnect the tool when it is not in use. Release the on-off device in case of energy supply failure.
8. Never carry tool by hose.

D. Maintenance And Lubrication

1. If you are not using an air line oiler, lubricate the air motor by using an oil pot or an oil injector through the air inlet and then run the tool. Several drops of SAE #10 lubricant or sewing machine lubricant is acceptable for this purpose. Do not use detergent oil.
2. Before connecting the hose for operation, apply 4 or 5 drops of #10 spindle oil at the air inlet. Avoid the misuse of thicker oil which may lead to the reduced performance or malfunction.
3. Oiling is necessary within 3 or 4 hours of operation.
4. After operation, take off the air hose and pour 4 or 5 drops of #60 spindle oil into the air inlet, then connect the hose again to run the tool for a few seconds, which can prolong the tool life.
5. Clean air inlet filter cartridge on the air line weekly.

E. Warnings

1. Never use the tool in potentially explosive atmospheres.
2. Keep your body in well balanced position and always wear gloves to reduce the risk of crushing caused by torque between a reaction bar and work-piece.

3. Unexpected tool movement due to reaction forces or breakage of inserted tool or reaction bar may cause injuries.
4. Prevent long hair or loose clothing from drawing in while operating the tool. You may get the risk of being injured if the handkerchief, necktie etc. are not kept away from the running tool.
5. The noise emission (sound pressure level) at the workplace may exceed the normal standard ---usually 85dB(A). In this case, a quality ear protector should be used.
6. Unexpected direction of inserted tool movement could case a hazardous situation.
7. Slip / Trip / Fall is a major cause of serious injury or even death. Be aware of excess hose left on your walking way or on the working surface and be aware of the whipping air hose too.
8. Excessive high air pressure and too much free rotation may speed up the wear of the tool and may cause dangerous situation.
9. Continuous operation and bad working condition will injure hands. Once hand numbs or aches, operator shall stop the tool for a while for relaxing and re-start the work after recovery. Operator shall immediately see a doctor if such a serious symptom occurs.
10. Never change the inner construction and design, which may cause a danger in operation.

F. General Trouble Shooting

* Troubles:
- Tool does not run at a normal speed or at a variable speed
- The motor blocks
- Automotive start when connected to compressed air
- Torque reduces
- Abnormal vibrating -Easy hot rising at the housing

* Causes:
- Air supply is not enough (air pressure not in a required standard)
- Speed controller/switch breaks down
- Rotor blades break or wear out
- Dust gets into the motor
- Throttle lever or starting trigger malfunctions
- Air leakage at the inlet or somewhere else
- Bearing(s) damages
- Correspondent O-ring(s) wears out or out of position
- Lack of lubricating

* Troubles Shooting:
- Check the air hose to see whether it is blocked or twisted for less air supply.
- Check the air compressor to gain the correct air pressure required.
- Replace rotor blades
- Disassemble the tool and clean the inner structure under proper instructions
- Check and fix the throttle lever or starting trigger for accurate operation
- Check the air leakage and fix it under proper instruction
- Replace new bearing(s)
- Replace the damaged O-ring(s) or put it back in correct position
- Oil / Lubricate the tool consistently until it gains the right speed and torque

**** Note:***

For any other special troubles which cannot be settled down by the operator, please contact the selling agent from whom you purchase the tool.

G. Storage

Avoid to store the tool in a location subject to high humidity, which may result in rusty mechanism inside the tool. Before storing, oil the tool at the air inlet with proper spindle oil and run it for a few seconds.

H. Disposal

When the tool is seriously damaged or out of life, leave it in a resource recycling can. Never drop it into fire.

I. Ordering Spare Parts

1. Contact the sale agent from whom you purchase the tool for spare parts ordering for any necessary replacement for continuous use of tool and extending the tool life.
2. In ordering spare parts and components, give each spare part number and order quantity.

Thank you.

SPARE PARTS LIST

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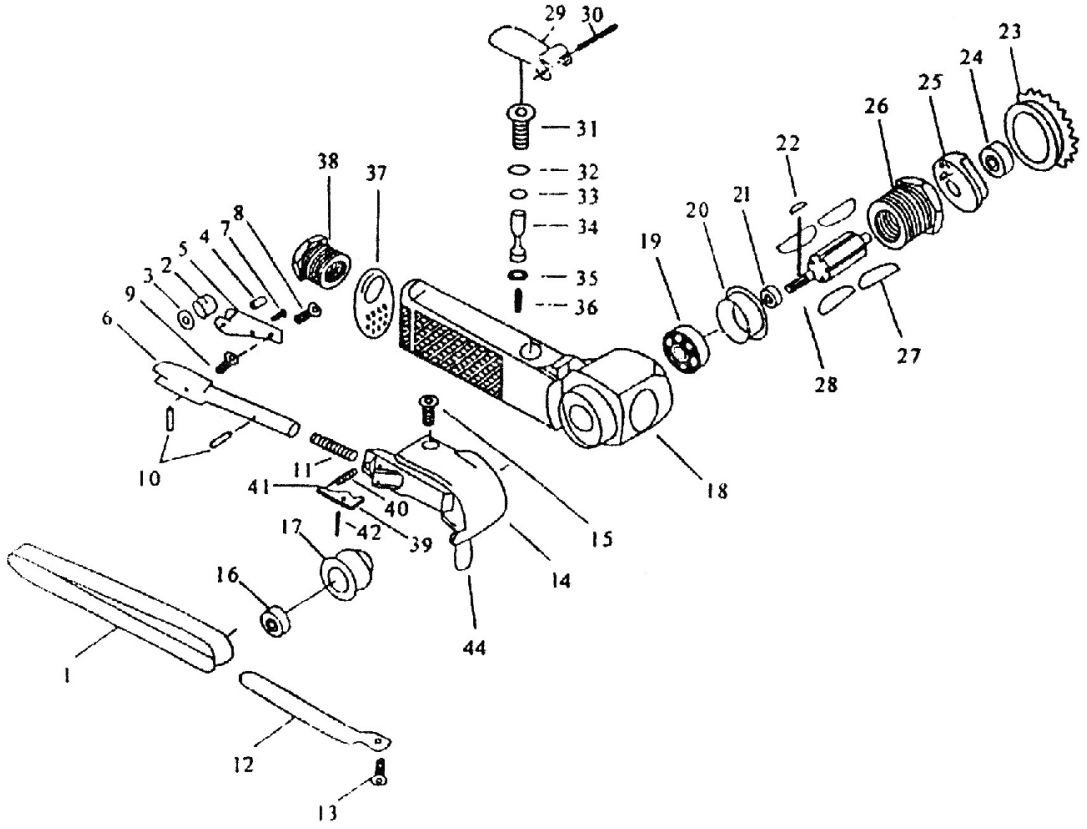

Part No.	Description	Qty.
1	Grinding Belt	1
1A	Grinding Belt	1set
1B	Grinding Belt	1
2	Idle Pulley	1
3	Washer	2
4	Idle Pulley Screw	1
5	Bracket 10	1
6	Tension Bar 10	1
7	Hexagon Socket Headless Set Screw 3x10	1
8	Cross-Recessed Flat Head Mashine Screw 3x8	1
9	Spring 1.0x7.2x6.5	1
10	Spring Pin 3x10	2
11	Spring 1.07x4.0x35.5	1
12	Shoe 10	1
13	Cross-Recessed Flat Head Mashine Screw 4x8	1
14	Guard Sud Assy A	1
15	Hexagon Socket Head Bolt 5*15	1
16	Hexagon Pulley	1
17	Drive Pulley	1
18	Housing	1
19	Ball Bearing 628zz	1
20	End Plate B	1

Part No.	Description	Qty.
21	Spacer 8x11x3	1
22	Sunk Key 3x3x1	1
23	Cap	1
24	Ball Bearing 607zz	5
25	End Plate A	1
26	Cylinder	1
27	Blade Assy (4pc/set)	1set
28	Rotor	1
29	Throttle Lever	1
30	Lever Pin	1
31	Valve Body	1
32	O-ring (P9)	2
33	O-ring (P5)	1
34	Valve Stem	1
35	O-ring (3.6x2.4)	1
36	Valve Spring	1
37	Defrector	1
38	Air Inlet	1
39	Tension Bar	1
40	Spring	1
41	Lever Pin (m2x6)	1
42	Lever Pin (m2.5x10)	1

TECHNICAL DATA:

* Free Speed: 16,000 RPM
* Sanding Belt: 2/5" x13" (10 x 330 mm)
* Air Inlet (PT): 1/4"
* Air Hose(ID): 3/8"
* Avg.Air Consumption: 6 SCFM
* Working Pressure: 90 PSI (6.3 BAR)