# USATCO U.S. Air Tool Co.

# 13-1127A-1 90° Angle Drill Instructions & Parts List



#### **Safety Instructions:**

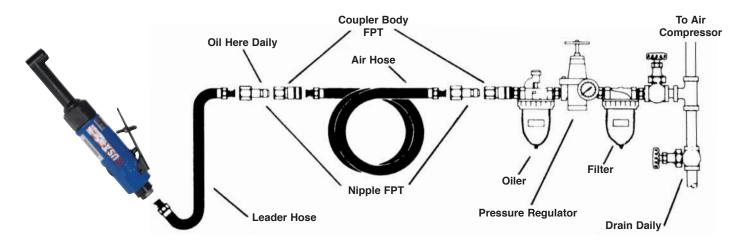
- 1. Review this entire manual before operating your air tool.
- **2. Before mounting accessories** and before placing tool in service, check the free spindle running speed with 90 PSI at the tool inlet. Periodically check the tool's free speed.
- **3.** Always wear approved eye protection. Use a dust mask if the operation creates dust.
- **4. Protect yourself from noise.** Noise levels vary with work surface. If noise level is high, wear ear protectors.
- **5. Wear gloves and protective clothing** to avoid injuries caused by chips or pieces, malfunctioning attachments, or improperly clamped work.
- **6.** Prolonged exposure to vibration may cause injury.
- 7. Never use this air tool at pressure above 90 PSI at tool inlet. This is an ungoverned tool and its free speed will increase in proportion to any increase in air pressure above 90 PSI. Control air pressure with a reliable automatic air regulator. Periodically monitor air pressure at tool's air inlet while tool is running at free speed.
- 8. Use only accessories with RPM (speed) rating at or above the actual free speed of the air tool. The rated free running speed of this tool is 2,500 RPM.
- **9.** Disconnect tool from air supply before changing or inspecting accessories. Do not perform service work on tool while connected to an air supply.
- **10. If a sudden change occurs** in the feel (vibration level) or sound (pitch) of the unit, the tool should be **immediately turned off** and the work head inspected for damage. Do not use cracked or chipped accessories.
- **11. Handle the tool safely.** Do not carry the tool with a finger on or near the throttle while the tool is connected to an air supply. Do not carry the angle drill by the hose. Protect the hose from heat and sharp objects.
- **12. When not in use, disconnect the tool from air supply** to prevent accidental or unauthorized use in the absence of the operator.
- 13. Before placing the tool into service, refer to and become familiar with the following:
- **a.** General Industry and Health Safety Regulations, Title 29 Code of Federal Regulation, Part 1910, available from superintendent of documents, Government Printing Office, Washington DC, 20402.
- **b.** Safety Code for Portable Air Tools, ANSI B186.1 available from: American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.

Toll Free Nationwide & Canada: 800-645-8180
USATCO\U.S. Air Tool Company, Inc. www.USATCO.com New York · California

## **Instructions**

#### Air Supply & Connections:

The angle drill is designed to operate at 90 PSI maximum air pressure at the tool when the tool is running. Less pressure prevents the tool from delivering its rated power. Air pressure over 90 PSI at the tool will cause tool to over speed and may result in tool exceeding the accessory strength. The air supply must be water-free; therefore as drop line or water trap should be used to remove condensation. In addition, an air line lubricator is strongly recommended to insure proper operation and long life of motor parts.



Shown above is the recommended order of filter, regulator, lubricator, line couplers and hose whip.

The minimum pipe size to be used is 1/4" and no fitting should be used that has an orifice of less than 7/32" diameter. If quick disconnect coupler is used, it should not be attached directly to the at the handle of the angle drill, but spaced off with a hose whip, in order to prevent breakage of fittings.

#### **Operation:**

- 1. Review Safety Instructions.
- **2.** The tool is started by depressing first the safety toggle lever and then the throttle which is spring loaded. The tool, returns to the off position when released.
- 3. Always wear safety goggles and protective clothing when operating the tool.

#### **General Maintenance:**

A parts breakdown is shown on the next page of this owners manual and details all the parts included in the tool. Refer to this sheet when cleaning, inspecting or when ordering parts becomes necessary.

**Rotor Vanes** - Vane life depends on proper lubrication. Test the tool frequently for proper operation. It is suggested that the tool be inspected on at least an annual basis by an authorized repair station.

**Lubrication** - To ensure proper operation, lubricate motor prior to initial use. If in-line lubricator is not used, add a few drops of oil into air inlet daily. Heavy oils are not recommended.

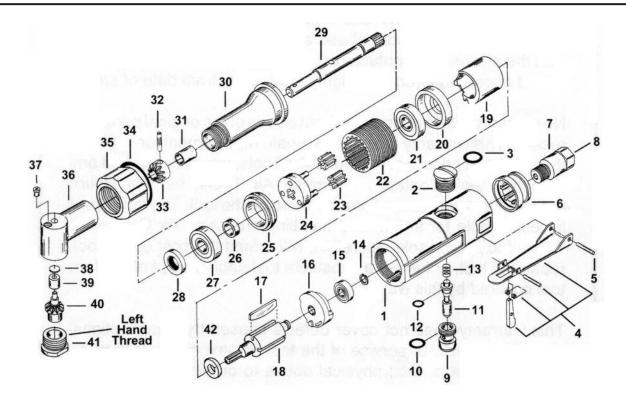
#### **Operational Specifications:**

Free Speed	
Required Air Pressure	90 PSI
Average Air Consumption	3 CFM
Air Inlet Size	1/4" NPT
Hose Size	3/8" I.D.

#### USATCO\U.S. Air Tool Company, Inc.

Eastern Division		NY 11779-6907	tel: (631) 471-3300	fax: (631) 471-3308
Western Division	.1219 W. Mahalo Place. Rancho Dominguez.	CA 90220-5446	tel: (310) 632-5400	fax: (310) 632-3900

## **Parts List**



Index	Part Number	Description	Qty.
1	2005.4	Housing	1
2	7073	Valve Plug	1
3	4009	O-Ring	1
4	1110	Throttle Assembly	1
5	5015	Roll Pin	1
6	7074	Exhaust Duct	1
7	3027	Hose Adapter	1
8	5030	Screen (not shown)	1
9	3008	Trigger Body	1
10	4000	O-Ring	1
11	3007	Trigger Stem	1
12	4005	O-Ring	1
13	6023	Spring	1
14	6014	Retaining Ring	1
15	6004	Bearing	1
16	7036	Rear End Plate	1
17	4011	Vane	4
18	3173	Rotor	1
19	7055	Cylinder	1
20	7045	Front End Plate	1
21	6099	Bearing	1

Index	Part Number	Description	Qty.
22	3089	Internal Gear	1
23	3172	Idler Gear	3
24	1216	Gear Plate Assembly	1
25	3166	Alignment Ring	1
26	3174	Spacer	1
27	6008	Bearing	1
28	6075	Oil Seal	1
29	3170.1	Pinion Shaft	1
30	3171	Spindle Housing	1
31	6105	Bearing Sleeve	1
32	5031	Dowel Pin	1
33	3164	Miter Gear	1
34	4041	O-Ring	1
35	3088	Locknut	1
36	2021	Angle Head	1
37	6055	Grease Fitting	1
38	8028	Thrust Plate	1
39	6106	Needle Bearing	1
40	3165	Miter Gear	1
41	3168	Spindle Bushing	1
42	3193	Rotor Spacer	1

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