



Model: **222**

Product Type:
2 PC. DIE GRINDER KIT WITH 1/4" 90° ANGLE DIE GRINDER AND 1/4" MEDIUM DIE GRINDER

WARNING

Study, understand and follow all instructions provided with this product. Read these instructions carefully before installing, operating, servicing or repairing this tool. Keep these instructions in a safe accessible place.

INTENDED USE OF THE TOOL

The 1/4" Die Grinders included in this kit are designed as a handheld pneumatic tool used to grind, sand, hone, polish or machine materials such as metal or plastic. Do not use this tool outside of the designed intent. Never modify the tool for any other purpose or use.

WARNING

Caution: To help prevent personal injury

- Normal use of this product is likely to expose the user to dust and/or microscopic particles containing chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Always wear appropriate safety equipment and clothing when using this product. Study, understand and follow all instructions provided with this product. Failure to read and follow all warnings and operating instructions may result in damages and serious injury or death.
- Always wear ANSI approved goggles when using this product. (Users and Bystanders).
- Never use this tool for any application other than for which it was designed.
- Only use accessories designed for this tool.
- Never alter or modify this tool in any way.
- Improper operation and/or maintenance of the tool, modification of the tool, or use of the tool with accessories not designed for it could result in serious injury or death.
- Always select the correct accessories of the correct size and design for the job that you are attempting to perform.
- Always work in a clean, safe, well-lit, organized and adequately equipped area.
- Do not begin repairs without assurance that vehicle is in secure position, and will not move during repair.



COMPOSITE BODY 1/4" MEDIUM DIE GRINDER - 22,000RPM - REAR EXHAUST



COMPOSITE BODY 1/4" 90° ANGLE DIE GRINDER - 20,000RPM - REAR EXHAUST

MADE IN TAIWAN



1 YEAR LIMITED WARRANTY

• Astro Pneumatic Tool Co. warrants our products to the original user against defective material or workmanship for a period of 1 year (except where noted on our price schedule) from the date of 1st use. Astro reserves the right to determine whether the product failed because of defective material, workmanship or other causes and to charge back for missing parts. Astro Pneumatic Tool Co., at its discretion, will repair products covered under this warranty free of charge. The distributor should direct the original user to return the product (with the exceptions listed below) with the distributor's name, address, adequate proof of date of purchase or a copy of warranty card, and a short note explaining the problem. **Failures caused by accident, alteration, or misuse are not covered by this warranty.**

• Astro Pneumatic Tool Co. or its authorized service representatives must perform all warranty repairs. Any repair to the product by unauthorized service representatives voids this warranty. The rights under this warranty are limited to the original user and may not be transferred to subsequent owners.

• This warranty is in lieu of all other warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose. Some states do not allow the exclusion of limitations of incidental or consequential damages so the above limitations may not apply to you.

PLEASE DO NOT RETURN ANY PRODUCT WITHOUT CALLING 1-800-221-9705 FOR INSTRUCTIONS

Unpacking

When unpacking, check the parts diagram and part number listing on page 4 to make sure all parts are included. If any parts are missing or damaged, please call your distributor.

PRODUCT INFORMATION:

202 - COMPOSITE BODY 1/4" MEDIUM DIE GRINDER - 22,000RPM - REAR EXHAUST

- Rear exhaust air flow system directs air away from work surface
 - Compact and lightweight
 - Built-in regulator
 - Safety lever
- SPECIFICATIONS:**
Collet Size: 1/4"
Free Speed: 22,000rpm
Overall Length: 6-3/4" (171mm)
Net Weight: 1.4lbs. (.63kgs)
Motor: 1/3hp
Air Inlet Thread NPT: 1/4"
Air Hose I.D. Size: 3/8" (10mm)
Avg. Air Consumption: 3cfm
Air Pressure: 90-120psi

204 - COMPOSITE BODY 1/4" 90° ANGLE DIE GRINDER - 20,000RPM - REAR EXHAUST

- Composite handle reduces vibration
 - Rib textured handle provides a firm grip
 - Lever throttle for feathering control
 - Compact and lightweight
 - Rear exhaust
 - Built-in regulator
- SPECIFICATIONS:**
Collet Size: 1/4"
Free Speed: 20,000rpm
Overall Length: 6-3/4" (171mm)
Net Weight: 1.2lbs. (.54kgs)
Motor: 1/3hp
Air Inlet Thread NPT: 1/4"
Air Hose I.D. Size: 3/8" (10mm)
Avg. Air Consumption: 3cfm
Air Pressure: 90-120psi

DO NOT DISCARD – GIVE TO USER



Model: **222**

Product Type:
2 PC. DIE GRINDER KIT WITH 1/4" 90° ANGLE DIE GRINDER AND 1/4" MEDIUM DIE GRINDER

MAINTENANCE INSTRUCTION:

1.) LUBRICATION:

Before connection of the hose, apply 4 to 5 drops of a good quality air tool oil at the air inlet. After 3 to 4 hours of operation, oiling may be necessary again.

2.) TIGHTNESS OF PARTS:

Regularly check whether all connection parts are **fastened securely. Follow this procedure daily before beginning work.**

3.) STORAGE:

Avoid storing the tool in a location subject to high humidity. If the tool is left unused, the residual moisture inside the tool can cause rust. Before storing and after operation, oil the tool at the air inlet with a good quality air tool oil and run it for a short period.

4.) DISPOSAL:

Follow national legislation of waste disposal.

5.) ORDERING SERVICE PART

For further operational and handling information or for replacement of parts and components, contact the sales agent from where you purchased the tool, or the service division of our company, phone number 800-221-9705.

*When ordering parts and components, give each part number, name, and quantities.



Users of this tool should review the chemical composition of the work surface and any products used in conjunction with this tool for any such chemicals prior to engaging in any activity that creates dust and/or microscopic particles.

Users should obtain the Material Safety Data Sheets for all identified chemicals, either from the manufacturer or their employer, and proceed to study, understand, and follow all instructions and warnings for exposure to such chemicals.

Some examples of these chemicals are: lead from lead based paints; crystalline silica from bricks, cement and other masonry products; and arsenic and chromium from chemically treated lumber. A listing of the chemicals can be obtained at www.oehha.ca.gov under Proposition 65.

In order to reduce their exposure to such chemicals users should always:

- work in well-ventilated areas.
- wear appropriate safety equipment and clothes that are specifically designed to filter out microscopic particles.



- 1) The tool shall not be used in potentially explosive atmospheres.
- 2) Disconnect the air hose before changing or adjusting any inserted tools.
- 3) Before using tool, please confirm all couplings and plugs are fixed securely. Air hose that is under pressure may lash out when disconnected and could lead to serious injuries.
- 4) Prevent loose clothes, long hair or any other personal accessories from coming close to moving parts to reduce the risk of being caught, trapped or drawn into the rotating spindle.
- 5) Excessive high air pressure, that exceeds the maximum pressure, may cause injuries to user.
- 6) Exposure to strong vibration for extended time may cause harm to operator.
- 7) Make sure of the rotation direction before starting the tool to reduce hazardous situations due to unexpected rotation direction.
- 8) Slip/Trip/Fall is a major reason of serious injury or death. Beware of excess hose left on the walking or work surface.
- 9) Wearing eye/face protector could reduce the danger to person from high speed splinters being emitted from the tool or work surface.
- 10) Wearing correct breathing protection will help avoid inhaling dust or handling debris from work process that can be harmful to your health.
- 11) High sound level can cause permanent hearing loss. Use hearing protection while operating tool.
- 12) Due to the material being processed, there may be a risk of explosion or fire. Be aware of work surface dangers prior to beginning work.
- 13) There is a risk of being cut due to high speed rotation. Do not touch high speed rotating disc.
- 14) This power tool is not insulated. If contact is made with an electric current, injury may occur.
- 15) Dust created by sanding, sawing, grinding, drilling and other related activities may expose the user to dust and/or microscopic particles that may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



Model: **222**

Product Type:
2 PC. DIE GRINDER KIT WITH 1/4" 90° ANGLE DIE GRINDER AND 1/4" MEDIUM DIE GRINDER

CAUTIONS FOR USE

- 1.) Always wear ANSI approved ear protection and safety glasses when using this tool. Gloves and protective clothing are recommended.
- 2.) Personal protection and dust collection devices shall be chosen according to the material being worked upon. Please consult provider of such devices.
- 3.) Release the start and stop device in case of failure of energy supply.
- 4.) Only use the lubricant recommended by the manufacturer.

202 - COMPOSITE BODY 1/4" MEDIUM DIE GRINDER - 22,000RPM - REAR EXHAUST

- Rear exhaust air flow system directs air away from work surface
 - Compact and lightweight
 - Built-in regulator
 - Safety lever
- SPECIFICATIONS:**
 Collet Size: 1/4"
 Free Speed: 22,000rpm
 Overall Length: 6-3/4" (171mm)
 Net Weight: 1.4lbs. (.63kgs)
 Motor: 1/3hp
 Air Inlet Thread NPT: 1/4"
 Air Hose I.D. Size: 3/8" (10mm)
 Avg. Air Consumption: 3cfm
 Air Pressure: 90-120psi

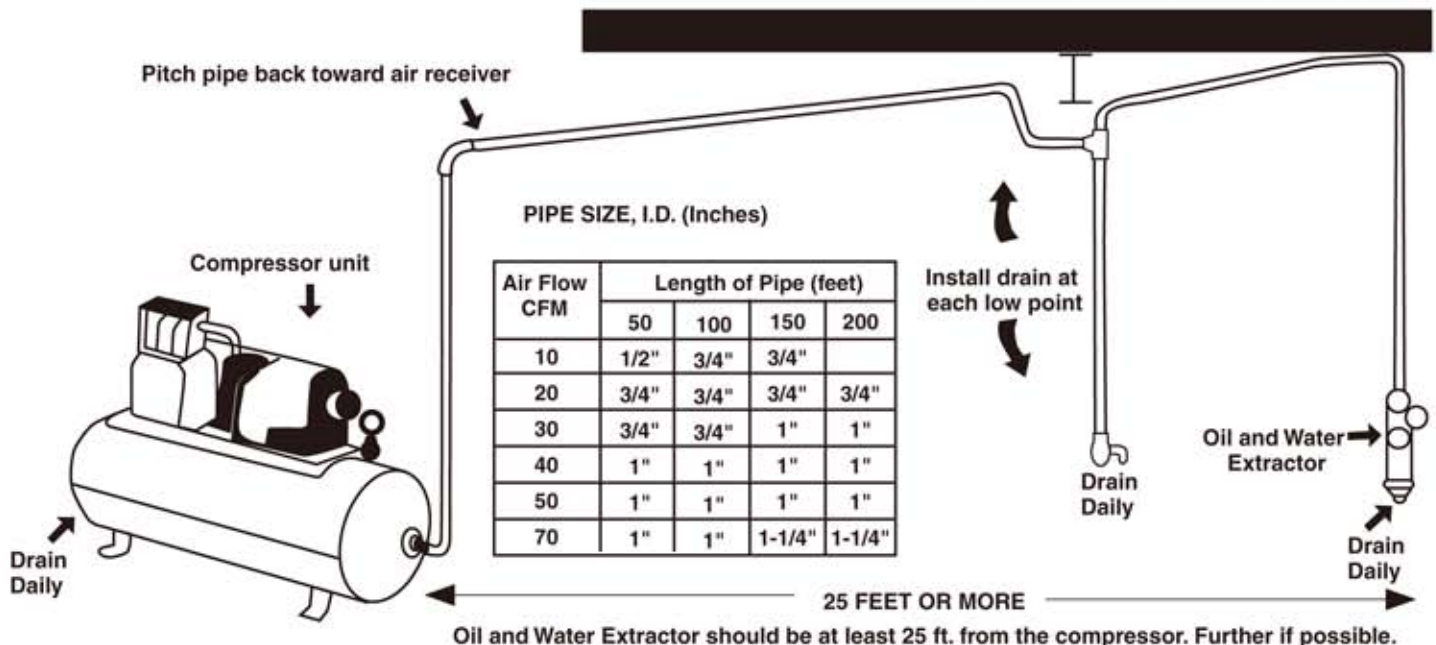
204 - COMPOSITE BODY 1/4" 90° ANGLE DIE GRINDER - 20,000RPM - REAR EXHAUST

- Composite handle reduces vibration
 - Rib textured handle provides a firm grip
 - Lever throttle for feathering control
 - Compact and lightweight
 - Rear exhaust
 - Built-in regulator
- SPECIFICATIONS:**
 Collet Size: 1/4"
 Free Speed: 20,000rpm
 Overall Length: 6-3/4" (171mm)
 Net Weight: 1.2lbs. (.54kgs)
 Motor: 1/3hp
 Air Inlet Thread NPT: 1/4"
 Air Hose I.D. Size: 3/8" (10mm)
 Avg. Air Consumption: 3cfm
 Air Pressure: 90-120psi

The oil and water extractor should not be mounted on or near the air compressor. The temperature of air is greatly increased during compression. As the air cools down to room temperature, in the air line, on its way to the Air Power Tool, the moisture contained in it condenses. Thus, for maximum effectiveness, the oil and water extractor should be mounted at some point

in the air supply system where the temperature of the compressed air in the line is likely to be lowest. Air lines must be properly drained daily. Each low point in an air line acts as a water trap. Such points should be fitted with an easily accessible drain. See diagram below. Pitch all air lines back towards the compressor so that condensed moisture will flow back into the air receiver where it can be drained off. Drain daily.

SUGGESTED AIR LINE CONNECTION





**Astro Pneumatic
Tool Company**

372 Old US Highway 52 South
Mount Airy, NC 27030

Model:

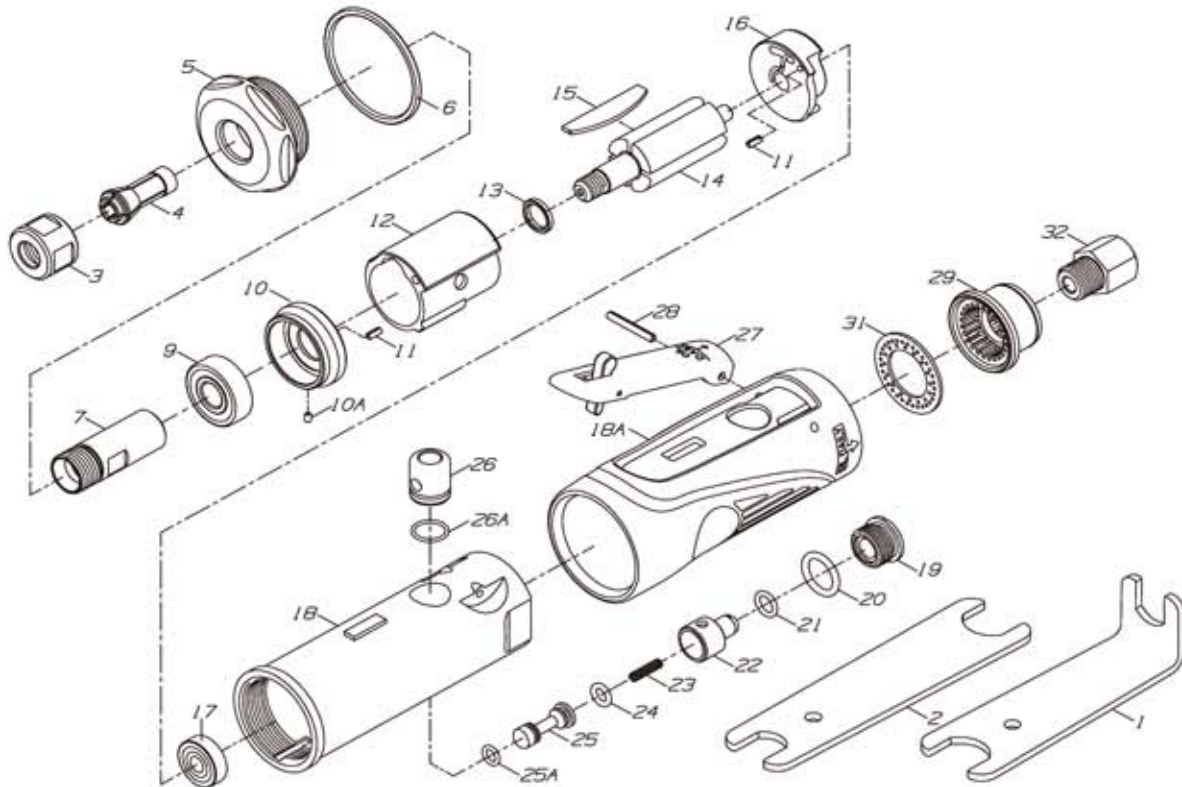
202

Product Type:

**COMPOSITE BODY 1/4" MEDIUM DIE
GRINDER - 22,000RPM - REAR EXHAUST**

PARTS BREAKDOWN

Call 1.800.221.9705 for questions concerning performance of the product or other inquiries.



Parts List

Index	Part No.	Description	Qty	Index	Part No.	Description	Qty
1	T210-01	Angle Ended Spanner	1	18	1206A-18	Housing	1
2	T210-02	Double Ended Spanner	1	18A	202-18A	Housing Sleeve	1
3	T210-03	Collet Nut	1	19	T210-19	Valve Screw	1
4	T210-04	Collet	1	20	T210-20	O-Ring	1
5	202-05	Housing Cap	1	21	T210-21	O-Ring	1
6	202-06	Ring	1	22	T210-22	Air Regulator	1
7	T210-07	Spindle	1	23	T210-23	Spring	1
9	T210-08	Ball Bearing	1	24	T210-24	O-Ring	1
10	T210-09	Front End Plate	1	25	T210-25	Throttle Valve	1
10A	T210-11P	Pin	1	25A	T210-25P	O-Ring	1
11	T210-10	Pin	2	26	T210-26	Valve Bushing	1
12	T210-12	Cylinder	1	26A	T210-26P	O-Ring	1
13	T210-13	Spacer	1	27	201-05	Safety Lever	1
14	T210-14	Rotor	1	28	202-28	Throttle Pin	1
15	T210-15	Rotor Blade	4	29	202-29	Exhaust Deflector	1
16	T210-16	Rear End Plate	1	31	T210-31	Exhaust Washer	1
17	T210-17	Ball Bearing	1	32	T210-32	Inlet Bushing	1



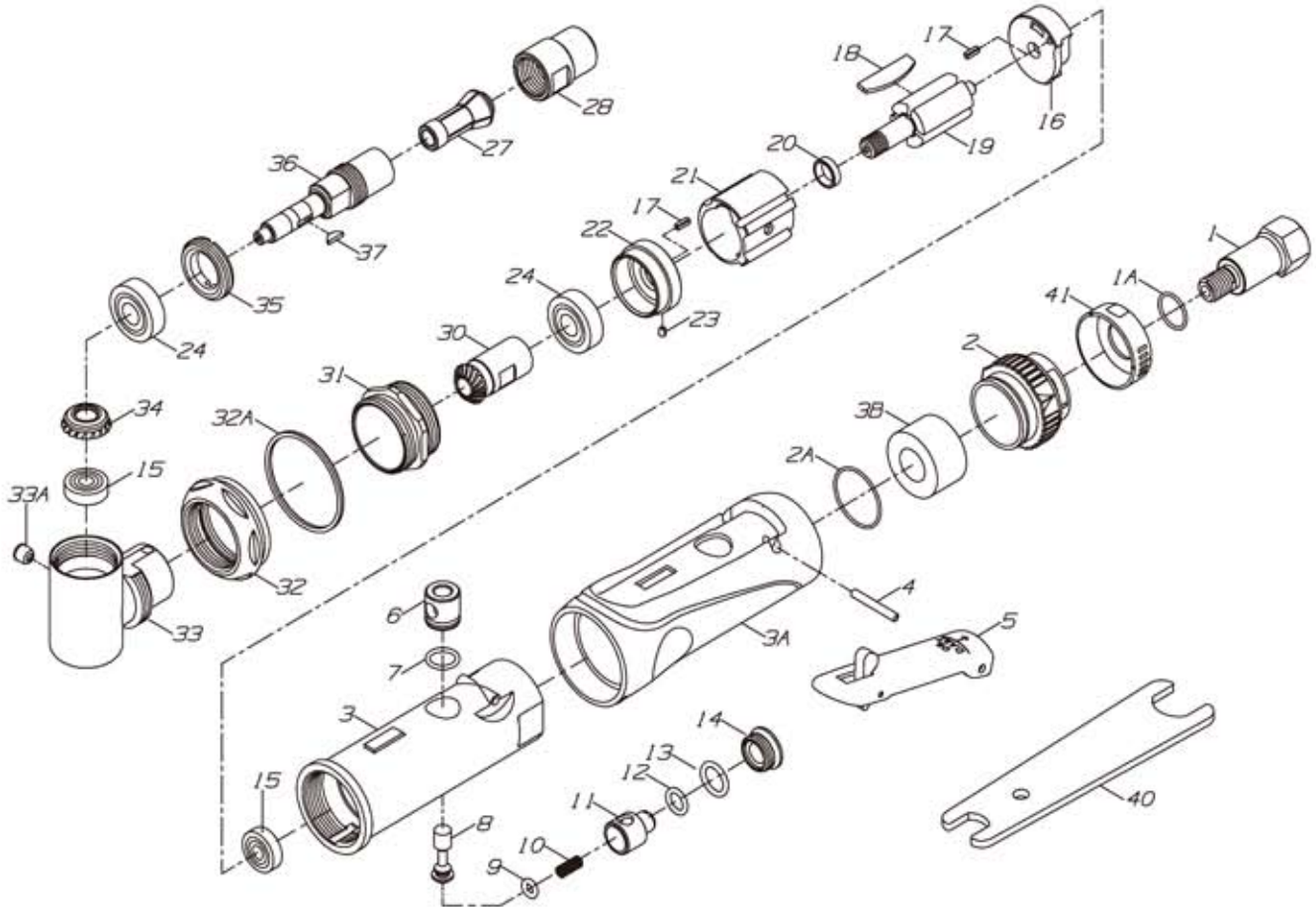
**Astro Pneumatic
Tool Company**
372 Old US Highway 52 South
Mount Airy, NC 27030

Model:
204

Product Type:
**COMPOSITE BODY 1/4" 90° ANGLE
DIE GRINDER - 20,000RPM -
REAR EXHAUST**

PARTS BREAKDOWN

Call 1.800.221.9705 for questions concerning performance of the product or other inquiries.



Parts List

Index	Part No.	Description	Qty	Index	Part No.	Description	Qty	Index	Part No.	Description	Qty
1	204-01	Inlet Bushing	1	11	T20AH-04	Air Regulator	1	27	T210-04	1/4" Collet	1
1A	T210-26P	O-Ring	1	12	T20AH-05	O-Ring	1	28	T20AH-30	Collet Nut	1
2	204-02	Exhaust Deflector	1	13	T20AH-06	O-Ring	1	30	T20AH-19	Bevel Gear	1
2A	204-02A	O-Ring	1	14	T20AH-07	Valve Screw	1	31	T20AH-20	Cap Lock	1
3	204-03	Motor Housing	1	15	204-15	Ball Bearing	1	32	204-32	Threaded Cap	1
3A	204-03A	Housing Sleeve	1	16	204-16	Rear End Plate	1	32A	204-32A	Ring	1
3B	204-03B	Muffler	1	17	T210-11	Pin	2	33	204-33	Angle Housing	1
4	T210-28	Pin	1	18	T20AH-16	Rotor Blade	4	33A	204-33A	Ball Cap	1
5	204-05	Safety Lever	1	19	204-19	Rotor	1	34	T20AH-24	Bevel Gear	1
6	T20AH-31	Valve Bushing	1	20	T20AH-13	Bearing Spacer	1	35	T20AH-28	Clamp Nut	1
7	T20AH-31P	O-Ring	1	21	T20AH-14	Cylinder	1	36	T20AH-27	Spindle	1
8	204-08	Throttle Valve	1	22	204-22	Front End Plate	1	37	T20AH-26	Key	1
9	T20AH-32	O-Ring	1	23	T210-11P	Pin	1	40	204-40	Double Ended Spanner	2
10	T20AH-03	Spring	1	24	T20AH-18	Ball Bearing	2				