SAFETY TOOLS allmet

**EX-certified Grinding tools**

# User Manual Grinding Tools

II 2G Ex h IIA T3 Gb
GEX 22 ATEX 1029X


## Cut the heat - Cut the risk

*Pictures used in this manual might vary from the actual product.*

## User manual Contents:





*Pictures used in this manual might vary from the actual product.*


**Picture of A-0057 All-around Solution - In a Pelicase with custom-fitted foam**

A-0057 Suitcase solution includes all tools available from the EX-certified grinding tools Safety Tools Allmet provides.
These tools can also be purchased separately.

These tools are only Certified with Safety Tools Allmet AS products exclusively.
Ex-certification, User Manuals, and documentation follow all Ex-certified products sold.

## Introduction to the user manual

Keep this instruction manual for future reference. Additional safety information may be available from the authorized Agent in your country. Consult them when necessary. Do not remove or allow any labels or markings on the tool to become obscure/unreadable.

## Important safety information

Read these instructions thoroughly before use. Failure to do this may result in serious injury. The user of this equipment must be competent in its use. The user must ensure that the equipment is selected, installed, and used following regulations and is checked thoroughly before use. The operator must use the equipment for its intended purpose and maintain it regularly.

Safety is a primary consideration when using the Safety Tools equipment. Operators should use the tools correctly with a good understanding of how to use the tools safely. Tools, attachments, and accessories should only be used for the purpose for which they are designed. Safety devices and accessories supplied should be used appropriately. Do not use outside the design intent unless first agreeing upon such use with the manufacturer and authorized Agent.

Read and fully understand all the instructions before attempting to install, use, service or maintain the equipment. Training is available through Safety Tools Allmet and the authorized Agent in your region. Generally, there is no need for specific training when using the ATEX-certified grinding tools from Safety Tools Allmet.



*Pictures used in this manual might vary from the actual product.*

## WARNING

To reduce the risk of injury, read and understand the following information before using or servicing the tool. The features and descriptions of our products are subject to change without prior notice.

This product is designed for milling and removing material using abrasives. The abrasives are hard and solid (9.7+ Rockwell scale). No other use permitted - for professional use only.

Before servicing the pneumatic tool, the compressed air supply must be disconnected and shut off.

## Disposal

When disposing of components, lubricants, etc., ensure the relevant safety procedures are carried out.

## Air Pressure

Check hose size and air pressure. The air pressure at the tool inlet with the grinder running shall not exceed the maximum operating pressure of 7 bars or lower if otherwise specified. The tool is designed for a working pressure of 6.3 bar (90 psi). The compressed air must be clean, and installation of a filter is recommended. For maximum efficiency and performance, comply with the specification of the air hose (antistatic, earthed hose or a minimum 1 MΩ. resistance.)

Avoid the risk of a whipping hose – regularly check the hose, fittings, and clamp conditions.

Always use the correct and clean air hose and fittings and check that they are all in good condition and installed correctly. Do not use damaged, frayed, or deteriorated hose end fittings. Replace them when necessary. Always store hoses properly. A hose failure can cause injury. The air hose may come off and whip.

Use only Antistatic hoses in ATEX gas zones 1. Air should be supplied at a constant pressure of 6.3 Bar at the tool with the trigger fully depressed. In-line lubricators and air filters are not required unless it is known that the plant air supply is likely to be contaminated. It is recommended that 1-2 drops of air tool oil be added to the tool after prolonged use.


## Types of Steel

The Safety Tools Allmet ATEX-Grinding Tools can be used against the following materials:

- Stainless steel grades 304/316
- Carbon steels
- Titanium
- 6Mo stainless steel
- Aluminum

***All excess metal fragments must be removed from Safety Tools files and discs before use.**



*Pictures used in this manual might vary from the actual product.*

## Maintenance

To obtain maximum efficiency from the pneumatic tool, preserve its features, and avoid repeated repairs, a routine inspection and repair program is recommended at least every 1000 hours, the intervals between the various inspections depending on the amount of exertion on the power tool.

The tool should be taken out of service for examination and repair at any sign of malfunction or unusual behavior. If repairs are necessary, contact the authorized Agent in your country or Safety Tools Allmet directly. It is recommended to dismantle air tools for overhauling and cleaning after 500 hours of operation or once every six months.

After cleaning the tool, ensure it has been correctly assembled. With all fasteners tightened.
Check the rotation frequency of the tool without an attached file or disc after each Maintenance or service.
If you are uncertain about the correct way to service a tool, contact the authorized Agent in your region.
Only trained personnel should service and maintain Safety Tools Allmet products/equipment.

Check the free speed of the tool at regular intervals and after each operation or maintenance task. Remove the file (burr) or disc to check the speed. The maximum allowed speed shown on the tool must not be exceeded, and the vibration level must not be excessive.

Safety Tools ATEX-certified Air Tools must be properly maintained and tested by competent and trained personnel.


## Motor speeds

These cold grinding tools are designed for use with the following motors:

| Motor type | RPM | Max air pressure | Air hose diameter |
|---|---|---|---|
| (A-0105) Fuji FCD-10X-52 special | 1000 | 6,3 Bar | 9.5mm (3/8 inch) |
| (A-0104) Fuji FCD-6X-51 special | 2000 | 6,3 Bar | 9.5mm (3/8 inch) |
| (A-0107) Fuji FG-2VX-50 special | 3000 | 6,3 Bar | 9.5mm (3/8 inch) |
| (A-0108) Fuji FAS-1X-50 special | 2000 | 6,3 Bar | 9.5mm (3/8 inch) |

## Noise

The operator must wear ear protection when the noise level at his position exceeds 83 dB or 85 dB. It is recommended that the operator wears ear protection even if the noise level is less than 83 dB or 85 dB.

3'rd party measured noise levels while grinding with Safety Tools equipment:
The lowest reading is 80dB
The highest reading is 85dB
Average reading is 80.5dB



*Pictures used in this manual might vary from the actual product.*

### Vibration Analysis HAV

Safety Tools Allmet tools have a low vibration level. Follow the guidelines for vibration wherever you are. 3-part testing shows an average vibration level of <2.5 m/s². s

### Posture

Safety Tools are generally used as hand-held units. It is recommended that it is used while standing on a firm surface. It may be used in other positions, but it is vital that the operator is in a secure position and has a firm grip and footing. Refer to risk analysis for further guidance.

Safety Tools Allmet also has Robotic Systems and Automated Tool Guides. Contact Safety Tools Allmet or the Authorized Agent in your Region for more information.

### Protective Equipment

Always wear the necessary protective equipment when using this equipment. Safety goggles or face shield, gloves and hearing protection are required. Ensure all clothing is close fitting to prevent becoming snagged in moving parts.

| | |
|---|---|
| **Safety Goggles/face shield** | **Mandatory** |
| **Hearing Protection** | **Mandatory** |
| **Safety Gloves** | **Mandatory** |
| **Safety Hat** | **Optional** |
| **Respiratory Protection** | **Optional** |

## Special Conditions

### Projectile Hazards for Misuse

- Always wear impact-resistant eye and face protection when involved with or near the operation, repair or maintenance of the tool or changing accessories on the tool.
- Be sure all others in the area wear impact-resistant eye and face protection.
- Even small projectiles can injure eyes and cause blindness.
- Use barriers to protect others from wheel fragments and grinding sparks.
- We recommend to weekly/monthly measure the air tool speed with a tachometer to ensure it is not greater than the RPM marked on the grinding accessory.
- This tool and its accessories must not be modified in any way.
- All excess metal fragments must be removed from Safety Tools files and discs before use. Soft metals such as aluminum can generate sparks when mixed with other metals. Safety Tools recommends using separate files and discs on different types of steel.

## Entanglement Hazards for misuse

- Avoid contact with rotating spindles, discs, or files. The rotation may persist for several seconds, even after releasing the throttle. Only place the tool down when the rotation has completely ceased.
- Refrain from wearing jewelry or loose clothing while operating the tool.
- Keep neckwear away from rotating tools and accessories to prevent choking hazards.
- To avoid the risk of scalping, ensure that hair is kept away from rotating tools and accessories.

## Mounting Hazards for misuse

- Whenever changing accessories, rotating discs, or files, always remember to turn off the air supply, release the air pressure from the hose, and disconnect the tool from the air supply.
- Ensure you use only the recommended sizes and types of abrasives for the tool.
- Do not use cracked files or discs, which may pose a safety risk.
- Proper mounting is essential to prevent injuries.
- Safety Tools Air Tools are specifically designed to be used with Safety Tools Grinding Files and Discs. Only use Safety Tools Air Tools and Accessories as intended and designed.
- Do not use the tool with other accessories or air tools that are not compatible.

## Operating Hazards for Misuse

- Operators and maintenance personnel must be physically able to handle the tool's bulk, weight, and power.
- Ensure that the workpiece is supported correctly.
- Maintain a balanced body position and secure footing.
- Avoid contact with rotating spindle and accessories to prevent cutting hands and other body parts. Wear the protective equipment listed.
- Do not use if vibration becomes excessive: check the accessory for damage or incorrect mounting.
- There is a risk of electrostatic discharge if used on plastic and other non-conductive materials.

## Workplace Hazards for Misuse

- Slip/Trip/Fall is a major cause of severe injury or death. Be aware of excess hose left on the walking or work surface.
- High sound levels can cause permanent hearing loss. Use hearing protection as recommended by your employer or occupational health and safety regulations.
- Repetitive work motions, awkward positions, and vibration exposure can harm hands and arms. Stop using the tool and consult a physician if numbness, tingling, pain, or skin whitening occurs.

## Air Supply and Connection Hazards for misuse

- Air under pressure can cause severe injury.
- Always shut off the air supply, drain the air hose of air pressure, and disconnect the tool from the air supply when not in use, before changing accessories, or when making repairs.
- Keep the airflow away from yourself and others.
- Whipping hoses can cause serious injury. Always check for damaged or loose hoses and fittings.
- Whenever universal twist couplings are used, lock pins must be installed.
- Do not exceed the maximum air pressure of 6.3 bar/90 psi or as stated on the tool nameplate.
- Check and maintain air hoses regularly.
- Use only an Antistatic or Earthed hose with a satisfactory ohm resistance minimum of 1 MΩ.
- Make sure the air supply is clean and dry.
- Safe to use in ambient temperatures -20°C to 50°C. If water is used, the ambient temperature for safe use must be greater than 0°C - 50°C.

## Special conditions for safe use

For use in an Atex Gas zone 1, the air tool must be earthed. The supply air hose can be earthed or be of an antistatic type with a minimum of 1 MΩ resistance. STA can supply Suitable air hoses.

For use in Atex gas zone 2, there is no requirement for an antistatic or earthed hose. The person is itself recognized as earthed enough.

Spanners, Dor Clamp and Allan Key are not Ex-certified. We advise you not to bring the Spanners, Dor Clamp and Allan key into Atex gas Zone 1.

Older equipment from Safety Tools may have pre-existing markings referencing the old certificate, Ⓔx II2GcT3. These pre-existing markings may be combined with the newer marking, Ⓔx II 2G Ex h IIA T3 Gb or short form Ⓔx II 2G Ex h. This combination can consist of one or more of the following:

- Both marking types on the same equipment.
- Two separate pieces of equipment, each with one of the marking types.
- The equipment has not been changed during the certificate update, and any pre-existing markings are to be considered the same equipment as equipment with the new markings.

For work in Atex gas sone 1, the air tool must be earthed by the supply air hose. The air hose can be of an antistatic type with a minimum of 1 MΩ resistance, or it's also possible to use an earth clamp from the air tool to the ground. Safety Tools Allmet recommends using an antistatic type of hose with a minimum of 1 MΩ resistance for all work.
Maximum air supply pressure is 6,3 Bar.

**The Grinding tools can only be used against the following materials:**

- Stainless steel Grade 316 and 304.
- Carbon steels.
- Titanium.
- Aluminum.
- 6Mo stainless steel.

Water cannot be used as a cooling medium at ambient temperatures below 0°C.

## Product markings

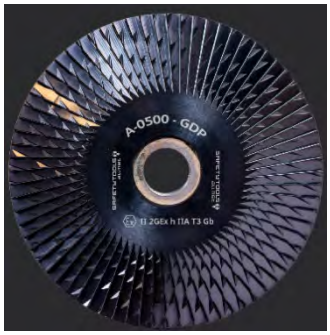
Markings for air tools and discs and burrs may vary some in design but should contain this information:

### Air Tool Markings:



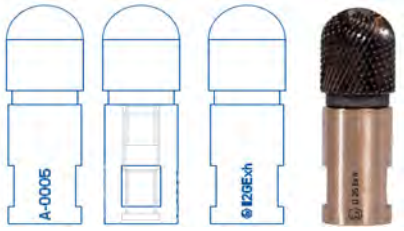

*Pictures used in this manual might vary from the actual product.*

**Grinding disc marking**:
(A-0500)

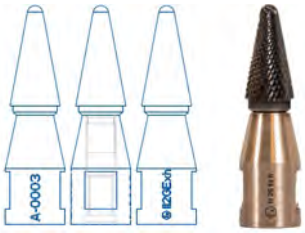



**Rotating Files:**
All Rotating Files A-0001, A-0002, A-0003, A-0004, A-0005, A-0006, A-0007, A-0008, A-0009B, A-0009C, and A-0010 are marked on two sides. One side with the product number and one side with the short form EX certificate markings: Ex II 2G Ex h

**Example #1**




**Example #2**




# Preparation

## Before Startup

- Ensure the workstation and the surroundings are safe and clear of oil, grease, etc.
- Ensure sufficient space for the grinding tool and the task to be carried out.
- Provide the best access for hoses.
- Make sure air pressure is 6,3 bar for the rotating Air tools.

## WORKING POSITION

- Use the correct lifting technique. Do not ever use the hose as a lifting handle.
- Adopt a good stance and avoid overreaching.
- Make sure that air hoses are fitted with whip checks.

## ASSEMBLING THE TOOL

- The operator must use the correct grinding tool for the task at hand.
- Install the rotating file or disc.
- Do not exert unnecessary force during this work.
- Ensure that the equipment has the required marking per the ATEX certificate.
- Do not modify the tool without first contacting Safety Tools Allmet.
- Do not use the tool until you are entirely familiar with its operation.
- For use in an Atex Gas zone 1, the air tool must be earthed. The supply air hose can be earthed or be of an antistatic type with a minimum of 1 MΩ resistance.
- For use in Atex gas zone 2, there is no requirement for an artistic or earthed hose. The person is itself recognized as earthed enough.
- Do not use the equipment if it emits unusual sounds, vibrates, or varies speed.
- Do not touch a rotating file or disc during operations, which may lead to injury.



*Pictures used in this manual might vary from the actual product.*

- To ensure your safety while using the equipment, take precautions if you have long hair or are wearing loose garments. Make sure to keep your hair and garments away from any rotating components.

## READY FOR USE

- Lube the air tools, one drop of air tool oil is recommended before and after use.
- Ensure the air tool is fitted with a safety START \STOP pin on the trigger. To start, press the safety pin forward and the trigger towards the air tool. And the air tool starts to rotate.
- Verify that the air hose has been installed per current regulations. This verification applies to all connections.
- Inspect the hoses visually to ensure that they do not leak air.
- Test the air tool by running the tool for approx. Thirty (30) seconds to ensure everything has been correctly installed and that the added oil can lube up the air tool.

## STARTUP OF ROTATING FILES

- Wear mandatory personal safety equipment.
- Make sure that you use the appropriate working posture.
- The air tool must operate when the rotation files/burrs are placed on a surface.
- Do not apply too much force while milling/grinding. Using less force will increase the efficiency and lifespan of the motor, file & disc.
- Place the file on the workpiece and pull it toward you. Then, guide the file back and forward and repeat the process until the desired material is removed.
- Cooling may be applied, both water and air. If water is used, the ambient temperature for safe use must be greater than 0°C.
- In the event of equipment change, isolate the air supply before changing equipment.
- In protracted stops, the air supply is to be isolated and disconnected.

## AFTER USE MAINTENANCE

- Clean the Air engines.
- Remove excess steel and rust from rotating files and discs.
- Lubricate the air engines. Use only one drop of air motor oil into the air supply connector. Typical always each time you put away the tool after prolonged use. Reconnect the air hose and run the tool for 10 seconds after inserting one drop of air tool oil.
- Place the tool in the safety suitcase securely.
- Remove any grinding residues from the place of work.
- Make sure that the safety suitcase is stored correctly.
- It is recommended to dismantle Safety Tools Air tools for overhauling and cleaning periodically after 500 hours of operation or once every six months. Service of Safety Tools equipment should only be done by Safety Tools Allmet or an authorized Safety Tools agent.

# Air tools overview

## A-0107 FUJI STRAIGHT GRINDER (FG-2VX-50)

| Prod.no. | Speed | Ref. no | ⚖ (g) | Air inlet |
|---|---|---|---|---|
| A-0107 | 3000 rpm | FG-2VX-50 | 894 | 1/4" NPT |

A-0107 Ex Certified Exclusively for Safety Tools - Fuji Straight Grinder (3000 RPM)

Use with Rotating Files A-0001 through A-0008.

*All Fuji Air Tools are Exclusive Ex Air Tools only available through Safety Tools Allmet or the authorized Safety Tools agent in your region.*

## A-0104 FUJI ANGLE GRINDER (FCD-6X-51)

| Prod.no. | Speed | Ref. no | ⚖ (g) | Air inlet |
|---|---|---|---|---|
| A-0104 | 2000 rpm | FCD-6X-51 2000 | 1700 | 1/4" NPT |

A-0104 Ex Certified Exclusively for Safety Tools - Fuji Angle Grinder (2000 RPM)

Use with Rotating Files A-0001 through A-0010.

*All Fuji Air Tools are Exclusive Ex Air Tools only available through Safety Tools Allmet or the authorized Safety Tools agent in your region.*

## A-0108 Fuji Angle Grinder (FAS-1X-50)

| Prod.no. | Speed | Ref. no | ⚖ (g) | Air inlet |
|---|---|---|---|---|
| A-0108 | 2000 rpm | FAS-1X-50 | 842 | 1/4" NPT |

A-0108 Ex Certified Exclusively for Safety Tools - Fuji Angle Grinder (2000 RPM) Use with Rotating Files (A-0009) og (A-0010 Rough Boy).

*All Fuji Air Tools are Exclusive Ex Air Tools only available through Safety Tools Allmet or the authorized Safety Tools agent in your region.*

## A-0105 Fuji Angle Grinder (FCD-10X-52)

| Prod.no. | Speed | Ref. no | ⚖ (g) | Air inlet |
|---|---|---|---|---|
| A-0105 | 1000 rpm | FCD-10X-52 | 2400 | 1/4" NPT |

A-0105 Ex Certified Exclusively for Safety Tools - Fuji Angle Grinder (1000 RPM)

Use with Grinding Disk for Paint A-0500.

*All Fuji Air Tools are Exclusive Ex Air Tools only available through Safety Tools Allmet or the authorized Safety Tools agent in your region.*



*Pictures used in this manual might vary from the actual product.*

# Rotating grinding burrs and disc

| Prod.nr. | | Dim./lengde | ⚖ (g) | |
|---|---|---|---|---|
| A-0001 |  | 65 mm | 76 | A-0001 - Grinding around very tight areas and in small holes. |
| A-0002 |  | 70 mm | 114 | A-0002 - Grinding around tight areas and in corners. The rounded file is great for non squared angle. Use to remove sharp edges. |
| A-0003 |  | 70 mm | 110 | A-0003 - Grinding in tight areas and in corners. The cone works well in squared angle situations. |
| A-0004 |  | 65 mm | 182 | A-0004 - Removing edges and following crack lines. Great for grinding inside pipes and angles on pipes and in corners. |
| A-0005 |  | 65 mm | 168 | Grinding inside pipes and removing weld seems , rounding situations & like the A-0004 for angles on edges. |
| A-0006 |  | 65 mm | 78 | Has a special nano-coating specially designed for on Aluminum, Titanium, Chartek & Heavy Coatings. |
| A-0007 |  | 57 mm | 194 | Removing edges and following crack lines. Great for grinding inside pipes and angles on pipes and in corners |
| A-0008 |  | 72 mm | 282 | Removing edges and following crack lines. Great for grinding inside pipes and angles on pipes and in corners |
| A-0009 B |  | 95 mm | 340 | Remove paint and steel from edges and pipes.<br>Use with A-0104 Angle Grinder and A-0060 Handle |
| A-0009 C |  | 95 mm | 340 | Remove paint and steel from flat surfaces and pipes.<br>Only fits A-0108 Angle Grinder and A-0060 Handle (Required) |
| A-0010 |  | 118 mm | 826 | Spot removing of paint and steel from flat surfaces and pipes and larger surface areas.<br>Only fits A-0108 Angle Grinder and A-0060RB Handle (Required) |

**GRINDING DISC FOR PAINT** FOR STA A-0105

Max 1000 RPM

| Prod.nr. | ⚖ (g) | Dim |
|---|---|---|
| A-0500 | 410 | Ø 80 mm |

Grinding Disk for paint - Use the Fuji Angle Grinder (FCD-10X-52) 1000 RPM.

Similar to a flap disc but remember it's a fixed disk and you must adjust yourself to the disk and how it is milling steel and paint. (Handle required for use).



*Pictures used in this manual might vary from the actual product.*

# ACCESSORIES

**A-0060 Handle**
Use with air Engine A-0108 & A-0104 on the file A-0009A/B

**A-0205 Dor Clamp 4mm**

Use for locking the spindle of the Small Angle Grinder air engine A-0108

**A-0060RB Handle**
Use with Safety Tools air too A-0108 and the A-0010 grinding file.

**A-0203 17mm Spanner** is used to loosen and tighten the files to Safety Tools Air Tools.

**A-0065 Covering**
Use with Safety Tools large 1000 RPM air engine A-0105. Covering for the paint removal grinding disk A-0500

**A-0207 6mm Allen Key** is used for to attach & remove the Grinding Disk for Paint (A-0500) – Rough Boy Handle (A-0060RB) and Support Handle for Straight Grinder (A-0107)

**A-0068 Drop safety**
Device - Used on every grinding air engine from Safety tools and on the handle A-0060.

*"Don't drop the tools - use the Drop Safety Device"*

**A-0200 10mm Spanner**
Used to Loosen and Tighten Grinding Files to Straight Grinder (A-0107) Air Tool.

**A-0062 Cooling cap. Use with the straight grinder A-0107**

This accessory is not required for the Atex certification. However, using water will increase the lifespan of the grinding file. Air can also be used with this accessory.

**A-0061 Comes with the Straight grinder A-0107**

This is an optional accessory and not required – it offers extra support when grinding.



*Pictures used in this manual might vary from the actual product.*

# WHAT FILE/DISC FITS WITH AIR TOOLS

## FUJI STRAIGHT GRINDER

| Prod.nr. | Speed | Prod. name | ⚖ (g) | Air inlet |
|---|---|---|---|---|
| A-0107 | 3000 rpm | FG-2VX-50 | 894 | 1/4" NPT |

## FUJI ANGLE GRINDER

| Prod.nr. | Speed | Prod. name | ⚖ (g) | Air inlet |
|---|---|---|---|---|
| A-0104 | 2000 rpm | special FCD-6X51 | 1700 | 1/4" NPT |

## FUJI ANGLE GRINDER

| Prod.nr. | Speed | Prod. name | ⚖ (g) | Air inlet |
|---|---|---|---|---|
| A-0108 | 2000 rpm | FAS-1X-50 | 842 | 1/4" NPT |

## FUJI ANGLE GRINDER

| Prod.nr. | Speed | Prod. name | ⚖ (g) | Air inlet |
|---|---|---|---|---|
| A-0105 | 1000 rpm | FCD-10X-52 | 2400 | 1/4" NPT |

| Prod.nr. | | Dim./lengde | ⚖ (g) |
|---|---|---|---|
| A-0001 |  | 65 mm | 76 |
| A-0002 |  | 70 mm | 114 |
| A-0003 |  | 70 mm | 110 |
| A-0004 |  | 65 mm | 182 |
| A-0005 |  | 65 mm | 168 |
| A-0006 |  | 65 mm | 78 |
| A-0007 |  | 57 mm | 194 |
| A-0008 |  | 72 mm | 282 |
| A-0009 B |  | 95 mm | 340 |
| A-0009 C |  | 95 mm | 340 |
| A-0010 |  | 118 mm | 826 |

## GRINDING DISC FOR PAINT FOR STA A-0105

Max 1000 RPM

| Prod.nr. | ⚖ (g) | Dim |
|---|---|---|
| A-0500 | 410 | Ø 80 mm |

**A-0062**
Cooling cap for Strait grinder
Fuji FG 2 VX50 ( A-0107)

**A-0065**
Covering for angle grinder
Fuji FCD 10X 52 ( A-0105)

**A-0068**
Drop safety device
for all air engine and
handle A-0060

**A-0060**
Handle for file A-0009 B and
A-00009 C

**A-0060 RB**
Handle for file A-0010



*Pictures used in this manual might vary from the actual product.*

## A-0107 Straight Grinder (3000 rpm)

Below are two pictures of accessories, mounting tools, and files.

Left Picture

- Ex Straight Grinder (A-0107)
- Files A-0001 to A-0008
- 10mm Spanner (A-0200)
- 16mm or 17mm Spanner
- 6mm Allen Key (A-0207)
- Drop Safety Device (A-0068)
- Straight Grinder Support Handle (A-0061)

Right Picture

To attach and remove grinding files to Ex Straight Grinder, use 10mm spanner & 16mm or 17mm spanner as shown below. Make sure the file is appropriately tightened before use.



### Special Information

Air tools should be properly cleaned and maintained after each use. See maintenance information on page 5 and preparation information on pages 9-10.

After prolonged use, use one or two drops of Air Tool oil directly into the air supply nozzle. When putting away an air tool, add one drop of air tool oil directly into the air inlet, reconnect the air hose, and run the tool for 10 seconds. Safety Tools files should be properly cleaned and maintained after each use.

All excess metal fragments must be removed from Safety Tools files and discs before use. Soft metals such as aluminum can generate sparks when mixed with other metals. **Safety Tools Allmet recommends using separate files and discs on different types of steel**.

This Air tool can be fitted with an optional support handle A-0061. To remove and attach, use the **A-0207 - 6mm Allen key**, as shown above. Make sure the handle is attached and tightened correctly before use.



*Pictures used in this manual might vary from the actual product.*

Air connection must always be disconnected from the air supply when:

- Attaching or removing files/discs.
- Cleaning & Maintaining Safety Tools equipment.

Do not exert excessive force when grinding with Safety Tools. The files are solid and strong, working better with moderate force.

## A-0108 Angle Grinder (2000 rpm) with Grinding File A-0009C

Below is the Safety Tools Angle Grinder (A-0108) used with Grinding File A-**Big Boy C**. There are only two rotating files that work with this air tool. The A-0009C and A-0010 Rough Boy.

While using the Angle Grinder (A-0108) and the Grinding File (A-0009C) - always have the handle A-0060) mounted. Do not use too much force while grinding. Using too much force will cause the equipment not to work as efficiently & possibly break parts inside the Air Tool. Safety Tools Grinding Files are very solid and have specially designed cuts. Using as much force with our grinding tools as conventional abrasive tools is unnecessary.

Left Picture

- Small Ex Angle Grinder (A-0108)
- Grinding File (A-0009C)
- 16mm or 17mm Spanner
- A-0205 Dor Clamp 4mm
- Handle (A-0060) with Drop Safety Device (A-0068)

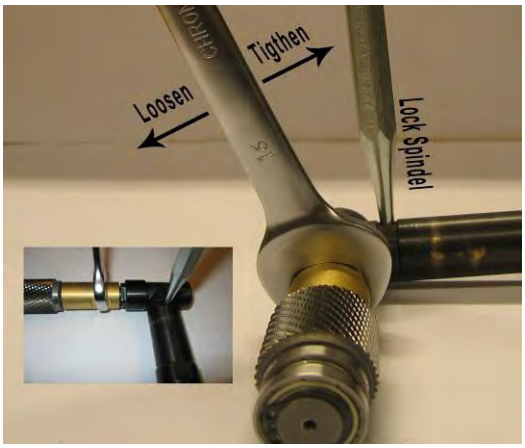
Center Picture

- Mounting procedure

*If further details are required, contact Safety Tools Allmet or the Authorized Agent in your region.*

Right Picture

- The Grinding Unit is fully assembled and ready for use.






*Pictures used in this manual might vary from the actual product.*

## Special Information

Air tools should be properly cleaned and maintained after each use. See maintenance information on page 5 and preparation information on pages 9-10.

After prolonged use, use one to two drops of Air Tool oil directly into the air supply nozzle. When putting away an air tool, add one drop of air tool oil directly into the air inlet, reconnect the air hose, and run the tool for 10 seconds. Safety Tools files should be properly cleaned and maintained after each use. Make sure the handle is attached correctly before use.

Air connection must always be disconnected from the air supply when:

- Attaching or removing files
- Cleaning & Maintaining Safety Tools

**Do not exert excessive force when grinding with Safety Tools. The files are very solid and strong and work better with moderate force. Also, do not bend the Air Tool and Handle together during use – Keep parallel. Failure to do this may break the rotating head of the Air Tool.**

## A-0104 Angle Grinder (2000 rpm)

Left Picture

- Ex Angle Grinder (A-0104) with A-0068 mounted
- Files A-0001 to A-0009B
- 17mm Spanner
- 16mm or 17mm Spanner
- Drop Safety Device
- Handle (A-0060) with Drop Safety Device (A-0068)

Right Picture

- To attach and remove grinding files to Ex Angle Grinder, use 17mm spanner as shown below. Make sure the file is appropriately tightened before use.


***Continued next page.***



*Pictures used in this manual might vary from the actual product.*

**A-0104 Angle Grinder (2000 rpm) (<u>continued</u>)**

<u>Left Bottom Picture</u>

- The Grinding Unit with the A-0009B File and Handle is fully assembled and ready for use. **A-0060 Handle is only used with A-0009 Files**.

<u>Right Bottom Picture</u>

- The Grinding Unit with the A-0004 is ready for use. **Do not use the A-0060 handle with Grinding Files A-0001 through A-0008.**

## Special Information

Air tools should be properly cleaned and maintained after each use. See maintenance information on page 5 and preparation information on pages 9-10.

After prolonged use, use one to two drops of Air Tool oil directly into the air supply nozzle. When putting away an air tool, add one drop of air tool oil directly into the air inlet, reconnect the air hose, and run the tool for 10 seconds.

Safety Tools files should be properly cleaned and maintained after each use. A good quality steel brush works best.

Make sure the handle is attached correctly before use.

Air connection must always be disconnected from the air supply when:

- Attaching or removing files
- Cleaning & maintaining Safety Tools

**Do not exert excessive force when grinding with Safety Tools. The files are very solid and strong and work better with moderate force.**

## A-0105 Angle Grinder (1000 rpm)

Listed are four pictures with Accessories, Mounting Tools, and Files.

Left Picture

- Ex Angle Grinder (A-0105)
- Grinding Disc (A-0500)
- 6mm Allen Key (A-0207)
- Phillips star screwdriver (*not included*)
- Support Handle for (A-0105) Ex Grinding Tool (Required for use)
- Covering for Paint Removal Disc (A-0065)

Right Picture

- Attach A-0065 Covering for Paint Removal Disc with Phillips star screwdriver – *as shown below*.

***Continued next page.***

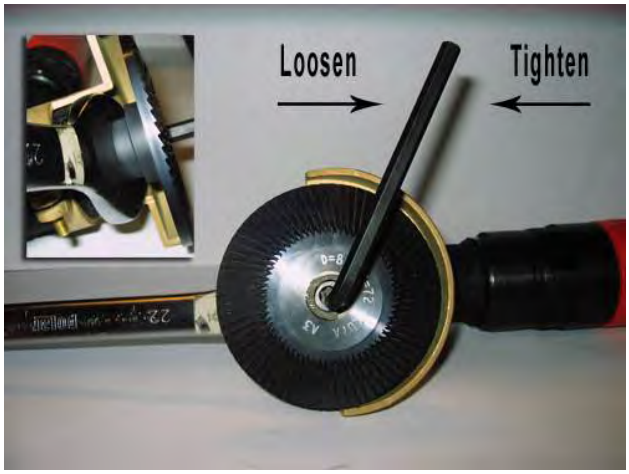
**A-0105 Angle Grinder (1000 rpm) (Continued)**

Bottom Left Picture

- Attach and remove the **A-0500 Paint Removal Disc** using the **A-0207 6mm Allen Key** and a 22mm Spanner (*Not Included*) fit on the disc's hub.

Bottom Right Picture

- Ex Grinding Disc assembled, with the handle screwed in - Ready for use.




## Special Information

Air tools should be properly cleaned and maintained after each use. See maintenance information on page 5 and preparation information on pages 9-10.

After prolonged use, use one to two drops of Air Tool oil directly into the air supply nozzle. When putting away an air tool, add one drop of air tool oil directly into the air inlet, reconnect the air hose, and run the tool for 10 seconds.

Safety Tools files should be properly cleaned and maintained after each use.

All excess metal fragments must be removed from Safety Tools files and discs before use. Soft metals such as aluminum can generate sparks when mixed with other metals. Safety Tools recommends using separate files and discs on different types of steel.

Make sure the Support handle is attached correctly before use.

Air connection must always be disconnected from the air supply when:

- Attaching or removing files
- Cleaning & Maintaining Safety Tools

Do not use too much force when grinding with Safety Tools. The disc is very solid and strong and works better with moderate force. A standard flap disc is soft. Safety Tools discs are very hard.

Contact Safety Tools Allmet or the Authorized Agent in your region for further information and training.

## A-0108 (2000 rpm) air tool with A-0010 Rough boy Assembled

Below is Safety Tools Angle Grinder (A-0108) used with Grinding File (A-0010).
Only A-0010 Rough Boy and Big Boy C (A-0009C) are used with air tool A-0108. (2000rpm)

While grinding with Angle Grinder (A-0108) and the Grinding File (A-00010) - always have the Rough Boy handle (A-0060RB) mounted. **Do not use too much force while grinding**. Excreting too much force will cause the equipment not to work as well and can break the angle head.

Safety Tools Grinding Files are very solid and have specially designed cuts. Using as much force with our grinding tools as conventional abrasive tools is unnecessary.

Left Picture

- Ex Angle Grinder (A-0108)
- Grinding File (A-00010)
- Handle (A-0060RB)
- 6mm Allen Key (A-0207)

Not Pictured

- Mounting procedure
- You only need to attach the brass piece of the handle with the Allen Key

If further details are required, please contact Safety Tools Allmet or the Authorized Agent in your region.

Right Picture

- Rough Boy is fully assembled and ready for use.


### Safety Notice

Air tools should be properly cleaned and maintained after each use. See maintenance information on page 5 and preparation information on pages 9-10.

After prolonged use, use one or two drops of Air Tool oil directly into the air supply nozzle. When putting away an air tool, add one drop of air tool oil directly into the air inlet, reconnect the air hose, and run the tool for 10 seconds.

Safety Tools files should be properly cleaned and maintained after each use.

Make sure the handle is attached correctly before use.

Air connection must always be disconnected from the air supply when:

- Attaching or removing files
- Cleaning & Maintaining Safety Tools

**Do not use too much force when grinding with Safety Tools. The files are very solid and strong and work better with moderate force. The Rough Boy Handle is designed to reinforce the tool so that the angle head is not bent.**

## Ignition sources evaluation chart: Ref. document: Gexcon-23-F100418-TN-1

The following table summarizes the original ignition source evaluation.

| CLAUSE | REQUIREMENT | NOTES | COMPLIANCE? |
|---|---|---|---|
| 5.1<br>6.4.2 | Hot surfaces | Relevant. Tested. | Moving parts and frictional heat will occur when operating the tool. OK |
| 5.2<br>6.4.3 | Flames and hot gases (including hot particles) | Not relevant | Not present |
| 5.3<br>6.4.4 | Mechanically generated impact, friction and abrasion | Relevant. Tested and ignition hazard assessment of tool | Moving parts and frictional heat will occur when operating the tool. |
| 5.4<br>6.4.5 | Electrical equipment and components | Not relevant | No electrical apparatus. |
| 5.5<br>6.4.6 | Stray electric currents, cathodic corrosion protection | Not relevant | Not present |
| 5.6<br>6.4.7 | Static electricity | Relevant for the hose | Not a part of the system Special conditions for safe use. |
| 5.7<br>6.4.8 | Lightning | Not relevant | Not present |
| 5.8<br>6.4.9 | Radio frequency (RF) electromagnetic waves from $10_4$ Hz to $3x10^{11}$ Hz | Not relevant | Not present |
| 5.9<br>6.4.10 | Electromagnetic waves from $3x10^{11}$ Hz to $3x10^{15}$ Hz | Not relevant | Not present |
| 5.10<br>6.4.11 | Ionizing radiation | Not relevant | Not present |
| 5.11<br>6.4.12 | Ultrasonic waves | Not relevant | Not present |
| 5.12<br>6.4.13 | Adiabatic compression and shock waves | Not relevant | Not present |
| 5.13<br>6.4.14 | Exothermic reactions, including self-ignition of dusts | Not relevant | Not present |

**Warning and cautions:**

> ***Warning*** statements describe conditions that may lead to personal injuries, including fatal injuries if the tool is not used correctly and the warnings are not thoroughly followed.
> ***Caution*** statements describe conditions that may lead to equipment damage.

**Warning:** Do not use this tool until you are entirely familiar with the safe operation of the tool, all accessories, and safety devices. Improper use can lead to severe injury. This
The manual defines the proper use of this equipment. Before using this tool for any other use, please consult the manufacturer. Please consult your dealer if you do not understand any part of this manual or operating procedure for this tool.

**Warning:** Always shut off and disconnect the tool from the energy source (air hose) when not in use or left unattended for any time. The air in the tool and supply hose should be discharged before disconnecting from the energy source.

**Warning:** Ensure all rotating parts have completely stopped before placing the tool down.

**Warning:** Use the correct air hoses. See ASSEMBLING THE TOOL page 9.

**Warning:** All air hose connections should be secured using" whip-check" restraining devices

**Warning:** Do not exceed the maximum air pressure.

**Warning:** All excess metal fragments must be removed from Safety Tools files and discs before use.

**Warning:** Always use safety goggles with this tool. Ordinary safety spectacles are not suitable. Full-face shields may also be used.

**Warning:** Always use gloves when using this tool. The gloves chosen should be suitable for the task.

**Warning:** Adding unsuitable accessories can create hazards. Use accessories or attachments only in accordance with the operating instructions.

**Warning:** Do not wear loose clothing whilst operating this tool. Neckties, rings, bracelets, or
other jewelry may get caught in the tool and should be removed or covered. Suitable non-slip footwear is recommended. Wear a protective hair covering to contain long hair.

**Warning:** Always keep a good footing and balance. Don't overreach. A rotating wheel can catch an article of clothing and cause personal injury.

**Warning:** Secure work. Use clamps if necessary to secure the workpiece.

**Warning:** Only use this tool in well-lit and ventilated areas. If necessary, wear respiratory.
Protection from the dust created using this tool.

**Warning:** Do not fit any damaged accessories to this tool. Only use accessories that are in good condition and free from visible cracks.

**Caution:** Use the correct tool. Don't force a tool or attachment to execute a task for which it is not intended.

## Usage areas examples:

## Safety Tools Allmet Vimeo profile:

**Safety Tools Allmet A/S**
Idrettsvegen 115,
5353 Straume, Norway

**Contact information**
(+47) 56 32 36 50
sales@safetytools.no
Org nr 992 842 679 MVA



*Pictures used in this manual might vary from the actual product.*