

Air File FRV-110

PRODUCT INSTRUCTIONS & SAFETY INFORMATION



**MANUFACTURED
IN SWEDEN**

Warning

Failure to follow the safety warnings and instructions may result in **serious injury**. Remember to save these warnings and instructions for future reference.

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Technical data

Length	182 mm	
Weight	1.05 kg	
Frequency of Strokes	150 Hz	
Maximum air Flow	1.5 l/s	
Air Pressure	6-6.5 bar	
Maximum Air Pressure	8 bar	
Maximum Air Temperature	35° C	
File shank size	Up to 6 mm (1/4")	
Hose Coupling	1/4 inch	
Size of Hose Recommended	6-10 mm	
Vibration Level according to ISO 28927-9 2,1 m/s ²	Uncertainty 0,7 m/s ²	
Sound Pressure Level according to ISO 15744	75 dB (A)	Uncertainty 4 dB (A)
Sound Power Level according to ISO 15744	86 dB (A)	Uncertainty 4 dB (A)

Warning. Declared values obtained from lab testing according to standards can help compare tools. However, they are insufficient for accurate risk assessments. Actual exposure and risk of harm depend on additional factors.

Thank you for choosing a tool from IPT Technologies

The FRV-110 air file is an advanced, actively vibration-dampened filing machine with a low noise level (System IPT). The high speed means rapid work, and the low vibration level means high precision without tiring the operator. Following these simple instructions will ensure a long life of excellent operation.

Intended use

This product is intended for professional use only. Neither the product nor its accessories must be modified in any way. If the product or accessories have sustained damage, do not use them. Installation, operation, and servicing should be carried out exclusively by qualified personnel. Safety and adherence to these guidelines are paramount.

This product is designed for different types of filing.

Important safety notes

All local safety rules regarding installation, operation, and maintenance shall always be followed. Always use adequate personal protective gear, such as safety goggles, noise protection, gloves, etc., as appropriate.

Always disconnect the tool from the air line before changing the file or making other adjustments.

Carefully blow the compressed air hose clean before connecting the tool to ensure there is no accumulation of water or dirt. The compressed air should be dry and clean. A filter unit should always be used.

Warnings

- ⚠ Do not exceed 8 bar pressure. Use a regulator set to 6 to 6,5 bars.
- ⚠ Power tools are not insulated for encountering electric power sources.
- ⚠ Power tools shall not be used in explosive atmospheres.
- ⚠ Do not use files that are broken, cracked, or deformed.
- ⚠ Use only accessories designed for this tool.
- ⚠ Stored compressed air may cause a hazard.
- ⚠ Long hair or loose clothing may be drawn in or trapped by the power tool.
- ⚠ Make sure that any sparks emitted are directed so as not to cause a hazard.
- ⚠ Be aware of the risk of a whipping compressed air hose.
- ⚠ Use a facemask or respirator if the work creates dust.

Warranty

The FRV-110 air file is warranted for 12 months from the date of purchase against faulty workmanship or materials, provided the tool has not been opened by unauthorized persons and has constantly been lubricated and connected to a filtered air supply of the recommended pressure.

Please return any defective tool to your authorized supplier.

This warranty does not include repair or replacement required because of misuse, abuse, or normal wear and tear on wear parts.

Use only original IPT spare parts for any replacement. Other parts may result in hazardous conditions, decreased performance, and increased maintenance and wear.

Instructions for use

General Information

The air file is designed to operate at an air pressure of 6 to 6.5 bar but will tolerate some variations without much change in performance. Do not exceed 8 bar pressure. Use a regulator set to 6.5 bar. Connect to 1/4" hose connection.

Ensure there is no accumulation of water or dirt in the hose by carefully blowing the hose clean before connecting the tool. The compressed air should be dry and clean. A filter unit should always be used. In-line lubrication is recommended. Where this is unavailable, apply a generous amount of oil in the air supply hose 2 to 3 m upstream of the tool every 2 to 4 hours of operation. This is considerably more efficient than supplying oil directly to the tool inlet.

Operation

The FRV-110 is excellent wherever high removal rates are desired, including removing flash from workpieces and castings. Its low vibration level also makes it suitable for precision jobs. The FRV-110 accepts shank sizes of 6 mm (1/4") and less.

NOTE: It is important to let the file do the work to ensure optimum performance. Do not force it down; guide it only. Make sure the file is installed correctly.

The tool is operated by the throttle lever (15). If the compressed air supply to the tool is interrupted, then release the throttle. Restart the tool when the supply is reestablished.

Changing the file

NOTE: Always disconnect the air file from the compressed air line when removing or attaching files.

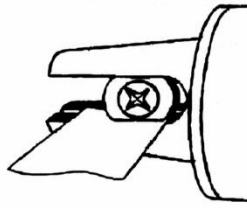
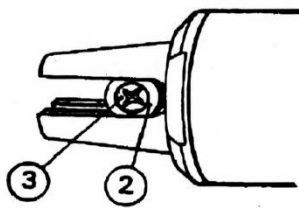
Use the hex key (29) to loosen the lock screw (4). Insert the file and orient it as desired. Tighten the screw securely by hand and ensure the file is properly clamped.

The tool is optimized for files commonly used in filing machines. These files are generally 100 to 120 mm long, weigh about 20 grams, and have a 5 to 6 mm shank diameter. It is not recommended for files heavier than about 60 grams.

Troubleshooting

If the file rotates or partly rotates when filing.

- Guide (2) is missing. Replace. Note that Screw (3) must be fastened with strong Loctite (No 270), or it will come loose during operation. Make sure the Guide does not bind in the Front. Use a thin sheet or blade (0.1 mm) between the Guide and the bottom of the groove in the Front when fixing the last turn of the Screw (3).



Strong Loctite on Screw (3) Use blade for clearance

Maintenance

Lubricate regularly (apply a generous amount of oil in the air supply hose 2 to 3 m upstream of the tool). Use only quality air tool oil. If a continuous lubrication unit is used, it should be positioned 3 to 5 m upstream of the tool, or it will not be effective. The oil flow should be set to provide one drop of oil for every 150 liters of free air. If you tend to push the machine hard downwards during work, apply a couple of drops directly into the front part of the tool.

Lack of lubrication will result in excessive wear of critical parts inside the tool.

Note: Do not open the tool; it will void the warranty!

Disposal

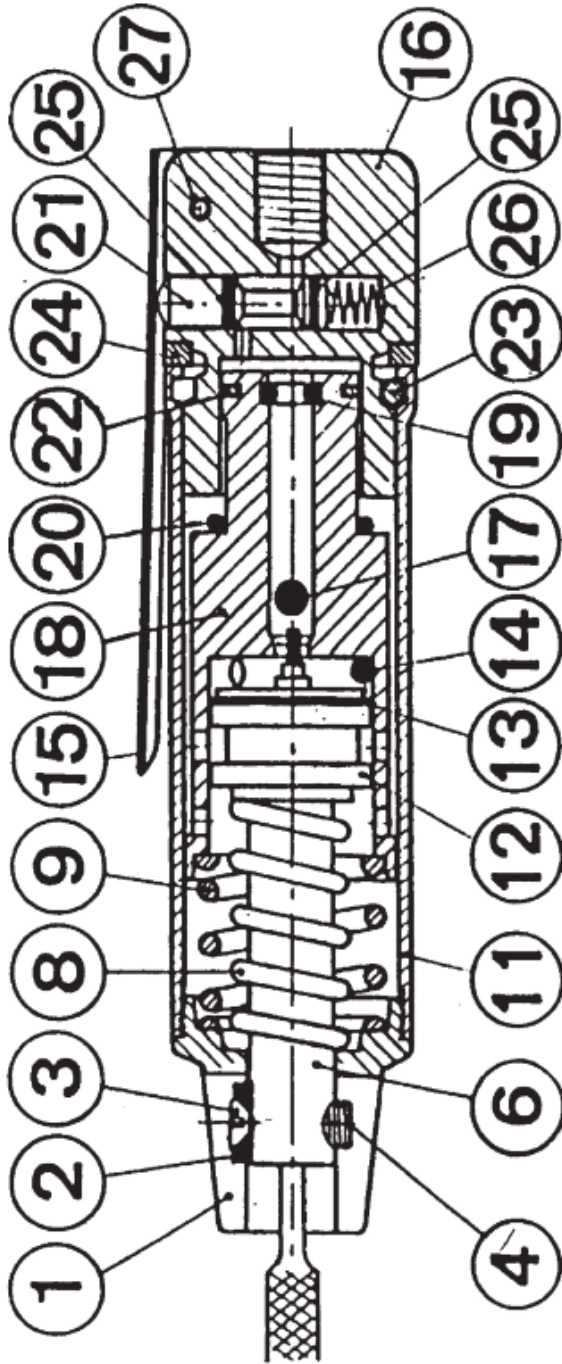
This tool is designed and manufactured to last a long time if properly maintained, and all parts are available as spare parts. If you want to recycle it for any reason, please dismantle it completely, degrease it, and send the different materials separately for recycling according to local laws and regulations.

Accessories

FRV-110 is delivered without a file so that you can choose the optimal one for your job.

Spare Parts

Use only original IPT spare parts for any replacement! Other parts may result in hazardous conditions, decreased performance, increased wear, and damage to the tool.



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|------------------------------|----------------------------|------------------------------------|
| 1. F-110-01 Front | 13. S-100-13 Piston Ring | 22. S-100-22 Piston Ring |
| 2. S-100-02 Guide | 14. S-100-14 Limit Ring | 23. S-100-23 Curved Cylinder |
| 3. S-100-03 Screw | 15. F-110-15 Throttle | 24. S-100-24 Lock Ring |
| 4. S-100-04 Lock Screw | 16. F-110-16 Rear | 25. S-100-25 O-ring (2 pcs needed) |
| 6. F-110-06 Piston Extension | 17. S-100-17 Ball | 26. F-110-26 Valve Spring |
| 8. S-100-08 Spring | 18. S-100-18 Cylinder | 27. S-100-27 Pin |
| 9. S-100-09 Spring | 19. S-100-19 Retainer Ring | 29. S-100-29 Key (Not Shown) |
| 11. F-110-11 Housing | 20. S-100-20 O-ring | |
| 12. S-100-12 Piston | 21. F-110-21-ss Valve Stem | |