

Engraving Pen G-400

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.

Table of Contents

Technical data..... 3

Thank you for choosing a tool from IPT Technologies 4

Intended use..... 4

Important safety notes 4

Warnings..... 4

Warranty 5

Instructions for use 5

Maintenance 7

Disposal..... 7

Spare Parts 8

Technical data

Length	140 mm
Weight	0,15 kg
Frequency of Strokes	600 Hz
Maximum air Flow	0,6 l/s
Air Pressure	6-6.5 bar
Maximum Air Pressure	8 bar
Maximum Air Temperature	35° C
Hose Coupling	1/4 inch
Size of Hose Recommended	1/4 inch
Vibration Level according to ISO 8662-1	1,4 m/s ²
Sound Level according to ISO 7574/2	75 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 Engraving Pen / Air Scribe G-400 is an advanced actively vibration-damped engraver with a low noise level compared to other industrial-strength engravers. It features operation that is virtually vibrationless without any compromise in performance or reliability. The high frequency and low vibration level provide excellent performance on metals, glass, ceramics, plastics, etc., with a maximum of operator comfort. Following these simple instructions will ensure a long life of excellent operation.

Intended use

This tool is intended for professional use only. Neither the tool 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.

The G-400 is designed for engraving.









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 stylus 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.
-  Use only accessories designed for this tool.
-  Do not use a bit that is cracked or deformed.
-  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 G-400 Engraving Pen 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 always been 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 engraving pen 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, as this may damage the tool. Use a regulator set to 6.5 bar. The G-400 comes with a 3 mm ID tubing with an ¼ inch fitting at the end. Connect this to ¼" hose or larger. 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 is strongly recommended.

Operation

The grip (10) also serves as the throttle. Rotating the grip (10) so it moves higher up on the housing (12) will start the engraver. The scribe will have full power before the grip comes to a stop. Do not overtighten! Rotating the opposite direction will decrease the power until the engraver stops. After several further turns, the air flow will cease, and finally, the housing and grip will separate from each other.

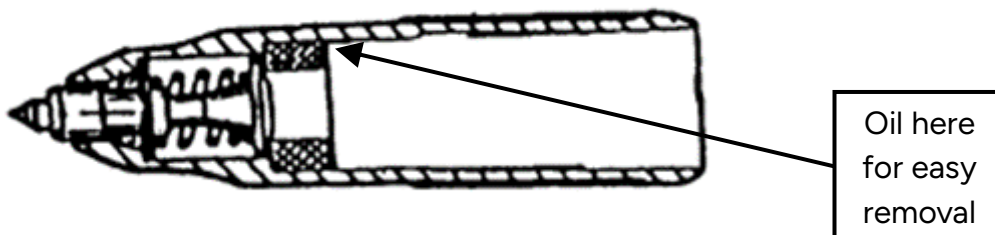
When operating, don't bear down excessively on the tool. Guide the engraver and allow the bit to do most of the work itself. Find the best angle to the work surface for smooth operation.

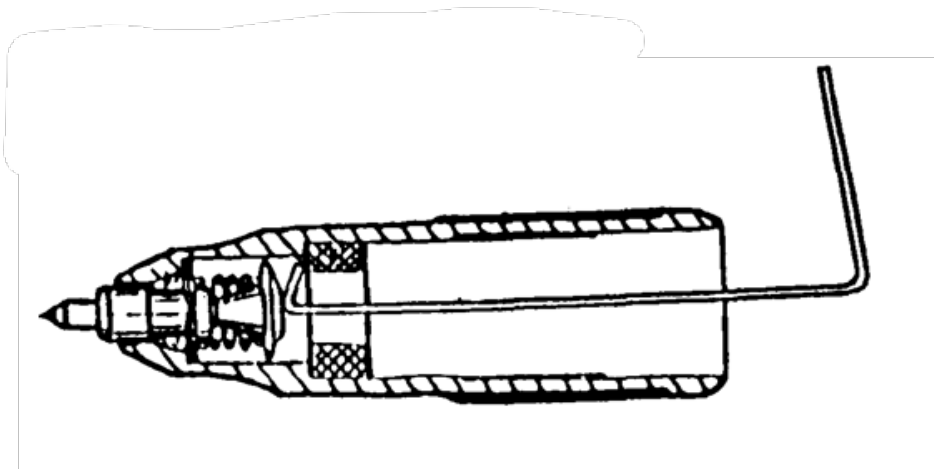
If the compressed air supply to the tool is interrupted, then rotate the grip into the position or disconnect the tool.

Bit replacement

Refer to the sectional view, the parts list, and the sketch below.

1. Separate the grip (10) from the housing (12) by unscrewing it clockwise.
2. Turn the grip(10) upside down and tap it gently against a workbench to remove the actuator (6).
3. Push the bit (1) firmly into a piece of wood to move the bit and the internal parts a few mm up into the grip.
4. Each spare bit comes with a wire as per the sketch (diameter 1,5 mm). Insert it into the grip and push down the top flat part of the bit (1) so the wire can be positioned per the sketch. Gently pull out the sleeve (5) from the grip. Use oil for easy removal.
5. The bit assembly (bit (1), bit guide (2), muffler (3), and spring (4)) can now easily be removed from the grip (10).
6. Pull out the bit (1) from the assembly and replace it. Rotate the new bit until it drops into position and is flush with the spring. Check that the spring stays flush with the bit guide.
7. Return the bit assembly into the grip.
8. Insert the sleeve (5) into the grip and push down until it rests straight against the ledge in the grip.
9. Return the actuator (6) into the grip and screw the grip back on the housing.





Maintenance

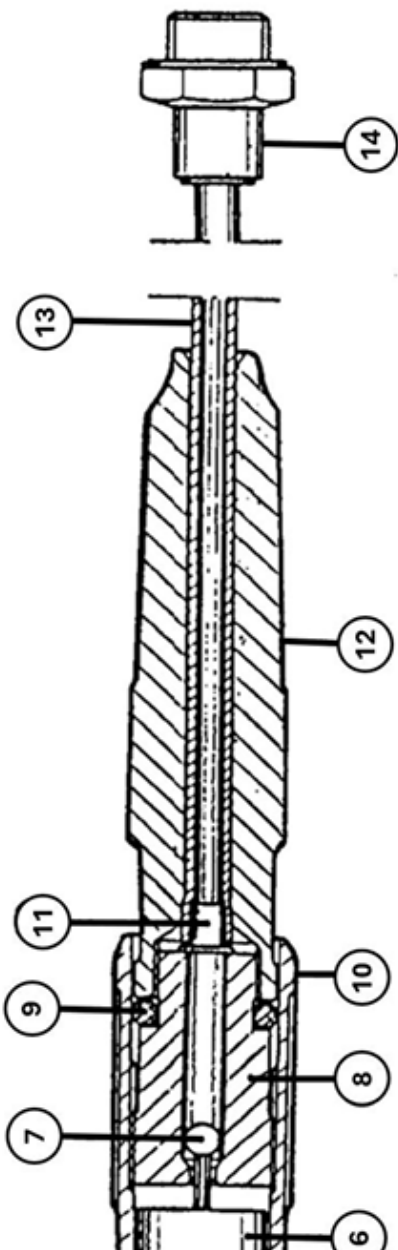
The G-400 Engraver doesn't need any lubrication. Excessive amounts of oil in the air should be avoided.

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.

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.



- 6. G-400-06 Actuator
- 7. G-400-07 Ball
- 8. G-400-08 Valve Seat
- 9. G-400-09 O-ring
- 10. G-400-10 Grip
- 11. G-400-11 Nipple
- 12. G-400-12 Housing
- 13. G-400-13 Tubing
- 14. G-400-14 Inlet with Washer