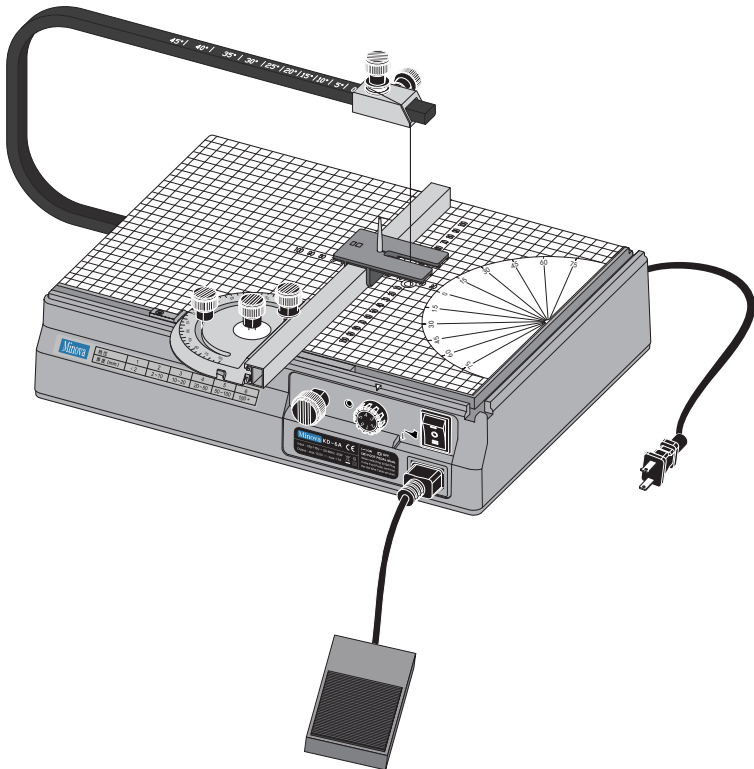


# MINOVA

## Manual KD-6A



**Note:** The picture above shows a full set of accessories for KD-6A on the manual. Maybe you select some of them according to your own need/order. Please refer to the actual kit that you purchased .

Dear customer!

Thank you for your purchase!

Please read the enclosed safety and operating instructions before you use the KD-6A the first time in order to ensure safe and proper handling.

## WARNING

Some fumes or gases created by soldering, welding or cutting when using these products can contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

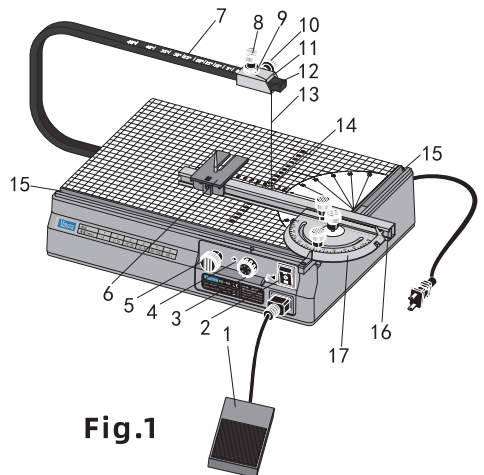
- lead from lead-based soldering wire,
- flame retardants from flame resistant insulation Styrofoam.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well-ventilated area, and work with approved safety equipment. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## Overall view(Fig. 1):

- |  |                         |
|--|-------------------------|
| 1. Foot Switch                                 | 12. Guide Slot          |
| 2. — ON, ○ OFF, = FOOT PEDAL Mode              | 13. Guide Wire          |
| 3. Temperature Knob                            | 14. Lower Wire Guide    |
| 4. Standby LED                                 | 15. Slot for Angle Stop |
| 5. Knurled Screw for Clamping the Cutting Wire | 16. Extension Rail      |
| 6. Circle Cutting Attachment                   | 17. Angle/Miter gauge   |
| 7. Overarm                                     |                         |
| 8. Screw for Wire Spool                        |                         |
| 9. Wire Spool                                  |                         |
| 10. Screw for Spool Carrier                    |                         |
| 11. Spool Carrier                              |                         |

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**Fig.1**

## Description of the device

With KD-6A you can cut polystyrene in a clean and safe way. The standard equipment includes a spool with cutting wire ( $\Phi 0.18\text{mm}$ , length 5m) and an adjustable angle stop with an extension.

## Technical data

Countries/Regions:	US, JP	DE, UK, AU
Voltage:	Primary 100-115 Volt, 50-60Hz Secondary max.10.5 Volt, 60Hz	Primary 220-240 Volt, 50-60Hz Secondary max.10.5 Volt, 50Hz
Power rating:	max.25watt	
Secondary current:	max.1.7 A	
Dimensions of work surface:	370 x 260 mm	
Max. cutting height:	14 ½" x 10 ¼" (370 x 260 mm)	
Throat:	13 "(350 mm)	
Weight:	8 lb (3.6 kg)	

For use in dry environments only  
Protection class II device

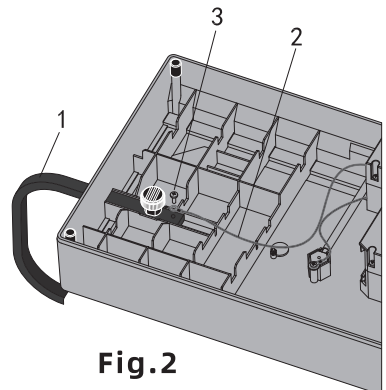


## Additional safety instructions

1. Provide good ventilation, when using the device
2. Observe the material suppliers safety instructions when cutting
3. The cutting wire is hot. **Risk of skin burn!**
4. Do not use the device near curtains or other combustible materials.
5. Do not leave the device unattended when it is switched on.
6. Only use the supplied cutting wire or original KD-6A replacement wire, otherwise the transformer can become overloaded.
7. Switch off the device after use.

## Assembling KD-6A

1. Fit the overarm 1 (Fig. 2) underneath the device by using the enclosed knurled screw. Fasten the cable 2 to the overarm with the screw 3. Tighten the screw well to ensure good electrical contact (10.5 volt low voltage). Slide the spool carrier 11 (Fig. 1) on to the arm and fasten it with the screw 10.



**Fig.2**

2. The table on the front of the device serves as a guide. The best way to find the ideal temperature is to try different temperatures yourself. For example, straightforward cuts you use a high temperature, for complicated shapes a lower temperature. Please note that too high temperatures will cause untidy edges.

3. Now move the workpiece through the wire with a light pressure and even speed. Be aware that too high pressure in the direction of the cut when cutting complicated shapes will tend to bend the wire.

**Note:** It is normal that the wire extends somewhat after being heated for the first time. Stretch the wire slightly by the first heating and tension it again. The wire will now retain its length.

## Cutting Type

### 1.Miter Cutting

Miter cutting can be done in two ways with KD-6A: by adjusting the spool carrier on the overarm or with the adjustable angle gauge.

Adjusting the spool carrier: loosen the screws 1 and 2 (Fig. 3) and select the required angle by sliding the spool carrier. Tighten the screw 1 again and tension the wire as usual.

**Note:** Adjusting the spool carrier will lengthen the heated part of the wire and thus increase the electrical resistance. The temperature must be adjusted accordingly.

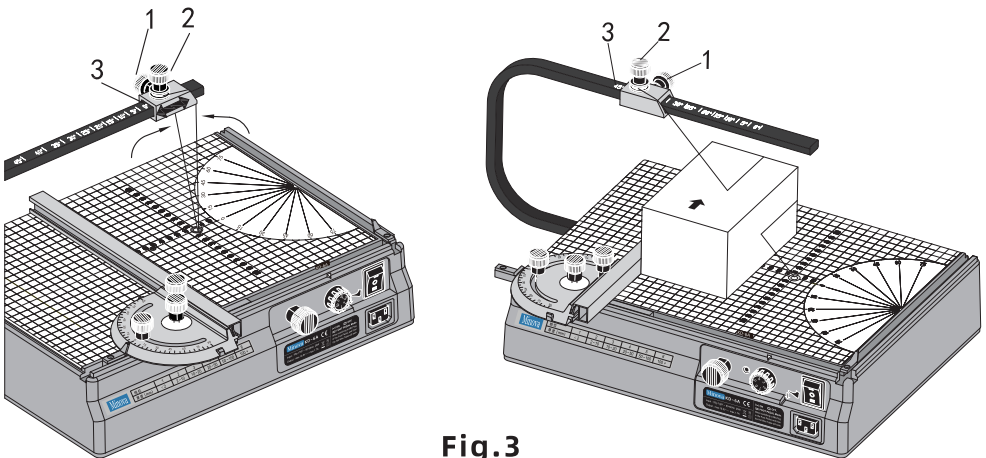


Fig.3

Working with the stop: Select the required miter on the angle stop and secure the adjustment with the screw 1 (Fig. 4). Move the extension 2 so that you can pass the cutting wire without difficulty. Press the workpiece against the stop and guide the stop along the slot.

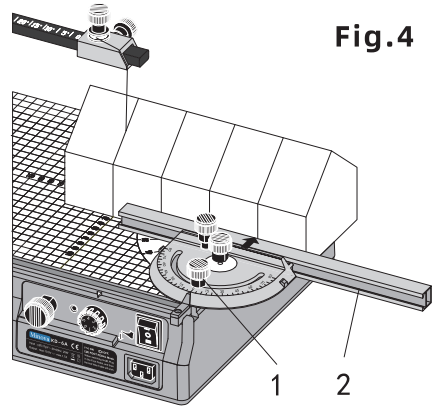


Fig.4

## 2. Parallel Cutting

The stop can be fixed for parallel cutting. Turn the screw 1 (Fig. 5) to clamp the stop in the slot. Guide the workpiece past the cutting wire along the stop.

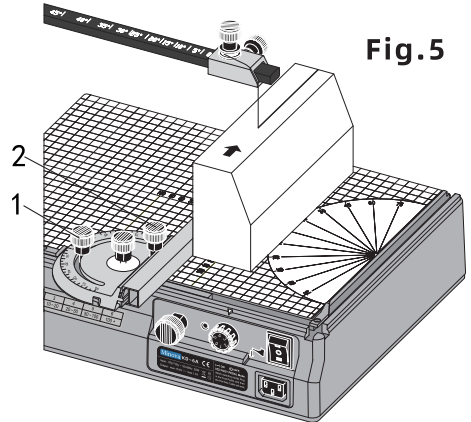


Fig.5

## 3. Small sections of long profiles

Small sections of long profiles can best be cut by laying a waste piece 1 (Fig. 6) between the stop the work piece and then cutting against the stop. The cutting wire then cuts into the waste piece and the edges remain clean.

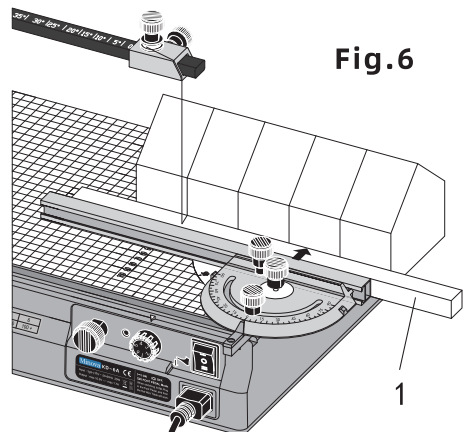


Fig.6

## 4. Cylindrical Cutting and Conical Cutting

You can fit circle cutting attachment 2 on the Extension 16 (Fig.1) to cut out the cylinder or the cone. By controlling foot switch 1 (Fig.7 & 8) and then releasing your hands to turn the workpiece, the cylinder or cone can be cut out accurately.

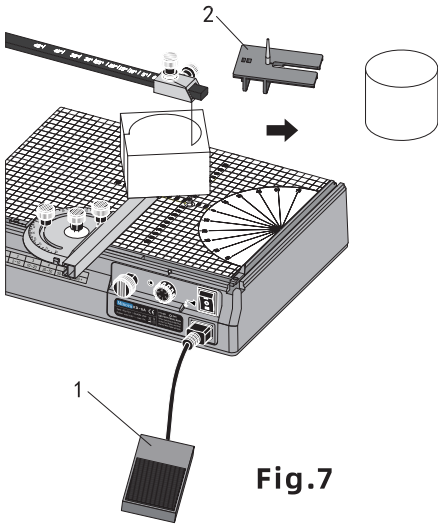


Fig.7

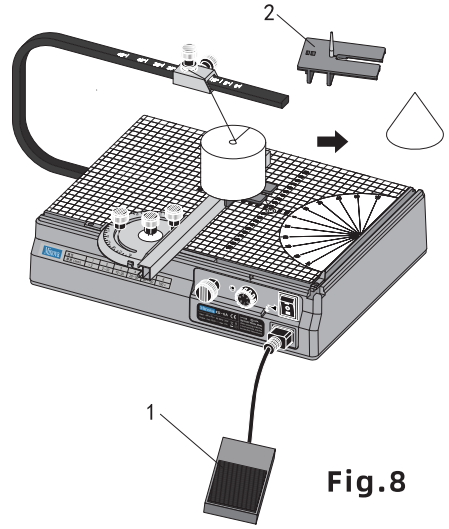


Fig.8

### Important hints:

- When cutting double miter (e.g. roof), don't remove the cut off part after the first cutting. Use it as an underlay for the second cut.
- The wire has a higher temperature at the exit side of the workpiece, which may cause surface melting. To prevent this, the wire can be cooled by blowing on it.
- The cutting wire normally breaks above the guide bushing. Insert the wire a few inches further in the lower wire guide and fasten it again at regular intervals to prevent the wire from breaking.

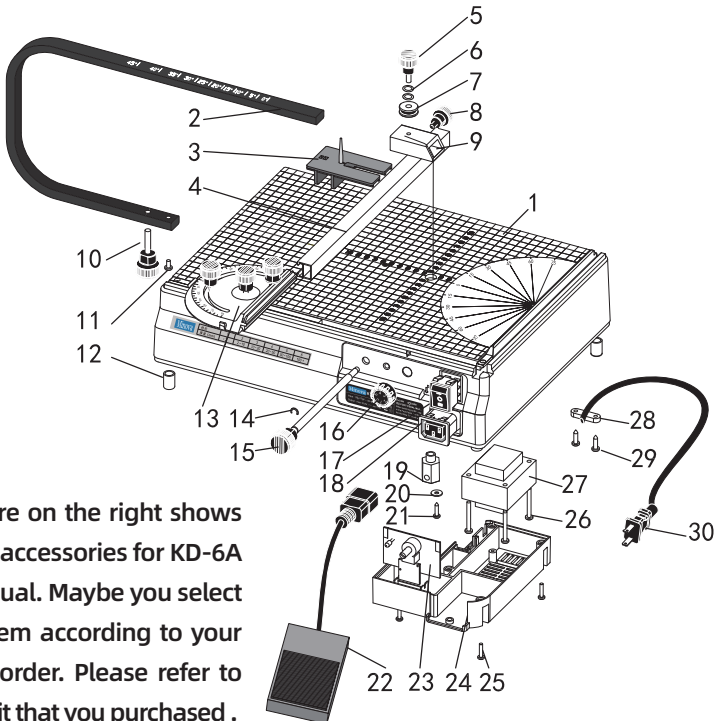
### Maintenance , cleaning and care

**Attention:** Disconnect the mains plug prior to every adjustment, maintenance measure or repair!

**Note:** Every device is dirtied when working. Cleaning is therefore essential. To ensure a long service life, however, the machine should be cleaned with a soft cloth or brush after each use. Mild soap or other suitable cleaning agent may be used in this context. Solvents or cleaning agents containing alcohol (e.g. petrol, cleaning alcohols, etc.) should be avoided , since these can attack plastic casings.

## KD-6A

- 01 Housing
- 02 Overarm
- 03 Circle Cutting Attachment
- 04 Extension
- 05 Knurled Screw Long
- 06 Washer
- 07 Cutting Wire  $\Phi 0.18\text{mm}$ , Length 5m
- 08 Knurled Screw Short
- 09 Slider
- 10 Knurled Screw for Overarm
- 11 Contact Screw
- 12 Rubber Foot
- 13 Angle Gauge
- 14 Clamp Spring
- 15 Knurled screw for Wire
- 16 Temperature Knob
- 17 Switch
- 18 Socket for Foot Switch
- 19 Clamping
- 20 Washer for Clamping
- 21 Screw for Clamping
- 22 Foot Switch
- 23 Circuit Board
- 24 Lower Housing Cover
- 25 Screw for Lower Housing Cover
- 26 Screw for Transformer
- 27 Transformer
- 28 Strain Relief
- 29 Screw for Strain Relief
- 30 Power Cord



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