



SWI/007

KESCRG SAFE WORKING INSTRUCTIONS

FOR

BRICK JIG



1. Revision Table

Revision	Date	Comments
1	01/03/2012	First Issue following review of draft

2. Objectives

- 2.1. The objective of this safe working instruction is to enable KESCRG members and others working on canal restoration projects to work safely.
- 2.2. This document will form part of a suite of documents for safe site working; and will be used for instruction and reference purposes.
- 2.3. This document refers specifically to a brick jig, made to make cutting bricks and other material on site easier and safer.

3. Introduction

- 3.1. The Brick Jig has been made to enable safe cutting of bricks or blocks on site with a Stihl Brick Saw or similar abrasive cutter.
- 3.2. The Brick Jig is simply a clamp which holds the brick in place enabling cutting to take place without the need to place feet close to the cutting edge of the Brick Saw.
- 3.3. The Brick Jig can be disassembled for ease of storage by unscrewing the clamp screw arrangement.
- 3.4. To avoid damage, carry holding the handle, **NOT** the clamp screws.

4. Health and Safety and Working Environment

4.1. Hazards from Brick Cutting

- Refer also to the Brick Saw Risk Assessment and the SWI for the use of the Brick Saw. These documents are in the suite of safety documents for safe site working.
- The main points are summarised below
- The cutting disc is sharp and rotates at high speed. Although a guard is fitted it may be possible to cut oneself on the disc.
- Dust and debris from cutting, use water feed and carry out operation away from others.
- PPE is required: long "site" or overall trousers, safety boots, mask and eye protection, ear protection, hard hat and high viz clothing.
- Possible burns from hot exhaust and blade

4.2. COSHH (Control of Substances Hazardous to Health)

- Inhalation of brick dust, see PPE and use of water feed to reduce dust.
- Eyewash required on site.
- Petrol and lube oil potential for dermatitis, use suitable PPE.
- Petrol is flammable, take care when filling/transferring fuel.

4.3. Manual Handling

- Assembling the brick jig is low risk (may come fully assembled), only hand-held screwdriver required.
- Jig is lightweight, no risk.
- Bricks are light. No perceived risk.



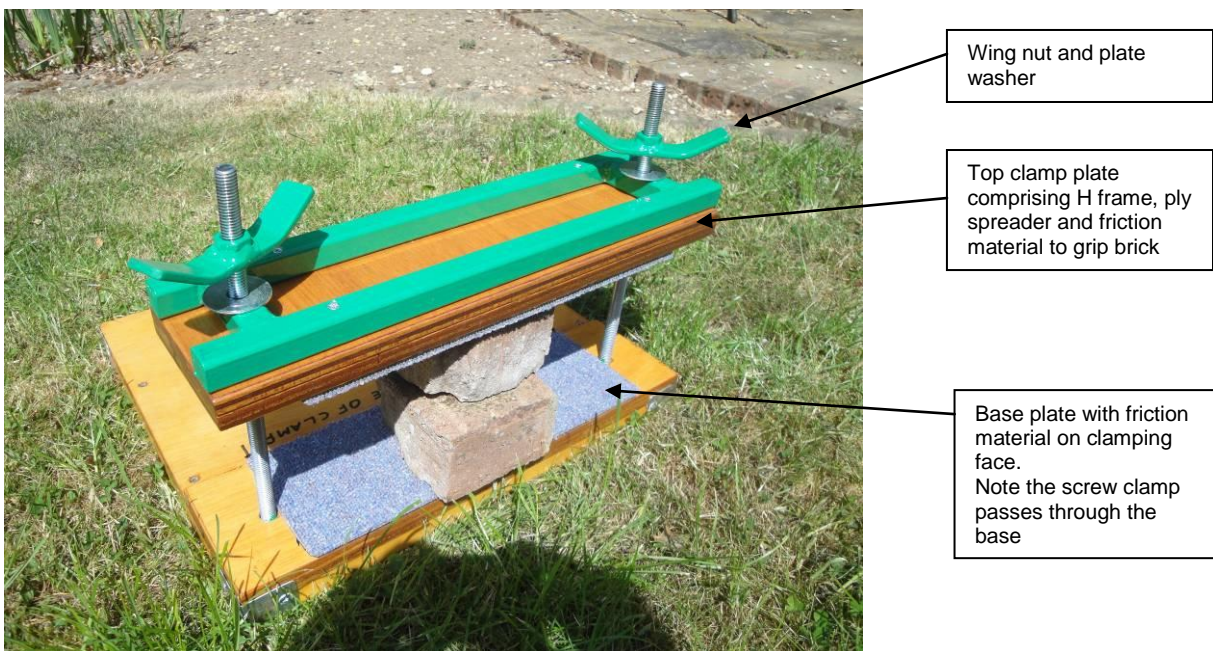
- Cut edges of brick can be sharp. Minimise risk by using gloves.

4.4. PPE. The following Personal Protective Equipment (PPE) is mandatory:

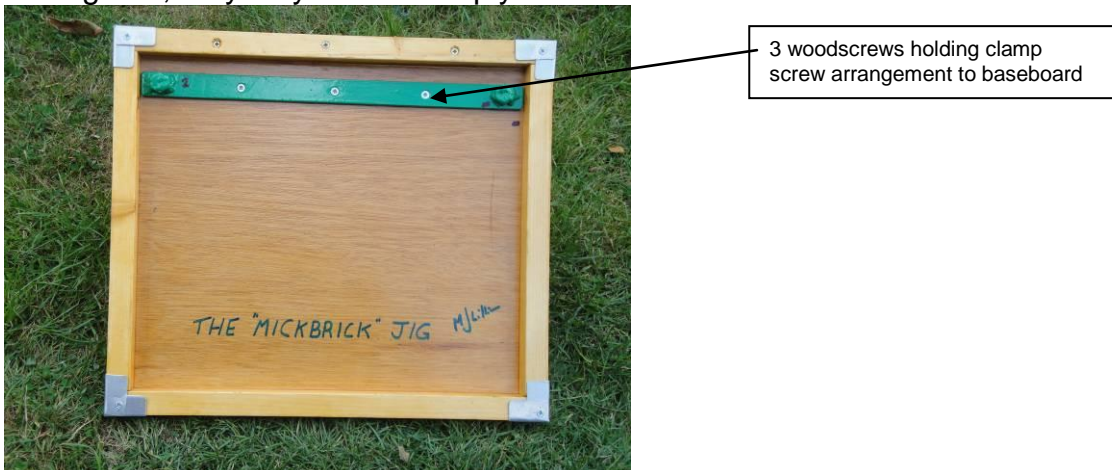
- Hard hat, safety boots and fastened high viz jacket (no loose bits to catch in machine). This applies to any site work.
- Dust Mask
- Safety eyewear and ear protection when using brick cutter.
- Gloves
- Eye Wash available on site

5. Pre-start checks and maintenance

5.1. Jig is simple in construction. The jig consists of a base, clamp screw arrangement, top plate, wing nuts and plate washers. See photo below



If not assembled then fix screw clamp to the baseboard, screws shown below, do not overtighten, they only attach into plywood.



Note that all parts are marked with 1 or 2; all 1's should align, all 2's should align.

5.2. Carry out following pre-use checks:

- Check all parts are present and ensure all woodscrews are reasonably tight using Philips screwdriver.
- Visually inspect the clamp screws for damage. Ensure they are reasonably free from dirt and dust.
- Operate wing nuts, check they move freely, if not then check they are not cross-threaded. Remove and refit if cross-threaded.
- Lift the top clamp plate, check it moves freely. If not then check for debris.

Carrying out pre-start checks will save damage and will save time. ...**Read the Instructions first, not after it's broken!**

5.3. After each use clean off all loose dust and dirt. When dry lightly lubricate screw clamp threads with WD 40 or light oil. Apply sparingly and operate wing nuts to spread lubricant.

6. Using the Brick Jig

6.1. First mark out the brick(s) to be cut with a chalk line. Open the jaws of the clamp so the brick(s) may be placed inside. Ensure the chalk line is clear of the clamp faces and projects sufficiently so that the cutter blade will clear the brick jig. Failure to do so will damage the brick saw blade (expensive) and damage the jig.

6.2. With brick in position spin the wing nuts so that they "bite" down evenly onto the top plate. Gently tighten evenly both the wing nuts so they are parallel with the long face of the jig, checking the brick does not move. Do not overtighten the wing nuts. If all OK the start cutting following the Safe Working Instructions for the Brick Saw. Place foot or heavy weight on the "non-cutting" face of the Brick Jig to prevent movement of the jig.



Brick in place, securely held. Note that the wing nuts need to be made parallel. In this picture one is not!

Note that the brick line is well clear of the edge of the Brick Jig

6.3. If possible it is ideal that the brick sticks out slightly from the back edge, this ensures full contact with the friction surface, ensuring better grip.

6.4. Note that up to 3 bricks can be held at once. See photo below:



6.5. Angle cuts can be undertaken



Note there is still plenty of clearance between cut mark and Brick Jig.

7. After Use

7.1. Clean off all loose dust and dirt. Allow to dry and clean off any dry dirt. Lightly lubricate the screw clamp threads using WD 40 or light oil. Operate the wing nuts to ensure distribution of lubricant.

7.2. If required remove the woodscrews holding the clamp screws in place and remove it from the base plate. Keep screws safe by part re-fixing in the baseboard. Similarly refit the plate washers and the wing nuts back on their screws.