



Transfer scribe for log cabin construction

For transferring the contour lines from one log to a second one directly above it



Material:

Dividers: stainless steel

Spirit level body: ABS plastic

Vial: acrylic

Vial fluid: oil-based



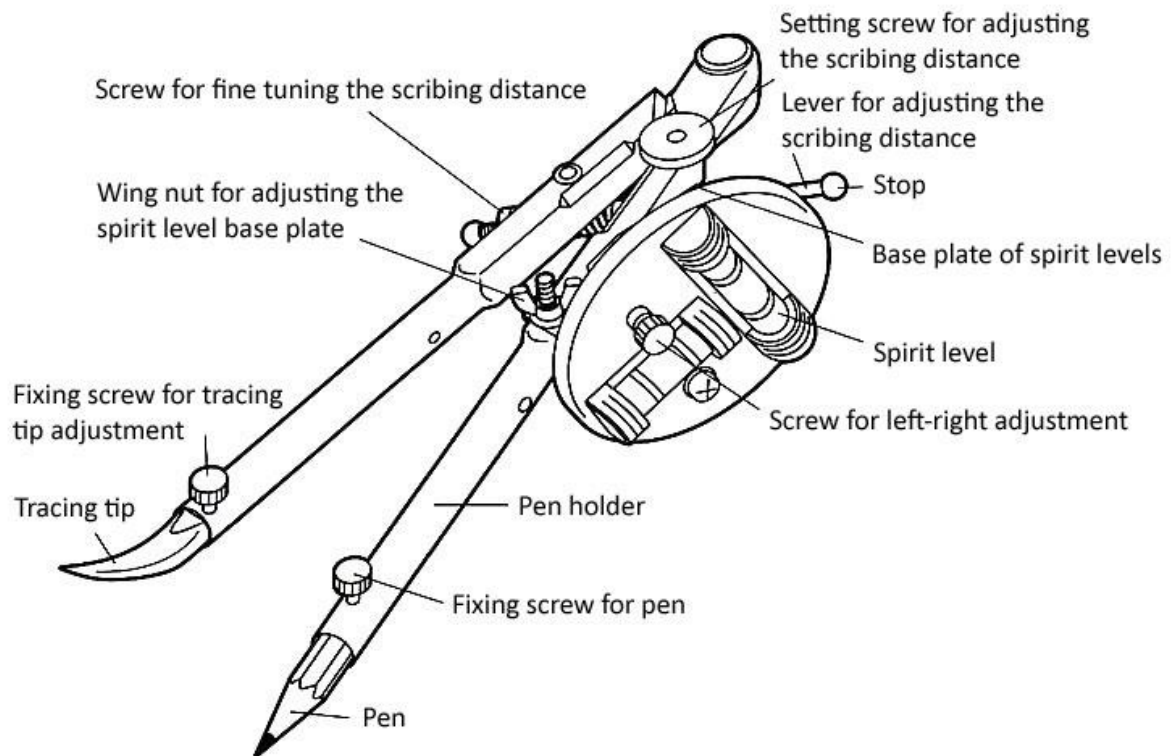
Before using the scribe for the first time read the safety precautions and make sure you understand the operating instructions. Store these user instructions in a safe place for later reference.



Pens:

On dry surfaces the pen leaves a black line which can be erased again.
On a moist surface the line colour changes to blue and cannot be erased anymore.

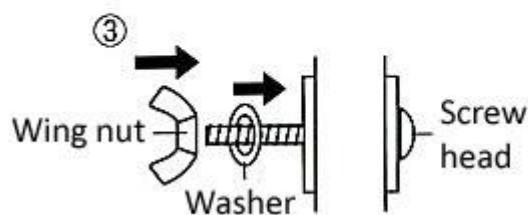
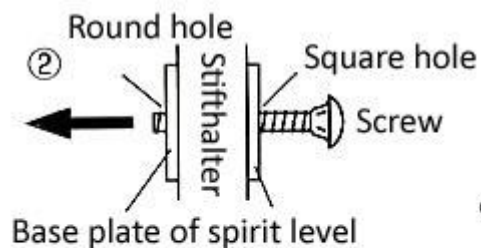
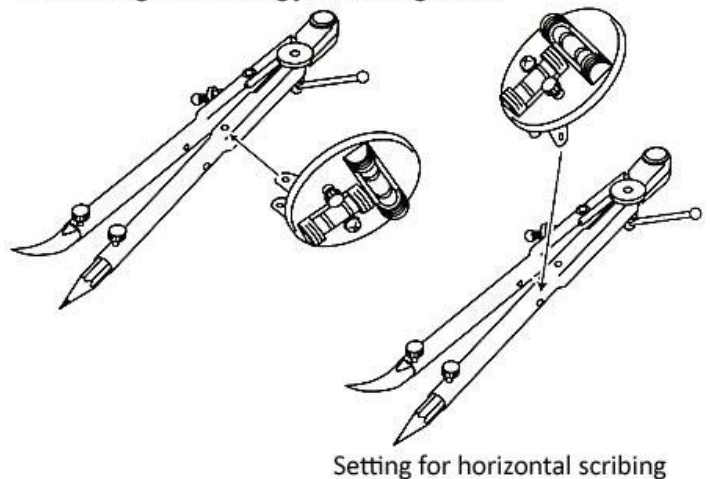




Mounting the spirit level:

1. Place the base plate over the appropriate hole on the pen holder (there are two holes, at right angles to each other; one is for vertical, the other for horizontal scribing).
2. To connect the base plate with the pen holder insert the fixing screw in the square hole.
3. Thread the wing nut onto the other end of the screw and tighten.

For scribing interlocking joints and grooves



Before starting

- Insert a pen or pencil into the penholder prior to scribing.
- If you want to scribe two lines at the same time, replace the tracing tip with a pen or pencil.

Application

1. Align the timber



2. Select an approximate scribing distance This value depends on the log diameter and the carpenter's technique. For the present model calculation assume a preliminary scribing distance of 75 mm.



Log with preliminary scribed notches/saddles

A: Scribing distance = A + 12 mm - 75 mm

B: Scribing distance = B + 12 mm - 75 mm

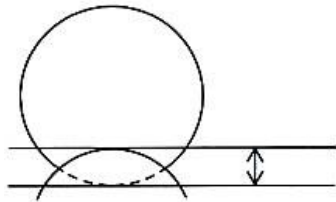
Machining the log will result in different values for A and B and consequently also for the scribing distances.

In the above drawing the value for A = 126 mm

A	126 mm
- Intersection of timber logs*	12 mm
- Estimated scribing distance	<u>75 mm</u>
Preliminary scribing distance	63 mm

In the drawing the value for B = 105 mm.

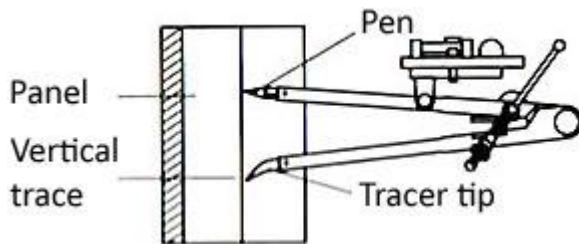
B	105 mm
+ Intersection of timber logs*	12 mm
- Estimated scribing distance	<u>75 mm</u>
Preliminary scribing distance	42 mm



Intersection here refers to the intersection of the logs. The actual intersection depends on the cross section of the log and the technique of the carpenter.

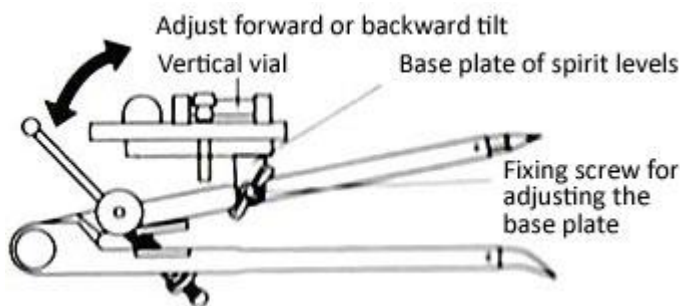
12 mm is a sample value for the model calculation.

3. Set the dividers to the approximate scribing distance and fix this setting with the locking screw. The adjusting screw lets you to fine tune the setting.
4. Align the two legs of the dividers along a vertical tracing on a panel with the pen holder above and the tracing tip below.

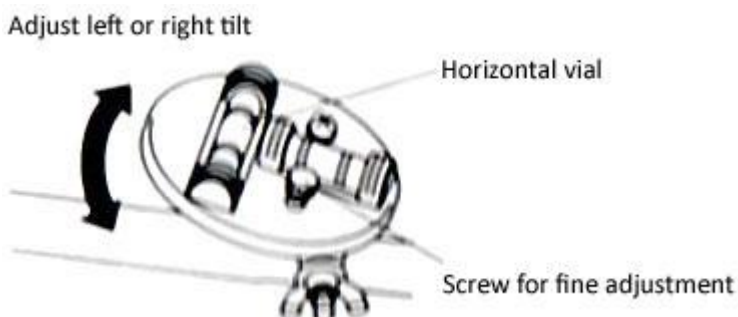


This is the position you must hold in order to adjust the spirit level(s).

First adjust the forward or backward tilt of the spirit level. Adjust the base plate so that the bubble of the vertical vial is exactly in the middle of the graduation lines. Fix the base plate in this position.



Then adjust the left or right tilt of the spirit level. Use the setting screw to adjust the



tilt so that the bubble of the horizontal vial is exactly in the middle of the graduation lines.

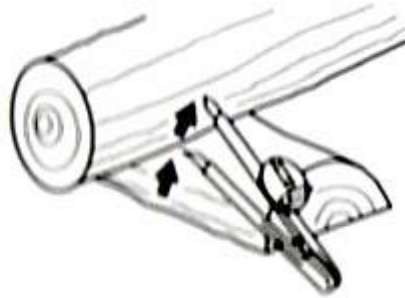
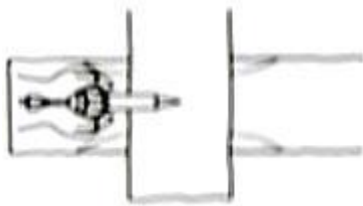
5 Preliminary scribing

Hold the dividers with both hands, making sure that you centre the bubble in both the spirit levels.



It is important that you hold and guide the scriber with a steady hand and that you do not bump the spirit levels.

While you trace the contour of the lower log with scriber tip and and mark the log above with the scriber pen, make sure the bubbles are always in the middle of the vial and that you guide the dividers as a whole.



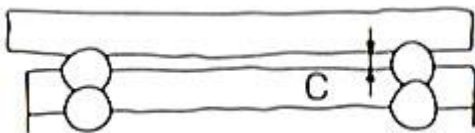
Hold the dividers with both hands and always trace the contours from the edge to the middle of the log.

6. Roughly machine the preliminary scribed notches for the interlocking joints.

7. Replace the roughly machined log.



8. Now determine the scribing distance for final machining.



First measure the largest distance between the two logs. In the model calculation the value $C = 76 \text{ mm}$.

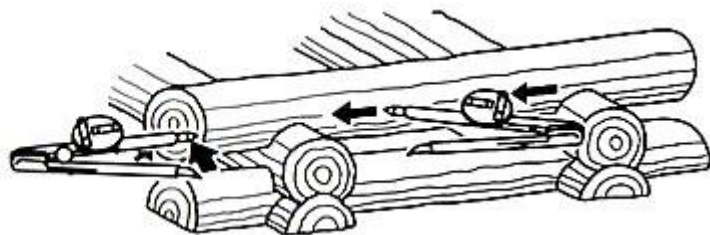
C	76 mm
+ Allowance for intersection (to compensate for unevenness)	<u>3 mm</u>
Final scribing distance	79 mm

The allowance for final scribing takes account of irregularities of the log. It depends on the log selection and the carpenter's technique (here 3 mm is again a sample value).

9. Open the legs of the dividers to set the scriber to the final scribing distance (see step 3).
10. Adjust the spirit levels using a panel with a vertical tracing, as described in step 4.
11. Final scribing
Proceed exactly as described in step 5.

Scribing the interlocking joint

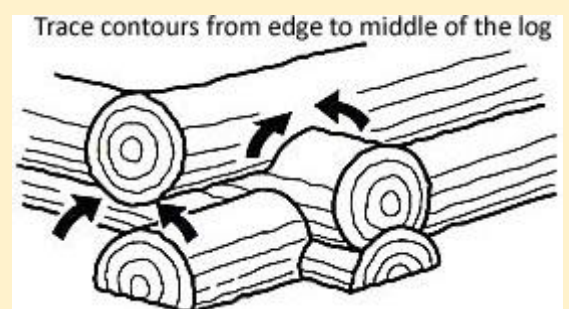
Scribing the groove on the underside of the log



12. Machine the log according to the scribing.

Important scribing tips

It is better to trace the contours from the edge to the middle of the log than to trace a single arc. This method gives you a more accurate and cleaner line.



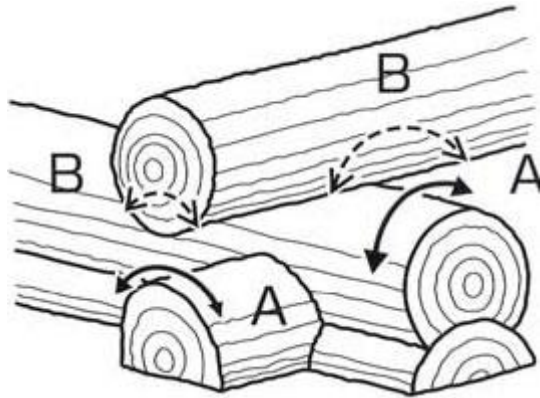
Special features

The tracing tip can be replaced by a second pen so that you can scribe two lines at the same time.

The two spirit levels are located in the forward section, where they are in full view, to make it easier to keep a check on the vertical alignment of the scriber during transfer scribing.

Scope of use

This scribe is used exclusively for transferring contour lines. In this context scribing is the exact transfer of contour lines from one log to a second one directly above it when building a log wall.



The contours of A are transferred to B.

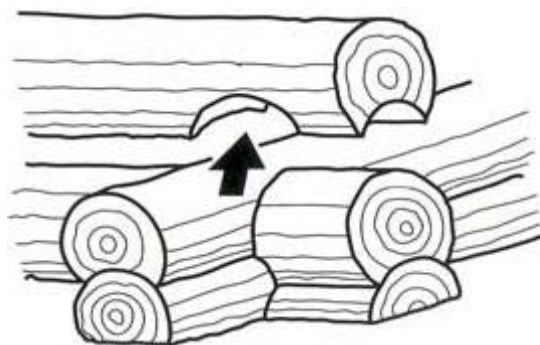
For scribing two lines at the same time a pen is inserted into both legs of the dividers. In this way both logs A and B can be scribed at the same time (normally just log B is scribed).

Once the upper log B has been machined as scribed it is replaced in its previous position. If both logs were scribed at the same time, the scribing on the lower log A would now be visible and you would see which section on the lower log still had to be machined.

The scribe is an indispensable tool for scribing interlocking joints (the notch at the point of interlocking is also called saddle) and grooves.

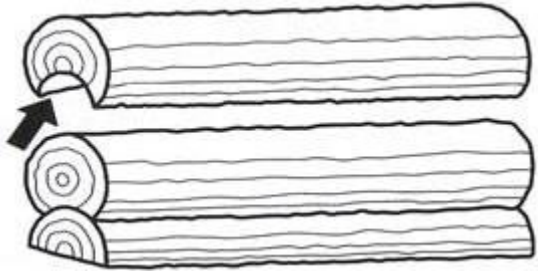
Interlocking

If logs are positioned at right angles to each other a notch is machined at the point of interlocking. This increases the accuracy of the log wall.



Groove

In this context, groove refers to the crescent-shaped (in cross section) cut that is removed from the underside of a log.



Safety precautions

- Protect the scribe from blows and excessive mechanical forces which could cause the scribe to lose its shape or damage the spirit levels. If damage causes a spirit level to fracture and liquid gets into your eye, rinse your eye with clean water and consult an eye specialist. If your skin gets splashed wash thoroughly with water and soap.
- Do not use the scribe near where you suspect electric cables may run.
- Do not take the scribe apart or shorten it.
- The spirit level has a measuring accuracy of 0.5 mm/m.
This corresponds to $\pm 0.0286^\circ$.
- Once the spirit level has been adjusted, take care not to bump it when scribing.

Storage

Remove any dirt and moisture once you have finished using the scribe. The scribe was painted with a rust preventative, but it can rust if kept in a damp environment for a long time.

Store the scribe safely away from children.