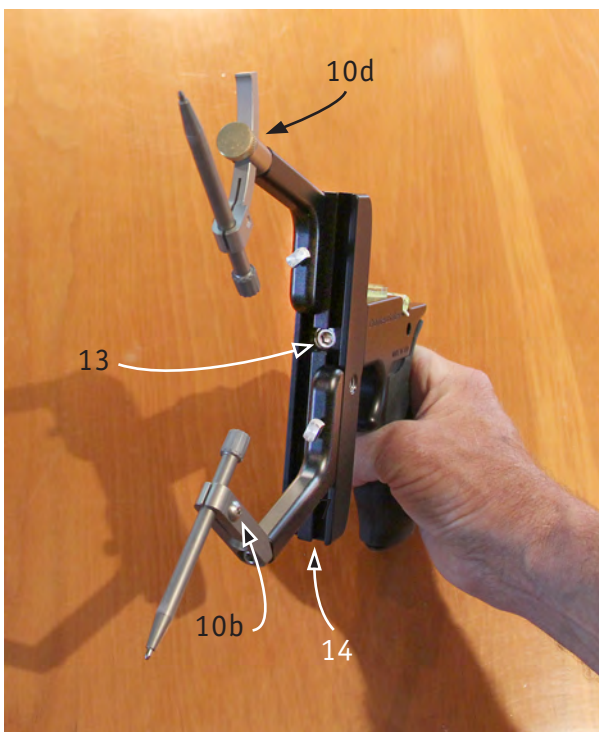
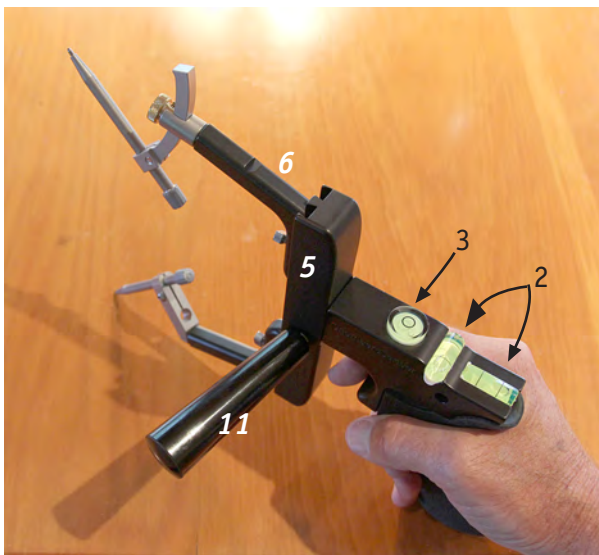
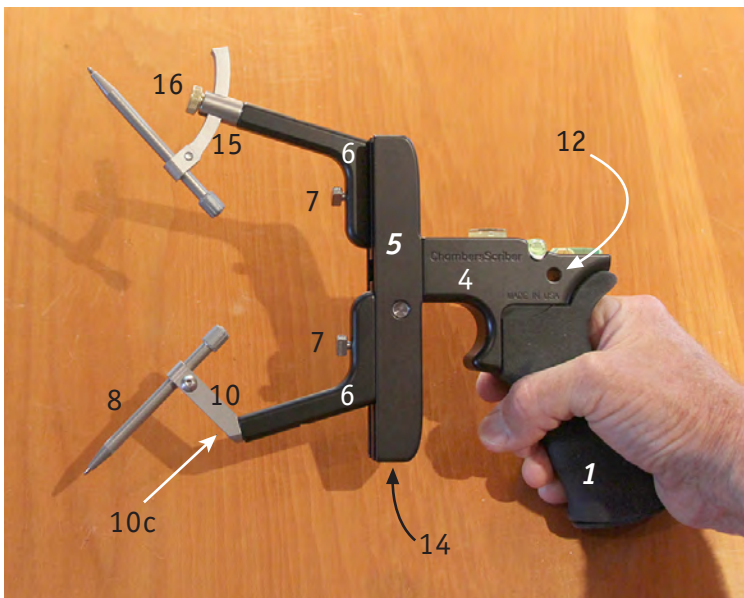


# ChambersScribers V.2 Arc

## Owner's Manual



## Parts List

- 1- ErgoGrip
- 2- Straight bubble vials
- 3- Bullseye vial
- 4- Receiver
- 5- Female slide
- 6- Sliders (qty 2)
- 7- Thumbscrew to lock Slider in place
- 8- Pen tube assembly (tube + cap + refill)  
Pen Refills: #PR-1B (blue) or PR-4B (black)
- 10- Pen arm - straight type
- 10b- Screw (to lock pen in place, 3/32" allen hex)
- 10c- Screw to adjust friction of rotation of arm (1/8" allen hex)
- 10d- Screw to adjust friction of Arc rotation (5/32" allen hex)  
Remove the brass thumbscrew & Arc to see screw #10d
- 11- Side Handle (optional part)
- 12- Lanyard hole
- 13- Bolt for horizontal scribing (3/16" allen hex)
- 14- Hole for adjusting pen length
- 15- Pen arm -- Arc type
- 16- Brass thumbscrew to lock Arc

### Parts Included, But Not Shown:

- Spare teflon washers
- 1/8" allen key hex wrench (for part #10c)
- 3/32" allen key wrench (for part #10b)
- 5/32" allen key wrench (for part #10d)
- 3/16" allen key hex wrench (for part #13)

All parts are available for sale as spare parts

ChambersScriber V.2 with Arc  
Owner's Manual, July 2013  
www.LogBuilding.org  
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## PENS

The ChambersScriber uses Fisher Space Pens inside stainless steel pen tubes. You can order refill pens from my website. There are also retail shops in the USA, Canada, and the EU that sell my scribe, and they sell the refill pens, too. Schroeder Log Home Supply, Timber Tools, and Magard Ventures in North America are three such shops. In Finland and Europe, contact Hirspek Oy, or [www.spacepen.com/internationalinquiries.aspx](http://www.spacepen.com/internationalinquiries.aspx) (this webpage lists distributors in many countries).

Pen refills for these pen tubes are **PR-1B** (blue) and **PR-4B** (black). NOTE: The stainless steel pen tubes are a PERMANENT part of your scribe. Do not discard them!

Fisher Space Pens have been proven over many years of use to be one of the most-preferred ways to scribe logs. They work on wet wood, and in cold and hot temperatures. The ink is permanent, and will not wash off. But they are not invincible. To remove ink from a surface (from log, fingers), to clean a plugged pen ball (nib) try using rubbing alcohol.

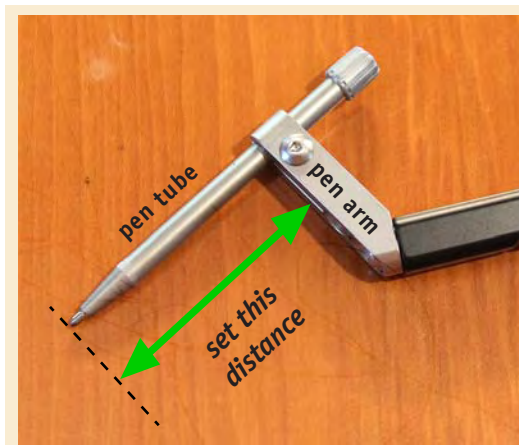
First, insert a refill pen into a pen tube, and screw on the end cap (two photos below). The end cap must be finger tight. If you lose an end cap, note that the end cap is the same as a tire cap (auto or bicycle).



Left:  
pen refill, pen tube and pen cap



Right:  
Pen assembled



### **IMPORTANT !** **SET PEN LENGTH**

The ChambersScribers will work properly *only* if the pen point (nib) is the correct distance from the Pen Arm. Both the Arc arm and the straight arm need to have pen length adjusted.

Refer to the 3 photos below.

And, watch the video [www.LogBuilding.org](http://www.LogBuilding.org)



**Step 1 :** Remove **one** Slider from the scribe, and put a pen tube (with refill) into the arm.



**Step 2 :** Insert pen assembly into the hole in the bottom of Female Slide.



**Step 3 :** Push pen assembly into hole until it stops. Hold the pen arm **tight** against the bottom of the Female Slide. Tighten screw to hold pen tube in place.

## Changing Pens on the Fly

Once the pen tubes have been correctly positioned in the the arms (the process above), then you should be able to change refills "on the fly." When a pen stops writing, or runs out of ink, you can remove the pen cap, and replace the pen refill, put the pen cap on, and keep on scribing.

## ADJUSTING THE SCRIBE SETTING

The distance between pen points is called the "scribe setting" or "scribe distance."

The RED ARROW in this photo shows a "scribe setting."

To change the scribe setting you move one of the Sliders (Part #6). Or you can move BOTH of the sliders. It's your choice.

Loosen the slider thumbscrew (Part #7) to move a Slider. Tighten the thumbscrew on each Slider to lock the slider in place before you start scribing logs.

You *never* need to "plumb" the ChambersScriber on a plumb board.

You can position the two Slider arms anywhere along the Female Slide that you want.



If you find that the Female Slide gets in the way while scribing, then position BOTH Sliders higher (Photo A) or you could position BOTH Sliders lower on the Female Slide (Photo B). The scribe setting in Photo "A" is equal to the scribe setting in Photo "B." Both positions will work. You can also use the Sliders anywhere in-between these extremes. Choose arm positions that avoid pen / log conflicts.

I recommend that you rough notch each new log in order to get a final scribe setting in the range of about 4" to 6" (100mm to 150mm). This might be larger than you are used to, but the ChambersScriber is accurate and easy to use at 6" (150mm), or more.

**SMALL SCRIBE SETTINGS.** Rotate the pen arms until the Sliders and Pens can bypass each other. This allows you to make very small scribe settings, but note that small scribe settings are difficult for ALL scribers. I recommend a final scribe setting for wall logs of 4" (100mm), or more. Rough notch your logs so you get this.

**LARGE SCRIBE SETTINGS.** The ChambersScriber will open to scribe settings of up to 10-1/2" (27 cm).

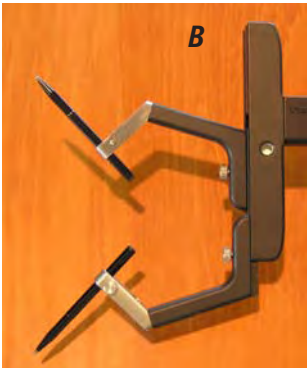
**EXTRA LARGE SCRIBE SETTINGS.** You can buy my optional Long Female Slide that will allow scribe settings of up to 22" (56cm). Some production builders do not rough notch their logs, and so they scribe each log only once, and need a scriber that will open very wide. Scribing valley logs, log purlins, log trusses, and logs for stairs may require very large scribe settings. Watch my website for updates on these, and other attachments.

**WHEN YOU REMOVE A SLIDER, IT MUST BE RE-INSTALLED AS SHOWN IN THE TOP PHOTO.**

*The LEFTHAND slider must point DOWN.*

*The slider in the RIGHTHAND dovetail slide must point UP.*

*See the photo above, and photos on page 1, for proper installation of Sliders.*



## BUBBLE VIALS

The ChambersScribers has 2 straight vials (Parts #2), and 1 bullseye vial (Part #3) to help you keep the pen points plumb as you scribe.

Because some professional log builders prefer bullseye, and other professional log builders prefer straight vials, I put both types of vials on my scriber.

I use the bullseye for notches, and the double vials for long grooves! Try it.

The straight vials are custom made in the USA specially for my scribers. Replacement vials are available from Robert Chambers.

**NOTE: You never need to "plumb" the ChambersScriber on a plumb board. And you must NEVER change pen length to make the scriber "plumb."**



## ROTATING THE PEN ARMS

The Pen Arms (#10) can be rotated to change the angle that the pen touches each log. Rotate the arms by hand—you do NOT use a wrench to rotate the pen arms. This rotation, or swinging, does NOT change the scribe setting; and it does NOT change plumb—you can swing the pen arms whenever you need to, as you are scribing. The pen points stay plumb to each other through any rotation you choose to use. As you rotate a Pen Arm, everything moves EXCEPT the very end of the ballpoint pen (the “nib”)—it stays in one place.

The SpacePens produce a good line when they touch each log at about 90-degrees, so rotate the pen arms to improve the way each pen’s ballpoint tip (nib) touches the log.

Most builders change the pen angle only rarely while scribing a long-groove (“lateral groove”). When scribing a notch it is common to change pen angle frequently. The Pens write best when they hit the upper log and the lower log at about 90-degrees, so the purpose of rotating the Pen Arms is to keep the end of both Pens touching the logs ‘straight on,’ not glancing. **Just hold the pen arm and rotate it by hand. Do not use a wrench.**

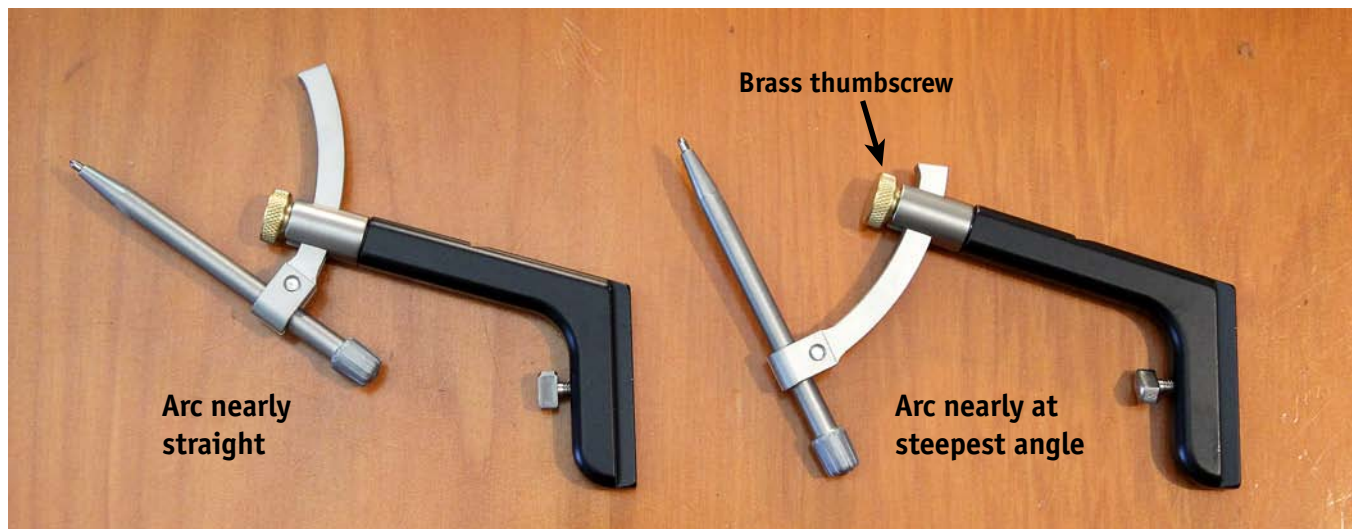
FOR SMALL SCRIBE SETTINGS. Rotate the pen arms until the Sliders and Pens can bypass each other. This allows you to make very small scribe settings.

**Swing Friction**—I have adjusted the friction, and you should try scribing several logs before considering adjusting the friction. Tighten or loosen the Pen Arm Screw (#10c) with an allen key hex wrench to adjust friction. This wrench came in your scriber’s tool kit. The screw has a lock-tight feature that prevents the threads from turning too easily, so it may not be easy to tighten or loosen this screw. NOTE that light friction is all that is needed. You can warm the arm part in hot water (not boiling) to soften the locktite and allow easier adjustment of the screw tension.

**Teflon Washers**—You will see that there is a small teflon washer on both sides of the Straight Pen Arm (#10). Do not remove these washers. A few spare washers were sent with your ChambersScriber. Two thin black washers go under the arm. One white washer goes under the screw head (#10c).

## SLIDING ARC

One arm has a sliding-arc pen holder. With it, you can easily adjust the angle of the pen where it touches the log that you are scribing. The sliding-arc pen holder rotates, just like the straight pen holder, but it also slides through an arc. No other scriber ever made can do this. The sliding arc allows infinite adjustment of pen angle.



The goal is usually to have the pen touch the log at about 90° to the surface of the log. There may also be times when you will adjust pen angle to avoid pen/log conflicts (eg. fitting a pen inside a rough notch to scribe the final notch).

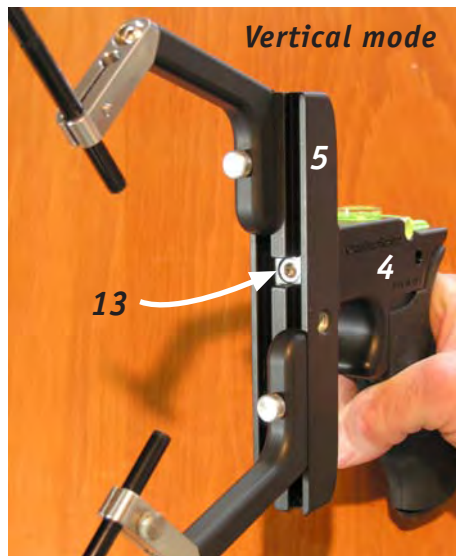
To slide the arc, loosen the brass thumbscrew slightly (a 1/4 turn is enough). Slide the arc to the angle you want. Tighten the brass thumbscrew. **Use only your fingers, never a pliers, to loosen and tighten the brass thumbscrew.**

While scribing a log you can change the arc-slider whenever you want. Adjusting the arc will **NOT** change the scribe setting (scribe distance), and will not cause the scriber to go out of plumb. Sliding and rotating do **not** change the position of the pen ballpoint (pen nib).

See the video of Arc Sliding on my website [www.LogBuilding.org](http://www.LogBuilding.org)

## HORIZONTAL SCRIBING

There are times when you may want to scribe horizontally, not vertically. Logs stairs, and scribing trim to a log wall are examples that might require horizontal scribing.



Use the 3/16" allen wrench supplied with your scriber to loosen the socket head cap screw (Part #13). Do not remove this screw.

When the screw is loose, the Female Slide (#5) will disengage slightly from the Receiver (#4). Note that the attachment screw (#13) should be loosened, but NOT removed. Rotate the Female Slide 90° in either direction to re-engage the locator pins, and tighten Screw #13.

See video on my website [www.LogBuilding.org](http://www.LogBuilding.org)



Use either the front straight vial (#2) or the bullseye vial (#3) to keep the pen points horizontal as you scribe. To keep the scriber **pointing** the correct direction you might want to use a laser pointer while horizontal scribing. The ChambersScriber has a hole (#14) that can hold a .25 caliber "bore sight" laser. (A bore sight laser is a tool that is used to adjust, "sight in" a telescopic scope on a rifle.) Watch where the laser is pointing to keep the scriber oriented for horizontal scribing.

The Grip is always held vertically—even when making a horizontal scribe.

## OPTIONAL SIDE HANDLE



**And is NOT 90° in any direction**

The ChambersScriber can be fitted with an optional Side Handle to help you hold your scriber steady and control its movement. I really like the side handle when I'm using scribe settings larger than 4" (100mm). It gives me a rock-solid grip.

You can buy a side handle from my website, but many power tools come with a handle that will work. The thread must be metric M8 x 1.25, which is a common size used for Makita, Hitachi, Ryobi, Bosch, and other small sanders and grinders. You might already own a handle that will fit.

Lefthanded people can try this— rotate the Female Slider so it is upside-down, and tighten it to the Receiver. Now the optional side-handle will be on the right side of the grip, instead of the left side of the grip.

**PLEASE NOTE that the side handle is NOT 90° in either direction. For ergonomic comfort, the handle points down and it also points away from you.**

**To turn the handle into the threaded hole you will need to match the angles shown in these photos.**

## MODULAR DESIGN

The ChambersScriber has a modular design, which means that you can use your scriber for many different purposes, and that you will be able to get accessories for your ChambersScriber to perform special tasks. One accessory that is available now is an extra-long Slider that allows you to scribe at very wide scriber settings (up to 22", 560mm). The Arc Arm is another modular attachment. Your scriber has one Arc Arm, but you might want two. You can buy an Arc Arm at my online shop.

All these 'upgrades' and accessories will fit onto your existing Grip, Receiver, Bubble Vials, and Pens. This makes upgrading easy for you, and because the parts are modular—you only buy the accessories that you need.

## TROUBLESHOOTING

### ***Scribe lines or scriber is not accurate***

- 1) Both pens **must** stick out the correct amount (page 2), and the screws that clamp the pens must be tight. Pen-tube end cap must be finger-tight and touching the end of the pen refill. (Can pen refill wiggle end for end? Cap is too loose.)
- 2) Make sure sliders are correctly installed in lefthand and righthand female dovetail slides (see page 3).
- 3) Keep bubbles inside the vial's lines at ALL times when drawing scribe lines. (Beginners need practice. It's not easy.) Look straight down at bubbles--do not look at bubbles from the end of the scriber (this is a common mistake!).
- 4) A pen tip might be bent if the scriber was pushed too hard into a log, or if the scriber was dropped. The pens should touch the logs only hard enough to produce a good clean line. Push no harder than that. Replace pen refill with new pen refill.
- 5) Brass thumbscrew is not tight (Arc is wobbling).

### ***Pen won't write***

- 1) Rotate pen arm to make tip of pen touch log at about 90°. Pen will not write if the tip is glancing against log surface. The pen tip must hit the log close to 90°.
- 2) Pen is out of ink. Fisher Space Pen says you might get one thousand feet (or more) of line from a new pen refill.
- 3) Pen tip has clogged. Try dipping the tip in alcohol and writing on rough paper. Repeat if necessary. The pen ball (nib) must **roll** in order to draw a line. The pen will not draw a line if the ballpoint does not roll.

### ***Side handle won't screw in***

- 1) Handle must have Metric M8 x 1.25 thread.
- 2) The handle can NOT be installed at 90° — see compound angles at top of page 5. Screw in while matching these oblique angles.

### ***I don't know what's wrong***

1) This Owner's Manual is not a book on how to scribe, it is a booklet on the features of this scriber. I assume that you already know how to scribe. One example: the scriber is almost never 90° to either log when scribing a log corner notch (it's about 45° to both logs). You learn that technique in a log home construction course, not here. There are many such scribing skills to learn.

2) Please send me an email, with a photo (cell phone photo ok), of what's wrong: [robert@LogBuilding.org](mailto:robert@LogBuilding.org)  
I'll do my best to reply within 72 hours.