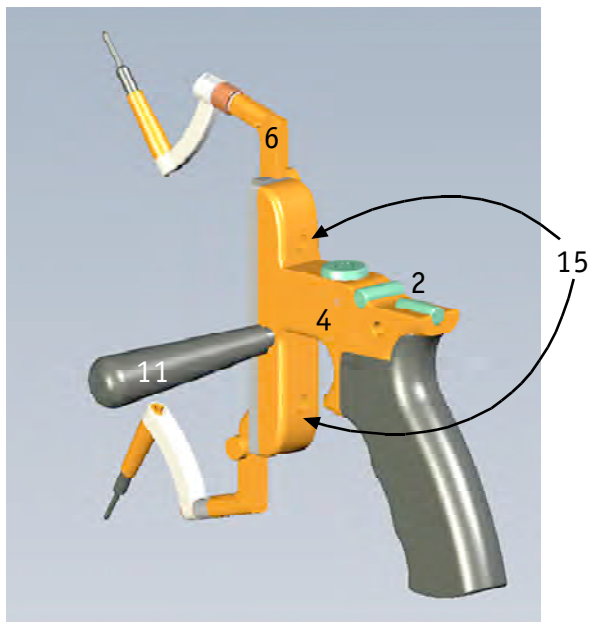


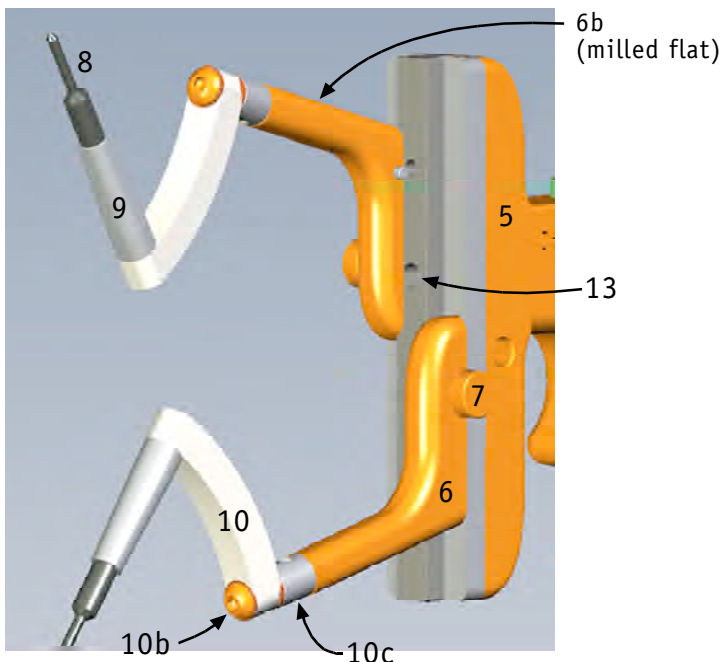
ChambersScribers

Owner's Manual



Parts List

- 1- Grip
- 1b- Grip storage (end cap)
- 2- Straight vials (qty 2)
- 3- Bullseye vial
- 4- Receiver and "trigger"
- 5- Female slide
- 6- Sliders (qty 2)
- 6b- Caliper flat
- 7- Thumbscrew
- 8- Pen
- 9- Pen tube
- 10- Pen arm
- 10b- Pen arm attachment screw
- 10c- Arm connector
- 11- Side Handle (optional)
- 12- Lanyard hole
- 13- Access hole for horizontal scribing bolt
- 14- Hole for optional bore-sight laser
- 15- Screws to adjust Slider Tension (qty 2)



Parts Included, But Not Shown:

- Spare teflon washers
- 1/8" allen key hex wrench
- 5/32" allen key hex wrench
- 3/16" allen key hex wrench

All parts are available for sale as spare parts

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. Two accessories that are planned to be available soon, include an extra-long Slider that allows you to scribe at very wide scribe settings (up to 22", 560mm); and a Sliding-Arc Pen Arm that gives you thousands more choices for pen angle than have been available with any other scriber.

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, they cost a lot less—you only buy the parts you need.

PENS

The ChambersScriber uses Fisher Space Pens (Part #8). Use **ONLY** the pen models listed below. You can order extra pens directly from Fisher (800-634-3494, weborders@spacepen.com, +1-702-293-3011), or you can order from my website. Pens are sold only in a pack, and there are 5 pens per pack. Prices vary (prices are lower from me than from Fisher).

MEDIUM PG M 27

BOLD PG B 27

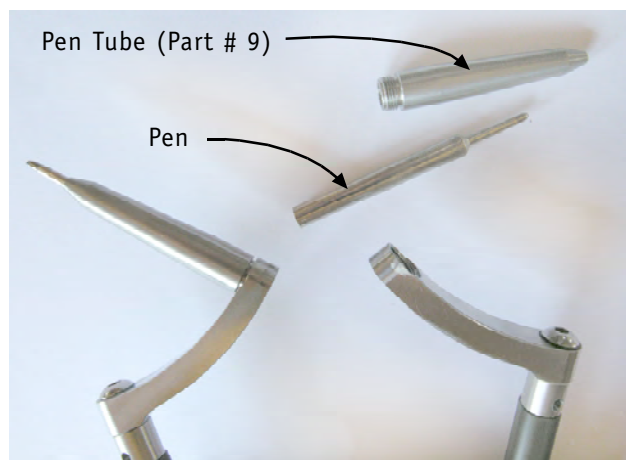
Pens are available with black ink ("BK-3" is the ink for logs) or with blue ink ("BU" ink).

The ChambersScribers will not work properly unless you use the pens listed above because the pen point **MUST** be exactly the correct distance out from the Pen Tube (#9). The pen must be the correct length for your scriber to work properly. Only the pens shown above are the proper length.

You can replace a pen at any time while scribing a log, and this will not change the scribe distance. You never need to "plumb" the ChambersScriber on a plumb board.

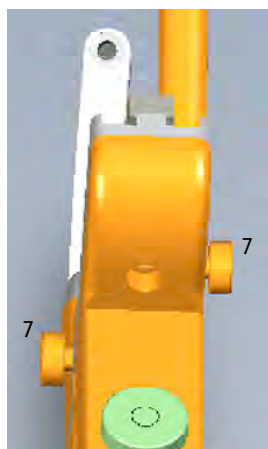
Make sure that the pens are always fully seated, and that there is no debris inside the Pen Tube (#9). You can look into the back of the pen tube through the hole in the back of the Pen Arm (#10) to see if the Pen is properly seated, and not obstructed. To make your scriber accurate, both pens must be fully seated inside the Pen Tubes. There will be a small gap between the pen tube and the pen arm—it is not possible to screw the pen tube all the way in (designed this way for a reason). Finger tighten **ONLY**. Do not use a pliers.

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. The ink is permanent, and will not wash off. But they are not invincible. The ink in each pen might last for one log house. To remove ink from a surface (log, fingers), use alcohol on a clean rag.



LEFT: pen tube and pen.

RIGHT: Pen in tube. Next, screw pen tube into arm until seated. There will be a small gap between the pen tube and the arm.



ADJUSTING THE SCRIBE SETTING

The distance between pen points is called the "scribe setting" or "scribe distance." To change the scribe setting you move one or both of the Sliders (Part #6). Both of the Sliders must be locked into place before you start scribing the logs. Tighten the thumbscrew (#7) on each Slider to lock the slider in place. You never need to "plumb" the ChambersScriber on a plumb board. Both thumbscrews should be securely finger-tightened before you start to scribe a log.

Many professional log builders use 2 or 3 different scribe settings when they final-scribe a log. They use one scribe-setting for the long-groove ("lateral"); a slightly different setting for the corner notch ("underscribe"); and sometimes use a third scribe-setting for the overhangs (flyways, extensions, flairs). With the ChambersScriber you can change the scribe setting 'on the fly' and keep scribing—you **NEVER** need to use a plumb board to re-plumb the ChambersScriber.

. . . Adjusting, continued on next page . . .

..... ADJUSTING SCRIBE SETTING CONTINUED

The Sliders have a VERY close fit in the Female Slide—only about .0015" (0.038mm) of clearance. This can make them 'vibrate' a bit as you slide them—this is normal for a tight-tolerance fit. If you do not like this, then try applying a small amount of high-quality spray lubricant. They slide better if you push them along down near the thumbscrews instead of up near the pen arms. If you think the Sliders are too loose, or too tight, then try adjusting one or both of the Tension Adjuster Screws (Part #15). Adjust these screws slowly, because a small fraction of one turn (as little as 5°) can make a noticeable difference in Slider tension.

You can position the two Sliders anywhere along the Female Slide that you want. If you find that the Female Slide gets in the way while scribing a notch (for example), then next time position both Sliders higher or both Sliders lower on the Female Slide (same scribe setting, of course). You will soon learn what works best for you.

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.

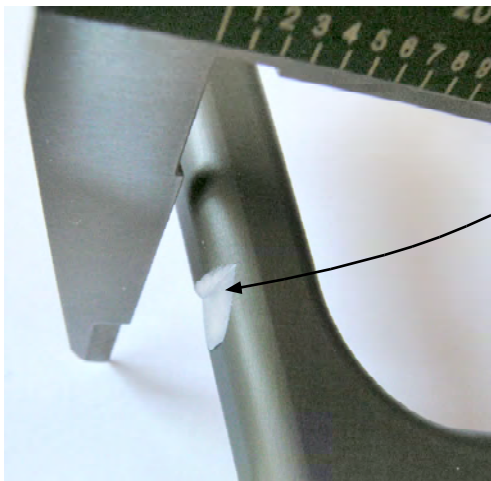
EXTRA LARGE SCRIBE SETTINGS. Soon, you will be able to buy an optional Long Female Slide that will allow scribe settings of up to 24" (610mm). Some production builders do not rough notch their logs, and so they scribe each log only once, and need a scriber that will open very wide. Scribing valley logs, log purlins, log trusses, and logs for stairs may require very large scribe settings. Watch my Scriber's website for updates on these, and other attachments.

MEASURING THE SCRIBE SETTING

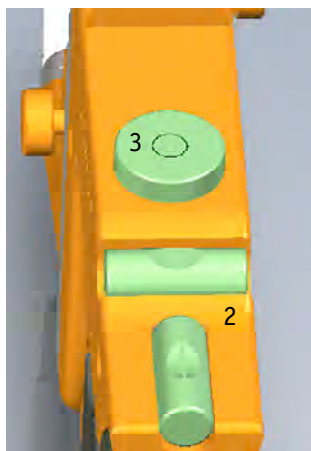
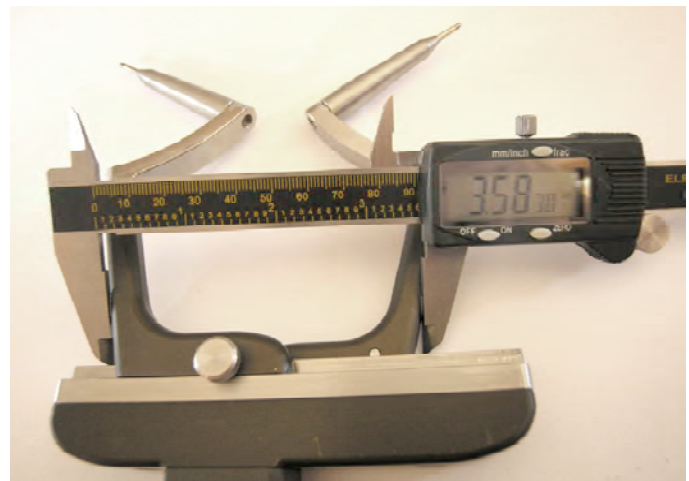
There is a small milled flat (Caliper Flat #6b) on each Slider that can be used to precisely measure a scribe setting. Most log builders do not need this sort of precision; but some do. With both sliders locked at their scribe setting, use a digital caliper to measure the distance from outside to outside of the two Caliper Flats. Then, add 2-inches (51mm) to the number on the digital caliper— that is your scribe setting. Hold the caliper tight onto the flats, and keep the caliper parallel to the Female Slide (Part #5).

- So, for example, if the digital caliper displays 3.58" Flat to Flat, then your scribe-setting is 5.58" Pen-to-Pen.
- Or, for example, if the digital caliper displays 120mm Flat to Flat, your scribe-setting is 171 mm Pen-to-Pen.

Each Caliper Flat is 1.0" (25.4 mm) from the pen point, and so the scribe setting is 2" (51 mm) bigger than the number on the digital caliper display.



Caliper Flat
Part # 6b



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. They are oil-filled to dampen the bubble movement, and you will find them easy to use—especially for grooves. The bullseye vial will seem "nervous" and sensitive compared to the 2 straight vials, but the bullseye vial is actually a normal factory-made vial.

All vials have the same accuracy, they differ only in the speed of bubble movement. If you break one, replacement vials are available from Robert Chambers.

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

PEN ARMS / SWINGING THE ARMS

The Pen Arms (#10) can be rotated to change the angle that the pen touches each log. This rotation, or swinging, does NOT change the scribe setting; and it does NOT change plumb. 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. (Ed Shure invented this feature.)

The Pens produce a good line when they touch each log at about 90-degrees. Rotate the pen arms to improve the way the 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. Depending on the notch style (round notch, saddle, dovetail, etc), the Arm might be adjusted for every 3” or 4” (75mm to 100mm) of scribing. The Pens write best when they hit each 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.

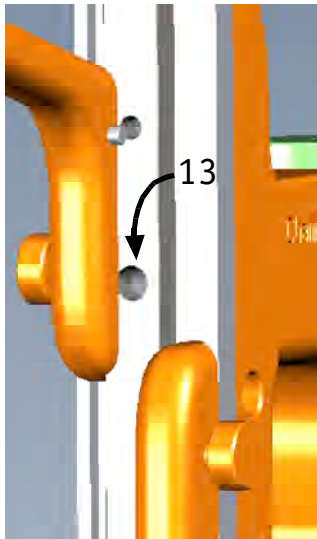
Some builders do not want to draw a line on the log below. If you do not want a line on the lower log, then use an empty pen in the lower Slider. Most builders use an operating pen in both the upper and lower Sliders so that a line is made on both the upper log and on the lower log, at all times.

Note: The pens should NOT draw the same line when they are swung through 180°. So, you cannot use this method to “test” the calibration of your ChambersScriber. This method ignores the fact that the ballpoint tip is 1.3 mm (about 1/16”) in diameter. The extreme tip end of the pen is in the center location (the tip is tangent to a plane that is 90° to the pen barrel, for the technically inclined!). Remember that the “sides” of a ballpoint tip sometimes do the writing, and the sides of the pen ball (nib) cannot be in the “center” location.

Swing Friction—I have adjusted the friction, and you should try scribing several logs before adjusting the friction. Tighten or loosen the Pen Arm Screw (#10b) with the 1/8” allen key hex wrench I sent with your scriber to adjust friction. This screw has a built-in, hidden, lock-tight feature that keeps the threads held from turning too easily, and it may not be easy to tighten or loosen.

Teflon Washers—You will see that there is a small teflon washer on both sides of Pen Arm (#10)—a black one is under the Screw (#10b) and a white one is between the Arm (#10) and the Arm Connector (#10c). Do not remove these washers. A few spare washers were sent with your ChambersScriber, if you need to replace them.

SLIDING ARC ARM, COMING SOON -- Soon there will an optional pen arm that you can buy from my website. This upgrade will allow you to rotate the pen arm (like the standard model you now own), but ALSO to slide the pen arm through an arc. Combining sliding with rotating gives you thousands of pen angles to use. This will help the bottom pen reach inside a rough notch, for example, and this will be very useful in scribing truss logs, valley and purlin logs, and staircases. Only the ChambersScriber has this ability—I invented this (patents pending).



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 can require horizontal scribing.

Use the hex wrench (3/16” allen key) supplied with your scriber to loosen the socket head cap screw inside the large hole (Part #13). This hole is on the same side as the Sliders—this photo shows where to find Access Hole #13. (There is a small hole above and below hole #13—do not adjust these.)

When the bolt is loose, the Female Slide (#5) will become loose from the Receiver (#4). The attachment screw will NEVER come out of the access hole.

DO NOT REMOVE THE FEMALE SLIDE FROM THE RECEIVER. LOOSEN THE SCREW JUST ENOUGH TO ROTATE THE FEMALE SLIDE. Rotate the Female Slide 90-degrees (either direction) so it is horizontal, then fit it onto the 2 locating pins, and finally re-tighten the socket head cap screw that is inside the hole (#13) making certain the 2 small locating pins are inside their holes.



Be careful that the Female Slider and the Receiver/grip do not come apart and fall as you loosen the bolt (#13). Do NOT separate these parts. They will easily rotate without separating them into two parts.

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 .28 caliber (30-06, 7mm) “bore sight” laser. A bore sight laser is a tool that is used to adjust, “sight in” a telescopic scope on a rifle. Some boresights are too long for the ChambersScriber. The one I use is a Model PJABS from Aim Sports, Inc. (US \$15 or so).

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

GRIP

The Grip (#1) is a high-quality ergonomic grip made in the USA. It is comfortable in all weather and temperatures, and does not get slippery when wet. It resists oils and solvents.

Remove the Grip's End Cap (#1b) to store spare pens, or to get access to the socket head cap screw (3/16" allen hex wrench) that attaches the Grip (#1) to the Receiver (#4). (You can customize your ChambersScriber by buying a different color grip from <www.ergogrips.net>. The Grip is model 4005AR SureGrip, and is available for right-hand use only, or for ambidextrous (either hand) use. The ChambersScriber comes with an ambidextrous grip.

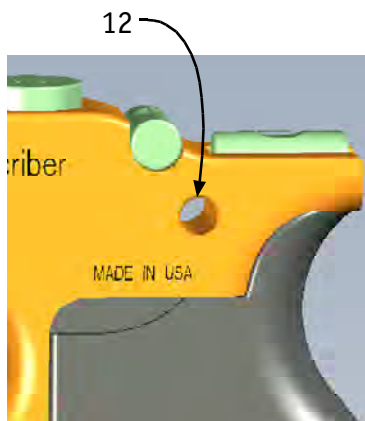
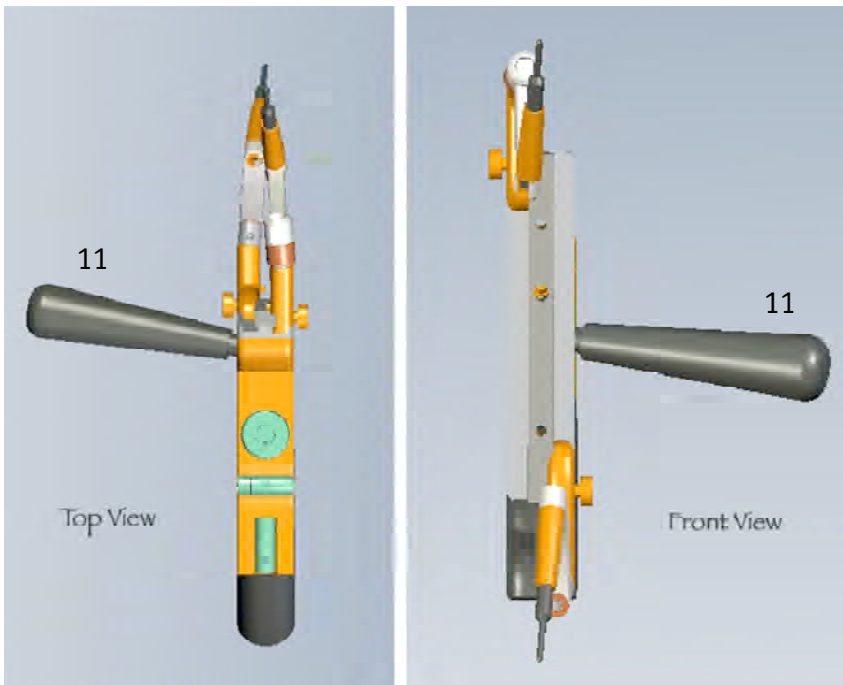
Any grip that fits an AR15 rifle will fit the ChambersScriber, but the attachment bolt and washer that came with your ChambersScriber may not work with a new grip. (The included bolt is a socket head capscrew 1/4-20 x 3/4".)

OPTIONAL SIDE HANDLE

The ChambersScriber can be fitted with an optional Side Handle (#11) to help you hold your scriber steady and control its movement. 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, and other 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-degrees in either direction. For comfort the handle points down and it also points away from you. To turn it into the threaded hole you'll need to match the angles shown here.



LANYARD

I have provided a hole (#12) that you can use to attach a lanyard for hanging your scriber off a tool belt. A short piece of cord can be tied in a loop through this hole, and then a clip or carabiner on your belt will carry your ChambersScriber.

ChambersScriber v.1
Owner's Manual 2c, May 2009
www.LogBuilding.org
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