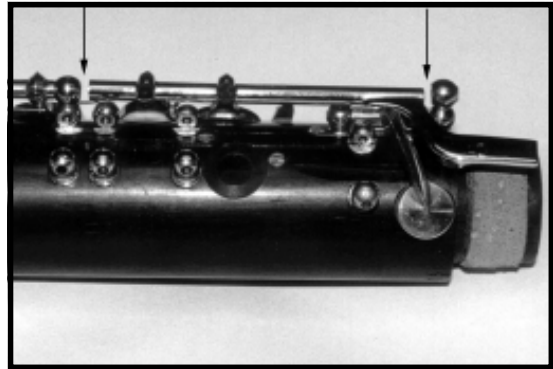
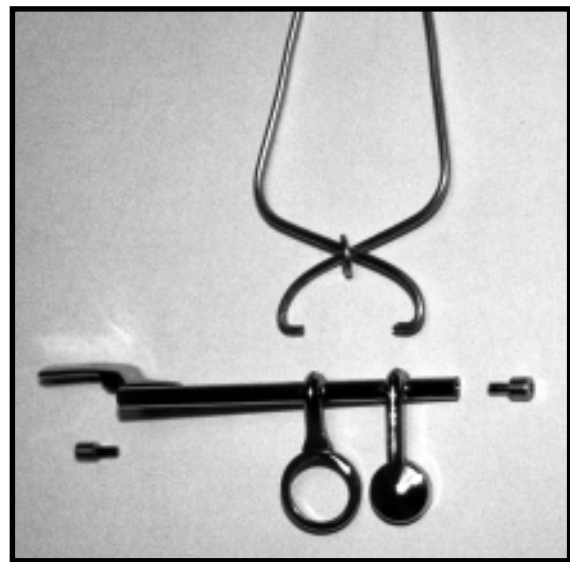


EXTENDING THE LENGTH OF A SOLID HINGE

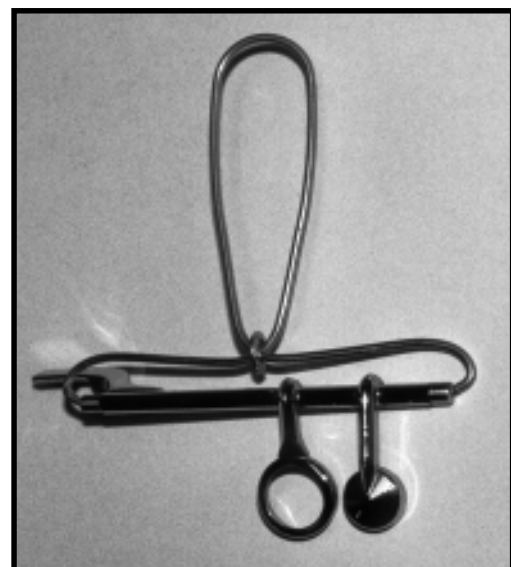
1. Measure the O.D. of the hinge to be lengthened.
2. Select a length of matching solid hinge stock (usually nickel or brass).
3. Secure the hinge stock in the Jacob's chuck of your bench motor so that approximately 3/16" extends beyond the jaws of your chuck.
4. Reduce the O.D. of this extended portion to .075".
5. Loosen the chuck and extend the stock out another 1/4" retighten the 3-jaw chuck.
6. Remove this length from the hinge stock by carefully sawing with a jeweler's saw.
7. Remove the remaining stock from the Jacob's chuck and insert the small piece (that you have just fabricated) back into the 3-jaw chuck. (Place the small diameter pilot end in the chuck, thus exposing the larger O.D. section.)
8. Face the surface of the exposed large end with a medium flat file.
9. Center-punch a mark in the exact center of this exposed end.
10. With the piece still secure in the 3-jaw chuck of your bench motor (under power), drill a .052" pilot hole by securing a #55 drill with a heavy duty parallel-jaw pliers. Center the bit and carefully push the drill into and through the small piece; make sure that you hold the drill very straight as you drill into the small piece. Drill completely through the piece, and remove the piece from the chuck.
11. Countersink the end of the key hinge. Place a #48 (.076") drill in the bench motor chuck and drill to a depth just exceeding the length of the smaller pilot of your newly fabricated extension.
12. Place a bit of silver brazing flux (borax) in the countersunk end of the key hinge and secure the extension so that you may silver braise it permanently into position. Be very careful when brazing so as not to allow adjacent parts to overheat and slip, or even fall off the hinge. You may have to heat-sink adjacent parts.
13. Clean up the freshly brazed extension (polish - buff).
14. Redrill the end with the #55 drill to relieve the hole of all debris.
15. Trim the hinge to the exact length desired, and install the appropriate bearing shape and depth (to match the pivot screw type).
16. Install the key and adjust the hinge extension and pivot as necessary.



The two arrows indicate the deficit lengths of the hinge.



The key, both prepared inserts, and the spring holder.



The key prepared for brazing.