



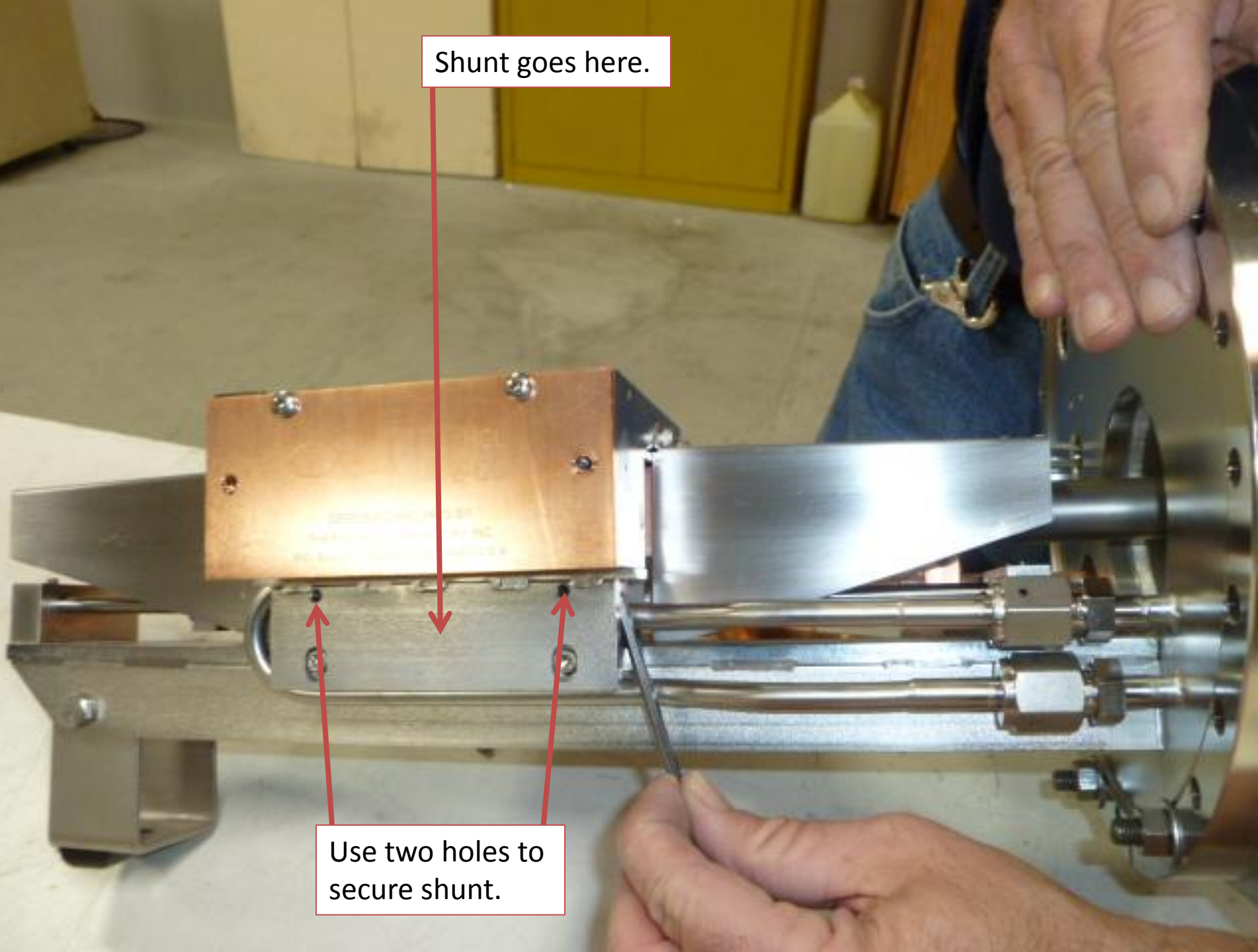
HCL Shunt Replacement Procedure

Caution: This is a general procedure. In the following we are working on show sources only.

Take caution in using UHV procedures to disassemble and reassemble your sources.

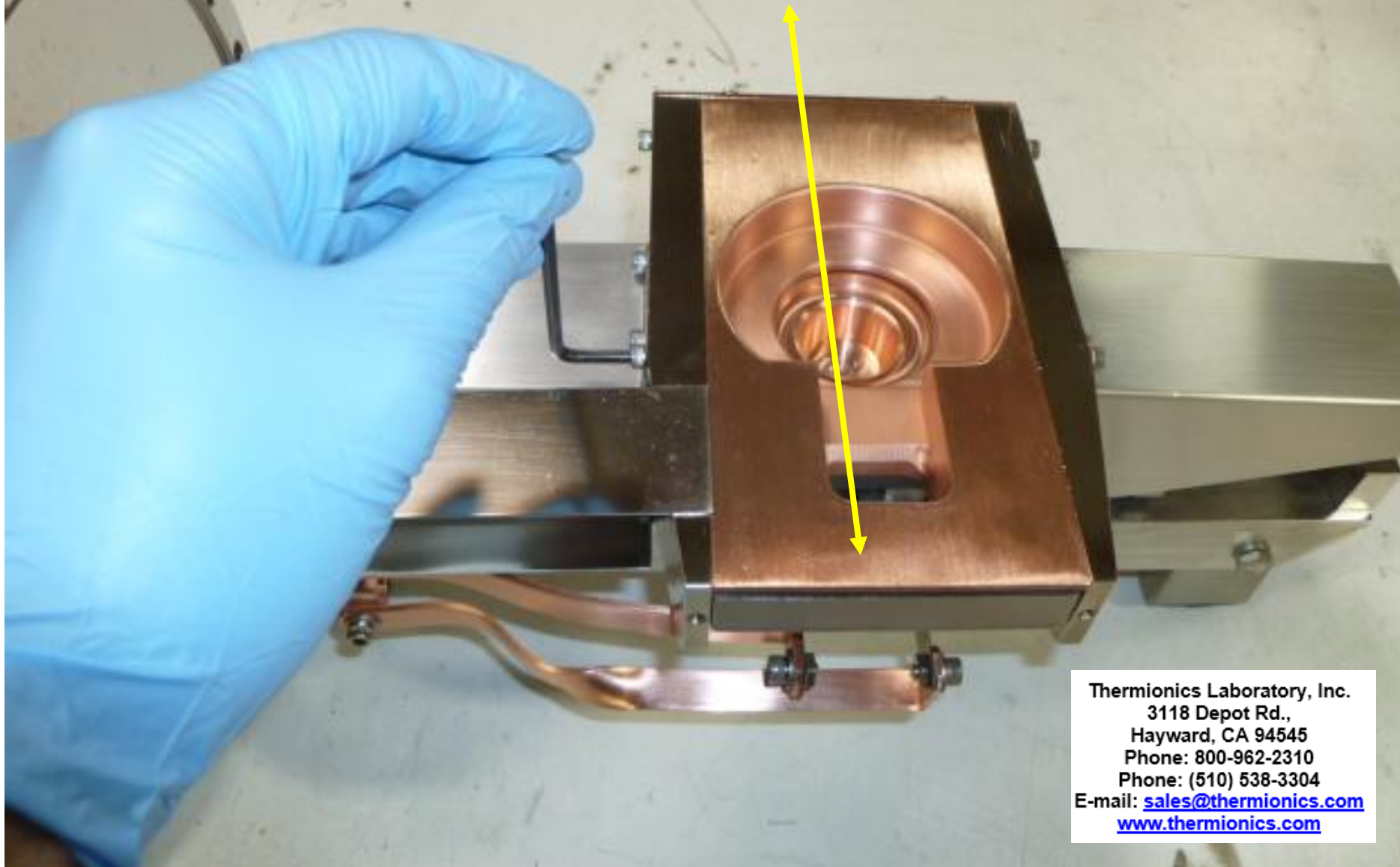
Shunt goes here.

Use two holes to
secure shunt.



Shunts are used to make magnetic field adjustments. Adding a shunt weakens the magnetic field and would move the beam spot center away from the emitter. Removing a shunt will strengthen the field and move the beam towards the emitter. Shunts come in three thicknesses for HCL e-GUN's. Part numbers are as follows 112161-01 at 0.060" thick, 112161-02 at 0.125", and 112161-03 at 0.030". The thinner the shunt the less the field strength will be affected and the less the beam spot will move. Shunts will only affect a change in the beam spot position along one axis. The next slide shows this axis.

The axis is center line to the crucible even if it doesn't look like it as the picture is off angle and the pocket is not completely centered.



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