

# Century Plasma Cutter Replacement Torch and Lead

50-55 Amp Models 118-014 (YA5550), 118-015 (2050), 118-016 (82050, 5Z031A, 5Z031B)



## Remove Cover:

remove front of the unit by taking out the 6 small screws from the front black plastic cover that houses the terminals and compressed air regulator. Pull away from the unit ensuring to feed the torch lead and grounding clamp lead through the cover and gently allow to hang. Make note of the terminals and connections before removing.

Remove all connections including the airline ensuring to remove only the lead connection, "Leaving the elbow attached", and the bracket attaching the lead to the unit for stabilization

## Remove Old Lead From Unit:

Feed the new lead through the front plastic cover carefully and attach the lead to the unit with the stabilizing bracket allowing enough to pass through the bracket to allow for proper routing of the terminals and airline.

### Verify Wire Lengths:

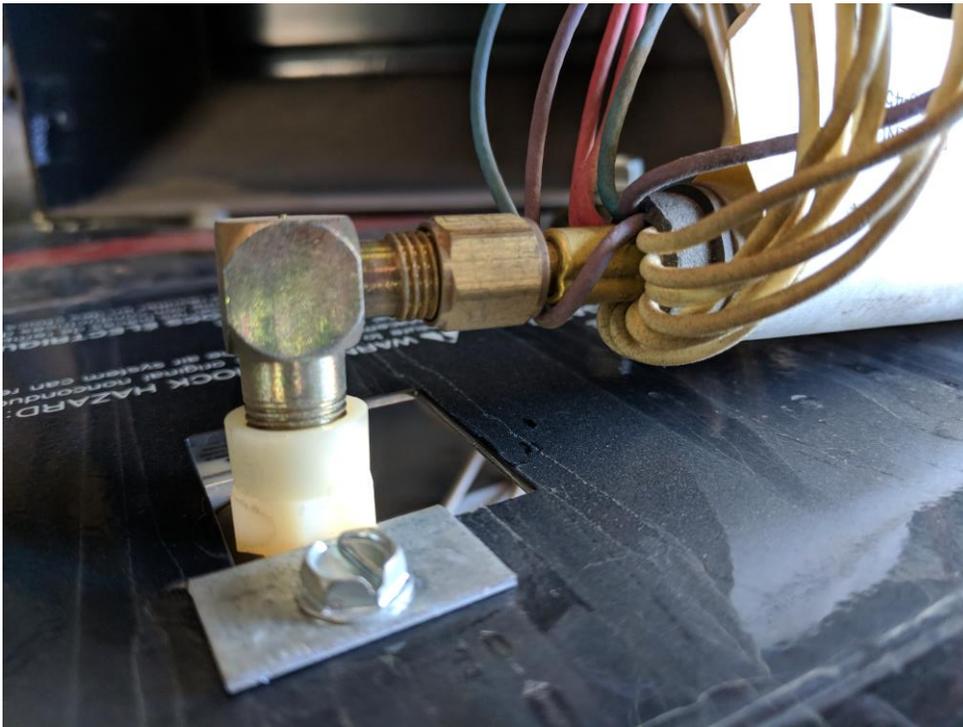
mock up how the routing will go for the terminals and airline making note of how much will need to be cut from the terminal leads and airline.

For these instructions I removed approx. 8 to 10 inches from the electrical lines and approx. 5 to 8 inches from the air line.

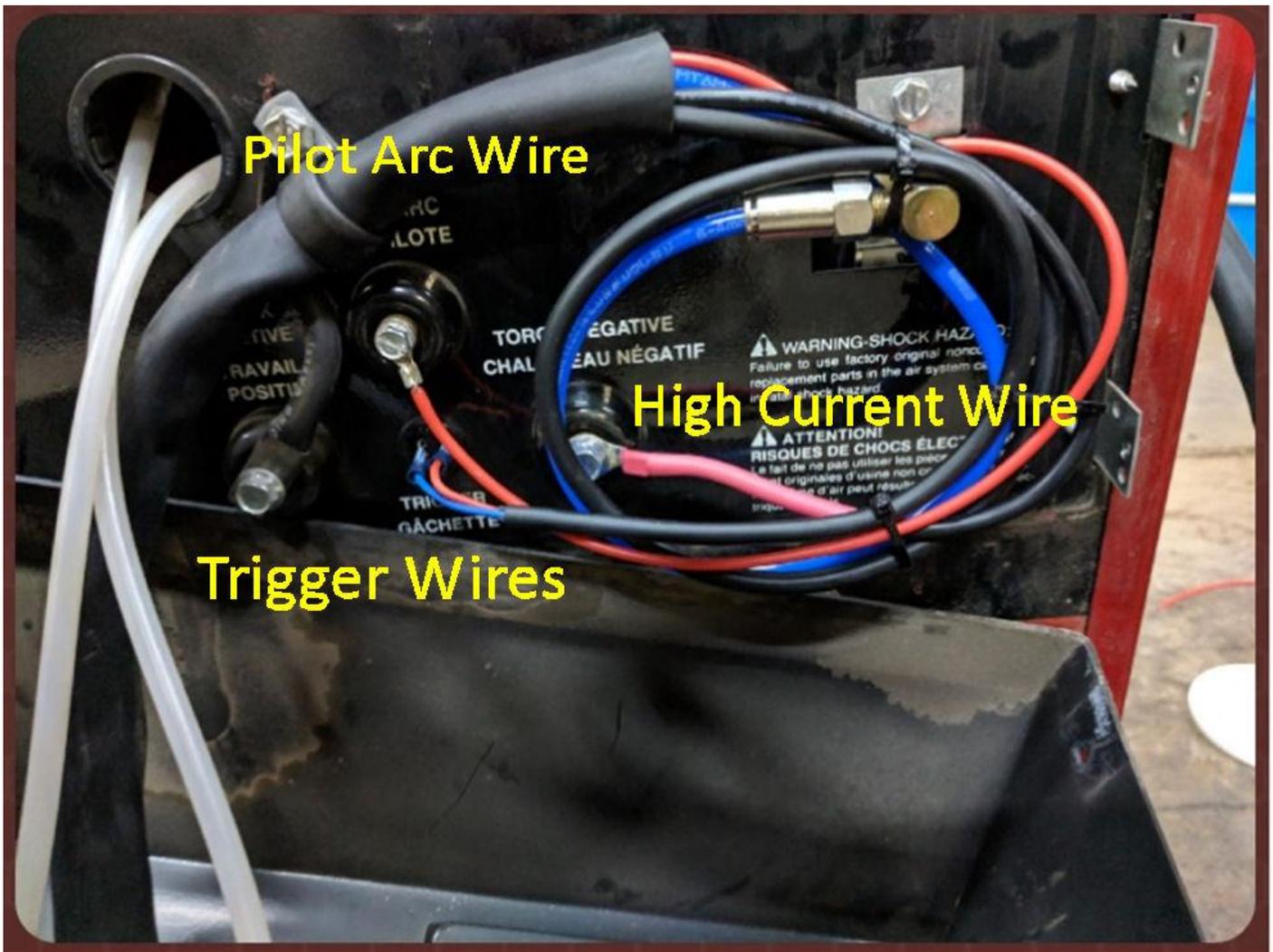
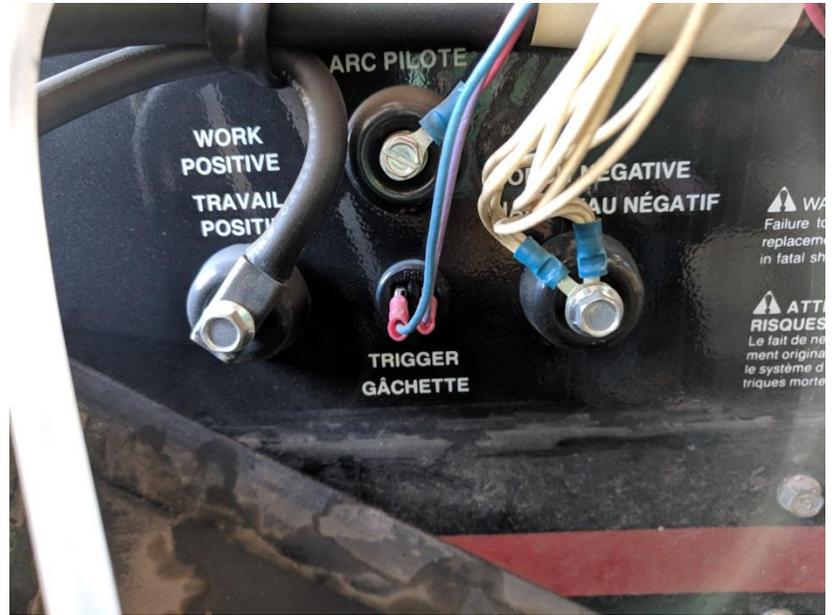
After removing appropriate lengths terminate electrical leads using correct ring connectors for the torch negative (larger) and pilot arc (smaller) leads and solder ends if necessary. Cut off and replace trigger leads with new connectors without shielding and solder if necessary.

Attach the new Female fitting to the metal 90 degree Airline Fitting that connected the old torch

Use Teflon tape— do not over-tighten. Press in the line until it stops approx.  $\frac{1}{8}$ <sup>th</sup> to  $\frac{1}{4}$  inches.



And attach the leads to the appropriate terminals – alternatively, you can clip the existing wires and connect the new torch using wire nuts



Ensure all connections are secure.

Reinstall the plastic cover ensuring to allow the torch lead and grounding lead to be fed through the cover until the cover is in place install the 6 screws snug do not over tighten as it will crack the cover.

Your done the installation of the replacement lead is complete. You will now need to adjust the air pressure to allow the new torch to function properly and test.

The new torch requires a slightly higher air pressure setting to work – set the machine up with power and air, then slowly adjust the air pressure up while trying to fire the troch in mid-air (pilot arc).

Once the troch will fire in mid-air, keep raising the air pressure to determine the high side pressure limit.

Be sure never to operate your machine outside these limits – otherwise you can damage your torch.