.40D
.10

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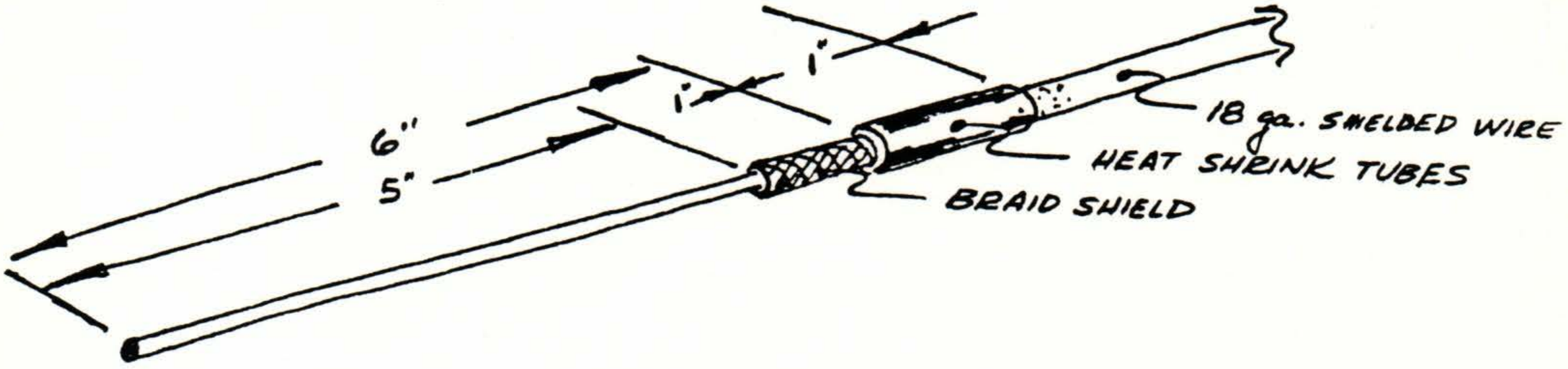
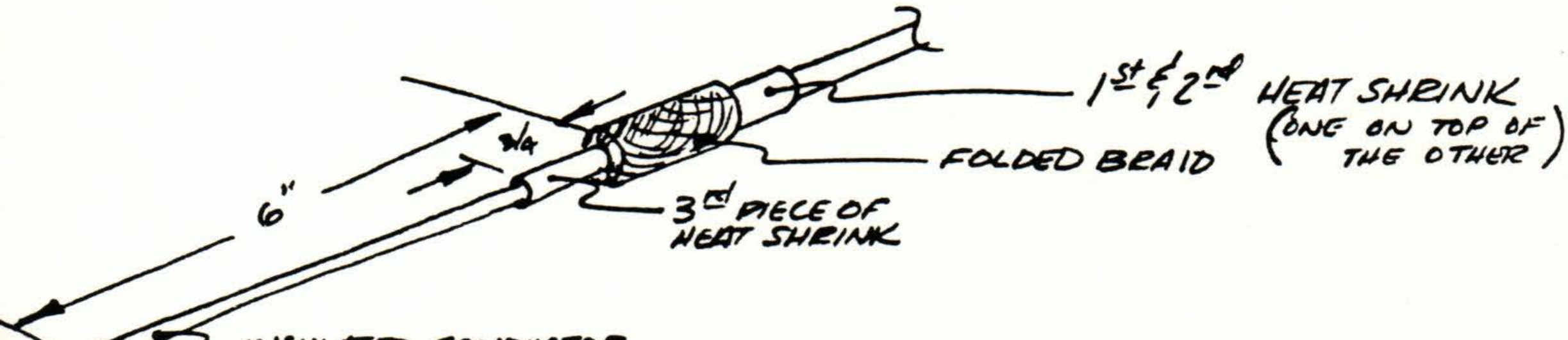
BUILDER'S HINT - From Dick Kreidel

One of the disadvantages to the slick mags that we use on our Longs is the difficulty in making a good reliable connection to the primary coil lead ("P" Lead) using shielded wire. A good way to handle this is illustrated below in a step by step procedure. By the way, it is a good idea to leave the "P" lead wires about 12" too long to form a large loop at the firewall. This will allow you to remove & replace the mags without fighting a cramped work space to make the "P" lead connections.

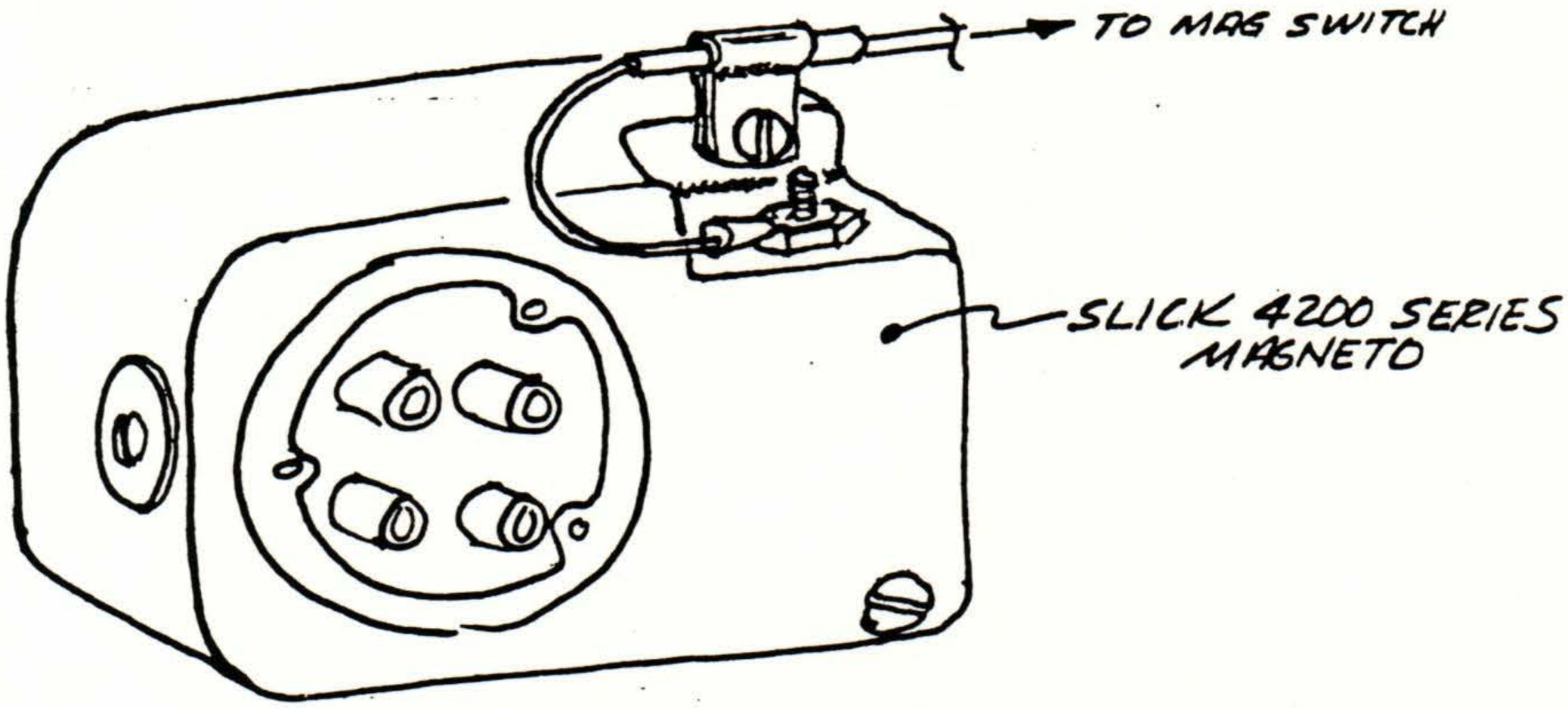
STEP 1 Strip the outer insulation uncovering the braided shield back 6", then cut-off the first 5" of braid leaving 1" remaining.



STEP 2 Cut 2 pieces of heat shrink tubing 1" long and shrink them both over the outer insulation as shown. Carefully unravel the remaining 1" of braid & fold it back over the heat shrink tubes. Cut a third piece of heat shrink tube 3/4" long and shrink it in place over the inner insulated conductor pushing the heat shrink tube as far under the braid as possible. You should now have this:



STEP 3 Use an AN742-D3 plain clamp (not the rubber insulated type) to clamp the "P" lead to the magneto frame using the short #8-32 screw. Be certain that the clamp securely retains the steel braid. This provides a good ground for the shield and acts as an excellent strain relief for the connector. Now trim the conductor to length and crimp on the "Stak-On" connector.



GENERAL NOTES:

1. The magneto "P" lead is the only exception (that I know of) to the general rule of grounding only 1 end of sheilded cabling. Both ends (at the switch & at the magneto) of the braided shield should be grounded.

2. Be sure to use a MS25171-1 rubber boot over the "P" lead connector at the threaded post.

3. Your workmanship on the "P" leads must be exemplary! Remember, if the wire inadvertently shorts to ground the magneto is out & you may be down!

4. DO NOT use a locknut on the post! There is a current slick service bulletin out warning that there have been several instances where the torque required to drive a locknut causes the post (an integral part of the condensor) to rotate and results in an internal short to ground. Use a regular nut, washer, split lockwasher and take it easy! The spec calls for only 10 in lb torque and that ain't much.