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L-600, M-900 Assembly Instructions



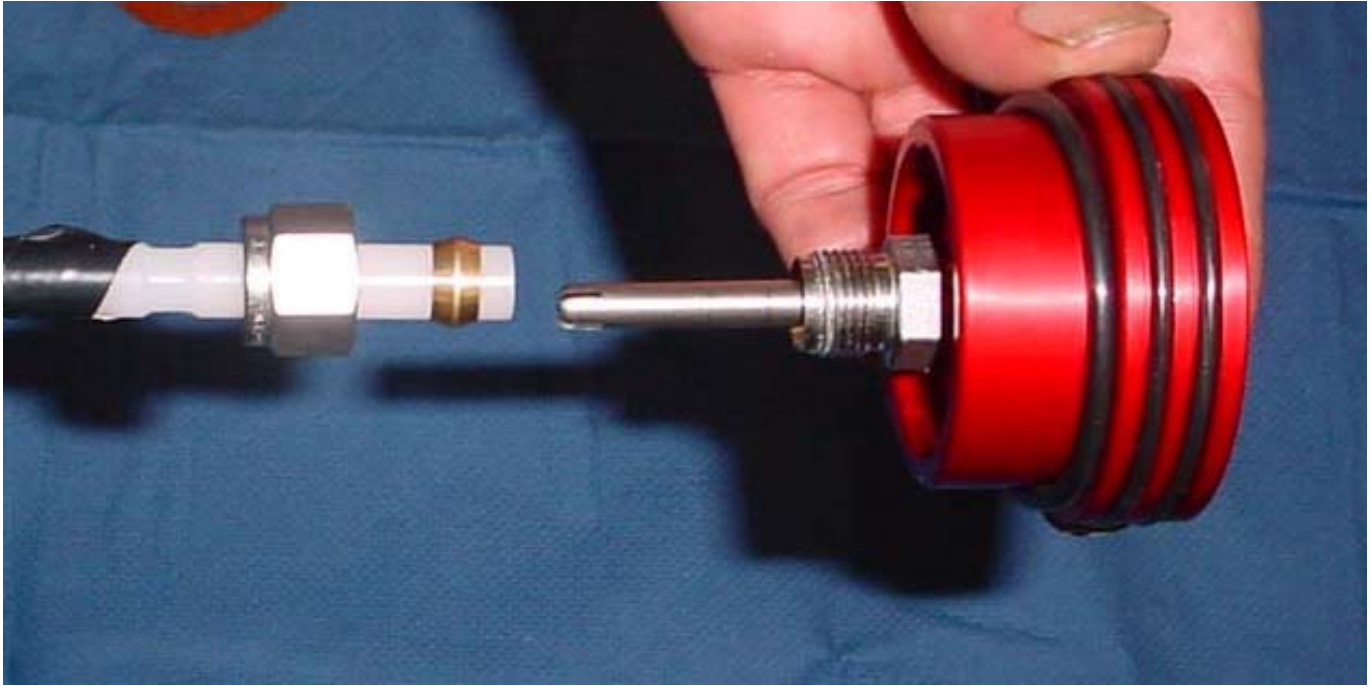
Items necessary to assemble motor (not supplied)

1. Preheater grain 54mm 'White lightning 1/2" to 3/4" long, 7/8" ID
2. Quick burst igniter, or similar
3. 11/16" Open end wrench
4. 3/8" Allen wrench
5. Black electrical tape
6. Masking tape
7. Krytox



Items supplied with reload

1. M-900 or L-600 polypropylene grain
2. 2 phenolic grain insulators tubes
3. 1 phenolic nozzle insulator ring
4. 1 #223 silicon o-ring
5. 3 #225 buna o-rings
6. 1 brass compression sleeve
7. 1 nylon 3/8" fill tube



Step 1

Add 3/8" compression fitting nut brass sleeve onto 3/8" nylon fill tube (Note, groove in fill tube location) Add 1 #225 buna o-ring to injector bulkhead.



Step 3

Place igniter on fill tube as shown, secure with black electrical tape. Note: do not cover groove.



Step 4

Place 2 #225 buna o-rings on both ends of grain as shown, no lubricant required then place 1 #223 silicon o-ring on nozzle, lube silicon o-ring with soap.



Step 5

Place phenolic sleeves on fuel grain as shown.



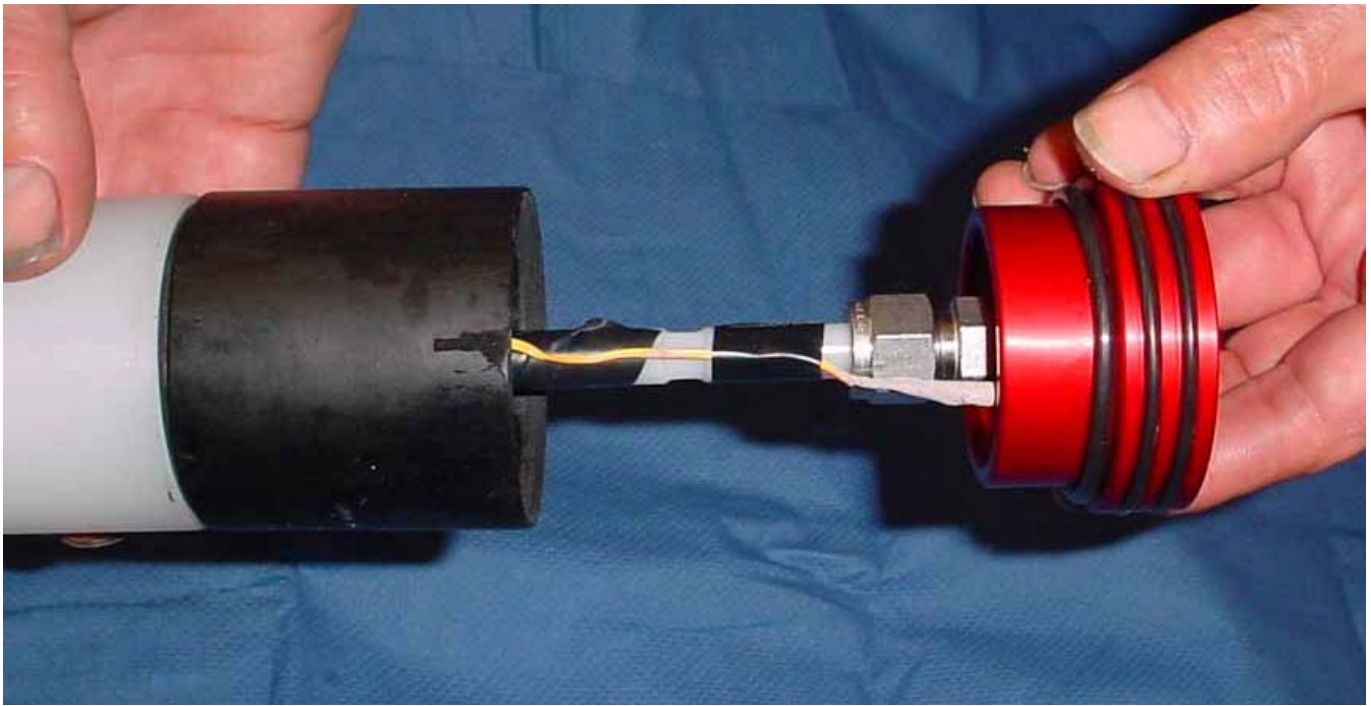
Step 6

Insert nozzle flush with phenolic sleeve.



Step 7

Wrap masking tape around pre-heater grain to increase diameter for a slightly snug fit then, push grain in until it seats as shown.



Step 8

Insert injector assembly into fuel grain.



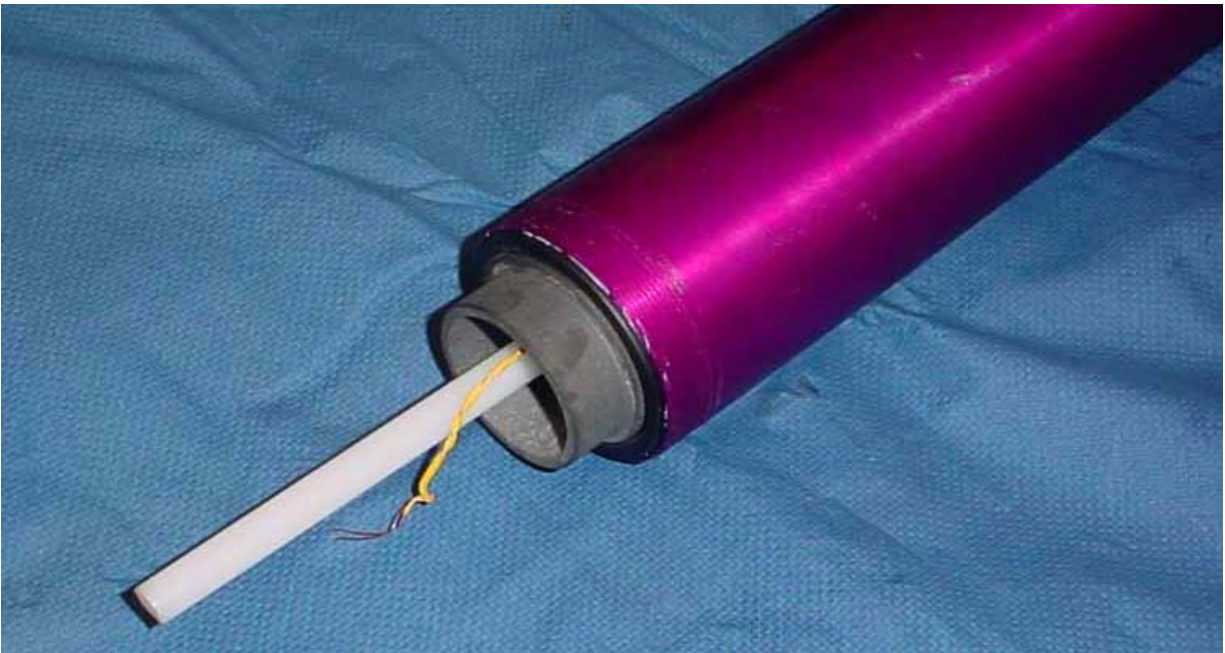
Step 9

Assembled fuel grain should look as shown.



Step 10

Add a good size bead of Krytox to inside motor tube as shown.



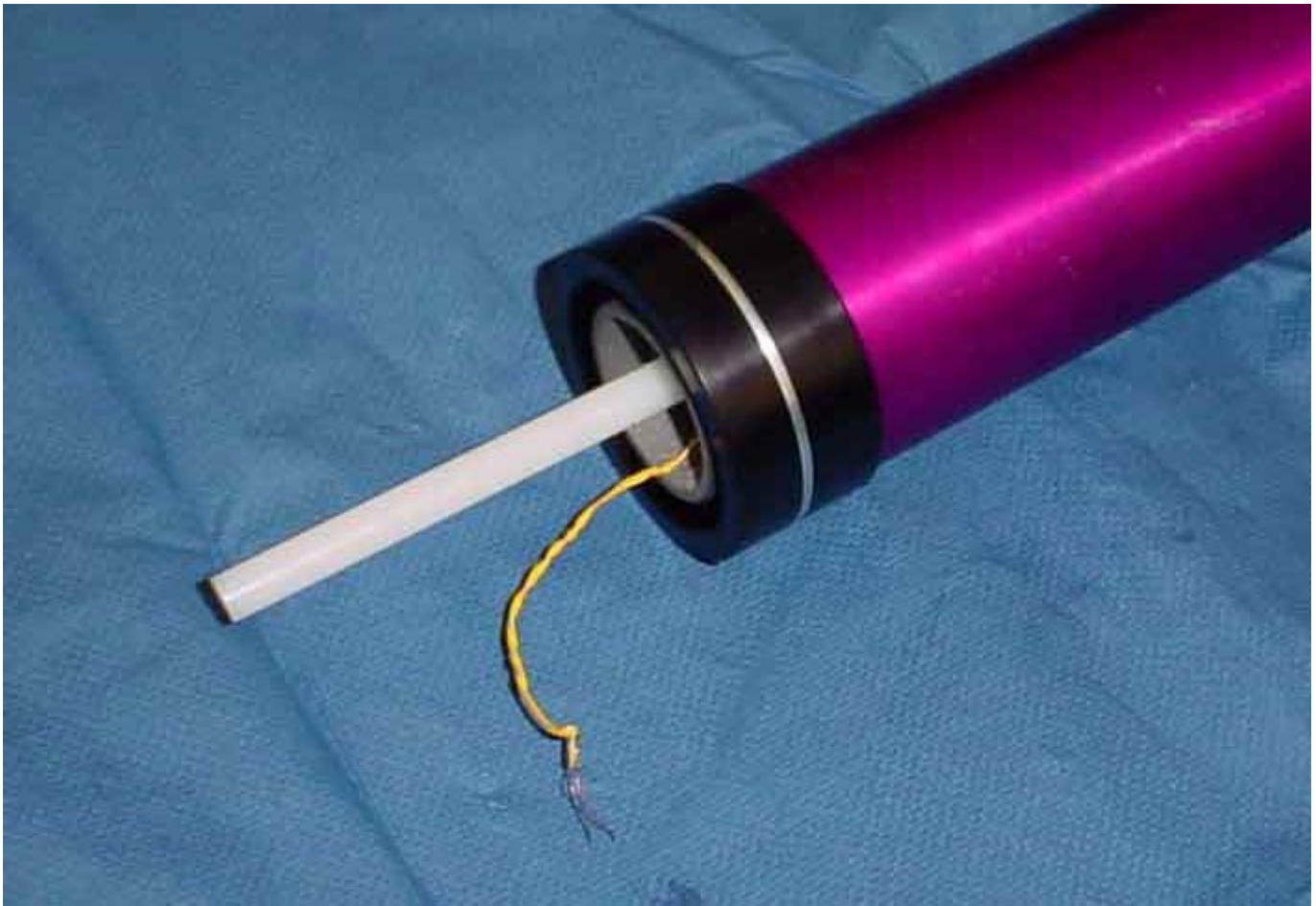
Step 11

Slide fuel grain assembly into motor tube until flush as shown.



Step 12

Place phenolic insulator ring into rear closure as shown.



Step 13

Place rear closure on motor tube as shown, hand tight.



Step 14

Add a little Krytox to the 2 o-rings on the tank connector, thread into motor tube until fully seated. Use a 3/16" or 10-32 2" long cap screw to assist in tightening. Note, if your assembling a L-600 skip steps 14 and 15 and go directly to step 16.



Step 15

Thread M-900 30" tank extension onto tank coupler, hand tight.



Step 16

Add a little Krytox to the o-ring on upper closure, thread into motor casing, use a 1/4" -20 to assist in tightening. Your motor should be complete and ready to launch.