54mm RMS-Plus™ Complete Reload Delay Kit (CRDK) Assembly Instructions

NOTE: Follow these instructions during forward closure/delay charge assembly of an AeroTech RMS™ 54mm high-power motor when using the enclosed RMS-Plus™ CRDK. Use the AeroTech 54mm Reload Delay Drilling Tool (RDDT) to adjust the time delay of this CRDK.

1-1. Apply a light coat of Permatex™ Super Lube™ or other grease to all threads and o-rings. This will facilitate assembly and prevents the threads from seizing.

1-2. Fig.-1: Chamfer both inner edges of the delay insulator with your fingernail. Assemble the RMS-Plus™ delay element, delay insulator, aft delay spacer and delay o-ring as shown. NOTE: It is not necessary to taper the delay element or delay insulator, the hot gas seal is provided by the delay o-ring alone.

1-3. Fig.-2: Insert the forward delay spacer (1-1/8” O.D. neoprene washer) into the delay cavity until it is seated against the forward end of the cavity. Apply a light film of grease to the inner circumference of the delay cavity (but not the forward end of the cavity).

1-4. Fig.-3: Insert the delay charge assembly shown in Fig.-1 into the delay cavity, o-ring end first, until it is seated against the forward delay spacer. NOTES: 1. When using a plugged forward closure ONLY, fill the opening in the forward delay spacer with grease prior to installing the delay charge assembly. 2. If your plugged forward closure has a “step” in the delay well, you do not need to use the delay o-ring or the forward delay spacer.

1-5. Complete the remainder of motor assembly according to the original instructions that accompanied your particular reload kit.

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1-5. Complete the remainder of motor assembly according to the original instructions that accompanied your particular reload kit.
**First Aid**
For a minor burn, apply a burn ointment. For a severe burn, immerse the burned area in ice water at once and see a physician as quickly as possible. In the unlikely event of oral ingestion of the propellant, induce vomiting and see a physician as quickly as possible. The AeroTech/RCS reload delay kit pyrotechnic components consists primarily of ammonium perchlorate and a rubber-like plastic elastomer.

**Disposal**
Damaged or defective reload delay kits should be returned to RCS.

**Fire Safety**
Tests show that the pyrotechnic components of RMS™ reload delay kits will not explode in fires and normally will not ignite unless subjected to direct flame and then will burn slowly. Use water to fight any fires in which AeroTech/RCS RMS™ reload delay kit pyrotechnic components may become involved: Direct the water at the AeroTech/RCS RMS™ reload delay kit pyrotechnic components to keep them below their 550 deg. F autoignition temperature. Foam and carbon dioxide fire extinguishers will NOT extinguish burning propellants of the type used in RMS™ reload delay kit pyrotechnic components. Keep reload delay kit pyrotechnic components away from flames, sources of heat and flammable materials.

**Disclaimer and Warranty**
**NOTICE:** Since we cannot control the storage and use of our products, once sold we cannot assume any responsibility for product storage, transportation or usage. RCS shall not be held responsible for any personal injury or property damage resulting from the handling, storage or use of our product. The buyer assumes all risks and liabilities therefrom and accepts and uses AeroTech/RCS products on these conditions. No warranty either expressed or implied is made regarding AeroTech products, except for replacement or repair, at RCS’s option, of those products which are proven to be defective in manufacture within one year from the date of original purchase. For repair or replacement under this warranty, please contact RCS. Proof of purchase will be required. Note: Your state may provide additional rights not covered by this warranty.

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**54mm High-Power RMS-Plus™ Complete Reload Delay Kit (CRDK)**

**For use with 54mm RMS™ reload kits using the following propellants to make a 14 second delay or smoke charge:**

**Reload Families:**
- White Lightning™, Black Max™, Metalstorm & DM, P/N CRDK54-1
- Redline™ & Mojave Green™, P/N CRDK54-2
- Blue Thunder™, P/N CRDK54-3

**Specific Reloads:**
- I115W & J180T ONLY, P/N CRDK54-4
- I170G ONLY, P/N CRDK54-5
- I215R ONLY, P/N CRDK54-6
- I229T & K2050ST ONLY, P/N CRDK54-7
- I117FJ & K11103X ONLY, P/N CRDK54-8
- J90W, J135W, K185W, K270W & K250W ONLY, P/N CRDK54-LB

Contains 1 each: RMS-Plus™ delay element, aft delay spacer (some configurations do not require or include an aft delay spacer), 54mm delay insulator, 54mm delay o-ring, 54mm forward delay spacer (washer).

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