

Available for Immediate Shipment!

AeroTech RMS™ J615ST-20A Aerospike Rocket Motor Reload Kit New Product Information Release 8/12/22

AeroTech/Quest is pleased to announce the Tripoli certification and immediate availability of our new RMS Reloadable Motor System™ J615ST-20A rocket motor reload kit (No. 106120), the first high-power hobby rocket motor featuring an “Aerospike” nozzle and designed to use the two-grain RMS-54/852 hardware.

Our Aerospike nozzle provides an especially cool “I flew one” experience for our high-power flyers. Theoretically, an Aerospike nozzle expands the rocket motor exhaust gases around a center body rather than internally in the exit cone of a conventional nozzle. Aerospike nozzles have the advantage of being self-adjusting to the rocket’s ambient pressure in flight and therefore can be more efficient than a traditional fixed-expansion ratio nozzle when used at a wide range of altitudes. In consumer applications, however, the Aerospike nozzle is utilized more for its unique appearance and novelty rather than for performance reasons. Our Aerospike nozzle does produce a rather novel exhaust plume.

The J615ST-20A has a high-thrust profile for heavy rockets delivering 745.5 N-Sec (167.6 lb.-Sec.) of total impulse with a 1.2 second burn time and an all-up weight in motor hardware of 1.8 lb. (801.7 g). This new rocket motor utilizes AeroTech’s aerospace-grade Super Thunder™ (ST) propellant formulation with a burn rate midway between Blue Thunder™ and Warp-9™ propellant types. The J615ST-20A generates a peak thrust of 933.9 N (209.7 lb.) with an average thrust of 615.1 N (138.3 lb.). The J615ST-20A includes an ejection charge and produces tracking smoke via a 20 second time delay adjustable to increments of 18, 16, 14 and 12 seconds.

J615ST-20A Specifications

Diameter: 54mm (2.13")
Length: 240.4mm (9.5")
Propellant: Super Thunder
Total Impulse: 745.5 N-Sec. (167.6 lb.-Sec.)
Burn Time: 1.2 Seconds
Peak Thrust: 933.9 N (209.7 lb.)
Delay Time: 20 Seconds - Adjustable to 18, 16, 14 and 12 seconds.
Propellant Weight: 370.5 g (0.82 lb.)
Loaded Weight: 801.7 g (1.8 lb.)

California State Fire Marshal classification and approval has been granted for the J615ST-20A RMS Reload Kit. It ships with a standard FirstFire™ Initiator, has a suggested retail price of \$99.99 each and may be purchased by consumers 18 years of age or older with a minimum Level 2 NAR or TRA Certification, or by educational institutions, government agencies and licensed commercial entities.

AeroTech invented the reloadable high-power rocket motor in 1990 and continues to lead the sport rocket industry in single-use and reloadable rocket motor technology. All RMS motor hardware features aircraft-grade machined aluminum casings and forward and aft closures with integral thrust rings. Thrust rings on RMS motors are designed to fit standard motor retainers.

TRA certification documents, RMS motor instructions and assembly drawings for the J615ST-20A will be available for download in PDF format from the Resource Library on the AeroTech-Quest website at <http://www.aerotech-quest.com>

