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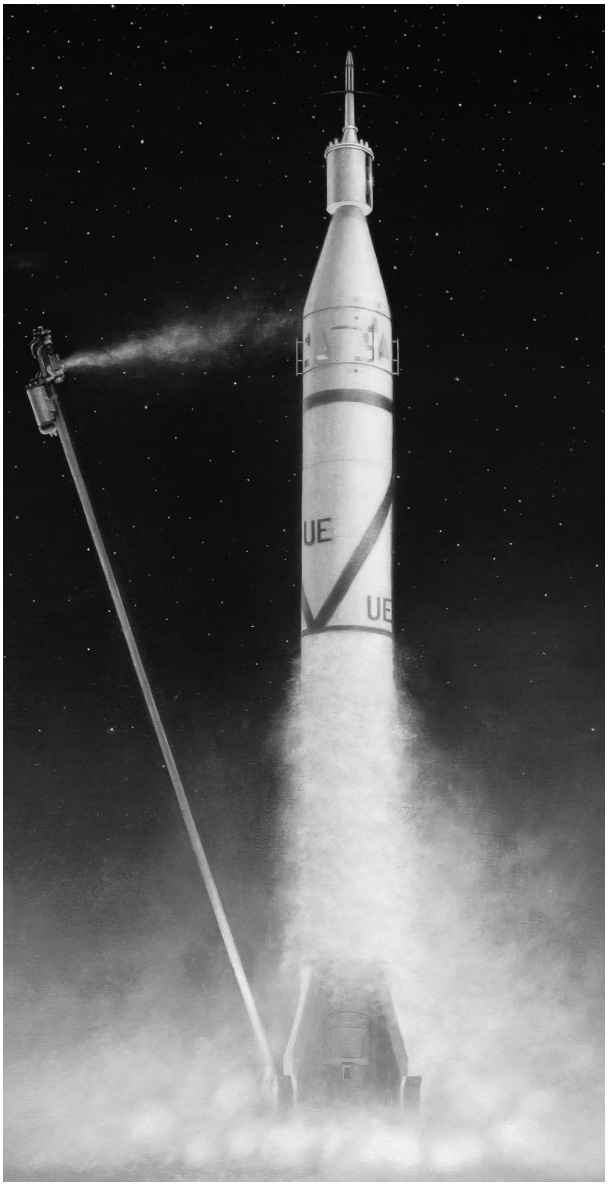
1/72nd scale

#2005

Redstone Launcher



Specifications: Redstone Launcher Variants

	PGM-11 Redstone IRBM	Juno I & Explorer I, Jupiter-C	Sparta/ WRESAT
Length	69 ft 4 in 21.13 m	69 ft 8 in 21.24 m	71 ft 5 in 21.77 m
Diameter	70 in (1.78 m) for all variants		
Span	12 ft 8 in (3.86 m) for all variants		
Launch Weight	61,200 lb 27,760 kg	64,070 lb 29,060 kg	66,000 lb 29,940 kg
Engine	One Rocketdyne A-7 for all variants		
Thrust	82,617 lbf 367.50 kN	93,560 lbf 416.18 kN	94,000 lbf 418.13 kN
Propellants	Ethyl Alcohol and Liquid Oxygen		
First Flight	Aug 20, 1953	Jan 31, 1958	Nov 28, 1966
Last Flight	Dec 1, 1965	Oct 23, 1959	Nov 29, 1967
Payload	6,305 lb 2,860 kg	24 lb 11 kg	99 lb 45 kg
Apogee	57 miles 92 km	Low earth orbit	Low earth orbit

America enters the Space Race

The Redstone rocket was one of America's most successful rockets – not only did it launch America's first satellite, it also launched America's first two astronauts into space on sub-orbital missions in 1961.

The Redstone rocket began its service life as an Intermediate Range Ballistic Missile (IRBM). Developed in Huntsville, Alabama, it had its first test flight in 1953 and became operational with the US Army from June 1958 to June 1964. It was designated *PGM-11 Redstone* and was stationed in Oklahoma and West Germany.

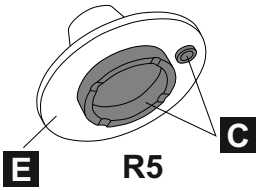
America launched its first satellite, *Explorer I,* aboard a *Juno I* rocket which was a derivative of the Redstone rocket. The launch occurred on January 31, 1958 from Cape Canaveral in Florida, and *Explorer I* remained operational for 111 days. It detected the Van Allen radiation belt, and finally re-entered the earth's atmosphere about twelve years later. The *Juno I* was based on the *Jupiter-C* developmental rocket, which consisted of the Redstone booster, plus three more stages. The second stage consisted of a cluster of eleven Baby Sergeant rockets that would fire for six seconds. The third stage was a smaller cluster of three Baby Sergeant rockets. The fourth stage consisted of a single Baby Sergeant rocket that was mated to the *Explorer I* satellite.

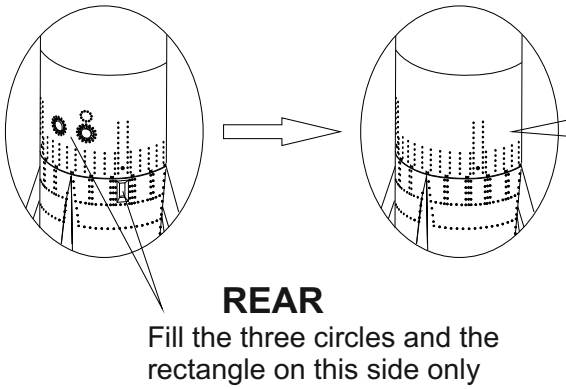
Another variant of the Redstone rocket was called *Sparta*, which consisted of surplus Redstone boosters and Antares-2 and BE-3 upper stages, that were used in a joint US-UK project to test re-entry dynamics. These rockets were launched from Woomera in South Australia. At the end of the successful *Sparta* test program, one remaining rocket was donated to the Australian government to launch their own satellite. The Weapons Research Establishment developed the *WRESAT* satellite and launched it from Woomera on 29 November 1967, becoming Australia's first satellite.

A White | **C** Exhaust Metal | **E** Silver | **G** Olive Drab

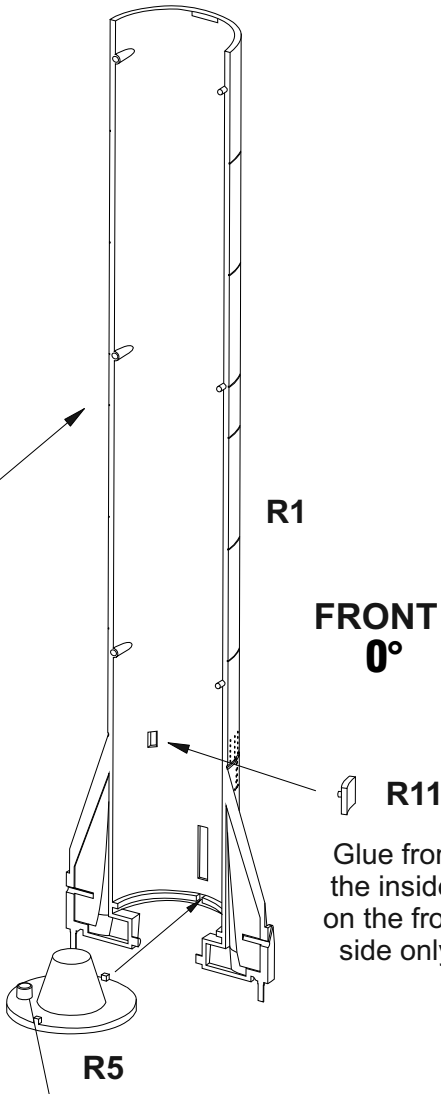
B Black | **D** Aluminium | **F** Dark Blue

1 REDSTONE BOOSTER ASSEMBLY



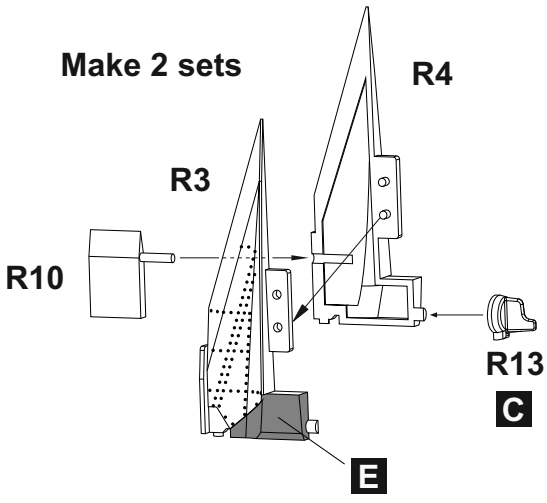


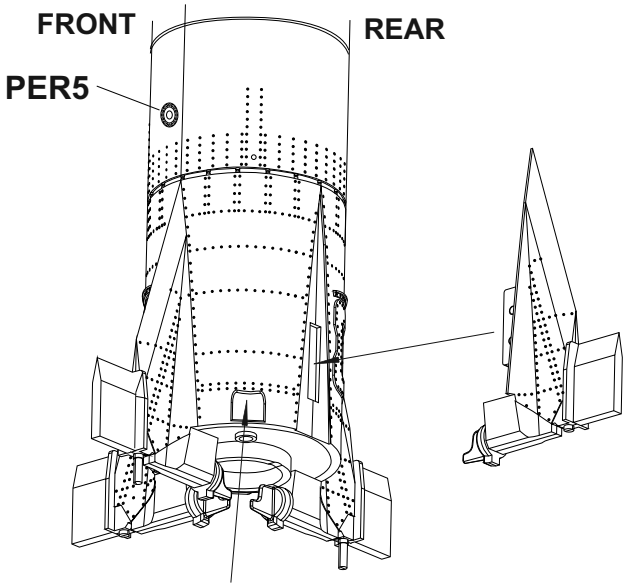
REAR
Fill the three circles and the rectangle on this side only



Glue from the inside, on the front side only

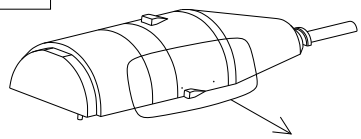
Note the orientation of this part relative to the front and rear rocket halves

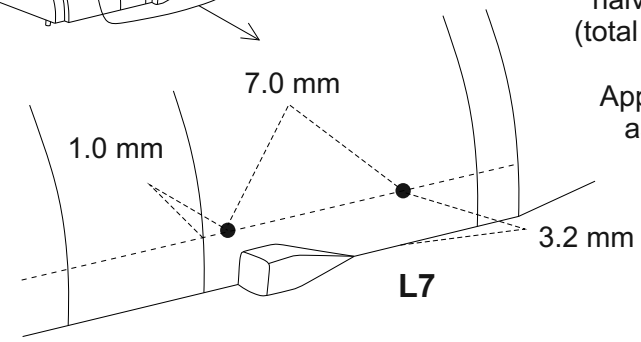




Repeat on other side

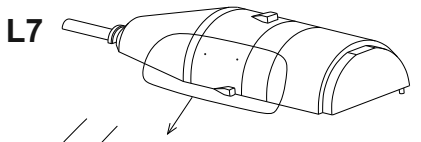
2 JUNO I WITH EXPLORER I / JUPITER-C UPPER STAGES

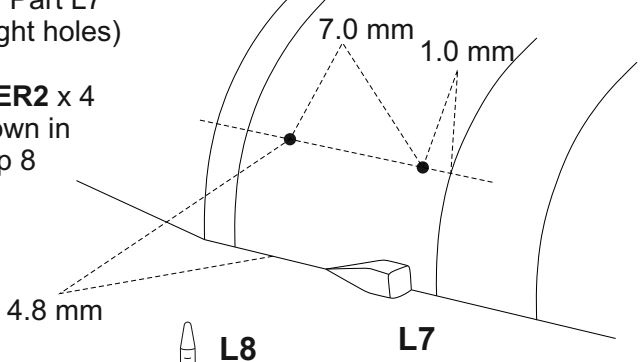




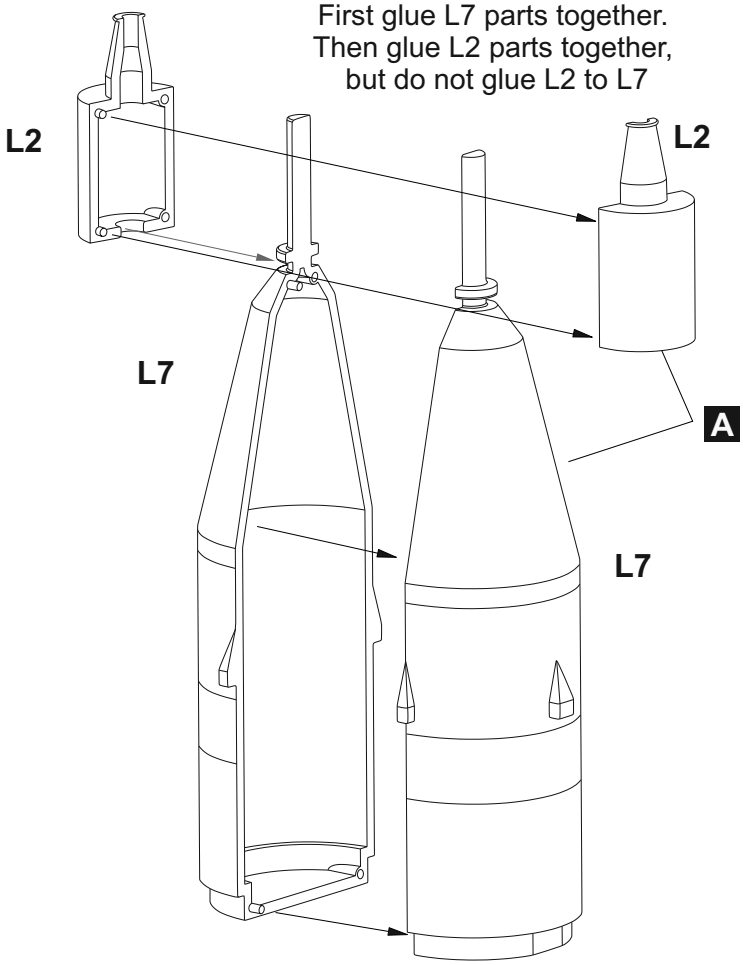
Drill Ø 0.2mm holes as shown in both halves of Part L7 (total of eight holes)

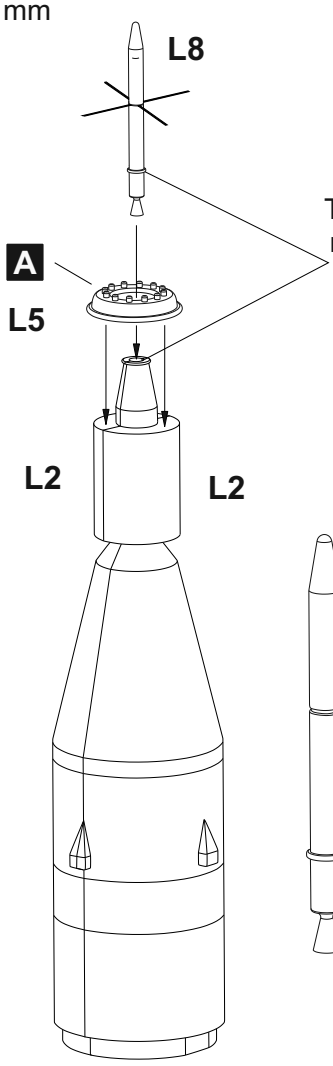
Apply **PER2** x 4 as shown in Step 8



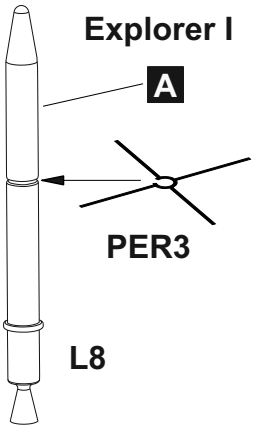


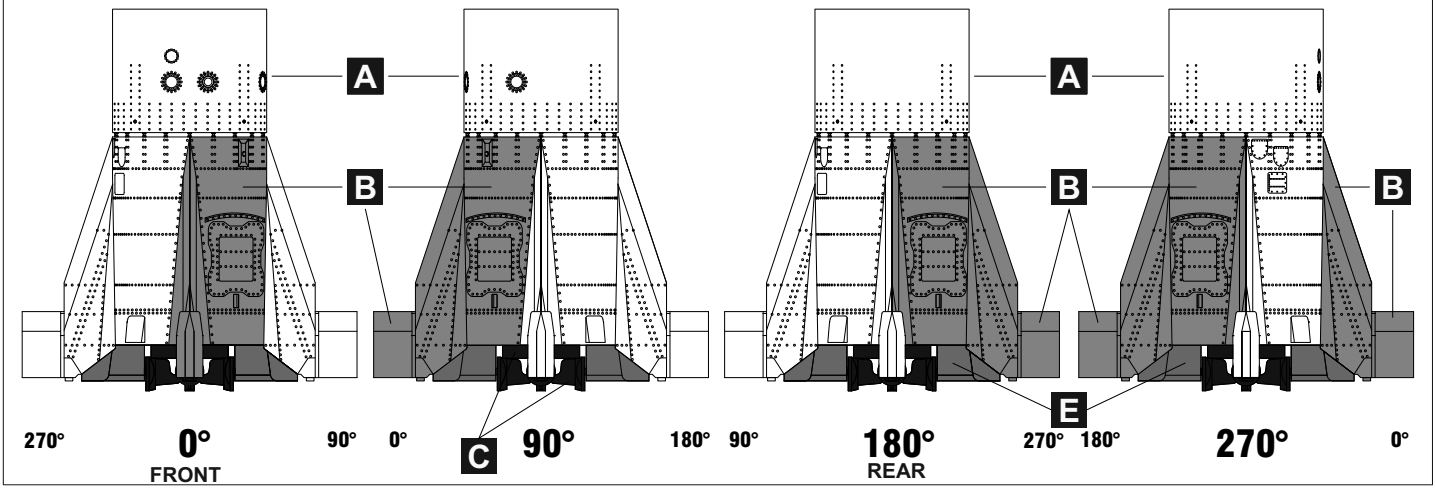
First glue L7 parts together. Then glue L2 parts together, but do not glue L2 to L7



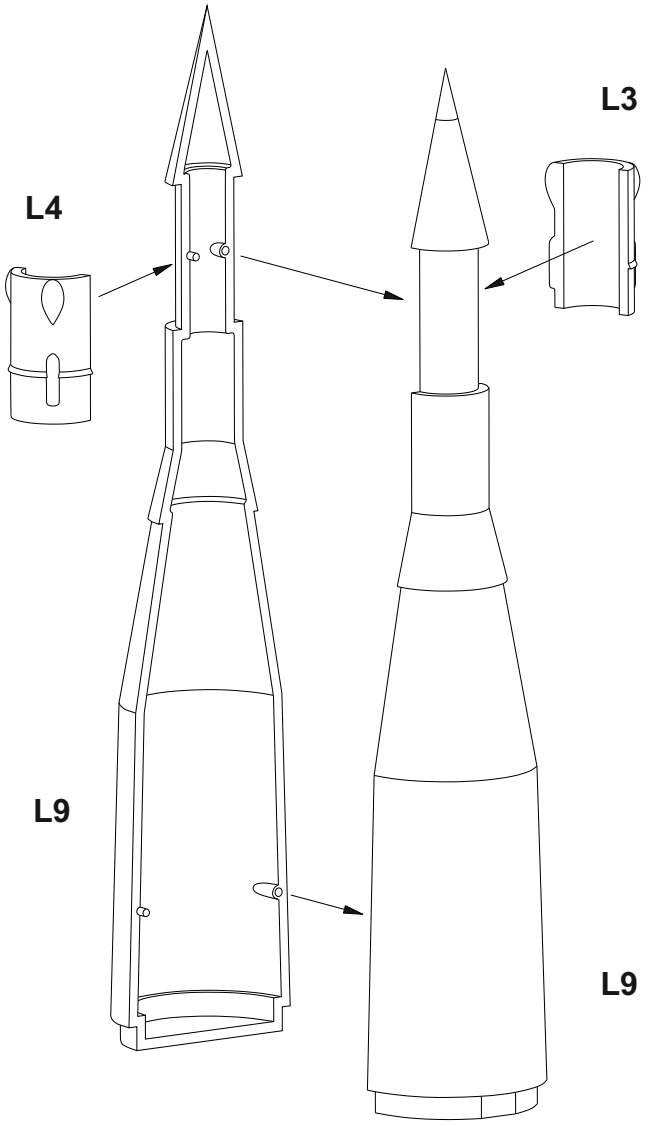


The base of the ring on Part L8 rests against the top of L2

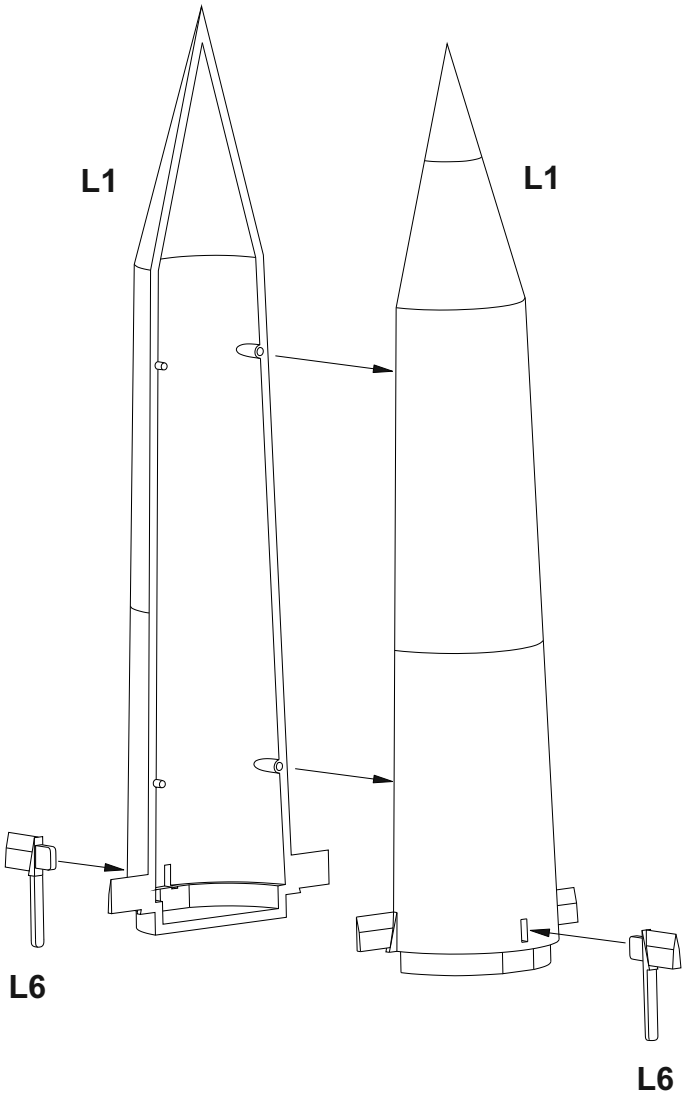




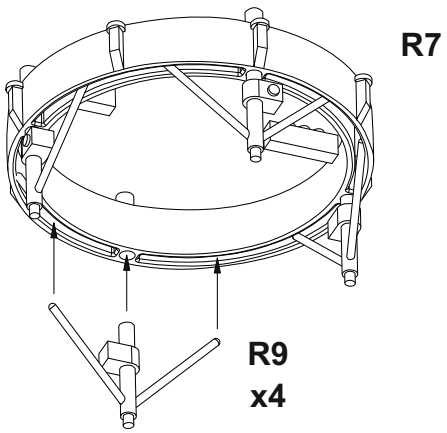
3 SPARTA / WRESAT UPPER STAGES

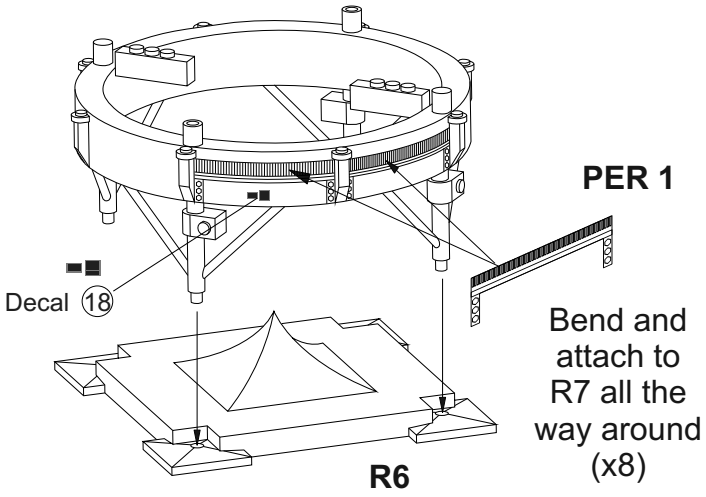


4 REDSTONE IRBM UPPER STAGES



5 LAUNCH STAND ASSEMBLY

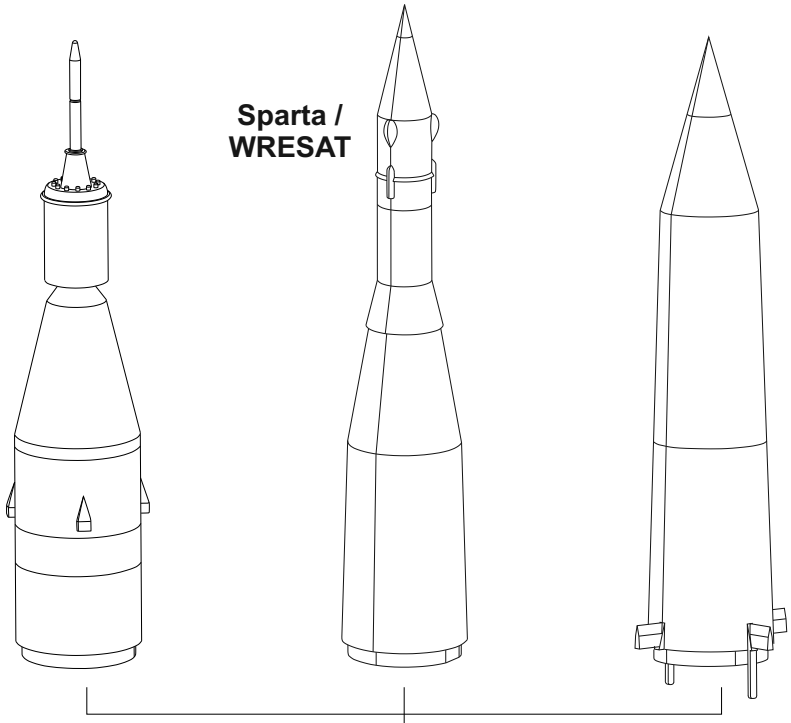




F **Dark Blue for Juno I with Explorer I**

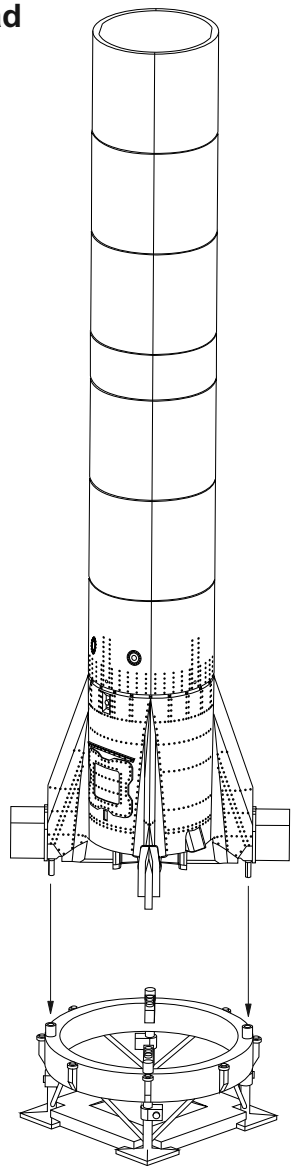
G **Olive Drab for IRBM/Sparta/WRESAT**

6 OVERALL AIRFRAME ASSEMBLY

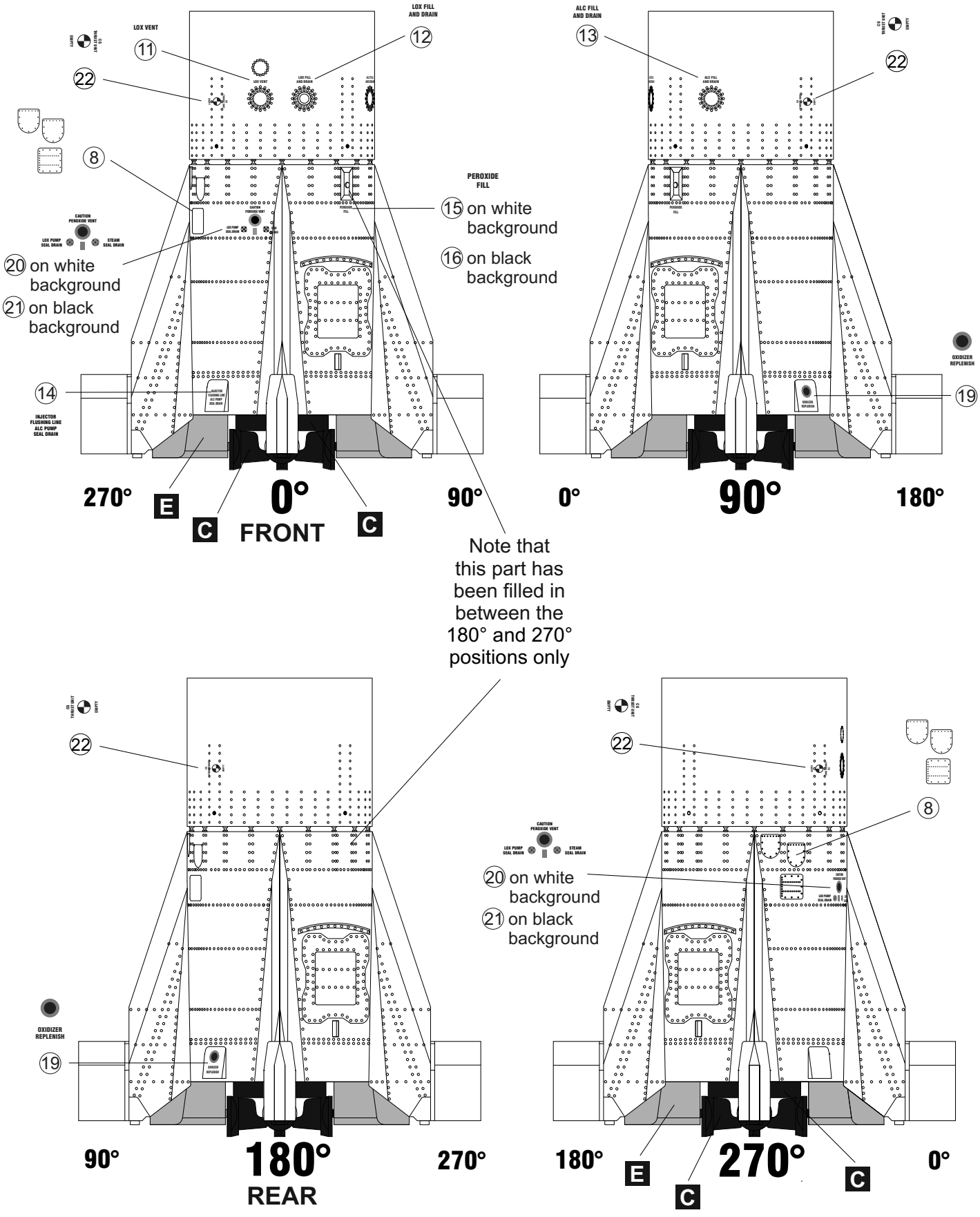


Some details
omitted for clarity

Pick one payload

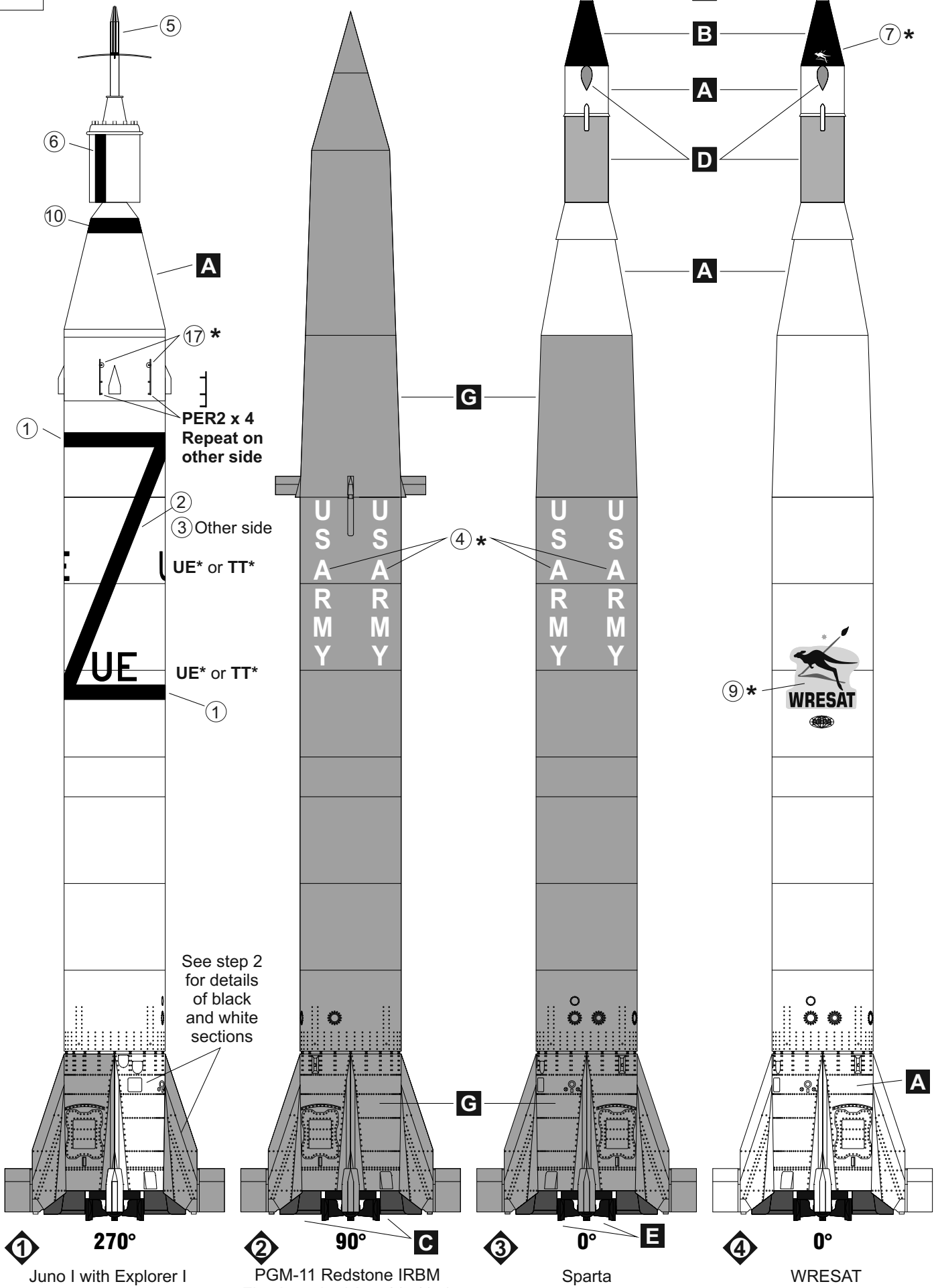


7 STENCILS COMMON TO ALL VARIANTS



8 APPLY DECALS

* = apply on both sides



① Juno I with Explorer I
Launched Jan 31, 1958

② PGM-11 Redstone IRBM
First launched Aug 20, 1953

③ Sparta
Nov 28, 1966 to Oct 31, 1967

④ WRESAT
Launched Nov 29, 1967

⚠ WARNING

CHOKING HAZARD: KEEP AWAY FROM CHILDREN UNDER THREE YEARS OF AGE.
DO NOT USE PAINTS OR GLUES NEAR FLAMES OR FIRE, OR WITHOUT ADEQUATE VENTILATION.
This model is intended for ages 14 and older.
Beware of small and/or sharp parts.
Throw away plastic bags when no longer required.
PAINT AND GLUE NOT INCLUDED
Use paints and glues in a well ventilated area.
Take care when handling knifes and other sharp objects.

Assembly

1 Study these instructions carefully before assembly and note the payload and marking options that you will build.
2 Remove the parts from the sprue one at a time with a sprue cutter, and carefully sand off any excess plastic.
3 Test fit the parts to ensure they fit correctly, then glue into place using polystyrene glue.
4 Some parts should be painted prior to gluing to the main assembly.
5 Before painting, carefully sand the model if required, then wash it in a soapy solution.
6 Allow to dry thoroughly before applying paint.
7 Paint the model in a well ventilated area, and allow to dry thoroughly.
8 Apply the decals (see instructions below).
9 Seal the decals with a clear coat of paint (allow at least one day for the decals to dry thoroughly).

Applying Decals

1 Cut the decal from the carrier sheet.
2 Dip the decal into water for about 10 seconds.
3 Place the decal on a cloth to absorb excess moisture.
4 Wet the model where you want to place the decal.
5 Slide the decal from the backing paper directly onto the model.
6 Do not lift the decal off the sheet as this may cause it to fold.
7 Once positioned correctly, press the decal gently with a soft cloth.

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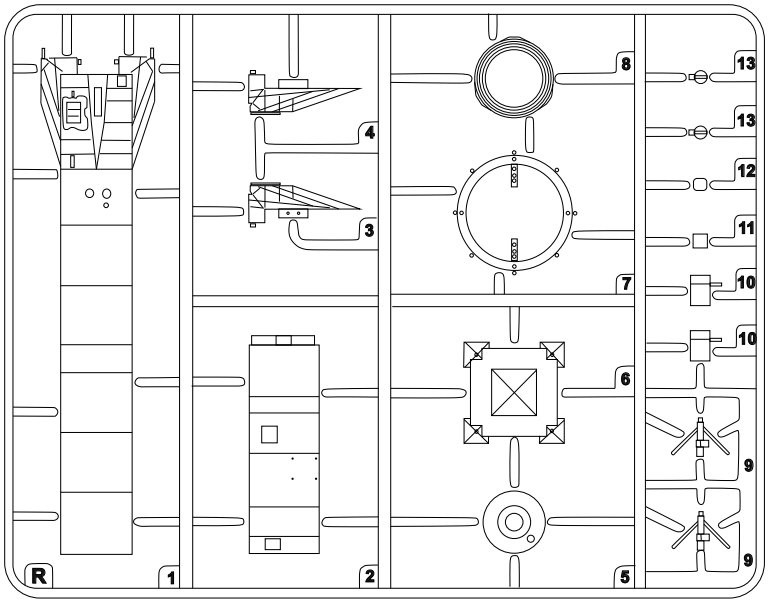
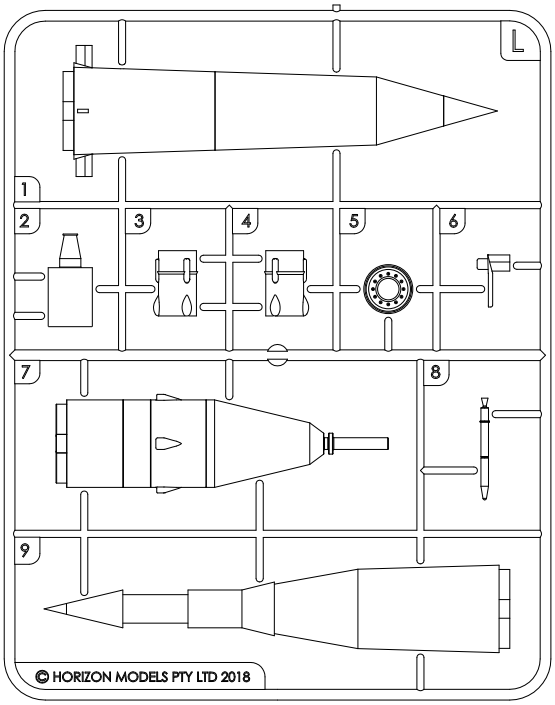
Sprue R (x2)



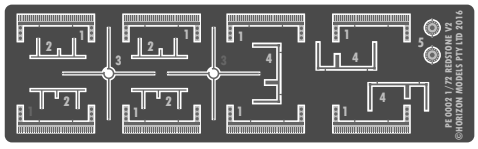
1 Fuselage Half
2 Upper Fuselage
3 Fin Half A
4 Fin Half B
5 Base with Nozzle
6 Exhaust Flame Deflector
7 Launch Adaptor Ring
8 Spacecraft Adaptor
9 Launch Stand Brace (x2)
10 Movable Rudders (x2)
11 Valve
12 Couplings Shroud
13 Carbon Jet Vane (x2)

Sprue L (x2)



1 IRBM Fuselage
2 Juno I Upper Stages
3 Sparta/WRESAT Upper Stage A
4 Sparta/WRESAT Upper Stage B
5 Juno I Upper Stages
6 IRBM Fin
7 Juno I Fuselage
8 Explorer I Satellite
9 Sparta/WRESAT Stage

Photo Etched Parts - Redstone (PER)



PER1 Launch Ring Detail (x8)
PER2 Juno I Antenna (x4)
PER3 Explorer I Whip Antenna (x2)
PER4 Not used (x3)
PER5 Alcohol Fill and Drain Port

Use a cyanoacrylate glue to attach Photo-Etched parts

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