

Convair SM-65D ATLAS



Specifications: Convair SM-65D Atlas

Length: 75 feet (22.9 metres) with Mk 2 RV
82 feet (25.0 metres) with Mk 3 RV
Diameter: 10 feet (3.05 metres)
Launch Weight: 260,000 lbs (117,900 kg)

Range: over 9,000 miles (14,500 km)
Speed at burnout: approx Mach 26
(17,000 mph / 27,350 km/h)

Engines:
Boosters: Two LR-89 engines rated at
150,000 lb thrust each (68,000 kg)
gimballed up to 5°
Sustainer: One LR-105 engine rated at
57,000 lb thrust (25,900 kg)
gimballed up to 3°
Verniers: Two LR-101 engines for control
rated at 1,000 lb thrust each (450kg)
moveable +/- 70° in pitch and
+20/-30° in yaw

Propellants:
RP-1 Kerosene: 76,000 lbs (34,470 kgs)
Liquid Oxygen: 130,000 lbs (58,970 kgs)

Guidance: Radio-Inertial Command

Warhead: 1.44 megaton W-49 warhead
in a Mk2 or Mk3 RV, or
3.75 megaton W-38 warhead
in Mk4 RV (test flown on the
Atlas D for later E/F models)

War would never be the same again. WWII changed the way they were fought. The USA developed the atomic bomb and Germany the ballistic missile. Nothing could stay the same and the Cold War that followed proved this. In that war, the USA and the USSR forged their industrial might into ever-more powerful nuclear weapons and the first Inter-Continental Ballistic Missile (ICBM) which became the symbol of strength for the superpowers.

You hold in your hands the Convair SM-65D Atlas. This was the USA's first ICBM. Weapons like this, tipped with a nuclear payload and shrouded in secrecy, held the peace for decades. It served in the Strategic Air Command from 1959.

The Convair SM-65D Atlas features a stage and a half design built from stainless steel and can launch a 1.44 megaton warhead over 9,000 miles (14,500kms). Later Atlas E and F variants grew to carry 3.75 megaton warheads enclosed by a Mk 4 re-entry vehicle.

The Atlas ICBM was retired by the more powerful two stage Titan II missile. But in its prime, the 1960s, Atlas played a crucial role in early space exploration, launching spy satellites, Lunar Ranger probes, and the first interplanetary probes, the Mariner, which were sent to Venus and Mars. The very first Americans to ever orbit the earth flew atop an Atlas rocket.

1

AIRFRAME PREPARATION

A Flat Aluminium

C Exhaust Metal

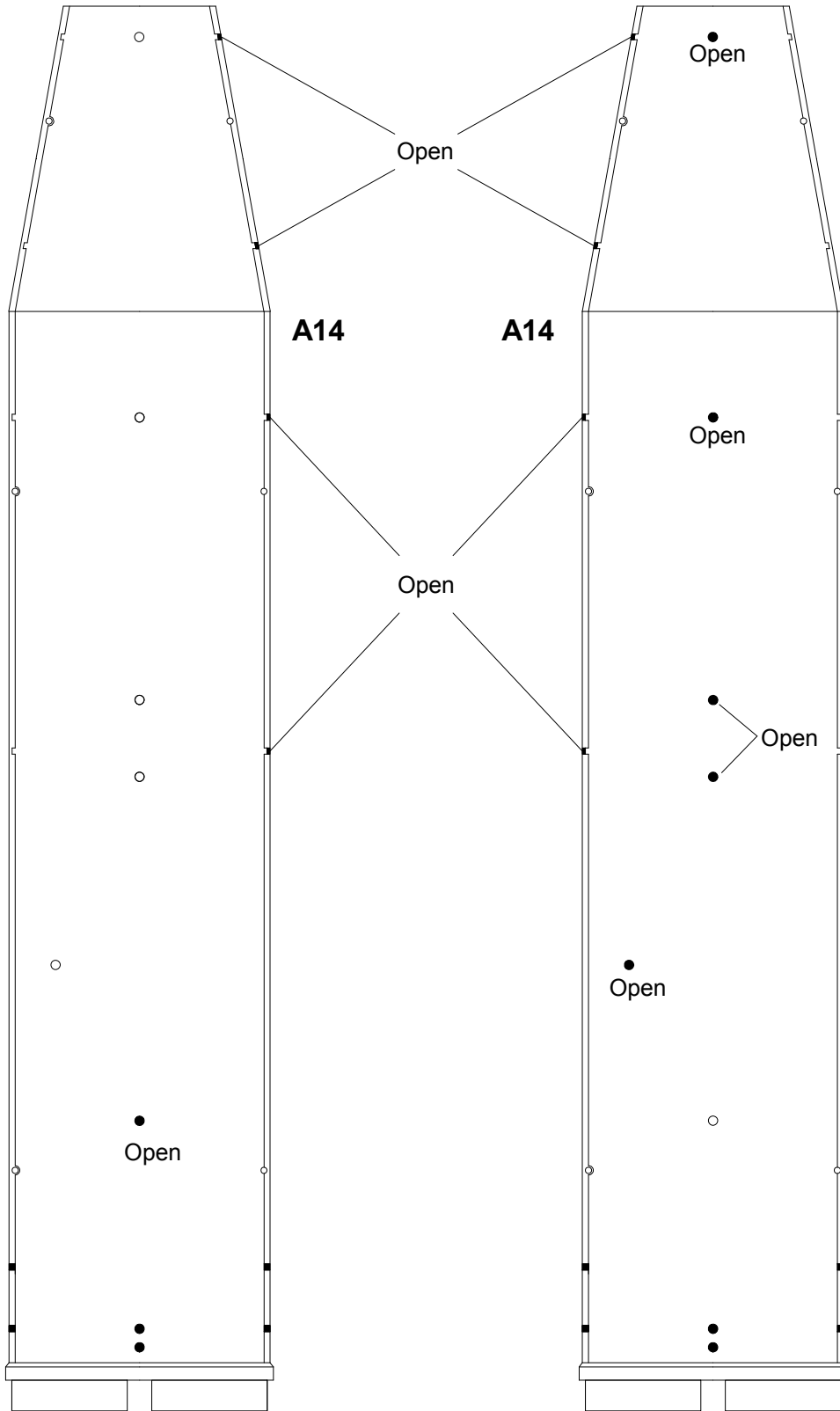
E Gloss White

B Stainless Steel / Silver

D Copper

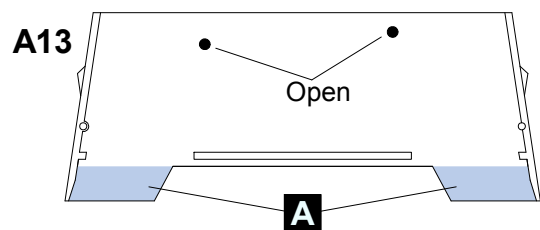
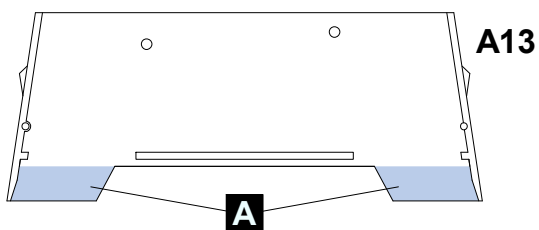
F Gloss Black

Open holes as shown below



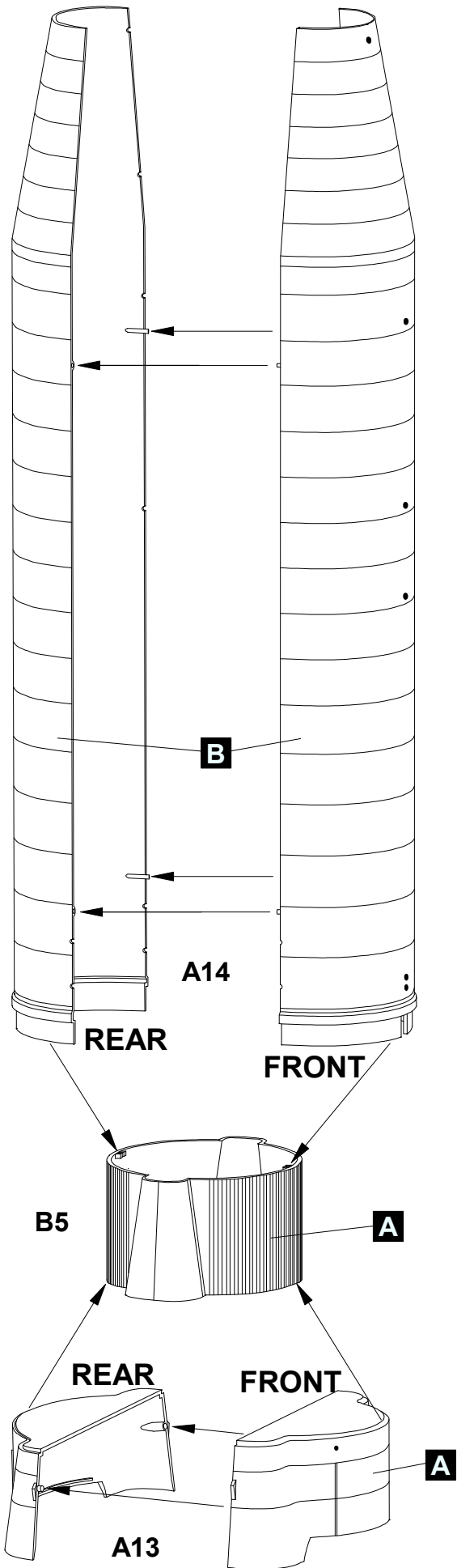
REAR

FRONT



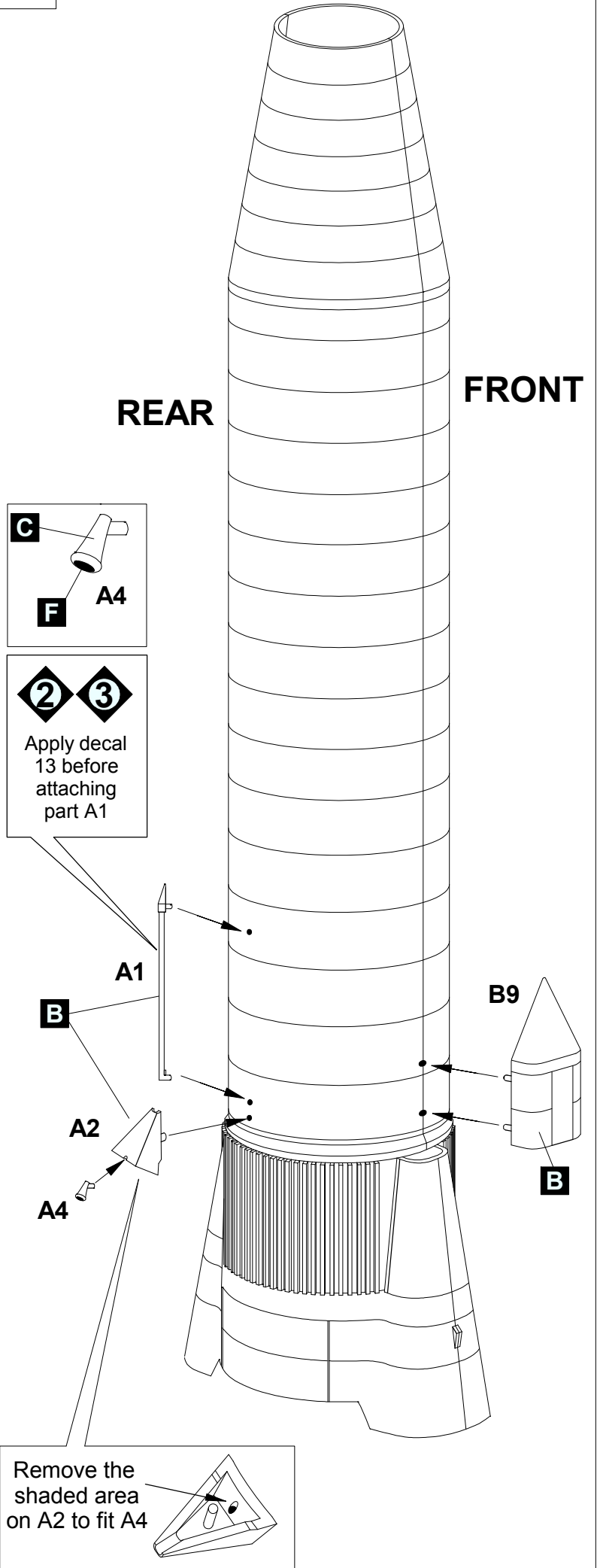
2

AIRFRAME ASSEMBLY



3

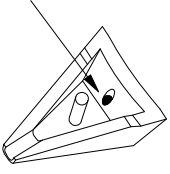
REAR AIRFRAME ASSEMBLY



4 FRONT AIRFRAME ASSEMBLY

2 **3**
 Apply decals 1, 13 & 19 before attaching parts A15 and A16

Remove the shaded area on A2 to fit A4

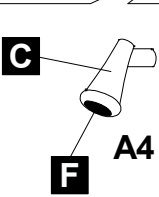
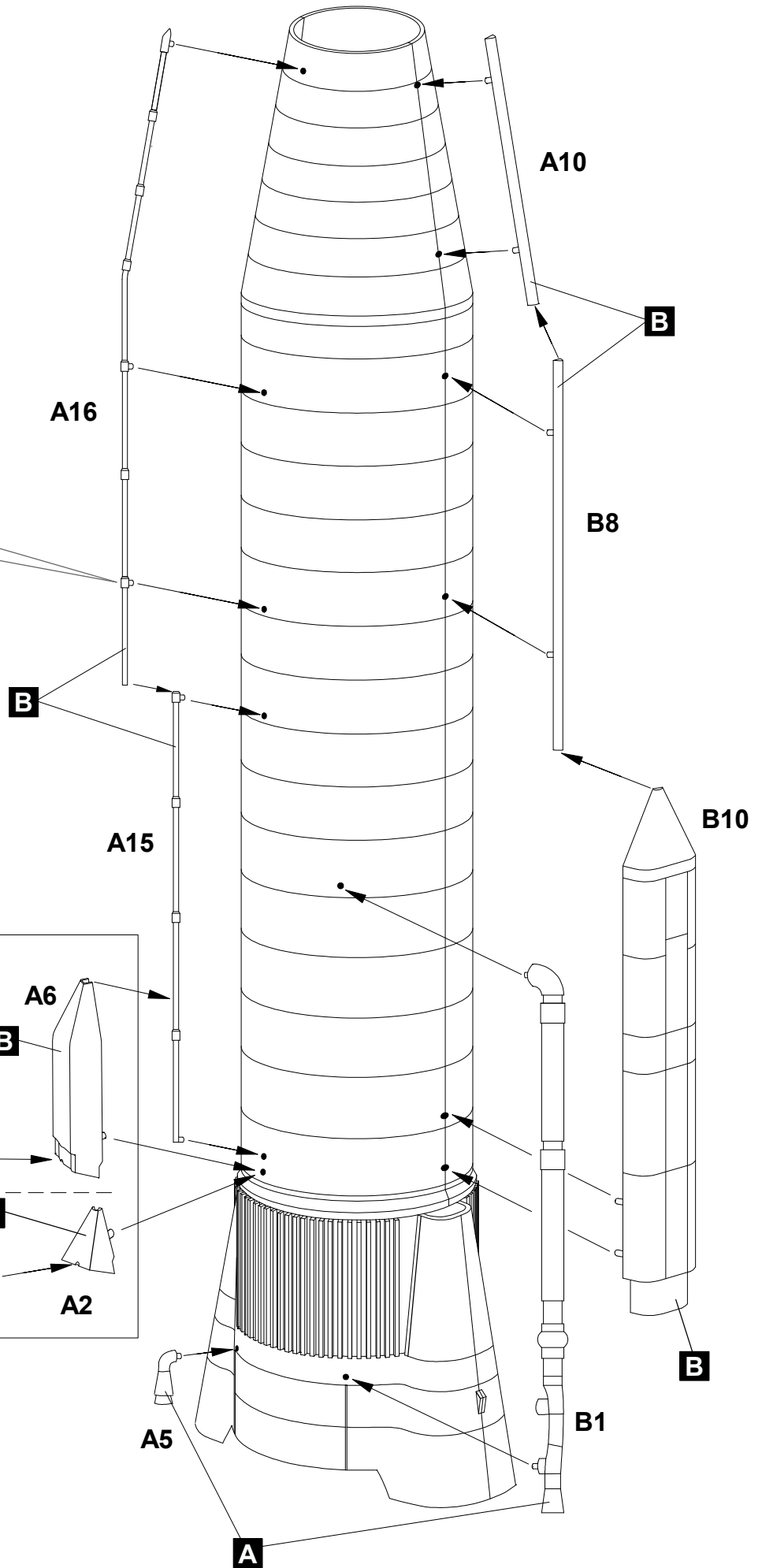


Typically, the large vernier fairing (Part A6) was used on this side of the Atlas D ICBM. However, some missiles such as Atlas 101D were fitted with the smaller vernier fairing (Part A2)

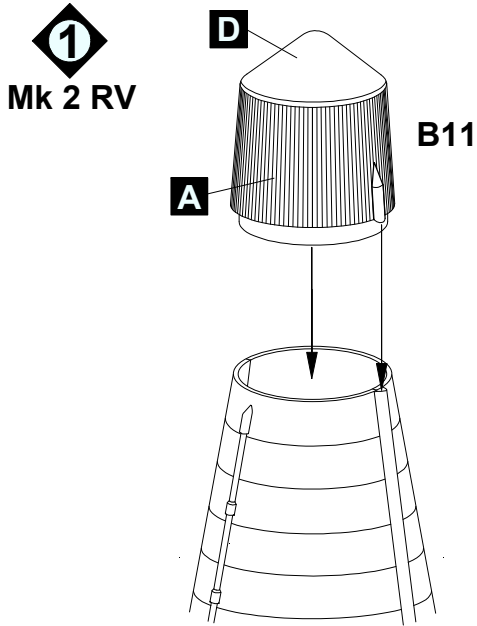
1 **3**
 A4 → **A6**
 B → **A6**

 OPTION
2
 A4 → **A2**
 B → **A2**

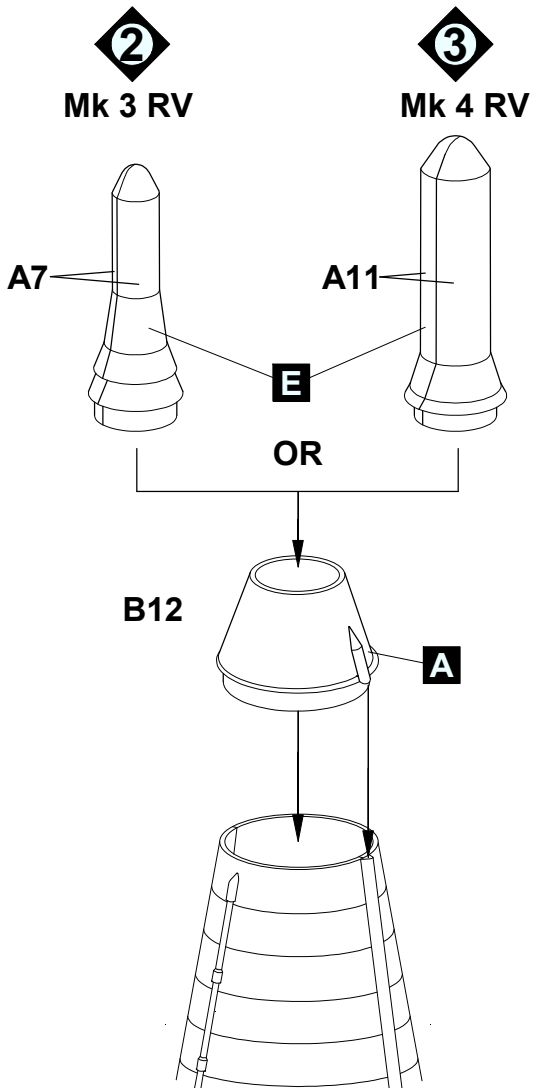
C
F **A4**

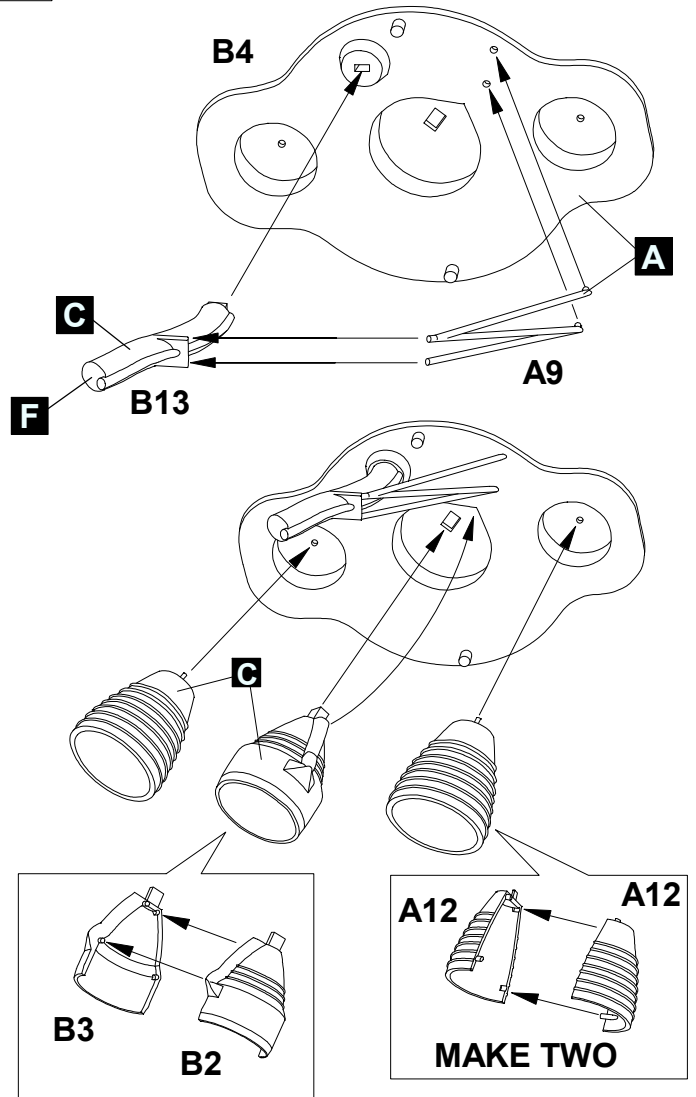
5 CHOOSE ONE OF THREE PAYLOADS



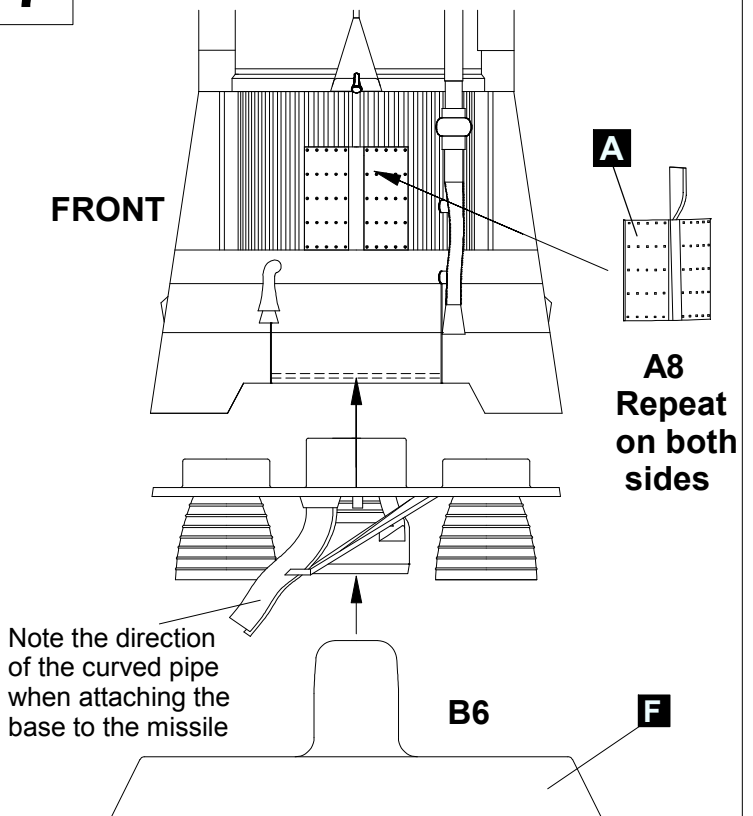
OR



6 ROCKET ENGINE ASSEMBLY



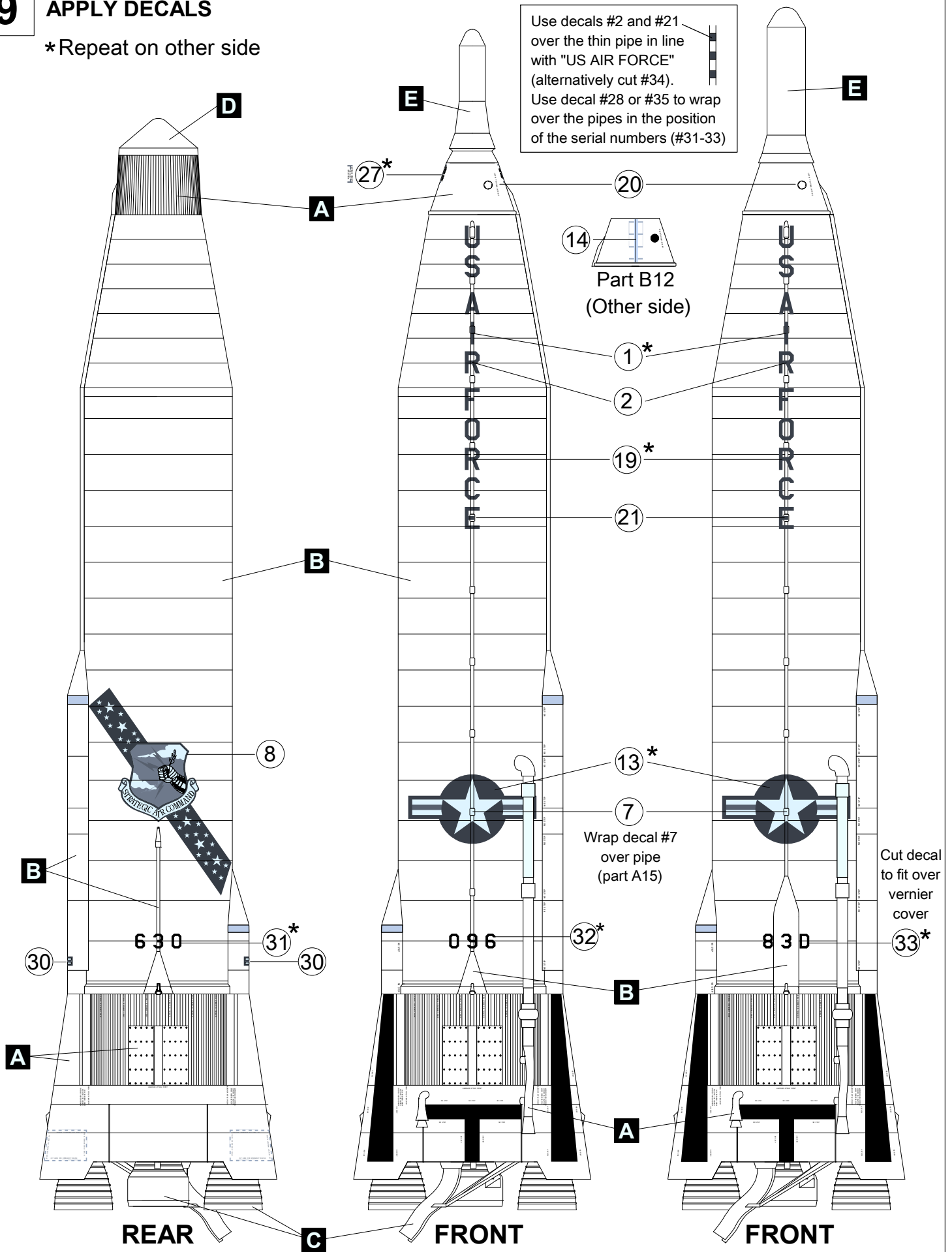
7 FINAL ASSEMBLY



9

APPLY DECALS

*Repeat on other side



1 First SAC Launch
Atlas 12D S/N 57-2630
Launched Sep 9, 1959
Vandenberg 576 A-2



2 Operation "New Nickle"
Atlas 101D S/N 58-7096
Launched Aug 22, 1961
Vandenberg 576 B-3



3 Mk 4 RV R&D Test Flight
Atlas 83D S/N 58-7078
Launched Nov 15, 1960
Cape Canaveral LC-12

! 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 knives 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

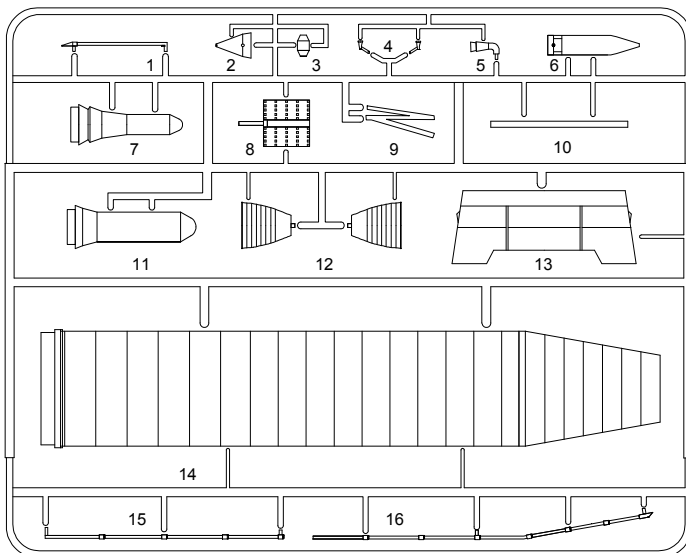
- 1 Cut the decal from the carrier sheet.
 - 2 Dip the decal into water for about 10 seconds.
 - 3 Place the decal on a cloth to absorb excess moisture.
 - 4 Wet the model where you want to place the decal.
 - 5 Slide the decal from the backing paper directly onto the model.
 - 6 Do not lift the decal off the sheet as this may cause it to fold.
 - 7 Once positioned correctly, press the decal gently with a soft cloth.
- * You can use decal 25 to create other serial numbers.
* Use decal 36 or 37 on the display stand, depending on the colour it has been painted.

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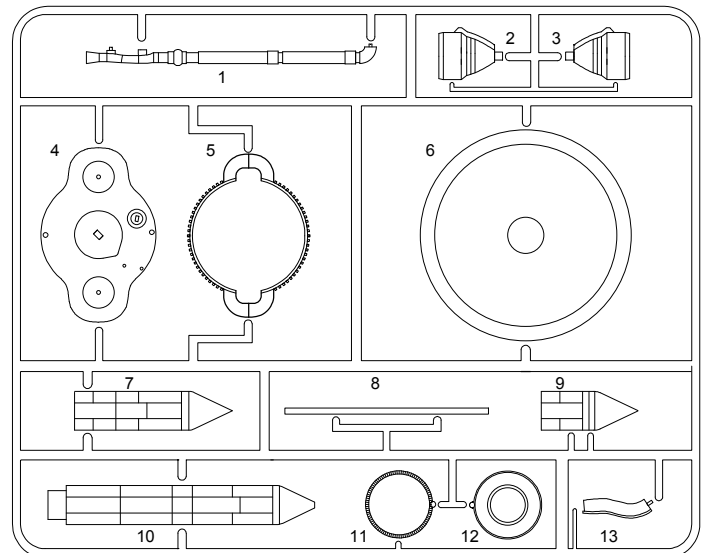
Sprue A (x2)

Part A3 not used



Sprue B

Part B7 not used



- | | |
|--------------------------------------|--|
| 1 Fuel pressure line | 10 Cable way fairing (top) |
| 2 Vernier fairing (small) | 11 Mk 4 re-entry vehicle |
| 3 Cable way fairing cover (not used) | 12 Booster engine half (x2) |
| 4 Vernier engine (x2) | 13 Thrust structure fairing (lower) |
| 5 Fuel fill & drain valve | 14 Tank structure |
| 6 Vernier fairing (large) | 15 Liquid oxygen pressure line (lower) |
| 7 Mk 3 re-entry vehicle | 16 Liquid oxygen pressure line (upper) |
| 8 Vernier heat radiation shield | |
| 9 Turbine exhaust duct brace | |

- | | |
|------------------------------------|--|
| 1 Liquid oxygen line | 7 Equipment pod (not used) |
| 2 Sustainer engine (left half) | 8 Cable way fairing (lower) |
| 3 Sustainer engine (right half) | 9 Equipment pod (short) |
| 4 Fire shield nacelle | 10 Equipment pod (long) |
| 5 Thrust structure fairing (upper) | 11 Mk 2 re-entry vehicle |
| 6 Display stand | 12 Nose cone adaptor (for Mk 3 and Mk 4 RVs) |
| | 13 Booster engine turbine exhaust duct |

MADE IN AUSTRALIA

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