

# PILGRIM OBSERVER

## MANNED SPACE STATION

### CONSTRUCTION PROCEDURE

**2** PLATED

**PLEASE READ THIS FIRST**

**2** NON-PLATED

It is recommended that you incorporate the following tools for constructing your space station. A modeler knife or single edge razor blade, small artist's paint brushes for detailing, plastic cement (liquid is recommended).

Read all the instructions carefully, step by step in the order numbered. The numbering system has been checked for ease in building

and should be followed. A star with a number one next to a part means that you should start that assembly with that part. Remember to use your cement carefully; do not get any on exposed surfaces. **MOVING PARTS:** should be lubricated with a small amount of petroleum jelly or household oil.

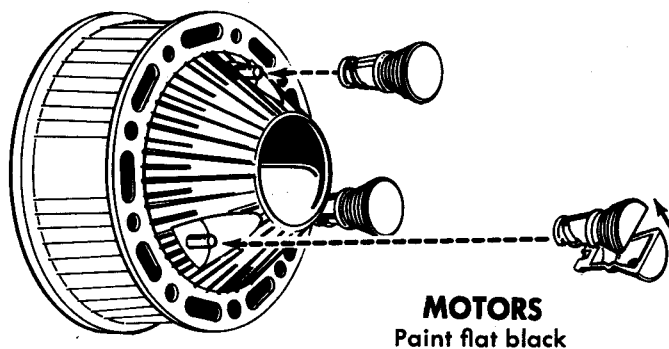
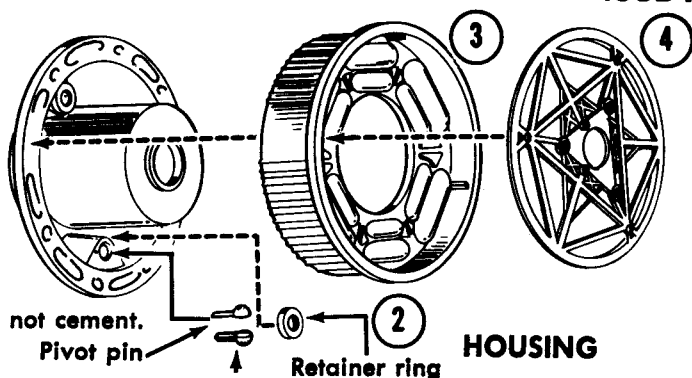
**PAINTING NOTE:** Parts of many assemblies should be painted prior to assembling. Plan your color scheme carefully. Paint where necessary and set aside to dry. **DO NOT HURRY,** care when building will reveal a model you will be proud of.



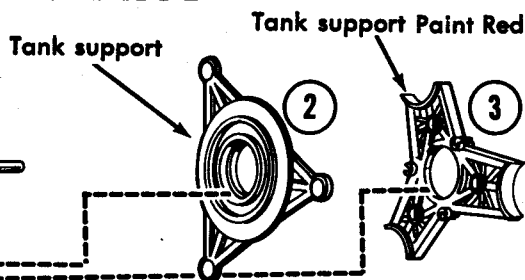
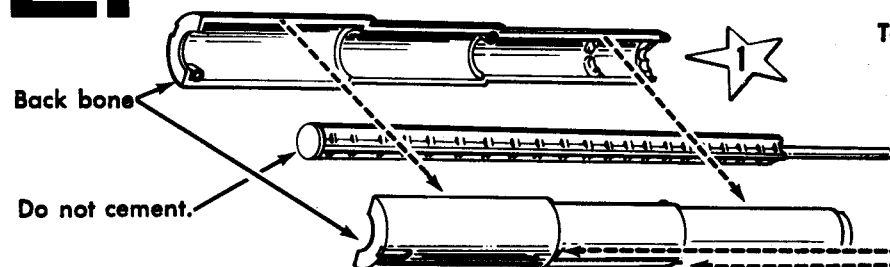
**1.**

#### MAIN THRUSTERS (SUB-ASSEMBLY)

Assemble three pivot pins as shown, use cement carefully on retainer ring.



#### **2.** (SUB-ASSEMBLY) BACK BONE-EXTENSION ROD



**NOTE:** Do not get cement on extension rod, it has to move in and out freely.

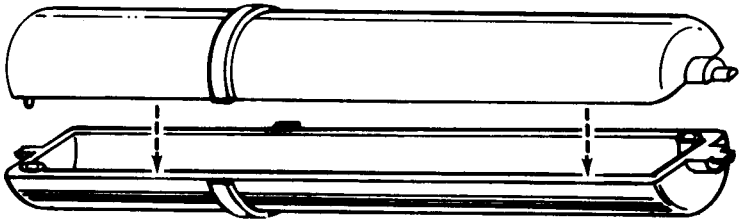
**CHECK ALIGNMENT**

Be sure to align tank supports to back bone using tabs and slots built in.

# 3.

## FUEL TANKS HYDROGEN LIQUID OXYGEN

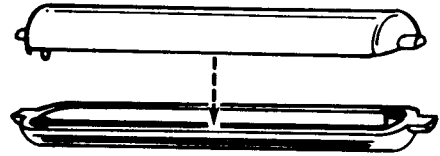
(SUB-ASSEMBLY)



Assemble three outboard tanks as shown.

## AFT STORAGE TANKS LARGE

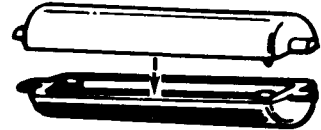
Assemble three large aft inboard tanks as shown.



Paint Light Blue

## FORWARD STORAGE TANKS SMALL

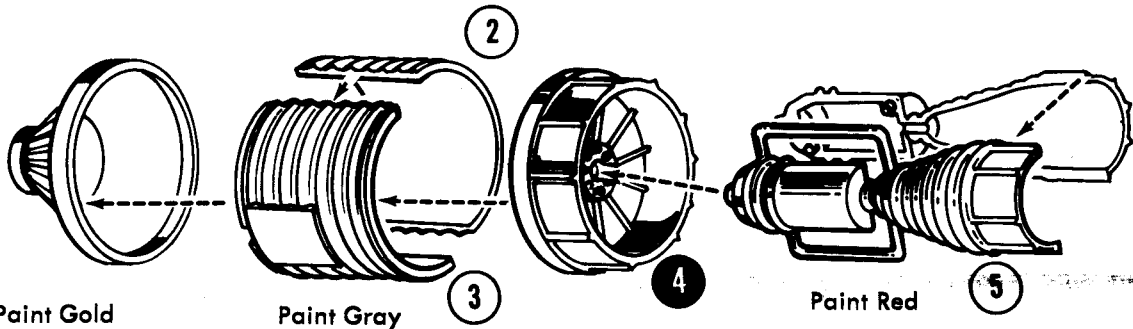
Paint Yellow



Assemble three small forward inboard tanks as shown.

# 4.

## NERVA NUCLEAR ENGINE



Paint Gold

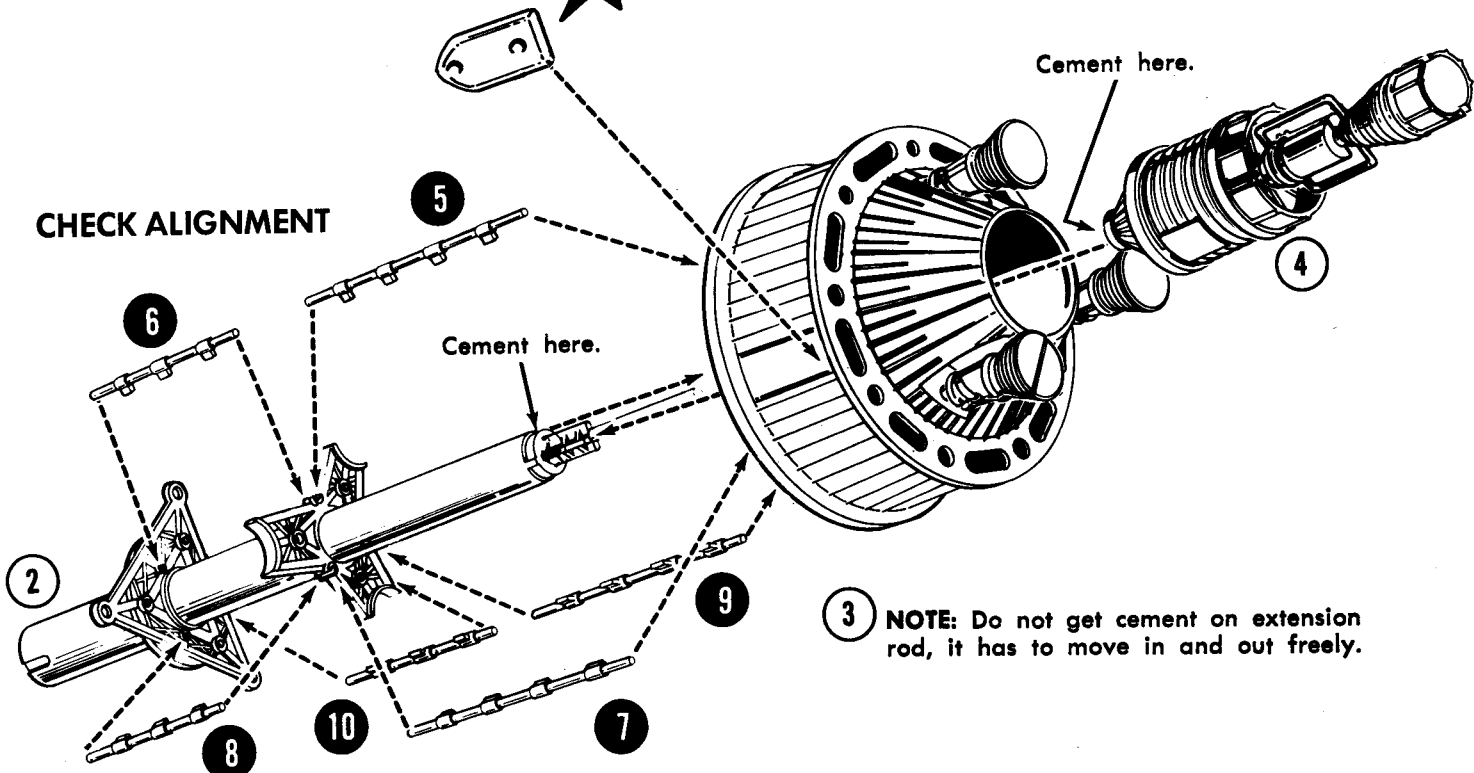
Paint Gray

Paint Red

# 5.

## ENERGY SUPPLY SYSTEM (SUB-ASSEMBLY)

★ Locate four vent-pods to ribs on housing.



Cement here.

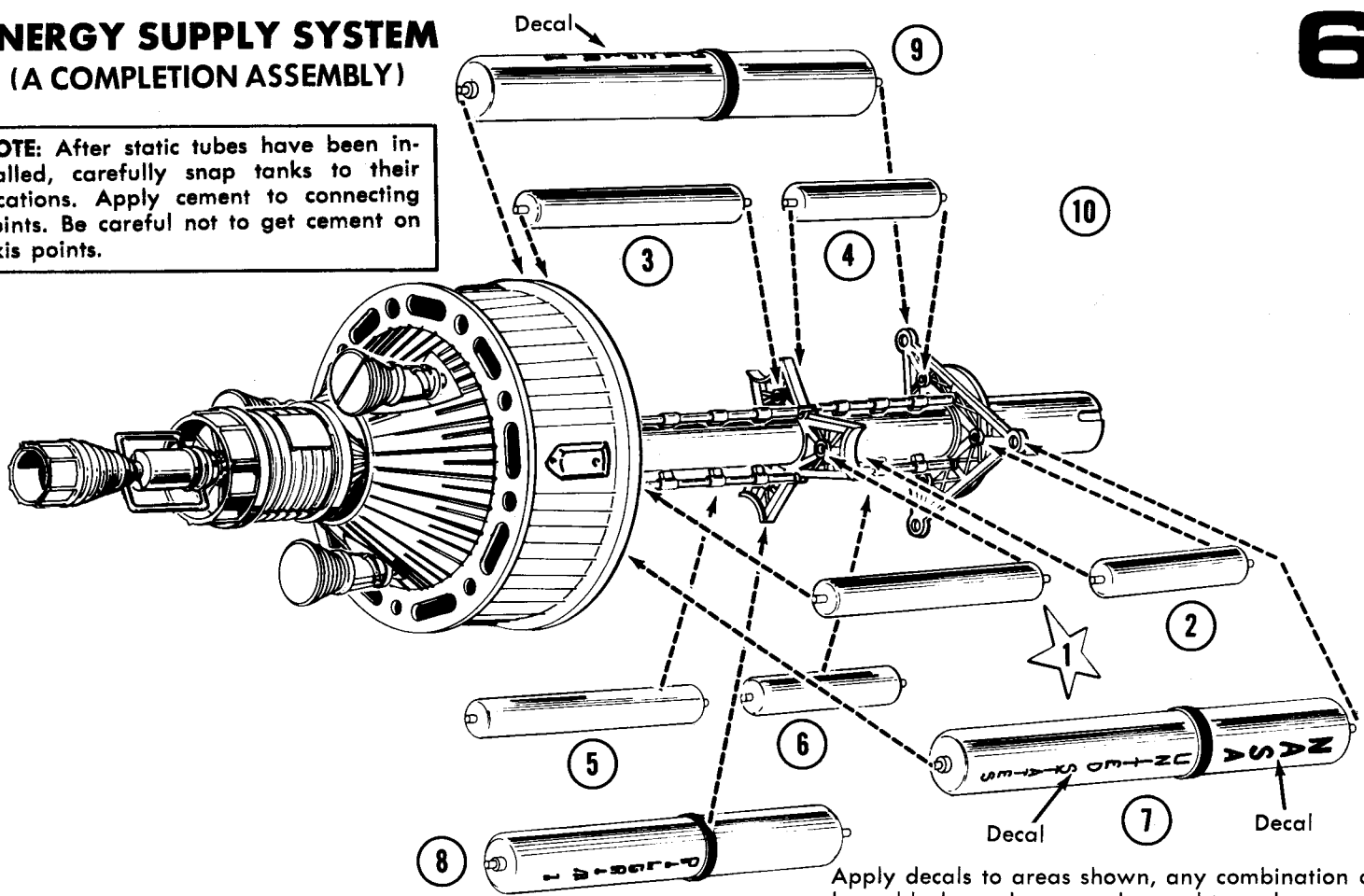
Cement here.

3 NOTE: Do not get cement on extension rod, it has to move in and out freely.

# ENERGY SUPPLY SYSTEM (A COMPLETION ASSEMBLY)

# 6.

**NOTE:** After static tubes have been installed, carefully snap tanks to their locations. Apply cement to connecting points. Be careful not to get cement on axis points.

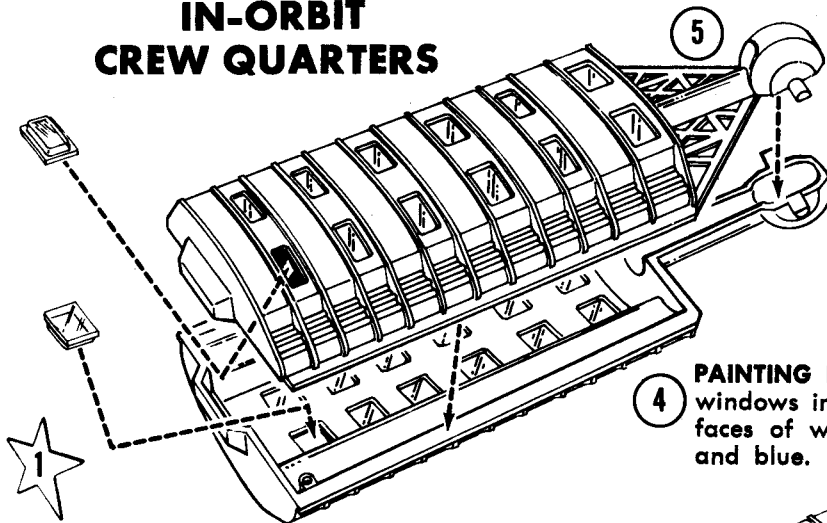


Apply decals to areas shown, any combination of the large black numbers may be used to make up a serial number.

## No. 1 (SUB-ASSEMBLY)

## GRAVITATIONAL SYSTEM

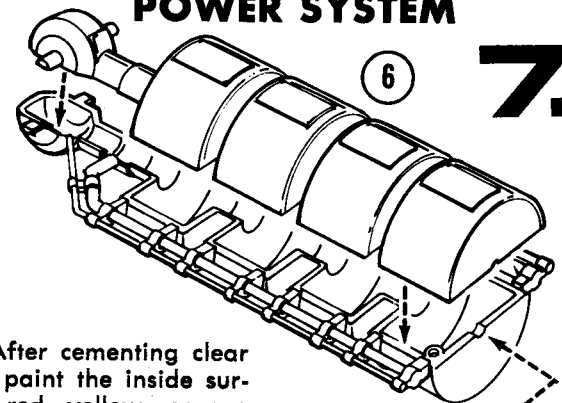
### IN-ORBIT CREW QUARTERS



1 Locate 12 square windows from inside.

2 Locate 12 round windows from inside.

## NUCLEAR INTERNAL POWER SYSTEM



4 **PAINTING NOTE:** After cementing clear windows in place, paint the inside surfaces of windows red, yellow, orange and blue.

## HYDRORNIL FARM

# 7.

# 3

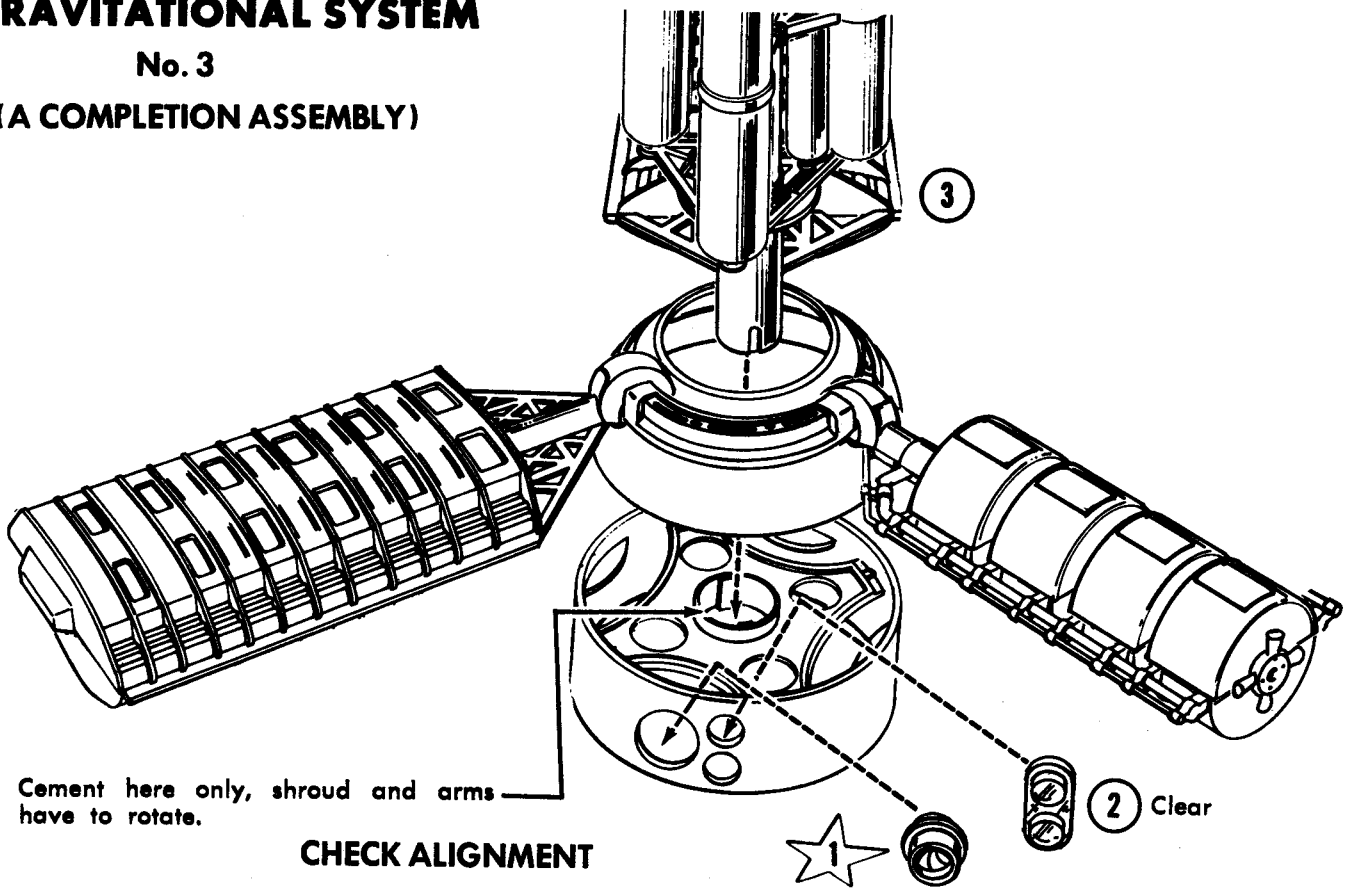


# GRAVITATIONAL SYSTEM

No. 3

(A COMPLETION ASSEMBLY)

9.

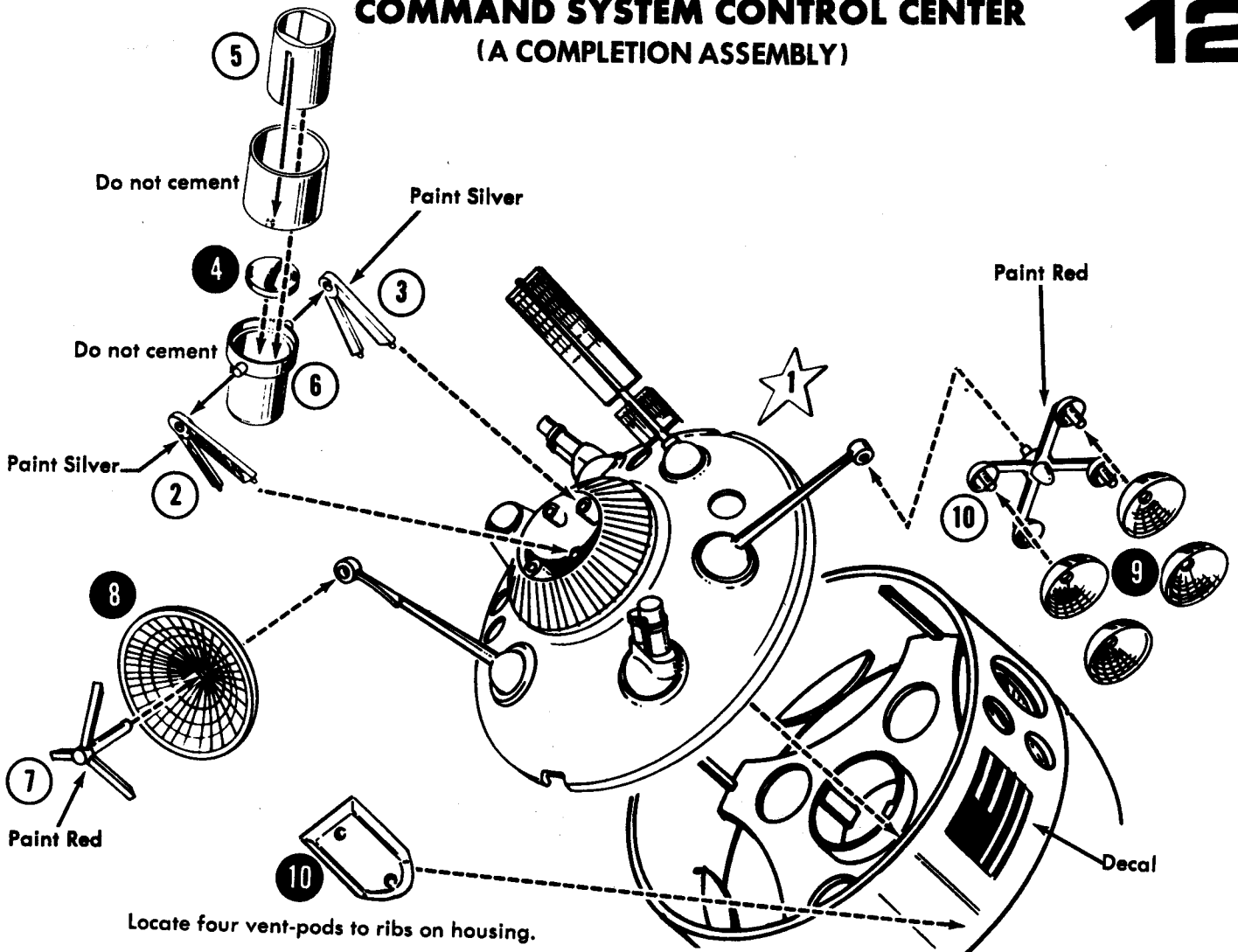


CHECK ALIGNMENT

# COMMAND SYSTEM CONTROL CENTER

(A COMPLETION ASSEMBLY)

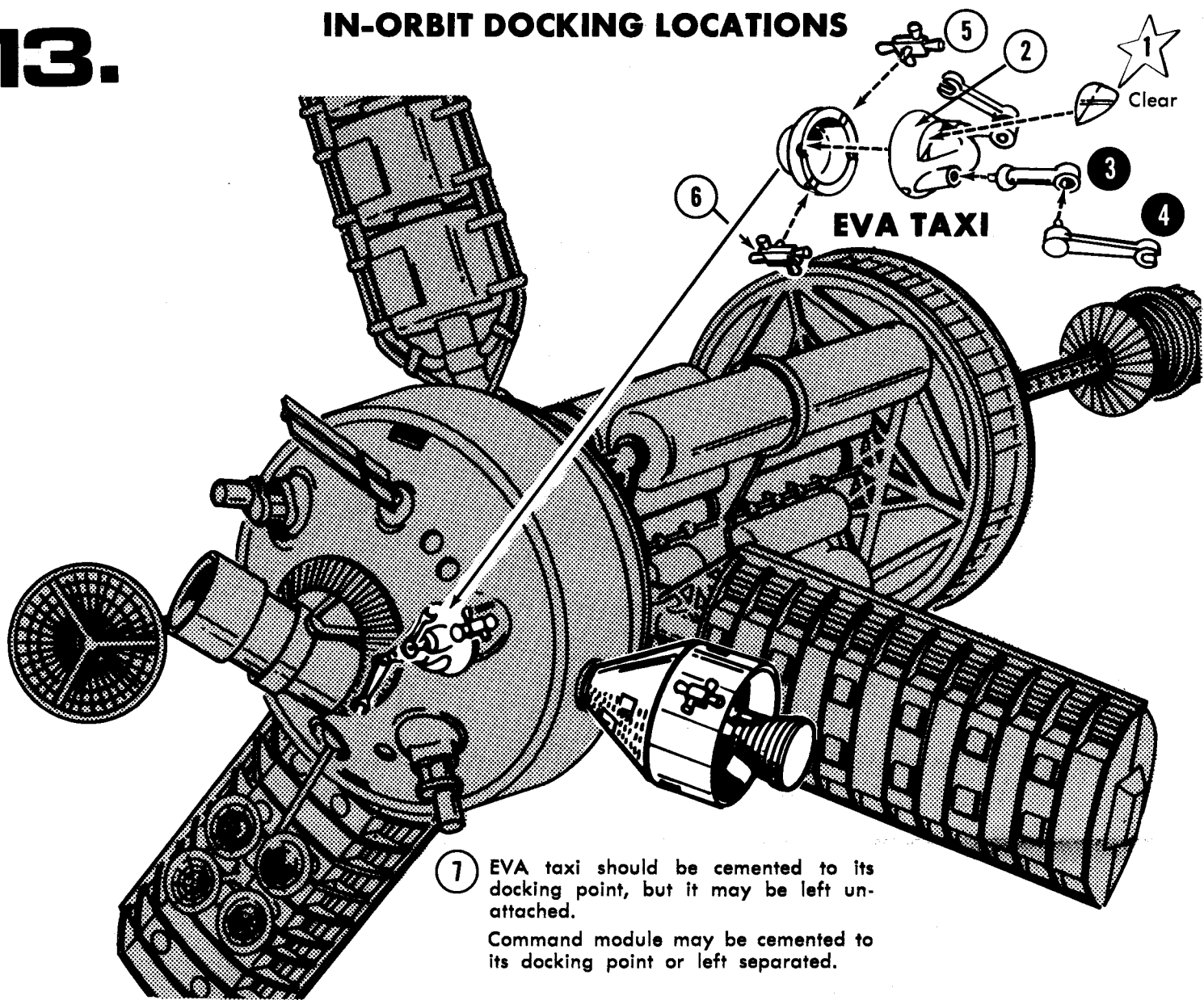
12.



Locate four vent-pods to ribs on housing.

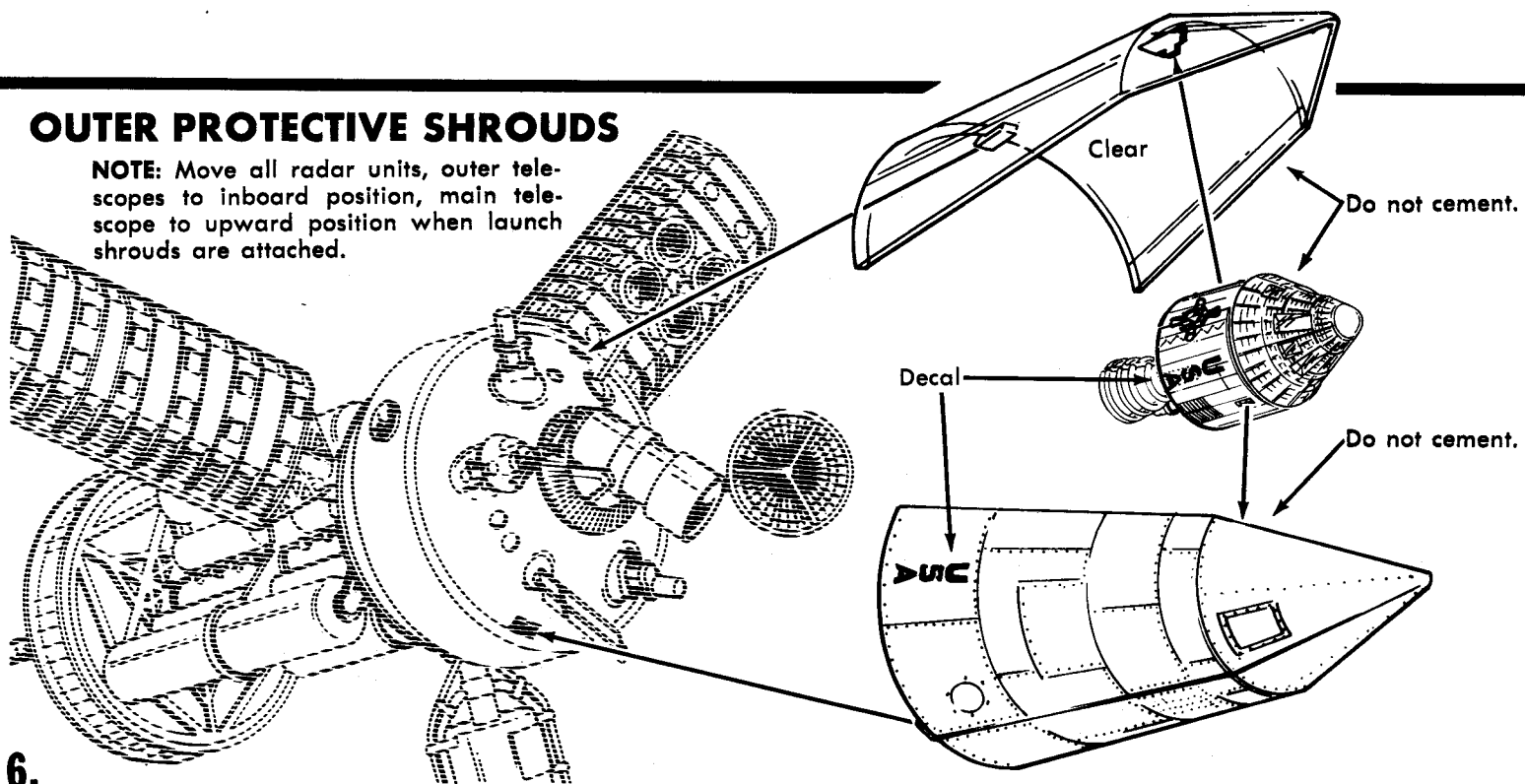
5.

## IN-ORBIT DOCKING LOCATIONS

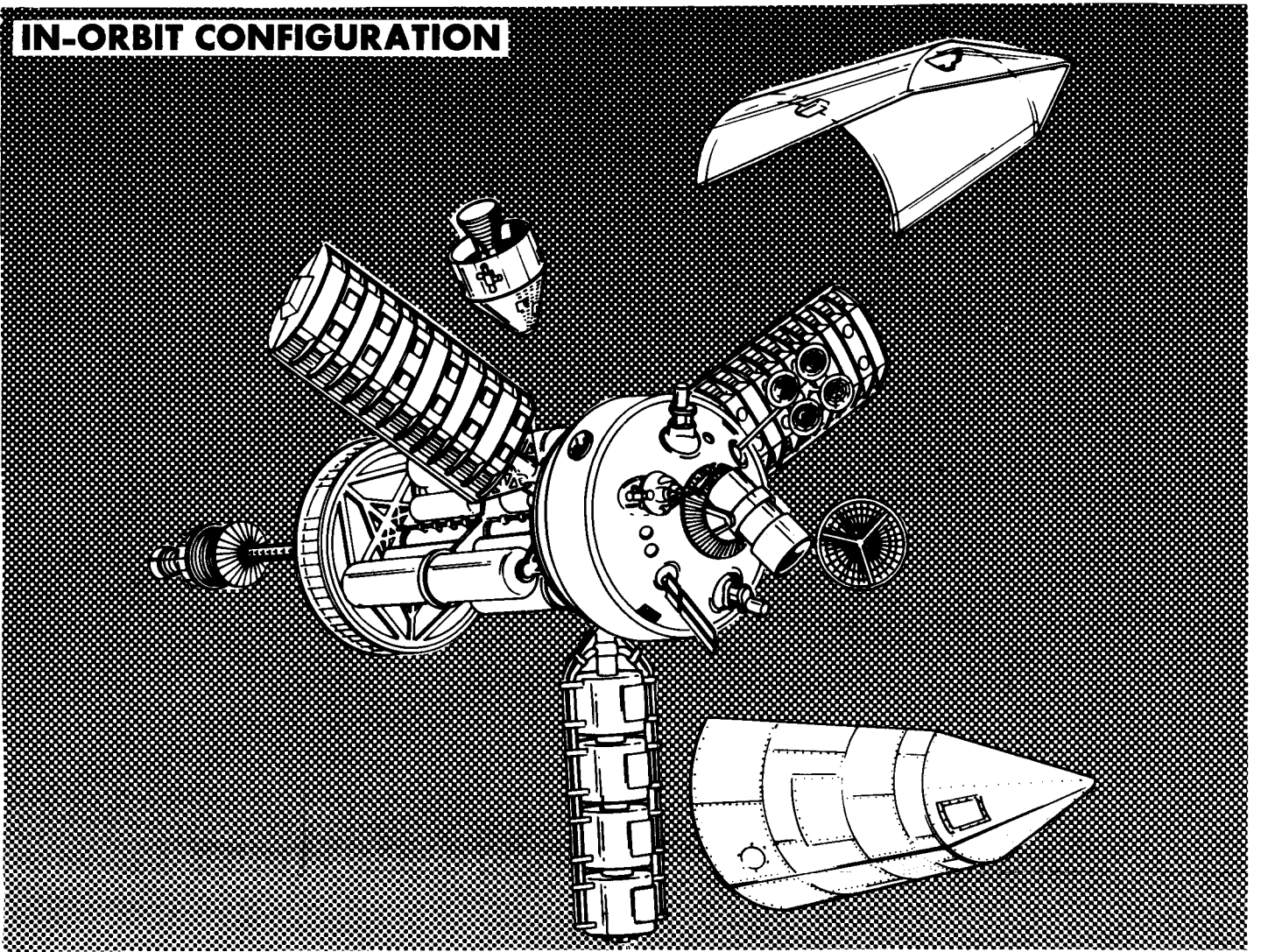


## OUTER PROTECTIVE SHROUDS

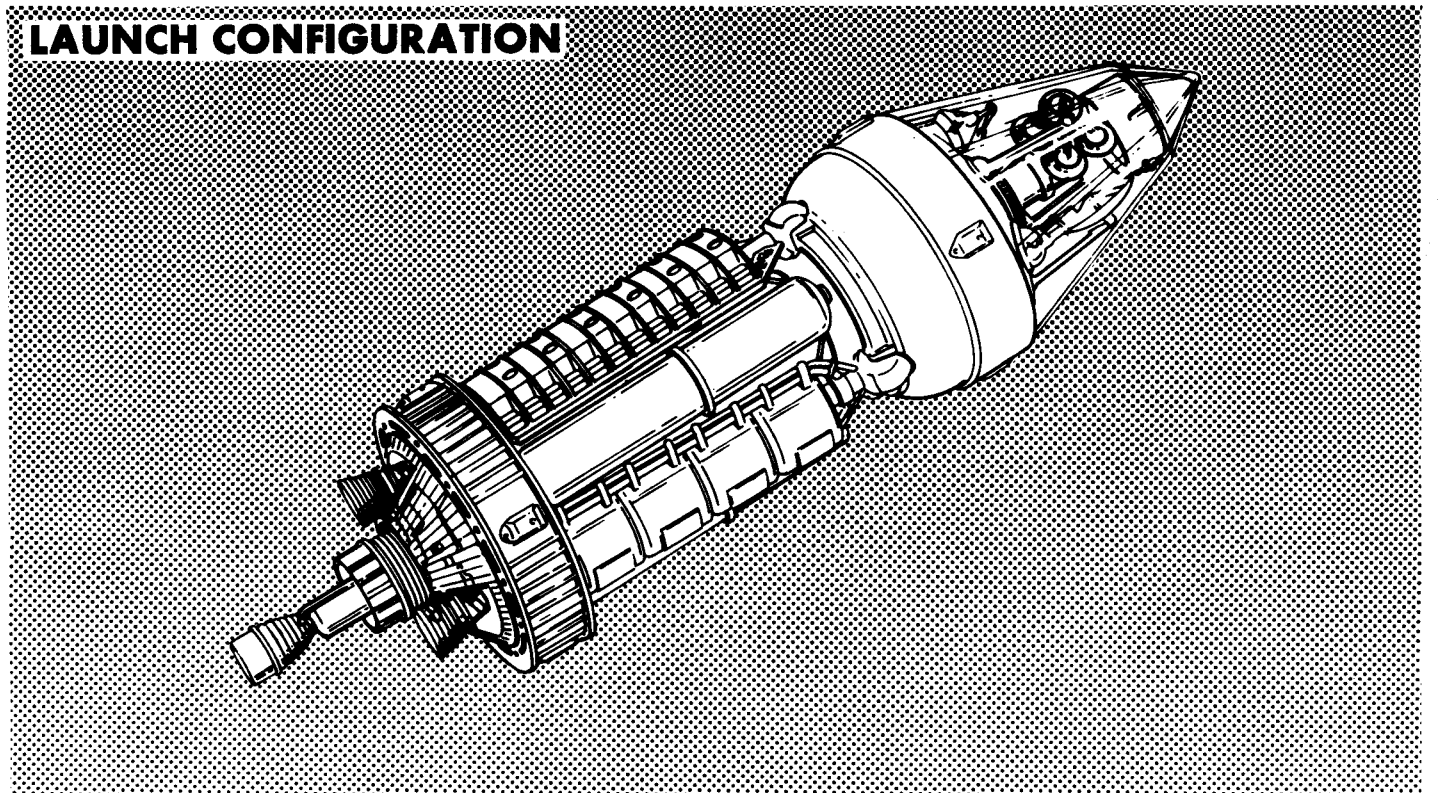
**NOTE:** Move all radar units, outer telescopes to inboard position, main telescope to upward position when launch shrouds are attached.



# IN-ORBIT CONFIGURATION



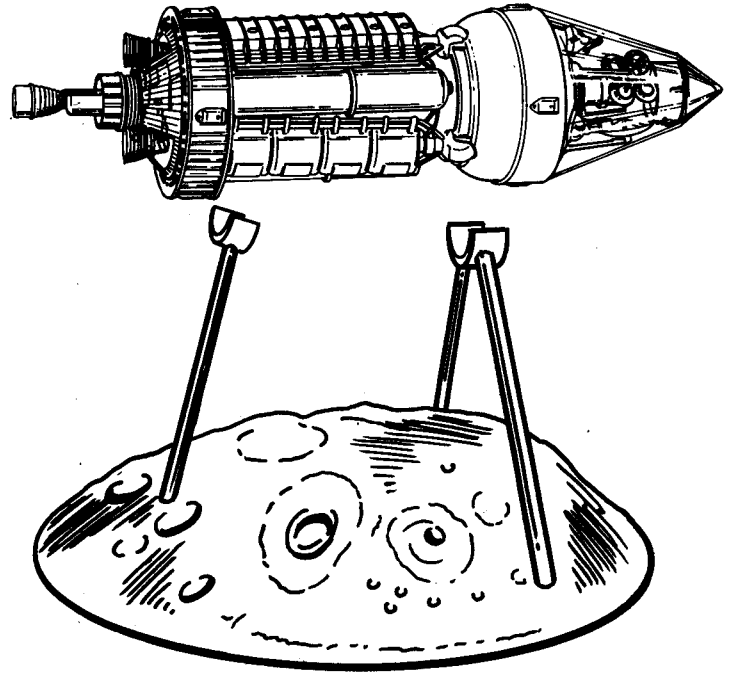
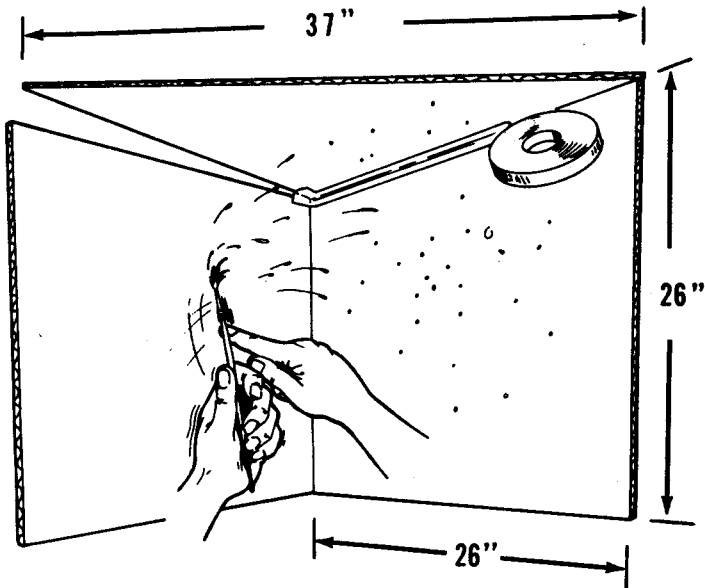
# LAUNCH CONFIGURATION





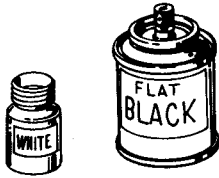
## DISPLAY STAND

Assemble legs to display base, after cement is dry, place (do not cement) space craft onto cradles.



Entire kit shown in display

## IN-ORBIT DISPLAY



Make your own in-orbit display. Cut two pieces of cardboard square in desired size. (Sizes shown may be used as a guide). Cut another piece triangular for the enclosure, tape seams with masking tape (inside and outside) for strength. Spray entire unit Flat Black — After black has dried, spatter white paint to simulate the solar system.

Using fine black thread, suspend space craft. (This display may be suspended from a corner of the ceiling).

