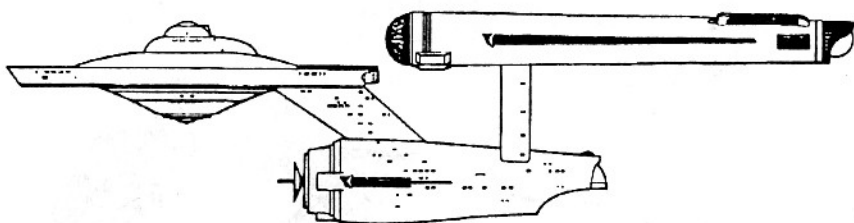


# STARSHIP LIGHT-UP KIT



A KIT DESIGNED TO ADD STRIKING REALISM TO YOUR  
AMT-ERTL CLASSIC STARSHIP KIT

## KIT INCLUDES:

- \*WARP ENGINE DOMES
- \*NAVIGATION DOME
- \*TRANSLUCENT LIGHT  
DIFFUSERS
- \*SILVERED REFLECTORS
- \*LIGHT BULBS:  
2 YELLOW  
3 CLEAR
- \*COLOR CODED WIRE
- \*9-VOLT BATTERY CLIP

## SUPPLIES NEEDED:

- \*HOBBY KNIFE
- \*RAZOR SAW
- \*LIQUID PLASTIC CEMENT
- \*CYANOACRYLATE GLUE
- \*FILE OR SANDPAPER
- \*SOLDER AND SOLDERING  
IRON (optional)
- \*TRANSPARENT RED PAINT
- \*MASKING OR ELECTRICAL  
TAPE

For the modeler of moderate experience-  
NO CIRCUITRY EXPERIENCE NEEDED!

9-VOLT BATTERY REQUIRED  
FOR OPERATION

(not included)

THIS KIT CONTAINS ALL THE MATERIALS NEEDED TO  
LIGHT UP WARP ENGINE DOMES, TOP AND BOTTOM  
SAUCER DOMES AND AFT NAVIGATIONAL BEACON.



## BEFORE YOU START

Unlike injection molded plastic kits, vacuformed kit pieces are very fragile and can bend or break very easily and must be handled gently.

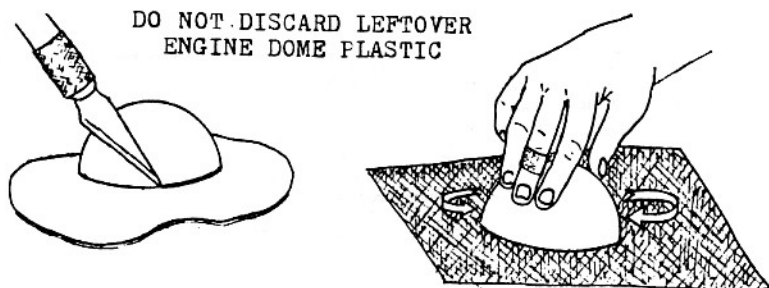
Like most plastic kits, the pieces of this kit are covered with a mold release agent. It is therefore recommended that vacuformed parts be gently washed in mildly soapy water (or detergent) prior to any painting or gluing.

Most important, **DON'T RUSH!!** As tempting as it often is to cut corners and try to get a model finished sooner, working carefully and taking your time will always guarantee you a better finished model.

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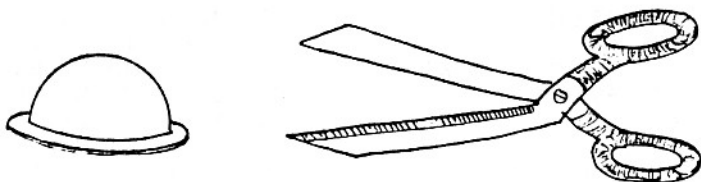
## WARF ENGINES

Using a hobby knife, cut out the two engine domes (1" dia.) being careful not to cut into the domes or your fingers.

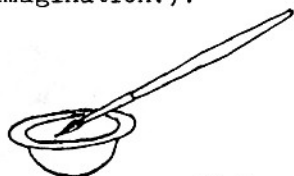


Gently sand the edges flat using 320 or 400 wet-or-dry sandpaper.

Cut out the two engine inserts (3/4" dia.) with a knife or scissors leaving a lip of 1/4" around.



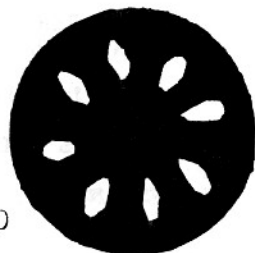
Using **TRANSPARENT** red paint (Tamiya **CLEAR RED** works well) paint **INSIDE** of insert using pattern illustrated (or use your imagination!).



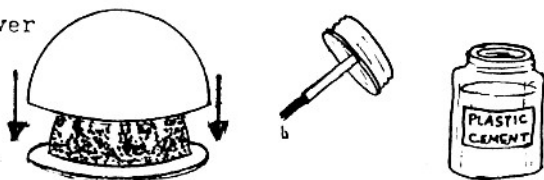
CLEAR  
RED



UN-  
PAINTED

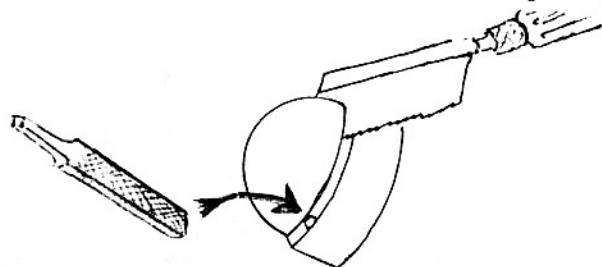


Glue the engine dome over the insert as shown.



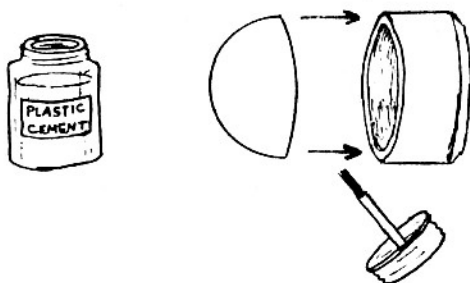
After glue dries completely, remove all of the insert lip sticking out from under the engine dome. Sand or file flat if necessary.

From the AMT kit, take the two "PROPULSION UNIT DOMES" and, using a razor saw, cut the dome off at the collar. (The domes may be discarded or saved for "spare parts")

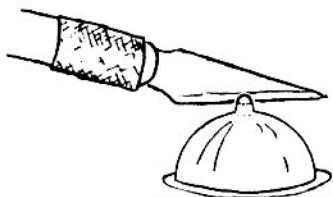


On the remaining collar, sand or file off the three raised things on the beveled end (the STARFLEET TECHNICAL MANUAL calls these the "Space Energy Field Sensors"). Smooth and flatten the beveled end with file or sandpaper.

Glue the new engine dome assembly to the BACK (flat) end of the collar.

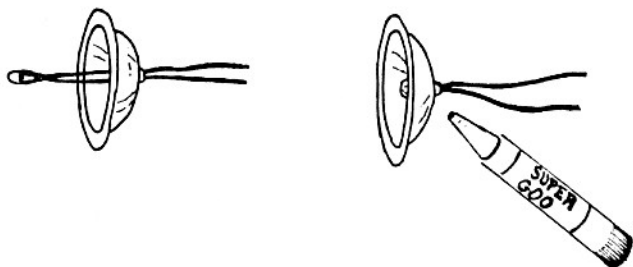


Cut out two silvered reflector dishes leaving enough lip so that they fit easily into the engine dome/collar assemblies. Cut nipple off dish back as shown.



A light coat of silver or white paint on the back of the reflector will enhance its reflectivity.

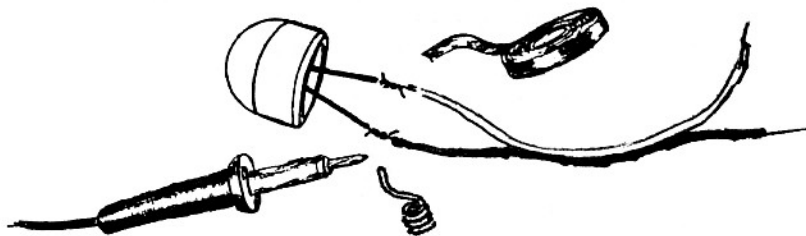
Thread YELLOW bulb through dish and glue in place.



Insert dish into dome/collar assembly and glue into place.



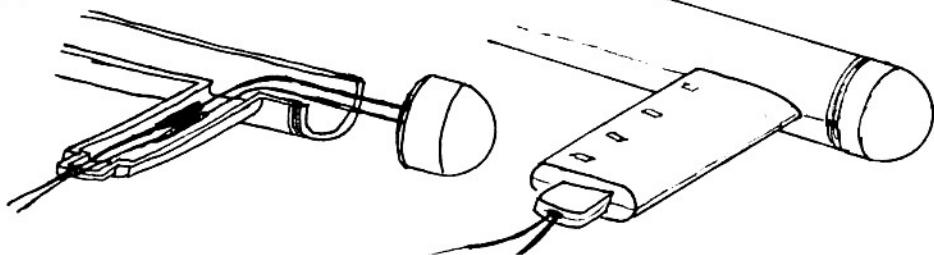
Cut two sections of wire, 5 inches long for each pair. Separate the ends and trim 1/2 inch of insulation off all ends. Attach these to extend the bulb wires (although not required, a little solder will strengthen the connections) and wrap each connection with tape.



On each engine half (from the kit) file the pylon tabs as shown. Also cut or drill a small hole at the bottom of each engine pylon slot on the secondary hull tops.



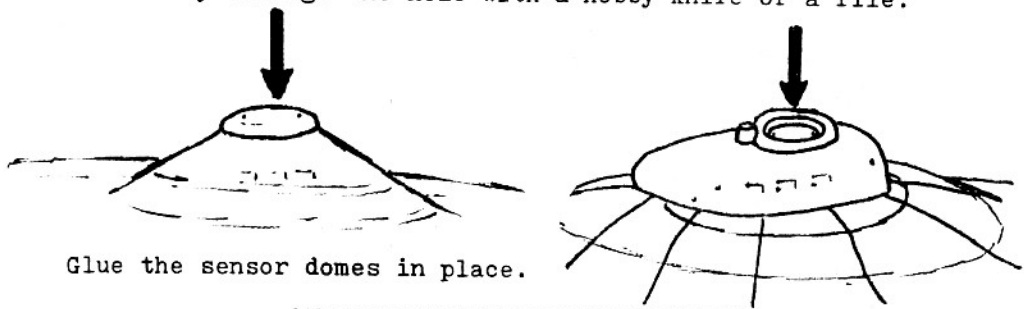
Complete left and right engine sub-assemblies as per kit instructions running wires down pylons and out pylon tabs.



Locate the sensor dome placements on the top and bottom saucer halves. In the center of each placement, make a hole  $3/8$ " in diameter.

**!!!IMPORTANT!!!**

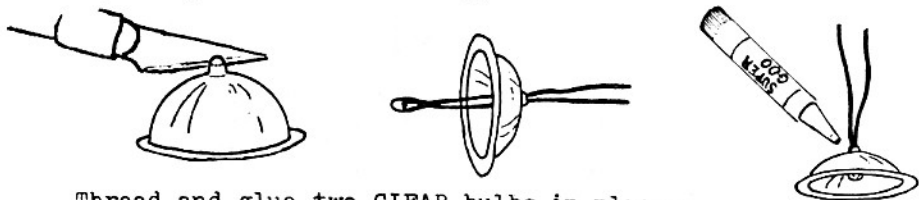
The fastest method is to use a  $3/8$ " drill. If you do, BE CAREFUL NOT TO CRACK THE SAUCER HALVES!! A far safer method is to start with a smaller hole ( $1/8$ " to  $1/4$ " ) and carefully enlarge the hole with a hobby knife or a file.



Glue the sensor domes in place.

Using plastic left over from the engine domes, cut out two discs,  $5/8$ " in diameter. Glue these over the holes inside the saucer halves.

Cut out the two remaining reflector dishes leaving a  $1/8$ " lip; cut off each nipple.



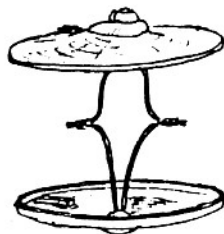
Thread and glue two CLEAR bulbs in place.

Glue reflectors inside saucer halves.

On the bottom saucer half, cut or drill a small ( $1/8$ " ) hole in the dorsal connection slot. Locate (without gluing) over the secondary hull dorsal and cut or drill a corresponding hole.

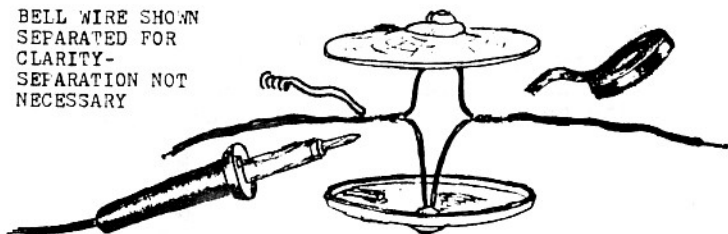


Connect the two saucer bulbs together in PARALLEL as shown.



Cut one pair of bell wire 4" long and trim off 1/2" of insulation from all ends. Attach one wire to each pair of connected bulb wires (solder if desired), and wrap the connections with tape.

BELL WIRE SHOWN  
SEPARATED FOR  
CLARITY-  
SEPARATION NOT  
NECESSARY



Assemble the primary hull as shown in the kit instructions, running as much wire as possible (without straining) out the dorsal mounting hole.

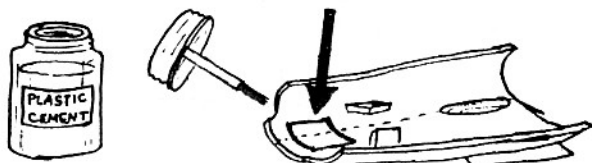


When attaching the saucer to the secondary hull dorsal, the wires should go through the hole on the saucer mounting tab.

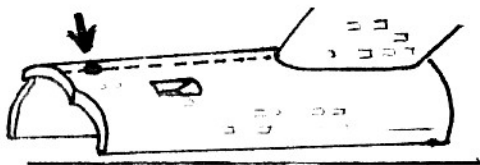
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#### AFT NAVIGATION DOME

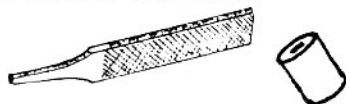
Cut a 1/2" square from the leftover engine dome plastic. Glue this inside the secondary hull top half (after the right and left halves have been glued together) over the part seam and 1/4" away from the back edge. (Liquid plastic cement is recommended)



After the glue has dried COMPLETELY (let it sit overnight) drill or cut a 1/4" round hole on the part seam centered 7/16" from the back edge. (As before, it's safer to start with a smaller hole and enlarge it with a file or knife)



Sand or file one end of the 1/2 inch section of plastic tube until it is smooth and flat.



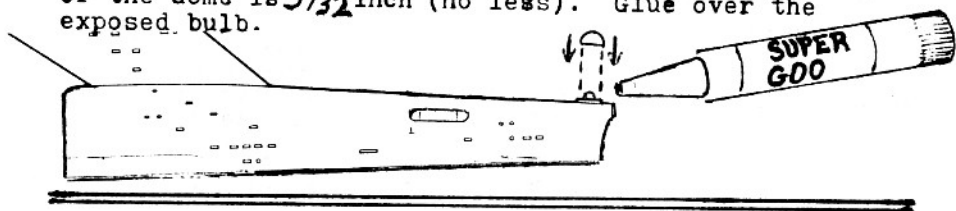
Insert the remaining clear bulb into the tube so that the tip sticks out 1/16 inch of the smooth end. Glue into place.



Insert bulb/tube assembly into hole in secondary hull top so that tube extends 1/16". Glue in place.



Carefully cut out the navigation dome (WATCH THOSE FINGERS!!) and sand or file the bottom until the height of the dome is  $3/32$  inch (no less). Glue over the exposed bulb.

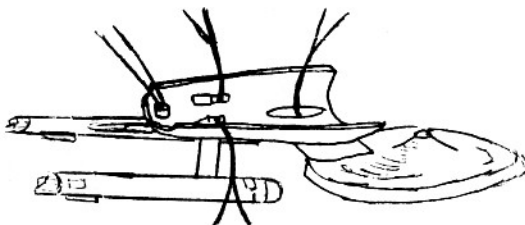


#### FINAL ASSEMBLY

- At this point your kit should consist of the following:
- two engine sub-assemblies with two wires (one red, one black) coming out of each pylon tab
  - Primary hull sub-assembly glued to secondary hull top half; two wires (one red, one black) coming out of the dorsal opening (inside of the secondary hull) with nav-dome wires in the rear.
  - Secondary hull bottom half
  - Shuttle Craft Hangar Deck
  - Secondary hull front cover
  - Main sensor and navigational deflector
  - More bell wire
  - 9 volt battery clip

#### HERE'S WHAT TO DO WITH IT!

Glue the engine sub-assemblies to the secondary hull running the wires through the openings in the pylon slots.



For the engine wires, ONLY, connect the RED wires to each other and connect both BLACK wires to each other.

Connect the RED saucer wire to the pair of BLACK engine wires (solder if desired and tape).

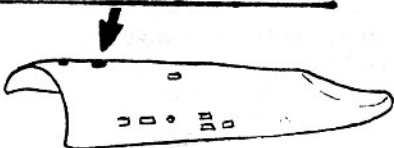
Connect the RED engine wire to one of the aft navigation dome wires (solder & tape).

Trim the insulation off the ends (about 1/2") of the two remaining lengths of bell wire. Connect one to the BLACK saucer wire and the other to the remaining free navigation dome wire (solder & tape). Loosely knot these two wires together as close to the connections as possible.

Cut or file the top forward edge of the Shuttle Craft Hangar Deck as shown.

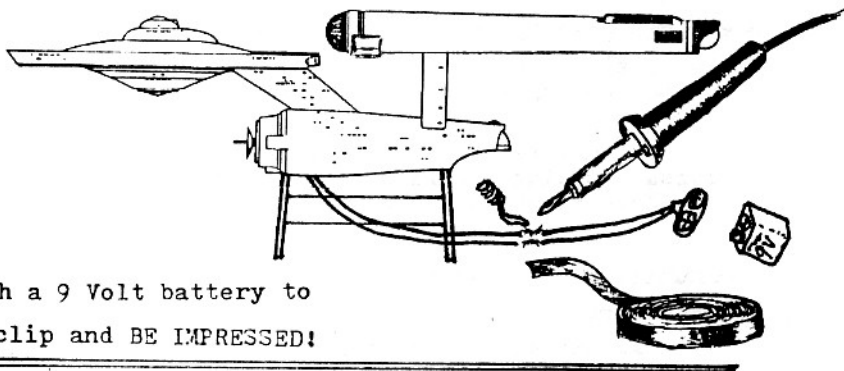


On the secondary hull lower half cut or drill a small hole (1/8" or so) about 1 inch BEHIND the existing base mounting hole.



Finish assembling the model as per kit instructions, running the two free wires out through the hole made in the last step.

Connect the wires from the 9 Volt battery clip to the wires coming out of the model.



Attach a 9 Volt battery to the clip and BE IMPRESSED!

#### FINAL NOTES

##### PAINTING:

Although it's not absolutely necessary, painting your model will give it a more finished and authentic look, and also helps the decals to adhere better. If you do paint, it IS absolutely necessary to mask off ALL illuminated domes.

##### POWER SOURCE:

This kit is designed for 9 Volts MAXIMUM. Although it looks good with as little as 7 Volts, it looks better (and photographs beautifully) at 9 Volts.

!!!WARNING!!!

KIT DETAILING MAY  
BE HABIT FORMING!

