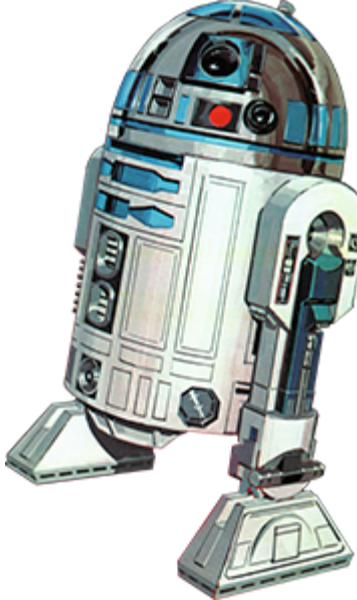
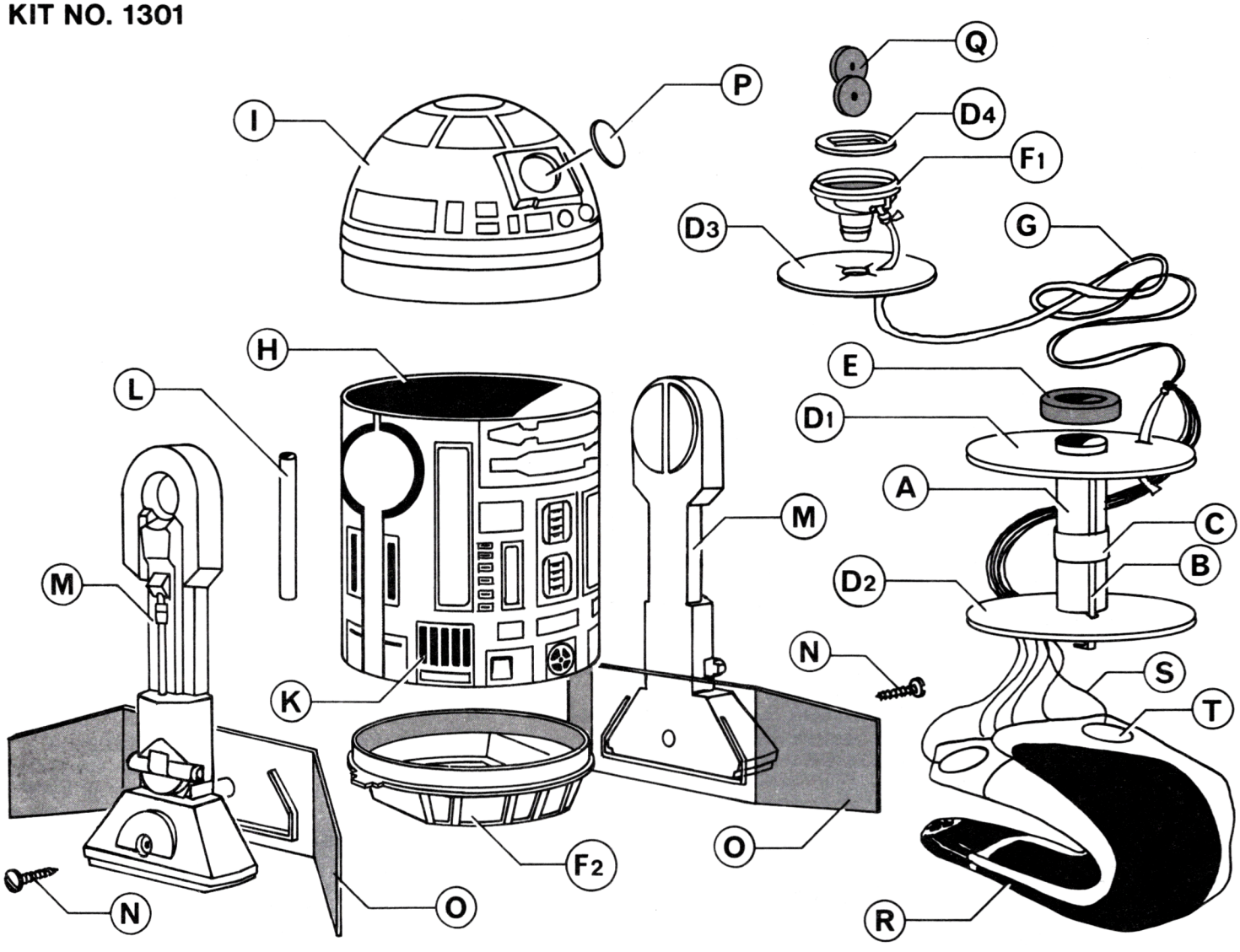


STAR WARS™

R2-D2™

"ROBOT HERO" Flying Model Rocket Kit!

KIT NO. 1301



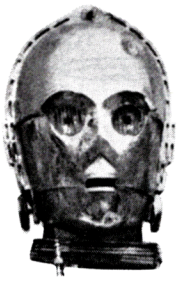
PARTS LIST

A)	1	Engine Mount Tube (type BT-20J) 2-3/4" long	30326
B)	1	Engine Hook (type EH-2)	35025
C)	1	Retainer Ring (type HR-20)	30168
D)	1	Card Die-Cut Sheet (type TA-1301)	30080
E)	1	Adapter Ring (type AR-2050)	30164
F)	1	Molded Plastic Skirt/Cup	33169
G)	1	Shock Cord	
H)	1	Body Tube (type BT-100D) 4.05" long	30435
I)	1	Molded Plastic Body Dome	33165
*J)	1	Body Marking Template	84046
K)	1	Stick-On Decal Sheet	37106
L)	1	Launch Lug (type LL-2B) 2-3/8" long	38178
M)	2	Molded Plastic Leg	33166
N)	2	Retaining Screw (type ST-4050) #4 X 1/2" long	45126
O)	2	Clear Plastic Leg Fin	33168
P)	1	Clear Plastic Lens	33169
Q)	2	Dome Weights (type NCW-1A)	38280
R)	1	18" Dia. Parachute (type PK-18A)	85566
S)	1	108" Shroud Line (type SLT-108)	38239
T)	1	Strip of 6 Tape Discs (type TD-3F)	38406

*Included in kit, but not illustrated.

ESTES
A SUBSIDIARY OF DAMON

BEFORE YOU START



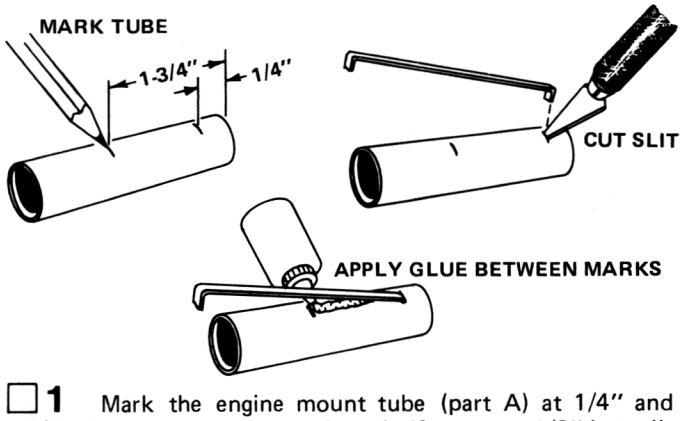
Pardon me, but my counterpart, Artoo-Detoo, insists that you read all instructions before beginning work on your Astro-Droid. Make sure you have all parts and materials. When you are thoroughly familiar with the assembly procedure, begin construction. Check off each step as you complete it. In each step, test-fit the parts together before applying any glue. If some part doesn't fit properly, sand lightly or build up as appropriate for precision assembly. Believe me - - these droids can be most troublesome if not assembled correctly.

TOOLS AND MATERIALS

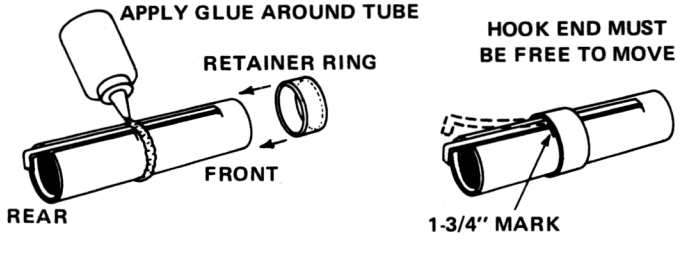
In addition to the parts included in this kit you will need white glue (Elmers or similar), tube-type plastic cement, a pencil or ball point pen, an X-Acto type modeling knife, a ruler, a modeling razor saw (a fine wood coping saw or a fine hacksaw blade will also do), medium and fine grit sandpaper, a scissors, a small screwdriver, and masking tape. To paint your model you will need gloss silver spray enamel, also dark blue, black, and silver brush-on enamel paints.

NOTE: Two different types of glue are required to assemble this kit. A household type "white" glue is required for paper to paper glue joints. A tube-type plastic model cement is required for gluing plastic to plastic or plastic to paper tube. Both types of glue are necessary and cannot be substituted for each other.

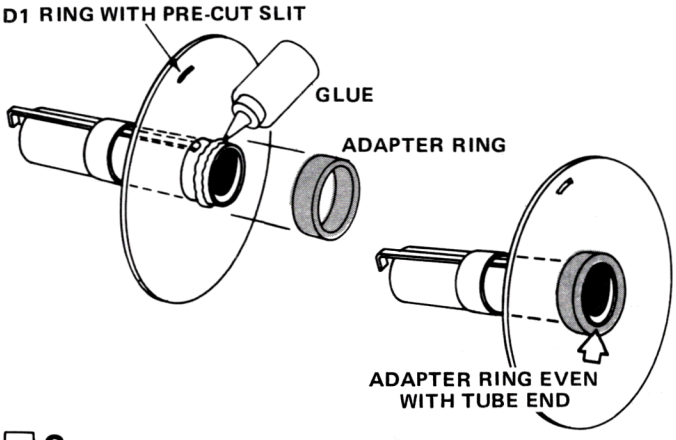
ASSEMBLY INSTRUCTIONS



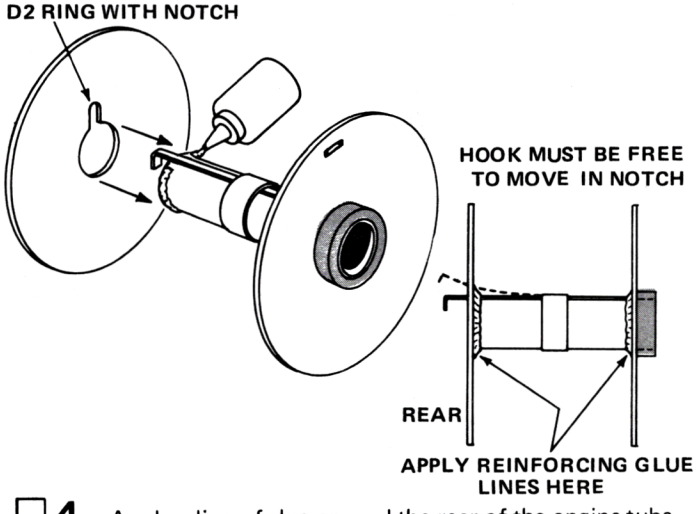
☐ **1** Mark the engine mount tube (part A) at 1/4" and 1-3/4" from one end. Use a sharp knife to cut a 1/8" long slit in the tube at the 1/4" mark as shown. Apply a line of white glue between the marks. Push one end of the engine hook (part B) into the slit and press the main part of the hook into the glue.



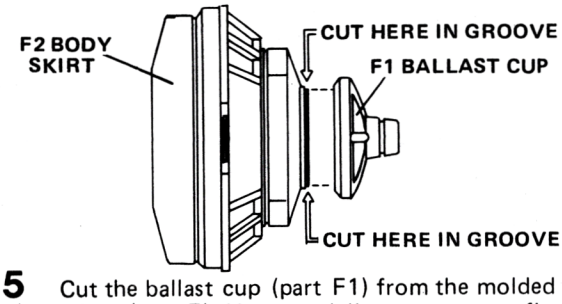
☐ **2** Apply a line of white glue around the tube just ahead of the 1-3/4" mark. Slide the retainer ring (part C) onto the tube. Center it over the glue and next to the 1-3/4" mark as illustrated. Be sure that the engine hook runs straight along the tube. The protruding hook end must be free to flex slightly as shown. Avoid getting glue on this area.



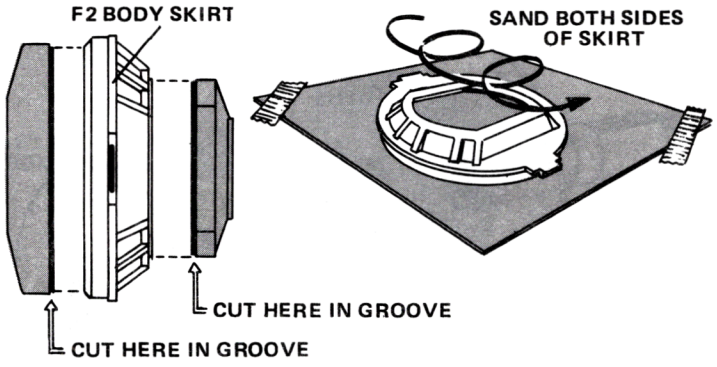
☐ **3** Remove the large forward centering ring (part D1, the ring which has the narrow die-cut slit) from the die-cut card sheet (part D). Slide it onto the front of the engine tube until it stops against the end of the engine hook. Apply a line of white glue around the tube end as shown. Slide the adapter ring (part E) onto the same tube end until the end of the ring is even with the end of the engine tube. Now push the large centering ring tight against the adapter ring. Wipe away any excess glue. Apply a reinforcing line of glue around the rear of the large centering ring where it meets the engine tube. (See illustration #4.)



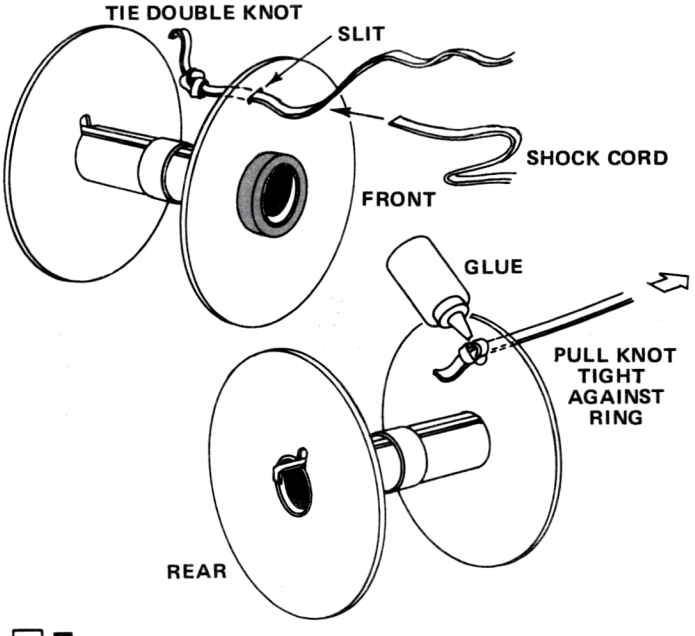
☐ **4** Apply a line of glue around the rear of the engine tube, just at the end. Do not get any glue on the hook. Slide the large rear centering ring (part D2, the ring which has the engine hook notch) onto the end of the tube. Position the ring even with the end of the tube. Be sure to center the notch over the engine hook. Apply a reinforcing line of glue around the front of the centering ring where it meets the engine tube. Set this assembly aside to dry completely.



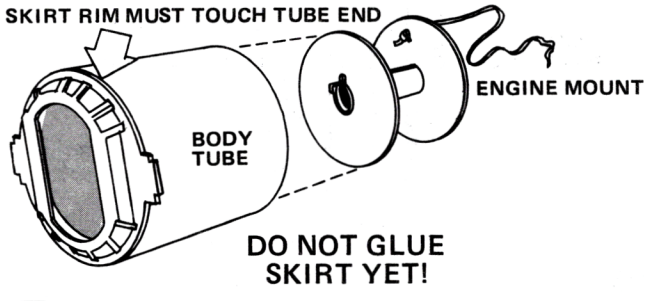
☐ **5** Cut the ballast cup (part F1) from the molded plastic skirt/cup piece (part F). Use a modeling razor saw, a fine wood coping saw, of a fine hacksaw blade to cut through the separation groove as shown. Make repeated light cuts around the groove until the ballast cup is cut free. Work slowly to avoid tearing or marring the plastic parts. Set the ballast cup aside for step 22.



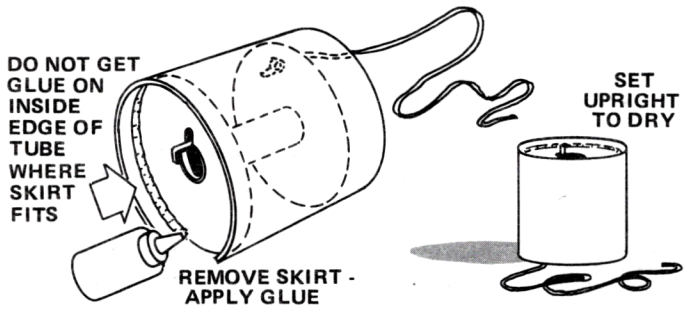
☐ **6** Cut the body skirt piece (part F2) from the remainder of the molded plastic part. Following the same cutting procedure as in step 5, cut off the two shaded portions on each side of the skirt. Cut carefully along the separation grooves as shown. Discard the two shaded pieces. Place a sheet of fine sandpaper on a smooth, flat work surface. Sand both sides of the skirt piece. Move the skirt in a circular motion across the sandpaper to smooth any rough or uneven edges remaining from your saw cuts. Lightly sand the inside of the cut edges for neatest appearance.



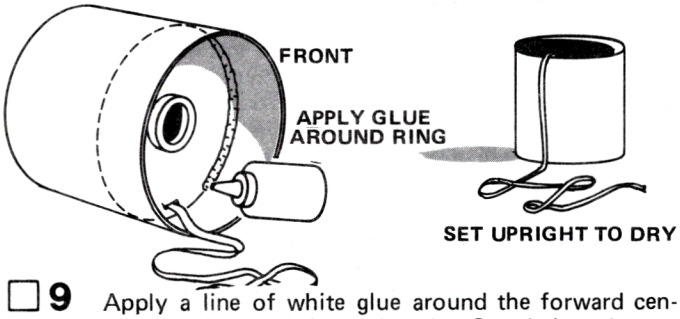
☐ **7** Use a knife blade to open slightly the slit in the forward engine centering ring. Pass one end of the rubber shock cord (part G) through the slit from the front side. Tie a double knot in the end of the cord. Apply a drop of white glue to the back of the slit and pull the knot tight against the centering ring.



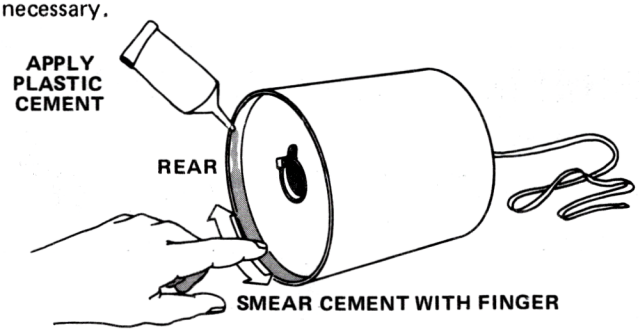
☐ **8** Insert the large end of the body skirt into one end of the large body tube (part H). Push it into the tube until the skirt rim stops evenly around the tube end. DO NOT GLUE YET! Now slide the rear of the engine mount unit (hook end first) into the other end of the tube. Push it into the tube until



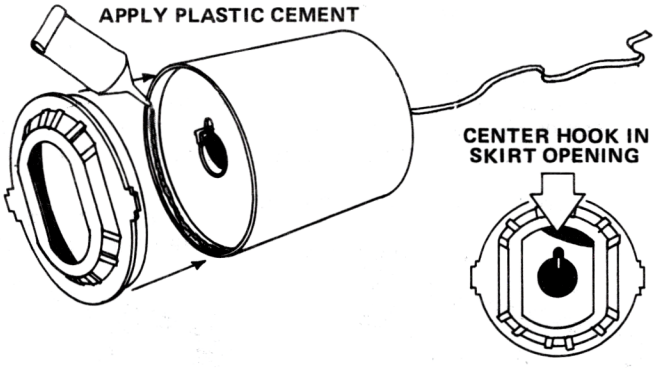
the rear centering ring stops against the plastic skirt piece. Remove the body skirt. Do not disturb the position of the engine mount. Apply a narrow line of white glue around the rear ring where it meets the body tube as shown. Stand the tube upright and allow the glue to dry for several minutes.



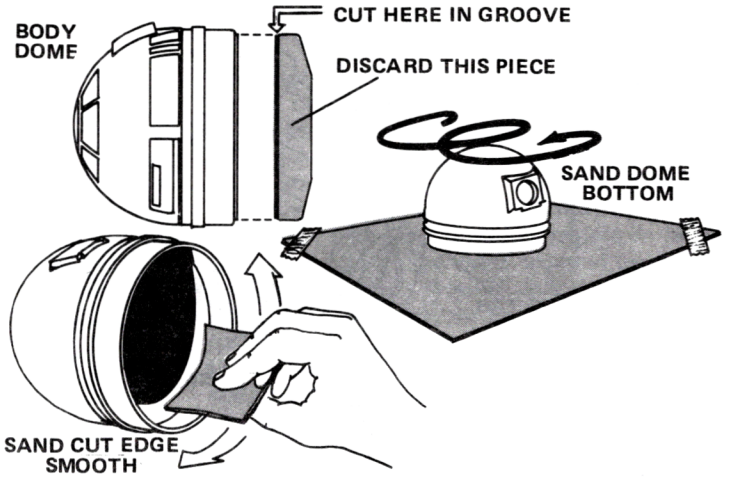
☐ **9** Apply a line of white glue around the forward centering ring where it meets the body tube. Stand the tube upright while the glue dries. Check to be sure that there are no gaps or holes in the glue joint when dry. Apply more glue if necessary.



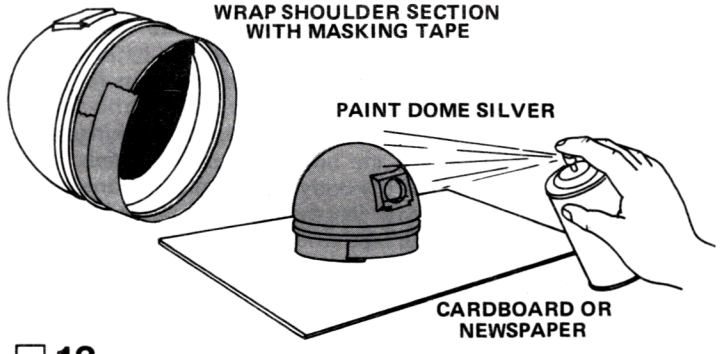
☐ **10** Use your finger to smear a layer of tube-type plastic cement around the inside of the body tube rear as illustrated. Allow the glue to dry for at least 10 minutes, or until dry-to-the-touch.



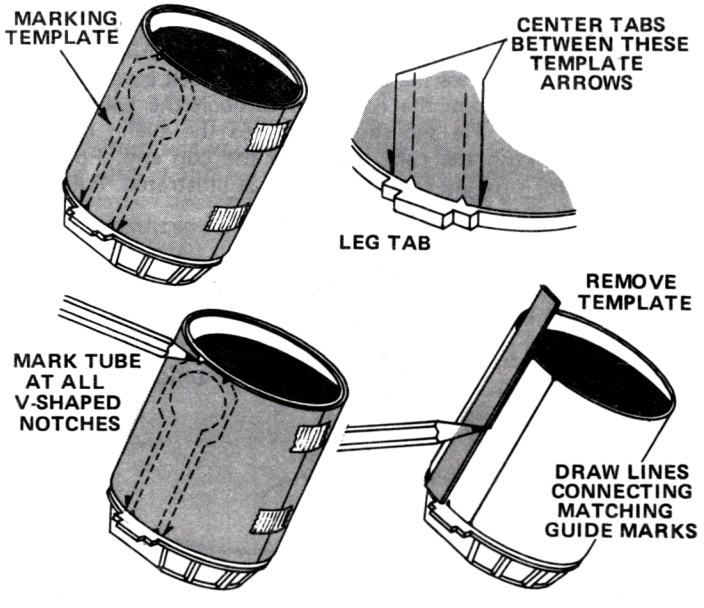
☐ **11** Wash the body skirt thoroughly in warm, soapy water to remove any molding release residue. Rinse well and dry with a clean cloth. Apply a line of plastic cement around the inside of the body tube rear, just ahead of the tube end as shown. Position the small skirt opening so that the engine hook is centered between the two straight sides. Push the skirt into the tube until the skirt rim stops evenly against the tube end. Wipe away any excess cement from the outside of the tube.



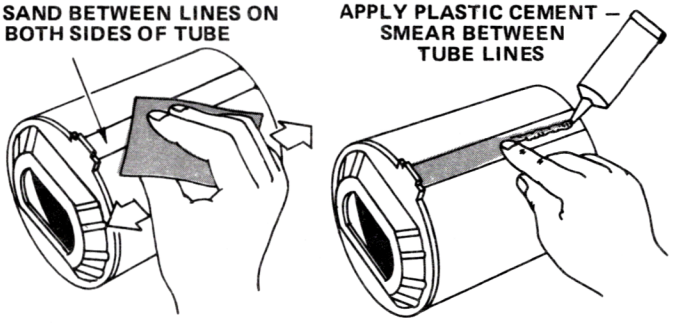
☐ **12** Cut off the end of the plastic body dome (part I) along the separation groove as shown. Work slowly to avoid tearing or breaking the plastic. Discard the shaded end piece. Using the same sanding method as in step 6, move the dome in a light circular motion across a sheet of fine sandpaper. Sand only until you smooth and even any rough edges from your saw cut. Also sand the inside of the cut edge until smooth.



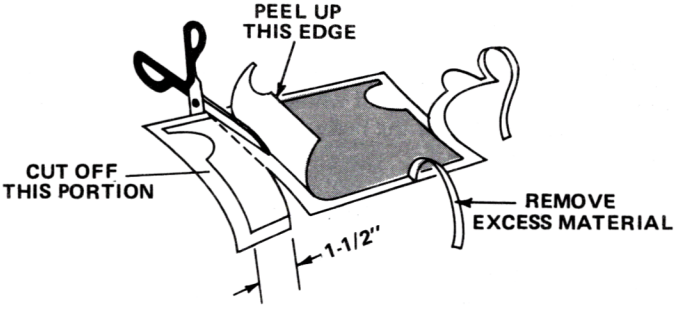
☐ **13** Wash the inside and outside of the dome thoroughly in warm, soapy water. Rinse well and dry. Wrap the shoulder section (the portion which fits into the body tube) with masking tape to protect it from paint overspray. Paint the dome with two light finish coats of gloss silver spray enamel. Remove the masking tape when the paint is completely dry.

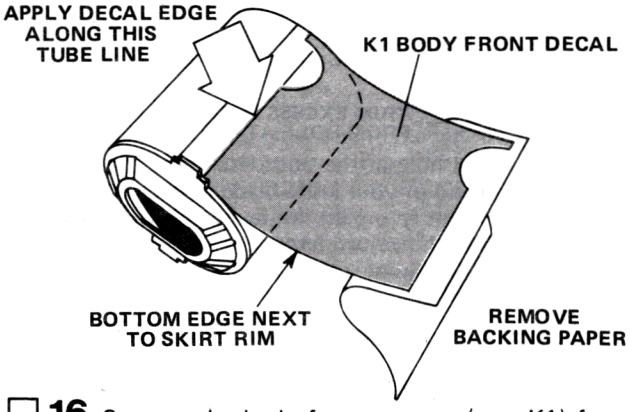


☐ **14** Cut out the body marking template from the pattern sheet (part J). Wrap it around the body tube so that the bottom edge is next to the plastic skirt rim. Position the template so that the plastic leg tabs on the skirt rim are centered between the large printed arrows. Align the printed guide marks and tape the template together. Mark the tube at each template notch by tracing the V-shaped cut. Remove the template. Draw a line on the tube connecting each matching pair of template marks.

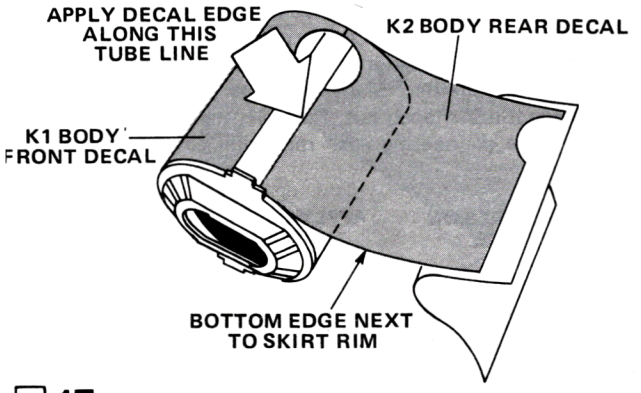


☐ **15** Sand the full length of the body tube between both sets of lines which you have drawn. Use medium grit sandpaper. Sand only until you have cut through the smooth finished surface of the tube. Redraw any of the lines which have been erased by sanding. Apply a line of plastic cement between one set of tube lines. Use your finger to smear the cement between the lines and along the tube. Following the same procedure, smear plastic cement between the lines on the other side of the tube. Allow the cement to dry completely.

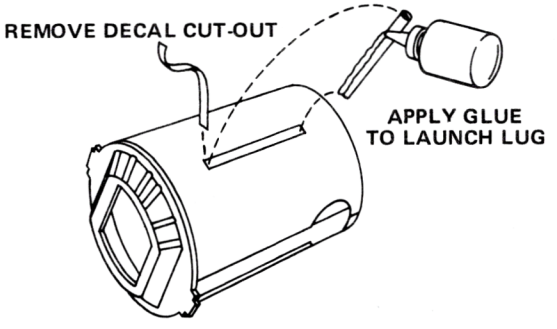




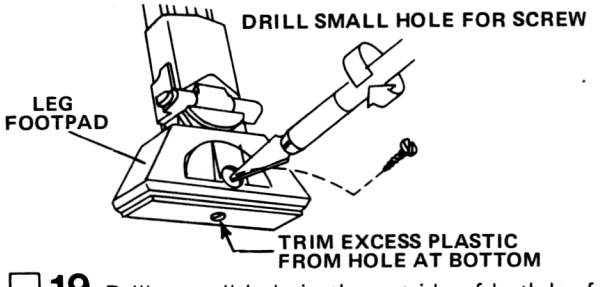
☐ **16** Cut out the body front wrap-on (part K1) from the decal sheet (part K). Cut just outside the pre-cut edge lines. Peel up the decal edge marked "Apply this edge first" from the backing paper for a distance of approximately 1-1/2". Cut off and discard the end of the backing paper as shown. Carefully peel away and discard the excess decal material outside the pre-cut lines. Beginning on either side of the body tube, position the bottom edge of the decal against the plastic skirt rim. Press the exposed sticky edge of the decal precisely along the tube line illustrated. Temporarily wrap the decal around the tube. Check to be sure that it will go on straight and not extend beyond the top or bottom edges of the tube. If it is crooked, pull it carefully off the tube and reapply until it is straight. Peel back the remainder of the backing paper and press the decal into place. Smooth out any bubbles or wrinkles as you go.



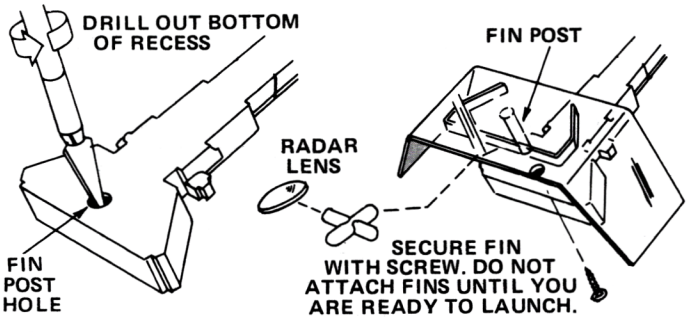
☐ **17** Following the same procedure as in step 16, apply the body rear wrap-on decal (part K2). Apply the same "first" decal edge along the tube line shown. Align carefully and press decal into place around the tube.



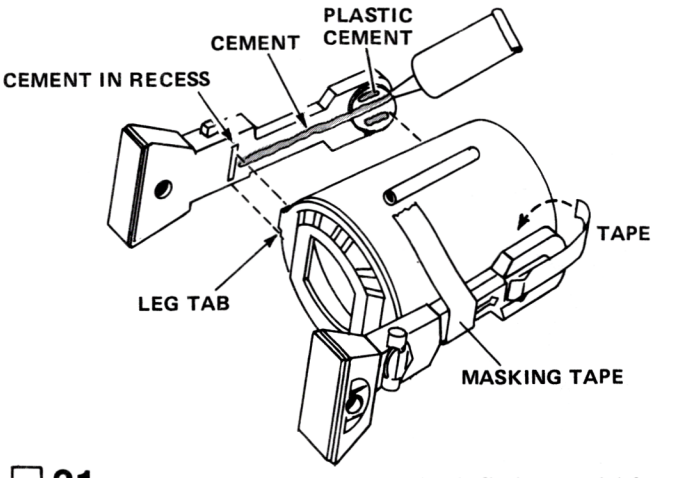
☐ **18** Remove the launch lug cut-out from the center of the body rear decal. Apply a line of white glue along the launch lug (part L). Glue the lug to the body tube in the bare slot left by the launch lug cut-out.



☐ **19** Drill a small hole in the outside of both leg footpads (part M). Twirl the tip of your knife blade in the center of the screw recess. Push lightly on the knife handle as you rotate the blade. Make the hole just large enough (approximately 7/64" dia.) for the retaining screw (part N) to pass through.



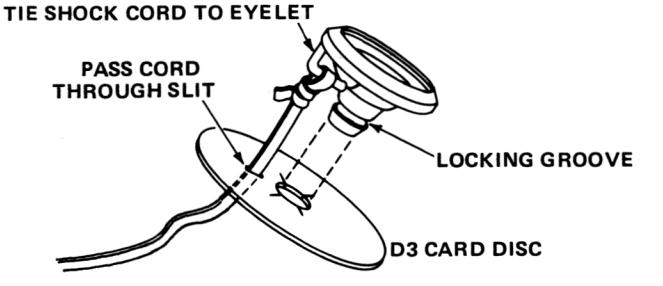
☐ **20** Drill out the bottom of the fin post recess located on the backside of both leg footpads. Make the hole large enough so that the clear plastic fin post (part O) can pass through. The plastic fin must be able to fit flush against the backside of the footpad. Trim any plastic flash material from the fins. Do not attach the fins until you are ready to fly your model. Set the plastic radar lens (part P) aside for step 26.



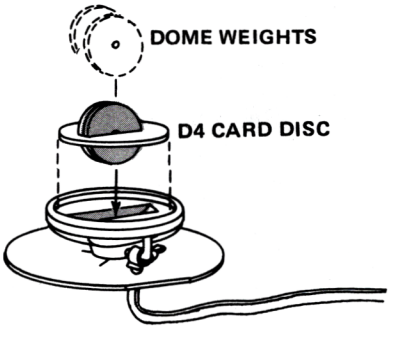
☐ **21** Sand or cut away any excess plastic flash material from around the sides of the legs. Wash both legs thoroughly in warm, soapy water. Rinse well and dry. Shake out any water from inside the leg which might have entered through the hole in the footpad bottom.

CONSTRUCTION TIP: If you wish to add painting detail to the legs, do so now before cementing to the body. Refer to the decor illustration.

Apply tube-type plastic cement to the leg tab recess and along the center of the leg and also to the round detail at the leg top. Fit the leg tab into the leg recess and press leg into position along the body tube. Check to be sure that the leg is straight along the body side. Apply a strip of masking tape across the center of the leg and body tube as illustrated. Tape the leg top to the inside of the body tube. Following the same procedure, cement the other leg to the opposite side of the body. Remove the masking tape when legs are completely dry.

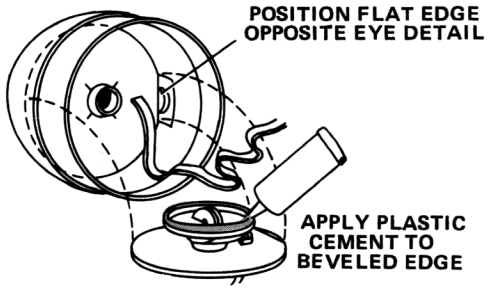


☐ **22** Remove the large ballast card disc (part D3) from the die-cut card sheet. Pass the free end of the shock cord through the narrow slit. Loop the cord end through the ballast cup eyelet (part F1). Tie the shock cord to the eyelet using a double knot. Push the card disc onto the cup end. Force it until it snaps into the locking groove as illustrated. Pull any excess shock cord back through the slit.

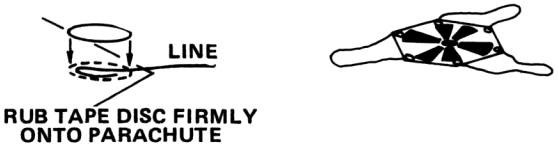


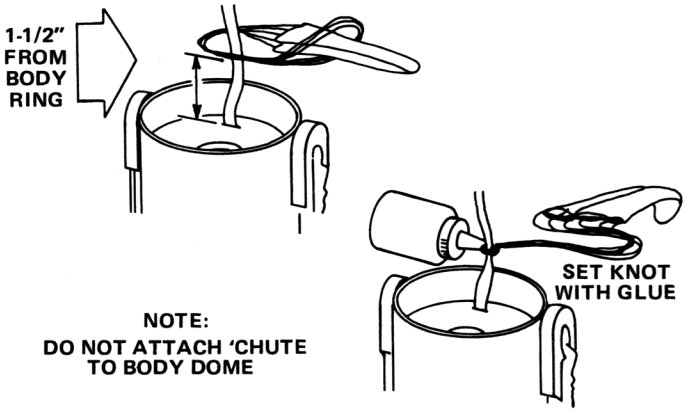
☐ **23** Remove the small ballast card disc (part D4) from the die-cut card sheet. Center both dome weights (part Q) in the card slot. Place the card and weights inside the ballast cup as illustrated.

(ASSEMBLY INSTRUCTIONS CONTINUED)



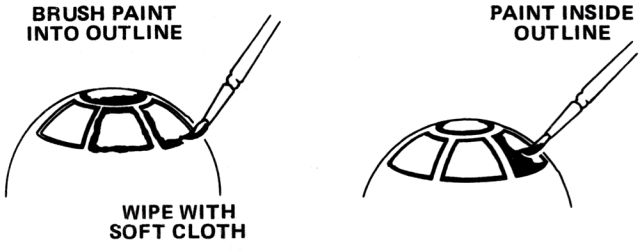
☐ **24** Cement the ballast cup to the inside of the body dome. Apply plastic cement around the beveled edge of the ballast cup. Position the flat edge of the large card disc opposite the radar eye detail. Center the cup inside the dome and press firmly into place against the dome top. Support the dome upright until dry.



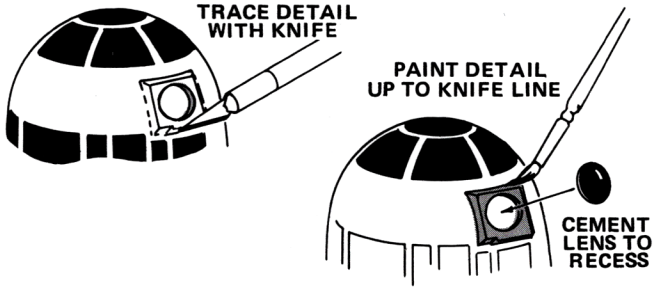


☐ **25** Cut out the parachute (part R) on its edge lines. Cut three 36 inch lengths from the shroud line (part S). Attach line ends to the top of the parachute with tape discs (part T) as shown. Wrap shroud line loop ends around the shock cord 1-1/2 inches from the forward body centering ring. Pass the parachute through the loop ends and draw lines tight against shock cord. Set the knot with a drop of white glue. IMPORTANT: Attach parachute exactly as shown. Failure to do so may affect the opening reliability of the parachute.

PAINTING AND DECALING



☐ **26** Paint the dome panel detailing dark blue. Refer to decor illustrations. The following painting technique is recommended. First brush a line of blue paint into the recessed outline of the panel. Immediately, while the paint is still wet, wipe a soft cloth across the area you have painted. The cloth will remove surface paint and leave a straight, painted outline. Paint and wipe only a small section of the dome at a time. When finished, paint all panels inside their outline.



☐ **27** Use the following method to paint raised detail for the dome and legs. First trace around the desired shape with the tip of a knife blade or a straight pin. Press just hard enough to scratch a line into the plastic. Now paint the desired detail. Carefully brush and "flow" your paint up to the scratch line. This greatly simplifies tedious freehand brushing. Paint black the rounded side of the clear plastic lens (part P). When dry, cement it to the recess in the radar eye detail. Scrape some paint from the center of the recess so that the plastic cement will adhere properly. Apply the remaining stick-on decals, K3 through K7, as shown in the decor illustrations.

LAUNCHING COMPONENTS

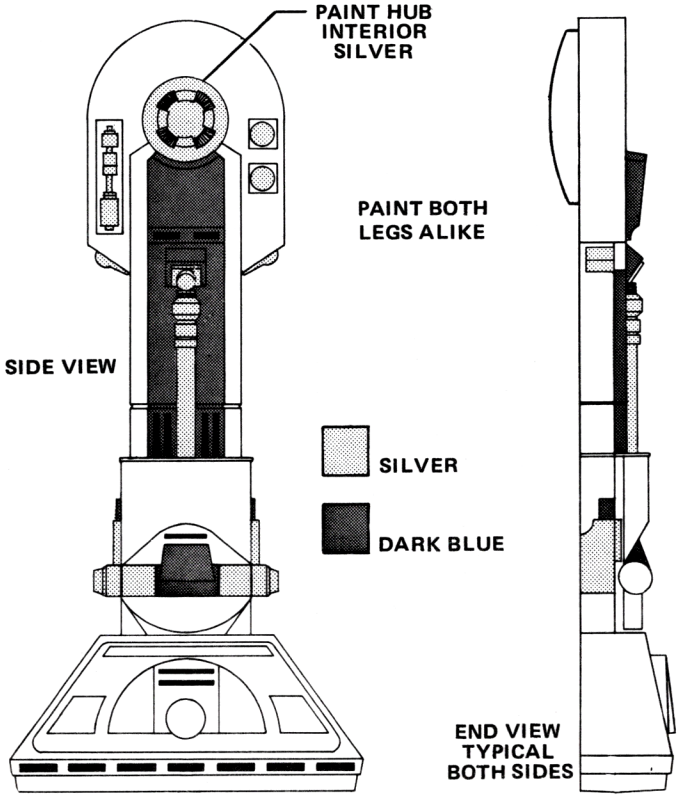
You will need the following launching supplies to fly your R2-D2 model rocket:

1. An Estes remote-control electrical launch system and the recommended battery or batteries.
2. Parachute recovery wadding (Estes Cat. No. 2274).
3. Estes C6-3 model rocket engines and igniters. The C6-3 is the only engine recommended for this rocket.

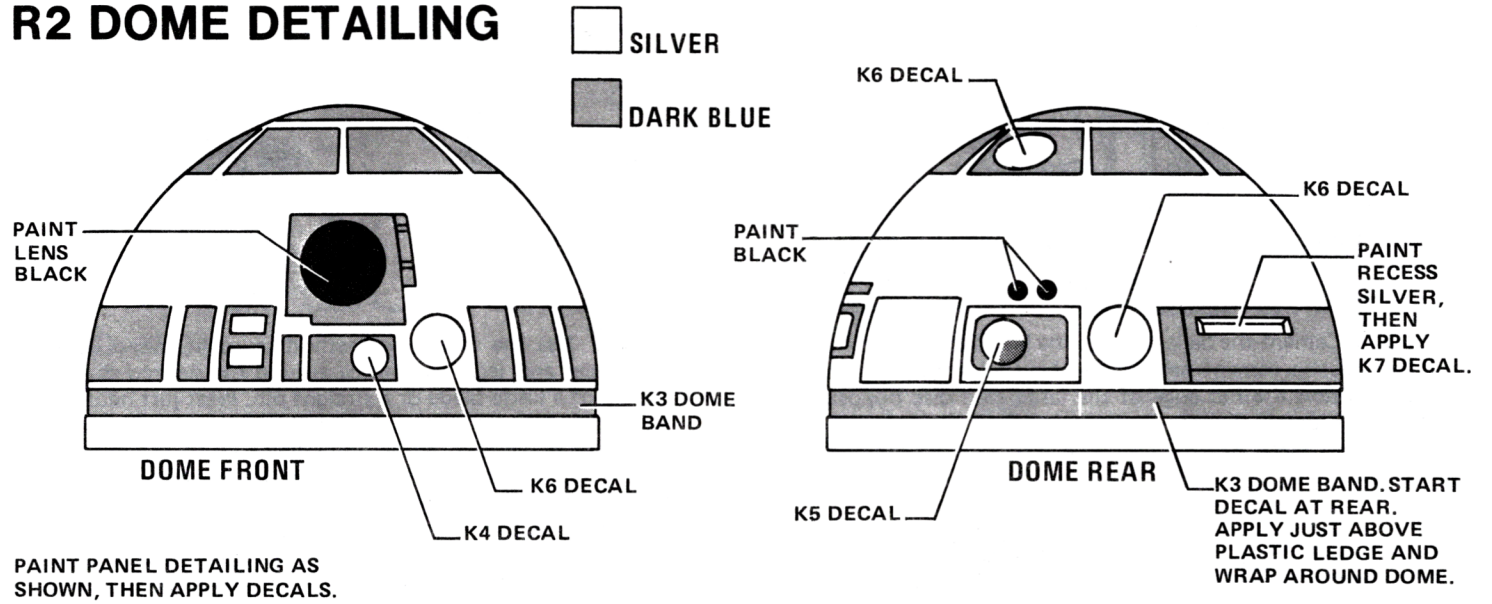
Be sure to follow the *HIAA-NAR Model Rocketry Safety Code when carrying out your model rocket activities.

*HIAA-NAR - Hobby Industry Association of America
- National Association of Rocketry

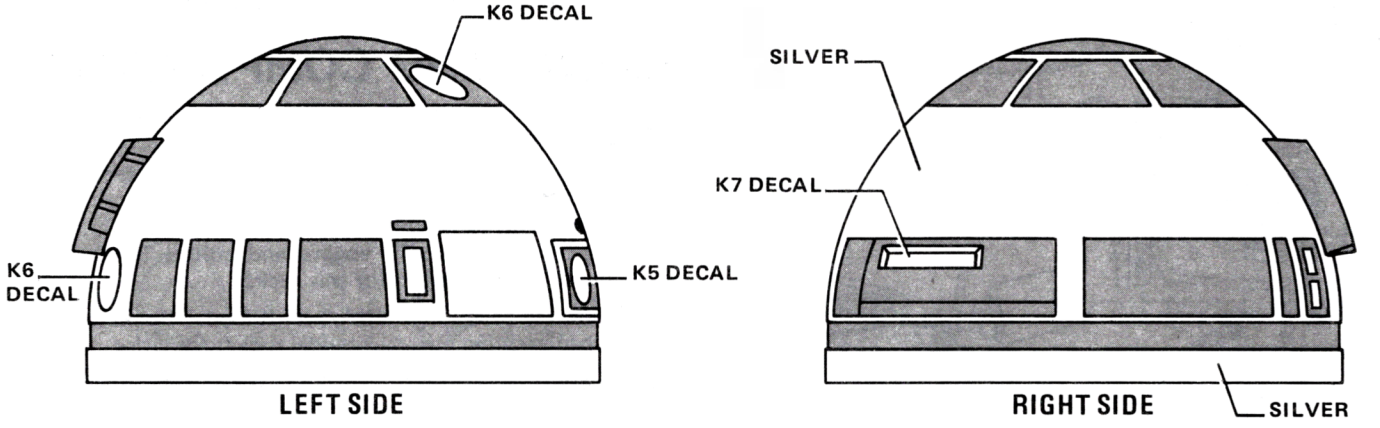
LEG DETAILING



R2 DOME DETAILING

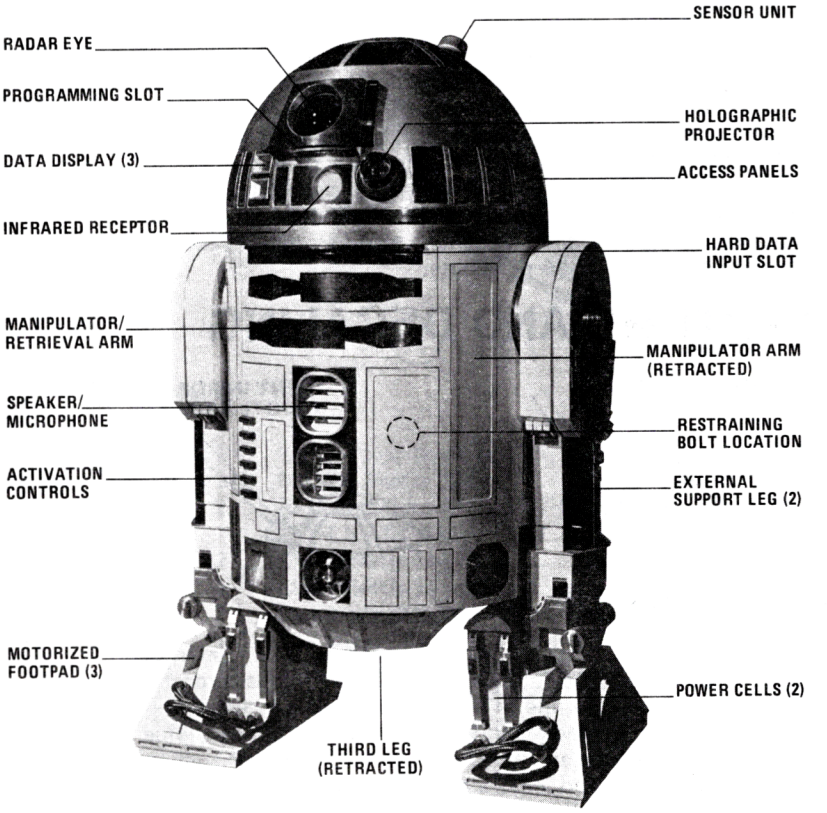


PAINT PANEL DETAILING AS SHOWN, THEN APPLY DECALS.



R2 TECHNICAL DATA

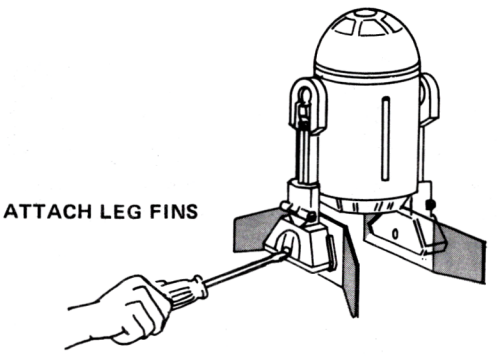
Artoo-Detoo (R2-D2) is a 43 inch high computer repair and information retrieval robot. Commonly referred to as Astro-Droids, or simply as droids, these sophisticated machines are totally self-contained and move readily about on motorized footpads. A third footpad is extended from the body when traversing irregular terrain. The 360° rotating dome cap houses computer sensors, data readout displays, infrared receptors, a single radar eye, a holographic projector for message display and numerous access panels. The cylindrical body contains all necessary servo-mechanisms, extendable retrieval and manipulator arms, interface linkages, activation controls and a speaker/microphone. They can speak only to other robots in a series of electronic sounds. Their language can be interpreted for humans by a Translator droid. Most R2 units are programmed for total independent operation and can function in a pressure atmosphere or a vacuum. They may also operate integrally with complex machinery and spacecraft. Remote command function is accomplished by attaching a restraining bolt device to the exterior of the robot.



ESTES INDUSTRIES, PENROSE, COLORADO 81240

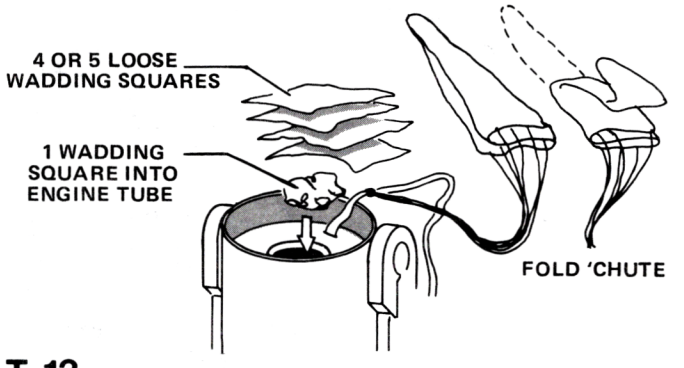
84066

ROCKET PREFLIGHT



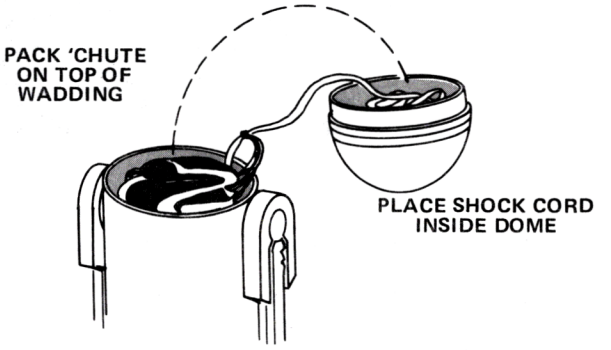
T-14 Attach the clear plastic leg fins to the inside of both legs. Secure fins with the retaining screws. The fins should fit tightly against the legs, but do not overtighten the screws.

DO NOT ATTEMPT TO FLY YOUR MODEL WITHOUT THE LEG FINS.



T-13 Pack 5 or 6 squares of flame-proof recovery wadding into the body tube. Pack one square of crumpled wadding directly into the end of the engine mount tube. Fold the parachute into a slim triangular shape as shown. Fold again into thirds. Pack 'chute and shroud lines loosely into rocket body on top of recovery wadding.

NOTE: DO NOT wrap shroud lines around the parachute. This could delay the opening of the 'chute. Do not pack parachute until you are actually ready to launch. For maximum parachute reliability, lightly dust the 'chute with ordinary talcum powder, especially in cold weather.

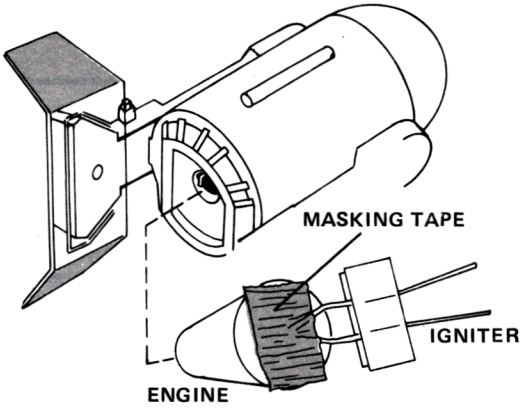


T-12 Gather the shock cord together and place inside the body dome. Slide dome into body. Check to be sure that there are no shroud lines or shock cord caught between the dome and body tube.

The body dome should separate easily from the body tube, but not be extremely loose. If it is too tight, sand inside of body tube end and shoulder of dome with fine sandpaper. If body dome is too loose, add a wrapping of transparent tape or masking tape to the shoulder of the dome.

Your model has an extremely short parachute compartment due to the squat body shape of Artoo-Detoo. You might experience an occasional scorching of the parachute from the engine ejection gases.

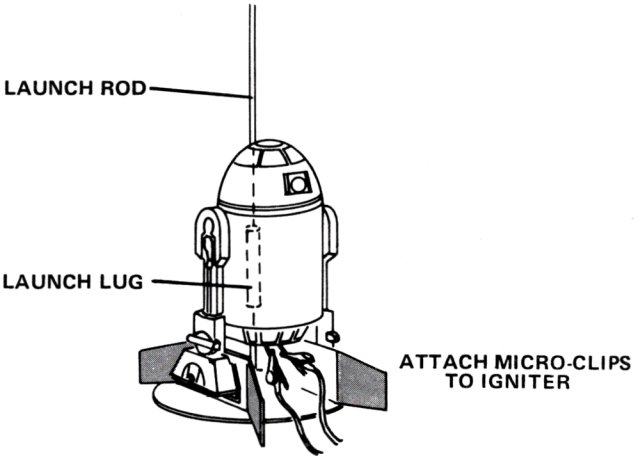
ROCKET COUNTDOWN



T-11 Install an igniter in a C6-3 engine as directed in the engine instructions. The C6-3 is the only engine recommended for this model.

T-10 IMPORTANT: Remove safety key from launch controller. Insert engine into rocket. Engine hook must latch securely over end of engine.

T-9 Place rocket on launch pad. Slide the rocket's launch lug over the end of the launch rod and lower the rocket to the blast deflector.



T-8 Attach micro-clips to igniter ends. Attach clips as close to engine as possible. Be sure that the micro-clip wires will not snag on the clear plastic fins.

T-7 Clear the launch area and alert recovery crew.

T-6 Arm the launch controller -- insert safety key.

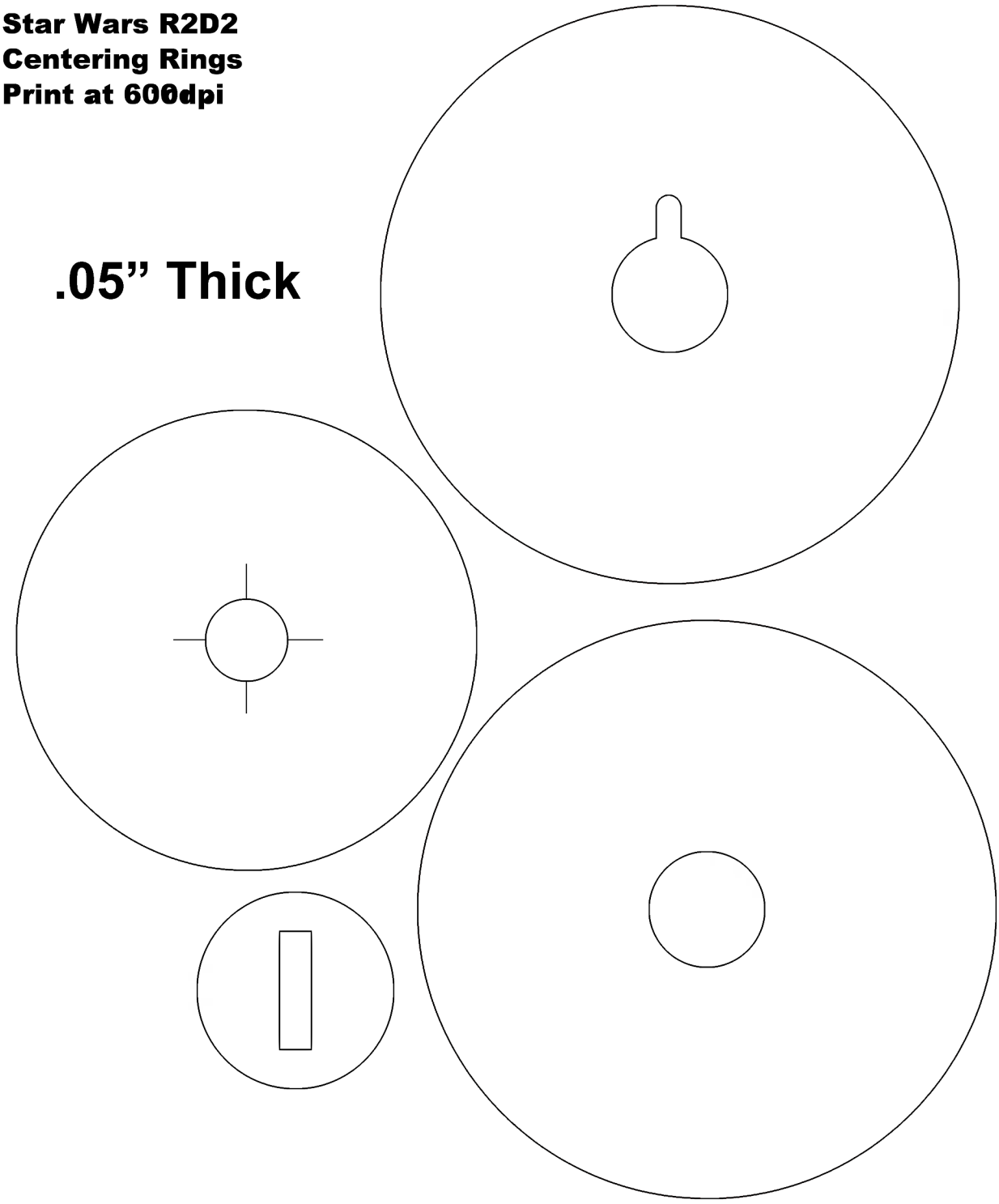
-5-4-3-2-1-LAUNCH!!

MISFIRE PROCEDURE

Occasionally an igniter will heat and burn into two parts without igniting the engine. This is almost always caused by a failure to install it correctly. Disarm the launch controller and remove the model. Clean igniter residue from nozzle with toothpick or similar object. Install a new igniter and repeat Rocket Countdown.

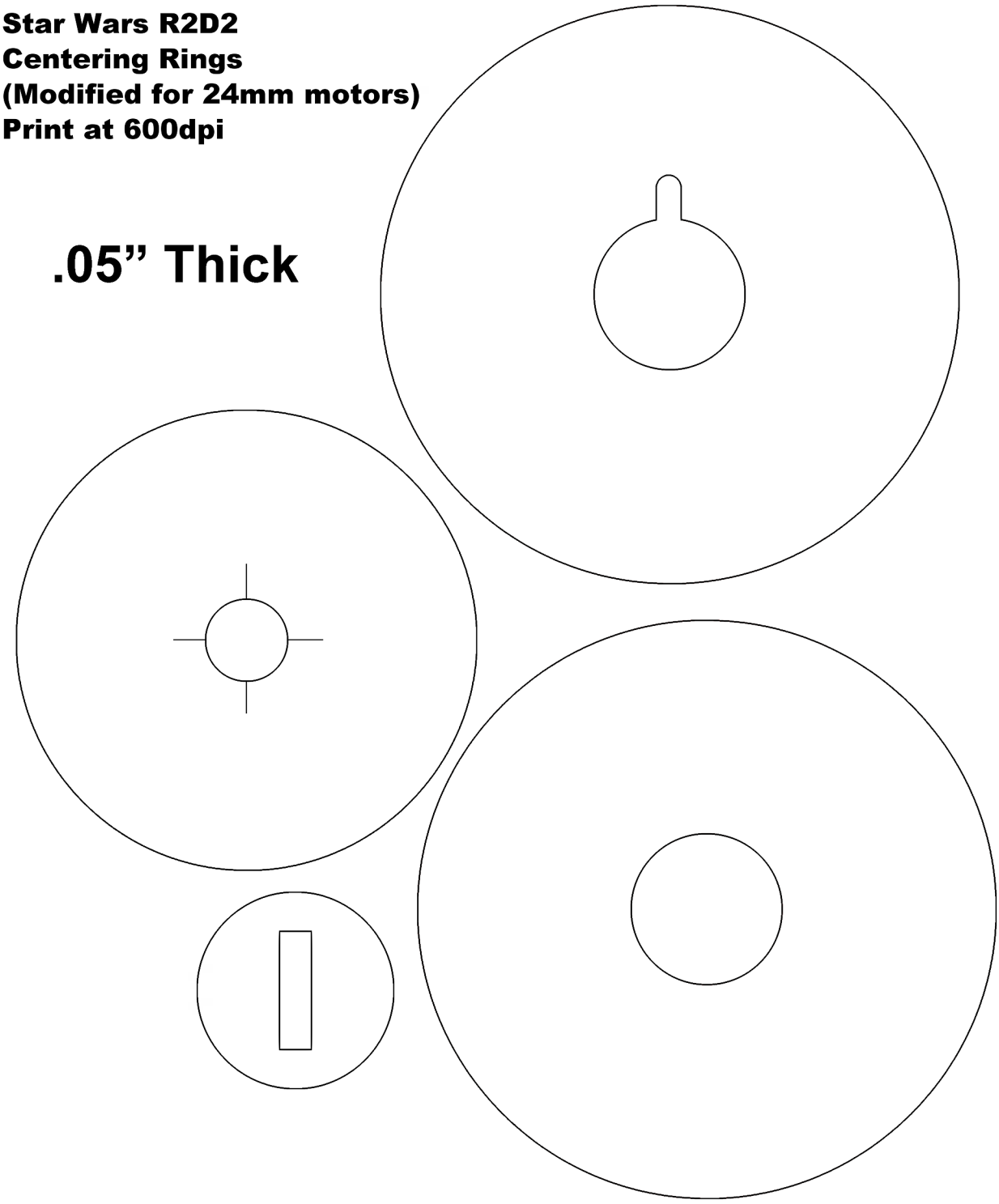
Estes Industries Rocket Kit #1301
Star Wars R2D2
Centering Rings
Print at 600dpi

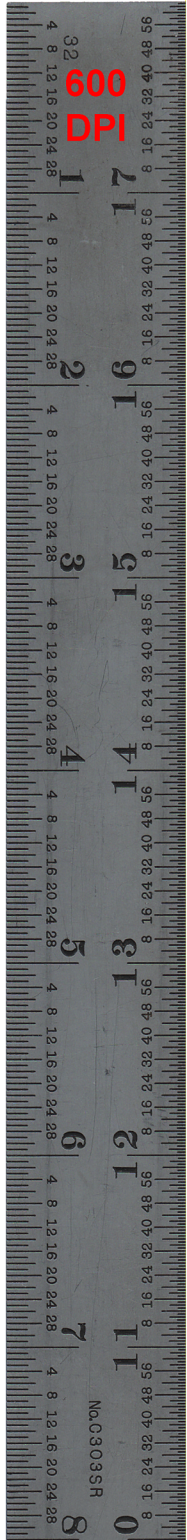
.05” Thick

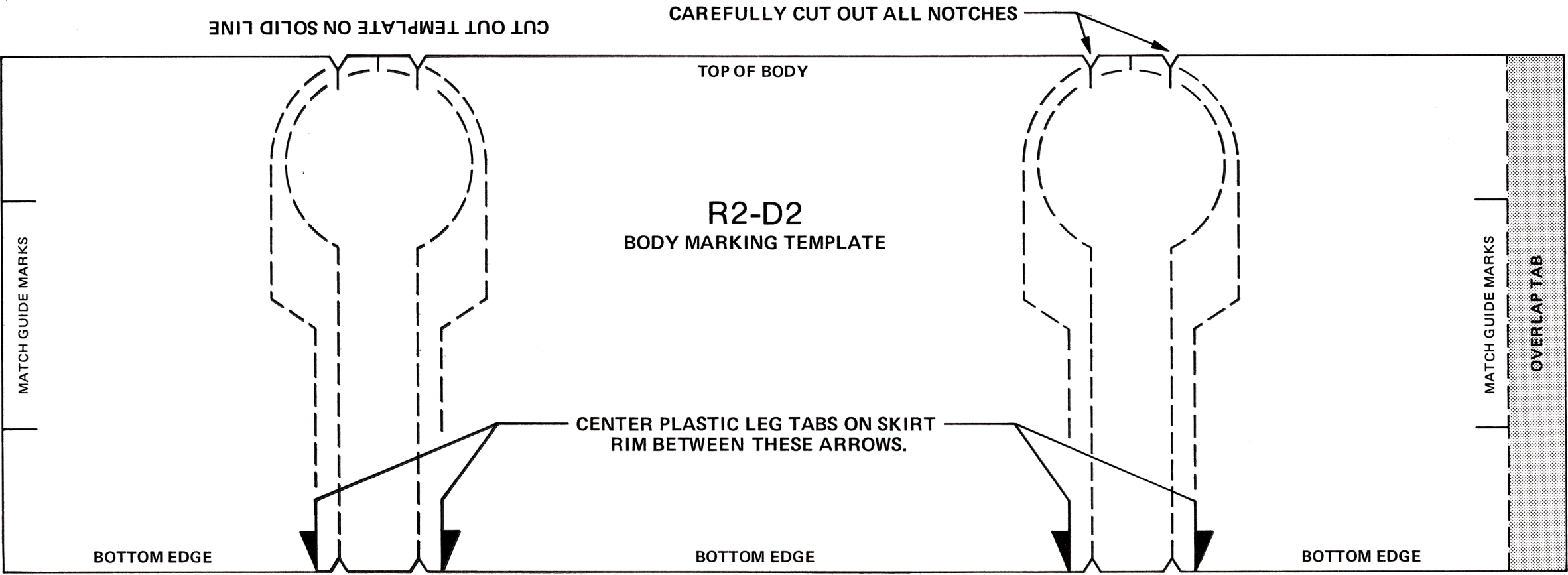


Estes Industries Rocket Kit #1301
Star Wars R2D2
Centering Rings
(Modified for 24mm motors)
Print at 600dpi

.05” Thick





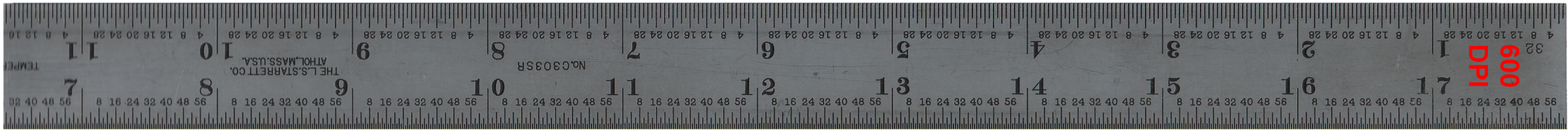


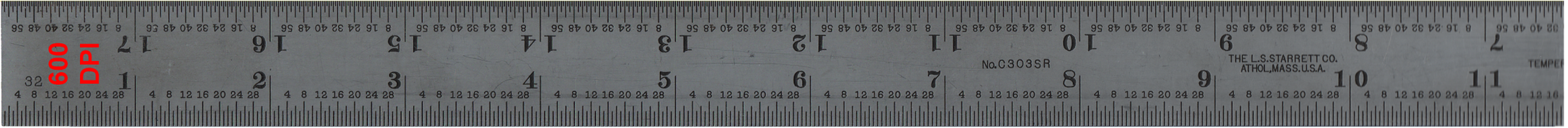
R2-D2 MARKING TEMPLATE

CUT OUT TEMPLATE ON SOLID LINE

PN 84046 ESTES INDUSTRIES

Print at 600dpi





K3 - DOME BAND

K7

K6

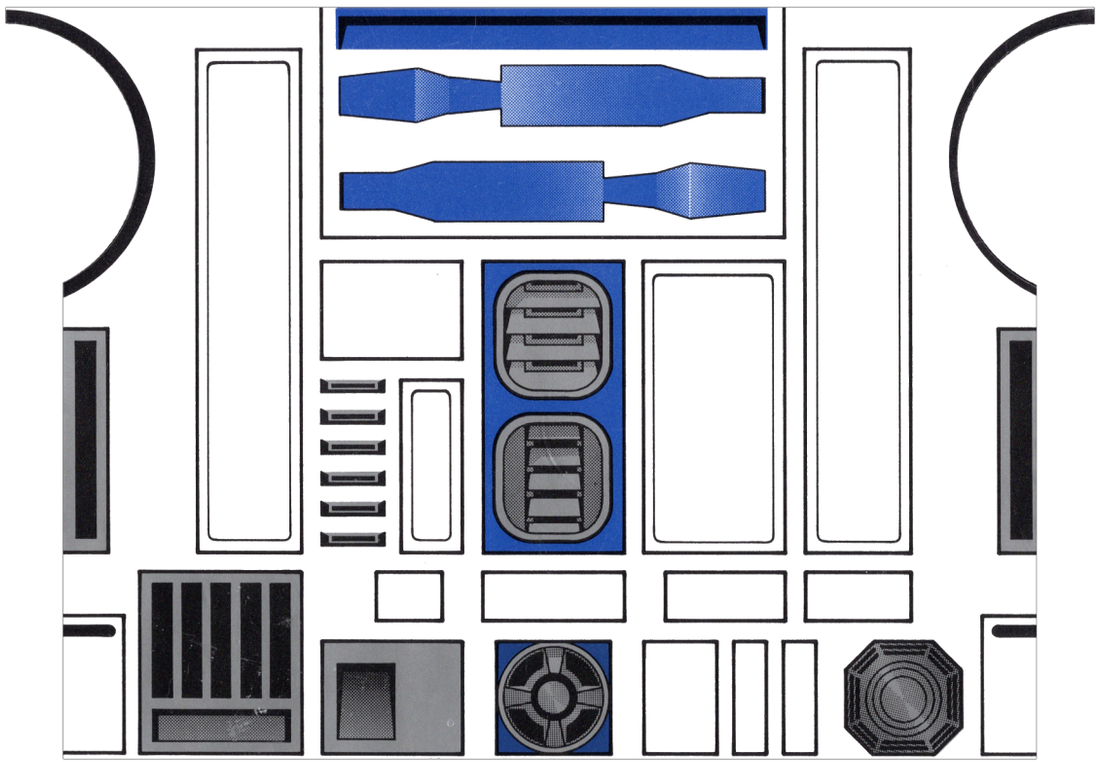
K6

K6

K5

K4

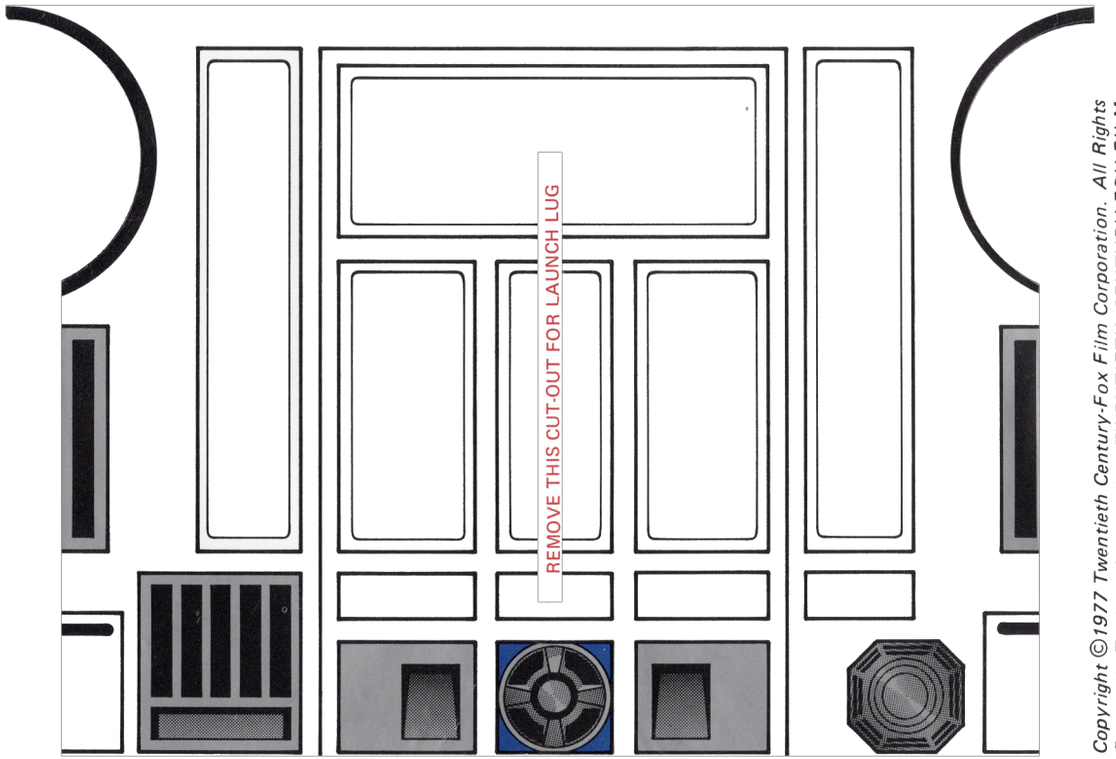
TOP



K1 - BODY FRONT

BOTTOM

TOP



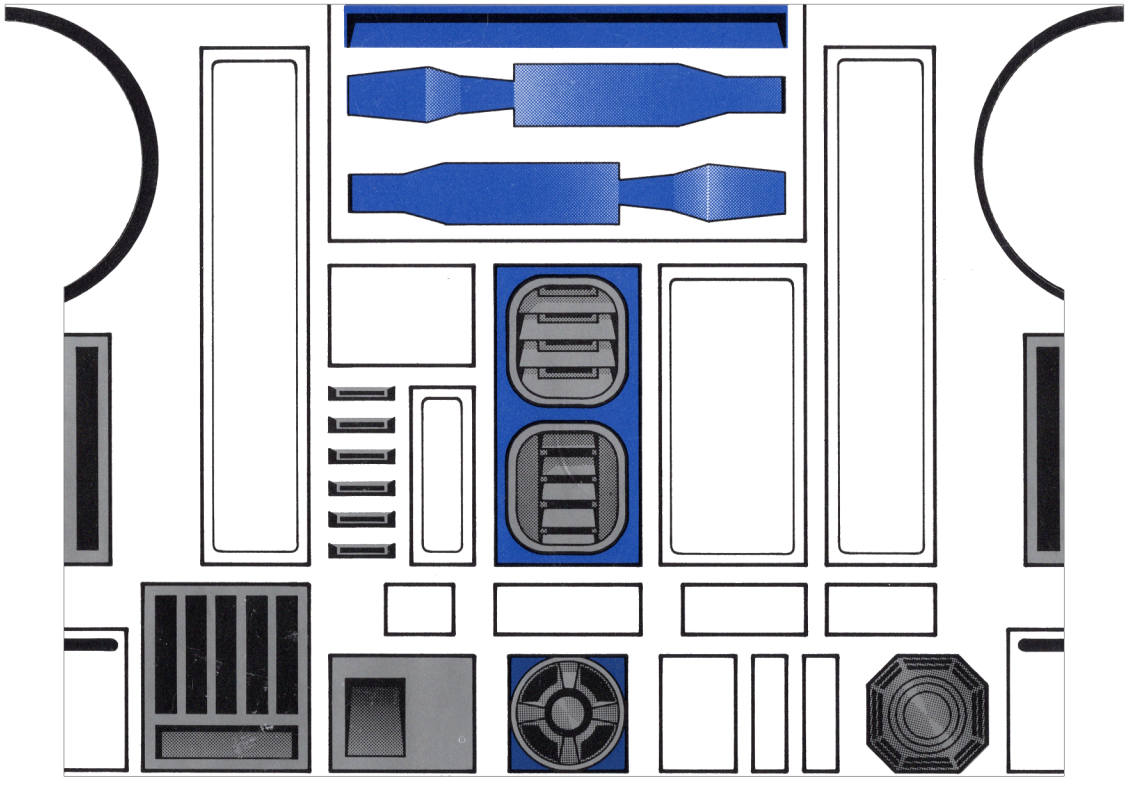
K2 - BODY REAR

BOTTOM

PN 37106 STAR WARS ARTOO-DETOO

Print at 600dpi

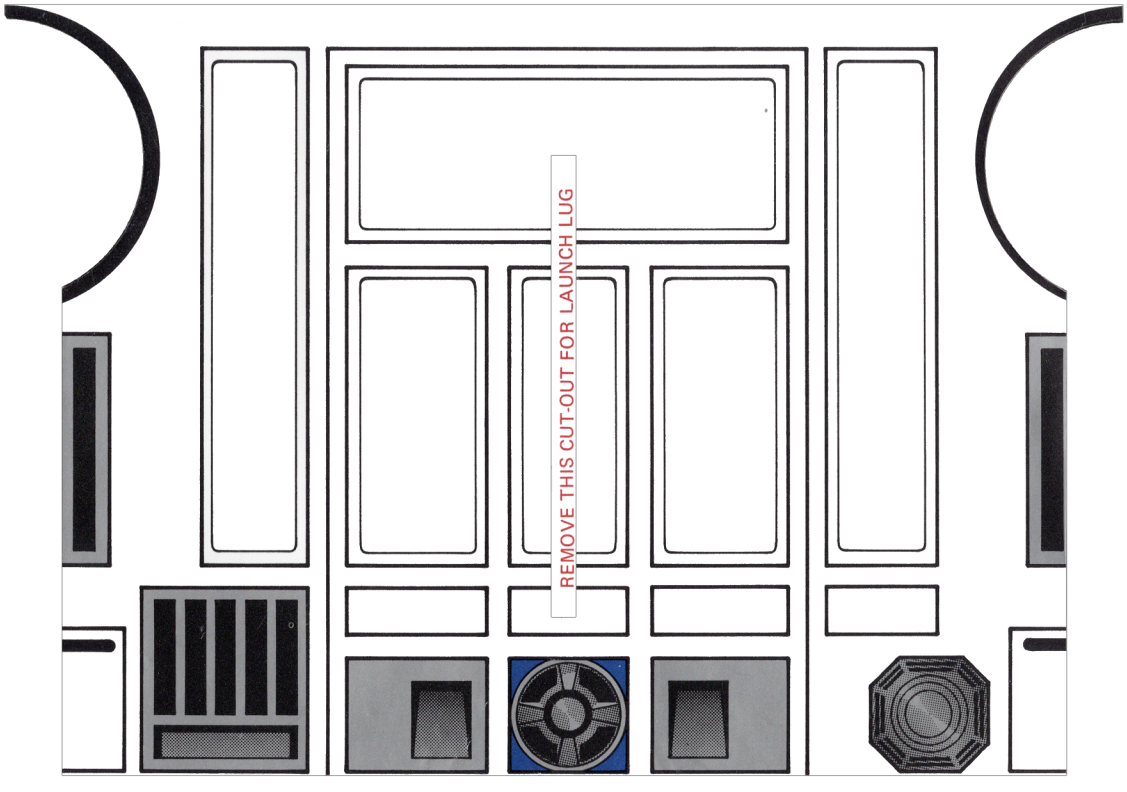
TOP



K1 - BODY FRONT

BOTTOM

TOP



K2 - BODY REAR

BOTTOM

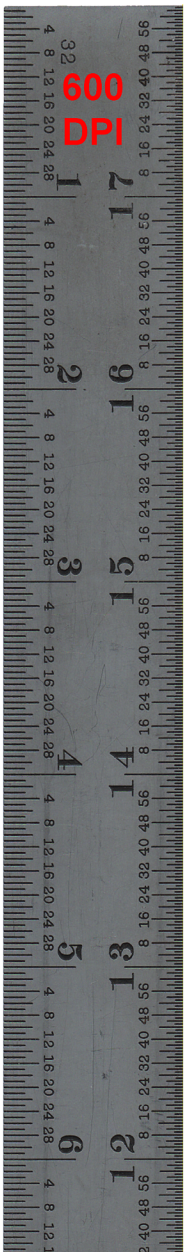
600 DPI

Print at 600dpi

PN 37106 STAR WARS ARTOO-DETOO

Print at 600dpi

K3 - DOME BAND



K7

K6

K6

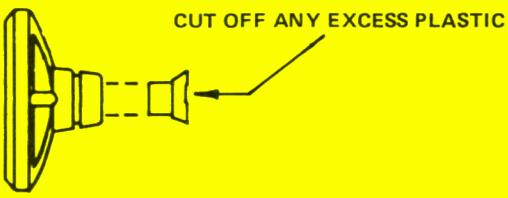
K6

K5

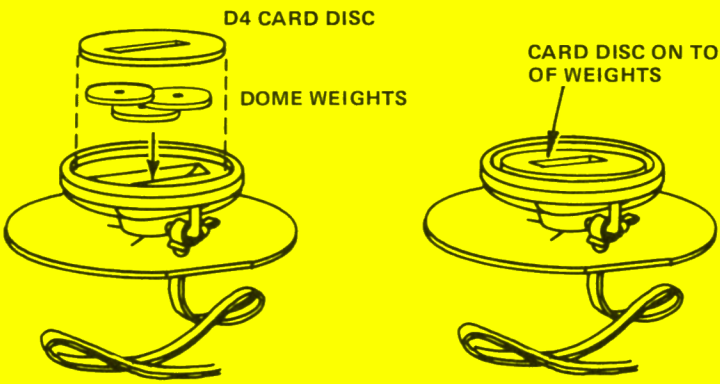
K4

IMPORTANT
Please Read!

Your R2-D2 model rocket requires three dome weights (part Q) for proper balance as a flying model. Please substitute the following assembly steps in the Assembly Instructions.



☐ **5** Addition to step 5: Be sure to cut off any excess plastic from the end of the ballast cup.



☐ **23** Loosely place the three dome weights (part Q) flat side down in the ballast cup. Place the small card disc (part D4) on top of the weights. Now cement the ballast cup to the inside of the body dome as shown in step 24.

ESTES INDUSTRIES, PENROSE, COLORADO 81240

905,405

PARTS LIST KIT N0. 1301 - R2-D2								
Quantity	Description	Type	Number	Details1	Details2	Details3	Details4	Comment
1	PAPER BODY TUBE	BT-20J	30326	2.75" long	0.710" ID	0.736" OD	0.013" wall	Glassine
1	ENGINE HOLDER	EH-2	35025	2.8" long	.100" wide	.025" thick		Reg. & D
1	MYLAR RETAINER RING	HR-20	30168	0.3" long	0.74" ID	0.76" OD	0.01" wall	BT-20
1	Card Die-Cut Sheet	*TA-1301	30080	8" long	7.75" wide	0.05" Thick	Cardstock	Scan
1	CENTERING RINGS	AR-2050	30164	0.25" long	0.737" ID	0.949" OD	0.106" wall	Green
1	Molded Plastic Body Dome	N/A	33165	3D print files are in the file est1301_stl.zip or downloaded from https://www.printables.com/model/426908-estes-1301-r2-d2-robot-hero-model-rocket See description for more details.				
2	Molded Plastic Leg	N/A	33166					
1	Molded Plastic Skirt/Cup	N/A	33167					
2	Clear Plastic Leg Fin	N/A	33168					
1	Clear Plastic Lens	N/A	33169					
1	Shock Cord	SC-2	38363	50" long	1/4" wide			Rubber
1	PAPER BODY TUBE	BT-100D	30435	4.05" long	3.702" ID	3.744" OD	0.021" wall	Glassine
1	Body Marking Template	N/A	84046	12" long	5" wide	Index Cardstock		Scan
1	*Stick-On Decal Sheet	N/A	37106	14" long	5" wide	Red, Blu, Blk, Gry	Selfstick	Scan
1	LAUNCH LUG	LL-2B	38178	5/32" ID	1/8" rod	2-3/8" long		Mylar
2	Retaining Screw	ST-4050	45126	#4 Panhead	0.5" long	Woodscrew		
3	NOSE CONE WEIGHT	NCW-1A	38280	11/16" dia.	0.12 oz.	w center hole		Lead Disc
1	Parachute	PK-18A	85566	18" dia.	18" x 6 Shrouds	LDPE plastic	Org/Blk/Wht	Damon Logo
1	Shroud Line	SLT-108	38239	108"	.020" diameter	Twisted cotton	3 x 36" shrouds	
1	Tape Disc	TD-3F	38406	1/2" dia.	Paper	Self-Stick	WO/Center Hole	Set of 6
* 24mm 'D' engine option also included.								
*Also included the decal split into 2 printable sheets.								

Description

Estes released model rocket #1301 - R2-D2 Robot Hero in the late 70's and again in the 90's. These files will recreate the nosecone, legs, skirt and fins included with the kit.

The rocket was known for being underpowered, a bit unstable, and frequently breaking the fins on landing. Upgrading the kit to a 24mm motor mount is strongly encouraged. The nosecone here includes space for adding additional weight, and I've included an alternate set of larger fins for better stability. 3D printed fins are stronger than the plastic fins included with the kit as well.

The dome in the kit was simplified from the actual design, so I've included a version that matches the kit, and one that better matches the movie. The kit replaced the holo-projectors with stickers, and you can do that with this one, or print the included holo-projectors and glue them on where the stickers go.

The legs and skirt have small changes that make them more movie accurate. In the kit both legs were identical but for greater accuracy print one leg as a mirror of the other. The mirrored leg should go on R2's right side (your left).

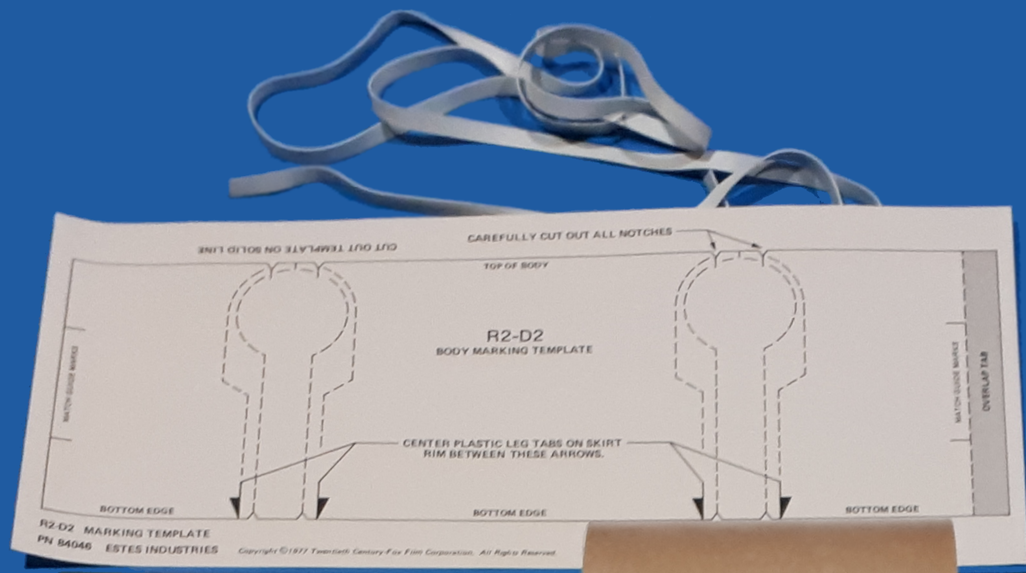
The body tube for the rocket is a 4.05" long BT-100. Semroc makes these still and eRockets.biz carries them and centering rings for a BT-50. I have sent upgraded scans of the decals and plans to JimZ's site so you should have everything you need to clone this kit now.

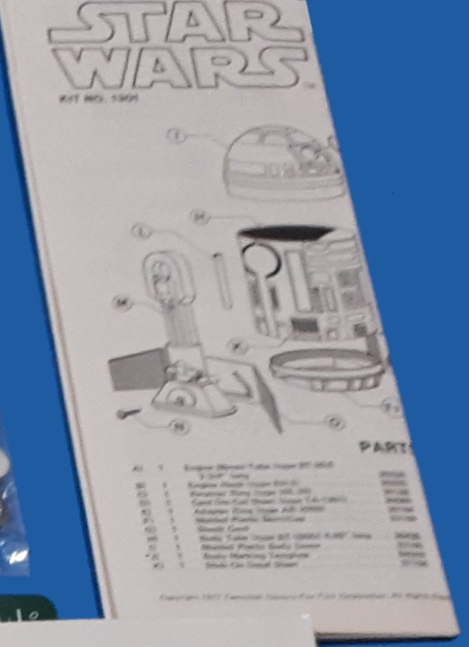
For printing, I used a 0.12 layer height and printed using white Sunlu PLA+ filament. For the dome I blocked supports around the threads at the top. For the legs I blocked supports around the screw hole near the bottom of the leg and the slot near the middle. I used 10% infill but you could probably go to 5%. For the original fins I printed them upright and blocked supports inside the screw holes. The weight compartment, projectors, lens and leg pins do not need supports when printed in the orientation shown.

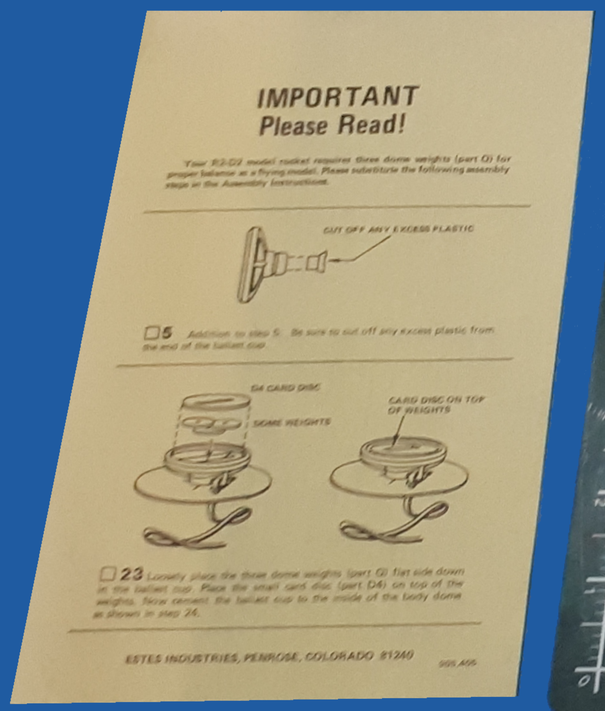
The weight compartment can hold 4 large washers, which I expect is more than what is needed but I have not done any stability testing. Since the weight compartment screws in place you can do your testing and make adjustment, then glue it in place once you have it set right.

Let me know if there are any issues with these models. I intend to add domes for R4, R5 and R6 astromech units as well, and do upscales to LOC 4" body tubes. The R3 series has the same dome as an R2, but they tend to have bad motivators so you might not want to build one of those.

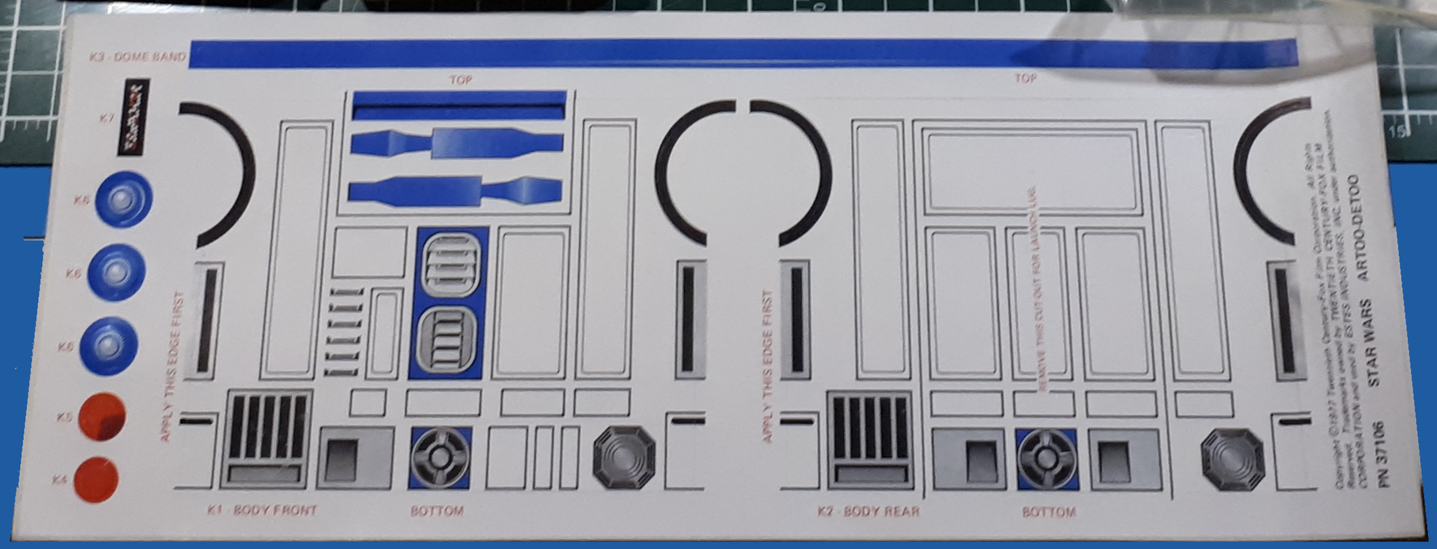
Paul Albers


CUT OUT TEMPLATE ON SOLID LINE
CAREFULLY CUT OUT ALL NOTCHES
TOP OF BODY
R2-D2
BODY MARKING TEMPLATE
CENTER PLASTIC LEG TABS ON SKIRT RIM BETWEEN THESE ARROWS.
WATCH DOOR MARK
OVERLAP TAB
BOTTOM EDGE
BOTTOM EDGE
BOTTOM EDGE
R2-D2 MARKING TEMPLATE
PN 84046 ESTES INDUSTRIES
Copyright ©1977 Twentieth Century-Fox Film Corporation. All Rights Reserved.


STAR WARS
PARTS


IMPORTANT
Please Read!
Your R2-D2 model rocket requires three dome weights (part G) for proper balance as a flying model. Please substitute the following assembly steps in the Assembly Instructions.
CUT OFF ANY EXCESS PLASTIC
☐5 Addition to step 5. Be sure to cut off any excess plastic from the end of the ballast cup.
D4 CARD DISC
DOME WEIGHTS
CARD DISC ON TOP OF WEIGHTS
☐23 Loosely place the three dome weights (part G) flat side down in the ballast cup. Place the small card disc (part D4) on top of the weights. Now cement the ballast cup to the inside of the body dome as shown in step 24.
ESTES INDUSTRIES, PENROSE, COLORADO 81240
999.A95


MERANGUE
CUTTING MAT
PLANCHE À DÉCOUPER
PIZARRA DE CORTE
12" x 18" (30.5 cm x 45.7 cm)


K3 - DOME BAND
TOP
TOP
K7
K6
K6
K5
K5
K4
APPLY THIS EDGE FIRST
APPLY THIS EDGE FIRST
REMOVE THIS CUT OUT FOR LAUNCH LUG
K1 - BODY FRONT
BOTTOM
K2 - BODY REAR
BOTTOM
PN 37106 STAR WARS ARTOO-DETOO


STAR WARS FLYING MODEL ROCKET
ESTES
R2-D2
FLYING MODEL ROCKET
If Really Flies!
Actual Size!
Specifications:
Height: 9.5" (22.8 cm)
Body Diameter: 3.744" (95.09 mm)
Width: 4.47" (13.7 cm)
Weight: 5.8 oz. (165 g)
18" Parachute Recovery
Recommended engine:
C6-3
ESTES
A SUBSIDIARY OF ORION
ESTES INDUSTRIES
#1301


Fly Estes Model Rockets
ESTES INDUSTRIES

STAR WARS™

"ROBOT HERO" R2-D2™

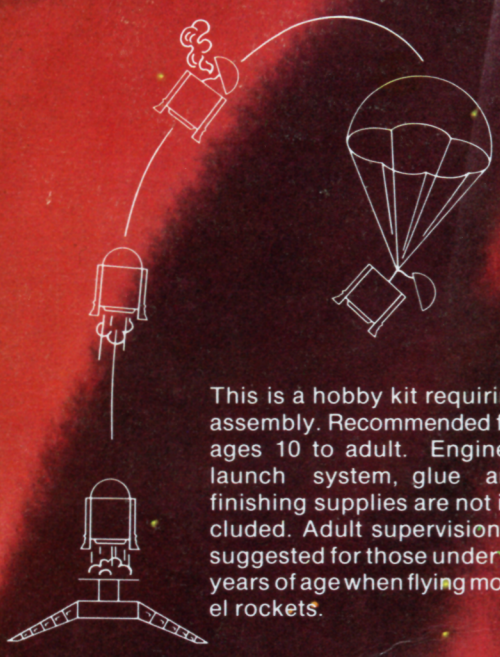
FLYING MODEL ROCKET

SKILL LEVEL 2

1—Beginner 2—Intermediate
3—Craftsman 4—Advanced 5—Expert

Your very own Star Wars R2-D2 (Artoo-Detoo), destined to become the most famous movie robot of all time. This Artoo model is 1/5 actual size and "pops-his-top" in normal model rocket fashion to deploy a giant 18" diameter recovery parachute for landing on the planet of your choice. Kit features include a molded plastic body dome and body skirt, precisely detailed four-color body wrap-on, quick change engine mount, and stabilizer leg-fins.

It Really Flies!



This is a hobby kit requiring assembly. Recommended for ages 10 to adult. Engines, launch system, glue and finishing supplies are not included. Adult supervision is suggested for those under 12 years of age when flying model rockets.

Actual Size!

Specifications:
Height: 9.0" (22.8 cm)
Body Diameter: 3.744" (95.09 mm)
Width: 5.4" (13.7 cm)
Weight: 5.8 oz. (165 g)
18" Parachute Recovery

Recommended engine:
C6-3

ESTES®
A SUBSIDIARY OF DAMON

ESTES INDUSTRIES
PENROSE, COLO. 81240 U.S.A.

THE HOBBY INDUSTRY OF AMERICA PROMOTES ACHIEVEMENT

#1301