GATES LEARJET





BACKGROUND

Fashioned after the Swiss FFA P-16 jet fighter, that was cancelled by the Swiss government in the late fifties, the sleek airframe had caught the eye of inventor and entrepreneur William (Bill) Lear, who saw it's potential for use as a twin engine business jet. After preliminary design work by his company in Switzerland, which was then called SAAC (Swiss American Aviation Corporation), Lear moved his company to Wichita, Kansas in 1962, to begin manufacturing, also changing its name to the Lear Jet Corporation. The first prototype Model 23, flew on 7 October 1963. The second generation, Model 24 was first flown on 24 February 1966. In 1967, the Gates Rubber Company acquired Bill's holdings in the company and renamed it the Gates Learjet Company. Model 24 variant D, which this kit is fashioned after, was developed in December 1970. The Learjet's speed, range and economy of operation have made it the most popular of all business planes.

SPECIFICATIONS 565 mph Maximum Speed 534 mph Cruise Speed 481 mph Cruise for max range 2470 miles Maximum Range 45,000 feet Ceiling 8 persons Seating 13,500 lbs Maximum weight 6800 feet/minute Climb rate 5900 lbs thrust 2 G/E CJ 610-6 Engines 35' 7" Wing Span 12' 3" Height 16' 2" Wheel base

BEFORE STARTING

PATIENCE is key to obtaining neat and professional results. If you have problems at any stage of assembly, give it a break, and resume the assembly at a later time.

REMEMBER: It is only plastic! Modeling is meant to be a pleasurable and relaxing experience, not a negative one. You also have to look at mistakes not as failures, but rather as learning experiences.

- Study the illustrations and sequence of assembly before beginning.
- Decide how much detail you wish to add to your mode! and whether or not you intend to modify or "convert" the basic model in any way. Study carefully, all available reference material before beginning to ensure an authentic model.
- Due to the amount of parts in this kit, do not detach the parts from the runner of the parts tree until you need them. This helps avoid confusion and lost parts.
- Before cementing parts together, (dry fit)check the way one part fits with another without cement. This assures a neat job with no surprises.
- 5. Read safety precautions on all hobby supplies used. Always remember when working with plastic model cement and paints, to keep your work area well ventilated. The fumes from plastic modeling products can be harmful if inhaled.

Testor reserves the right to change or amend specifications without notice.

PAINTING

You can obtain an excellent finish on your model using Testor finish preparation products and paints. Detailed descriptions of paint types and colors are included throughout the pages that follow. Good brushes are essential for proper

Testor Model Master brushes are recommended and available at most hobby retailers. Be sure you have the entire selection for all your modeling needs. To clean them, wash in soap and water, and store with bristles upward when not in use. Wash plastic parts before detaching them from the parts tree. Warm water and liquid dishwashing detergent will remove the oils left from the manufacturing process. Let the parts dry and avoid excessive handling. For best results use a white primer basecoat.

Immediately before painting, wipe the parts with a "tac rag" to remove dust and lint. Most small parts are best painted while still attached to the parts tree. You can also detach them and hold with tweezers or "magic" tape while painting.

Paint in one direction only. If your paint is the correct thickness, brush strokes will disappear as the color dries. If the paint seems too thick, thin with appropriate thinner. Let the paint dry completely before handling.

When the parts are dry, assemble the model following the directions closely. Remember cement will not hold strongly to painted surfaces. Use your Testor Hobby Knife to carefully remove paint from all surfaces to be cemented. After you have assembled the model you can touch-up areas where cement may have marred

ASSEMBLY TIPS

Tweezers will be useful in assembling the many small parts in this kit, such as Testor Tweezers #50631C. Liquid cement, Testor #3502 is recommended for construction since it can produce the neatest, quickest, and strongest glue joints. Apply small amounts of cement, using the tip of a Model Master #2 brush, to the surfaces to be joined while holding the parts in place.

DO NOT use large amounts of cement, it may run and ruin detail on parts.

1 LANDING GEAR

Preliminary Painting

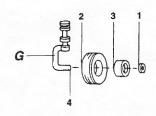
Paint parts as indicated by **Bold Italic** letter callouts using the **COLOR KEY**.

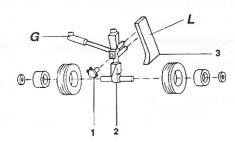
This kit offers two landing gear options:

- 1. Landing Gear Down (on Ground).
- 2. Landing Gear Up (in Flight).
 In both options the Main Inner Gear Doors are closed since they only open during the up and down movement of the landing gear. These doors and the Landing Gear Up position are detailed in section Final Assembly, Steps 3-6. The following instructions apply only to Landing Gear Down position.
- Cement Wheel Retainer 1, to wheel. Press Tire 2, onto Wheel 3.
- Press Nose Wheel onto Nose Gear Strut 4.
- Cement Landing Light 1, into hole on Main Gear Strut 2. Let Dry.
- Cement Outer Main Gear Door 3, in open position onto Main Door Strut as shown. Let dry.
- Assemble Main Wheels and press onto Main Gear Strut.

PREPARATION OF PARTS

- Never remove parts from the tree by hand. Use a Testor Model Master Sprue Cutter #50628C, Testor Hobby Knife #8801, or fingernail clippers. Trim the "gate" off of the part after it has been removed from tree.
- 2.For best appearance and fit, remove all parting lines from parts before cementing or painting. Test fit all parts before assembly. Use small files, your hobby knife, or Testor Sanding Films #8802, or Model Master Sanding Films #8812, available at a hobby shop or hobby retail store near you.
- If you desire, you may fill any seams (where parts fit together), irregularities or imperfections with *Testor Contour Putty #3511* for plastic models, or *Model Master Red Putty #8879C*. Available at most hobby retailers.





- 4. Testor recommends washing the plastic parts before detaching them from the parts tree or after you have prepared them for assembly and final cementing. Warm water with just a little dishwashing detergent will remove the oils used in the manufacturing process. Let the parts air dry before painting.
- 5. You may paint small parts while they are still attached to the parts tree, or paint separately, held by tweezers or tape. When brush painting the smaller parts in your kit, paint in one direction only. Brush strokes will level out and disappear as the paint dries. Using a file or hobby knife, carefully remove paint from areas to be cemented. A plastic to plastic bond is the strongest of all. The same thing goes with chrome plated parts.

SPECIAL FINISHING HINTS WASHES

Make a wash of 50% flat black and 50% thinner. Using a small paintbrush, (#0—#000), dip brush in wash and apply to, chrome parts, filling in depressions and flowing into corners, then wipe all the high points off with a lint free rag to simulate natural shadow patterns.

DRY-BRUSHING

Dry-brushing — consists of taking a larger paintbrush, (in the 1/4—1/2 inch range), and dipping a small amount of paint onto the end of the bristles, then wipe the excess paint off the bristles by rubbing on a cloth or paper towel. When paint stops rubbing off of the bristles, lightly feather the ends of the paintbrush bristles over details such as, seat edges, consoles, and any area you want the engraved detail to stand out.

2 FUSELAGE DOORS

Preliminary Painting

Paint parts as indicated by **Bold Italic** letter callouts using the **COLOR KEY**.

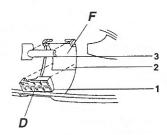
Upper Door

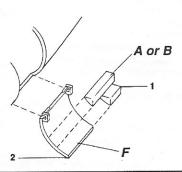
- Cement Magazine Panel 1, to Upper Door 2. Let dry.
- Slip Upper Door into door opening in fuselage and tape in closed position. Cement Upper Door Hinge Retainer 3, into place.

NOTE: Do not get glue on hinge pins or door will not open.

Lower Door

- Cement Stairs 1, onto Lower Door 2, and let dry.
- Insert Lower Door Pins in place beneath Interior Compartment Floor. Do not cement these pins. Be sure interior lines up with door.





COLOR KEY

0020111121		
A	Red	#1104
B	Blue	#1111
C	Green	#1124
D	Brown	#1140
E	Wood	#1141
F	White	#1145
G	Silver	#1146
H	Gloss Black	#1147
J	Flat Black	#1149
K	Zinc Chromate	#1184
L	White (Spray)	#1245

3 TURBO JET ENGINES

Preliminary Painting

Paint parts as indicated by **Bold Italic** letter callouts using the **COLOR KEY**.

- Cement Turbine 1, into Air Intake 2, and let dry.
- Cement Engine 3, onto Lower Engine Nacelle 4. Cement Air Intake assembly to Engine assembly.
- Cement Tailpipe 5, onto engine assembly. Do not cement Engine Covers 6. Position them correctly when model; is completely assembled.

NOTE: The "T" on *Air Intakes* and *tailpipes* indicates the top of the part. Remove these T's when you have completed this assembly.

4 wings

Preliminary Painting

Paint parts as indicated by **Bold Italic** letter callouts using the **COLOR KEY**.

- Position Aileron 1, correctly into Lower Wing 2. If you wish it to remain stationary, cement it in place.
- Cement Upper Wing 3, to Lower Wing and let dry.

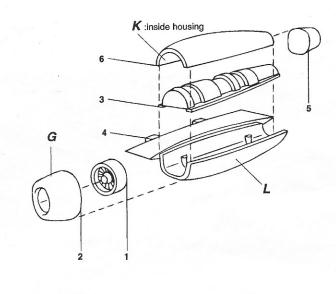
NOTE: We suggest that you use masking tape to hold the wing halves together while drying.

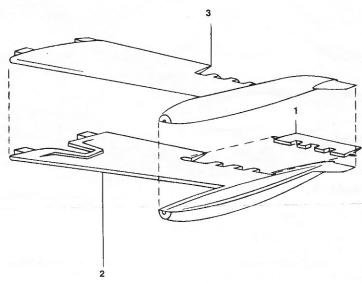
5 INTERIOR

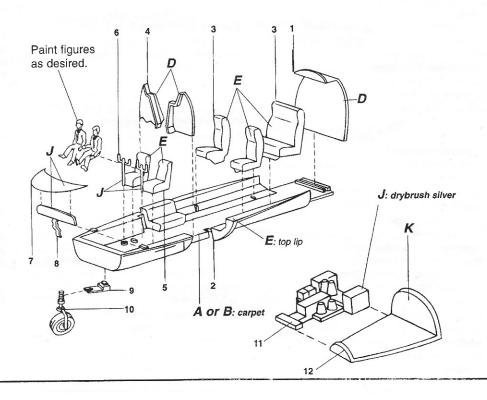
Preliminary Painting

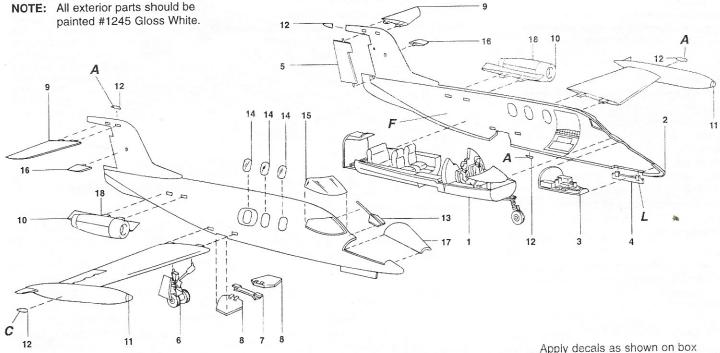
Paint parts as indicated by **Bold Italic** letter callouts using the **COLOR KEY**.

- Cement Rear Bulkhead 1, to Compartment Floor 2. Let dry. Cement Compartment Seats 3, to tabs on floorboard as shown.
- Cement Compartment Bulkheads 4, to Compartment Floor. Cement Pilot and Co-pilot Seats 5, to tabs on floorboard as shown. If you wish to have pilot figures in your model cement them to their seats as shown.
- Cement Control Columns 6, into holes in compartment floor, make sure they are upright.
- Cement Instrument Cowl 7, to top of Instrument Panel 8. Cement this assembly to tabs in front compartment as shown.
- If you are assembling your LearJet in the gear down position, cement Nose Gear Bracket 9, to underside of compartment floor. Snap Nose Gear 10, into Nose Gear Bracket; DO NOT CEMENT!
- Cement Instruments11, to Compartment 12, as shown.









6 FINAL ASSEMBLY

Preliminary PaintingPaint parts as indicated by *Bold Italic* letter callouts using the **COLOR KEY**.

- Cement Interior Compartment
 Assembly 1, to Left Fuselage 2, carefully positioning it on mounts in fuselage interior.
- Cement Electronics Compartment Assembly 3, into nose of left fuselage half as shown.
- Gear Down Position:
 Cement left and right Nose Gear Doors 4, in open position (in both fuselage halves).

Gear Up Position:
Cement left and right Nose Gear Doors in closed position, flat against

underside of fuselage.

- 4. Placing Rudder Pins 5, into holes on left half of fuselage, cement fuselage halves together being careful not to cement Rudder pins. Use rubber bands or masking tape to hold halves together while cement dries.
- Gear Down Position:
 Cement Main Landing Gear
 Assembly 6, into place on underside of both wings.

Gear Up Position: Cement *Outer Gear Doors* (see landing gear and wheel assembly) in closed position, flat against underside of wings. NOTE: Clear parts are best glued in place with Testor Clear Parts
Cement #3515C. Clear Parts
Cement will not mar the plastic and thus results in a better appearance than conventional cement.

- Cement Airframe Filler 7, to center of fuselage. Cement Inner Main Gear Doors 8, flat against bottom of fuselage in closed position.
- Cement Stabilizers 9, to fuselage. Make sure they are exactly perpendicular to tail and parallel to each other.
- Cement Wing assemblies to fuselage, referring to photos on package for correct angle in relation to stabilizers.
 Cement Engine Assemblies 10, to fuselage where shown.
- Cement Landing Lights Lens 11, to both wingtips. These may be painted (#1149 flat black), to simulate anti-ice boots.
- Cement De-Icing Duct and Deflector
 to center of windshield as shown.
 (Refer to detail photo's).
- Carefully cement Side Windows14, and Windshield 15, into the openings as shown. See Note above.
 Cement VOR Antennae 16, to fuselage where shown.
- Set Electronics Compartment Cover
 17, and Engine Cover 18, into correct position.

Apply decals as shown on box photo. Note that the flag shown on box photo is incorrect. Flag on decal sheet is the correct version usually seen on Learjets.

APPLYING DECALS

- Select the decals you plan to use and cut them from the decal sheet with scissors or a Testor Hobby Knife.
- Working with only one decal at a time, dip the decal in clear water for no more than five seconds. Remove it from the water and place on a dry paper towel for about one minute.
- When the decal slides easily on the backing paper, slide it to the edge of, and on to, the surface of the model with a paint brush or tweezers.
- **REMEMBER**: the decals are very thin and can be easily ripped. Work slowly and carefully.
- 4. Once the decal is in the desired position apply a small amount of Testor Deccl Setting Solution #2146, or Solvent Solution #2145 for complex surfaces. These will help the decal conform to any irregularities in the surface of the model. Allow the decal to dry undisturbed. Should you desire to move decal before it has dried, apply a little Decal Setting Solution to soft brush and push the decal into desired position.
- 5. When the decals are completely dry (usually overnight), if you wish you may apply a coat of **Testor Model Master Glosscote #2736.** If you decide to do this, you must mask off the windows with clear tape first. Then apply Glosscote to the entire model. Let dry before removing tape. This will give the model an authentic gloss finish and will protect the surface of your model.