

I bet just about every modeller has an airliner or two in their collection. Simple, colorful and in most cases just the right size. But how accurate are the basic kits? The scope of this article will be to accurize a B-727. Particularly the Airfix (MPC) 1/144 kits.

The first thing you must realize is that every airline has its own needs and options when they order aircraft and the manufacturers will try to comply with those needs. So once you have your plane and airline picked out, get as many photos as you can for absolute accuracy. I will try to cover the things common on all 727's and options on United and Eastern 727's.

There are two basic 727's. The -100 standard series and the -200 stretch series. There is a -200 advanced series but it is externally the same as the basic -200 series. There are some major differences between the -100 and -200 aircraft making it a big job to convert the -200 aircraft into the hard to find -100.

FUSELAGE

Besides the obvious length difference and door arrangement one distinction is the #2 engine inlet. The -100 inlet is oval while the -200 inlet is round. The Airfix -100 kit does not have the oval inlet but the -200 kit has the correct round inlet. If you plan to open up your aircraft, the cargo doors on the -100 open inward into the cargo pit while the -200 open outward and are supported by hold open rods on the fwd edge of each door. The -100 kit gives you a separate fwd cargo door while the -200 kit has raised panel lines for cargo doors. The -200 kit also gives you the uncommon 3 cargo door configuration. 1 fwd, 2 aft. A little sanding of the most aft panel lines will give you the more common 2 door version. If you think Airfix goofed and didn't put in an aft cargo door on the -100 kit, you're wrong. The door is located under a sliding fairing and is accurate on the -100 kit.

If you want a cargo hauler (i.e. Emery or Federal Express) you'll need to scribe the huge cargo door on the left side on the -100 kit only. To my knowledge no -200 cargo plane was ever built. But it is possible that a cargo door was installed later (yes it can be done). Also metal plugs are installed instead of the usual glass windows.

Check to see if your aircraft has a fwd entry airstair door on the left side. Most 727's do but United 727's do not. The -100 kit has this door while the -200 kit does not.

Above each cabin entry door is a slanted rain gutter. Yes, a rain gutter! It is missing on both door on the -100 kit. But strangely it is on only the fwd left door of the -200 kit. A small piece of thin sprue should take care of the problem for both kits.

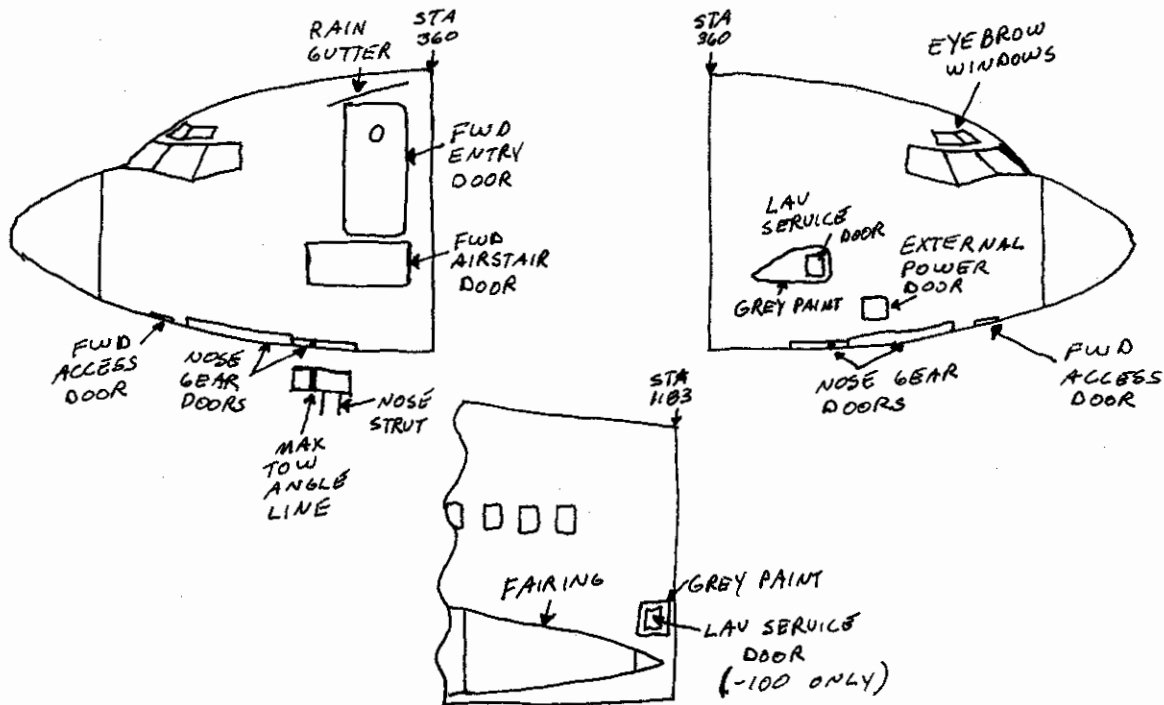
The lav service doors are located in the same areas on both -100 and -200 aircraft. Both are just below floor level. The fwd door is just behind the rear cockpit window on the right side. The aft door is just under the #1 engine inlet on the left side. The main reason I mentioned these doors is that on natural metal aircraft, the doors and surrounding areas are painted grey. American Airlines 727's are perfect examples and will also give you the correct shapes of the painted areas.

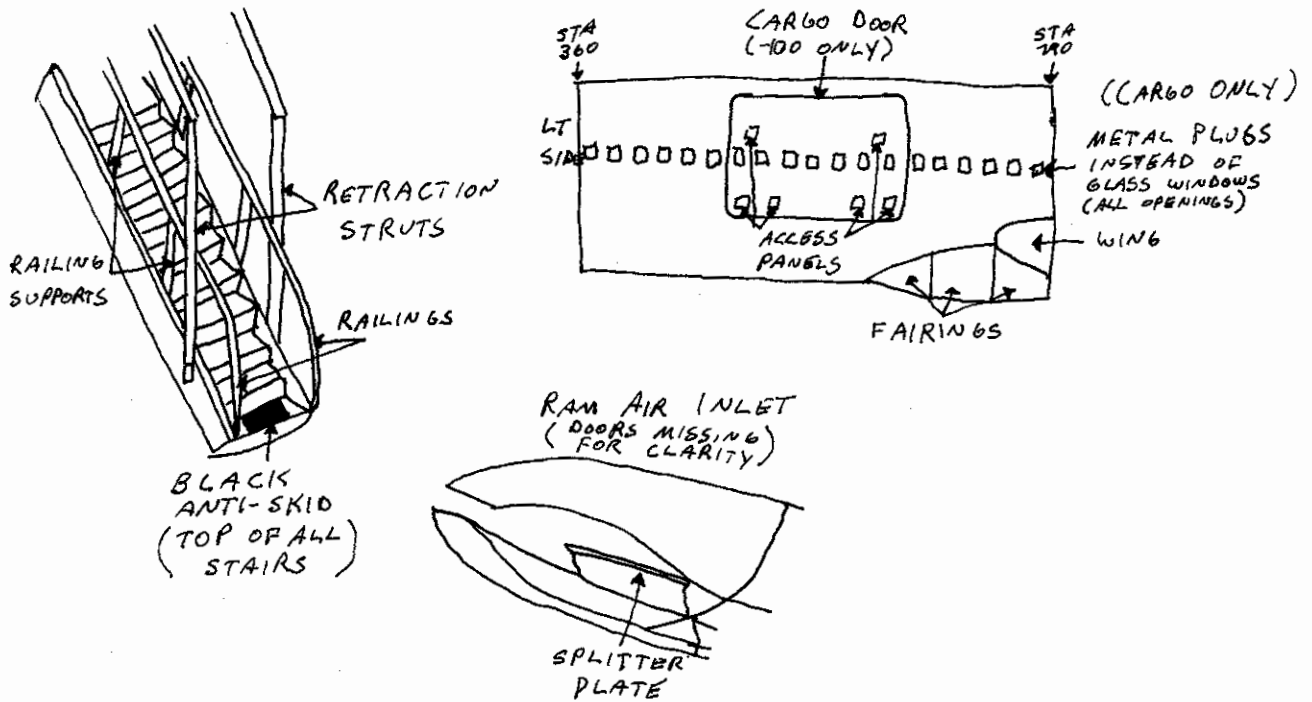
Both kits have molded in antenna blades on the upper and lower fuselage. Replace them with blades fashioned from flash off a poorly molded kit. Check your aircraft for antenna positions because of the different avionics packages that are available.

Both kits also do not have beacons. The lower beacon is on the centerline below the overwing exit doors. The upper beacon is just right of the centerline above the fwd cargo door.

Even though the kits give you cockpit windows, they do not give you the four eyebrow windows. There are a few ways to represent these windows. You could drill and shape the windows and fill them with either Kristal Kleer or white glue. You could cut black decals or you could paint them on. I would suggest one of the latter two.

The kits do not have the 4 heat exchanger exhaust doors located in the belly just fwd of the main gear wheel wells. You should scribe them in. Forward of the exhaust doors are the ram air inlet doors. Both kits just have a scoop but there should be a splitter plate in the middle with a small door on either side of the splitter plate. Both kits offer you a two position aft airstair. The retracted position is no problem. If you want the stairs down railings and retraction struts will have to be added.



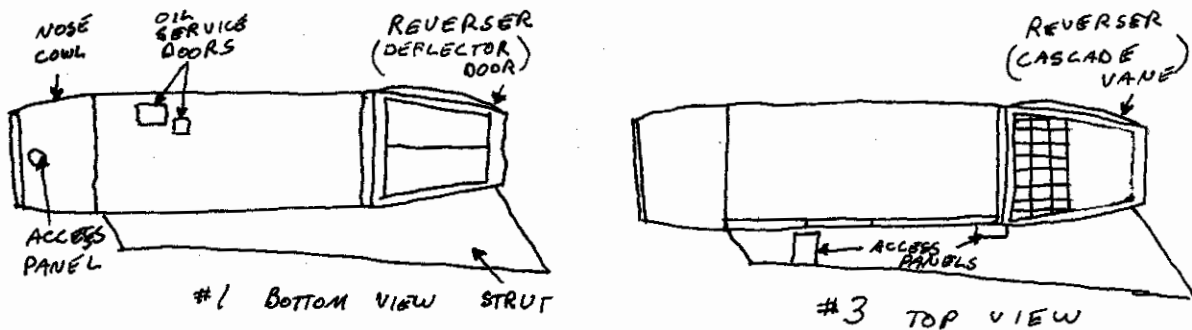


ENGINES

Both kits offer nice engine nacelles. But the reversers can be modified. There are three types of reversers. Clamshell, deflector door, and cascade vane. Clamshell reversers are very rare and used only on the older -100 aircraft. Deflector door and cascade vane are used on all types of 727's. United has both deflector door and cascade vane while Eastern has only cascade vane. If you want clamshell reversers, do nothing. For deflector door reversers scribe two squares on both upper and lower exhaust areas. For cascade vanes scribe a grid in the same place as the deflector doors. Or you could use a decal. ATP 5028 gives you three complete sets of cascade vanes.

The kits also have the 1st stage compressors for the #1 and #3 engines but nothing for the exhaust. Small bulkheads should be made and painted black to keep from seeing up the tailpipe. For something different you could make inlet and exhaust plugs. If you do, paint them yellow.

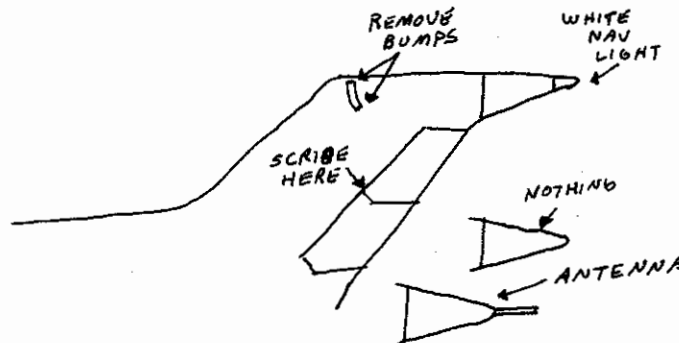
When you assemble the nacelles, blend out the seam. The thrust reversers and nose cowling do not have a seam. Also lower the engine cowl separation line 1/16" below the old seam line.



VERTICAL STABILIZER

On the sides of the vertical stabilizer near the top are two bumps. They should not be there, so sand them off. The aft tip of the stabilizer has many different set ups. United has an occilating white navigation light there. Eastern can have nothing, the nav light, or a three foot long rod antenna sticking out. Most 727's have the nav light.

Both kits give you the impression the rudder is one piece. It's not, there are two rudders. Simply scribe deeply where the two rudders meet. Follow the raised panel lines.

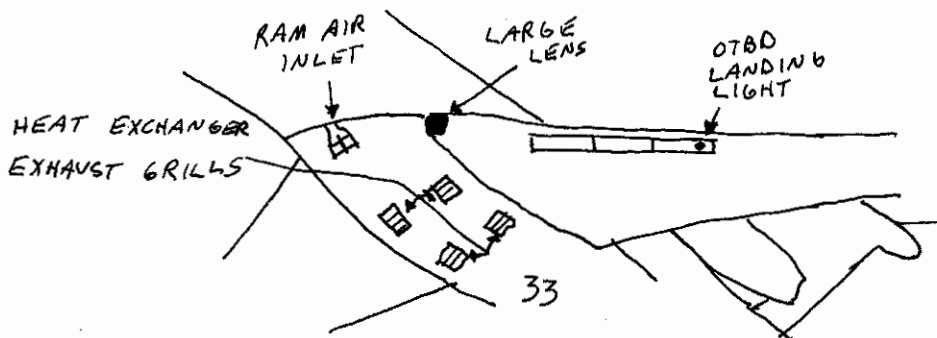


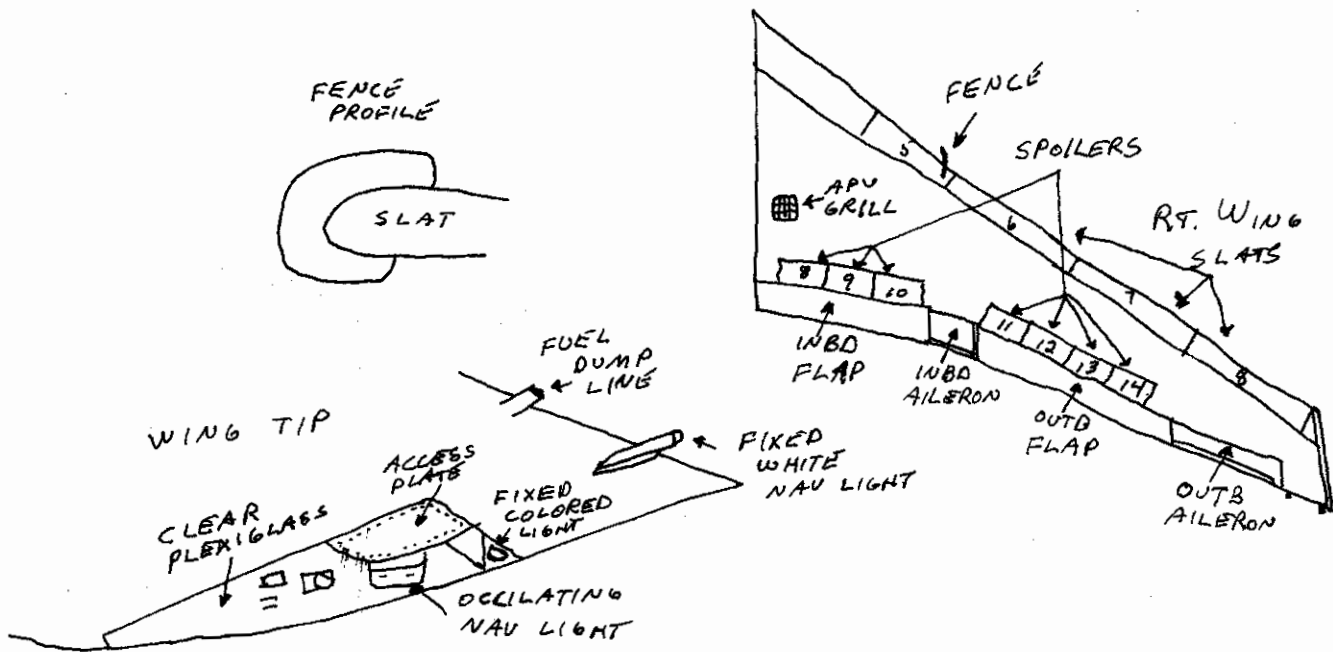
WINGS

The wings for both kits are identical. The one glaring error is that the leading edge fence is on the trailing edge flap. This should be removed and a new one placed on the #4 slat on the left wing and the #5 slat on the right wing. Wing flight controls are numbered from the left wing tip to the right wing tip. Add a slight curve to the fence (fwd tip inward) when you install it.

Airfix had a good idea in making the seam line the same as the flight control hinge lines. But the gaps are just to big. They should be filled and rescribed. At the leading edge wing root on both sides are two lights; 1 taxi, 1 landing. Both are recessed behind a large lens. Black paint or decal can be used to represent the lens. Also on the #1 and #6 leading edge flaps on the outboard ends are other landing lights. A small black dot should be made for this light.

On top of the right wing near the wing root is the APU exhaust. Just scribe a small grid just aft of the most aft overwing exit door. If your lucky you might have the exhaust grill on the overwing walkway decal. No matter what, stain the area to simulate the exhaust soot.

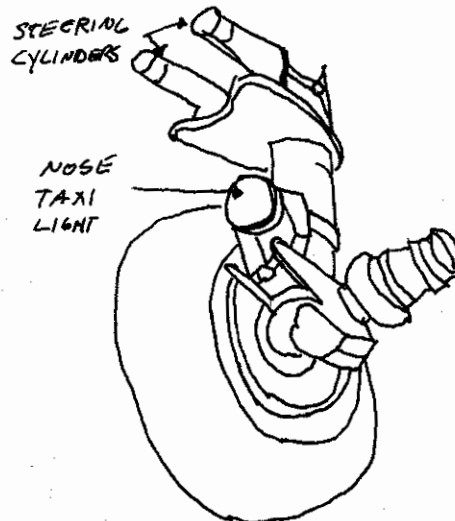
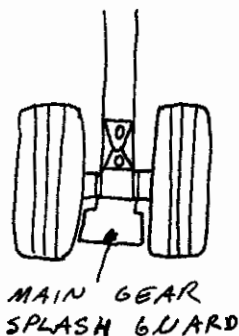




LANDING GEAR

In the gear up mode, the main gear doors are a hit or miss proposition. I've had some doors fit perfectly, some to big, some to small. So test fit yours. If you want the gear down and you want to put some detail in, here's what you do. Don't fill in the main gear wheel well side walls. There are deep shelves on the real thing. Paint the struts and wheel wells a gloss light grey. Paint the main wheel hubs either an off white or steel. Gear wells and wheels are filthy. So a healthy wash of flat black is in order. Only on -200 aircraft there is a splash guard fixture between the wheels on the main gear. A simple piece of sheet plastic attached to the strut will simulate this fixture.

On the nose gear doors about 1/3 of the way aft of the fwd edge is a red vertical stripe. This is a max tow angle line. They are on all 727's. Cut off the blob of plastic protruding fwd just above the axle. Replace that with two pieces of thick sprue or wire. Those will be your steering cylinders. Also most 727's have a taxi light in between the nose tires. Make sure you file down the bottom of the tires. These are heavy aircraft.



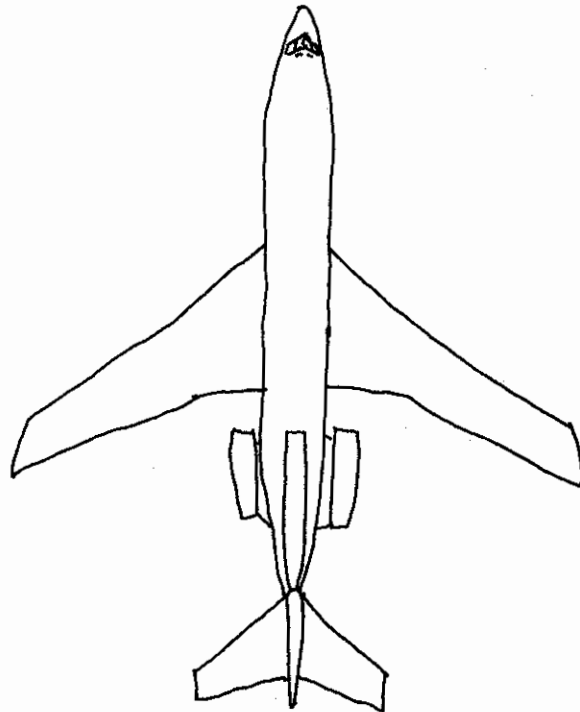
PAINTING

Everybody has their favorite ways of trying to simulate natural metal finishes, so I'm not going to preach any particular technique. There are so many paint schemes and variations of those schemes that it's impossible to list them all. But two things are constant on all 727's. One is the grey paint used on composite structures or as a corrosion preventitive. I call it Boeing Grey. Mix equal parts of Testor gloss grey #1138 and Testor gloss white #1145. I also use Model Master Flat Gull Grey (FS36440) and Model Master Light Ghost Grey (FS 36375) for shade variations. The second constant is that all leading edges are not painted including engine cowl inlets.

Don't be afraid to weather your airplane. These planes constantly have small leaks and are greased and serviced daily. It's very rare to see a plane that is spotless. The wheel wells and landing gear should have heavy streaking and flight control hinges should have light streaking. Next time you go to the airport, take a close look at the planes and you'll be surprised at just how dirty the planes are.

EPILOGUE

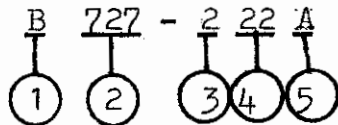
Even though this article was geared towards the Airfix 1/144 kits, most of this can be used for other scales and kits. I know I've missed some details so by no means is this the last word on 727's. I just hope that this article gave you a few details that will make your airliner fly high above the rest.



KNOW YOUR BOEING

by Jeff Jensen

This little follow-up falls under the useless-but-dazzle-em category. When people talk about aircraft they usually refer to them by their basic designator, such as F-4, P-51, 727, etc. Of course, aircraft have more to their designator than those basic terms. But does anybody really know what all those numbers and letters mean? Well, it's a good thing this article came along when it did, because the next time you see a Boeing jet transport you'll be able to shock and amaze your friends with your exact description of the plane. Below is just an example of the Boeing designator system:



- 1) This is the international designator for Boeing-built aircraft.
- 2) This is the type designator: i.e., 727, 737, 767, etc.
- 3) This is the series designator. All -1?? series aircraft are referred to as standard. For example, a B737-122 is a -100 standard series aircraft for United. If a '2' or a '3' is here then that describes that particular series with its modifications. Hence, a B737-222 is a -200 series plane for United and the -322 is a -300 series plane for United.
- 4) How come I say that the above planes are for United AL? Well, this digit designator is Boeing's way of keeping track of who ordered the aircraft. Since all airlines have different needs, Boeing has to know what options go on what aircraft. Some examples: 22 is United, 25 is Eastern, 49 is Flying Tigers, S2 is Federal Express, and D4 is Ozark. So, a B727-2D4 is an Ozark ordered -200 series(727 stretch) airplane.
- 5) This designator is used to further clarify modifications in the series. For example, 'QC'(Quick Change) is for passenger/cargo -100 727 planes. 'A' is for Advanced. Other examples include 'SP'(Special Performance), 'SR'(short Range), and 'C' for Cargo. Most of the clarification designators are not interchangeable between aircraft types.

So, now when you're waiting at the airport and see the designator B747-249C, you'll know immediately that it's a Boeing 747-200 series cargo plane ordered by Flying Tigers. Hey, if that doesn't wow 'em, nothing will.