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F-7B Parts List

#	Name	Area	Qty.	#	Name	Area	Qty.
1.	Body		1		<i>Side Detail Sprue</i>		
	<i>Brake Hatch Sprue</i>			21.	Left Skirt	Side	1
2.	Dynamic Brake Hatch	Roof	1	22.	Right Skirt	Side	1
3.	Non-Dynamic Brake Hatch	Roof	1	23.	Small Side Door Step	Side	4
	<i>Roof Detail Sprue</i>			24.	Right Side Sill Step	Side	3
4.	Fan Housing	Roof	1	25.	Center Side Sill Step	Side	6
5.	Fan Blade	Roof	5	26.	Left Side Sill Step	Side	3
6.	Fan Blade Retainer	Roof	5	27.	Left Large Panel	Side	1
7.	Exhaust Stack	Roof	2	28.	Right Large Panel	Side	1
8.	Small Eye Bolt	Roof	11	29.	Left Small Panel	Side	1
9.	Large Eye Bolt	Roof	6	30.	Right Small Panel	Side	1
10.	Steam Generator Air Intake	Roof	1		<i>End Detail Sprue</i>		
11.	Steam Generator Smoke Jac	Roof	1	31.	End Door w/Round Window	End	2
12.	Steam Generator Piping	Roof	1	32.	End Door w/Square Windo	End	2
13.	Winterization Duct	Roof	1	33.	End Post Assembly	End	2
	<i>Etched Metal</i>			34.	End Door Grab	End	4
14.	Winterization Duct Grate	Roof	1	35.	Door Safety Gate	End	2
15.	Etched Metal Grille	Side	2	36.	End Uncoupling Rod	End	2
	<i>Handle Sprue</i>			37.	End Grab	End	6
16.	Sand Hatch Knob	Side	6	38.	Coupler Centering Device	End	2
17.	Door Handle	Side	10		<i>Clear Plastic Sprue</i>		
18.	Left Medium Grab Iron	Side	6	39.	Porthole Glass	Side	6
19.	Right Medium Grab Iron	Side	6	40.	Round End Door Window	End	2
20.	Short Grab Iron	Side	10	41.	Square End Door Window	End	2

HO Scale F-7B Locomotive

Over 7,600 EMD (Electro-Motive Division of General Motors) F Unit diesels were delivered to more than 60 railroads from the production of the first FTs in 1939 to the last of the F-9s built during 1960. This included both A and B units, and several "phases" of these popular locomotives.

F-7B production began in February of 1949, and extended through 1953. Some of the distinguishing features of these locomotives were the three side portholes, four low 36-inch diameter fans, and a roof overhang. (F-7B units built after September, 1952 had no roof overhang.) For those units with dynamic brakes, the dynamic brake panel was equipped with a 36-inch cooling fan, until June, 1952 when some units used a 48-inch cooling fan.

Many variations and customer options were available. Two of these were dynamic or non-dynamic brakes and steam generators.

The InterMountain F-7B unit kit provides nearly unlimited modeling possibilities for both as-built and as-modified locomotives. Many of the necessary alternative parts are provided in the kit, while others are available from other manufacturers or will be available at a later date from InterMountain.

Recommended Tools

Pin Vise

#72 Drill (.025")

#65 Drill (.030")

1/8" Drill

5/32" Drill

Small File or Emery Board

Testor's Plastic Cement

Clippers

X-acto Knife

Tweezers

Fine Sprue Cutter

Tenax-7R Adhesive

Self Healing Mat

NOTE: if you find that a part is missing or defective, or if you should lose or break a part, please contact us for a replacement.

GENERAL INSTRUCTIONS:

The F-7B unit model is comprised of over 130 parts, including the etched metal grilles and the winterization duct grate. Also included are several spare and optional parts; therefore, the total number of parts used on a particular model will be less than 130 in most cases.

If you are assembling the undecorated version, the following information is very important:

1. Thoroughly research the prototype locomotive you are going to replicate, keeping in mind that this model is designed as an early F-7B unit, as built after March, 1950. If you are attempting to model a prototype locomotive that was modified, you may need to acquire additional detail parts.
2. Carefully analyze your prototype paint scheme to determine the best time during assembly to paint and decal the various parts.

If you are assembling a decorated model, you will find separate instructions that identify the parts configuration for that prototype.

Please note that several of the grab irons have small "protrusions" which, when the grab irons are glued in place, form mounting brackets. Do not trim these off when preparing the grab irons for assembly.

READ THE INSTRUCTIONS CAREFULLY, REFER TO THE PARTS LIST, AND STUDY THE DRAWINGS THOROUGHLY BEFORE STARTING ASSEMBLY. Note that some of the parts on the parts sprue drawings are not numbered nor listed in the parts list. These parts will not be used in building your model.

Some of the detail parts are very fine and delicate. The best way to remove them from the sprue is with fine clippers, a single-edged razor blade, or a sharp X-acto knife. **BE SURE TO TEST FIT ALL PARTS BEFORE GLUING!!** When attaching small parts, use tweezers to help hold them in position. Very small amounts of glue are needed to affix styrene plastic, and many of the parts can be glued from inside the shell, keeping excess glue from the surface of the model. In the Assembly Instructions that follow, the first reference to a part will be capitalized and will be followed by the part number.

ASSEMBLY INSTRUCTIONS:

1. If your model includes steam generation, refer to the drawing of the inside of the Body (1) (Figure 2). Drill location A using a 5/32" drill, location B using a 1/8" drill, and location C (two holes) using a #65 drill. Install the Steam Generator Air Intake (10) in hole A from the top of the roof. Be sure that the air intake is installed vertically so that the outside edge of the cap sits off the roof about 1/8". The base of the Steam Generator

Smoke Jack (11) is designed to fit the contour of the roof and can now be installed in hole B. The Steam Generator Piping (12) is installed from inside the body, using holes C. The two pipes barely protrude through the roof when the horizontal piece connecting the pipes is flush against the inside of the body.

2. Assemble the Fan Housing (4) by installing the Fan Blades (5) and Fan Blade Retainers (6) in the fan housing. One side of the fan blade hub extends out from the blades. This is the side that is inserted into the fan housing. Turn the fan housing upside down and insert the fan blades. Place the fan blade retainers over the fan blades and glue in place. Remove any existing flash from the edges of the fan housing opening on the body, test fit the fan housing assembly, and glue in place.

3. Determine whether you are going to use dynamic or non-dynamic brakes on your model. Remove the appropriate hatch (Dynamic Brake Hatch (2) or Non-dynamic Brake Hatch (3)) from the sprue. If your model has dynamic brakes, install the fan blade and fan blade retainer using the method described in step 2. Test fit the brake hatch and glue in place.

4. The openings behind the etched metal grilles are partially covered whether the unit has dynamic or non-dynamic brakes:

a. Non-dynamic brakes - Install the two Large Panels (27 and 28) in the center of the openings under the brake hatch (Refer to Figure 1). Align the grooves on the backs of the panels with the reinforcing ribs in the openings on the body.

b. Dynamic brakes - Install Small Panels (29 and 30) in the side openings in the body under the brake hatch. Please note that the small panels with the cutouts to match the reinforcing ribs behind the panels are installed in the ends of the opening nearer the center of the body.

5. Install Left Skirt (21) and Right Skirt (22) on the body, using the locating notches on the lower inside of the body. The short wheel cutout on each skirt is placed under the brake hatch. (The wedge shaped protrusions at the two ends of the skirts are designed to mount the locomotive on a Stewart/Kato drive. If you are going to use an Athearn drive, these wedges must be removed. The body then mounts on an Athearn drive using the center slots of the skirts. With a small modification, the Life-Like Proto 1000 drive may also be used.)

6. Determine whether the End Doors (31 or 32) on your prototype have round windows or square windows, and install the appropriate doors in the door openings in the ends of the body. Install the End Post Assemblies (33) around the end doors using the six locator holes in the ends of the body. (Typically, end doors with square windows were used until October, 1950. After this, end doors with round windows were used.)

7. Install two Exhaust Stacks (7) in the locator holes in the fan housing, one between

the first and second fans, and the other between the third and fourth fans.

8. Install side sill steps (or "stirrups") in the eight locator notches on the inside lower edge of the body. Note that four of the Center Side Sill Steps (25) are to be installed in the two center positions on each side of the body. Position the Left Side Sill Steps (26) and the Right Side Sill Steps (24) so that the notches face to the ends of the locomotive. When the stirrups are in place, the locating notches are filled by the locators, the stirrups are directly under the side walls of the body, and the notches on the end stirrups are all towards the ends of the body.

9. Determine if the prototype you are modeling has a Winterization Duct (13). If so, install the Winterization Duct Grate (14) inside the winterization duct and install the winterization duct assembly over the fan closest to the steam generator panel.

10. Install the End Door Grabs (34) using the two locators to the right side of each end door. Install Door Safety Gates (35) using the locator holes on the left side of each end door. The door safety gates may be installed in vertical (open) or horizontal (closed) orientation. It's your choice. Install two End Grabs (37) on each end of the locomotive using the two locator holes on either side of each end.

11. Install ten Small Eye Bolts (8) using two locator holes in the brake housing, four locator holes in the steam generator panel, and four locator holes in the blank panel adjacent to the brake housing. Install four Large Eye Bolts (9) using the locator holes in the fan housing.

12. Install four Small Side Door Steps (23), one beneath each side door (or "side access door".)

13. Install a Left Medium Grab Iron (18) and a Right Medium Grab Iron (19) on the correct side of the four side access doors. The upper mounting brackets for each of these grab irons point out slightly at an angle away from the door. Install four Short Grab Irons (20) in the locator holes above the end stirrups on each side of the locomotive body.

14. Install six Door Handles (17), one in each of the two end doors and four side doors. Install two door handles, one each in the doors on the skirts. When installed, the handles on the skirts should be pointing to the steam generator end of the body.

15. Install four Sand Hatch Knobs (16), one in each of the four sand hatches, two on each side of the body.

NOTE: It is recommended that painting of the partially assembled body be completed at this time, before installation of the remainder of the parts. The remaining parts should be painted individually prior to installation.

NOTE: When removing clear plastic parts from their sprues, cut the gate as far from

the part as possible and remove the remaining gate material very carefully with a small file in order to minimize damage to these parts. Also, when gluing them in place, use only small quantities of an appropriate adhesive, as some adhesives cause "crazing" of clear plastic. It is recommended that these parts be installed by applying a small amount of Testor's liquid cement to the perimeter of the opening and then putting the clear part in place.

16. Remove the End Uncoupling Rods (36) from the parts sprues and install them using the locator holes provided on the ends of the body.

17. After carefully removing the clear plastic parts (Parts 39 through 41) from their parts sprue as described above, install them in their appropriate locations as shown in Figure 1.

18. Carefully remove the excess metal from the Etched Metal Grilles (15), being sure to leave the ten "tabs" in place. These tabs are used to mount the grilles to the locomotive body. Inspect the grilles to determine which side has "shiny" vertical supports. This side faces inward when installed. The outside vertical supports have been etched to produce a more realistic look. Bend the eight "tabs" to ninety degrees, and place them in the locator holes. The grilles are not symmetrical, therefore can only be installed on one side of the locomotive. Bend the tabs down from the inside of the body to hold the grilles in place. The grilles were not painted on the prototype locomotives, therefore should be left in their natural state. (We have included horizontal grilles in this kit. Farr vertical grilles were used on some F-7B units after March, 1951. Beginning October, 1951, the Farr grilles became standard.)

19. The use of the Coupler Centering Devices (38) depends on the drive unit you use with your locomotive. They may have to be modified with some drive units, or, if used, may require that the couplers be installed after the locomotive body is placed on the drive unit.

CONGRATULATIONS!! You have completed the assembly of your F-7B locomotive. It is now ready to put into service on your model railroad. We at InterMountain sincerely hope you will regard it as one of the most valuable models in your stable of model railroad equipment.

F-7B
Assembly
Figures



InterMountain
Railway
Company

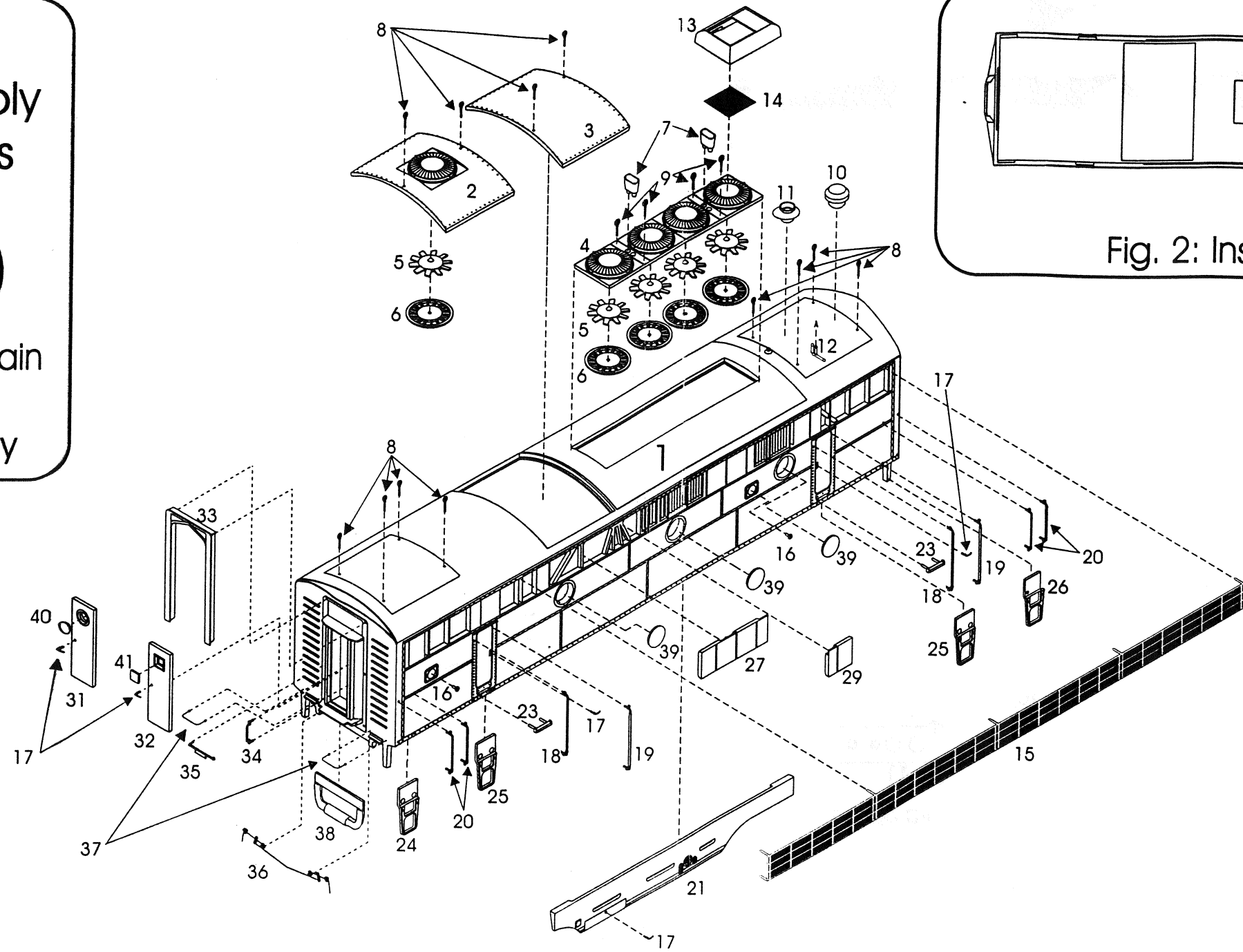


Fig. 1: Exploded View

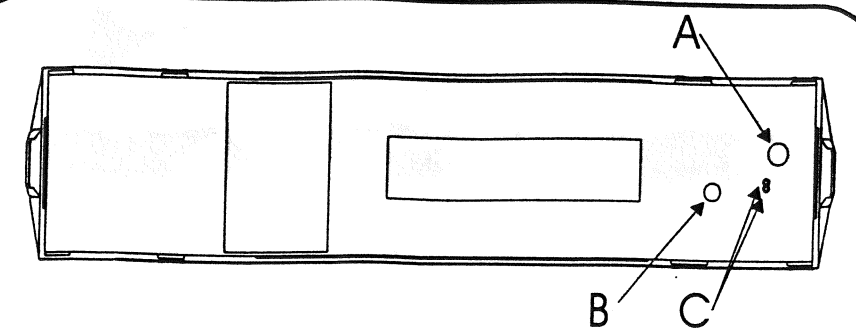
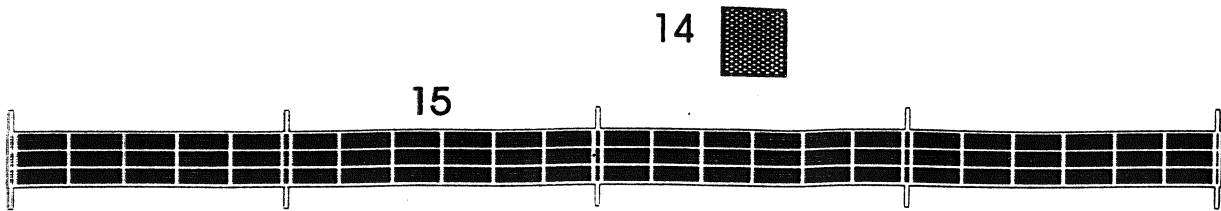
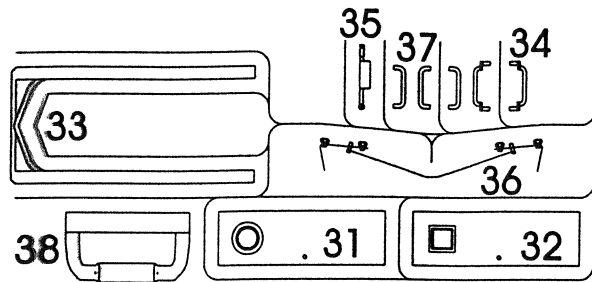


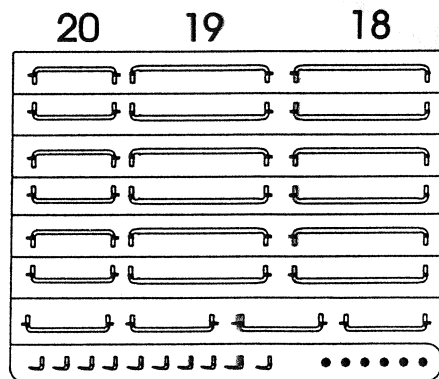
Fig. 2: Inside View



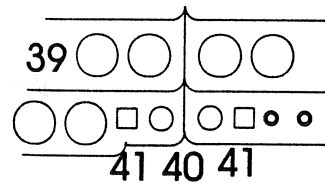
Etched Metal Parts



End Detail Sprue



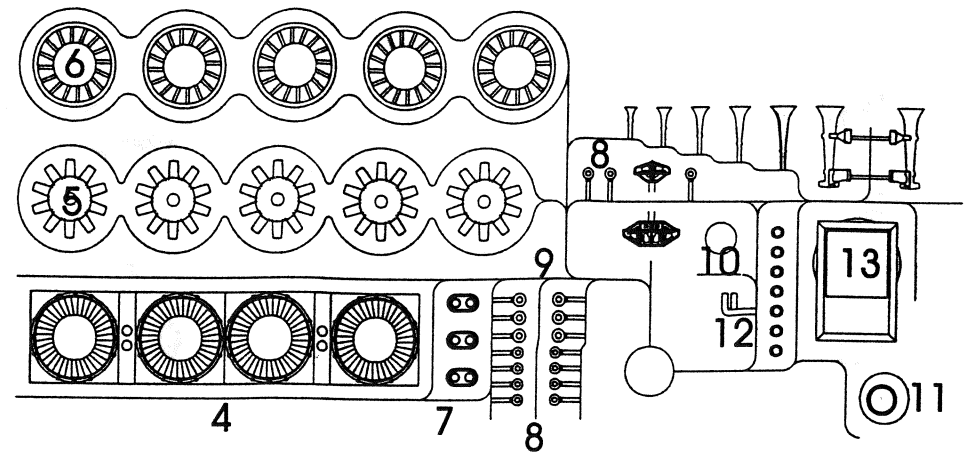
Handle Sprue



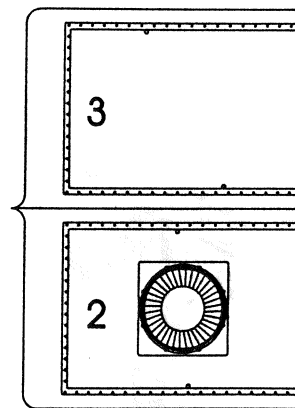
Clear Plastic Sprue



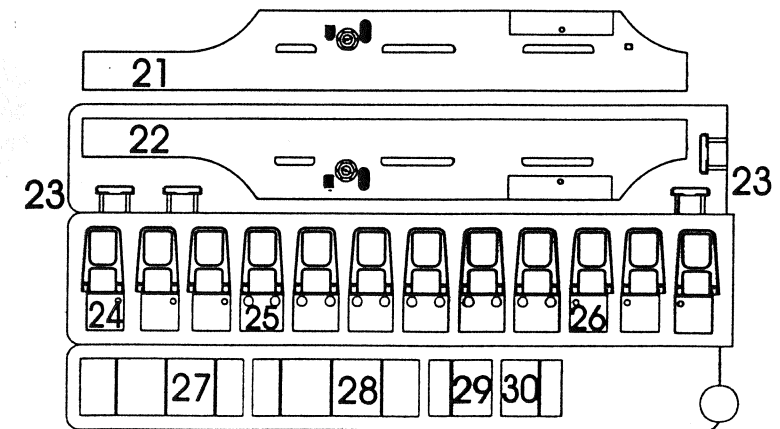
F-7B Detail Sprues



Roof Detail Sprue



Brake Housing Sprue



Side Detail Sprue