



# Stewart's HO Scale Santa Fe FT's

by Wally Abbey

**S**tewart sent to me a powered A unit and a dummy B unit, both of which came partly assembled (thank you!). I found fit and finish very good to superb and assembly easy. (There are some vertical lines on the nose of the A unit that shouldn't be there, but they're noticeable only in strong, angled light.) In the equivalent of an afternoon, moving inexpertly, I put the two models together as completely as I could without glue, drilling, or the accessory parts that are called for if one wants his model to be of showcase quality.

Which means that my 100 and 100A still lack grab-irons and handrails, diaphragms, control-air hoses and jumper cables between the units, Santa Fe's unique cast-iron pilot steps, horns, a chrome ring around the headlight, windshield wipers, three of the four dynamic-brake grids (which won't stay on without glue), a few

minor decals and the Stimsonite reflective road number under the medallion on the nose, a flag or marker-light bracket or eight, brake cylinders and swing hangers on the trucks, couplers fore and aft, and the A-to-B drawbar, although Santa Fe used couplers. A list of parts is hereby included to facilitate modifications of the Stewart units.

The models represent Santa Fe's 100's as they looked when they first appeared out of EMD beginning in December, 1940. With the kits are parts that permit one to apply any of the three types of dynamic-brake grid housings found on Santa Fe's FT fleet (or to model a locomotive without dynamic brakes), and to represent the external vestiges of a steam generator in the back of the B unit. Thus, the capability is in the box to model any member of the Santa Fe's 100-class FT's.

Stewart's price list indicates that it can

supply undecorated FT body shells in six versions, and we understand that a passenger-service version of Santa Fe's FT's is, or soon will be, available. Stewart's instruction sheet, which serves for both the A and the B units, provides information on how to customize the models to any legitimate road number on any road that acquired FT's.

The models are essentially snap-together kits. The highly detailed body shells come exquisitely (and accurately) painted. Snap-in clear plastic inserts put glass in all the windows, except those in the end doors, and in the nose and side number boxes; black plastic parts add roof and truck details. Warning: The cab window-glass insert is a little hard to cut loose. I broke a piece off mine.

For any modeler for whom this isn't the first project in half a lifetime, these kits should offer few challenges. (One: to paint the porthole glass where the body framing members showed through the windows. The areas are marked on the plastic.) And little needs to be done to conform the model more closely to its Santa Fe prototype. About all I could find to do was to trim off the steps behind the pilot. The Santa Fe had EMD omit these steps and apply Santa Fe's own cast-iron pilot steps instead. You might also want to paint and thus disguise the sides of the cast-metal motor frame where it shows through the portholes. It doesn't look very much like a 16-567 diesel engine.

As to dimensions, this is a model of EMD's out-of-the-catalog Model F and not of Santa Fe's somewhat reengineered version, so there are differences. Refer to accompanying table for the more important dimensions, compared with those derived from pages out of a Santa Fe locomotive diagram book:

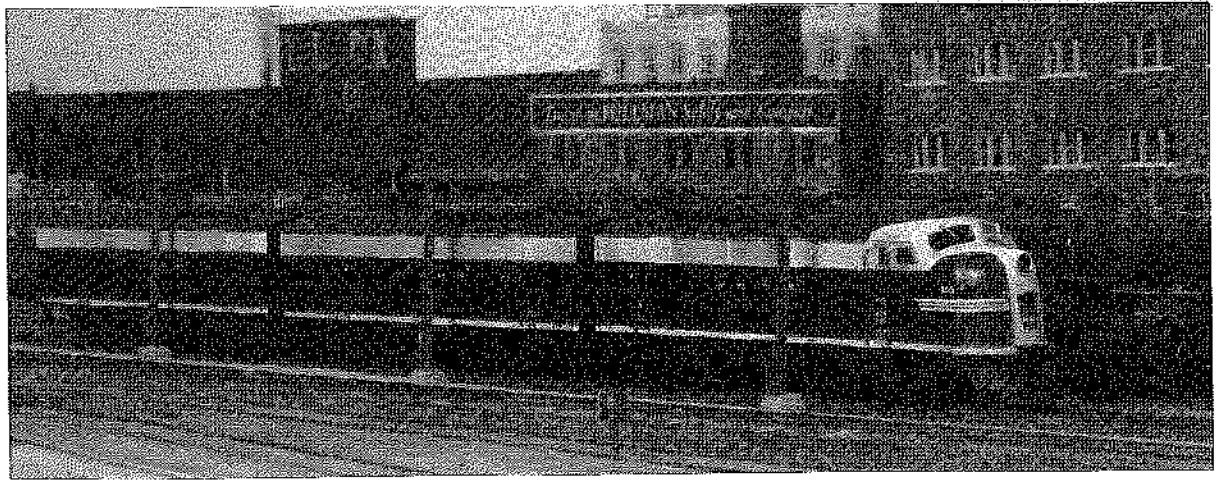
If your FT were tooling along at scale speed beneath scale blackjack pines on the way up to a simulated Arizona Divide, I don't think anybody'd notice that it was a little longer, a little wider, and a little higher than



Amid modern Santa Fe steam power, FT No. 148 pauses between runs on August 4, 1952 at the Argentine engine terminal. Stewart's new HO scale models make the scene possible.

-Chuck Hitchcock

Right side of a three-unit lash up of Stewart FT's. With a little modification, the models effectively capture the Santa Fe prototype.  
-Chuck Hitchcock



was its prototype, and that its trucks weren't exactly where they should be. After all, the truck spacing on the real-life locomotives was more than a little weird to begin with.

A little more obvious, on the other hand, are the truck sides. Martin Blomberg's side frames were gently arched. Stewart's are absolutely flat across the top. And the trucks look as if there were two leaf-spring groups, one atop the other. The bottom protrusion is of course the spring plank that rests on the outside swing hangers. It shouldn't be as prominent as is the spring group itself.

Then there are the ends, particularly the rear end of the A unit and the front end of the B unit. (By the way, which was the front end of an FT and which the rear end? Look inside. The main generator is at the rear of the unit, regardless of the fact that this makes the B-unit carbody look as if it were on backwards. Another way: the fifth porthole on the B unit, which gave a hostler a way to see out, should be in the right front corner of your model.) Stewart has done a creditable job of differentiating the two, which were different. Fine-detail advocates may want to look at photos of real-life FT's and see if they can find something to add to both ends of their models.

The irony here is that on drawbar-

#### Stewart FT's Modification Parts List

Foot Steps:	Precision Scale 3208
Speed Recorder:	Detail Associates 2807
Windshield Wipers:	A Line Small
Detail Associates Wire:	
Handrails	.19
Grabs	.15
Decals for side panels and nose:	
Microscale	87-794 "FT Diesel unit data and number boards"
	-Chuck Hitchcock

linked FT's, there were no end doors. It was only on locomotives modified for the Santa Fe and for a few others that the ends over the drawbar were fully enclosed.

And finally there is the connection itself between the A unit and the B unit. Stewart's instruction sheet has this to say: "This unit is part of an FTA/FTB set. A coupler can only be installed on one end. As per prototype practice, a drawbar is provided for the opposite end to mate with another unit. . . ." Well, that wasn't the Santa Fe's prototype practice, although it was the case with about two thirds of the total FT production. So modelers who desire to rig their Santa Fe FT's as lone A units, or as A-A combinations, or A-B-A, or A-B-B, or A-B-B-B, all of which did run — they have their work cut out for them.

But right now, right here between my external hard drives and a tape transcriber, it's early January of 1940 and I'm seeing four FT units snaking out of Argentine Yard with dynamometer car 29, two business cars, a tank car of diesel fuel, and a 2,000-ton First 43, headed for San Bernardino.

That's good enough for me. Thank you, Stewart Models.

#### On dynamic-brake grids and paint schemes

Modelers might appreciate a discussion of the various shapes of the dynamic-brake grid housings on Santa Fe's FT's, of which there were three, and of the manner in which the FT's were painted, of which there were several. These differences were perhaps the most noticeable over the fleet as a whole and over the time in which the FT's were in service.

The dynamic-brake grid housing, a vertical-sided rectangular box, was the same throughout the fleet. On early locomotives,

#### Prototype and Model Comparison

	Prototype	Model
Distance between coupler pulling faces:	96'6"	97'4"
Pulling face of front coupler to centerline of front truck:	12'6"	12'6"
Truck rigid wheelbase:	9'0"	10'0"
Distance between truck centers:		
A unit	27'3"	28'3"
B unit	26'6"	28'3"
Length of carbody:		
A unit	46'6"	47'6"
B unit	45'9"	47'3"
Width over body posts:	9'10"	10'0"
Height, top of rail to top of carlines:	14'½"	15'0"
Over-all height (to top of horn):	15'0"	16'0"
End of carbody to centerline of truck:		
A unit, front	11'9"	12'6"
A unit, rear	7'6"	9'0"
B unit, front	7'6"	8'6"
B unit, rear	11'9"	12'9"

The distance between the two B-unit carbodies of a four-unit consist was about 32"; between the A and B carbodies about 26".  
-Wally Abbey

the 100 through the 103, the box appeared without adornment. Beginning with the 104 and on up through about the 117, the box was surrounded by a fairing the sides of which were curved. Apparently, this fairing was entirely cosmetic.

From here on through the end of production for the Santa Fe, an apparatus appeared at each end of the grid housing that was related to EMD's effort to resolve a ventilation problem.

Fans (which looked like traction-motor blowers) mounted beneath the ceiling of the locomotive immediately fore and aft of the dynamic-brake grids took in outside air whenever the brakes were being used and blew it back out through the grids. The intakes for these fans were in the center of the roof, directly in line with the diesel engine's exhaust stacks. The ductwork with the

# FT Paint Schemes

1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963

Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
Cat Whiskers																							
Red nose stripes, Cat Whiskers																							
No red stripes, Cat Whiskers																							
Cigar Band, Blue/Yellow																							
Cigar Band, All Blue																							
Passenger scheme																							

Notes: Based on images referenced in books, magazines, and photo collections noting the engine number, date and paint scheme. Sightings were rounded off to years for clarity. Specific engine numbers are associated with each year. -John B. Moore

1. Full red stripes, Cat Whiskers  
Cream yellow and blue with full red stripes were recorded between 1941 to 1948. Numbers sighted 100 to 176 (random scatter). 1948 sighting FT 176 from **Early Diesel Daze**.
2. Red nose stripe, Cat Whiskers  
Cream yellow and blue w/abbreviated red stripes were recorded between 1945 -1949. Numbers sighted 100 to 195 (random scatter). 1949 sightings 100, 109 Whittaker photos, 136 **Railroads Through Cajon**, 180, **The Revolutionary Diesel EMC's FT**. FT 126 was the first sighting in 1945 with new red nose stripes, and again in 1950 with the new blue and yellow cigar band paint scheme.
3. No red stripe, Cat Whiskers  
Cream yellow and blue, Cat Whisker nose emblem, no red stripe, between 1949-1954. Numbers sighted 100 to 429 (random scatter). 1954 sightings 179 and 180, at Norman, OK July '54.
4. Cigar Band, Blue/ Yellow  
Cream yellow and blue/yellow and blue cigar band nose emblem 1950-1963. Numbers sighted 108 to 430 (random scatter).
5. Cigar Band, All Blue  
All blue cigar band nose emblem 1951 and 1952. Numbers sighted 108, 120, 133, 142, 151, 155, 170, 194, 199, 405.
6. Passenger scheme  
FTs 158-166 and 168 converted to passenger starting 9/46. Last set converted back 12/51.  
Note that the background behind the big numbers in the side number boards always remained blue.

screened "birdcages" at its outer ends gathered in air from points farther away from, and not in a direct line with, the stacks.

The vermilion striping back of the cab doors probably didn't last past the first repainting of the locomotive. On many, if not all locomotives, it disappeared altogether in the 1950's.

At some point in the early '50s, the yellow striping also began to disappear. All-blue locomotives, now sporting a yellow-and-blue version of the passenger-locomotive nose emblem, became common. Roofs apparently were still black, as they and the

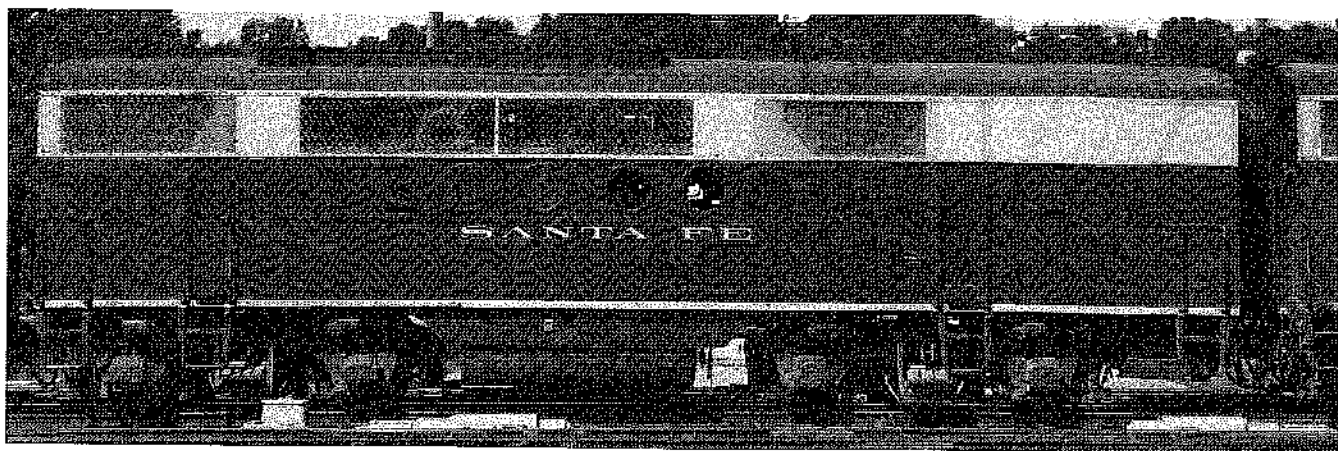
trucks and underbody had been from the beginning.

In October, 1953, the yellow came back and the roof color was changed from black to blue. At this time the yellow was changed to a darker, more vibrant shade.

In its final styling, a 100-class locomotive was blue (except below the frame, where it was black) with the original yellow striping, but without the vermilion pin-stripe, and with a yellow-and-blue version of the passenger-diesel herald.

Please don't take these statements as hard-and-fast rules. There were exceptions.

The author saw a 400-class unit in Kansas about 1953 with the original "postage-stamp" nose treatment and the darker yellow. He saw a 100-class lead unit at Cleburne shops in 1953—all yellow! And he was working at the 21st Street diesel shop in Chicago in 1944 when a painter turned the passenger 1-spot all black. A few days later it was its regular aluminum, red, and yellow, and black, of course (and that unit at Cleburne certainly got its blue). The practice in both instances was to apply each color to the entire locomotive before the next color went on. ●



FT 146A displays the final B unit paint scheme as it makes its way east to EMD for credit on 1300 class GP35's in 1964.

-Art Riordan photo, courtesy Stan Kistler