

WHEN THINGS WERE MADE THE IVES 3241/3242/3243 WIDE GAUGE LOCOMOTIVES

By: Martin Fasack TCA 79-13548, ITS I-6669 Rev. 26 3/02/11

Technical Assistance: Randy Berger, David McEntarfer, and Don Lewis

Emerging out of their one gauge era the IVES Manufacturing Corporation in 1921 produced three wide gauge electric model locomotives numbered 3241/3242 and 3243. It was a series of engines that for the next 10 years of production came in 13 different production colors and many different styles of trim. The 3241(R) being the least expensive engine of the three had less trim and color availability and the shortest production life that lasted from 1921 through 1925. On the other hand, the 3243 (R) being the most expensive was longer in size, had two sets of pilot trucks, additional trim and detail, and was manufactured for a period from 1921 to 1928. In between these two extremes lies the 3242 (R) locomotive with two headlights as compared to the 3241 (R), and more production colors than the larger 3243 (R). This locomotive was produced for the entire IVES wide gauge production period from 1921 to 1930.

Even though these three engines varied in detail as a direct result of product pricing, IVES did not skimp on the quality of motors they used, for every locomotive they produced had the same motor, regardless of price. To support our research we have included the major motor variations with each type of engine, and overall have found motor variations to be somewhat helpful in pursuing our adventure in determining “When Things Were Made” the IVES 3241/3242/3243 locomotive.

IVES 3241(R): As in our previous research we are able to draw some conclusions on the rarity of these locomotives based on the years of production and the quantity of specimens that exist in the collections of the “old timers”. The IVES 3241(R) being the least expensive locomotive one might think a difficult to find variation does not exist, but you’re mistaken. In 1925 IVES produced these engines with plates for trim instead of the common rubber-stampings. This is where the water gets a little murky. We have some specimens of this locomotive with 3241 (R) plates in red or apple green, with a full array of handrail trim (12 railings) and two headlights instead of the normal single version. The consensus is these two-headlight engines are actually 3242’s, with either the wrong plates, or IVES ran out of 3242 plates when they were produced. Only the single light, reduced handrail trim (8 railings), plated 3241(R) locomotives, produced in 1925, which comes in either red or light olive green will be considered as a 3141(R) for this article.

In order of difficulty the 1925 **Red (Fig. 8)** and **Light Olive Green (Fig. 3)** 3241(R) locomotives are the hardest to find **in the plated varieties**. A rubber stamped version in **Kelly Green (Fig. 2)** has surfaced and is as difficult to find as the plated aforementioned olive green locomotives. It is mentioned in Greenberg’s guide to IVES trains, but no picture is shown. This Kelly green color locomotive appears in the 1922 catalog but the 184 series cars in this color were never made. We have a specimen of this locomotive and would like to have more information on this color variation. The remaining rubber-stamped variations with the exception of the **Wanamaker Wine (fig. 4)** model are all common and easy to collect. Note that we use the word difficult in place of the word rare; which is used much too often in determining the collectible value of a single piece. “Rare” is reserved for how little a piece of meat is cooked, or is used to specify a particular item that is uniquely produced and owned by less than a handful. For example, the plated 187 series passenger cars in **Capitol City Green** are rare!

WHEN THINGS WERE MADE -THE IVES 3241/3242/3243 WIDE GAUGE LOCOMOTIVES

The early passenger sets produced with the 3241 locomotive consisted of either two or three 180 series (14") cars. As a three car set in 1921 it was packaged as two parlors and one buffet car in maroon with a 3241 red engine. In 1922 the set was changed as a result of the addition of a 186 observation car, it consisted of a maroon parlor, buffet and observation car. The set was also cataloged in medium green and consisted of a 3241 with 3 matching cars. The number 700 was used to designate a two-car set, and the number 701 for a three-car set.

The IVES 3242(-R) was produced for 10 years and had the most color changes. As a result there are some versions that are difficult to acquire. The 3242 **State Brown** (Fig. 5), **Cadet Blue** (Fig. 7), both engines in **Black** (semi-gloss and flat) (Fig. 11), **Dark Olive Green** (Fig. 9), the **Southern Pacific in Apple Green** (Fig. 13), and the plated Maroon (Fig. 12) are very difficult to find. The locomotives in **Orange** (Fig. 10), **Wanamaker Wine**, and **Apple Green** (Fig. 6), would be next in order of difficulty. **We have added on the IVES CD a unique example of a white 3242 locomotive. This 3242 color variation and the history of other white IVES locomotives will be addressed in a separate article on the subject.** The remaining rubber-stamped variations are all common and easy to collect. The dating characteristics of this locomotive are similar to the 3241 engines; except that now we have to consider a 2nd headlight, four extra handrails, and the engine colors themselves. All of these items play an important role in dating the production period of a specific locomotive.

The early passenger sets produced with the 3242(-R) locomotive consisted of either two or three 187 series (17 inch) cars. As a two car set in 1921 it is packaged as set number 702 consisting of one 187 buffet car, and one 189 observation. As a three car set, using the model number 703 it is packaged as above but with the addition of a 188 parlor car. IVES used the larger 17-inch cars with this locomotive as long as it was producing the 3241(R) locomotive with the 14-inch cars. In 1926 when the 3241(R) was discontinued the sets packaged with a 3242(R) consisted of the 14 inch cars, and the 17 inch cars were enhanced to go along with the larger 3243(R) locomotive.

IVES Motors: During my research I found the motors to be somewhat interesting, but not always helpful or relevant in the dating process. Many of the locomotives reviewed that were clearly made in 1925 or later contained motors manufactured much earlier. In the charts below where it states "Engines Reviewed" represents actual locomotives that were physically checked for specific characteristics. Some of the details of this study follow:

1921 (type 1)

(2) Versions of the motor

- **Early** - Fingers touch the commutator directly. Idler gear made up from 3 stampings
- **Late** - Fingers now have attached brushes, and these brushes touch the commutator directly. The fingers were unreliable and wore out to fast. IVES, as an improvement in reliability placed brushes on the fingers to reduce wear, and improve armature contact. Idler gear still made up from 3 stampings

1921 Engine/s Reviewed: 3243 Dark Green, 3242 Brown

1922 - (type II) Brush tubes are added with a tube cap secured by a wire going through the cap. Commutator fingers are gone. Idler gear is now a hobbled brass gear no longer made up from 3 stampings.

WHEN THINGS WERE MADE -THE IVES 3241/3242/3243 WIDE GAUGE LOCOMOTIVES

1922 Engine/s Reviewed: 3241 Kelly Green, 3242 Brown, 1132 Black, and 3242 Dark Green

1923 (type II)

- *Early* – Same as 1922

1923 Engine/s Reviewed: 3242 Red

- *Late* - Motor pickup has been redesigned to a stronger nickel alloy and wider rollers. In reviewing many of the engines that have survived you find rollers that have broken off. The stronger nickel alloy was an attempt to prevent that.

1923 Engine/s Reviewed: 3241 Medium Green

1924 (type III). - Brush tubes are improved with brushes being held by tube cap that is screwed on. The tubes are also wider which allows for larger brushes and improved motor contact. New wider version pickup of nickel alloy is used.

1924 Engine/s Reviewed: 1132 Tan

1925 (type IV) - Still using the narrow motor from 1924 design but the pickup shoes are now separated with individual rollers, and a brass plate has been added between the rollers. The plate reads: **THE IVES MFG. CORP. – BRIDGEPORT, CT.**

Engines Reviewed: 3241 Red, with plates (1925), 3241 Light Olive Green with plates (1925), 3242R Apple Green with 3241 plates (1926), 3243R Orange with plates (1925), 3243R Red with plates (1925), 3242 Grey (1926), 3242R Apple Green with sheet metal frame (1927), 3237 Cadet Blue (1927), 3243R Apple Green (1927).

What is interesting from the above is the **3241 Red** with plates fits the 1925 criteria perfectly. The, **3241 Light Olive, 3243 Orange, 3243 Red** is using a 1923 motor (wire holding brush caps) and the new 1925 pickup shoe with brass nameplate; The **3242R Apple Green** with 3241R plates was made in 1926 but is using the 1925 motor.

1926 (type IV) –Same as 1925

1926 Engine/s Reviewed: 3242 Gray (narrow motor, with individual pickup rollers), 3242 Gray narrow motor, with individual pickup rollers held on by two screws), 3237 (narrow motor, with individual pickup rollers), 3235 (narrow motor, with individual pickup rollers)

1927 (type V) - New wide motor

1927 Engine/s Reviewed: 3242R Apple Green with sheet metal frame (1927, with narrow motor), 3237 Cadet Blue(wide motor, with separate pickups held on by 2 screws).

1928 Early (type V) - Wide motor, with double reduction gear and individual pickups. Two external screws support the pickup assembly. The base plate now reads:

THE IVES MFG. CORP. – BRIDGEPORT, CT

WHEN THINGS WERE MADE -THE IVES 3241/3242/3243 WIDE GAUGE LOCOMOTIVES

Engine/s Reviewed: 3242R Orange, Sheet Metal Frame, and Window Panes

1928 Late - 1930 (type VI) - Wide motor double reduction gear and individual pickups mounted on a separate metal plate that is secured by two external screws. The pickup rollers can be replaced separately. Base plate reads:

THE IVES CORP. – BRIDGEPORT, CT

1928 –1930 Engine/s Reviewed: 3242 Cadet Blue with sheet metal frame and brass window panes, 3242 Black with sheet metal maroon frame, brass window panes and, four brass doors. Note: Some late 1928 and very late 1930 motors have the old THE IVES MFG. CORP. PLATE. We believe they were just using up old plates.

Motor Summary: I had hoped the motor variations would have helped in our adventure but I found them to be only sporadically beneficial in the dating process. I did discover the type of motor used in conjunction with a particular locomotive's frame, in addition to color, trim, or other pertinent characteristics helped to simplify the dating process as shown in the final chart. We can summarize the IVES production as follows: The 1921 production contained narrow motors with fingers touching the commutator and a later 1921 variation with fingers holding brushes that touch the commutator. The idler gear for this year is made from a composite of three gears forged together as one. Brush tubes holding brushes against the commutator by a brush cap and wire are added in 1922 and remain that way until 1924 when screw caps replace the wire security. Therefore we can use this information to determine if a motor was made before 1924. Unfortunately you will find 1922/1923 type motors used in locomotives from 1925 and later which requires us to now use the pickup assembly from 1925 forward to determine the next dating milestone. In 1925 the pickup rollers are two separate rollers with a plate that states: **THE IVES MFG. CORP. – BRIDGEPORT, CT.** It remains that way until late 1928 when the wide motor is produced with a double reduction gear, and two external screws hold on the pickup plates. As the earlier plates are used up, they are replaced by the new base plate between the pickup rollers which now states: **THE IVES CORP. BRIDGEPORT, CT.**

The IVES 3243(-R) was the granddaddy of the Standard gauge electrics. Until 1924 its trim and lettering complement is the same as the 3242 locomotive. After 1924, like the other locomotives in the line, plates are added to replace the rubber stampings. What is unique about this locomotive is the variations in frame production from 1921 until 1928. It is because of these nuances coupled with the other key indices, such as motor variations, colors, trim, etc. allows us to determine when these locomotives were produced. These engines always came in sets with the large IVES bodied 17" cars until 1928. During that year the IVES catalog lists this locomotive with two different sets of American Flyer bodied cars, in outfits numbered 1052 and 1064.

Many hard to obtain variations were produced during its 8 years of manufacture. The plated **Light Olive Green (Fig.23)** locomotive, the **Lumber Car Green (Fig. 25)** with plates is difficult; the late productions of the **Cadet Blue (Fig. 18)** and **Black locomotives (Fig. 22)** are the hardest of the plated catalogued variations. In the uncatalogued variations, the newly

WHEN THINGS WERE MADE -THE IVES 3241/3242/3243 WIDE GAUGE LOCOMOTIVES

discovered plated **Brown** (*Fig. 19*), **Yellow-Orange** with matching frame (*Fig. 20*), and **Gray with red underpaint** (*Fig. 21*) examples are rare locomotives and all might be unique. Two versions with **Southern Pacific** plates are known to exist. One example is painted Apple Green and the other is painted Orange. This is a situation where the colors are common and the trim for the locomotive is rare.

The **Wanamaker Wine** (*Fig. 16*) and the rubber stamped **Red locomotive** (*Fig. 14*) are the hardest of the rubber stamped varieties. **The White Locomotive that came with the famous "White IVES Set" is difficult to obtain and has many variations that will be explored in a future article.** This writing is a work in progress and is intended to give the novice and experienced collector the understanding of how one can identify the date of any locomotive for those that might exist in any collection, or to help you in determining a variation that might exist on an engine you did not know about. As we find other variations we will update this article to keep it current and accurate. Please email me at fasttrack@erols.com to discuss a major variation not listed, or to simply ask a question on something we stated.

COLOR GREEN	LOCOS & CARS	CIRCA
Dark Green	3243 , 187-1, 188-2, 189-3 3242 , 187, 189	1921 1922
Medium Green (commonly seen)	3241 184, 185, 186	1922-1924
Kelly Green	3241	1922
Light Olive Green :	3235, 170, 172 3235(R) plated 171, 173 3236 170, 171, 172 (<i>uncataloged</i>) 3141 plated	1924 1925 1926 1925
Light Apple Green	3243 , 187, 188, 189 3242 cast iron frame 3242 sheet metal frame, 184, 185, 186 3242 Southern Pacific, 184, 185, 186 with sheet metal frame	1927 1927 1927 1927
Capitol City Green	1134 Cast Iron, 184, 185, 186 3242 3243	1927 1927 1927
Lumber Car Green	3243	1928
Transcontinental Green –or- Dark Olive Green	3242 3243	1926, 1927 1927

WHEN THINGS WERE MADE -THE IVES 3241/3242/3243 WIDE GAUGE LOCOMOTIVES

IVES 3243 (-R) DATING CHARACTERISTICS	1921	1922	1923	1924	1925	1926	1927	1928 Early	1928 Late	1929	1930
<i>COUPLERS</i>											
Thin 1 Gauge Coupler	x	x									
Thick Wide Gauge Coupler		x	x								
<i>ENGINE FRAMES</i>											
Type 1: (4) Painted Steps, <i>Square</i> Opening for Reverse Lever	x										
Type 2: (4) Steps, <i>Keyhole</i> Opening for Reverse		x	x	x							
Type 3: (5) Steps Square or Keyhole Opening for Reverse				x	x						
Type 4: High Frame:(6) Steps, <i>Keyhole</i> Opening for Reverse				x	x	x					
Type 5: High Frame: (6) Steps, <i>Square</i> Opening for Reverse							x				
Type 6: High Frame: (7) Non-Painted Steps, <i>Square</i> Opening for Reverse								x	x		
Type 7: Stamped Steel, Pilot Trucks Cast Iron									x		
<i>PILOT WHEELS</i>											
Tinplated metal wheels	x										
Solid – Painted Red/Black	x	x									
Spoked - Cast Iron	x	x	x	x							
Spoked Die Cast-Nickel Jacketed					x	x	x	x	x		
<i>RAILING COTTER PINS</i>											
32 Railing Cotter Pins	x	x	x	x							
16 Railing Cotter Pins					x	x	x	x	x		
<i>WINDOWS</i>											
Single Pane	x										
4 Pane-Brass Inserts								x	x		
<i>WHEELS</i>											
Cast Iron Drivers	x	x	x	x							
Die Cast Drivers					x	x	x	x	x		
<i>CAB WEIGHTS</i>											
Engines with Type 2 Frames only		x	x	x							
<i>TRIM</i>											
Rubber Stamped	x	x	x	x							
Brass Plates					x	x	x	x	x		
Nickel Railings Top to Both Ends	x	x	x	x							
Brass Railings Top to Both Ends					x	x	x	x	x		
Nickel: Octagonal Headlight, Full Size Pantograph, Whistle, Bell	x	x	x	x	x						
Brass: Octagonal Headlight, low Clipped Pantograph, Whistle, Bell					x	x	x	x	x		
Flag Stanchions	x	x	x	x	x		x	x	x		

WHEN THINGS WERE MADE -THE IVES 3241/3242/3243 WIDE GAUGE LOCOMOTIVES

IVES 3243 (-R) DATING CHARACTERISTICS	1921	1922	1923	1924	1925	1926	1927	1928 Early	1928 Late	1929	1930
MOTORS											
Type I - Idler Gear = 3 Stampings, Fingers on commutators or Fingers Holding Brushes to commutators	x										
Type II - Idler Gear = 1 Stamping, Tubular Bushes secured by wire		x	x								
Type III - Idler Gear = 1 Stamping, Tubular Bushes secured by screw caps				x	x						
Type IV - Idler Gear = 1 Stamping, Tubular Bushes secured by screw caps – separate roller pickups					x	x					
Type V - Wide Motor-Plate reads “The Ives Mfg. Corp”. Separate roller pickups							x	x			
Type VI - Wide Motor-Plate reads “The Ives Corp”. Separate roller pickups									x		
COLORS											
Red – Rubber Stamped (Fig.14)			x								
Red – Plated (Fig. 24)						x					
Brown – Rubber Stamped (Fig.15)	x	x									
Dark Green Rubber Stamped	x										
Capitol City Green (Fig. 17)							x				
Light Olive Green					x						
White	x	x	x								
Wanamaker Wine (Fig.16)				x							
Yellow		x									
Yellow Orange			x	x							
Orange			x	x	x	x	x				
Yellow/Orange (Fig. 20)				x							
Apple Green						x	x				
Black (Fig.22)								x	x		
Cadet Blue (Fig.18)							x	x	x		
Lumber Car Green (Fig. 25)								x	x		
Brown – Plated (Fig.19)					x						
Gray - (Fig. 21)						x					
Dark Olive Transcontinental Green						x	x				
DOORS											
Plain embossed	x	x									
Brass Side Doors									x		
PICKUPS											
Narrow Brass	x	x	x								
Wide Nickel Alloy			x	x							
Separate with MFG Plate					x	x					
Same MFG with Individual Screws							x	x			
Separate Pickups with Corp Plate									x		

WHEN THINGS WERE MADE -THE IVES 3241/3242/3243 WIDE GAUGE LOCOMOTIVES

SIMPLIFIED METHOD OF DATING YOUR 3241/3242/3243

DATE	3241	KEY	3242	KEY	3243	KEY
1921		<i>Type I Motor (Fingers on motor) Painted steps on frame</i>		<i>Type I Motor (Fingers on motor) Painted steps on frame</i>		<i>Type I Motor (Fingers on motor) Painted steps type 1 frame</i>
1922		<i>Type II Motor (Wire holding brush caps) Painted steps on frame</i>		<i>Type II Motor (Wire holding brush caps) Painted steps on frame</i>		<i>Type II Motor (Wire holding brush caps) Painted steps type 2 frame</i>
1923		<i>Type II Motor (Wire holding brush caps) No Paint on frame steps Thick wide gauge coupler</i>		<i>Type II Motor (Wire holding brush caps) No Paint on frame steps Thick wide gauge coupler</i>		<i>Type II Motor (Wire holding brush caps) Painted steps type 2 frame Thick wide gauge coupler</i>
1924		<i>Type III Motor (Screw holding brush caps) No Paint on frame steps Thick wide gauge coupler</i>		<i>Type III Motor (Screw holding brush caps) No Paint on frame steps Thick wide gauge coupler</i>		<i>Type III Motor (Screw holding brush caps) Painted steps on frame Thick wide gauge coupler Type 2 or 3 Frame</i>
1925		<i>Type III Motor (Screw holding brush caps) Brass Plates - or - Type IV Motor (Screw holding brush caps) Brass Plates (Separate roller pickups)</i>		<i>Type III Motor (Screw holding brush caps) Brass Plates - or - Type IV Motor (Screw holding brush caps) Brass Plates (Separate roller pickups)</i>		<i>Type III Motor (Screw holding brush caps) Brass Plates - Or - Type IV Motor (Separate roller pickups) Brass Plates Type 3 or 4 frame</i>
1926				<i>Gray, Buff/Tan, Apple Green with cast iron frame</i>		<i>Type V Motor Type 4 Frame</i>
1927				<i>Snowplow Pilots Sheet Metal Frame</i>		<i>Type V Motor Type 5 frame</i>
1928				<i>Spoked Pilots Embossed plain doors</i>		<i>Type 6 or 7 frame</i>
1929				<i>Brass side doors</i>		
1930				<i>Brass end doors</i>		