

Modeling Ludington & Northern SW8 #16 Using Decal Set LUN-1

Decal set LUN-1 set will letter one switcher as either Ludington & Northern #16 or Michigan Southern/Kendallville Terminal #16 in any of the paint scheme variants that it wore from 1953 to 2020. It is designed to best fit the Walthers or Proto 2000 SW8 or a modified Walthers or P2K SW9, though an Athearn or Broadway Limited Imports (BLI) SW7 can be converted with the removal of a smokestack and the addition of a few parts.

The data presented here are based upon observations made from numerous photographs, a 1980 article in *Railfan* magazine. Special thanks must be given to Kevin Wootton and Hugh Hornstein, as Hugh's photos on Kevin's former Muskegon Railroad Crossing web site saved me from having to make a special trip to Kendallville, Indiana to verify the proportions of the artwork I'd drawn up for the current lettering on #16. Thanks also to Bill Brillinger, who pointed out some lettering details that could be added to update the set for #16's appearance from 2003 to 2020.

The drawings presented in these instructions are not to scale.

The Prototype

The Ludington & Northern (LUN) was a railroad built by Sargent Sand Company around the turn of the century to haul fine white sand from the area around Hamlin Lake on Michigan's west shore. Approximately seven miles of trackage connected the sand pits with the Pere Marquette and later the C&O, at Ludington. In January, 1952, the LUN took delivery of an SW8 to dieselize its operations. This switcher became the LUN's sole motive power for the railroad's last 30 years. The LUN typically used gondolas and covered hoppers provided by the Chesapeake & Ohio, and later Chessie System, since it did not own any revenue freight cars.

For thirty years this switcher, numbered 16, mainly hauled covered hoppers and gondolas of sand. For major servicing, it would be sent to the C&O's shops at Wyoming, Michigan. After service on the LUN was discontinued in early 1982, #16 was stored and used by the Tuscola & Saginaw Bay at their shops and locomotive rebuilding facility in Owosso, Michigan for several years, before being sent to the Ann Arbor Railroad in the late 1980s. The Ann Arbor mainly used #16 to switch a General Mills facility and an auto parts plant adjacent to the ex-DT&I Temperance yard on the north side of Toledo, until the early 1990s.

During the 1990s, #16 was moved to White Pigeon, Michigan and became part of the Morris Leasing fleet, closely associated with the Michigan Southern Railroad. After a stint working on the Michigan Shore Railroad in Muskegon, it was moved to Kendallville, Indiana to switch a short stretch of ex-Grand Rapids & Indiana trackage. This is now known as the Kendallville Terminal Railroad.

Through the years, #16 retained basically the same paint scheme despite operating on six different railroads. This six-color decal set is designed to model the six major paint and lettering variations it has worn over the last nearly 70 years.

The Model

There are three ways to use plastic models to model this locomotive in HO:

- The easiest way is to use the Walthers undecorated SW8 (Walthers Item #920-31442), or the older Life-Like Proto 2000 #30073 that is the basis for the Walthers model.
- The next easiest is to convert a Walthers undecorated SW9 (Walthers Item #920-8908) or the older Life-Like Proto 2000 #8908 that is the basis for the Walthers model. For either of these, you need to remove the rear exhaust stack.
- The least expensive is to convert an older undecorated Athearn blue box SW7 (Athearn item #4001) by removing its rear exhaust stack and replacing both of its headlights with either two packages of Custom Finishing #330 headlights or one package of Detail Associates #LT-1011 headlights. To make an accurate model, you will also need to scrape/sand off the row of three louvers at the tops of the hood doors.

Brass models were imported by Oriental Limited in 1985 and Precision Scale in 1994. The Oriental Limited model comes with full-length sill-mounted handrails, which #16 did not have.

The twin sealed-beam headlights are arranged so that the upper light is clear, while the lower light is red.

If you plan to paint #16 in any of its last four schemes, remove the footboards from the pilots before painting the model.

Painting

First paint the hood and cab "Caboose Red" with whatever paint you are comfortable using. After the red paint is dry, mask the hood so that you can paint it black from the walkway down and from the tops of the hood doors up. On the cab, only the top and edges of the roof are black. The walkways and frame are black. Any black paint will do. Before decaling, I recommend applying a hard, clear glossy finish.

The handrails are yellow. We have used Santa Fe Cat Whisker Yellow with good results.

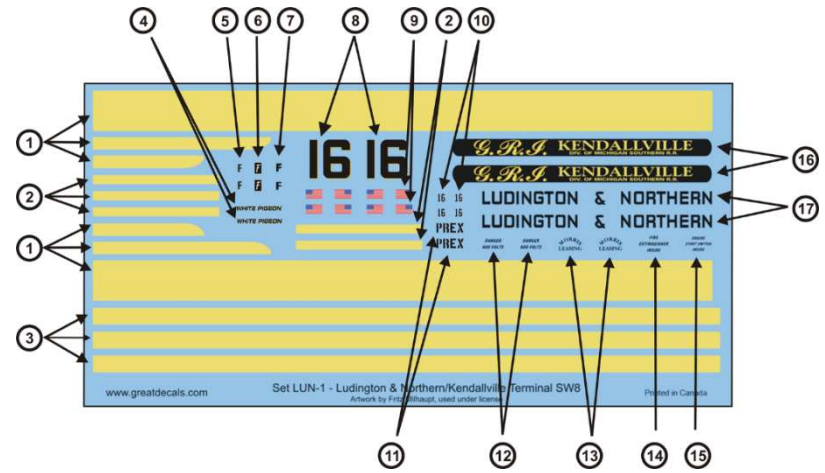
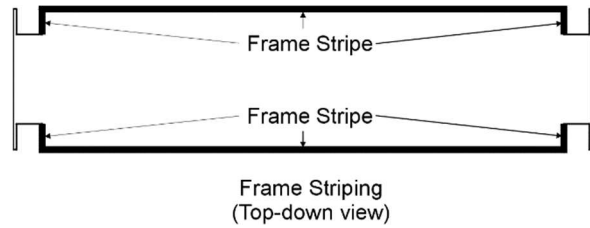
Applying the Decals

Given the number of variations this set supports, it is necessary to apply decals on top of other decals. We recommend applying the combined large stripe and wing stripes, the yellow strips that frame the radiator and, if the scheme you are modeling uses the yellow sill-side stripe, the sill stripe, first. Once they have settled onto the model, let them dry at least overnight before moving on to apply the other decals. We recommend sealing them with a light layer of gloss, and letting that dry thoroughly, before applying the other lettering on tops of the stripes.

Place the decals as shown on the appropriate diagram on the following pages. On the ends, the only lettering is the number on the number boards on each side of the headlight.

The yellow frame striping is applied to the outer sides of the frame as shown below. They do not go over the edge onto the top of the walkway. On each side, it is necessary to use a

piece of the third stripe to get enough length to complete the stripe.



- 1 Stripes – The large stripe and two “wing” stripes are spaced so that you can apply them to the model as a single piece, if you wish.
- 2 Radiator frame stripes – Use these pieces to frame the radiator on the front of the hood. These are provided as separate pieces (with two extras) to accommodate the different size radiators on the different HO models.
- 3 Frame Stripes – Used to cover the sides of the frame on the Phase 1 through 3 paint schemes.
- 4 “White Pigeon” lettering – Used only on the Phase 3 and Phase 4 schemes. Indicates servicing terminal assignment.
- 5 Narrow “Front” Fs (Yellow) – Used on the original Ludington & Northern scheme.
- 6 Reversed “Front” Fs – Used only on the Kendallville Terminal schemes
- 7 Wide “Front” Fs (Black) – Applied in the yellow sill stripe during the years #16 was on the TSBY and the Ann Arbor.
- 8 Locomotive Cab Numbers – Used on all schemes. Intentionally a different yellow than the stripes, to match the prototype.
- 9 US Flags – Used on both sides of the nose and on the back of the cab on the “Phase V” Kendallville Terminal scheme
- 10 Number board numbers - Used on the number boards on the headlights in all schemes. These require a black background on the number boards.
- 11 PREX Leasing stencil – Used on Kendallville Terminal Phase 5 paint scheme
- 12 “Danger 600 Volts” lettering – Used only on all schemes
- 13 “Morris Leasing” stencil – Used on phase 4 scheme
- 14 “Fire Extinguisher Inside” – Used on the front door of the fireman’s side on Phase 2 through 5 schemes.
- 15 “Engine Start Switch Inside” lettering – Used only on the Kendallville Terminal scheme.
- 16 “Kendallville Terminal” lettering – Paint scheme phases 4 and 5
- 17 “Ludington & Northern” road name lettering – paint scheme phase 1, 2 and 3

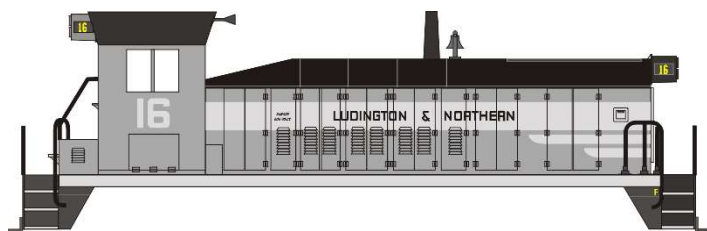
The Five Lettering Phases of LUN #16

To classify the paint schemes that #16 has worn for nearly seventy years, I have assigned each of #16's major lettering and striping variations a "phase", as outlined below:

- Phase 1 From 1952 to the early 1980s
- Phase 2 From the early 1980s to the early 1990s
- Phase 3 From the early 1990s to approximately 1998
- Phase 4 Kendallville Division of the GR&I – From approximately 1998 to approximately 2002-2003
- Phase 5 Kendallville Division of the GR&I – From approximately 2002-2003 to present

Phase 1

From its construction in 1952 until the Ludington & Northern was closed in January, 1982, #16 wore the scheme shown below.



It uses the following lettering from this decal set:

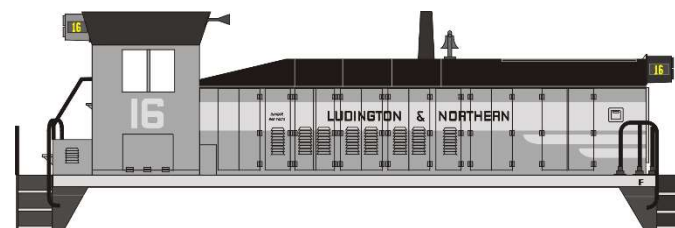
- Broad stripe and nose wings 1
- Radiator frame stripes 2
- Frame stripes 3
- Locomotive cab numbers 5
- Number board numbers – applied to the sides of the headlights 10
- Ludington & Northern road name 17
- Narrow yellow "Front" F – located on the front step skirt below the frame stripe 6
- "Danger 600 Volts" stencil (post-1975) 12

There is no lettering on the back of the cab, aside from on the number boards on the rear headlight.

Phase 2

The second phase paint scheme was worn by #16 during its stay on the Tuscola & Saginaw Bay and Ann Arbor Railways.

The changes from the earlier scheme are moving the "F" next to the front stairwells up into the frame stripe, and adding the "Fire Extinguisher Inside" lettering to the front of the fireman's side front cab door.



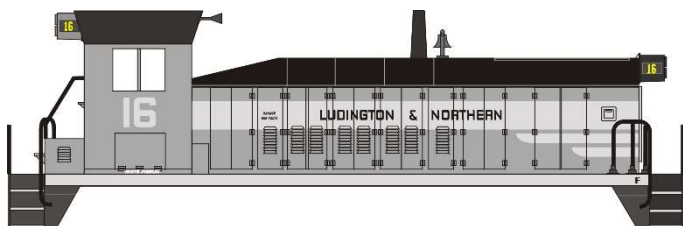
It uses the following lettering from this decal set:

- Broad stripe and nose wings 1
- Radiator frame stripes 2
- Frame stripes 3
- Locomotive cab numbers 5
- Number board numbers – applied to the sides of the headlights 10
- Ludington & Northern road name 17
- Wide black "Front" Fs – centered on the frame stripe, beneath the middle handrail stanchion 6
- "Danger 600 Volts" stencil (post-1975) 12
- Ludington & Northern road name 1
- "Fire Extinguisher Inside" lettering – on the fireman's side front cab door 9
- "Engine Start Switch Inside" – centered vertically within the wide yellow stripe and centered horizontally on the hood door closest to the cab on the fireman's side 11

There is no lettering on the back of the cab, aside from on the number boards on the rear headlight.

Phase 3

While on the Michigan Southern and during its stint on the Michigan Shore Railway, #16 wore the “Phase 3” scheme with “White Pigeon” lettering added beneath the access door on both sides of the cab.



It uses the following lettering from this decal set:

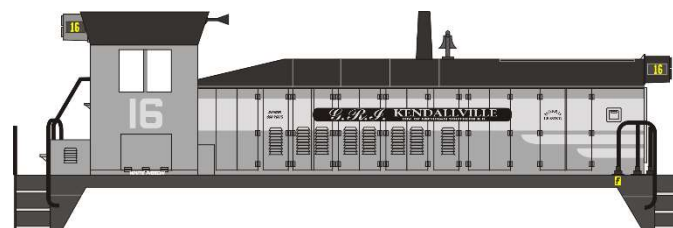
- Broad stripe and nose wings 1
- Radiator frame stripes 2
- Frame stripes 3
- Locomotive cab numbers 5
- Number board numbers – applied to the sides of the headlights 10
- Ludington & Northern road name 17
- Wide black “Front” Fs – centered on the frame stripe, beneath the middle handrail stanchion 6
- “Danger 600 Volts” stencil 12
- “Fire Extinguisher Inside” lettering – on the fireman’s side front cab door 9
- “White Pigeon” lettering – centered on the cab, just above the frame stripe 10

There is no lettering on the back of the cab, aside from on the number boards on the rear headlight.

Phase 4

Since the late 1990s, #16 has been assigned to a 2.5 mile stretch of the former GR&I in Kendallville, Indiana. The scheme shown below was in use from approximately 1998 to 2002 or 2003.

The major changes from the previous phase are that the frame is painted black (there is no frame stripe), the “Ludington & Northern” lettering was overlaid with the oval GR&I/Kendallville Terminal herald, and the “Morris Leasing” lettering was added to the second hood door from the front on both sides.



It uses the following lettering from this decal set:

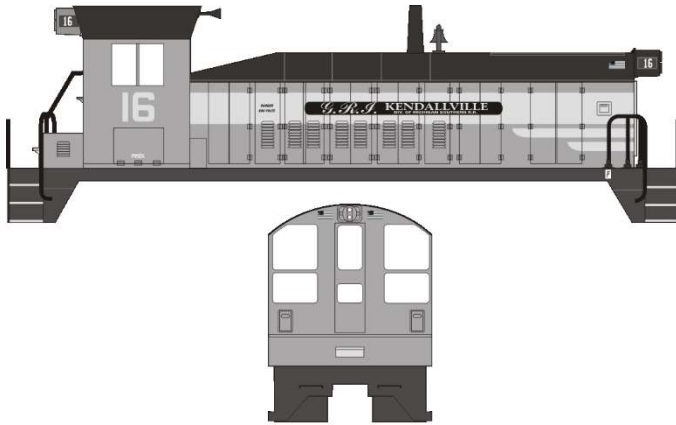
- Broad stripe and nose wings 1
- Radiator frame stripes 2
- Locomotive cab numbers 5
- Number board numbers – applied to the sides of the headlights 10
- Kendallville Terminal road name 17
- Reversed “Front” Fs – centered on the frame, beneath the rearmost front handrail stanchion 6
- “Danger 600 Volts” stencil 12
- “Fire Extinguisher Inside” lettering – on the fireman’s side front cab door 9
- “Morris Leasing” lettering 13
- “White Pigeon” lettering – centered on the cab, just above the frame stripe 10

There is no lettering on the back of the cab, aside from on the number boards on the rear headlight.

Phase 5

The most recent scheme worn by #16, at the time of this writing, is the one shown below. The differences from the previous phase are the addition of four flag decals at the front of both sides of the long hood, and to both sides of the headlight on the back of the cab, the removal of the “White Pigeon” lettering beneath the battery access door as well as the “Morris Leasing” lettering, and the addition of the “PREX” reporting marks stencil on the battery box door on both sides of the cab.

Over the years, the flag stickers on the hood have peeled off, leaving a discoloration in the black paint where the stickers had been. The flags on the back of the cab are still in place, even as the unit has weathered. As far as I have been able to tell, all of the flag stickers were applied in the “normal” orientation, with the stars to the left and the stripes to the right.



It uses the following lettering from this decal set:

- Broad stripe and nose wings 1
- Radiator frame stripes 2
- Locomotive cab numbers 5
- Number board numbers – applied to the sides of the headlights 10
- Kendallville Terminal road name 17
- Reversed “Front” Fs – centered on the frame, beneath the rearmost front handrail stanchion 6
- “Danger 600 Volts” stencil 12
- “Fire Extinguisher Inside” lettering – on the fireman’s side front cab door 9
- “PREX” stencil – centered on the cab, just above the bottom of the access door 13
- US flag stickers – applied to sides of hood and to back of cab. 14
Use the versions with the stripes to the right.

Applying These Decals

I prefer to apply decals over a light coat of a high-gloss finish, such as Scalecoat I or Scalecoat II Gloss Finish or Floquil Crystal-Cote. Once the gloss finish has set, it provides a hard, glossy finish that is essential for proper decal application.

I recommend using Micro Sol from Microscale to wet the area to receive the decal. Once the decal is in place and holding its position, use Micro Set to cause the decals to snuggle down into the details. Once the decal has dried, use a pin to prick any air bubbles trapped beneath the decal, then apply more Micro Set.

Once the decals have dried thoroughly (overnight or longer), a light coat of Testor's Dull-Cote or other flat finish or other similar flat finish will seal in the decals and blend them into the paint.

If you have difficulty painting or decaling, just remember this— A little bit of weathering can cover up a multitude of errors!

These decals are sold by:

Great Decals
3306 Parkside Terrace
Fairfax, VA 22031

www.greatdecals.com

This decal set is based on artwork created by John F. ("Fritz") Milhaupt, which is used under license. Additional artwork supplied by Bill Brillinger.

Decals printed in Canada.