# Plano Model Products #14880 CNW SD18 Conversion kit - Ex Southern units - Atlas Model

The parts in this kit are designed to be used on the Atlas SD24 model to build a representation of a CNW / Precision National SD18. This kit has the parts needed to build a ex-Southern High Short Hood unit CNW#6622 - 6643. If you are planning to build a ex-Union Pacific Low nose unit, you will need our #14881 SD18 conversion kit. These instructions are written with the assumption you are working with an Atlas undecorated SD24 model. If you are working with a predecorated model, you will need to disassemble it as much as you can. All of the parts in this kit will be added to the main body and some if the modifications can only be made with the body removed from the walkway. We suggest you read through these instructions completely to not only become familiar with them but also help you understand what all is being done. There are several small details that can be added at anytime. You can do the work in any order you want but keep in mind that some parts might get damaged if mishandled while working on something else. We have a page on our web site with photos of some of these parts installed on our them on our models. models as we tested Go to www.planomodelproducts.com/CNW\_SD18/14880.html

We highly recommend you research the unit(s) you intend on building. While most of these SD18's had a common configuration for the replacement doors, a few of them had some door variations. We have included a list of door configuration variations we have seen photos of. The list is not a guaranteed or official list. It is only a reference list! Something else to look for is exhaust fan variations. I few units had their fans replaced with newer fans. Replacement fan research is up to you.

## Making the body modifications.

There are several body modification to make before you can add some of these details. We will start with the easier ones and move to biggest one last. This is for handling purposes.

and move to biggest one last. This is for handling purposes. Front and back of unit - On the front of the short high nose, the existing inspection doors will need to be sanded off leaving a flat, smooth surface, just below the horizontal strap. On the back (long hood end), you will need to remove the ladders if they are on there, and/or fill the holes if there are any and also sand off the lower rectangular inspection doors

The turbo stack should be removed and the plate filed smooth. The dynamic brake fans should be removed and the hatch should be smooth. The dynamic brake intake fins. These need to be filed, carved, sanded off to give you a even , flat and straight surface to attach the replacement brass plate to. The surface and contour should match that of the front taper.

The openings for the new doors. Use patience here! You will need to cut out a section of the body on both sides of the body. On both sides you will cut from bottom to top to the line just below the roof line (height of old plastic doors). Also on both sides, the cut closest to the dynamic brake (DB) hatch will be made vertically with the door edge and front of the batten strip on the front of the DB hatch. And again on both sides cut vertically, even with the front edge of the most forward door. you will remove four doors on the left side and four on the right side. For size reference as to how much to remove from each side, you can use the new brass wall sections to verify you are removing the correct amount of material. But if you do, handle the brass walls with care as you do not want to mess up (bend) your new walls.

Now would also be a good time to cut out for those new stainless steel intake screens (Plano #14890) you will want to add to your model.

## Rebuilding body

Included in this kit is the styrene needed to fill in the cutouts for the new door walls. The .015" X .156" styrene strip will be cut to the height of the opening (about 1.100") and glued to the inside of the body with half of the strips width, length wise, exposed. Using the supplied .030" piece of styrene, cut two new panels to fill the cutouts. Make sure you keep the body straight. Test fit body on walkway frame to make sure everything is straight and lines up before you glue it in place. The new panels will rest on and glue to the exposed portion of the .156" strips. This will be enough to hold the new styrene panels in place. If the new panels are snug and making good contact on all three sides, once glued in place they should stay. Please note, a thicker material on the inside of the body WILL interfere with the weights and motor on the chassis and is not recommended The new brass walls can be added at this time. A contact glue like Barge glue on both surfaces will hold the brass walls in place. What ever glue you use, make sure you have a good bond and the brass walls are holding flat on the shell. Using your photos and the supplied door guide, install and glue doors to recessed areas in brass walls. Add louvers to doors as needed. The louvers are designed to fit one way only. The ends of the louvers point down and the bottom has small tabs that fit into notches on the door openings. New door latches can also be added to appropriate recessed areas on doors. The opening in the latch will fit over handle on the door. Carefully add all the hinges needed to all of the small rectangular half etched areas on the edges of the doors. That should

Add replacement dynamic brake hatch plate and also replacement turbo stack plate to appropriate areas. Detail Associates exhaust stacks #2402 will fit the cutouts in the dynamic brake hatch plate and can be added at any time.

complete the rebuilding of the door section.

There are two rectangular half etched brass plates that are the panels to fit over the side fins of the dynamic brakes. These are very delicate and should be handled with care. Place them over the modified DB sides, gently form with fingers to contour to match DB blister and glue in place.

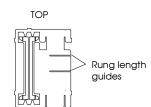
### **Building ladder**

Assembly of the ladder can be done several different ways. A few options will be given in these instructions as we attempt to walk you through the assembly process.

Note that there is a left hand and right hand ladder side. And yes there is a top and bottom. Carefully trim each ladder side from the fret and clean up ends if needed. Bend top and bottom mounting feet 90 degrees at the half etch lines. Etch lines are the inside of the bends.

Part of the fret is an assembly fixture to aid in assembling the ladder. Insert the top of each ladder side into the upper cutout of fixture and then ladder bottoms into lower slot. Slide ladder sides up until they rest against the top of the fixture slots. Use a piece of tape on the back to hold the feet flat and keep the sides at 90 degrees.

Time to add the rungs. On the fixture you will notice a couple half etch lines. Place a piece of the supplied wire in the etch line and cut the wire to the length of the etch line. Insert rung into matching holes and glue in place. Another option is to insert the wire into the match-



ing holes with one side flush. Glue in place and trim to length. Repeat on remaining rungs. Soldering rungs in place is also an option if soldering is your thing.

## Installing ladder

Once ladder is assembled, four #78 holes will need to be drilled in the body for mounting the ladder. There are holes in the fixture that can be lined up on the end of the body and used to drill the holes. Another option is to temporarily tape ladder in place and drill holes through the holes in the ladder feet.

Using the supplied NBWs, insert one in each hole to hold ladder in place. And another option as to insert a NBW into one drilled foot hole to hold ladder in place, drill another hole, insert a NBW, drill - insert until all four are install and the ladder is attached.

#### Adding new inspection doors

The new inspections doors can now be added. The doors with the single centered latch go in the front (short high hood). Position doors on ends but not even with shell edge (leave room for hinge) and hinge slots on the bottoms of door and glue in place. Glue a hinge to each slot. Position a latch top over the latch handle and glue in place.

We have included a set of round inspection plates that match the ones on the model. If you accidently marred yours on the model or you want to add these to give them a little more depth, you can add them now.

#### Dynamic brake brackets

There is a fret of brackets that go in front of and behind/over the dynamic brake hatch. Really do not know what these are for on the prototype but these parts can be added to represent those parts. The 'U' shaped bracket is applied just in front of the batten strip behind the dynamic hatch. To drill the mounting holes, tilt the U bracket 90 degrees on the fret without removing it from the fret. Position on body to help center the fret for drilling. Position fret so drill guide holes are against the front edge of the batten strip. Mark and drill #78

holes at these locations. Now remove U bracket from fret, insert mounding pins in drilled holes, square up and glue in place.



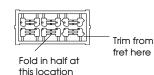
Drill guide for side brackets

There is one bracket on each side, just in front of the dynamic brake blister. Position fret drill guide centered where new bracket is going to be and drill #77 holes. The new brackets are made in halves and will need to be folded over to create double sided bracket. Remove a bracket pair, fold in half at the ends of the mounting pin, insert in drilled hole and glue in place. Repeat on other side.

#### Adding side lift lugs

A fret of side lift lugs is include in this kit that can be used to replace the plastic lift lugs found on each side of your model. For durability, these lift lugs are intended to be folded in half and installed in a double thickness configuration.

If you are adding the lugs to an undecorated model, carefully remove a lug 'set' from the fret, clean up trimmed spot if needed, fold 'set' in half at etch center of mounting pins, insert into slot on body and glue in place.



If adding to a prebuilt model, one 'set' of the mounting pins will be removed to allow the lift lugs to be inserted and glued into one #76 hole. Remove a lift lug 'set' from the fret, clean up trimmed surface and bend 'set' in half. Holding the two halves together, carefully remove the bottom pin.

You will notice if you look very closely, one pair of the lift lug sets have a small 'lump' near the top that is intended to represent a flag holder. If you will not be needing these flag holders, they can be removed by carefully running a file over them to file them off. Just work with light, slow passes and they will come off.

#### Adding new Sunshades

The new sunshades will fit in the same holes as the plastic sun shades. You may need to trim the cast on drip rail to accept the brass sunshade. Carefully remove the brass shades from the fret. The sides bend down 90 degrees. The outer, long edge has a half etch lip that can rolled up to create a rain drip rail. This will have to be handled carefully! You will be able to form it by just pressing it up with your finger. Again, handle carefully. Insert mounting pins in holes and glue in place.

#### Add intake screens

This will be a good time to add the #14890 stainless steel intake screens per that kits instructions.

That should complete our portion of rebuilding the body of your SD18 model. Finish assembling the rest of your model to your liking. Don't forget to add the replacement steps to the walkway frame and cab steps using our kit #14924.

Thank you very much for using our kit on your model. For more of our photo etch detail parts, please see you local hobby supplier or visit us online.

