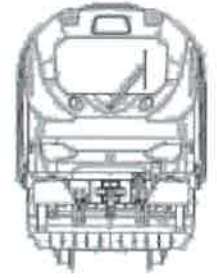


Thank you for purchasing this Dapol product. This information is applicable to all versions of this locomotive.



- The model can be controlled with a DCC decoder or by DC operation and is factory set for DC operation.
- The model is shipped with directional head and tail lamps and leading cab light 'ON'. It is ready to run in DC mode or with a 2 function DCC decoder. Full operation and selection of lighting functions in DC mode is described in section 4.
- DCC decoder fitting instructions and description of DCC lighting is in section 5 and the DCC guide sheet.

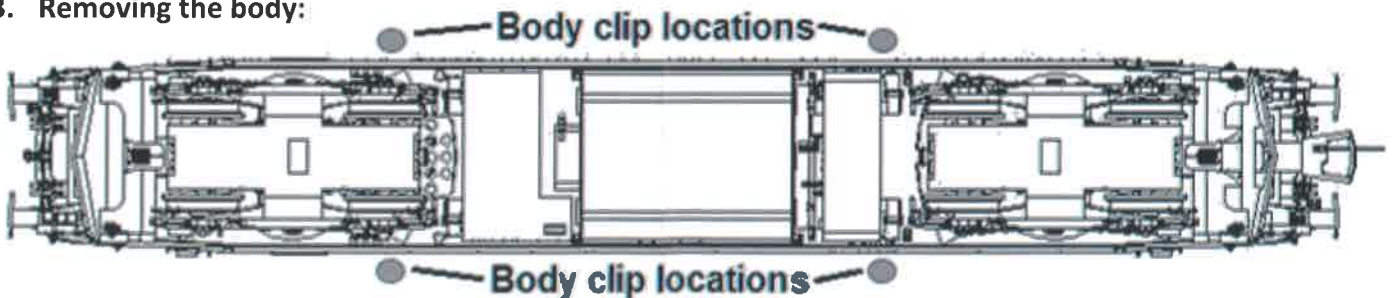
1. Running in / First use: No special running in or initial lubrication is required, as our 'new generation' locomotives have been designed with care to offer many years of service with minimal maintenance. However, we suggest that before you operate your model for an extended time, you first run it in both directions at a low speed whilst checking for correct operation. This operation can be performed in either DC or DCC (after fitting a decoder – see section 5) Also, please check that you have the following items within the packaging (in addition to this sheet).

- a) Dapol 'No Quibble' warranty sheet
- b) DCC Guide sheet

2. Fitting accessories: All detail parts have been factory fitted to your locomotive,

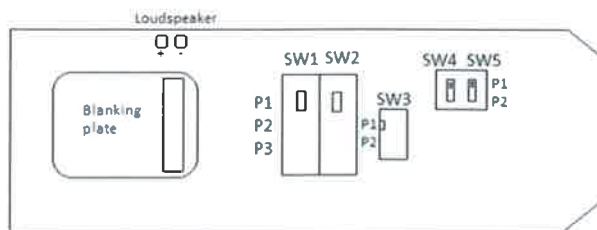
- a. Your model has been supplied fitted with one slotted and one unslotted valance. A spare valance has been provided for use in case you wish to change the coupling set-up of your model. The fitted valances are a push fit into the body and can be carefully pulled to remove. To re-fit, push the valance into position.
- b. The NEM coupling can be pulled out from its pocket and the pocket can be removed entirely to allow an unslotted valance to be fitted (or vice-versa)

3. Removing the body:



- a. The body is held to the chassis by 4 clips, these are positioned adjacent to the bogie as shown above.
- b. Two methods of body release can be used:
 - i. Carefully avoiding underframe detail, locate the inboard recesses moulded into the chassis (located near the inboard wheels), using these, gently ease the body outwards whilst pulling up on the chassis. Repeat with the remaining three clips.
 - ii. Using four offcut strips of thin plastic sheet, slide a strip between the body and chassis near the clip, slide towards the clip until you feel resistance then work the strip between the clip and body. Repeat with the remaining three clips until all four strips are in place the body can then be lifted off.
- c. The body will lift clear of the chassis once all clips are released. There is no need to be concerned about wires, as a 'plugless' connector has been used which will separate when the body is removed.

- 4. Internal switch function:** You will note 5 switches on the internal control board. The lighting operation has been chosen to permit choice of cab lighting options (leading, trailing off or both on) as well as control of lights for push-pull operation. **TIP:** Switches 1 and 2 (Cab light control) can be accessed easily by removing the exhaust moulding on the roof. The function of the switches is shown in the table overleaf:



Switch	Description	Position 1 (P1)	Position 2 (P2)	Position 3(P3)
SW1	No. 1 end Cab light control	On when leading	Always Off	On when Trailing
SW2	No. 2 end Cab light control	On when leading	Always Off	On when Trailing
SW3	Refer to description below	4 or 6 function DCC	DC or 2 function DCC	N/A
SW4	No. 1 End Push pull lighting control	#1 end Lamps on	#1 end lamps off	N/A
SW5	No. 2 End Push pull lighting control	#2 end Lamps on	#2 end lamps off	N/A

Switch 3 (SW3) Note: This switch is used to turn off the lighting at No. 2 end when using DC or a 2 function DCC decoder. If using a 4 function (or above) DCC decoder and you wish to independently control the rear lights, place this switch in position 1 (This will disable #2 end lamps if a 6-function decoder is not fitted). When in position 2 (factory set position) the front and rear lamps are controlled by SW4 & SW5

- 5. Fitting a DCC decoder:** This model accepts a standard **21 pin MTC DCC Decoder**. *To use all functions a SIX function (MTC) decoder will be required.* Please refer to the separate DCC guide for full information. Regardless of the decoder type (sound or non-sound), the basic fitting remains the same, however, if you are fitting a sound decoder, instructions on installing a speaker are shown as optional steps below.
- Remove body (section 3 above)
 - Remove DC blanking plate (We suggest easing it gently and evenly alternately on both sides, pulling is likely to result in bent pins!)
 - Insert decoder, aligning the decoder key pin with the 'missing' pin of the locos plug.
 - Optionally install loudspeaker (DCC Supplies part 100673 100 ohm/100789 8 ohm/103543 4 ohm to suit your sound decoder) by soldering its wires to the marked areas of the PCB (SPR+ and SPR-) (also shown in the diagram in section 4).
- 6. Maintenance:** We have designed the model using components which require little maintenance, however we suggest that after every 100 hours running a lubrication service is performed using a light *synthetic* lubricating oil such as Dapoil or Locolube™. Mineral oil types or thicker oils may damage your locomotive and/or invalidate your warranty.
- When applying lubrication only 1 or 2 drops are required on the gear-train, *do not over oil, over oiling may damage paint finishes and/or cause build-up of dust.* Remove surplus oil using a lint free cloth.
 - Regularly check your model for build-up of dust or loose scenic materials around moving parts.
- 7. Spare parts:** A range of spare parts are available from Dapol service centres.

