

Dapol O gauge 3F 'Jinty' locomotive

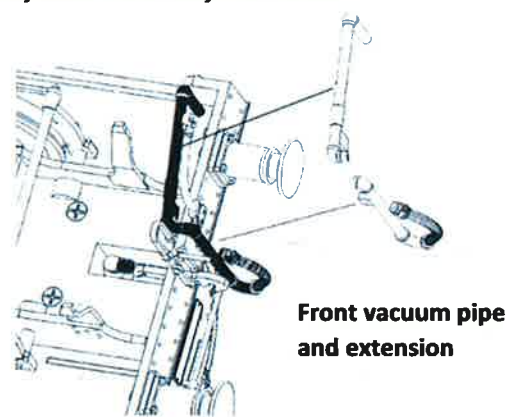
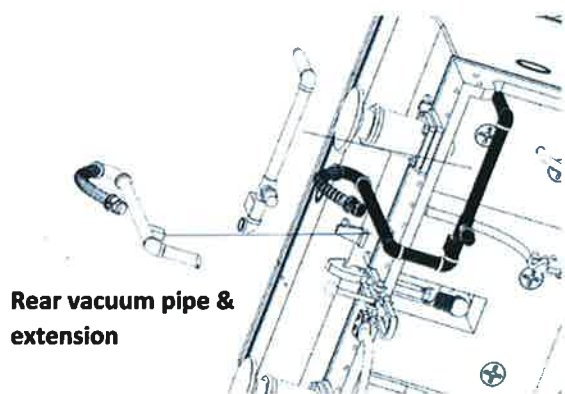
All versions

Owners guide

- 1) **Quick Start:** Factory fitted DCC and DC versions of the model is ready to run from the box without further concern. If you are fitting your own decoder please refer to section 5 for installation instructions.
- 2) **First Use:** No special running in or lubrication is required. Our 'new generation' locomotives have been designed with care to offer many years of service with minimal maintenance.
 - We suggest that you first operate your model in both directions at a low speed whilst checking for correct operation. This can be performed in either DC or DCC (after fitting a decoder – see section 6)
 - Please check that you have the following additional items in within the packing:
 - a. Dapol 'No Quibble' warranty sheet
 - b. Accessory pack comprising:
 - i. Rear vacuum pipe (x1)
 - ii. Front vacuum pipe extension (x1)
 - iii. Rear vacuum pipe extension (x1)

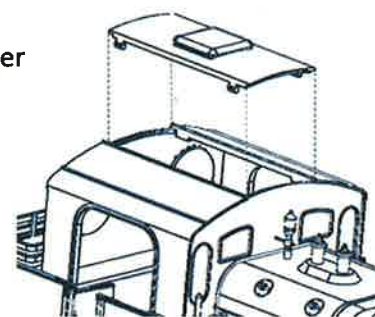
- 3) **Fitting Detail Parts:** If desired the additional parts are fitted per the illustrations below. Locating slots are provided in the chassis and loco body.

Please note: Do not glue both ends of the extension pipes as this will prevent future removal of the chassis.



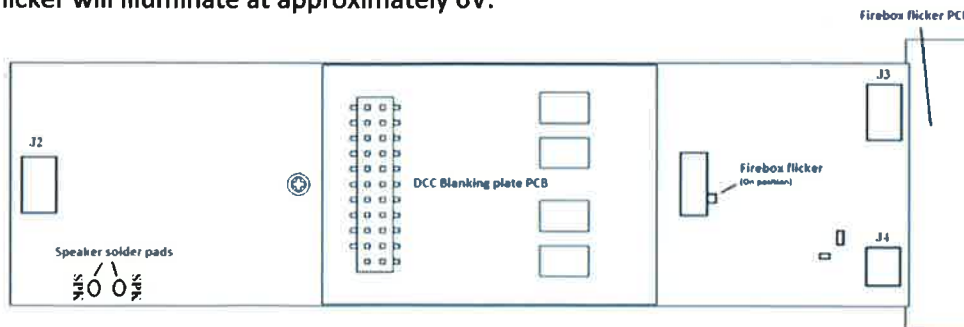
- 4) **Removable Cab Roof:** If you wish to fit a footplate crew or otherwise gain access to the footplate area the centre section of the cab roof is held in place with four clips.

- Grasp each end of the centre section of the roof between thumb and forefinger and firmly pull upwards.
- **Replacement:** The part is NOT symmetrical. It will be noted that the clips are staggered. The larger space between clip and roof edge faces to the front.



- 5) **Firebox Flicker Effect:** The model is fitted with a switchable and controllable (DCC only) firebox glow effect.

- When operated in DC the flicker will illuminate at approximately 6V.
- Under DCC control, the flicker is operated by the AUX1 output of the decoder.
- This effect can be disabled (in both DC and DCC) by moving the switch nearest the cab on the internal PCB.



6) DCC Decoder Installation / Body removal:

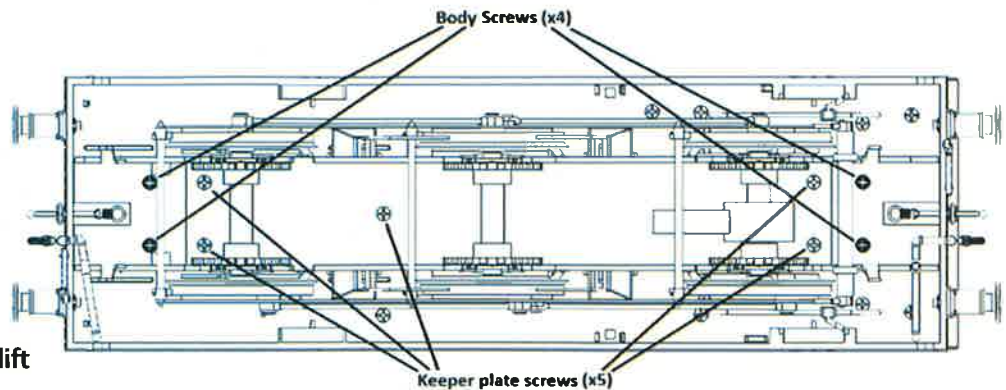
• Removing the body:

Remove the four outermost screws (located in the base of the model).

• All components and wiring are attached to the chassis; once the screws are removed, the body will lift away freely.

• The DCC blanking plate will be found fitted to the main PCB on top of the motor assembly (refer to drawing in section 5). Carefully unplug this (using a gentle rocking motion with thumb and fore-finger) and fit the 21 pin decoder of your choice.

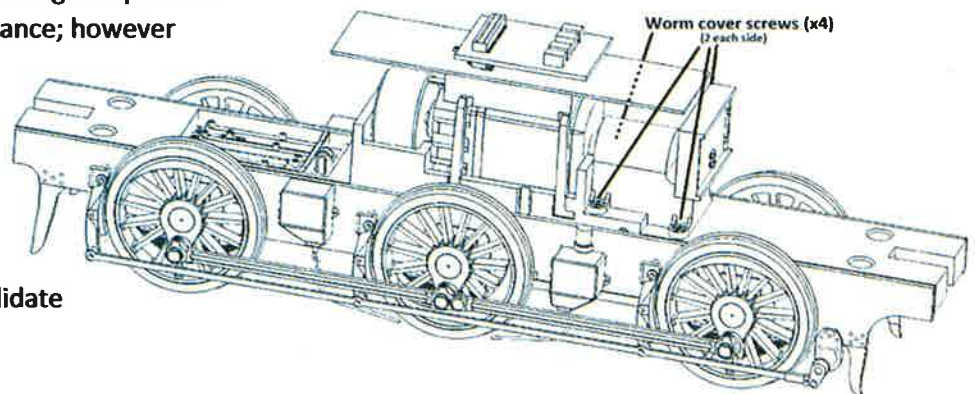
• If you are fitting sound, the speaker can be fitted into the boiler. A larger speaker (such as a Bass enhanced DCC Supplies part # 100898 100 ohm/100790 8 ohm/103541 4 ohm select to suit your sound decoder). can be placed into position within the locos pannier. The speaker wires are soldered to the designated pads on the decoder mounting PCB (labelled SPK) polarity is not important for a single speaker installation.



7) Maintenance: The model is designed using components

and materials requiring little maintenance; however

we suggest that after every 100 hours running a basic lubrication service is performed, using light *synthetic* lubricating oil (such as DapOil or Locolube™). Mineral oil types or thicker oils/greases may damage your locomotive and/or invalidate your warranty.



a) When applying lubrication only 1 or 2 drops are required on the connecting rods, gear-train and axle bearings. Take care not to over oil, sufficient oil will be carried from the gear train to lubricate the worm gear (body removal is not normally required for maintenance).

b) All screws are all Phillips headed, we recommend a size 00 Phillips screwdriver to fully engage the screw heads.

i) Keeper plate removal (access to axles and final drive gearing)

- Remove 5 screws indicated in the diagram above (Section 6).

ii) Body removal (Access to worm gear)

- Remove the body as described in section 6.
- Remove the worm gear cover (located under the PCB at the end of the motor opposite to the flywheel) held by 4 screws (indicated above right).

8) Spare Parts, Repairs and Servicing: For your model are available from DCC Supplies (01905 621999 www.dccsupplies.com).

O Gauge 3F JINTY

DCC sound functions

The detail's in the sound!

Thank you for purchasing the 3f Jinty locomotive with sound.

The sound project has been meticulously crafted from specially commissioned recordings of JInty no. 47406 on the Great Central Railway.

The sound project contains some unique features designed to enhance the driving experience and increase the authenticity.

There are a number of sounds that occur when a function button is pressed, and a number of sounds that are played automatically. These are detailed below and overleaf.

We hope you enjoy the added realism and enhanced driving experience that this will bring to your layout operations. To get the best realism and satisfaction out of your sound decoder, you will need to practice a little bit of driving!

Class 3F Jinty manual functions

F1	Sound fade in/fade out	Useful when the locomotive is going "off-scene" or into a tunnel, to simulate the effect of going into the distance. Conversely, on entering the scenic section, or when exiting a tunnel, this can be used fo fade the sound back in. The overall volume is controlled via CV266.
F2	Short whistle	On pressing F2, a short whistle will be heard. You can adjust the volumebu modifying the value in CV517. As delivered, the volume is at maximum (CV517=0), but this can be turned down by setting CV517 to a value between 1 and 254, inclusive, where 1 is quietest and 254 is loudest.
F3	Medium whistle	On pressing F3, a long and short whistle will be heard. You can adjust the volumebu modifying the value in CV520. As delivered, the volume is at maximum (CV520=0), but this can be turned down by setting CV517 to a value between 1 and 254, inclusive, where 1 is quietest and 254 loudest.
F4	Coal shovelling	On pressing F4, the sound of the shovelling coal will be heard. The coal shovelling will continue until F4 is turned off. You can adjust the volume by modifying the value in CV523. As delivered, the volume is at-18db (CV523=32), but this can be turned up or down by setting CV523 to a value between 1 and 254, inclusive, where 1 is quietest and 254 loudest.
F5	Injector	On pressing F5, the sound of the water injector will be heard. This sound will continue until F5 is turned off. You can adjust the volume by modifying the value in CV526. As delivered, the volume is at-12db (CV526=64), but this can be turned up or down by setting CV526 to a value between 1 and 254, inclusive, where 1 is quietest and 254 loudest.
F6	Ejector (Blower)	On pressing F6, the sound of the ejector will be heard. This sound will continue until F6 is turned off. You can adjust the volume by modifying the value in CV529. As delivered, the volume is at-12 db (CV529=64), but this can be turned up or down by setting CV529 to a value between 1 and 254, inclusive, where 1 is quietest and 254 loudest.
F7	Brake application/release	When F7 is pressed, the sound of the brakes being applied will be heard and at the same time, the working brake (if RealDrive is active) will be applied. When F7 is pressed again (F7 turned off), the sound of the brakes being released will be heard and at the same time the working brake (if RealDrive is active) will be released.
F8	Buffer clash	On pressing F8 with the locomotive stationary, the sound of buffering up will be heard. BY pressing F8 whilst the locomotive is moving, you can 'pre-select' the buffer clash to play the instant that the locomotive comes to a halt.You can adjust the volume by modifying the value in CV989. As delivered, the volume is at maximum (Cv980=0)), but this can be turned down by setting CV980 to a value between 1 and 254, inclusive, where 1 is quietest and 254 loudest.
F9	Light engine mode	With F9 ON, lighter chuffs will be heard and at the same time, the inertia will be reduced to simulate a lightly loaded engine or train. CV390 can be used to determine to what extent the inertia is reduced. CV390 affects both acceleration and deceleration.

O Gauge 3F JINTY

DCC sound functions

F10	Firebox door open/close + fire 'crackle'	On pressing F10, the sound of the door opening will be heard, followed by the crackling sound of the fire. This crackling sound will continue until F10 is turned off. In addition, the firebox flicker effect will be seen. When F10 is turned off the sound of the firebox closing will be heard and the flicker effect will be extinguished.
F11	Safety valves	On pressing F11, the sound of three safety valves will be heard until F11. You can adjust the volume by modifying the value in CV544. As delivered, the volume is at maximum volume (CV544=0), but this can be turned down by setting CV544 to a value between 1 and 254.
F12	Manual draincocks	As well as the automatic draincocks, F12 can be used to turn this effect on. The effect will be heard until F12 is turned off. You can adjust the volume by modifying the value in CV544. As delivered, the volume is at maximum volume (CV544=0), but this can be turned down by setting CV544 to a value between 1 and 254.
F13	Coupling up/uncoupling	On pressing F13, the sound of the coupling being placed on the hook will be heard. On pressing F13 again (F13 turned OFF), the sound of uncoupling will be heard. You can adjust the volume by modifying the value in CV550. As delivered, the volume is at 91
F14	Coach door slams	On pressing F14, the sound of passenger carriage doors being closed will be heard. These will continue playing until F14 is turned OFF. You can adjust the volume by modifying the value in CV556. As delivered, the volume is at maximum (CV553=0).
F15	Flange squeal	On pressing F15, if the locomotive is moving, the sound of wheel flanges squealing will be heard. This will continue playing until F15 is turned OFF or the locomotive becomes stationary. The sound heard will be different for light engine (F9) being ON or OFF. You can adjust the volume by modifying the value in CV981 for light engine flange squeal or CV982 for train flange squeal. As delivered, these are set at CV981=0 and CV982=64.
F16	Guard's whistle	On pressing F16, the sound of the Guard's whistle will be heard. You can adjust the volume by modifying the value in CV559. As delivered, the volume is at a value of 181.
F17	Damper open/close	On pressing F17, the sound of the damper being closed will be heard. On pressing F17 again (F17 turned OFF), the sound of the damper being opened will be heard. You can adjust the volume by modifying the value in CV562. As delivered, the volume is at a value of 64.
F18	Gauge glass blowout	On pressing F18, the sound of the gauge glass being vented will be heard. You can adjust the volume by modifying the value in CV565. As delivered, the volume is set to a value of 64
F19	Three short whistles	On pressing F19, the sound of three short whistles will be heard. You can adjust the volume by modifying the value in CV568. As delivered, the volume is at maximum volume (CV544=0), but this can be turned down by setting CV568 to a value between 1 and 254
F20	Long whistle	On pressing F20, the sound of a long whistle will be heard. You can adjust the volume by modifying the value in CV674. As delivered, the volume is at maximum (CV674=0), but this can be turned down by setting CV674 to a value between 1 and 254
F21	Very long whistle	On pressing F21, the sound of a very long whistle will be heard. You can adjust the volume by modifying the value in CV677. As delivered, the volume is at maximum (CV677=0), but this can be turned down by setting CV677 to a value between 1 and 254

O Gauge 3F JINTY

DCC sound functions

Class 3F Jinty automatic functions

Brake squeal	The brake squeal will be played when the speed of the locomotive drops below the threshold AND the locomotive is decelerating AND if RealDrive is enabled, the brake is ON (F7 ON) The threshold can be set via CV287 in order to reduce or increase the amount of brake squeal. As supplied CV287 is a value of 20.
Different chuff intensities.	There are 3 chuff intensities on this sound project. Heavy chuffs will be heard when the locomotive is accelerating. Lighter chuffs will be heard when the target speed is reached. On deceleration, no chuffs are heard. With F9 ON, even lighter chuffs are heard.

Other useful CVs

No	Purpose	Comment
3	Acceleration rate ('heavy' engine (F9 OFF))	As supplied this is set to a value of 40. A higher value gives a slower acceleration. A lower value gives more rapid acceleration.
4	Deceleration rate (brake OFF)	As supplied this is set to a value of 25. A higher value gives slower deceleration. A lower value gives more rapid deceleration.
349	Deceleration rate (brake ON)	As supplied this is set to a value of 20. This gives the locomotive keen brakes! A higher value will give more gentle braking.
266	Overall volume	As supplied, this is set to a value of 64. A higher value will increase the volume whilst a lower value will decrease the volume. The recommended maximum is around 100.
267	Chuff synchronisation	As supplied this is set to a value of 92. As your model locomotive is run in, you may find it necessary to alter this to achieve close synchronisation between the sound of the chuffs and the wheel revolutions. There should be 4 chuffs per wheel revolution.

The 'RealDrive' Experience

The driving experience can be enhanced by activating '**RealDrive**'. This changes the set up of the driving characteristics, such that you will need to apply the brake in order to bring the locomotive to a controlled stop – simply closing the throttle will not suffice!

Explanation of 'RealDrive': In this mode, you feel you really are driving the engine; assuming the locomotive (train) is travelling at a medium speed as the regulator is closed (speed step 0) the locomotive will continue to coast for some considerable distance, slowing gradually. Applying the brake using F7 will bring the model to a stop. The braking speed can be adjusted by changing CVs as below.

- When F7 is ON the brake is ON. When F7 is OFF, the brake is OFF.
- The braking intensity can be altered via CV349. Some users prefer sharper brakes, which allows several short applications to bring the locomotive to a controlled stop (if possible set F7 on your DCC system to 'momentary' operation). Other users may prefer a gentle brake (use a higher value in CV349) so that only a single application of the brake is needed to bring the locomotive to a halt. CV 349 factory setting is 50.
- **Note:** If the brake is left ON, the locomotive will not accelerate. This means that if it is stationary and the brake is ON when the regulator is opened, the locomotive will not move.
- **Note:** The brake will not 'win' over the regulator. This means that if the brake is applied whilst the regulator is open it will continue to run at the current speed.

To activate 'RealDrive' set CV4 to 254, and CV309 to 7.

To de-activate 'RealDrive' set CV4 to 25, and CV309 to 0. These are the factory settings

DAPOL Jinty

Fine-tuning the sound

With this sound project, It is possible to alter the volume of the various individual sounds if you wish, in order to fine-tune the sound project to your personal preferences.

This is possible because each sound has a 'volume CV' associated with it. By modifying the value in the relevant 'volume CV', the volume can be altered.

Each 'volume CV' can have a value of 0 to 255 inclusive. Note that a value of 0 means the same as a value of 255! Therefore, the minimum volume is when a value of 1 is placed in the 'volume CV'. The maximum volume is when a value of 255 or a value of 0 is placed in the 'volume CV'.

The individual sounds are listed below, with their associated 'volume CV' number. Also shown is the value in each 'volume CV' as delivered.

	Sound functions	Volume CV	As delivered value
F2	Toot whistle	517	0
F3	Long whistle	520	0
F4	Coal shovelling	523	32
F5	Injector	526	0
F6	Ejector	529	91
F7	Brake application/release	532	23
F8	Buffer up	535	128
F10	Firebox door open/close	541	32
F11	3 x toot whistles	544	0
F12	Manual draincocks	584	0
F13	Coupling up/uncoupling	550	64
F14	Damper open/close	553	64
F15	Boiler water glass clearing	556	64

Please see over for automatic sounds

Automatic sounds	Volume CV	As delivered value
Simmering	574	0
Brake squeal	578	128
Draincocks	584	0