BRITISH RAILWAYS

L M S 3F 0-6-0T

SHUNTING ENGINE

ENGINE DRIVER'S

MANUAL

MESHTOOLS LMS Jinty Class 3F 0-6-0T Shunting Engine

Contents

1. BACKGROUND

The LMS 0-6-0T Class 3F Shunting engine, nicknamed "Jinty" to some, "Jockos" to others, was the standard shunting engine of the LMS. Sir Henry Fowler introduced them in 1924 due to a shortage of modern shunting engines. The LMS had a serious engine shortage of modern efficient designs, shunting engines were no exception. At grouping the railways consisted mainly of the L&Y Class 23 saddle tanks, which while good were antiquated, in an attempt to build new engines, the Caledonian 0-6-0Ts would have been excellent contenders but would have needed some serious rebuilding to fit Midland loading gauges. Then there were the Midland shunting engines, the most modern of which were the rebuilt 2441 class. These had recently been rebuilt during the early 1920s with Belpaire fireboxes, the 2441s themselves could trace their roots back to the class 1900 Class 3 Shunting engine of 1900, which had in turn been developed from Johnson's earlier 1377 class 1 Shunting tank of 1878. This the LMS decided was the perfect candidate to become the LMS standard shunting engine since it required little reworking.

The Jinties were a direct development of the re-boilered 2441 class. The Jinties had improved cabs, larger water tanks, an extension of the coal bunker, extended smoke box and improved buffer beam arrangements but were very similar to the Midland engines in other aspects. The engines were built at the ex-L&YR Horwich Works and at the private firms Bagnalls, Beardmores, Hunslet, North British and the Vulcan Foundry. In total 422 were built between 1924 and 1931. 7 were built for the S&DJR and were later absorbed by the LMS fleet.

The design was simple and straightforward, with a non-superheated Belpaire boiler of type G5 1/2 and inside cylinders. The engines were seen practically everywhere on the LMS system and their duties ranged from shunting, local freights, local passenger trains, banking and piloting.

Withdrawals of the Jinties began in 1957 with Number 47331 and the last to be withdrawn was number 47629 in 1967. However Number 47445 continued in use with the NCB after this. In total 9 have been preserved on heritage railways including the ELR where the sounds for the Jinty were recorded from behind 47324.

Technical data

- Power Classification: 3F
- Configuration: 0-6-0T
- Total Built: 422
- Length: 31'. 4.75"
- Width: 8'.9"
- Height: 12'. 6.81"
- Weight: 49T. 10C
- Coal Capacity: 2.25 Tons
- Water Capacity: 1200 Gallons
- Tractive Effort: 20835 Lbf
- Estimated Power Output: 515HP
- Fire tube heating surface: 967 Sq Ft
- Firebox heating surface: 97 Sq Ft
- Total Heating Surface: 1 074 Sq Ft
- Cylinder Size 18' x 26'
- Driver Diameter 4'. 7"
- Boiler Pressure 160PSI

Trivia

- In 1940, 8 Jinties were transferred to the War Department and were shipped to France, 5 returned and 3 were lost, presumed destroyed during the war. The French railways classified them as 030 TW. One engine returned with a GWR Chimney (Presumably from a WD Dean goods), another returned with a French pressure gauge with the red line at the equivalent of 227psi!
- The seven engines built for the SDJR were fitted with screw reversers instead of the more standard pole reverser, carriage warming apparatus and Whitaker tablet exchangers. They were absorbed into the LMS in 1930 and in 1934 they were transferred to Saltey and Devon Road. They were replaced on the SDJR by standard Jinties. On the SDJR they were used on light passenger and freight workings, shunting and at any one time 3 or 4 were based at Radstock for Banking goods trains up to Masbury summit as well as shunting in the area's collieries.
- 50 Jinties were built with steam brakes only.
- Jinties were capable of speeds of up to 50mph and could occasionally reach 60mph.
- The Jinties were liked by their crews, they could pull remarkably heavy loads for their size and were able to stop smartly with fitted or unfitted trains, although they lacked the additional brake force of the tender engines on unfitted trains.
- The Jinties had enough coal bunker capacity to last 24 hours of normal shunting work although the tanks would need replenishing 2 or 3 times in an 8 hour shift and the fire would have to be cleaned every 8 hours on average.
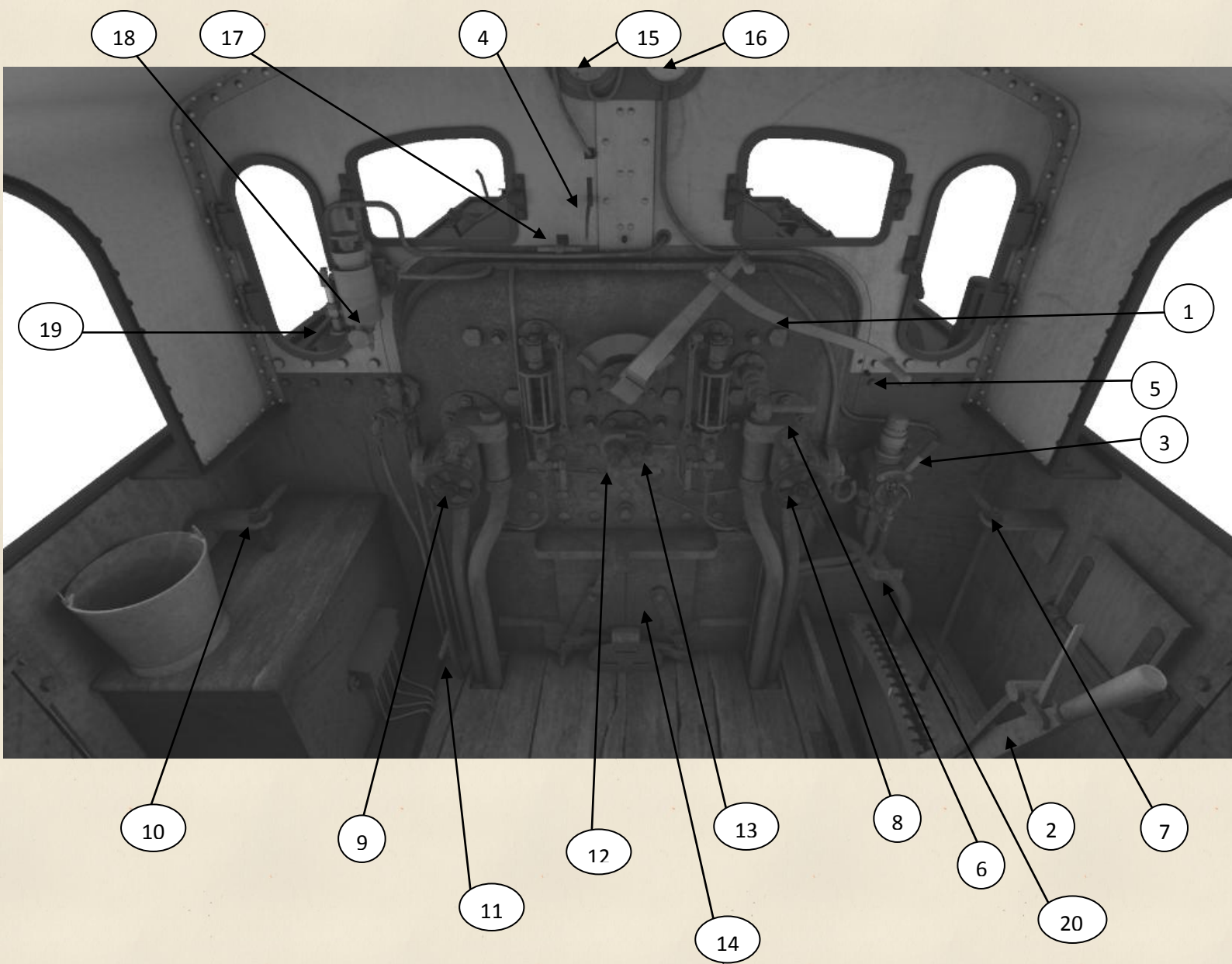
1.Regulator

2. Reverser

3. Combination Brake Valve

4. Whistle

5. Large Ejector

6. Small Ejector

7. Driver's Water Valve

8. Driver's Steam Valve

9. Fireman's Steam Valve

10. Fireman's Water Valve

11. Damper

12. Blower

13. Sander

14. Firebox Doors

15. Pressure Gauge

16. Vacuum Pressure Gauge

17. Lubricator Steam Supply Isolate

18. Lubricator Steam valve

19. Lubricator oil valve (under sight glass)

20. Cylinder Cocks

THE MODEL

We have created both a Standard (STD) and Advanced (ADV) version of each locomotive. The need for both arose when creating the script as we found that the AI simply could not drive the engine and some controls did not work via the HUD.

The advanced version includes advanced scripting which allows full simulation of the brake, damage resulting from misuse, more accurate regulator and reverser. The locomotive struggles to steam if over-fired so you have to keep a keen eye on the fire mass to ensure optimum performance. This version is neither HUD compatible nor AI compatible.

The simple version is designed for users who do not want the intricacies of the advanced features, having simplified control and more tolerant physics. This version is also AI compatible unlike the advanced version.

All scenarios have an option to drive the standard or advanced versions, allowing drivers of any skill to drive them without having any fuss and having to edit the scenarios themselves.

We have also included an AI version.

THE CONTROLS

Regulator

The regulator controls how much steam from the boiler enters the cylinders, the further it is opened the faster you will accelerate. Be careful how much you open it since the engine may slip. The regulator can be controlled by using the mouse or the **A** and **D** key to respectively increase and decrease the regulator setting.
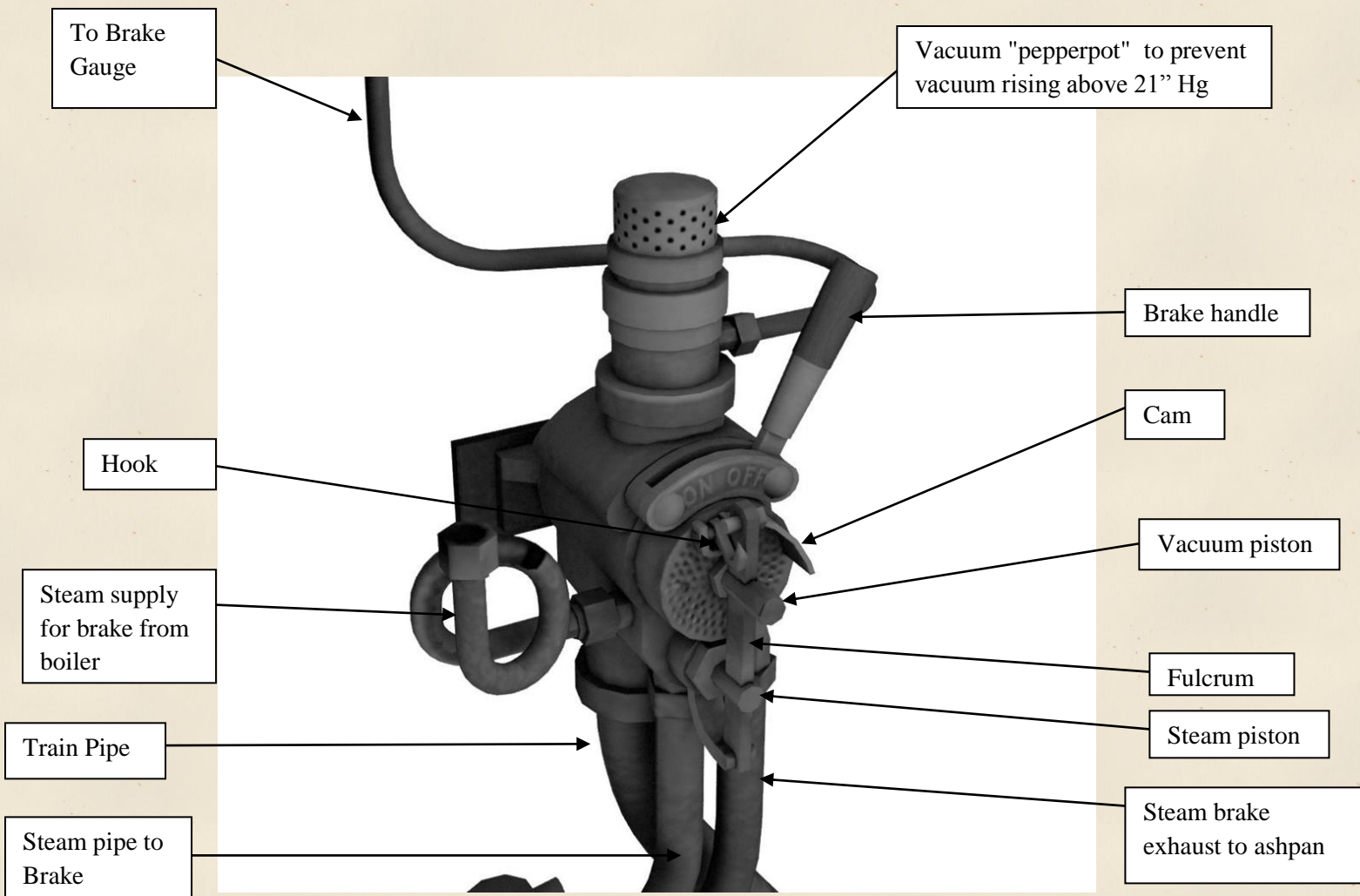
Note: To fully shut the regulator you may need to quickly open it then slam it shut.

Note: At low speeds the cylinder cocks may need to be opened, operated by pressing **C,** to control the amount of steam entering the cylinders and prevent steam building up. If you open the regulator while stationary and with the brake on you will need to open the cylinder cocks before opening the regulator

Reverser

The reverser on the Jinty is of a pole design, it has 7 notches in either direction and a mid-gear notch. It is fitted with a reverser lock which locks the reverser into a notch and prevents it moving while the regulator is opened. To release the lock the **E** key must be used, but caution must be used to not release the lock while the regulator is open more than a third otherwise the reverser could fly into full forward or reverse taking your arm with it!

The reverser works by limiting the amount of steam which enters the cylinder and allows the steam to expand more efficiently hence you will be able to go faster without emptying your boiler and making the fireman rather grumpy. To move the reverser the **W** and **S** keys are used to move it forward and back

To Brake Gauge

Vacuum "pepperpot" to prevent vacuum rising above 21" Hg

Brake handle

Cam

Hook

Vacuum piston

Steam supply for brake from boiler

Fulcrum

Steam piston

Train Pipe

Steam brake exhaust to ashpan

Steam pipe to Brake

Combination Brake Valve

The LMS combination brake enables a steam for the locomotive and vacuum for the train. When the brake handle is moved towards the on position air is admitted into the train pipe through a series of holes applying the brakes on the train, this however does not apply the locomotives brakes. To apply the locomotives steam brake the brake valve also has a fulcrum which balances the force of the vacuum piston pushing in and the steam pressure pushing out. When vacuum is reduced the force pushing inwards is reduced until the point where the steam pressure exceeds the force acting inwards (usually about 14-17" Hg) and the fulcrum is thereby pushed out, when it is pushed out the exhaust port of the steam brake is shut allowing steam to enter the pipe towards the steam brake cylinder applying the brake. When vacuum is recreated the force inward increase and when the vacuum exceeds the range stated above the fulcrum will move in shutting off steam to the brake cylinder and opening the exhaust port venting the steam brake cylinder to the ash pan releasing the steam brake. It should be noted therefore the steam brake application is not proportional to the vacuum brake application unlike with BR Standard locomotives where the steam brake application is proportional.

However the fulcrum can be manipulated by hand, it's a bit awkward but the spindle can actually be pulled out, or pushed in when the steam brake is being applied. As a result, the steam brake pressure can be manipulated to an extent by pushing in and letting go of the fulcrum allowing a partial application of the steam brake, not easy but you can do it. In

addition to this, the brake valve has a cam attached to the handle which pushes the fulcrum out should the vacuum piston stick.

To summarise, the brake can be applied in the following ways:-
• Destroying Vacuum below 17"

• Moving the brake handle towards the on position

• Manually pulling the fulcrum out

The locomotive brake can be released in the following ways:-

• Recreating vacuum above 17"

• By pushing vacuum spindle in manually with the handle in the off position

The brake valve also has a small hook built into it; this allows the steam brake to be pinned off when the vacuum brake is applied, as should be done if standing for any length of time. This can be achieved by pushing the spindle in (while brakes in the off position) and manipulating the hook onto a small notch. The hook can also be used to hold the steam brake on while vacuum is created, this can be achieved by pulling the fulcrum out and resting the notch on the outside of the hook or by wedging a block of wood in or metal in – unfortunately we can't model this in game! When the brake valve is moved towards the on position the hook should drop down allowing the brake to release or apply.

To operate the brakes:-
• The brake handle can be moved to on or off with **:** or **'**
• The fulcrum can be pushed in by pressing **[**
• The fulcrum can be pulled out by pressing **]**
• The hook can be lifted up or down by pressing **P**
• Large ejector is **U**
• Small ejector is **J / Shift J**

Whistle

The **spacebar** will play a single toot of the whistle – there are a number of different short whistles that are played with the spacebar.

Holding **B** will play a continuous long blast of the whistle

Ejectors

The Jinty is fitted with an SSJ type ejector produced by Gresham and Craven of Manchester. It has a 20mm small ejector cone and a 25mm large ejector cone. The small ejector is more

easily manipulated and used to maintain or slowly create a vacuum and the large ejector which is operated by a pull rod is used to quickly create vacuum.

The large ejector may be opened or closed by pressing U, while the small ejector may be opened using J and closed by pressing **Shift+J**.

Note: The headcode you select will affect the rate at which the vacuum is created; For example a passenger headcode allows the brake to be created at a normal rate, a fitted freight will take longer and an unfitted freight will take less time as only the locomotive's vacuum has to be created.

The headcode scheme used is the 1962 as shown below. Also note longer trains take longer for the brake to apply and release so be careful when handling long fitted trains!

Injectors

The LMS Jinty is fitted with two 8mm non-lifting live steam injectors produced by Gresham and Craven, injectors are used to introduce water into the boiler, their operation is as follows:

The water regulator is opened for the respective injector, this is located on the far left and right of the cab, being used for the left and right injectors respectively. This can also be open and closed by the **K** and **Shift+K** keys for the left injector and **L** and **Shift+L** for the right. Next the steam valve is opened gradually to allow the injector to pick up, this can be done by holding the **I** key for the right injector and **O** for the left, **Shift+I** and **Shift+O** shut the steam valve. Once the steam valve is opened the water valve can then be trimmed to the desired level being careful not to let the injector blowback or flood the injector with water.

Note: Remember to also open the water valve before starting the injector, and after you have shut the steam valve otherwise steam will erupt from the injector, this may deafen you!

Note: Partial water feeds can be setup by opening the water valve to the desired level and slowly open the steam valve until the injector sings.

Damper

On the Jinty there is only a single front damper, it is used to allow air into the firebox through the ashpan, providing primary air, thereby heating up the fire-bed through improved combustion. The damper handle is located to the left of the firebox doors on the floor. To open and close the damper the **M** and **Shift+M** key are used.

Blower/Sander

The blower is used to create a draught through the fire when the regulator is shut, it's useful for creating pressure quickly when stationary ready for an assault on a hill! However it doesn't do much when the regulator's open since that creates a draught as well. Make sure however it is open a bit when shutting the regulator and is wide open when going through tunnels to prevent a blowback of the fire into the cab, which would really ruin your day! To open and close the blower the **N** and **Shift+N** keys are used respectively

The sander on the Jinty is bidirectional. Steam is used to force sand in front of or behind the wheels. Sand aids adhesion in poor railhead conditions. The handle has three positions: Up activates the forward sanders, horizontal stops both sanders and down activates the rear sanders. To move the handle up the **X** key is used while to move the handle down the **Shift X** key is used.

Note: There is only a limited amount of sand so use it sparingly. There is enough sand to last for approximately 20 minutes in each direction so make sure you do not waste any!

Firebox Doors

Open and shut the doors with the **F** and **Shift+F** keys. It is probably wise to shut the firebox doors when entering a tunnel to help prevent the fire blowing back into the cab. Just below the doors is a flap which can be used to reduce the amount of air entering the fire and still allow you to fire, this prevents the fire from cooling too much.

Gauges

The gauge on the left gives the boiler pressure in pounds per square inch, and the gauge on the right will give you the vacuum brake pressure in inches of mercury.

Note: Ejectors failure will occur when boiler pressure drops below approximately 90psi.

Note: It is a requirement by law for 19" of Hg to be shown on the vacuum gauge when the brakes are not being used, on a passenger service, make sure you are able to maintain this level before starting off.

Hydrostatic Lubricator

The Jinty is fitted with a hydrostatic sight feed lubricator of the displacement type. It is used to lubricate the engine's slide valves and cylinders. It works by displacing oil by the use of condensed steam which is regulated by an oil valve under a sight glass allowing the current feed rate to be determined. To operate open the manifold steam valve to the horizontal position and turn the steam valve to the right. The oil valve under the sight glass can be then opened and the feed rate regulated. The usual rate is about 6 drops per minute. Please note the lubricator will start working, but the oil valve will need to be opened more if you are going to do any prolonged or fast movements. Problems may develop with the engine if the correct amount of lubricant is not deposited.

Cylinder Cocks

The cylinder cocks allow any water droplets which have condensed in the cylinders to be exhausted out of the cylinders thereby preventing damage. A secondary effect of the drain cocks is that they aid the warming of the cylinders when the regulator is opened. They can be found under the reverser pole. When you use the model the previous driver will have left the cylinder cocks open to prevent the engine moving while it stands idle. This also prevents any accidents should you forget to open the cylinder cocks yourself. The drain cocks should be

opened when starting from being stationary for a prolonged period of time and left in the open position for around 5-6 revolutions of the wheels. They are controlled by the **C** key.

Other Controls

- The locomotive's handbrake may be applied by holding **/** or released by holding **Shift+/**
- The cab doors to the engine may be opened using the mouse
- All the front windows can be opened using the mouse
- The driver's seat may be moved using the mouse
- The coal door near the floor at the back of the cab can be used to regulate the rate of firing. To begin firing press **R**, to increase the rate of firing tap **R** until the desired level is reached, to stop firing press **Shift+R.**
- The gauge glass protectors may be rotated either way by use of the mouse to spin them round.
- The gauge glass isolating handles, the long handles on the outer sides of the glass, are used to shut of the glass and prevent it refilling or blowing. Moving the handle down isolates the gauge glass.
- The gauge glass drain valve is located below the glass. To drain or test the water in the glass the handle can be moved to the horizontal position where the water will drain. Returning it will stop the glass draining.
- The tank water level gauge moves depending on the water level inside of the tank. The outside view works fully but the gauge in the cab view mode only gives a indication of the water used since you started/ resumed the scenario and so should not be judged to be totally accurate; this is due unsolvable scripting issues.

DRIVING TIPS

The Jinty is a unique engine, it requires skill to master but once you have you can send this thing flying about like it's made of elastic. They key things which differentiate the Jinty from other engines are the regulator, reverser and brakes.

Regulator

- Watch out for the lag on the regulator, it may catch you out if you want to quickly shut off steam
- If going into second valve make sure you fully open and then slam the regulator shut.
- At low speeds be careful of steam building up in the cylinders, use the cylinder cocks to help keep the pressure in them steady.

Reverser

- Remember the reverser has a latch on it, to move the reverser this must be disengaged.
- Be careful not to move release the latch with the regulator open ; this could lead to some unfortunate problems

- There are many ways of driving an engine, my own method is to start in full gear, upon reaching about 8mph shut of steam and notch back to notch 3, upon reaching about 20mph notch back again to notch 2 and stay in that until about 35 mph where I notch back to notch 1.
- If driving the standard version you will be able to move the reverser at will since the reverser scripting is simplified.

Brakes

- Remember when starting to have the brake fully off before opening the regulator
- When making a brake application make a reduction to about 7" of Hg until the brakes bite at which point the brake force can be manipulate by applying or destroying vacuum
- To hold a steady vacuum put the brake into off and have the small ejector open a crack
- Avoid the use of the large ejector except when stationary or if you are going to pull up too soon
- Do not stop with the vacuum brake fully applied passengers will not like it!
- When handling fitted or unfitted trains make a light brake application or apply the locos handbrake until all the wagons have bunched up before making a full brake application, this is to prevent couplers snatching.
- Try to stop with the brakes releasing with a pressure of about 12" Hg just as you pull up.

FIRING TIPS

The firing of Jinty will vary quite considerably depending whether you select the advanced or standard version, generally the Advanced version is harder to fire and get right than the standard version. The Standard version has the normal basic firing controls and can be used with the auto fireman. The Advanced version is not compatible with the auto fireman and has more complex firing controls.

Fire

- The ideal "firemass" for the Jinty 530 lbs of coal, you should aim to keep the fire around that mark.
- The smoke colour will also give you an indication of the state of the fire, clear smoke indicates either too much air or you need to add coal, black smoke indicates the fires got too much coal on it and heats being wasted, if this occurs stop firing and open the fire doors and put the flap up and let it burn through. Black smoke may also indicates too little air getting to the fire, you may want to check whether your dampers open if you get black smoke.
- Pale yellow/grey smoke indicates the fire isn't up to temperature.
- Light grey smoke is ideal, when the smoke clears and the white of steam can be seen you can now add coal, keep adding until the smoke goes grey and then close the fire doors.
- The tactic of "little and often" does apply, do not put too much coal on the fire otherwise you may ruin it.
- If the boiler is generating more steam than is needed the damper may be shut, this will cool the fire down and reduce steam generation, but be make sure you open again it advance of needing more steam!
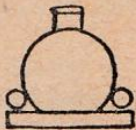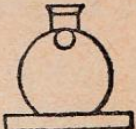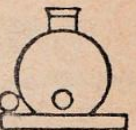
Water

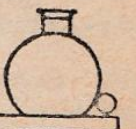- Try to keep the water level of the boiler about the 3/4 of a glass mark.
- To test the water level of the boiler the gauge glass drain valve may be opened then closed to help see the level.
- Do not let the water level get to high, if it does the engine will start to prime, if the water gets about 1.05 open the cylinder cocks immediately to prevent water building up in the cylinders.
- If you here the pitch of the injector drop it's a good sign the water level is getting way too high.
- The optimum position of the water handle is about 3/4 of its travel with the steam valve fully open, partial feeds may also be used but the steam valve will need to be partially open.
- If the injector "sings" then the feed is optimally set for that water valve opening.
- If the pitch of the injector is low and quiet, or the injector is blowing back the water handle is incorrectly set and needs to be adjusted.

LIST OF CONTROLS

| Regulator	Open	Hold **A**	**Left Injector Water**	Open	Hold **K**
	Close	Hold **D**		Close	Hold **Shift K**
Reverser	Forward	Hold **W**	**Left Injector Water**	Open	Hold **L**
	Reverse	Hold **S**		Close	Hold **Shift L**
Reverser Latch	Release	Hold **E**	**Right Injector Steam Valve**	Open	Hold **I**
Brake handle	Off	Hold **:**		Close	Hold **Shift I**
	On	Hold **'**	**Right Injector Steam Valve**	Open	Hold **O**
Fulcrum	Push In	Hold **[**		Close	Hold **Shift O**
	Pull Out	Hold **]**	**Firing Rate**	Increase	Hold **F**
Brake hook	Up/Down	Toggle **P**		Decrease	Hold **Shift F**
Large ejector	Open/Close	Toggle U	**Damper**	Open	Hold **M**
Small ejector	Open	Hold **J**		Close	Hold Shift **M**
	Close	Hold **Shift J**	**Blower**	Open	Hold **N**
Whistle	Blast	Tap **Space**		Close	Hold **Shift N**
	Continuous	Hold **B**			
Handbrake	Apply	Hold **/**			
	Release	Hold **Shift /**			
Sander	Handle Up	Hold **X**			
	Handle Down	Hold Shift **X**			

Standard Classification and Code of Head Lamps or Discs—*continued*

Description of Train	Maximum Speed m.p.h.	Classification (first frame of indicator box)	Head Code (white lights or discs)
Express passenger train, newspaper train or breakdown van train or snow plough going to clear the line or light engine going to assist disabled train. Officers' Special train not requiring to stop in section.	—	1	
Ordinary passenger train, mixed train, or breakdown van train not going to clear the line. *Branch passenger train.	—	2	
Parcels, fish, fruit, horse, livestock, meat, milk, pigeon or perishables train composed entirely of vehicles conforming to coaching stock requirements. Empty coaching stock train (not specially authorised to carry "1" head code).	—	3	
Express freight train pipe fitted throughout with the automatic brake operative on not less than 90% of the vehicles.	55‡	4	
Express freight train partly fitted with the automatic brake operative on not less than half of the vehicles.	50	5	
Express freight train partly fitted, with the automatic brake operative on not less than 20% of the vehicles.	45	6	
†Express freight train not fitted with the automatic brake.	40	7	
†Through freight train not fitted with the automatic brake.	35	8	
†Branch or stopping freight train and Officers' Special train or ballast train requiring to stop in section.	35	9	
Light engine or light engines coupled. Engine with not more than two brake vans.	††	0	

The above arrangements do not apply on the Southern Region, except where specially authorised.

NOTES:—

‡ A maximum speed of 60 m.p.h. will apply in respect of certain trains specifically indicated in the Working Time-tables.

† Where fitted vehicles are required to be placed next to the engine and coupled up, this will be shewn in the appropriate Regional train loading instructions.

†† According to class of engine and type of brake van.

* To be used only where authorised by the Regional Operating Officer.

Empty wagons and ballast trains should run at the highest classification appropriate to the braked portion available and the type of wagon conveyed.

WEIGHTS

BOILER
FIREBOX

TUBES

HEATING SURFACE

GRATE AREA.

ADHESION FACTOR 5.32
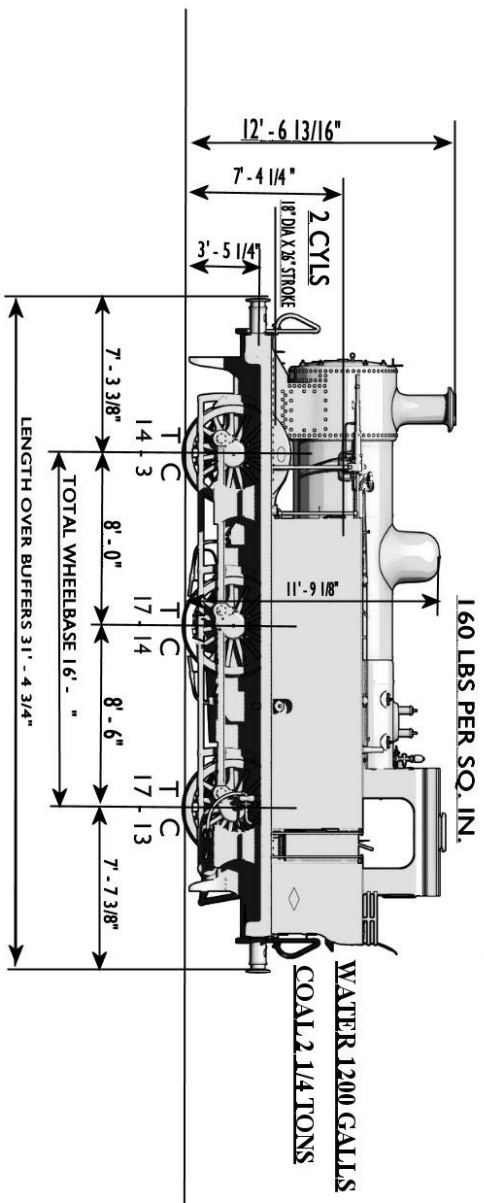
DESCRIPTION.

BARREL 10' 4 3/16" DIA. OUTS. 4' - 1" INCREASING TO 4' - 2".

OUTSIDE FIREBOX 5'-5 15/16" X 4' 0 1/2

SUPERHEATER ELEMENTS — DIA. OUTS. — SWG.

LARGE TUBES — DIA. OUTS — SWG.

SMALL TUBES 194 - 1 3/4" DIA. OUTS. X 12 SWG.

TUBES	967.5	SQ. FT
FIREBOX	97.0	SQ. FT.
SUPER HEATER	—	
	16.0	" "

TRACTIVE EFFORT. AT 85% BP.   20, 830 LBS.

BRAKE % 63.7

0-6-0 FREIGHT ENGINE Nos. 47200-47681

12' - 6 13/16"

7' - 4 1/4 "

3' - 5 1/4"

2 CYLS

18" DIA X 26" STROKE

LENGTH OVER BUFFERS 31' - 4 3/4"

TOTAL WHEELBASE 16' - "

7' - 3 3/8"   8' - 0"   8' - 6"   7' - 7 3/8"

T C   T C   T C
14 - 3   17 - 14   17 - 13

11' - 9 1/8"

160 LBS PER SQ. IN.

WATER 1200 GALLS
COAL 2 1/4 TONS

WEIGHTS

		T. C. O.
LIGHT		38 - 6 - 0
LOADED		49 - 10 - 0

RADIUS OF
MINIMUM CURVE
6 CHAINS (OR 4 CHAINS DEAD SLOW)

L. M. S.
DRAWING OFFICE
DERBY

16

INCLUDED LIVERIES

Official Liveries

LMS Early (1924 – 1928) - This was the first standard freight engine livery and was introduced from the formation of the LMS, it began to be phased out in 1928.

LMS Late (1928 – 1948) - This is the most typical livery of the later LMS period. This style began to be applied in 1928 and had several variations. Our livery most accurately represents the initial 1928 style of font with most engines carrying it until nationalisation.

BR Early (1948-1950) - This livery first began being applied in 1948, however not all engines received it many carrying their old LMS liveries, it began to be phased out in mid 1949 however some engines carried it into the 50's.

BR Mid (1950 – 1956) - This livery replaced the earlier style with most if not all the class receiving it. This livery features the BR 'monocycling lion' and lasted until the late 1950's.

BR Late (1956 – 1968) - This livery was first introduced in 1956 and replaced the earlier 'monocycling lion' with a 'ferret and dartboard' crest. The livery began being applied in February 1957 but took many years for all engines to receive it. This livery also features Overhead electrification warning flashes introduced in 1960.

Unofficial Liveries

BR Late Special – This livery of representative of some of the class which got decorated by shed staff in order to improve the appearance of their engines, such examples include Preston's Station Pilot 47472.

NCB This livery represents 47445 which was purchased by the National Coal Board in 1967 for work at one of its collieries near Wakefield. Note: This engine is steam brake only.


Note: BR Mid also has a steam brake only version. This is representative of the 50 engines built without any vacuum brakes.

Note: Numbering scheme:

The locomotive number can be altered in the scenario editor. Once the loco has been placed double clicking on the engine will bring out a pop out on the right side of the screen, the loco number may be entered into the box in the format shown below:
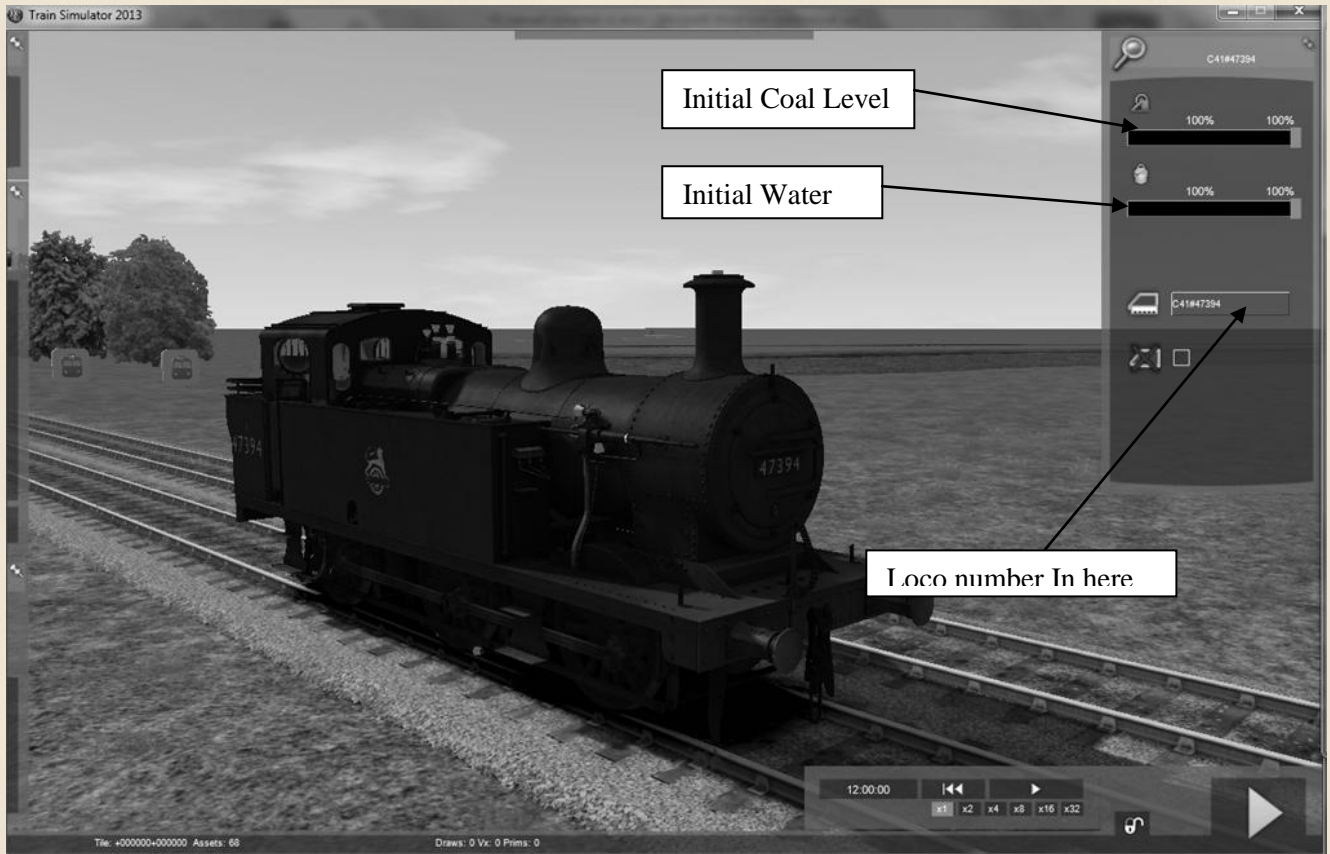
LMS Early: 18#16414 - First two digits are the 2 digit shed code , last 5 digits are the locomotives number.

LMS Late: 18#7405 - First two digits are the 2 digit shed code, last 5 digits are the locomotives number.

BR Liveries: D26#47324 - First Letter is the letter of the shed code, next 2 digits are the shed code number, last 5 digits are the locomotives number

NCB: A00#47445 - First 3 digits are unused, last 5 digits are the locomotives number.

Wagons: 419599 - Wagon numbers may be altered in a similar way. The 6 digits are the wagons number.

Note : On the same pop out the initial water and coal levels can be selected as a % of their respective maximum (1200 gallons of water and 2.25 Tons of coal).

WAGONS

The wagons included are variants of LMS 12T open and LMS 12T covered wagons. Each version includes a fitted and unfitted version. Each of the open wagons include loaded variant which can either be filled with gravel, milk churns or general goods covered with a tarpaulin. Please note that due to the way the setup wagons it is not possible to load wagons during a scenario, they can only be placed loaded or unloaded. The pack also contains a brake van of the BR Diagram 506 and is fitted with vacuum brakes.

LMS 12T Open Wagons

LMS 12T Covered Vans

BR 20T Brake van

SCENARIOS

Intro A basic scenario giving you an introduction in how to operate the locomotive, there are some interesting new features you may want to look at and learn how to use! This scenario is only available for the Advanced [ADV] version of the locomotive. Have an easy drive with some wagons to Dumfries. This is a good time to learn and get used to the controls.

Days Duty Today you will be running a local passenger service, but first you have a few shunting tasks you'll need to complete. There are Mk1 coaches all over the place and you'll need to shunt them together for a later express services. You'll be driving to Newton Stewart stopping at all stations.

Shuffling You have a long schedule ahead of you, with quite a few shunting tasks. Take your time and keep checking your task list for instructions. There are lots of wagons scattered around in sidings and they need organising, as well as a number of Mk1s which need to be prepared for service.

The Local Haul Some light shunting tasks and a short run to Dalbeattie. Keep your eye on your task list and keep a look out for other services on and about the line.

The Local Service The local passenger service to Kirkcudbright stopping at all stations with a strict timetable to stick to. Make sure you stick to the schedule so you can make it to the stations on time. Good luck!

All scenarios, except the first, support the standard and advanced versions, they are defined using [Std] for Standard and [Adv] for Advanced.

Reskinning/Sound Policy

Our (Meshtools) re-skin policy for the Jinty add-on is as follows:

We generally allow re-skins of our work to be done. Permission needs to be sought prior to the creation of the re-skin. Contact us at Meshtools by filling in a support form on our website at http://www.meshtools.co.uk/contact ,

We would also like for you to inform us how your re-skin is going and if any improvements can be made to make re-skinning easier. Approval should also be sought before uploading it to any site.

The re-skins must not include the shape files, child object files, simulation files, script files, sound files or animation files, but it can include the loco bins if needed.

No modifications to any of the sounds is permitted, any sound modifications must be done from scratch and not based on the included sound files, this includes both .xml and .bin file. Sound modifications must not use or include any audio files such as .wav or .dav files included with the add-on.

THANK YOU

Meshtools would like to thank you for buying the Jinty model. We hope you enjoy driving it, should you have any problems please contact us through the contacts page on our website at: www.meshtools.co.uk

Please feel free to suggest any improvements that could be made either for this or future add-ons.

CREDITS

Thank you to all those who those who helped out, contributed and gave their own time to this project! Without them it would not be possible to release this model to you.

Also, thank you for taking some time to go through and read this manual, we hoped it helped answer some of your questions or any problems you've been having! I'd also personally like to thank you for purchasing this addon and supporting us. We hope to bring you a lot more exciting add-ons in the future!

Major contributors:

Michael Whiteley: 3D modelling, texturing, animation, route building, scenarios, research and live steams.

Edward Fisk: Sounds, simulation/physics, scripting, quality control, support, research and live streams.

RailSimulator.com: support, publishing and testing.

Additional contributors:

Simon Hall: Programming/scripting and testing.

Pete Gillam: Additional Programming/scripting and testing.

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Our group of enthusiastic beta testers!

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http://www.eastlancsrailway.org.uk/

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http://www.kwvr.co.uk/

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