

Guards Handbook.

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Introduction.

This handbook is designed to help you carry out the role of a guard in a working environment at the Middleton Railway. It focuses mainly on the role of a passenger guard, since most of the trains that are operated are passenger trains, but it also provides brief coverage of the role of a goods guard. It should be read alongside the Railway's Company Rules (Rules), General Regulations (Gen Regs) and Train Operating Regulations, (TOR) and provide a cross-reference to the relevant parts of these.

Anyone wishing to train as a guard must consult the Traffic Manager in the first instance, to arrange to 'shadow' a guard as a travelling ticket inspector (TTI). This will allow you to see first-hand what the guard's role involves and, under their supervision, to accumulate practical experience in that role. Guarding is a safety-critical role, and so the MRT's medical fitness procedures apply to it. Anyone who has passed the Railway medical and is at least 18 years old (the minimum age for a guard) and has accumulated suitable practical experience may ask to take the guards' examinations. There are two of these: one, covering knowledge of the rules and regulations, and the other a practical examination.

Section 1 – The Role of a Guard.

There are two forms of the role of a guard (TOR sections H and I). The most common form is that of a passenger guard, who acts as the guard for a passenger train, since most of the trains that are operated at the Middleton Railway are passenger trains. The other form is that of a goods guard, who acts as the guard for a goods train. (Goods trains may be engineering trains or Demonstration trains at Galas.) Most of this handbook is concerned with the role of passenger guard, but section 8 briefly explains the extra responsibilities that a goods guard has.

The role of a passenger guard has two parts. One part is to be responsible for the safety of passengers, in collaboration with the locomotive crew. The other part is to provide effective customer service to passengers by welcoming them to the Railway, by checking tickets and providing them with information.

Your responsibility for passenger safety begins with the process of preparing for duty, as described in section 2. It also includes managing your own safety, as described in section 3, as well as the various tasks that need to be done when working the trains, as described in section 4, and some additional aspects that are covered in section 7 and Appendices A,B,C

Communication is an important part of both managing passenger safety and providing effective customer service to passengers. The procedures that are needed for these are described in sections 5 and 6 respectively.

Section 2 – Preparing for Duty.

2.1 If for any reason you are unable to make your rostered duty you must as soon as possible contact the Traffic Manager or Roster Clerk, so that arrangements can be made to find an alternative member of staff to cover the turn. If you have difficulty in reaching the railway whilst on route, please call the shop to advise. (0113 2710320)

2.2 You must arrive at the railway not less than 1 hour before the departure of the first train. On arrival you must sign in for duty at the shed signing on point. (Gen Regs 9 / 17). By signing, you confirm you are fit for duty and not under the influence of alcohol, drugs or any other medication that may affect your duties.

2.3 **Yo**u must then read any Special Traffic Notices, (STN's), timetables, and any other Relevant notices posted at the signing in point. (TOR section A).

This is particularly relevant on turns during galas, charters or other special events where "non-standard" train movements are likely to occur.

2.4 You must make sure that your appearance is appropriate as you will be working in public view. Sensible, sturdy footwear is also needed as you will be required to work on the track whilst preparing the vehicles for the day's service. Some guards also prefer to wear a long "prep coat" and gloves whilst preparing the stock so as to avoid dirt or oil getting onto their smart clothes.

Section 3 - Track Safety.

3.1 When working on or near the track it is always important that you are aware of all safety procedures, (Introduction to Railway Safety briefing).When walking on the track-side, you must be aware of any train movements around you. Walk on the ballast, rather than the sleepers as these can become slippery with oil etc. and during wet weather. When crossing over lines you should step over rails rather than on them. This also applies to point rodding. Caution must also be taken whilst working near point blades and under no circumstances should you place any body part foul of any moving parts.

3.2 If during the course of your work a train approaches, the driver will whistle to you (*Gen Regs* 27). At this point you must stand clear of the track and acknowledge by raising one hand above your head. Drivers will "pop" their whistle again acknowledging that you have seen them. If you are using any tools or equipment whilst working on the lineside you must make sure that they are left at least 4 feet (1.2 Meters) clear of the lineside and not left fouling any lines.

3.3 You must be proficient with both hand and lamp signals, along with audible whistle signals for both guards and locomotives (TOR section E).

Section 4 - Working Trains.

4.1 Normally the passenger coaches are kept in the Richard Holland Carriage Shed. This building is accessible via the platform. Entry is via the red side door. The building is alarmed and this must be deactivated on entry. The roller shutter door isolation switch is located to the right of the operating control on the right hand side of the roller shutter door.

4.2 To ensure all is order with the coaches you must:

- * turn off the wall charger switches and disconnect and store safely the orange charging cables.
- * turn the battery isolator switches to ON (switch vertical).
- * check the vacuum relief valve (fitted under the veranda coach) if coach used is set correctly. Steam, handle parallel to pipe, Diesel, handle 90 degrees to pipe.
- * inspect the coaches for possible damage both inside and out.
- * in warm weather, open all windows.
- * in cold weather, check the heaters work (Appendix A) and that the diesel tanks are well filled ask for help from the crew to top up the tanks if required.
- * complete the top part of the "Fitness to Run" form

4.2.1 Any defects must be logged on the Fitness to Run (FTR) sheet. However any serious defect that needs attention must be brought to the attention of a senior engineer (Gen Regs 16); if the defect is serious then it must also be reported urgently, either in person or by telephone to the Traffic Manager, Chief Mechanical Engineer or any available Council member on site.

4.3 Ensure you have all the equipment required on the train.

Fire extinguisher, First Aid kit, access ramp, tail lamp, red and green flags, the guard's bag, blue paper roll, black bin bags and spare leaflets to refill containers on the coaches. These items are normally all kept in the guards' compartment.

The guard's bag with tickets, a small float, a carriage key and the portable radio are kept in the shop. Test the radio before you leave the shop.

The plastic "Rescue" boxes with ladder securing straps and HV vest are stored in the Guards compartments.

4.4 At the start of the day the train crew MUST perform a brake test (TOR section G), and while the responsibility for carrying out this test rests primarily with the driver, they do need your assistance. The purpose of this test is to check that the continuous train brake (vacuum brake) is operating correctly on all vehicles. To do this, the locomotive will couple onto the train and create vacuum. You must check on your vacuum gauge that vacuum has been created and has reached a minimum of 18 inches of mercury required for passenger operations. Ideally 21 inches will be created, but this can vary.

4.4.1 You must check with the driver that you have the same or nearly same reading on both the rolling stock and the locomotive (dependent upon gauge calibration). Either you or the driver should then walk onto the trackside and kick the brake blocks of each axle, checking that they are loose and the brakes are released. If this is all correct, one of you should then remove the rear vacuum pipe from its "dummy". This will destroy the vacuum and apply the brakes. Again you or the driver should check the brakes have come on, by kicking the brake blocks. These should now be hard against the wheels and not move. It is also important to check that the guard's vacuum gauge is reading 0.If all is correct, the rear vacuum hose must be re-connected allowing the vacuum to be recreated.

4.4.2 Whilst walking alongside the coaches, be aware if a steam engine is using its injector as there could be a discharge of water or steam.

You must also check that the emergency valve located in the guard's compartment is working correctly. Once satisfied, you must tell the driver that the brake test is complete, and then record it on the Fitness to Run checklist, and sign and date it. If during the day, any item of rolling stock, or a different locomotive is used, the brake test must be repeated in its entirety and recorded in the log book. (TOR Section G)

4.4.3 The guard's log (blue folder) contains pre-printed sheets. These are the daily inspection sheet, record of brake tests and records of passenger numbers for each journey. These numbers are required by the commercial department to record passenger numbers per trip which we have to supply to the Heritage Railway Association.

4.5.1 As departure time approaches, start preparing the train, (TOR section H). Firstly you must check that the required vacuum has been created. Then you must check that all the doors have been closed properly before releasing the handbrake. You must then stand in a position on the platform where you can see all the doors are securely closed before giving the correct "right away" signal (TOR section F).

4.5.2 Once the train is moving you must keep a proper lookout from your compartment to make sure that nobody tries to get on or off the train. When the train approaches the tunnel the lights must be turned on, and then off once it has fully left the tunnel. The light switches are located in both the Guards compartments and either can be used to operate all the train lights or just the Guards compartment light. After this point is the best time to check the passenger's tickets.

4.5.3 Once the train approaches Park Halt station you must again keep a look out from your compartment. When the train comes to a stop, you must wait until the vacuum has been dropped and then apply the handbrake firmly. Then, check ALL coaches are located with doors on the level part of the platform. If not, action must be taken to ensure passengers **do not** use any exits not on the level platform.

4.5.4 The tail lamp must then be moved to the rear of the train. Once the locomotive has run round, you must instruct the driver to proceed to the train (TOR Section G) and observe the crew coupling up and satisfy them that all is correct and ready for a return to Moor Road.

4.6 Sometimes for unexpected reasons it is necessary for the train to be stopped away from a station. In these cases you will become aware of the train stopping. You must immediately return to the guard's compartment and watch proceedings from the window and await instructions from the driver. If for any reason the train is held for more than a few minutes, the driver may request that the handbrake should be applied. When the driver is ready to start, he will advise you and then you will need to give a start signal in line with normal dispatch procedure. (TOR Section F.) Normally you would not need to leave the train, but remain with the passengers. The driver may walk down the train to confer with you if the situation is causing a serious problem. In the event of a locomotive failure, the driver will advise you so arrangements for a rescue loco may be made. In cases requiring external assistance, you should notify the shop staff by radio or telephone of the problem so waiting passengers can be advised of a delay. Do not forget to keep the passengers on the train updated if there is to be a long delay.

4.7 Normally the passenger coaches will be stabled back in the carriage shed. After the return of the last train, these will need to be propelled with the guard acting as shunter giving the appropriate hand signals (TOR section E).

- The handbrake must be firmly applied when they are stopped in the correct position.
- The batteries must be isolated using the switch on each coach, (switch horizontal), the charging cables can then be connected and the battery chargers switched on.
- The vacuum relief valve may need to be set to the appropriate position ready for the next operating day.
- The front end vacuum hose will normally be left off the dummy by the engine crew. At this point the strings for each vacuum cylinder must be pulled, allowing the pistons to drop fully, releasing the vacuum brakes.
- The coaches must be swept, mopped if required and checked for any lost property.
- When closing the pedestrian roller shutter door, ensure the door is fully down and the locking bolts are fully inserted.
- The waste bins on the platform should be emptied at the end of the day.

Section 5 - Communication.

5.1 On normal operating days radios are provided for communication between the guard and Engine House Shop. Radios should be set to the appropriate channel (normally 2). On special events radio communication may also be used for the purpose of train control. Care must be taken when using radios as to what is said, as members of the public may be able to hear other radios.

5.2 Any occurrences of stone throwing must be reported to the shop. The shop staff will make any reports to the police that are necessary. Any occurrences of late running (more than a few minutes) must also be reported to the shop so that they can inform customers.

Section 6 – Providing Effective Customer Service.

6.1 Tickets must be checked on each trip, Ticket clippers are kept in the guard's bag that is obtained from the shop. Any special instructions regarding the checking of tickets (for example at galas, where special tickets may be issued) will be issued by the ticket office duty manager.

6.2 Sometimes people wish to board the train at Park Halt. If it is possible to sell them a ticket on the train then this should be done. If, however, this is not possible, then they must be asked to pay at the shop once at Moor Road. The guard must advise the ticket office, they are sending passengers down who require tickets.

6.3 As acting as guard is very much a "front of house" job, please be polite and patient with members of the public. Please remind people that their tickets are valid all day and try to make their stay as pleasant as possible. If you are asked any questions that you do not have the answer to, please try and find someone who does. The railway prides itself on a "can do" attitude. Try to stay as clean as possible during the day and give the public a smart impression.

Section 7 - Other Aspects of Passenger Trains.

If the locomotive is only crewed by two people then (especially on steam days) it can become quite hard work for the crew to do all the uncoupling, watering etc. Sometimes this (especially taking water) can also cause lateness. If you are qualified as a shunter, and so are authorized to operate the ground frame at Moor Road, then you could help by working it. This may save a few minutes, which will be appreciated by everybody.

Section 8 - Goods Rolling Stock.

8.1 Goods rolling stock is used for two kinds of trains. One kind is fully vacuum fitted and is classed as a passenger train, so that passengers may be carried as usual in the brake van, or in the coaches if they form part of the train. The guard's role for such trains may be carried out by any qualified passenger guard.

8.2 When such passenger trains are being operated the goods rolling stock will either be empty, or any load will have been checked before the train is operated to ensure that it is safe. Thus, the responsibility that you have for such goods vehicles is the same as for passenger vehicles, namely to ensure that the daily inspection is completed and its results recorded in the defect sheet (as described in 4.5), and to ensure that all vehicle doors are properly secured before the train sets off.

8.3 The other kind of goods train is where at least some of the vehicles are not vacuum fitted, so that passengers may not be carried. The guard's role for such trains must be carried out by a qualified goods guard, and involves two additional responsibilities.

8.4 One additional responsibility of a goods guard for a goods train that is not fully vacuum fitted is to assist the locomotive crew with managing the braking on the train. This may involve pinning down wagon brakes before descending inclines, either from Park Halt to Moor Road or from Moor Road to Balm Road, and subsequently releasing them. In these cases brakes should normally be pinned down on one wagon in three, but the driver may decide that more brakes than these need to be applied. The guard should also be ready to apply the brake in the guard's van if given the appropriate signal by the driver.

8.5 The other additional responsibility of a goods guard for a goods train that is not fully vacuum fitted is that the goods vehicles may be carrying loads, and if so then the guard is responsible for ensuring that the loads are safely stowed and adequately secured. For works trains the guard may be assisted in this by the engineers responsible for the running of the works train, since as part of this they will be responsible for the loading or unloading of the wagons.

Appendix A

Coach Heater Operation

The coaches are fitted with individual heaters with a separate heating control for each coach. These heaters provide the facility to heat the coach or supply fresh air at outside temperature to ventilate the coach.

Important Note. After turning off any heater, DO NOT turn the main power switches OFF until all the heaters have stopped running. (This is to clear any residual fuel / heat from the unit, failure to do this can cause operating problems later.)

Coach: - Braked Saloon 1074

(Control located on East side wall of Guards Compartment.)



<u>Heating</u> – Turn Black centre knob clockwise to turn on heater and further to increase heat to desired setting.

To turn off heater, turn knob fully anticlockwise, until it clicks off.

<u>Ventilation</u> – **Operate "VENT"** switch on right hand side of plate.

Turn centre knob clockwise to increase air flow speed.

To stop ventilation, turn centre knob fully anti-clockwise to switch off then turn off "Vent" switch.

Coaches: - Non Braked Saloons 1867, 2223, Veranda Coach 2084, NE Brake van



Veranda Coach – (Control located on North panel at east side of guard' compartment.)

Non Braked Saloons – (Control panel located on East side of passenger area.)

<u>Heating</u> – Press top left hand button. Red LED lights. Adjust heat with central knob to give the desired heat setting. Clockwise increases heat.

To turn off heating, Press top left hand button, red LED should extinguish.

The temperature button, (marked "°C") switches the heater to thermostatic mode. The heater will switch to a cool down cycle once it has reached the selected temperature.

Ventilation – Press bottom button (marked with fan symbol). Green LED lights.

To stop ventilation, press bottom button, green LED should extinguish.

NE Brake Van

Battery Isolation switch and Heater control are inside the van on the East side at the end of the bench seat. Heater operation is as coaches 1867, 2084 or 2223 above.

Appendix B

What 3 words locations.

Balm Road Loop / Level Crossing – taxi, split, salt Beza Road Level Crossing – player, wallet, trace Moor Road Level Crossing – scout, swung, gifts

Moor Road Station – socket, gather, chin South Gates Footpath Crossing – boil, salad, name Dartmouth Junction – rails, slams, limbs Footpath Crossing GN curve – shave, wide, reveal John Charles Approach Bridge – raves, humans, mount Park Halt Station – sparks, noses, silly

Useful Telephone Numbers

Emergency Services -Police, Fire, Ambulance 999

Railway Shop - 0113 271 0320

Railway Shed - 0113 270 6162

Appendix C

First Aid required during journey

Should minor first aid be required during the journey, passengers may be offered the use of a first aid kit carried on the train. Soot or cinders in the eye should (if practicable), wait until the train returns to Moor Road where eye wash facilities are available.

In case of major incident, the WYMAS ambulance response time is between 9 and 51 minutes for a Heart attack or stroke. As there is no easy road access to the railway line at Park Halt or at the school footbridge, in event of a major requirement for an ambulance, it is recommended that you advise the train crew of the emergency and then decide the best method of return to Moor Road, ensuring the ambulance service is called immediately and advise you will meet them at Moor Road platform. Do not forget to advise the shop of what is happening so they can meet the crew and take them to the platform. Evacuation of a seriously ill patient would not be easy up the line, so using the level platform would speed access.

Due to the number of variants of what is possible, decisions must be left to the crew to decide the best cause of action in the patient's best interest taking advice from the emergency service advisor.

Appendix D

Train Evacuation Guidance

In the guards compartments are plastic boxes containing a HV coat (for ease of identification), and various straps to secure the ladder to the coach body.

Under normal working conditions, there should be no need for passengers to exit the carriages except for normal loading and unloading at Moor Road and Park Halt platforms.

There are two basic reasons that passengers may need to be evacuated from the coaches,

- (a) Inability to continue to a platform due to vehicle derailment, track or local environment damage or closure of the station due to local emergency.
- (b) Due to a fire possibly involving either the locomotive or rolling stock.

The failure due to (a) is not considered to be an urgent evacuation and time is not critical.

In the case of (b) Fire, then this is a time critical evacuation.

How to proceed. - Non Time Critical evacuation.

Co-operation is essential between the train crew and guard staff at all times. Please work together.

In all cases, the shop should be advised as soon as possible of what has happened so waiting passengers can be advised and assistance form workshop staff can be arranged as required.

Handbrakes must be applied to prevent movement of stock. The vacuum brake should not be relied on for holding the stock.

Where available the TTI should be used to advise passengers of what has occurred and what is to happen next.

The guard should set the ladder (from the Guards Compartment), from the Guards Door to the ground. This must then be secured with straps to prevent movement. The colored end of the ladder must be uppermost. The straps should be used to prevent the ladder moving away from the coach by positioning the straps to the coach at the top and bottom of the ladder.

Passengers should be assisted to step onto the ladder by the guard whilst another crew member must be on the ground to assist the passengers using the ladder. Use of the handrail must be emphasized for safety.

If other members of staff are available, able bodied passengers may use the crew steps on the coaches to exit, but there must be a railway staff member in attendance to ensure they can reach the steps securely.

If required, passengers' prams can be lifted out from the coaches, care being taken to keep them level.

If there is any difficulty with a passenger with disability needing assistance to exit, then the possibility of calling the emergency services to help must be considered.

If required to speed up evacuation, ask passengers to leave bags behind and they will be passed down at the end.

How to proceed. - Time Critical evacuation.

If there is a fire, it is most likely to be due to the locomotive causing this. The coach heaters are enclosed and have over-heat protection, though they could still cause problems.

STOP the Train; make the crew aware of the problem, then depending on the situation will result on what appropriate action to take. Notify the shop immediately.

Decide what to do. If fire seems serious, or could become serious, **call the Fire Brigade Immediately**. Do not hesitate. Use **THREE words** for location and give any information about best possible road access (if known) to required location.

If the heater is the cause of the possible fire, usually excessive smoke would be seen, if possible turn off the fuel supply to the heater. This is a knurled knob on a metal can located near the coach fuel tank. These taps are on the EAST side of the coach. These are labeled -Turn clockwise to close. This will stop fuel to the heater.

If one coach is affected, move passengers away from that coach via the gangways to the other coaches.

If you feel confident, use a fire extinguisher, these are in both guards' compartments.

Use all available staff to position the ladders as above and assist passengers from the coaches.

The driver or fireman may consider splitting the train if possible, but no risks must be taken.

How to use Buckle Strap



Published by the Middleton Railway Trust Ltd, The Station, Moor Road, Leeds, LS10 2JQ. Registered Charity No. 230387.