

NEW ZEALAND RAILWAYS

Local Instruction No. L739

Sheet No.1

No of Sheets: 4

UPPER HUTT : LOCAL INSTRUCTIONS FOR UPPER HUTT YARD AND REMOTE CONTROL OF
TRENTHAM.

The points and signals as shown on Circular S. & I. No.739 are controlled from and indicated on a control panel in the station building. The control panel also includes controls and indications for certain signals and points at Trentham when Trentham is unattended as described in Circular S & I No.726.

TRACK DIAGRAM

The track diagram incorporates the following indications :

Track Circuit Indications

The twin red lights on the track are illuminated when the track circuit is occupied

Pilot Light

Indicates that the power supply to the diagram is alive.

CONTROL PANEL.

Signal Levers.

All signals are controlled by two position control switches, the normal positions of which are to the left.

The red indication above the signal lever indicates that all signals controlled by that Lever are at "stop".

The green-light indicates that a "proceed" aspect is displayed.

In the event of failure of C.T.C. Control 8R emergency lever may be operated when it is necessary to clear the Up Departure Signal. This lever is for emergency use only as directed by Train Control

It should be noted that the Up starting signals cannot be cleared for a normal speed movement unless 8R signal is off. Also Outer Home signal No.60 cannot be cleared unless Home Signal No.59 is off.

Points Levers.

A points lever must not be operated unless the "F" light above it is illuminated.

TIME RELEASES.

Electrically operated time releases work in conjunction with the approach locking of all signals.

Any signal may be replaced to "stop" by restoring the lever, to the normal position at any time but if a train is indicated on the approach track circuit to the signal no alteration to the route can be made until the automatic time release has operated.

Time releases are set as follows:

Signal Nos.	31, 36, 52, 59, 60.	90 secs.
Signal Nos.	32, 38, 39, 51, 53, 54	60 "
Signal Nos.	57	30 "

A special time release is provided to release the backlocking of Nos.31 and 59 signals. If a train is signalled into the station by No.31 signal and comes to rest still occupying 41T no opposing or fouling moves can be made. Similarly with 59 signal and 49T or 46T track circuits. This backlocking may be released after replacing the lever to normal by pushing "Time Release" plunger and holding it in for 60 seconds.

OVERLAP TRACK CIRCUITS

The track circuit controls of certain signals have been extended beyond the next signal in advance and the signal cannot clear to proceed until these track circuits as well as the track circuits over the route concerned are unoccupied.

<u>Signal No.</u>	<u>Route</u>	<u>OverLap Track Circuit</u>
31	Main	49T
	Loop	46T, 48T
59	Main	41T
	Loop	43T
60	Main	49T
	Loop	46T, 49T

LOW SPEED SIGNALS.

The following low speed signals are cleared by simultaneously moving the signal lever to the reverse and depressing the plunger below the lever:

31C, 36B, 53B, 59C.

Note: 31 Signal and 59 Signal will display medium speed to loop only if the road is trapped and unoccupied. 53 Signal will show "Proceed at normal speed" only if 52 Signal is also showing "proceed". The "low speed" light on 53 signal may be used to draw a train ahead.

POINTS AND ARROW INDICATORS.

The arrow indicators for 42, 43, 41 points are controlled by a two position switch below 42 lever.

The points and arrow indicators for 48 points are controlled by a similar switch above 48 lever.

While the arrow indicators are showing and the point indicator shows a yellow light the points cannot be moved, and will remain locked for 30 seconds after the arrow indicators have been extinguished and the point indicator has been placed at "stop".

MOTOR POINTS.

All motor points are of the type M5 & M2.

Crank handles for use in the event of failures are kept in sealed boxes in the following locations:

On the west side of the main line opposite No.43 crossover, and 46 crossover.

Trains may be hand-signalled over the motor points, past a "Stop" signal, if the appropriate "N" or "R" indication is displayed.

If neither the "N" nor "R" indication is showing the points must be isolated in accordance with Traffic Code Instruction: No. 37 Clause 5 before a hand-signal is given.

TELEPHONES.

A microphone and loudspeaker system is provided for the following telephone circuits:

- (a) Local telephones in the yard at Upper Hutt.
- (b) Local telephones at Trentham when Trentham is unattended.

Either (a) or (b) may be disconnected if desired by operating the appropriate key.

- (c) Train Control: The train control selector and bell operates in the normal fashion.

Any of the above circuits may be switched to the telephone instrument which is also provided for the following circuits.

- (d) Box to box: The telephone may be switched to this circuit by pulling the switch down. The normal bell code-ring works in conjunction with this circuit. Code ringing may be transmitted over the circuit by pushing the key switch up the required number of times.
- (e) Service circuit: Pulling the switch down connects this circuit to the telephone.

LEVEL CROSSING ALARMS :

Blenheim Street.

Level crossing barriers and flashing light signals are provided at Blenheim Street level crossing.

With the exception of movements to and from the South Backshunt trains will operate the barriers automatically when approaching the crossing.

On the south backshunt the start push button near No.32 signal must be pushed to lower the barriers which will remain down until the road crossing track circuit has been occupied and cleared again.

The claim established by operating the start push-button, may be cancelled by pressing the cancel push-button provided in the same box.

In order to ensure adequate warning for an Up train detained at No.31 signal a 15 seconds delay in the clearing of 31 signal when the lever is reversed comes into effect if a train is approaching or stationary at the signal. Similarly for signals Nos. 51, 53 and 54.

A white post marks the south end of the road crossing track circuit on the south backshunt.

If a Down train is standing on the main or loop then the respective starting signal should not be cleared until the train is about to depart or unnecessary delay to road traffic will be caused.

It will be found that under certain circumstances the reversing of a starting signal lever will not immediately clear the starting signal. This is due to interlocking between the barriers and signals in order to prevent a barrier which is lifting from suddenly falling again in the face of road traffic just released.

EMERGENCY MANUAL OPERATION OF THE BARRIERS AND POWER FAILURE.

In the event of a breakdown of the AC supply, the barriers will fall and remain down for 4 minutes, after which they will automatically rise.

During the time that power is off, each barrier may be operated manually

A switch in a locked up box at the relay location adjacent to the road crossing will raise or lower the barriers at will.

When power is restored the barriers will take up their automatic operation again.

If it is desired to operate the barriers manually while the power is "ON" it will be necessary to take the special key which is kept in Upper Hutt station office, insert it in the key switch at the barrier concerned and turn it. This will give absolute responsibility for the protection of the road crossing to the member operating the "Raise-Lower" switch adjacent.

King Street.

Bells are provided at King Street level crossing. Down trains operate the alarms automatically on approaching the crossing. Up trains also operate the alarms automatically provided 8R signal is at proceed. If an Up train is standing on the main No.36 Up Main starting Signal and 8R Up departure signal should not be cleared until the train is about to depart or unnecessarily prolonged operation of the alarms will result.

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DISTRICT TRAFFIC MANAGER

District Traffic Manager's Office
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