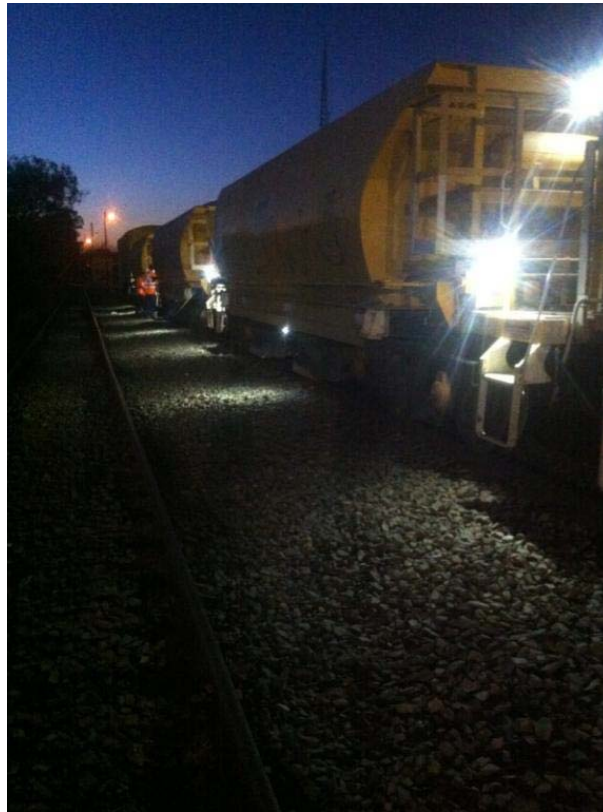


ARTC ADFR Remote Ballast Wagon

Lighting Manual

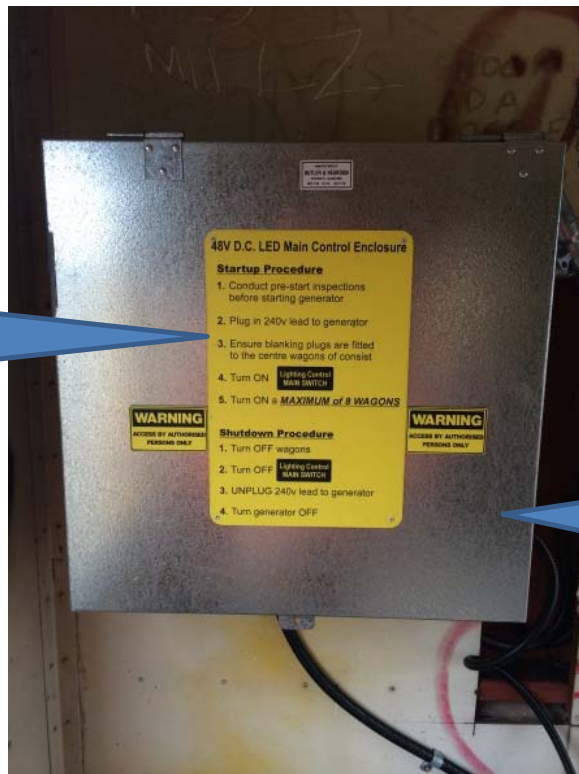


Key components of the lighting system -





Auxiliary 240V power points & circuit breaker (RCD)



Operating instructions for the ballast wagon lighting including generator start-up & shutdown procedure.

Electrical wiring distribution box for the ballast wagon lighting system. **This box is not to be accessed by unauthorised personnel.**

Ballast wagon lighting on/off switch. **A maximum of 12 wagons per generator** to be turned on at any one time



Electrical switch box, **not to be accessed by unauthorised personnel**

The sign below will be secured to a cable which is to be position between the two ballast wagons in the centre of the ballast rake. **Only a cable which has this sign secured to it is to be used in this location.**



Spare cables are available from the local area ARTC Plant Coordinator.

Operating Instructions for Ballast Wagon Lighting System.

Start-up Procedure

1. Conduct pre-start inspections before starting generator checking oils, fuel level & visual inspection of all electrical connections
2. Ensure **all** lighting switches are turned off on **every** ballast wagon. Failure to follow this instruction could overload the system & blow the electrical fuse or trip the circuit breaker, resulting in no lights on any wagons.
3. Ensure blanking plugs are fitted to the centre wagons of the consist



4. Prior to attempting to start the generator ensure engine stop switch is turned on, fuel is primed (if fitted) & the choke is in the on position.
5. Use the key start or pull start to start the engine
6. Turn ON a **MAXIMUM of 12 WAGONS** at any one time per generator. Failure to follow this instruction could overload the system & blow the electrical fuse or trip the circuit breaker, resulting in no lights on any wagons.
7. Prior to accessing the ballast wagon to be unloaded turn on the wagon lighting system via the wagon light control switch located adjacent to ballast door isolation valve on either side of the ballast wagon.



8. As each wagon is unloaded & prior to moving onto the next wagon turn off all lights via the wagon lighting control switch after all team members have alighted from the wagon.



Shutdown Procedure

1. Turn **OFF** all wagon lighting switches, both sides of the wagons



2. Shutdown the generator via the engine stop switch



3. Ensure all switches are turned off, fuel tap is closed & the generator is secure prior to alighting the plough wagon.

Trouble Shooting Section

<u>Problem</u>	<u>Possible Fault</u>	<u>Action Required</u>
Generator not starting	Low fuel	Check fuel level
Generator not starting with key	Flat battery	Use pull start
Generator starting but lights working & then shutting down after a minute	Not all lighting switches turned off prior to starting generator	Check all lights switches are turned off on every wagon prior to starting generator
Lights not working	Loose or missing wagon interconnector cable	Check all wagon interconnector cables
Lights work but then turn off	Check generator is still working	Restart generator
Some lights work but following wagons do not	Check wagon interconnector cable	Reconnect cable or replace – spare cables can be found in the plough wagon tool boxes
Some lights working but not all	Check light is still in place & wiring is ok	Report defect for future repair on the ARTC Ballast Unloading Report Form
Lights missing	Stolen	Report defect on the ARTC Ballast Unloading Report Form