10.3 Disclaimer

11. Contact

12. Pre-Start Checklist

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1. **General Information**

1.1 **Description of the Hi-Rail Unit:**

This vehicle has been equip with 2 Rail axles for use on track. The hyrail has been assessed to the vehicle’s intended GVM, 6500Kg.

The vehicles only use for rail is a flat top truck to gross vehicle mass.

The vehicle is propelled on track by the original vehicle drive axle, which is Load sharing with the rear hyrail axle.

A Fail-safe hand brake has been fitted to the all rail wheels of this vehicle to prevent any roll away potential of when the vehicle is being stowed on the track.
2. **Technical Data**

2.1 **Braking System**

- The Hyrail components of this vehicle are fitted with rail park brakes.
- These brakes are controlled by air over hydraulics pressure valves.
- Both truck and rail axle sets have independent circuits.
- For correct operation, the rail brake fluid must be checked frequently.
- Brake pad inspection is required before use and must have a pad thickness of 2-3mm remaining.
- Fail safe park brake is activated by the air booster spring when air pressure is lost.
- Before towing this vehicle, the brake system’s air boosters must be wound off for brakes to be released. This can only be done once connected to tow vehicle securely.

2.2 **Hydraulic System**

- This hyrail’s hydraulic system is supplied from an electric pump.
- When activating any switch on the hyrail control panel, the systems electric pump is activated, which supplies pressure to the hyrail circuit.
- This circuit is controlled by a pressure relief. This pressure is set for optimum use when transferring the vehicle from road to rail mode.
- The pressure of this circuit is critical and must not be tampered with by unauthorised personnel. To prevent this happening, the circuit’s relief valve has been fitted with tamper proof seal and should never be removed or broken.

2.3 **Electrical System**

- The hyrail electrical power is critical for use, and must never be switch off when on the rail.
- The power to the hyrail circuit is supplied from the vehicle OEM supply.
- The front and rear axles are fitted with Up/Down limit switches and must always be operational and adjusted correctly before use.
- Unauthorised personnel must not tamper with the Hyrail’s electrical circuit.
3. **Safety**

3.1 **General Safety / Equipment Safety**

- The Road Rail Pre-Start Checklist Must be used Daily
- The vehicle's engine must NOT be shut off when on rail
  - Unless Section 8 of this manual is followed correctly
- The Hyrail Power Switch Must NOT be shut off when operating on rail
  - If power is lost audible and visual alarms will not function correctly
- This Hyrail and its systems must not be modified without the manufacturer's consent
- Head lights must be ON at all times when operating on rail.
- Hi-rail brakes must be release when operating hyrail switches
- DO NOT carry out work under suspended Rail Axles without correct mechanical supports
- 3 Points of contact must be used at all time when accessing the vehicle
- ANY power driven equipment can cause serious injury and great damage if mishandled
- Only drive your vehicle when it is safe operating conditions
- Only make a move when you are certain it is a SAFE one, whether starting, loading, hauling, dumping or stopping your vehicle.
- Only work on equipment you understand thoroughly. Surprises can be fatal.
- If you are unsure about any matter- Please Ask
- Appropriate Personal Protective Equipment must be used at all times
- Do not operate this vehicle when a crushing hazard is potential (pinch points)
3.2 **Operation Safety**

- Check that all tyre pressures are set to the recommended pressure in the vehicle's handbook.
- Operators should familiarise themselves with the vehicle and its equipment before driving on the rail.
- Make several practice stops and starts daily during rail operations, particularly if the vehicle is operating with varying loads.
- Be aware that when on the rail, increased stopping distances are required.
- Never approach a crossing without care.
- Do Not overload the vehicle. Refer to the OEM rating of the vehicle specifications. **WHEN ON RAIL**
- Speed must be reduced when operating around curves or on branch lines. Maximum speed of 5km/h when travelling through Points and crossing.
- Do Not use the rail guidance system as a hitch for towing or dragging other vehicles
- Do Not exceed the speed limitations. Manufacturers rated maximum speed 30km/h.
- Vehicle must have current rail registration before use
- Driver must have appropriate qualifications to operate machinery (Track machine Operator)
- Vehicle owner/operator MUST conduct their own risk assessment before use of machine.
- Ensure path is clear before using/operating this vehicle functions.
4. **Operations**

For lowering and raising of the attached Hyrail gear please follow the guide below.

Before conducting any of the following, an inspection of the rail gear must be taken to make sure it is in a suitable working condition. Please see the attached Pre-Start Checklist

**DO NOT PROCEED ON TRACK IF ANY ITEM FAIL’S PRE-START INSPECTION**

Owner/Operator must conduct risk assessment before use of vehicle.

Head Lights and Tail Lights must be ON at all time when operating on rail. This vehicle is fitted with automatic lighting and should be checked before proceeding to drive

4.1 **Hi-Rail Control System**

4.1.1 **General Description**

The road rail gear is controlled by a central electronic control system. This system is located in the centre of the dash panel and has two methods of input, physical button’s and touch screen.

This control systems ensures the road rail equipment cannot be operated incorrectly and has built in alarms and data logging.

Throughout the control system there are a number of visual and audible indicators for the operation of the rail equipment.

4.1.2 **Control System Indicators**

Visual Indicators include:
- Air tank pressure (red/green)
- Road rail equipment position
- Automatic step position
- Flashing light status
- Head and tail light status
- Road hand brake position
- Rail hand brake position

Audible Indicators include:
- Transit alarm
- Door open without handbrakes applied alarm
- Low air alarm

4.1.3 Control System Modes

There are four main modes within the control systems.

a) Sleep Mode

This is when the control system is inactive and not in use. Sleep mode is automatically enable when the vehicle is left in ‘Road Mode’ for more than 1 minute.

During sleep mode, all functions are disabled

b) Road Mode
This is when the control system is powered up and you have passed the safety check screen.

All functions are enable and ready for use.

(Headlight and flashing lights are not active at this point)

c) **Transit Mode**

Transit mode is when either front or rear rail equipment is out of ‘Road’ or ‘Rail’ position.

There is an audible alarm in the cabin to notify the operator the rail equipment is in transit position.

The vehicle picture on screen shows the operator which side of the rail equipment is in transit position.

(In this position headlight and flashing lights are activated automatically)
d) Rail Mode

Rail mode is when the front and rear rail equipment is fully deployed and confirmation buttons have been activated. In this position all automatic functions have been activated.

4.2 Operating the Road Rail Equipment

4.2.1 Deploying the Rail Equipment

The rail equipment is fitted with automatic rail locks. This eliminates the need to remove and shackles and put yourself in a dangerous position.

The rail locks automatically activate then the axle are raising or lowering.
**Step 1:**
Activate battery power to the road rail system by engaging battery switch

**Step 2:**
Activate and log into the control system by confirming you have read this operation manual and completed the vehicle pre-start inspection checklist (Section 12 of this manual). The press ‘Enter Rail Mode”
Step 3:  
Align your vehicle parallel to the rail tracks using the vehicle controls.

Step 4:  
Once aligned with the rail you must have the rail and vehicles park brake system in the correct sequence before the control system will let you deploy the rail axles.

Rail Park Brake Must be Released (Pushed in)

(For this to function correctly the air pressure must be above 5 Bar. The low air buzzer and rail handbrake in the Cabin will activate if this falls below the recommended pressure. The air system pressure bar on the control system will change colour to green when air pressure is correct)

And the Road Park Brake Must Be Activated (Pulled Up)
If this sequence is not followed a warning at the bottom of the screen will appear and raise/lower function will not work. When park brake sequence is correct the error are removed and system function as normal.

(In the case of an emergency, the OEM foot brake will be in normal operation. If needed the rail park brake can be applied in an emergency)

**Step 5:**
Lower the rear rail axle by activating the Deadman and rear lower buttons at the same time.

(The Deadman must always be depressed when lowering or raising the rail axles to prevent in advert operation of the rail gear)

Lower the rear rail axle until the control system shows the wheel in the down position. 
(When the rail axle are in transition an audible alarm will siren in the cabin. This will stay active until the rail axles are correctly position in rail mode and confirmed)

**Step 6:**
Lower the front rail axle following the same sequence in Step 4 & Step 5.

If the front rail wheels are not correctly aligned with the rail track, release your road hand brake and reverse vehicle into correct position parallel with the rail tracks.

Lower the front rail axle until the control system shows the wheel in the down position.
Step 7:
Now you have both rail axles aligned with the track and in the fully deployed position, it’s time to confirm the rail gear position.

Apply both the rail park brake and the vehicle park brake before opening the door.

(The vehicle horn will sound if you are in rail mode and open the door when the hand brakes are not engaged. This is to prevent the vehicle being left unattended without the brake engaged.)

It’s required that the operator and the spotter confirm the rail gear is in the correct ‘On Rail’ position.

Items to check before you confirm the vehicle is in the ‘On Rail’ position are:

a) The control system has the rail wheel down picture activated.
b) All four rail wheel flanges are on the inside of the rail head and aligned correctly.

c) The road axle locks are engaged and the front road wheels are suspended in the air.

d) The head and tail lights are activated (automatic)
e) The flashing light is activated (automatic)

f) The rear road tyres are sitting on the rail head correctly.

g) The front road tyres are pointing straight
After all the above have been confirmed ‘Push’ the “Rail Confirmation Buttons” Located on the driver’s side, at the front and rear of the vehicle. Then Push the on screen confirmation check boxes.

Now the system in in ‘Rail Mode’ and is safe to travel on track.

**Step 8:**
Remove both the Rail and Road hand brakes and operate the vehicle to the recommended rail speeds.

### 4.2.2 Driving On Rail

The Hi-Rail is driven by the rear drive axle on the truck.

*Acceleration needs to be carried out slowly to ensure the wheels do not spin or break traction.*

*When the vehicle is in motion, the OEM ABS light is activated. This is normal and because the front road axle is raised from the ground.*

**Stopping/Braking**

When driving, the machine is fitted service brakes to all rail and road axles. This is operated from the foot brake as normal.

Appling the foot brake at high speeds may cause the wheels to skid!
*When the machine is loaded you must allow for a greater stopping distance.

*When the rail is Wet you must allow for a greater stopping distance.

The vehicle is also fitted with a rail park brake. This must be applied when parking, in combination with the vehicle road park brake. If the driver’s door open’s and the rail park brake is not activated, the vehicles horn will activate until the rail park brake is engaged.

4.2.3 Raising the Rail Equipment

Step 1:
Return the vehicle to a level ground or crossing.

Step 2:
Before using any of the system functions, you must have the rail and vehicles park brake system in the correct sequence before the control system will let you raise the rail axles.

Rail Park Brake Must be Released (Pushed in)

(For this to function correctly the air pressure must be above 5 Bar. The low air buzzer and rail handbrake in the Cabin will activate if this falls below the recommended pressure. The air system pressure bar on the control system will change colour to green when air pressure is correct)

And the Road Park Brake Must Be Activated (Pulled Up)
If this sequence is not followed a warning at the bottom of the screen will appear and raise/lower function will not work. When park brake sequence is correct the error are removed and system function as normal.

(In the case of an emergency, the OEM foot brake will be in normal operation. If needed the rail park brake can be applied in an emergency)

**Step 3:**
Raise the rear rail axle by activating the deadman and rear raise buttons at the same time.

(The Deadman must always be depressed when lowering or raising the rail axles to prevent in advert operation of the rail gear)

Raise the rear rail axle until the control system shows the wheel in the up position.
(When the rail axle are in transition an audible alarm will siren in the cabin. This will stay active until the rai axles are correctly position in rail mode and confirmed)

**Step 4:**
Raise the front rail axle following the same sequence in Step 2 & Step 3.

Raise the front rail axle, until the control system shows the wheel in the up position.
**Step 5:**
Once both the rear and front rail axles are raised the control system will cycle from ‘Transit’ mode to ‘Road’ mode.

During this transition the automatic rail locks will position themselves to lock the rail gear up, and prevent any unwanted lowering of the rail axles when travelling down the road.

The automatic steps will also retract to their home position.

**Step 6:**
Once you are in ‘Road’ mode and all persons are clear of the vehicle, you can release the road hand brake and drive the vehicle off the rail tracks.

**Step 7:**
If you need to immediately return the vehicle to road and shut down automatic lights, push the ‘Sleep’ button to shut down the screen. Otherwise the control system goes into ‘Sleep’ mode automatically after 1 minute.

**Step 8:**
Before travelling down the road, the operator must ensure the vehicle and rail axles are packed up and are in their correct positions.
5. **Unauthorised Use**

- It is not allowed to drive the vehicle faster than 30Km/h in the forward direction.
- It is not allowed to drive the vehicle faster than 5Km/h in the reverse direction or over crossing and bridges or through points.
- It is not allowed to use the vehicle without the correct rail protection.
- It is not allowed to use the vehicle on a line open for traffic.
- It is not allowed to use the vehicle for anything other than the intended use of manufacture.
- It is not allowed to use the vehicle by unqualified personnel.
6. **Care and Maintenance**

6.1 **Maintenance schedule**

All maintenance shall be carried out by trained, authorized and qualified personnel. Maintenance shall be carried out in a safe manner with correct safety equipment and at a location when safety is not compromised by, for example, adjoining rails or contact lines.

<table>
<thead>
<tr>
<th>Maintenance schedule</th>
<th>Service interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product</strong></td>
<td><strong>Check</strong></td>
</tr>
<tr>
<td>Hydraulic hoses</td>
<td>Check the condition of the hydraulic hoses and hose connections</td>
</tr>
<tr>
<td>Hydraulic oil</td>
<td>Check oil level, oil quality</td>
</tr>
<tr>
<td>Oil filter</td>
<td>Check oil filter</td>
</tr>
<tr>
<td>Lubricating points</td>
<td>Wheel bearings do not require maintenance; other lubrication points to be treated</td>
</tr>
<tr>
<td>Screws/bolts and nuts</td>
<td>Check that all bolts and nuts are tightened in compliance with the chapter “Nominal fitting torque in Nm for steel screws”</td>
</tr>
<tr>
<td>Rail wheels</td>
<td>Check there is no play. Check for wear on the wheels.</td>
</tr>
<tr>
<td>Emergency stop</td>
<td>Check function. (Ignition)</td>
</tr>
<tr>
<td>Warning signs, decals and rotating beacon</td>
<td>Check that all decals are fitted to the machine in compliance with the chapter “Warning Signs”.</td>
</tr>
<tr>
<td>Brakes operation</td>
<td>Check the rail and truck brakes are functioning before placing vehicle on track.</td>
</tr>
<tr>
<td>Cleaning</td>
<td>Ensure the rail wheel adapter is kept in a clean condition. This applies in particular to the hydraulic system with valves and cylinders.</td>
</tr>
<tr>
<td>Component</td>
<td>Check the attachment points for possible wear or cracks.</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Entire unit</td>
<td>Check that all the carrier machine's functions work properly in the environment in which it is to be operated.</td>
</tr>
<tr>
<td>Brakes</td>
<td>Check that the pad thickness is 3-2 mm</td>
</tr>
<tr>
<td>Air Tank</td>
<td>Moisture in tanks</td>
</tr>
<tr>
<td>Rail Suspension</td>
<td>Check rubber spring units for crack or defects</td>
</tr>
</tbody>
</table>

### 6.2 Wheel Examination

Before starting an examination the machine shall be secured by brakes, the engine stopped and starter key removed. This examine is to be done every 250 h of use or on a 12 monthly cycle.

#### 6.2.1 Scheduled work

1. Using a calibrated gauge, check that the back-to-back measurement is within tolerance.

   Note! This shall only be measured with the machine standing on the rails.

2. Lift the wheels from the rail.

4. Clean the entire wheel flange and tread, removing any grease, corrosion and debris.

5. Rotate the wheel and check that there is no sign of axial or radial play in the bearings, or noises or harshness. If float is detected, check that it does not exceed 0,05 mm.

6. Rotate the wheel slowly by hand, and examine all surfaces of the wheel, checking for cracks, cavities, metal migration and flats.
The acceptable limits for all wheel parameters are found in *Wheel Examine Record Form*. A description of the different types of defects is found in *Wheel fault descriptions*.

### 6.2.2 Arising Work

1. If the back-to-back dimension is out of tolerance replace wheels or book for an authorised accessor to check for issues.

2. If axial or radial play in the bearing exceeds 0,05 mm or noise or harshness is detected, dismantle the bearings and rectify the defects.

**Note!** This work must be carried out in a covered workshop.

3. Replace worn wheels in pairs or re-profile in pairs.
   **Note!** If flat spot is >30 mm, remove from service immediately. If flat spot is 20-30 mm, remove from service on completion of work.

### 6.2.3 Wheel Fault Descriptions

![Wheel Fault Descriptions Diagram]

### 6.2.4 Cracks

Cracks normally have a jagged saw tooth type of surface profile with sharp edges. Cracks will normally form at the tread chamfer in an axial direction (across the thread).
No cracks are permitted. Replace wheels unless the cracks can be completely removed by re-profiling.

6.2.5 Cavities
Rolling contact fatigue causes microscopic subsurface cracks which develop into a localized network (See Figure below). Over a long period small sections or spalls break away leaving cavities (See Figure below). Record the number and length of the cavities. Take action if the length of any cavity exceeds 15 mm, or if two cavities are within 50 mm of each other and their combined length exceeds 15 mm. Re-profile wheels to remove cavities and cracks, otherwise replace the wheels.
6.2.6. Migration
Material migration results from a rolling action that forces the surface material sideways. This can occur in two places:

6.2.7 Tread Rollover
This forms on the tread chamfer (See Figure below). The maximum allowable is 5 mm. Associated with this are circumferential cracks (See Figure below) which do not affect the integrity of the wheel.
6.2.8 Migration Down the Flange
Where the extreme edges have flaked off. This does not affect the integrity of the wheel. These defects are removed when re-profiling becomes necessary to restore the wheel profile.
### 6.3 Wheel examination record form

Please copy this page and use it when the wheels are to be examined.

<table>
<thead>
<tr>
<th>Vehicle no:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Examiner:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of defect</th>
<th>Allowable limit</th>
<th>Record findings here</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cracks</td>
<td>None allowed</td>
<td>Tick if none is found (X)</td>
</tr>
<tr>
<td>Cavities</td>
<td>15 mm length</td>
<td></td>
</tr>
<tr>
<td>Migration</td>
<td>5 mm tread roll over, otherwise no limit</td>
<td></td>
</tr>
<tr>
<td>Flats</td>
<td>20 mm</td>
<td></td>
</tr>
<tr>
<td>Back to Back</td>
<td>+0/-2mm</td>
<td></td>
</tr>
</tbody>
</table>

#### Record amount of wear below

<table>
<thead>
<tr>
<th>Wear/defect</th>
<th>Limit (mm)</th>
<th>Axle1</th>
<th>Axle2</th>
<th>Axle3</th>
</tr>
</thead>
</table>

**NOTES**
7. **Emergency Off Tracking**

This machine is equipped with an emergency hydraulic hand pump.

1. Locate the emergency hand pump

2. Remove hydraulic pump cover. (Held in place by 2 wing nuts)
3. Locate emergency pump handle to the left of the hydraulic valves.

4. Override the hydraulic spools for raising of the road rail gear. (Front and rear ‘raise’ spools are circled below)

5. The override spools are activated by a “Push and Quarter turn” this locks the override ‘ON’.

6. Once overrides are activated, use the handle to pump the road rail gear to the raised position.

7. De-activate the override spools once the road rail gear is in the desired position.

1 = Raise rear road rail gear
2 = Raise front road rail gear
8. **Towing the Vehicle on Rail**

Towing vehicle on rail in an emergency, shall be included in the operators risk assessment and shall include the following:

Before Towing, ensure all hand brakes are released. Only when securely couple to tow vehicle.

1- Ensure Vehicle is securely coupled to tow vehicle
2- Insert the bolt into rail brake booster and turn clockwise a quarter turn to lock into place. Tighten the nut until the rail brakes have been released.
3- Tow vehicle to site for removal.
4- Insert bolt here and tighten nut to release rail brakes
9. **Leaving Vehicle On Track Unattended**

Leaving vehicle on track while unattended shall be included in the operators risk assessment and shall include the following:

1. Ensure hand brake is applied to rail and road axles
2. Chock rear road wheels
3. Power down truck
4. Lock cabin and turn off isolator
5. Return keys to supervisor

10. **Guarantee and Service**

10.1 **Guarantee**
All products from Hinton Engineering are supplied with a 12-month guarantee.
The guarantee is not valid if the indicated defect or fault in the product does not exist or if the fault is the result of a handling error, tampering or non-permitted modification, or if the machine has been exposed to fire, lightning or excess voltage.

10.2 **Service**
After sales support and technical service are available from Hinton Engineering, during and after the guarantee period. Please contact Hinton Engineering.

10.3 **Disclaimer**
Hinton Engineering exempts itself from liability in the event of the machines systems which include all hydraulic, electric, pneumatic circuits or structural components, that have been modified from OEM and any usage that deviates from that recommended in this manual.

11. **Contact**

**Address:**
29 Elizabeth St,
Carrington, NSW, 2294

**Phone and Fax:**
PH, (612) 4902 8400

**Internet and E-mail**
www.hintonengineering.com.au
hinton@varleygroup.com
12. **Pre-Start Checklist**

**Road/rail pre-work inspection checklist**

<table>
<thead>
<tr>
<th>Rail Industry Vehicle Registration No.</th>
<th>Label No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection/Test Date</td>
<td>Location</td>
</tr>
<tr>
<td>Vehicle Description</td>
<td></td>
</tr>
<tr>
<td>Road Vehicle Rego</td>
<td>VIN/Serial No.</td>
</tr>
<tr>
<td>Plant ID</td>
<td>Vehicle Owner</td>
</tr>
<tr>
<td>Odometer/Hour Reading</td>
<td>Inspected By</td>
</tr>
</tbody>
</table>

*Note: The vehicle will not be permitted to operate if it fails any item.*

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Before going on track, the following items: must be checked (where applicable)</th>
<th>Pass</th>
<th>Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ensure tyres are correctly inflated</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>2</td>
<td>Inspect for tyre tread and wall damage and for an uneven wear pattern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Inspect road and rail wheel rims for security and signs of cracks or fatigue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Check road and rail wheel studs and nuts for security or damage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Inspect rail wheel profile for excessive wear or damage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Inspect rail equipment safety locks, etc. for correct operation or damage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Test head, tail, flashing, hazard lights, etc. for correct operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Test for presence and function of emergency hand pumps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Ensure load is secured correctly and evenly, within gauge and GVM axle load limits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Ensure electrical warning signs and reflective delineators are fitted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Ensure fluid levels are at a proper level</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item No.</th>
<th>After the vehicle is placed on track, check the following items:</th>
<th>Pass</th>
<th>Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Inspect rail suspension unit flexitors for damage or misalignment</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>13</td>
<td>Inspect anti derail frame for misalignment or damage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Inspect the over centre locking mechanism for correct adjustment or damage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Inspect the rail guidance equipment assembly for misalignment or structural damage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Inspect all rail sweeps for correct position or damage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Check rail guidance equipment hydraulics for correct function &amp; damage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Check electrical controls for correct function or damage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Test warning devices, horns and sirens for correct operation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Operator Initials**