to pass, return to station in rear. If the Loco Pilot is not able to find anything doubtful, subsequent trains shall be dispatched with a speed restriction of 10 kilometres per hour over the suspected track length until the track is certified to be safe by engineering officials. If the condition as reported earlier is confirmed by the Loco Pilot, then no train movement shall be allowed till the track is certified to be safe by engineering officials.

## Obstruction on adjacent track

If Loco Pilot and / or Guard notices any obstruction or any other unsafe condition, on or near the track adjacent to the line over which his train has passed, they shall immediately switch on the flasher light of loco and inform the Station Master(s) concerned through the available means of communication. Concurrently, the Loco pilot and Guard shall also stop their train and proceed with danger hand signals to protect the obstructed line. If there are trains on run towards the obstructed track that cannot be stopped by the Station Master, in electrified section, OHE shall be immediately switched off from the Traction Power Control.

Once it is ensured that there are no trains that are on run towards the affected spot, they shall continue journey to the next station cautiously keeping flasher light on and be prepared to stop any incoming train approaching on the affected line by exhibiting danger hand signal or any other available means of communication like walkie talkie. On arrival at the next station, he/she shall inform the Station Master through a written memo about the occurrence. On receipt of such information, the Station Master shall take action as per SR 6.07.1(c) to (f).

## Patrolman not turned up in time

When patrolling is in force, if a Patrolman does not turn up within 15 minutes of his/her scheduled arrival, the Station Master shall stop run through trains proceeding into the block section and issue a Caution Order to all trains proceeding into the block section advising the Loco Pilot to be alert and specify a speed restriction of 40 KMPH. The Station Master shall also immediately advise the Station Master at the other end of the block section to take similar action and advise the SCOR, the concerned section Gangmate and the PWI. The Caution Orders shall continue to be issued till the Patrolman arrives and report that the line is safe for passage of trains.

## Unusuals in a running train

## Hot Axle

Hot Axle is a condition where the axle of the wheel gets heated up because of reasons like faulty bearings, insufficient greasing etc. that leads to excess friction during wheel rotation. If the condition continues, it can result in seizure of axle and derailment.

Hot Axle can be identified by the following symptoms:

- (1) Splashed grease marks on wheels;
- (2) Smell of Burning grease;
- (3) Smoke from the Axle Box;
- (4) Discoloration of Axle Box;
- (5) Red glow of Axle Box (visible during night);
- (6) Whistling sound or metallic screech;
- (7) Flames coming out from Axle Box and
- (8) Wheel not rotating due to seizing of bearing.

These symptoms occur in stages in the order shown. As the stage shifts, the condition of bearings will progressively deteriorate. The earlier the detection, the lesser will be the damage. Hence all the staff shall keenly look out for such possibility in a train which passes by them. As and when a Hot Axle is detected, efforts shall be made to show danger signal to the Loco pilot / guard to stop the train immediately. If the train could not be stopped, the incident shall be brought to the notice of the Station Master who in turn shall take action to stop the train if the train is approaching his/her station or inform the other end Station Master who shall stop the train and advise train crew to examine the affected wagon.

If the block section is long and the Hot axle is in an advanced stage, and Loco Pilot could not be alerted to stop the train, in electrified sections, efforts should be made to switch of OHE through control. On stopping, the train crew shall examine the suspected vehicle and share the details to the C&W control. After consultation, the train can be moved with necessary conditions to clear the block section.

The train with hot axle vehicle shall be received onto main line or in case of junction stations, onto the line not involving turnout negotiations. In cases where these lines are not available for reception, the train shall be brought to stop at Home signal. After examining the wagon concerned and if found safe to run over turnouts, it shall be received in the most adjacent loop line. The affected wagon shall be detached from the train for attention by TXR.







Hot Axle

Obstruction on track

Fire on train