

CE Circular No. 112

Greasing of ERCs and daily roster of keyman

1. Para 1411 (5) of IRPWM specifies general procedure for greasing of Elastic Rail Clips. Grease graphite to specification IS:408-1981 grade 'O' should be used.
2. Following action therefore, is to be taken while greasing of ERC.
 - a. Greasing of ERCs should be done by the keyman in PSC sleeper track. Keyman should carry out greasing of ERCs in a systematic manner from one end at the rate of 20 sleepers (80 clips) per day. Greasing should be planned in such a way that entire length of beat is covered once in two years. However, in corrosion prone areas (all platform lines at stations, approaches of towns) greasing of ERCs should be done once a year as per IRPWM Para 1411 (5) (c). To supplement the efforts of keyman, each gang shall also be engaged periodically to grease ERCs in their respective gang beat as it will not be possible for keyman alone to complete the work. In addition to greasing by keyman, it shall also form part of systematic maintenance of track by the gang.
 - b. Before greasing and transfer, slightly strike ERC on rail head to cause it to vibrate and distress. For ERCs which have got stuck into the inserts due to jamming, use of suitable de-rusting chemicals or heating the leg of inserts shall be made to ease out the clips.
 - c. Greasing of ERCs should not be carried out during extreme of summer (rail temperature more than $t_d + 20^{\circ}\text{C}$) and during heavy rainfall. However, there is no bar of greasing of ERCs on monsoon season provided it is not raining. At a time ERCs should not be taken up by deploying gang, at least 15 sleepers shall be kept intact between any two sleepers taken up for lubrication of ERCs at the same time. The ERCs should be cleaned by wire brush and emery paper. The eye of the insert shall also be cleaned by round wire brush. After cleaning, grease graphite shall be applied to the inside surface of eye of insert and leg of ERC.
 - d. However, for increase retentivity of toe load in ERC, the contact surface of ERC needs to be changed periodically. This will facilitate relief from partial permanent set under constant stress accumulation in a particular position of long time. Change in contract points will form new lines of stress forces in ERCs. Therefore, inside/outside ERCs should be interchanged and fixed again. ERCs should be driven back up to correct length.

- e. Monthly schedule of portion of track where ERCs are to be greased should be posted well in advance by PWI in keyman's diary. Details of greasing of ERC should be recorded by keyman in diary with date and name of keyman who has done the greasing. Record of lubrication of ERCs should be kept in gang's diary by gangmate/PWS. The inspecting officials should also check these aspects while doing push/motor trolley and inspection of gang/keyman. He must satisfy himself with the adequacy of greasing of ERCs.
3. Keyman shall inspect by foot his entire beat once a day in the morning hours, both the tracks and bridges. On double line, keyman will carry out one round of inspection in morning hours by going along UP line. During afternoon, another round of inspection will be done by keyman along the opposite rail in case of single line or along the DN line in case of double line.

During afternoon hours, keyman shall ensure availability of full complement of fittings/tightening of fittings, correct driving of ERCs in a systematic manner from one end (besides greasing of ERCs/eyes of inserts @ 20 sleepers per day as per the guidelines in Para (2) above). For this, date wise schedule shall be entered by PWI in keyman's diary so that entire beat of keyman is covered once a month. Days for lubrication of SEJs, points etc will also be mentioned in the monthly schedule.

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