

Track Work Instruction 2G046

How to move rail manually

Introduction

This Track Work Instruction covers how to move rail short distances using rail tongs and bars.

See also separate instructions:

TWI 2P004 How to turn rail (over)

TWI 2P010 How to move rail using lifting and transporting equipment

Competence

You must be competent to carry out this work. See TWI 2G086 - Competence requirements.

All must be briefed on manual handling methods and the risks of injury.

All those involved must have been trained on the handling of rail.

Risks

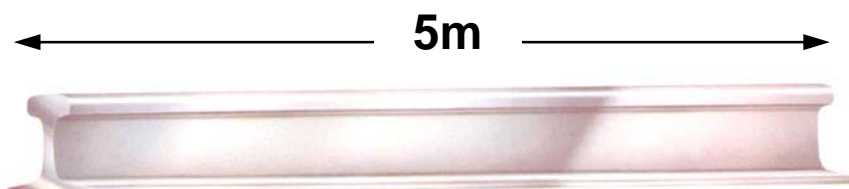
It is vital that everyone is wearing safety footwear.



Tools and Equipment

Rail tongs, bars, wooden blocks, shovels, approved rail turning bars and gloves.

Method



= 1/4 tonne!

Remember, a 5-metre length of rail weighs ¼ tonne.

Track Work Instruction 2G046

How to move rail manually

Method continued

Before you start

Look at the site under good lighting conditions.

What sort of rail is it?

If it is bullhead, it will need to be turned upright so that you can get hold of it.

If it is flatbottom, is it sitting on its foot or is it tipped over? If it is tipped over it will need to be stood upright.

Measure the length of the rail. This will give you an idea of how heavy it is and what manpower you will need.

Plan the move in stages if necessary.

Remember! You don't have to move the rail all the way in one go.

Look at where you are moving the rail to and look at any places where you are going to pause the move for a rest.

Look at what you will be standing on. Arrange to move any loose ballast from the top of sleepers.

Is there any equipment in the way? If so, you will have to protect it, or find a method to enable you to work round it. A dropped rail can destroy cables and equipment and could cause massive train disruption.

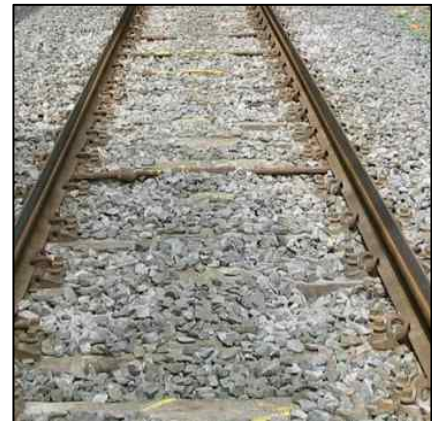
Check that the rail is not attached to anything - look for cables or bonds.

Check that there is nothing attached to the rail - look for rail anchors, baseplates and lubricator plates.

Also be careful to check whether there are any welds in the rail that would cause an obstruction under the rail.

Note! Make sure everyone involved is aware of what is to be done, how it is to be done, where the rail is being moved from, where it is to end up and what the commands will be.

Keep everyone who is not involved in the move well out of the way.



Clear loose ballast like this!



Treadle, cables, rodding - all have to be avoided!



Be very careful of even small cables attached to a rail.

Track Work Instruction 2G046

How to move rail manually

Method continued

Moving the rail

Make sure you have enough manpower to complete the move.

A rail can be moved very small distances by easing it with bars.

If you are using lifting tongs:

Stand the rail upright using rail turning bars. With bullhead rail you will have to hold it with the rail turning bars whilst the rail tongs grip the rail.

Note! On bullhead rail be careful once the rail is upright that it does not 'slip' out of the rail turning bars and fall on to someone's foot. To avoid this, it is a good idea to have spare rail turning bars ready to grip the railhead from the opposite side once the rail is upright.

Give commands clearly and loudly. Make sure everyone involved can hear you.

Lift the rail in unison!

Note! This is heavy work – it is essential that there is only **one** leader to ensure that everyone works together.

Site Clearance

Make sure any scrap rail is left in such a way that it will not create a hazard to either rail traffic, staff walking on the railway or be a tempting object for vandals. If possible remove any scrap or unused rail from site completely.

Before you leave the site

No rail less than 6m long is to be left on site. 6 - 9m lengths may be left but must be secured.

Do not obstruct walkway routes or places of safety.

Problem solving

What if there is insufficient staff to move the rail?

Do not attempt the move. Wait until sufficient staff are available