Vortok Automatic Power Control Magnet

ENGINEERING SOLUTIONS FOR RAILWAY MAINTENANCE

Single Super Strength White APC Magnet Single Sleeper-Mounted

The APC is used to “instruct” an electric locomotive to open the circuit breaker on its transformer so that it does not draw current as the pantograph traverses as neutral section to eliminate arcing. A second magnet tells it to switch back on again afterwards. It is mounted on the end of a sleeper to align with the train-borne sensor.

Using a simple spacer, the magnetic properties can be checked with either a standard S&P (Strength & Polarity) meter or a Gauss meter

Typical cost savings = £3,000 to £4,000 per location

ACCEPTED BY Network Rail

PADS NO: PA05/02321

Features & Benefits

Modern NdFeB magnets giving:

- A highly stable magnetic field
- Lightweight assembly (No lifting equipment needed)
- A low profile (less risk of being struck)
- Use to replace ferrite magnets

Compact stainless steel construction means:

- It attaches to one sleeper only, irrespective of fastener type
- No special sleepers—any standard concrete or timber
- No disturbance of ballast
- Quick installation or de-mounting (2-3 minutes)

Vortok International

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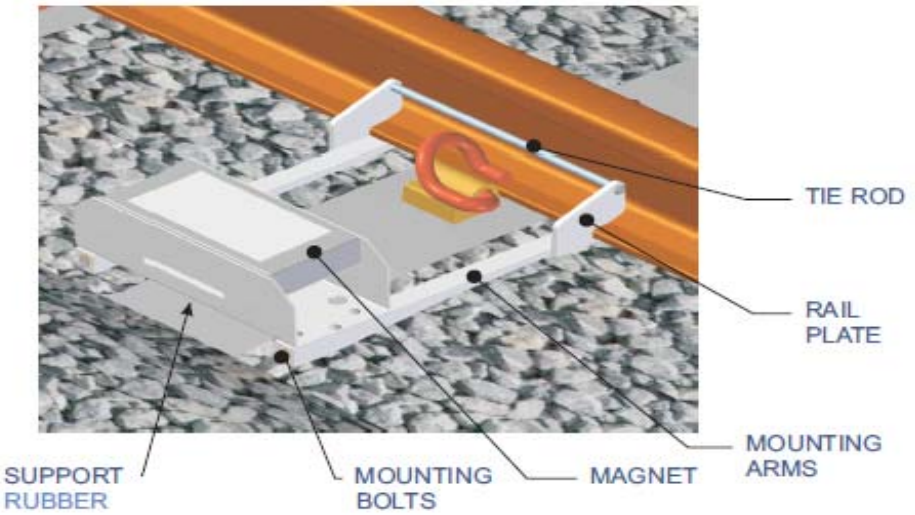
Installation



Caution

The magnet on this unit is extremely strong. Avoid contact with steel or iron tools. It is recommended that watches, credit cards and other magnetically sensitive objects be removed before installing the unit. Staff with pacemakers or other medical aids should not approach the unit.

Assuming that the installation site has been predetermined and that the works are authorized and safe.

1. Select the sleeper onto which the APC magnet is to be installed.
2. The rail should be flat bottomed and should have no INJs, welds or other features at the attachment point.
3. Determine which side of the track the APC magnet is to be installed.
4. Clear the ballast away from either side of the sleeper to a depth of 100mm or more
5. Ensure that there are no cables, signal lines or heaters etc. on the foot of the rail at the location
6. The mounting bolts on the unit as supplied should be slack and pushed fully home
7. Hold the magnet by the tie rod and the other hand under the magnet frame
8. Offer the rail plates up to the foot of the rail and push them fully home
9. The support rubber will be in contact with the top of the sleeper (depending on sleeper type*****)
10. Kneeling on top of the magnet will provide sufficient compression of the rubber to allow the lock catches to be slipped over the foot of the rail in the four-foot
11. When the catches are over the foot of the rail, turn the mounting bolts until they are tight. Ensure that the end plates are located correctly in the end of the mounting arms.
1. Torque up the mounting bolts to 35Nm
2. Check that the top of the magnet is between 20-50mm below the head of the rail
3. Check that the unit is secure and tightly clamped to the rail
4. Restore the ballast around the unit, remove all tools and withdraw from the site

If the support rubber is not in contact with the top of the sleeper, it can be adjusted with a spanner through the slot in the end.

UNIPART RAIL
Also available in the UK from Unipart Rail

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