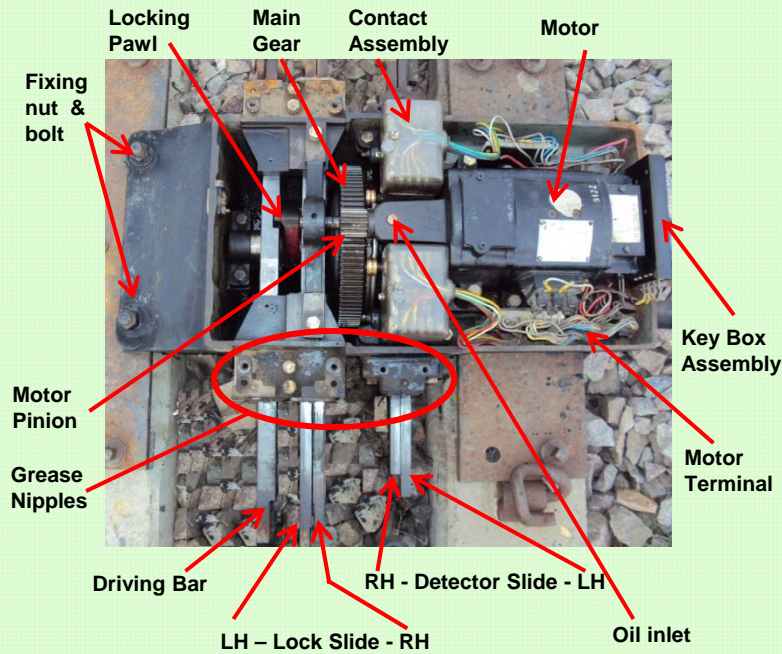


IRS ELECTRIC POINT MACHINE

Introduction

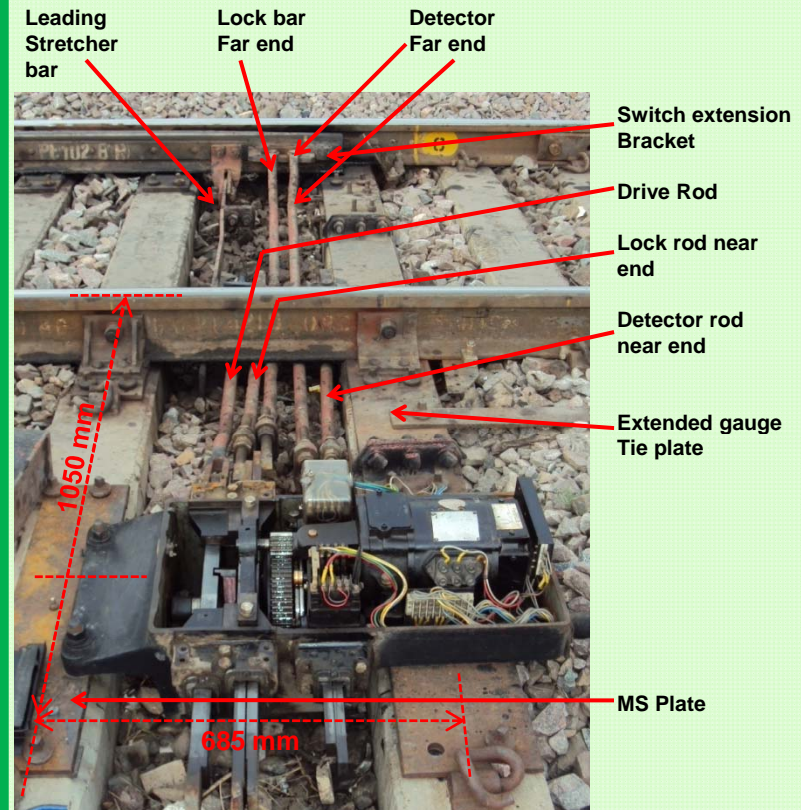
This pamphlet covers brief description of installation, adjustment, testing and maintenance of IRS electric point machine.

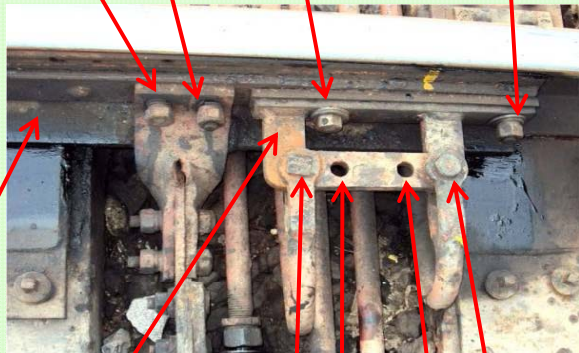
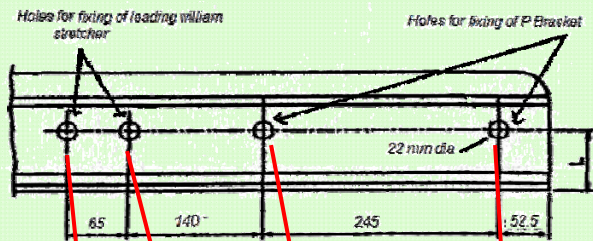
Main Parts



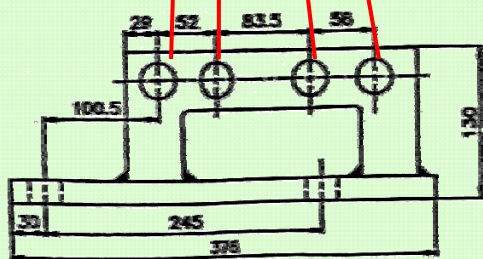
Installation

Installation layout of the electrical point machine assembly on long sleepers at site with dimensions.



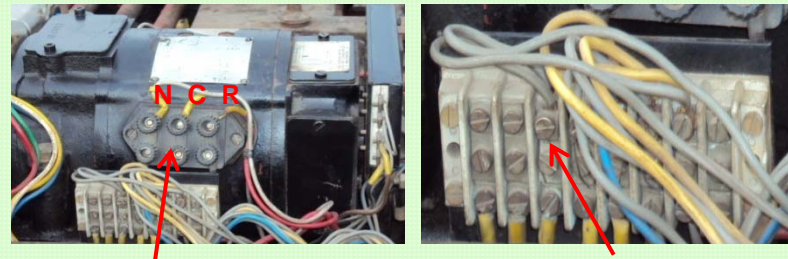


Switch extension Bracket



Technical Data

Throw of point machine	143 mm.± 2
Time of operation	4 to 5 sec.
Current consumption	< 4.5 Amp.
Obstruction/slipping current	1.5 to 2 times normal working current
Rated voltage	110 V DC

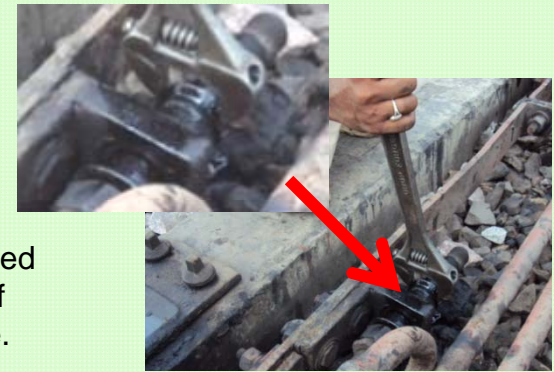


Measure voltage and current .

Tight I-let wire terminals.

Adjustment of Driving rod

Adjust with the help of nuts of drive rod provided on both sides of drive lug sleeve.



Adjustment of Locking and Detection slides

Adjust the locking slide such that locking pawl enters in to closed notch.

Adjust the detector slides with the help of nut on the threaded portion such that detector contact just make with 1.6 mm test piece and break with 3.25 mm test piece.



Locking Slide

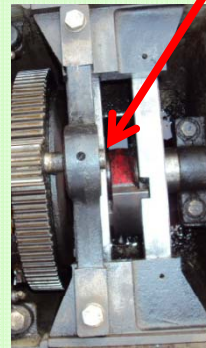
Detection Slide

Obstruction test

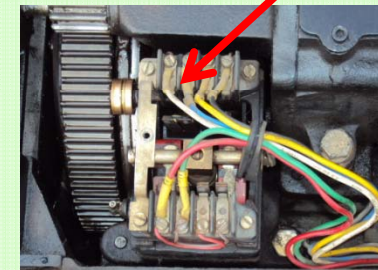
Use 5 mm of obstruction test piece in switch and stock rail at 150 mm from toe of switch and ensure.



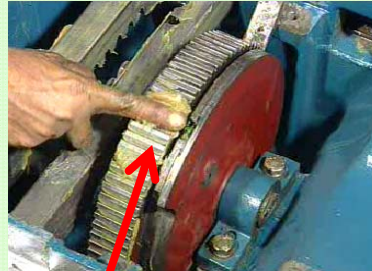
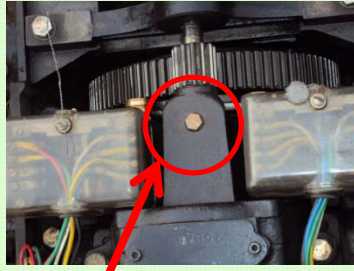
1. Lock pawl should not enter into lock slide notch.



2. Detector contacts of closed switch should not make.



3. Clutch should slip continuously.



Lubrication oiling and greasing

Pour SAE 30 lubricating oil through oil inlet .

Apply grease properly on Bearings, Locking bars, Detection slides, External gears, Contact assembly of lever bearing.



Crank handle point
SMs key

Disclaimer

The information given in this pamphlet does not supersede any existing provisions laid down in S.E.M., Rly. Board and RDSO publications. This document is not statutory and instructions given in it are for the purpose of guidance only. If at any point contradiction is observed, then S.E.M., Rly. Board/RDSO guidelines or Zonal Rly. instructions may be followed.



GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(For Official Use)

IRS ELECTRIC POINT MACHINE



CAMTECH/S/2010-11/IRSPM/2.0
July 2010



Indian Railways
Centre for Advanced Maintenance Technology

Contact Address:

Indian Railways
Centre for Advanced Maintenance Technology
Maharajpur, Gwalior – 474 005
Email: camtech_snt@yahoo.com