नाम
Name : _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

अनुक्रमांक
Roll No : _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

प्राप्तांक
Marks Awarded :

पाठ्यक्रम
Course : _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

दिनांक
Date : _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

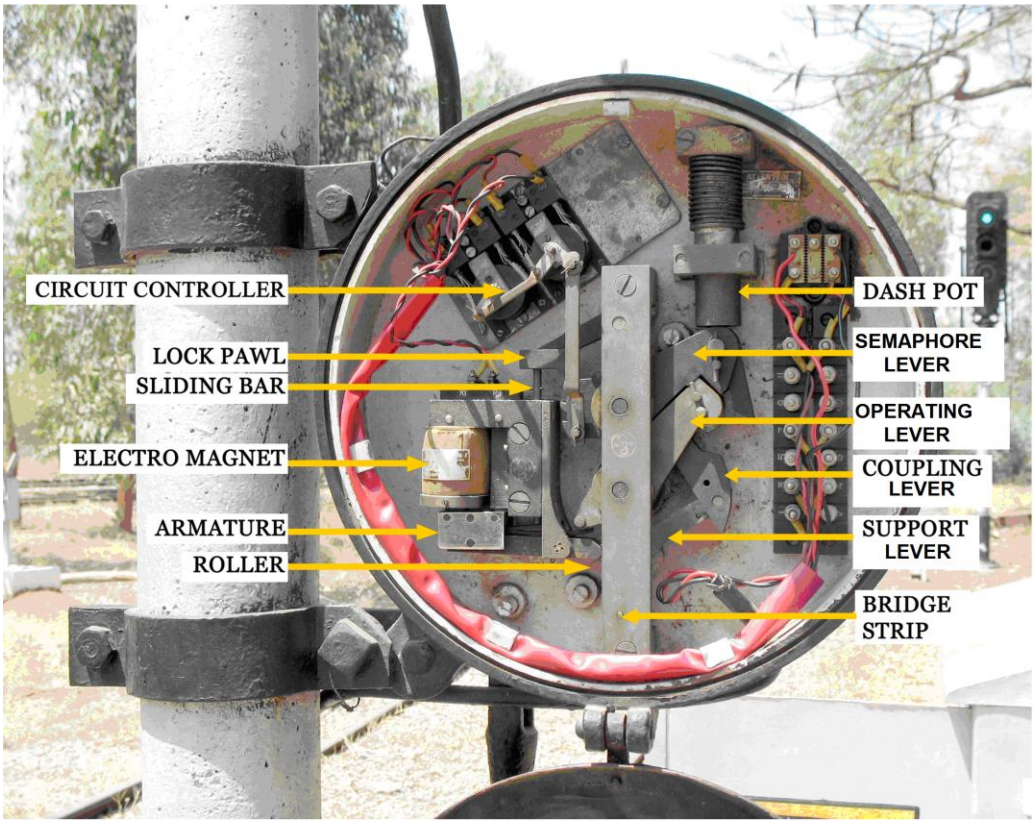
अनुदेशक के आद्यक्षर
Instructor Initial :

STUDY OF POST TYPE (STYLE "B") REVERSERS

Electric Signal Reverser is electromagnetic equipment and used in the Mechanical Transmission of Semaphore Signals. Normally it is used to provide a slot control over a semaphore signal to achive inter cabin control but other interlocking requirement such as TPRs and NWKR/RWKR can also be the part of electrical control.

Energised electromagnet of reverser couples two down rod pieces to work as one piece (rigid connection) and signal can take to OFF. When no feed is made available to electromagnet, then two down rod pieces made independent of each other, hence stroke cannot be extended to signal arm and signal cannot taken to OFF. If the reverser controlled signal is taken to OFF and feed to reverser is cut off then signal will go back to ON.

A mechanical arrangement is provided in the reverser which prevents physical operation of semaphore Arm to OFF position, to prevent unauthorized operation of signal.



1. Checks to be made for Style “B” Reverser during installation that:
    a) Oil level in the dash pot must be at least 35mm. above the bottom of the sliding cylinder.
    b) All parts are oiled, greased and electrical connections are proper and intact.
    c) With the signal arm in “ON” position, and counter-weight lever (or crank of signal mechanism) in its normal position, the position of the arrow mark on the spectacle and the operating lever must be in alignment with the respective mark on the bridge strip. In this position, the arrow on the spectacle lever and the arrow and the operating lever make angles 60° and 48° respectively from the plumb line of the bridge strip. This helps the armature house properly on the core face.
    d) The pins of the down rod must not protrude to create the infringement between relative cranks.
    e) The clearance between the teethed portion of the lock pawl and spectacle lever is maintained with 1mm. gap when the signal is operated fully.

2. Procedure of routine checks done during inspection:
    a) Try to lower the signal without slots the signal should/should not be lowered.
    b) Strain the wire transmission and try to lower the signal, it should/should not be lowered.
    c) Disconnect the feed from any of the source and observe that the signal goes back/does not go back to danger promptly. Try to lower the signal arm-in this condition by force, the arm could/could not be lowered.
    d) Put back the signal to normal position, and note that the arrows on the spectacle and operating lever correspond/does not correspond to the mark on the bridge and the armature house properly against the core face.
    e) The surface of the armature and the cores should be properly cleaned from dust and scale.

3. a) The working voltage and current required for Style “B” reverser at its terminals are (_____V) and (_____mA) respectively. The resistance of the coil is (_____ Ohms).
    b) The core and the armature are (_____) to eliminate effect of (_____).
    c) The Reverser for UQ signal can be converted to LQ signal by (_____).
    d) The bliding bar moves with (_____) and engages and disengages (_____) with (_____).
    e) The housing of armature to the core face is depending on (_____) adjustment of arrows on (_____) and (_____) with bridge mark.
    f) Un-authorised re-setting of the signal arm to (_____) position by physically pulling the arm downwards (or pushing in upwards) is prevented by (_____) by (_____) engaging in the (_____) or the spectacle gear.
    g) The supply voltage required depends on (_____) of the overhead wire connecting the reverser. The minimum voltage required for the reverser is (_____V).

    h) From the given circuit how one slot one train movement is achieved?

Date Signature of the Trainee