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

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

प्राप्तांक
Marks Awarded :

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

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

अनुदेशक के आद्यक्षर
Instructor Initial :

DISMANTLING, ASSEMBLING AND STUDY OF MINIATURE LEVER

INTRODUCTION TO MINIATURE LEVER:

A miniature lever is not required to work as a mechanical transmission but adopt to receive or transmission control .This lever can hence be mounted over an intermediate stanchion.

The handle of the miniature lever is mounted on the standard with a pin extended on the other side and the connected to the tappet which moves in the locking box to achieve interlocking with other levers . The handle is connected with a plunger which moves iv a slot in the standard . Sufficient space is available for fixing two 'D' type locks on the standard ,one above the plunger and other below the plunger.

Suitable notches are put in the plunger to allow operation 'E' type locks bolts when required .Due to the weight of the tappet it is difficult to keep the lever in the fully operated position , and for this purpose a steel ball is provided which is spring loaded and works against a counter sunk depression on the plunger. This keeps the lever in the required position and also avoides accidental operation.

THERE ARE TWO TYPES OF MINIATURE LEVERS:-

A. TWO POSITION MINIATURE LEVER.

B. THREE POSITION MINIATURE LEVER.

A. TWO POSITION MINIATURE LEVER:

In this type there are only two positions.NORMAL when the lever handle is up and REVERSE when lever handle is pressed down.The lever is held in its NORMAL OR REVERSE positions with the help of the spring loaded ball working against two counter sunk depression on the plunger in N and R positions respectively.

When the lever is operated from NORMAL TO REVERSE the tappet moves upward therefore , a reverse notch in the tappet should be provided below the channel in which the lock is provided.

B. THREE POSITION MINIATURE LEVER:

In this there are three positions,namely NORMAL , PUSH AND PULL.The centre position of the lever handle is considered as normal position .The lever is operated upwards for PUSH position and downwards for PULL position.The lever is held in its three different positions by providing three counter sunk depressions on the plunger against the spring loaded bell.

If the locking is required to the effective when the lever is PULLED then the notch in the tappet should be cut in such a way that the locking must be effective when the lever is pushed and reverse . For this purpose the notch is cut ¾ inches 20mm is cut ¾ inches 20mm longer than required .This extra ¾ 20mm is provided on that side where is locking in to be ineffective.

This type of lever is used for operating two conflicting controls which are not required at the same time and as such route controls lever where simultaneous reception facility is not available can be a three position miniature lever.

1. INDICATE THE FOLLOWING PARTS IN THE SKETCH ATTACHED.

A. STANDARD.

B. LEVER HANDLE.

C. NUMBER PLATE.

D. PLUNGER.

E. INDEX PLATE.

F. 'E' TYPE LOCKS AND KEYS.

2. A miniature lever is used as:

a. _____ position miniature lever.

b. _____position miniature lever.

3. What are the essentials differences between the two and mention at least three differences.

4. where these levers are used ?.

5. How is the lever handle held in its different positions?

6.What is the maximum number of "E" type locks which can be mounted on a Miniature lever?.

7. Can you mount a miniature lever ever on intermediate stanchion?

8. Measure the stoke of the tappet and indicate the magnitude and direction of travel of the tappet for

A. TWO POSITION MINIATURE LEVER:

NORMAL TO REVERSE POSITION:

REVERSE TO NORMAL POSITION:

B. THREE POSITION MINIATURE LEVER:

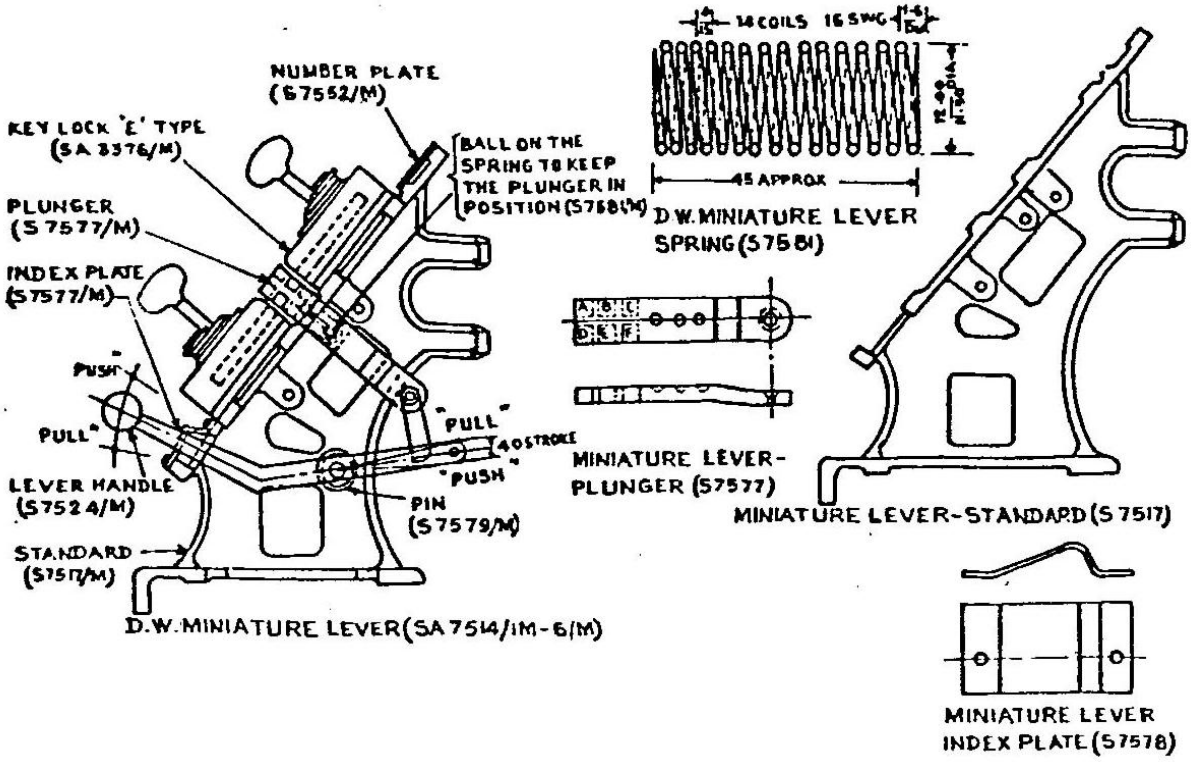
NORMAL(CENTRE POSITION) TO PUSH POSITION:

NORMAL(CENTRE POSITION) TO PULL POSITION:

9. what are the precautions to be observed while cutting the notches on the tappet of

A. TWO POSITION MINIATURE LEVER:

B. THREE POSITION MINIATURE LEVER:



Date; Signature of trainee