



नाम

Name : _____

अनुक्रमांक

Roll No : _____

पाठ्यक्रम

Course : _____

दिनांक

Date : _____

प्राप्तांक

Marks Awarded : _____

अनुदेशक के आद्यक्षर

Instructor Initial : _____

Introduction to clutch lever:

In a clutch lever the lever handle and the rope drum are not rigidly connected, but held together with a spring loaded spring clutch, permitting

The rope drum to rotate independently of the lever with a restricted movement, if the lever is forced against an obstructed transmission or if a wire is broken.

Tripping displaces the tappet to lock the dependent levers and will not allow an unsafe operation. This will also give an indication in the cabin that the transmission is defective. Tripping is the restricted relative motion between lever handle and rope drum caused by a tension difference in the two wires. The movement of the rope drum is restricted to 3 inches. However, if a locked lever is "TRIPPED" movement of the drum is only 7/8 inches, in this case also the fault indicator appears.

The standard is mounted on the channel. The rope drum has three notches out at the periphery to take the auxiliary lever for resetting the lever drum when it trips. This rope drum is mounted on a hollow axle of the lever handle and the lever handle mounted on the main axle. The clutch is fitted to the lever handle. One of its arms ends in a wedge chapped head and engage with a similar notch is held up by the pull of the adjustable catch handle spring which is connected to the catch handle at the other end.

In order to indicate tripping of the lever two fault indicator plates painted alternately red and white are welded to the shaft. The shaft is pivoted on the number plate and is operated by a strip which is connected to the shaft and the other end of the strip is connected to the clutch with 1/8 inches 3mm

Dia pin. the strip is allotted and guided by a pin on the lever. The fault indicator is normally covered by the number plates, when the lever

Trips is pulled down the fault indicator turn clock wise on the shaft and fall out and show. During the lever operation the catch handle remains pressed and therefore F of the latch rod and lug 'G' of the clutch pawl are in contact

And lug G of latch rod moves on quadrant, the down rod movement of the latch rod prevented the lug G and bass F are $\frac{3}{4}$ inches 18mm a part and therefore tripping is possible.

A lever which has already tripped cannot be operated because for operation of the lever the catch is to be pressed and is not possible as the cam d or b of the rope drum forces the projection p to remain locked F to remain locked and cannot move upwards the latch rod remains locked and prevents pressing of the catch handle until the lever drum reset, when the tappet upwards when the lever is normal. This movement and sufficient to distance the locking.

A clutch lever is used for the operation of points, facing point locks economical points, lock-retaining or holding bars, fouling bar detected and signals with detector.

The clutch lever is available in two sizes, 20 inches (500mm), 24 inches (600mm) stroke lever is used for.

20 inches –500mm stroke lever:

1. points transmission upto 550yards or 500mts
2. Detector transmission upto 650 yards or 600mts.

stroke lever: 24inches –600mm:

1. Points transmission greater than 550yards or 500mts.

And upto maximum of 600yards or 730 mts.

3. Detector transmission greater than 650yards or 600mts

And upto a maximum of 800 yards or 730 mts.

Indicate the following parts in the sketch attached.

- A. ROPE DRUM.
- B. LEVER HANDLE.
- C. CATCH HANDLE.
- D. LINK.
- E. LATCH ROD
- F. CRANK
- G. CLUTCH
- H. CATCH HANDLE SPRING.
- I. STANDARD .

J. MAIN AXLE.

K. NUMBER PLATE BRACKET.

1. How is the lever handle connected to the rope drum?

2. How do you reset a tripped clutch lever?

3. How is a clutch lever prevented from tripping during its operation?

4. How is tripped lever prevented from being operated?

5. How is the faulty conditions of the transmission indicated in the cabin?

6. When and how is the fault indicator actuated?

7. Will the fault indicator be displayed if the transmission breaks while the lever is locked or back locked tight in the interlocking frame?

8. When lever trips in its normal position .

- a. The rope drum rotates by _____
- b. Clutch is lifted upto _____
- c. Catch handle in free/ locked
- d. The tappet moves by _____ in the _____.

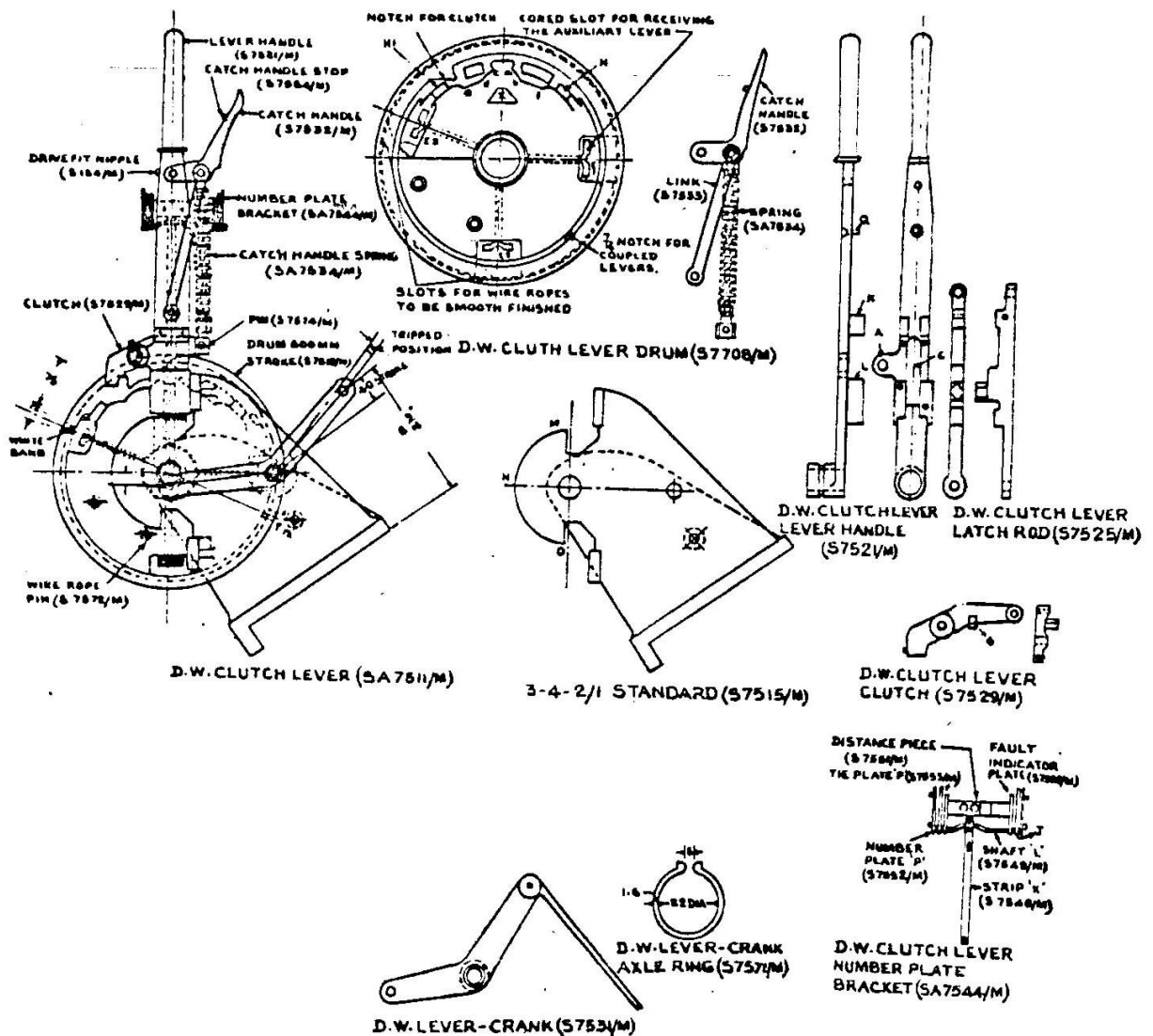
9. How is the locking actuated by the tripping of the lever?

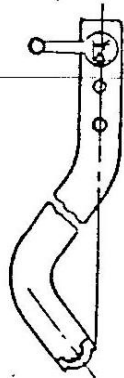
10. A. For what type of transmissions is a clutch lever used?

B. What is the range of operation of a clutch lever?

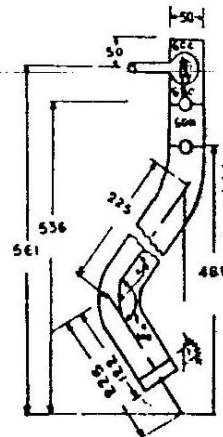
- a. With a rope drum of 20 inches ,500mm
- b. with a rope drum of 24 inches ,600mm stroke?

11. Can you think of any improvements /midifications if so, detail briefly.

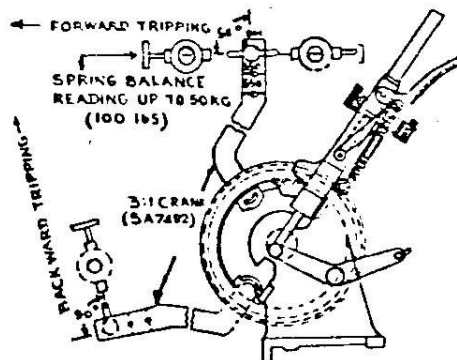




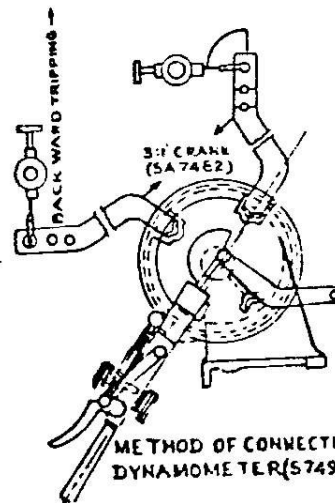
3:1 CRANK COMPLETE FOR TESTING D.W. CLUTCH LEVER (SA7492)



3:1 CRANK COMPLETE FOR TESTING D.W. CLUTCH LEVER (S7495)



METHOD OF CONNECTING DYNAMOMETER (SA 7490/M)



METHOD OF CONNECTING DYNAMOMETER (S7491)

Date;

Signature of trainee