

ROLLING LADDERS EQUIPPED WITH W.E. O. TYPE BRAKES  
ADJUSTMENT

1. GENERAL

1.01 This Section provides adjustment procedures for rolling ladders equipped with W.E.Co. type brakes. For information on the installation of rolling ladders refer to the appropriate Section in the 237 series of GSP's.

2. ADJUSTMENT TOOLS

2.01 The only adjustment tool required for this Practice is the W.E.Co. R-2481 30 lb. spring balance or equivalent.

3. PROCEDURE

3.01 The stop screw of the release lever, illustrated in Figure 1, is adjusted at the factory and should require no further adjustment.

3.02 To adjust the retractile spring to meet the no-load requirement:

- (a) Adjust the nut at the lower end of the retractile spring assembly to tension the retractile spring. It should be tensioned sufficiently to prevent the brake of the unloaded ladder from dragging at any point along the track when the ladder is moved at a walking pace in either direction.
- (b) The no-load requirement will usually be met if the retractile spring is adjusted so that the hanger pivot bolt touches lightly the top of the 1-inch circular opening in the frame when there is no load on the ladder. This adjustment is made, standing on another ladder, by turning the adjustment nut shown in Figure 1.

NOTE: When the adjustment nut is turned to the right (which moves the nut in an upward direction) it tends to release the brake or reduce its holding power.

If the nut is turned to the left (which moves the nut in a downward direction) it tends to apply the brake or increase its holding power.

3.03 The brake should be adjusted so that a load of approximately 140 lbs., applied on the 3rd step from the bottom of 8, 9 and 10 step ladders, the 4th step from the bottom of 11, 12 and 13 step ladders, and the 5th step from the bottom of 14 and 15 step ladders, will cause the brake to set, at any point along the track, so that a force of at least 25 lbs. applied approximately horizontally at the loaded step in the direction toward which the ladder is inclined, will be required to start movement of the ladder. Under these conditions the operation of the brake release should reduce the force required to move the ladder to not more than 12 lbs. Use the W.E.Co. R-2481 30 lb. spring balance for these tests.

3.04 If the brake does not meet the above 25 lb. pull requirement, the adjustment nut should be slackened off (turned to the left) until the requirement is met. Then recheck the no-load requirement, Paragraph 3.02 and the 12 lb. brake release requirement.

3.05 The clearance between the release rope stop clamp and the top surface of the associated rope guide bracket for all points along the track should be at least 1/8-inch and not more than 1/4-inch when the ladder is loaded just sufficiently to operate the brake and the release lever is operated against the lever stop. This requirement is checked by ascending the ladder to a point where the brake operates and then pulling the release rope until the release lever makes contact with the release lever stop.

3.06 The brake release rope clamp should be adjusted to provide enough slack in the rope to allow unrestricted motion of the release lever when the ladder is loaded sufficiently to fully operate the brake. This requirement should be met with the ladder at any point in its run.

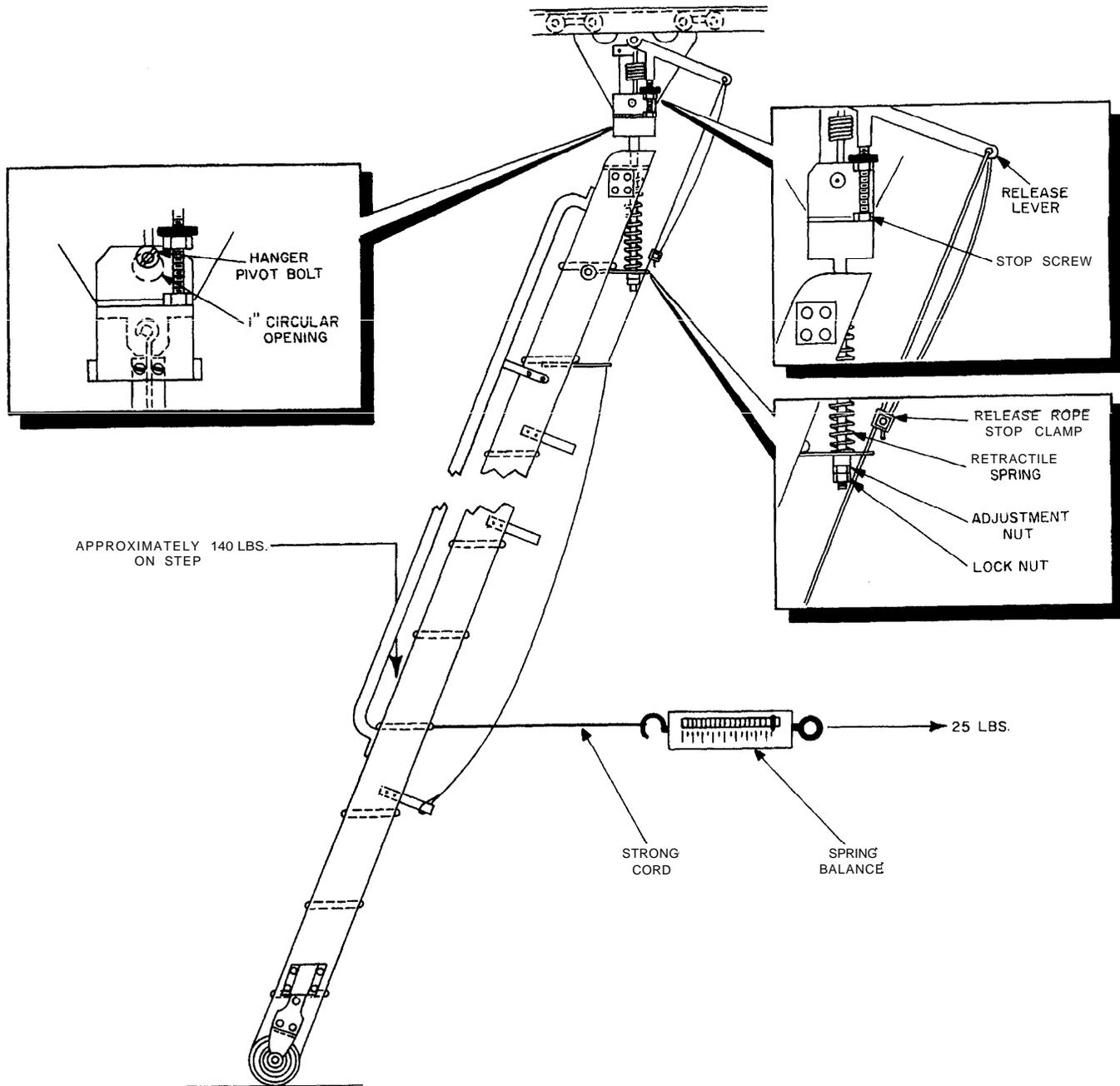


Figure 1. Typical Rolling Ladder Equipped with W.E.Co. Type Brakes