

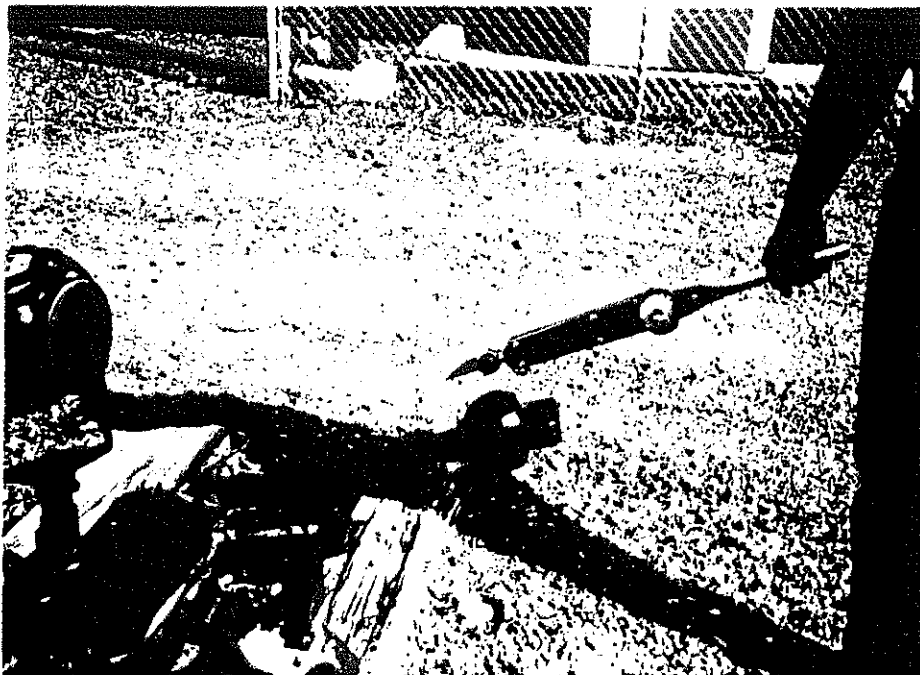
READ FIRST BEFORE USING TORQUE WRENCH !!!

MEASURING FORCES ON GROUND THROW STANDS WITH **SHORT** HANDLES: TORQUE WRENCH SHOULD BE POSITIONED AS SHOWN BELOW. THEN, THE TORQUE READING ON THE DIAL IS EQUAL TO THE ACTUAL FORCE EXERTED ON THE HANDLE.

MEASURING FORCES ON GROUND THROW STANDS WITH **36" LONG** HANDLES: POSITION TORQUE WRENCH AT END OF HANDLE AS SHOWN BELOW. HOWEVER, THE FOLLOWING NUMBERS SHOULD BE USED INSTEAD OF THE NUMBERS ON M/W CIRCULAR # 12 TO ACCOUNT FOR THE FACT THAT YOU ARE READING TORQUE NOT FORCE (LBS.) ON THE TORQUE WRENCH DIAL. THE RANGES ARE AS FOLLOWS:

LIFT UP = 36 - 162
MIDDLE = 72 - 95
PUSH DOWN = 102 - 144

TORQUE WRENCH ATTACHMENT SHOULD BE POSITIONED WITH DRIVE AS CLOSE TO END OF HANDLE AS POSSIBLE AS SHOWN BELOW.

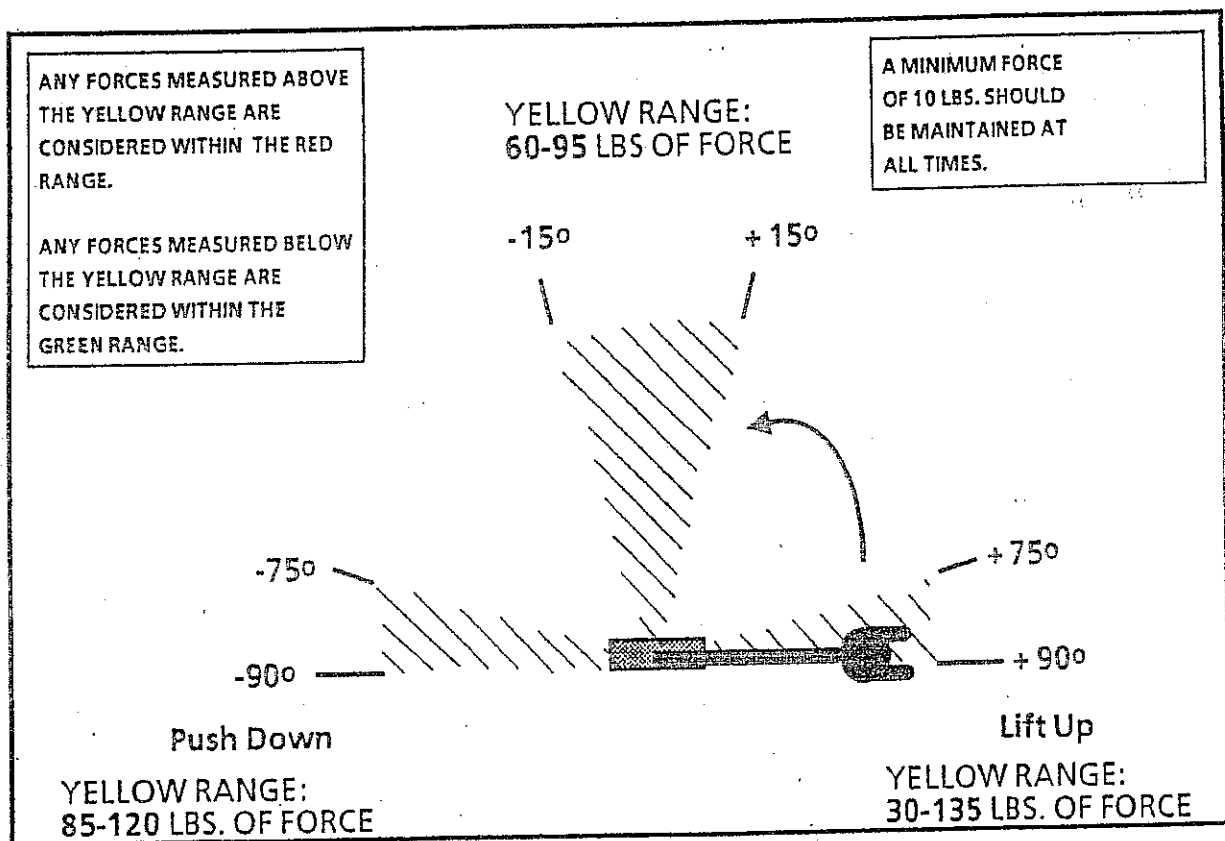


SWITCH STAND ADJUSTMENT GUIDELINES

This information is intended to provide guidelines for the adjustment of switch stands. Foreign objects that become lodged in the switch points, switches that have been run through (including automatic switch stands), sand from locomotives, snow, and ice will interfere with normal switch operation. These conditions are not covered by these guidelines.

Maximum forces measured at the switch stand handle have been established, and are divided into 3 classes: red, green, and yellow, as explained below. A switch will be calibrated for the "green" range of forces under the following circumstances:

1. Initially during new switch installation and again within one week after installation.
2. At the time of inspections as determined by Roadmaster.



Green Range: Forces are below the yellow range. No action is required.

Yellow Range: Forces measured at the switch stand handle are in the ranges as shown above. Forces indicate switch should be scheduled for maintenance.

Red Range: Forces measured at the switch stand handle are above the yellow range. Switches should NOT be utilized until maintenance can be performed.