BOOM OVER OPEN LANE – GUAGE INSTALLATION

1.0 INTRODUCTION

This procedure is to be used when installing the boom height indicator gauge to determine lower boom height when working over roadways.

2.0 APPLICATION

The boom height indicator gauge shall be applied to all vehicles capable of having their lower boom extend over a travel lane while the bucket is at a workable height. This is determined by drawing a chalk line along the ground, perpendicular to the outermost outrigger and parallel to the vehicle (see **Figure 2** and **Step 4** in the Installation Procedure section). If the lower boom is capable of extending beyond this line while work is being completed aloft, the truck shall be equipped with a boom height indicator gauge.

3.0 INSTALLATION PROCEDURE

1. Ensure the truck is in the garage on the floor or on a paved flat level surface. Extend the truck outriggers fully so that firm contact is made with the surface and the bulge has been lifted out of the tires.
2. Confirm the trueness of the truck's built-in levels using a level that is external to the truck. Using the truck's levels, verify the truck is level in the side to side direction and the front to back direction.
3. Install the angle gauge bracket at 40 degrees (+/- 5 degrees) on the operator's side of the lower boom, on the steel section just below the insulated section. See **Figure 1.** The bracket shall be bolted to the boom. If existing holes are present in the boom at the correct location, these should be used. Holes may be drilled and tapped as necessary.
4. For trucks where the outriggers have equal extension, place the 4.8m measuring stick parallel to the truck, on the ground, such that it touches the outer edge of both outriggers on the driver's side of the truck. Use chalk to draw a straight line along the measuring stick between the outer edge of the two outriggers. See **Figure 2.**

NOTE: For trucks where the outriggers do not extend equally, the chalk line must be drawn perpendicular to the furthest reaching outrigger.

5. Swing the lower boom out over the driver side of the truck. The boom should be perpendicular to the side of the truck. Raise the lower boom to a height of 4.8 meters measured straight up from the chalk line directly under the boom. The 4.8m measuring stick is used to confirm the boom height. Use a level to ensure the measuring stick is perpendicular to the garage floor. See **Figure 3.**

   NOTE: This measurement is not to be taken while standing at either outrigger. The measurement must be taken from the point on the chalk line and underneath the boom when the boom is perpendicular to the truck side.
6. Mark the location of the pointer on the gauge when the boom is at 4.8m.
7. Lower the boom to a workable height and apply the red, yellow, and green tape to indicate the height of the lower boom on both the inner and outer sides of the gauge. The decal should be placed such that the mark on the gauge from step 6 is on the line between red and yellow. See **Table 1 and Figure 4.**
8. Repeat steps 4 and 5 on the passenger side of the lower boom to confirm the gauge pointer is aligned to the same location (between the red and yellow section) when the boom is at the 4.8m clearance.

Figure 1: Angle Gauge Installed on Lower Boom

Table 1: Gauge Interpretation

Measurement Location	Indicator
From road to lower boom when measurement is taken with the boom perpendicular to the truck at a distance of the furthest reaching outrigger	**Red** = less than 4.8 meters
	Yellow = 4.8 to 5.4 meters
	Green = greater than 5.4 meters

Figure 2: Line Parallel to Truck from Front to Back Outrigger

Figure 3: Boom Height Measurement

Figure 4: Angle Gauge Tape Application