

AIR-WEIGH BINMAXX CALIBRATION – PREP WORK

TOPIC: BinMaxx Calibration Bin Size and Weight Selection

METHOD 1 – SINGLE CAN METHOD

Take a 6 yarder and weigh it on a ground scale (not on another onboard scale). This weight will be the weight entered for the EMPTY WEIGHT portion of the calibration.

Next, subtract 100 pounds from the weight of the empty six yarder. This is the amount or weight of the material that needs to be added to the empty six yarder to transform it into the HEAVY WEIGHT CONTAINER.

For example: if the empty six yarder weighs 940 pounds, then approximately 840 pounds of material needs to be added to the empty can to create the HEAVY WEIGHT CAN and in this example that HEAVY WEIGHT CAN would now weigh 1780 pounds.

The material chosen must be able to be spread evenly and uniformly throughout the can with the center of gravity of the material in the middle of the can; the material chosen cannot be able to absorb moisture when it gets wet, as this would change the weight; the material chosen must be able to be packed tightly in the can so that it does not move when the can is lifted; the material chosen must be able to be easily lifted in and out of the can.

For non-permanent calibration cans, bags of oil dry work well as the material to be added to the empty can. Place approximately 21 forty pound bags of absorbent (i.e. 840 pounds) into the empty can. Ensure that the bags are placed into the container in a manner that will **NOT** allow the bags to move during the calibration process and in a manner that will allow the center of gravity of this added weight to be in the center of the container. Next, do some math - add this 840 pounds (21 x 40) to the empty weight of the empty 6 yarder and use this sum total as the weight to be entered into the display for the HEAVY WEIGHT in the scale's memory **PRIOR TO** and for the calibration process.

Bags of absorbent do not have to be used. Any material that meets the needed criteria is good.

Proceed with the calibration procedures by lifting the HEAVY can with the bags of absorbent inside first; then remove the bags from the container and proceed with lifting the EMPTY container to complete calibration. Use the calibration instructions for the proper lifting procedures for both the HEAVY and EMPTY container found below.

METHOD 2 – TWO CAN METHOD

Two IDENTICAL bins are needed for calibration. Typically 6 yarders are preferred. The empty weight of these two bins needs to be known and needs to be the same within 20-40 lbs. Thus, these two containers need to be weighed on a ground scale (do not use another onboard scale to weigh these containers).

Next, one of these two identical cans will become the HEAVY can, as it is referred to in the calibration instructions. This HEAVY can is filled with a material that will not easily move and that is not susceptible to moisture. The material used needs to have its center of gravity in the center of the can during calibration and must not be able to move or slide during calibration.

The weight of the material to be placed into one of the 6 yard containers is based on the weight of the empty 6 yarders used. Typically, a weight of about 100 pounds less than the weight of the empty 6 yarders is desired. For example, if the 6 yarders weigh 920 pounds, add approximately 820 pounds of material to create the HEAVY can. The precise weight of the HEAVY can (contents plus can weight) in this example would then be 1740 and the EMPTY can weight would be 920, in this example. Your weights will vary from those used in this example and it is **your actual weights** that need to be entered into the display prior to lifting the cans.

Entering Weights

1. Weigh an empty 6 cu. yd. refuse bin on an accurate in-ground scale
2. Record your empty weight in BinMaxx. Press **ESC** until you reach the main menu. Select **SETUP** and push the ▼ key until you reach **CAL WT SETUP**.
3. Select **CAL WT SETUP** and use ▼ to select **EMPTY WEIGHT**. Use ▲ or ▼ to enter the empty weight and press **OK**.
4. Next, add approximately 800 lbs. of material that will not shift as the can is lifted, and that allows for the center of gravity of the material to be in the middle of the 6 yard can. The exact weight of the material added must be known. This material can be added to the same can weighed in step 1, but will later in the calibration process need to be removed. Therefore, bags of absorbent (speedy dry) work well.

A second option is to use separate cans for the empty can and the heavy can in the calibration process, but if so, the cans **MUST BE IDENTICAL** in dimensions and weight. Using two separate, but identical cans will eliminate the need to remove the weighted material from a can during the calibration process.

5. Enter your heavy weight in BinMaxx. Press **ESC** until you reach the main menu. Select **SETUP** and push the ▼ key until you reach **CAL WT SETUP**.
6. Select **CAL WT SETUP** and use ▼ to select **HEAVY WEIGHT**. Use ▲ or ▼ to enter the heavy weight and press **OK**.

You have successfully entered BinMaxx calibration weights. This is the first step in the two step calibration process, that being **TELLING THE SCALE WHAT THE CANS WILL WEIGH**.

The second step is to **SHOW THE SCALES WHAT THAT WEIGH FEELS LIKE** by lifting both the heavy and empty cans, if using two separate but identical cans, or by lifting the same can both in a heavy (weigh added) state and an empty state.

Instructions on how to do this are to follow.

Heavy Calibration

1. Turn the vehicle on to power the scale.
2. Place the heavy bin that you weighed earlier, in the section on Entering Weights, onto the forks.
3. From the main menu, select **SETUP** and press **OK**. Use **▼** to select **CALIBRATION** and press **OK**. Then use **▼** to select **HEAVY WEIGHT** and press **OK**.
4. Wait a few seconds after the warning **USE FILLED AIR-WEIGH CAL WEIGHT** appears. The display will show **RAISE WEIGHT UNTIL DISPLAY FLASHES**. Begin lifting the bin in a smooth, consistent motion.
5. The display will flash when you reach the high proximity switch. Immediately stop the lift.
6. The display will stop flashing and change to **LOWER WEIGHT UNTIL DISPLAY FLASHES**. Immediately, lower the heavy bin in one smooth, consistent motion.
7. The display will flash when you reach the low proximity switch. Immediately stop lowering the bin. Be careful not to touch the ground.
8. If you receive a **LIFT ERROR** message, restart the calibration process.
9. Repeat lifting and lowering the heavy bin until you have completed five successful lifts and drops. The display will read **HEAVY CALIBRATION DONE**.

Empty Calibration

1. Place the empty bin that you weighed earlier onto the forks.
2. From the main menu, select **SETUP** and press **OK**. Use ▼ to select **CALIBRATION** and press **OK**. Then use ▼ to select **EMPTY WEIGHT** and press **OK**.
3. Wait a few seconds after the warning **USE EMPTY AIR-WEIGH CAL WEIGHT** appears. The display will show **RAISE WEIGHT UNTIL DISPLAY FLASHES**. Begin lifting the bin in a smooth, consistent motion.
4. The display will flash when you reach the high proximity switch. Immediately stop the lift.
5. The display will stop flashing and change to **LOWER WEIGHT UNTIL DISPLAY FLASHES**. Lower the empty bin in one smooth, consistent motion.
6. The display will flash when you reach the low proximity switch. Immediately stop lowering the bin. Be careful not to touch the ground.
7. If you receive a **LIFT ERROR** message, restart the calibration process.
8. Repeat lifting and lowering the empty bin until you have completed five successful lifts and drops. The display will read **EMPTY CALIBRATION DONE**.