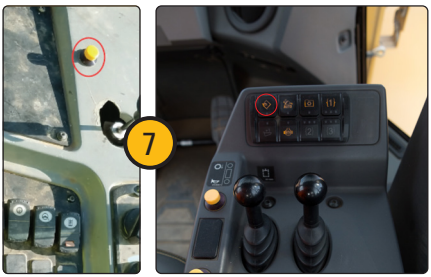
Cat® Payload (Standard)*
Next Gen MWL & Cat Payload Kit
Quick Reference

1) TRUCK WEIGHT – Displays the total of the material loaded into the truck. The smaller number indicates the number of passes in the truck. Bucket weight will instantly transfer to the truck when scaled weight is calculated.
2) BUCKET WEIGHT – Displays the weight of material currently in the bucket.
3) TARGET WEIGHT – Displays the remaining weight needed to achieve the target payload for the currently selected truck.
4) BUCKET ZERO or TIP-OFF mode
5) SCALE SYSTEM STANDBY
6) -1 PASS AND TRUCK CLEAR
7) STORE BUTTON – Press at the end of a truck load cycle to store the data to memory and update lifetime and trip payload totals.
8) WEIGH RANGE INDICATOR – This icon will appear over the bucket when the linkage is in the weigh range.
9) MANUAL TIP OFF Activate/Deactivate button
10) Main MENU access for PAYLOAD SETTINGS and Reweigh button
11) UNITS in USE



BUCKET WEIGHT TYPES

PRECISION SCALED WEIGHT – the most accurate weight. Displayed within a green box. Occurs after lifting through weigh range smoothly with bucket in fully racked position.

ESTIMATED WEIGHT – a weight with no green box. Methods to obtain estimated weight:

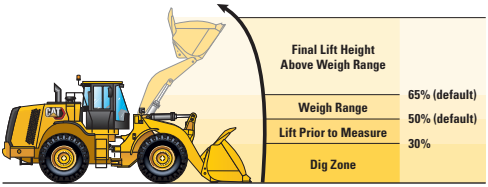
1) Low lift weigh – estimates weight anytime lift arms are above 30% of height and smooth lift command issued for 1-3 seconds.
2) While tipping the bucket when operating in one of the tip-off modes.
3) The "Reweigh" button is pressed (at any lift height).

**Not legal for trade.*

Cat Payload (Standard)*
Next Gen MWL & Cat Payload Kit
Quick Reference

Basic Operations

1) Warm up lift components.
2) Zero the empty weight.
3) If desired, set a new target weight.
4) Load bucket.
5) Lift smoothly through the weigh range to generate a scaled weight (green box).
6) Dump bucket into target, confirm bucket weight was committed by watching for the "***" as bucket weight.
7) After last bucket, press store.

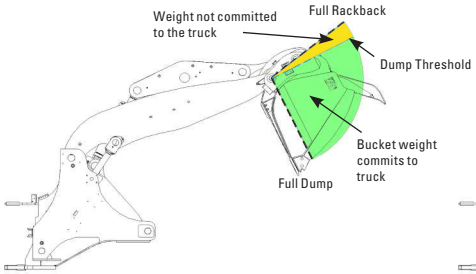


Weighing Operation — Default Weigh Range Setting

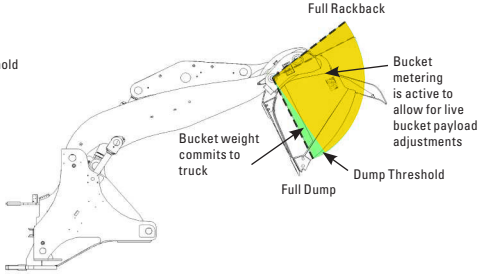
BUCKET DUMP THRESHOLD DEFINITIONS

Determines when Bucket Weight is Committed to the Cumulative Truck Weight

Tip-Off Disabled
"Commit" Weight to the Truck



Tip-Off Enabled
"Commit" Weight to the Truck



Once the dump threshold is reached, the logic will commit the bucket payload and pass count to the truck.

Weight committed to the truck is signified by the *** in the bucket.

Dump thresholds:

- Yellow – weight not committed to the truck
- Green – weight committed to the truck

Note: Once a bucket weight has been committed to the truck, no more changes can be made to that bucket weight; however, operator can use the "-1" button to remove it.

Cat Payload (Standard)*
Next Gen MWL & Cat Payload Kit
Quick Reference

TIPS FOR BEST ACCURACY

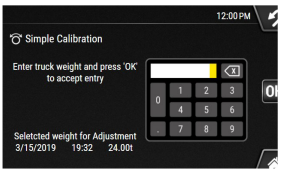
- Allow 20% of lift height or 2 seconds between the start of lift and the start of weigh range.
- Adjust ride control activation ground speed so ride control does not activate in the weigh range.
- Minimize tire bounce while the linkage is in the weigh range.
- Maintain consistent ground slope for every truck load.
- Set raise kickout, if using, to 15% above the end of the weigh range.

- Initial press of "-1 Pass" button removes last pass from the truck, second press clears the current truck weight.
- Reweigh is automatic when you lower and raise through weigh range without dumping the bucket and does not increase cycle count.

ZEROING AN EMPTY BUCKET – used to zero a bucket on startup, when prompted, or when carryback is occurring and not able to be removed.

1) Rack an empty bucket back and lift through the weigh range.
2) Make sure it is a scaled weight with a green box.
3) Press bucket zero button.
4) Alert message area will report "Zero Accepted" or "Weight Too Heavy to Zero".

PERFORMING A SIMPLE CALIBRATION – used to fine tune payload.
Note: Simple calibration relies on a properly zeroed system and is intended to align errors that are a **constant offset** only.



1) Press Menu > Payload Settings > Simple Calibration.
2) Select a truck from the list.
3) Update truck weight with scale house weight.
4) Truck will disappear from list.
5) For additional accuracy, repeat for as many as 15 trucks.

For more advanced feature descriptions refer to the machine Operation and Maintenance Manual.

Cat Payload (Standard)*
Next Gen MWL & Cat Payload Kit
Quick Reference

Expanded Operation Quick Reference Guide

LOW LIFT WEIGH

- Use in conjunction with tip-off for a very efficient last pass bucket adjustment OR if a precision scaled weight is not required (hopper charging for example).
- With linkage above 30% of full lift travel, issuing a slow and smooth lift command for 1-3 seconds will generate an estimated weight.
- This weight is not as accurate as a scaled weight but more accurate than other estimated weights.

TIP-OFF

INTRODUCTION

- Allows faster cycle time on final pass of truck loading.
- Less accurate than the scaled weight.
- A live estimated weight is shown on the screen while partially dumping a bucket.
- For best accuracy, confirm tip-off weight with scaled weight by lifting final payload through the weigh range.

TIP-OFF MODES

AUTOMATIC TIP-OFF TRIGGER

- Logic will automatically detect when operator has started tipping material.
- Icon indicates that tip-off is in Auto mode.
- The Tip-Off mode select button replaces the ZERO button when activated.

  Note: When not tipping, make sure to fully dump the bucket in order to commit scaled weight to the truck.

MANUAL TIP-OFF TRIGGER

- Use the Tip-Off Activate/Deactivate button to initiate and end tip-off during the final pass.
- The Tip-Off mode select button replaces the ZERO button when activated.

STOCKPILE TIP-OFF MODE

- After final bucket load, dump unwanted material back to the stockpile and dump remaining material to the truck.
- Live tip-off estimated weight is most accurate at mid-lift heights.
- Easier to avoid overloading than truck tip-off. Final pass weight is known before transferring material to truck.

STOCKPILE TIP-OFF MODE BEST PRACTICES FOR FINAL PASS

- End dig with bucket as low as practical and fully racked back.
- Slowly lift until an estimated weight appears.
- Slowly dump material back to stockpile until desired weight is reached. **Note:** In Manual Tip-Off Trigger mode, use the tip-off activate and deactivate button to begin and end tipping off. For best accuracy, make sure to end the tip-off before leaving the stockpile.
- Achieve scaled weight by lifting through the weigh range while approaching truck.
- Dump scaled weight into the truck.
- Confirm weight commits to truck by obtaining "***" in bucket.
- Press the store button to end the truck.

Cat Payload (Standard)*
Next Gen MWL & Cat Payload Kit
Quick Reference

TRUCK TIP-OFF MODE

- Useful when leftover material from the first truck can be immediately dumped into the next truck.
- Could result in higher fuel burn if unwanted material is carried and lifted through the cycle.

TRUCK TIP-OFF MODE BEST PRACTICES FOR FINAL PASS

- End dig with bucket fully racked back.
- As you approach the truck, execute a scaled weight by lifting through weigh range.
- Slowly dump material into the truck until desired weight is reached. **Note:** In Manual Tip-Off Trigger mode, use the Tip-Off Activate/Deactivate button to begin and end tipping off.
- To achieve most accurate weight, lower and raise again to achieve scaled weight. If scaled weight is not achievable, fully rack bucket to get a more accurate estimated weight.
- Press the store button to end the truck.

TIP-OFF OPERATOR TECHNIQUE

- Certain factors will affect the payload accuracy during tip-off.
  - Pausing before, during, or after tipping.
  - Amount and position of material in the bucket at the start of tipping.
  - Lift height when tipping.
  - Speed of dump command while tipping.
- Higher accuracy can be achieved from estimated tip-off weights by:
  - Developing a consistent machine operation.
  - Developing repeatable operator behavior: One operator may need to stop 0.2 tons short of target weight. Others may be able to stop at target weight.