



G+ SERIES WHEEL LOADERS CLICK & DIG QUICK USER GUIDE

Come and discover the new and exclusive Click & Dig Automation functionalities, available as standard on all the G+ series wheel loaders.

Click & Dig does not exclude the operator from operation control, but it makes him a sort of "supervisor" on what the machine is going to do automatically.

This quick guide is designed to help you make the best use of your wheel loader, achieving maximum productivity with full comfort and optimal fuel efficiency.

WARNING!

This quick guide does not replace the Operation and Maintenance Manual, which must be carefully read before operating this machine.

GET STARTED

After completing the daily checks (see Operation and Maintenance Manual) and ensuring that there are no error codes, leaks, or any other issues that could prevent proper machine operation, we recommend following the steps described below.

Now you are on the operator seat, engine running, FNR on joystick enabled.

1. ENABLING THE AUTOMATION FEATURES.

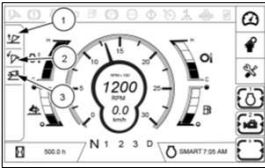
To enable Auto Dig, Auto Dump and Auto Metering features, press the Automation icon on the keypad.



A pop-up message will show up to confirm the enabling of the automation features. Once confirmed, the automation features are enabled.



The automation feature icons (1), (2), and (3) will appear on the left side of the home and payload screens.



Ref. 1: Auto Dig

Auto Dig is an operator assist function that allows for partial automation of a dig cycle. This feature is intended to allow the operator to load the bucket with material with minimal input compared to manual operation.

Ref. 2: Auto Dump

Auto Dump is an operator assist function that automates the bucket unloading process. The operator can specify a dump speed, and the bucket will fully dump at the press of a button and then return to level after unloading.

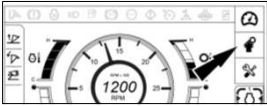
Ref. 3: Auto Metering

Auto Metering is an operator assist function that automates a bucket shake action that can be useful for spreading material and for metering into a truck or hopper.

Now the "Click & Dig" functionalities are enabled but the operational control are still in the hands of the operator, who can proceed with further settings or start soon with the preset system parameters.

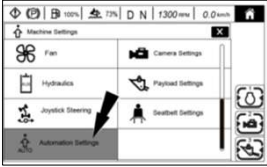
To refine the Click & Dig settings, proceed as follows:

To navigate to the Automation Settings, select the "Machine Settings" icon from the main menu.



From the machine settings page, select the "Automation Settings" icon.

NOTE: The Automation Settings menu can also be set as a configurable button for easier accessibility



There are four options for the operator to choose for the Auto Dig operation:

- (1). **Light:** Lower engine speed, smoother boom and bucket actuation, suitable for loose and light materials.
- (2). **Smooth:** Medium engine speed during bucket rollback, aggressive boom and bucket actuation, suitable for soft materials.
- (3). **Aggressive:** Higher engine speed during bucket rollback, aggressive boom and bucket actuation, suitable for packed materials.
- (4). **Recorded:** If the operator has recorded a dig cycle, then the recording is available for selection. If selected, Auto Dig will replay the dig profile using the same recorded inputs. The operator can rename this mode at his convenience.

Once everything has been set, bring the machine in front of the pile, select the loading direction, keep the machine straight. Ready to use the Auto dig function.

2. USING AUTO DIG

To Arm:

- Hydraulics function lockout is turned off.
- Lower the boom to travel height (boom angle is less than -20°).
- Place the bucket to level (bucket angle is less than 20°).
- Release the implement joystick.
- Release the brake pedal.
- Put the vehicle in forward.
- Maintain a speed below 15 km/h (9.3 mph) when activating the feature.

NOTE: The Auto Dig icon on the display screen will appear **YELLOW** when armed.

To Activate:

- Press and release the Kick-down button.

An activation attempt when one or more arming conditions are not met, will result in a display pop-up explaining the reason for the denied activation.

NOTE: The Auto Dig icon on the display screen will appear **GREEN** when active.

To Abort:

- Press the brake pedal or move the implement joystick in any direction at any time during the Auto Dig cycle.



WHAT HAPPENS WHEN YOU ARE USING AUTO DIG?

Here there is a recap of what you will experience once you have clicked on the trigger button of the implement joystick, activating the autodig function:

1. SETUP

- Machine in front of the pile.
- Park brake released.
- Brake pedal released.
- FNR in forward position.
- Auto dig armed.
- Now, click on the kickdown trigger!**



- Boom and bucket automatically repositions to the predefined Boom and Bucket Starting Position.
- No need to accelerate, or to move the joystick. The machine will proceed autonomously. **Just keep the steering control.**

2. PILE DETECTION

- Boom and bucket are in position and machine drives forward until pile is first contacted.
- The pile must be contacted within 10 s, or the function will abort.



3. CONTROLLED LOADING

- BREAK:** Machine penetrates the pile and tractive effort is applied.
- ROLLBACK:** The bucket rolls back and the boom lifts to fill the bucket.



4. SHAKE AND REVERSE

- SHAKE:** as soon as the machine starts its forward travel, select the position R on the FNR switch. At the end of rollback, the bucket shakes once to better distribute the material inside.
- EXIT:** Depending on the FNR position at the end of the rollback phase:
 - Forward:** Machine shifts to Neutral and remains idle until the operator moves the FNR selection to Neutral and then to the desired direction.
 - Neutral:** Machine Shifts to Neutral and remains idle in Neutral until the operator shifts the FNR selection to the desired direction.
 - Reverse (recommended) :** Operator has selected Auto Reverse. The machine shifts to reverse and backs up for three seconds while the bucket settles the material and returns to a travel position. The machine remains in reverse until the operator shifts the FNR selection to the desired direction.



Now you are back in the full control of the machine, ready to drive the wheel loader toward the point where the material in the bucket needs to be dumped.

A good opportunity to experience the Auto Dump function!



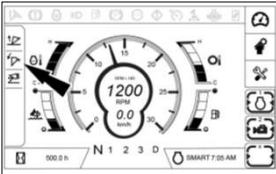
3. USING AUTO DUMP

- To Arm:**
- Hydraulics function lockout is turned off.
 - Parking brake is disabled.
 - Raise the boom to a dump height (Boom angle is greater than -5°).
 - Keep bucket curled back (Bucket angle is greater than 30°).
 - Do not make any manual joystick commands in the bucket dump or rollback directions.
 - Maintain a speed below 10 km/h (6.2 mph) when activating and using this feature.



NOTE: The Auto Dump icon on the display screen will appear YELLOW when armed.

- To Activate:**
- Press and release the Kick-down button.
 - An activation attempt when one or more arming conditions are not met, will result in a display pop-up explaining the reason for the denied activation.



NOTE: The Auto Dump icon on the display screen will appear GREEN when active.

NOTE: The operator has full control of the transmission (forward, neutral or reverse) and they can raise or lower the boom.

- To Abort:**
- Move the implement joystick in the dump or rollback directions

WHAT HAPPENS WHEN YOU ARE USING AUTO DUMP?

You are now in front of the truck or hopper where the material in the bucket has to be dumped. In this case the brake pedal has to be kept pressed.

Once the bucket is full, Auto Dump takes over to:

- Synchronize bucket tilt and shaking, ensuring complete material evacuation.
- Automatically return the bucket to level, reducing manual input.
- Let operators focus more on payload tracking and surrounding awareness

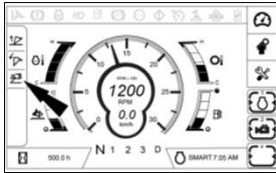


4. USING AUTO METERING

- To Arm:**
- Same procedure used to arm Auto Dump.

NOTE: The Auto Metering icon on the display screen will appear YELLOW when armed.

- To Activate:**
- Press and hold the Kick-down button for at least one second. The metering cycle will last as long as the Kick-down button is held.
 - An activation attempt when one or more arming conditions is not met, will result in a display pop-up explaining the reasons for the denied activation.



NOTE: The Auto Metering icon on the display screen will appear GREEN when active.

NOTE: The operator has full control of the transmission (forward, neutral or reverse) and they can raise or lower the boom.

- To Abort:**
- Release the Kick-down button or move the implement joystick in the dump or rollback directions.

WHAT HAPPENS WHEN YOU ARE USING AUTO METERING?

Now you want to evenly spread the material in the bucket to level an uneven ground area going reverse, or maybe you are going to dump the last bucket on a truck bin, and you must take care not to exceed the maximum truck payload, having a look to the weighting system display.

Without any automatic operator assist – auto metering in this case – what you normally do is apply fast alternate movements left-to-right on the joystick to trigger a bucket dump with simultaneous high frequency bucket shake, trying to make the best possible material dosing. It's not a relaxing operation, isn't it?

With Auto Metering what you have to do is grab the joystick push the kick-down button and hold it for the entire duration of the metering operation.

For precise material distribution, Auto Metering automates the unloading process, ensuring even and controlled spreading.

Operators can:

- Adjust flow and metering intensity for optimal spread patterns.
- Maintain full control over transmission, engine speed, and arm height.
- Reduce material waste while improving efficiency.



4. RECORDED MODE

Not really satisfied with the preset Auto Dig automatic functions?

Were you happier with your own loading method?

No problem at all. You can teach the machine how to operate according to your preferences by activating a New Recording in the Automation Menu.



Recording a Dig Cycle

With the automation functions enabled, but not active, press "Record New" on the Auto Dig settings screen.

Once "Record New" is pressed the following steps must be completed or the recording will be cancelled:

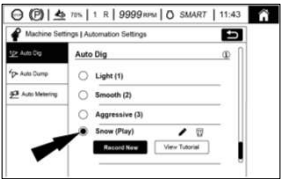


- Start to approach pile within 10 s of arming the recording.
- Make contact with the pile within 10 s of the start of the approach.
- Complete the bucket rollback within 15 s of contacting the pile.
- The recording will stop when in neutral after reversing or after 3 s of reversing.

NOTE: These steps can be seen by pressing the "View Tutorial" on the Auto Dig home screen.

The recorded dig can be saved and named by following the prompts on the display screen. The saved recording will appear on the Auto Dig settings page as a selectable dig mode.

NOTE: The recording can be aborted at any time by pressing the kick-down button on the joystick.



Now it's up to you!
Do you prefer to continue with an old-style working, or do you feel ready to drive the future?
You have the tools; you make the choice!

ENJOY WORKING WITH
CLICK & DIG!



CASE
CONSTRUCTION