

 **Bestbale**TM

Installation Instructions

710 *Pro Series*

Massey Ferguson 1843s/1844S

Hesston 4690



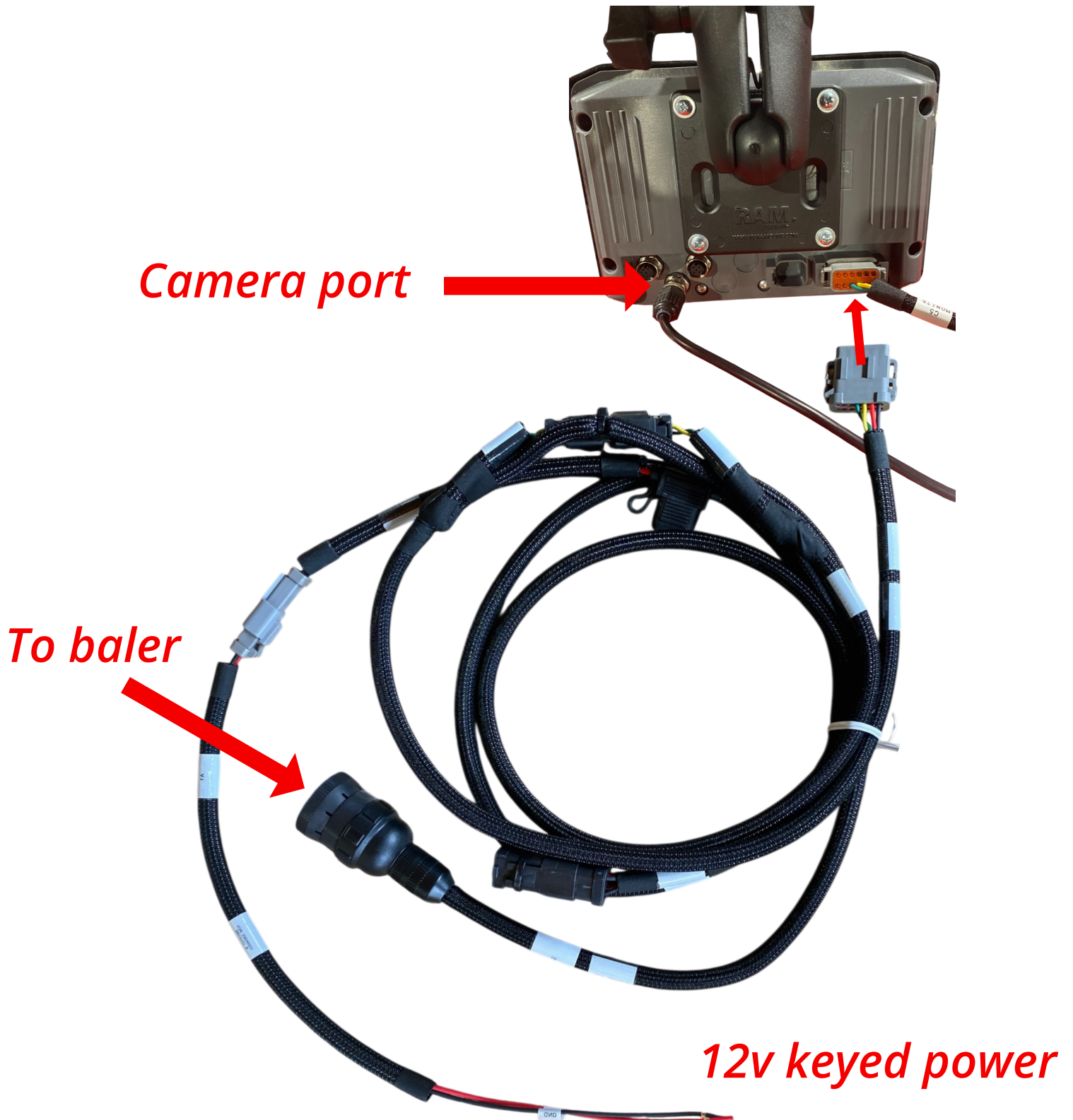
Scan for online instruction manual



Mount the monitor in the tractor



Connect cab harness to the monitor and to 12v 7.5 amp (minimum) keyed power.



Install stroke counter sensor

Option 1, 1844S shown



This is where the sensor mounts

Video of stroke counter installation on MF 1840

Open cover



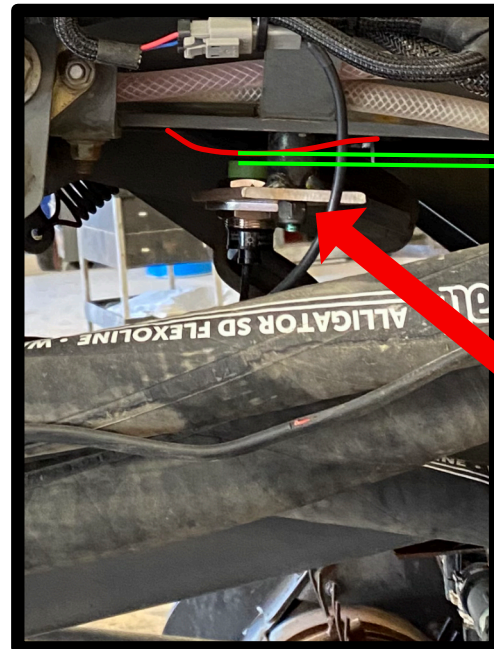
Prepare to rotate flywheel



Rotate until plunger arm is in this position



Install bracket & sensor



(7 mm)
1/4"

1844S shown

Install stroke counter sensor

Option 2, 4690 shown

IMPORTANT: Gap must be no more than $\frac{1}{4}$ "

- 1) For 4690 or engine drive balers, a second location may be used.
- 2) Turn flywheel by hand so feeder fork shaft bolt is at the closest possible point to the sensor (shown below).
- 2) Install the sensor so there is **NO MORE THAN $\frac{1}{4}$ " GAP AT THE CLOSEST POINT.**
- 3) Locktite may be used.
- 4) Check periodically.
- 5) Plug into X11

Red LED illuminates when triggered



Tighten M30 x 1.5 nuts really tight and check periodically after operation.



4690 shown

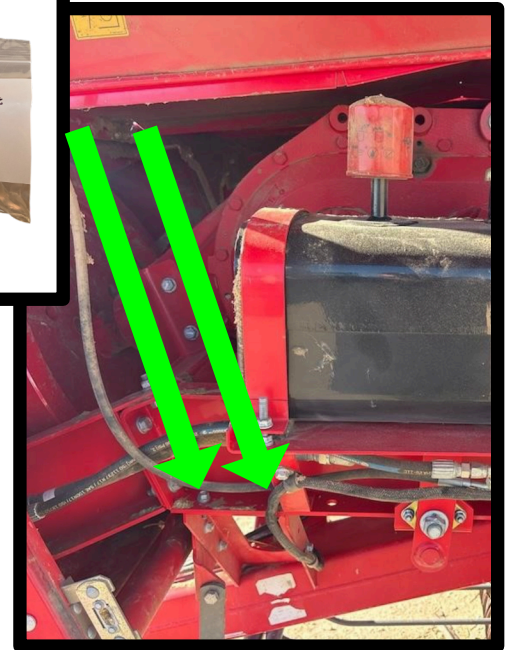
**1" minimum
(25 mm)**

If this sensor is too close to the sidewall, it may pick up signal constantly. Red LED should disappear when sensor is not triggered by bolt.

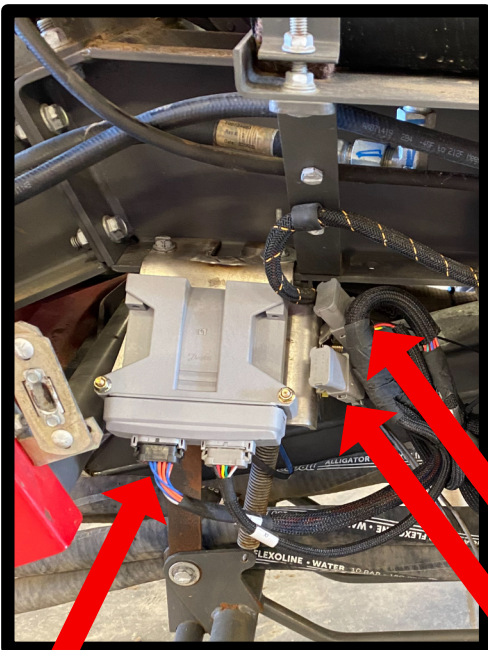
Install ECU/gray controller

Install gray controller & bracket, plugs into X7 and X8

Open cover



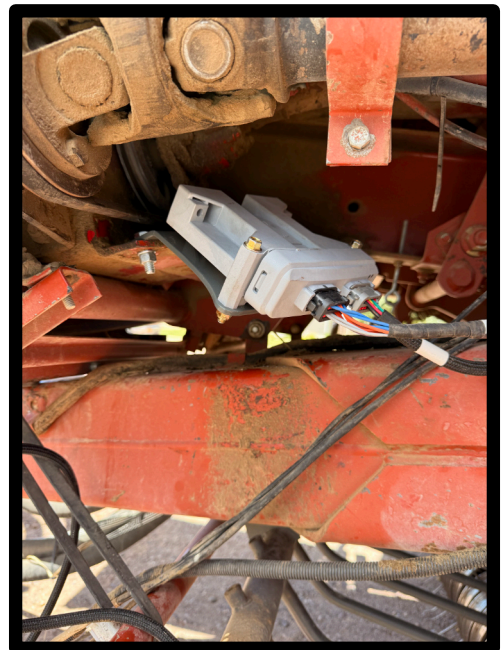
Install bracket with controller and busses



1844S shown
X7 & X8 connectors

*Ground (black) &
power (red) busses*

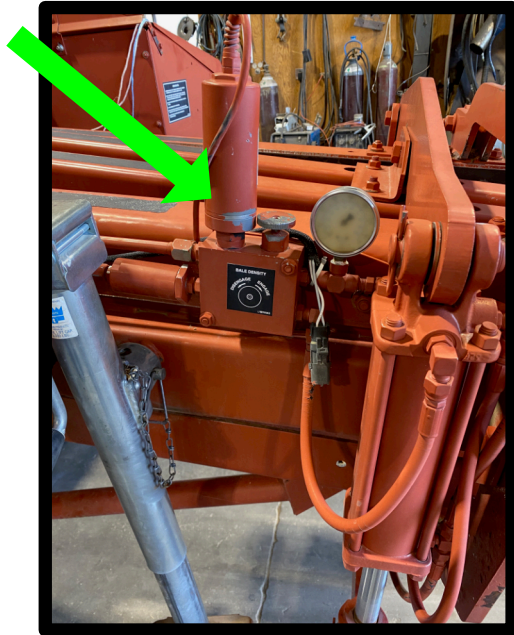
X9 & X10 connectors



4690 shown

Install hydraulic control valve

Remove old valve



*Install BestBale valve & coil
Plugs into X12*



Install pressure transducer



Plugs into X13



Install with wires down so any moisture drains out of plug

Install bale tie sensor



Video of bale tie sensor installation tips



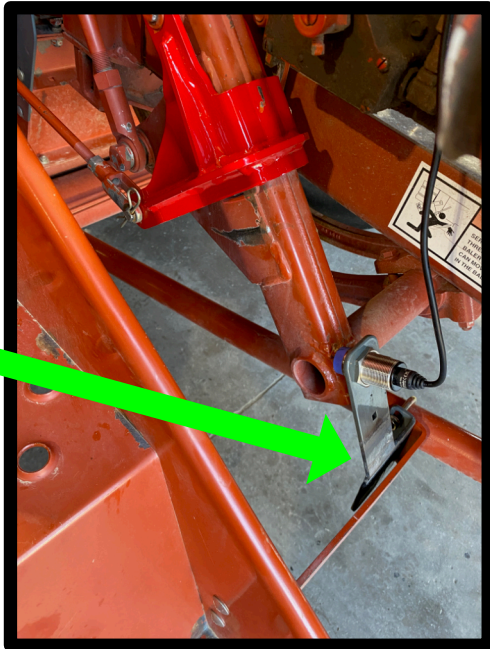
Installation location

Install bale tie sensor

IMPORTANT: Gap must be no more than ¼"

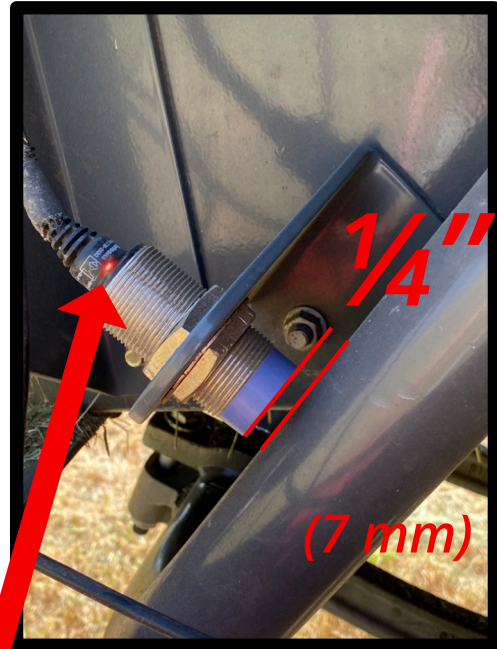
- 1) Check M30 x 1.5 jam nuts periodically to ensure they remain tight.
- 2) Damage caused by unsecured jam nuts are not covered under BestBale warranty.
- 3) Locktite may be used to help secure the jam nuts.
- 4) Plug into X14.

Secure bale count bracket & sensor



4690 shown

Set gap NO MORE THAN ¼"



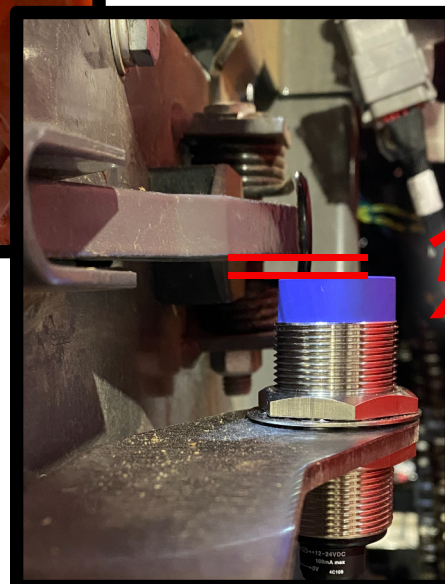
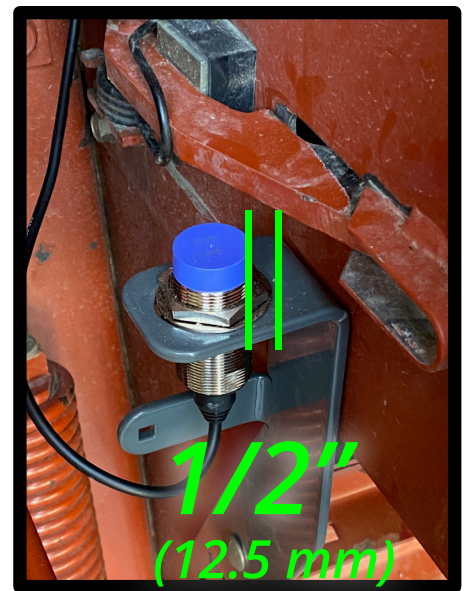
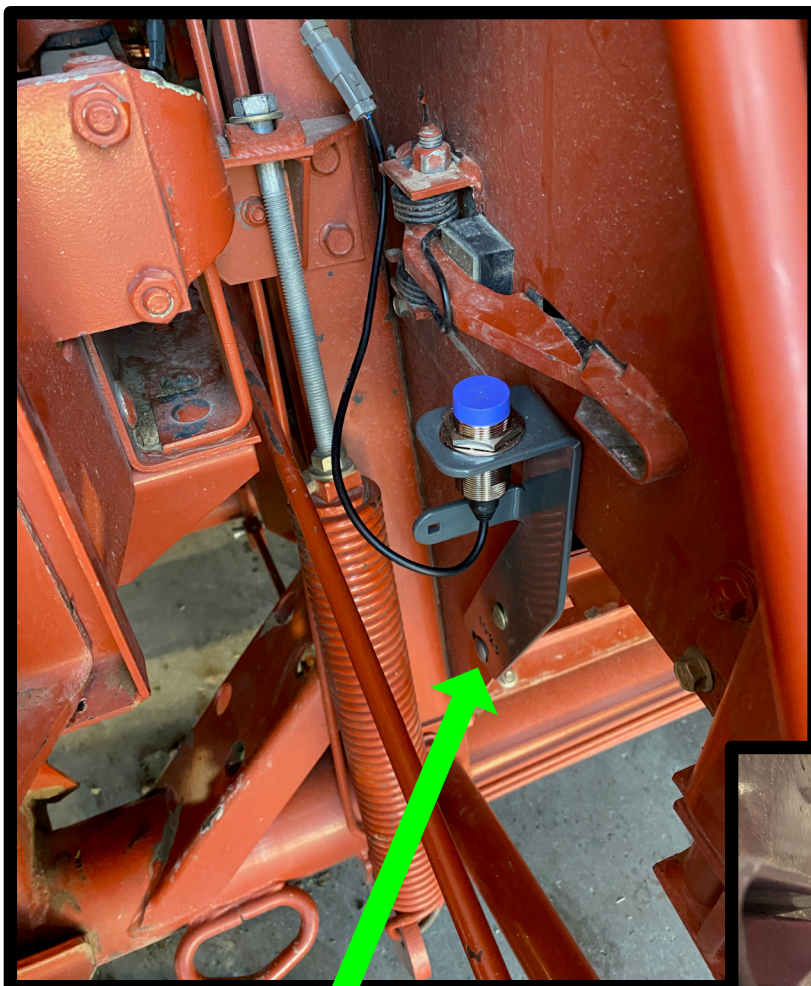
1840 shown

NOTE: The sensor should be triggered and the LED should be illuminated in the home position, as shown. When the needles go through a tie cycle, the LED should no longer be illuminated and the sensor adds one bale to the bale count.

Install flake sensor

IMPORTANT: Gap must be no more than $\frac{1}{4}$ " when the hay dog is fully extended.

- 1) Set distance between the edge of the sensor and the "point" or edge on the hay dog in the home position to $\frac{1}{2}$ " (12.5mm).
- 2) Open the hay dog so it is extended over the sensor and set that gap to NO MORE THAN $\frac{1}{4}$ " (7mm).
- 3) Plug into X22.



Adjustment bolts

Install scale amplifier



Video for performing a hard zero of the scale amplifier

*Install box to bracket,
then bracket to baler.*



*Connect M12 wires from scale
(no order required)*



Connect X17 wire harness



Perform hard zero if necessary

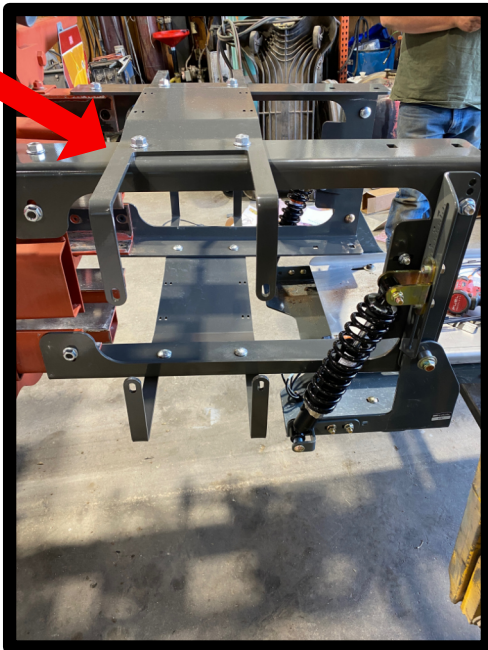


Install scale

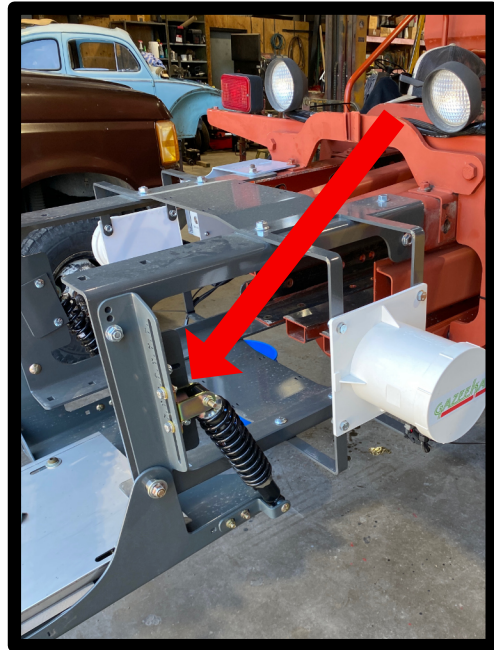


Video for F500-18 scale installation overview on MF1840

Install chamber extension brackets



Install shock mount gauges & shocks



Set lower shock mount brackets to furthest hole



Mount scale to chamber extensions



Install scale

Set both shocks to tightest setting



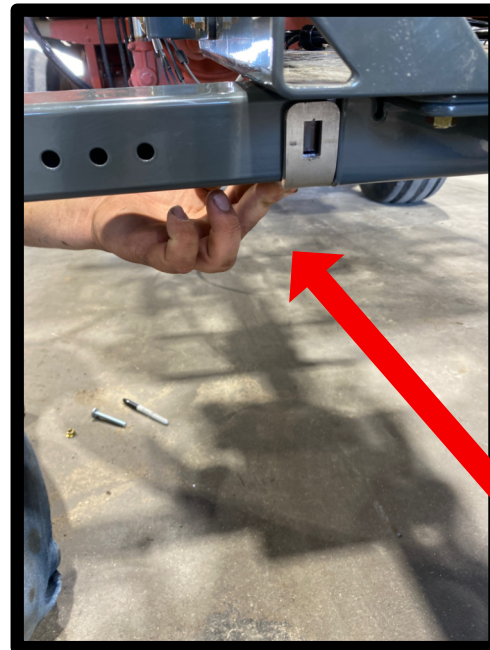
Adjust upper shock mounts so scale platform is level with the ground when baler twine boxes are level also.



Both lines level with ground



Set stop arm to desired width (1/4 turn)



Install scale

IMPORTANT: Scale must weigh, drop bale, and have no weight before the next bale touches the scale.

- 1) Set the coilover spring tensioners at the bottom of the shock absorbers to tightest setting*
- 2) Adjust the scale platform narrower for chambered balers, wider for non-chambered.*
- 3) Adjust upper shock mount up or down to set platform with the ground.*
- 4) Make sure scale platform cleats pull bale toward the passenger side of the baler.*

*Level or slightly raised
when empty*



*Slightly angled
when loaded*



*Rebounds up and has no
weight before next bale touches*



*Make sure baler is level
to the ground when installed
on tractor hitch.*



Properly installed ¼ turn scale



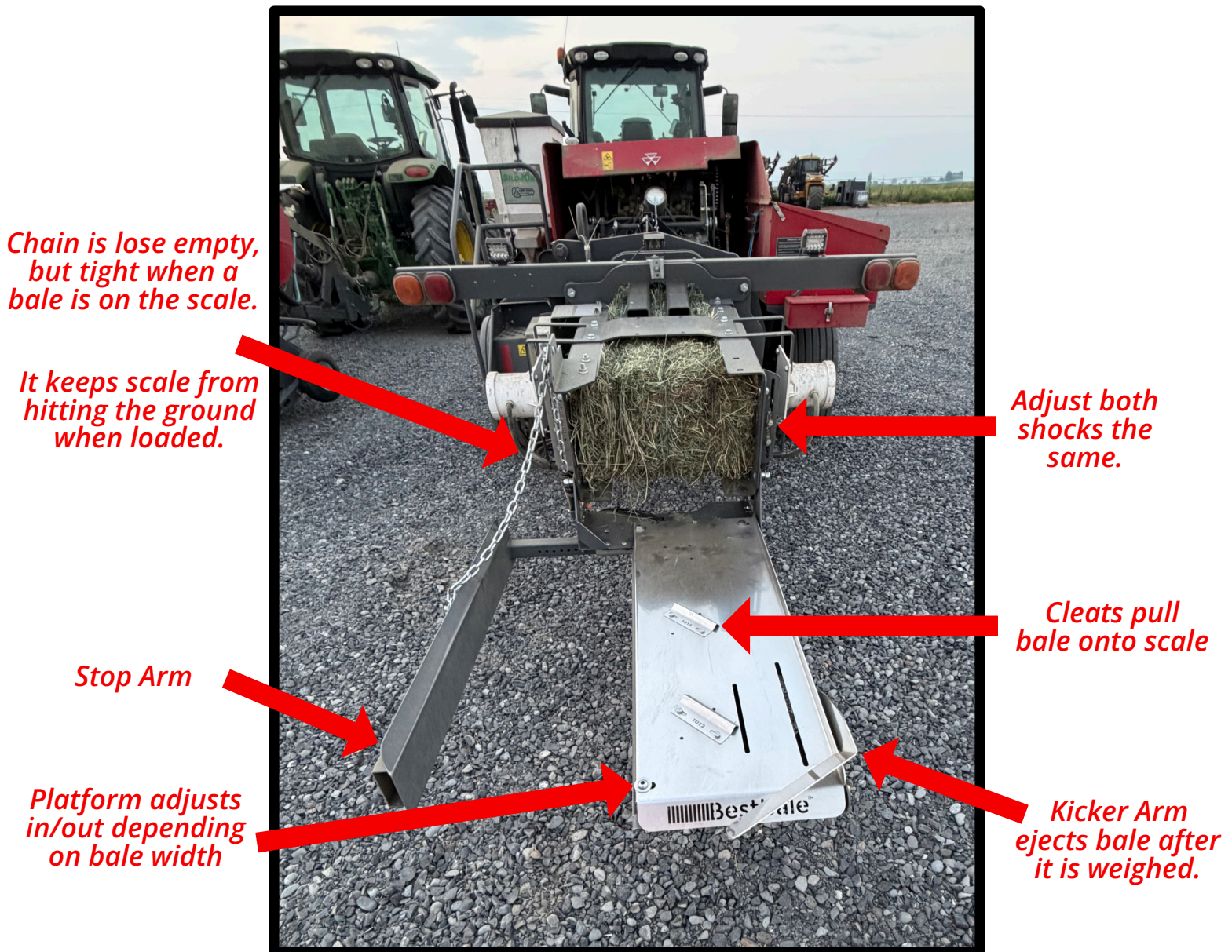
TIP: Be sure the bale is on the scale for a couple plunger strokes before it falls off and turns. If the bale is turning before it lands fully on the scale, your weights will read light in the cab. The full weight of the bale should be on the scale at least 2 seconds for the best results.

¼ Turn Scale Install

IMPORTANT: Scale must weigh, drop bale, and have no weight before the next bale touches the scale.

1) Use chain to anchor Stop Arm

2) Adjust Kicker Arm to kick bale off the platform before the next bale touches the scale.



Run baler wire harness

TIP: LOOSELY secure BestBale harness to factory baler harness with zip ties until all connections are made, then tighten it to the baler harness. This gives room to adjust the harness until all connectors are fitted.

A1/A2 Power in (12v 7.5 amp req)

C5 Monitor

C6 Tractor to baler

X6 Baler to tractor

X7 Gray controller

X8 Gray controller

X9 Power bus

X10 Ground bus

X11 Stroke sensor

X12 Valve coil

X13 Pressure transducer

X14 Bale tie

X15 Greaser lube pump

X16 Gazeeka/aux

X17 Scale amplifier

X18 Greaser divider block

X19-X20 Not used

X21 LED lights (knotter hood)

X22 Flake counter



Install Gazeeka

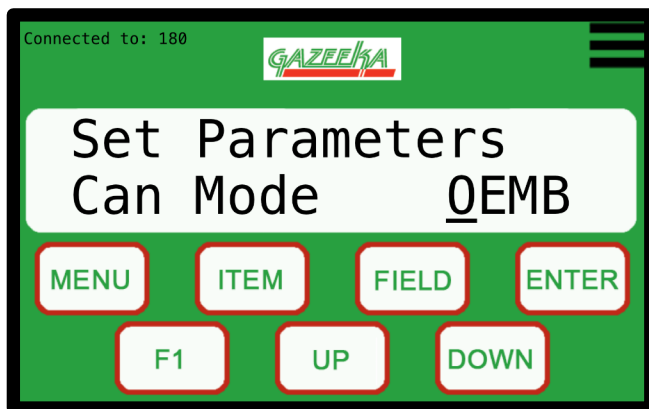


Video for Gazeeka software update



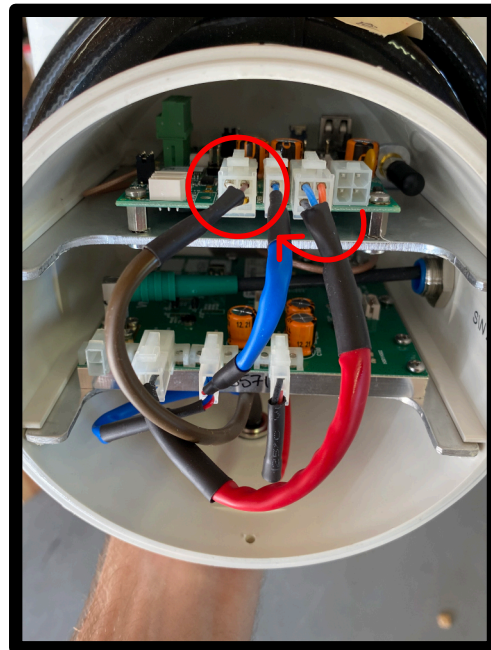
Video showing Gazeeka installed on scale

Must have Gazeeka 25.03 software or later, CANMODE set to "OEMB"



Plug adapter harness into Gazeeka and X16 plug.

Make sure plug is inserted into left connector



Install Gazeeka brackets to scale. Air calibrate after installation.



Ensure scale is still parallel with the chamber or slightly raised



710 Pro Series Preflight Checklist



Scan to watch Preflight Checklist

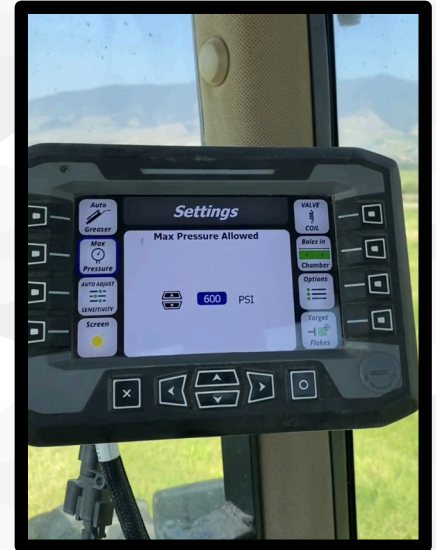
Push circle to toggle screens.



Enable applicable options under Options



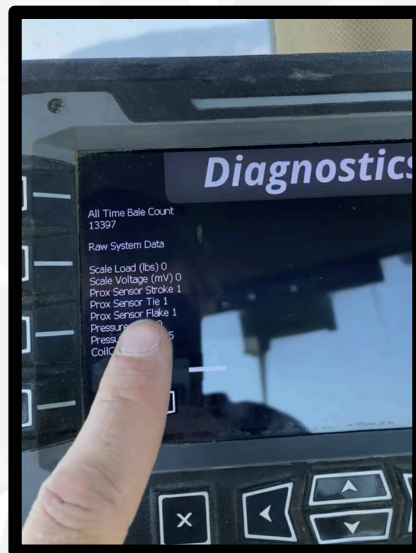
Set Max Pressure



**Enable Flake Watcher
If desired.
(Speed up/Slow Down)**



**Verify Prox Sensor
Stroke, Tie, & Flake
are 1 when triggered,
0 when not triggered.**



**Hard Zero Scale if needed.
(See "Install Scale Amplifier"
page if needed)**



710 Pro Series Quick Start Guide



Video showing screen operation and settings adjustment

Manual Mode shown

Toggle LBS to KG



Hold 3 seconds

Quick press

Adjust target pressure (manual)
Adjust target weight (auto)

Return to Home
from any screen

Toggle screens: Home, Camera (if enabled), Settings,
Gazeeka Settings (if enabled), Diagnostics

Auto Mode shown at night



8 bale average changes
color depending how close
it is to your set target weight
when operating in Auto Mode

Baler strokes per minute

Live scale reading

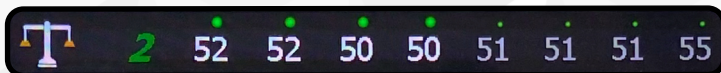
Field bale count & average weight

Instant, Average, & Peak Moisture



Start in Manual, then switch to Auto when you get the baler set after making several bales.

Flake counts: (white is current, orange is last 3).



Green dots above weights: The green dots appear when the shown weights are representative of the current pressure setting. If you make an adjustment in Manual or Auto, the weights will dissappear, and reappear after enough bales have been made to reflect the new pressure setting.



In Auto mode, the control tile shows 3 numbers. The top is your set target weight. Use the UP/DOWN Arrow keys to adjust the target weight.

The middle number is the target pressure the BestBale system is telling the baler to be at.

The bottom number is the actual baler pressure.

Still have questions? Give us a call!

Jared Herbst (208) 993-1959 cell (FaceTime available) or email at jared@bestbaleusa.com

Darren Herbst (208) 557-1607 cell or email at darren@bestbaleusa.com

Troubleshooting

1. Monitor will not turn on

Check:

Verify the tractor is supplying at least 12V.

Check the 7.5A BestBale fuse.

Verify power and ground connections are fully seated.

Check the gray controller for a green LED.

Common fix: Correct a loose, reversed, or missing power connection.

2. Monitor flashes red or buttons do not respond

Check:

Look at the LED on the gray controller.

If the controller LED is off, check controller power and ground.

If the controller LED is green, inspect the CAN connections between the cab, baler, and controller.

Common fix: Reseat a loose CAN or power connection and power-cycle the system.

3. Baler will not build pressure

Check:

Make sure the yellow stroke RPM/SPM is displaying.

If SPM is zero, inspect the stroke sensor.

Sensor gap should be approximately 1/8"-1/4".

Verify the stroke sensor LED turns on when the target passes it.

On a new installation, verify the stroke and valve wiring are connected to the correct locations.

Common fix: Adjust the stroke sensor or correct an improperly connected sensor/valve harness.

4. Pressure stays around 75-85 PSI

Check:

Verify the stroke counter is working.

Check the Max Pressure setting.

Use Coil Override to verify the hydraulic valve responds.

Common fix: Correct the stroke sensor setup or Max Pressure setting. If Coil Override works normally, the hydraulic valve itself is generally capable of building pressure.

Troubleshooting

5. Scale says "No Scale"

Check:

Verify Scale is enabled in Options.

Check whether the monitor buttons respond normally.

Verify the gray controller LED is illuminated.

Inspect the scale/controller power connections and power buses.

Common fix: Enable the Scale option or restore power to the controller.

6. Bale weights are consistently too heavy or too light

Check:

Remove all weight from the scale and look at the empty reading.

Empty weight should be near zero.

Make sure nothing is touching or binding the scale platform.

Make sure the empty platform is approximately parallel with the bale chamber or slightly raised.

Common fix: Remove any obstruction and zero the scale.

Important: A scale that is significantly negative when empty will make every bale appear too light. A scale platform angled too far downward can also produce light readings.

7. Scale weights are erratic or suddenly incorrect

Check:

Inspect the scale platform for rocks, hay, brackets, or other objects preventing it from moving freely.

Push the platform through its normal movement and make sure it does not contact the baler frame.

Make sure the M12 load-cell connectors at the scale amplifier are fully tightened.

Common fix: Remove the obstruction or tighten a loose load-cell connection.

setting.

8. Flake counter does not work

Check:

Verify a separate flake sensor is actually installed.

Make sure Flake Counter is enabled only when the optional sensor is installed.

Check that the flake sensor LED turns on as the hay dog passes over it.

Troubleshooting

Sensor gap should be approximately 1/8"-1/4".

On Pro 710 systems, verify the flake sensor is connected to X22, not X21.

Common fix: Adjust the sensor, correct the connector location, or correct the Flake Counter option setting.

9. Flake count is not working and bale count is increasing rapidly. This is a common new-installation problem.

Check:

Watch the bale count while the baler is running.

If the bale count is increasing much faster than actual bales are being tied, inspect the bale tie sensor.

The bale tie sensor may be adjusted too far away from the target.

Set the bale tie sensor gap closer, toward approximately 1/8".

Common fix: Move the bale tie sensor closer to the target so it triggers once reliably as the needle arm returns home.

A bale tie sensor that is too far away can bounce or double-trigger, causing false bale counts and interfering with the flake-count history.

Before Calling BestBale

For most new-installation problems, first verify:

Tractor voltage is at least 12V

7.5A fuse is good

Gray controller LED is green

Stroke counter is working

Sensors are properly adjusted

Scale is free-moving and zeroed

Installed options are enabled

Max Pressure is set correctly

All connectors are fully seated

If the problem continues after these checks, contact BestBale Support.

-Jared Herbst 208-993-1959 (Facetime available)

-Darren Herbst 208-557-1607

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