 **Bestbale**TM

Installation Instructions

710 *Pro Series*

Massey Ferguson 1843s/1844S

Hesston 4690



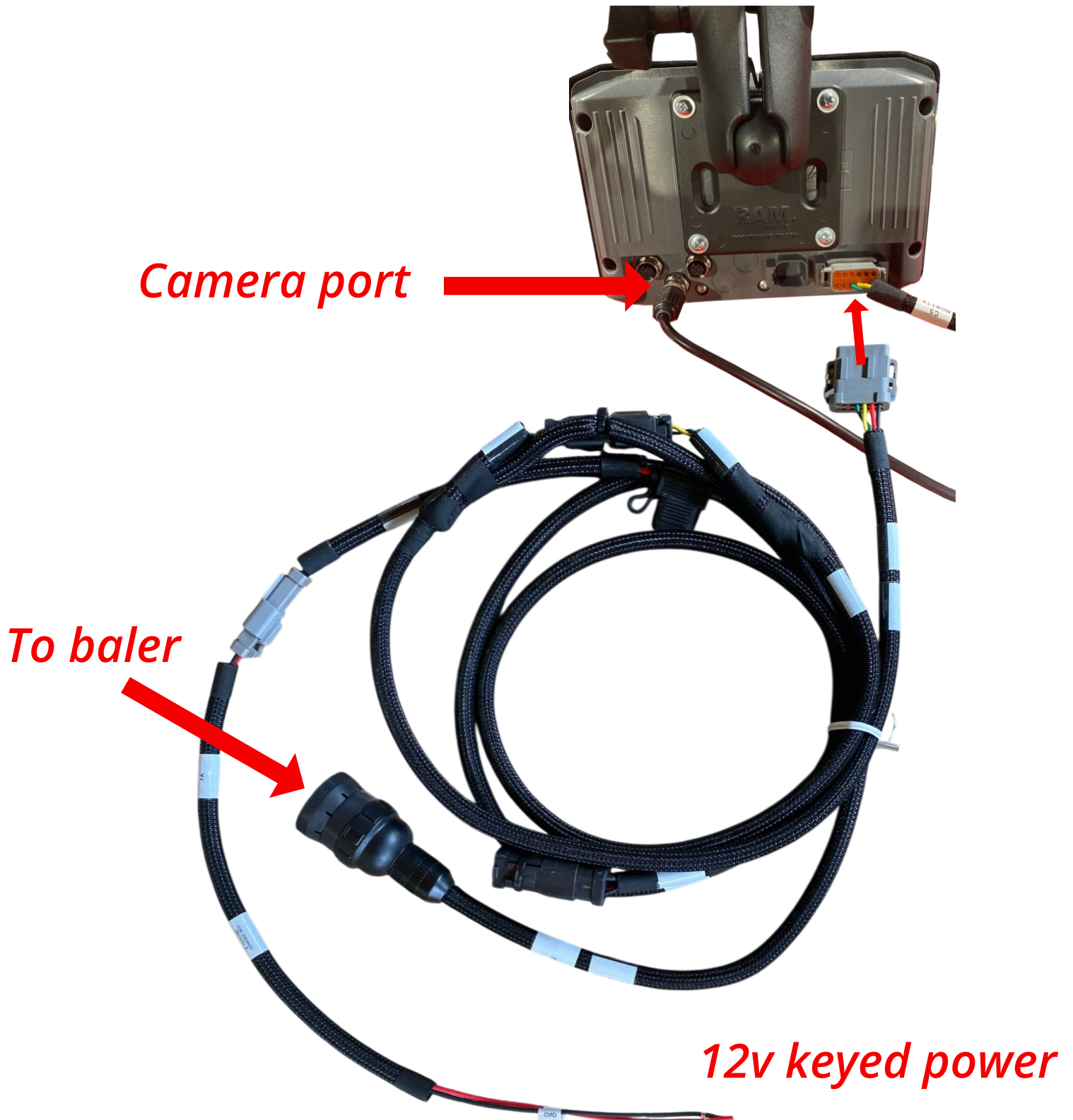
Scan for online instruction manual



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

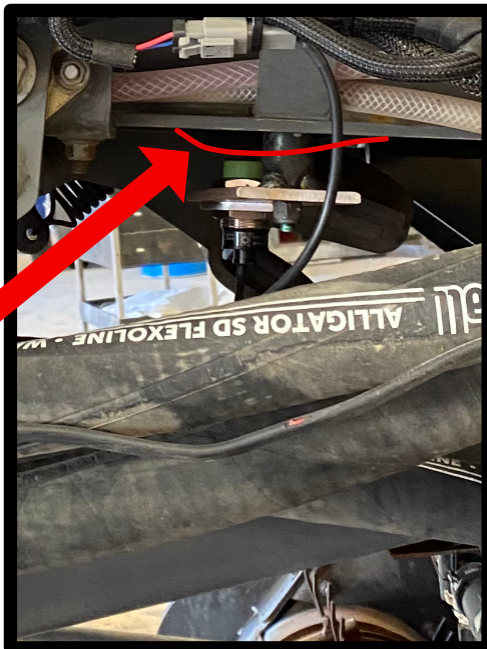
Open cover



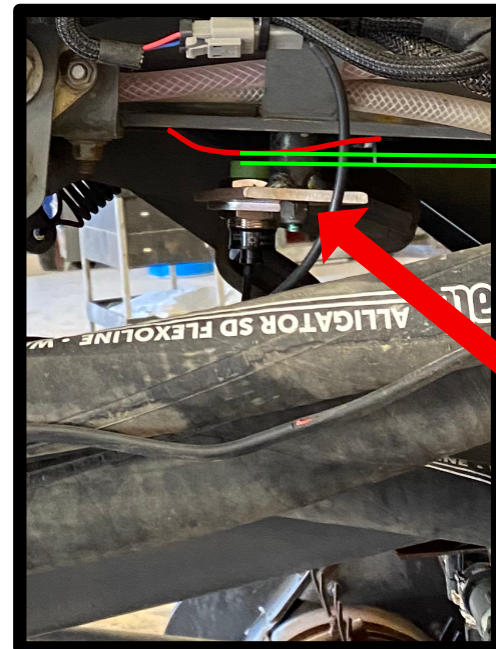
Prepare to rotate flywheel



Rotate until plunger arm is in this position



Install bracket & sensor



(7 mm)
1/4"

1844S shown

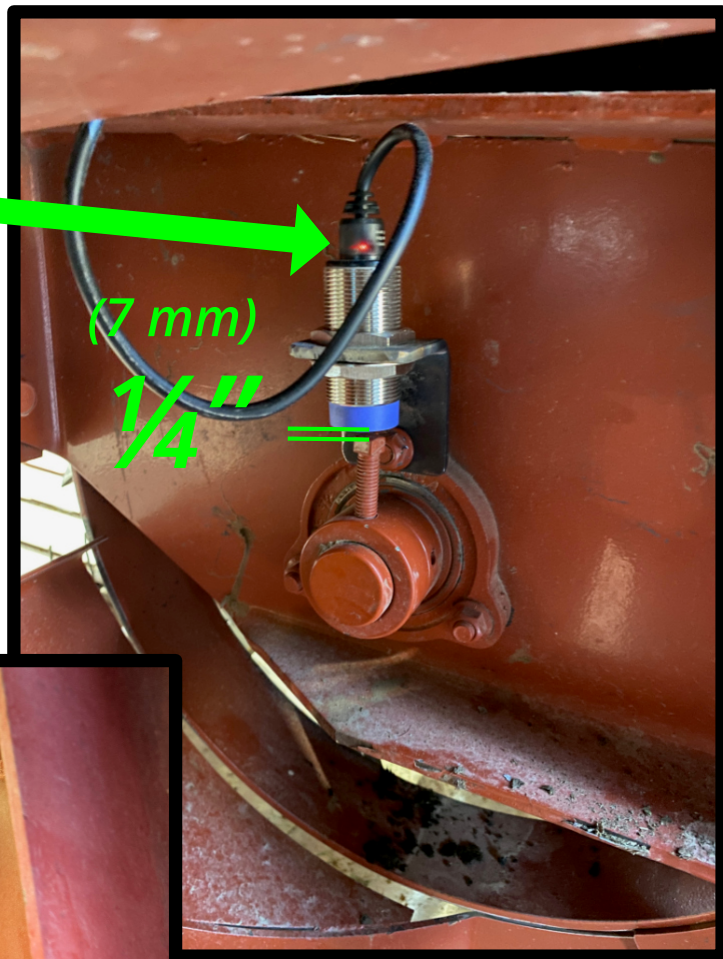
Install stroke counter sensor

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

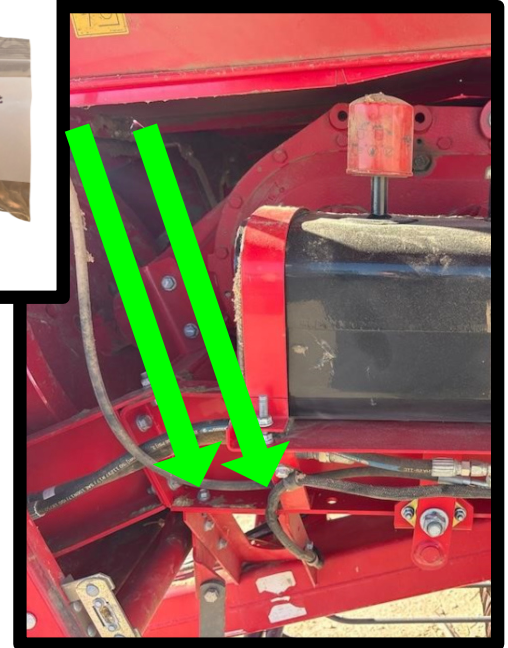
**1" minimum
(25 mm)**

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

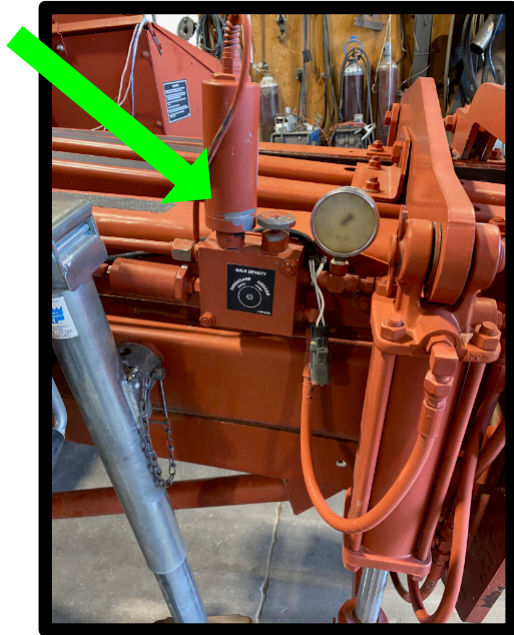
X9 & X10 connectors



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



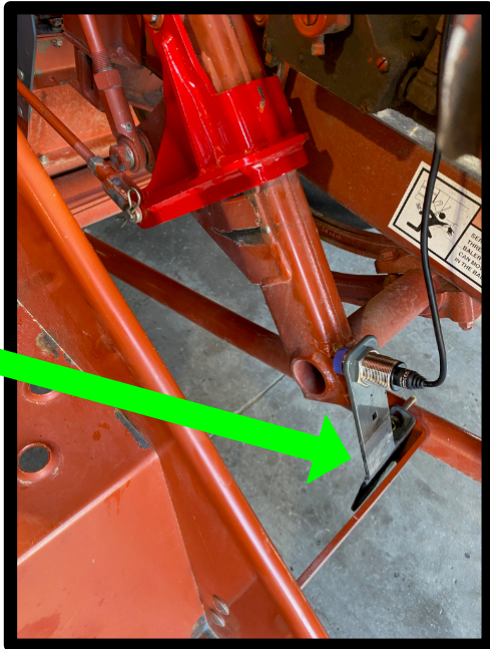
Installation location

Install bale tie sensor

IMPORTANT: Gap must be no more than ¼"

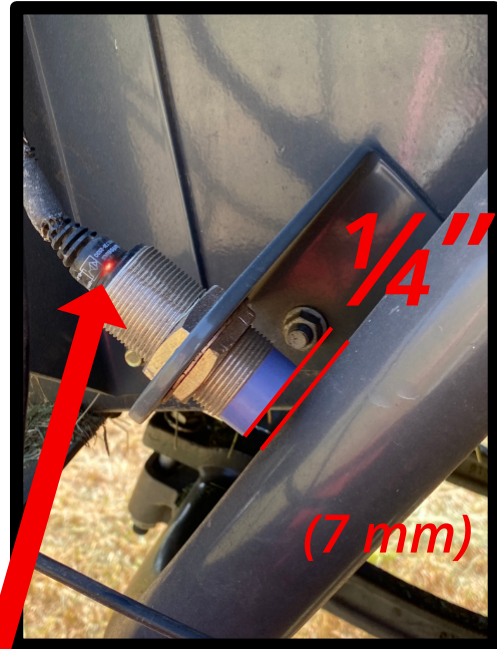
- 1) Check M30 x 1.5 jam nuts periodically to ensure they remain tight.
- 2) Damage caused by unsecured jam nuts are not covered under BestBale warranty.
- 3) Locktite may be used to help secure the jam nuts.
- 4) Plug into X14.

Secure bale count bracket & sensor



4690 shown

Set gap NO MORE THAN ¼"



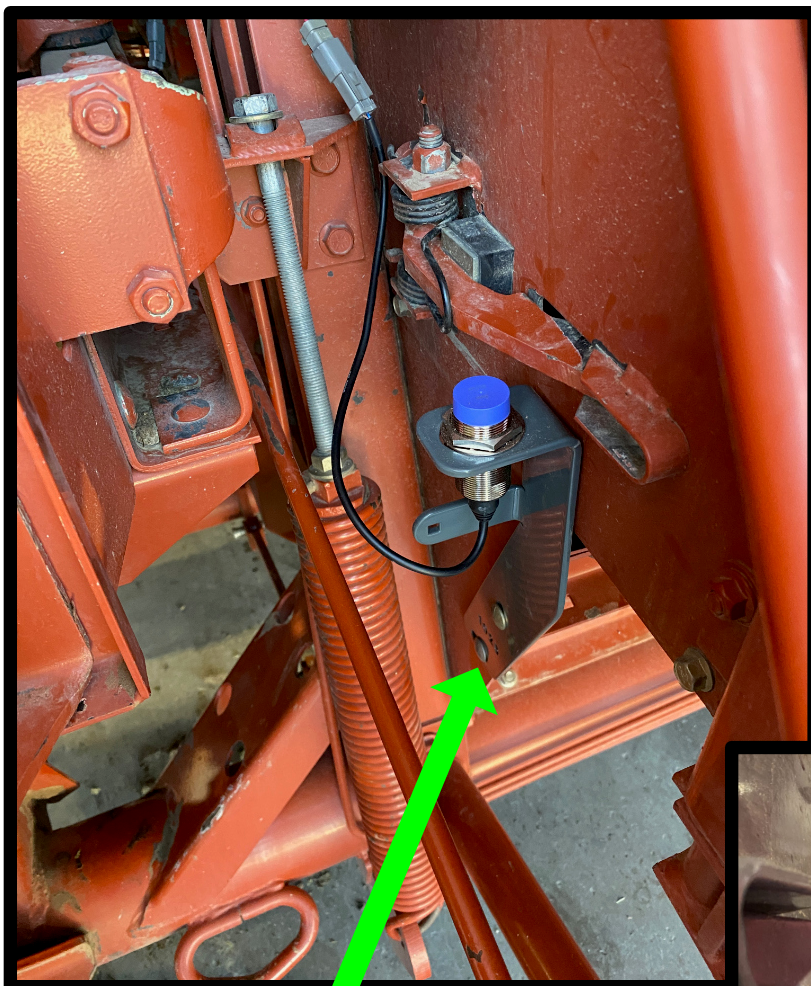
1840 shown

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.

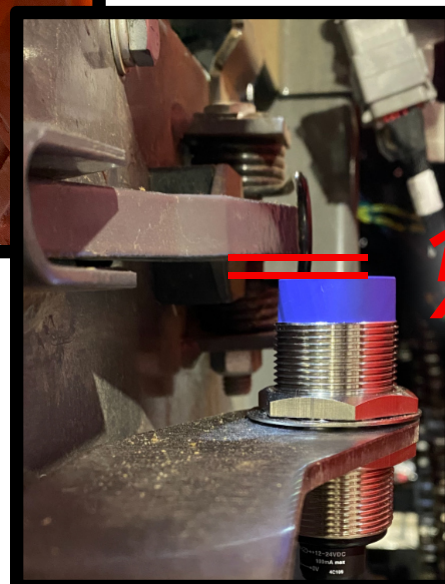
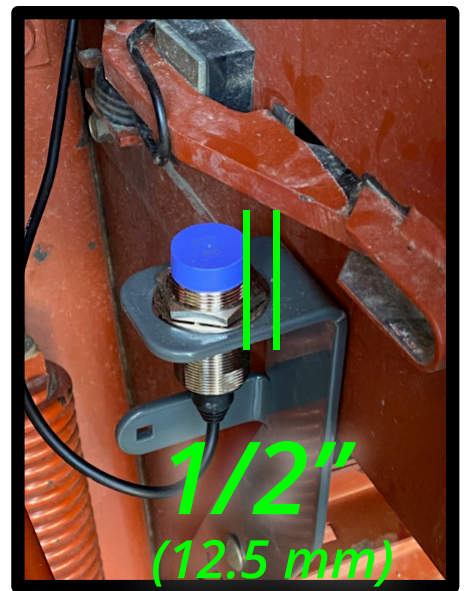
Install flake sensor

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

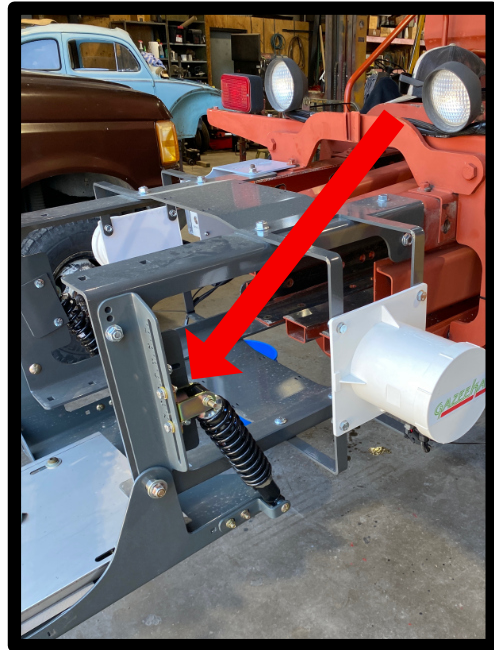


Video for F500-18 scale installation overview on MF1840

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



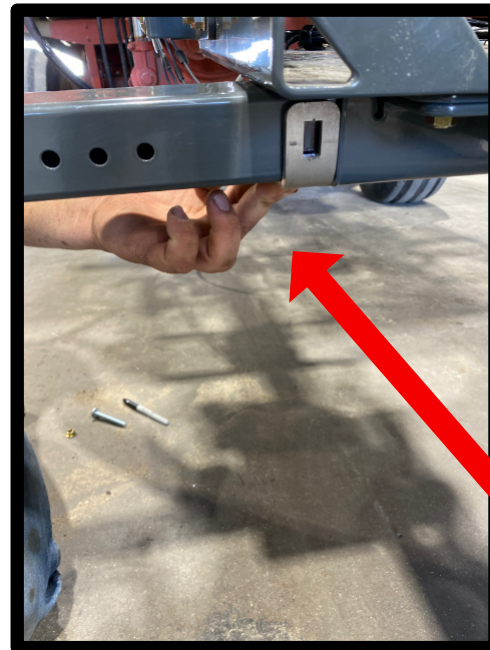
Adjust upper shock mounts so scale platform is level with the ground when baler twine boxes are level also.



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.*



This is set for a ~36" bale



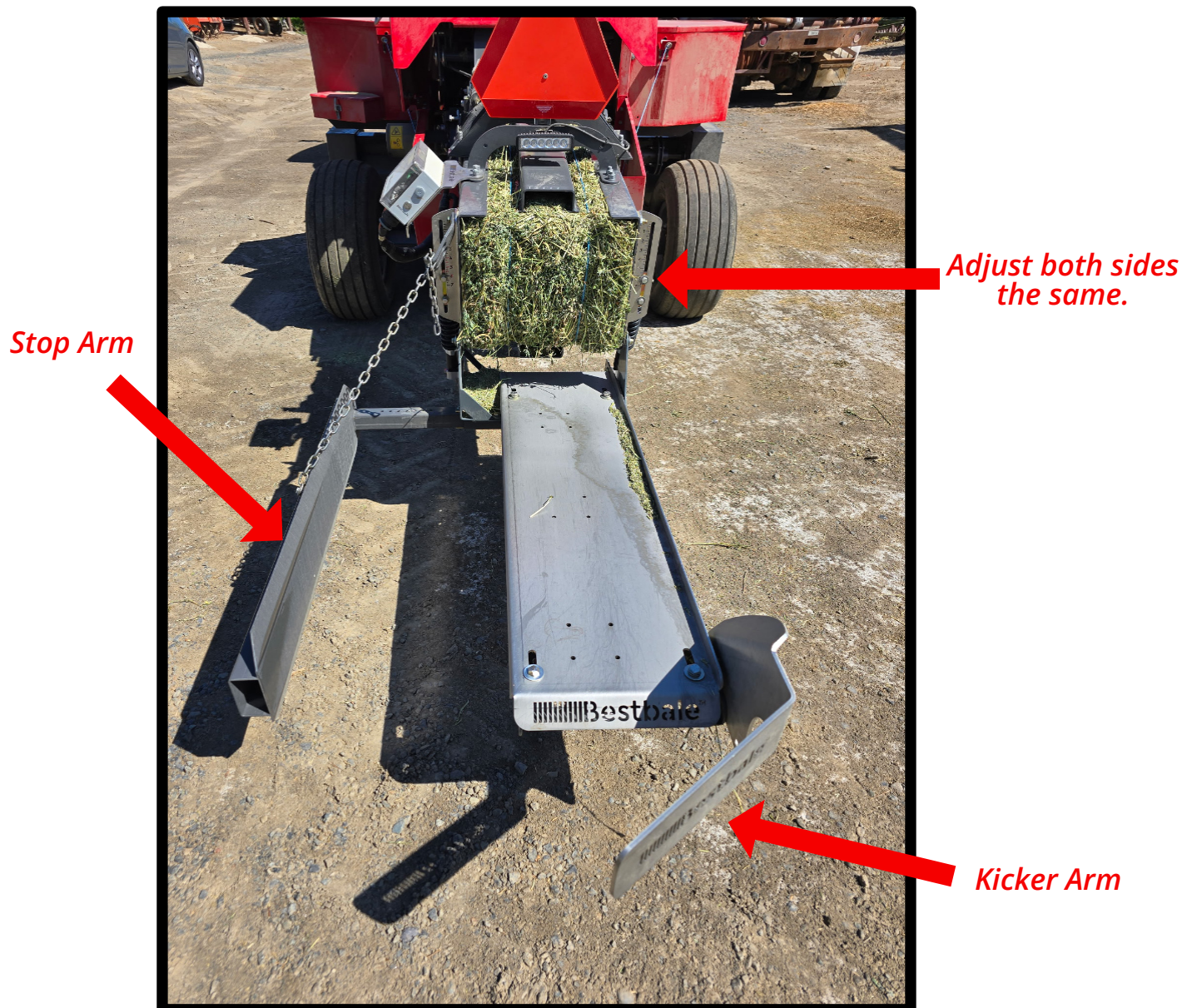
TIP: Be sure the bale is on the scale for a couple plunger strokes before it falls off and turns. If the bale is turning before it lands fully on the scale, your weights will read light in the cab. The full weight of the bale should be on the scale at least 2 seconds for the best results.

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

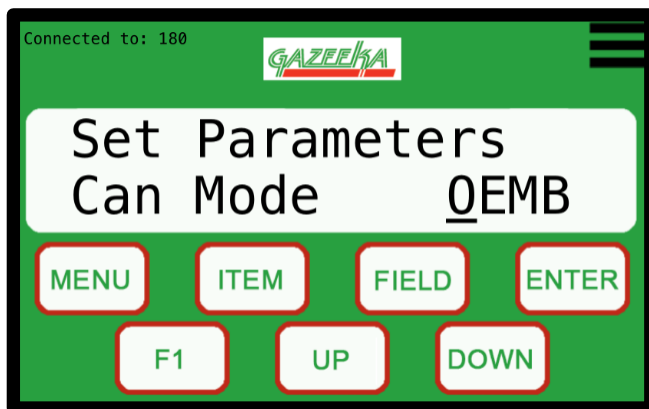


Video for Gazeeka software update



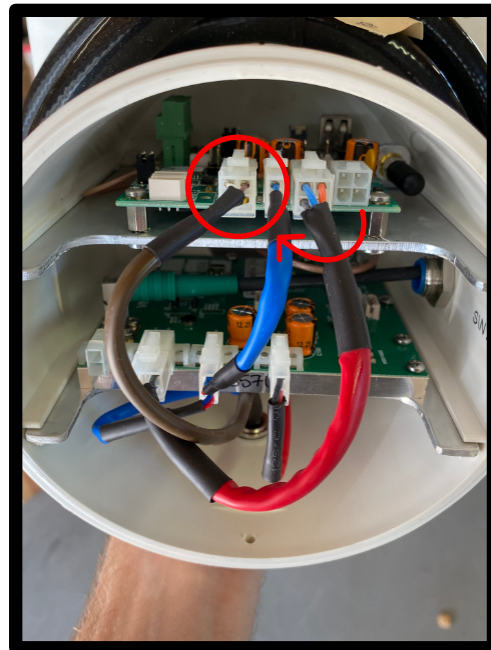
Video showing Gazeeka installed on scale

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



Troubleshooting

Baler won't build pressure.

- 1) Check that monitor is set to Manual Mode and that pressure is set to a value above 80 psi, and tractor RPM is set above 1500.
- 2) Make sure valve is plugged into X12 and transducer is plugged into X13.
- 3) Make sure stroke counter is plugged into X11 and that **yellow SPM number is reading**.
- 4) If PSI is less than 70, check the oil level, pump shaft connection, or other mechanical failure.

Baler strokes per minute (yellow number) reads 0 when the PTO is on.

- 1) Check that stroke counter is plugged into X11.
- 2) Check that the stroke counter sensor is within .250" of the feeder fork arm and that the red LED light is illuminated when triggered.
- 3) If no light, make sure power busses are plugged in properly and that there is power going to the baler.

Scale reads more than 2.0 lbs or less than -2.0 when empty.

- 1) Perform hard zero calibration found in the video on "Install Scale Amplifier" page.

Flake counter sensor not working.

- 1) Make sure "Flake Sensor" is enabled under the "Options" page in the Settings menu
- 2) Check clearances on flake sensor found on "Install Flake Sensor" page in this manual.
- 3) NOTE: Flake counter will only register once per stroke sensor trigger.

Field count is increasing more than once per tie cycle, and flake count shows many zeros.

- 1) Most likely the sensor is triggering more than once per tie cycle. This can happen if the sensor is not close enough, or there is excessive play in the needle carriage assembly.

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

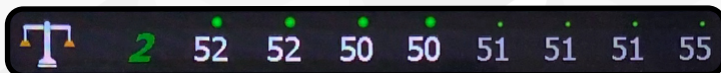
Field bale count & average weight

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 disappear, 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!

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