

# Bestbale<sup>TM</sup>

## Installation Instructions

### 710 *Pro Series*

## Massey Ferguson 1840



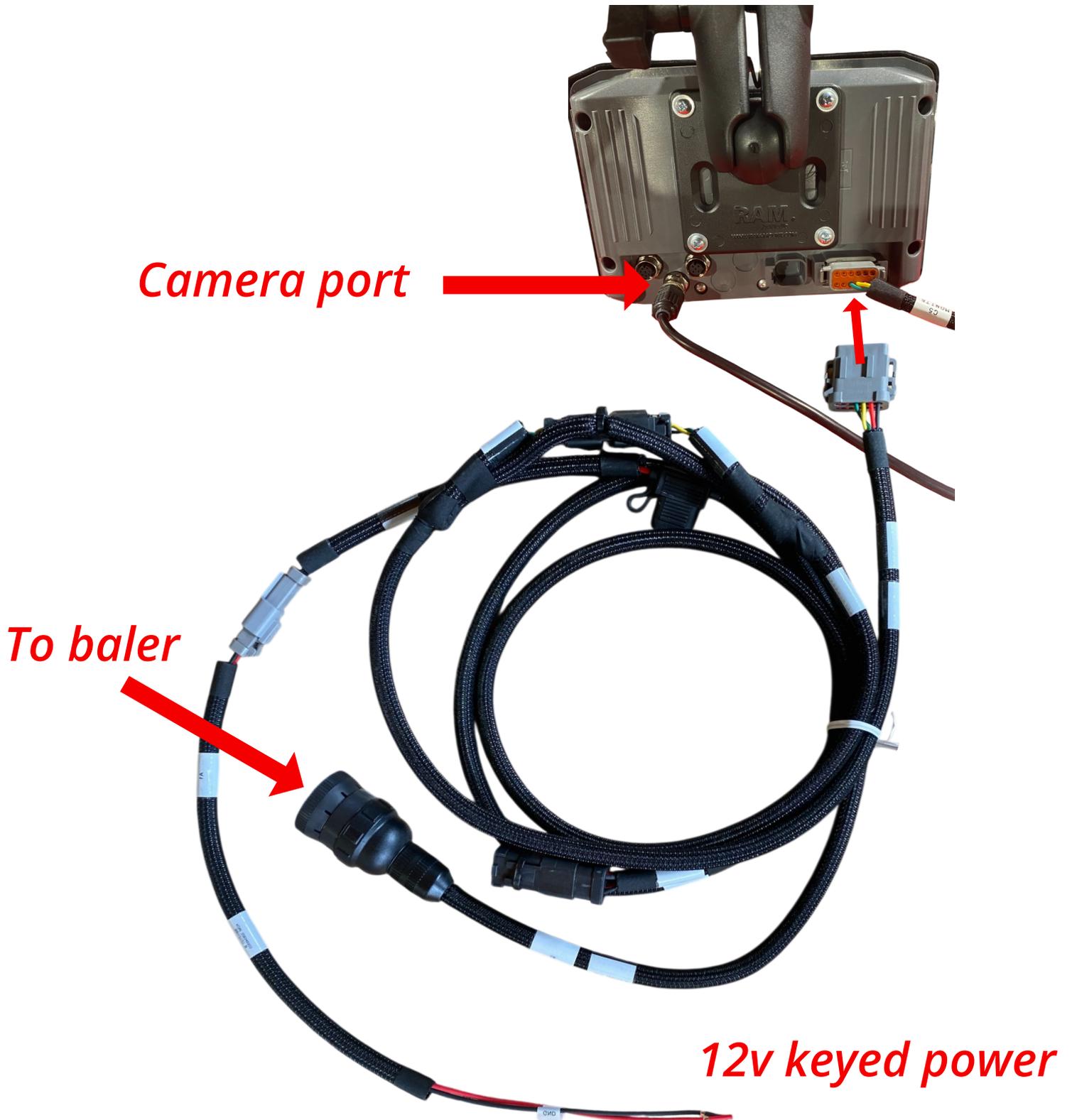
*Scan for online instruction manual*



## *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

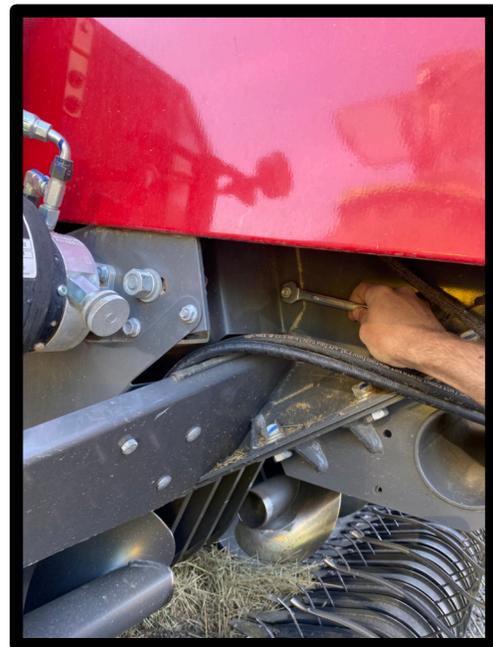


Video of stroke counter installation.

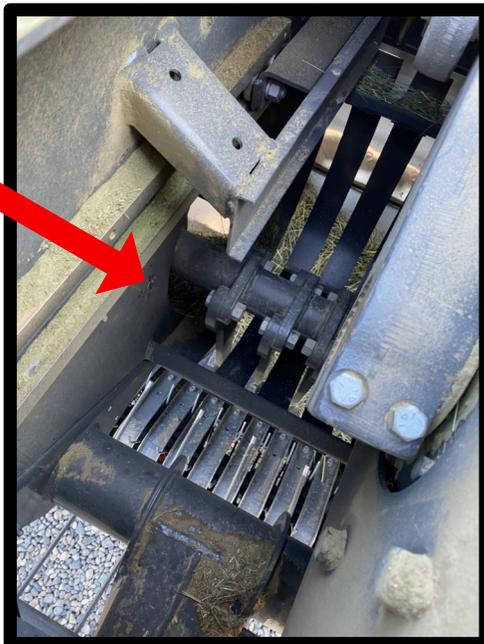
Remove cover



Remove nut/bolt.



Looking into plunger cavity



This is where the sensor mounts



## Install stroke counter sensor

**IMPORTANT: Gap must be no more than ¼"**

- 1) Tighten the M30 x 1.5 jam nuts really tight onto the bracket before installation.
- 2) Hand tighten the 3/8" bolt that holds the bracket to the frame.
- 3) Turn flywheel by hand so feeder fork bar is at the closest possible point to the sensor.
- 4) Adjust the bracket so there is **NO MORE THAN ¼" GAP AT THE CLOSEST POINT.**
- 5) Tighten bracket to frame.
- 6) Locktite may be used.
- 7) Check periodically.
- 8) Plug into X11

Use this to adjust the gap.

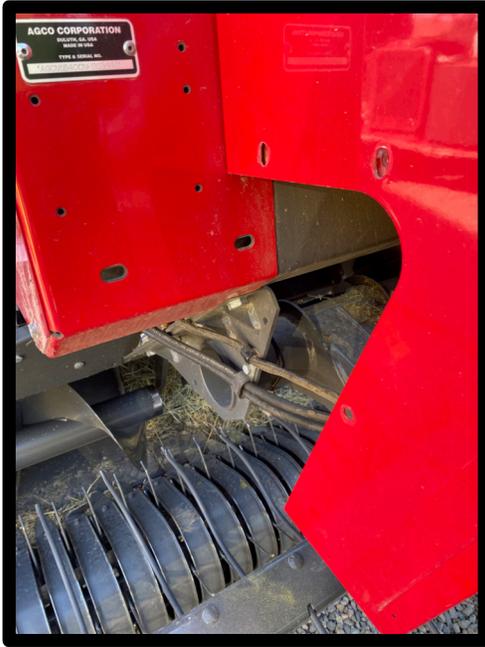
Tighten M30 x 1.5 nuts really tight and check periodically after operation.



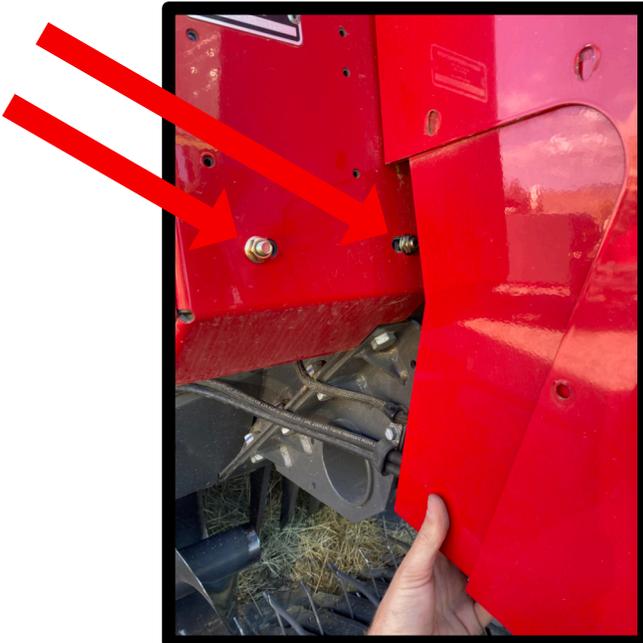
# Install ECU/gray controller

Install gray controller & bracket, plugs into X7 and X8

Remove cover



Tighten bolts

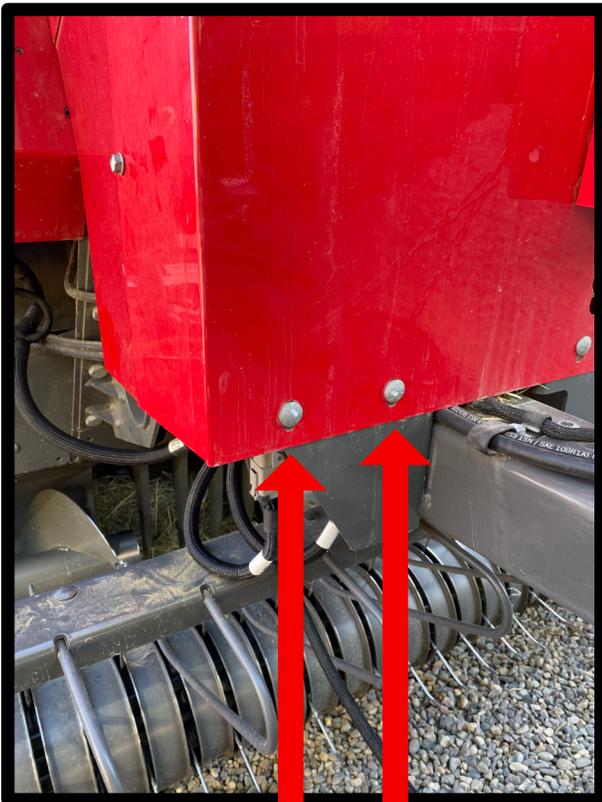


Reinstall cover



# *Install busses onto the frame*

*Plugs into X9 and X10*



# Install valve and pressure transducer



Plugs into X12 and X13

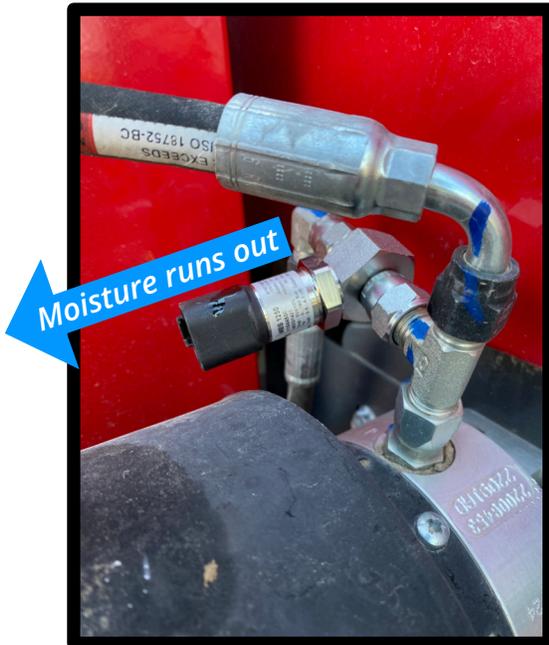


Video of valve installation

Video of pressure transducer installation

Install tee fitting so transducer is angled downward.

Remove old valve (22mm wrench) and install BestBale valve with provided 3D printed socket



Green O-ring



Properly seat black O-ring

Check hydraulic oil level

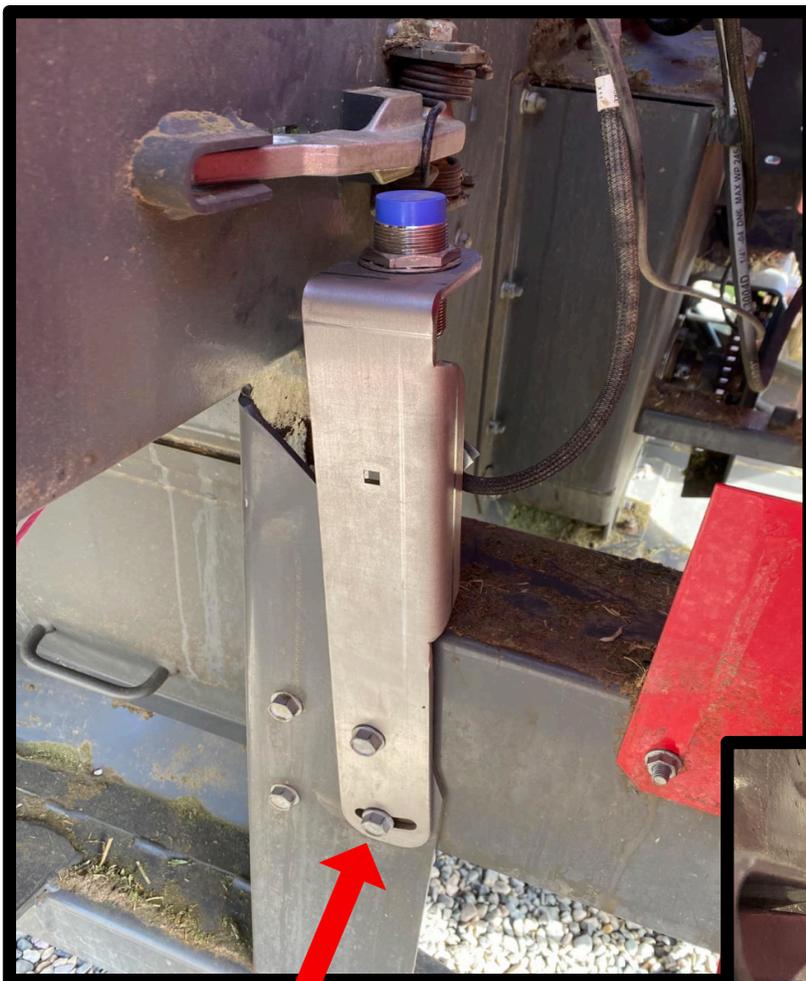




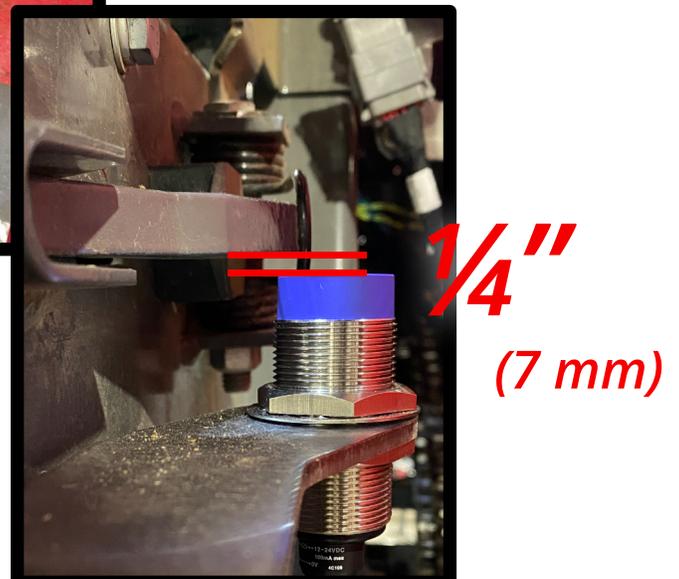
## Install flake sensor

**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" on the hay dog in the home position to  $\frac{3}{8}$ " (9.5mm).
- 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 bolt



# 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



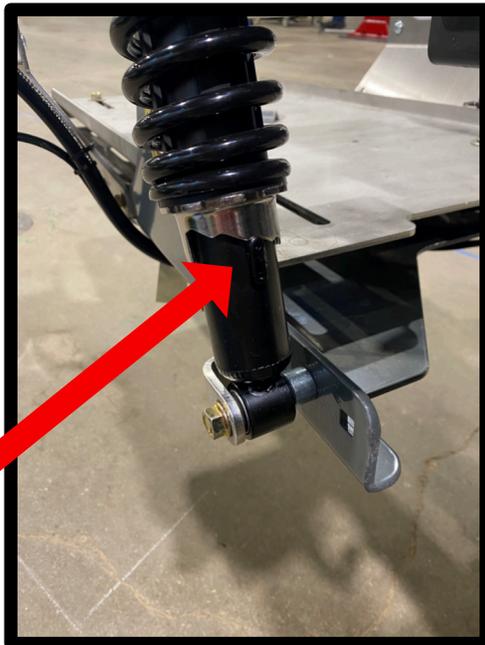
Video for F500-18 scale installation overview

**Reverse bale chamber support bracket**    **Install shock mount gauge & shock**



**Start at middle setting for 50-60 lb bales**

**Install spacers/washers/nuts**



## Install scale

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

- 1) Set the coilover spring tensioner at the bottom of the shock absorber to the middle setting
- 2) Adjust the scale platform forward/backward to desired bale length setting
- 3) Adjust upper shock mount up or down to set platform parallel with the baler chamber or slightly raised from the parallel position.

*Parallel 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.*



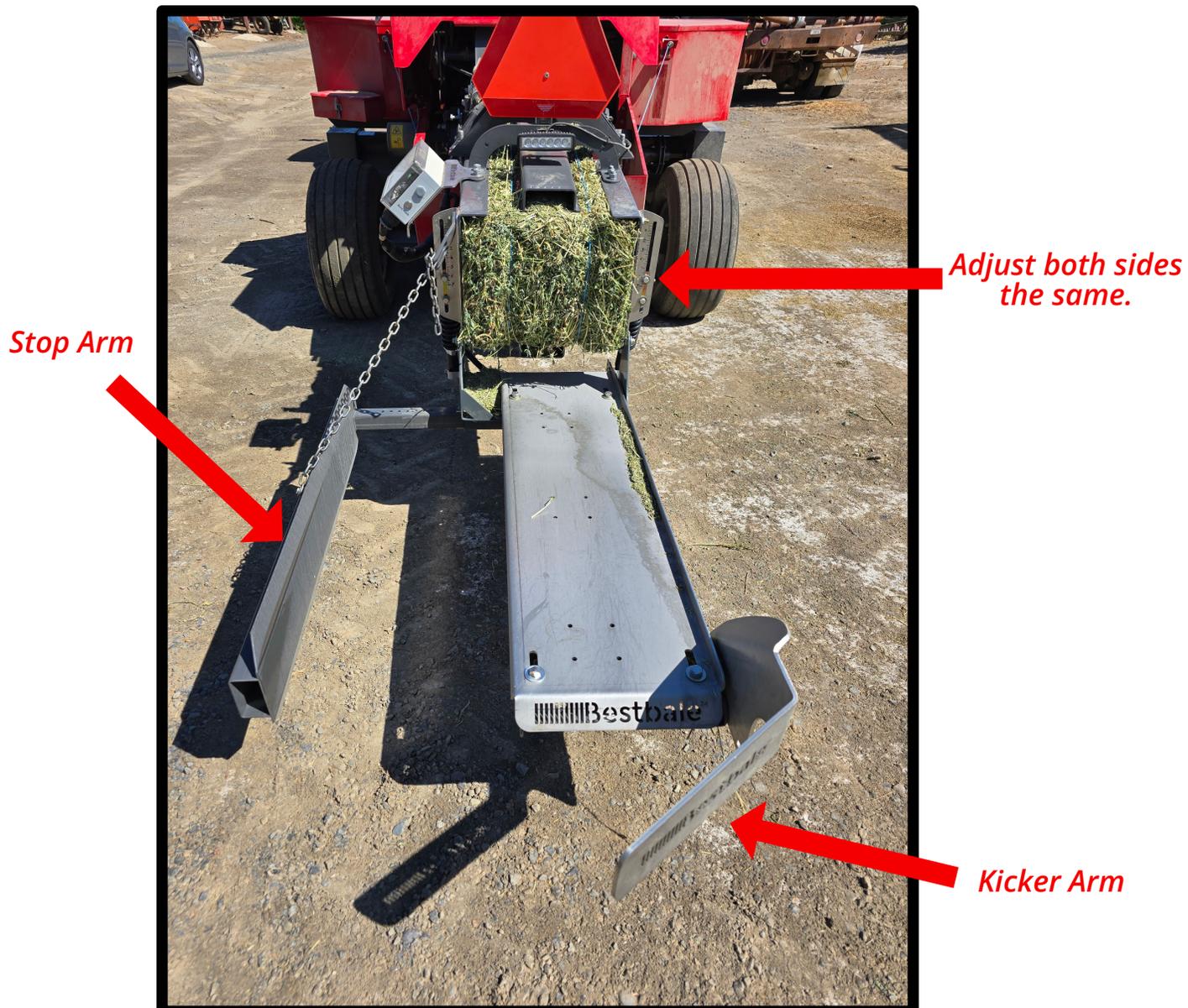
*This is set for a ~36" bale*

**TIP: Set the platform farther forward for shorter, stickier bales, (alfalfa, steamer, etc) and farther backward for longer, more slippery bales (grass, straw, etc). Platform has adjustment for roughly 30-38" bales.**

## *¼ Turn Scale Install*

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

- 1) Set the coilover spring tensioner at the tightest setting on both sides.*
- 2) Adjust the scale platform all the way forward*
- 3) Adjust upper shock mounts up or down to set platform parallel with the baler chamber or slightly raised from the parallel position.*
- 4) Use chain to anchor Stop Arm*
- 5) 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

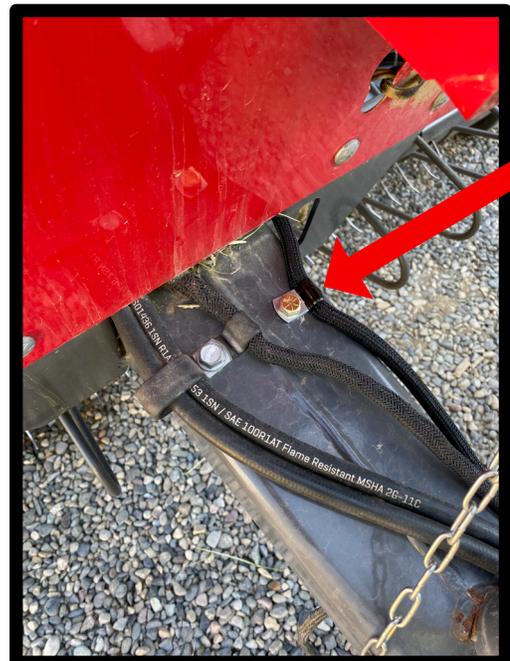
X17 Scale amplifier

X18 Greaser divider block

X19-X20 Not used

X21 LED lights (knotter hood)

X22 Flake counter



# Install Gazeeka

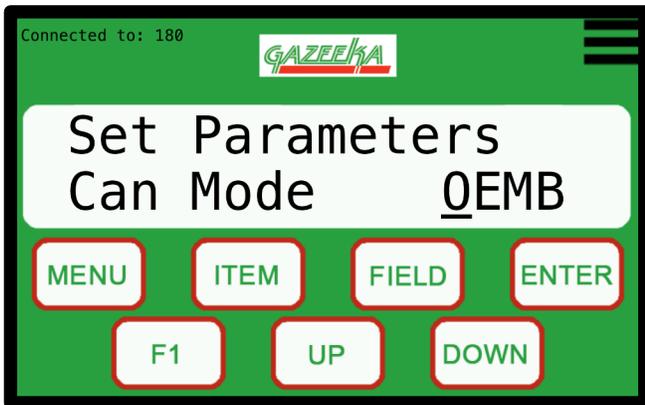


Video for Gazeeka software update

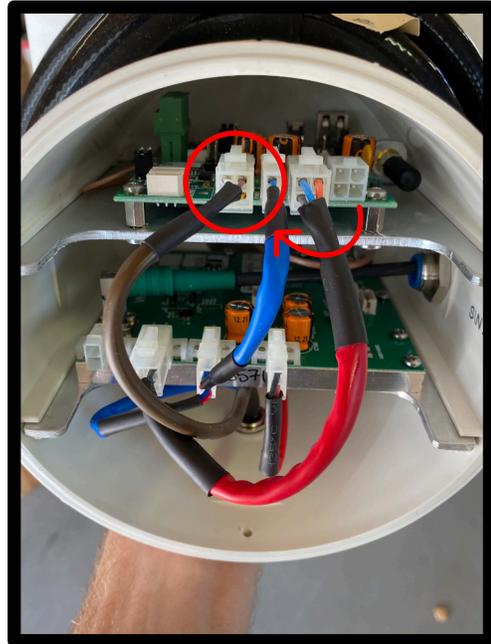


Video showing Gazeeka installed on scale

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



**Make sure plug is inserted into left connector**



**Plug adapter harness into Gazeeka and X16 plug.**

**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



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

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



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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