

# Bestbale<sup>TM</sup>

## Installation Instructions

### 430 Lite Series

### Massey Ferguson 1840



*Scan for online instruction manual*



# Mount the monitor in the tractor



# *Connect cab harness to 12v power*

*Connect to  
12v keyed power*

*To monitor*



*To baler*

# Install stroke counter sensor

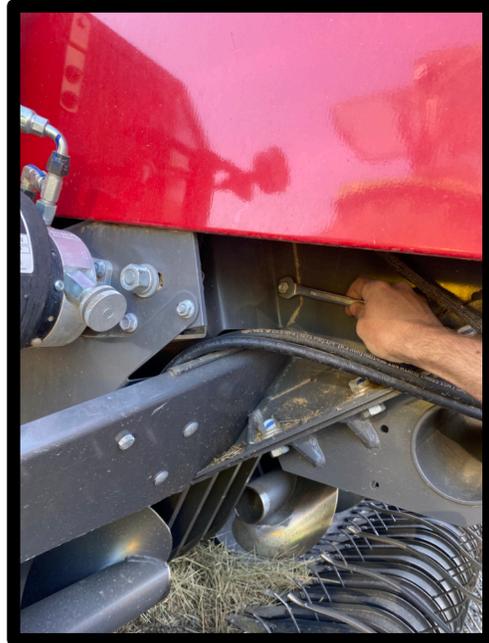


Video of stroke counter installation.

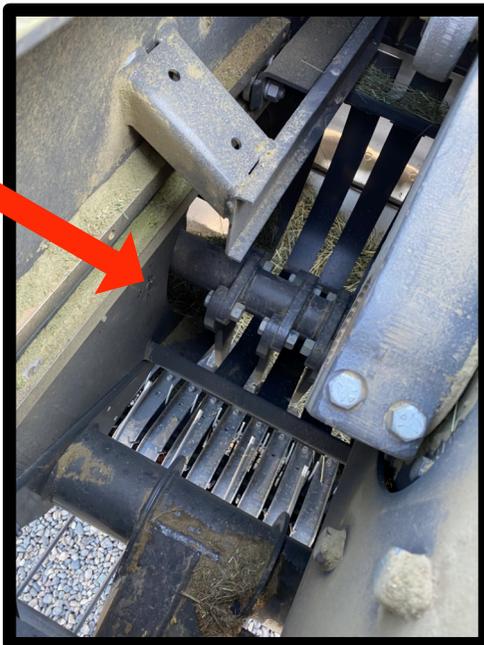
*Remove cover*



*Remove nut/bolt.*



*Looking into plunger cavity*



*This is where the sensor mounts*



# Install stroke counter sensor

**IMPORTANT: Gap must be no more than 1/4"**

- 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 1/4" 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 bale tie sensor



*Video of bale tie sensor installation tips*

## **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) Loctite may be used to help secure the jam nuts.
- 4) Plug into X14.

**Set gap NO MORE THAN ¼"**

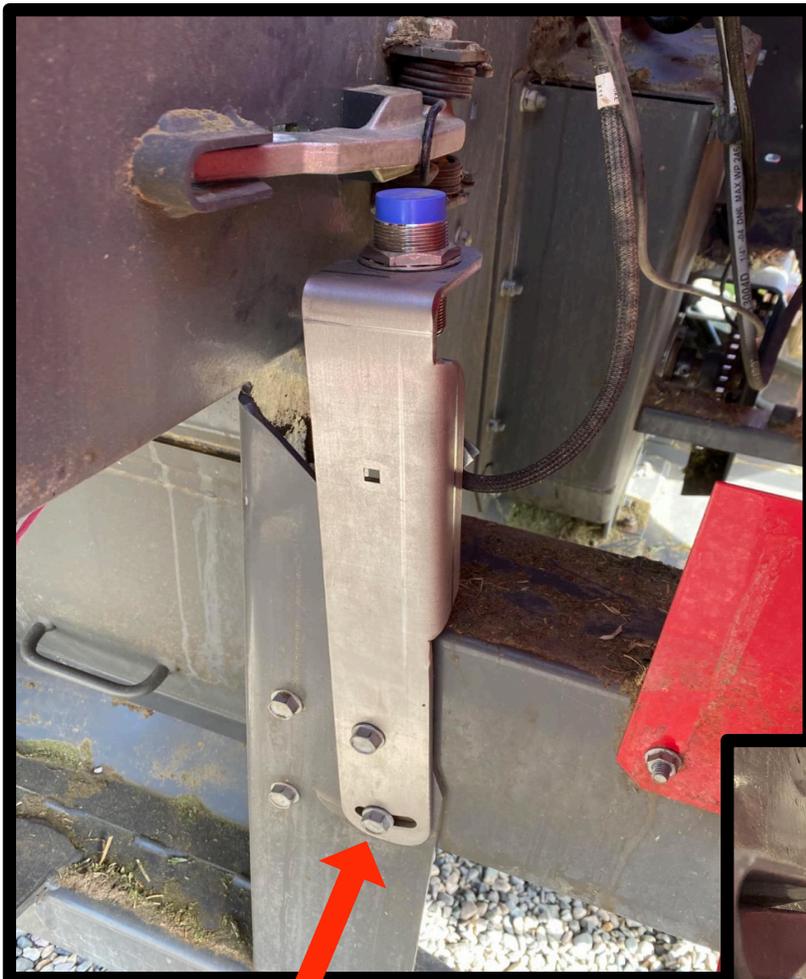


**NOTE: The sensor should be sensing and the LED should be illuminated in the home position, as shown.**

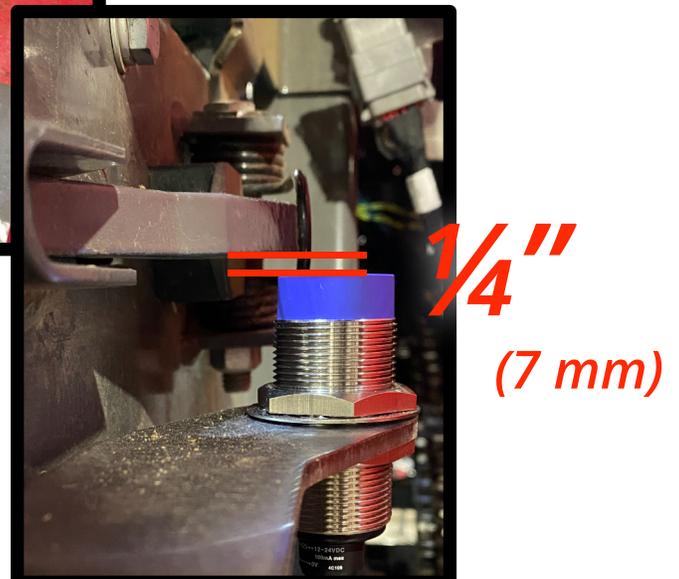
## Install flake sensor

**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



# 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 after all the sensors are properly installed. This gives room to adjust the harness until all connectors are fitted.**

**NOTE: The Lite Series harness is a universal harness, made to fit several makes and models. There will be some extra wire on your baler. Simply tie up and secure any extra wiring and make sure it is out of the way of moving parts.**

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

**C5 Monitor**

**C6 Tractor to baler**

**X6 Baler to tractor**

**X11 Stroke sensor**

**X14 Bale tie**

**X16 Gazeeka/aux**

**X17 Scale amplifier**

**X22 Flake counter**

**X100 Scale/Moisture (if installed)**

**SC100 to baler harness X100**

**SC101 Scale Amp**

**SC102 Gazeeka/Aux**



# 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)*



*Connect X17 wire harness*



*Perform hard zero if necessary*



# Install scale



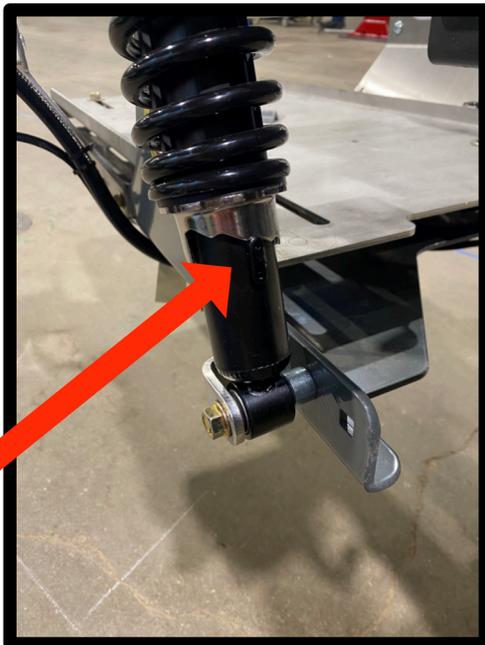
Video for F500-18 scale installation overview

*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.*



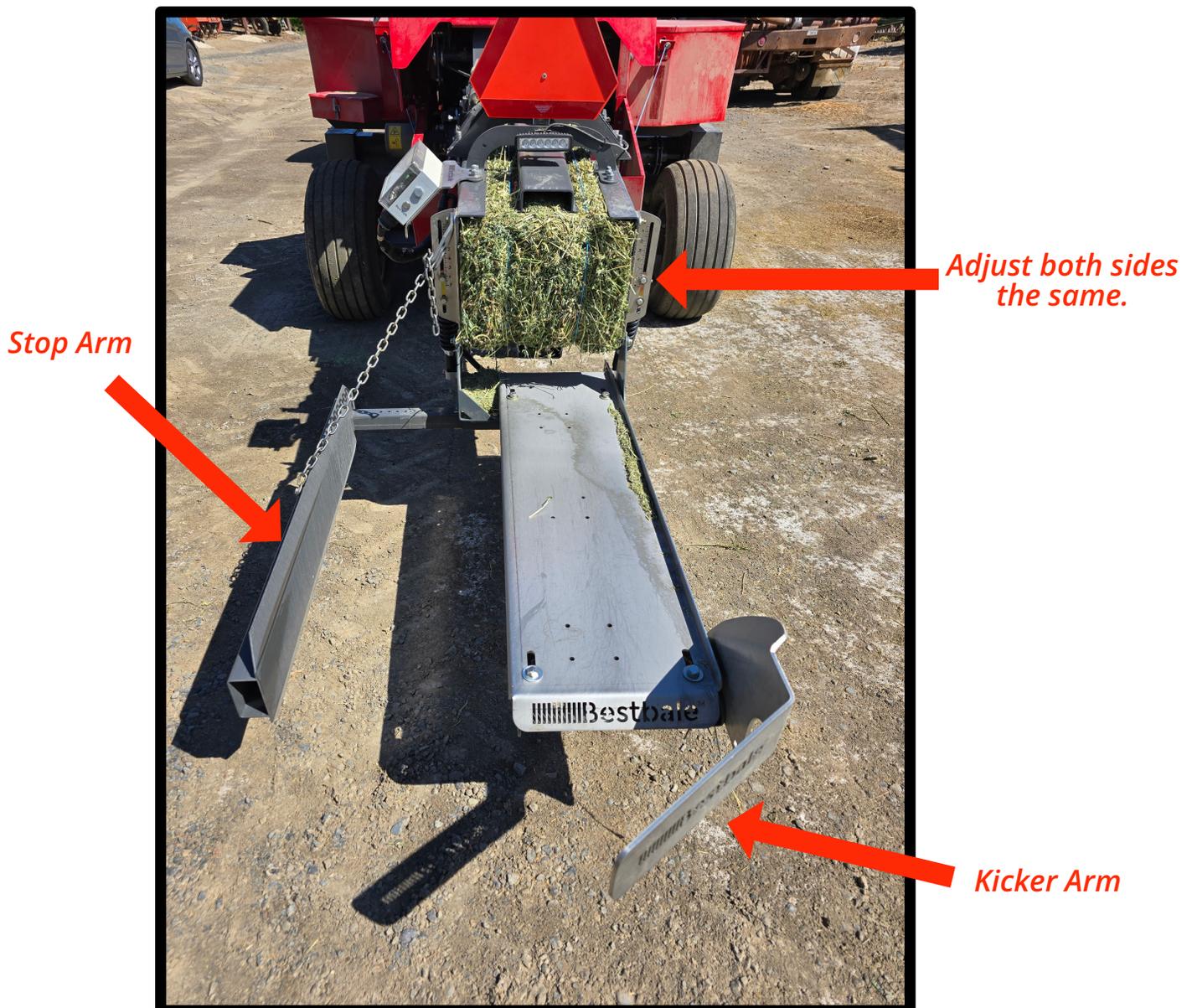
*This is set for a ~36" bale*

*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.*



# Install Gazeeka

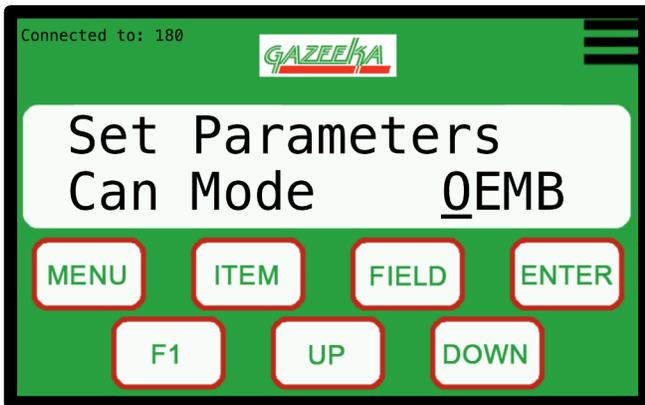


Video for Gazeeka software update

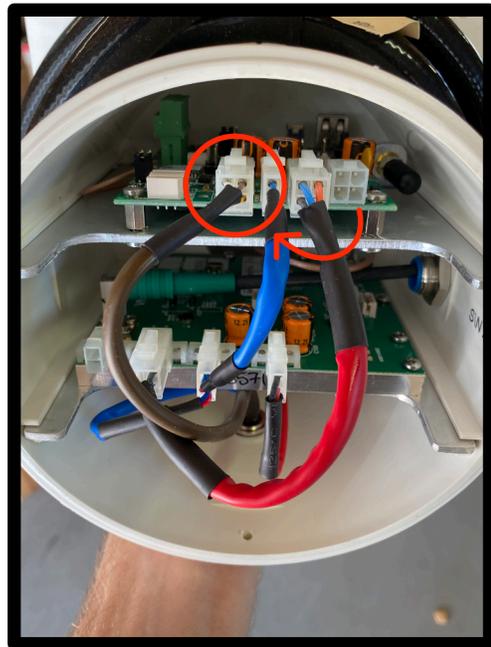


Video showing Gazeeka installed on scale

**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 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 there is power (12v) going to the baler and to the X11 connector. Use frame ground to check power to X11, pin 1 (red wire).

## **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.

# 430 Lite Series *Quick Start Guide*

## Basic Screen



## Options Enabled



# Enable Options



*Use Home button to get to Options screen.  
Use Up/Down and Left/Right arrows to enable purchased options.*



*On Diagnostics page, the Bale Tie, Plunger, and Flake Sensor are all "0" when not triggered, and "1" when triggered.*

*Still have questions? Contact us at [www.bestbaleusa.com](http://www.bestbaleusa.com) or check out our Facebook group BestBale Owners Group for more helpful tips.*

*Jared Herbst 208-993-1959 call, text, and Facetime available  
Darren Herbst 208-557-1607 call and text available*