



# **MAD CONCAVES**

## **INSTALLATION GUIDE**

John Deere STS/S Series Combines



## Thank you for choosing Bushel Plus MAD Concaves!

We understand the issues farmers face when it comes to rotor loss, grain quality, and the difficult process of installing and removing heavy, awkward concaves – we've been there!

MAD Concaves are designed by farmers for farmers. We define success as helping you achieve the highest levels of yield and quality possible, while increasing your efficiency and profitability through our innovative concaves.



# GETTING STARTED

## DISCLAIMER

- Ensure proper personal protective equipment (PPE) is worn at all times. This includes CSA approved steel-toe boots, gloves, goggles, pants, and a long sleeve shirt.
- Refer to the manufacturer's operation and service manuals for information on specific calibration and installation/removal procedures.
- When removing and installing concaves, ensure proper lifting techniques are used.

## How John Deere STS/S Series MAD Concaves Work

Swapping out traditional round wire combine concaves for our innovative bar-and-grate style modular MAD Concaves™ results in more efficient threshing, getting your grain out of the head and into the hopper quicker for decreased rotor loss and less dockage. This means higher quality crops and more money in your pocket.

In addition to increased quality and reduced loss, our fast and easy-to-change modular designs allow you to quickly swap out inserts in minutes. Therefore, you'll save valuable time, which is critical in a busy harvest season.



A modular frame (green) replaces the original concave, fits into the original concave position in the combine, and always stays in place.

Changing concaves now means you only change out two "concave inserts" (black) per frame.

# INSTALLATION PROCESS

## Tools Required

- Socket sets (metric and imperial)
- Torque wrench

## Concave Removal and Installation

**Important:** Keep all existing hardware (bolts, etc.) for install of MAD Concaves. Use new nuts.

### Step 1

Put the rotor gear into neutral.

### Step 2

For an easier installation, start with a concave clearance of 0.5" between the rotor and concaves.

### Step 3

Undo all concave bolts on the Z-bar and the right-side keeper on the first and second position concaves.

### Step 4

Rather than remove all of the existing concaves from your combine at once, for the S Series, we recommend removing each concave by position, and proceeding with installation of the new concave for that position in the following order:

First step – remove OEM concave from the second position (centre concave).

Second step—remove OEM concave from the first position (front concave)

Make sure the transition lip is bolted and secured to the MAD split frame that goes into the first position (torque labels are located on the transition lip).

## Installation Continued

Third – Remove third position concave only after the first position split frame is installed. This will ensure the concave mounts stay in place for easier installation – IF APPLICABLE.

Install the third position one-piece MAD Concave. Before installing the 2nd position split frame – IF APPLICABLE.

Fourth – Install the 2nd position MAD Concave Split Frame.

Now you can install the concave inserts into the split frame in the first position. Leave the split frame in the second position empty (without inserts) for now. This will make the calibration of the concave clearance easier, as you can visually see the distance between the rotor and the concave (rub bars to the threshing bar of the concave insert).

Following calibration, install the 2nd position concave inserts.

### Calibration (zero out the concave)

To calibrate, refer to the combine user manual/operator's service manual.

## Questions? We're happy to answer them.

Contact your local Bushel Plus dealer or reach out to one of our specialists.

## Bushel Plus Contact Information



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