Presenters

- Don Seltzner – Service Manager
- Neal Sennhenn – Mobile Technician

Pre-Season Check Over

Customer Clinic Events

Header – corn headers general

- Drum Scrapers to prevent plugging

    - Has to be set as close as possible (**A**)

    - Use bolts (**B**) to adjust

- Cleaners to prevent plugging and high

    header power consumption (**C**)

    - Check frequently

    - Should have sharp edges.

JOHN DEERE
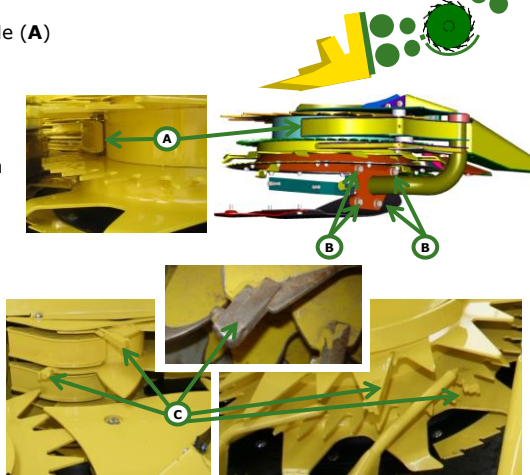
Header – corn headers general

- Crop dividers are to prevent plugging in tough harvesting conditions

    - Clearance has to be 1-7mm (**A**)

    - Use bolts (**B**) to adjust

- Stubble scrapers (**C**)

    - Check daily

    - High wear / could be damaged by stones

- Sharp Cutting blades prevent high power consumption

    - Check frequently for wear

    - When replacing make sure that

        tungsten coating is on the top

JOHN DEERE
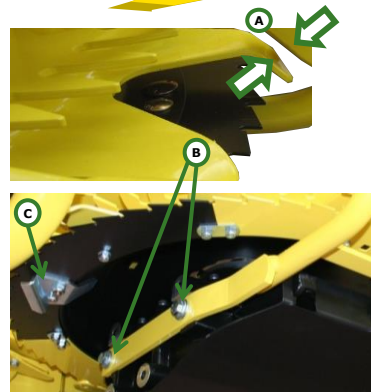
Header – Corn Headers General

- Speed control from cab
- Infinitely variable speed
- Auto Mode adjusts speed according to LOC settings
- In whole crop silage the header speed has to be increased drastically
- For larger corn headers the hydraulic cylinder (header tilt) has to be engaged
- Have the right amount of rear ballast fitted to the SPFH
- Service the slip clutches on the header at the beginning

  of the season (see owners manual)

5

JOHN DEERE
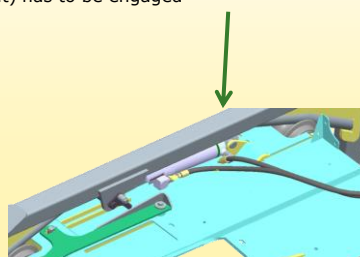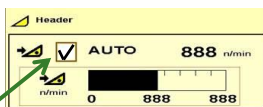
SPFH Headers Main Topics

➤ **Heavy Duty Slip Clutch**
  o Higher torque (1700Nm instead of 1400Nm)

➤ **Reinforced compression roll**
  o Additional reinforcement sheets for higher reliability

➤ **Optimization of 690 Series headers**
  o Better feeding
  o No buildup of material
  o Open gears

➤ **New knife rotor cleaners Small Drum**
  o No damages to upper half of gearcase
  o Cleaners hooked into rotor

➤ **Down Corn Kit (Hurricane Kit)**
 o Bundle to optimize working in down corn conditions

6

JOHN DEERE
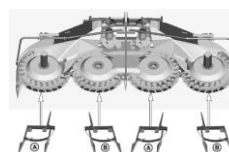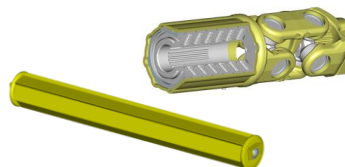
Header – grass Pickup

- Intake auger
  - Finger type no longer available
  - Paddles setup:
    - Low volume windrows = move paddles out (bigger auger diameter)
    - Medium volume windrows = move paddles in
    - High volume grass windrows and in WCS = paddles and brackets should be removed
    - Standard setup is smooth side out. Serrated side out can lead to back feeding.
  - Auger position:
    - Distance auger flights to scrapers = 0-2 mm
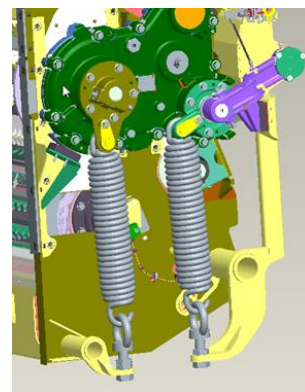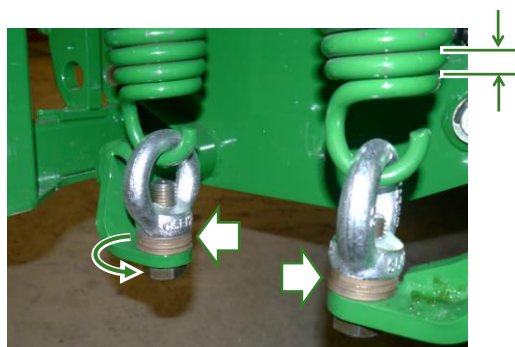   - Distance auger flights to deck sheet = 20 mm
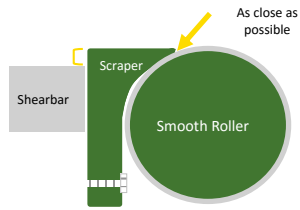
JOHN DEERE
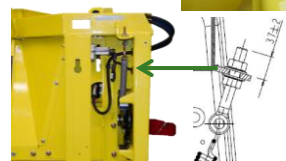
7

Feedrolls

- Feedroll spring tension
  - Standard setup is 2 washers rear 3 washers front– see picture
  - Dependent on LOC and conditions
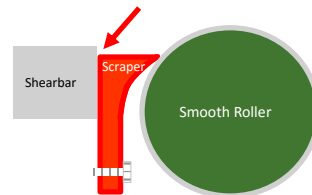 - For more tension washers can be removed

JOHN DEERE

8

Smooth Roll Scraper 7000

As close as possible

Scraper

Shearbar

Smooth Roller

The Scraper should always be above the shear bar:

Approx: 2mm [.080 inch]

Scraper

Shearbar

Smooth Roller

The scraper should never be allowed to move below the shear bar:
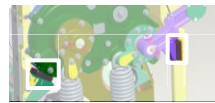This will affect the cutting quality & increase wear

9

JOHN DEERE

Feedrolls
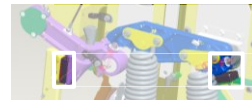
• Feedrolls
  • UFFR bars can be reversed (smooth side out) for fragile crops
  • UFFR plastic bars for all crops. Bars might be removed in heavy corn for more aggressive feeding
  • Smooth roll scraper adjustment =0.8mm

10

JOHN DEERE
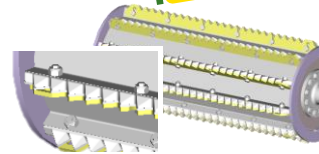
Knives/Shearbar adjustment

JOHN DEERE

Power Required with Misadjusted Shearbar

JOHN DEERE

Optimal Knife Sharpening in Grass

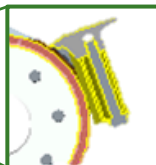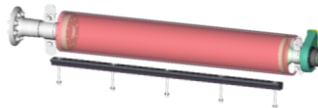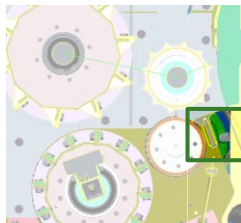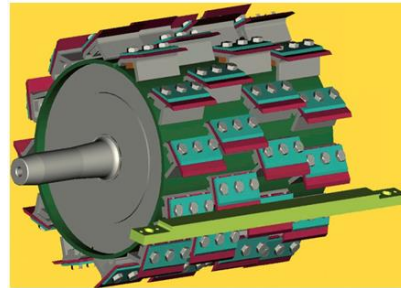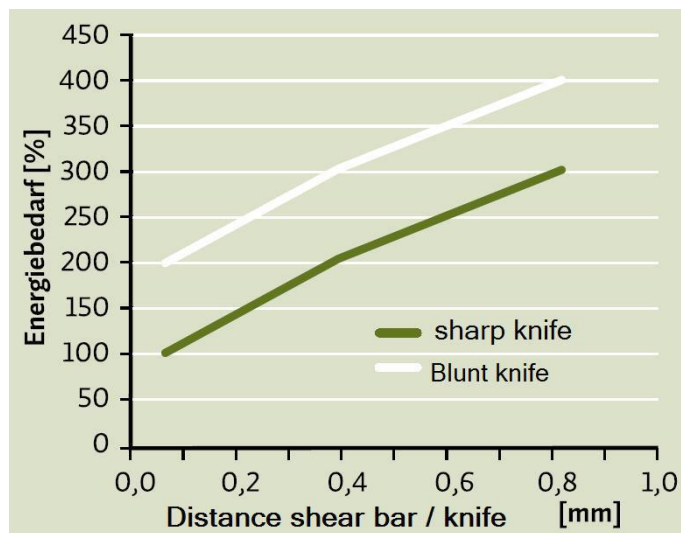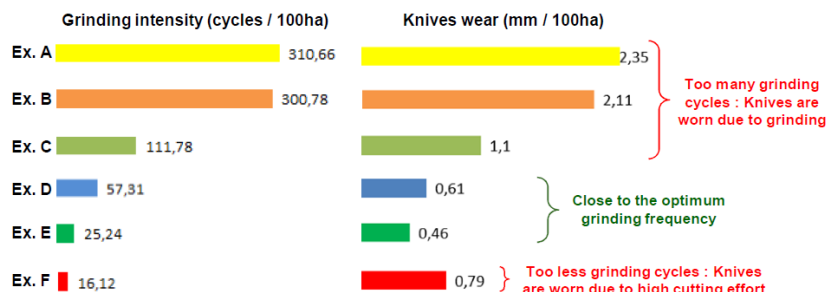|	Grinding intensity (cycles / 100ha)		Knives wear (mm / 100ha)	
Ex. A	310,66		2,35	Too many grinding cycles : Knives are worn due to grinding
Ex. B	300,78		2,11	
Ex. C	111,78		1,1	
Ex. D	57,31		0,61	Close to the optimum grinding frequency
Ex. E	25,24		0,46	
Ex. F	16,12		0,79	Too less grinding cycles : Knives are worn due to high cutting effort

100 ha = 247 Acres
Optimal 25 passes per 247 acres
Factory Recommendation to sharpen 15 grinding 3 finish passes in Grass
Should sharpen every ~150 acres in grass
Highly depends on Tonnage and Conditions
Source: Claas Jaguar Journal N° Juli /2013, Author Dominik Grothe
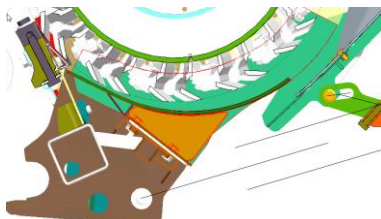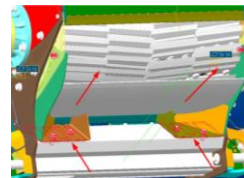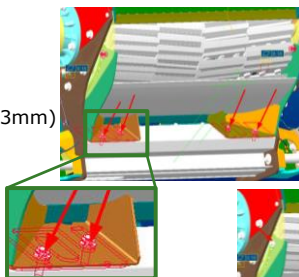
8000 series SPFH – Operator training
13

JOHN DEERE

Cutterhead

Spiral band adjustment

- Dependent on Crop Conditions
- In dry gummy conditions (1mm-3mm)
  - To prevent plugging
- In Wet conditions (5mm-8mm)
  - To prevent recirculation

14

JOHN DEERE

Grass chute

Chute adjustment
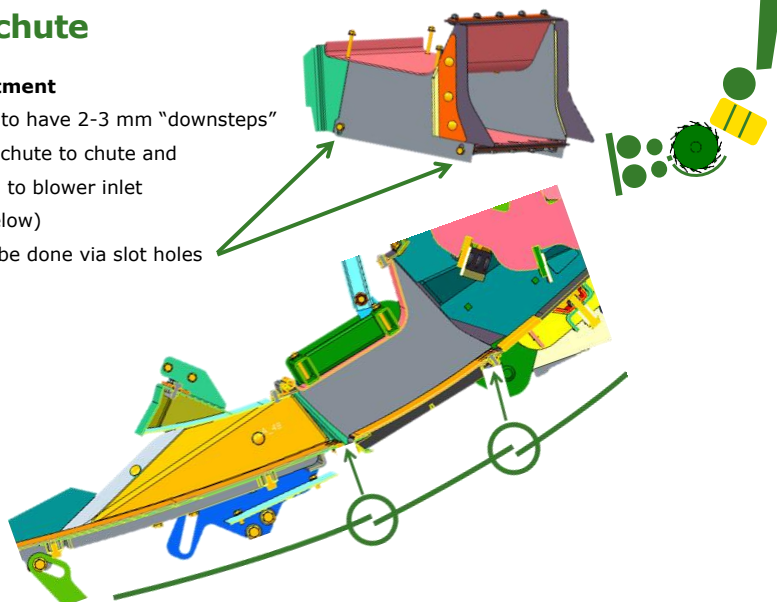
- Make sure to have 2-3 mm "downsteps" from front chute to chute and from chute to blower inlet (picture below)
- Setting to be done via slot holes
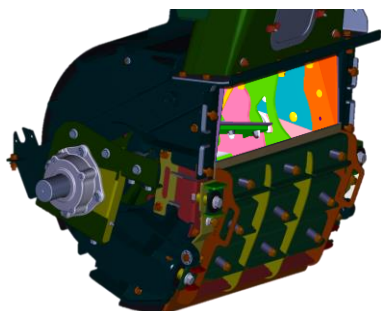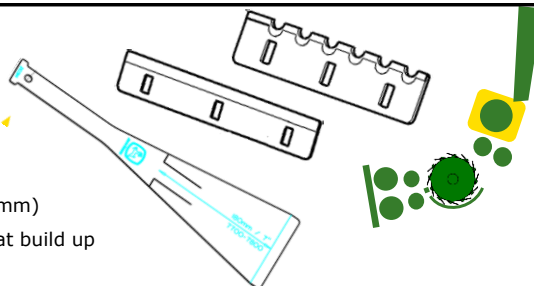

15

JOHN DEERE

Crop Accelerator

Accelerator paddle adjustment

- Special tool available
- Access from the back door
- Basic gap setting is 3.0 mm (+/- 0.5 mm)
- Serrated paddles available for less heat build up

16

JOHN DEERE

Kernel Processor 7000

24% - 32% - 32% bottom roll reversed - Kernel Star

Less Aggressive   More Aggressive

18

Kernel Processor 7000

-New KP bottom roll cover both WB and NB

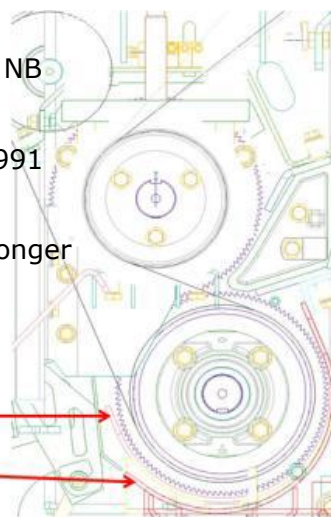-Added Spring Washers 42 to 46 FH311991

-New belt wrapping with 32% requires longer
belt set
   Wide Body -AZ101386
   Narrow Body -AZ61336

New cover

Standard cover

19

Kernel Processor 8000

Options 8000 series

32% - Kernel Star – 40% - 40% Scherer Processor rolls

Less Aggressive   More Aggressive

20

JOHN DEERE

Transition Chute Liners

21

JOHN DEERE

Spout Liners

22

JOHN DEERE

Harvest Lab

Crop	Material	Moisture	ADF*	NDF**	Starch	Protein	Sugar
Corn silage		Yes	Yes	Yes	Yes	Yes	No
Alfalfa		Yes	Yes	Yes	No	Yes	Yes
Snaplage	Freshly harvested and ensiled	Yes	Yes	Yes	Yes	No	Yes
Whole crop silage		Yes	Yes	Yes	Yes	Yes	No
Grass		Yes	Yes	Yes	No	Yes	Yes

Map and record constituents on the go to get the best
representation of feed
Allows the ability for AutoLOC to automatically control LOC
based on moisture

23

JOHN DEERE

AutoLOC

1. HarvestLab™ — moisture and ingredients on the go
2. Manual control (operator)
3. AutoLoc — automatic control
4. Infinitely variable length of cut (IVLOC™) — length of control changes on the go

JOHN DEERE

Silage Additive Dosing

JOHN DEERE

AMS - HarvestLab

+65°C
(149°F)

+5°C
(41°F)

26

JOHN DEERE

Harvest Lab

Harvest Labs should be Black and White referenced every year for continued accuracy

27

JOHN DEERE

Keep your machine CLEAN!

28

JOHN DEERE