# Quick Reference Card for Flex Draper Headers (Supplement to set-up in Operators Manual. See Operators Manual for greater detail.)

1. Set-up adapter & header as per Operator's Manual and install adapter into header with combine. Follow all set-up directions.

- NOTE: 1) When setting a machine it is advisable to shake and/or rock the machine a few times after each adjustment.
  - 2) It is good practice to follow the below instructions and then run the machine in the field for a break in period and perform the adjustments again.
- 2. Check Float Settings. (Lock up Gauge Wheels in Storage Position When Setting Float and/or Cutting on the Ground).

NOTE: Positioning table angle and reel as follows will enable best floatation results when operator moves reel fore and aft or table angle on the go.

• It is recommended to set float for most conditions with the center cylinder set to dimension (C) shown in Fig. 2. Pin to pin length of 490mm (19.5"). Some adapters (depending on combine) will use the front hole in adapter but measurement will be the same.

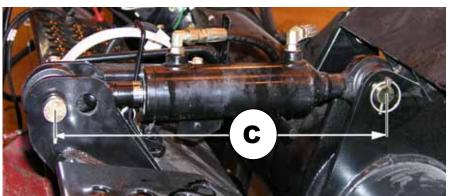


Fig. 2 Center Link Dimension

- Move Reel to mid position #5 or 6 on gauge.
- Raise header 150mm (6") off the ground.
- Lock wing pins on both wings (see Fig.1).
- Place adapter float lock in down position (float engaged see Fig.3) on both sides of adapter.
- Inspect distance at (F) between float arm (G) and down stop (H). On the ground cutting (F) = 13mm (1/2). (Notch in down stop arm is used for a visual reference to gauge correct float for this field condition).
  - Off the ground cutting (F) = Float arm (G) touching down stop (H)
- To adjust distance (F) Loosen jam nut (D), tighten both bolts (E) equally to increase dimension, loosen to decrease. Tighten jam nut (**D**) when adjustment is complete

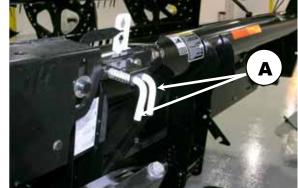


Fig.1 Wing Lock Pins -Wings Locked

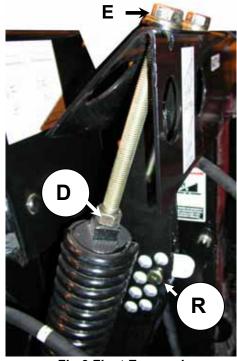


Fig.3 Float Engaged

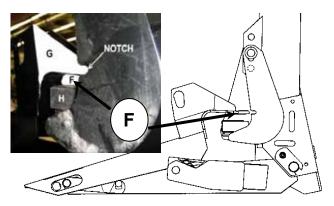


Fig.4 Float Arm Down Stop Setting

# **Quick Reference Card for Flex Draper Headers**

## 3. Check Float Optimizer Adjustments

- Vertical positioning of sensing arm is critical for proper operation of the float optimizer. Check with center cylinder retracted fully.
- Float Optimizer should be set with float on downstop pad (**F** = 0, See Fig 4).
- Raise header 150mm (6") off the ground and shut off combine. Press down on float optimizer until clearance at (J) is slightly more than 1mm (1/16") between upper arm and base. (indicator at 1" to 1-1/4") This will be deemed the nominal setting prior to adjusting ground pressure with combine controls.
- Hold in this position and slide bolt (**H**) up until sensing arm touches the bottom of the center link cylinder if adjustment is required.
- Lock bolt (H) in position with nut.

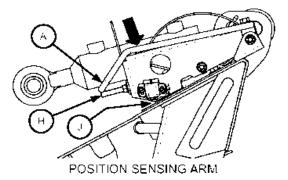


Fig. 6 Float Optimizer Adjustments

# 4. Check Wing Balance

- Adjust float as per Step 3 for cutting on the ground.
- Position reel in mid position #5 or 6 on gauge.
- Ensure adapter float is engaged (R) (Fig.3) on both sides of adapter.
- Raise header 150mm (6") off the ground.
- Pull wing pins (A) out one at a time. Note the ease at which each pin pulls out of the engaged position. This will help determine the correct wing balance when checking the smile and frown adjustment.

**NOTE:** Before adjusting the bell crank, lower headers to round until vertical strut (**P** – See Fig 9) is loose

# **Checking Smile Adjustment**

Outside pin ( $\mathbf{K}$ ) should just pull out with no resistance. If smile pin ( $\mathbf{K}$ ) is tight, loosen bell crank nut ( $\mathbf{M}$  - See Fig. 9) and adjust nuts ( $\mathbf{N}$  - see Fig. 5) to move pin upwards (exposed threads should be shorter at  $\mathbf{O}$ ). Adjust until outside pin moves freely.

**NOTE:** Adjust one wing at a time, ensure both pins are engaged on opposite wing.

# **Checking Frown Adjustment**

If frown (inside pin L) is tight, loosen bell crank nut (M - See Fig. 9) and adjust nuts (N - See Fig. 5) to move pin downward (exposed thread should be longer at O). Adjust until inside pin L has slight pressure on it when removed.

**NOTE:** Adjust one wing at a time, ensure both pins are engaged on opposite wing.

# K O

Fig. 5 Wing Balance Check

### 5. Block Test

- Engage float by lowering float lockout bracket (R See Fig.3).
- Center link set to 490mm (19.5").
- Position reel to mid position 5 or 6 on gauge.
- Check with wing lock out pins (L & K See Fig 5) disengaged.

### (Block Test) Header Frown

- a. Lower header to ground and engage wing lock pins.
- b. Raise header and place 150mm (6") blocks under cutterbar just inboard of hinge point. (See Fig 8A).
- c. Lower header until it touches blocks and remove wing lock pins.
- d. Continue to lower header until wing gauge moves (Note and record float optimizer gauge position).
- e. Wing gauge should move before float optimizer gauge has moved one full number.
- f. Full frown should happen before float optimizer gauge has moved two full numbers.

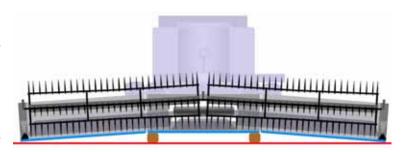


Fig. 8A Block Test – Header Frown

# **Quick Reference Card for Flex Draper Headers**

## (Block Test) Header Smile

- Lower header to ground and engage wing lock pins.
- b. Raise header and place 150mm (6") blocks under the cutter bar, at crop dividers.
- Lower header until it touches blocks and remove wing lock pins.
- d. Cutter bar should begin going into smile before float optimizer gauge has moved one full number.
- e. Full smile should occur before gauge has moved two full numbers.

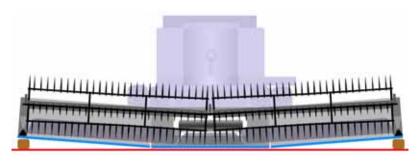


Fig. 8B Block Test - Header Smile

# Block Test Analysis (Refer to Tech Manual for more in depth analysis)

- a. If less ground pressure was required to frown the wing than to smile the wing, there is too much weight on the wing. Refer back to step 4. Check Frown Adjustment and make wing lighter.
- b. If less ground pressure was required to smile the wing than frown the wing, the wing is too light. Refer back to step 4. Checking smile adjustment and add weight to the wing.

# 6. Wing Flex Range

- Frown Flex Range needs to be checked with header in frown position.(see Fig.8A) Pin (1) must reach end of travel slot (2) (range 0-3mm (1/8") gap).
- Smile Flex Range needs to be checked with the header in smile position. Pin (1) must reach end of travel slot (2) (range 0-3mm (0-1/8") gap).

**NOTE:** Wings should reach full flex range within the same amount of movement on the float optimizer.

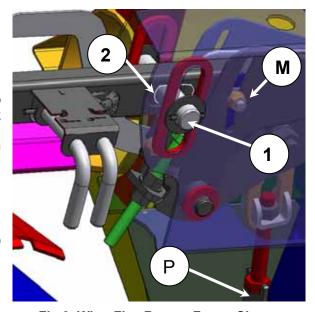


Fig 9. Wing Flex Range- Frown Shown Smile to be Checked at Other End of the Slot

\*\*NOTE: If full frown or smile range is not achieved the vertical strut needs to be adjusted. To achieve full frown or smile consult the Technical Manual. This is a factory adjustment and should normally not need adjusting.

• Repeat block test to check wing flex if strut has been adjusted.

### 7. Reel Adjustments

- Move reel fore-aft to mid position #5 or 6 on gauge.
- Place header into full frown position.
- Reel to guard clearance at hinge points: 7mm [1/4"] tip to hinge points.

**NOTE:** Reel clearances are factory set, and no adjustment should be required.

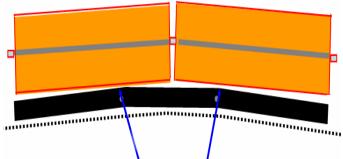


Fig. 10 Hinge Points Reel Clearance

\*\*NOTE: This adjustment is critical when beans are short or thin. This adjustment must be made in full frown position with a fair bit of down pressure from combine feeder housing.

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## 8. Operator Controlled Adjustments

- Float Optimizer (Combine Auto Header Height) Controls down force on cutter bar with automatic height control.
  - o Lower ground pressure or flatter angle is required if there is excessive pushing of trash and dirt.
  - o More ground pressure is required if cutter bar rides up on stubble or does not follow ground.
  - o A good starting point for ground pressure is one number above nominal (See Step 5) on FO indicator. ie. If FO gauge reads 2 when cutter bar is just above the ground the float optimizer should read 3 when on the ground.
  - o The bigger the number on optimizer gauge= more ground pressure, less floatation.
  - o The smaller the number on optimizer gauge= less ground pressure, more floatation.
- Hydraulic Guard Angle Control stubble height by adjusting the center link length to set guard angle.
  - o Steeper guard angle is required if stubble is too high across full width of header.
  - o Reduce guard angle to raise guard point to ride over rocks and ground trash
- Skid Shoe Height Adjustment:
  - o Use skid shoes along with the hydraulic guard angle adjustment to vary cutting height.
  - Lowering the skid shoes raises the cutting height. This may be desirable in stony conditions, to reduce damage to cutting components. Other benefits include reduced cutterbar pushing or uneven cutting height, due to mud or dirt buildup.
  - o Refer to 974 Operator's Manual for further skid shoe adjustment details.
- When you are cutting on the ground gauge/transport wheels are recommended to be run in storage position.
- 9. Locking Gauge Wheels/Transport Wheels up into Storage Position (For on the ground cutting applications)
  - Lock wings and engage float lock-out.
  - Raise header high enough to insert 8"
    [200mm] blocks under wheels. Lower
    cutterbar to the ground and retract table
    angle cylinder fully. Install pin (S) into
    storage position.

Note: If always cutting on the ground it is recommended to remove springs from gauge/transport wheels. By removing springs, blocking of the wheels would not be necessary. Springs could be added back in for higher cutting heights if necessary.

# STUBBLE HEIGHT SETTINGS

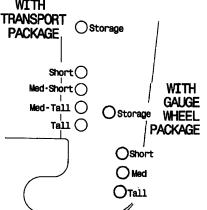




Fig. 11 Transport/ Gauge Wheel Storage Positioning

- For Maximum Stability and Adapter Clearance When Transporting with Gauge Wheel/ Transport Option.
  - (Refer to Slow Speed Transport Manual Form # 46581 for complete details).
  - Remember to insert Pin Z. (Installed with cutterbar in full frown).

