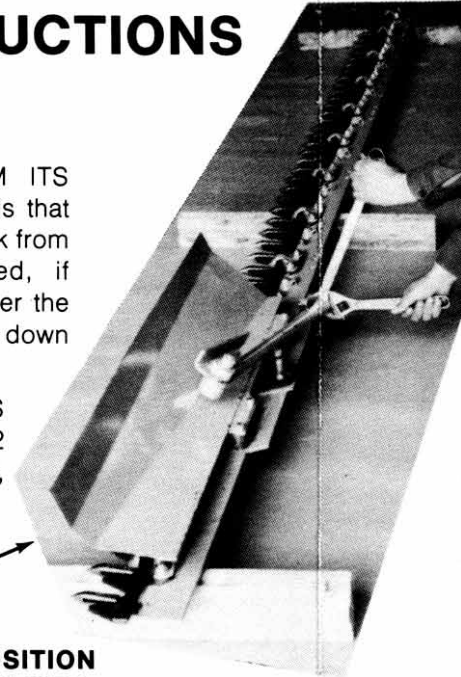


1. PREPARE COMBINE

- A. INSPECT THE COMBINE HEADER and SICKLE DRIVE for worn or broken parts.
- B. REMOVE SICKLE and GUARDS from COMBINE GUARD ANGLE. Some of the guard bolts will be used for attaching the LOVEBAR to the combine.
- C. REMOVE ROCK SHIELDS from underside of header, if any, they will interfere with the floating shoes.

2. PREPARE LOVEBAR

- A. REMOVE THE LOVEBAR FROM ITS PACKAGE. Inspect it for any bends that may have become set in the barback from handling. It can be straightened, if necessary, by placing a block under the point of bend and applying pressure down on each side.
- B. PLACE CUTTERBAR ON BLOCKS ON A FLAT AREA, approximately 2 feet in front of Combine Header, approximately centered.
- C. LOOSEN JAM NUTS ON RADIUS ROD ENDS.

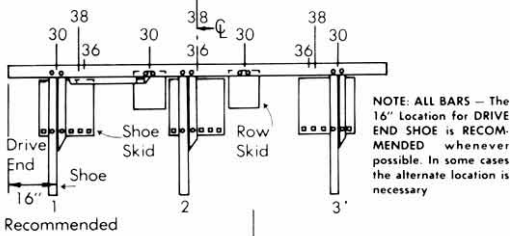


DO NOT WORK UNDER HEADER WHEN IT IS IN THE RAISED POSITION UNLESS IT IS PROPERLY BLOCKED. DO NOT RELY ON MECHANICAL STOPS.

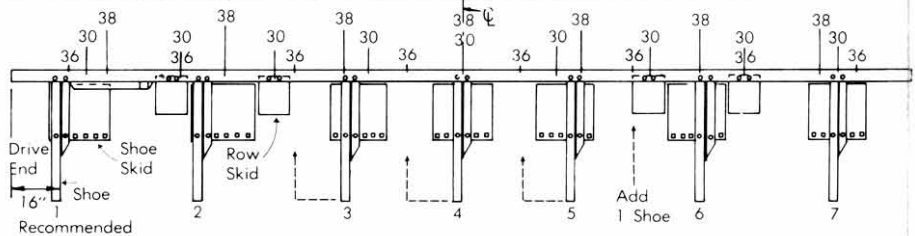
SHOE CHART:

NOTE: STANDARD PACKAGES are intended to **primarily cover 38" rows** with shoe location **and 30" rows** by either SHIFTING WIDESKIDS or ADDING ROWSKIDS (**except 17"**). In many cases it will also cover 36" rows, if set up properly. For 36" rows shoes and rowskids may have to be relocated or added as indicated below.

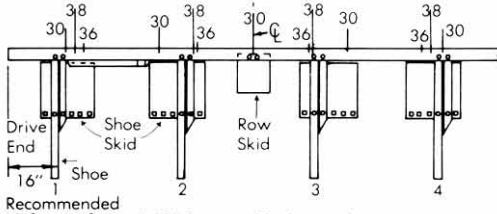
10 ft. - 11 ft. --- 3-38" Rows, 4-30" Rows, also 3-36" Rows



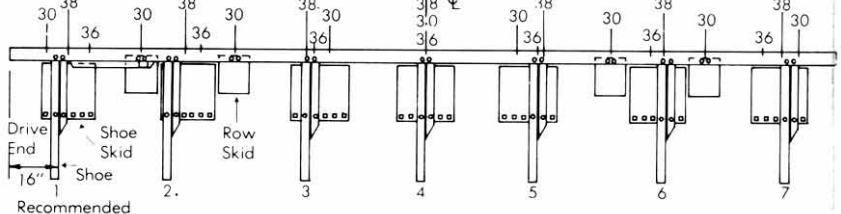
23 ft. - 24 ft. --- 7-38" Rows, 9-30" Rows - Dashed lines indicate shoe relocation for 36" rows.



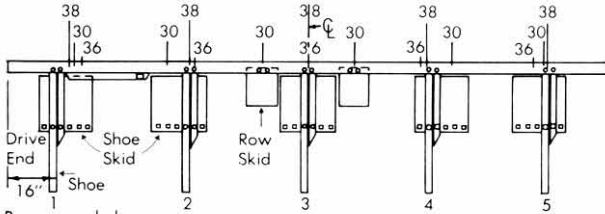
12 ft. - 13 ft. - 14 ft. --- 4-38" Rows, 5-30" Rows, also 5-36" Rows



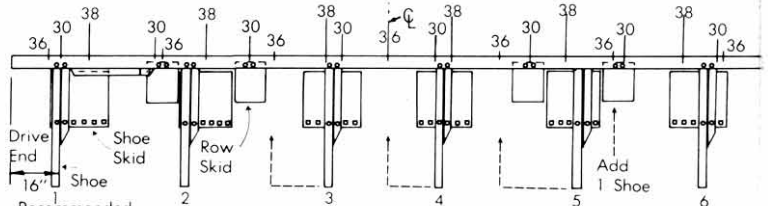
22 ft. --- 7-38" Rows, 9-30" Rows, also 7-36" Rows



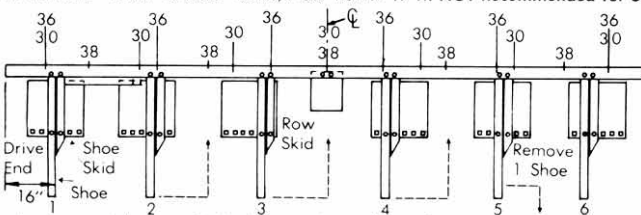
15 ft. - 16 ft. --- 5-38" Rows, 6-30" Rows, also 5-36" Rows



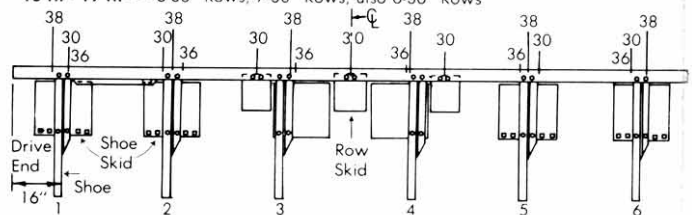
19 ft. - 20 ft. --- 6-38" Rows, 8-30" Rows - Dashed lines indicate shoe relocation for 36" rows.



17 ft. NOTE - SETUP for 6-36" Rows, 7-30" Rows - 17 ft. NOT Recommended for 38" Rows



18 ft. - 19 ft. --- 6-38" Rows, 7-30" Rows, also 6-36" Rows



3. MARK ROW LOCATIONS

- A. Using the center of the LOVEBAR as reference, as indicated by centerline in Shoe Chart (below left), mark ROW LOCATIONS on the BARBACK. Even straddle centerline and odd start on centerline.
- B. Lay out shoes behind BARBACK at holes marked "Shoe". Shoes are spaced at or near 38" rows.

4. ALIGN END GUARDHOLE of LOVEBAR with END GUARD HOLE of COMBINE GUARD ANGLE, as shown at right.

5. CHECK FOR SHOE FRAME CLEARANCE UNDER HEADER

LOCATE & MARK REINFORCING RIB LOCATIONS ON HEADER GUARD ANGLE. LOVEBAR SHOES MUST BE LOCATED SO THAT SHOE FRAME WILL BE CLEAR OF REINFORCING RIBS OF HEADER. If there will be interference, shift the shoe on the barback, using alternate holes provided. Although every effort is made to provide all the holes necessary, occasionally there may be situations that will require the customer to drill additional holes in the barback.

6. INSTALL SHOES ON BARBACK

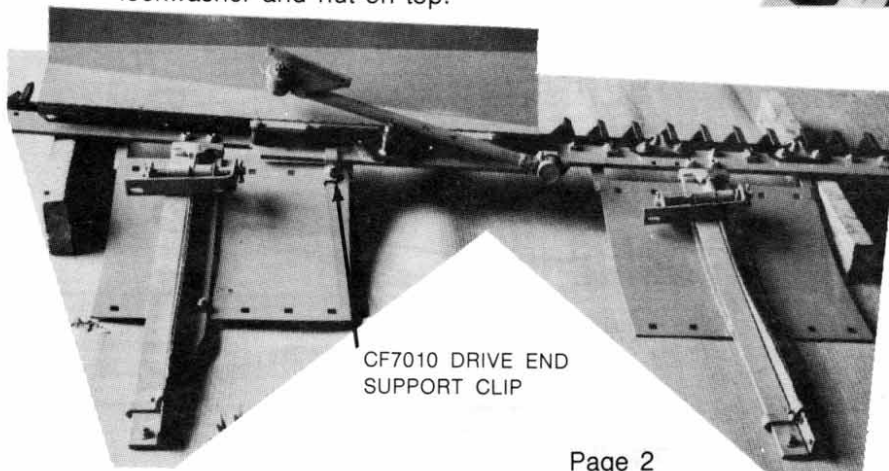
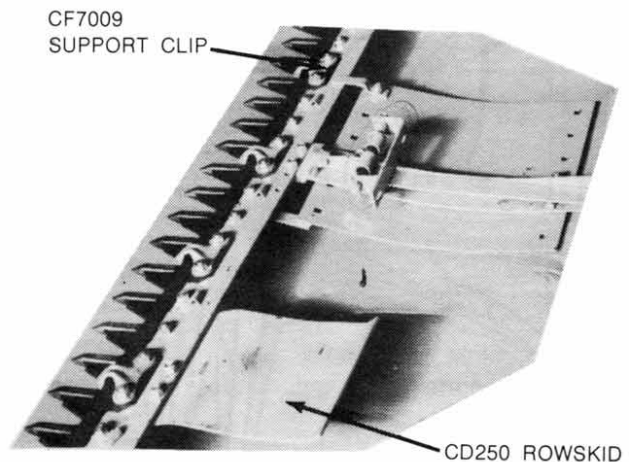
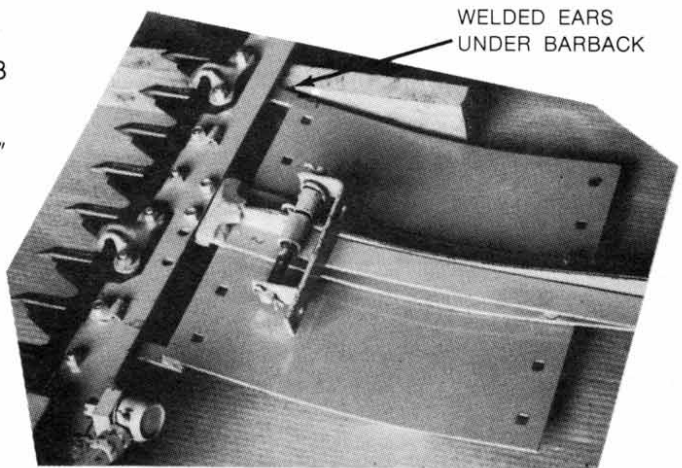
- A. **DOUBLE CHECK** for HEADER RIB CLEARANCE.
- B. ATTACH SHOE TO BARBACK using $\frac{1}{2}$ " unc x $1\frac{1}{4}$ " bolt from the bottom, self locking nut on top.

7. INSTALL SHOE SKIDS

- A. LAY OUT SKIDS under shoes to be sure the SKIDS are on the ROWS.
- B. ATTACH SHOE SKIDS TO SHOE FRAME using $\frac{7}{16}$ " x 1" carriage bolts from the bottom, lockwasher and nut on top.

8. INSTALL SKID SUPPORT CLIPS

- A. CF7009 SKID SUPPORT CLIP is designed for shoe skids OTHER THAN the DRIVE AREA, to reach to the barback and support the SKID when shifted off center. See photo at right.
- B. CF7010 DRIVE END SKID SUPPORT CLIP IS **SHORTER**, and designed for SHOE SKIDS AT THE DRIVE AREA, to reach onto the barback extension. CF7010 is always used for SHOE #1, and may be required for SHOE #2 if it is under the drive. See photo below.
- C. USE $\frac{7}{16}$ " x 1" carriage bolts from bottom, with lockwasher and nut on top.

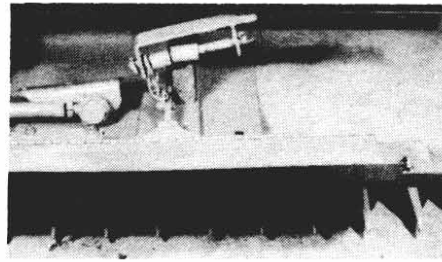


9. INSTALL ROWSKIDS

- A. For 30" Rows not covered by SHOE SKIDS. Use $\frac{1}{2}$ " x $1\frac{1}{4}$ " bolts with self-locking nuts. See photo above.
- B. SHOE IS NORMALLY AT OR NEAR 38" ROW. THE SKID IS SHIFTED TO COVER 30" ROWS.

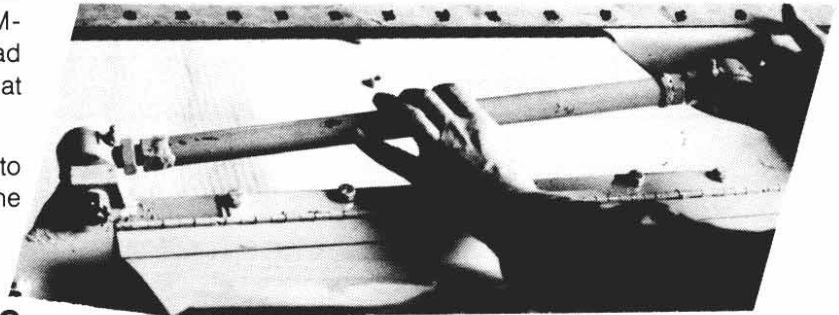
10. PLACE CUTTER BAR UNDER HEADER

- A. PLACE a short 2" x 4" wood block under front of shoe spring.
- B. LOWER HEADER until GUARD ANGLE just touches front shoe spring hanger with hanger standing up as shown at right.



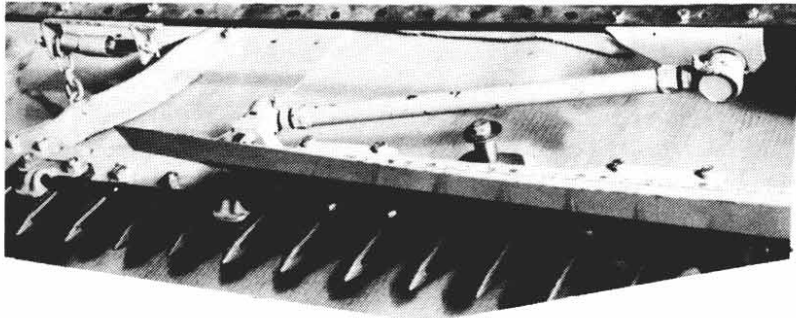
11. ATTACH RADIUS ROD

- A. TURN RADIUS ROD COUPLER until holes in ANCHOR BRACKET align with holes in COMBINE GUARD ANGLE. EQUAL length of thread should be showing at both ends. See photo at right.
- B. ATTACH RADIUS ROD ANCHOR BRACKET to GUARD ANGLE using 3-3/8" x 1 1/2" Combine Guard Bolts, and **DOUBLE NUT**.



12. ATTACH FRONT SHOE SPRING

HANGERS to GUARD ANGLE using Combine Guard Bolts.



BE CAREFUL — NEVER WORK UNDER A RAISED HEADER UNLESS IT IS PROPERLY BLOCKED.

13. ATTACH REAR SHOE MOUNTING

REFER TO SPECIFIC MODEL INSTRUCTIONS for more complete instructions on REAR SHOE MOUNTING. Steps listed here correspond with steps listed on SPECIFIC MODEL INSTRUCTIONS.

- A. Attach rear tube hanger to back of header.
- B. Place tube in clamps.
- C. Attach CF2142 clamp to tube, at each shoe tail.
- D. Attach CF2143 shoe tail link to CF2142 clamp with **1 bolt**.

14. INSTALL SICKLE DRIVE ADAPTER, IF APPLICABLE

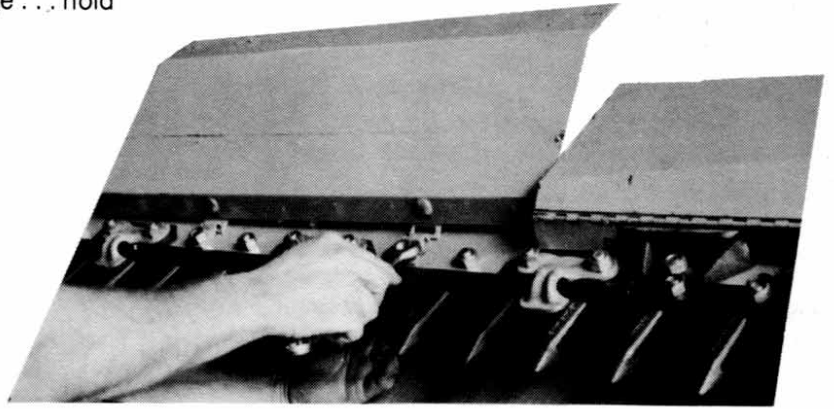
REFER TO SPECIFIC MODEL INSTRUCTIONS, for more information.

15. INSTALL PITMAN AND TIME SICKLE.

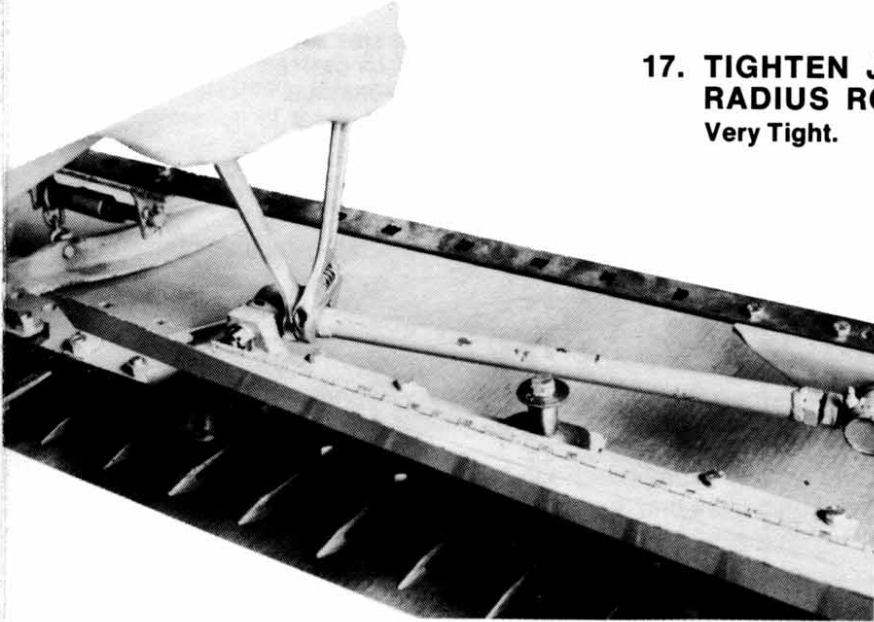
- A. SET COMBINE SICKLE DRIVE TO CENTER OF STROKE.
- B. MOVE LOVEBAR SICKLE TO CENTER OF STROKE, as shown in SICKLE DIAGRAM, Page 5.
- C. PLACE PITMAN BALL JOINT END THROUGH HOLE IN COMBINE DIVIDER, and ATTACH TO COMBINE.
NOTE: In some cases, this hole will need to be made bigger, to clear the pitman.
- D. LOOSEN JAM NUT, and lengthen pitman until the rubber bushing will fit on sickle drive head pin, with Combine and LOVEBAR both in CENTER OF STROKE.
- E. ATTACH PITMAN TO DRIVE HEAD. Use hand cleaner to lubricate the rubber bushing.
- F. RUN THE SICKLE THROUGH A COMPLETE STROKE TO SEE IF THE SICKLE SECTIONS CENTER ON GUARD POINTS at each end of the stroke, or EQUAL movement each way from center.

16. INSTALL FEEDER SHIELDS

- A. Loosen nut on guard at CF2190 hinge . . . hold down clip.
- B. The notched feeder shield (CF2164 or CF2133) is installed adjacent to the CF2181 drive shield. Remaining feeder shields are to be arranged to match hinge clips (installed at factory) and so that they overlap towards the center of header.
- C. DO NOT TIGHTEN NUTS ON BACK OF SHIELD THAT HOLD HINGE TO SHIELD.

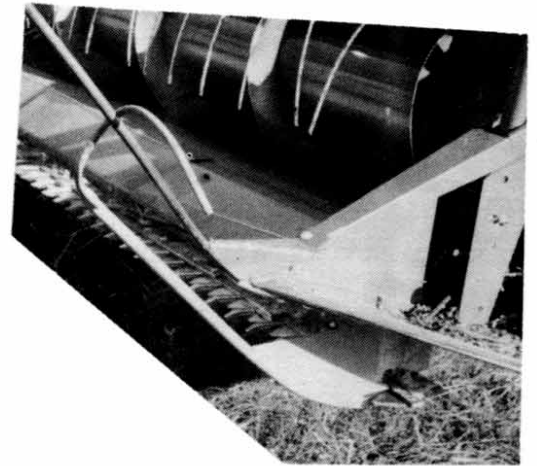


17. TIGHTEN JAM NUTS ON BOTH PITMAN AND RADIUS ROD — Also check to see that taper seats are Very Tight.



18. INSTALL OUTER DIVIDERS

- A. Guard fits inside cone.
- B. Use 7/16" x 2" carriage bolt to attach thru guard hole.
- C. Bend rod around Combine Loop.



19. NOTE ABOUT AUTOMATIC HEADER HEIGHT CONTROLS

— If a LOVEBAR is mounted on a combine with Automatic Header Height Control, it is VERY IMPORTANT to readjust the sensing fingers so that there is a FINGER ON EVERY SHOE SKID, and that RAISING ANY SHOE up against the header WILL RAISE THE HEADER. THIS MUST BE SPECIFICALLY CHECKED, as the header will run in a higher position with the LOVEBAR mounted and the SENSING FINGERS need to be BENT DOWN to contact the SHOE SKID with the LOVEBAR hanging.

20. CUTTERBAR HEIGHT ADJUSTMENT

— Adjust the cutting height by raising the shoe tail at the rear of the header to lower the guard points. Lower the shoe tails to raise the guard points. With the header raised so shoes are free to float between the ground and header the guard points should be 3/4" from the ground when bar is at rest.

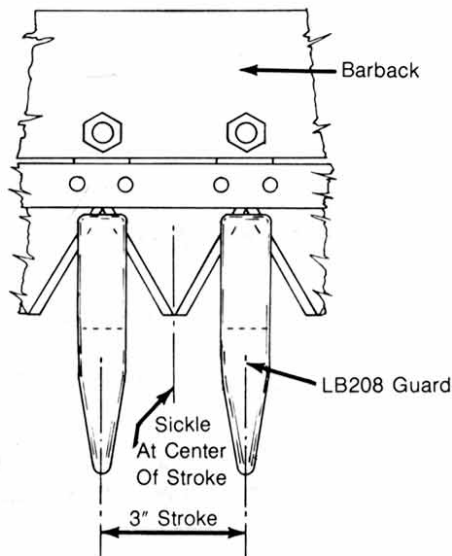
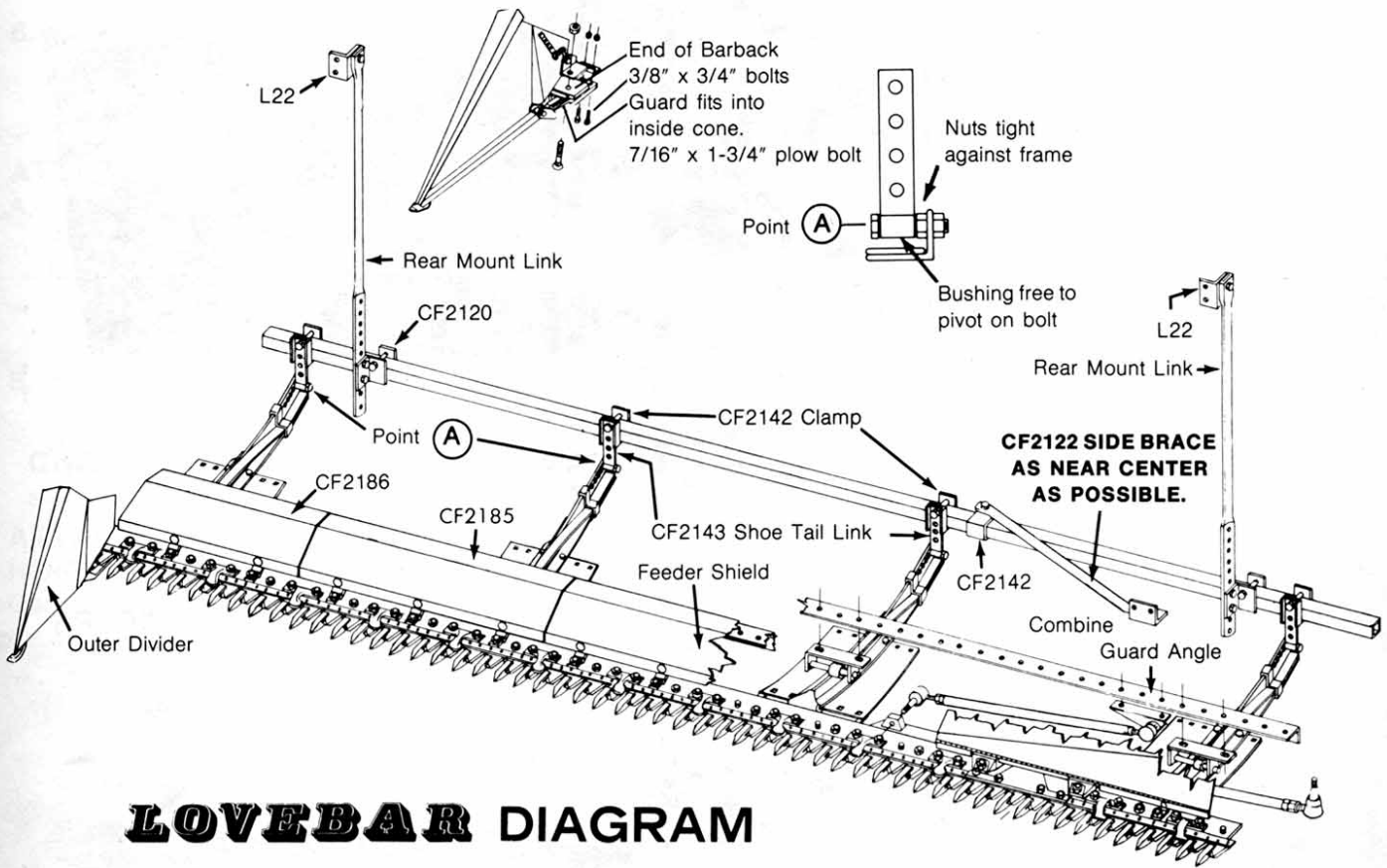
Adjust reel as indicated on page 8. With the header sitting on the shoe frames, make sure the reel tines clear the sickle by a minimum of one inch for the full header length.

J. E. LOVE CO.

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New Albany, Miss. 38652—Phone (601) 534-9541

flexible floating
CUTTER BAR

163CF — 3/78 — R



LOVEBAR

FIELD OPERATION & TROUBLE FINDING CHART

Most troubles are caused by improper installation or adjustment. The following suggested remedies are shown to familiarize the operator with the adjustments that may be made for the most common difficulties encountered in the field. A sincere effort should be made to understand the Combine and the LOVEBAR. Carefully observe the effect of all adjustments. It will soon become apparent as to what adjustment will solve the problem.

TROUBLE	SUGGESTED REMEDY
Crop bunching at outer ends of the combine platform.	This generally occurs in tangled or lodged crop conditions. The use of Special outer dividers may solve the problem.
Crop building up on the LOVEBAR.	Use the LOVE Pick-Up Reel to pick up the crop and sweep it into the platform.
Crop building up on the LOVEBAR.	In light crop conditions it may help to increase speed within reason.
Cutting ragged or uneven.	Lower the Combine platform, clean off the LOVEBAR. Adjust the Pick-Up Reel, sweep the LOVEBAR.
Cutting ragged or uneven.	Check and replace all worn and broken parts on the LOVEBAR. Adjust the Sickle register so the sections pass an equal distance through adjacent guards at each end of the stroke. Check speed of Combine sickle drive. It should be approximately 400 to 450 cycles per minute. If it is faster than this there may be excessive vibration. Adjust Knife clips so Sickle will work freely, but still keep the sections from lifting off Ledger plates.
Dirt and stubble building up under floating shoes.	The rear of the Floating shoe is too far down causing it to drag. Raise the rear of the Floating shoe. Refer to Page 7 for proper relation of the Floating shoe to the Ground Line.
Excessive vibration of the Combine platform and LOVEBAR.	Excessive Sickle speed may be the cause of excessive vibration. Check SPECIFIC MODEL INFORMATION for Sickle drive information. Check installation of Sickle drive for binding or striking. Correct this situation before continuing to operate the LOVEBAR. Problem may be in the Combine sickle drive. Check for worn and broken parts. Check for loose parts.
Excessive vibration of the Combine platform and LOVEBAR.	The LOVEBAR may need to be washed so as to remove the gummy trash from cutting parts. Use water to wash the LOVEBAR. Do not allow gummy trash to harden.
Excessive vibration of the Combine platform and LOVEBAR.	Check bearings on Sickle drive. On older style Massey Fergusons check the nylon button on the under side of the Swaybar guide for wear.
Excessive Knife clip wear on drive end of the LOVEBAR.	Check alignment of all Wear plates the full length of the Bar-back.

TROUBLE	SUGGESTED REMEDY
<p>Floating action of the LOVEBAR is limited.</p>	<p>Adjust the Shoe Spring tension by moving the Shoe Spring Tension Clip.</p> <p>Shoe Spring may be binding on the center angle frame limiting the floatation by one-half.</p> <p>The Shoe may be located under a reinforcing rib. It must be relocated so that rib will not strike the Floating Shoe.</p> <p>Check Point A in LOVEBAR DIAGRAM. The Floating Shoe must be free to pivot at this point.</p> <p>Check to make sure the Shoe suspension chain is not twisted. If it is, release the twist allowing the full usage of the linkage.</p>
<p>LOVEBAR digging into dirt.</p>	<p>If Header Height Control is being used with the LOVEBAR, be sure feelers are set so that raising ANY shoe will raise the header.</p> <p>Possibly rear of Shoes is too high. Lower rear mount one inch.</p>

