

ROLL-A-CONE

CORN LIFTERS

PICKUP ATTACHMENT FOR CORN HEADS



**IF YOU HAVE DOWN CORN --
WE HAVE THE MACHINE TO GET IT**

ROLL-A-CONE MFG. CO.

- * Gently lifts and guides stalks as the corn head moves under them.
- * Simple installation.
- * Can be adapted to any make or model corn head.
- * Drives either mechanically or with hydraulic motor.
- * Corn head snout retains its flexibility because cones have telescoping drive shafts.
- * Eliminates necessity for operator to clear any clog-ups by hand.
- * Extremely light weight but built to give good service over a lot of acres.
- * Reel attachment keeps loose stalks fed into machine eliminating stoppages.



SEE YOUR DEALER
or Call:

ROLL-A-CONE MFG. CO.
806-668-4722

INSTALLATION INSTRUCTION FOR CORN CONES

1. Assemble the bearings (C-10) and flangettes (C-20) onto the shafts which extend from the cones. The set collar side of the bearing goes on toward the upper (large) end of the cone. Tighten the set collar with a punch, and then tighten the alien screw. Install the 7/8 washer and put the cotter pin through the small hole in the end of the cone shaft. (See Fig # 1).

2. Using the stud bolts which extend down from the nose shield (C-21) as a template, mark your snout as indicated. (See Fig #2) Drill an oversize 1/2" hole. Now you are ready to mount the nose shields onto each cone by bolting the loose flanges above the bearing onto the flange half which is welded on the nose shield.

3. Use the cone with nose shield mounted as a gauge now to locate the position in which you will install the drive unit. The best way to do this is to hang the drive unit above the back of the header using a hoist of some kind. With the drive unit hanging above the rear of the cone head, slip a cone onto one of the drive shafts (C-7). NOTE: All shields which interfere with the mounting of the drive unit must be removed, this is at your discretion. These drive shafts should be pointing toward the tips of the snouts. Move the drive unit around until it is in approximately the position indicated on the drawing (Fig # 3). This position is not critical, so don't be afraid to change it around some if necessary to make your drive line up better or to keep from getting into your windshield. The main thing is that approximately 5" to 10" of the small drive shaft (C-7) should extend out of the cone so that when the snout of your corn head flexes upward, the cone will have room to rise with it without hitting the pulley. While positioning the drive unit, keep the top of the main bar (2" square tubing) flat with the header in the down position. If you install this bar tilted severely one way or the other, the belts will not feed onto the pulleys properly. NOTE: On some combines, particularly Gleaners, there is very little room between the pulleys on the drive unit and the glass front of the cab. Be careful that the drive unit is installed so that it won't break the glass. Use the brackets which came with the machine to attach the drive unit. In some cases you may have to modify the mounting brackets to make them work on your corn head. See the loose supplement page pertaining to your combine for more detailed mounting instructions.

4. With the drive unit installed as described above, you are now ready to slip each cone with nose shield onto the drive shafts. The direction of the rotation of each drive shaft is predetermined at the factory. You must match LEFT HAND CONES with counterclockwise turning drive shafts (Fig # 4). Turn the drive shaft with a pipe wrench the same directions that your auger turns to check rotation of cone drive shafts, (C-7) (Direction of rotation is determined as if you are sitting in drivers seat looking forward). If matched properly, each cones fighting will seem to move upward while turning the line shaft. Now insert the two studs extending out of the nose shields into two holes which you drilled into the corn head snouts earlier. Tighten the two nuts until the nose shield fits firmly onto the top of the snout. If necessary use a hammer to make the nose shield conform as closely as possible to the snout.

5. All pulleys must be adjusted so that the belts run straight and do not rub. (Fig # 5). Next, tighten all the set collars on the bearings, tighten all allen screws on the set collars and tighten the set screws on the pulley. Tighten belts slightly. (DO NOT OVERTIGHTEN).

6. Mount the reel mounting brackets (R-3 & R-4) onto the main support bar (C-8) so that the bearing supports are approximately equally spaced apart, and so that support on the end which is driven is close enough to the sprocket and chain to support it properly. Next slide the shaft for the reel through the bearings and through the bat assemblies (R-5), which operate in the middle of the row. Adjust the mounting brackets so that the bats are in the proper place (Fig # 6) and tighten all the bolts. Use the two sprockets which are bolted to the hubs to get power from the main line shaft via a # 50 chain down to the reel shaft. Use the idler arm with the wood block to take the slack out of the loose side of the chain.

7. There are two main ways to drive this machine, hydraulically and mechanically.
HYDRAULICALLY: Use the hydraulic motor off your grain head (or any hydraulic motor which you may have.) The motor mounts onto the hydraulic motor bracket (furnished). Install the drive sprocket (furnished) onto the motor. Using the # 50 chain connect the drive sprocket to the line shaft sprocket. Tighten by sliding the entire motor bracket back toward the back and tighten the 1/2" set screws (Fig # 7). Line shaft will vary according to conditions, but 60-80 RPM (line shaft speed) is a good starting point.

MECHANICALLY: Corn lifters can be driven mechanically on any combine, in most cases there is a factory drive method worked out. However, due to the vast number of variations of corn heads there may be rare cases where the drive sprockets furnished do not fit. In these cases it is the customers responsibility to make the drive work on the combine. To do this, a rule of thumb would be to find the slowest turning shaft on the corn head. If possible, mount your drive sprocket to this shaft and drive up to the jack shaft assembly. Any method of driving which is workable and is safe, is all right. The recommended cone speed varies with the conditions you have, but approximately 80 RPM (at shaft speed) is a good point to start. See Fig # 8.

8. Use a file or sand paper to dress any nick or rough place off the flights, where they first contact the corn stalk at the small end of the cones. Check and tighten all bolts, set screws, bearing collars, and belts. Check the alignment of all the belts and drive chains. Start the machine and let it turn slowly for a few minutes. Observe carefully for a few minutes for any potential problems. If there are none, you are ready to take the machine to the field. NOTE:there is an extra sprocket (32 tooth). This is a speed change sprocket which can be used to either speed up or slow down the machine depending on where it is mounted.

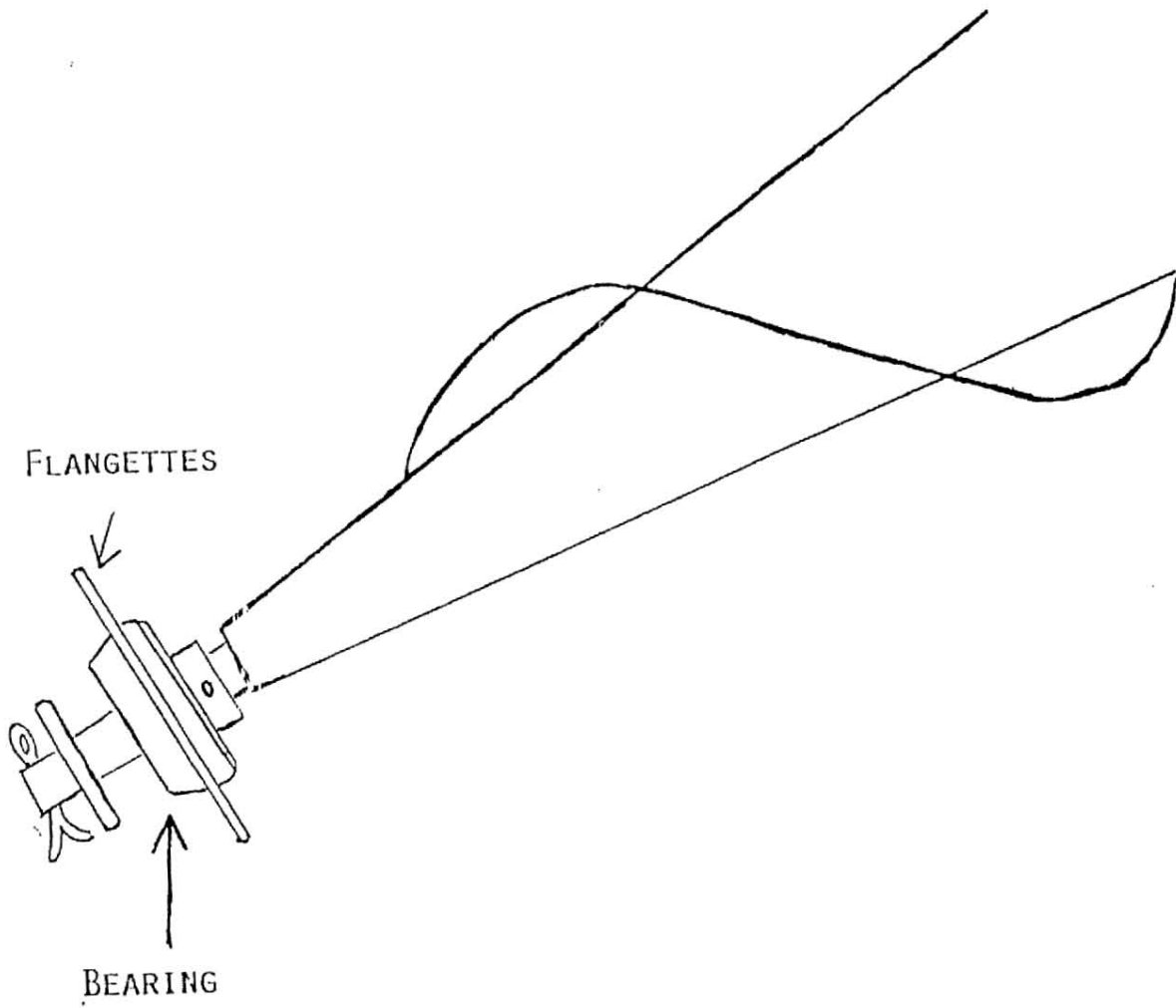


FIGURE 1

There are 2 nuts and washers on each of the nose shield bolts. The top nuts and washers go on top of the snout. These are used to adjust the nose shield height. The bottom nuts and washers go under the snout to clamp on the nose shield. Please see back of book for poly snouts.

FIGURE 2

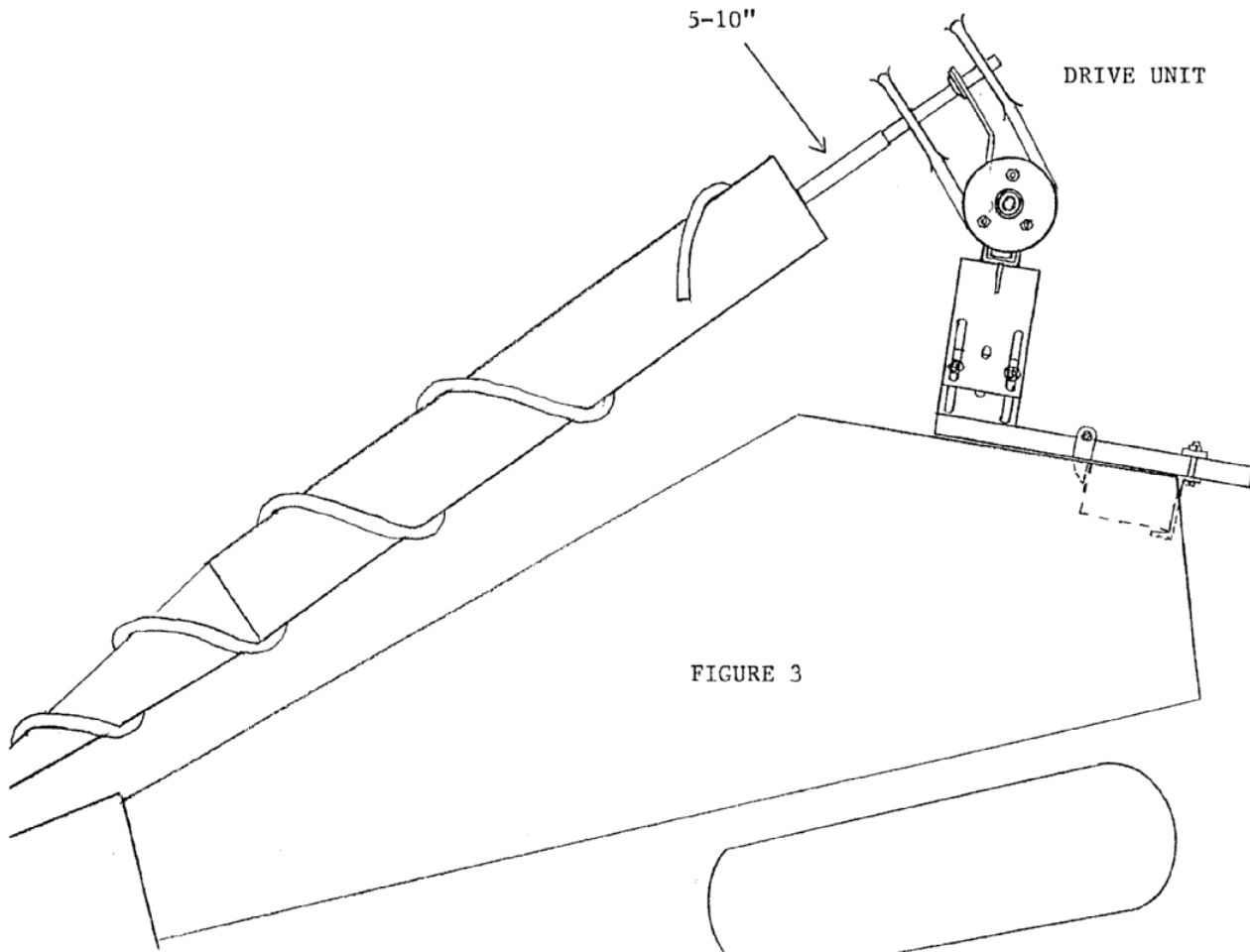
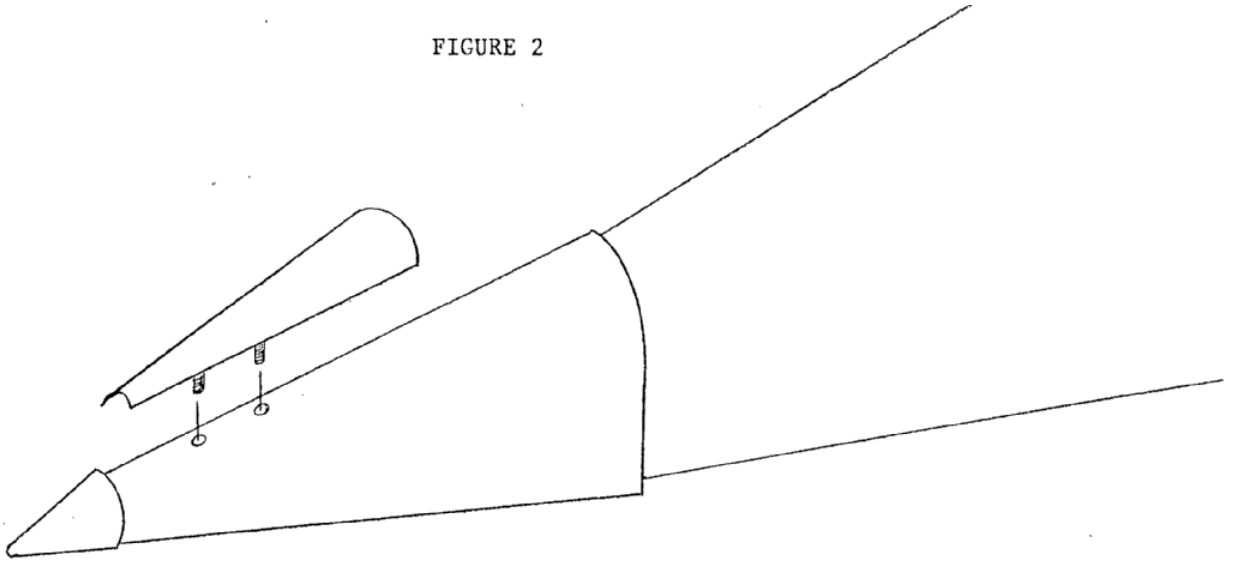
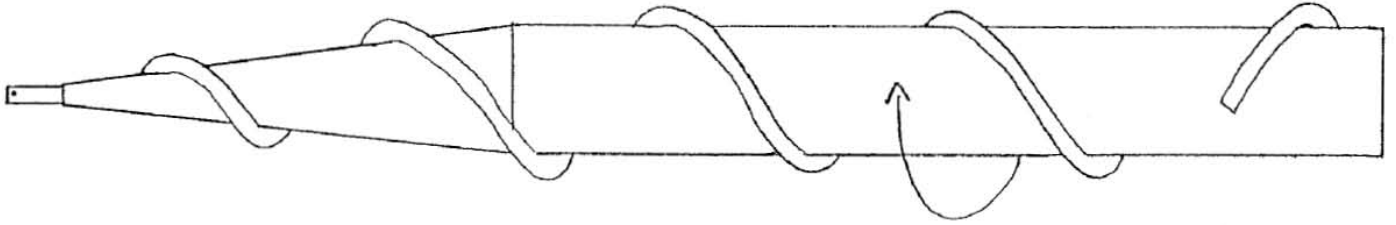
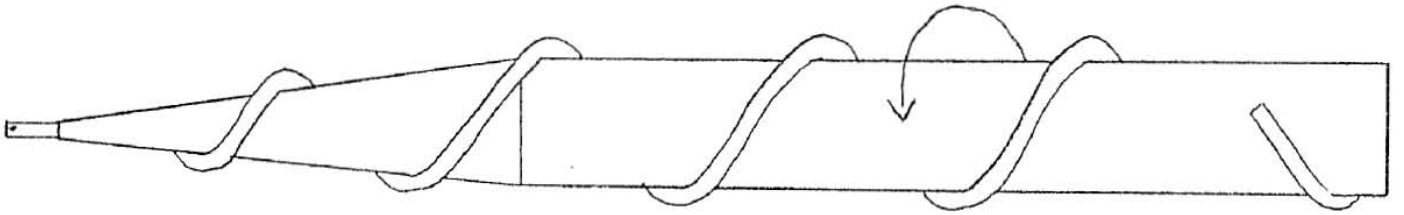


FIGURE 3

FIGURE 4

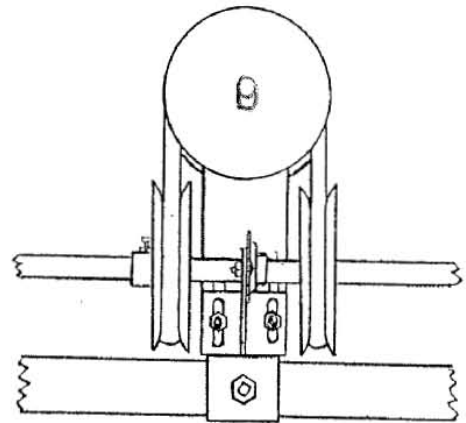
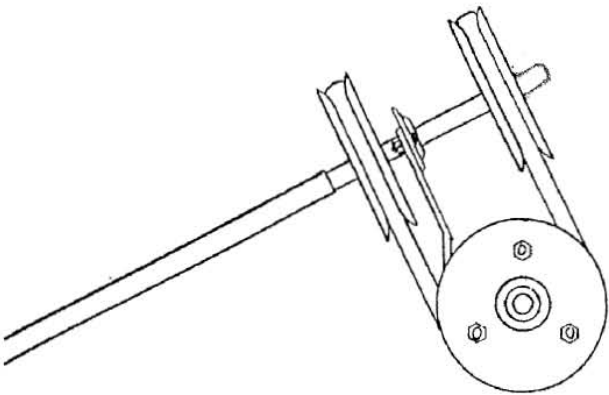


RIGHT HAND CLOCKWISE



LEFT HAND COUNTERCLOCKWISE

FIGURE 5



INSTRUCTIONS FOR REEL ATTACHMENT

Mount one reel attachment bracket as close as possible to drive sprocket. Space the remaining three as evenly as possible. Center the beater brackets over each row. Alternate positions with the beater bracket on every other row. Adjust reel to where it works best for crop conditions.

FIGURE 6

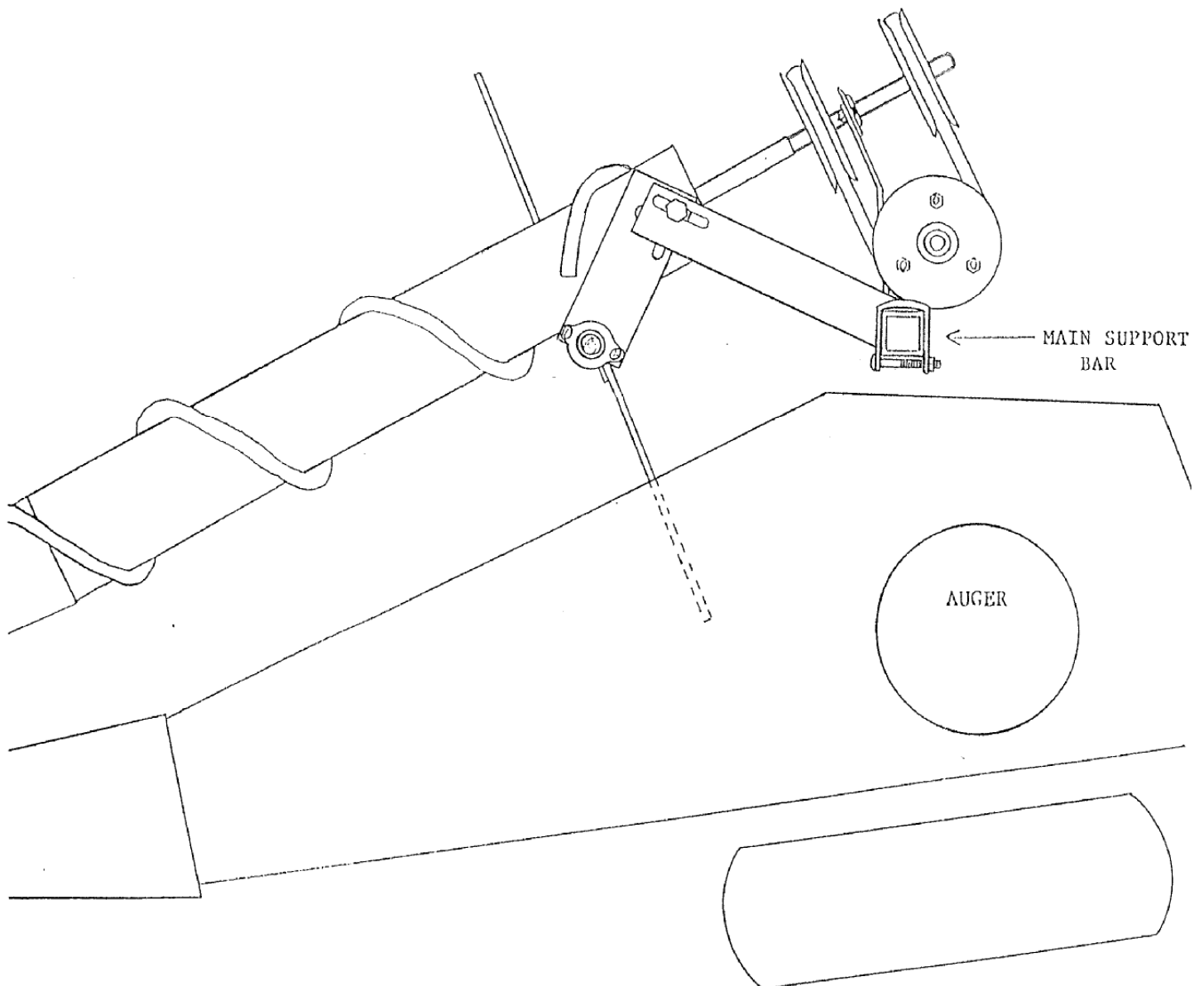
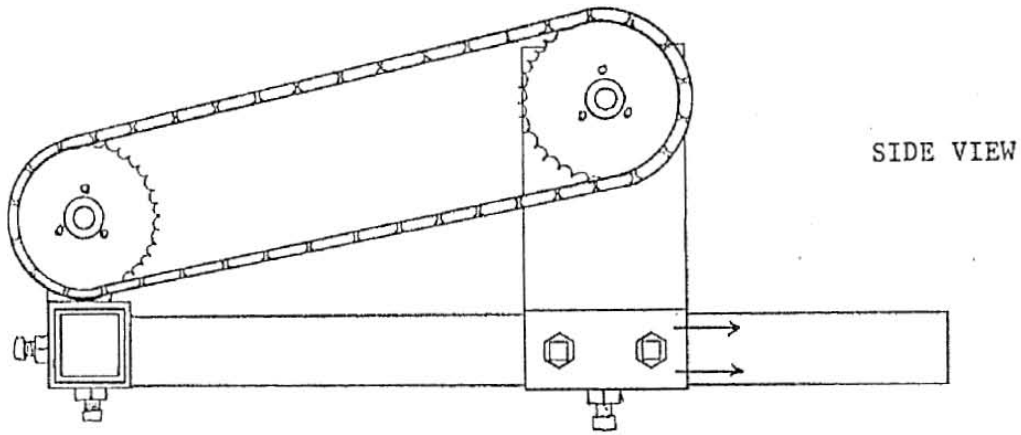


FIGURE 7



SIDE VIEW

TOP VIEW

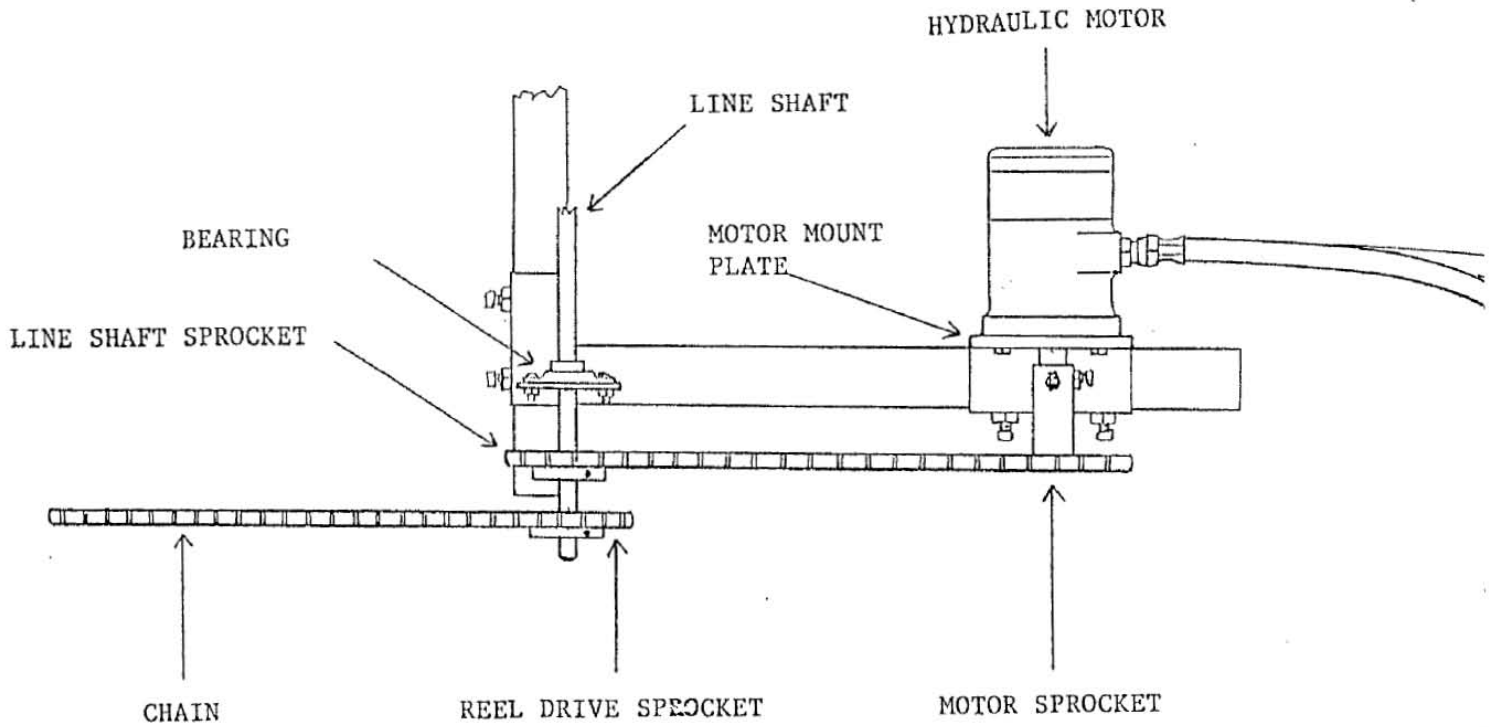
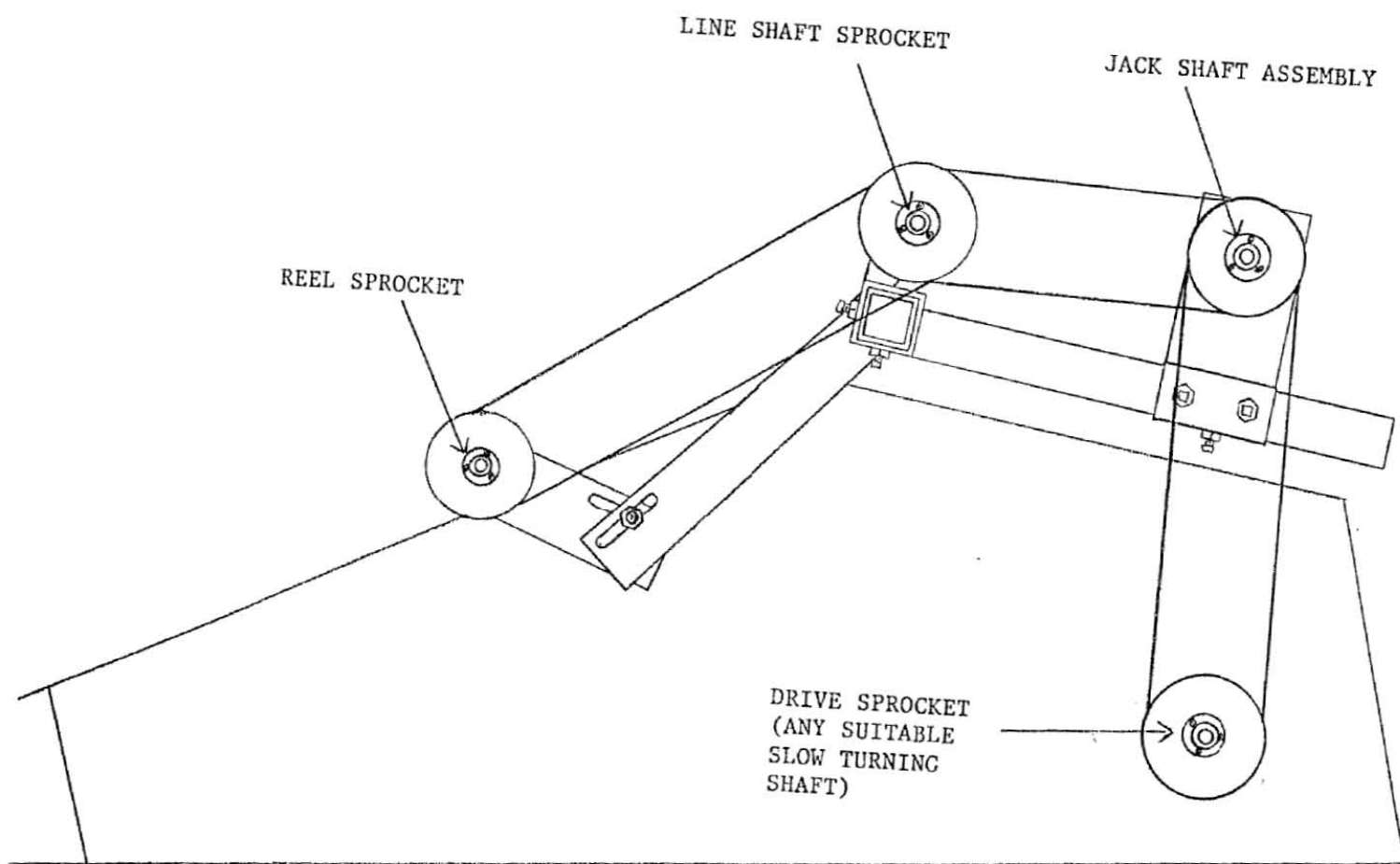


FIGURE 8



END DRIVE

ASSEMBLY OF FRAME FOR CORN MACHINES

PLEASE READ ALL INSTRUCTIONS BEFORE STARTING ASSEMBLY

Begin by marking off your centers on the main frame (2x2 tubing) starting from the end opposite from which you will drive the machine. Three or four inches to the first mark will be fine. This should leave room for the drive bracket (C-12) and reel attachment brackets. See Figure B. On some machines it may be necessary to bring in the two outside carrier brackets (C-4) in order to line the cones up with the cornhead. After marking your frame off, go ahead and slide the carrier brackets on and lock them down using the 1/2" set screws. Next bolt the bearing brackets (C-5) onto the carrier brackets. These may be pre-assembled from the factory. If not, use the 1/2x1-1/2" carriage bolts and nuts supplied. Be sure that the bend faces away from the frame. Do not tighten these bolts until you have completely finished assembly.

Lay the line shaft out with the keyed end on the same side as the access main frame tubing. Slide all necessary pulleys, bearings, flangettes and locking collars onto the line shaft. This has to be done correctly or the cones will not turn the right direction. Each carrier bracket will have one drive pulley, one idler pulley, one bearing with locking collar and two flangettes. When driving a right hand cone the drive pulley will be mounted on the right hand side of the carrier bracket. When driving a left hand cone the drive pulley will be mounted on the left hand side. (See Figure B). Before you continue, lay one belt (C-6) over each carrier bracket.

Now bolt the line shaft onto the carrier brackets using the 5/16x1" carriage bolts and nuts supplied.

Take each drive shaft (C-7) and slide a drive pulley (C-1) onto it with the set screws going on first. Next slide one flangette (C-20) on, one bearing (C-10), one more flangette and the locking collar. The idler pulleys go on last. They should be pre-assembled at the factory. Install cotter pins in the holes on the ends of the shafts. **DO NOT FORGET THIS.**

Take the assembled drive shafts and bolt them onto the bearing brackets (C-5) using two 5/16x1" bolts and nuts. Lay the belts over the pulleys as shown in Figure C and align all pulleys. Do not tighten any set screws or locking collars until the cones are mounted onto the cornhead. After everything is mounted, be sure the belts are running straight, adjust the tension of the belts and lock down the 1/2" carriage bolts and nuts. Check the drawings for the positioning of the cones.

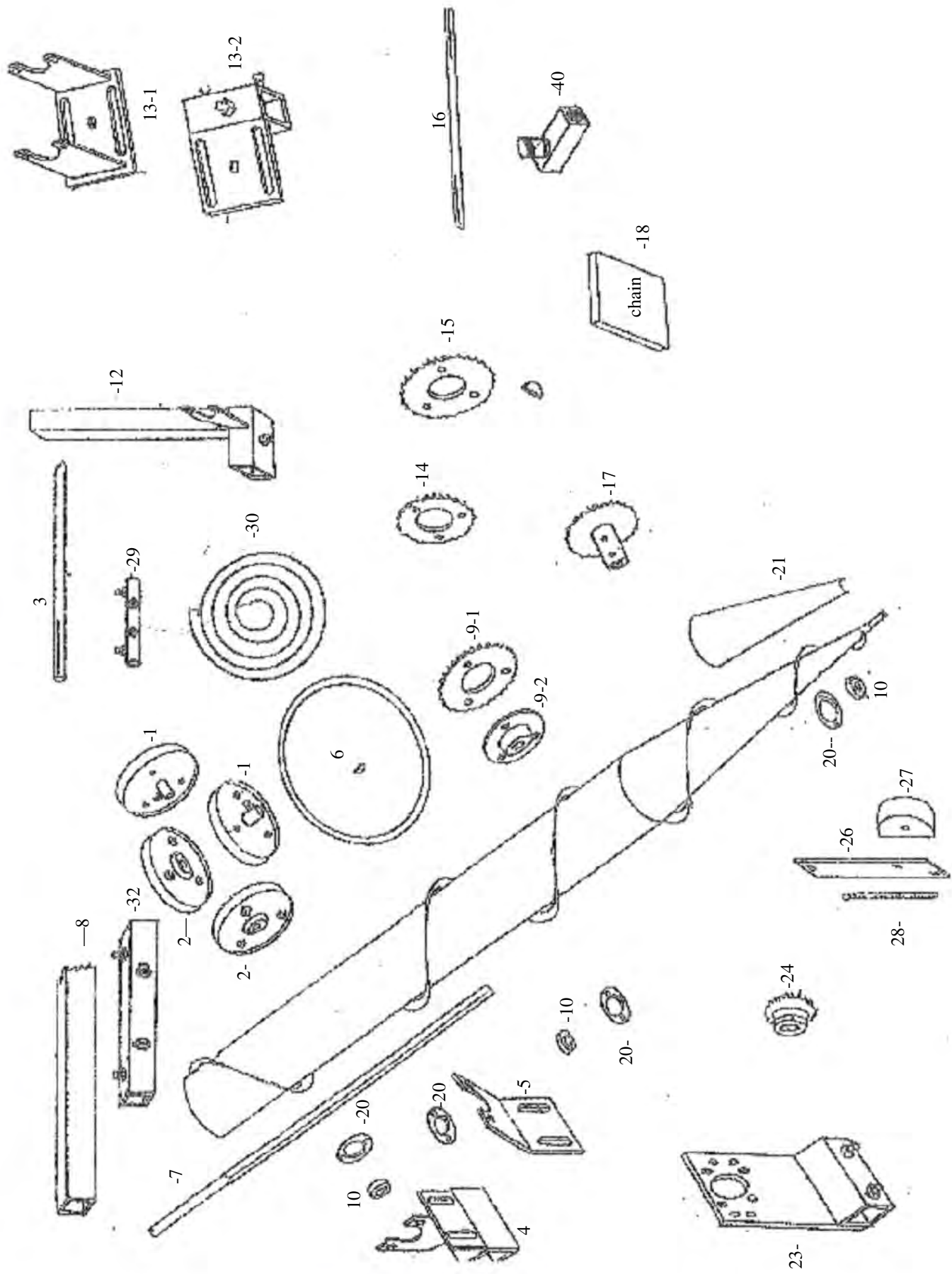
ROLL-A-CONE MFG. & DIST. CO., INC.
7655 ROLL-A-CONE RD.
TULIA TX 79088

PHONE: 806-668-4722 FAX: 806-668-4725

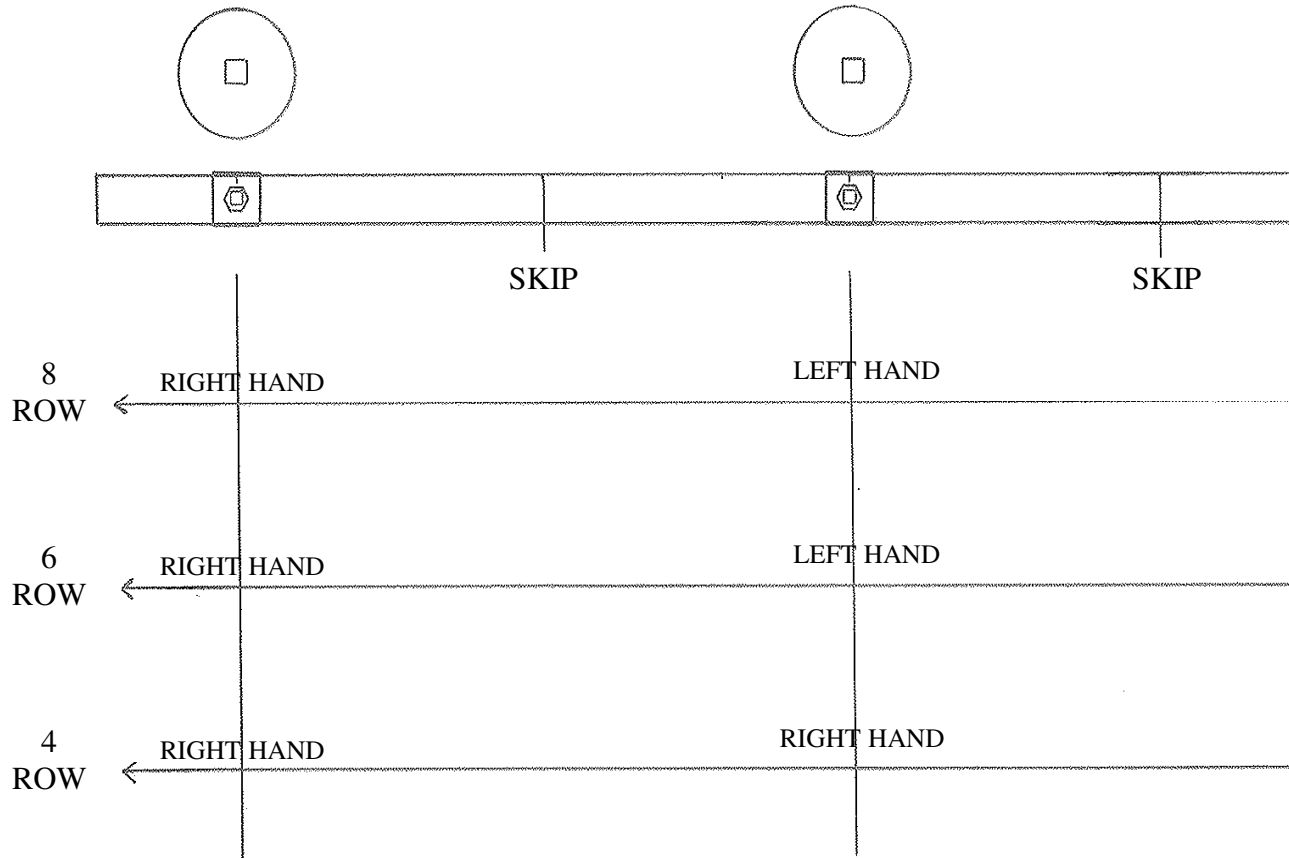
E:Mail: rollcone@roll-a-cone.com Web Page: www.roll-a-cone.com

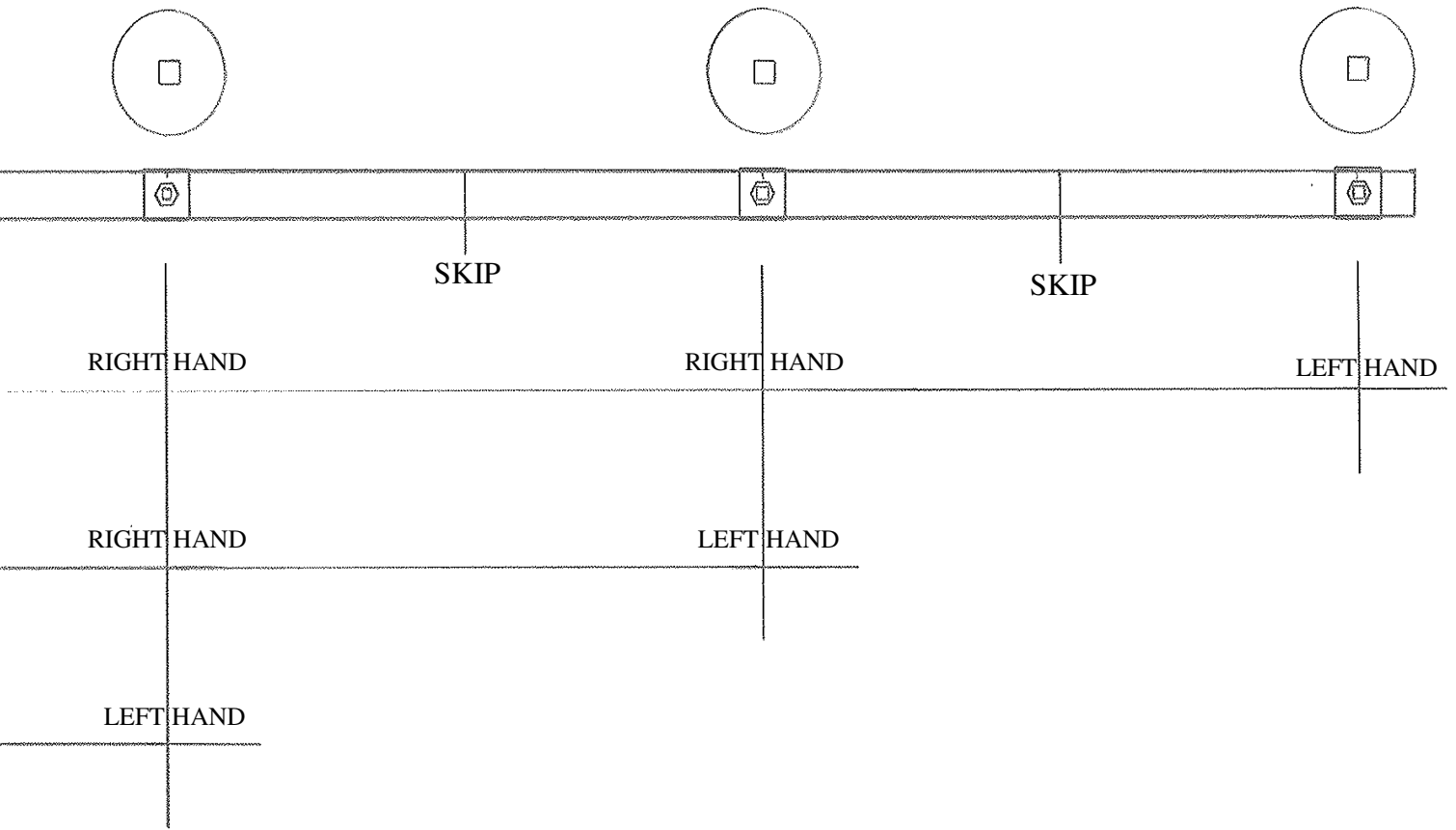
May 2008

C-1	Driver Pulley
C-2	Idler Pulley
C-3	Line Shaft (Per Foot)
C-4	Carrier Bracket
C-5	Bearing Bracket
C-6	Belt (BB-60)
C-7	Drive Shaft
C-8	Main Support (Per Foot) [2x2 Square Tubing]
C-9-1	Bolt On Sprocket
C-9-2	Bolt On Hub
C-10	Bearing
C-12	Drive Bracket (Specify Right or Left)
C-13-1	Top Jack Shaft Bracket
C-13-2	Lower Bracket
C-14-22	22 Tooth Sprocket
C-14-24	24 Tooth Sprocket
C-14-26	26 Tooth Sprocket
C-15-32	32 Tooth Sprocket
C-16	Jack Shaft
C-17	Hydraulic Drive Sprocket
C-18	#50 Chain (Per Foot)
C-19	Cone (Specify Right or Left)
C-20	Flangettes
C-21	Shield (Metal)
C-21P	Shield (Plastic)
C-23	Motor Mounting Bracket
C-24	Mechanical Drive Sprocket
C-26	Idler Arm
C-27	Wood Block
C-28	Spring
C-29	7/8" Line Shaft Connector
C-30	Flighting
C-32	2" Square to 2" Square Coupler
C-40	Needle Valve
C-41	Woodruff Key

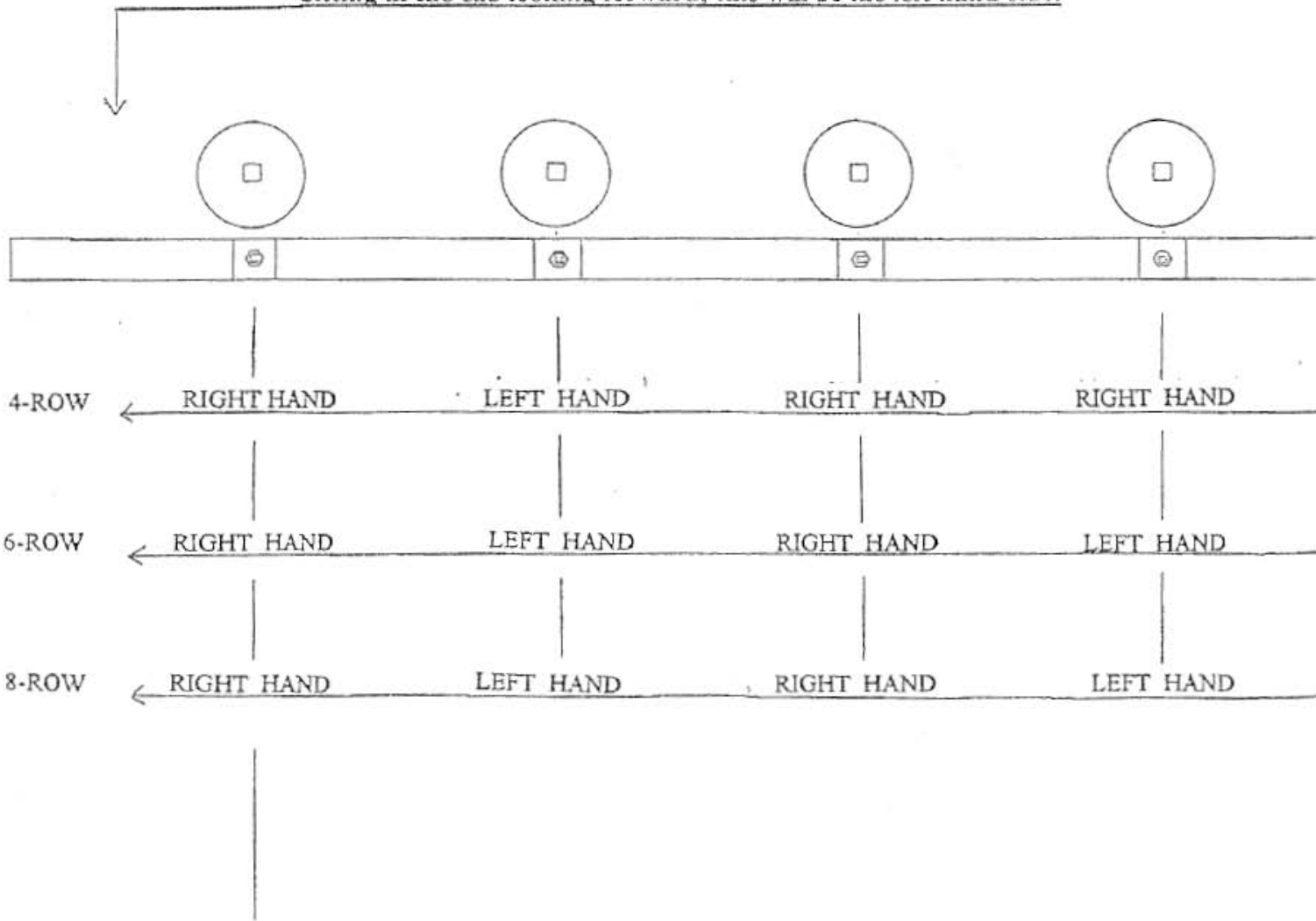


RIGHT AND LEFT HAND CONE PLACEMENT CONES EVERY OTHER ROW

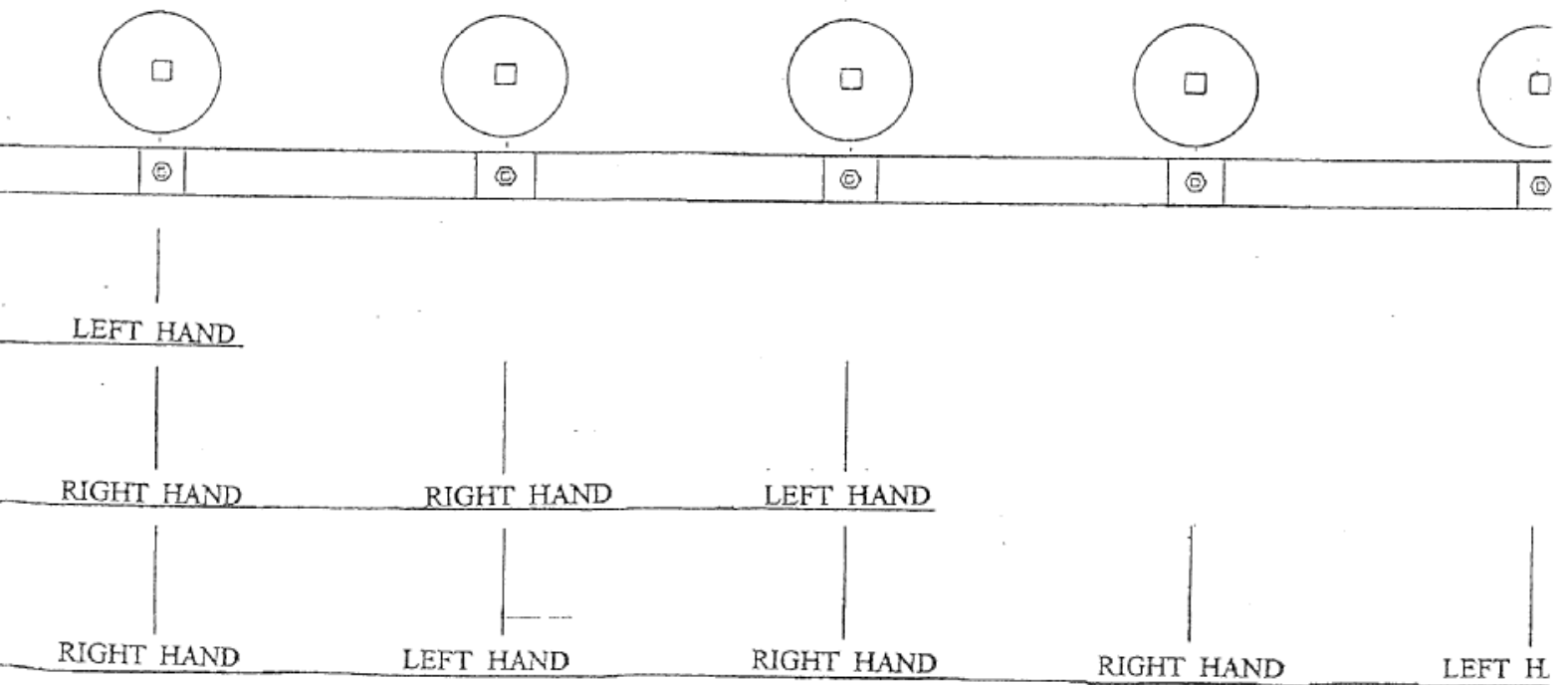




Sitting in the cab looking forward, this will be the left hand side.

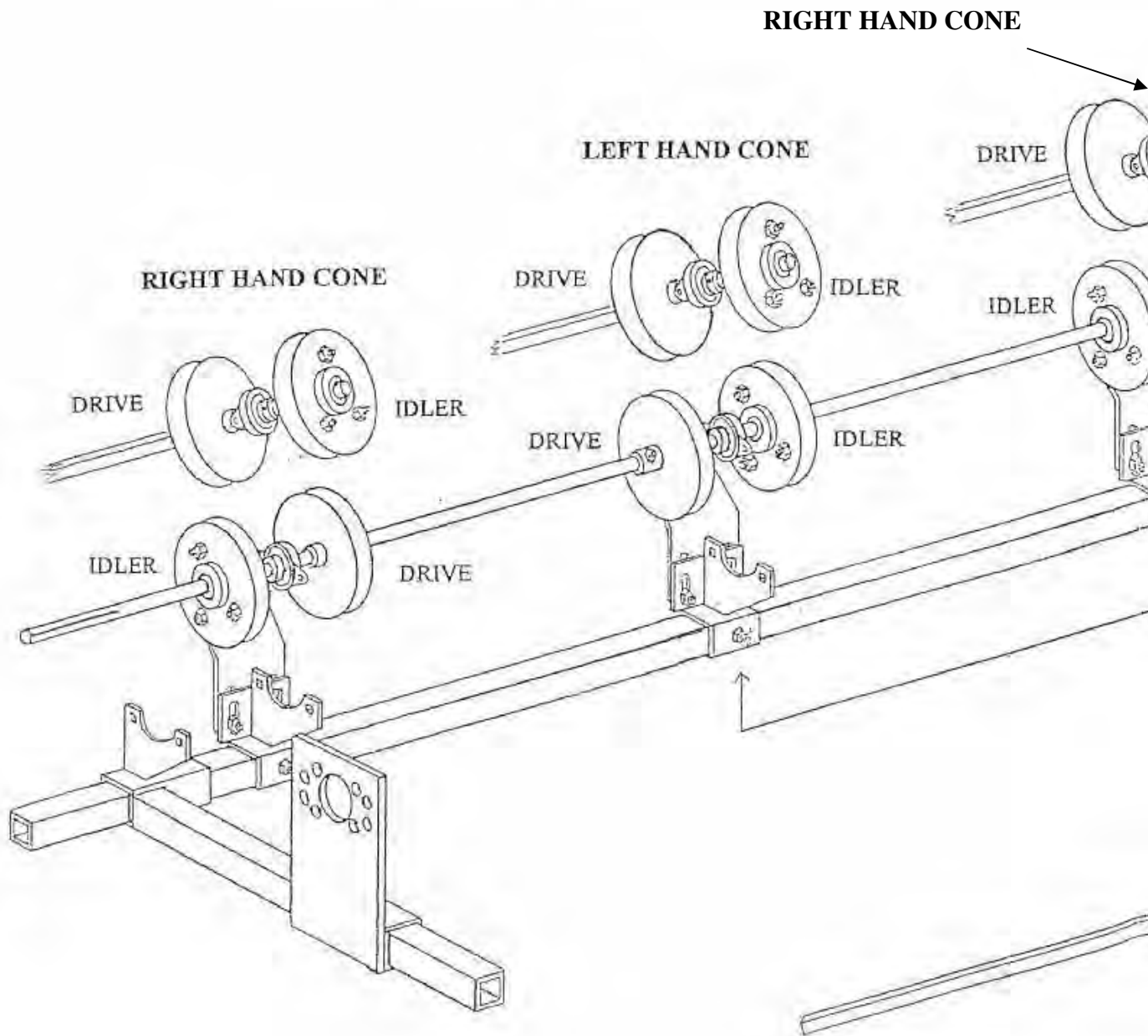


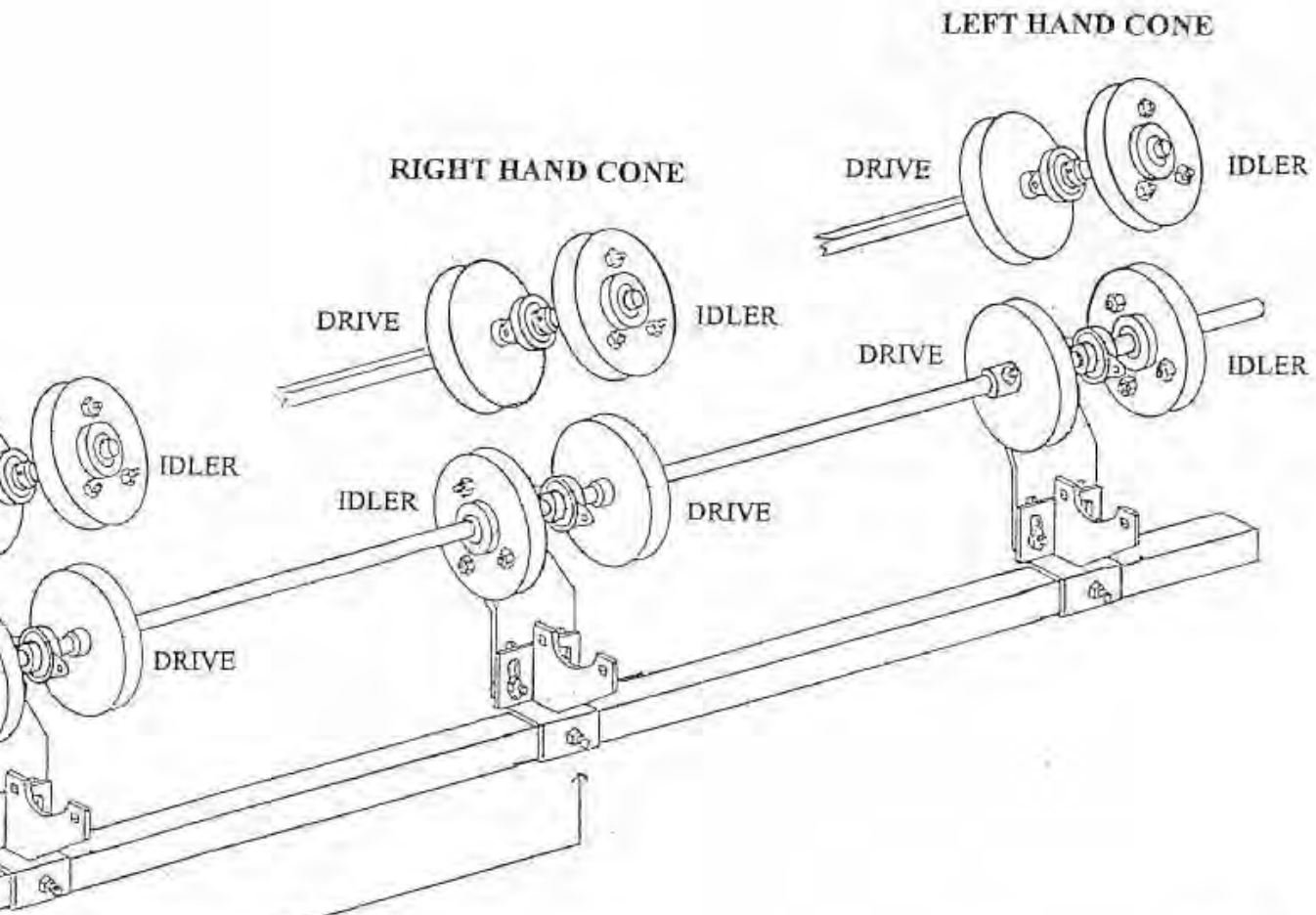
RIGHT AND LEFT HAND CONE PLACEMENT
FIGURE A



**4-ROW CORN MACHINE
FRAME ASSEMBLY**

FIGURE B





SET CARRIER BRACKETS
ON CENTERS 30-38-40- etc.
Except on the outside rows. They should be
angled in 10 to 12 inches

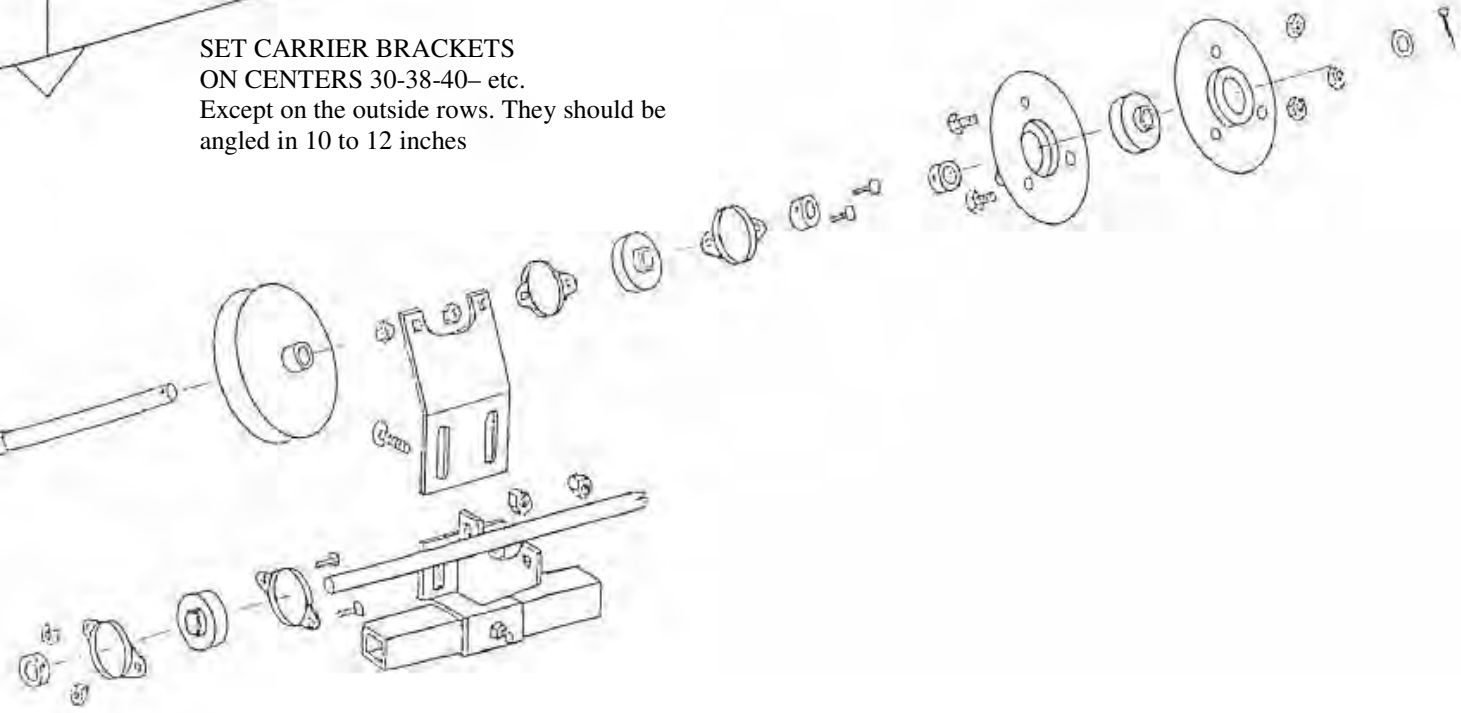


FIGURE C

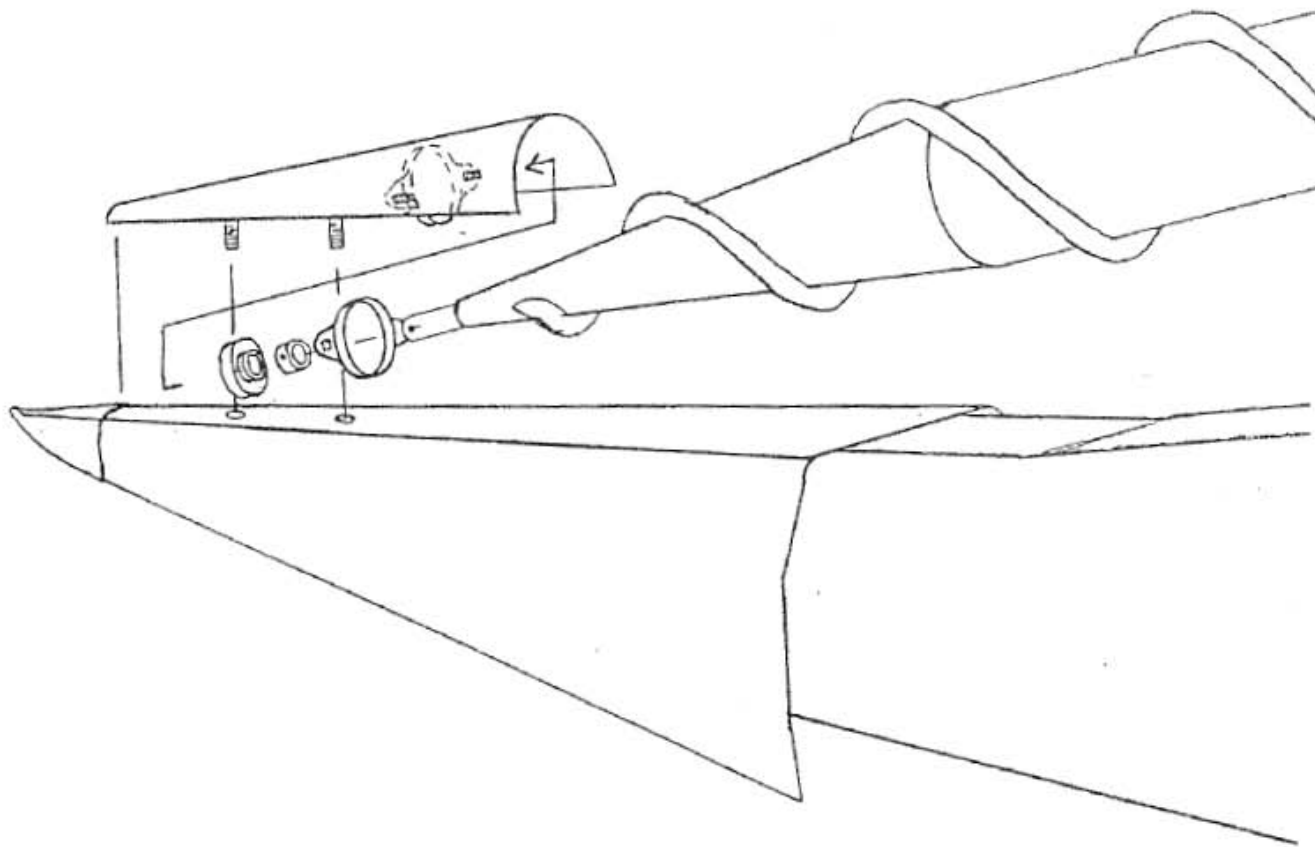
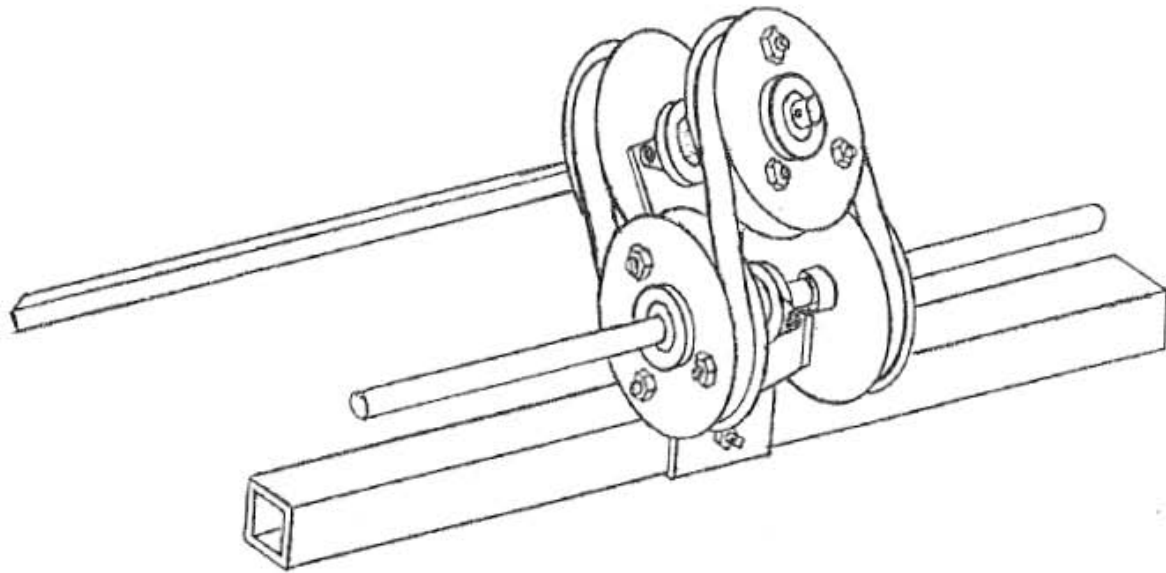
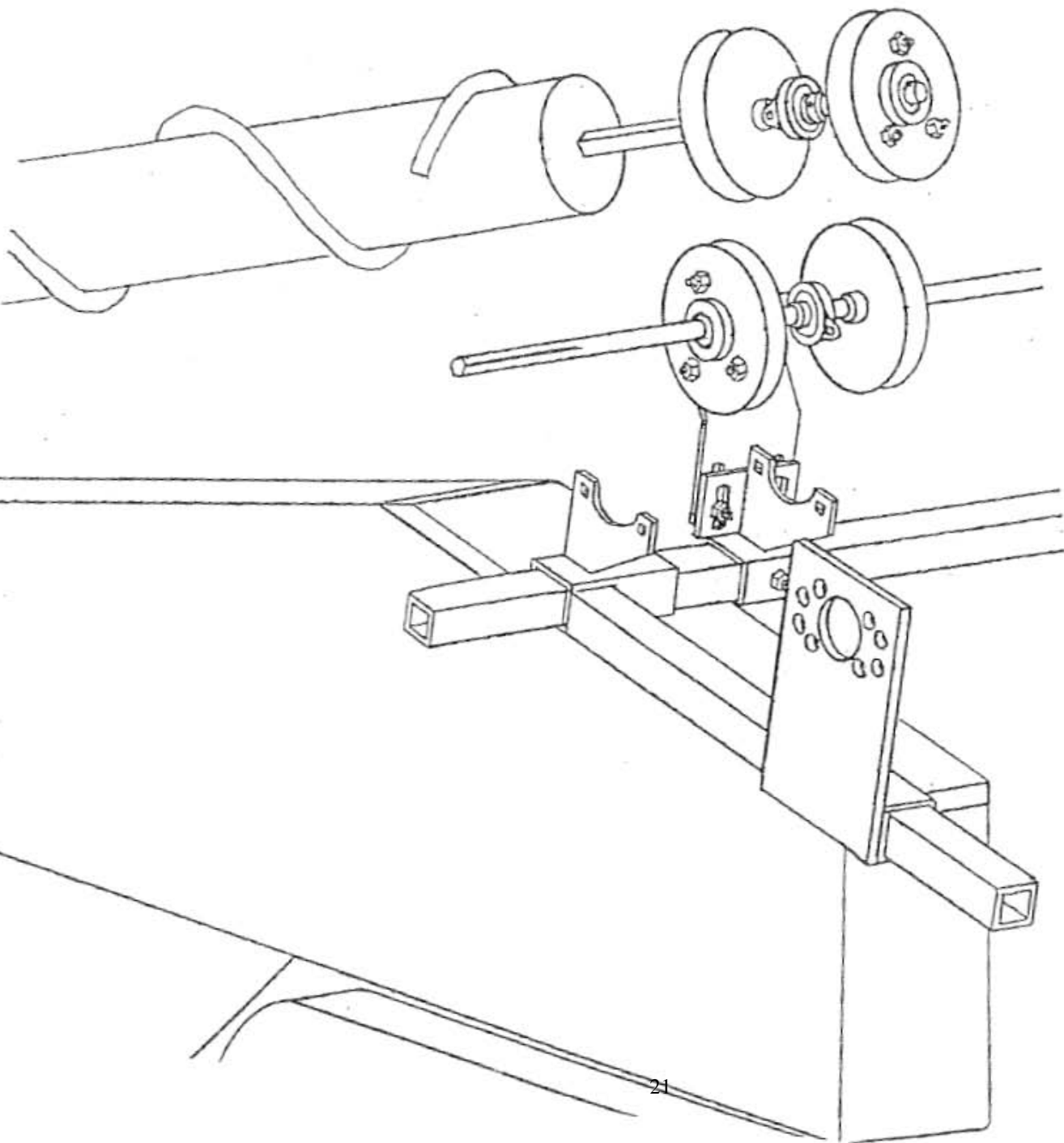
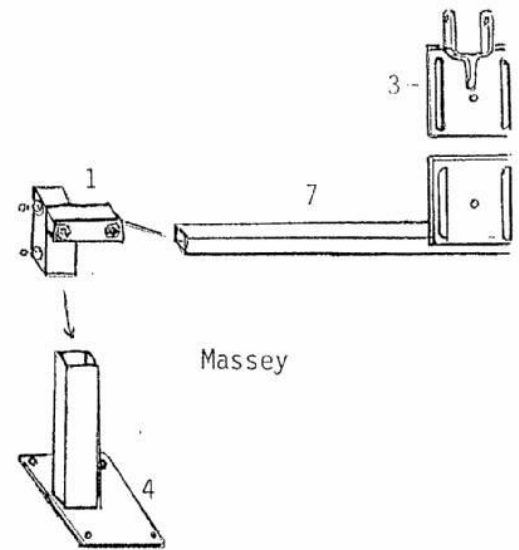
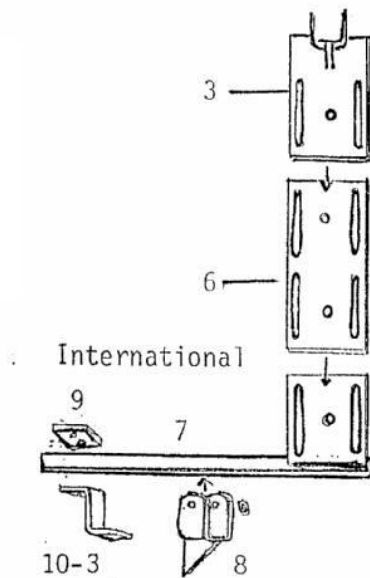
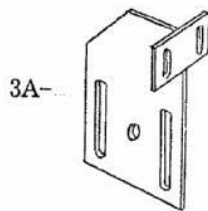


FIGURE D

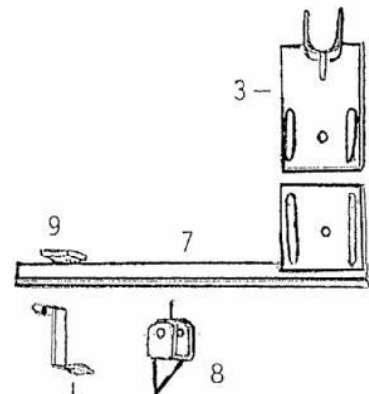




4 Mounting Brackets Needed for Each Machine



Use this bracket in place of MB-3 Bracket for hydraulically driven single cones.



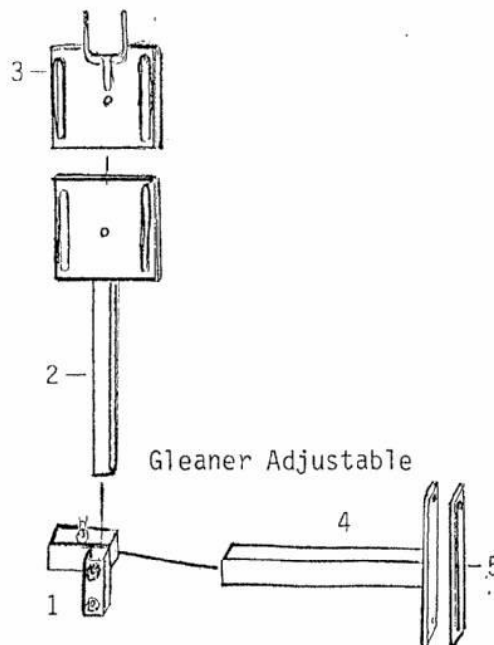
10-3	John Deere	3"Z
10-4	White	5"Z
10-5	Ford	3"Z
	New Idea	4"Z
	New Holland	3"Z

Mounting Bracket Parts

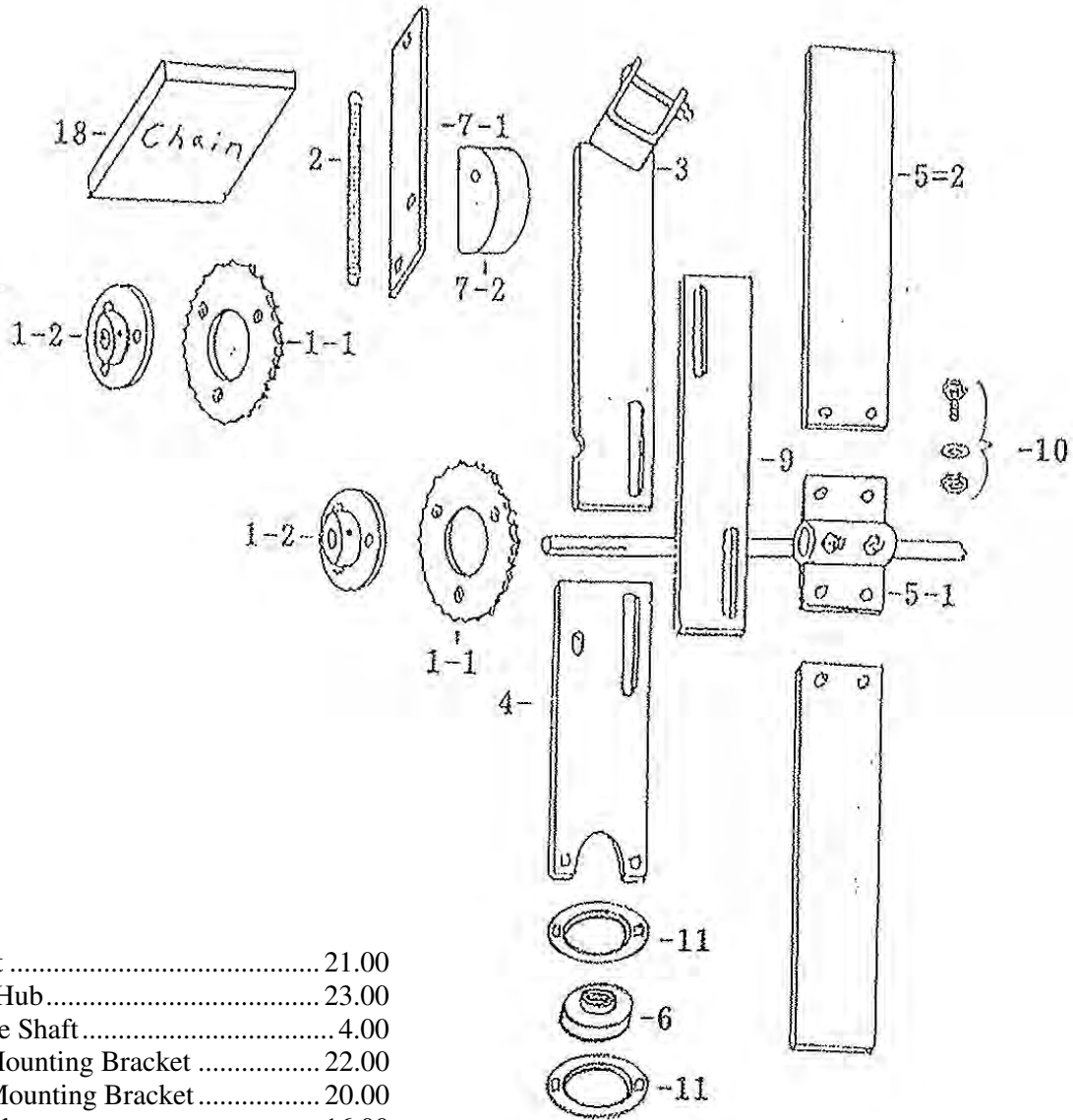
- MB-1 Cross Piece
- MB-2 Straight Ext. Arm
- MB-3 Bar Clamp
- MB-3A Carrier Bracket
- MB-4 Base
- MB-5 Back Up Plate
- MB-6 Extension
- MB-7 90 Ext. Arm
- MB-8 Stop Clamp
- MB-9 Strap
- MB-10-3 3" Z Clamp
- MB-10-4 4" Z Clamp
- MB-10-5 5" Z Clamp

Mounting Brackets

- MBJD John Deere
- MBIHC International
- MBGL Gleaner Adjust
- MBGLH Gleaner Hugger
- MBMA Massey
- MBWH White
- MBFORD Ford
- MBNH New Holland
- MBNI New Idea
- MBCAT Caterpillar



REEL ATTACHMENT



Reel Attachment

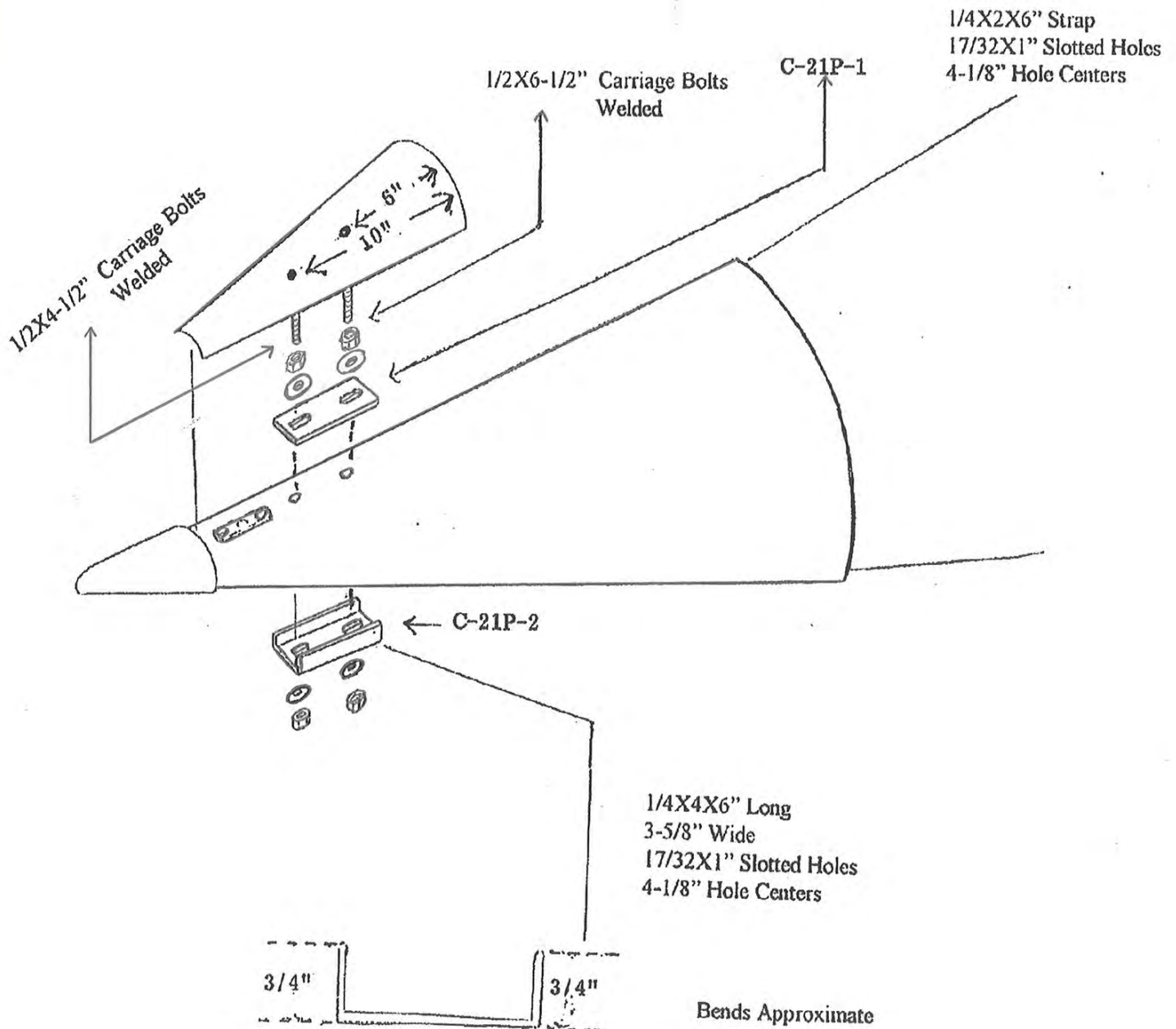
R-1-1	Sprocket	21.00
R-1-2	Bolt on Hub.....	23.00
R-2	7/8" Line Shaft.....	4.00
R-3	Upper Mounting Bracket	22.00
R-4	Lower Mounting Bracket.....	20.00
R-5-1	Bat Bracket.....	16.00
R-5-2	Bat Only	10.00
R-6	Bearing.....	14.00
R-7-1	Idler Arm.....	5.00
R-7-2	Wood Block	5.00
R-8	#50 Chain (Per Ft).....	6.00
R-9	Extension.....	20.00
R-10	3/8x1" BNW75
R-11	Flangettes	7.00

Plastic Noses old Style no Sensors

August 2011

There are 2 nuts and washers on each of the nose shield bolts. The top nuts and washers go on top of the snout. These are used to adjust the nose shield height. The bottom nuts and washers go under the snout to clamp on the nose shield.

Install flat strap and c-clamp as shown.



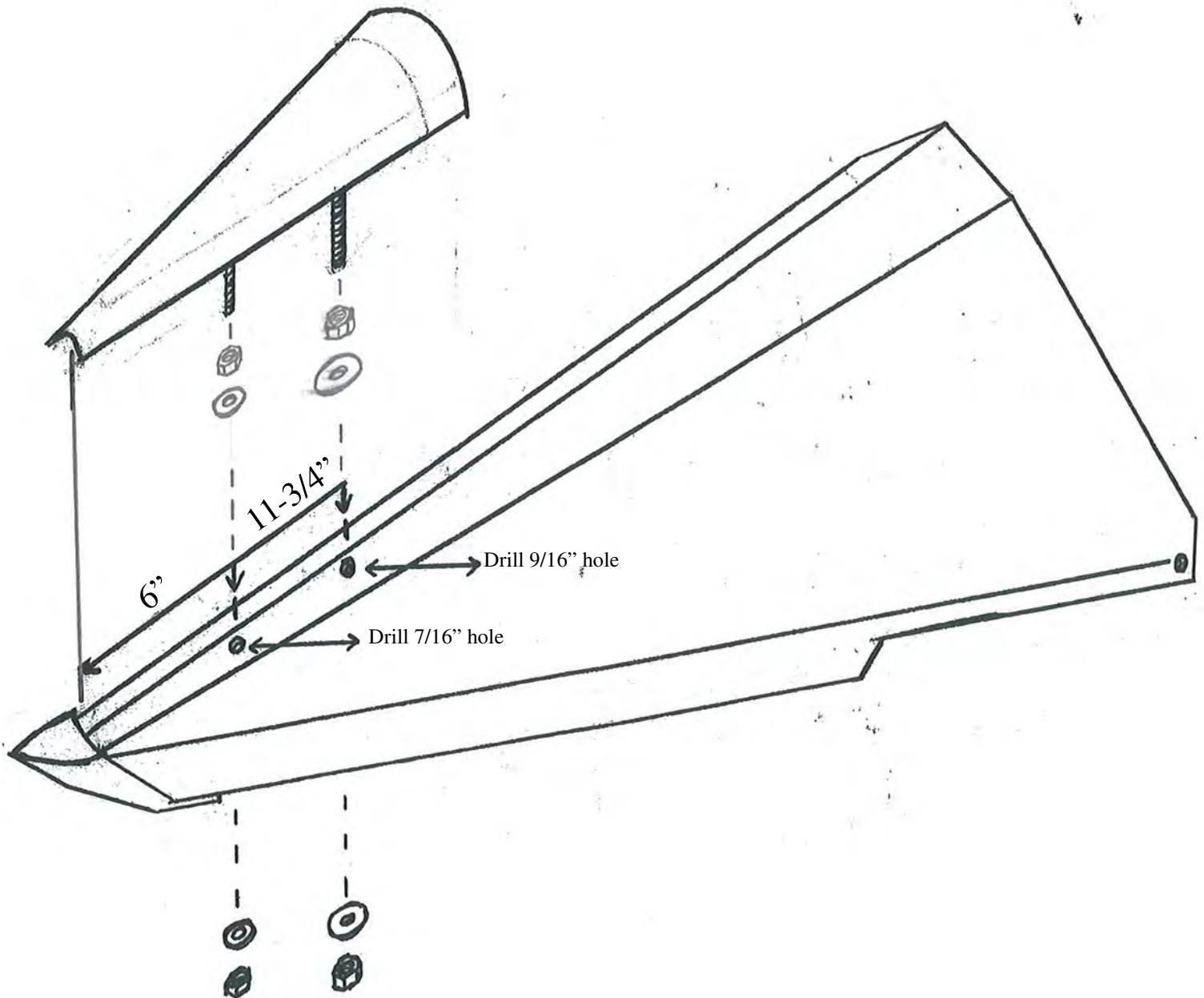
Drago Corn Head Nose Shield Placement

August 2011

Mount nose shield as shown below. Remove 4 bolts that fasten sensor assembly onto the bottom of the snout. Remove sensor assembly from snout, remove and discard front bolt and nut from sensor assembly. Drill holes in snout as shown. Mount nose shield using 1/2" nut & washer provided.

There are 2 nuts and washers on each of the nose shield bolts. The top nuts and washers go on top of the snout. These are used to adjust the nose shield height. The bottom nuts and washers go under snout to clamp on nose shield.

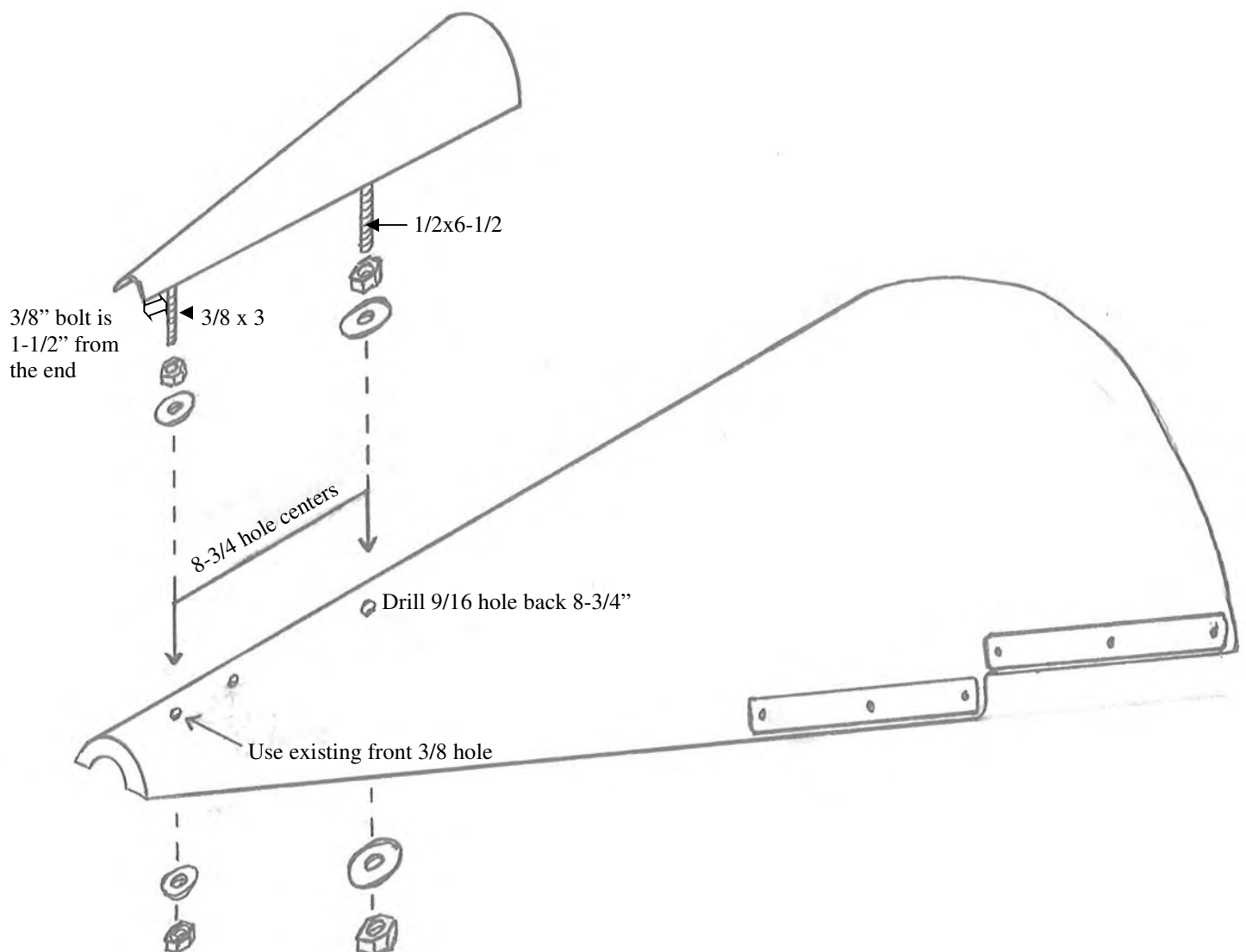
At this time install and tighten back nut and washer only. Reinstall sensor assembly under snout. The front bolt on nose shield should go through hole in sensor assembly. Install and tighten front nut and washer on nose shield.



Mount nose shields as shown. The sensor Assembly will need to be removed in order to fasten the 1/2" washer & nut onto the rear bolt of the nose shield underneath. After installation reinstall the sensor Assembly.

There are 2 nuts and washers on each of the nose shield bolts. The top nuts and washers go on top of the snout. These are used to adjust the nose shield height. The bottom nuts and washers go under the snout to clamp on the nose shield.

Note: If plastic wear protector is used please remove in order to remove front 3/8 bolt then reinstall and drill wear protector inline with existing hole.



Notes

ROLL-A-CONE

MFG. CO.

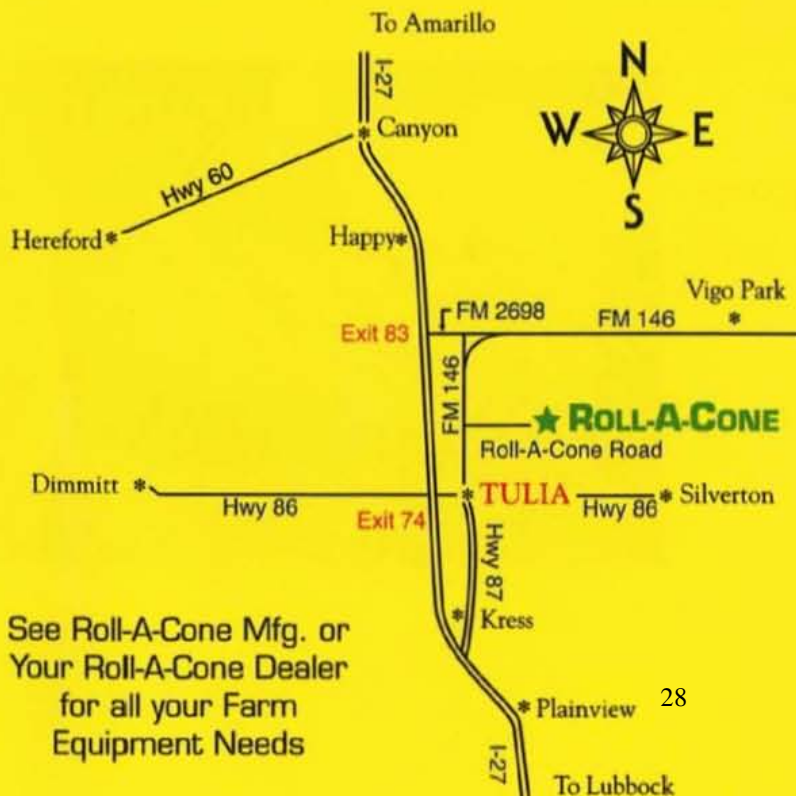
7655 Roll-A-Cone Rd
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E-mail: rollcone@roll-a-cone.com



See Roll-A-Cone Mfg. or
Your Roll-A-Cone Dealer
for all your Farm
Equipment Needs

If Taking I-27 South From Amarillo:

- Take Exit 83 (FM 2698) and cross back over the over-pass heading East
- Go East 4-1/2 miles on FM 2698
- Turn right (South) onto FM 146 and go 3 miles
- Turn left (East) at the Roll-A-Cone sign and go 2-1/2 miles on Roll -A-Cone Road

If Taking I-27 North From Lubbock:

- Take Exit 74 and follow Hwy 86 signs into Tulia
- In Tulia turn right (East) at the first blinking caution light to follow Hwy 86
- Go through downtown and at Junction 146 turn left onto FM 146 North
- Turn back right (East) at the Roll-A-Cone sign and go 2-1/2 miles on Roll-A-Cone Road