

LINDEMAN "CZ-100" CORRUGATOR



JOHN DEERE

OPERATORS MANUAL LINDEMAN "CZ-100" CORRUGATOR

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TO THE PURCHASER

The purpose of this manual is to acquaint you with your new John Deere-Lindeman Corrugator. In this manual you will find instructions and helpful suggestions for installing one or more corrugators on a tool bar, making adjustments, and setting up Corrugators for operation. Also included is a complete parts list with illustrations to aid in proper identification of parts if replacement becomes necessary. Study this manual and keep it handy for future reference. If you need additional information, see your John Deere dealer. He will be glad to serve you.

Your new Corrugator is simple in design and easy to operate. It makes perfect furrows in a scientific manner, thus saving the top soil by making it easier for water to run through your fields. By operating your Corrugator correctly and giving it proper care, you will receive the years of service designed and built into it.

If, after much active work, your Corrugator requires new parts, go to your John Deere dealer, who will see that you get high-quality, genuine John Deere parts. When ordering, give your dealer the correct part number and description of the part desired. This information can be obtained from the parts list portion of this manual. Give your Corrugator proper attention during slack periods, and it will always be ready for use when you need it.



JOHN DEERE-LINDEMAN CZ-100 SERIES CORRUGATOR

Date of Purchase _____ 19____

To Be Filled in by Purchaser

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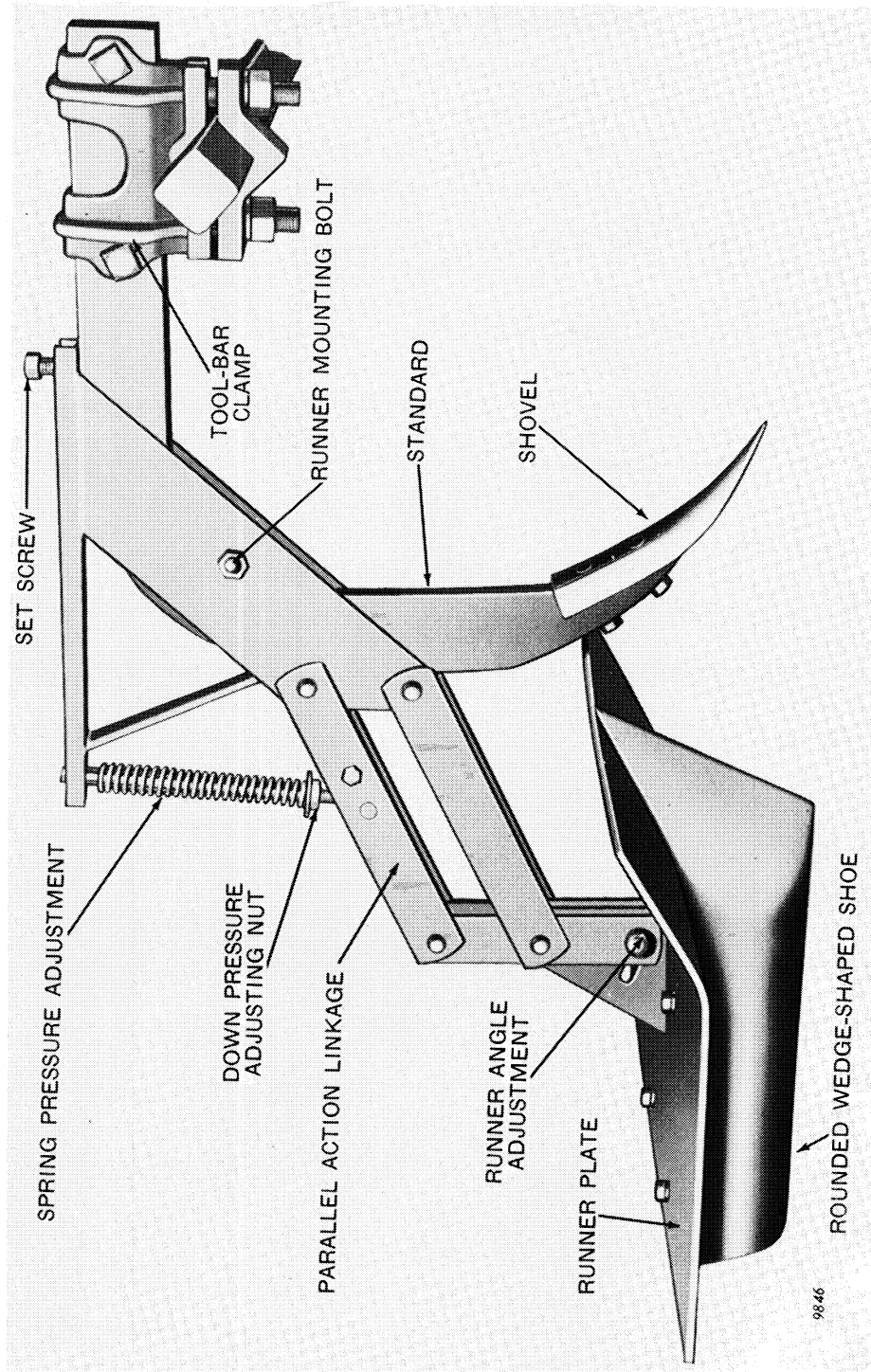


Figure 1-John Deere-Lindeman "CZ-100" Corrugator

DESCRIPTION

The John Deere-Lindeman "CZ-100" Corrugator is an entirely new machine developed to assure better ditches, whether in finished seedbeds or in rough stubble such as that in an alfalfa field.

The Corrugator is a complete, self-contained unit. It consists of a standard with shovel and a parallel-action runner. Attached under the runner is a rounded, wedge-shaped shoe that is available in two sizes. Although the Corrugator was designed for John Deere-Lindeman Integral and Drawn Tool Carriers, it works equally well behind tractors equipped with a power-operated lifting device (such as John Deere Power-Trol), and a square tool bar measuring from 1-3/4 up to 2-1/4 inches square.

When properly installed and adjusted an ideal irrigation ditch is formed by the Corrugator. The standard may be used as a cultivator when the runner assembly is removed.

SPECIFICATIONS AND DATA

(Subject to Change Without Notice)

Tool Bar Requirements.....	Fits any 1-3/4 to 2-1/4-inch square tool bar that can be raised and lowered.
Minimum Spacing.....	24 inches, with two or more units closely spaced on tool bar. (Down to 12-inch spacing obtainable by splitting centers on second round.)
Maximum Spacing.....	Practically any desired wider row spacing is obtainable.
Capacity.....	Number of Corrugator units used is limited only by capacity of tractor power lift and tool bar. (Tool bars of various lengths are available.)
Approximate Ditch Sizes....	4" wide x 5" deep, and 5" wide x 5" deep.
Standard Shank.....	7/8" x 3", high carbon steel.
Standard Shovel.....	4" x 10".
Standard Clamp.....	Steel casting; fits 1-3/4 up to 2-1/4-inch square tool bar.
Runner Linkage.....	Parallel action, held down by spring pressure.
Runner Plate.....	Steel plate—21" x 24" x 1/4".
Runner Shoes.....	Wedge-shaped. Two sizes available; 4" wide x 5" deep, and 6" wide x 5" deep.
Approximate Shipping Weight	143 lbs. complete.

OPERATING INSTRUCTIONS

General Information.

The John Deere-Lindeman Corrugator is designed for mounting on a square tool bar of not less than 1-3/4 inches or more than 2-1/4 inches. The runner shoes are available in two sizes—4 and 6 inches.

It is very important that you operate and adjust your new John Deere-Lindeman Corrugator correctly. For efficient work read and follow instructions closely.

Before entering the field, make sure all nuts and bolts are tight so that the units fit snugly to the tool bar. Check the units for proper placement on the bar. Make sure you get the desired furrow spacing.

Installation on Tool Bar.

The following steps will assist you to install Corrugators on the tool bar correctly.

(1) Raise the tool carrier to its full “up” position and locate center of the tool bar.

(2) Select the number of Corrugators for the desired row spacing and mark the tool bar where each unit should go.

(3) Start from center of the bar and measure out each way from the center.

(a) If using one unit, place in center of bar.

(b) If two or any other even number of units are used, measure 1/2 the row spacing out from center.

(c) If five or any odd number of units are used, place the middle unit at the center point on the bar and space the other accordingly.

NOTE: The standard's clamp is designed so it may be hooked over the tool bar and it will remain in place while the tool bar clamps are being installed.

ADJUSTMENTS

The most important adjustments for correct operation of the Corrugator units are as follows:

Correct Standard Angle.

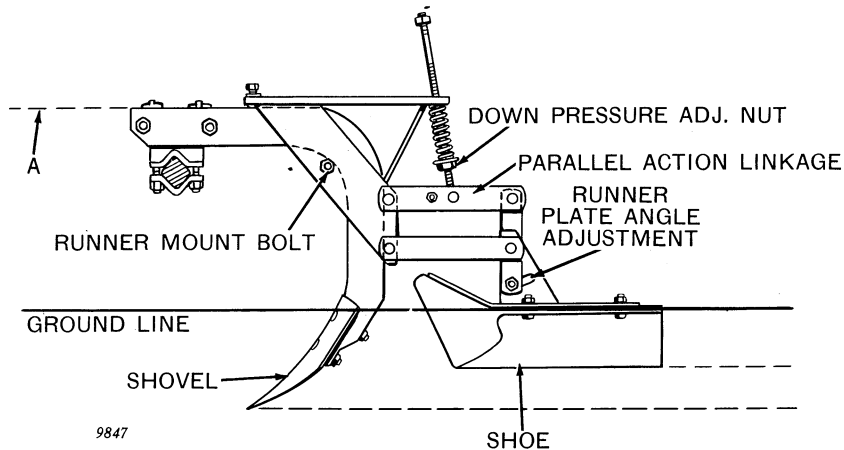


Figure 2—Correct Position of Corrugator in Working Position.

Rotate tool bar so that a line along the top edge of the standard (see “A”, Figure 2) will be parallel to the “ground line” when the Corrugator is in working position. When using Corrugators on a John Deere-Lindeman “ABG” Integral or Drawn Tool Carrier the suction adjustment is made by the carrier. (Refer to instructions covering *Suction Adjustments* in the Carrier Operator’s Manual.)

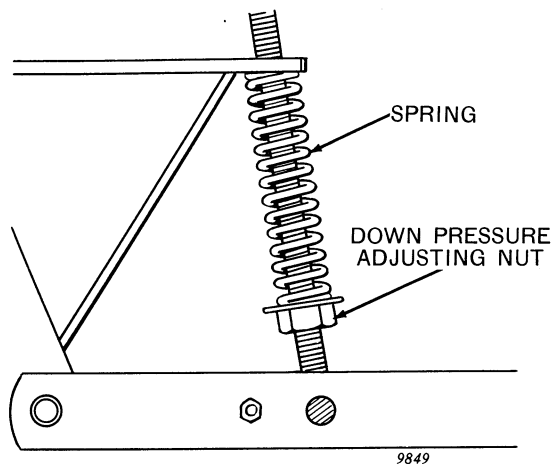


Figure 3—Location of Down-Pressure Adjusting Nut

Down-Pressure Adjustment.

The down-pressure adjustment is made entirely by the down-pressure adjusting nut. When the correct amount of down pressure is applied to the runner by the spring, the runner plate will ride flat on the ground surface without rising off the ground when a low spot is hit or digging in too deep when a high spot is hit. That is, it will follow the ground contours (ups and downs).

Correct Shovel Depth.

For normal soil conditions the shovel point should run below the bottom of the runner shoe (See Figure 2) to loosen the soil for good subbing.

In sandy soil or very porous soil where a firm bottom is required the point should run level with bottom of the runner shoe. Shovel depth is controlled, of course, by your tool bar depth adjustment.

When the Corrugator is working correctly your furrows will have firm, rounded edges, packed shoulders and sloping sides. In normal soil the bottoms will be loose, and in sandy soil they will be firm.

Runner Angle Adjustment.

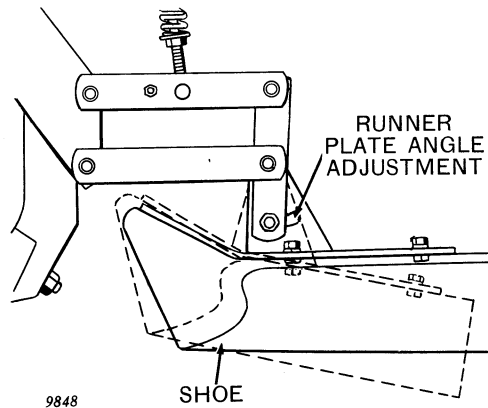


Figure 4—Runner Plate Angle Adjustment

After entering the field, lower the units to the ground and move forward a short distance. Note the type of furrow that is being formed. If soil is being pushed up and over nose of runner plate, it indicates either that too much down pressure is being applied or that runner nose is too low. When runner plate is properly adjusted it will ride as shown in Figure 4 (solid line). To change runner angle, loosen runner plate adjustment nut and tilt the nose up. Runner will ride as shown in Figure 4 (dotted line). If

soil is still boiling over top when nose has been tilted up as much as possible, the down pressure should be released until correct furrow is being formed.

NOTE: When operating on uneven ground it is recommended that a gauge wheel be used in conjunction with the tool bar.

MAINTENANCE

Lubrication.

At the end of each job, the shovel should be covered with heavy grease or some rust preventative.

Storage.

At the close of the season, paint any exposed parts, remove collected dirt, and store corrugator in a dry place.

SETTING-UP INSTRUCTIONS

SHIPPING BUNDLE INFORMATION

Each corrugator unit complete includes:

	<u>Bundle Number</u>
1—Unit Assembly complete.....	AW3106Y
1—Standard Assembly complete.....	AW3103Y
1—Shoe.....	(W143Y (4"x5") or W101Y (6"x5"))

For shipping purposes, the shovel and mounting bolts are wired to the runner assembly.

SETTING UP THE CORRUGATOR

The easiest way to attach the standard assembly to the runner assembly is as follows:

(1) Place the runner and linkage assembly on the ground upside down with the 5/8-inch runner mounting bolt removed from its mounting bracket.

(2) Place the standard over the mounting bracket and force the curved part of the standard down into the bracket.

(3) Install the runner mounting bolt and tighten the set screw to snug the runner assembly to the standard. The Corrugator unit is now ready to be mounted on the tool bar.

(4) Remove the tool bar clamps of the standard assembly, or loosen them if it is possible to slide the units onto the bar.

(5) Install the assemblies on the tool bar at the points marked on the tool bar and discussed under paragraph covering *Installation*, Page 4.

FOR GENUINE JOHN DEERE



PARTS

AND DEPENDABLE

SERVICE



Go to your
JOHN DEERE DEALER

WHEN you need new parts for your John Deere equipment, always *insist on genuine John Deere parts*. They are made from the same patterns, of the same high-quality materials as the original parts. They will save you money because they fit properly, wear better, last longer and maintain the high quality of your equipment throughout its long working life.

You'll also find it pays to take advantage of the facilities offered by your John Deere dealer when you need special service for your John Deere equipment. He has *trained mechanics* who know your equipment best. He has *special equipment* for doing special work efficiently and economically. He will give you complete satisfaction on any work necessary to keep your equipment in A-1 condition.

**GENUINE JOHN DEERE PARTS FIT BETTER,
LAST LONGER, AND DUPLICATE ORIGINALS.
YOUR JOHN DEERE DEALER HAS TRAINED
MECHANICS WHO KNOW YOUR EQUIPMENT**

PARTS LIST

USING THE PARTS LIST

Exploded Views.

From the exploded views of parts in the pages which follow, it is easy to find any part or part number.

The exploded views also show the order of assembly of parts. If it is necessary to disassemble a unit for replacement of parts, be sure parts are assembled properly for satisfactory performance of your Corrugator.

Key Number.

Each part has been given a key number which is used only as a guide to find the part number, description, and quantity used. *Do not use the Key Number when ordering parts.*

Quantity.

If only one of each part number is used, the quantity is not shown. If more than one part of each is used, the quantity is shown with the description.

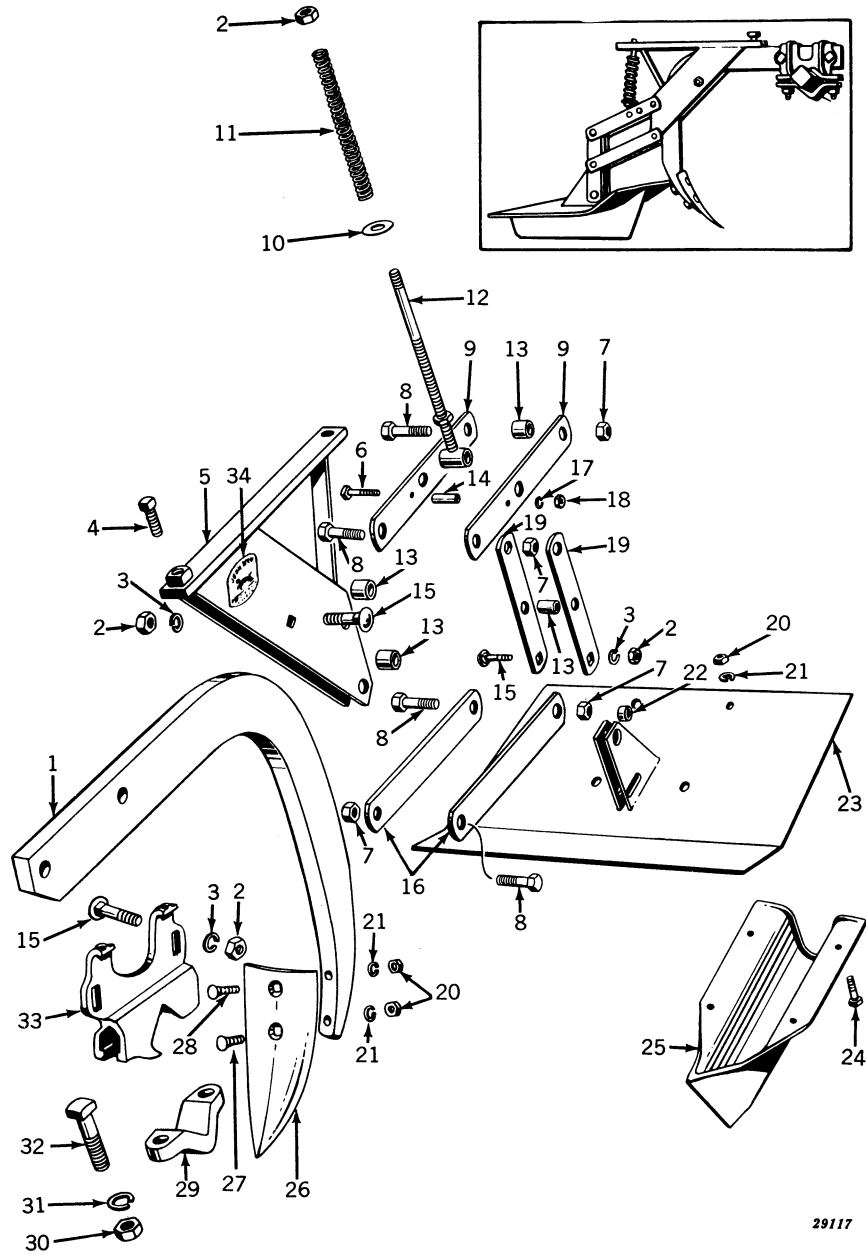
When Purchasing Parts.

When ordering parts from your John Deere dealer, give the part number, description, quantity wanted, and model number of your Corrugator.

Symbols and Abbreviations.

Cge. —Carriage	Nom. —Nominal
Hex. —Hexagon	O.D. —Outside Diameter
Hd. —Head	Reg. —Regular
I.D. —Inside Diameter	Rd. —Round
Med. —Medium	Sec. —Section
NC —National Coarse	Sq. —Square
	Std. —Standard

STANDARD AND RUNNER ASSEMBLY



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STANDARD AND RUNNER ASSEMBLY (Continued)

Key	Part No.	Description
1	Q 13127 K	Cultivator Standard (Killefer)
2	14H 263 Y	Nut, Reg. Hex., 5/8"—11 NC2 (3 used)
3	12H 15 R	Washer, Med., Split Lock, 5/8" Nom. (2 used)
4	22H 242 R	Set Screw, Sq. Hd., Cup Point, 5/8"—11, 1-1/2" Long
5	AW 2127 Y	Mounting Bracket Assembly
6	7H 230 H	Bolt, Machine, Reg. Sq. Hd., 5/16"—18, 2-1/2" Long
7	9028 Y	Nut, Lock, 3/4" (4 used)
8	19H 800 R	Cap Screw, Hex. Hd., 3/4" x 2-3/4" Long (4 used)
9	W 111 Y	Strap, Upper
10	24H 624 A	Washer, 5/8" Plain Flat, 1-3/4" O.D., 11/16" I.D., 10 Gauge Mfg Std.
11	W 121 Y	Spring, Press Rod
12	AW 2119 Y	Press Rod Assembly
13	W 131 Y	Spacer, Runner Pivot, 1" Long (4 used)
14	W 141 Y	Spacer, Side Bar, 1-17/32"
15	3H 693 A	Bolt, Cge., 5/8"—11, 2-1/4" Long (4 used)
16	W 109 Y	Strap, Lower
17	12H 10 R	Washer, Med. Split Lock, 5/16"
18	14H 253 R	Nut, Reg. Hex., 5/16"—18
19	W 107 Y	Strap, Runner, Adjusting (2 used)
20	14H 257 R	Nut, Reg. Hex., 7/16"—14 (6 used)
21	12H 12 R	Washer, Med., Split Lock, 7/16" (6 used)
22	C 291 Y	Spacer, Runner, Adjusting, 1/2" Long
23	AW 2103 Y	Plate, Runner Assembly
24	7H 556 B	Bolt, Reg., Sq. Hd., 7/16"—14, 1" Long (4 used)
25	W 143 Y	Runner, 4" x 5"
	W 101 Y	Runner, 6" x 5"
26	W 133 Y	Ditcher, Shovel
27	9H 472 H	Bolt, Plow, No. 3 Rd. Hd., Sq. Neck, 7/16"—14, 2" Long
28	9H 495 Y	Bolt, Plow, No. 3 Rd. Hd., Sq. Neck, 7/16"—14, 2-1/2" Long
29	E 367 Y	Clamp, Tool Bar
30	14H 266 Y	Nut, Reg. Hex., 3/4"—10 (2 used)
31	12H 17 R	Washer, Med. Split, 3/4" Nom.
32	8H 1386 Y	Bolt, Machine, Reg. Sq. Hd., 3/4"—10, 3" Long (2 used)
33	W 135 Y	Clamp, Corrugator Shank
34	JD 121	Leaping Deer Transfer (3")

NOTE: Only one part used in this grouping unless otherwise indicated.

NUMERICAL INDEX

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
9028 Y.....	11	22H 242 R.....	11	Q	
3H 693 A.....	11	24H 624 A.....	11	Q 13127 K.....	11
7H 230 H.....	11	AW		W	
7H 556 B.....	11	AW 2103 Y.....	11	W 101 Y.....	11
8H 1386 Y.....	11	AW 2119 Y.....	11	W 107 Y.....	11
9H 472 H.....	11	AW 2127 Y.....	11	W 109 Y.....	11
9H 495 Y.....	11	C		W 111 Y.....	11
12H 10 R.....	11	C 291 Y.....	11	W 121 Y.....	11
12H 12 R.....	11	E		W 131 Y.....	11
12H 15 R.....	11	E 367 Y.....	11	W 133 Y.....	11
12H 17 R.....	11	JD		W 135 Y.....	11
14H 253 R.....	11	JD 121.....	11	W 141 Y.....	11
14H 257 R.....	11			W 143 Y.....	11
14H 263 Y.....	11				
14H 266 Y.....	11				
19H 800 R.....	11				



Farm Accidents Can Be Prevented *with Your Help*

NO accident prevention program can be successful without the whole-hearted cooperation of the person who is directly responsible for the operation of equipment.

To read accident reports from all over the Country is to be convinced that a large number of accidents can be prevented only by the operator anticipating the result before the accident is caused and doing something about it. No power-driven equipment, whether it be transportation or processing, whether it be on the highway, in the harvest field, or in the industrial plant, can be safer than the operator who is at the controls. If farm accidents are to be prevented—and they can be prevented—it will be done by operators who accept a full measure of their responsibility.

It is true that the designer, the manufacturer, the engineer can help; and they will help, but their efforts can be wiped out by a single careless operator.

It is said that "*the best kind of operator.*" We ask you to be that operator.

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corrugator.

