

# Cadman

IRRIGATION & AGRICULTURAL MACHINERY



**TR-MAN-1100-UG1**

Indexing System Upgrade

Creator:

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by  
Ivon LeBlanc

Revision:

## Indexing System Upgrade Kit

This upgrade kit is design to improve the machines indexing accuracy. Please follow all the following step and safety warnings in this document.



**ONLY perform this upgrade or any other maintenance when the machine is shut down with the battery removed and is in a non-loaded condition. This means that no water is being pumped through the reel, all water pressure has been appropriately bled, and all mechanical tension has been released from the hose rewind system.**

### Kit Contents

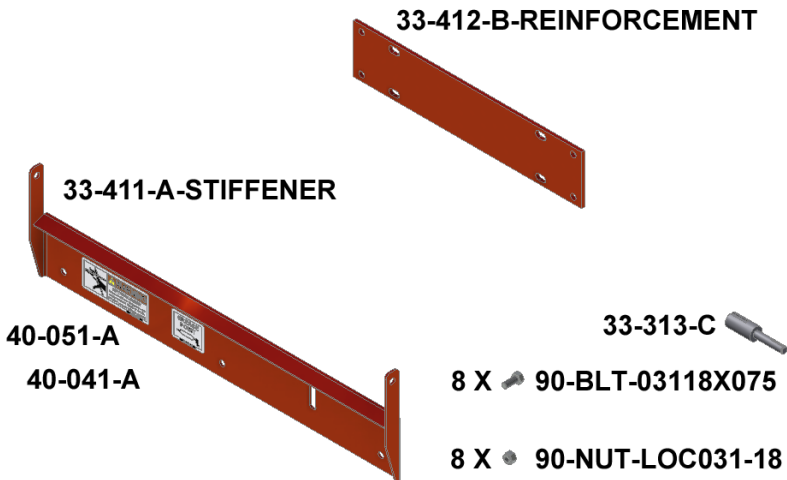


Figure 1 - Kit Contents

img-00481



**Before starting this upgrade ensure that you have a complete set of required parts.**

## Tools Required



*Figure 2 - Tool Required*

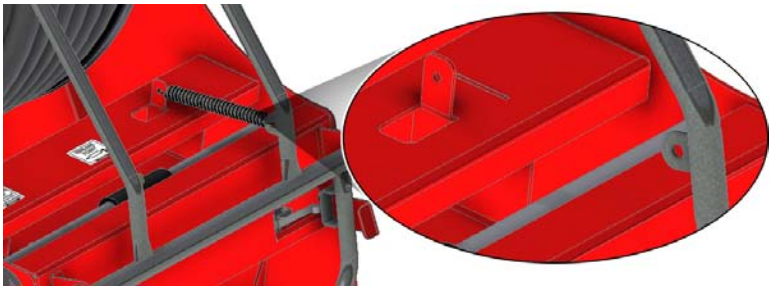
*img-00482*

- |                             |                                   |
|-----------------------------|-----------------------------------|
| 1. 1/8" & 3/32 Allen Wrench | 4. Snap Ring Pliers               |
| 2. 11/32" Drill Bit         | 5. Needle Nose Pliers             |
| 3. 1/2" Combination Wrench  | 6. 1/2" Socket Wrench w/Extension |

Complete the following steps once the machine ready for upgrade.

### Step 1

Remove the shut off bar tension spring.



*Figure 3 - Remove Tension Spring*

*img-00483*



## Step 2

Remove the indexer shield bolt and lock nut (no longer required) to prepare for the next step.

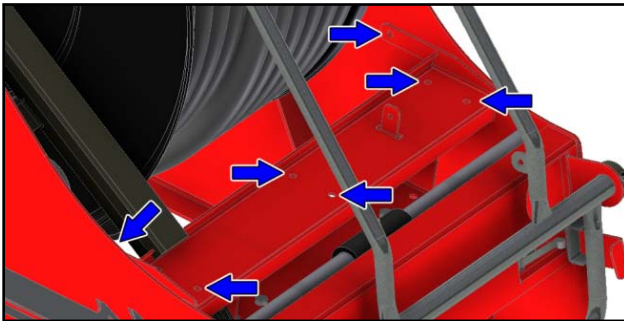


*Figure 4 - Remove Indexer Shield Bolt*

*img-00484*

## Step 3

Place the Reinforcing Plate (P/N 33-411-A-STIFFENER) on top of the cross member and line up the indexer bolt hole and the front faces. Mark the center of the seven (7) holes and remove.



*Figure 5 - Mark Hole Centers*

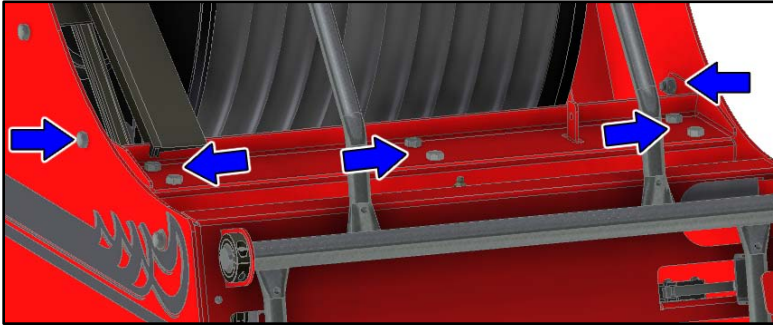
*img-00485*

### Step 4

Drill seven (7) holes using an 11/32" diameter drill bit. Be careful to remove all drill shavings and burs.

### Step 5

Once the holes have been drilled, place the Reinforcing Plate (P/N 33-411-A-STIFFENER) into position, and then fasten using the provided fasteners.

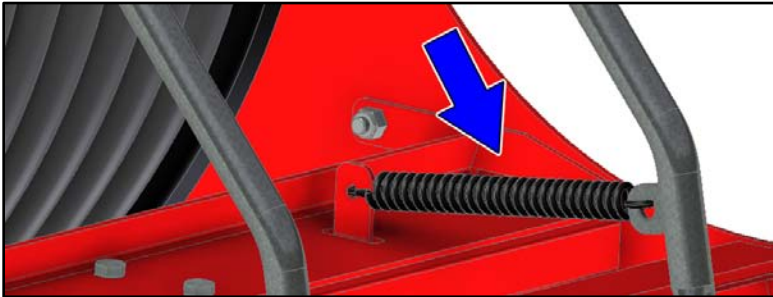


*Figure 6 - Fasten Re-enforcing Plate*

*img-00486*

### Step 6

Reinstall the shut off bar tension spring.

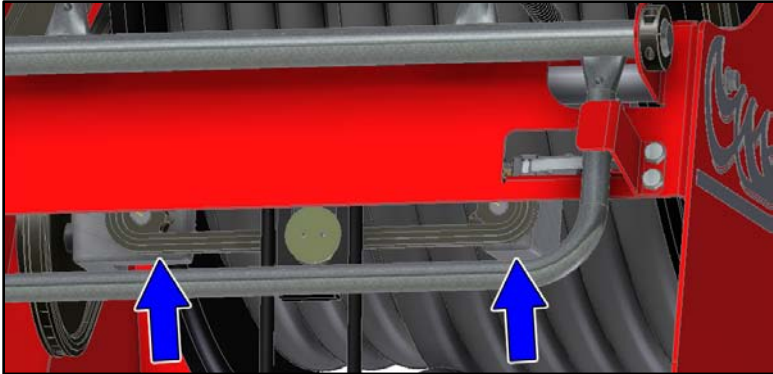


*Figure 7 - Reinstall Tension Spring*

*img-00487*

## Step 7

Remove the indexer gear box and indexer idler block from the frame.

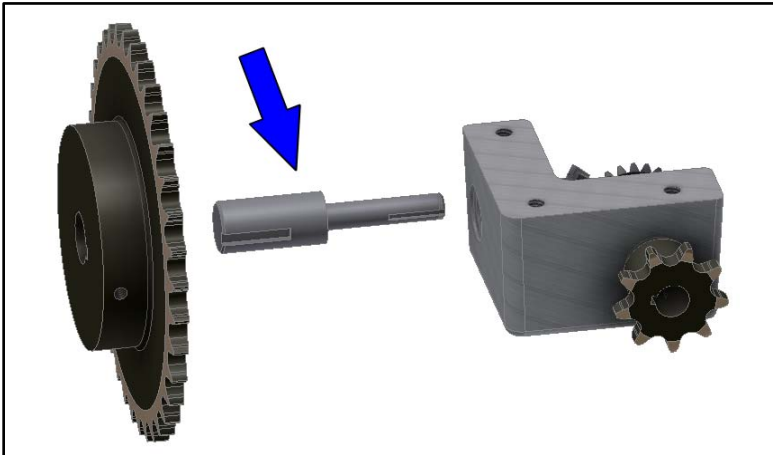


*Figure 8 - Remove Indexing System*

*img-00488*

## Step 8

Remove the existing indexer drive sprocket shaft. Remove the snap ring and loosen the sprocket set screw. Install the improved sprocket shaft (P/N 33-313-C).

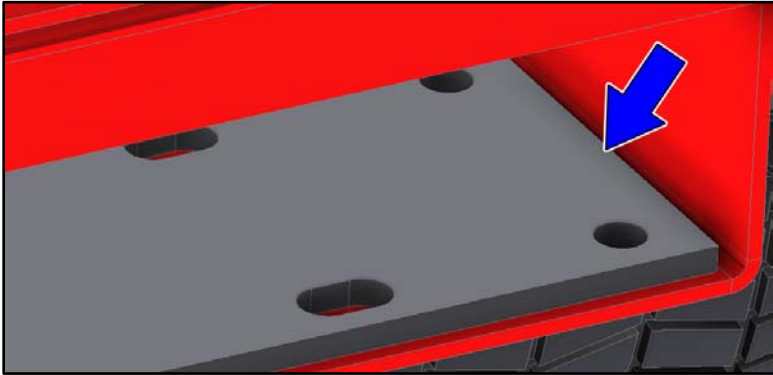


*Figure 9 - Change Shaft*

*img-00489*

### Step 9

Install the Reinforcing Plate (P/N 33-412-B-REINFORCEMENT), line up the holes and slots as in the existing plate.



*Figure 10 - Install Re-enforcing Plate (parts removed for clarity)*

*img-00490*

### Step 10

Reinstall the indexing system and if required complete the "**Indexer Adjustment Instructions**" found in your Operator's Manual on page 59.

**Congratulations your Mini-Traveller Indexing System is now upgraded.**



## Useful Information

### Length

<b>1 FOOT</b>	= 12 = 0.3048	Inches Meter	<b>1 METER</b>	= 39.37 = 3.2808	Inches Feet
<b>1 ROD</b>	= 0.3048 = 16.5 = 5.5 = 5.03	Meter Feet Yards Meters	<b>1 MILE</b>	= 5280 = 1760 = 320 = 1609	Feet Yards Rods Meters

### Area

<b>1 SQUARE FOOT</b>	= 144 = 0.0929	Square Inches Square Meters
<b>1 SQUARE YARD</b>	= 1296 = 0.8361	Square Inches Square Meters
<b>1 SQUARE METER</b>	= 1549.4 = 10.764	Square Inches Square Feet
<b>1 ACRE</b>	= 43560 = 4047 = 0.4047	Square Feet Square Meters Hectare
<b>1 HECTARE</b>	= 107642.62 = 10000 = 2.47105	Square Feet Square Meters Acres
<b>1 SQUARE MILE</b>	= 640 = 259	Acres Hectares

### Volume

<b>1 GALLON ( US )</b>	= 0.8327 = 231 = 0.1337 = 8.345	Imperial Gallons Cubic Inches Cubic Feet Pounds
<b>1 CUBIC FOOT</b>	= 1728 = 7.48 = 62.4 = 28.32	Cubic Inches Gallons ( US ) Pounds Liters
<b>1 ACRE INCH</b>	= 27154 = 254	Gallons ( US ) Cubic Meters / Hectare
<b>AREA OF A CIRCLE</b>		= Diameter <sup>2</sup> X 0.7854
<b>CYLINDER VOLUME (US GAL.)</b>		= Diameter <sup>2</sup> X 0.7854 X Length