ASSEMBLY, ADJUSTMENT & PARTS

MOUNTED HEAVY DUTY COIL TINE HARROW

FOR 614NT SERIES DISCS

AND 800NT SERIES DISCS
PERSONAL SAFETY IS IMPORTANT!
All personnel involved with the assembly and/or operation of this equipment must be informed of proper safety procedures. Operator's and assembly manuals provide the necessary information. If the manual is lost for a particular implement, order a replacement at once. Operator's and assembly manuals are available at no charge upon request.

ADDRESS INQUIRIES TO:
WIL-RICH
PO BOX 1030
WAHPETON, ND 58074
PH (701)642-2621    FAX (701)642-3372
Remove all wires and arrange the parts conveniently.

NOTE: Always wear safety glasses or goggles and be careful when cutting wires and steel bands as they are under tension and will spring back when cut.

Wherever the terms "left" and "right" are used, it must be understood to mean from a position behind and facing the machine.

Lubricate all bearings and moving parts as you proceed and make sure they work freely.

Loosely install all bolts connecting mating parts before final tightening.

When tightening bolts, they must be torqued to the proper number of foot-pounds as indicated in the table unless specified. It is important that all bolts be kept tight.

On new machines, all nuts and bolts must be rechecked after a few hours of operation.

<table>
<thead>
<tr>
<th>GRADE 2</th>
<th>GRADE 5</th>
<th>GRADE 8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BOLT DIA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3/8</td>
<td>1/2</td>
</tr>
<tr>
<td></td>
<td>3/4</td>
<td>7/8</td>
</tr>
<tr>
<td></td>
<td>HEX HEAD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9/16</td>
<td>3/4</td>
</tr>
<tr>
<td></td>
<td>1-1/8</td>
<td>1-5/1</td>
</tr>
<tr>
<td></td>
<td>UNC GR2</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>UNC GR5</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>UNC GR8</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>UNF GR2</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>UNF GR5</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>UNF GR8</td>
<td>48</td>
</tr>
</tbody>
</table>

**ASSEMBLY INFORMATION**

When replacing a bolt, use only a bolt of the same grade or higher. Except in shear bolt applications, where you must use the same grade bolt.

Bolts with no markings are grade 2.

Grade 5 bolts furnished with the machine are identified by three radial lines on the head.

Grade 8 bolts furnished with the machine are identified by six radial lines on the head.

**All U-bolts are grade 5.**

**CAUTION**

Failure to follow these instructions may result in personal injury and/or equipment damage.

- Just before and during operation be sure no one is on or around the implement.
- Before activating the hydraulic system, check hoses for proper connections.
- Before lowering the wings for the first time, make sure the entire system has been charged with oil.
- With wings down always install hydraulic cylinder channel lock(s) for transporting.

**CAUTION**

To avoid injury and/or machine damage:
- Refer to Operator's Manual for safety instructions.
- Do not stand or climb on machine when operating.
- Use clean hazard flashers and SMV sign when transporting.
- Observe highway traffic regulations.

23325
HARROW OPERATION
SECTION LEVEL ADJUSTMENT

To set the harrow working depth, first set the disc to its working position. Remove the 5/8NCx5 GR5 bolt and relocate as required. The section should be set to run 3” to 5” deep in the working position.

To set the front to rear level of the section adjust the pivot bracket as shown below. Remove the 1/2NCx1-1/2 GR5 bolts and rotate the section until the section is level. Reinstall bolts and tighten to specified torque.
NOTE: LONG END FORWARD ON DROPDOWN, ANGLED END UP NOT REQUIRED WITH ADD ON REAR FRAME.
### ITEM PART NO. DESCRIPTION

<table>
<thead>
<tr>
<th>Item</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>88295</td>
<td>5/8NCx6 GR5 BOLT</td>
</tr>
<tr>
<td>2</td>
<td>22521</td>
<td>SPACER TUBE</td>
</tr>
<tr>
<td>3</td>
<td>88277</td>
<td>5/8 FLAT WASHER</td>
</tr>
<tr>
<td>4</td>
<td>222562</td>
<td>BUSHING</td>
</tr>
<tr>
<td>5</td>
<td>222570</td>
<td>ADJ UST BAR</td>
</tr>
<tr>
<td>6</td>
<td>88627</td>
<td>5/8NC LOCK NUT</td>
</tr>
<tr>
<td>7</td>
<td>222575</td>
<td>INNER ADJ UST BAR</td>
</tr>
<tr>
<td>8</td>
<td>23039</td>
<td>HAIR PIN</td>
</tr>
<tr>
<td>9</td>
<td>32871</td>
<td>5/8x1-3/8 BENT PIN</td>
</tr>
<tr>
<td>10</td>
<td>222574</td>
<td>8FT REAR HARROW TUBE</td>
</tr>
<tr>
<td></td>
<td>222569</td>
<td>6FT REAR HARROW TUBE</td>
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<tr>
<td></td>
<td>236027</td>
<td>4FT REAR HARROW TUBE</td>
</tr>
<tr>
<td>11</td>
<td>88298</td>
<td>5/8NCx4 GR5 BOLT QTY - 24-8FT</td>
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<tr>
<td></td>
<td></td>
<td>18-6FT</td>
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<td></td>
<td></td>
<td>12-4FT</td>
</tr>
<tr>
<td>12</td>
<td>200479</td>
<td>BUSHING</td>
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<tr>
<td>13</td>
<td>88845</td>
<td>5/8NC LOCK NUT</td>
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<tr>
<td>14</td>
<td>236195</td>
<td>8FT HARROW MOUNT WELD</td>
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<tr>
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<td>236198</td>
<td>6FT HARROW MOUNT WELD</td>
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<tr>
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<td>236028</td>
<td>4FT HARROW MOUNT WELD</td>
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<table>
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<th>ITEM PART NO. DESCRIPTION</th>
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<tbody>
<tr>
<td>15 236021</td>
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<td>16 236020</td>
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<td>17 236087</td>
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<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>18 222573</td>
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<tr>
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<td>19 222572</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>20 88409</td>
</tr>
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</table>
NOTE: THIS IS FOR GENERAL ASSEMBLY INSTRUCTIONS. HARROWS CAN HAVE DIFFERENT SECTION ARRANGEMENTS.
THIS KIT IS DESIGNED TO BE USED ON HARROW SECTION THAT ARE SUPPORTED WITH ONE ARM. USUALLY THEY ARE 4FT SECTION ON OUTER WINGS OF MACHINES
ASSEMBLE HARROW STOP 240361 AS SHOWN REPLACING 5/8x5 BOLT WITH BOLT SUPPLIED. THIS SHOULD BE DONE ON OUTER WINGS TO PREVENT HARROW DAMAGE.
BOLT-ON FRAME EXTENSION

8IN - (LH) 241916
(RH) 241917

16IN - (LH) 241924
(RH) 241925

30IN - (LH) 241931
(RH) 241932

88295 - 5/8NCx6 GR5 BOLT

88627 - 5/8NC LOCK NUT
ADD-ON REAR FRAME - 800NT

NOTE: BOLT ON FRAME EXTENSION NOT REQUIRED WITH ADD-ON REAR FRAME

89130 - 3/4NCx6-1/2BOLT
244687 - BACKING PLATE
244683 - HARROW SETBACK
88110 - 3/4NC LOCK WSHR
88110 - 3/4NC NUT
88295 - 5/8NCx6 BOLT
88129 - 5/8NC LOCK WSHR
88126 - 5/8NC NUT
245873 - SMALL BACKING PLATE

244686 - TUBE 78IN
244684 - TUBE 100IN
NOTE: CENTER SECTION DOES NOT GET STANDOFF TUBES. CENTER SECTIONS WILL SIT FORWARD OF WING SECTIONS
### 614NT SERIES DISC HARROW MOUNTING CHART

<table>
<thead>
<tr>
<th>DISC MODEL</th>
<th>WINGS</th>
<th>MAIN FRAME</th>
<th>WINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 disc</td>
<td>158in Mnt tube</td>
<td>8ft 46&quot;SP 8ft</td>
<td>158in Mnt tube</td>
</tr>
<tr>
<td>16 disc</td>
<td>158in Mnt tube</td>
<td>6ft 46&quot;SP 6ft 6ft 6ft</td>
<td></td>
</tr>
<tr>
<td>17 disc</td>
<td>158in Mnt tube</td>
<td>6ft 46&quot;SP 6ft 6ft 6ft</td>
<td></td>
</tr>
<tr>
<td>20 disc</td>
<td>230in Mnt tube</td>
<td>8ft 46&quot;SP 8ft 8ft 8ft</td>
<td></td>
</tr>
<tr>
<td>24 disc</td>
<td>70in Mnt tube</td>
<td>120in Mnt tube</td>
<td>70in Mnt tube</td>
</tr>
<tr>
<td>27 disc</td>
<td>70in Mnt tube</td>
<td>120in Mnt tube</td>
<td>70in Mnt tube</td>
</tr>
<tr>
<td>30 disc</td>
<td>70in Mnt tube</td>
<td>120in Mnt tube</td>
<td>70in Mnt tube</td>
</tr>
<tr>
<td>33 disc</td>
<td>120in Mnt tube</td>
<td>132in Mnt tube</td>
<td>120in Mnt tube</td>
</tr>
<tr>
<td>36 disc</td>
<td>120in Mnt tube</td>
<td>132in Mnt tube</td>
<td>120in Mnt tube</td>
</tr>
</tbody>
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**APPROX ARM LOCATION (IN FROM CENTER)**

**SECTION, STUBS, SPANNERS & EXT**

- 60
- 20
- 20
- 60

- 60
- 20
- 20
- 60

- 72
- 29
- 29
- 72

- 72
- 29
- 29
- 72

- 140
- 83
- 40
- 0
- 40
- 83
- 140

- 140
- 83
- 40
- 0
- 40
- 83
- 140

- 150
- 110
- 40
- 0
- 40
- 110
- 150

- 180
- 135
- 110
- 40
- 0
- 40
- 110
- 135
- 180

- 180
- 135
- 110
- 40
- 0
- 40
- 110
- 135
- 180
## 800NT SERIES DISC HARPWAY MOUNTING CHART

<table>
<thead>
<tr>
<th>DISC MODEL</th>
<th>WINGS</th>
<th>MAIN FRAME</th>
<th>WINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 disc</td>
<td>100in Mnt tube</td>
<td>8ft 46&quot;SP 8ft</td>
<td>52 52</td>
</tr>
<tr>
<td>16 disc</td>
<td>100in Mnt tube</td>
<td>6ft 46&quot;SP 6ft 46&quot;SP 6ft</td>
<td>52 8 52</td>
</tr>
<tr>
<td>18 disc</td>
<td>100in Mnt tube</td>
<td>72 22 22 72</td>
<td></td>
</tr>
<tr>
<td>22 disc</td>
<td>78in Mnt tube</td>
<td>8ft 6ft 46&quot;SP 4ft 6ft 8ft</td>
<td>110 92 22 22 92 110</td>
</tr>
<tr>
<td>24 disc</td>
<td>78in Mnt tube</td>
<td>6ft 38&quot;SP 4ft 6ft 38&quot;SP 4ft 8ft</td>
<td>145 110 45 45 110 145</td>
</tr>
<tr>
<td>26 disc</td>
<td>78in Mnt tube</td>
<td>8ft 6ft 46&quot;SP 6ft 8ft 6ft 46&quot;SP 6ft</td>
<td>145 110 45 45 110 145</td>
</tr>
<tr>
<td>30 disc</td>
<td>78in Mnt tube</td>
<td>8ft 6ft 46&quot;SP 8ft</td>
<td>155 122 45 45 122 155</td>
</tr>
<tr>
<td>34 LNT disc</td>
<td>78in Mnt tube</td>
<td>6ft 46&quot;SP 6ft</td>
<td>178 143 110 45 2 45 110 143 178</td>
</tr>
<tr>
<td>38 LNT disc</td>
<td>78in Mnt tube</td>
<td>8ft 46&quot;SP 6ft</td>
<td>178 143 110 45 2 45 110 143 178</td>
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EXAMPLE FOR HARROW ASSEMBLY

EXAMPLE 30FT DISC

<table>
<thead>
<tr>
<th>DISC MODEL</th>
<th>WINGS</th>
<th>MAIN FRAME</th>
<th>WINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 disc</td>
<td>WINGS</td>
<td>MAIN FRAME</td>
<td>WINGS</td>
</tr>
<tr>
<td></td>
<td>78in Mnt tube</td>
<td>100in Mnt tube</td>
<td>78in Mnt tube</td>
</tr>
<tr>
<td></td>
<td>8ft</td>
<td>46&quot; SP 8ft</td>
<td>8ft</td>
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<tr>
<td></td>
<td>155</td>
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<td>122</td>
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<td>155</td>
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