Introduction

Your new John Deere 24T Baler is a dependable machine. With proper care and operation, you can expect to receive the service and long life designed and built into it. Like any precision machine your baler will require some attention at regular intervals. When any questions arise regarding lubrication and adjustments, etc., use your manual as a guide to service your machine the RIGHT WAY.

If you find yourself in need of additional information or special servicing not covered in this manual, see your John Deere dealer. He is in a position to answer your questions for you.

When in need of parts, either to replace worn parts or to make emergency repairs, see your local John Deere dealer.

Contents

Specifications ........................................ Page 1
Operation ............................................. Page 2-11
  How the knot is tied ................................. 2-3
  Before operation .................................... 3-5
  Safety precaution .................................. 6
  Operating adjustments ............................ 6-9
  Machine protective devices ....................... 10-11
Lubrication .......................................... Page 12-13
Service ................................................ Page 14-29
  Trouble shooting .................................. 14-19
  Service checking .................................. 20
  Needle frame adjustment ......................... 20
  Timing the baler ................................... 20-21
  Billhook ............................................ 21
  Knife arm ......................................... 22
  Twine disk ........................................ 23
  Twine holder ...................................... 23
  Needle adjustment ................................ 24
  Knotter drive brake ................................ 24
  Tucker fingers .................................... 25
  Plungerhead safety stop ......................... 25
  Plungerhead and knife adjustment ............. 26
  Safety slip clutch ................................ 27
Auger drive belt .................................... Page 27
Chain adjustments .................................. 27
Timing marks ........................................ 27-28
Knotter gears ....................................... 28
Bale measuring control ......................... 28
Gear case ........................................... 28
Pitman ................................................ 29
Engine and belt alignment ....................... 29
Attachments ......................................... Page 30-34
  Wisconsin engine and mounting ............... 30
  Power take-off .................................... 30
  No. 2 Bale Ejector ................................ 31
  Oversized tires ................................... 31
  Dual wheels (less tires) ......................... 31
  Pickup gauge wheel ................................ 31
  Wagon hitches and bale chute ................. 32
  Pickup slip clutch ................................ 32
  Bale counter ....................................... 33
  Wiper arm modeling tool ......................... 33
  Compressors ...................................... 33
  Tool box .......................................... 33
  Side-drop bale chute ............................. 33
  Assembly .......................................... 35-40

When ordering parts, give your dealer the model and serial number of your baler. This information will help him give you prompt and efficient service.

The serial number of your baler is located on the left-hand side of the bale case between the flywheel and the tire. (Record it in the space below.)
## Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auger: Diameter</td>
<td>16 In.</td>
</tr>
<tr>
<td>Auger: Length</td>
<td>49 In.</td>
</tr>
<tr>
<td>Bale: Cross-Section</td>
<td>14 in. x 18 in.</td>
</tr>
<tr>
<td>Bale: Length</td>
<td>Adjustable 12 in. to 50 in.</td>
</tr>
<tr>
<td>Compression Chamber Length</td>
<td>44 In.</td>
</tr>
<tr>
<td>Engine, Wisconsin Model THD</td>
<td>17 Horsepower</td>
</tr>
<tr>
<td>Feeder Opening Dimensions</td>
<td>13 in. x 21 in.</td>
</tr>
<tr>
<td>Flywheel Diameter</td>
<td>27 In.</td>
</tr>
<tr>
<td>Height (Maximum)</td>
<td>64 In.</td>
</tr>
<tr>
<td>Length: With Engine Tongue and Bale Chute</td>
<td>17 Ft. 10-1/2 In.</td>
</tr>
<tr>
<td>Length: Less Tongue and Bale Chute</td>
<td>10 Ft. 6 In.</td>
</tr>
<tr>
<td>Pickup Cylinder Diameter</td>
<td>12 In.</td>
</tr>
<tr>
<td>Pickup Width: Inside</td>
<td>53 In.</td>
</tr>
<tr>
<td>Pickup Width: On Flare</td>
<td>50 In.</td>
</tr>
<tr>
<td>Plungerhead: Stroke</td>
<td>28 In.</td>
</tr>
<tr>
<td>Plungerhead: Speed</td>
<td>Normal (under load) 65 strokes per minute, Maximum (no load) 72 strokes per minute</td>
</tr>
<tr>
<td>Size of tractor recommended</td>
<td>2-Plow Tractor or Larger</td>
</tr>
<tr>
<td>Power Take-Off Shaft Speed</td>
<td>ASAE-SAE Standard—540 or 1000 rpm</td>
</tr>
<tr>
<td>Tires: R.H., Standard (Inflation pressure, 30 psi)</td>
<td>15 x 4.00-4-ply</td>
</tr>
<tr>
<td>Tires: R.H., Oversize (Inflation pressure, 27 psi)</td>
<td>15 x 5.00-4-ply</td>
</tr>
<tr>
<td>Tires: L.H., Standard (Inflation pressure, 40 psi)</td>
<td>15 x 6.40-6-ply</td>
</tr>
<tr>
<td>Tires: L.H., Oversize (Inflation pressure, 35 psi)</td>
<td>15 x 6.70-6-ply</td>
</tr>
<tr>
<td>Transmission: Gears</td>
<td>Steel Cut, Enclosed</td>
</tr>
<tr>
<td>Transmission: Capacity</td>
<td>2-3/4 Qts. SAE 140</td>
</tr>
<tr>
<td>Weight (Approximate): With PTO</td>
<td>2400 Lbs.</td>
</tr>
<tr>
<td>Weight (Approximate): With Engine</td>
<td>2650 Lbs.</td>
</tr>
<tr>
<td>Width</td>
<td>8 Ft.</td>
</tr>
</tbody>
</table>

**NOTE:** Right- and left-hand sides referred to in this manual are determined from a position at the rear of the machine facing in the direction of travel.

*Specifications and design subject to change without notice.*
Service checking

Follow these related major service checks in the order listed to remedy most tying troubles not solved in the "Trouble Shooting" section, pages 14-19. Also follow them as a service guide to pre-season use.

1. Needle frame adjustment (page 20).
4. Knife (wiper) arm (page 22).
5. Twine disk (page 23).
6. Twine holder (page 23).
7. Needle adjustment (page 24).

If any of these chains are uncoupled or if parts are removed for servicing, check all timing operations before operating baler. Each of the following checks or adjustments should be made as the baler is run, by hand, through one complete tying cycle.

Needle frame adjustment

The needle frame is properly adjusted when it will clear the main frame by 3/4 to 1 inch with needles fully raised.

Adjust for correct needle frame clearance by disconnecting the lift link from the needle frame and turning the clevis on the lift link. After adjusting the length of the lift link, tighten the locking nut against the clevis.

CAUTION: The plungerhead and needle timing, and the plungerhead stop, must be checked after making any adjustments with the needle lift link.

Timing the baler

Timing is controlled by the main drive chain, feeder drive chain, and the knotter drive chain.

1. Place feeder pivot pin in bottom hole of feeder teeth.
2. Turn flywheel by hand in a counter-clockwise direction until the face on the plungerhead (on a compression stroke) is centered in the front feeder slot. The left-hand edge of the tip of the front feeder tooth should measure 14-1/4 to 16-1/4 inches from the left-hand edge of the front feeder support. If the feeder tooth does not fall within this range, disconnect the feeder drive chain, set the tooth 15-1/4 inches (measured horizontally) from the extreme left-hand edge of the feeder support. A block may be used to hold the teeth in this position.
3. Connect the feeder drive chain. Turn the flywheel clockwise as necessary to install chain with drive side tight. Tighten the idler against the chain with thumb pressure.

NOTE: After connecting chain, relocate plungerhead face in center of slot. If feeder dimension does not measure between 14-1/4 and 16-1/4 inches, retime feeder using the main drive chain instead of the feeder drive chain for a finer adjustment.
Wagon hitches and bale chute

These attachments permit loading bales directly from the baler to a wagon or trailer, eliminating the job of picking up bales.

The bale chute attaches in the same manner as the regular chute and is supported by four chains.

The hitch support is bolted to the axle and bale case. You have a choice of a fixed hitch, or an adjustable telescoping hitch for wagons or trailers having tongues of variable length.

Pickup slip clutch

The pickup slip clutch will help protect the pickup from damage due to overloads, and save valuable time lost in the field when replacing shear bolts. A one-piece driven sprocket is also provided to take the place of the present two-piece driven sprocket with shear bolt. The pickup slip clutch is correctly adjusted when it leaves the factory. The clutch should be tested prior to each baling season for a static slip torque of 150-180 foot-pounds of pressure.

Testing slip clutch

To test slip clutch, it is necessary to first construct a torque lever. The torque lever can be made from a piece of 3/4 inch pipe, 48 inches in length, and having a 3/8 inch hole drilled in each end of the pipe, 3/4 inch in from each end. The lever is then bolted to disassembled chain, using a washer on top of chain. Block plunger-head movement, then connect scales to other hole in lever and GENTLY apply pressure, with scale at right angle to lever, until clutch slips. The slip clutch is correctly adjusted when it slips at from 37 to 46 pounds of pressure. Loosen or tighten spring bolts accordingly. Always loosen or tighten spring bolts equally.

BE SAFE

It pays to be careful,
It costs to be careless!