HAY TOOLS

Bale Carriers
**PRODUCT OVERVIEW**

- The quick and safe way to move round bales
- 4 x 6 or 5 x 6 bales
- 60 hp required, 1450
  80 hp required, 2400
  100 hp required, 2450

**FEATURES**

- Rotating pickup arm
- Simple hand-held controls
- Bale deflector

**ROUND BALE CARRIER**
Models 1450, 2400 and 2450

**Deck**

The heavy duty undercarriage and tandem walking beam axles ensure reliable transport to the unloading area. To unload, the operator tilts the carrier deck using the tractor control. Once the rear of the deck is on the ground, the pusher, controlled with the hand-held remote, unloads the bales in tight end-to-end rows.

**Pickup Arms**

Gentle yet rugged pickup arms place bales on the deck where a pusher, powered by two hydraulic motors, slides the bales back on graphite coated carrier beams (models 1450, 2450). This means efficient bale handling, less stress and more bales moved each day.

**Pusher**

After bales are lifted onto the deck, a pusher moves the bales rearward. The pusher has two settings that are selected on the hand held remote. The operator can choose the most efficient speed and torque for varying conditions: ‘high’ for dry hay and straw; ‘low’ provides additional torque for wet or high moisture silage bales, and the pusher moves with less speed.
The Farm King 1450 round bale carrier can carry seven 5’ x 6’ bales weighing up to 900 kg (2,000 lb) each in a single row. The double wide Farm King 2450 has twice the capacity. Ideal for hilly terrain the shorter, more maneuverable 2400 can carry ten 4’ x 6’ round bales. Heavy-duty construction means the bale carriers are robust, yet designed to load and unload bales quickly and without damage. Lower bale handling costs and simple maintenance help improve the profitability of your hay.

[1] Graphite coated beams available on models 1450 and 2450
[2] Pickup arms
[3] Pusher
[4] Hand-held remote
[5] Transport lights

Model 1450
A single-row carrier can accommodate seven 5’ x 6’ bales, or eight 4’ x 6’. Equipped with a single-sided pickup arm.

Model 2400
The double wide, short model is ideal for picking bales in hilly terrain, with a capacity of up to ten 4’ x 6’ or eight 5’ x 6’ bales.

Model 2450
With a capacity of up to sixteen 4’ bales, fourteen 5’ bales, the 2450 minimizes the number of trips out to the field.
Standard Arm

The 1450S, 2400S and the 2450S feature standard pickup arms. A bale deflector is built into the outer fork which means bales can be picked up from either the 'end-on' or 'side-on' position. This allows the operator to approach the bale from any angle.

Model 2400 features a right-hand side pickup arm while model 2450 is equipped with both left-hand and right-hand side pickup arms for even more maneuverability and convenience. Model 2400 features an optional bale stop indicator for use with more narrow bales (4’).

Rotating Pickup Arm

The 1450R and 2450R are equipped with rotating pickup (RPu) arms with forks that hydraulically squeeze, rotate and lift bales onto the deck for 'side-on' picking. This allows the operator to follow the travel of the baler.
## SPECIFICATIONS

<table>
<thead>
<tr>
<th>MODEL &gt;&gt;</th>
<th>1450</th>
<th>2400</th>
<th>2650</th>
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</thead>
<tbody>
<tr>
<td>Capacity</td>
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<tr>
<td>Tractor requirements</td>
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<tr>
<td>GVW: 18,720 lb (8,491 kg)</td>
<td>GVW: 18,720 lb (8491 kg)</td>
<td>GVW: 37,440 lb (16,983 kg)</td>
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<tr>
<td>Eight - 4' (1.2 m) wide bales</td>
<td>Ten - 4' (1.2 m) wide bales</td>
<td>Sixteen - 4' (1.2 m) wide bales</td>
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<td>Seven - 5' (1.5 m) wide bales</td>
<td>Eight - 5' (1.5 m) wide bales</td>
<td>Fourteen - 5' (1.5 m) wide bales</td>
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<tr>
<td>60 hp (45 kW) at 12,480 lb (5,660 kg)</td>
<td>80 hp (60 kW) at 12,480 lb (5,660 kg)</td>
<td>100 hp (60 kW) at 25,000 lb (11,340 kg)</td>
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<td>Maximum recommended speed when loaded is 20 mph (32 km/h)</td>
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<td>Hand held remote control</td>
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<tr>
<td>Hydraulics</td>
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<td>Two double acting circuits required</td>
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<td>Hydraulics, lift cylinder</td>
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<td>One - 3&quot; diameter</td>
<td>One - 4&quot; diameter</td>
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<td>Hydraulics, tilt cylinder</td>
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<td>One - 3&quot; diameter</td>
<td>One - 3&quot; diameter</td>
<td>Two - 3&quot; diameter</td>
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<tr>
<td>Hydraulics, motor</td>
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<tr>
<td>Two - 22.0 cu. in</td>
<td>Two - 22.0 cu. in</td>
<td>Four - 22.0 cu. in</td>
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<td>Tires</td>
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<td>(Four) 12.5L x 15H tires, load range F, intermittent unloaded highway use</td>
<td>(Four) 12.5L x 15H tires, load range F, intermittent unloaded highway use</td>
<td>(Eight) 12.5L x 15H tires, load range F, intermittent unloaded highway use</td>
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<td>Tires, capacity</td>
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<tr>
<td>4,680 lb (2,130 kg) at 90 PSI inflation</td>
<td>4,680 lb (2,130 kg) at 90 PSI inflation</td>
<td>4,680 lb (2,130 kg) at 90 PSI inflation</td>
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<td>Tires, hub</td>
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<td>6 bolt with twine guard</td>
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<td>Tires, wheel</td>
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<td>Heavy-duty implement style</td>
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<td>Deck length</td>
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<td>37' (11.3 m)</td>
<td>36' (7.9 m)</td>
<td>37' (11.3 m)</td>
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<tr>
<td>Overall length</td>
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<td>44' (13.4 m)</td>
<td>34' (10.4 m)</td>
<td>45' (13.7 m)</td>
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<tr>
<td>Transportation width</td>
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<tr>
<td>8.5' (2.6 m)</td>
<td>12' 7&quot; (3.8 m)</td>
<td>12.75' (3.9 m)</td>
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<td>Hitch weight</td>
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<tr>
<td>Empty vertical drawbar load 1,356 lbf (6,071N)</td>
<td>Empty vertical drawbar load 1750 lbf (7,789N)</td>
<td>Empty vertical drawbar load 2,395 lbf (10,653N)</td>
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<tr>
<td>Shipping weight (approx.)</td>
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<tr>
<td>5,495 lb (2,498 kg)</td>
<td>6,600 lb (2,995 kg)</td>
<td>9,587 lb (4,348 kg)</td>
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</table>
**PRODUCT OVERVIEW**

- Stacks bales in uniform tight rows
- Simple operation
- 100 hp required

**FEATURES**

- In cab control for complete manual and automatic operation
- Hand held remote control
- Graphite coated beams

**SQUARE BALE CARRIER**

**Model 4480**

**Bale Pusher**

After bales are lifted onto the deck, a pusher powered by two hydraulic motors moves the bales rearward. If the pusher senses resistance from a heavier-than-average bale during regular operation, it automatically shifts to ‘low’ for five seconds to provide more power to push the bale. If the bale will not move, a sensor sends a message to the monitor to alert the operator. The sensor on the pusher motor counts revolutions to efficiently measure the pushback distance.

**Reduce Stress**

The beams on the carrier deck have been covered with a special graphite coating that allows the bales to slide with minimal effort.

**Carrier Arm**

The reinforced carrier arm enhances the structural integrity of the machine. Hydraulic hoses and electronic sensors have been positioned to avoid being pinched or damaged by moving parts.

**Hydraulics**

The bale carrier automatically adjusts its hydraulic configuration to correspond with the hydraulic system on the tractor, as selected by the operator. The bale carrier is compatible with open-center, closed-center, or load-sensing closed-center hydraulic systems.
With years of on-farm testing and refinements the Farm King 4480 Square Bale Carrier offers simplified operation and an intuitive display.

The Farm King 4480 Square Bale Carrier picks, hauls and stacks eight 48" x 48" bales or can double row twenty 32" x 34" x 96" bales, and features a host of new innovations and technology designed to increase efficiency and minimize bale damage. The Farm King 4480 Square Bale Carrier is designed to follow the same path as the baler.

**Chain**

The chain that powers the pusher is recessed beneath the beams so the weight of the bale is never resting fully on the chain, minimizing bale stress and limiting the chance of string breakage.

**Structure**

The Farm King 4480 square bale mover features a heavy-duty undercarriage to support heavy loads under stress.

**Unloading**

Unloading is quick and easy thanks to the innovative design of the carrier. The rear deck tilts backward, resting the back half of the load on the ground. Move the carrier forward and return the tilt deck to the neutral position. Push the remaining bales to the back of the carrier and repeat the process.

**Stacking**

The bales are stacked in tight rows. The strings are not touching the ground, which prevents prolonged exposure to surface moisture. As settling occurs, the bales rest together in a structurally sound stack.
A hand-held control and a system monitor are responsible for programming and operating the Farm King 4480 Square Bale Carrier. The hand-held control activates the pickup arm and initializes the pickup sequence and operates the pusher and tilt deck.

System Monitor

Shipped from the factory with default settings and preset bale sizes, the bale carrier is ready for operation once the operator indicates the type of hydraulics the operating tractor is using: open center, closed center or closed center with load sensing. The carrier adjusts its hydraulic operation to match that of the tractor.

Designed to be intuitive and straightforward, the main menu offers four options, selected by buttons located next to the screen; auto mode, calibrate, diagnostic, and manuals.

Auto

The operator simply chooses from one of the preset bale sizes listed on the monitor and indicates preference of single- or double-row stacking.

Calibrate

Every operator has a different set of requirements and the 4480 Square Bale Carrier has several customization options. On the monitor, the operator can set grab arm approach height, squeeze pressure and lift height. A pressure status bar on the monitor allows for quick fine-tuning and customization, and six memory slots are available for various bale sizes.

Manual

This mode allows the operator to manually operate each function of the bale carrier, which is useful for picking up a bale that is heavier than the others, or is a different size.

Diagnostic

The carrier features a diagnostic mode that provides the status of seven sensors strategically placed throughout the machine. When the machine is in its neutral, or “Home” position, a quick check of all seven sensors will indicate that the machine is ready to use, or specify which area of the carrier needs attention.

Hand-Held Control

The hand-held control connects to the in-cab harness, which is compatible with the standard 3-tab accessory port on most tractors. The wiring harness is designed to make connections to the power supply and components virtually fool-proof. To initiate the sequence, press the “Start” button when the bale is within the grab arm of the carrier. The grab arm squeezes the sides of the bale then gently lifts the bale off the ground. When the arm reaches a preset height, it rotates 90 degrees and sets the bale on the carrier deck. The arm then returns to the neutral or “Home” position.
Capacity
GVW 37,440 lb (16,983 kg), payload 28,000 lb (12,700 kg)
48" x 48" (122 x 122 cm) bales: 8, single row on carrier, stacked 4 high unloaded
32" x 35" (81 x 90 cm) bales: 20, double row on carrier, stacked 5 high unloaded
36" x 48" (91 x 122 cm) bales: 16, double row on carrier, stacked 4 high unloaded

Tractor requirements
100 hp (75 kW) at 25,000 lb (11,340 kg)
Maximum recommended transport speed when loaded is 20 mph (32 km/hr)

Control
In cab control for complete manual and automatic operation. Includes hand-held control for convenient operation

Hand held remote control
12VDC, 15 amp circuit

Hydraulics
Tractor: one double acting remote valve required
Lift: one, 4" DIA x 18" stroke cylinder
Squeeze: one, 3" DIA x 16" stroke cylinder
Rotate: one, 3" DIA x 16" stroke cylinder
Tilt: two, 3.5" DIA x 36" stroke cylinder
Pusher: two, 22.2 cu. in hydraulic motors

Tires
8, 12.5L x 15FI tires, load range F, intermittent unloaded highway

Tires, capacity
4,680 lb (2,130 kg) at 90 PSI inflation

Tires, hub
6 bolt with twine guard

Tires, wheel
Heavy-duty implement style

Deck length
34' (10.4 m)

Overall length
42.66' (13 m)

Transportation width
10.16' (3.1 m)

Shipping weight
9,485 lb (4,302 kg)
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