

## Beet harvesting flyer

This equipment flyer from the Hesston Corporation, includes photographs, diagrams and text to represent a variety of models of the company's beet harvester. This publication funded by the National Historical Publications and Records Commission through the Kansas State Historical Records Advisory Board.

Creator: Hesston Corporation

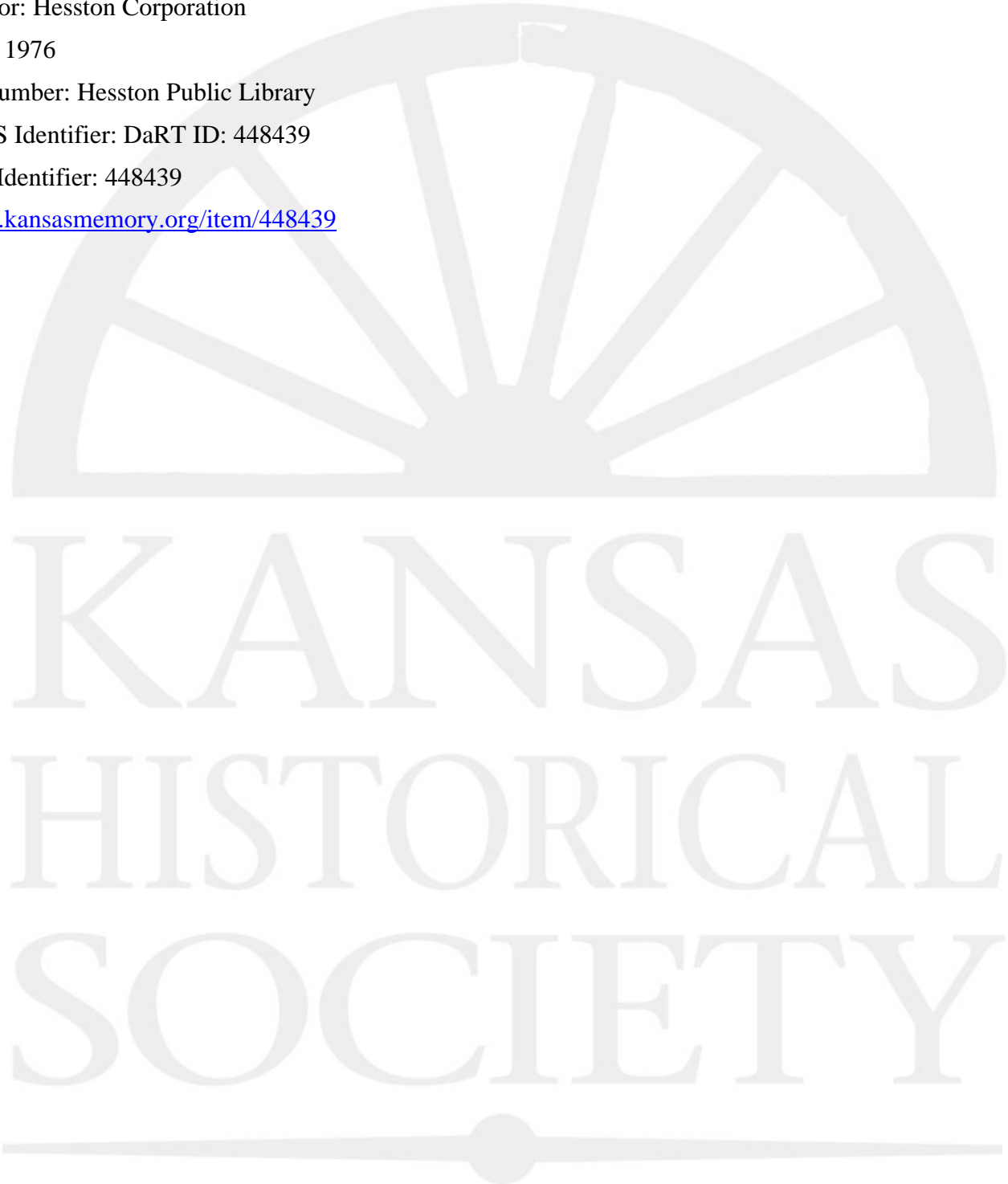
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## Beet harvesting flyer

### Hesston Beet Harvesting Equipment

Direct Type Models 496/496W & 696  
Tank Type Model 565



### ...and Beet Top Defoliators Models 34 & 65



First with a better way

**HESSTON**  
FARM EQUIPMENT



## Beet harvesting flyer



**Model 496 Direct Type.** For dependable 3-row(20" thru 36") or 4-row(20" thru 24") direct harvesting with superior cleaning action, the Hesston 496 is tops! A **special 496** — the 496-Wide — harvests four rows on 28" and 30"

spacings. All 496-Wide performance features and dimensions — except for depth frame width, rienshaft length and overall rienshaft cleaning area — are the same as 496 dimensions.

**Whether you prefer high volume or once-over harvesting...**

**Model 696 Direct Type.** The newest and biggest direct harvester from Hesston.

Able to handle up to six rows of beets in a single trip — behind 150 hp tractors — with no sacrifice in quality.



696 shown with extra rienshaft bed option



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**Model 565 Tank Type.** The strength and stamina Hesston builds into the 565 Tank Harvester keeps you going after others break or bog down. With optional depth frame topper, you can top as you lift for once-over harvesting.

## j... Hesston equipment delivers the cleanest beets possible!

**Hesston Defoliators** feature fast, clean operation to assure fast, plug-free performance from your choice of harvesters!

**4-Row Model 34**

**6-Row Model 65**





## Beet harvesting flyer



### **Heavyweight construction and design simplicity key the 496's dependability in all conditions!**

The Hesston 496 Direct Harvester has a well earned reputation for dependability.

When digging conditions are ideal, no other direct harvester can dig more beets and get them as clean with as little service and maintenance. When fields are muddy and other harvesters bog down, the 496 keeps on going, and still gets beets acceptably clean.

What's the secret? Hesston built the 496 from the ground up to match almost any conceivable harvesting condition. Structural members are built to take the beating varying soils can dish out. Light draft 29" lifter wheels pick up less dirt and allow faster digging with less horsepower. Ejection paddles give positive transfer of beets to the rienk bed, and patented wobble-mounted rienks stay at top cleaning capacity because they clean themselves as they clean the beets.

The spiral design, long length and varying speed of the grab rolls give beets maximum cleaning exposure. So you get low tare beets whether you're operating in muddy or hard, sun-baked soils.

For exceptionally rocky fields, an optional rubber grab roll kit can be installed to provide the best cleaning possible in these conditions.

In short, Hesston engineers have designed a wide assortment of options and extras to tailor your 496 to almost any unfavorable condition. As a result, you can harvest more beets, get them clean and harvest them fast with either the 496 or 496-Wide. And all this with less time and money spent on maintenance.

Isn't that what harvesting beets should be like?

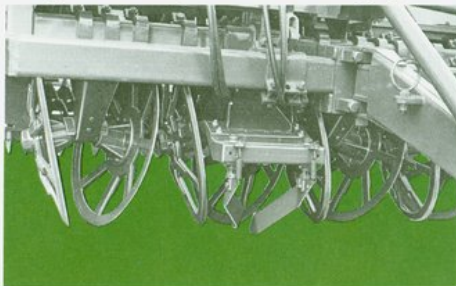


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**Ejector paddles.** Available in steel or optional heavy-duty rubber flails. (Steel paddles equipped with slip clutch drive protection.)

**Shallow-running lifter wheels lighten draft!** One-piece wheels with 2½" rims are hard surfaced and re-rimable. Optional 2" rim wheels are also re-rimable and have traction lugs but are not hard surfaced. Wheels are set at the precise angle needed to compress the soil just below the beet bowl and pop the beets out without touching them. Extras include: Row Finder for reduced operator fatigue (or when using operators with less skill); Wheel Close-Ups to improve tonnage when harvesting smaller beets in dry soil; Rock Springs to reduce wheel and post assembly damage where soils are rocky; Counterweights (up to fifteen 75-lb. units) to break through hard ground and stay down for efficient digging.

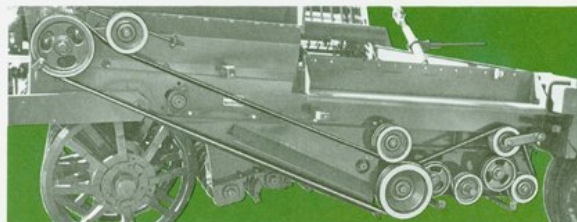


**Offset bed row posts** (optional) provide correct angle for "pop out" lifting in 14" bed rows and over.

**Horizontal and vertical wheel adjustments** for balance and for use in all types of planting patterns. Tires are 9.50 x 14, 6-ply implement. Extra wheel strut available for smoother operation in the roughest fields.

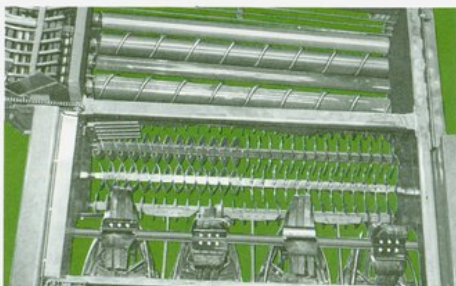


**Simple, rugged power distribution.** Drives take the punishment of 80 hp or over tractors with 1000 rpm PTO ratings even when digging in tough conditions. Power band belts, instead of chains, drive the grab rolls and provide extra slip protection.

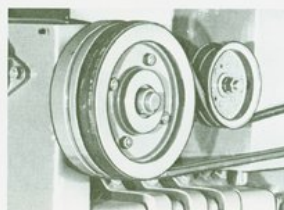
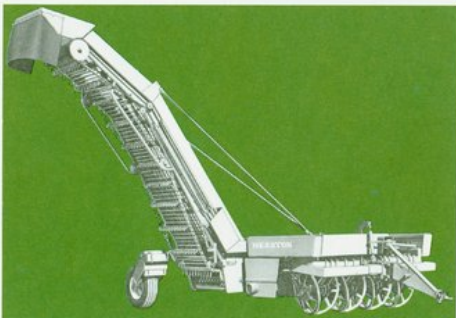


**Positive load elevator** adjusts so you can load high-sided trucks even if beets are wet and tonnage is heavy. Quick-detach flights make spacing to match volume easy. Beets get thorough cleaning action all the way up. Adjustable hood permits truck load balancing.

**It's features like these that separate the 496 from the "boys!"**



**Superior cleaning action with extra large rienk bed!** Here's how beets travel through a Hesston Direct Beet Harvester: The first cleaning takes place as steel (or rubber) flail paddles slap the beets out of the lifter wheels. After transferring to the first row of patented wobble-mounted **plate** rienks, the beets are tossed and tumbled to rows two and three. The right half of these rows are open-center spiral rienks. They claw at the dirt while augering the beets to the left side. Here, wobble-mounted **spider** rienks with four fingers chip away more dirt. Finally, row four — another set of wobble-mounted **plate** rienks — tosses and tumbles the beets to the grab roll area. Two pairs of extra long steel grab rolls — one smooth and one flighted — give the beets their final cleaning while moving them to the elevator. For better operation in rocky conditions, optional rubber grab rolls replace the smooth steel rolls.



**12-volt high capacity electric elevator clutch!** Stay on the tractor and save time at the turnrows. Operates off tractor's 12-volt electrical system. (Same clutch as in 696 model.)



## Beet harvesting flyer



### Now, make the most of those too few harvesting hours with the 6-row performance of the new Hesston 696!

When it's time to hit the fields during beet harvest, the clock can sometimes be your biggest enemy. No telling when bad weather will set in. That's why capacity becomes so important. You need to get in there and harvest the crop as soon as possible. And that's the real beauty of the new Hesston 696 Direct Beet Harvester. Because when you talk capacity, you're speaking its language.

With six-row harvesting capability in a single pass, you know you can get out of the field fast. And not only will you harvest more beets per trip with the 696, but your beets will be as clean as in four-row harvesting.

This is because the 696 is basically a larger machine with **three** pairs of extra long steel flighted and smooth grab rolls. The extra grab rolls work hand-in-glove with an optional extra rienk bed area to provide all the extra cleaning

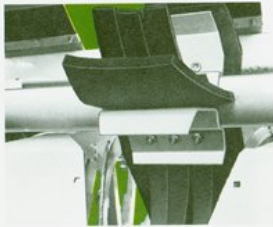
required in six-row harvesting. The end result is effective, efficient cleaning . . . whatever the condition of the field.

But without the strength and endurance to back up this increased capacity and cleaning area, you wouldn't be any better off than with a two or four row harvester. So the 696's drive train and frame members are built to take the punishment six-row harvesting can dish out. Structural members are formed of heavy gauge steel to stay in perfect alignment even under extreme power applications. PTO and drives are stronger and shafts and bearings are large enough to harness up to 150 horsepower PTO's in the roughest fields.

It all adds up to a faster harvest with clean beets and little maintenance . . . and this means more **PROFIT** for **you**.



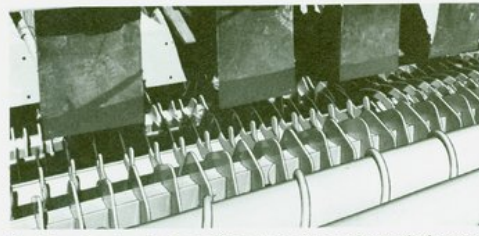
## Beet harvesting flyer



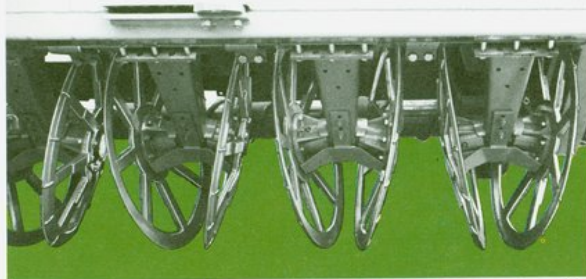
**Heavy rubber flail ejector paddles** help clean dirt from beets before they reach the grab rolls.



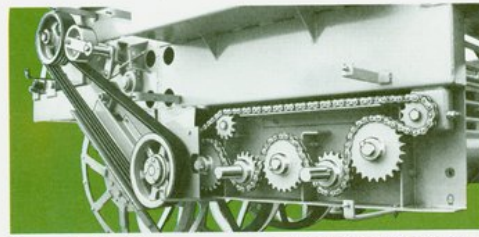
**Adjustable wheels.** Double wheel design offers added flotation for the extra weight of the 696. Wheels adjust horizontally as well as vertically for adapting them to varied row spacings and height adjustments. **Extra Wheel Strut Kit** keeps machine level in deeply rutted terrain.



**Optional extra bed section.** In regions where clods are a problem or soils are heavy, an extra rienk bed section is available (**as a factory option only**) to maintain top cleaning efficiency. This rienk bed is just one more example of how Hesston designs a machine that can be adapted to any harvesting condition.



**32" diameter lifter wheels** have 2 1/2" rims. Hard surfaced, re-rimable and fitted with traction lugs, they provide the lifting action needed with such a large harvester. Extra equipment available with the 696's lifter wheels are: Wheel Close-Ups and Rock Springs. Counterweights and Row Finder also available.

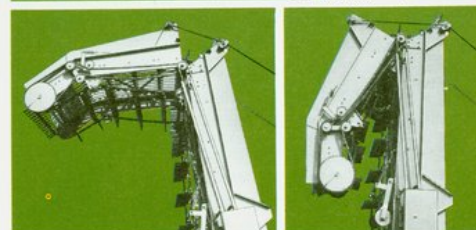


**Rugged drive train components.** Grab rolls are driven by a power band belt on the primary drive. Secondary drive is by dependable #80 roller chain. The rienk bed is also chain driven.

### The 696 is only as strong as its weakest feature . . . but try to find a weakness:

**Unique hydraulically controlled elevator** with new, economical drag chain instead of the old, expensive spud chain. Simple-to-operate hydraulic fold-away elevator makes storage possible in small areas. When fully extended (right), the elevator reaches **into** high sided trucks as well as up

to them so loads can be spread evenly in all four corners. Elevator in partially folded position (left photo). Elevator fully folded away (right photo).





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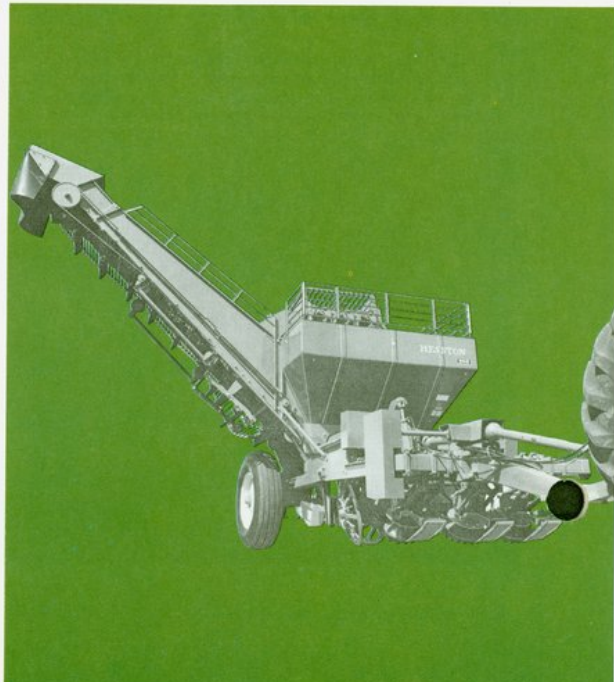
### **If you've ever lost a crop to wet weather, you should look at the 565 Tank Type when choosing a harvester!**

A 565 has the strength, the balance, the flotation and the tank to get you started or keep you going long before or long after you could get a loading truck into a muddy field.

And that's where the real beauty of tank harvesting lies. As the tank load increases, more weight is transferred to the tractor wheels to give them greater traction. This helps keep you going in mud or soft fields. And the 565's huge 7500-lb. tank capacity — plus its speed in lifting and cleaning — lets you finish fields fast.

In more favorable field conditions, the 565 Tank Type model offers even better performance. Features like the optional depth frame toppler let one man handle a harvest with once-over efficiency. Light draft wheels and adequate weight provide all the lifting you need in hard soil. And the 565's unique rienk bed and upper cross conveyor offer a maximum cleaning area for the cleanest beets possible.

If you need extra insurance against soft fields or the extra convenience of once-over harvesting, the 565 may be just what you're looking for. And, as with **any** Hesston beet harvester, you get quality construction throughout to keep maintenance and downtime at a bare minimum.



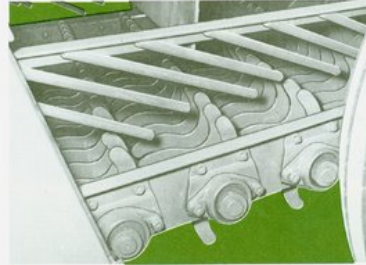


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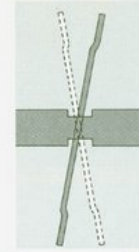
**Improved "POP OUT" action lifter wheels** go easy on the beets. Beets pop out when the 29" lifter wheels compress the soil just below the beet bowl. The precise lifting angle of these hard faced 2½" re-rimmed wheels gives thorough lifting — with minimal draft — without touching the beets. Bed Row Posts (optional) are available for harvesting double bed rows planted at spacings of less than 20". Rock Springs (extra) let the wheel give when rocks or other obstructions are lifted along with the beets. Wheel Close-Ups (extra) provide higher capacity in smaller beets.



**Depth frame topper.** With this option, you can top as you lift for once-over harvesting. The frame is now lengthened to give more clearance when row finders are used. Main drive is powered by a shaft from the gear box. Belt-driven main drive gives slip protection. Topper lifts with main frame. Adjustment for spacing is simple. Row Finders (extra) let you stay right on the row automatically with less fatigue. More inexperienced, less expensive labor can be used. Universal valve adapts to all tractor hydraulics.



**Self-cleaning riengk bed** gives unobstructed beet flow. Loose mounting makes patented wobble-mounted riengk possible. The riengk rid themselves of dirt and trash, so cleaning and beet movement is unobstructed. Sides of inclined bed are ¾" rod so dirt is eliminated at sides as well as bottom. Drive chains are shielded for longer life. **Extra Rock Protection Shield** for use in rocky conditions consists of a rubber shielding along the edge of the bed to prevent rocks from locking riengk.



**Heavy rubber flail ejector paddles** provide better beet transfer and improved cleaning action. Dirt and mud are quickly ejected as the wider flail paddles reach deep into lifter wheels. Easy adjustment is assured by clamp installation on 3" tubular shaft. This provides slip clutch type protection, too. New live rubber cover over flail paddle is designed to flex so it can shed excessive mud and trash build-up.



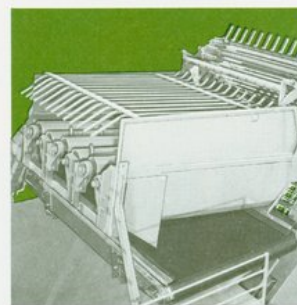
**Wheel adjustment to row spacing is simple.** Wheels slide easily for spacing from 80" to 120". 11.25 x 24 tires give superb flotation in soft or muddy soil. Safety parking stand is standard. Easy unit leveling is provided by simple three-position adjusting spindles mounted on both sides of the harvester. This assures constant control of digging depth on both sides of machine in all conditions.

## Besides extraordinary standard features, there are options and extras to tailor the 565 to your needs!

**Increased roller diameter** produces smoother running vertical elevator. Larger drive sprocket and rollers give extra life to spud chain. Big capacity of riengk and grab roll cleaning areas is matched by a 40" elevator width. Quick-change flights on 2¼" pitch chain lets you equalize capacity to tonnage and beet size.



**Rubber cushioned tank hood** is strong and long wearing. You can unload in about 90 seconds with minimum spillage even into high-sided trucks because of the tank's extended sides. Rubberized hood also means gentler handling. For fast, on-the-go operation, an improved electric clutch can be controlled from the tractor seat. An elevator extension (extra) is also available for taller trucks.



**Options in upper cross conveyor** maximize your efficiency. Choose between a potato chain upper cross conveyor for outstanding cleaning in light soil conditions or a grab roll assembly for operation in areas where clods are a problem. For optimum cleaning in rocky regions, a further option in the grab rolls lets you replace the smooth steel rolls with smooth rubber rolls. Steel flighted grab rolls are standard with smooth steel or rubber grab roll option.



**7500-lb. tank capacity.** Plywood lining, where beets drop, cushions beets. Smooth operation and long life for transfer chain are achieved by running chain on slides and cast iron idlers. Tank railing is standard equipment.



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### 4-row Model 34 6-row Model 65 for maximum harvesting efficiency!



Without a good defoliator, you'll never realize the maximum performance your harvester is designed to deliver.

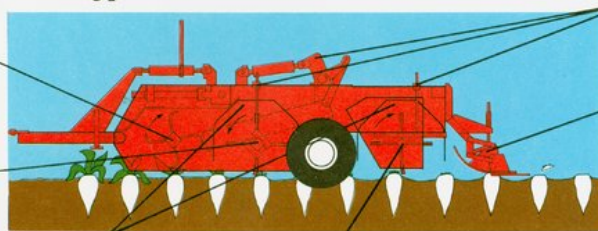
That's why both the Hesston 34 and 65 have become so popular with beet growers all over the country. Their proven ability to finely chop even the toughest growth of leaves assures you that plug-ups in the harvester are headaches of the past. And when it comes to topping performance, Hesston Defoliators are second to none in the industry.

## Hesston Beet Top Defoliators

With 40 or 60 heat-treated steel flails rotating on the primary drum at 1,000 rpm (that's 200 more chops than others), you get more finely chopped tops for quicker decomposition; no piles of unchopped leaves left behind; no problem with tough weeds.

Sixteen (or eight) 11" rubber flails per row on the second and third drum complete defoliation fast.

**...for a faster, cleaner, more efficient job  
in all types of field and weather conditions!**



Mud simply cannot build up on the rubber belt covering over the second and third drums. Instead of clinging, as it does to steel, mud flexes right off no matter how wet the field. No more time-consuming stops to free mud-clogged drums.

The third drum, standard on both Hesston models, greatly improves defoliating capacity so you get cleaner beets and cleaner rows. No debris is left behind to clog harvester. The third drum al-

so features independent height adjustment, heavy-duty tool bar, roller chain drives with heat-treated sprockets.

Built-in adjustments on wheels and drums assure fast, precise positioning of flails and scalper under all conditions. Sliding bearings plus screw jack or cylinder (extra) take the work, and guesswork, out of making positive adjustments.

Optional scalper kit (one per row) — installed behind defoliator — removes only the impurity-laden crown core and bud. Exclusive curved 10" guide shoe floats over beets to eliminate "clubbing" ... allows accurate scalping at 5-5½ mph (compared to 2-2½ mph with others). Linkage assures constant angle at which blade slices beet so crowns are always sliced parallel to the ground regardless of beet size. Scalper slides easily on tool bar for accurate row spacing. Scalper's 12" heat-treated knife cuts tops off cleanly. Depth of cut adjustable.



**Improved tool bar design** at rear of Model 65 lets an extra hydraulically controlled kit be added for easy adjustments of scalper attachments (cylinder not included). This new kit helps you avoid terrain hazards such as high ditch embankments or other obstacles by raising the scalpers with just a flick of a lever. Provides more constant topping in rough fields. Kit comes with scalpers (six units on 22" row spacing only).



**Wheel strut kit** (optional on Model 65 only) gives twice the flotation, helps keep machine level on rutted terrain. Kit includes two wheel struts and wheels with 8.5L x 14 tires (8 ply rated). Struts adjust to fit row spacings.



**Rubber flails.** Four smooth and four grooved rubber flails alternate in 16 flail row units. **Optional bundles** (model 65 only) may be ordered either 16 flails to the row or eight flails to the row for secondary and third drum beaters.



**Model 65 primary drive** features 4-groove power band belt.



**Exclusive curved guide shoe** on scalper gradually raises to eliminate bouncing and vibration. Positions accurately for controlled slicing action of knife. Scalpers (extra) mount on standard tool bar.



## Beet harvesting flyer

	MODEL 496 Direct Type	MODEL 696 Direct Type	MODEL 565 Tank Type	MODEL 34 Defoliator	MODEL 65 Defoliator
<b>ROW SPACING</b>					
2 rows .....	N. A.	N. A.	20" thru 40"	N. A.	N. A.
3 rows .....	20" thru 36"	N. A.	20" thru 24"	28" and 30"	N. A.
2 row bed row .....	N. A.	N. A.	14" and over	N. A.	N. A.
4 rows .....	20" thru 24"	28" and 30"	N. A.	22" and 24"	30"
5 rows .....	N. A.	26" thru 30"	N. A.	N. A.	26" thru 30"
6 rows .....	N. A.	22" and 24"	N. A.	N. A.	20" and 22"
496-Wide (4 rows) .....	28" and 30"				
<b>TRACTOR REQUIREMENTS</b>					
PTO rpm required .....	1000 only	1000 only	540 or 1000	540 or 1000	1000 only
Minimum PTO hp .....	80	100	70 (with Topper Frame) 60 (less Topper Frame)	60	80
Maximum PTO hp .....	125	175	125	100	100
Hydraulics .....					
(Two remote control valves) .....	Yes	Yes	Yes	N. A.	N. A.
<b>OPERATING SPEED (mph)</b> .....	3 to 7	3 to 7	3 to 7	3 to 7	3 to 7
<b>LIFT &amp; DEPTH CONTROL</b> .....	Hydraulic	Hydraulic	Hydraulic	Screw Jack and Hydraulic Ball	Screw Jack and Hydraulic Ball
<b>HITCH</b> .....	Ball	Ball	Ball		
<b>DIGGER WHEELS</b> (re-rimable) .....	29" d., 2 1/2" Rims with hard facing--without traction lugs. Or 2" Rims with traction lugs--without hard facing.	32" d., 2 1/2" Rims hard facing standard--with traction lugs.	29" d., 2 1/2" Rims hard facing standard.	N. A.	N. A.
<b>PADDLES</b>					
Type .....	Steel or Heavy Rubber	Heavy Rubber	Heavy Rubber	Heavy Rubber	Heavy Rubber
Number (per row) .....	3	3	4	16 (flail bundle)	8 or 16 (flail bundle)
<b>RIENK BED</b>					
Type .....	Steel plate (#1 & #4) finger and spiral (#2 & #3)	Steel plate (#1 & #4) finger and spiral (#2 & #3) (available without riens)	Steel, 4 finger, flex-mounted	N. A.	N. A.
Area .....	18 sq. ft.	28 sq. ft.	16 1/2 sq. ft.	N. A.	N. A.
496-Wide area .....	22 sq. ft.				
<b>ELEVATOR</b> (unloading)					
Width .....	34"	41"	28"	N. A.	N. A.
Spud Chain .....	2 1/2" pitch	Drag chain	2" pitch	N. A.	N. A.
Flights .....	31	33	20	N. A.	N. A.
Clutch (12-volt) .....	Electric	Electric	Electric	N. A.	N. A.
<b>VERTICAL ELEVATOR</b>					
Width .....	N. A.	N. A.	40"	N. A.	N. A.
<b>TANK CAPACITY</b>					
Width .....	N. A.	N. A.	7,500 lbs.	N. A.	N. A.
<b>TREAD WIDTH</b> (adjustable) .....					
To match row spacing .....	To match row spacing	To match row spacing	80" to 120"	N. A.	N. A.
<b>TIRES</b> (implement)					
Size .....	9.50L x 14 (6-ply)	12.5L x 16 (12-ply)	11.25 x 24 (8-ply)	6.70 x 15 (6-ply rated)	8.5L x 14 (8-ply rated)
Operating pressure .....	35 psi	35 psi	35 psi	35 psi	35 psi
<b>OVERALL DIMENSIONS</b>					
Height .....	13' 2"	15'	12' 6"	4'	4' 4"
Length .....	14' w/tongue	16' w/tongue	23' 10"	16' 8"	16' 8"
			(with topper frame) 21' 2"		
			(less topper frame) 16' 4"		
Width .....	18' (with elevator) 14' (less elevator)	20' (with elevator folded)		8' 4"	12' 6"
<b>APPROXIMATE WEIGHT</b>					
7400 lbs.* (4 row) .....	7400 lbs.* (4 row)	12,000 lbs.* (with riens) 10,000 lbs. (without riens)	7355 lbs.*	2285 lbs.	3400 lbs.
<b>EXTRA EQUIPMENT</b>					
Wheel Close-Ups, Rock Springs, Row Finder, Counterweights, Bed Row Post, Extra Wheel Kit .....	Wheel Close-Ups, Rock Springs, Row Finder, Counterweights, Bed Row Post, Extra Wheel Kit	Wheel Close-Ups, Rock Springs, Row Finder, Counterweights, Extra Wheel Kit, Extra Lifter Post Kit	Wheel Close-Ups, Rock Springs, Row Finder, Rock Protection Shield, Final Elevator Extension, Bed Row Posts, Rubber Grab Rolls	Scalper Row Kit (4-row unit, field installed)	Scalper Row Kit (6-row unit, field installed), Hydraulically controlled Scalper Lift Kit (cylinder not included), Wheel Strut Kit (includes tires)
<b>OPTIONAL EQUIPMENT</b>					
Steel or Rubber Paddles .....	Steel or Rubber Paddles	Lifter (with riens) Lifter (without riens)	Depth Frame Topper (2 or 3 row), Grab Rolls (6 to 14 sq. ft.--smooth steel or rubber), Bed Row Digger Posts	Rubber Flail Kit (8 or 16 flail bundle)	
Smooth Grab Rolls (steel or rubber) .....	Smooth Grab Rolls (steel or rubber)	Smooth Grab Rolls (steel or rubber)			

\*Plus extra equipment  
Specifications subject to change without notice.

Hesston Corporation, Hesston Division, Hesston, Kansas 67062

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## Hesston Beet Harvesting Equipment

Direct Type Models 496/496W & 696  
Tank Type Model 565

...and  
Beet Top  
Defoliators

Models 34 & 65

First with a better way.

