

H&S

RAKES

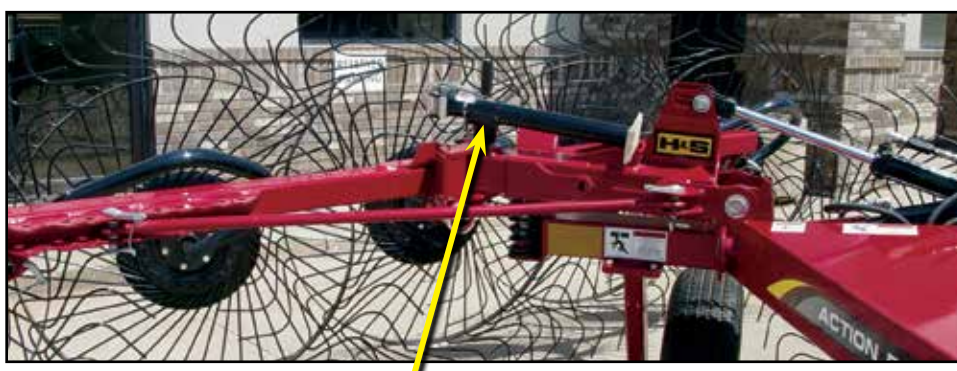


Innovators in the Manufacture
of Agricultural and
Commercial Equipment

H&S HAS A MODEL TO FIT YOUR OPERATION

2100 SERIES HIGH CLEARANCE ACTION RAKE

STANDARD FEATURES 2100 ACTION RAKES



The **hitch jack** can adjust the windrow width to three different positions. This feature is **standard on ALL 10 and 12 wheel Action Rake**.

MODEL - ACTION RAKES	2108	2110	2112
NUMBER OF RAKE WHEELS	8	10	12
WHEEL DIAMETER	60"	60"	60"
TEETH PER WHEEL	40	40	40
TOOTH DIAMETER	7.5 MM	7.5 MM	7.5 MM
RAKING WHEEL HUBS	TAPERED BEARINGS	TAPERED BEARINGS	TAPERED BEARINGS
TRANSPORT WIDTH	10'	10' 8"	12'
TRANSPORT LENGTH	17'	19'	21'6"
TRANSPORT HEIGHT IN TRANSPORT POSITION	86"	101"	105"
RAKING WIDTH	15' - 19'	18' - 22'	20' - 24'
WINDROW WIDTH ADJUSTMENT	3' - 5'	3' - 6'	3' - 6'
NO. OF RAKING POSITIONS W/TRANSPORT POSITION	6	10	10
GROUND PRESSURE RAKE WHEEL ADJUSTMENT	ADJUSTABLE TENSION SPRING		
ACTION CYLINDER - RAISE/LOWER	4½"	4½"	4½"
WING CYLINDERS	2"	2"	2"
JACK	STANDARD	STANDARD	STANDARD
WEIGHT	1,400#	1,670#	1,860#
CENTER KICKER WHEEL	OPTIONAL	OPTIONAL	OPTIONAL
TRANSPORT WHEELS ADJUSTABLE BALL HITCH	(2) - ST205 / 75D15	(2) - ST205 / 75D15	(2) - ST205 / 75D15
ADJUSTABLE BALL HITCH	OPTIONAL	OPTIONAL	OPTIONAL



The **Rake Arm Pivot Joints** provide flexibility for the rake beam in uneven ground conditions unlike competitors.



The **Rake Wheel Pivot** also provides additional ground flexibility.



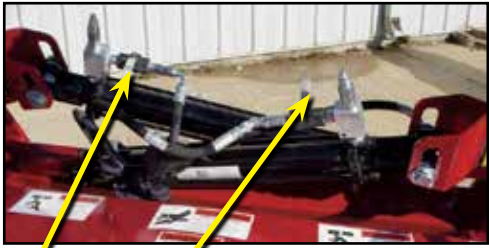
Adjust the **fine tune spring** to allow proper rake wheel down pressure on each arm of **2100 Series Rakes**.

RAKES



**3100 SERIES
HIGH CLEARANCE
ACTION RAKE**

STANDARD FEATURES 2100/3100 SERIES



RIGHT and **LEFT** side raking is done easily by turning either one of the wing transport valves off on all action rakes.



The **“KWIK PIK”** system on **all Action Rakes** features greater clearance in the raking position/stability during transport.



Rake in transport position.

STANDARD FEATURES 3100 SERIES



The spring suspension system allows each rake wheel to float independently over the ground. The down pressure for **ALL** the wheels on each side is done by a single hand crank.

MODEL - ACTION RAKES	3108	3110	3112
NUMBER OF RAKE WHEELS	8	10	12
WHEEL DIAMETER	60"	60"	60"
TEETH PER WHEEL	40	40	40
TOOTH DIAMETER	7.5 MM	7.5 MM	7.5 MM
RAKING WHEEL HUBS	TAPERED BEARINGS	TAPERED BEARINGS	TAPERED BEARINGS
TRANSPORT WIDTH	10"	10' 8"	12'
TRANSPORT LENGTH	19'	21'	23'
TRANSPORT HEIGHT IN TRANSPORT POSITION	86"	101"	105"
RAKING WIDTH	15' - 19'	18' - 22'	20' - 24'
WINDROW WIDTH ADJUSTMENT	3' - 5'	3' - 6'	3' - 6'
NO. OF RAKING POSITIONS W/TRANSPORT POSITION	6	10	10
GROUND PRESSURE RAKE WHEEL ADJUSTMENT	INDEPENDENT WHEEL FLOTATION WITH SINGLE SIDE ADJUSTMENT CRANK		
ACTION CYLINDER - RAISE/LOWER	4½"	4½"	4½"
WING CYLINDERS	2"	2"	2"
JACK	STANDARD	STANDARD	STANDARD
WEIGHT	1,800#	2,000#	2,250#
CENTER KICKER WHEEL	OPTIONAL	OPTIONAL	OPTIONAL
TRANSPORT WHEELS ADJUSTABLE BALL HITCH	(2) -ST205 / 75D15	(2) -ST205 / 75D15	(2) -ST205 / 75D15
ADJUSTABLE BALL HITCH	OPTIONAL	OPTIONAL	OPTIONAL

3 WHEEL SIZES TO CHOOSE FROM! 12, 14, or 16

Adjustable hitch

Rake arms on the hi-capacity rakes feature bearings on each end of the arm for long life, smooth operation and less wear than rakes with bushings.



An **adjustable brake band** on top of the front spindle keeps the front gauge wheels from spinning in rough conditions.

STRONG AND DEPENDABLE

The H&S Hi-Capacity bi-fold rakes have the raking wheels positioned ahead of the rake arms, main frame beams and transport wheels. Coupled with a high and wide end of frame there are no hangup points or restrictions when raking the heaviest of hay crops.

The Hi-Capacity rake opens and closes hydraulically, rake wheels are lowered and raised hydraulically, and the rake wheels float independently.

MODEL	4112	4114	4116
NUMBER OF WHEELS	12	14	16
WHEEL DIAMETER	55"	55"	55"
TEETH PER WHEEL	40	40	40
TOOTH DIAMETER	7 MM	7 MM	7 MM
TRANSPORT WIDTH	8' 6"	8' 10"	8' 10"
TRANSPORT LENGTH	24' 6"	27' 3"	30' 3"
WINDROW WIDTH ADJUSTMENT	38"- 58"	38"- 58"	38"- 58"
RAKING WIDTH	UP TO 24' HYD. SET.	UP TO 28' HYD. SET.	UP TO 32' HYD. SET.
RAKING WHEEL HUBS	TAPERED BEARINGS	BALL BEARINGS	BALL BEARINGS
WING FLEX	3' UP OR DOWN	3' UP OR DOWN	3' UP OR DOWN
NUMBER OF TRANSPORT WHEELS	4	6	6
HITCH JACK	STANDARD	STANDARD	STANDARD
CENTER KICKER WHEELS	OPTIONAL	OPTIONAL	OPTIONAL
GAUGE WHEELS	15"	15"	15"
TRANSPORT WHEELS	15"	15"	15"
WEIGHT	3500 LBS.	3800 LBS.	4200 LBS.

Y BI-FOLD WHEEL RAKES



The adjustment for the ground pressure on the rake wheels allows the operator to fine tune the Hi-Capacity wheel rakes to fit varying conditions.



Limited oscillating offset tandem transport wheels assure a smooth, level ride, even over irrigation tracks. Standard on the 14 & 16 wheel Hi-Capacity, optional on the 12 wheel Hi-Capacity.

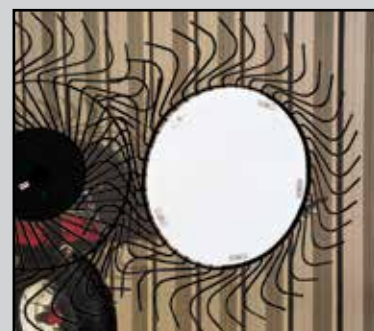
OPTIONAL FEATURES



An optional set of 15" front gauge wheels for the 14 and 16 wheel Hi-Capacity rakes help improve float over irrigation tracks or rough ground.

MORE OPTIONS: Transport lighting, Safety Chain, and Wrap around front rake beam with 15" gauge wheels.

2 wheel center kicker assembly is available.



Rake wheel wind boards are also available.

LARGE 60" DIAMETER RAKE WHEELS TURN SLOWER FOR LESS WEAR AND DELIVER MORE CAPACITY.

H&S **5100 Series Hi-Capacity Bi-Fold Rakes** have the raking wheels positioned ahead of the rake arms, main frame beams and transport wheels. Coupled with a high and wide end of frame, there are no hangup points or restrictions when raking the heaviest of hay crops.

- The standard wrap-a-round gauge wheels give added support to the rake beams.

- Adjustable height hitch

- Limited oscillating offset tandem transport wheels assure a smooth, level ride.

- A brake band on the 4 front gauge wheels can be easily adjusted to field conditions.

- A large diameter rake wheel hub is used for added strength to the rake wheel dish.

- Independent rake wheel suspension allows the rake wheels to follow the contour of the ground and low maintenance "Bee Hive" style springs support the large 60" rake wheels.



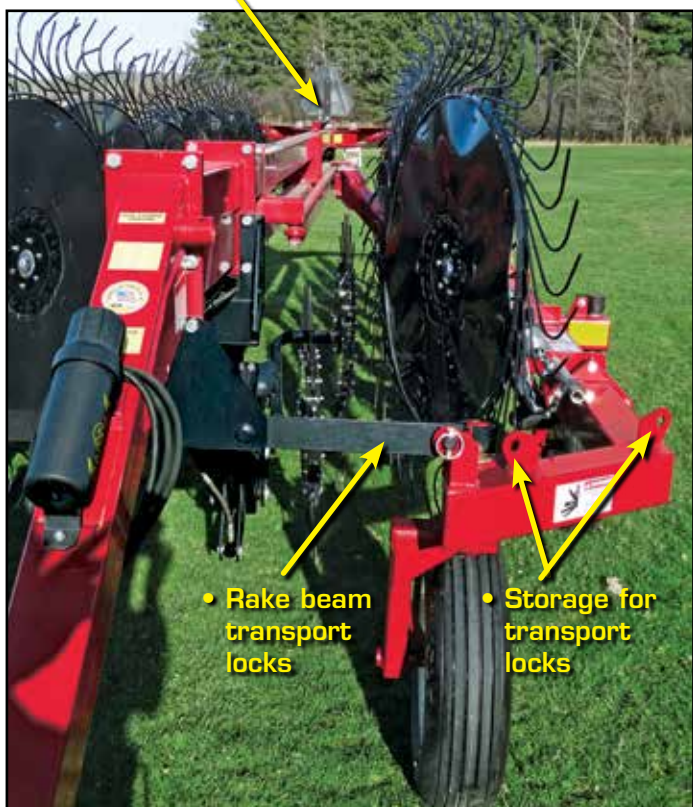
- Rake arms feature 2 ball bearings on each end of the arm for long life, smooth operation and less wear than rakes with bushings.

- Adjustment for the ground pressure on the rake wheels allows the operator to fine tune the 5114 and 5116 wheel rakes to fit varying conditions.

Y BI-FOLD WHEEL RAKES



- Rake wheel wind boards are standard on both models.
- The windrow width adjustment is done with a hand crank and adjusts windrows from 36" to 60" in width.
- Independent articulated rake beams have the flexibility to flex 3' up or 3' down.
- Setting the **spring loaded stop** allows you to set pre-determined raking widths up to 28' on the **5114** and 32' on the **5116**. Raking widths can be hydraulically adjusted in any position up to the pre-determined raking width.



• Rake beam transport locks

• Storage for transport locks

MODEL	5114	5116
WHEEL DIAMETER	60"	60"
TEETH PER WHEEL	40	40
TOOTH DIAMETER	7.5 MM	7.5 MM
TRANSPORT WIDTH	8' 10"	8' 10"
TRANSPORT LENGTH	27' 3"	30' 3"
WINDROW WIDTH ADJUSTMENT	36" - 60"	36" - 60"
RAKING WIDTH	HYDRAULICALLY SET UP TO 28'	HYDRAULICALLY SET UP TO 32'
RAKING WHEEL HUBS	BALL BEARINGS	BALL BEARINGS
60" RAKE WHEEL WIND BOARDS	STANDARD	STANDARD
WING FLEX	3' UP OR DOWN	3' UP OR DOWN
NUMBER OF TRANSPORT WHEELS	8	8
HITCH JACK	STANDARD	STANDARD
GAUGE WHEELS	15"	15"
TRANSPORT WHEELS	15"	15"
WEIGHT	N/A	N/A
DUAL CENTER KICKER WHEELS	OPTIONAL	OPTIONAL
TRANSPORT LIGHTING & POWER CORD	OPTIONAL	OPTIONAL
SAFETY CHAIN	OPTIONAL	OPTIONAL



A **2 wheel center kicker assembly** is **optional** for the Hi-Capacity rakes.

The H&S Flex-Frame Rake features the raking wheels positioned ahead of the rake arms, main frame beams and transport wheels. Coupled with a high and wide end of frame there are no hang-up points or restrictions when raking the heaviest of hay crops.

• Adjustable height hitch



• The rake arms feature **2 roller bearings** on each end of the arm for long life, smooth operation and less wear than rakes with bushings.

• Low maintenance "**Bee Hive**" style springs support the large 60" rake wheels.

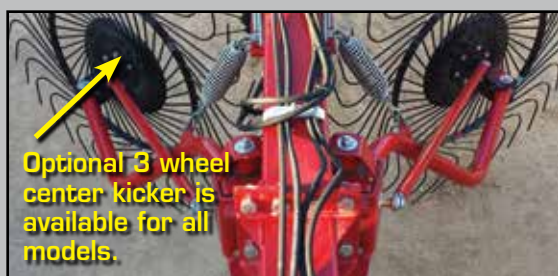
• Independent rake wheel suspension allows the rake wheels to follow the contour of the ground.



• The **U-joint/Ball-joint** design of the rake beam arms allows the flex frame rake to be the most versatile rakes on the market.



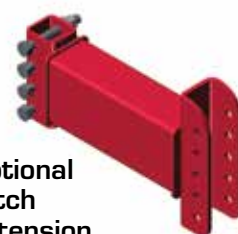
OPTIONAL FEATURES



Optional 3 wheel center kicker is available for all models.



2-Point Hitch Option



Optional Hitch Extension

EX-FRAME RAKES



ADJUSTABLE BRAKE BANDS
on the front gauge wheels can be easily adjusted to field conditions or transport.



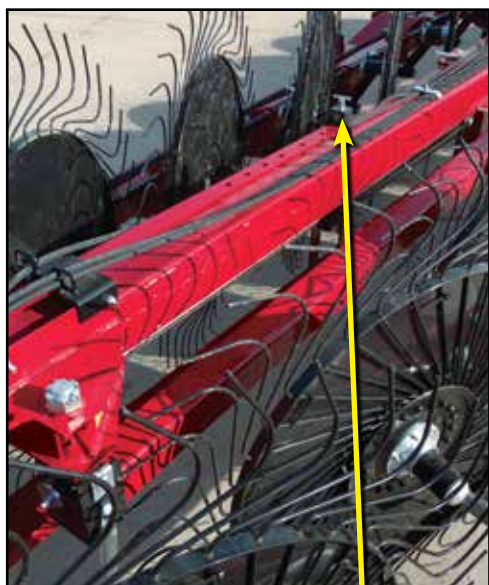
• Optional hydraulic rear width adjustment.



• Adjustable ground pressure screws for the rake wheels, allows the operator to fine tune to fit varying conditions.



Limited oscillating offset tandem transport wheels assure a smooth, level ride, even over irrigation tracks.



• Moving the spring loaded **T-pin** allows you to set predetermined raking widths. Raking widths can be hydraulically adjusted up to the predetermined raking width.

MODEL	6116	6118	6120	6122
NUMBER OF WHEELS	16	18	20	22
WHEEL DIAMETER	60"	60"	60"	60"
TEETH PER WHEEL	40	40	40	40
TOOTH DIAMETER	7.5 MM	7.5 MM	7.5 MM	7.5 MM
RAKING WHEEL HUBS	BALL BEARINGS	BALL BEARINGS	BALL BEARINGS	BALL BEARINGS
RAKE WHEEL ANTI-WRAP SHIELDS	STANDARD	STANDARD	STANDARD	STANDARD
TRANSPORT LENGTH - APPROX.	32' 7"	34' 8"	37' 6"	40' 6"
TRANSPORT WIDTH	10' 6"	11' 6"		
TRANSPORT HEIGHT - IN TRANSPORT POSITION	80" W/SMV SIGN	N/A		
FRONT GAUGE WHEELS	4 - 9.5L X 15	4 - 11L X 15		
REAR TRANSPORT WHEEL	4 - 9.5L X 15	4 - 11L X 15		
OPTIONAL TANDEM REAR TRANSPORT WHEELS	4 - 9.5L X 15	4 - 11L X 15		
MAXIMUM RAKE WIDTH - APPROX.	32'	35' 6"	38' 6"	41' 6"
WINDROW WIDTH ADJUSTMENT	3' - 5'	3' - 5'	3' - 5'	3' - 5'
NUMBER OF RAKING POSITIONS	6	6	6	6
RAKE WHEEL WIND PANELS	STANDARD	STANDARD	STANDARD	STANDARD
HITCH JACK	STANDARD	STANDARD	STANDARD	STANDARD
WEIGHT	5,750 LBS	7,894 LBS	8,224 LBS	8,521 LBS
CENTER KICKER WHEEL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
TRANSPORT LIGHTING	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
WHEEL RAKE SUSPENSION	INDEPENDENT "BEE HIVE" SPRING			
GROUND PRESSURE RAKE WHEEL ADJUST	NUT/THREAD ROD FOR FINE TUNING			
HYDRAULIC REAR WINDROW ADJUST	OPTIONAL - ADDITIONAL REMOTE NEEDED			
HYDRAULIC REQUIREMENTS	1 DOUBLE ACTING CYLINDER FOR FOLDING - 1 DOUBLE ACTING CYLINDER FOR RAKE WHEEL LIFT			

7100 SERIES HD RAKES

INTRODUCING NEW H&S HC7116 WHEEL RAKE

AVAILABLE IN
16 & 18 WHEEL MODELS

• Adjustable
Cleviss
Height
Hitch

• Hydraulic
Hoses with
Tips

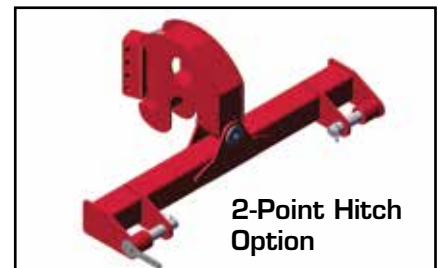
• Hydraulic Raise/Lower
Independent Rake Wheel
Torsion Style Suspension

• Single Point Rake
WheelDown-Pressure
Adjustment on each
Rake Beam

**60" Rake Wheels w/18 Sets
of Rubber Mounted Teeth (HDII style)
for handling tougher crops such as
corn stalks, or high tonnage forage.**



Rear Limited Oscillating Offset Tandem Axle



MODEL	HC7116
NUMBER OF WHEELS	16
WHEEL DIAMETER	60"
TEETH PER WHEEL	18 sets of 2 = 36
RAKING WHEEL HUBS	TAPERED BEARINGS
RAKE WHEEL SUSPENSION	Independent Rake Wheel Suspension w/Buffered Compression Spring System
NUMBER OF RAKING POSITIONS	7
GROUND PRESSURE RAKE WHEEL ADJUSTMENT	Nut/Threaded Rod for fine tuning
WINDROW WIDTH ADJUSTMENT	RACHET JACK
RAKE WHEEL WIND PANELS	STANDARD
HITCH JACK	STANDARD
HYDRAULIC REQUIREMENTS	1 Double Acting Cylinder for Folding 1 Double Acting Cylinder for Rake Wheel Lift.
FRONT GAUGE WHEELS	2 - IF240/80R15IMP
TANDEM REAR TRANSPORT WHEELS	4 - IF240/80R15IMP
(2) FRONT WHEEL ADD-ON KIT	OPTIONAL
SET OF (2) FRONT CASTER WHEELS	OPTIONAL
CENTER KICKER WHEEL	OPTIONAL
HYDRAULIC REAR WINDOW ADJUSTMENT	OPTIONAL - 3rd Hyd. Remote Needed
HIGHWAY & WORK LIGHTING	OPTIONAL
2- POINT HITCH	OPTIONAL

An **Optional**
3-wheel
Center Kicker
is available.



8100 SERIES HDII RAKE

- The windrow width can be adjusted hydraulically to a maximum of 72". One hydraulic remote along with the electrical control box, controls all functions of the rake.
- Because of the offset of the rake wheel beams, there is no need for center kicker wheels.

5"x7" Overhead Mainframe

- Each side opens independently.

4 SIZES TO CHOOSE FROM! 17, 18, 19 or 20 WHEELS

- Heavy **angle** iron gussets for superior strength.

- Heavy **channel** iron outer ring.

- UV treated poly wind panels and an over center wheel stop.

- Adjustable rake wheel ground pressure.

- Rake beams with a variable adjustment to set the rake wheels straight or in a tilted setting up to 10°. (patented)

- Heavy Duty tapered roller bearings are used in each HDII rake arm.

Torsional Dampening Springs

- Torsional dampening springs allow the rake wheels to roll smoothly over the terrain.

Tractor Mounted Control Box



The rake wheels may be lifted independently left or right or both at the same time with the master switch.



- Lift pipes slide in oil impregnated bronze bushings and also feature a lock for transportation.

- Standard anti-wrap hay guards.

NUMBER OF WHEELS	17	18	19	20
WHEEL DIAMETER	60"	60"	60"	60"
TEETH PER WHEEL	38	38	38	38
TEETH	RUBBER MOUNTED IN A SET OF 2	RUBBER MOUNTED IN A SET OF 2	RUBBER MOUNTED IN A SET OF 2	RUBBER MOUNTED IN A SET OF 2
TRANSPORT WIDTH	12' 3"	13' 3"	12' 3"	13' 3"
TRANSPORT LENGTH	28' 3"	30' 9"	30' 4"	32' 9"
MAXIMUM RAKING WIDTH	30' 3"	31' 3"	33' 3"	34' 3"
RAKE WHEEL HUBS	TAPERED BEARINGS	TAPERED BEARINGS	TAPERED BEARINGS	TAPERED BEARINGS
HITCH JACK	STANDARD	STANDARD	STANDARD	STANDARD
TAIL & WORK LIGHTS	STANDARD	STANDARD	STANDARD	STANDARD
TIRES	IF240/80R15IMP	IF240/80R15IMP	IF240/80R15IMP	IF240/80R15IMP

STRONG HERITAGE

STRONG PEOPLE

STRONGER FUTURE!

For over 50 years, H&S Manufacturing has made life better. Our team is committed to building long-lasting relationships and high performance machinery. As we continue to grow and move forward we want you to farm smarter with our most reliable and innovative farming equipment.

H&S is proud to be American Made!



Warranty: See operators manual for warranty details and limitations. H&S reserves the right to change its products or the description at any time without notice or obligation.

Models and specifications are subject to change without prior notice.

10/19 4M



H&S MANUFACTURING

2608 S. Hume Avenue
Telephone (715) 387-3414
FAX (715) 384-5463 • Website www.hsmfgco.com
MARSHFIELD, WI 54449



H&S WAREHOUSE 10145 Lakeshore Road
P.O. Box 1260 • Telephone (716) 736-7595
FAX (716) 736-7596 • Website www.hsmfgco.com
RIPLEY, NY 14775