

14074

Heartland

4RSPH <sup>W</sup>65" AH

Manufacturing Use Only

AFE Manufacturing Form  
4 Row Self Propelled  
Airhead Harvester

Serial Number: #14074

Customer: Hartland TRSPH65AH

Dealer: Big Iron/Zeck

Standard Equipment:		Special Notes
Full Width Digger Bed	X	
QSM 360 HP Cummins Engine		
4 Wheel Drive	X	
Rear Tires: 6600-43 x 25 Terra		
Front Tires: 1400-24 x 12 Tires		
40" Cross		
Triple 3.0 Electronic Pumps		
MS 50 Rear Motors		
Front Steps		
Strobe Light		
Back-Up Beeper		
<b>Airhead Option</b>		
* 40"		
* 50"		
* 65"	X	
	<b>Options</b>	
<b>Engine</b>		
* QSM-11 Liter 360 HP Cummins		
* QSM-11 Liter 400 HP Cummins		
* 9 Liter- 350 HP John Deere		
* 13.5 Liter 400 HP John Deere		
* QSX-15 Liter 450 HP Cummins		
* QSX-15 Liter 510HP Cummins	X	QSX - 15 LITER 520HP CUMMINS REVERSIBLE PITCH FAN BLADE
* 13.5 Liter 450 John Deere		
* 13.5 Liter 500 John Deere		
<b>Rear Tires</b>		
* 6600-43 x 25 Terra		1000/50 R 25 MICHELIN REAR TIRES
* 73 x 5000-32		RIMS TO HAVE 3/8" BARREL TO HANDLE MS 83 TORQUE, DOUBLE RIM LOCKS AND STRAP
<b>Front Tires:</b>		
* 17.5 x 24		w/ re-inforcement Bands
* 1400 x 24 x 12	X	
* 4800 x 25 x 12		
<b>Steering:</b>		
* No Rear Steering		
* 37 Degree Rear Steering	X	GPS COMPATABLE STEERING VALVE
<b>Front Wheel Motors:</b>		
* MS 18		
* MS 18 Plus 20% (Required if ordering MS83's)	X	
<b>Rear Wheel Motors:</b>		
* MS 50		
* MS 83 (MS18+20's required w/this option)	X	
<b>Row Spacing</b>		
* 32" with 30" chain		
* 34" with 32" chain		
* 36" with double wide chain		

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* 36" with 33" chain	X	
* 36" with 34" chain		
* 36" with Double wide chain		
* 38" with 36" chain		
<b>Digger Blade Bracket</b>		
* Standard		
* Rock Guard	X	
<b>Digger Blades</b>		
* Regular Straight		
* Extended Straight		
* Clod Blades		
* Sand Blades	X	
* Full Width Solid Blade ¾" x 12"		
* Regular Straight w/ Plastic Under		
* Full Width Solid ¾" X 12 w/ Bevel		
* Full Width Solid ¾" X 12 w/ Rod		
* Extended Straight w/Plastic Under	X	
<b>Center Blades</b>		
* 12"	X	15 INCH POINTS
* 15"		
<b>Primary Bed</b>		
* Full Width Common Lift	X	
* Full Width Side to Side Control		
<b>Primary Drive</b>		
*Top Drive	X	DOUBLE CUT KEYS ON PRIMARY SHAFT
* Reverse Drive		180 DEGREE APART
		LARGE REVERSING VALVES
<b>Primary Bed Chains</b>		
* Single Width Belted	X	
* Double Width Belted		
* Double Width Belted w/Double Belt Center		
<b>Primary Belted Chains</b>		
* 45 mm All Straight Belted Chains		
* 45 mm 2 Down & 1 Straight Belted Chains	X	NOFFSINGER 1/2X33
* 50 mm All Straight Belted Chains		
* 50 mm 2 Down & 1 Straight Belted Chains		
* 50 mm 1 Up & 2 Down Belted Chains		
* 56 mm All Straight Belted Chains		
<b>Secondary Bed Chains</b>		
* Single Belted SRT		
* Full Belted SRT	X	
<b>Secondary Belted Chains</b>		
* 45 mm All Straight SRT	X	7/16" X 68 X 45MM BROEKEMA
* 45 mm 2 Down & 1 Straight SRT		
* 50 mm All Straight SRT		
* 50 mm 2 Down & 1 Straight SRT		
<b>2nd Secondary</b>		
* No 2nd Secondary		

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Dealer: \_\_\_\_\_

* 2nd Secondary Belted Chain		
<b>2nd Secondary Belted Chain Width</b>		
* No Second Secondary		
* Single Belted Chains		
* Full Belted SRT		
<b>2nd Secondary Belted Chains</b>		
* No 2nd Secondary		
* 45mm All Straight SRT		
* 45mm 2 Down & 1 Straight SRT		
* 50mm All Straight SRT		
* 50mm 2 Down & 1 Straight SRT		
<b>2nd Secondary Star Table Options</b>		ALL 13 POINT BROEKEMA STARS
* No Star Table Option		5-1/2" STEEL ROLLERS, MANUAL VALVES 1
* 5 Stars with Distributor Stars on Cross		REVERSE STARS IN CAB CONTROL FOR
* 6 Stars with 2 Adjustable Smooth Roll and Distributing stars on cross, extra star roll on left	X	SPEED AND SPACING
<b>Primary Gear Box Option</b>		
* 6,000 Hydraulic Motor w/Chain		
* 6,000 Hydraulic Motor w/Gear Box		
* VIS Direct Drive Motor	X	IN CAB SPEED CONTROL
<b>Secondary Gear Box Option</b>		
* 6,000 Hydraulic Motor w/Chain		
* 6,000 Hydraulic Motor w/Gear Box	X	IN CAB SPEED CONTROL
<b>2nd Secondary Drive Option</b>		
* No Secondary		
* 6,000 Hydraulic Motor w/Chain		
* 6,000 Hydraulic Motor w/Gear Box	X	
<b>Deviner Drive Option</b>		
* 6,000 Hydraulic Motor w/ Chain		
* 6,000 Hydraulic Motor w/ Gear Box	X	
<b>Reversing Valve Option</b>		
* No Reversing Valves		
* Primary	X	LARGE REVERSING VALVE
* Secondary-Deviner	X	
* 2nd Secondary	X	
<b>Vibrator</b>		
* No Vibrator		
* Rotating Hydraulic Shaker Primary		
* Rocking Hydraulic Shaker Primary		
* Rotating Hydraulic Shaker Secondary		
* Lift in Shaker	X	TRIANGLE BROEKEMA TEETH SHAKER MUST BE WITHIN 1/4" OF WEBBING
<b>Override Chain</b>		
*150 mm	X	5/8"X 68 X 150MM BROEKEMA STRAIGHT CUSHION
*180 mm		
*200 mm		
<b>Vine Coulters</b>		

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* Double Disk Coulters	X	
* Kickers		
<b>Bulk Loader</b>		
* 35"		
* 40"	X	
<b>Bulk Loader Chain</b>		7/16"X40X36MM BROEKEMA STRAIGHT
*40 mm All Straight SRT		CUSHION
*45 mm All Straight SRT		
<b>Self Leveling System</b>		
* No Leveling System		
* Hydraulic Rear Cross & Side Elevator		
<b>Rear Cross</b>		
* 40" Cross		
* 48" Cross	X	
<b>Rear Cross Chain</b>		
* 40 mm All Straight SRT		
* 45 mm All Straight SRT	X	7/16" X 48 X 45MM BROEKEMA STRAIGHT
<b>Rear Cross Table Option</b>		CUSHION
* No Star Table Chain Only	X	
* Star Table		
<b>Vine Belt Option-Top Side Elevator Return Conveyor</b>		
* No Vine Belt		
* 40" Vine Belt w/Fan and Distributing Stars		
* 50" Vine Belt w/Fan and Distributing Stars		
* 65" Vine Belt w/Fan and Distributing Stars	X	
* No Stars or Steel Rolls feeding Vinebelt		
<b>Lower Side Elevator AFE Star Table</b>		
* No AFE Star Table	X	
* AFE Star Table		
<b>M-Table</b>		
* No M-Table Option	X	
* 40" with Dist Stars		
* 50" with Dist Stars		
* 65" with Dist Stars		
<b>Sort Table</b>		
* No Sort Table needed if ordering Bin		
* 35"		
* 40"		
<b>Sort Table Belted Chain</b>		
* No Belted Chain		
* 45mm All Straight SRT		
* 50mm All Straight SRT		
<b>Bin</b>		IN CAB SPEED CONROL WITH EXTRA
* No Bin		SWITCH TO SHUT OFF BOOM AND TUB
* Bin with In Tank Fill Conveyor and Sonic	X	TO BE ATTACHED TO JOY STICK
Control 35" Conveyor in Tank		INSTALL BIN DISCHARGE GATE (AJST)
* 40" Conveyor in Bin	X	HEARTLAND STYLE TUB W/ C SECTION BE

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Dealer: \_\_\_\_\_

* Flights on Bin Belt, "V" shaped every 24"		FLAT BELT
<b>Flow Controls</b>		
* Flow Control, Actuator & Switch in Cab		
* Actuator and Switch in Cab (providing actuator is already there)		
* Flow Control only, manually operated		
<b>Multi-Sep Table</b>		
* Distribution Stars onto Sorting Table, Hydraulic Adjust up/down, Reversing Valves w/ Speed Control from Cab		
* 60"		
* 72"		
<b>Fold Over Stone Box (outside half)</b>		
<b>Primary Plates:</b> 4" extensions on outside		
<b>Plat Form Behind Vinebelt</b>		
<b>Plat Form by Stone Box</b>		
<b>Plat Form by Stone Conveyor</b>		
<b>Stone Conveyor Chain</b>		IN CAB SPEED CONTROL
* Belted		
* Hooked	X	7/16" X 14X1.25 HOOK
<b>Stone Conveyor Floor</b>	?	LOOKING FOR NEW IDEA
* Solid		ROLLER IN FRONT OF PLASTIC ON ROCK CHAIN
* Solid w/Open Under Airhead		
* Open w/Pan on Bottom		
<b>Seat by Stone Conveyor</b>		
<b>Extra Foot Control for Truck Directions</b>		
<b>Stainless Steel on Primary, Welded to Outside</b>	X	ALL THE WAY UP SIDES
<b>Camera System: Colored, 3 Camera's</b>		
<b>Deflector for Airhead Discharge</b>		
<b>Airhead Leveling</b>		
* Mechanical		
* Electrical	X	
<b>Removable Sand Pans on Primary</b>		
<b>12" Lift for Cab</b>	X	MOVE CAB BACK TO OPEN VIEW OF AFE TABLE
<b>Hydraulic Gauges</b>		
* Mechanical	X	
* Electrical		

**Comments:**

SECONDDAYS  
RUBBER COATED CARRY BACK ROLLERS  
4 SPROCKETS ON DRIVE  
DOUBLE CUT KEYS  
ELECTRONIC PUMP  
IN CAB SPEED CONTROL

PRIMARYS

SMALL NOSE ROLLERS R4FBRSU2  
12TOOTH SPROCKETS  
ANTI-WRAP BARS ON PRIMARY SHAFT  
ELECTRONIC PUMPS  
DIGGER BLADE IN BOTTOM,BOTTOM HOL  
1 BEARING ON DRIVE SHAFT IN CENTER  
(TRIPPLE SEALED)  
PIVOT POINT ROLLER R41NSDBB2

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Dealer: \_\_\_\_\_

Estimated Delivery Date:
Customer:
Dealer:
Manufacturer:

Please Indicate Noffsinger or Broekema (N=Noffsinger / B=Broekema)

Mfg.	Chain/Location	Qty	Rod Size	Width	MM	LPR	Pattern	Covering
	Primary							
	Secondary							
	Deviner							
	Cross							
	Side							
	BulkLoader							
	Bin Fill							


# Comments

## Vine Chain

- 1. Large Flange rollers on Return by rear Cross Bolt on Sprockets
- outside speed control tied w/ secondary Snap rollers
- Heavier Chain on Snap Rollers
- Double rollers on front Rollers and Rear Rollers
- Anti-wrap rollers by Sprockets

## AFE Table

- clean up and cover bearings
- Clean up and cover ends of shafts to prevent stones from catching
- Pressure switch to tell when AFE table stops
- Fingers should be close to roller

## Rear Cross

- Boil rear cross so it has enough tilt Adjustme
- Speed control on outside of cab by centre
- For Dist. Stars
- Pressure switch
- Rear cross delivery onto dist. stars should be level.
- No side on rear cross underneath AFE
- Table rollers on short side



## Top Stars

outside Flow Control

13 point Broekema

## Porcupine belt

Actuator for tilt act. in Cab

Outside Flow Control

Reversible

New style Carry Fan

Fan on Seperate Switch not tied to Master

## Bin Load

Out Side Flow Control

14 tooth terag sprockets

Rollers Instead of Slides up to pivot point

Green Tronix Yield Mapping

Lower Drive Shaft to Accomodate yield map

# Tub

Heavier Hinges on Boom Flaps  
Longer & heavier

# Boom

7/16<sup>th</sup> x 40 x 36mm Brockway Str Wash

14 tooth terag sprockets

In cab speed control with extra  
Switch

14" Sides

Move hydraulic lines where tub  
dumps onto boom so it doesn't  
Build up with Dirt.

NO Pan Under Boom

Agust Rollers on end by Sprockets

Green tronix Rite Height Boom System  
2 different speed controls

# Hervester

350 Gallon Fuel Tank

All light on Machine Gap Approx

200 Amp Solenoids on light circuit

Block Heater

Large Hole Grating.

Climate Control

Rear discharge on engine  
exhaust.

Noffsinger Clips on All Chains (Bolted)

Front Steps

Controlled by Rite-Height on Auto- # 3 switch on manual

## Harvester Checklist

### Other options included

- 1) QSX -15 520HP Cummins engine
- 2) Reversible pitch radiator fan blade
- 3) MS83 Wheel motors
- 4) 1000/50 R 25 Michelin rear tires
- 5) Rims to have 3/8" barrels to handle increased torque of MS 83's
- 6) Double rim locks-and strap
- 7) MS18 plus 20 front wheel motors- Thick plates
- 8) 1400x24x12 Front tires
- 9) 4 Wheel drive
- 10) 37 degree rear axle
- 11) Front steps
- 12) Noffsinger clips on all chains ( Bolted)
- 13) Extra master & boom switch wired in to be attached  
to joystick-boom and bin switch must be independent of master
- 14) Raise cab up
- 15) Move cab back to open up view of AFE table
- 16) 350 gallon fuel tank
- 18) Layout of switches in cab to be approved.
- 19) All lights on machine to be Gap certifiable
- 20) Light on left side by fan to illuminate rows when turning (separate switch)
- 21) 200 amp solenoids on light circuits
- 22) Better quality lights-Lights on our last machine filled with water
- 22) Better quality chain on fan gates- stainless?
- 23) Mechanical guages
- 24) Address electrical issues with cannon plugs
- 25) Block heater
- 26) Fused power and ground station in cab for accessories per Heartland specs..
- 27) Large hole grating on walkway by cab.
- 28) Monitor mount in cab ( 1- Trimble FMX,2-Greentronics )
- 29) GPS compatible steering valve
- 30) Climate control
- 31) Rear discharge on engine exhaust pipe

# Harvester Checklist

Updated 12/6/2013

## Primaries

- 1) Small nose roller R4FBRSU2
- 2) Plastic under blades
- 3) Stainless all the way up sides
- 4) Top drive
- 5) Double cut keys on primary shaft 180 degrees apart
- 6) VIS Motors
- 7) 12 Tooth sprockets
- 8) Large Reversing valve
- 9) Anti-wrap bars on primary shaft
- 10) Electronic Pumps
- 11) Digger blade in bottom , bottom holes
- 12) In cab speed control
- 13) 1 bearing on drive shaft in center Triple sealed
- 14) Double disc coulters
- 15) Mechanical lift shakers- Triangle broekema  
Teeth of shaker must be within 1/4" of webbing  
Shaker should not turn when in down position-might have to add roller
- 16) 1/2 x 33 x 45mm Noffsinger 2dn 1st
- 17) 15 inch points 12 inch blades
- 18) Pivot point rollers R41NSDBB2
- 19) Rock guard
- 20) 3 1/4" stand-offs on primary carrybacks
- 21) Extensions on sides of digger bed to facilitate better flow (long nose)
- 22) Digger bed lift chains mounted on outside to prevent hangups.

## Secondaries

- 1) Rubber coated carry back rollers
- 2) 4 Sprockets on drive
- 3) Double cut keys
- 4) Electronic pump
- 5) Reversing valve
- 6) Gearbox drive
- 7) In cab speed control
- 8) 7/16 x 68 x 45mm Broekema all straight-cushion
- 9) Make sure middle brace has matching holes for bottom rollers

## Vine Chain

- 1) Gearbox drive
- 2) Large flange rollers on return by rear cross
- 3) Bolt on sprockets
- 4) Outside speed control tied with secondary
- 5) Snap rollers
- 6) 5/8 x 68 x 150mm Broekema straight-cushion
- 7) Heartland's first roller on Vine chain is in different spot
- 8) Heavier chain on snap roller
- 9) Double rollers on front rollers
- 10) Double rollers on rear rollers
- 11) Anti-wrap rollers by sprockets

## Harvester Checklist

### AFE Table

- 1) Clean up and cover center bearings
- 2) Clean up and cover ends of shafts as to prevent small stones from getting caught
- 3) Install pressure switch or shaft monitor so you know when AFE table stops
- 4) In cab speed and spacing control
- 5) All 13 point Broekema stars
- 6) Last roller to be centered over edge rear cross-potatoes should drop on chain-not webbing
- 7) 5-1/2" steel rollers
- 8) No end caps on AFE table. Want fingers as close as possible to sides so there are no big holes,. Especially by steel rollers.
- 9) Manual valves to reverse stars
- 10) Easier removal of shafts for star replacement
- 11) Steel roller diameter? Finger should be close to rollers.

## Harvester Checklist

### Rear cross

- 1) Build cross so it has enough tilt adjustment-we added 5" on last machine
- 2) Speed control outside of cab located by control for Dist stars
- 3) Pressure switch
- 4) Rear cross delivery onto dist stars should be level
- 5) 7/16 x 48 x 45mm Broekema straight- cushion
- 6) Relocate 1 cross brace underneath dist rolls so rocks can't get caught
- 7) No side on rear cross where it is underneath AFE table on right side of machine.
- 8) Install split pipe on top of the side underneath AFE table rollers on short side
- 9) Adjustable front and back position. ( 4 inches )

### Distribution rollers

- 1) Big shafts with big bearings
- 2) 13 point Broekema stars
- 3) In cab speed control
- 4) Length and placement of rollers per specs

### Bottom side elevator

- 1) 4 sprockets on drive shaft
- 2) In cab speed control
- 3) 7/16 x 65 x 45mm Broekema straight- cushion

### Top side elevator

- 1) 4 sprockets on drive shaft
- 2) In cab speed control
- 3) 7/16 x 65 x 45mm Broekema 5 DN Cushion - 1 STR Cushion

### Airhead

- 1) Electronic pump
- 2) Bell cleaner
- 3) In cab fan RPM readout
- 4) Electronic leveling
- 5) 65"
- 6) 3 inch cylinder on bell and band cleaner
- 7) Use 4-R4FBRS2 behind bell cleaner

# Harvester Checklist

## Stone conveyor

- 1) 7/16 x 14 x 1.25 hook
- 2) In cab speed control
- 3) New idea on bottom tray or no tray
- 4) Rollers in front of plastic on rock chain

## Top stars

- 1) Outside flow control
- 2) 13 point broekema
- 3) Make sure side elevator straight rods are within 1/16" of stars

## Porcupine belt

- 1) Actuator for tilt adjustable in cab
- 2) New style in feed with 2 star rollers and small tube.
- 3) 13 point Broekema stars
- 4) Outside flow control
- 5) Reversible
- 6) New style Crary fan
- 7) Fan on separate switch not tied to master

## Distribution rollers

- 1) Outside flow control
- 2) 13 point Broekema stars
- 3) Close gaps where potatoes discharge onto bin fill conveyor

## Bin load

- 1) Outside flow control
- 2) 7/16 x 40 x 36mm Broekema straight- cushion
- 3) 14 tooth terrog sprockets
- 4) When bin fill conveyor is all the way down it should be 1" from hitting any part of the tub
- 5) Yield mapping components-Greentronics- (\$5139.00 my last price )
- 6) Rollers instead of slides up to pivot point
- 7) Sides of conveyor need to close so potatoes can't fall through
- 8) Lower drive shaft so load cells have more clearance

## Tub

- 1) Flat Belt w/C section
- 2) In cab speed control with extra switch to shut off boom and tub to be attached to joy stick
- 3) Heartland style tub
- 4) Front roller (drive) should be able to just flip over with keyways on both ends
- 5) Install bin discharge gate ( adjustable )
- 6) Heavier hinges on boom flaps

## Boom

- 1) 7/16 x 40 x 36mm Broekema straight- cushion
- 2) 14 tooth terrog Sprockets
- 3) In cab speed control with extra switch
- 4) 14" sides
- 5) Move hydraulic lines where tub dumps onto boom so it doesn't build up with dirt

- 6) No pan under boom
- 7) Conduit for lights and Rite-Height needs to be bigger, heavier and hidden to protect it from truck contact.
- 8) Adjustable rollers on end by sprockets
- 9) Greentronics Rite-Height system on boom ( 2 different oil flows )  
My last price \$ 4050.00
- 10) 2 different speed controls on lift. Auto (slow) for control by sensors. Manual (fast) for override.