

X-tended Reach
12 & 22 Series Single Auger Grain Cart



GREATER

— And Straighter —

Upward, Outward & Forward Reach



12 SERIES MODELS 812 • 1012 • 1112 • 1312 • 1412 22 SERIES MODELS 1122 • 1222 • 1522



GREATER

— And Straighter —

Upward, Outward & Forward Reach

J&M introduces the new 12 & 22 Series X-Tended Reach Grain Carts, available in 875-1,500 bushel capacities. The new X-Tended Reach models offer greater and straighter, upward, outward and forward reach. The in-line auger design eliminates the need for costly and problematic u-joint and soft-start type connectors, allowing the grain to quickly travel straight from lower to upper auger, transferring grain efficiently and reliably from the cart to the semi.

The 12 Series carts have a standard 12 ft wide tank design while the 22 Series carts have a patented leaner tank design that extends the low side of the cart an extra two feet towards the combine. The new 20" Bullet Auger unloads 600+ bushels per minute, the same rate as a larger 22" auger. Both 12 and 22 Series carts feature a unique three part telescoping flow control spout with a quick attach design that provides various height and reach combinations to meet your specific unloading demands. Easily reach the tallest semi trailers and across ditches and fence rows while still having the forward reach to give the operator the closest and clearest view of the auger during unloading.





Unload Position



Field Position



Storage Position

FRONT FOLD DESIGN

“100% Visibility”

Since we were awarded a patent for our front folding corner auger design over 20 years ago, some competitors have described their side folding auger carts using the terms “Corner Auger Design”, “Corner-Like” and “100% Visibility”. We believe this is a creative marketing ploy to try and convince the end user that they offer the operator the same visibility of the upper auger as our patented design. Don’t be fooled by side folding auger carts that use these terms. Many of the side folding augers barely extend past the front of the tank, placing the unloading spout further away from the tractor cab. Ironically, some of the side folding auger designs also provide an “Upper Auger Indicator” on the front of the cart so the operator can tell where the auger is when they fold it in the storage position. If it provides 100% visibility, why do they need an auger indicator??

Designed with the operator in mind, J&M’s Front Folding Corner Auger design offers 100% Visibility of the upper auger during unloading AND during the folding sequence, giving the operator a closer, clearer view when unloading grain.

Excellent Cleanout

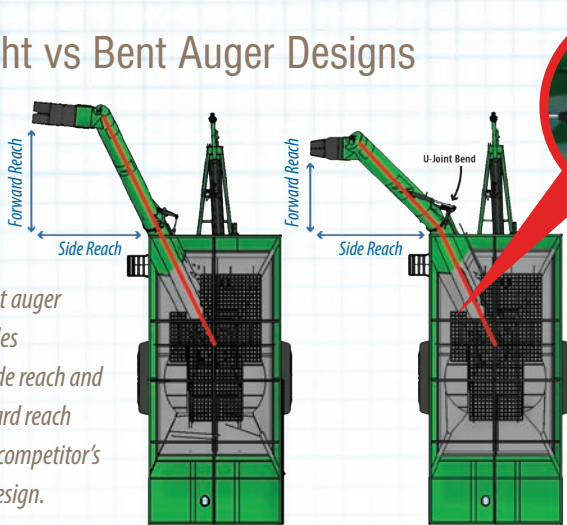
All J&M grain carts have built a solid reputation for excellent cleanout... even in high moisture grain. The secret is in the tank design, allowing the grain to enter the sump at different speeds. This creates a boiling effect that prevents bridging in high moisture grains.





Straight vs Bent Auger Designs

J&M's straight auger design provides equivalent side reach and greater forward reach compared to competitor's bent auger design.



In-Line Auger Design is much more efficient and reliable compared to an offset auger design. No u-joint coupling or cushion arm required. Grain is not redirected, ensuring better transfer of grain and auger cleanout. The in-line auger design eliminates the need for costly and problematic u-joint and soft-start type connectors, allowing the grain to quickly travel straight from lower to upper auger.

Industry Best Bearing Rating

Some competitors are using liberal claims in their brochures such as "Industry Best Bearing Ratings" to describe their gearboxes, claiming bearing ratings of 3,000 lbs to 6,000 lbs. They must not be comparing them to J&M heavy duty gearboxes, which have stronger inner and outer bearing ratings of 6,900 lbs and 7,000 lbs.



Heavy-Duty Gearbox

Dynamic gearbox ratings have been the industry standard for years, but recently, some competitors have been using Static ratings in an attempt, we believe, to make their gearboxes appear stronger. Dynamic ratings are calculated when the gearbox is under rotation, or in use. Static ratings are calculated when components rotate at very slow speeds and when heavy shock loads of short duration act on the rotating components. A different rating calculation that produces a higher horsepower number does not change the strength of the gearbox. . . it only makes it appear to the unknowing consumer that it is better, when in fact, it may not be. Don't be fooled by misleading HP ratings.

From a web article on "How to Calculate Dynamic and Static Load Ratings", by Power Transmission Engineering: "It is important that the end user develop a keen understanding of how capacity ratings and subsequent life calculations are generated in order to make a true comparison, or be left to comparing the claims of well-heeled marketing departments."



J&M Heavy-Duty Gearbox 362 HP Static/168 HP Dynamic

Telescoping Side-Shooter™ Flow Control Spout™

The patented hydraulic flow control spout allows the operator to precisely place grain across the trailer. The Side-Shooter design positions the spout perpendicular to the trailer so all four corners can be easily filled!

The telescoping spout features a three part design that extends outward for maximum side reach and retracts when in the downward position to maintain maximum unloading height. Each of the three sections can be easily removed or added to offer multiple combinations of height and reach to fit your particular unloading need.



V-Truss Axles & Oversized Spindles

Competitor grain cart axles feature small tubular steel that is prone to bending or I-beam designs that are prone to twisting. This can put premature stress on the rest of the cart. J&M's exclusive V-Truss axles are designed using heavy-duty tubular steel with a reinforced V-Truss design to resist both bending and twisting, protecting the cart from premature wear & tear.

J&M also uses larger hubs, bearings and 6" spindles compared to competitor's smaller 4 1/2" spindles to handle the heaviest demands year after year. The difference in tensile and yield strength between J&M's "1144" steel versus the "Stress-Proof" material competitors use is small when measured per square inch. However, the difference in cross sectional area between a J&M 6" diameter spindle and a competitor's 4 1/2" diameter spindle is substantial. J&M's larger spindles provide 78% more material to ensure your grain cart will perform under your toughest demands, year after year.

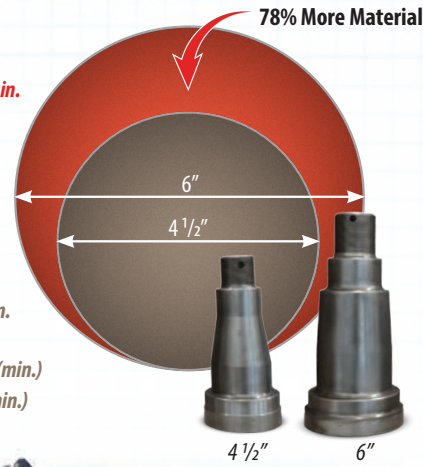
A lightweight fighter may be slightly stronger pound for pound, but when you put him against a heavy weight fighter that is 78% larger, the advantage will always go to the heavy weight with both **STRENGTH AND SIZE!**



V-TRUSS axle

J&M Spindle (Orange)
Diameter = 6 inches
Cross Sectional Area = 28.26 sq in.
Material = 1144 Steel
Tensile Strength = 120,000 psi
Yield Strength = 110,000 psi

Competitor Spindle (Brown)
Diameter = 4 1/2 inches
Cross Sectional Area = 15.9 sq in.
Material = "Stress Proof" Steel
Tensile Strength = 125,000 psi (min.)
Yield Strength = 100,000 psi (min.)





Single Wheel Option

Single Wheels come in many choices of tire sizes, widths and treads to meet your farming demands.

Dual Walking Tandem Wheel Option

The oversized wheel pivot pin reduces stress during transport, allowing the wheels maximum movement to walk over uneven terrain. Our unique pin and clamp design makes unfortunate tire changes quick and easy compared to hard to align dual pin systems, reducing downtime and expense from costly tire change-overs. Available in 30" or 36" row spacings.



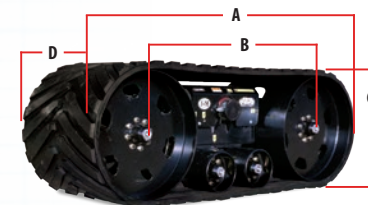
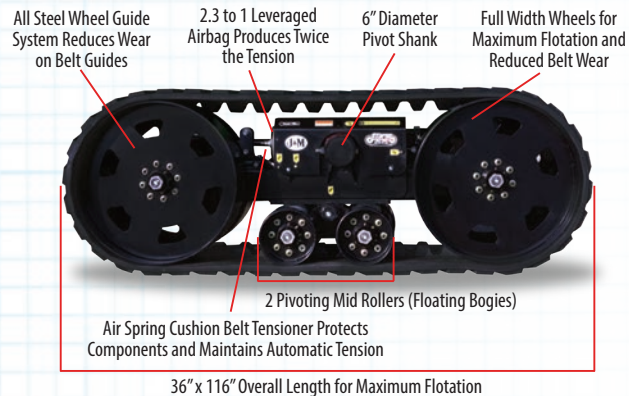
Track Specifications

TRACK SPECIFICATIONS	Storm Tracker	Storm Tracker LT
Belt Width	36"	36"
Wheel/Idler Width	33"	33"
Overall Length	146"	116"
Overall Weight (Tracks Only)	11,350 lbs.	9,950 lbs.
Footprint:		
Size	105" x 36" x 2"	75" x 36" x 2"
Area	7,560 sq. inches	5,400 sq. inches
End Idlers	Steel	Steel
Pivot Shank	6" Diameter	6" Diameter
Mid Rollers (Bogies)	4 Sets (16 total)	2 Sets (8 total)
Pivot Bogey System	Yes	Yes
Air-Spring Cushion Belt Tensioner	Yes	Yes
Leveraged Tension	2.3 to 1	2.3 to 1
Number of Hubs	24	16

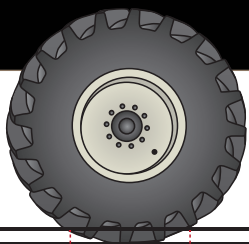
Storm Tracker LT

Maximizing flotation by adding tracks to grain carts is no longer reserved for just the big boys. J&M introduces their new LT Series of Storm Tracker tracks with a smaller footprint for Lower Tonnage capacity grain carts (up to 1,150 bushels).

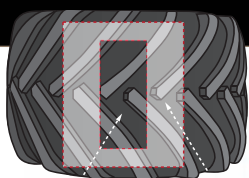
Designed with the same heavy-duty components and innovative design features as the larger tracks, the LT Series offers a cost effective option for mid-size grain carts without compromising quality.



DIMENSIONS
 A) 116"
 B) 75"
 C) 42"
 D) 36"



Flat Plate
3" Ground Penetration



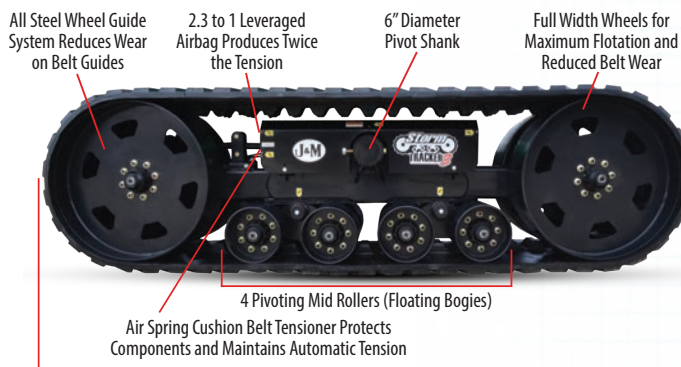
Flat Plate 3" Ground Penetration

3" Versus Flat Plate Ground Pressure Calculations

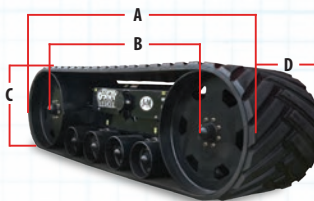
Don't be fooled by the "3" Ground Penetration" compaction ratings used by some competitors. 3" Ground Penetration measures the surface area of the tire after it has sunk 3" into the ground. This allows a much larger surface area and the compaction ratings appear to be better than compaction ratings measured by using the true "Flat Plate". Although some competitors may want you to believe their cart tires provide better flotation, they don't. If the tires are the same size, they will generally have the same surface area and compaction will be the same.

Storm Tracker

Built for grain carts with 1,200 to 1,500 bushel capacities, the Storm Tracker tracks are designed with a belt-wide steel wheel system that utilizes a 6" pivot shank, four pivoting mid-rollers (bogies) and a leveraged air-spring that maintains maximum effective track surface area over uneven terrain. The 36" wide x 146" long belt provides a total footprint of 7,560 square inches, keeping your cart from sinking in wet conditions and reducing your compaction rate between 11.96 to 13.69 pounds per square inch.



36" x 146" Overall Length for Maximum Flotation



DIMENSIONS
A) 146"
B) 105"
C) 42"
D) 36"

Ground Pressure Ratings

Model	Tire Size (Qty)	Flat Plate		3"
		Total Footprint Sq. Inch	Lbs. per Sq. Inch	
1522 X-Tended	1250/50R32 (201B LI) Tires (2)	2,746	34.52	22.00
	36" Wide x 146" Storm Tracker® Tracks	7,560	13.69	
1312 X-Tended 1412 X-Tended	1250/50R32 (201B LI) Tires (2)	2,746	31.14	22.00
	520/85R42 Tires (162 LI) (4)	1,760	50.28	
	36" Wide x 146" Storm Tracker® Tracks	7,560	12.20	
1222 X-Tended	1250/50R32 (201B LI) Tires (2)	2,746	29.28	17.00
	76x50.00 Tires (20 ply) (2)	1,930	41.66	
	520/85R42 Tires (162 LI) (4)	1,760	46.99	
	36" Wide x 146" Storm Tracker® Tracks	7,560	11.96	
1112 X-Tended 1122 X-Tended	1250/50R32 (201B LI) Tires (2)	2,746	26.69	17.00
	1050/50R32 Tires (185LI) (2)	1,680	43.63	
	900/60R32 Tires (193LI) (2)	1,208	60.68	
	520/85R42 Tires (162 LI) (4)	1,760	42.95	
	36" Wide x 116" LT Storm Tracker® Tracks	5,400	14.94	
	36" Wide x 146" Storm Tracker® Tracks	7,560	10.67	
1012 X-Tended	1250/50R32 (201B LI) Tires (2)	2,746	24.65	15.00
	1050/50R32 Tires (185LI) (2)	1,680	40.30	
	900/60R32 Tires (176 LI) (2)	1,208	56.04	
	520/85R42 Tires (162 LI) (4)	1,760	39.77	
	36" Wide x 116" LT Storm Tracker® Tracks	5,400	13.91	
	36" Wide x 146" Storm Tracker® Tracks	7,560	9.93	
812 X-Tended	900/60R32 Tires (176LI) (2)	1,208	45.12	21.00
	30.5x32 Lug Tires (2)	900	60.56	
	24.5x32 Diamond Tires (16 ply) (2)	780	69.87	
	36" Wide x 116" LT Storm Tracker® Tracks	5,400	11.48	



J&M iFarm Plus by Agrimatics™

J&M iFarm Plus by Agrimatics™ is the leading edge of agricultural weighing systems. The patent pending system can connect wirelessly to any compatible in-range mobile device providing world-class indicator displays to the entire team. iFarm Plus is simple to install with a long-lasting battery to easily get you through the harvest or planting season. Our rugged design can handle extreme temperatures, vibrations, mud, sun, rain and snow.

- Uses your mobile device as an advanced scale indicator and harvest data manager
- App based software with free updates
- Multiple users
- Moisture sensor option
- Auto gate option*
- Cloud based storage option
- Powered from tractor with battery back-up



**Must purchase optional solenoid package (IFM-GS-1P)*



5-Point Electronic Weigh System

As grain carts get larger, so do the tires that are under the carts. When tires reach a certain width, the 3-Point Scale Systems start to lose accuracy. J&M uses a 5-Point Scale System to ensure our scales stay accurate within 1/2 percent.

12 & 22 Series X-tended Reach Single Auger Grain Cart



GT400

BASE INDICATORS	Digi-Star GT400
Start/Stop Operation	Yes
Field Data Storage	1 Line
Print Ready	Yes
Serial Port	Yes
USB Downloader Kit	Available



GT560



2060



iFarm™ Plus

UPGRADED INDICATORS	Digi-Star GT560	Weigh-Tronix 2060	iFarm Plus
Auto Unload Detect	Yes	Yes	Yes
Field Data Storage	Yes	Yes	Yes
USB Data Transfer	Yes	Yes	No
Built-in Email & Cloud	No	No	Yes
Software Updates	No	USB	Over The Air
Auto Gate Shut Off Ready	Yes	Yes	Yes
iOS/Android Compatible	Yes*	No	Yes
Desktop Software	Included	Included	Free Web Base
Cloud Storage	Yes*	No	Yes

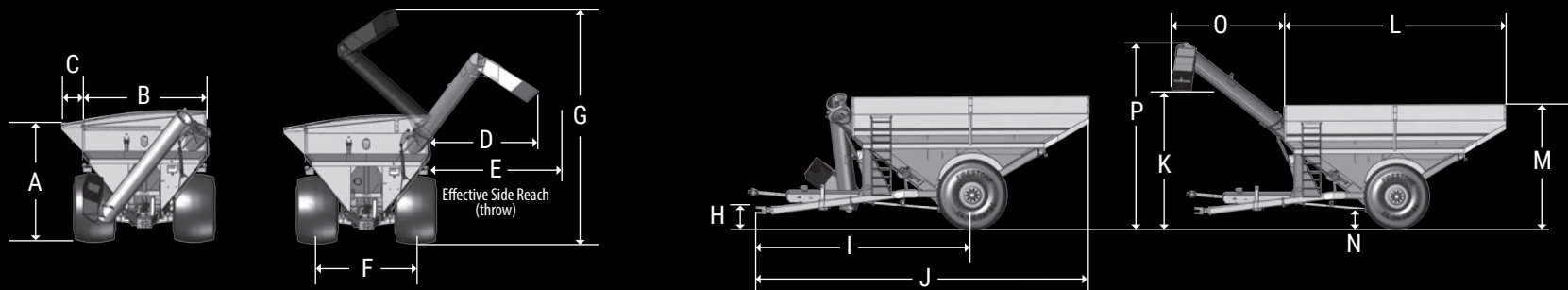
* ERM WiFi Module Required





12 Series Specifications

SPECIFICATIONS					
Single Wheel Option	Model 812	Model 1012	Model 1112	Model 1312	Model 1412
Capacity	875 Bushels	1,025 Bushels	1,150 Bushels	1,325 Bushels	1,400 Bushels
Auger, One Vertical	18" Bullet	20" Bullet	20" Bullet	20" Bullet	20" Bullet
Unload Time (bu/min)	500 Bushels	600+ Bushels	600+ Bushels	600+ Bushels	600+ Bushels
Wheels (2)	21x32, 27x32, 30x32, or 25x36	30x32, 31x32, 32x36 or 44x32	30x32, 32x36 or 44x32	44x32	44x32
Tires (2)	24.5x32, 30.5x32, 800/60R32, 900/60R32 or 66x43.00	900/60R32, 35.5x32, 1050/50R32, or 1250/50R32	900/60R32, 1050/50R32, or 1250/50R32	1250/50R32	1250/50R32
Hubs (2)	10 Bolt	10 Bolt	10 Bolt or 20 Bolt	10 Bolt or 20 Bolt	10 Bolt or 20 Bolt
Spindles (2)	4 1/2" (Stress-Proof)	4 1/2" (Stress-Proof)	6" Diameter	6" Diameter	6" Diameter
Tongue Weight					
Empty	1,275 lbs.	2,900 lbs.	2,900 lbs.	2,400 lbs.	2,400 lbs.
Loaded	3,800 lbs.	4,200 lbs.	4,200 lbs.	4,800 lbs.	4,800 lbs.
Total Weight (approx.)	9,300 lbs.	12,900 lbs.	13,500 lbs.	16,100 lbs.	16,300 lbs.
Walking Tandem Dual Wheels Option					
Capacity		1,000 Bushels	1,125 Bushels	1,300 Bushels	1,375 Bushels
Wheels (4)		16x42, 18x38, 18x42	16x42, 18x38, 18x42	18x42 Heavy	18x42 Heavy
Tires (4)		480/80R42, 520/85R38 or 520/85R42	480/80R42, 520/85R38 or 520/85R42	520/85R42	520/85R42
Spindles (4)		4 1/2" Diameter	4 1/2" Diameter	4 1/2" Diameter	4 1/2" Diameter
Total Weight (approx.)		16,100 lbs.	16,500 lbs.	19,100 lbs.	19,300 lbs.
Tracks Option					
Capacity	875 Bushels	1,050 Bushels	1,175 Bushels	1,350 Bushels	1,425 Bushels
Total Weight (approx.)	17,300 lbs.	21,300 lbs.	21,700 lbs.	22,800 lbs.	23,000 lbs.
Compaction Rate		9.93 lbs/sq inch	10.67 lbs/sq inch	12.20 lbs/sq inch	12.75 lbs/sq inch
Compaction Rate LT Series	11.48 lbs/sq inch	13.91 lbs/sq inch	14.94 lbs/sq inch		



12 & 22 Series X-tended Reach Single Auger Grain Cart

SPECIFICATIONS			
Single Wheel Option	Model 1122	Model 1222	Model 1522
Capacity	1,130 Bushels	1,250 Bushels	1,475 Bushels
Auger, One Vertical	20" Bullet	20" Bullet	20" Bullet
Unload Time (bu/minutes)	600+ Bushels	600+ Bushels	600+ Bushels
Wheels (2)	30x32, 32x36 or 44x32	44x32	44x32
Tires (2)	900/60R32, 1050/50R32, or 1250/50R32	1250/50R32	1250/50R32
Hubs (2)	10 Bolt or 20 Bolt	10 Bolt or 20 Bolt	20 Bolt
Spindles (2)	6" Diameter	6" Diameter	6" Diameter
Tongue Weight			
Empty	2,900 lbs.	2,900 lbs.	3,000 lbs.
Loaded	4,200 lbs.	4,200 lbs.	4,800 lbs.
Total Weight (approx.)	14,600 lbs.	14,800 lbs.	16,900 lbs.
Walking Tandem Dual Wheels			
Capacity	1,105 Bushels	1,225 Bushels	
Wheels (4)	16x42, 18x38, 18x42	18x42 Heavy	
Tires (4)	480/80R42, 520/85R38 or 520/85R42	520/85R42	
Spindles (4)	4 1/2" Diameter	4 1/2" Diameter	
Total Weight (approx.)	17,600 lbs.	17,800 lbs.	
Tracks Option			
Capacity	1,155 Bushels	1,275 Bushels	1,500 Bushels
Total Weight (approx.)	22,800 lbs.	23,200 lbs.	24,300 lbs.
Compaction Rate	10.67 lbs/sq inch	11.96 lbs/sq inch	13.69 lbs/sq inch
Compaction Rate LT Series	14.94 lbs/sq inch		

	812	1012	1112	1312	1412
A	11'-6"	10'-11"	11'-11"	11'-9"	12'-3"
B	11'-9"	11'-9"	11'-9"	11'-9"	11'-9"
C	NA	NA	NA	NA	NA
D	11'-7"	10'-10"	10'-10"	10'-5"	10'-5"
E	14'-2"	13'-6"	13'-6"	13'-1"	13'-1"
F	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
G	22'-1"	22'-3"	22'-3"	20'-11"	20'-11"
H	1'-7"	1'-6"	1'-6"	1'-6"	1'-6"
I	15'-6"	20'-1"	20'-1"	21'-10"	21'-10"
J	22'-8"	30'-7"	30'-7"	34'-5"	34'-5"
K	13'-10"	13'-6"	13'-6"	13'-6"	13'-6"
L	16'-0"	22'-0"	22'-0"	25'-6"	25'-6"
M	12'-0"	12'-0"	12'-6"	12'-8"	12'-8"
N	1'-5"	1'-5"	1'-5"	1'-5"	1'-5"
O	10'-4"	11'-2"	11'-2"	11'-8"	11'-8"
P	16'-8"	18'-2"	18'-2"	18'-0"	18'-0"

	1122	1222	1522
A	11'-3"	12'-4"	11'-10"
B	11'-9"	11'-9"	11'-9"
C	2'-0"	2'-0"	2'-0"
D	10'-10"	10'-10"	10'-5"
E	13'-6"	13'-6"	13'-1"
F	10'-0"	10'-0"	10'-0"
G	22'-3"	22'-3"	20'-11"
H	1'-6"	1'-6"	1'-6"
I	20'-1"	20'-1"	21'-10"
J	30'-7"	30'-7"	34'-5"
K	13'-6"	13'-8"	13'-6"
L	22'-0"	22'-0"	25'-6"
M	12'-4"	12'-8"	12'-7"
N	1'-5"	1'-5"	1'-5"
O	11'-2"	11'-2"	11'-8"
P	18'-2"	18'-2"	18'-0"



The low side of the grain cart features a bolt-on tank design that extends toward the combine auger for an additional two feet, giving both the combine and grain cart operators more room to navigate in the field without overlap.



Measured with 20" hitch height. 812 measure with 30.5x32R1 tires. 1012, 1112, 1122 measured with 900/60R32 tires. 1312, 1412, 1222, 1522 measured with 1250/50R32 tires.

Standard Features

- 875 to 1,500 Bushel Capacity with 18" or 20" Diameter Bullet Auger
- Patented X-Tended Reach Folding Auger
 - Three Position Upper Auger Design
 - Storage Position (for Narrow Transport)
 - Field Position (for Convenient Storage in the Field)
 - Unload Position (for Maximum Upward, Outward and Forward Reach)
- Unique Auger Rest Lever Design for Easy Transition Between Storage and Field Positions
- Patented Side-Shooter with Hydraulic Flow Control Spout and Removable Rubber Spout For Extra Clearance
- Computer Balanced Bullet Augers (within 1 oz.) with Reinforced Flighting at Critical Wear Points and 7/16" Max Edge Flighting with 7" or 10" Pitch at Intake for Maximum Unload Speed and Durability
- Heavy-Duty Drive Line with Over-Sized Gearbox
- Over-Running, Automatic Cut-Out Clutch for Maximum Durability
- Easy-Access Side Mounted Inspection Ladder with Compact Storage Design
- Heavy-Duty Jack Stand Assembly
- Graphite Coated Interior for Efficient Unload and Excellent Cleanout
- Bolt-On Bottom Tang Hitch
- Hydraulic Hose and Electric Cable Organizer
- Balanced Tongue Weight

Available Options

- Choice of Durable Red, Green, Blue or Yellow Urethane Exterior Finish
- Choice of Large Flotation Tires, Walking Tandem Dual Wheels or Storm Tracker Track System
- Heavy-Duty 18 Ounce Roll Tarp with Reliable Cable and Tension-Spring Design or Upgraded Electronically Controlled Roll Kit for a Tight and Even Seal
- Electronic Weigh Scale System with Optional AutoLog Kit, USB Downloader Kit or Thermal Printer
- iFarm Plus Scale System with Optional Moisture Sensor and Auto Gate Shut-Off
- LCD Color Fixed Camera System
- Single Speed Hydraulic Drive (High Capacity) in Place of PTO



"This cart by far out does the competition. The single auger system is simple with fewer wear items. With the X-Tended Reach, we can stay away from the truck and still have plenty of clearance. We just put the spout between the bows of the truck and load it perfectly right down the center every time. It just speeds up the operation so much more, making it less stressful on everybody."

Joe & Tim Keller
Keller Farms - Crestline, OH

GUARANTEE

J & M MANUFACTURING CO guarantees against any faulty construction or materials for a period of ONE year. We reserve the right to inspect and decide whether material or construction was faulty or whether abuse or accident voids our guarantee.

Specifications are subject to change without notice or obligation.
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