

Farm King

GRAIN HANDLING



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Backsaver Auger | Models 10", 13" and 16"



Model 16104

Backsaver Auger 10" / 13" / 16" The Farm King Backsaver Auger is designed by the people who know and understand your grain handling needs. With 10", 13" and 16" tubing by up to 104' length, the operator is able to move large quantities of grain in short periods of time. Transporting the auger has never been easier with a maximum transport height of 15'.

PRODUCT OVERVIEW

- › Manufactured for high-capacity with heavy-duty construction
- › Full height of 77'
- › 175 hp required

FEATURES

- › Swing away auger with a self-leveling hopper
- › Hydraulic winch and hopper mover
- › Working and travel light kits
- › Hydraulic mechanical linkage

OPTIONS

- › 1-3/4" 20 spline PTO shaft



Features



Self-Leveling

The self-leveling hopper on the swing-away auger will remain level regardless of auger height. The unique design allows the intake hopper to be loaded on uneven terrain. Increased flexibility relieves the hopper of unnecessary down pressure on all hopper parts.



Hydraulic Cylinders

Powered by a heavy-duty hydraulic cylinder (two on model 16104, shown), the unique scissor lift undercarriage is capable of holding the auger at a 44° angle when fully extended. With the cylinders completely compressed, the auger angle changes to 5° in transport mode.



Hydraulic Controls

Using the auger-mounted hydraulic controls, the swing away auger can be lifted into position for transport and the hopper can be moved back and forth. This system removes most of the physical labor that was once required during grain handling.



Hydraulic Winch

An hydraulic winch easily lifts the hopper into place for transport. The lever and hydraulic valve are mounted to the main auger tube for easy access. Standard on model 16104 and optional on 10" and 13" Backsaver models.



Hydraulic Hopper Mover

The standard hydraulic hopper mover adds a powerful hydraulic motor to each of the inside wheels on the swing away hopper so the hopper can be positioned easily and with minimal effort. The control lever for the mover is mounted on the intake auger tube for easy access. Optional on 10" and 13" models.



Hydraulic Drive Wheels

Each 16104 Farm King auger comes standard with a hydraulically controlled intake hopper. By simply moving the hydraulic lever, the intake hopper can be moved into precise position under hopper bottom and end dump trucks. Optional on 10" and 13" models.

Features



Dual Action Spool Valve (option)

The optional two spool valve allows for hydraulic operation of the intake hopper winch and the hopper mover while only using two remote valves. The hydraulic controls eliminate the need to operate the winch and intake hopper by hand.



Swing-Away Auger

The swing-away auger can be positioned on the right side or left side of the auger, adding flexibility for yards with limited space or restricted access. An optional power mover uses two hydraulic motors that move the swing-away auger, limiting the physical labor required.



Gearboxes

Farm King Backsaver Augers feature two internal gearboxes for the intake auger assembly. Easy to maintain and service, these gearboxes do not restrict auger capacity.



Adjustable Light

A lighting kit provides light where it is needed most when unloading after hours. One light, located on the swing-away auger, provides light to the hopper and truck unloading area. Another light on the end of the auger tube directs light in the direction of the auger spout. The high quality, flexible spout is standard.



Undercarriage

The scissor lift undercarriage, exclusive to Farm King Backsaver Augers, requires less hydraulic pressure to raise and lower the auger. The wide undercarriage is stable and solid while still meeting transportation requirements. When the auger is at the desired position, a shut-off valve on the underside of the tube limits the circulation of the hydraulics so the auger will maintain its height.



Auger Steer (option)

The auger-steer is designed to make modern augers easier to maneuver. The auger steer assembly is attached to the wheel/spindle hub assembly on the axle frame. Two hydraulic cylinders on either side of the auger frame control the side-to-side wheel motion, controlled by the hydraulic system on the tractor.

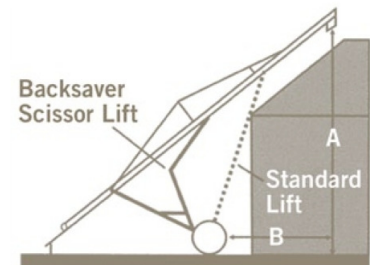
Specifications

MODEL	1050	1060	1070	1080*	1370	1385	1395*
Size	10' x 50'	10' x 60'	10' x 70'	10' x 80'	13' x 70'	13' x 85'	13' x 95'
Tubing	12 gauge				12 gauge		
Flighting	7 gauge				1/4" flighting in swing-away and main auger		
Flighting shaft	11 gauge, 2 3/8" diameter				11 gauge, 2 3/8" diameter		
Undercarriage	3" x 3" x 1/8" square tube				70' - 3 1/2" x 3 1/2" x 3/16" square tube; 85' and 95' - 4" x 4" x 1/4" square tube		
Lift arms	2" x 5" x 3/16" tube				1/4" formed tubing upper, 7 gauge lower		
Bridging	3/8" cable on 50' and 60' models, 1/2" cable on 70' and 80' models				1/2" cable		
Wheels and hubs	15" with 5 bolt automotive type hubs and bearings				15" with 6 bolt automotive type hubs and bearings		
Swing auger drive	Two internal gearboxes (PTO driven), sprocket and chain				Two internal gearboxes (PTO driven), sprocket and chain		
Hopper dimensions	43-1/2" x 60"				43-1/2" x 60"		
Standard hopper height from ground*	15-1/4" at heel end, 14-1/4" at other end				16-3/4" at heel end, 16-1/4" at other end		
Multi-flighting hopper height from ground*	11-3/4" at both ends				12-3/4" at both ends		
Tractor requirements - min PTO hp (with 540 RPM PTO) - approx. hydraulic requirements for lift	40 hp 1000 PSI	48 hp 1000 PSI	55 hp 1000 PSI	65 hp 1000 PSI	80 hp 1200 PSI	90 hp 1200 PSI	100 hp 1200 PSI
Hitch weight	-	-	840 lb		1140 lb	1270 lb	
Weight	2545 lb	2987 lb	3354 lb	3622 lb	5175 lb	6381 lb	6683 lb

*not including rubber spill guard

MODEL	1050	1060	1070	1080*	1370	1385	1395*
Wheel track	9'	10'	12'	12'	12'	12'	12'
A, height † - lowest - half way - highest	11' 2" 23' 6" 36'	11' 3" 27' 6" 43' 8"	12' 6" 30' 3" 48'	13' 6" 34' 3" 55'	13' 7" 31' 9" 50'	13' 8" 36' 6" 59' 6"	14' 8" 40' 6" 66' 4"
B, forward reach - lowest - half way - highest	26' - 18'	30' 3" - 22' 3"	35' 8" 33' 5" 27' 10"	45' 7" 41' 10" 34' 9"	36' 11" 33' 27' 5"	45' 4" 39' 8" 31' 10"	55' 4" 48' 3" 38' 9"

† All measurements taken with 18" hitch height. 'A' lowest is overall transport height, half way and highest are spout to ground measurements. *includes 10' extension.



MODEL	16104
Size	16" x 104'
Tubing, 1 and 2 / 3, 4 and 5	10 gauge / 11 gauge
Flighting	1/4" on swing and main auger
Flighting shaft	3" diameter, 3/16" wall
Undercarriage	5" x 5" x 1/4" square tube
Lift arms	1/4" formed tubing
Bridging, upper/side	3/4" cable / 1/2" cable
Wheel and hubs	8 bolt hubs, 16.5 L x 16.1 x 10 ply
Hopper	Multi-flighting w/ hydraulic Power Mover
Hopper dimensions	48" x 60" x 13 1/2" tall
Clearance in down position	14' 10"
Below spout to ground @ maximum lift	77' 4"
Below spout to ground in down position	12' 5"

MODEL	16104
Reach - edge of wheels to center of spout, down position	57' 8"
Reach - edge of wheels to center of spout, 1/2 up position (44' 3" spt-grd)	52'
Reach - edge of wheels to center of spout, up position	36' 1"
Tube angle, up position / down position	44° / 5°
Wheel track, center to center	13' 1/2"
Wheel track, outside of wheels	14' 5-1/2"
Hitch weight in down position	2,700 lb
Overall weight	13,000 lb
Tractor requirements - Min PTO hp (with 1000 RPM PTO) - Approx. hyd. requirements for lift	175 hp 1500 PSI

Backsaver Auger | 10" and 13" models



Models 10" / 13" Farm King Backsaver Augers are practical, economical and dependable. That dependability has been a benchmark of Farm King Backsaver Augers for many decades. Auger tubing sizes are available in 10" or 13" diameters and lengths ranging from 50 to 95 feet. The 43-1/2" x 60" intake hopper invites large quantities of grain to be quickly moved up the auger and into the bin.

PRODUCT OVERVIEW

- › Manufactured for high-capacity with heavy-duty construction
- › Lengths of up to 95'
- › 40 to 100 PTO hp required

FEATURES

- › Swing away auger with a self-leveling hopper
- › Scissor lift undercarriage
- › Load carrying tapered thrust bearing

OPTIONS

- › Hydraulic winch to lift the hopper into transport position
- › Hydraulic hopper mover
- › Dual flighting low-profile hopper

Undercarriage

The scissor lift undercarriage requires less hydraulic pressure to raise and lower the auger. The wide undercarriage is stable and solid while still meeting transportation requirements.



[1]



[2]



[3]



[4]

[1] Locking Ball Valve - Safety locking ball valve restricts hydraulic lines from losing pressure. **[2] Tapered Thrust Bearing** - Load carrying tapered thrust bearing supports the weight of the flighting with auger in upright operating position. **[3] Cleanout** - Cleanout is simplified with an optional reverse kit and an underside access panel. **[4] Flighting** - Durable 11 gauge flighting is used on every 10" and 13" model.



[5]



[6]

[5] Transport - Transporting the auger has never been easier than with the 11' to 15' transport height and standard road lighting kit. **[6] Hydraulic Winch** - An optional hydraulic winch easily lifts the hopper into place for transport. The lever and hydraulic valve are mounted to the main auger tube for easy access.



Model 16104 The 16104 Farm King grain auger is designed by the people who know and understand your grain handling needs. The large 16" tubing by 104' length allow the operator to move large quantities of grain in short periods of time. Equipped with a 3" flighting shaft, the Farm King auger handles even the dampest crops with ease.

PRODUCT OVERVIEW

- › Manufactured for high-capacity with heavy-duty construction
- › Full height of 77'
- › 175 hp required

FEATURES

- › Swing away auger with a self-leveling hopper
- › Hydraulic winch and hopper mover
- › Working and travel light kits
- › Hydraulic mechanical linkage

OPTIONS

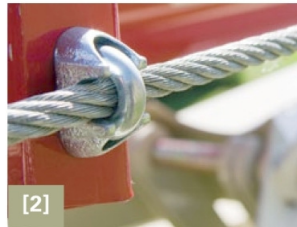
- › 1-3/4" 20 spline PTO shaft

Hydraulic Cylinders

Powered by two heavy-duty hydraulic cylinders, the unique scissor lift undercarriage is capable of holding the auger at a 44° angle when fully extended. With the cylinders completely compressed, the auger angle changes to 5° in transport mode.



[1]



[2]



[3]



[4]

[1] Transport - Transporting the 16104 has never been easier than with the 15' transport height and standard road lighting kit. The 16.5L x 16.1 tires are rated for intermittent highway usage and come with 8-bolt rim design.

[2] Cables & Structural Design - The 1/2" and 3/4" cables create a bridge design to help maximize stability and even weight distribution. Cables can be tightened and loosened according to operator preference. With the auger reaching 104' in the air, stability and precise maneuverability is paramount when positioning the auger.

[3] 77' Height - An unprecedented ground-to-spout height of 77' allows the Farm King 16104 to supply even the largest bins. With such a large reach, the 16104 is constructed with 5" x 5" thick steel tubing and a 14 1/2' outside wheel track assist in the stability and solid foundation during operation.

[4] Specs - The dual flighting hopper and 16" tube means the 16104 backsaver auger is ideal for hopper bottom trailers. Fully lifted, the 16104 backsaver auger has a ground-to-spout height of 77', but drops to clearance height of less than 15' when in the lowered position.

Conventional Auger | 8", 10" and 13" models



Model 1041

Conventional Auger 8" / 10" / 13"

The gearbox, featuring left- or right-side drive, is positioned to allow the auger to reach deeper into the bin. The ductile casting houses quality oil seals, ball bearings and casehardened, forged gears, meaning the auger runs smoothly and requires less power. 8", 10" and 13" models are available with an optional reverse shift gearbox. Double flighting intake has a brass bushing on all conventional auger intake guards. The narrow safety guard and removable clevis hitch improve access to bins with small auger ports. A storage bracket holds the clevis hitch when not in use.

PRODUCT OVERVIEW

- › Manufactured for high-capacity with heavy-duty construction
- › Wide stance undercarriage
- › Lengths of up to 61'

FEATURES

- › 7 gauge flighting in 10" models
- › Heavy-duty reversible gearbox

OPTIONS

- › Light kit which features a quick-connect coupler
- › Multiple drive options available
- › Poly spout and poly hopper

The top drive uses #60 roller chain on most 8" models, while #80 roller chain is used on the 861, 10" and 13" models.

Belt-drive engine models are equipped with a self-leveling motor mount and a self-tensioning belt system. Belt guards are included.

Reliable safety clutch winches are included.

The top drive is housed in a sealed oil bath and features a chain-tightener.

The wide stance of the undercarriage improves stability and is constructed using square tubes to enhance strength and durability.



Model 841

Features



Undercarriage

The wide stance of the undercarriage improves stability and is constructed with square tubes to enhance strength and durability. In addition to being well balanced, the undercarriage features automotive-type hubs and bearings that improve ease of handling.



Transport

The sturdy lightweight assembly allows the conventional auger to be easily transported. The trailing swivel wheels can be raised hydraulically to allow for increased turning radius as well as smooth transitions over uneven terrain.



Top Drive

The top drive is housed in a sealed oil bath and features a chain-tightener. The components in the sealed oil bath are resistant to heat, dust, debris and moisture, reducing maintenance and enhancing the longevity of the chain and sprockets.



Poly Spout

Flexible poly spout for accurate bin filling is optional. Also optional is a poly hopper to minimize spillage.



Frame

Hardened steel square tubing frame provides a solid foundation.



Intake

The double-flighting intake increases grain flow. A narrow safety guard and removable clevis hitch improve access to bins with small auger ports.



Several drive options are available, including direct PTO, belt-drive PTO, gas engine drive, and electric motor drive matched to a belt or direct drive.



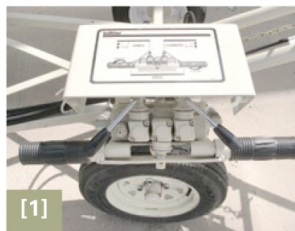
Options



Auger Mover

The two-wheeled auger mover easily adapts to the entire line of Farm King conventional augers. The auger mover is constructed with the farmer in mind with easily accessible hydraulic controls, hydraulically adjustable auger height and sturdy frame construction.

The auger mover features two durable hydraulic motors to power the wheels, controlled by a user-friendly T-bar control.



[1] Quickly position - With a turn and a twist of the T-bar, the auger can be quickly moved into position. **[2] Drive Wheel** - Each drive wheel comes standard with an over center wheel locking mechanism to ensure that there is no further movement once the auger is in place. These drive wheels also include a single ring gear located on the inner rim. The hydraulic motor connects to the gear ring to avoid slippage when maneuvering the auger. **[3] Belt Drive** - Each auger mover is belt driven by the conventional auger motor. The heavy-duty motor operates the hydraulic pumps necessary to control every aspect of the mover. **[4] Hydraulic Lift** - Each Farm King mover has a hydraulic lift to easily elevate the auger to the appropriate height. This feature eliminates the manual winch, reducing operator fatigue.



Single Person Operation

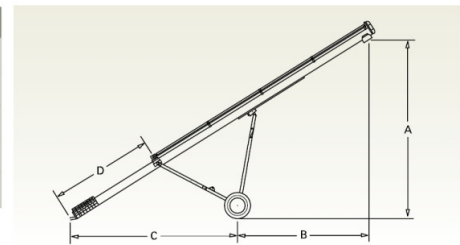
The T-bar is one of the most user-friendly auger control system on the market today. To operate the T-bar, simply, turn the handlebars in the desired direction, similar to a bicycle. Rocking the T-bar up or down, like a motorcycle throttle, powers the hydraulic motors to move the auger forward and backward.

Two levers are conveniently positioned above the T-bar. One lever operates the hydraulic winch to adjust the height of the auger to match the height of the bin. The second lever controls the hydraulics that lift the trailing swivel wheels for transport.

Specifications

MODEL	831	836	841	846	851	856	861	1031	1036	1041	1051	1061	1336
Tube width	8"							10"					13"
Tube length	31'	36'	41'	46'	51'	56'	61'	31'	36'	41'	51'	61'	36'
Wheel track	6' 0"	6' 6"	7' 6"	8' 2"	8' 2"	9' 9"	10' 2"	6' 0"	6' 6"	7' 8"	9' 9"	10' 2"	7' 5"
Belt drives	Double	Double	Double	Double	Double	N/A	N/A	Triple	Triple	Triple	Triple	N/A	Triple
Tube (gauge)													
- Top	14	14	14	14	14	14	14	14	12	12	12	12	12
- Center	-	-	-	-	-	-	14	-	-	-	-	12	-
- Bottom	-	14	14	14	14	14	14	-	12	12	12	12	12
Flighting	10 gauge							7 gauge					1/4"
Flighting shaft	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 3/8"	2 3/8"	2 3/8"	2 3/8"	2 3/8"	2 3/8"	2 3/8"
Drive line	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 1/2"
Gasoline hp (3450 RPM)	10 - 12	10 - 12	12 - 16	16 - 20	18 - 20	N/A	N/A	18	22	24	28	N/A	30
- Belt pulley	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	N/A	N/A	3 1/2"	3 1/2"	3 1/2"	3 1/2"	N/A	3 1/2"
Electric hp (1725 RPM)	9	10	12	14	15	15	15	15	17	18	20	20	22
- Belt pulley	6"	6"	6"	6"	6"	N/A	N/A	6"	6"	6"	6"	N/A	6"
- Direct pulley	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"

AUGER MOVER	CONVENTIONAL AUGER SIZE
C502	8" x 46' and under
C503	8" x 51' and over
C504	10" x 41' and under
C505	10" x 51' and over
C506	13" x 36'



MODEL	831	836	841	846	851	856	861	1031	1036	1041	1051	1061	1336
A, up	16' 0"	18' 1"	28' 3"	31' 6"	35' 2"	39' 0"	42' 0"	16' 0"	16' 8"	28' 3"	35' 2"	42' 0"	19' 1"
A, down	8' 5"	10' 0"	12' 2"	13' 0"	13' 2"	13' 0"	13' 0"	8' 5"	9' 5"	10' 5"	12' 10"	13' 0"	9' 9"
B, up	11' 11"	14' 10"	13' 6"	14' 0"	15' 8"	18' 9"	21' 5"	11' 11"	13' 3"	13' 11"	16' 10"	21' 5"	13' 2"
B, down	13' 2"	14' 0"	18' 2"	20' 2"	22' 1"	26' 0"	29' 2"	13' 2"	13' 8"	18' 1"	22' 2"	29' 2"	14' 3"
C, up	14' 3"	16' 9"	15' 4"	17' 9"	20' 0"	20' 5"	23' 2"	14' 3"	17' 10"	15' 3"	19' 0"	23' 2"	16' 4"
C, down	16' 0"	19' 8"	21' 7"	23' 3"	26' 10"	28' 3"	30' 6"	16' 0"	20' 8"	21' 5"	26' 9"	30' 6"	19' 5"
D	8' 6"	12' 2"	12' 3"	12' 2"	14' 1"	5' 10"	6' 0"	8' 4"	12' 7"	11' 10"	14' 2"	6' 1"	10' 10"

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