

KAGE[®]

**EXPERIENCE DRIVEN
INNOVATION**



Summer/Winter Catalog

PLOWING FORWARD

CONTENT

KAGE QUALITY GUARANTEE

When you purchase a KAGE product, we want you to be confident you're buying the best equipment possible. We back our products with a 15-day trial guarantee. From the date of delivery, you have 15 days to try out the product and if you're not satisfied, you can return it - no questions asked. KAGE will reimburse 100% of the purchase & shipping costs.*

BUILDING IT BETTER

If the idea isn't revolutionary or innovative as our company name states, we're not taking the idea far enough. KAGE Innovation invents and manufactures equipment for the professional grounds manager. Our core objective is to offer new products as solutions to common industry setbacks. In short, we're always on the lookout for "the better way."

WHAT'S IMPORTANT

Our customers and employees.

KAGE Innovation is run by people, and we serve people. The company was started because of an opportunity that was seized. KAGE Innovation continues to create opportunities for people - both customers and employees alike.

DRIVING NEW IDEAS TO THE INDUSTRY



Have you ever thought, "There just has to be a better way!" Applying our Experience Driven Innovation to conquer those ideas is what we do. Every week new ideas are hashed out and the ones that make it earn the KAGE stamp for excellence in design.

As our business has flourished, our mindset has not changed. It is still much like when I started out tinkering in my dad's workshop. Persevering until we find the better way, and designing with the end-user in mind. As we grow and the number of KAGE employees grow, our collective vision can be summed up in one sentence: "We want to make it easy for you".

Ours is a timeless industry. Timeless because there has, and always will be, grass to mow and snow to push. The caveat is that time is of the essence. In this industry the only variable is time, and we all need more of it. Time is expensive, and as labor costs increase we're pushed to work smarter and faster. It's this void where we seek to make the difference.

"Whatever you do, work heartily, as for the Lord and not for men"
- Colossians 3:23

Mike Stephan
PRESIDENT & FOUNDER



* The money back guarantee reimburses 100% of the purchase & shipping costs. However, all return shipping and shipping arrangements are the responsibilities of the original purchaser.

Snow Systems

- 3 SnowFire/Skidsteers
- 5 SnowFire/Compacts
- 7 SnowStorm
- 9 ShadowBlade
- 11 SnowDozer

AG Mounts

- 13 Tractor Mounts

Snow Tires

- 15 KageKlawz

Anti-Icing

- 17 LiquidRage

Flexible Cutting Edge System

- 19 AdvantEdge

Lawn Management

- 21 WheelKaddy

Ground Leveling

- 23 GreatER Bar

Snow Management

- 25 Snow Stakes
- 25 BuddyStrap
- 26 Poly Rotor Paddles
- 26 SnowBlaze Shovel

Plow Accessories

- 27 Curb Guard Kit
- 27 Polyurethane Cutting Edge Kit
- 27 Back Drag Kit
- 27 Plow Guides
- 28 Cutting Edge Extenders
- 28 Floating Skid Kit
- 28 Floating CamLock Brackets
- 29 WingLine™ - Laser Plow Guide

Specifications

- 31 SnowFire/Skidsteer/Compacts Specs
- 33 SnowStorm Specs
- 35 ShadowBlade Specs
- 36 Tractor Mounts Specs
- 37 SnowDozer Specs
- 39 KageKlawz Specs
- 40 LiquidRage Specs
- 41 AdvantEdge Specs
- 43 WheelKaddy Specs
- 44 LiquidRage Summer Kit
- 45 GreatER Bar Specs

LEGEND



Skidsteer



Telehandler



Compact Wheel Loader



Wheel Loader



Compact Loader Backhoe



Loader Backhoe



3-Point Tractor



Rear 3-Point Tractor



Municipal Truck



Commercial Walk-Behind Mower



THE BLADE

>Plow structure like no other in its class with an attack angle of 65 degrees

>Moldboard sheet itself is built with 10-gauge GRADE 50 steel to extend the life of the plow

>Blade features a standard 8" safety trip-edge that prevents accidental damage when encountering hidden obstacles by tripping back 68 degrees

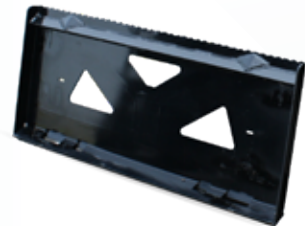


THE BOX

>Bullet proof structure that conquers the destructive tendencies of any snow removal operation

>Self-adjusting, flexible polyurethane skids. They have the ability to slide upwards as the cutting edge of the plow becomes worn, allowing it to cleanly scrape the plowing surface

>10" wide snow catches to prevent spillage while pushing



UNIVERSAL SKIDSTEER MOUNT

The Universal Skidsteer Mount is the standard for the SnowFire System. This couples to any modern skidsteer in seconds. Then, just couple the hydraulic couplers to the machine auxiliary hydraulic and you are ready to roll snow!



FROM BOX TO BLADE IN SECONDS

The SnowKage Box hooks onto a skidsteer snow plow to instantly create a revolutionary containment system. This is done in seconds without leaving the cab – no pins, bolts or hinges.

Attaching & detaching the box can take less than 5 seconds for a skilled operator to do.



SNOWFIRE/COMPACTS

SNOW PLOW SYSTEM PATENT PROTECTED



OVERBUILT BY DESIGN



MULTIPLE CARRIER ATTACHMENTS

This system can incorporate many different styles of hook-and-pin style attachments OR universal skidsteer attachments. See attachment options in back of brochure.



FLOATING TOP LINK

Uniquely designed for compact wheel loader applications, this attachment allows the plow to float while driving over uneven terrain. This hitch style is recommended for all wheel loader applications because it increases the ability to steer the loader, and the scraping ability of the plow. For available Quick Attaches see our specification tab.



SNOW PUSHER CAM LOCK

The simple and sturdy way to attach the SnowKage to the blade from inside your skidsteer cab is by using the cam locks. Raise the boom up and tilt the plow down behind the hooks of the SnowKage, align the cam lock brackets on the blade with the receptor hooks of the SnowKage and raise the boom.... then back to work! This is done in about 5 seconds. Back and forth from plowing to pushing.



THE PAYOFF

Reduce plow time by 25% to 50%

Advantages of a snow plow and a pusher box combining them into one fast and seamless operation

Windrow or back drag with the plow normally, then grab the box to push out their piles or windrows





BOLT-ON UNDERCARRIAGE KITS FOR TRACTORS

Everyone knows tractors are versatile, and fuel efficient machines. Combined with a SnowStorm series plow system, tractors can be far more useful for your business year round. Each undercarriage kit comes with an owners manual to help you mount the unit in short time.



CONSTRUCTED WITH HIGH GRADE STEEL

The SnowStorm blade is designed specifically to take the abuse from mid-sized wheel loaders, backhoe loaders, tele-handlers and agricultural tractors. The link, the blade and SnowKage mate perfectly creating the ultimate snow containment tool. The hydro-lock brackets of the blade latch onto the bars of the box. Controls in the cab allow the operator to remain in the cab until the job is done.



THE BLADE

The SnowStorm blade cuts clear down to the plowing surface with the aid of an oscillating mount. The blade also comes with a standard trip-edge which is backed up with 8 compression springs and a tri-formed box.

THE BOX

Tough, triangulated supports mean that you can push this to the extreme with no breakdowns. On both sides of the box are 2-inch poly skids designed to go easy on curbs. The box width manually adjusts from 10 feet out to 14 feet.



BUILT TO LAST



TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM

See Specifications on Page 33



OPTIONAL LASER GUIDANCE

The optional laser guidance reminds the operator when the ShadowBlade is deployed off to either side.



3-POINT SNOW ATTACK

We're building our reputation on being an innovator for the snow-removal industry. The ShadowBlade is a patented 3-point rear attachment design. This new weapon will set your tractor up to be a worthwhile year-round investment.



SIMPLE JOYSTICK CONTROL

Simple joystick control eases the operators ability to control both front and rear plow systems.



HYDRAULIC VALVE CIRCUIT

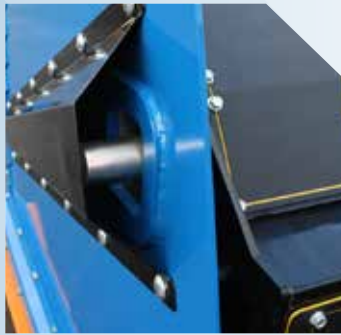
Located at the rear of the tractor up high for easy access, the hydraulic valve circuit, stays clear of compacted snow.



TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM

See Specifications
on Page 35

It is designed for Loaders 30,000 - 55,000 pounds. Big jobs need a big plow and KAGE's SnowDozer goes to 20'. Blade and Box. The two-in-one blade and box combo quickly becomes the favorite and most productive part of your snow removal fleet.



The SNOWDOZER plow system offers unrivaled intuition and simplicity.



Custom build to the width of your choice with 36 and 24 inch sections.



TWO IN ONE BLADE +
SNOWKAGE BOX



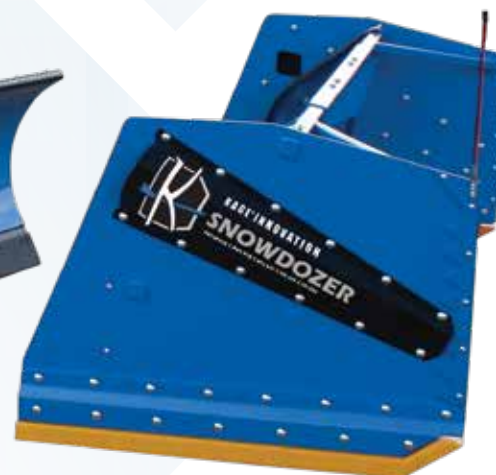
These heavy duty springs keep your blade on the ground meaning fewer passes and saved time.



Every feature of the SNOWDOZER is overbuilt and tested by snow removal professionals with years of experience in the field.



Unlike wing plows, this patented System is simple and robust with fewer moving components.



BIG PLOW FOR BIG JOBS!



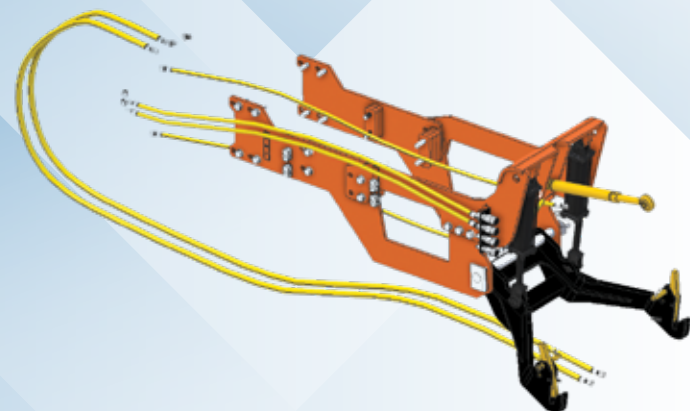
2 YEAR
STRUCTURAL
WARRANTY

TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM

**See Specifications
on Page 37**

12

TRACTOR MOUNTS BOLT-ON UNDERCARRIAGES



REVOLUTIONARY DESIGN

Let's have a conversation about the fuel efficiency of a tractor, the maneuverability of a tractor, the comforts of a tractor cab, and the superior traction and power of a tractor.

Then let's talk about mounting the world's best plow on the front of that tractor. Now that's something worth talking about! KAGE has harnessed the versatility of using a tractor for snow plowing by designing a bolt-on undercarriage mount for their signature plow systems. Our tractor mounts are built to handle the rigors of massive snow removal.

MORE VISIBILITY

With the low profile attachment of the KAGE Plow System and the undercarriage, the tractor and plow are more maneuverable and visibility is vastly improved over the use of loader arms.

FLOAT MODE

Maintain full down pressure while still easily plowing over contoured surfaces with the float mode.



KAGE TOUGH



TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM

See Specifications
on Page 36



HORSEPOWER'S NOT THE ISSUE

We've done the side by side tests and there's no comparison in performance between conventional skidsteer tires and the KageKlawz. Even in a downward sloped drive, the results were obvious - the traction of the KageKlawz proved to be the game changer for skidsteer snow removal. You have all the power you need, now just put it to use.

RADIAL VS BIAS TECHNOLOGY

MICHELIN® XM+S4 Pre-mold Retread Tires are the best performing snow tire tread on the market. They come with a Tread-Life Warranty* serviceable at any Michelin Retread dealer near you which will minimize down time — and with retreads, you may never need to buy a set of replacement tires again.

*Michelin Pre-mold Retread Tires are warrantied for the life of the tire, or down to 2/32 which is the legal limit. Search on-line for a certified Michelin retread tire dealer near you.



MICHELIN XM+S4 RETREADS

These tires allow the machine to transfer more power to the ground and absorb more shock from uneven surfaces.



PROTECTED VALVE SYSTEM

Wheels come standard with a welded valve protector.



TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM

See Specifications
on Page 39



TOP 10 REASONS TO USE LIQUID ICE CONTROL

1. Liquid products are better for turf, soil, and ground water
2. Liquids do not bounce off your target coverage area
3. Liquid anti-ice applications do not 'plow off'
4. Liquids almost completely eliminate tracking into buildings and reduce corrosion and build up
5. Liquid anti-icing applications prevent ice bonding to the pavement
6. Liquids are easier to pump than dry salt is to scoop
7. Liquid blended products include corrosion inhibitors which lengthens equipment life
8. It takes 10x more resources to post de-ice than pretreat with liquid
9. Dry salt stops working at 10-15 degrees F
10. It takes 20 minutes for dry salt to start working at 25 degrees F

ADVANTAGES AND FEATURES

Anti-icing liquids are becoming all the rage. Use fewer solids to get the job done, and provide your customers with top-notch service.

The LiquidRage enables you to apply brine and other chemicals from your skidsteer or tractor, without the need to buy expensive adapters and other equipment.

Features:

Adaptable to skidsteers and ag tractors (universal skidsteer attachment, CAT II 3-Point Hitch attachment)

>Fully enclosed design protects critical components

>150 gallon capacity

>Up to 10' spray width

REEL KIT

By installing the hand hose reel kit, you add the ability to apply both summer and winter designed product to a precise location, up to 50' away from where the tractor is parked with the Liquid Rage.



Check out **LiquidRage Summer Kit** on page 44

TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM

See Specifications
on Page 40

ADVANTEDGE FLEX CUTTING EDGE SYSTEM



UNIVERSAL MOUNT



FRONT AND WING BLADE FLEX EDGE SYSTEM

Until now, sectional plows and cutting edges have only been available on a few brands of plows. The AdvantEdge™ makes it possible to harness sectional cutting edge technology on almost any plow or pusher available on the market today!



REDUCES DAMAGE TO PLOWED SURFACES

The AdvantEdge reduces the damage to curbs, asphalt/concrete transitions all while scraping better!

Each 18" or 24" cutting edge section comes standard with Hardox™ wear-plate, or an optional Carbide cutting edge.



AUTOMATICALLY NAVIGATES PEAKS AND DEPRESSIONS

No pavement is perfectly flat, so unless your cutting edge is flexible, you're leaving snow behind. The independent cutting edge sections of the AdvantEdge help the blade to contour to the shape of any surface. The more snow you can remove during your plowing operations, the less salt and sand usage you'll have.

PRESSURE ADJUSTABLE ENCAPSULATED DESIGN

This patented design gives you the flexibility to adjust the pressure on each section so you can obtain just the right amount of preload. Each section is equipped with multiple 120 lb/inch die springs. AdvantEdge uses a closed face design reducing the impact that salt, sand, and ice can have. Each section is completely covered by the cutting edge, which is easily replaced by removing two bolts.



See Specifications on Page 41

TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM

SULKY

We designed the KAGE WheelKaddy with two things in mind: Increased life expectancy, and reduced down time. That is why this sulky utilizes automotive-grade components, such as tapered roller bearings, drive-train (PTO) pivot yokes, and a grade 50 steel platform. Experience less down time plus a more comfortable ride because of our designed-by-the-user approach!



250 SERIES

Simple and durable. The economic model that gives you the lowest maintenance sulky ever.

500 SERIES

The original. Simple, yet packed with features and as durable as they come! The 500 series features a very smooth ride with the unique suspension.

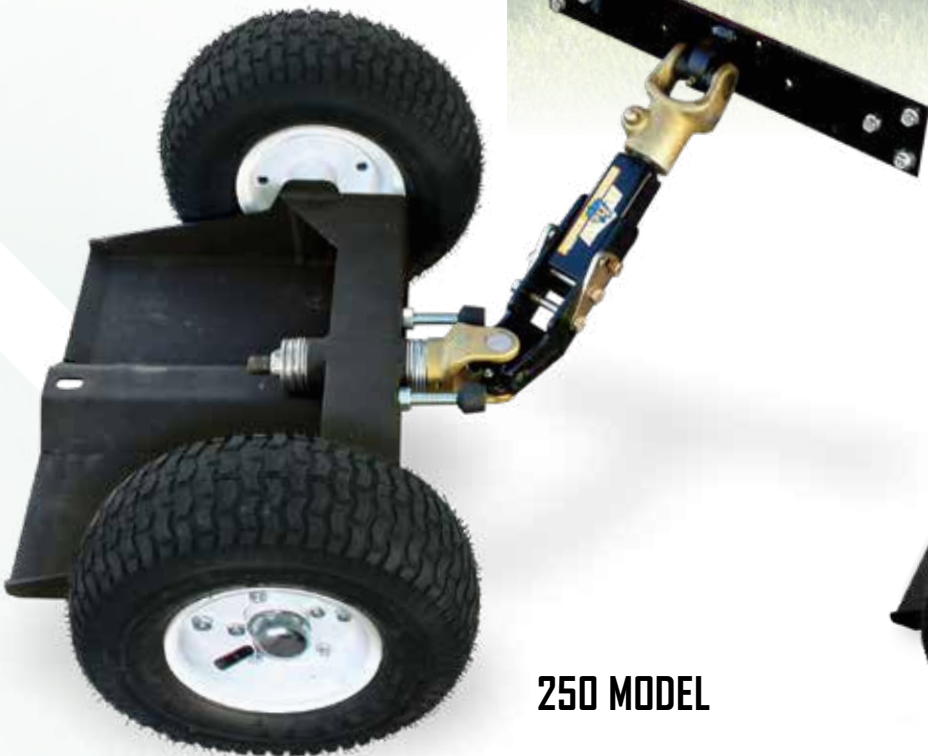


360 SERIES

The 360 series swings 360 degrees for backing up without damaging turf. This model features suspension, longevity, and full 360 degree range of motion.



360 MODEL



250 MODEL



500 MODEL



TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM

See Specifications
on Page 43



Ground Breaking Design

Grading Bars and Land Planes are commonly used to make ground more suitable for drainage, sports, landscape features and turfgrass preparation. Grading Bars are the fastest and easiest way to cut high spots down and fill small depressions. Many Graders also include a row of ripper (scarifier) teeth. In the past they have been lowered manually by the operator climbing outside the cab, or hydraulically.



SPRING LOADED RIPPER BAR

The KAGE GreatER Bar makes it easy for the operator and removes the potential of hydraulic failure or problems by using a mechanically activated Quick Rip Bar.



REPLACEABLE BOLT-ON CUTTING EDGE

Overbuilt by design to give you the most return on your investment.



HEAVY DUTY CORNER GUSSETS

Key mechanical pieces are built from HARDOX™ steel which provides longer wear life and more durability.



QUICK RIP TEETH

Operators will also benefit from teeth that retract automatically when moving backwards and bucket hooks that allow the operator to carry a bucket from job to job.

We make it easy...
No Manual or Hydraulic Ripper Teeth

KAGE
GreatER Bar™

LAND PLANES



"Dirt Work Done Right"



TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM

See Specifications
on Page 45

SNOW MANAGEMENT

A TOOL FOR ANY JOB



SNOW STAKE SYSTEM

STAY ON TRACK ALL SEASON

KAGE developed this Pounder & Quiver Kit to address the shortcomings of conventional snow stakes. The KAGE Pounder punches a perfect hole for the marker stake. The 3 lb. slide hammer can punch through the toughest soils and even road base gravel.

The Quiver features high-quality nylon material and carries 120 stakes up to 36" long. Strap the quiver to your leg and waist or your back like a traditional quiver, using the two 2" wide straps and industrial strength buckles.

Our Snow Plow Stakes are made of a durable polymer blend which readily rebounds after impact, even in sub-zero temperatures. Available in 26", 32" and 36" lengths.

Replacement tips are available.



BUDDYSTRAP

MINIMIZE BACK STRAIN

The BuddyStrap includes many features that make what was previously a chore, fun! A major benefit of the strap is that it's universal, so you can enhance any D-handled snow shovel in 5 minutes, saving you time, money, and back strain.

Simply attach the strap to the shovel and you can sling it over your shoulder for hands-free carrying. For high-speed commercial applications, the one-handed on and off design allows for easy access.

The strap does not interfere with stacking or storage, so when it's time to put your shovel away, you can do so with ease. The durable seatbelt material resists damage and abuse, and with reinforced stitching and grommets, the heavy duty strap won't tear or weather.



POLY ROTOR PADDLES

KICK MORE SNOW... LONGER

Single-stage snow blowers are a crucial part of your snow removal business. It's hard enough to keep them maintained without the frequent paddle and scraper bar replacement due to normal wear. Compared to rubber paddles, Poly Rotor Blades last up to 4 times longer, produce a cleaner wear edge and sell for the same price.

Keeps its edge as it wears, cutting down to the pavement and cleaning more efficiently.



SNOWBLAZE SHOVEL

CLEAR SNOW MORE EFFICIENTLY

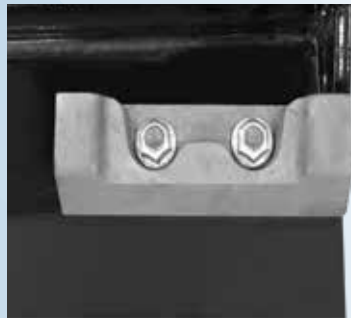
The SnowBlaze revolutionizes the way that commercial contractors and home-owners alike are able to remove mass quantities of snow. Clearing long stretches of sidewalk, or even driveways is easiest if you can 'windrow' the snow. By 'plowing' the snow to one side while pushing it forward, you are displacing the snow in two directions, and containing the dribbles to one side. The flip-stick used for windrowing tucks up and out of the way when not in use and does not interfere with pushing, back-dragging, or lifting the snow.

Utilizes a steel cutting edge that is easily removable and replaceable. It is also supported by an aluminum backing bar to help keep the edge straight.



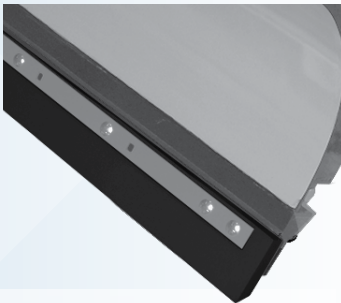
PLOW ACCESSORIES

WE FIT YOUR NEED



CURB GUARD KIT

Optional curb guard kit helps reduce wear to the trip edge. Clean curb lines are crucial, but don't wear out your plow in the process! The curb guards are sold as a kit, and they are able to transpose so that you get double the wear.



POLYURETHANE CUTTING EDGE

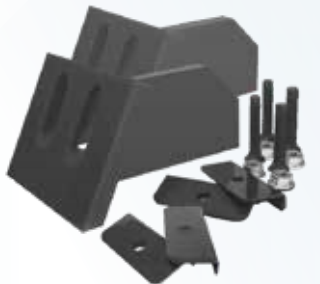
The Polyurethane Cutting Edge is useful when plowing delicate surfaces such as decorative concrete and pavers, or seal-coating. In our experience, this proprietary blend of polyurethanes outlasts rubber, and even steel in some cases without damaging the plowing surface. The blade is 1 1/2 inches thick, pre-drilled and the optional kit comes with a steel support strip and extra long carriage bolts for easy installation.



BACK DRAG KIT

The Back Drag Kit manufactured exclusively by KAGE Innovation is designed to fit any 6" to 8" snow plow cutting edge machine with a highway punch bolt hole pattern. It also works great with trip-edge plows and when you're angling snow away from curbs.

The entire kit weighs 10 pounds and it's built from the same uniquely blended polyurethane material used in our Poly Cutting Edges and Poly Skids. It's far more durable and will last considerably longer than rubber.



PLOW GUIDE

High visibility plow guides keep you on track during plow time and helps prevent landscape and curb damage. Easy to replace and universal to all KAGE plows.



CUTTING EDGE LIFE EXTENDERS

Add these carbide edge extenders at the ends, and center of the plow to increase the life expectancy of your cutting edges. These are sold in kits including the carbide embedded edge, and two bolts and locknuts to replace the existing hardware. Order up to 4 per SnowStorm plow, and 2-4 per SnowFire plow.



FLOATING CAM LOCK BRACKETS

These will provide the box another 3" of vertical and rearward travel to assist the Poly Skids and SnowKage to be independent of the Blade. In combination with the Floating Skids, this will allow the operator to clean neatly right up to the curb, pushing the snow over while allowing the snow plow cutting edge to do the work of digging the last ounce of snow from the base of the curb. (Not designed to overcome curbs over 8" tall).



FLOATING POLY SKID

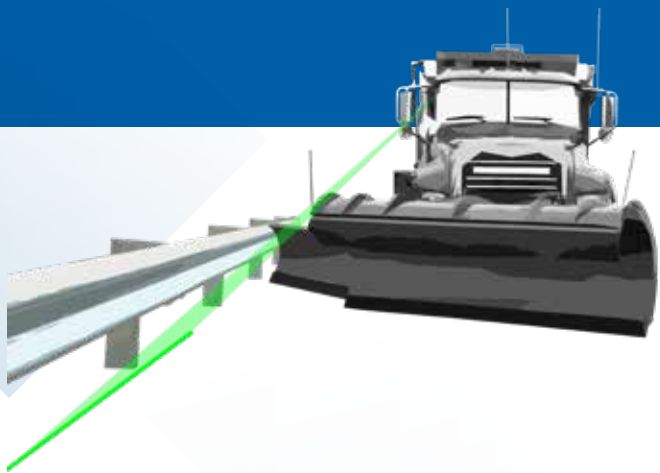
The heel of the poly skid is allowed to move up and down 3" independent of the moldboard or side panel. This allows even pressure against the plowing surface even while the AdvantEdge is contouring or flexing over the plowing surface. It also helps in conjunction with the Floating Cam Lock Brackets to clean directly up the curblines, without the need to remove the SnowKage Box.





BUILT TO MAKE YOUR JOB EASY

Wing Plows are a great way to increase productivity by clearing more ground per pass. The problem is that many operators do not use the wing because they can't see it and worry about hitting cars, guardrails and mailboxes which lead to costly claims. The WINGLINE™ fixes this issue by showing the operator a clearly projected line on the ground so they know where their wing will be before they reach the object.



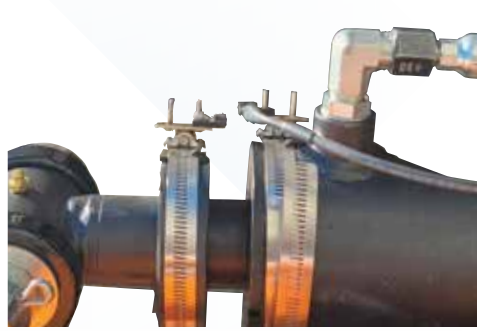
UNIVERSAL IN CAB SUCTION CUP MOUNT

The WINGLINE™ is the most versatile and highly visible laser on the market for snow removal applications. The in cab suction cup mount was designed for Municipal Plow Trucks but can be easily installed in anything with a windshield and a 12v power source. The Class IIIR laser is self contained, maintenance-free and provides a clearly projected line that operators can see.



HIGH VISIBILITY LINE

Allows you to keep your eyes on the road and in control of the vehicle. The WINGLINE™ instantly projects a line in front of the vehicle directing the operator where the trailing edge of the wing plow will be, seconds before it arrives. This not only reduces liability, but also reduces operator fatigue and neck strain.



REMOTE SWITCH

Alerts you when the wing is deployed increasing awareness to the operator. Using a simple IP67 switch mounted to the retract cylinder this system **turns on and off** with wing plow deployment so its nearly fail proof.



>>Turns on and off with activation of wing

DRAWING A LINE IN THE SNOW



COMPLETE KIT is easy to install in about 45 minutes and comes with everything needed to install. The kit can be powered by 12V accessory plugs or hardwired.



High Visibility Laser with 12' of In-cab Cable
Dual Suction Fully Adjustable RAM Mount
Wing-plow Activation Limit Lever Sensor
30' Wing-plow Limit Switch Cable
Manual On/Off Switch
12v Power Supply Adapter
Anti-refraction Tube
Mounting Hardware
Assembly & Installation Instructions

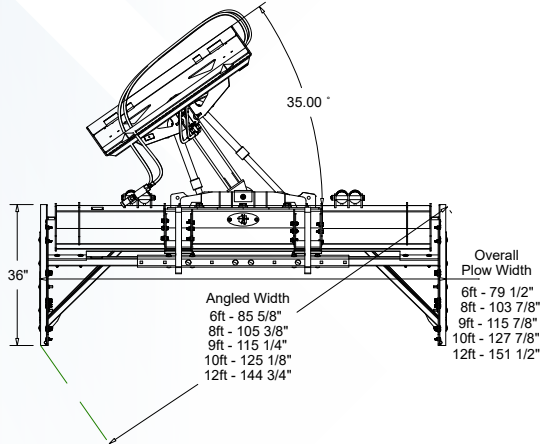
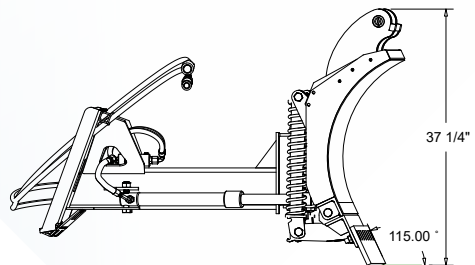
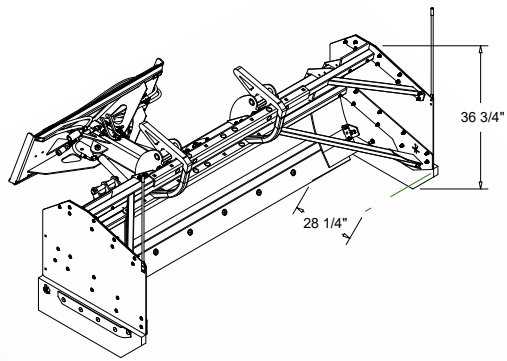
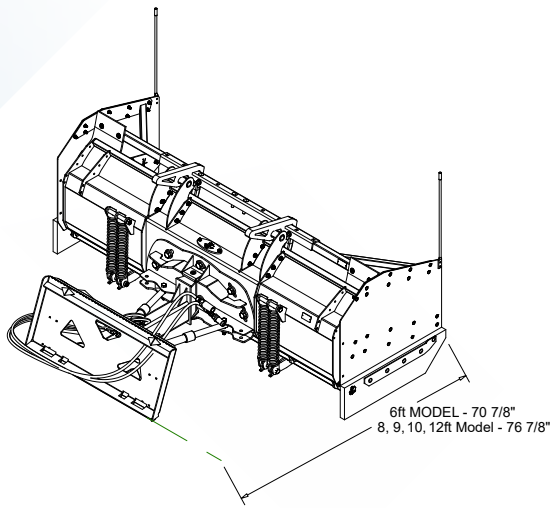
TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM

SNOWFIRE SPECS

SNOWBLADE					
For Machines Weighing 5,000 lbs.	SB72/LB72	SB96/LB96	SB108/LB108	SB120/LB120	SB144/LB144
Blade Width	6'	8'	9'	10'	12'
Blade Width at Full Angle	59"	79"	88-1/2"	98-1/4"	125"
Oscillation (Degrees/Inch) Each End	6° / 7-1/2"	6° / 10"	6° / 11-1/4"	6° / 12-1/2"	6° / 15"
Moldboard Radius	15-1/2"				
Moldboard Gauge/Steel Grade	10 Ga. / Grade 50				
Universal Skid Steer Attachment Guide	Standard				
Trip Springs	4 Compression	4 Compression	4 Compression	4 Compression	8 Compression
Machine Size Recommendation	5,000 +	6,000 +	6,500 +	7,000 +	9,000 +
Cutting Edge	5/8" x 6" High Carbon				
Pivot Frame Length	Shortened (25")	Standard Length (31")			
Cross-Over Relief Valve	Standard				
Weight	906 lbs.	1,031 lbs.	1,087 lbs.	1,147 lbs.	1,651 lbs.
Cylinders	1-1/2" Rod	1-1/2" Rod	1-1/2" Rod	1-1/2" Rod	2" Rod
Blade Height	31-1/8"				

SNOWKAGE					
For Machines Weighing 5,000 lbs.	SB72/LB72	SB96/LB96	SB108/LB108	SB120/LB120	SB144/LB144
Overall Height	36 3/4"				
Overall Width	80"	104"	116"	128"	151-1/2"
Replacement Side Panels	YES				
Hook Thickness (Skid Steer Only)	1-1/2"				
Replacement Polyurethane Skids	Yes				
Unit Weight	366 lbs.	442 lb.			
Machine Size Recommendation	5,000 +	6,000 +	6,500 +	7,000 +	9,000 +
Overall Width at 35° Angle	85-5/8"	105-3/8"	115-1/4"	125-1/8"	144-3/4"

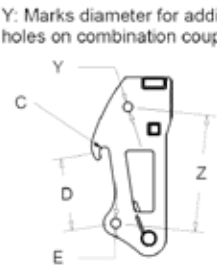
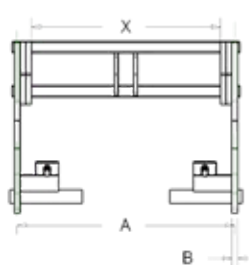
SNOWFIRE SYSTEM					
For Machines Weighing 5,000 lbs.	SBK72/LBK72	SBK96/LBK96	SBK108/LBK108	SBK120/LBK120	SBK144/LBK144
Total Weight (Blade & Box)	1,272 lbs.	1,473 lbs.	1,529 lbs.	1,589 lbs.	2,093 lbs.



SNOWFIRE QUICK ATTACH SPECS

SNOWFIRE QUICK ATTACH DIMENSIONS									
Coupler	KAGE Part #	A (in inches)	B (in inches)	C (in inches)	D (in inches)	E (in inches)	X (in inches)	Y (in inches)	Z (in inches)
CAT IT28	28-10	21.875	1.125	2.520	19.937	2.063			
JCB 212	212	25.188	1.000	2.280	19.209	1.760	33.750		
John Deere 310	JD310	38.00	1.000	2.596	20.321	1.825			
JCB 409	409	35.125	1.000	1.650	12.289	1.590			
Takeuchi	TAK506580	37.250	1.125	1.580	12.200	1.580	33.126	1.580	19.690
Case 221	221	9.250	1.000	2.000	20.174	2.025	42.00		
FFC	FFC	47.500	1.000	2.066	24.498	2.060			
JCB 535	535-10	40.375	1.000	2.410	23.652	1.509			
Komatsu WB140	WB140	29.375	1.000	2.030	17.687	1.810			
Volvo 356-20	356-30	39.375	1.000	2.420	24.187	2.000			
New Holland Euro	845	30.250	1.000	1.650	11.750	.920			
Universal Coupler	28-600	-	-	-	-	-			

X: Marks additional width dimensions for ears on different planes than the main ears



Z: Marks additional dimensions for combination couplers



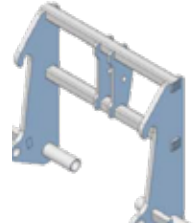
CAT IT28

JCB 212

John Deere 310

Volvo 356-20

Komatsu WB140



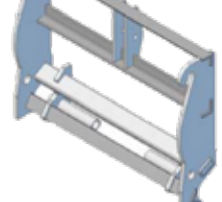
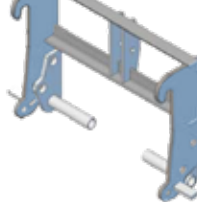
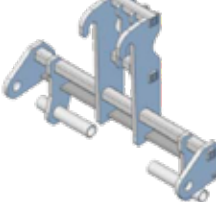
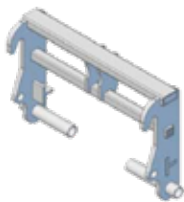
JCB 409; Euro; Volvo L35B; Kubota R530/R630

Takeuchi TW50;65;80

Case 221

JCB 535

FFC QCP-7000



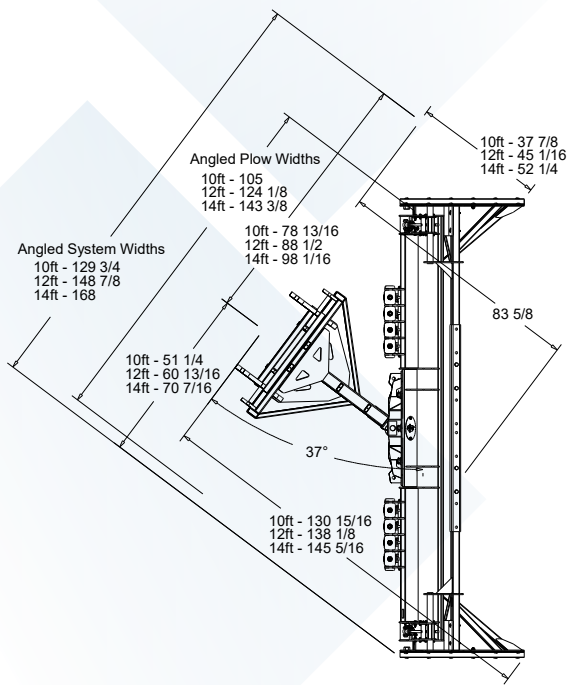
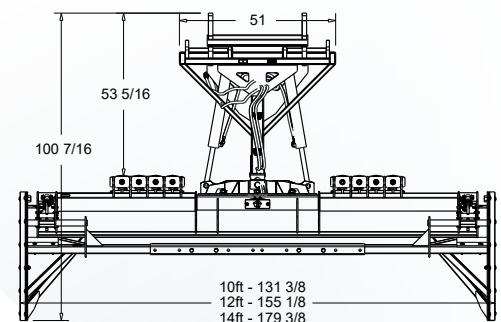
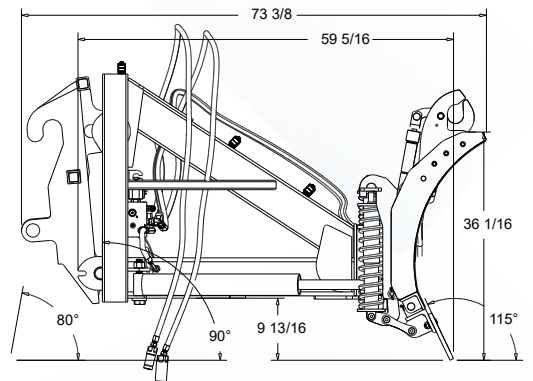
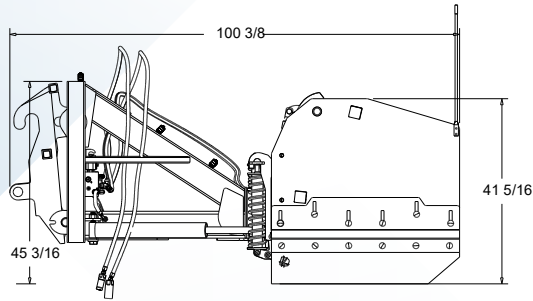
TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM

SNOWSTORM SPECS

SNOWBLADE			
For Machines Weighing 15,000-30,000 lbs.	KBSS10	KBSS12	KBSS14
Blade Width	10'	12'	14'
Angle	36 Degrees		
Blade Width at Full Angle	97"	116-1/2"	136"
Oscillation (Degrees/Inch) Each End	6° / 12-1/2"	6° / 15"	6° / 17-1/2"
Moldboard Gauge/Steel Grade	10 gals. / Grade 50		
Loader Quick Attach	See Page 28		
Trip Springs	8 Compressions		
Cutting Edge	(2 pc.) 5/8" x 8" x 5'	(2 pc.) 5/8" x 8" x 6'	(2 pc.) 5/8" x 8" x 7'
Hydraulic Cross-Over Relief Valve	Standard		
Pivot Frame Length	48"		
Weight	2,282 lbs.	2,375 lbs.	2,468 lbs.
Cylinders (2)	(2) 3" Bore 1-1/2" Rod		
Blade Height	36"		
Electric/Hydraulic Valve Kit	12V/24V		

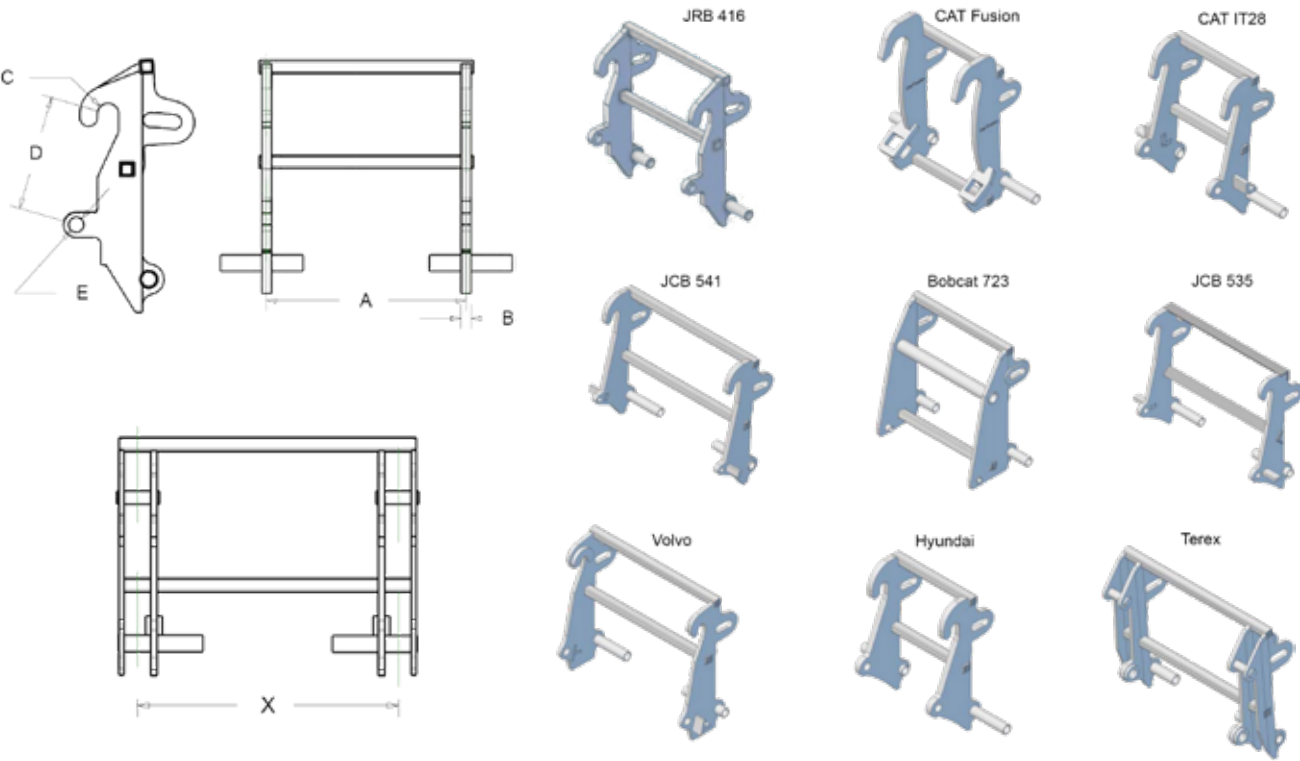
SNOWKAGE			
For Machines Weighing 15,000-30,000 lbs.	KBSS10	KBSS12	KBSS14
Overall Height	40"		
Overall Width	143"	155"	179-1/2"
Overall Width at Full Angle	131"	150-1/2"	169-3/4"
Approximate Capacity	12 yds. +	14 yds. +	18 yds. +
Replaceable Polyurethane Skids	2" x 10" x 42"		

SNOWSTORM SYSTEM			
For Machines Weighing 15,000-30,000 lbs.	KBSS10-XL	KBSS12-XL	KBSS14-XL
Total Weight (Blade & Box)	3,088 lbs.	3,181 lbs.	3,274 lbs.



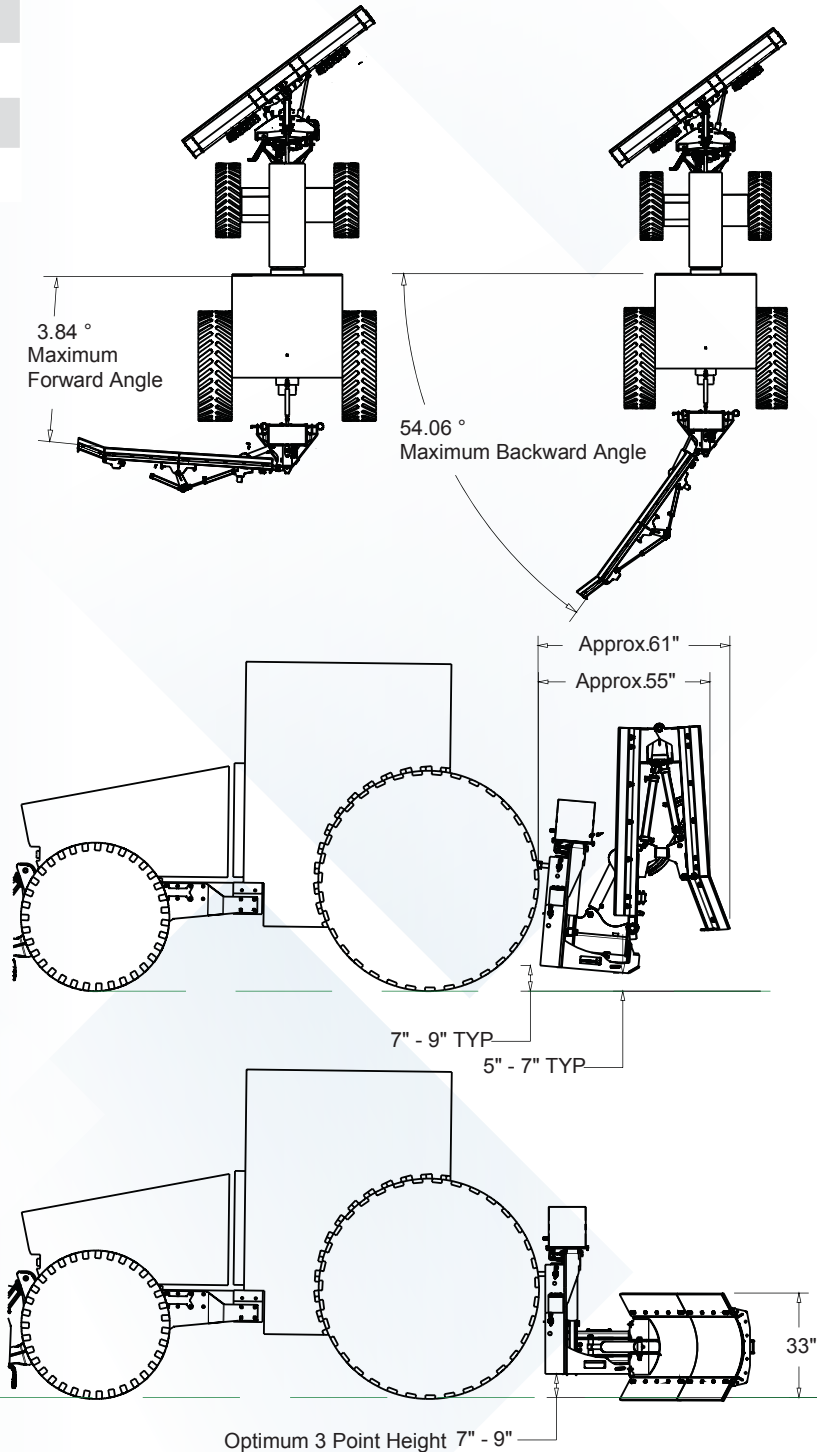
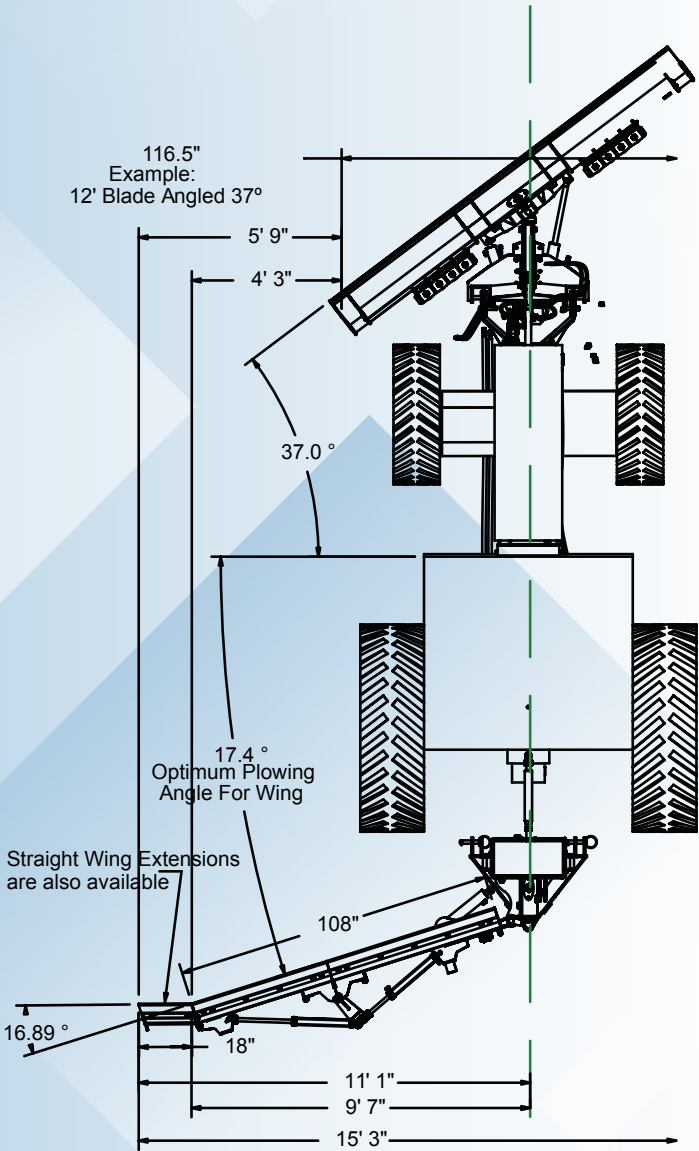
SNOWSTORM QUICK ATTACH SPECS

SNOWSTORM QUICK ATTACH DIMENSIONS								
Quick Attach	KAGE Part #	A (in inches)	B (in inches)	C (in inches)	D (in inches)	E (in inches)	X (in inches)	Non Stocked Additional Cost
JRB 416	JRB-416	30.628	1.500	3.001	16.281	2.126		
CAT Fusion	CATFUSION	22.875	1.500	5.000	24.625	3.376		
CAT IT28	CATIT28F-K	22.250	1.500	2.520	19.937	2.062		
Volvo	356-1	39.360	1.000	2.420	24.260	2.000		
Hyundai	HL740TM	22.287	1.500	2.461	19.770	1.992		
Terex	TERSKI863	34.250	4.000	1.969	19.860	2.362	39.250	
JCB 541	JCB541SS	42.484	1.500	2.266	23.687	1.265		
Bobcat 723	BBTC-723	31.250	1.000	3.250	22.437	1.275		
JCB 535	535-200	40.625	1.250	2.437	23.625	1.500		
JRB 418	JRB-418	32.750	1.500	3.030	20.670	2.060		Yes
CAT IT38	CATIT-38	36.250	1.500	3.090	22.790	2.060		Yes
Hi Viz	544HV	39.120	1.500	2.440	24.280	2.064		Yes
ACS 1000/2000	QA90006150							Yes



SHADOWBLADE SPECS

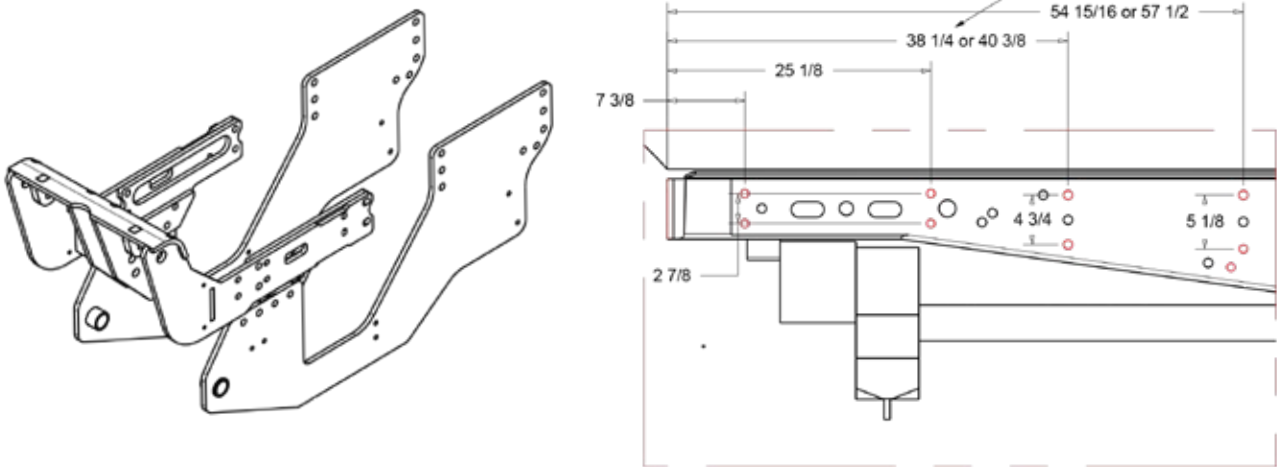
SNOWBLADE	
Specifications	Rear Tractor Snow Plow Recommendations
Weight KMX9 (Standard Assembly) – 1,620 lbs.	1 Rear Auxiliary with constant flow (detent)
Weight Optional 17 Degree Wing Extension – 102 lbs.	Cat II 3-point hitch
Weight Optional Straight Wing Extension – 102 lbs.	Recommended tractor weight no less than 9,500 lbs
Operating Voltage – 12VDC	
Operating Current – <20 amp	
Optional Laser Beam Classification – IIIR	
Moldboard Height – 33 ins.	



TRACTOR MOUNT SPECS

UNDERCARRIAGE KITS				
Make/Model Tractor	Plow Hitch Style	Lift Cylinders	Tractor Requirements	Recommended System
John Deere® - 6430/6125R/6125M/6115M	Cat II 3-Point	(2) 3"x10"	Loader Valve/Joystick in Cab	10', 12', 14' SS
John Deere® - 6410M/6150M			One Auxiliary (mid or rear)	
John Deere® - 5095M/5105M/5100M/5115M/5085M			Loader Valve/Joystick in Cab	10' SS or 12' SF
John Deere® - 5101E/5083E/5085E*			One Auxiliary (mid or rear)	
John Deere® - 5075E			800-1,000 Lbs Counterweight Recommended	6', 8', 9', 10', 12' SF or 10' SS
John Deere® - 6101D/6115D/6130D/6140D **			Joystick in Cab	
John Deere® - 6105D/6140D	2-Pin Style	(1) 2-1/2"x16 Cylinders	One Auxiliary (mid or rear)	10', 12', 14' SS
KUBOTA® - L4240/L4740/L5040/L5240/L5740/L6060			Joystick in Cab W/3rd Auxiliary Option	8' SF
JOHN DEERE® - 4120/4320/4520/4720			800-1,000 Lbs Counterweight Recommended	6' SF
JOHN DEERE® - 4066R				
KUBOTA® - M8540/M9540/M8560/M9960/M5	Cat II 3-Point	(2) 3"x10" Cylinders	Loader Valve/Joystick in Cab	10' SS or 12' SF
KUBOTA® M135X			One Auxiliary (mid or rear)	10', 12', 14' SS
KUBOTA® M110GX				
KUBOTA® M135GX/M6				
Universal Kit (requires end-user fabrication)			Loader Valve/Joystick in Cab One Auxiliary (mid or rear) 800-1,000 Lbs Counterweight Recommended	8', 9', 10', 12' SF or 10', 12' SS

* Verify for all models. Ask your salesperson for more information
** Excludes Tier 4 engines

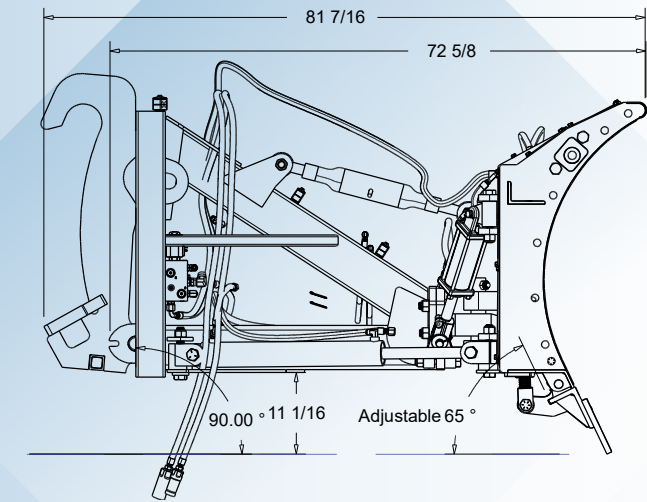
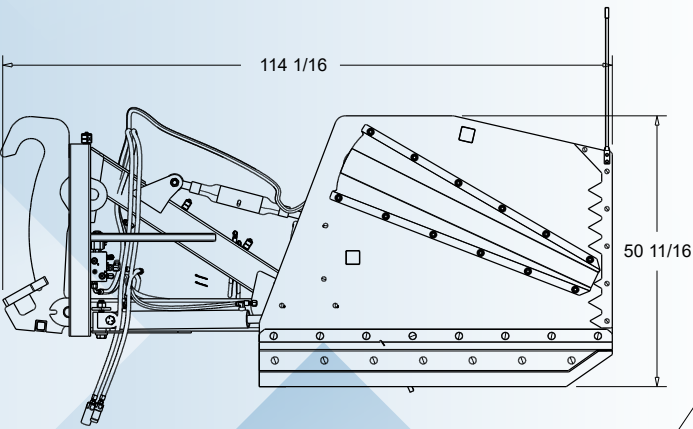


SNOWDOZER SPECS

The KAGE SnowDozer is designed for large wheel loaders in the 30,000 – 50,000 lb weight range. With a 48” tall moldboard this fills a segment in the market that KAGE did not produce a good fit for.

SNOWDOZER SPECIFICATIONS					
	12 FOOT	14 FOOT	16 FOOT	18 FOOT	20 FOOT
ANGLE DEGREES	34	34	34	34	34
BLADE WEIGHT	4933	5016	5575	5658	5741
SYSTEM WEIGHT	7021	7104	7663	7746	7829
BLADE HEIGHT	48"	48"	48"	48"	48"

CUSTOM BUILD TO THE WIDTH OF YOUR CHOICE WITH 36 AND 24 INCH SECTIONS
12 FOOT UP TO 20 FEET



Angled System widths
12 Foot = 165 1/2
14 Foot = 185 3/8
16 Foot = 205 5/8
18 Foot = 225 1/4
20 Foot = 245 1/8

Angled Plow widths
12 Foot = 130
14 Foot = 150 1/16
16 Foot = 170
18 Foot = 189 7/8
20 Foot = 209 3/4

Full Angle 34.00°

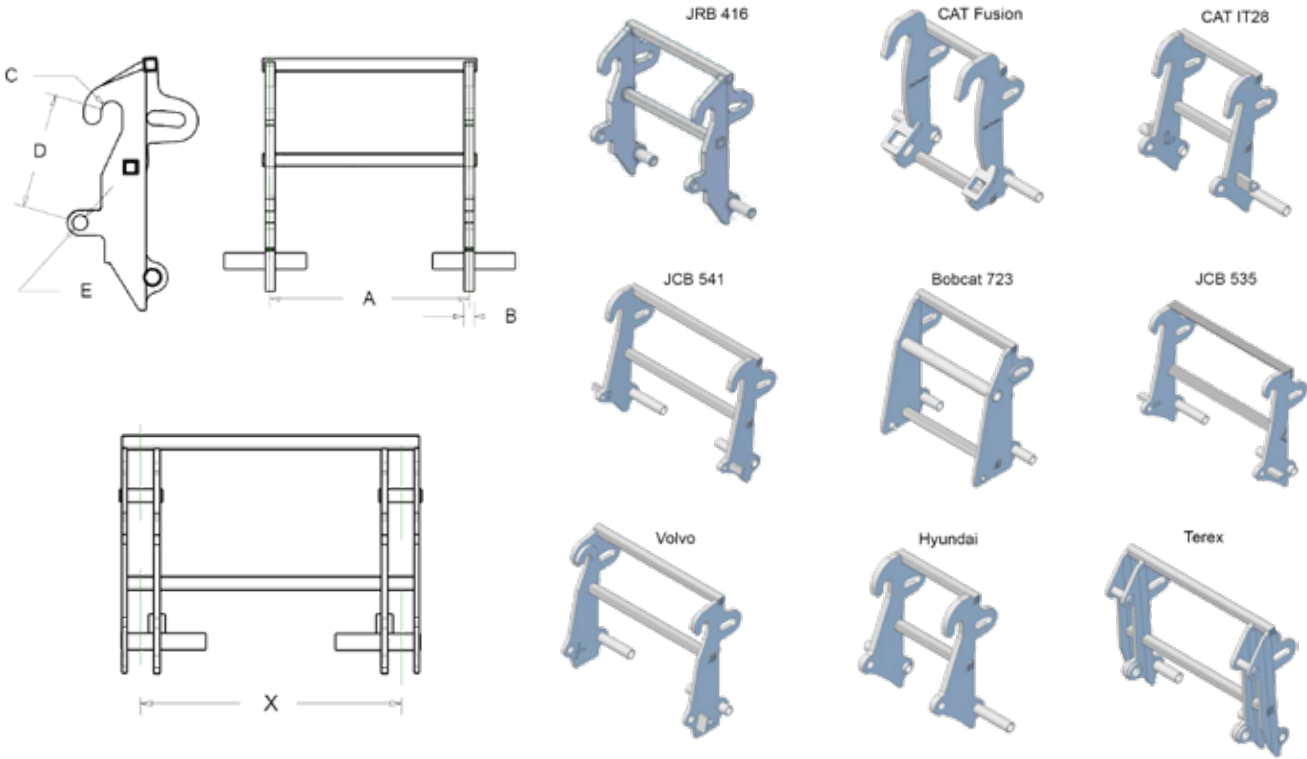
12 Foot = 152 3/4
14 Foot = 159 1/2
16 Foot = 166 1/8
18 Foot = 172 7/8
20 Foot = 179 1/2

12 Foot = 155 1/8
14 Foot = 179 1/8
16 Foot = 203 1/8
18 Foot = 227 1/8
20 Foot = 251 1/8

3" Hydraulic cylinders angle the Blade left and right, 34 degrees. The angle function works with and without the SnowKage Box attached, so not only can you windrow or 'plow' snow normally, but you can hog snow at an angle. This is especially helpful when you are swooping into corners, or clearing entrance loops.

BIG PLOW FOR BIG JOBS!

SNOWDOZER QUICK ATTACH DIMENSIONS								
Quick Attach	KAGE Part #	A (in inches)	B (in inches)	C (in inches)	D (in inches)	E (in inches)	X (in inches)	Non Stacked Additional Cost
JRB 416	JRB-416	30.628	1.500	3.001	16.281	2.126		
CAT Fusion	CATFUSION	22.875	1.500	5.000	24.625	3.376		
CAT IT28	CATIT28F-K	22.250	1.500	2.520	19.937	2.062		
Volvo	356-1	39.360	1.000	2.420	24.260	2.000		
Hyundai	HL740TM	22.287	1.500	2.461	19.770	1.992		
Terex	TERS1863	34.250	4.000	1.969	19.860	2.362	39.250	
JCB 541	JCB541SS	42.484	1.500	2.266	23.687	1.265		
Bobcat 723	BBTC-723	31.250	1.000	3.250	22.437	1.275		
JCB 535	535-200	40.625	1.250	2.437	23.625	1.500		
JRB 418	JRB-418	32.750	1.500	3.030	20.670	2.060		Yes
CAT IT38	CATIT-38	36.250	1.500	3.090	22.790	2.060		Yes
Hi Viz	544HV	39.120	1.500	2.440	24.280	2.064		Yes
ACS 1000/2000	QA90006150							Yes



KAGEKLAWZ SPECS

KAGEKLAWZ APPLICATION GUIDE				
STOCK TIRE SIZE				
10 x 16.5 (stock tire is about 30-32" tall)			12 x 16.5 (stock tire is about 33" tall)	
KAGE KLA W Z MODELS				
225 Kit	245 Kit*	255 Kit**	245 Kit	255 Kit*
FENDER INTERFERENCE				
3" Fender Clearance Required		6" Fender Clearance Required	3" Fender Clearance Required	
SPEED ENHANCEMENT				
No Significant Increase	11% Increase (~1.5 mph)	11% Increase (~2.1 mph)	No Significant Increase	11% Increase (~2.1 mph)

*NOTE: This configuration increases the overall height of the machine by approximately 1.5"
**NOTE: This configuration increases the overall height of the machine by approximately 3"

KAGEKLAWZ SPECIFICATIONS				
SNOW TIRE KIT	Model 225	Model 245*	Model 255	Model 255**
Size	225/70R19.5	245/70R19.5	255/70R22.5	255/70R22.5
Ply Rating / Load Range	12	14	16	16
Capacity Per Set of 4	14,560 lbs.	18,160 lbs.	22,040 lbs.	22,040 lbs.
Pilot Hole Diameter	6"	6"	6"	9" - Bobcat Specific
Bolt Pattern	8 x 8"	8 x 8"	8 x 8"	8 x 10.25"
Wheel Size	19.5 x 6.75	19.5 x 6.75	22.5 x 8.25	22.5 x 8.25
Tire Height	32.4	33.4	36.6	36.6
Overall Tire Width	8.8	9.6	9.8	9.8
Offset	POS 1.25"	POS 1.25"	NEG 1.5"	ZERO
Tread Width	7.1	7.5	7.8	7.8
Product Number	225KIT	245KIT	255KIT	255LGKIT

KAGE KLAWZ 225



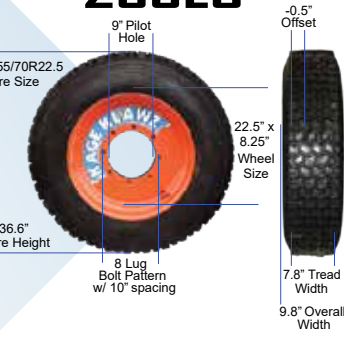
KAGE KLAWZ 245



KAGE KLAWZ 255



KAGE KLAWZ 255LG

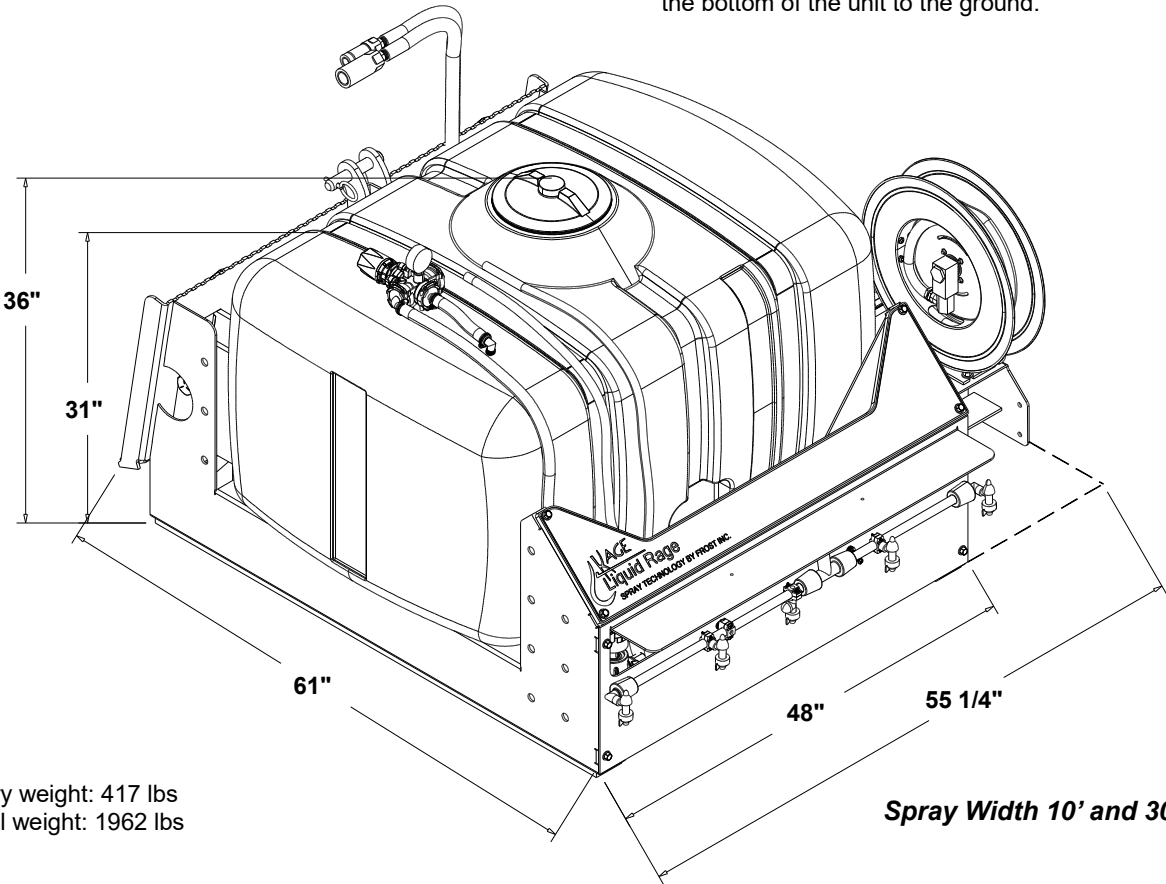


LIQUIDRAGE SPECS

LIQUIDRAGE	
Specifications	
Mounts	Skid Steer/Cat II 3-Point
Pump	Hydraulic
Internal Debris Filter	Standard
Dump Valve	Standard
Quick Disconnect Hydraulic Couplers	Skid Steer Flat Face Standard
Quick Disconnect Ag Hydraulic Couplers	EXTRA
Nozzle Type	(5) 6 Stream Penetrating Nozzles
Tank Capacity	150 gals.
Pressure Regulator with Gauge	Standard/Manual
Spray Width	Adjustable 5' - 10'
Weight Lbs (loaded/empty)	2067/417

Liquid Rage Assembly 150 SA150

Operating height should be 4" to 6" from the bottom of the unit to the ground.



Dry weight: 417 lbs
Fill weight: 1962 lbs

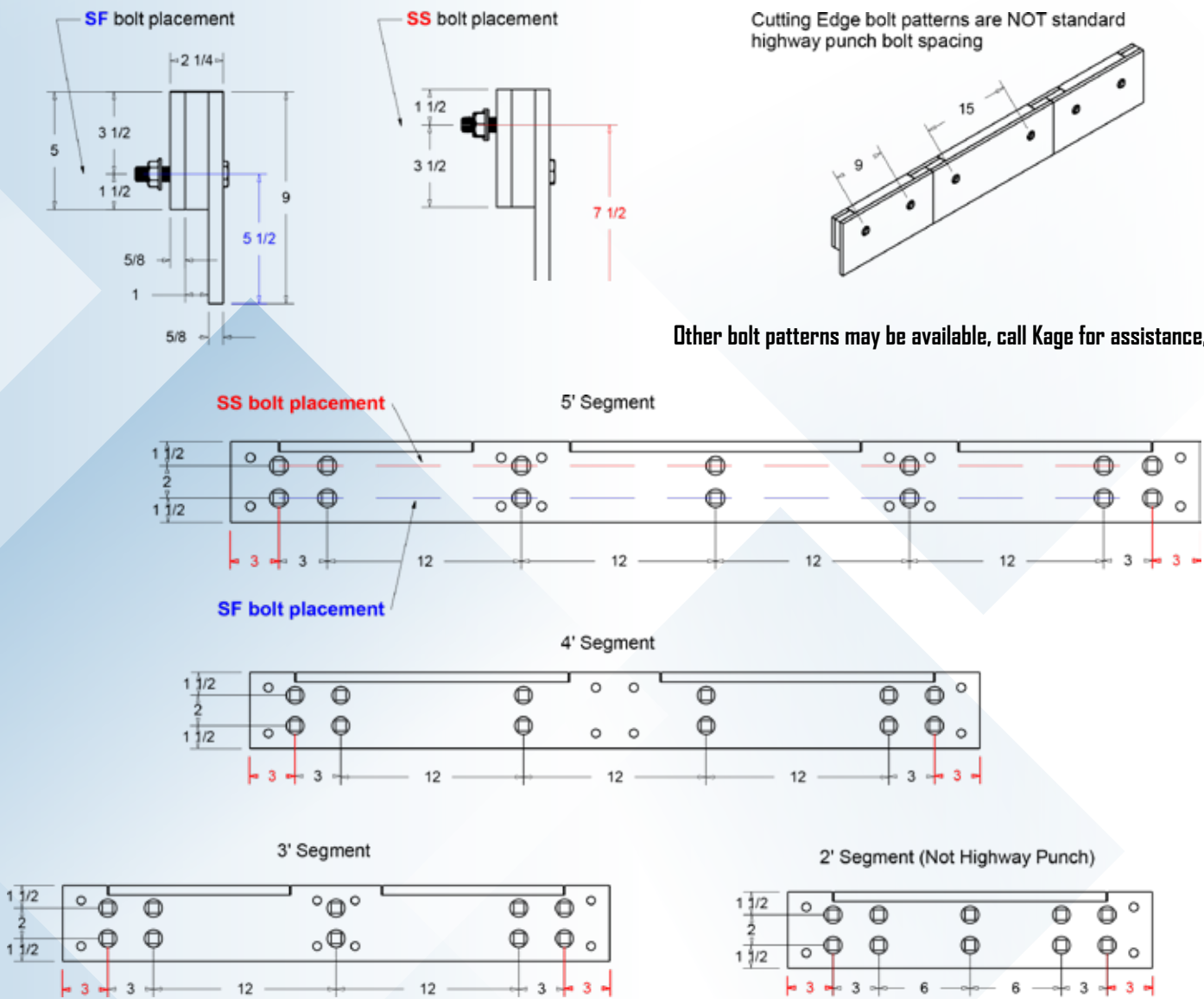
TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM

ADVANTEDGE SPECS

MOUNTING OPTIONS

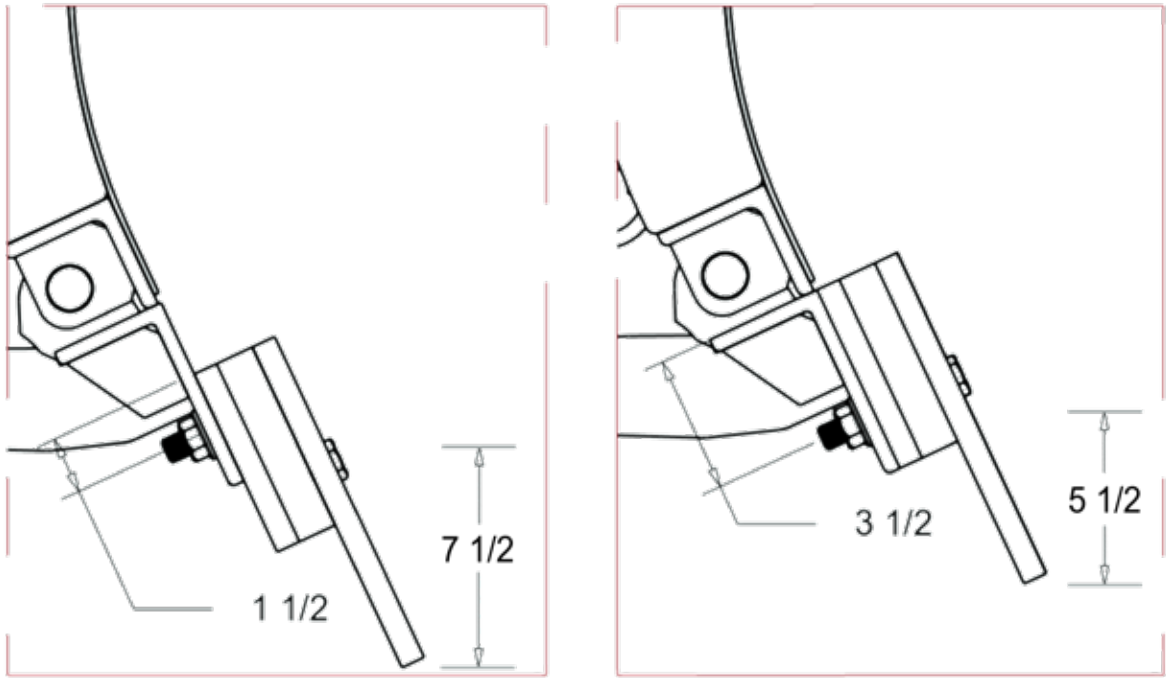
ADVANTEDGE Weight and Dimensions								
Part Name	Part Number	Segment Qty	Cutting Edge Steel	Usable Cutting Edge	Vertical Travel	Max Peaking Angle of Sections	Weight in lbs	Attachment Bolt Pattern
SF AdvantEdge 8'	SFAE8	2 x 4'	Hardox® 500	3"	1.375"	2°	311	Highway Punch
SF AdvantEdge 9'	SFAE9	3 x 3'	Hardox® 500	3"	1.375"	2°	363	Highway Punch
SF AdvantEdge 10'	SFAE10	2 x 5'	Hardox® 500	3"	1.375"	2°	397	Highway Punch
SF AdvantEdge 12'	SFAE12	4 x 3'	Hardox® 500	3"	1.375"	2°	484	Highway Punch
SF AdvantEdge 14'	SFAE14	2 x 3' + 2 x 4'	Hardox® 500	3"	1.375"	2°	554	Highway Punch

Below are the bolt patterns of the plate that will attach to your plow. The horizontal spacing is known as "standard highway punch". Two height options are available. Choose either SF or SS bolt placement for the AdvantEdge kit.



SS Mounting Option

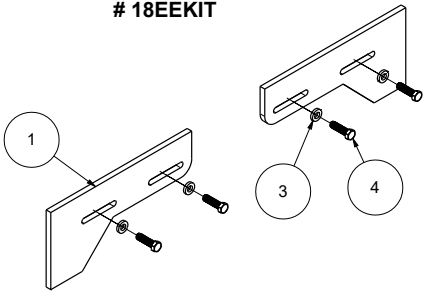
SF Mounting Option



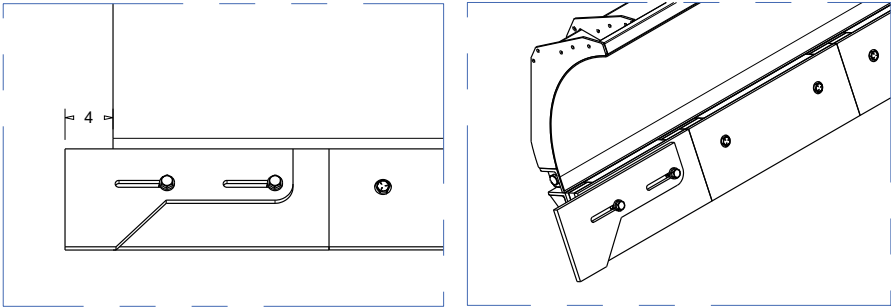
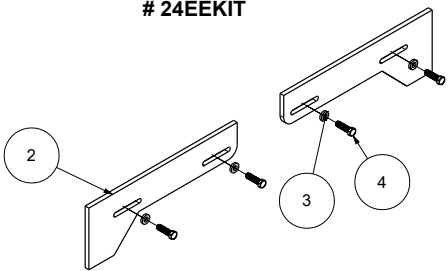
Snow pushers equipped with the Kage AdvantEdge that require additional cutting edge length may be fitted with an extension kit. The kits attach over either an 18" or 24" cutting edge. They can extend the edge length from 0 to 4" closing any gaps between the edge and the pushers sides. Typically this is only required by pushers sized in foot and a half widths.

Item Number	Part Name	Part Number	Revision	Quantity
1	Edge Extension 18	SBCEE18	1	2
2	Edge Extension 24	SBCEE24	1	2
3	Flat Washer 5/ 8 x 1.25 x .25 Thick	91201A035		4
4	Hex Bolt GR8 5/ 8-II x 2.25	91257A803		4

18 Edge Extension Kit # 18EEKIT

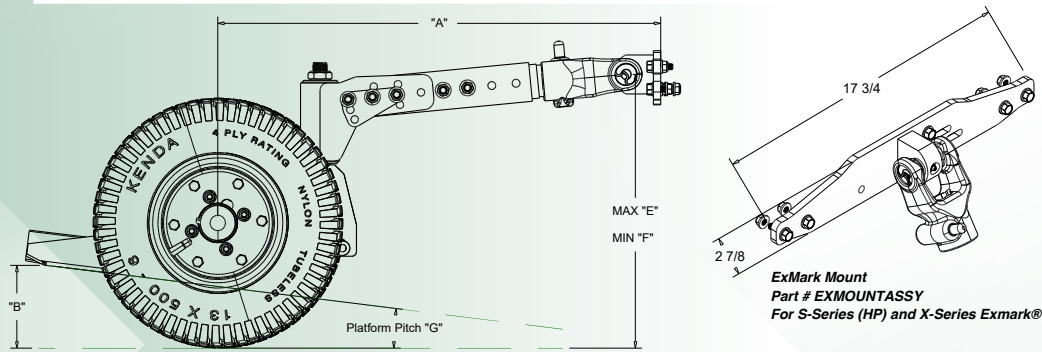


24 Edge Extension Kit # 24EEKIT

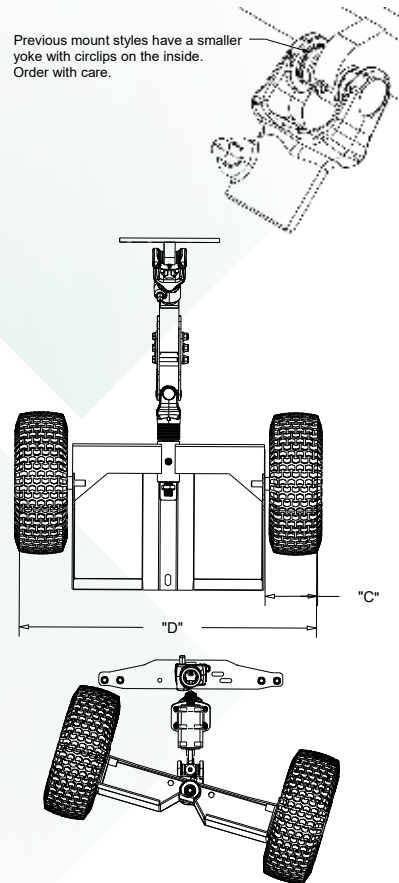


WHEELKADDY SPECS

WHEELKADDY FEATURE COMPARISON			
	250 Series	500 Series	360 Series
Soft-Ride Suspension		✓	✓
3-Piece Wheels (quick tire change)	✓	✓	✓
360 Degree Pivot Action			✓
Grade 50 Steel Platform	✓	✓	✓
Quick Release Mount	✓	✓	✓
Tapered Roller Bearings	✓	✓	✓
Grease-able P-T-O Pivots	✓	✓	✓
Platform Pitch Adjustment	✓	✓	✓
Standard Tire Diameter	13"	13"	10"



WHEELKADDY SERIES	250 SPECS	500 SPECS	360 SPECS
Tire Size Option	13" Tires (13x5.00-6)	13" Tires (13x5.00-6)	10" Tires (410/350-4)
DIM "A" (Length Adj.)	Adjustable 20" - 26"	Adjustable 20" - 26"	Adjustable 21" - 25"
DIM "B" In. (Platform Height)	3"	3"	1 3/4"
DIM "C" (Tire Width)	4 1/2"	4 1/2"	3 7/8"
DIM "D" (OA Platform Width)	26 3/4"	26 3/4"	26 1/4"
DIM "E" (Max Mount Height)	15 3/8"	15 3/8"	13 1/2"
DIM "F" (Min Mount Height)	9 3/8"	9 3/8"	12"
DIM "G" (Pitch Adj.)	N/A	N/A	Adjustable +/- 3° from Level
Weight Lbs.	48	48	46.8
Bearing Type	Tapered Roller Bearing	Tapered Roller Bearing	Tapered Roller Bearing
Oscillation	Yes	Yes	Yes
Tubed	Yes	Yes	Yes
360 Degree Pivot	N/A	N/A	Yes
Suspension	N/A	Yes	Yes



LIQUIDRAGE SUMMER KIT

LIQUIDRAGE	
Description	PartID
Liquid Rage Sprayer Assembly	SSAI50
Broadcast Nozzle Kit	BNK10
Hose Reel Kit	HRK50

The Liquid Rage features the patented hitch design which allows for easy adaptation between skid steer or tractor carriers. No adapter plate required. In fact, you can change from a skid steer to a tractor in less than 8 minutes! By installing the summer boom kit, you instantly convert your Liquid Rage into the perfect broadleaf or other IPM application tool!



TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM

GreatER BAR SPECS

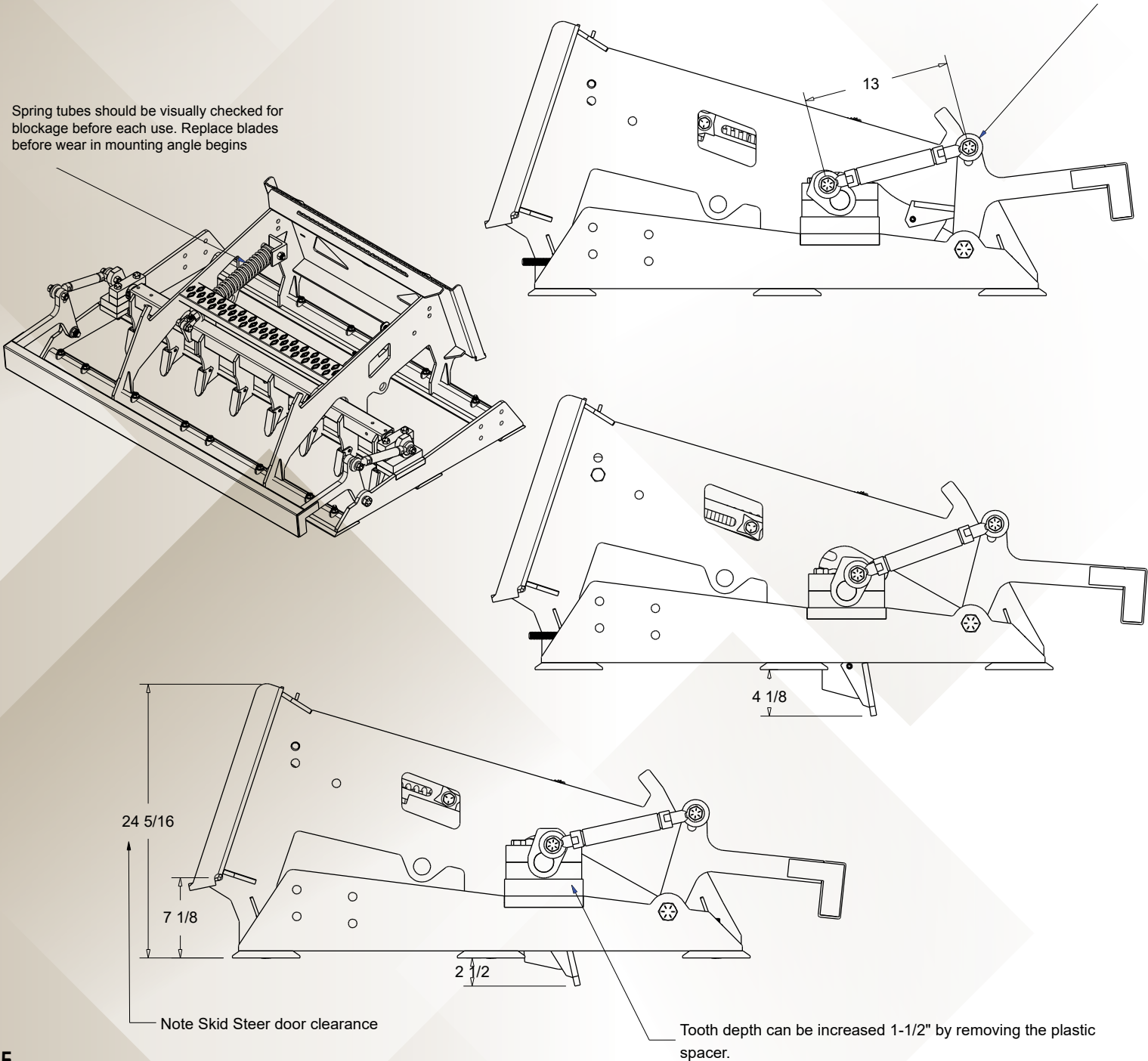
NOTES

MODELS

Model / Option #	Description
GBT72	GreatER Bar w/ Quick Rip 72"
GBT84	GreatER Bar w/ Quick Rip 84"
GB72	GreatER Bar 72"
GB84	GreatER Bar 84"

Default length for top link is 13". Lengthening or moving to the lower bolt hole will allow teeth deployment with less downward angle. However this will increase the pressure required to activate the teeth. Lighter machines may need to reduce the length of the top link.

Spring tubes should be visually checked for blockage before each use. Replace blades before wear in mounting angle begins



Notes section with horizontal lines for writing.

TO ORDER CALL 651-433-4628, OR GO ONLINE: KAGEINNOVATION.COM



KAGE Innovation, LLC

KAGEInnovation.com | 651-433-4628 | fax 651-344-0887

502 Simmon Drive
Osceola, WI 54020

PATENT INFORMATION

SNOWFIRE & SNOWSTORM - Patent #7,654,016; #7,788,829; #7,941,947; #2,707,963; #2,574,587
SHADOWBLADE - Patent # 8,776,406