GRASSHOPPER°

MAXIMIZERS[™]

\\\\\For MidMount™ and \\\\\\\OutStander™ Stand-On Mowers

Maximize the performance of your Grasshopper!





EDA DEALER'S CHOICE AWARD WINNER

We're proud to be the EDA Dealer's Choice Award Winner for #1 Outdoor Power Equipment Manufacturer, scoring first in Product Quality, Product Technical Support, Product Availability, and Parts Availability.



△ **WARNING:** California Proposition 65 Cancer and Reproductive Harm – www.P65Warnings.ca.gov M1 Models include: 200, 300 Air-cooled, 300 Liquid-cooled and 400 Series

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Engine Performance MAXimizers™

40-AMP AITERNATOR KIT

For liquid-cooled Kubota engine. Recommended when installing two or more electrical options or when specifications require 40-amp alternator. Standard on 322D, 325D,

329, 400D 1.3L and 432.

DETAILS	ORDER #
321D	604020
428D & 430D	KU1145



BATTERY MINDER

Ensures engine will start every time by keeping batteries in tip-top shape yearround. The Battery Minder not only keeps batteries at full charge, but also prevents

sulphation on battery plates through a patented pulsation process. No need to remove battery from power unit, as Battery Minder can be connected to batteries in the cradle of power units. Each Battery Minder is backed by a 5-year warranty.



BIOCK HEATER

Block heater for Kubota liquid-cooled engines helps with cold-weather starting.

DETAILS	ORDER #	
325D, 329 & 432 with SN 5500000 and above	KU1174	81
428D, 430D and 400D 1.3L	KU1176	-
432 with SN 5499999 and below	KU1176	



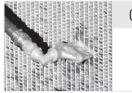
FILTER MINDER® KIT

Filter Minder® Kit alerts you when it is time to change the air filter element. Available for all models except 100V, 200V, 200V-G4, 225, 327EFL and 321D.

	ORDER #
FILTER MINDER	603326

RADIATOR CLEANOUT TOOL \\\\\\\

For liquid-cooled models. Attaches to standard garden hose and provides correct pressure and reach for thoroughly cleaning all four corners of the radiator cooling fins (without bending the fins) and all areas in-between. A must-have if mowing in hot/dry conditions.



ORDER #

609015

For radiator grille on liquid-cooled models and sight windows on PowerVac™ Collection Systems.



TEMPERATURE SENSOR

Low Oil Audible Signal Kit for liquid-cooled models sounds an alarm if low oil pressure or high engine temperature is detected. Mounts on console filler panel above fender.

ORDER #	
604025	

For liquid-cooled models (SN 6299999 **and below**.) Keeps tabs on the engine temperature gauge, automatically shutting off PTO in the rare event an overheat condition occurs. A safeguard in multi-operator environments or where mower will be used in dry, dusty conditions. **Contact dealer for order number.** (Standard on models with SN 6300000 **and above**.)

Power Unit MAXimizers™

FIRE EXTINGUISHER KIT

Mounts on ROPS, close to operator, to quickly contain any fire emergency.





STRING TRIMMER MOUNT KIT

Mounts to ROPS on MidMount (and side of machine on Stand-On) to hold string trimmer in convenient location.



STAND-ON ORDER # 503480





In 2005, Grasshopper was one of the first mower manufacturers in the industry to voluntarily include roll-over protection (ROPS) on its mowers. Mowers made prior to 2005 may be fitted with a 2-Post ROPS. Includes retractable seat belt.

ROPS KITS	ORDER #
2-Post ROPS, 200/300 Series SN 5499999 or prior	533386 [†]
2-Post ROPS, 400 Series SN 5499999 or prior	533388
† Wheel spacer kit required on 52-inch models	503946



Allows units to be stored or transported into trailers with low clearance. If equipped with foldable ROPS, always wear seat belt when ROPS is deployed in upright position as described in operator's manual. When foldable ROPS must be down (e.g., when loading or unloading from an enclosed trailer), DO NOT use seat belt, and drive with extra care.



FOLDABLE ROPS KITS	ORDER #
200V Series	533393
200V-G4 Series	533379
300G4/300G5 Series	533381
400 Series (SN 5499999 & prior)	533394
M1 (200, 300, 400) Series (SN 5500000 or later)	533395
200/300 Series (SN 5499999 & prior)	533398 [†]
† Wheel spacer kit required on 52-inch models	503946

LIGHT KIT -BEACON STROBE \\\\\\\\\\\\\\\\

Installs on OPS or ROPS, adding a high degree of visibility with yellow strobe effect.

DETAILS	ORDER #	
Beacon Strobe w/ Straight Stand	503326	
Beacon Strobe w/ Offset Stand (For Aluminum Sunshade Canopy)	503341	

CUP HOLDER KIT

Adjustable, locks into multiple positions to accommodate a variety of drink containers, including the larger "big gulp" sizes.

ORDER # 504185



Improve visibility in low-light situations while mowing. LED lights are standard on 300G5 and 400 1.3L Series. Plug-in ready for easy installation.





LED LIGHT KITS	ORDER #
All 100 and M1 300 Series, 200V-G4 Models (SN 719999 and below), M1 200 Series (SN 5300000 and above) and M1 400 Series (SN 6919999 and below)	503339
100V-48, -52 & -61 (SN 7110000 and above), 200V-G4 (SN 7200000 and above) and 300G4 Models.	503342

The Premium Comfort Seat – a standard feature on all V Series (Premier Suspension Seat standard on all 300G5 models) and M1 MidMount™ mowers – was designed with speed, control and comfort in mind. Maintaining a low center of gravity and positioned at the pivot point of zero-radius turning, it includes solid, stable, maintenance-free iso-suspension, shock-absorbing coil-spring suspension, and luxurious, variable density foam with padded armrests, backrest and lumbar support. CoolTemp™ Cordura® exterior repels moisture and remains cool to the touch even in the hot summer sun. Armrests are reinforced with the structural strength of steel seat side panels to support the weight of the operator when mounting and dismounting from the machine. ComfortReach™ control levers are hydraulically dampened and foam-padded for precise and effortless control with automatic return to neutral. With the instrument console positioned in natural reach and an extended footrest to provide additional leg room, Grasshopper's Premium Comfort Seat is integral to unmatched comfort and performance.

Various options and accessories are available to accommodate the wide range of preferences that often exist when multiple operators use the same Grasshopper mower. These include control lever, seat cushion and other options found on pages 7 - 9.

LEVERS: QUIKAJUST™ TILT CONTROL

Allows you to maintain all the advantages of the standard Premium Comfort Seat while accommodating the size differences of multiple operators. Provides 9 inches of infinitely variable adjustment to accommodate the comfortable reach of any operator.



DETAILS	ORDER #
100V Series SN 6300000 and above (except 124V-41) All 200V/200/300/400 Series	503705

Hydra-Smooth™ Dampened, Dual-Steering Levers

MODEL	ComfortReach™ with 2-inch adjustment	QuikAjust Tilt™ with 9-inch adjustment
124V-41	•	N/A
124V-48	•	0
125V/126V/127V	•	0
200V Series	•	0
200V-G4 Series		•
200 Series M1	•	0
300 Series M1	•	0
300G4/G5 Series		•
400 Series M1		•

^{• =} Standard O = Option

"Tall Boy" QuikAjust™ Tilt Control levers are 2 inches taller for "big and tall" operators. Available for 200V-G4, 300G4/G5, 200, 300 & 400 Series.

DETAILS	ORDER #
Tall Boy QuikAjust Tilt™	503707

"Tall Boy" 2-inch Extended Standard ComfortReach™ Levers are extended 2 inches for additional leg room. Consider ordering a "Tall Boy" lever kit whenever a suspension seat kit is installed on machine.

DETAILS	ORDER #
100V & 200V Series	503711
200V-G4, 300G4/G5, 200, 300, 400 Series	503713

FOAM GRIPS

Replace worn and/or torn foam grips with new foam grips.
Order 2 to replace both grips.

ORDFR # 422179

WIDE SEAT CONVERSION KIT

Adds 2 inches of sitting room for larger operators or for those who carry cell phones on their belts. A seat belt extension is included in the kit.

DETAILS	ORDER #
100V, 200V, 200V-G4, 300G4 and M1 Series models SN 6000000 & above	503928

SLIDING SEAT UPGRADE KIT (ADJUSTABLE SEAT KIT)

Provides 2-inch seat adjustment for additional operator comfort. Available for 100V Series (except 124V-41) SN 6310000 to 6899999, standard with SN 6900000 and above).

Also available for 200V Series & 200 & air-cooled 300 Series M1 models with SN 6000000 & above. Standard on 200V-G4 and 300G4 models.

ORDER # 503698

SEAT BELT EXTENSION KIT

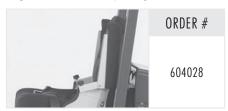
For standard Cordura seat. Adds up to 8" of belt length. Replaces seat mount only (included with 503928 Wide Seat Conversion Kit).

ORDER # 324201



Contains the plush Cordura®-wrapped padded armrests, backrest and seat with the attractive Grasshopper logo embroidered in bright red UV-treated, colorfast fiber. Order this as a replacement kit or to add a touch of elegance to your Grasshopper!

FOLDABLE ARMREST KIT



Allows greater on-off accessibility. Kit includes backrest support and other hardware but reuses existing cushions. For 200, 300 and 400 Series.

PREMIER SUSPENSION SEAT - FULLY ADJUSTABLE

Provides maximum mowing comfort over rough ground. Seat can slide forward and backward and provides adjustable tension platform customized to operator weight to control ride quality. Also features adjustable armrests and lumbar tensions. Seat cushion and seat back are covered in durable CoolTemp™ Cordura® material. Standard on 300G5 Series. Premier seat kits not available for 100, 100V, 200V or 200V-G4 models.

DETAILS	ORDER #	
ORDER BOTH SEAT PAN KIT AND GRAMMER SEAT		
Seat Pan for 200 Series SN 5500000 and above	503668	
Seat Pan for 300 LC/400 LC Series SN 5500000 and above	503669	
Seat Pan for 300 AC Series SN 5500000 and above	503670	
Seat Pan for 300G4	503672	
Grammer Seat for all models except V Series	503671	



NOTE: Consider installing the taller "Tall Boy" lever option when installing Premier Suspension Seat, which sets higher than the standard Premium Comfort Seat.

FOOTREST RISER

Optional footrest riser for 300G Series models raises footrest 2 inches to provide increased comfort for smaller operators.

ORDER # 533275



Relocates the fuel gauge from under the seat to a more visible location on the console.



DETAILS	ORDER #
M1 Series models (SN 6500000 & above)	E04272
225V and 226V Series (SN 6712516 & above)	504272

HYDROSTATIC TRANSMISSION SEAL GUARD KIT

Prevents "grass wrap" around the hydro pump's shaft which causes damage to the seal.



DETAILS	ORDER #
200 Series/400 Series	606390
300 Series	606391

PUSHER KITS

As the name implies, these "bumpers" allow operator to push or nudge sturdy lawn objects such as picnic tables to allow closer trimming. Mounts to front fork assemblies on all models (except 124V-41).



DURAGUARD™ REAR BUMPER \\\\\\\\

Designed for M1 Series. Replaces standard bumper. Provides enhanced protection for rear service shield in close-quarters mowing situations. Maintains easy access to and removal of shield.

DETAILS	ORDER #
200 Series	504090
300 AC, 321D	504091
300 LC, 430D, 432	504092



30-gallon reservoir and 53-inch shielded boom reduces spray particles for better surface coverage to reduce amount of chemical solution required per acre. Skirted shields also control spray drift to protect operator and nearby vegetation. Spray wand with 25-foot coil and auxiliary pump for fertilizer applications sold separately. Available for 200, 300 and 400 Series.

DETAILS	ORDER #
Sprayer Reservoir & Shield Boom	533433
Spray Wand	533435
Auxiliary Pump	533437



SUNSHADE CANOPIES \\\\\\\

Canopies are highly recommended for comfort and protection from the sun's harmful rays. Vinyl version is lightweight, water-repellent and UV-resistant. Diamond-plated aluminum version tilts up and down and is highly resistant to abrasions. Vinyl and aluminum versions fit all models.

Optional nine-inch diameter, one-speed fan mounts to the bottom side of the aluminum canopy and adjusts up and down and fore and aft to direct maximum airflow on the operator.

Optional LED Work Light Kit (2-front, 1-rear) for the plug-in-ready aluminum canopy increases visibility for roadside mowing and in low light conditions. Lights tilt up and down. Rear light can also be set to flash for higher visibility when mowing.

See page 6 to order optional offset beacon light stand (Order # 503341) for aluminum canopy.



ROPS-mounted Sunshade Canopies

DETAILS	ORDER #
Vinyl Sunshade	533392
Aluminum Sunshade	503188
Fan Kit — Aluminum	503370
LED Light Kit — Aluminum	503371

Weather-resistant, black Cordura® fabric cover with embroidered Grasshopper logo keeps seat and engine area protected during storage or between mowings. Slips over ROPS, with Velcro closure to secure the opening.



Mounts to the side of Stand-On power unit fender to hold a five-gallon trash bucket. (bucket not included)



Deck MAXimizers™

Air Dam Kits may be installed along the front edge(s) of mower decks listed below. They are effective at minimizing dirt and dust from escaping the front edges of the mower deck in dry or dusty conditions.

DECK MODEL	ORDER #
48" Deck	503030
52" Deck	503041
61" Deck	503042
72" Deck	503043



GRASSMAX[™]

IT'S ALL ABOUT A PERFECT CUT!



The only blade syst tolerances incorporat treating process throu 25- to 40-percent had edge of GrassMax™ to blades claiming to blades deliver better a picture-perfect cut stamped onto the blades.

HIGH-LIFT NOTCHED

EXTREME HIGH-LIFT NOTCHED

MEDIUM LIFT







Recommended for most normal side-discharging applications, from the moist grass conditions of early spring to final mowing in the fall. Available with optional LaserEdge® EverSharp™ technology that requires no sharpening for the life of the blade

Not recommended for mulching or vacuum applications. Consider Medium Lift or Contour blades in dry, sandy soils.

In dry, dusty conditions, ensure that deck is leveled properly and consider using air dams to minimize dust blow-out from around deck. Recommended for sidedischarge applications in very lush or overgrown conditions. They are recommended for use with liquid-cooled models or air-cooled models greater than 23 hp.

Not recommended for mulching or vacuum applications and should never be used in dusty, sandy conditions Recommended for use with all PowerVac® Collection Systems. Medium Lift blades are required with certain mulching packages – use Medium Lift blades with any mulching package that originally included Medium Lift blades. Also recommended for most rear discharge decks.

Also satisfactory for many side-discharge applications, including dry, sandy conditions.

Order Nu	mbers:	Order Numbers:	Order Numbers:
Standard	LaserEdge®		
15-in 320234	N/A	15-in 320248	15-in 320231
18-in 320239	320317	18-in 320241	18-in 320236
21-in 320245	320318	21-in 320246	21-in 320242
25-in 320253	320319	25-in 320254	25-in 320250

BLADE SIZE REQUIREMENTS FOR SIDE-DISCHARGE DECKS:

41-in. decks: two (2) 21-in.

48-in. decks: one (1) 15-in. and two (2) 18-in.

61-in. decks: three (3) 21-in.

42-in. and 44-in. decks: three (3) 15-in.

52-in. decks: three (3) 18-in. 72-in. decks: three (3) 25-in.

em in the world manufactured to meet the precise design ed into every Grasshopper DuraMax® deck. A patented heatgh-hardens every GrassMax™ MARBAIN® blade, making them order than cheap aftermarket options. In field tests, the cutting blades lasts twice as long with fewer sharpenings compared o be exact replacements. Don't be fooled – only GrassMax™ cut quality, optimal airflow and minimal grass build up for every time. Look for the Grasshopper logo and part number

LOOK FOR THE LOGO AND PART NUMBER

on the grass side of the blade to be sure you're using GrassMax™ blades.



CONTOUR



HIGH-LOW MULCHING

SHREDDER™







The blade of choice for the highest quality cut in sidedischarge mode in ideal conditions where the 1/3 rule is followed. They are also preferred when mowing over dry, sandy soils. In high-profile areas that are mowed on a regular basis, Contour blades will leave the most manicured cut

Not recommended in lush, moist, high-volume conditions. Designed for use with all mulching packages beginning with SN 5700000 and above. In conjunction with the Down Discharge™ mulching baffles, High-Low Mulching blades recut clippings multiple times thanks to an extended cutting edge and a carefully crafted rise and fall airflow pattern that helps clippings disappear into the turf canopy.

Use Medium Lift blades if they were provided with your original package.

Looking for a toothy-edged blade to break apart leaves or clippings in drier conditions? The Shredder™ Blade was designed for this purpose. Used with Grasshopper 52-, 61- and 72-inch DuraMax® decks, Shredder™ blades are the best choice when serrated-wing blades are desired to reduce volume of leaves and clippings.

Not for Down Discharge™ mulching but can reduce leaf and clipping volume in drier conditions.

Order Numbers:

15-in. - 320233

18-in. - 320238 21-in. - 320244 25-in. - 320252

Order Numbers:

15-in. - 320235

18-in. - 320240

21-in. - 320247 25-in. - 320255

Order Numbers:

18-in. - 320321 21-in. - 320322 25-in. - 320323

BLADE SIZE REQUIREMENTS FOR 35R, 37R & 4XRD REAR DISCHARGE SERIES DECKS:

3552R 52 in. decks: two (2) 18-in. - 320280 (CCW); one (1) 18-in. - 320236 3561R/3761R 61-in. decks: two (2) 21-in. - 320285 (CCW); one (1) 21-in. - 320242

3572R 72-in. decks: two (2) 25-in. - 320290 (CCW); one (1) 25-in. - 320253

M1 4XRD 48 in. decks: two (2) 18-in. - 320236; one (1) 15-in. 320231; one (1) Grass Thrower - 766025

M1 4XRD 52 in. decks: three (3) 18-in. - 320236; one (1) Grass Thrower - 766025

M1 4XRD 61-in. decks: three (3) 21-in. 320242; one (1) 18-in. 320240

M1 4XRD 72-in. decks: three (3) 25-in. 320250; one (1) 18-in. 320240

100V/200V-G4 4XRD 48-in. decks: two (2) 18-in. 320236; one (1) 15-in. 320231; one (1) 766026 - Grass Thrower

100V/200V-G4 4XRD 52-in. decks: three (3) 18-in. 320236; one (1) Grass Thrower - 766026

100V/200V-G4 4XRD 61-in. decks: three (3) 21-in. 320242; two (2) 766025 - Grass Thrower; one (1) 766026 - Grass Thrower

EDGE-EZE™ \\\\\\\

Used for maintaining a clean, blade-cut edge along sidewalks, roadways and driveways, Edge-EZE™ completes the job much faster and with less effort than strenuous, hand-held edgers. A must for anyone wanting to save time maintaining miles of edges or who dislikes holding heavy, noisy edgers.

Ideal for commercial use, the reversible blade and hub assembly allow edging from the curb, sidewalk, driveway or turf. Downward pressure from electric actuator and placement of pivot point for the fork assembly keeps continuous contact between the blade and the hard surface. Choose the appropriate Edge-EZE™ model for mounting to side discharge or trim side of deck.

DETAILS	ORDER #
Electric Lift, Side Discharge decks only, RIGHT side mount	533137
Electric Lift, 4X Rear Discharge™ decks only, RIGHT side mount	533139
Electric Lift, Side Discharge or 4XRD decks, LEFT side mount	533142
Wiring harness for Stand-On	605993

HEIGHT ADJUSTMENT KIT

Electric kit is available for 200 and 300 Series models (not for V Series), and a Hydraulic kit is available for 61- and 72-inch decks on 300 LC and on 400 LC Series Models SN 5499999 and below and for 300G4/G5 Series Models.

DETAILS	ORDER #
Electric Height Adjustment Kit for 200 & 300 Series. Includes Power Harness, Toggle Switch Box under armrest.	503297
Hydraulic Height Adjustment Kit for $300LC/400-61-8.72$ -inch decks (standard on $400\ LC$ Series beginning with SN 5500000). Includes Power Harness, Toggle Switch Box under armrest	504256
Hydraulic Height Adjustment Kit for 300G4/G5 Series. Includes Power Harness, Toggle Switch Box under armrest	504265
Foot Pedal Extension Kit for 100V/200V-G4 Models. Makes height adjustment easier for smaller operators	503381
Spring-Assist Height Adjustment Kit for 41" decks. Spring transfers weight of deck when adjusting height. Not for 100V models.	504222

DURAFLEX™ SUSPENSION FORK KIT \\\\\

A unique stabilized design dampens the impact of rough ground by absorbing impact without creating a residual bounce, smoothing the ride and maintaining an even cut. Tension can be adjusted to fit operator preference and mowing conditions. Not for use with Michelin® X® Tweel® front tires, flat-proof tires or PowerVac Collection Systems.



DETAILS	ORDER #
For all models except 124V-41	504735

Spindle Cones shield spindle housing and seal lower bearings from moisture, fiber wrap and other material. Fiber Washers provide a buffer between spindle housing and cone.



DETAILS	ORDER #
Spindle cone	423680
Fiber washer	421200

Kits are available for most decks. Roller kits are priced "field-installed." Listed below are the most popular anti-scalp roller kits.

Four-Corner Roller Kit (Front and Back)

DETAILS	ORDER #
M1-48 deck	503627

Two-Corner Roller Kit (Front Only)

DETAILS	ORDER #
M1-48 deck	503626

A TrimAide™ Vertical Trim Roller Kit is available for left-hand corner of 52-inch decks or can also be added to the right-hand corner of 4XRD decks.

DETAILS	ORDER #
M1-52 deck LEFT	503640
M1-52 deck RIGHT (4XRD only)	503639

Speed-Trimming™ Roller Kits set the standard for trimability along fences, buildings, cemetery markers and other obstacles. For for 61- & 72-in. decks (and 52-in. deck on Stand-On model)



DETAILS	ORDER #
Semi-pneumatic roller and vertical roller for left corner of M1-61 and M1-72 decks with bolt-on anti-scalp roller brackets	503629
Semi-pneumatic Speed-Trimming™ kit for left corner of Stand-On 52" and 61" decks.	503637
Non-pneumatic Speed-Trimming™ kit for right corner of M1-61 and M1-72 4XRD decks	503638

SIDE-DISCHARGE CONTROL KIT

Control the discharge of the mower on V Series (except 124V-41) M1 and Stand-On decks to avoid putting clippings in flower beds and on sidewalks. When in the open position, the discharge is released from the side of the mower deck. When in the closed position, the discharge is released from the rear of the mower deck. (Does not replace Down Discharge Mulching Kit.)

MODEL	ORDER #
V Series & M1	504210
Stand-On	504211
CLOSED	OPEN

MULCHING PACKAGES \\\\\

Years of airflow research have led to a mulching package design that produces exceptional results in the Down Discharge™ mode. More than just a kit, the Grasshopper mulching package reroutes airflow and clippings into a vortical pattern that forces them deep into the turf after being recut into small particles.

Mulching packages consist of three main components: special shrouding,
High-Low GrassMax™ blades and a discharge restriction plate. Only four bolts are required for easy field installation.
Available for all models.

DECK SIZE AND MODEL	ORDER #
41" 124 & 124V	504548
48" 124 & 220	504566
52" 124	504575
48" V Series & M1	504551
52" V, V-G4, 300G4, M1 & Stand-On (SN 5500000 & above)	504567
61" V, V-G4, 300G4/G5, M1 & Stand-On (SN 5500000 & above)	504569
72" 300G5 & M1 (SN 5500000 & above)	504571

NOTE: While current mulching packages include High-Low style GrassMax™ blades, prior mulching packages (SN 5499999 and below) included Medium

Lift Blades. Customers should continue to order whichever style of blade was furnished with their mulching package. (See pages 12-13) High-Low blades are not compatible with mulching packages designed for Medium Lift blades



GRASS-GROOMING STRIPING KIT \\\\\\

Optional deck flap for V Series decks. Attaches to rear of deck to "comb" grass and enhance the stripe effect of the final appearance. Standard on 300G Series and M1 decks.

DECK MODEL	ORDER #
V Series-48	504665
V Series-52	504666
V Series-61	504667



MULCHING GUIDELINES \\\\\

Grasshopper's highly engineered mulching package enables clippings to be recut into small pieces and discharged into the turf canopy where they decompose and nourish the lawn. Here are a few tips to ensure you get the best results from mulching:

9 TIPS FOR BETTER MULCHING:

- Follow the "1/3 Rule": Don't cut off more than one-third of the grass height when you mulch.
- 2 Keep mower blades sharp. Because grass clippings are recut several times in the Down Discharge™ mulching mode, mower blades may need to be sharpened more frequently.
- 3 Dry clippings mulch easier than wet ones. In moist conditions, clean the deck often to achieve best results and slow down.
- 4 Mow the grass about 1/2-inch higher than you would normally mow in the side-discharge or vacuum modes.
- Grasshopper mulching packages are shipped with proper blades. Always use the recommended blades rather than aftermarket "mulching" brands.
- 6 Mow often. This will encourage a denser turf and will also help maintain grass at a desirable height for mulching.
- Fertilize less if you follow a regular mulch program. Mulching returns nutrients back to the soil, reducing the need for chemical fertilizers.
- Disengage the PTO drive before passing over sidewalks and drives to prevent clippings from discharging onto these areas.
- The recommended minimum cutting height is 2-1/2". If the grass is too tall to follow the "1/3 Rule", you may need to make two passes over the grass for optimum results. Cut grass higher on the first pass, and on the second pass cut at the desired height in the opposite direction from the first pass.



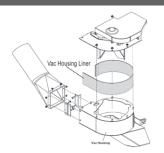
Mower-ganic™: Recycle grass clippings by mulching and save time while reducing dependence on excess water and chemical applications.

PowerVac[™] MAXimizers[™]

VAC HOUSING LINER KIT

Designed to extend the life of the vac housing in very dusty or sandy conditions. It can be used in any vac housing except 41-inch vac.

ORDER # 606900



COMPONENTS OF A POWERVAC™ COLLECTION SYSTEM \\\\\\

Collector

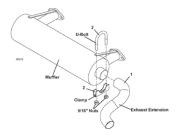
Choose from Model 16 Lever-Actuated metal hopper, Models 8HT or 8F twinbag, and Models 12HT or 12F triple-bag

collectors.

Exhaust Extension

Required for Model 16 collector on Big Block power units.

ORDER # 101395

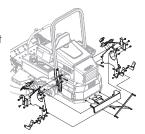


Air Dam Kit

Adding an Air Dam Kit minimizes dust and leaves from escaping the front of the deck and provides a cleaner environment for the operator. See page 11.

Mount Kit

Collector mount kits are specific to the power unit and to the collector.



Vac Drive Kit

Vac drives are specific to the size of deck and power unit.



Medium Lift Blades

Medium Lift blades are recommended with PowerVac™ Systems. Be sure to install Medium Lift blades when switching from side discharge or mulching to vacuum applications.

Counterweight

Be certain to install recommended counterweight with all PowerVac™ Collection Systems.

See counterweight chart on page 21.

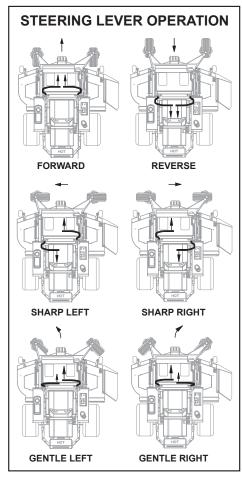
TIRES & STEERING: TRACTION & TURNING

Turf damage should not be a common experience on a Grasshopper. A little practice on proper turning will make for "an ounce of prevention" while choosing the right tires and inflating them to the proper level will provide for "a pound of cure."

Grasshopper power units have advanced handling characteristics unlike any other mower. For example, gas-cylinder dampers on the steering controls protect against operator over-aggressiveness on the drive system. Low pressure tires flex with the terrain, providing an extra grip for traction. A low center of gravity allows for a smoother ride and better ground-hugging properties. Internal components of the drive system are design-matched for smoother responsiveness in forward and reverse.

The two most common causes of turf scuffing are tires slipping and pivoting on a tire when making turns. Fortunately, both situations can be avoided. To prevent tire slippage, use only a low pressure gauge to ensure tires are inflated exactly as indicated on the rims. A common misconception is that bar tread tires create more turf damage. Bar tread tires require less air pressure than most standard turf tires, thus they float and flex with the terrain to hug the ground without spinning out. If you frequently mow over soft soils or on undulating terrain, consider the switch to low pressure, bar tread tires for a more turf-friendly experience.

To prevent turf scuffing caused by pivoting on a tire during turns, remember that the drive tires should be rotating when making a turn. Avoid letting go of one lever when making a turn. For gradual turns, keep both tires rotating forward, applying extra force to whichever lever controls the outside tire of the turn. For sharp, zero-radius turns, make sure to counter-rotate the drive tires. This is done by pulling back on one lever while pushing forward on the other. As long as both tires are rotating, the mower will leave no divots on the pivots.



Beginning a sharp turn from a stationery position can cause castor wheels to bind. To ensure that castor wheels leave no marks on the lawn, keep the unit moving in forward or reverse while turning left or right to allow the castors to turn freely.

The advanced components in your Grasshopper are intended to provide you every advantage in creating a beautiful lawn. By spending a little practice time on turns in an open area, and by keeping tires properly inflated, turf damage should be eliminated.

TIRE OPTIONS FOR YOUR MIDMOUNT™ MOWER

Optional tire styles are available for many Grasshopper models. Four-ply turf-type tires provide good overall traction and handling and are ideally suited for level terrain.

Premium Low Pressure (LP), high flotation tires (also known as bar tread, tractor-type or chevron-type) flex with the terrain for maximum traction, thus minimizing the scuffing caused by wheel spin-out.

In addition to its effect on deck pitch and cutting quality, proper tire pressure is critical where traction is concerned. Overinflated drive tires will cause poor traction resulting in slippage and possible turf damage. Correct tire inflation also extends tire life, reduces wear and tear to frame of machine, and improves the comfort of the ride.

When replacing tires on your Grasshopper, demand Grasshopper OEM replacement tires. Aftermarket tires come in all sizes, textures and qualities despite their claims to be exact replacements. Having tires of unequal size or handling capabilities can result in loss of comfort, difficult handling and poor cutting quality. Non-OEM aftermarket tires may not hold well on rims. Grasshopper parts technicians will take the extra care and attention to closely match your new set of drive tires.

Please note that proper tire pressure affects traction, riding comfort and quality of cut.



Turf Tread Design Standard on MidMount™ models. Overall excellent performance on level mowing areas.



Bar Tread Design Optional Bar Tread low-pressure (LP) flotation design is ideal for preventing "spin out" on undulating terrain and soft ground.

DETAILS	ORDER #
M1-61 & M1-72 300G4-52 & 61; 300G5-61 & 72 24 x 12-12, Set (Field Installed)	504245

ALWAYS REFER TO DECALS ON TIRE RIMS FOR PROPER AIR PRESSURE.

MICHELIN® X® TWEEL® AIRLESS TIRES*

Airless Turf Tread Drive Tires for 61- and 72-inch M1 (200, 300 & 400 Series), and 52-, 61- and 72-inch, 300G Series (G4 & G5) models, perform without the inconvenience and downtime associated with flat tires. Designed with a 5-bolt pattern.



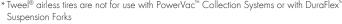


Consistent hub height helps the mower deck produce an even cut.

DETAILS	ORDER #
Michelin® X® Tweel® Airless Turf Tread Wheel Set (24 x 12-12) for any M1 with 52", 61" or 72" deck, and all 300G Series models.	483975 (Order 2)

Airless Front Tires (set of 2) performs without the inconvenience and downtime associated with flats.

DETAILS	ORDER #
Michelin® X® Tweel® Airless Front Tire Set (13 x 6.5-6)	483867 (Order 2)
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PUNCTURE-PROOF FRONT TIRE & WHEEL ASSEMBLY

Features dust-proof bearings, 13 x 6.5-6 (not for V Series or Model 220). This semi-pneumatic assembly will never go flat and requires no air. It is

heavier than a standard pneumatic tire and although it is cushioned, the ride will not be as smooth as the standard fully pneumatic air-filled tire.

DETAILS	ORDER #
Order two (2) Flat-Proof Wheels	603976

COUNTERWEIGHT REQUIREMENTS



Counterweight is required with all vacuum collections systems on MidMount™ models.

Models	With 8 cu. ft. Collector	With 12 cu. ft. Collector
124V-41	70 lbs.	NA
100V-48, 100V-52	35 lbs.	NA
200V-G4 (all decks)	100 lbs.	150 lbs.
All 48/52-inch Models (except V Series)	50 lbs.	100 lbs.
All 61-inch Models (except V Series)	50 lbs.	100 lbs.
All 72-inch Models	NA	100 lbs.

Models	With Model 16 Collector
100V and 200V Series	NA
Air-Cooled 48-, 52- and 61-inch Models; Liquid-Cooled 325D-72, 329-72 and 400 Series-61	200 lbs.
Liquid-Cooled 48-, 52- and 61-inch Models (except 400 Series-61)	250 lbs.
All 72-inch Models EXCEPT 325D/329-72	150 lbs.

OEM PARTS PROTECTING YOUR INVESTMENT



Don't cut corners on quality. When you invest in quality Grasshopper equipment, don't be tempted to save a few dollars on generic aftermarket parts that can reduce your mower's power or efficiency. Protect your investment and ensure peak performance by trusting only genuine Grasshopper parts and supplies to maintain your mower. Aftermarket parts have proven time and time again to be unacceptable, even voiding warranties in some situations. Manufactured to meet ultra-precise engineering specifications, genuine Grasshopper parts help you maximize performance and significantly extend the life of your mower.

The following is a case in point: aftermarket oil filters that don't make the grade.

The cross section of a hair is on average about 70 microns in diameter and hardly visible to the human eye. A white blood cell is only 25 microns wide and is invisible to the unaided eye. Yet, particles much smaller than this are capable of contaminating and shortening the life of a drive system, and many filters allow such particles to recirculate. In drive systems, these particles are abrasive to valves and other moving components.

A micron is .001 mm or .00003937 inches. While most small engine oil filters use up to a 40-micron filter, transmissions work under close tolerances, heavy stress

loads and higher temperatures and thus require more effective filtration.

If this were a cross section of a hair ... This is how a white blood cell would compare And this is how a 7-micron particle would compare

HYDRO-MAX

Most zero-turn mowers use a 10- to 25-micron rated filter. Most of these are nominal filters meaning that as fluid passes through them, they only trap about half of the particles of the stated size. Grasshopper mowers, on the other hand, use finer particle filtration systems to ensure a longer service life from its drive systems. Superior filtration is one reason Grasshopper drive systems last longer and require fewer fluid changes. Superior filtration and superior transmission fluid combine to provide the lowest operating costs of any commercial drive system available.

COOLTEMP HYDRO-MAX™ FLUID

CoolTemp Hydro-Max™ fluid paired with genuine Grasshopper filters form an advanced protective shield that eliminates the need for break-in fluid changes and significantly extends fluid and filter service intervals, saving time and money.

DETAILS	ORDER #
1 qt.	345044
2 gal.	345046

GRASSHOPPER PREMIUM HEAVY-DUTY TIRE SEALANT

Grasshopper Tire Sealant 32 oz. bottle will treat one turf tire drive wheel, or two tail wheels on FrontMount™ unit, or two front wheels on MidMount™ unit. Bar Tread tires require 1.5 bottles each. If you own multiple mowers, consider ordering Grasshopper Tire Sealant -5-gallon bucket.



HOW IT WORKS

- 1. Liquid-absorbing cellulose fibers immediately fill the hole with their organic bulk. As organic fibers and particulate liquid slow air from escaping, synthetic nylon fibers cover the hole and create a flexible seal on the inside of tire.
- Finally, the hole becomes packed with flexible fiber solids - creating a permanent, flexible seal.
- When the puncturing object is removed, centripetal force further packs the particulate material into the hole to seal off the puncture. Very small amount of air escapes during fast process.

- Proper tire inflation improves quality of cut. While helping maintain constant air pressure, Grasshopper Tire Sealant stops flats, saves fuel and extends tire life keeping your equipment moving on schedule.
- Twin-Fiber Sealant contains three times the fiber content of other brands, and is backed by more than 25 years in the market
- Eliminates flat tires from tread punctures, bead leaks, rim leaks, and other forms of air loss for the life of a tire.
- Adheres to inside of the tire and rim to provide permanent, full-time protection against tread punctures, bead leaks, rim leaks and other forms of air loss.
- pH balanced to prevent rubber corrosion and contains rust inhibitors to protect rims.
- Effective in temperature extremes from -40° F to 200° F.
- Excellent shelf life allows customers and dealers to keep plenty in stock without fear of spoilage.
- Protects against punctures up to 1/4" in the tread area. Coats all inside surface areas and seeks location of air loss.

DETAILS	ORDER #
32 oz Bottle / 1 quart	345020
5-gallon bucket	345015
Reusable pump for 5-gallon bucket	141610

MAXIMIZER™ MAINTENANCE TIPS

- 1 Keep mower blades sharp to produce a clean cut, to keep grass healthy, and to reduce fuel consumption.
- 2 Check spring tension idler settings periodically. Proper belt tension extends belt life, ensures optimum power delivery and proper blade tip speed for the best cut.
- 3 Check tire inflation daily. Don't overinflate tires. The low pressures specified for your Grasshopper will help ensure Grasshopper's legendary comfortable ride and reduce wear and tear on the power unit.

MAXIMIZER™ OPTIONS INFORMATION

Part of the Grasshopper advantage is being able to tailor your Grasshopper to fit your exact range of mowing conditions. Options, accessories and kits are available to maximize performance and are referred to as MAXimizers™. Many of the most popular MAXimizers™ for present and past models are listed in this guide, where a brief overview of power unit, deck, vacuum collection system and implement options is provided. Complete instructions and information sheets are available for most options.



BEFORE CALLING YOUR DEALER TO ASK ABOUT MAXIMIZERS™, IT HELPS TO HAVE YOUR ORDER NUMBERS HANDY.



Model and serial identification numbers are affixed to all power units, decks and implements. Whenever calling with questions about options, it's necessary to provide both the model and serial number so that your dealer can provide you with accurate information. The serial number plate is typically found on the frame beneath the seat on power units and along the rear exterior of mower decks.

All kits must be ordered through authorized Grasshopper dealerships, and dealer installation is recommended for all kits.



The Grasshopper Company • 105 Old U.S. Highway 81 P.O. Box 637 • Moundridge, KS • 67107 U.S.A.

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