

MERRILL TOOL & WATER JET, LLC. MTW SPECIALTY PRODUCTS DIVISION

Merrill Tool and Water Jet



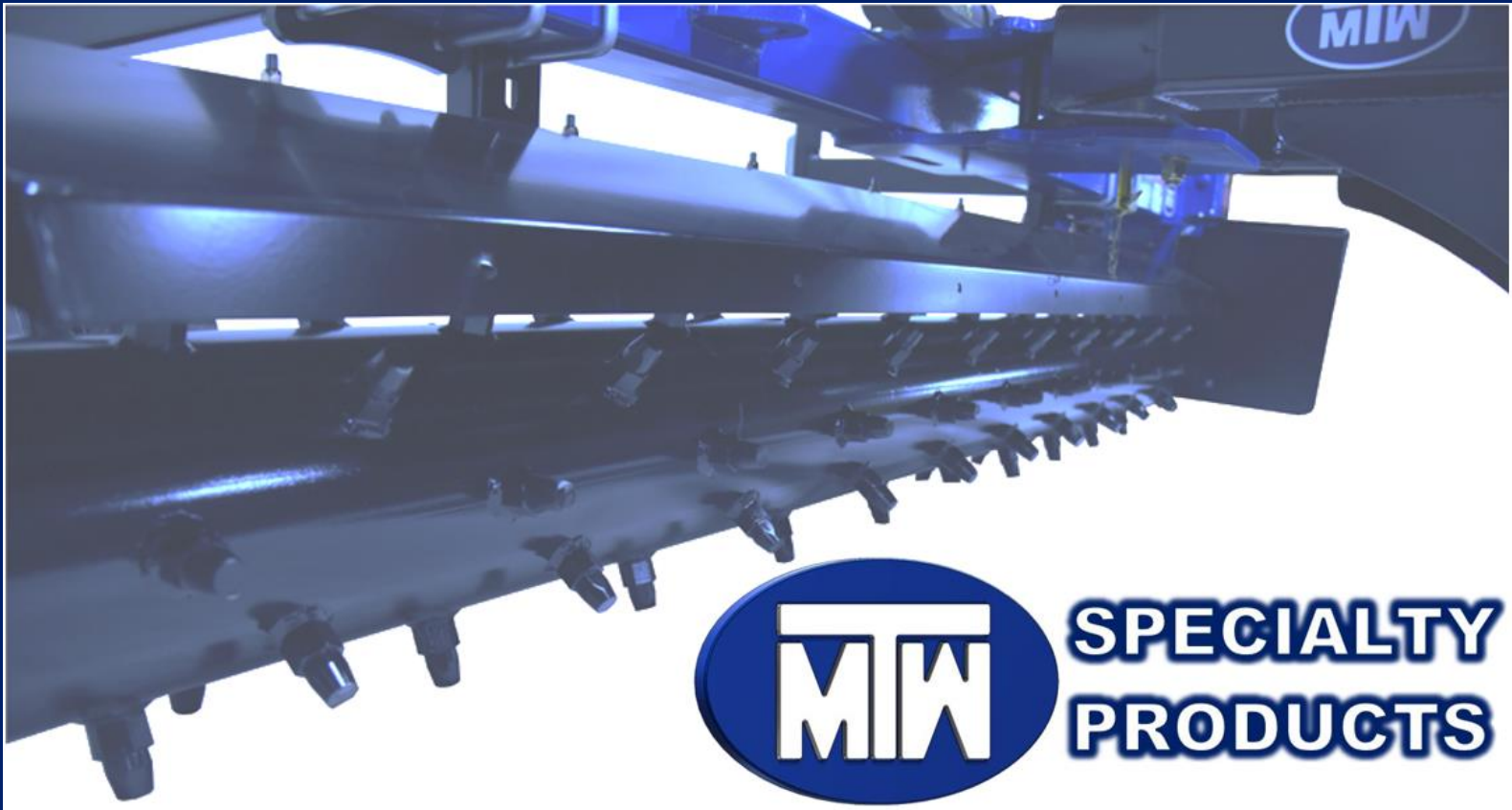
MTW Specialty Products

POWER BOX RAKE

MASTER THE WORK

US PATENT PENDING PPA# 63155053 www.mtwsp.com

SKID STEER
MINI SKID STEER
MINI CTL
COMPACT TRACK LOADER
AUXILIARY HYDRAULICS



**SPECIALTY
PRODUCTS**

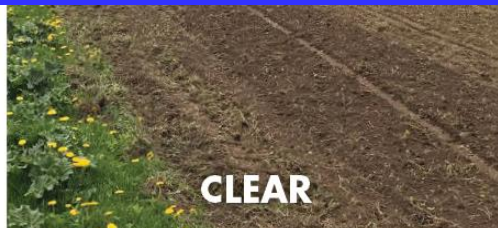
SKID STEER & COMPACT TRACK LOADER POWER BOX RAKE



POWER RAKING QUALITY:



SMOOTH



CLEAR



RAKE



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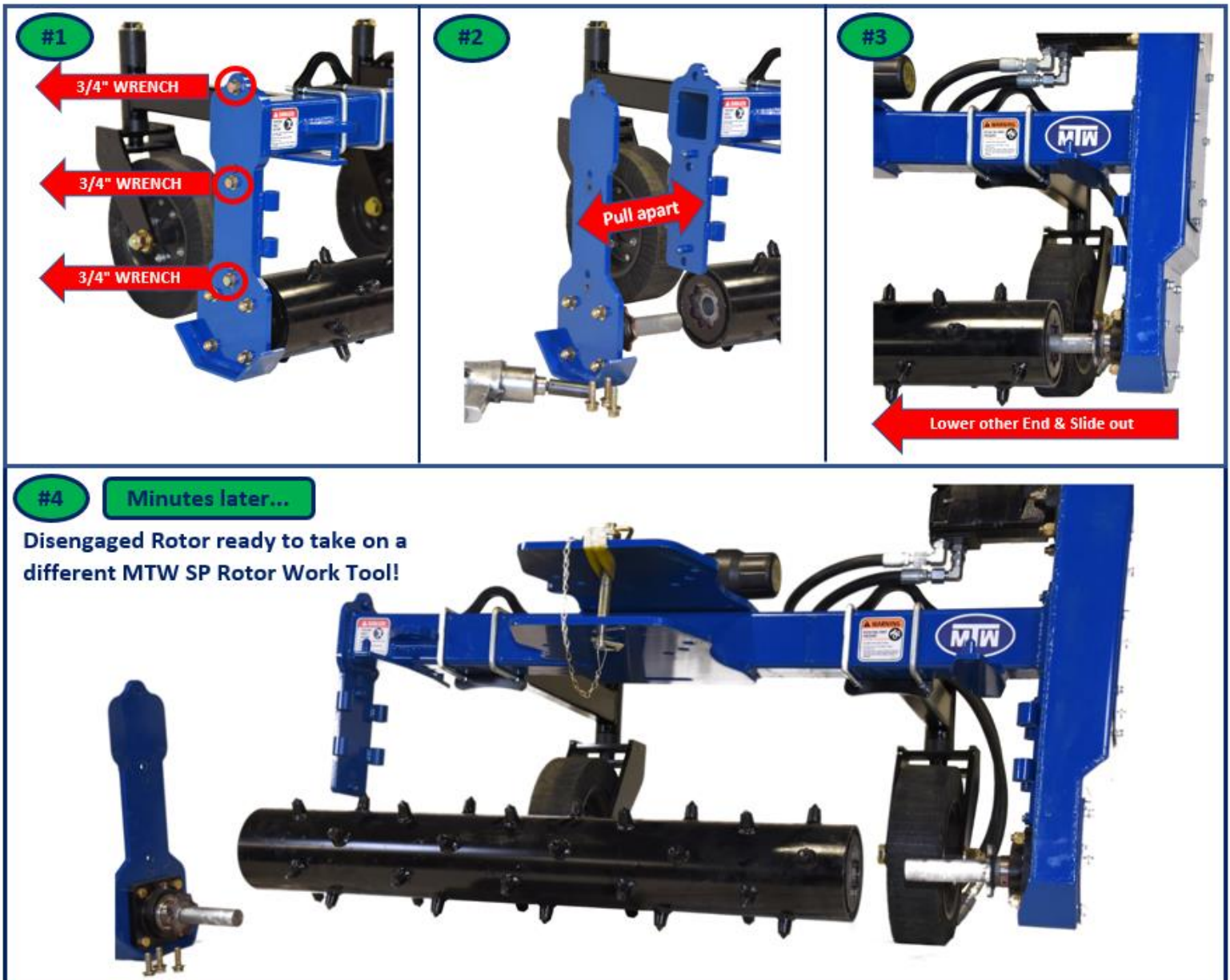
It's a FaCT / Fast Change Tool!

You don't have to buy a Power Rake/Soil Conditioner that's limited to just one tool, ANYMORE!

That's why Merrill Tool & Water Jet, LLC has filed for US Patent Pending PPA# 63155053

"INTERCHANGEABLE SURFACE ENGAGING ROTOR AND ROTARY POWER TRANSMISSION METHOD"

SAFETY NOTE: Shut off your Machine & disconnect hydraulic hoses when working on your PBR!





POWER BOX RAKE

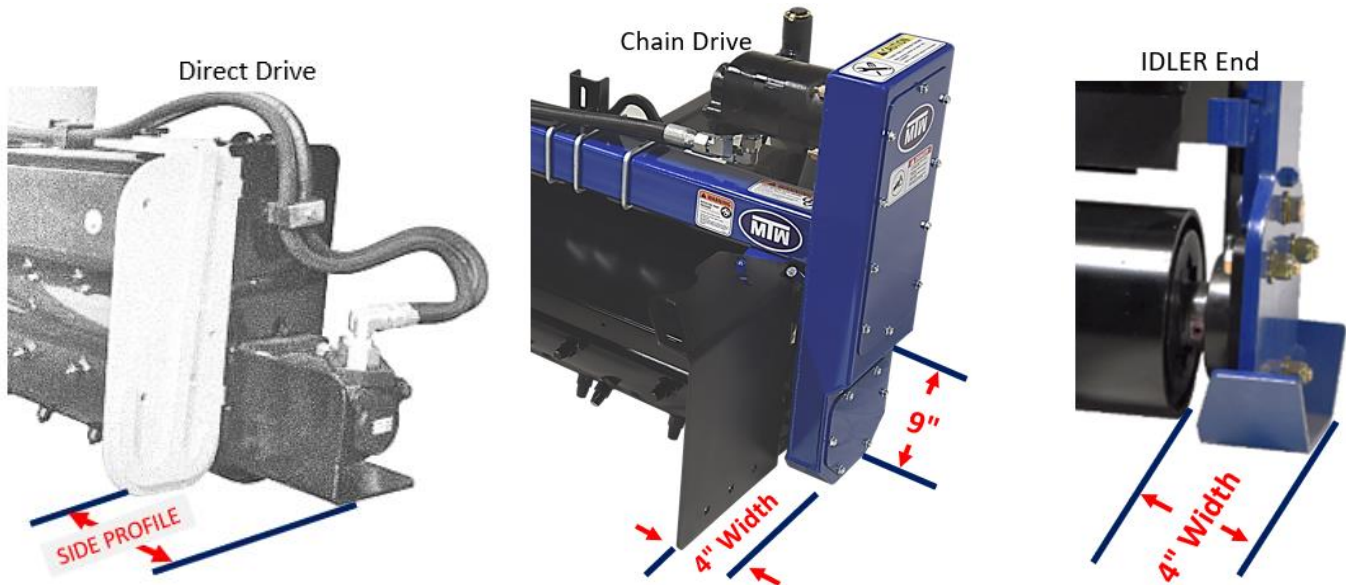
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CHAIN DRIVEN ROTARY POWER TRANSMISSION:

With PTO & Hydraulic Motor Protection into our Design, our chain drive system allows us to minimize our Overall Width, where a reduced side profile (illustrated below) allows you to side swipe your edge closer to landmarks. Approximately 4" from flush, with a recessed depth of 9" on the Chain Case Side. These 3" wide bottom Footers are **Abrasion Resistant Steel.**



Our Power Box Rake is designed for longevity by having a failure point at the chain master-link, to keep your job site from unnecessary down time and excessive repair costs.

Chain replacement <30 minutes to replace the chain (if you have your tools and can raise it up in the air without sprocket damage).



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MTW-SP POWER RAKE SERIES:

FaCT

I

Our Miniscaper – MTW’s low-cost model. Uses primarily 1/4” wall construction and a 6” diameter rotor with carbide teeth. Ideal and affordable choice for compact tractors, small to medium skid steers, and mini-skid steers. Available in 4’, 5’, and 6’ hydraulic.

FaCT

II

Our Landscaper - MTW’s most popular model. Standard features include 1/4” wall construction throughout, virtually indestructible chain case, “no flat” solid rubber tires, fabricated wheel yoke, and heavy-duty hitches. Designed for skid steers flowing **20-40 gpm**, the **FaCT 2** is available in 6’, 7’, and 8’ sizes for hydraulic applications. The unit comes standard with 8” diameter rotors.

FaCT

III

Our Hardscaper, The **FaCT III** is MTW’s most rugged model with an 8-inch diameter rotor in seven, eight, or ten-foot widths. It’s designed for high flow skid steers and tractors exceeding 60 HP and features .375 wall construction, reinforced fabrication throughout, extreme duty hitches, a virtually indestructible chain case and fabricated wheel yokes.

Hydraulic PBR Series:		Overall Width	Overall Height	Working Width	Approx. Weight	Angled Work Width		Chain	Rotor	Skid Mount
FaCT I 20 GPM MAX	PR148H	58"	34"	48"	590 lbs	45"	42"	80 Single	Ø6"	Standard or Mini
	PR160H	70"	34"	60"	650 lbs	57"	54"	80 Single	Ø6"	Standard or Mini
	PR172H	82"	34"	72"	725 lbs	69"	66"	80 Single	Ø6"	Standard or Mini
	PR184H	94"	34"	84"	800 lbs	81"	78"	80 Single	Ø6"	Standard or Mini
FaCT II 20-30 GPM	PR272H	82"	35"	72"	960 lbs	69"	66"	80 Single	Ø8"	Heavy
	PR284H	94"	35"	84"	1030 lbs	81"	78"	80 Single	Ø8"	Heavy
	PR296H	106"	35"	96"	1100 lbs	93"	90"	80 Single	Ø8"	Heavy
FaCT III 30-40 GPM	PR384H	94"	35"	84"	1425 lbs	81"	78"	80 Heavy	Ø8"	Heavy
	PR396H	106"	35"	96"	1530 lbs	93"	90"	80 Heavy	Ø8"	Heavy
	PR3120H	130"	35"	120"	1640 lbs	117"	114"	80 Heavy	Ø8"	Heavy

You select your Rotor Work Tool Tooth: Weld-on, Carbide, and Replaceable!



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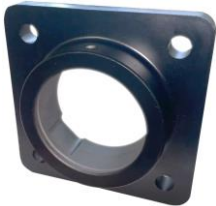
GAUGE WHEEL ARM TOOLS:



DUAL WHEELS OPTION

- Laminated Solid Rubber Wheels Ø15" X 4" Wide
- No Checking Tire Pressures & No Flats Tires
- No Tire Foam **BREAKDOWN**
- Adjustable Wheel Depths for custom grades & slopes
- Making Overseeding passes easier
- Narrow footprint keeps it from riding up and affecting the Grade while push rolling your materials.
- Depths are individually adjustable by hand – no tools needed.
- Heavy duty fabrication 2"x 3" Rec Tube with 1/4" Wall Carbon Steel.
- Dual Wheels Option Available if a wider foot print is needed for floating on your terrain.

STEEL BEARING HOUSINGS:



- **SHOCK LOAD Protection with 4-Bolt Steel Bearing Housings**
- **Cast Bearing Housings FAIL causing down-time, repair costs and setting back your schedule.**
- **Grease Zerks at 12 o'clock/vertical up defensive position**

HEAVY DUTY ATTACHMENTS:



**SEVERE
DUTY
HITCHES**



Mini Skid Plate



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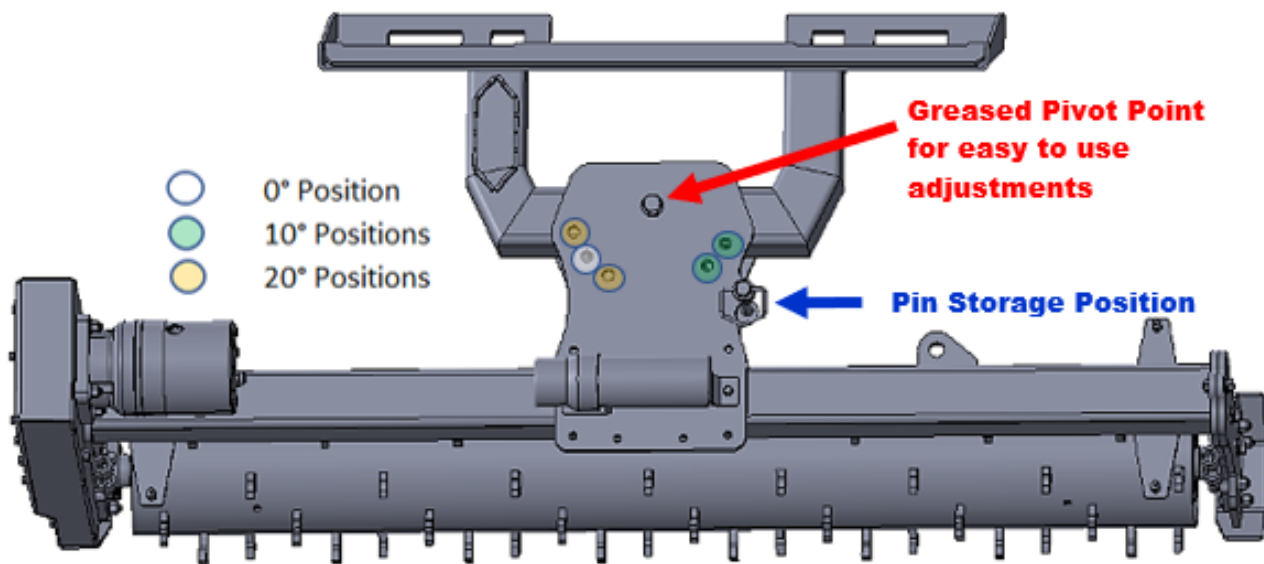
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POWER BOX RAKE MANUAL PUSH ANGLES:

MANUAL 5 PT PUSH ANGLES

Quick-Attach Pin Adjustments

-20° / -10° | 0 | 10° \ 20°

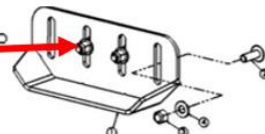


Comes Standard to keep costs low and is ideal if you are going to be running your Power Box Rake on different Skid Steer/Compact Track Loader brands.

SIDE SHIELD BOXING PLATE TOOLS:



- 1/4" thick carbon steel with Press Brake Formed Bends for increased rigidity.
- Adjustable, Removable, and Reversible for Front or Back Raking.
- Pull pin to remove interlock then swing out and lift up off the pin.
- Comes handy when running $\pm 10^\circ$ to 20° raking push angles
- Comes standard with a set of 2
- Ideal for Soil Conditioning and Windrowing/Casting Rocks and Debris
- No Tools Required / Point of use Tooling!



OPTIONAL:
Depth Shoes
(Tools Required)

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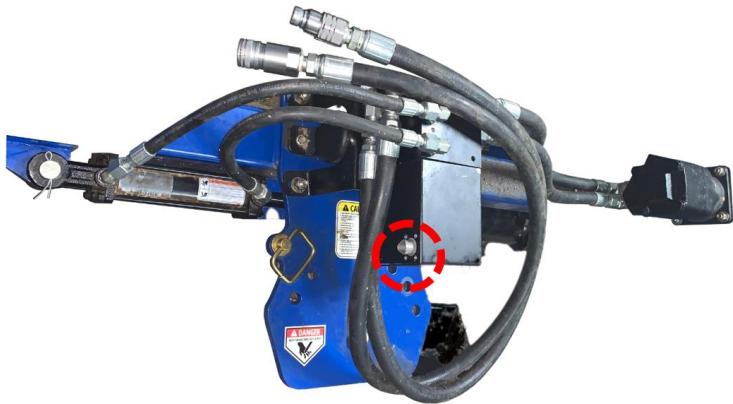
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COMPACT TRACK LOADER

AUXILIARY HYDRAULICS

(OPTION) POWERED ANGLE HYDRAULICS KIT TOOL:

- Favored by Commercial Power Users for quick on the fly Angle Adjustments
- Keep your Power Box Rake throttled and running continuous from inside your cab
- Power your hydraulics to the Push Angle you need and it's simple
- Great for windrowing rocks or debris out of your path
- Quick-attach Pin must be in Storage Position.
- Hydraulic Cylinder, 1D Diverter Valve, and Hoses.
- Red-dashed Circle = Auxiliary Electronic Control Port



- Plug directly into your auxiliary controls, if available. If not, please see our 2 Button Control Box below.
- Ideal if you will be dedicating your Power Box Rake to one Loader Brand.
- 14-Pin, 8-Pin, and 7-Pin Adapters available
- We send you the correct Wiring Harness Kit, you take it to your dealer and get it pinned directly to your configurations.



- Universal Controller 2 Push Button Switch
- Hydraulic Powered Angle isn't limited to one Loader Brand or if you don't have a Pin Adapter.
- Rainproof – doesn't mean it is water proof.
- 2 choices available for Control Box power supply
 - Plug into your 12-Volt Car Adapter / Cigarette Lighter Socket, or
 - Wire into your machine's battery (includes fuse protection)



- Usually referred to as a 3rd Line. Going from the hydraulic motor, it typically connects where you plug in your attachment's auxiliary hydraulic hoses. Should be smallest hydraulic hose port diameter.
- Alleviating excess pressure and draining it back to the return line – extending motor life!
Comes Standard on Mark II & Mark III Series



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AUXILIARY HYDRAULICS

LSHT BIDIRECTIONAL HYDRAULIC MOTORS:



- LSHT / Low Speed High Torque Hydraulic Motors
- 2-Year Limited Warranty
- 2K Series Motors / Disc Motor / Geroler / Disc Valve
- 6K Series Motors / Disc Motor / Geroler / Disc Valve
- Our selection process demands high quality performance at competitive prices which allows us to offer a two-year limited motor warranty.

ADJUSTABLE MATERIAL BAR TOOL:



- 3/8" thick 220 2-Ply Rubber (Conveyor Belt Material).
- 4" blade is slotted and adjustable, so you can keep oversized materials from rolling over the rotor/drum, screening finer materials through.
- Essential for tilling or pulverizing your materials for soil conditioning, breaking up sod & clumps.
- Located underneath the Mainframe Tube and above the Rotor.





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(OPTION) MATERIAL SHIELD TOOL:



- **Optional** with Hydraulic Power Box Rake and benefits with “back raking” action, by boxing in your materials and pulverizing them. A must have if you operate in reverse as it shields your cab from gravel. It is mounted to the Material Spreader Bar, boxing in your rake materials for pummeling.
- Beneficial for raking alleys and gravel driveways where you can angle down your material trajectory for rocks and hard debris.
- You can add additional **Material Spreader Bar Tool** to the front lip of the **Material Shield Tool** (in this view, the lip with 5 thru-holes, as an additional Option).



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SURFACE ENGAGING ROTOR WORK TOOLS:



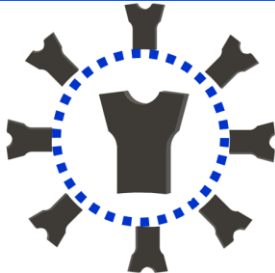
← Straight Tooth / Pointed Carbide Tip / Threaded Stud

- Bidirectional Rotary **RAKING** Action
- 3/4-16 Nut Welded to Rotor & Tooth is Torqued to Nut
- Replaceable Tooth & 3/4-16 Interchangeability!
- 2-3/8" Overall Length X Ø1" Major X Ø5/8" Minor
- Popular with Commercial Power Users for high tooth wear



← Straight Tooth / Round Flat Heat Treat Tip / Threaded Stud

- Bidirectional Rotary **DETHATCHING** Action
- 3/4-16 Nut Welded to Rotor & Tooth is Torqued to Nut
- Replaceable Tooth & 3/4-16 Interchangeability!
- 2" Overall Length X Ø1" Major X Ø3/4" Minor
- Popular with Commercial Power Users for high tooth wear



← Straight Tooth / Y Tip / Weld-on Stud

- Bidirectional Rotary **RAKING** Action
- Welded directly on Rotor
- Multi-edge design to extend rotor life (work-in-process)
- 2" TALL X 1-3/4" Major Width X 1/2" Thickness
- Abrasion Resistant Material!



← Straight Tooth / Pointed Carbide Tip / Weld-on Stud

- Bidirectional Rotary **RAKING** Action
- Welded directly on Rotor
- 1-1/2" Tall X Ø1" Major X Ø5/8" Minor
- Popular with rehabilitating driveways



← Straight Tooth / Rounded Carbide Tip / Weld-on Stud

- Bidirectional Rotary **DETHATCHING** Action
- Welded directly on Rotor
- 1-1/2" Tall X Ø1" Major X Ø5/8" Minor
- Popular with Seed Bedding. Specifically designed for Soil Fracture Patterning for increased moisture retention!



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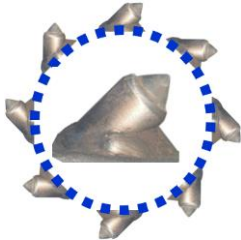


CONDITIONING

← **UCCS / UNITED SOIL CLASSIFICATION SYTEM / OSHA**

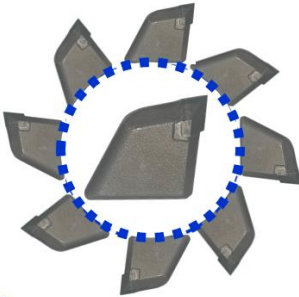
XCONDITIONING = Type A Soil Classification Cutters

Hardpacked, Clay Packed, Gravel Packed, Cemented Soil, Cohesive Soil, Granular Soil, Clay, Silty Clay, Sandy Clay, Clay Loam, Sandy Clay Loam, Caliche, and Hardpan.



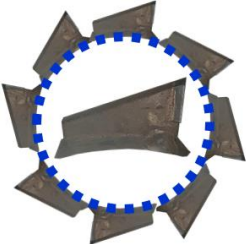
← **Angle Tooth / Pointed Carbide Tip / Weld-on Stud**

- **Low Profile - Unidirectional Rotary XCONDITIONING Action**
- **Welded directly on Rotor**
- **1" Tall X Ø1" Major X Ø5/8" Minor**
- **Popular with gravel and hard pack**



← **Angle Tooth / Carbide Cutter Tip / Weld-on Stud**

- **High Profile - Unidirectional Rotary XCONDITIONING Action**
- **Welded directly on Rotor**
- **2-1/4" TALL X 2-1/2" Long X 7/8" Wide Carbide Cutter**
- **Popular w/ glued Racetracks, Speedways, & Clay Terrains!**



← **Angle Tooth / Carbide Cutter Tip / Weld-on Stud**

- **Low Profile - Unidirectional Rotary XCONDITIONING Action**
- **Welded directly on Rotor**
- **1-1/2" TALL X 2-1/2" Long X 3/4" Wide Carbide Cutter**
- **Popular w/ glued Racetracks, Speedways, & Clay Terrains!**

MTW GUARANTEE



- **You're my boy Blue 1-Year Limited Warranty!**
- Production & Engineering Teams working together towards continuous improvement of our Products Lines.
- *Do what you say, say what you do, do it, and improve it!*
- We take Service Calls seriously with effective response times and quick resolutions as we stand behind our products! We believe issues in the field are opportunities to learn and improve our Products.