

MAZAK® CUTTING HEAD UPGRADE



PROVIDING ADVANCED

SOLUTIONS FOR

LASER DELIVERY SYSTEMS

Frequently Asked Questions

Q Will a Laser Mech Mazak Cutting Head Upgrade adversely affect my machine?

A No. Installing a Laser Mech head upgrade onto a properly working Mazak flatbed cutter will in no way change the machine's functionality. All our products are designed to appear transparent to the Mazak machine. In fact, you'll get more productivity out of your machine from the reduction in setup time and downtime. With the addition of a Laser Mech Capacitive Height Sense Unit (HSU), you'll actually expand your machine's capability to include true non-contact metallic cutting.

Q Will my machine require reprogramming with the Laser Mech Capacitive HSU?

A No. Unlike other head modifications, including those from Mazak itself, no changes are required to your existing software.

Q Is the Laser Mech Capacitive HSU complicated?

A No. Calibration is surprisingly simple, and similar to techniques you already use. Once calibrated, the system runs automatically without the need for constant monitoring.

Q If I install the Laser Mech Capacitive HSU can I still cut non-metallic materials?

A Yes. Just reattach the foot follower and select FOOT FOLLOWER mode on the HSU controller box.

Q Will the addition of a magnetic crash protector impact my productivity?

A Yes. It actually increases productivity, even if you never crash the head. The fact that a typical head reset takes just seconds with no damage or costly repairs speaks for itself. But even without a crash, if you need to check something on the head, you can do it in seconds with no need for tools or realignment.

Q Are there safety concerns with a magnetic crash protector?

A No. All Laser Mech head upgrades come with a safety interlock switch. In the event of a crash, the switch opens and stops the machine. Without our upgrade, the possibility exists that a machine may not even shutdown from a crash – even if the head is torn clean away!

Q Do I need to realign the head if I remove a lens?

A No. Our head design features a unique lens cartridge system that, once adjusted, retains lens alignment when removed for cleaning or replacement. No further alignment is required.

LASER MECH

MAZAK® CUTTING HEAD UPGRADE

Laser Mech's Mazak Cutting Head Upgrade brings state-of-the-art laser processing technology to your existing Mazak flatbed cutting machine.

Cartridge Style Lens Holder

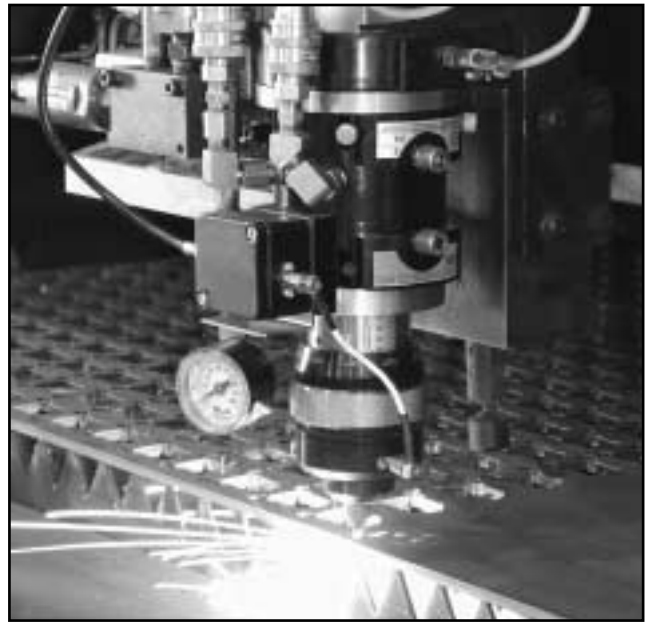
Engineered to quickly integrate into your existing equipment without modification, the head features Laser Mech's industry-leading, cartridge style lens holder. The cartridge design allows you to easily remove lenses for inspection or cleaning, and replace them without the need for realignment. In fact, cartridge removal, inspection and replacement takes a matter of seconds!

Single And Multiple Focal Lengths

Single and multiple focal length designs are available to match your cutting requirements. A multiple focal length head will increase your processing capability, decrease changeover downtime and eliminate the need for a second head.

Magnetic Crash Protection

Laser Mech's magnetic crash protection minimizes the potential for damage to the system or workpiece in the event of a crash situation. Magnetic crash protection allows for immediate head reset using no tools – no shear pins, broken screws or stripped threads. The head quickly references back to its standard operating position with no realignment or refocusing required.



Non-Contact Cutting

External Focus Adjustment

The Laser Mech Mazak Cutting Head Upgrade features an external, hand-adjustable focus ring and a precision focus scale for establishing accurate, repeatable focus settings. With a Laser Mech head you can perform rapid focus changes without the need for tools or having to open access doors.

LENS CARTRIDGE SYSTEM



Lens removal is quick and easy with our lens cartridge system



Simply slide the cartridge out to inspect, clean or change the lens



Replace the cartridge and the machine is ready to go

MAGNETIC CRASH PROTECTION



Crash occurs separating cutting head from machine



Operator resets head instantly with minimal downtime



Ready to run with no damage or realignment required

One-Year Limited Warranty

At Laser Mech we stand behind our Mazak Cutting Head Upgrade with a full, one-year limited warranty. While we are confident in the precision-crafted material and workmanship that goes into every head we build, we cannot, however, warrant consumables including lenses, nozzles and wires. Please contact your Laser Mech technical sales associate or your local distributor for complete warranty information.



Contact Cutting

head and use your existing stylus foot follower system, or fully convert to an electronic, non-contact Capacitive Height Sense Unit (HSU). Even if you decide to only upgrade the head now, you can always add HSU capabilities later – the choice is up to you.

Call Laser Mech or your local distributor today for more information on how our Mazak Cutting Head Upgrade can enhance your machine's performance and increase your overall productivity.

Lots Of Options

With five different Laser Mech Mazak Cutting Head Upgrades to choose from, we have an option that's right for you. You can select to upgrade just the

Available Configurations

Contact Stylus Foot Follower Heads – For use with existing stylus foot follower machine configurations.

Non-Contact, Capacitive Height Sense Heads – Electronically-controlled heads work with your machine to follow workpiece contour. Existing stylus foot follower system remains in place for quick changeover to non-metal cutting. Includes an external, magnetically-mounted control box.

Note: Use our convenient head selection chart, at right, to choose the Laser Mech Mazak Cutting Head Upgrade that's right for your machine and application.

"With the Laser Mech upgrade we've been able to expand the capabilities of our existing machine while at the same time increasing performance and reducing downtime."

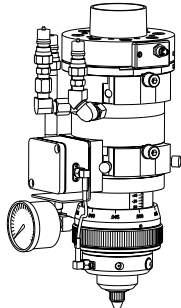
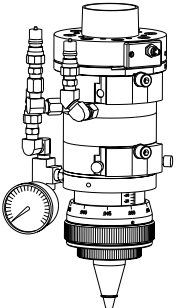
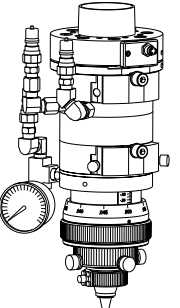
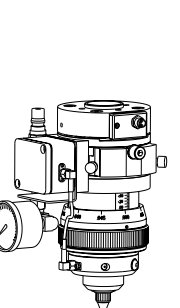
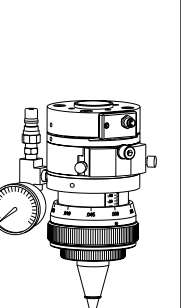
Novi Laser, Inc.
Novi, Michigan

FOCUS



Precision, repeatable focus in seconds with no tools required

Choose The Head That's Right For You

<p><i>No matter which model Mazak machine you presently own, we offer a Mazak Cutting Head Upgrade to expand its current capabilities and improve its overall performance.</i></p>					
Model Number	PLACF0159	PLACC0424	PLACC0417	PLACF0160	PLACC0422
5.0" Head				●	●
Single Lens Cartridge System				●	●
5.0" / 7.5" Head	●	●	●		
Dual Lens Cartridge System	●	●	●		
Mazak Capacitive Height Sense			●		
Laser Mech Capacitive HSU	●			●	
Mazak Stylus Foot Follower	●	●	●	●	●
Magnetic Crash Protection	●	●	●	●	●
Mazak & Stock Lenses	●	●	●	●	●
Mazak & Stock Nozzles		●	●		●
Tool-Free, Hand Focusing	●	●	●	●	●
Adjustable Focus Scale Ring	●	●	●	●	●
0.85" Focus Adjustment	●	●	●	●	●

LASER MECH CAPACITIVE HEIGHT SENSE UNIT

Laser Mech's Capacitive Height Sense Unit (HSU) brings true non-contact cutting capabilities to your existing, stylus-foot Mazak machine. While the stylus foot can mar certain metallic surfaces, the Laser Mech Capacitive HSU preserves a clean, scratch-free finish.

When used with one of our non-contact heads, the Laser Mech Capacitive HSU senses the distance to the metal surface and maintains a constant standoff while cutting. This creates consistent cut quality even if the material is bowed or warped.

For non-metallic material, where contact following is required, select foot follower mode on the HSU and reattach the original stylus foot – it's that easy! In fact, switching between foot follower and non-contact modes takes less than three minutes.

Like all Laser Mech upgrades, the capacitive HSU is simple to install. And because it appears transparent to



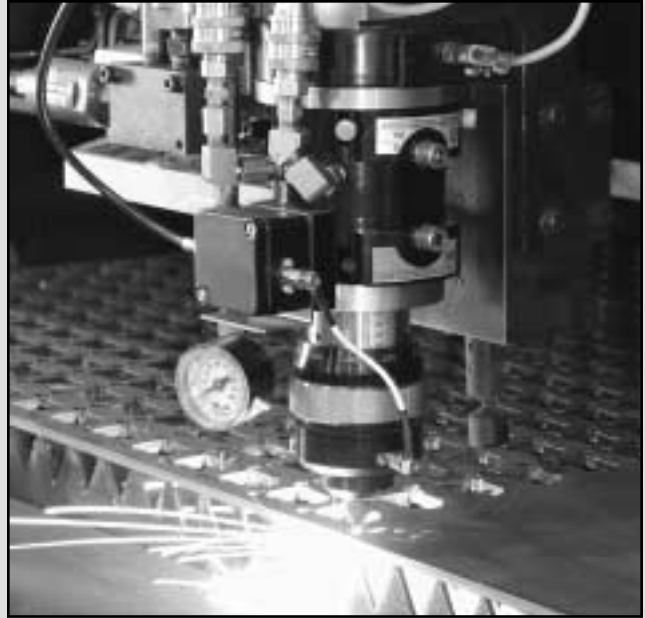
PLHSU0024

the Mazak machine, no software changes are required.

With the capacitive HSU's intuitive menu system, even novice machine operators are up and running quickly. Clearly marked control switches, bright system status lights and an ultra-sharp, backlit LCD display provide instant operational feedback. Housed in a rugged, metal enclosure, the Laser Mech Capacitive HSU is engineered to deliver years of reliable service.

KEY FEATURES

- Uses existing hole patterns – arrives ready for customer installation
- Magnetic crash protection provides immediate head reset – no shear pins, broken screws or stripped threads
- Cartridge style lens holder reduces downtime
- Single or multiple focal length heads available
- External, hand-adjustable focus provides accurate, repeatable focus settings
- One-year limited warranty
- Unique internal assist gas pressure port increases lens life with maximized cooling flow
- Contact and non-contact styles available
- Safety interlock interfaces with existing hardware
- All replacement parts are in stock for immediate shipment
- A variety of off-the-shelf nozzles are available for processing different material



- No salt windows needed to prolong lens life – increased directional internal gas flow moves debris away from the lens
- The addition of Laser Mech's Capacitive Height Sense Unit (HSU) brings true non-contact cutting to your existing, stylus-foot Mazak machine

Contact Laser Mech or your distributor for more information on cutting head upgrades for other popular brands.

DISTRIBUTED BY:

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MECH**
REPLACEMENT
PARTS & SERVICE

24730 Crestview Court • Farmington Hills, MI 48335 USA • Phone: (248) 474-9140 • Fax: (248) 474-5598
Web: www.lasermech-rps.com • E-Mail: info@lasermech-rps.com

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