



## INSTALLATION MANUAL

### MP 1200 Mist Collector



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MP Systems is committed to delivering precisely designed products, providing users with maximum productivity and uptime. Our engineering team is diligent in eliminating high maintenance issues

associated with machine tool accessories, to allow better performing equipment for your business.

Thanks to our quality components, dedicated team of engineers, and manufacturing personnel, MP Systems high pressure coolant systems & accessories are low maintenance and longer lasting. MP Systems prides itself on building and supporting a dependable product.

Our team works closely with CNC machine tool manufactures, distributors and customers to provide excellent customer service and application experience. Our goal is to help make you a more productive with less downtime, decreased cycle times, improved tool life and more parts out the door.



**MP 1200 Mist Collector INSTALLATION MANUAL**

**DOCUMENT PART #: B MP1200 INSTALL**

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## **MP Systems**

### **1. MP 1200 Mist Collector Features / Benefits**

The MP 1200 Mist Collector is used to remove unwanted mist and vapors created by spraying coolant in machine tool cabinets. Instead of coolant mist escaping into the work atmosphere, the MP 1200 Mist Collector collects the majority of the mist that would normally escape and recycles it back into machine coolant reservoir. Not only does the MP 1200 keep the air in a work place much cleaner it can save money by recycling wasted coolant.

## **Section: 1**

There are three filters located inside the MP 1200 Mist Collector and one optional post filter mounted on top. Starting from the bottom there is a baffle that traps most liquids passing through the unit. Next a 2" wire mesh filter that will remove the remaining fluids passing through. The main piece of filtration is the high capacity, high efficiency filter that provides 95% efficiency. And finally there is an optional post filter that can be fastened to the top of the unit that provides 99.97% efficiency.

### 2. Prepping R Series for MP 1200

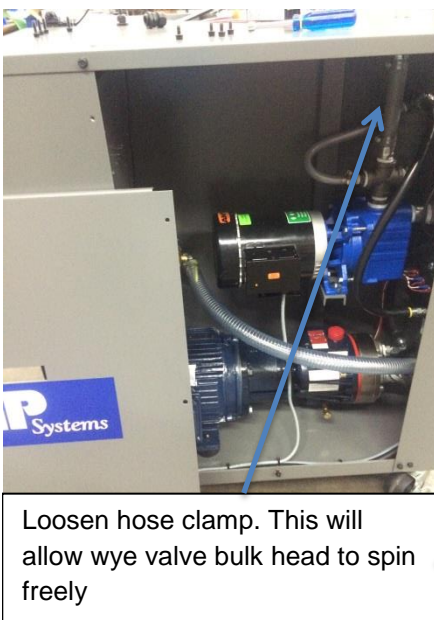
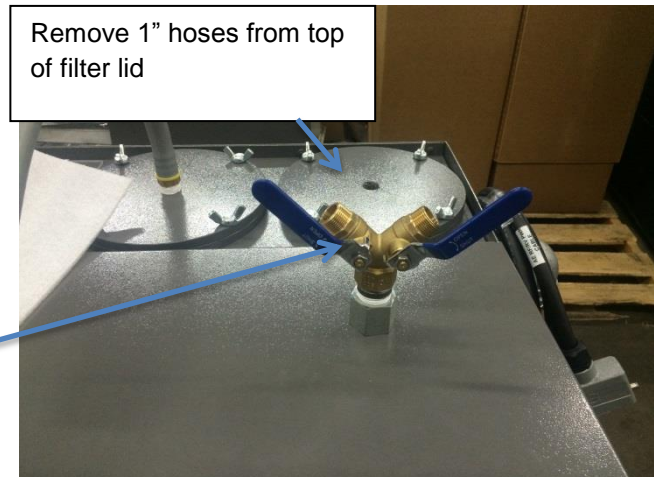
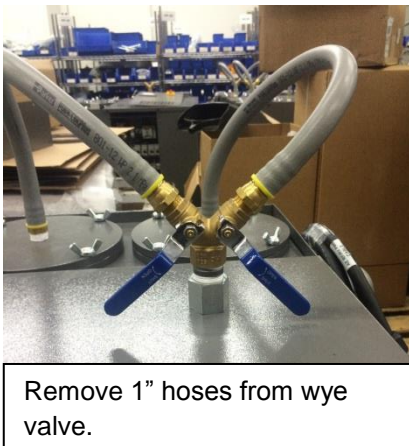
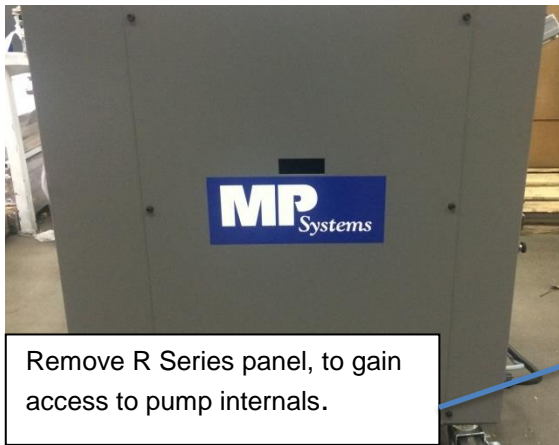
A few modifications will need to be made to the R Series high pressure unit before a MP 1200 Mist Collector can be installed.

- Re-position wye valve to accommodate Mist Collector and Mist Collector bracket.
- Replace (1) 1" grey push lock hose.
- Install new overload and terminal blocks for Mist Collector electrical interface, in R Series electrical cabinet.
- Install 1" cord grip on R Series lid to allow Mist Collector signal/power cable to reach R Series electrical cabinet.
- Install MP 1200 Mist Collector bracket.

## Section: 2

## MP Systems

### 2.1. Re-position Wye Valve





## MP 1200 Mist Collector



Loosen wye valve bulk head by using steel coupler at base of wye valve & nut located under lid.



**DO NOT LOOSEN 1" JIC FITTING**



- Rotate wye valve counter clockwise until wye valve is perpendicular to front of R Series.
- Re-tighten wye valve bulk head.



- Install supplied 43" long 1" hose into filter lid.
- Re-install 1" hose to wye valve.



Re-tighten hose clamp

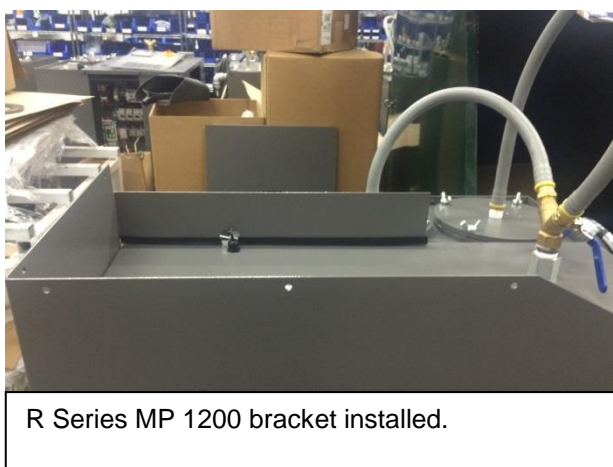
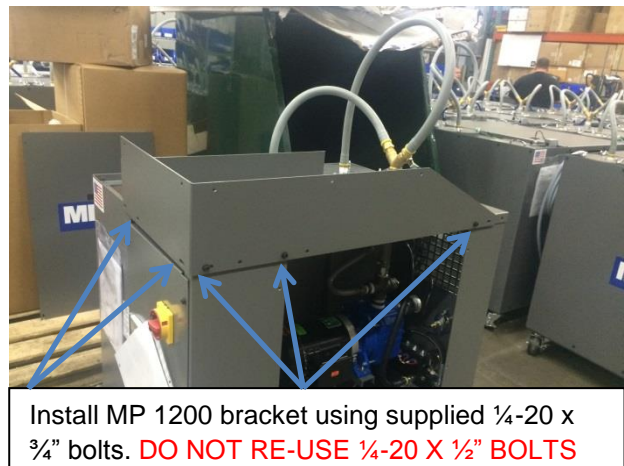
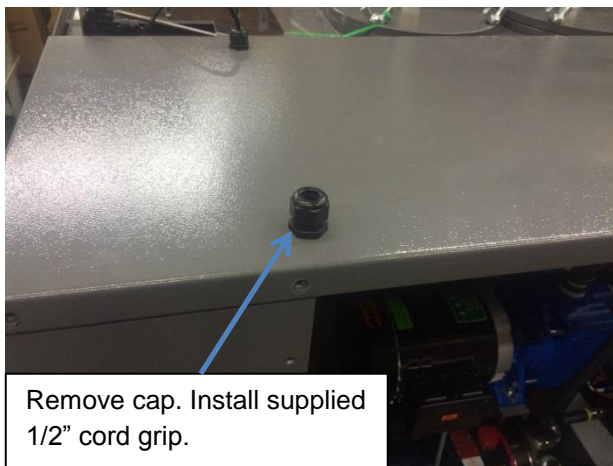
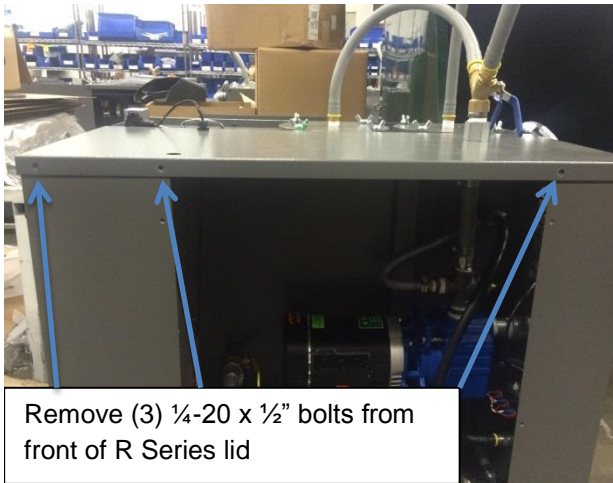


Wye valve reposition complete.



## MP Systems

### 2.2. MP 1200 Bracket Installation



### 2.3. R Series MP 1200 Return Replacement



R Series return will need to be replaced with MP 1200 mist collector return.



Double sided nip may not come out with 90, a pipe wrench may be used to remove.



Replace with supplied R Series MP 1200 return. R Series is ready for MP 1200.

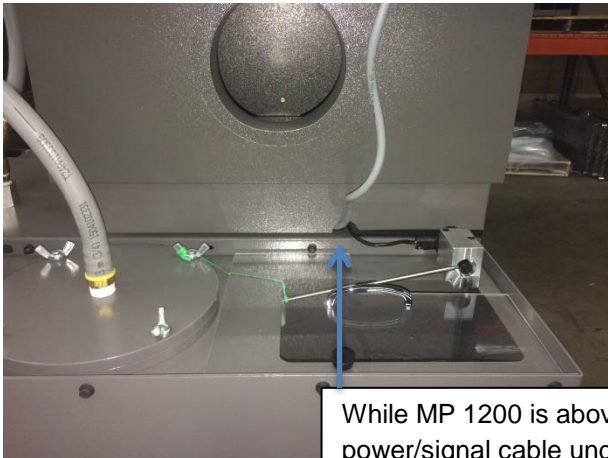
## MP Systems

### 3. MP 1200 Installation

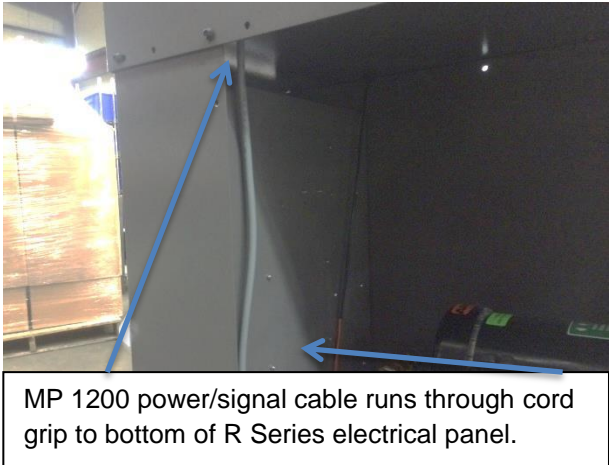
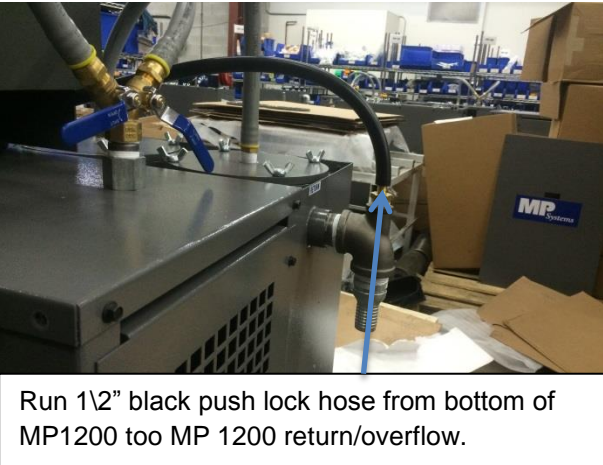
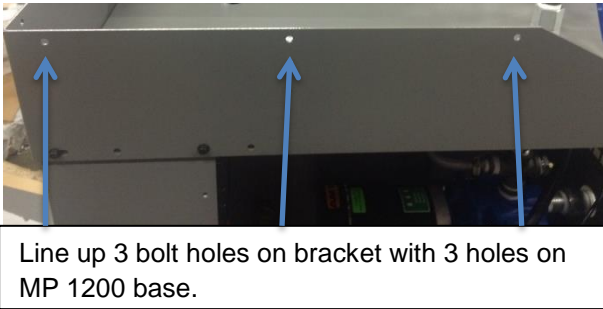
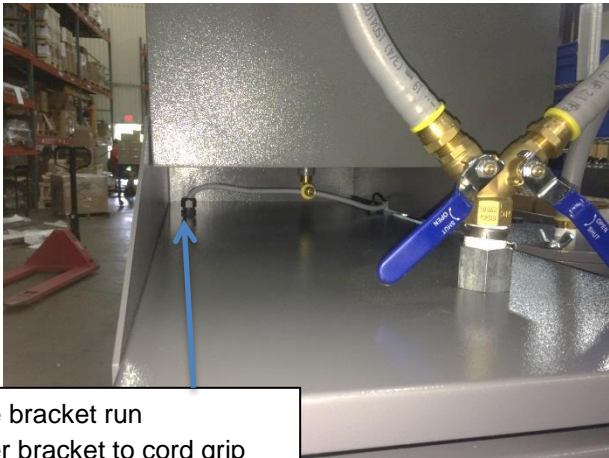
Installing MP 1200 Mist Collector will require a fork truck / overhead crane & suitable straps or chains (MP 1200 weighs approximately **200lbs**). No less than 2 people should install MP 1200 Mist Collector (1 lifting with fork truck / overhead crane & 1 person to guide MP 1200 Mist Collector into place).

**Section: 3**

3.1. MP 1200 Mounting



While MP 1200 is above bracket run power/signal cable under bracket to cord grip on R Series lid.



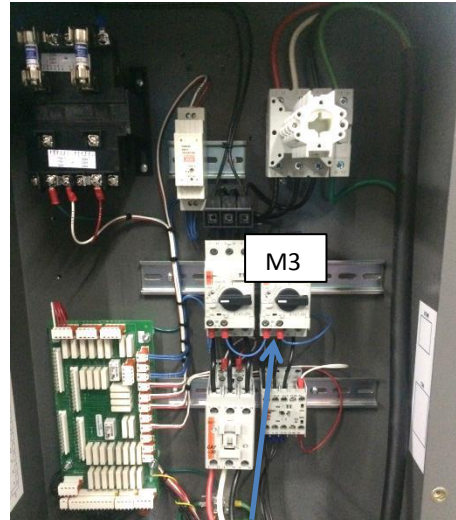


## MP Systems

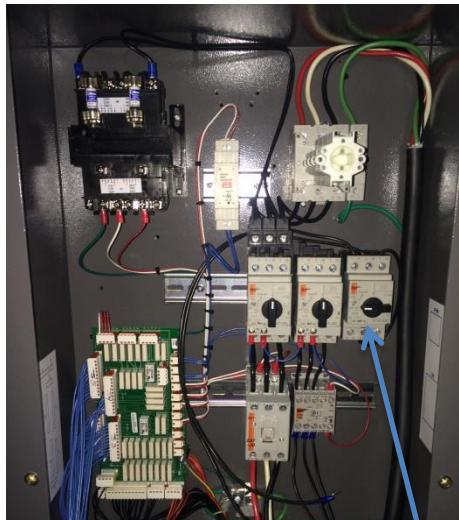
### 3.2. MP 1200 Electrical Installation



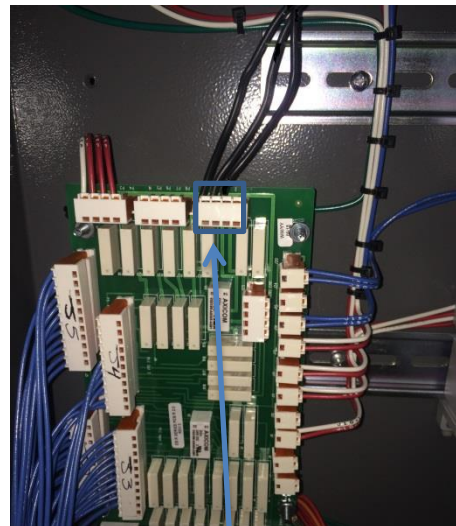
Power off R Series. Remove electrical panel door.



Standard R Series electrical cabinet. Remove jumper from M3 T14.



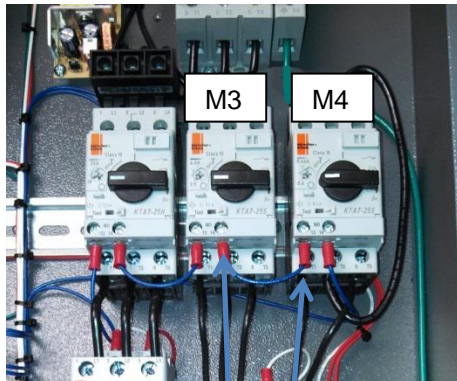
Install supplied overload (Set AMP setting to 5) on R Series dim rail as shown.



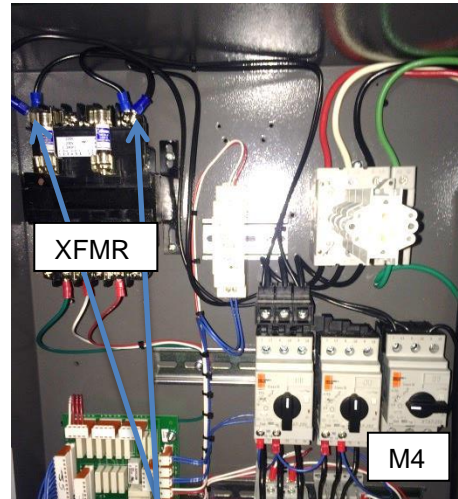
Install supplied 3 pin connector to J19 as shown.



## MP 1200 Mist Collector



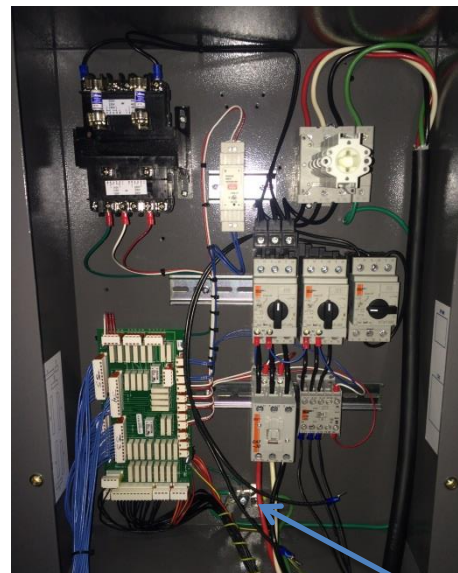
Install supplied jumper, M3 T14 to M4 T13 (MP1200) Re-install M3 T14 to M4 T14.



M4 L1 to XFMR L1. M4 L2 to XFMR L2.



Wire # 1 & Wire # 2 from MP 1200 signal.



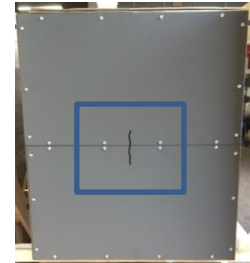
Ground MP 1200 to proper ground lug.

## MP Systems

### 4. MP 1200 Voltage Conversion

#### MP 1200 460v Transformer Installation

- Remove 2 outside panels. Mark the sides that touch for re-installation.



Remove inside circle only. Leave outer ring.

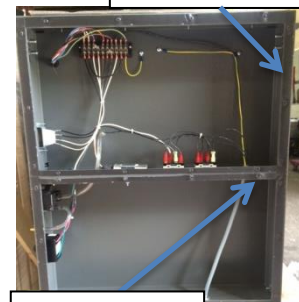
Top



- Mount transformer with supplied nuts, bolts, and washers. Pop out **INNER** circle on bottom of transformer.

- Drill a hole to fit the supplied 3/8" cord grip. Hole should be next to cord grip already installed in cabinet

Transformer



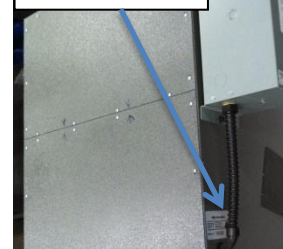
Hole for 3/8" cord grip



Hole for 3/8" cord grip

- A hole for 1/2" cord grip will need to be drilled on the side of the electrical cabinet. The hole should be a few inches below transformer, to allow enough room for conduit to flex.

Hole for 1/2" cord grip



**MP 1200 Mist Collector**

- Please follow the chart to wire the transformer to the MP1200 unit.
- **T1** wire **T2** wire may need to be extended. Use supplied connectors.

