

# HONEYVILLE MPC SERIES

Medium Pressure Compressed / Reverse Air  
Continuous Cleaning Baghouse Filter

## Models

MPC-260-8

MPC-260-10

MPC-260-12

MPC-361-8

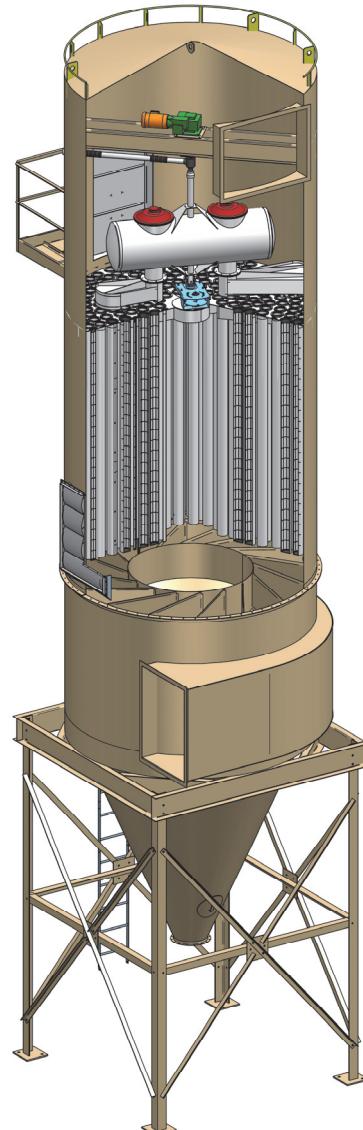
MPC-361-10

MPC-361-12

MPC-420-8

MPC-420-10

MPC-420-12



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## HONEYVILLE MPC SERIES

|                  |  |
|------------------|--|
| Customer Name    |  |
| Model Number     |  |
| Serial Number    |  |
| Date of Purchase |  |

# HONEYVILLE MPC SERIES

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# HONEYVILLE MPC SERIES

## FILTER DESCRIPTION

**HONEYVILLE MPC CYCLONIC FILTERS** are recommended for medium to heavy dust load applications utilizing cyclone separation and bag filtration. This design includes a 110° involute inlet with an inner cyclone baffle and vortex breakers to insure minimal air swirl in the bag chamber. The primary material separation takes place in the 67° cone section. The involute inlet allows for better material separation by providing an extended transition as the dust laden air enters the cyclone. By increasing the material separation in the cyclone section, the dust load on the bags is significantly decreased allowing for better air flow and extended bag life.

**THE MPC BAGHOUSE FILTER** will effectively filter such materials as grain, feed, flour, minerals, cement products, plastics, and all types of wood waste. The filter utilizes high volume, medium pressure cleaning of the bags. The NO-TOOL top bag removal allows for easy inspection or service.

**THE MPC FILTER OPERATES AS FOLLOWS:** Dust laden air enters the involute inlet directly above the cone section. Large particles enter the cone section, separate, and exit out the bottom while smaller particles flow upward into the bag chamber and are retained on the exterior of the filter bags. The clean air flows upward through the bags and exits via the open top of the bags into the clean air plenum. This clean air may be vented outside or inside a building.

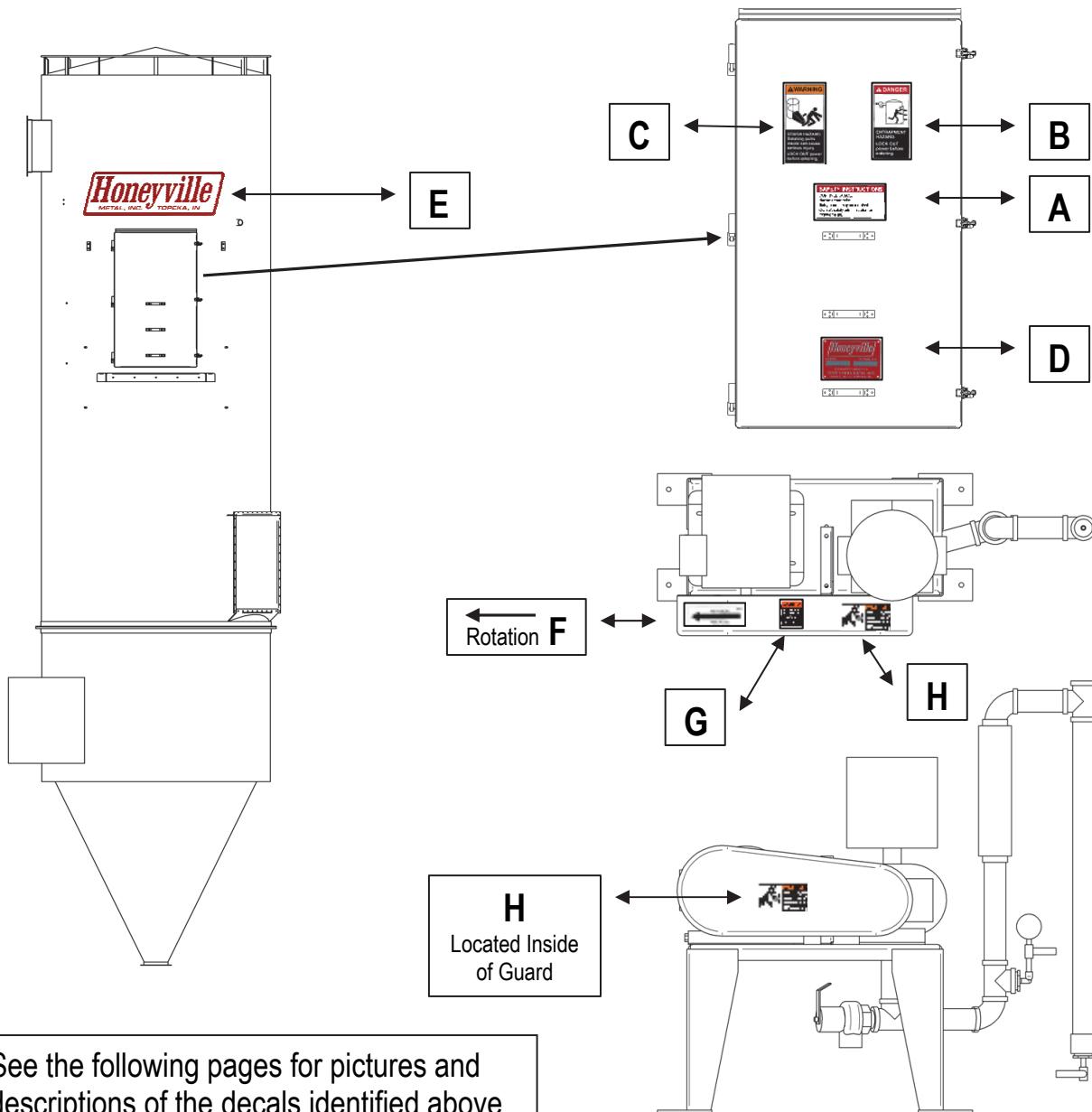
**THE MPC BAG CLEANING PROCESS** is an innovative hybrid of traditional high pressure pulse jet and reverse air cleaning of the bags. The cleaning mechanism is comprised of a large compressed air tank mounted on a rotating assembly with diaphragm valves connected to manifolds with air discharge nozzles. A mechanical timing control with precision adjustment directs a high volume, medium pressure burst of air through the nozzles and into the bags. As the burst of air enters the bags, filtration is momentarily stopped. As the compressed air bubble travels down the bags, it is moving the fabric outward to its elastic limit. The bag movement is stopped while the dust continues to move away from the bag surface because of the large volume of air that is following the initial pulse action. The released dust cake is discharged into the cone of the filter and is blended with larger particulate that is being separated.

# HONEYVILLE MPC SERIES

## SAFETY INFORMATION & DECALS

**Lockout-Tagout Requirements:** **WARNING!** - Before inspecting or servicing this equipment perform an approved lockout-tagout procedure on the electrical service.

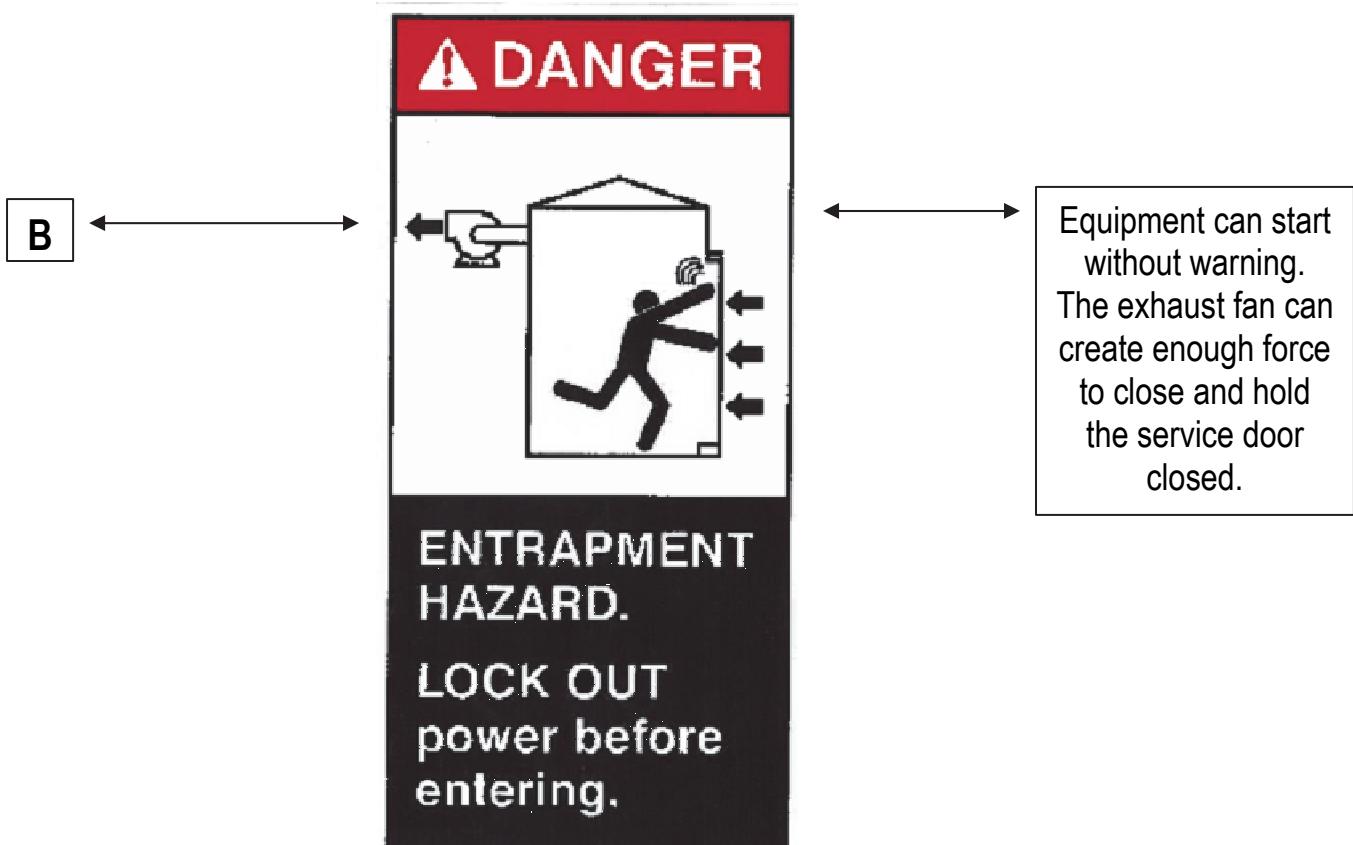
**Read and Understand Safety Decals:** Several safety labels are located on this piece of equipment in different locations to warn the operator(s) of potentially hazardous situations. The following figure shows typical locations for safety decals on the MPC Filter. The locations of decals for your particular filter may vary from those indicated. Inspect your filter for locations of all decals.



# HONEYVILLE MPC SERIES

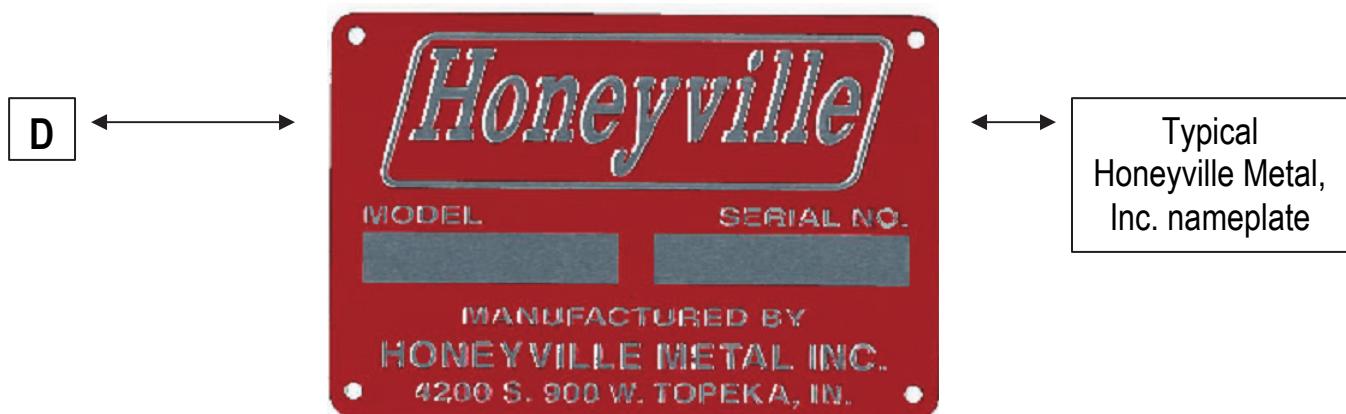
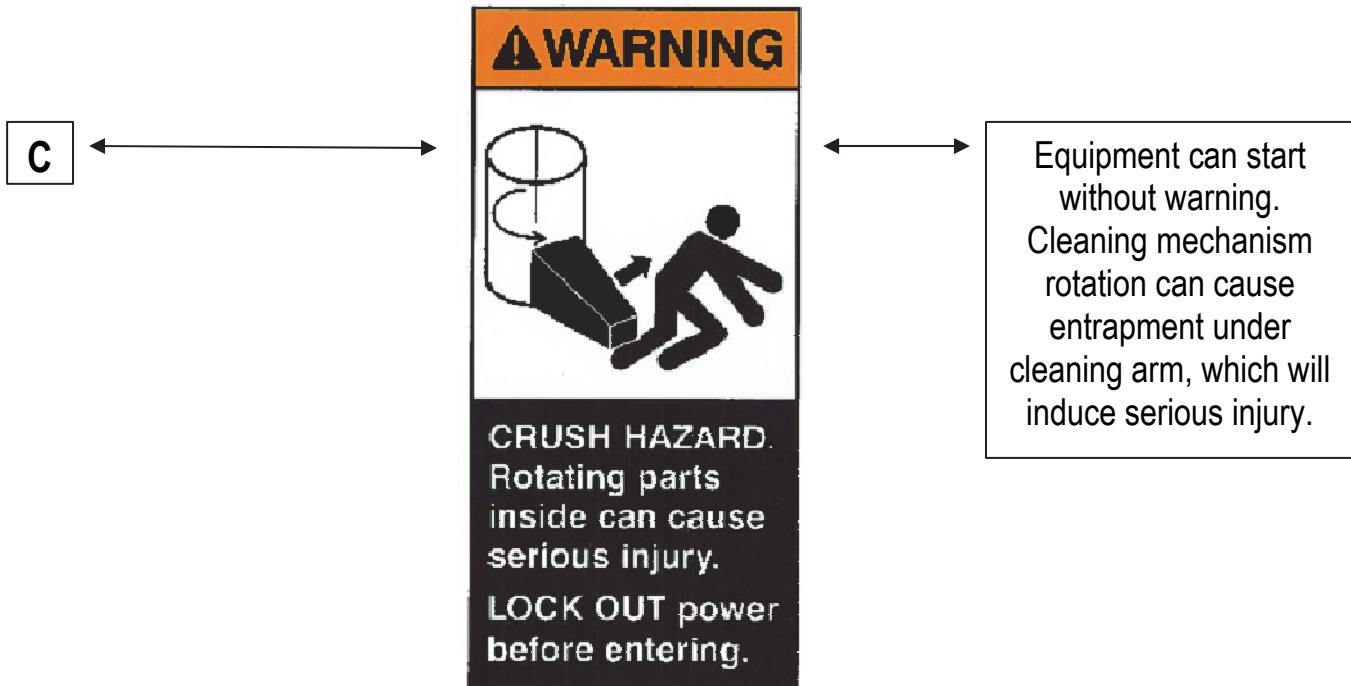
## SAFETY DECALS

Safety decals (and other information labels) may include, but are not necessarily limited to, the examples shown below. Locate all of the safety decals on your equipment and know their meaning prior to operating this dust filter. It is the owner/operator's responsibility to maintain the integrity of these decals and to ensure that all operators of the equipment are aware of them and understand their meaning. Free replacement decals are available if required.



# HONEYVILLE MPC SERIES

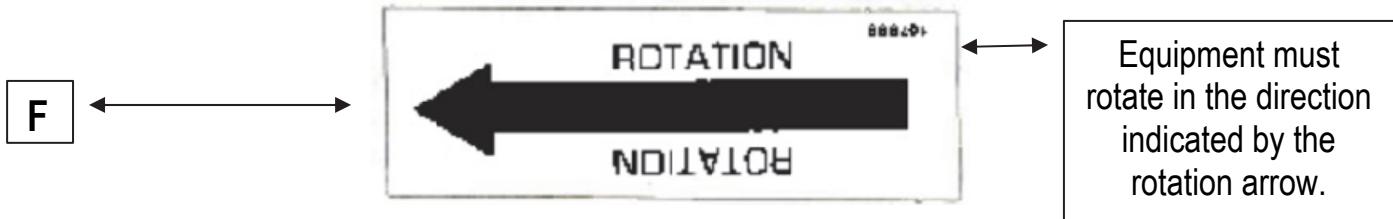
## SAFETY DECALS



45" x 16"

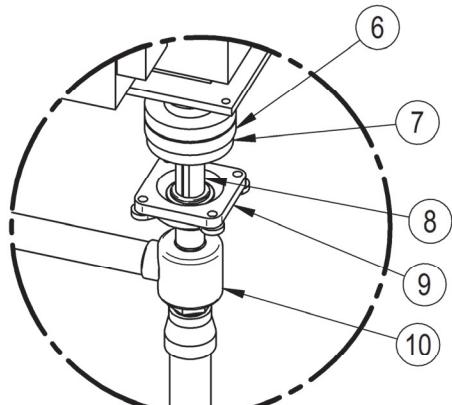
# HONEYVILLE MPC SERIES

## SAFETY DECALS



# HONEYVILLE MPC SERIES

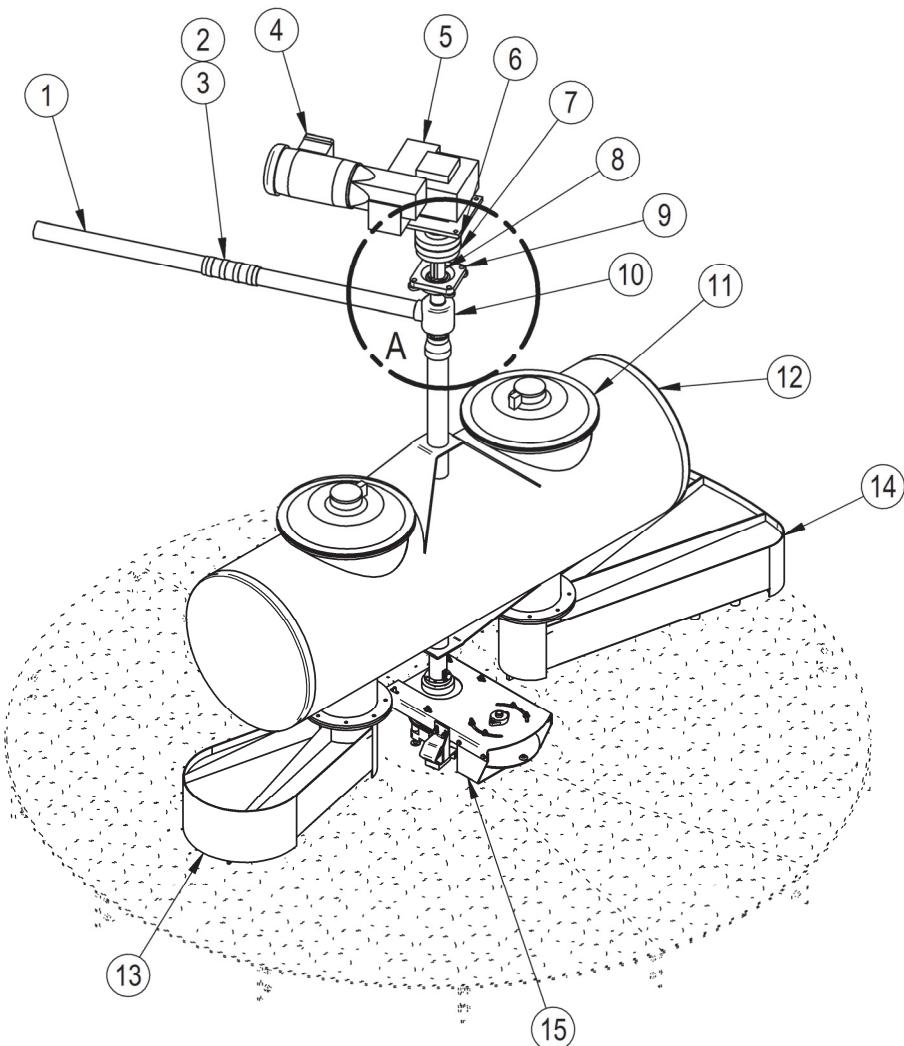
## FILTER WORKS



DETAIL A

| Item | Part Number   | Qty | Description                                  |
|------|---------------|-----|--|
| 1    | See Chart     | 2   | 2" Galv. Pipe Sch. 40                        |
| 2    | PDHS0206      | 1   | 2½" ID Black Rubber Hose w/spiral wire       |
| 3    | HWHC0300      | 4   | 3" Dia. Hose Clamp                           |
| 4    | PTEM3001012BX | 1   | Baldor VM7032 1HP 1200 RPM Motor             |
| 5    | PTGR1201      | 1   | Peerless-Winsmith 943MDVD 750:1 Gear Reducer |
| 6    | FLHW1203      | 2   | 9S x 2" Sure-Flex Flange                     |
| 7    | FLHW1202S     | 1   | 9JES Sure-Flex Split Sleeve                  |
| 8    | FLMPUS01      | 1   | 2" Rotary Union Shaft for MPC Filters        |
| 9    | PTFB1008      | 2   | Peer UCF211-32E 2" Four-bolt Flange Bearing  |
| 10   | FLMPRU01      | 1   | Rotary Union                                 |
| 11   | FLPG1027      | 2   | 8" Low Pressure Valve                        |
| 12   | FLMPTA02      | 1   | Double Valve Tank Assembly                   |
| 13   | See Chart     | 1   | Manifold A                                   |
| 14   | See Chart     | 1   | Manifold B                                   |
| 15   | FLMP5001      | 1   | Timing Mechanism Assembly **                 |

\*\* See separate drawings for breakdown of Timing Mechanism Assembly



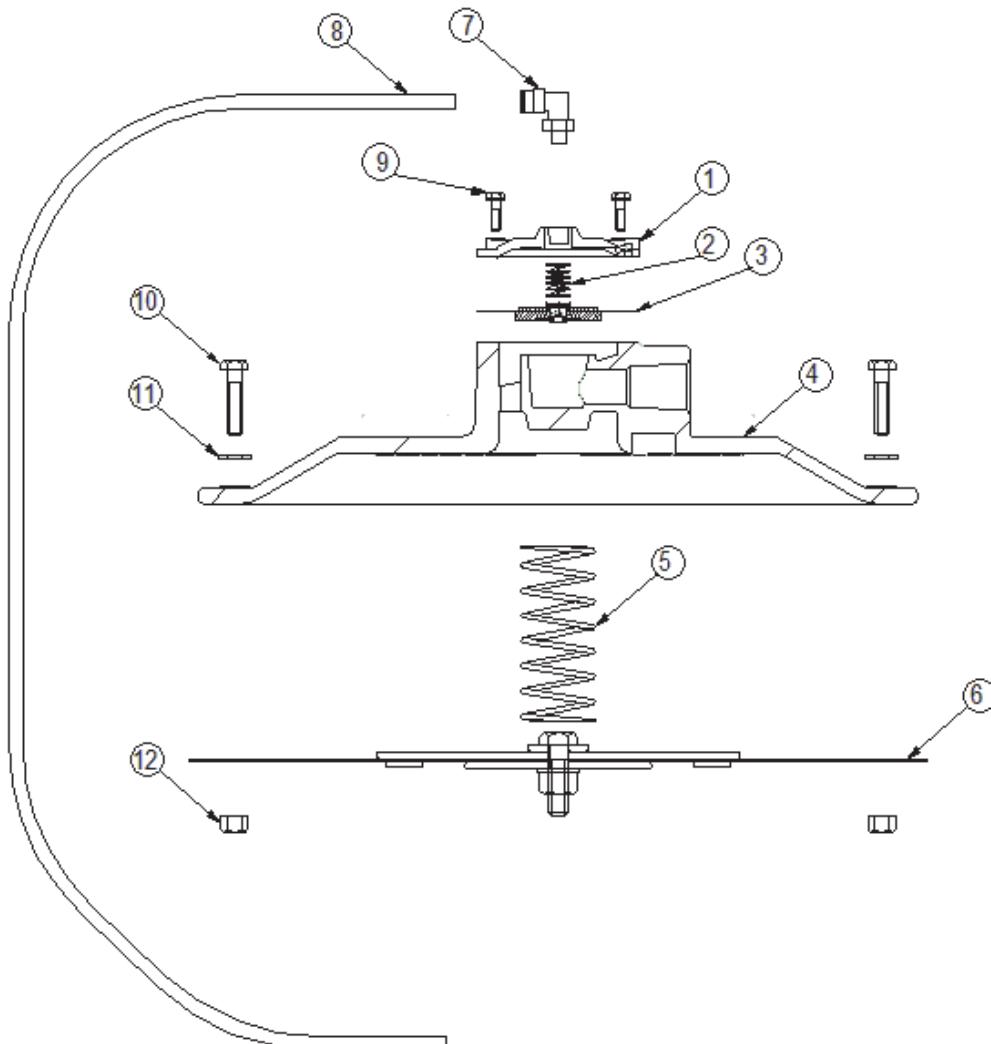
| Item | Model   | Part Number   |
|------|---------|---------------|
| 1    | MPC-260 | PPGP020405600 |
|      | MPC-361 | PPGP020406800 |
|      | MPC-420 | PPGP020408000 |
| 13   | MPC-260 | FLMPMA10A     |
|      | MPC-361 | FLMPMA12A     |
|      | MPC-420 | FLMPMA13A     |
| 14   | MPC-260 | FLMPMA10B     |
|      | MPC-361 | FLMPMA12B     |
|      | MPC-420 | FLMPMA13B     |

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## 8" LOW PRESSURE VALVE

| Item | Part Number | Qty | Description  |
|------|-------------|-----|--|
| 1    | FLGP1034    | 1   | Secondary (Small) Cover                              |
| 2    | FLGP1033    | 1   | Secondary (Small) Spring                             |
| 3    | FLGP1036    | 1   | Secondary (Small) Diaphragm                          |
| 4    | N/A         | 1   | Main Cover   |
|      | FLGP1037    |     | Main Cover Assembly (Includes Items 1, 2, 3, 4, & 9) |
| 5    | FLGP1032LSS | 1   | Main (Large) Spring, Stainless Steel                 |
| 6    | FLGP1035H * | 1   | Main (Large) Diaphragm Assembly                      |
| 7    | HWHF1008    | 1   | 1/8" NPT x 3/8"OD Hose 90° Swivel Elbow              |
| 8    | CSTB1006    | 6'  | 3/8" Black Poly Flo Tubing                           |
| 9    | HWMBM625    | 6   | M6 x 1.0 x 25 S.S. Hex Washer Head Machine Screw     |
| 10   | HWMB506014  | 12  | 3/8"-16 x 1 1/4" Hex Grade 5 Machine Bolt            |
| 11   | HWFW1006    | 12  | 3/8" Flat Washer                                     |
| 12   | HWNN1006    | 12  | 3/8"-16 Nylock Nut                                   |

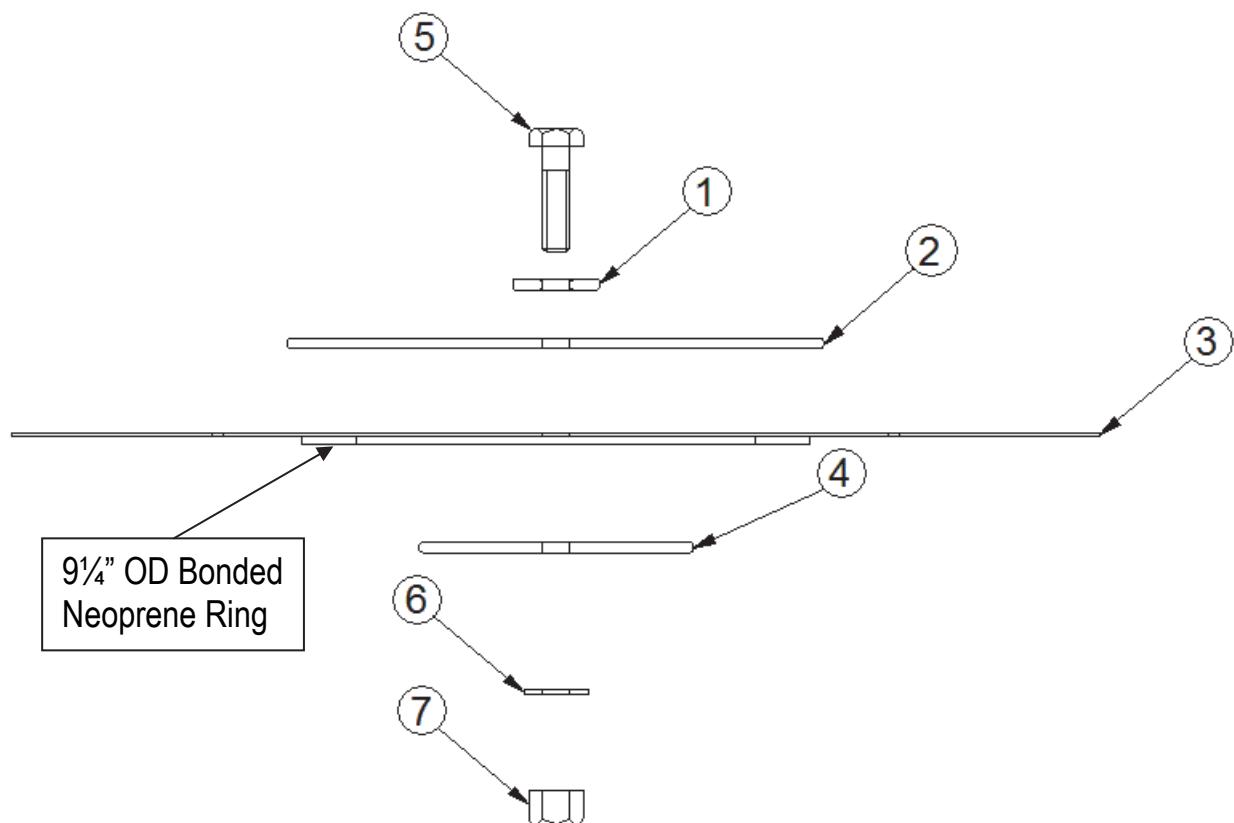
\* See parts breakdown on the following page.



# HONEYVILLE MPC SERIES

## MAIN (LARGE) DIAPHRAGM ASSEMBLY

| Item | Part Number | Qty | Description  |
|------|-------------|-----|--|
| 1    | FLGP1035DK3 | 1   | Spring Retainer Disk for Main (Large) Diaphragm Assembly   |
| 2    | FLGP1035DK1 | 1   | Large Disk for Main (Large) Diaphragm Assembly             |
| 3    | FLGP1035D3  | 1   | Main (Large) Diaphragm for Main (Large) Diaphragm Assembly |
| 4    | FLGP1035DK2 | 1   | Small Disk for Main (Large) Diaphragm Assembly             |
| 5    | HWMB508012  | 1   | 1/2"-13 x 1 1/2" Hex Grade 5 Machine Bolt                  |
| 6    | HWFW1008    | 1   | 1/2" Flat Washer   |
| 7    | HWNN1008    | 1   | 1/2"-13 Nylock Nut   |



Note: Item 3 must be installed with the 9 1/4" OD Bonded Neoprene Ring on the bottom (tank side) of the diaphragm as shown in the drawing above.

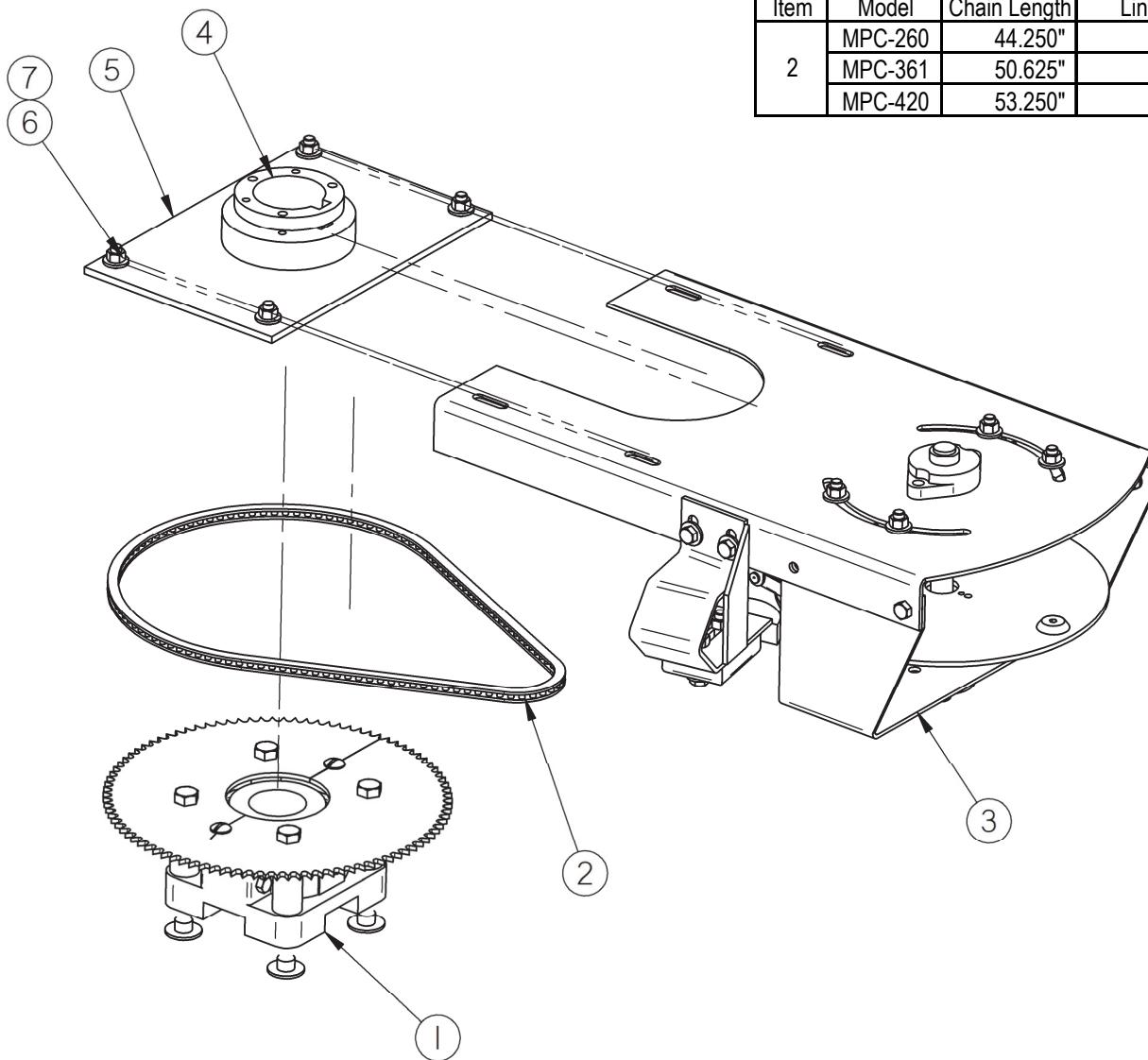
# HONEYVILLE MPC SERIES

## TIMING MECHANISM ASSEMBLY

| Item | Part Number   | Qty | Description                                     |
|------|---------------|-----|---|
| 1    | FLMP5002 **   | 1   | MPC Fixed Sprocket Assembly                     |
| 2    | PTRC35HC      | 1   | #35 Roller Chain (See chart for length)         |
| 3    | FLMP5004S2 ** | 1   | MPC Timing Mechanism Arm Assembly - Double Tank |
| 4    | PTSBB039      | 1   | B 2-7/16" Bushing                               |
| 5    | FLMP5003      | 1   | MPC Arm Mount Assembly                          |
| 6    | HWNT0206      | 4   | 7/8"-16 Nut                                     |
| 7    | HWFW1006      | 4   | 7/8" USS Flat Washer                            |

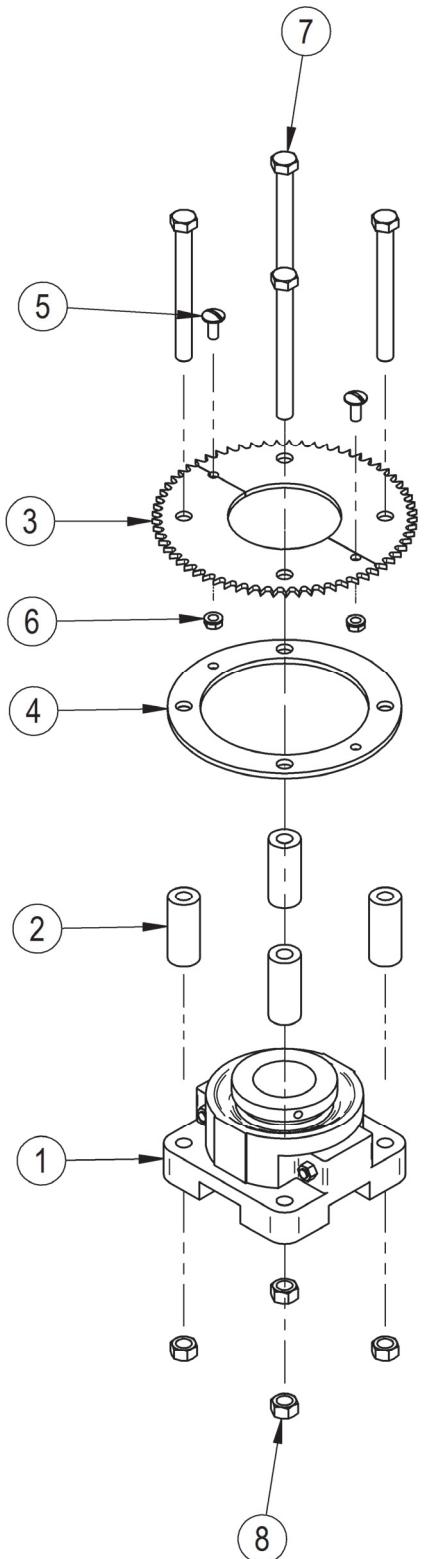
\*\* See separate drawings for breakdown of parts.

| Item | Model   | Chain Length | Links |
|------|---------|--------------|-------|
| 2    | MPC-260 | 44.250"      | 118   |
|      | MPC-361 | 50.625"      | 135   |
|      | MPC-420 | 53.250"      | 142   |



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## FIXED SPROCKET ASSEMBLY

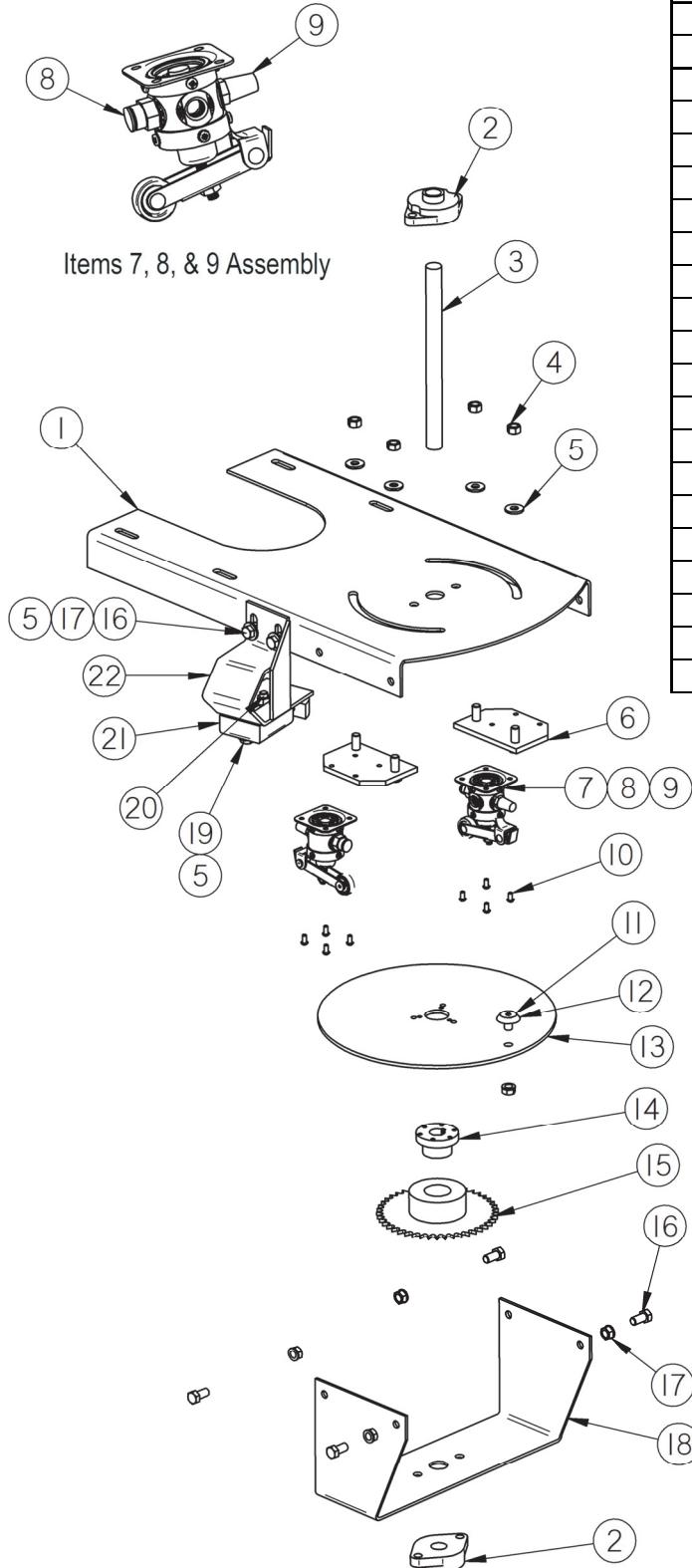


| Item | Part Number | Qty | Description                            |
|------|-------------|-----|--|
| 1    | PTFB5011    | 1   | Dodge S2000 1-15/16" Flange Bearing    |
| 2    | FLMP5006    | 4   | Timing Mechanism Spacer                |
| 3    | See Chart   | 1   | Split Sprocket                         |
| 4    | FLMP5002R   | 1   | Sprocket Ring                          |
| 5    | HWTH0506    | 2   | 5/16"-18 x 3/4" Truss Head Plated Bolt |
| 6    | HWNN1005    | 2   | 5/16"-18 Whiz Nut                      |
| 7    | HWMB508040  | 4   | 1/2"-13 x 5" Hex Grade 5 Machine Bolt  |
| 8    | HWNT0208    | 4   | 1/2"-13 x 5" Nut                       |

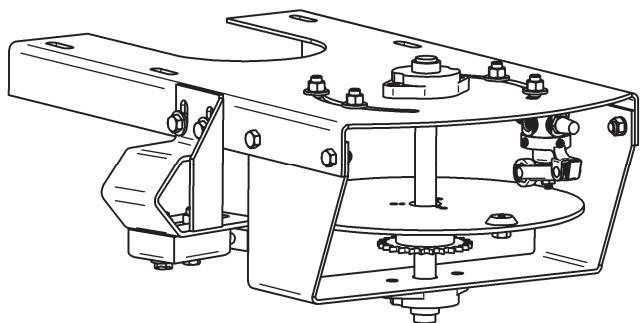
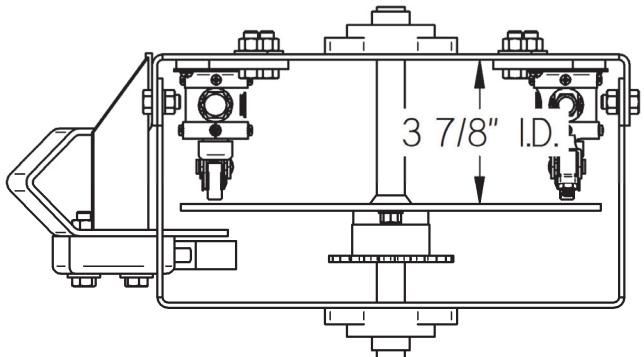
| Item | Model   | Part Number |
|------|---------|-------------|
|      | MPC-260 | FLMP5008    |
| 3    | MPC-361 | FLMP5009    |
|      | MPC-420 | FLMP5010    |

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## TIMING MECHANISM ARM ASSEMBLY

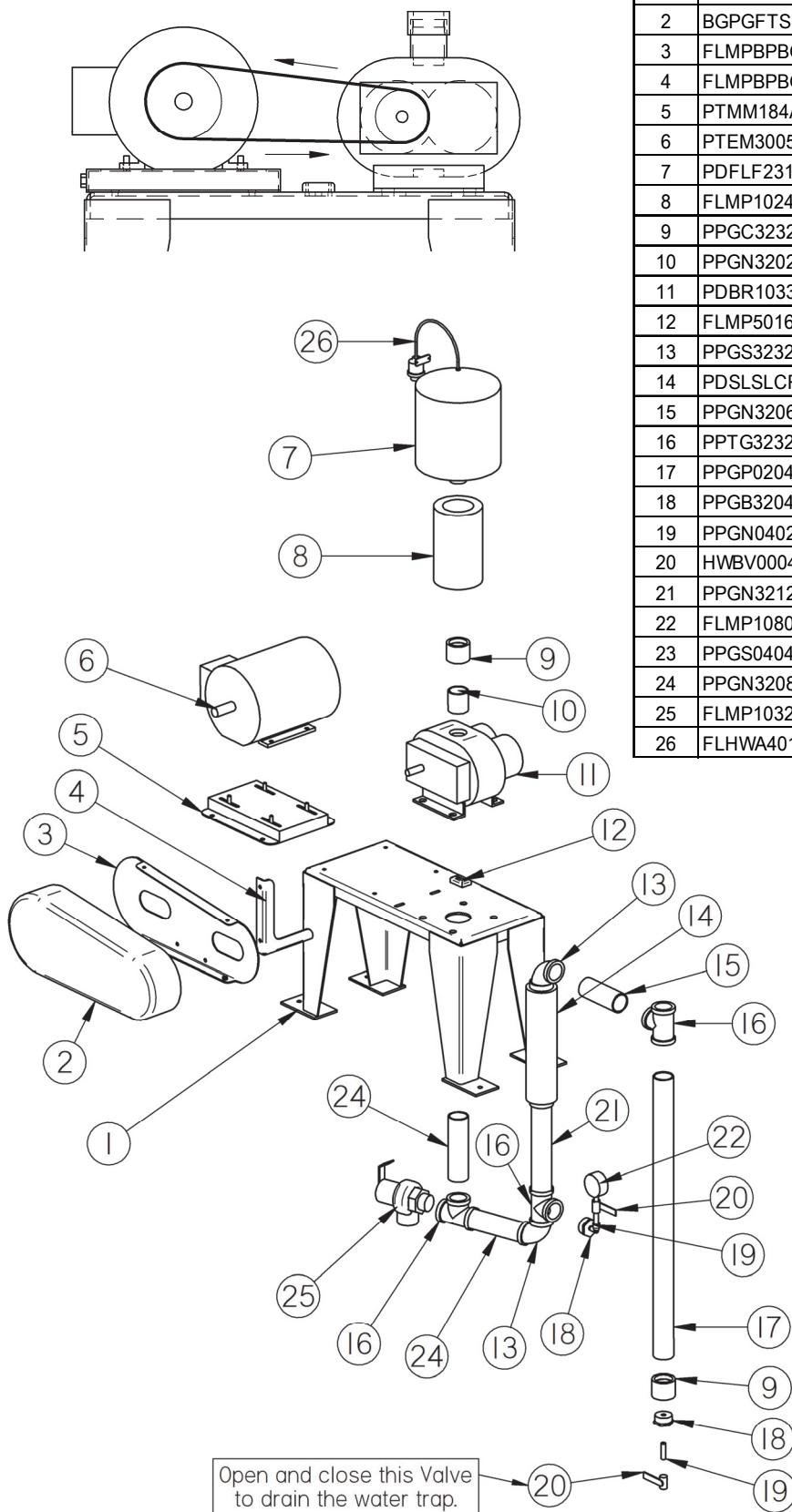


| Item | Part Number  | Qty | Description                                    |
|------|--------------|-----|--|
| 1    | FLMP5004-1   | 1   | Timing Mechanism Arm                           |
| 2    | PTFB1018     | 2   | Peer FHSLF204-12G 3/4" Two-bolt Flange Bearing |
| 3    | FLMP5004-4   | 1   | Timing Mechanism Shaft                         |
| 4    | HWNT0206     | 4   | 3/8"-16 Nut                                    |
| 5    | HWFW1006     | 8   | 3/8" USS Flat Washer                           |
| 6    | FLMP5005     | 2   | Timing Mechanism Valve Mount                   |
| 7    | FLMP5021     | 2   | 250C210-21BRB Humphrey Valve                   |
| 8    | HWHF1004     | 2   | 1/4" NPT x 3/8" OD Hose Straight Adapter       |
| 9    | FLHW1081     | 2   | 1/4" Sintered Bronze Muffler Filter            |
| 10   | HWMSPP103203 | 8   | 10-32 x 3/8" Machine Screw                     |
| 11   | FLHW1227     | 1   | 3/8"-16 x 3/4" Flat Head Socket Cap Screw      |
| 12   | FLHW1228     | 1   | 3/8" Brass Countersunk Washer                  |
| 13   | FLMP5004-3   | 1   | Index Disk                                     |
| 14   | PTSBQDSH12   | 1   | 3/4" QDSH Bushing                              |
| 15   | PTSP35SH45   | 1   | 35SH45 Traveling Sprocket                      |
| 16   | HWMB506006   | 6   | 3/8"-16 x 3/4" Hex Grade 5 Machine Bolt        |
| 17   | HWNN1006     | 7   | 3/8"-16 Whiz Nut                               |
| 18   | FLMP5004-2   | 1   | Timing Mechanism Arm Bearing Mount             |
| 19   | HWMB506012   | 2   | 3/8"-16 x 1 1/2" Hex Grade 5 Machine Bolt      |
| 20   | HWNN1006     | 2   | 3/8"-16 Nylock Nut                             |
| 21   | FLMP5011     | 1   | CT1201-L Chain Tensioner Sm Arc Head #35 SG    |
| 22   | FLMP5004-5   | 1   | Chain Tensioner Mount Weldment                 |



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## BLOWER PACKAGE



| Item | Part Number   | Qty | Description                              |
|------|---------------|-----|--|
| 1    | FLMPBPBW      | 1   | Base Weldment                            |
| 2    | BPGFITS1024   | 1   | TS1024 Yellow Belt Guard                 |
| 3    | FLMPBPPBG     | 1   | Belt Guard Back                          |
| 4    | FLMPBPPGM     | 1   | Belt Guard Mount                         |
| 5    | PTMM184A2     | 1   | 184A2 Double Adj. Motor Mount            |
| 6    | PTEM3005018BE | 1   | Baldor EM3615T 5HP Motor                 |
| 7    | PDPLF231P200  | 1   | Compact Filter, 2" NPT Outlet            |
| 8    | FLMP1024      | 1   | 231P Solberg Filter (Included w/Item #7) |
| 9    | PPGC3232      | 2   | 2" Standard Galv. Coupling               |
| 10   | PPGN320250    | 1   | 2" x 2½" Long Standard Galv. Nipple      |
| 11   | PDBR1033      | 1   | 33 URAI-DSL Roots Blower                 |
| 12   | FLMP5016      | 1   | ENM T56F1 Vibration Activated Hour Meter |
| 13   | PPGS323290    | 2   | 2" 90° Galv. Street Elbow                |
| 14   | PDSLSCR200    | 1   | SLCR200 Solberg Silencer                 |
| 15   | PPGN320600    | 1   | 2" x 6" Long Standard Galv. Nipple       |
| 16   | PPTG323232    | 3   | 2" Galv. Tee                             |
| 17   | PPGP020403600 | 1   | 2" Sch. 40 Galv. Pipe 36" Long TBE       |
| 18   | PPGB3204      | 2   | 2" x ¼" Galvanized Hex Bushing           |
| 19   | PPGN040200    | 2   | ¼" x 2" Long Standard Galv. Nipple       |
| 20   | HWBV0004      | 2   | 6GD11 ¼" Brass Ball Valve                |
| 21   | PPGN321200    | 1   | 2" x 12" Long Standard Galv. Nipple      |
| 22   | FLMP1080      | 1   | Noshok 25-901-15 Pressure Gauge          |
| 23   | PPGS040490    | 1   | ¼" 90° Galv. Street Elbow                |
| 24   | PPGN320800    | 2   | 2" x 8" Long Standard Galv. Nipple       |
| 25   | FLMP1032      | 1   | 12 PSI Safety Relief Valve               |
| 26   | FLHWA40108    | 1   | Pressure Drop Indicator                  |

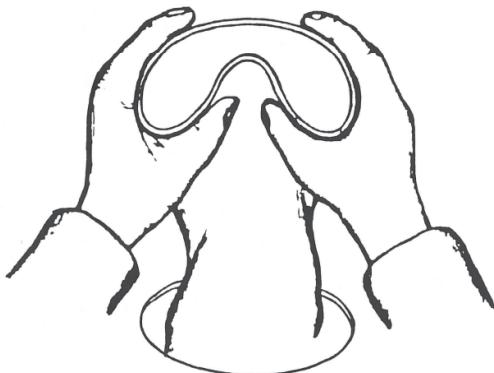
| Item           | Model   | Part Number  |
|----------------|---------|--------------|
| Motor Sheave   | MPC-260 | PTSH00BK052H |
|                | MPC-361 | PTSH00BK057H |
|                | MPC-420 | PTSH00BK067H |
| Motor Bushing  | MPC-260 | PTSBH018     |
|                | MPC-361 | PTSBH018     |
|                | MPC-420 | PTSBH018     |
| Blower Sheave  | MPC-260 | PTSH00BK072H |
|                | MPC-361 | PTSH00BK062H |
|                | MPC-420 | PTSH00BK065H |
| Blower Bushing | MPC-260 | PTSBH012     |
|                | MPC-361 | PTSBH012     |
|                | MPC-420 | PTSBH012     |
| Belt           | MPC-260 | PTBLB44      |
|                | MPC-361 | PTBLBX43     |
|                | MPC-420 | PTBLB45      |

Note: Items not shown.

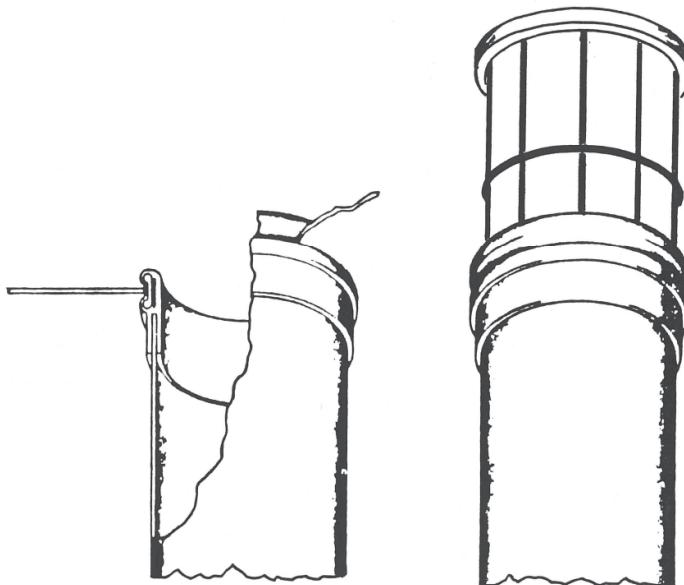
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## FILTER BAG INSTALLATION

1.



2.



Before entering the filter, be sure to perform the appropriate lockout-tagout procedures. To install the filter bags and wire cages, enter the clean air chamber through the door and stand on the cell plate. There will be sufficient room to install the bags and wire cages.

- 1) Insert the lower (closed) end of the bag through the cell plate. The best method for inserting the bag cuff into the cell plate is to form the bag cuff into a "U" shape. Center the cuff groove in the cell plate, and carefully snap the bag cuff into its sealed position. Caution must be exercised and each bag checked carefully to insure that the filter bag cuff groove is properly seated in the cell plate.
- 2) Insert the wire frame into each bag by sliding each cage downward until the bottom edge of the upper lip is fully covering the bag cuff and resting firmly on the filter cell plate.

| MPC Filter Bags & Cages |  |
|-------------------------|--|
| Part Number             | Description  |
| FLBG1005                | 4 $\frac{1}{2}$ " x 8' 16oz PE Felt Mirror Finish Microseal Bag  |
| FLBG1006                | 4 $\frac{1}{2}$ " x 10' 16oz PE Felt Mirror Finish Microseal Bag |
| FLBG1007                | 4 $\frac{1}{2}$ " x 12' 16oz PE Felt Mirror Finish Microseal Bag |
| FLWC1002                | 96" Wire Cage  |
| FLWC1003                | 120" Wire Cage   |
| FLWC1004                | 144" Wire Cage   |

# HONEYVILLE MPC SERIES

## MAGNEHELIC DIFFERENTIAL GAUGE PARTS LIST

| Quantity | Unit of Measure | Part Number | Description                                     |
|----------|-----------------|-------------|---|
| 1        | Each            | FLHW1003    | 2010 Magnehelic Gauge                           |
| 1        | Each            | FLBR1001    | Magnehelic Gauge Bracket                        |
| 80       | Feet            | CSTB1002    | 1/4" Black Poly Flo Tubing                      |
| 5        | Each            | FLGB1000    | Grommet Bracket for 1/4" Hose                   |
| 9        | Each            | FLHW1022    | 230 Rubber Grommet                              |
| 2        | Each            | HWHF1002    | 1169X4S 1/8" NPT x 1/4"OD Hose 90° Swivel Elbow |
| 2        | Each            | HWHF1001    | 1168X4 1/8" NPT x 1/4"OD Hose Straight Adapter  |
| 1        | Each            | FLHW1080    | 75048496 1/8" Polyethylene Exhaust Muffler      |

# HONEYVILLE MPC SERIES

## MAINTENANCE

### Daily/Weekly Procedures

- Check the magnehelic gauge and record the pressure level. The normal operating range is 0.25" to 6.00". Note, your system will perform best if pressure is below 3.00". If the pressure changes significantly over a short period of time, investigate to determine the cause of the change.
  - If the pressure has increased, you should check the operation of the bag cleaning mechanism and check *if baghouse is plugged*.
  - If the pressure has decreased, you should check for torn filter bags, verify that the fan is producing the proper CFM, and verify that the magnehelic gauge is working properly.
- Check the pressure gauge on the blower package (Item #22 on page 13). The pressure should reach between 6 and 9 psi before pulsing, then the pressure should drop to zero and begin building back up.
  - You will need to open the valve directly below the pressure gauge before you can get a reading. After you are done, close the valve to prevent excessive wear on the pressure gauge.
  - Ensure that the relief disc on the top of the gauge is in the raised position.
- Empty the water trap on the blower package by opening the valve at the bottom of the trap (Item #20 on page 13).
- Check fan and motor bearings for excessive heat or vibration.

### Quarterly Procedures

- In the clean air chamber of the filter (perform lockout-tagout procedures before entering the filter):
  - Tension the chain in the timing mechanism assembly (Item #2 on page 10). See page 17 for further instructions.
  - Ensure that the nuts (Item #4 on page 12) on the timing mechanism valve mounts are tight. See page 17 for instructions on adjusting the timing of the cleaning pulse.
  - Check the split sprocket (Item #3 on page 11) and traveling sprocket (Item #15 on page 12) for signs of wear. Signs of wear may indicate that the chain is not tight enough.
  - Check for visible dust.
    - If dust is visible, check the bags in the areas where dust is present for tears.
    - Leaks that are difficult to detect may require the use of ultraviolet dye and a black light. Contact Honeyville Metal for further information.

# HONEYVILLE MPC SERIES

## MAINTENANCE (continued)

### Semi-Annual Procedures

- Check the belt tension on all V-belt drives.
- Check the oil levels in the Peerless-Winsmith Gear Reducer (Item #5 on page 7). Note that the double reduction gear reducer has two oil housings. The Peerless-Winsmith Installation, Operation, and Lubrication Instructions have been included with this manual. Please consult their manual for further instructions specific to the gear reducer.

### Annual Procedures

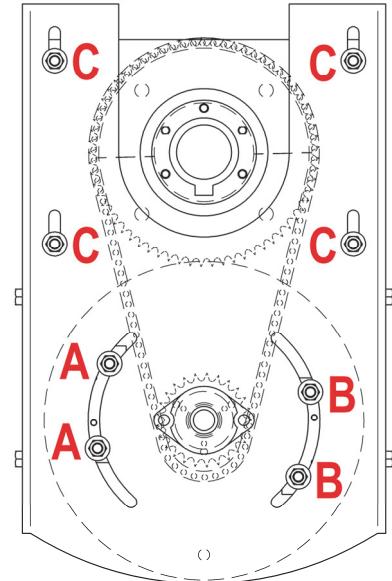
- Remove the Main Covers on the 8" Low Pressure Valves (Item #4 on page 8) and inspect the Main Spring (Item #5 on page 8) and the Main Diaphragm (Item #3 on page 9) in each. Please contact Honeyville Metal if these items appear to have significant signs of wear.

### Tensioning the Timing Mechanism Chain

- To tension the chain, loosen the four nuts labeled "C" in the image below, slide the Timing Mechanism Arm Assembly away from the Fixed Sprocket Assembly until the chain is tight, and then retighten the nuts.

### Adjusting the Timing of the Cleaning "Pulse"

- For the bag cleaning process to function properly, the filter must "pulse" when the air discharge nozzles are passing over the centerline of the individual filter bags. The "pulse" is triggered when the Humphrey Valve passes over the Cap Screw and Countersunk Washer on the Index Disk (see Page 12).
- You can adjust the timing of the "pulse" by shifting the Timing Mechanism Valve Mounts (Item #6 on page 12). Loosen the two nuts corresponding with the manifold you are adjusting ("A" nuts for Manifold A & "B" nuts for Manifold B in the image to the right) to shift the valve mount and retighten the nuts when finished.
  - If the valve pulses *BEFORE* the air discharge nozzles are centered on the bags, move the valve mount *counter clockwise*.
  - If the valve pulses *AFTER* the air discharge nozzles are centered on the bags, move the valve mount *clockwise*.



# HONEYVILLE MPC SERIES

## MAINTENANCE (continued)

- The following manufacturer's manuals have been included with this MPC Series manual. Please consult these manuals for maintenance instructions specific to their products that have been included in the filter.
  - Baldor AC & DC Motor Installation & Maintenance
    - Item #4 on page 7
    - Item #6 on page 13
  - Dodge S-2000 Spherical Roller Bearings
    - Item #1 on page 11
  - Peer Bearings Engineering Data
    - Item #9 on page 7
    - Item #2 on page 12
  - Peerless-Winsmith Installation, Operation, and Lubrication Instructions
    - Item #5 on page 7
  - Rotary Systems Dis-Assembly / Assembly Instructions
    - Item #10 on page 7
  - TB Wood's Sure-Flex Couplings Installation Instructions
    - Items #6 & 7 on page 7
  - Roots Blower Installation Operation & Maintenance Manual
    - Item #11 on page 13
  - V-Belts Operation & Maintenance
    - Blower Package Belt on page 13

# HONEYVILLE MPC SERIES



## INSTALLATION AND MAINTENANCE INSTRUCTIONS

### Explosion Vents

06-308-1

#### WARNING

- Read these instructions carefully and completely before attempting to unpack, install or service the explosion vent.
- Handle the explosion vent with extreme care. DO NOT bend, poke, or in any way distort the explosion vent.
- Do not locate vent assembly where personnel are exposed to the vent or the area above or in front of the vent, as they may be injured by the release of pressure, flame, noise, particles, and/or process material.
- Locate the explosion vent so that the discharge does not ignite other combustibles, resulting in an ensuing fire or secondary explosion.
- Interfacing equipment and/or machinery must also be protected.
- Flow arrows on round explosion vent tags, or explosion vent tag for square and rectangular vents must be directed to the atmospheric side of the process. Provisions shall be made to prevent personnel from standing or walking on vents, as they risk falling through.
- The vent opening is to be left free and clear. Nothing, i.e. goods or products, is allowed to obstruct the vent area as this will decrease vent efficiency.
- Install the enclosed DANGER sign in a conspicuous location near the zone of potential danger.

#### GENERAL

An explosion vent is a pressure relief device, designed to give an instantaneous opening at a predetermined pressure. Its purpose is to protect the equipment from excessive pressures caused by dust or gas deflagrations.

#### INSPECTION/PREPURATION

**WARNING:** Always handle the explosion vent with extreme caution. Handle the explosion vent by its edges only. Damage to the functional area (center) or seat area of the explosion vent may adversely affect the performance of the explosion vent. Read the explosion vent tag completely before installing to confirm that the size and type are correct for your system.

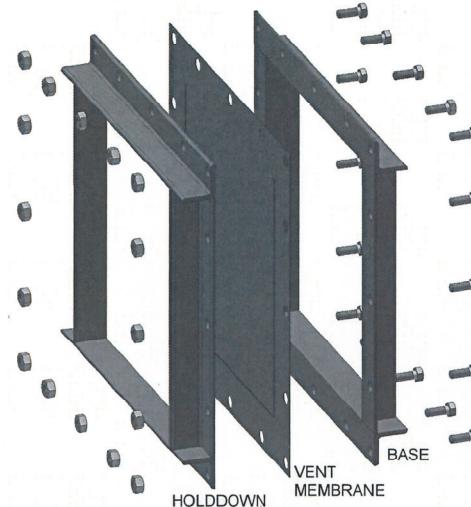
1. Carefully remove the explosion vent from its packaging container.
2. Inspect the explosion vent for damage.
3. If foreign material is present, carefully clean the explosion vent with a solvent that is compatible with your media.
4. Two personnel are recommended for handling of all vents larger than 24" x 30" (600 x 1000 mm) (rectangular) and 30" (800 mm) (round) or larger.
5. CV-SF vents require vent frames with back-up bars to properly function (consult Fike for design requirements).

#### INSTALLATION - OPEN DISCHARGE

**WARNING:** The vent opening should be left free and clear. Do not insulate any part of the explosion vent or frame without consulting Fike.

**IMPORTANT:** When explosion vents are installed horizontally, the use of drainage/weep holes in the holddown frame is required.

1. Use base/inlet of explosion vent frame as a template to indicate placement of explosion vent on the vessel or duct to be protected.



2. Cut the vessel or duct opening to the marked size. The marked size should match the size identified on the vent tag.
3. Weld or bolt the inlet angle frame to the vessel or duct.

**IMPORTANT:** The explosion vent frame must be installed such that the seat area is flat and bolt holes remain perpendicular (square and rectangular vent frames) or circular (round vent frames).

4. If sealing is a particular concern due to the nature of the process, apply a process compatible silicone sealant or gasket to provide seal between explosion vent and inlet frame.
5. If using a gasket, select a gasket material that is compatible with the process, with a suggested thickness of 1/8" (3.2 mm) maximum. The gasket is to have the same inside diameter and outside diameter as the explosion vent frame.
6. Install the explosion vent and outlet flange aligning the bolt holes. DO NOT force the explosion vent hole alignment.
7. Apply light oil to the threads and install the nuts and bolts hand tight.
8. Torque each bolt to the value identified on the explosion vent tag.

**CAUTION:** The torque values should not be exceeded as this may cause failure of the bolt and/or damage to the vent.

#### INSTALLATION - WITH FLAMQUEENCH II SQ (FQIISQ)

For additional information, refer to FQIISQ installation instructions, E06-085.

**WARNING:** The vent opening should be left free and clear. Do not insulate any part of the explosion vent or frame without consulting Fike.

1. Use base/inlet of explosion vent frame as a template to indicate placement of explosion vent on the vessel or duct to be protected.

# HONEYVILLE MPC SERIES

2. Cut the vessel or duct opening to the marked size. The marked size should match the size identified on the vent tag.

**IMPORTANT:** The FQIISQ uses an alignment hole feature to ensure proper orientation of the hinge of the explosion vent. The alignment hole must be included on the mounting frame so the explosion vent and FQIISQ can be mounted in only the prescribed orientation. Consult factory for FQIISQ bolting pattern.

3. Weld or bolt the inlet angle frame to the vessel or duct.

**IMPORTANT:** The explosion vent frame must be installed such that the seat area is flat and bolt holes remain perpendicular (square and rectangular vent frames).

4. Install gaskets on both sides of the explosion vent. Select a gasket material that is compatible with the process, with a suggested thickness of 1/16" (1.5 mm) maximum. The gasket is to have the same inside diameter and outside diameter as the explosion vent frame.
5. Install the explosion vent and outlet flange aligning the bolt holes. DO NOT force the explosion vent hole alignment.
6. Apply light oil to the threads and install the nuts and bolts hand tight.
7. Torque each bolt to the value identified on the explosion vent tag.

**CAUTION:** The torque values should not be exceeded as this may cause failure of the bolt and/or damage to the vent.

## BURST INDICATOR

The explosion vents can have as an option an integrated electric burst indicator designed for intrinsically safe service. Refer to Burst Indicator Instructions / Drawing for electrical and dimensional specifications.

**CAUTION:** Unacceptably high voltage or currents will permanently damage the electrical system and the use of a non approved intrinsically safe power supply may even be the eventual ignition source of a dust or gas explosion. All burst indicators must be installed in an intrinsically safe circuit which conforms to the applicable national standard.

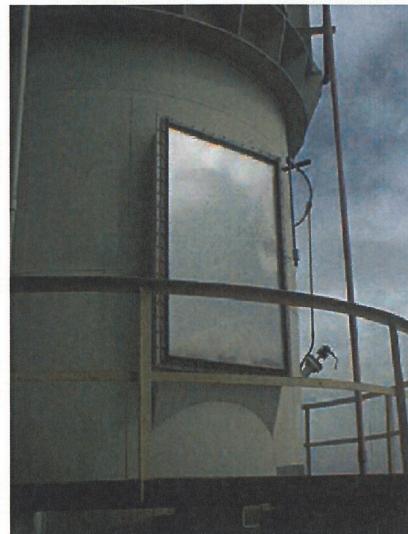
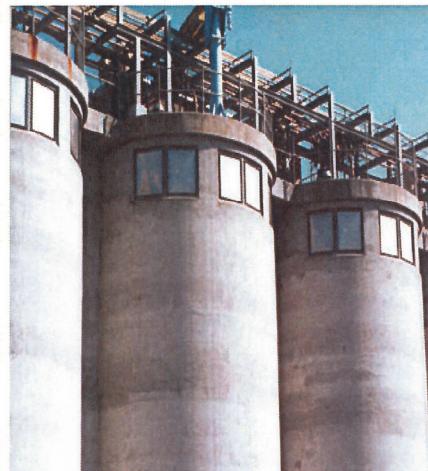
**WARNING:** Do not bend the electrical cable at any angle at a distance of less than 8 inch (20cm) from the mechanical bracing part and do not lift the explosion vent by the electrical cable, as this may damage the electrical circuit.

**WARNING:** The maximum torque values as mentioned on the nameplate must not be exceeded as this will permanently damage the electrical circuit.

## MAINTENANCE

The explosion vent is maintenance-free due to its basic design and concept. Periodic visual inspections should be performed in accordance to the operating parameters and severity of service. All operational system parameters should be observed as a standard maintenance practice. The explosion vent must be replaced if they appear damaged, corroded, or leaking.

**NOTE:** Severe service is defined as rapid changes in pressure, high pressure, high temperature, or corrosive process.



# HONEYVILLE MPC SERIES

## FIKE WARRANTY INFORMATION

### LIMITED WARRANTY

1. Because of the many and varied circumstances and extreme conditions under which Fike's products are used, and because Fike has no control over this actual use, Fike makes no warranties which extend beyond the express provisions herein. **FIKE MAKES NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS.** Fike makes no express warranties beyond the following provisions, which only apply to the original purchaser.
2. Fike only warrants to the original purchaser as follows: When the products and their component parts are properly installed and maintained, and if the product has not been modified or tampered with, then only the products actually manufactured by Fike shall be free from defects in material and workmanship only for a period of one year from shipment by Fike for all products except certain qualified Fike Fire Suppression Systems which shall be free of said defects for a period of sixty (60) months (see additional details for qualifications). The original manufacturers' warranties apply to products and components not manufactured by Fike.

### NON-ASSIGNABILITY OF WARRANTY

3. The warranty as set forth in these terms and conditions may not be assigned, transferred, sold, or alienated in any other way and extends only to the original purchaser.

### PURCHASER'S EXCLUSIVE REMEDY

4. The original purchaser's sole and exclusive remedy, unless varied by written agreement with Fike, is that Fike will, at Fike's option, repair or replace any defective part which is returned to Fike within ninety (90) days of discovery of the defect.

### DISCLAIMER OF CONSEQUENTIAL DAMAGES

5. In no event shall Fike be liable for consequential damages, including but not limited to damages for loss of use, damages for lost profits, and damages for resulting harm other than the Fike assemblies and their component parts.



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Form No. TC1001 July, 2010 Specifications are subject to change without notice.

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## **HONEYVILLE MPC SERIES**

### **HONEYVILLE METAL WARRANTY**

The full extent of the warranty supplied by Honeyville Metal, Inc. ("HMI") is to correct any defects in material and/or workmanship on the products manufactured only by HMI. Any unauthorized modification to the equipment voids this warranty. This warranty period extends for **one year** from the date the product arrives on the site where installation will take place. HMI retains the right to review and/or adjust the time period for those products that may be held in inventory at a dealer's warehouse. HMI retains the final authority on determining if a product is within the warranty period and if full replacement of that product is required to retain the integrity of our products reputation and meet the customer's expectations. HMI will not furnish labor for replacement of any defective product or components of a product. Any product that is determined defective by both HMI and the end user who purchased the product may not be returned to HMI without the receipt of a Return Merchandise Authorization ("RMA") from our office. Returned merchandise must be shipped prepaid, unless instructed otherwise, and clearly marked with the RMA number provided by HMI. This warranty supplied by HMI excludes damage to products while in transit to the destination on all public forms of transportation except the trucking equipment owned and operated by HMI. This warranty does not cover performance guarantees on products, only defects in material and/or workmanship as prior statement. HMI does honor vendor warranties that extend beyond the one year period and will pass warranty coverage on to the purchaser of that vendor product.

HMI will provide replacement Main (Large) Diaphragms, Item #3 on page 9, and Main (Large) Springs, Item #5 on page 8, free of charge for the life of the filter to the original owner. HMI will not furnish the labor to replace these parts.

## **HONEYVILLE MPC SERIES**

### **HONEYVILLE CERTIFICATE OF QUALITY**

Every effort has been made to make this equipment the best value you can obtain for your money. All the components have been inspected and assembled. The complete system has been tested to insure proper operation. We sincerely hope this equipment and our efforts meet with your approval. The full extent of the Honeyville Metal, Inc. warranty is to correct any defects in material or workmanship in those products manufactured by Honeyville Metal, Inc. Motors and drives, and all electrical and air control parts carry a one-year warranty.

**READ INSTRUCTIONS CAREFULLY BEFORE OPERATING!**

THIS UNIT WAS FINAL INSPECTED AND PACKED BY \_\_\_\_\_

#### **Honeyville Metal, Inc.**

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