DATA SHEET MAG-JET VALVE*



- Model: **31804** Use with Pump Models: 3CP1120, 3CP1120G, 3CP1130, 3CP1140
- Model: **31810** Use with Pump Models: 56, 56G1, 57, 60, 60G1, 5CP5140CSS, 5CP5140CSSG1
- Model: **31814** Use with Pump Models: 310, 340, 350, 5CP2120W, 5CP2140WCS, 5CP2150W
- Model: 31815 Use with Pump Models: 45, 45G1, 5CP3120, 5CP3120CSS, 5CP3120CSSG1, 5CP5120, 5CP5135CSSG1
- Model: **31845** Use with Pump Models: 660, 1050, 5CP6120, 7CP6110CS, 7CP6170



FEATURES

- Pushing the Mag-Jet handle activates the jetting action and pulling returns the pump smoothly to full flow high pressure operation.
- Special SS magnetic valve and super strong corrosion resistant magnet hold one inlet valve open for pulsing action. Holding the valve open permits the flow to continue to exit through the valve eliminating a dry cylinder.
- All cylinders see liquid at all times and pump is not exposed to extreme vacuum conditions. This means longer seal and pump life!
- Mag-Jet easily mounts in the manifold inlet plug on most models for easy field-retrofit.

SELECTION:

The MAG-JET Valve is designed for a specific pump or group of pumps and conveniently mounts into any of the standard inlet valve plug ports.

Due to it's stacked valve design, plunger pump model 3560 cannot be retrofitted in the field. The discharge manifold must be machined in order to add the MAG-JET feature. To convert to 3560J, order Stem and Valve Kit PN 899910.

INSTALLATION:

To convert from high pressure to jetting, remove the standard inlet valve plug and valve assembly from any inlet valve chamber of your choosing. To install the MAG-JET Valve, first insert the pre-assembled MAG-JET valve assembly (items 162-168) and press completely into the valve chamber. Then thread the MAG-JET body and handle assembly (items 169-195) into the valve chamber and torque to specifications (see Tech Bulletin 074).

OPERATION:

Release the trigger on the gun to activate the by-pass mode, push in the handle to activate the magnet that holds open the inlet valve and start the jetting action. On the model 3560J the inlet valve is held open by the detent when the MAG-JET is pushed in. Pull out the handle to return to full flow high pressure cleaning mode. NOTE: When in jetting mode, pump output is reduced by 1/3 and discharge pressure will drop.

EXPLODED VIEW



PARTS LIST

| | | Mag-Jet Valve Assembly | | | | | | |
|------|------|---|---------|---------|---------|---------|---------|-----|
| ITEM | MATL | DESCRIPTION | 31804 | 31810 | 31814 | 31815 | 31845 | QTY |
| 162 | PTFE | Back-up-Ring, Seat | N/A | 43248 | _ | N/A | 43248 | 1 |
| | D | Back-up-Ring, Seat | N/A | _ | 48361 | N/A | _ | 1 |
| 163 | NBR | O-Ring, Seat | 17547 | 43249 | 43358 | 17547 | 43249 | 1 |
| 164 | S | Seat, Inlet | 45790 | 43722 | 43725 | 45790 | 44718 | 1 |
| 165 | S | Stem | 899926 | 899935 | 899926 | 899926 | 899938 | 1 |
| 166 | SSSS | Valve (Magnet) | 899929* | 899937* | 899929* | 899929* | 899937* | 1 |
| 167 | S | Spring | 43750 | 43751 | 43750 | 43750 | 43751 | 1 |
| 168 | PVDF | Retainer, Valve | 899928 | 899936 | 899928 | 899928 | 31131 | 1 |
| 169 | СР | Magnet (1/4"x1/4") | 899923 | 899923 | 899923 | 899923 | _ | 1 |
| | СР | Magnet (3/8"x3/8") | _ | _ | — | _ | 899939 | 1 |
| 172 | NBR | O-Ring, Valve Plug | 17615 | 14179 | 17615 | 17549 | 17617 | 1 |
| 173 | PTFE | Back-up-Ring, Valve Plug | N/A | 20213 | N/A | — | N/A | 1 |
| | D | Back-up-Ring, Valve Plug | N/A | — | N/A | 48365 | N/A | 1 |
| 174 | BB | Body, Valve Plug | 899930 | 899931 | 899930 | 899933 | 899934 | 1 |
| 175 | S | Detent Assembly | 899925 | 899925 | 899925 | 899925 | 899925 | 1 |
| 176 | STZP | Nut, Jam (1/4"-20) | 899927 | 899927 | 899927 | 899927 | 899927 | 1 |
| 180 | NBR | O-Ring, Stem - 70D | 899921 | 899921 | 899921 | 899921 | 899921 | 1 |
| 181 | PTFE | Back-up-Ring, Stem | 899922 | 899922 | 899922 | 899922 | 899922 | 1 |
| 195 | POP | Handle, Jetter | 899920 | 899920 | 899920 | 899920 | 899920 | 1 |
| 310 | _ | Kit, Stem and Valve (Inclds: 162-169, 172, 173, 180, 181) | 899904 | 899906 | 899907 | 899908 | 899909 | 1 |

*NOTE: Special Magnetic Valve used in MAG-JET assembly. Do not use standard valve from Valve Kits.

Bold print part numbers are unique to a particular pump model. Italics are optional items.

MATERIAL CODES (Not Part of Part Number): BB=Brass CP=Chrome Plated D=Acetal NBR=Medium Nitrile (Buna-N) PTFE=Pure Polytetrafluoroethylene POP=Polypropylene PVDF=Polyvinylidene Fluoride S=304SS SSS=440SS STZP=Steel/Zinc Plated

TROUBLESHOOTING

| Won't Pulsate | Secure detent assembly setting thread in and back off 1/8 turn. | Won't resume to High Pressure | Check jetter valve and seat for damage or trapped debris and replace as needed with stem and valve kit. | | |
|-----------------|--|----------------------------------|---|--|--|
| Leaking at Stem | Worn O-Ring on stem. Check all valves and repair as needed. | | | | |

\triangle CAUTIONS AND WARNINGS

All High Pressure Systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. Cat Pumps does not assume any liability or responsibility for the operation of a customer's high pressure system.

Read all CAUTIONS and WARNINGS before commencing service or operation of any high pressure system. The CAUTIONS and WARNINGS are included in each service manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at www.catpumps.com/cautionswarnings or can be requested directly from Cat Pumps.

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WARRANTY

View the Limited Warranty on-line at www.catpumps.com/warranty.



CAT PUMPS

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