



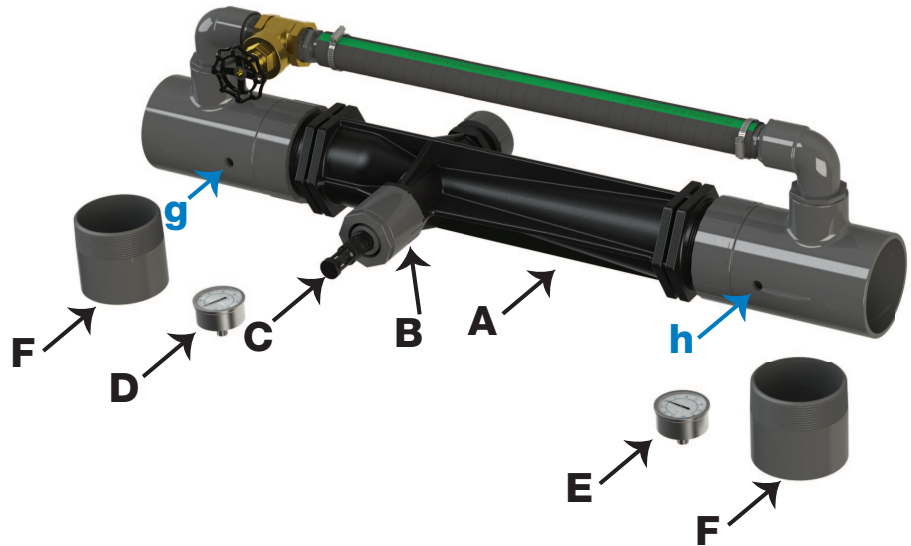
World Leader  
in Mixing and Contacting  
Technologies

# Mazzei AirJection® Irrigation

US Patent No. 7,040,839 and Various International Patents

## CONTENTS:

- A. One (1) Black PVDF or Polypropylene AirJection Unit
- B. One (1) Air Suction Port Assembly
- C. One (1) Strainer Assembly
- D. One (1) Inlet Pressure Gauge (marked 'D')
- E. One (1) Outlet Pressure Gauge (marked 'E')
- F. Two (2) Schedule 40 Gray PVC Half-Nipples



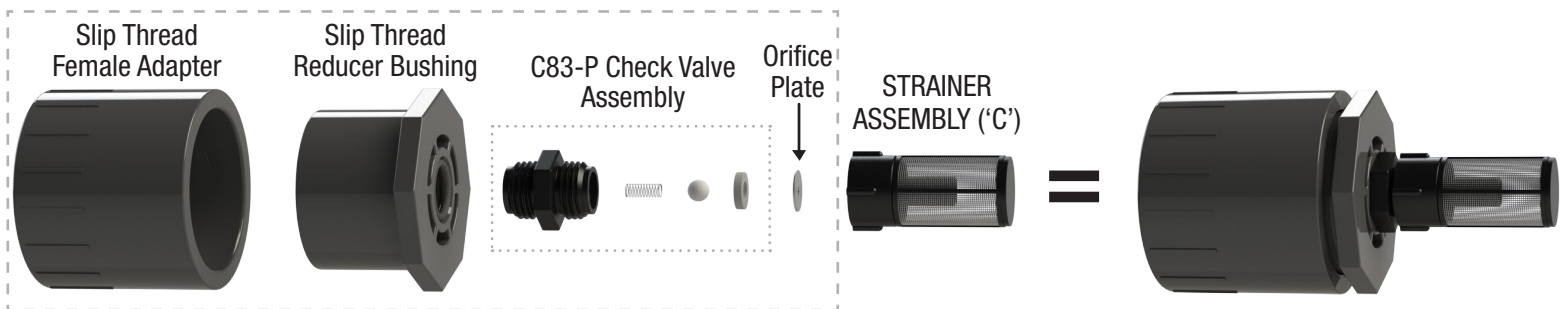
## INSTALLATION:

1. Remove and inspect all the components in the box.
2. Install the inlet pressure gauge (marked 'D') in the hole marked 'g' on the unit.
3. Install the outlet pressure gauge (marked 'E') in the hole marked 'h' on the unit. *(To avoid cross threading, please use care when installing the gauges.)*
4. Install the Air Suction Port Assembly ('B') on the injector suction port.
5. Install the Strainer Assembly ('C') on the Air Suction Port Assembly ('B').
6. Install the MAI unit in the field (using the supplied half-nipples ('F'), if desired). *(Please notice the water flow indicator arrow on the unit and install accordingly.)*

### TIPS:

- *If using a tee as the lateral connection to the outlet of the unit, it must be level to allow equal air/water distribution.*
- *If installing the unit in an existing system, please flush the lines at initial start-up as the aerated water will scour the inside of the tape and dislodge any deposits in the line.*

### AIR SUCTION PORT ASSEMBLY ('B')





# Mazzei AirJection® Irrigation

## Selection & Calibration Guidelines

### 2" Model MAI-2081 Male NPT 89 to 184 GPM

Inlet Pressure (PSIG)	Bypass Valve Position (Turns Open)	Water Flow (GPM)	Orifice Plate No.
30	0	89	107
	2	106	125
	4	116	125
	6	123	125
40	0	102	107
	2	124	107
	4	140	125
50	0	114	107
	2	135	107
	4	158	125
	6	171	125
60	0	121	107
	2	152	107
	4	177	125
	6	184	125

### 3" Model MAI-3090 Male NPT 210 to 374 GPM

Inlet Pressure (PSIG)	Bypass Valve Position (Turns Open)	Water Flow (GPM)	Orifice Plate No.
30	0	210	151
	2	234	151
	4	253	172
	6	273	182
	8	279	182
40	0	246	151
	2	268	151
	4	303	172
	6	314	182
	8	316	182
50	0	263	151
	2	289	172
	4	325	182
	6	347	182
	8	349	182
60	0	287	151
	2	312	172
	4	354	182
	6	373	182
	8	374	182

### 4" Model MAI-4091 Male NPT 350 to 661 GPM

Inlet Pressure (PSIG)	Bypass Valve Position (Turns Open)	Water Flow (GPM)	Orifice Plate No.
30	0	350	196
	2	437	196
	4	503	218
	6	527	218
	8	531	218
40	0	392	196
	2	492	218
	4	570	218
	6	598	250
	8	600	250
50	0	429	196
	2	542	218
	4	628	250
	6	658	250
	8	661	250

### CALIBRATION:

Using the information from these tables, ensure that the correct orifice plate is installed in the MAI unit. Choose the plate that corresponds closest to the MAI unit inlet pressure, valve position and water flow.

#### To obtain the desired outlet pressure:

After starting water flow and allowing the system to fully pressurize, adjust the bypass valve until the outlet gauge is at the desired pressure. You may have to raise or lower the supply pressure to the MAI unit to obtain the desired operating inlet/outlet pressures and flow. You should have a minimum of 30 PSIG at the inlet of the MAI unit.

**Bypass Valve at 0 turns is completely CLOSED**

**Bypass Valve at 6 or 8 turns is completely OPENED**

### ORIFICE PLATE:

- The Orifice Plate should be installed with the numbers facing up.
- The smooth side should be down on the gasket.
- Care should be taken to ensure the Orifice Plate is centered on the gasket.

*This side up*

