

5000 Plus Series Rotor Technical Specification

5000 Plus Series Full and Reversing Full/Part Circle Sprinkler

The full and/or part circle sprinkler shall be a single-stream, water-lubricated, gear-drive type capable of covering a ____ foot (xx meter) at ____ pounds per square inch (psi) or (bar) with a discharge rate of ____ gallons per minute (____ gpm) (____ m³/h). The sprinkler shall have a flow shut-off device that is integrated into the flow path of the rotor as well as adjustable arc coverage of 40 to 360 degrees. Arc adjustment can be performed with or without the sprinkler in operation and shall require only a flat-blade screwdriver.

The sprinkler shall have a smoothed flow path entrance to enhance the flow characteristics of the rotor. In addition, the sprinkler shall feature a flow path to nozzle bore transition radius to minimize pressure loss and assure peak nozzle radius is achieved.

The sprinkler shall have a pressure activated, multi-function wiper seal that positively seals against the pop-up stem to keep debris out of the rotor and to clean debris from the pop-up stem as it retracts.

This wiper seal shall prevent sprinkler from sticking up, and be capable of sealing the sprinkler cap to sprinkler body under normal operating pressures.

The sprinkler shall have a screen installed in the pop-up stem to filter inlet water, protect the drive from clogging and simplify its removal for cleaning and flushing of the system. It shall have a 3/4" (FNPT) bottom inlet.

The sprinkler shall have a standard green rubber cover and a strong stainless steel retract spring for positive pop down. Pop-up height as measured from the top of the cap, at normal installation, to the middle of the nozzle orifice shall be ____ inches or ____ cm.

The rotor's overall height shall be ____ inches (____ cm), with an exposed surface diameter of 158" (4.1 cm).

The sprinkler shall have 12 interchangeable nozzles: 8 Rain Curtain nozzles for superior coverage and, 4 Low Angle nozzles for reduced radius of throw and superior wind resistance with all nozzles containing Micro-Ramp™ for superior

close-in watering. The angle of trajectory shall be 25 degrees for the Rain Curtain nozzles and 10 degrees for the low angle nozzles. The sprinkler shall come with a stainless steel adjusting screw capable of reducing the radius up to 25%.

The sprinkler shall be as manufactured by Rain Bird Corporation, Glendora, California.

Optional Feature Specification

5000 Plus Series SAM, Full and Reversing Full/Part Circle Sprinkler SAM unit

When so indicated on the design, the sprinkler shall have a spring-loaded Seal-A-Matic™ (SAM) device in the base of the case. The device shall hold back at least 7' (2.13m) of elevation change to prevent puddling, run-off and erosion caused by low-head drainage.

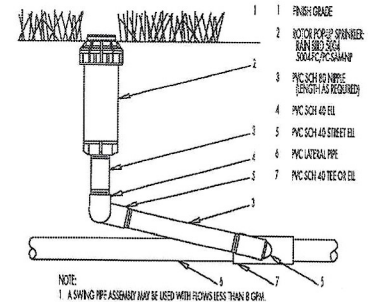
5000 Plus Series Full and Reversing Full/Part Circle Non-Potable

When so indicated on the design, the sprinkler shall have a purple rubber cover to indicate to the user that non-potable water is being used. There shall be no difference between the black and the purple covers, except for the color.

The sprinkler shall be as manufactured by Rain Bird Corporation, Glendora, California.

5000 Series Shrub Model Full and Reversing Full/Part Circle Sprinkler (SAM)

When so indicated on the design, the shrub model shall contain all of the specifications of the standard 5000 series rotor plus a locking screw to fasten the shrub unit to the riser. Additionally, the shrub base unit will feature Secure Ribs™ that are designed to assist in the staking of the shrub model if so specified on the design. When the Seal-A-Matic™ (SAM) model is indicated on the design, the device shall hold back at least 7' (2.13m) of elevation change to prevent puddling, run-off and erosion caused by low head drainage. As well the SAM unit shall experience no pressure loss during normal operation.



5000 Plus Series Stainless Steel

When so indicated on the design, the rotor shall have a stainless steel covered nozzle turret and riser stem. This riser stem shall be tapered and conform to the standard plastic riser in all other ways.

5000 MPR Nozzle Specification

The MPR Nozzle shall be capable of covering a ____ foot radius (FT.RAD.)/(meter) at ____ pounds per square inch (psi)/(Bars) with a discharge rate of ____ gallons per minute (GPM)/(m³/h, l/s).

The MPR Nozzle shall have a matched precipitation rate of 0.6 in/hr (15 mm/h) at 45 psi (3.1 bar).

The MPR Nozzle shall be color-coded by radius. The MPR Nozzle shall contain Micro Ramp™ technology for superior close-in watering.

The MPR Nozzle shall be manufactured by Rain Bird Corporation, Azusa, California.

How To Specify

5000 - MPR - 25 - Q			
Model	Nozzle	Radius	Pattern
5000 Series	Matched	Range	Q=Quarter
	Precipitation	25'	T=Third
	Rate	30'	H=Half
		35'	F=Full

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The Intelligent Use of Water™
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5000 Series Rotors

5000 Series Low Angle Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow gpm	■ Precip In/h	▲ Precip In/h
25	1.0 LA	25	0.76	0.23	0.27
	1.5 LA	27	1.15	0.30	0.35
	2.0 LA	29	1.47	0.34	0.39
	3.0 LA	29	2.23	0.51	0.59
35	1.0 LA	28	0.92	0.23	0.26
	1.5 LA	30	1.38	0.30	0.34
	2.0 LA	31	1.77	0.35	0.41
	3.0 LA	33	2.68	0.47	0.55
45	1.0 LA	29	1.05	0.24	0.28
	1.5 LA	31	1.58	0.32	0.37
	2.0 LA	32	2.02	0.38	0.44
	3.0 LA	35	3.07	0.48	0.56
55	1.0 LA	29	1.17	0.27	0.31
	1.5 LA	31	1.76	0.35	0.41
	2.0 LA	33	2.24	0.40	0.46
	3.0 LA	36	3.41	0.51	0.58
65	1.0 LA	29	1.27	0.29	0.34
	1.5 LA	31	1.92	0.38	0.44
	2.0 LA	33	2.45	0.43	0.50
	3.0 LA	36	3.72	0.55	0.64

Precipitation rates based on half-circle operation

■ Square spacing based on 50% diameter of throw

▲ Triangular spacing based on 50% diameter of throw

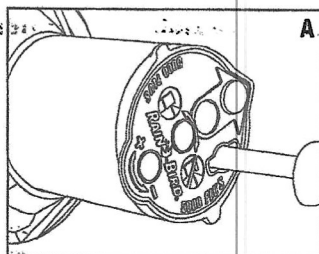
Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASAE Standards; ASAE S398.1.

5000 Series Low Angle Nozzle Performance

METRIC

Pressure bar	Nozzle	Radius m	Flow m ³ /h	Flow l/m	■ Precip mm/h	▲ Precip mm/h
1.7	1.0 LA	7.60	0.17	3.0	6	7
	1.5 LA	8.20	0.26	4.2	8	9
	2.0 LA	8.80	0.33	5.4	9	10
	3.0 LA	8.80	0.51	8.4	13	15
2.0	1.0 LA	8.00	0.18	3.0	6	6
	1.5 LA	8.60	0.28	4.8	8	9
	2.0 LA	9.10	0.36	6.0	9	10
	3.0 LA	9.30	0.55	9.0	13	15
2.5	1.0 LA	8.60	0.20	3.6	5	6
	1.5 LA	9.20	0.32	5.4	8	9
	2.0 LA	9.50	0.41	6.6	9	10
	3.0 LA	10.10	0.62	10.2	12	14
3.0	1.0 LA	8.80	0.22	3.6	6	7
	1.5 LA	9.40	0.35	6.0	8	9
	2.0 LA	9.70	0.45	7.8	10	11
	3.0 LA	10.60	0.68	11.4	12	14
3.5	1.0 LA	8.80	0.24	4.2	6	7
	1.5 LA	9.40	0.38	6.6	9	10
	2.0 LA	9.90	0.49	8.4	10	11
	3.0 LA	10.80	0.74	12.6	13	15
4.0	1.0 LA	8.80	0.26	4.2	7	8
	1.5 LA	9.40	0.41	6.6	9	11
	2.0 LA	10.10	0.52	9.0	10	12
	3.0 LA	11.00	0.80	13.2	13	15
4.5	1.0 LA	8.80	0.27	4.8	7	8
	1.5 LA	9.40	0.44	7.2	10	11
	2.0 LA	10.10	0.56	9.0	11	13
	3.0 LA	11.00	0.84	13.8	14	16

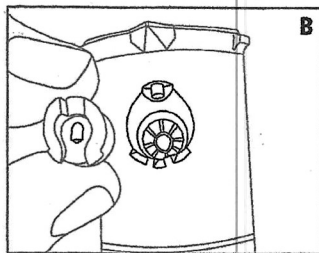


A

English Installation Instructions

Installing and Removing Nozzles:

1. Insert tool into pull-up slot, turn 90 degrees, and lift up stem. (A)
2. Insert the desired nozzle into the nozzle socket, and turn the radius adjustment screw clockwise to secure the nozzle in place. (B)
3. Insert the selected nozzle's identification plug into the opening on the top of the rotor.
4. To remove the nozzle, back out the radius adjustment screw, place the blade of the screwdriver under the nozzle removal tab and press the handle down. (C)



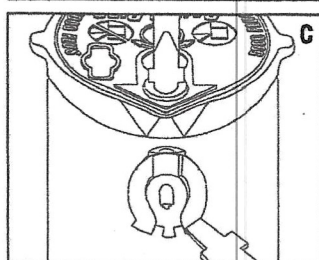
B

Setting the Arc:

The arc is adjustable from 40 – 360 degrees (PC units only). The rotor is factory set to 180 degrees.

Align Fixed LEFT Edge:

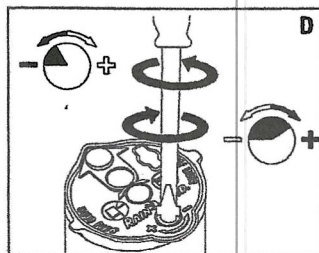
1. Pull up turret and turn to the left trip point (counterclockwise).
CAUTION: If the rotor does not turn easily to the left, first turn it right (clockwise) to the right trip point.
2. Rotate entire case to the desired fixed left position, OR unscrew cap and pull out assembly. Rotate internals to re-align left trip point to the desired point and re-install.



C

To increase or decrease the arc: (D)

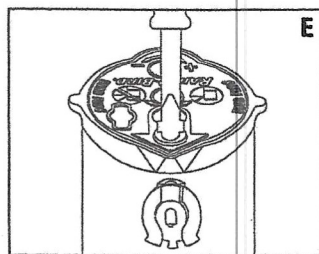
1. While holding the nozzle turret at the fixed LEFT stop, insert tool or screwdriver into the adjustment socket.
- 2a. Turn the screwdriver clockwise, (+) to INCREASE arc.
- 2b. Turn the screwdriver counterclockwise, (-) to DECREASE arc.
3. Each full clockwise turn of the screwdriver will add or remove 90 degrees of arc.
4. When the maximum arc of 360 degrees or minimum arc of 40 degrees has been set, you will hear a ratcheting noise. Do not adjust the rotor beyond the maximum or minimum arc.



D

Radius Adjustment: (Radius can be reduced up to 25%) (E)

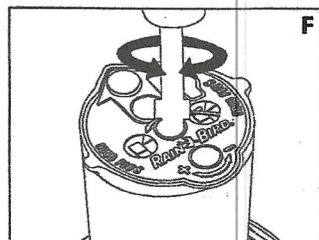
1. Insert screwdriver into the radius adjustment socket.
2. Turn the screwdriver clockwise to reduce radius, and counterclockwise to increase radius.



E

(5000 PLUS ONLY) Turning Flow On or Off (F)

1. Insert screwdriver into Flow Shut-off Slot.
2. Turn screwdriver clockwise 180 degrees to stop the flow of water.
3. Turn screwdriver counterclockwise 180 degrees to start the flow of water.



F