

The CR500 Rotor is designed for residential and light commercial installations. It is ideal for medium turf applications where heads are spaced from 30-50" (9-15 m) on center.

Features:

- Three Body Styles: 5" Pop Up, 12" Pop Up, & Shrub Version
- Top Arc Indicator for Visual Adjustment
- Slip Clutch
- Automatic Arc Return
- 9 Interchangeable, Reusable Nozzles
- Part/Full Circle in One Head
- Pre-installed Check Valve
- Universal Stator
- Standard Rubber Cover
- Single Bore Orifice Prevents Clogging
- Heavy Duty Retract Spring
- Pressure Activated Seals
- Heavy Duty Plastics Construction
- Robust Trip Mechanism

Nozzling Up The System

Nozzle number 2.5 comes pre-installed from the factory. A nozzle tree consisting of eight additional nozzles is provided with each rotor (**Figure 1**). Please see the nozzle performance chart for flow rates. By using various combinations of nozzle flow rates and arcs, you can balance the sprinklers to achieve approximately the same precipitation rates.

Every case of product contains two CR500 rotor keys (**Figure 1**). The CR500 key is used to pull up the riser, to remove the nozzle, to reduce the radius and to adjust the arc (**Figure 2**). Each use is described in the following instructions.

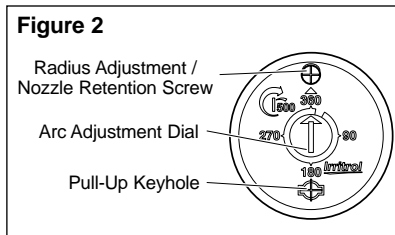
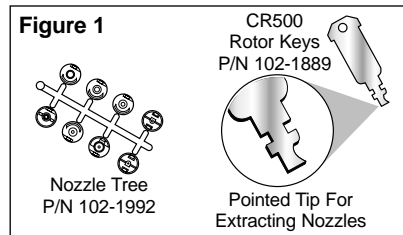
To Insert/Extract A Nozzle

Use the winged portion of the key to pull up the riser on the pop up version to access the nozzle orifice. Insert the key into the pull-up hole (**Figure 3**), turn it 90°, and pull up. Hold the riser in the pulled-up position.

Using the end of the key, turn the radius adjustment screw counterclockwise until it clears the top of the nozzle (**Figure 4a**).

To remove the nozzle, insert the CR500 key into the slot at the top of the nozzle, above the nozzle number. Exert pressure laterally while pulling on the key to dislodge and remove the nozzle (**Figure 4b**).

To install a nozzle, press the nozzle into the nozzle socket. The nozzle number should be visible and the nozzle prongs should be at 12 o'clock. Turn the radius adjustment screw clockwise to its desired location (**Figure 5**) ensuring that it is in a position to hold the nozzle in place even if radius reduction is not required.



To Set The Arc

The rotor is pre-set from the factory at 90°.

The CR500 rotor has a fixed LEFT stop. To find the left stop position, rotate the nozzle turret clockwise (to the right) until it stops, then rotate the nozzle turret all the way back to the left.

To increase the arc, insert the CR500 key into the arc adjustment slot, indicated by an arrow in the center of the turret. Hold the turret in place while turning the tool clockwise. Keep turning until the arrow points to the desired arc. The arrow will point to the adjustable right stop. See **Figure 6**.

When the rotor is set at 360°, it will continuously rotate in a clockwise direction.

To decrease the arc, insert the CR500 key into the arc adjustment slot. Hold the turret in place while turning the tool counter clockwise. Keep turning until the arrow points to the desired arc. The arrow will point to the adjustable right stop.

To adjust the arc while the rotor is running, turn the turret gently in the direction that it is spraying. Once the left stop has been located, follow the directions above to increase or decrease the arc.

To line up the left stop with hardscape features which define the left side of the irrigated arc, simply turn the pop up housing or the shrub base and point the riser slot where the sprinkler should start spraying. You may also pull the pop up riser with the CR500 key and rotate the LOWER part of the riser until the slot is at the desired left stop position. **DO NOT rotate the TOP part of the riser.**

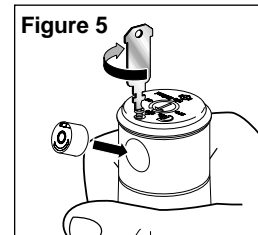
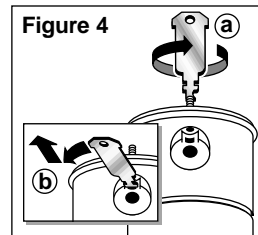
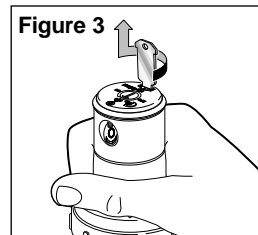
Installation Tips

The pop up version should be installed with the cap at the finished grade (**Figure 7**). It is not designed to be installed below grade. The shrub version is mounted above grade.

The radius adjustment screw can be used to reduce the radius of throw by up to 25%. You should note that this does not reduce the flow of the nozzle.

The screen can be accessed through the bottom of the riser. Remove the cap of the pop up version and lift the riser assembly out of the housing can. The shrub version can be unscrewed from the base. If plugged, the screen can be removed, cleaned, and re-inserted into the riser.

The CR500 rotor has a universal stator which eliminates the need to regulate the flow regardless of the nozzle used. There is a pre-installed check valve on the CR500 rotor. Use of the check valve will eliminate low head drainage after the zone has run.



Nozzle Performance Chart

Pressure PSI	Nozzle Number	Radius Ft.	Flow GPM	Pressure PSI	Nozzle Number	Radius Ft.	Flow GPM
30	.50	28	0.5	50	.50	29	0.7
	.75	29	0.7		.75	31	0.9
	1	32	1.3		1	34	1.6
	2	37	2.4		2	42	3.0
	2.5	38	2.5		2.5	40	3.2
	3	38	3.6		3	41	4.6
	4	43	4.4		4	46	5.6
	6	45	5.9		6	48	6.3
	8	42	8.0		8	49	9.5
40	.50	29	0.6	60	.50	30	0.8
	.75	30	0.8		.75	32	1.0
	1	33	1.5		1	35	1.8
	2	40	2.5		2	43	3.3
	2.5	39	2.8		2.5	41	3.5
	3	39	4.2		3	42	5.0
	4	44	5.1		4	49	5.9
	6	46	6.0		6	49	6.7
	8	45	8.5		8	50	10.0

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