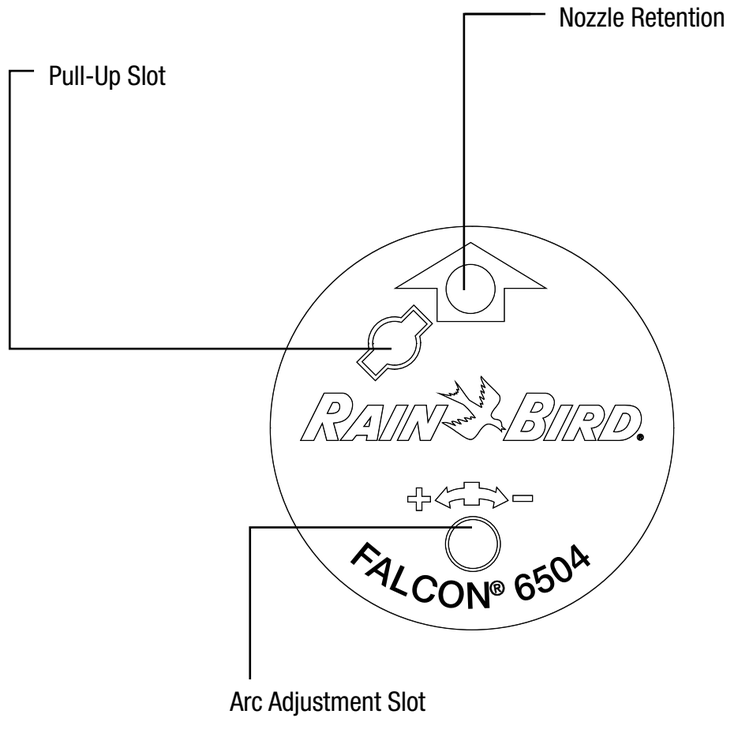
Falcon® 6504 Rotor

Installation and Operating Guide



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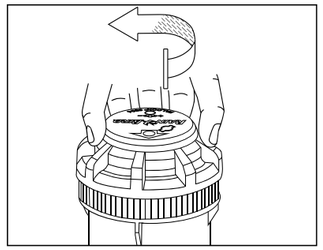
English



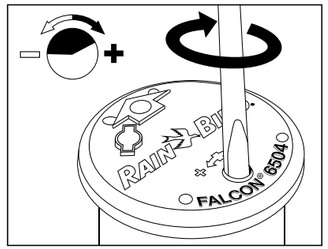
A

Arc Adjustment

The arc is adjustable from 40°–360° (PC units only). All part-circle Falcon® 6504 rotors are factory preset to approximately 180 degrees. It can be adjusted from the right trip. The left trip is fixed.

Align Fixed Left Trip (A)

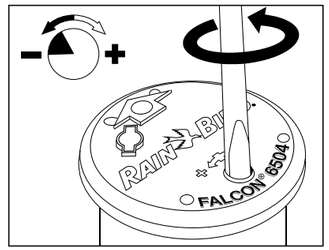
1. Pull up turret and turn to the left trip point (counterclockwise). Caution: If the rotor does not turn easily, first turn it right (clockwise) to the right trip point.
2. Next turn the turret until the arrow points in the direction you want to set the left edge trip.



B

To increase the arc: (B)

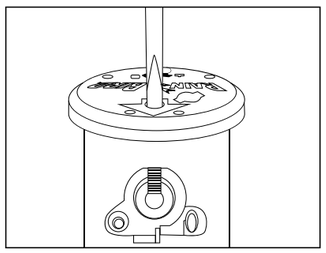
1. While holding the nozzle turret at the fixed left stop, insert tool or screwdriver into the adjustment socket.
2. Turn the screwdriver counter clockwise (+) to increase the arc.
3. Each full turn of the counterclockwise turn of the screwdriver will add 45 degrees of arc.
4. When the maximum arc of 360 degrees has been set, you will feel some resistance in the adjustment screw. Do not adjust the rotor beyond the maximum arc.



C

To decrease the arc: (C)

1. While holding the holding turret at the fixed left stop, insert tool or screwdriver into the arc adjustment socket.
2. Turn the screwdriver clockwise (-) to decrease the arc.
3. Each full clockwise turn of the screwdriver will remove 45 degrees of arc.
4. When the minimum arc of 40 degrees has been set, you will feel some resistance in the adjustment screw. Do not adjust the rotor below the minimum arc.



D

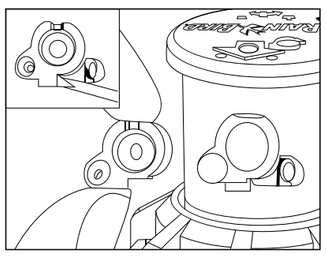
Radius Adjustment (radius can be reduced up to 25%)

1. Insert tool or screwdriver into the nozzle retention socket.
2. Turn the screwdriver clockwise to reduce radius, and counterclockwise to increase radius.

   Note: Interrupting water stream decreases distribution uniformity.

Nozzle Installation (D & E)

1. Insert the Pull-up Tool into the pull-up slot, turn 90 degrees, and lift up stem. Use the Hold-up tool to support the riser in this extended position.
2. Loosen the nozzle retention screw until it no longer obstructs the nozzle opening in the nozzle housing.
3. Insert the color-coded nozzle firmly into the opening until it is flush with the nozzle turret.
4. Tighten the nozzle retention screw clockwise to secure the nozzle. The screw threads must engage the nozzle surface to ensure proper seating of the nozzle.
5. To remove the nozzle, first back out the nozzle retention screw. Then insert a flat-head screwdriver into the slot in the lower right side of the nozzle to pry it loose.



E

Falcon® 6504 Nozzle Performance

IMPERIAL

Pressure psi	Nozzle	Radius ft.	Flow gpm	Precip In/h ■	Precip In/h ▲
30	04	39	2.9	0.37	0.42
	06	43	4.2	0.44	0.50
40	04	41	3.3	0.38	0.44
	06	45	4.9	0.47	0.54
	08	49	6.6	0.53	0.61
	10	51	8.1	0.60	0.69
	12	53	9.7	0.66	0.77
	14	55	11.3	0.72	0.83
	16	55	12.6	0.80	0.93
	18	59	13.7	0.76	0.87
50	04	41	3.7	0.42	0.49
	06	47	5.5	0.44	0.51
	08	51	7.4	0.55	0.63
	10	53	9.1	0.62	0.72
	12	55	11.0	0.70	0.81
	14	59	12.7	0.70	0.81
	16	61	14.3	0.74	0.85
	18	59	15.4	0.85	0.98
60	04	41	4.0	0.46	0.53
	06	47	6.0	0.52	0.60
	08	51	8.2	0.61	0.70
	10	55	10.0	0.64	0.73
	12	57	12.2	0.72	0.83
	14	61	14.0	0.72	0.84
	16	63	15.7	0.76	0.88
	18	63	17.1	0.83	0.96
70	04	41	4.4	0.50	0.58
	06	49	6.3	0.51	0.58
	08	51	8.9	0.66	0.76
	10	57	10.8	0.64	0.74
	12	59	13.2	0.73	0.84
	14	61	15.2	0.79	0.91
	16	63	16.9	0.82	0.95
	18	65	18.3	0.83	0.96
80	04	43	4.6	0.48	0.55
	06	49	6.9	0.55	0.64
	08	53	9.4	0.64	0.74
	10	55	11.6	0.74	0.85
	12	61	14.0	0.72	0.84
	14	61	16.2	0.84	0.97
	16	63	18.1	0.88	1.01
	18	65	19.6	0.89	1.03
90	18	65	21.7	0.99	1.14

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 ASABE Standards; ASABE S398.1.

METRIC

Pressure bar	Nozzle	Radius m	Flow m³/h	Flow l/m	Precip mm/h ■	Precip mm/h ▲
2.1	04	11.9	0.66	10.98	9	11
	06	3.1	0.95	15.90	11	13
2.5	04	12.3	0.72	11.92	10	11
	06	13.5	1.05	17.56	12	13
	08	14.9	1.50	25.20	13	16
	10	15.5	1.84	30.60	15	18
	12	16.2	2.20	36.60	17	19
	14	16.8	2.57	42.60	18	21
	16	16.8	2.86	47.40	20	24
	18	18.0	3.11	51.60	19	22
3.0	04	12.5	0.78	13.02	10	12
	06	14.1	1.16	19.34	12	13
	08	15.1	1.56	26.04	14	16
	10	15.8	1.92	31.99	15	18
	12	16.4	2.31	38.44	17	20
	14	17.2	2.68	44.63	18	21
	16	17.4	3.00	49.95	20	23
	18	18.0	3.25	54.11	20	23
3.5	04	12.5	0.85	14.09	11	13
	06	14.9	1.26	20.96	11	13
	08	15.5	1.69	28.24	14	16
	10	16.2	2.08	34.70	16	18
	12	16.8	2.52	41.98	18	21
	14	18.0	2.91	48.45	18	21
	16	18.6	3.27	54.53	19	22
	18	18.1	3.53	58.78	22	25
4.0	04	12.5	0.89	14.91	11	13
	06	14.4	1.34	22.33	13	15
	08	15.5	1.83	30.44	15	17
	10	16.6	2.23	37.17	16	19
	12	17.3	2.72	45.28	18	21
	14	18.5	3.12	52.01	18	21
	16	19.1	3.50	58.37	19	22
	18	19.0	3.81	63.45	21	24
4.5	04	12.5	0.96	15.94	12	14
	06	14.6	1.40	23.33	13	15
	08	15.5	1.95	32.43	16	19
	10	17.1	2.37	39.44	16	19
	12	17.7	2.89	48.17	18	21
	14	18.6	3.32	55.38	19	22
	16	19.2	3.71	61.82	20	23
	18	19.5	4.03	67.12	21	24
5.0	04	12.7	1.01	16.84	13	15
	06	14.9	1.47	24.50	13	15
	08	15.7	2.05	34.16	17	19
	10	17.2	2.50	41.64	17	19
	12	18.1	3.04	50.72	19	21
	14	18.6	3.51	58.49	20	23
	16	19.2	3.91	65.11	21	24
	18	19.8	4.23	70.51	22	25
5.5	04	13.1	1.04	17.39	12	14
	06	14.9	1.56	25.79	14	16
	08	16.1	2.13	35.54	16	19
	10	16.8	2.63	43.84	19	22
	12	18.6	3.18	52.92	18	21
	14	18.6	3.67	61.23	21	25
	16	19.2	4.10	68.40	22	26
	18	19.8	4.44	74.07	23	26
6.0	18	19.8	4.79	79.77	24	28
6.2	18	19.8	4.93	82.13	25	29