

### Rain Bird® XLR Series Water Jets

are efficient and durable long-range impact rotors designed for a variety of uses and applications where relatively high flows and extended radius of throw are desired.

For best results, please read the following instructions before installation to ensure optimal performance.

#### Start Up Note

Always verify pressure. Pressure at the pump or point of connection does not equal pressure at the water jet. The most common problem associated with water jet installations is insufficient or too much pressure at the head.



## Quick Start Guide

### 1. Configuring Your XLR Series Water Jet

With an included jet-breaker and 9 available nozzles (sold separately), you can customize your water jet to any application.

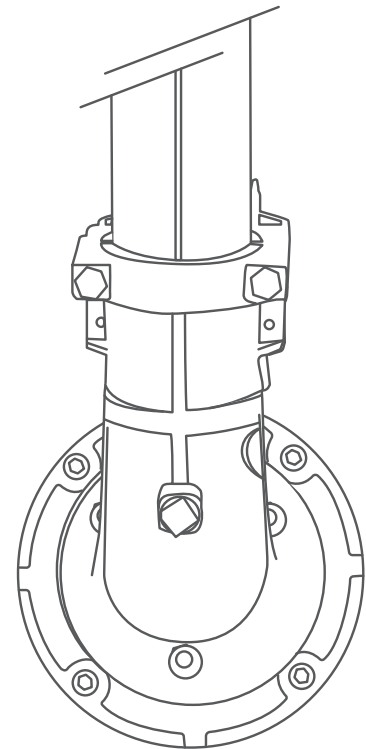
- Manually set the desired rotation arc by pushing the two friction collars to the desired position.

### 2. Installing Your Water Jet

Now that you have configured your water jet, make sure that it is mounted securely. If there is wobble while your water jet is in operation, it is a signal that you are losing energy needed to ensure optimal rotation speed. Refer to *Installation Tips* for more information if needed.

### 3. Starting Your Water Jet

- Make sure that the water jet is pointed in a safe direction and all people in the area are ready.
- Activate valve if automatic. If controlled by a manual valve, open valve slowly until the desired pressure and flow are reached.



## XLR Series Water Jet Configuration Details

### Nozzle Selection

Select one of the nine available nozzles based on your performance requirements, available water pressure (at the water jet) and flow capacity.

Table 1 — XLR 24 Performance Data

		Nozzle Throw Range																	
		12 mm (0.47")		14 mm (0.55")		16 mm (0.63")		18 mm (0.71")		20 mm (0.79")		22 mm (0.87")		24 mm (0.94")		26 mm (1.02")		28 mm (1.10")	
Pressure	bar	Flow m³/h	Radius m	Flow m³/h	Radius m	Flow m³/h	Radius m	Flow m³/h	Radius m	Flow m³/h	Radius m	Flow m³/h	Radius m	Flow m³/h	Radius m	Flow m³/h	Radius m	Flow m³/h	Radius m
2,0	7,8	24,2	10,6	26,5	13,8	28,9	17,5	29,1	21,7	29,4	26,1	29,8	31,1	30,2	36,7	30,6	42,3	30,9	
2,5	8,7	26,8	11,9	29,0	15,4	31,3	19,5	32,5	24,2	33,8	29,2	34,4	34,7	35,1	41,0	35,8	47,3	36,5	
3,0	9,6	29,4	13,0	31,6	16,9	33,7	21,4	35,9	26,5	38,2	31,9	39,1	38,0	39,9	44,9	41,0	51,8	42,1	
3,5	10,3	31,2	14,1	33,3	18,2	35,5	23,1	37,9	28,7	40,4	34,5	41,6	41,1	42,9	48,5	44,4	56,0	45,9	
4,0	11,1	32,9	15,1	35,1	19,5	37,3	24,7	39,9	30,7	42,5	36,9	44,2	43,9	45,8	51,8	47,8	59,8	49,7	
4,5	11,7	33,9	16,0	36,2	20,7	38,6	26,2	41,2	32,5	43,9	39,1	45,7	46,6	47,6	55,0	49,8	63,5	52,0	
5,0	12,4	34,8	16,8	37,3	21,8	39,8	27,6	42,5	34,3	45,2	41,2	47,3	49,1	49,3	58,0	51,8	66,9	54,3	
5,5	13,0	35,7	17,7	38,4	22,9	41,1	29,0	43,8	35,9	46,5	43,2	48,7	51,5	50,9	60,8	53,5	70,2	56,2	
6,0	13,5	36,6	18,4	39,5	23,9	42,4	30,3	45,0	37,5	47,7	45,2	50,1	53,8	52,5	63,5	55,3	73,3	58,1	
6,5	14,1	37,4	19,2	40,4	24,9	43,3	31,5	46,0	39,1	48,7	47,0	51,2	56,0	53,7	66,1	56,5	76,3	59,3	
7,0	14,6	38,2	19,9	41,2	25,8	44,2	32,7	46,9	40,6	49,7	48,8	52,3	58,1	54,9	68,6	57,7	79,2	60,6	

The performance data were obtained under ideal testing conditions and may be adversely affected by wind and other factors. Pressure refers to pressure at nozzle. A lowered trajectory angle improves the irrigation efficiency in windy conditions. For every 3° drop of the trajectory angle the throw is reduced by approx. 3 to 4%.

Table 2 — XLR 44 Performance Data

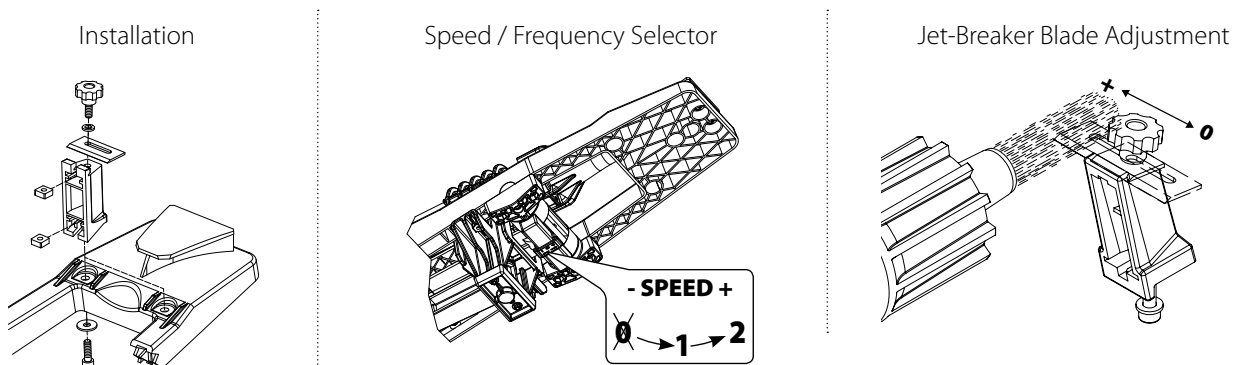
		Nozzle Throw Range																									
		12mm (0.47")			14mm (0.55")			16mm (0.63")			18mm (0.71")			20mm (0.79")			22mm (0.87")			24mm (0.94")			26 mm (1.02")			28 mm (1.10")	
Pressure	bar	Flow m³/h	Radius m	Height m	Flow m³/h	Radius m	Height m	Flow m³/h	Radius m	Height m	Flow m³/h	Radius m	Height m	Flow m³/h	Radius m	Height m	Flow m³/h	Radius m	Height m	Flow m³/h	Radius m	Height m	Flow m³/h	Radius m	Height m		
3,0	9,6	26,1	11,9	13,0	28,5	12,1	16,9	31,0	12,3	21,4	33,5	12,5	26,5	35,9	12,7	31,9	37,2	12,9	38,0	38,5	13,1	44,9	39,7	13,3	51,8	41,0	13,4
3,5	10,3	27,7	13,1	14,1	30,3	13,4	18,2	33,0	13,7	23,1	35,6	14,0	28,7	38,2	14,4	34,5	39,7	14,6	41,1	41,1	14,9	48,5	42,6	15,1	56,0	44,0	15,3
4,0	11,1	29,3	14,3	15,1	32,1	14,7	19,5	34,9	15,1	24,7	37,8	15,6	30,7	40,6	16,0	36,9	42,2	16,3	43,9	43,8	16,6	51,8	45,5	17,0	59,8	47,1	17,3
4,5	11,7	30,4	15,1	16,0	33,4	15,6	20,7	36,3	16,1	26,2	39,3	16,7	32,5	42,2	17,2	39,1	43,9	17,6	46,6	45,6	18,1	55,0	47,3	18,5	63,5	49,0	18,9
5,0	12,4	31,5	15,9	16,8	34,6	16,5	21,8	37,7	17,1	27,6	40,8	17,8	34,3	43,9	18,4	41,2	45,7	19,0	49,1	47,4	19,5	58,0	49,2	20,0	66,9	51,0	20,5
5,5	13,0	32,4	16,4	17,7	35,6	17,2	22,9	38,7	17,9	29,0	41,9	18,6	35,9	45,1	19,4	43,2	46,9	20,0	51,5	48,7	20,6	60,8	50,5	21,2	70,2	52,3	21,8
6,0	13,5	33,3	17,0	18,4	36,5	17,8	23,9	39,8	18,7	30,3	43,0	19,5	37,5	46,3	20,3	45,2	48,1	21,0	53,8	50,0	21,7	63,5	51,8	22,3	73,3	53,6	23,0
6,5	14,1	33,9	17,4	19,2	37,2	18,3	24,9	40,5	19,2	31,5	43,8	20,1	39,1	47,1	21,0	47,0	49,0	21,8	56,0	50,9	22,5	66,1	52,7	23,3	76,3	54,6	24,1
7,0	14,6	34,5	17,9	19,9	37,8	18,8	25,8	41,2	19,8	32,7	44,6	20,7	40,6	48,0	21,7	48,8	49,9	22,5	58,1	51,8	23,4	68,6	53,7	24,2	79,2	55,6	25,1
7,5	15,1	34,8	18,1	20,6	38,2	19,1	26,7	41,7	20,2	33,8	45,1	21,2	42,0	48,5	22,2	50,5	50,4	23,1	60,1	52,4	24,0	71,0	54,3	24,9	82,0	56,3	25,8
8,0	15,6	35,2	18,4	21,3	38,7	19,5	27,6	42,1	20,6	34,9	45,5	21,6	43,4	49,0	22,7	52,2	51,0	23,6	62,1	53,0	24,6	73,3	55,0	25,5	84,6	57,0	26,4

The performance data were obtained under ideal testing conditions and may be adversely affected by wind and other factors. Pressure refers to pressure at nozzle. Radius = radius of throw in meters. Nozzle at 1,5 meters above ground level. Height = maximum stream height in meters above nozzle.

### Jet-Breaker

The jet-breaker is individually adjustable. To start, set the blade so it intersects the water stream for approximately 20% of the mounted nozzle diameter (e.g. for a nozzle of 20 mm [ 1.0" ], the blade should reach 4 mm [ 0.2" ] into the water stream). Fine tune, if required. The intermittence frequency can be adjusted with the speed / frequency selector.

Figure 1 — Jet Breaker

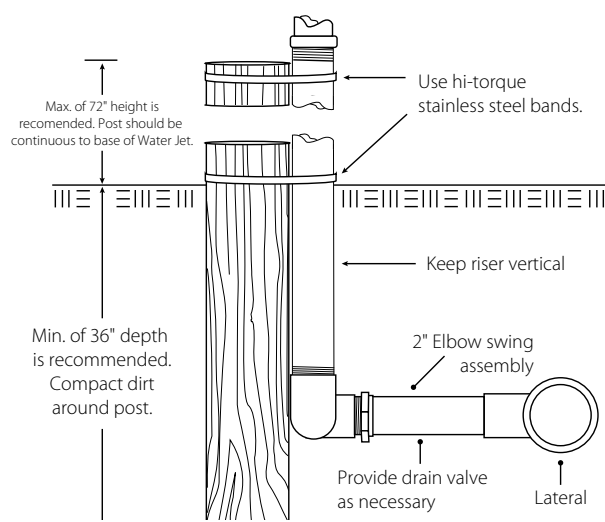


### Riser Installation

To ensure proper operation and performance for the life of your Water Jet, the riser must be stable and solidly installed to resist vibration. An unsupported riser is insufficient for proper operation. Additionally, a PVC riser will not support the reaction load of a water jet. Some options that may be used are: (Note: confirm friction loss and flow in your application)

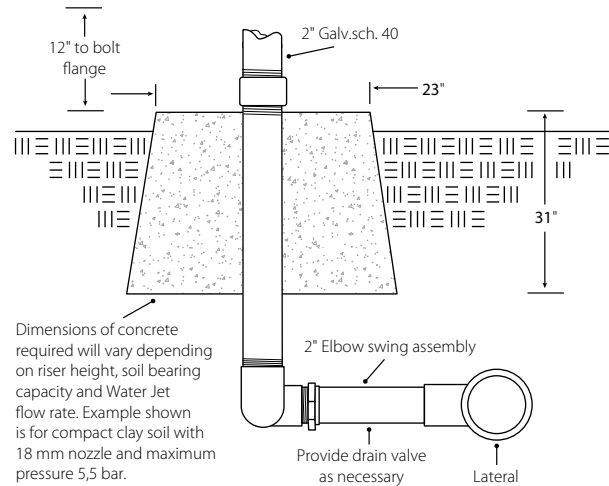
#### Option 1: Galvanized Riser Strapped to Pressure-Treated Wood Post

**Figure 2: Galvanized riser strapped to a 140mm x 140mm (6x6) pressure-treated wood post**



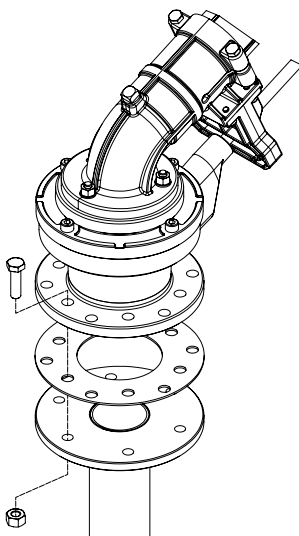
#### Option 2: Galvanized Riser Set in Concrete

**Figure 3: Galvanized riser set in a pillar of concrete**

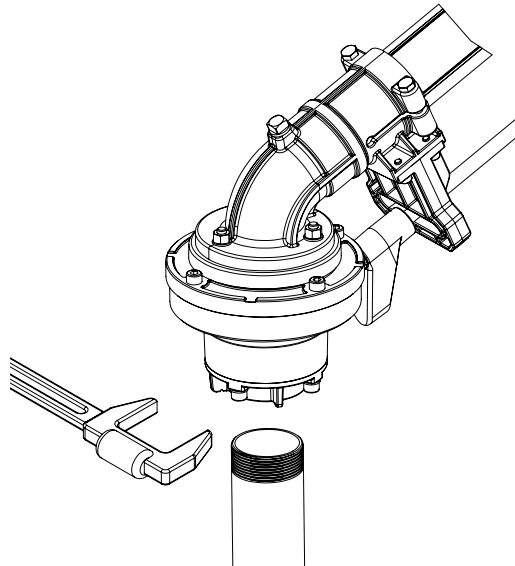


Install Water Jet to riser as shown in Figure 4 or 5.

**Figure 4: Using Bolt Flange**



**Figure 5: Using Thread Adapter**



## Water Jet Warranty

Our comprehensive product warranties make it even easier to choose Rain Bird and relax. Most Rain Bird Landscape Irrigation products are warranted to the trade for a period of either three or five years from the date of original purchase. A Rain Bird warranty is hassle-free support that enables maximum peak performance by irrigation system professionals. For you, it's the added peace of mind of knowing Rain Bird is there when you need it.

### Rain Bird's Professional Customer Satisfaction Policy

Rain Bird will repair or replace at no charge any Rain Bird professional product that fails in normal use within the warranty period stated below. You must return it to the dealer or distributor where you bought it. Product failures due to acts of God including without limitation, lightning and flooding, are not covered by this warranty. This commitment to repair or replace is our sole and total warranty.

**Implied Warranties of Merchantability and Fitness, if Applicable, are Limited to One Year from the Date of Sale.** We will not, under any circumstances be liable for incidental or consequential damages, no matter how they occur.

#### I. Landscape Irrigation and Drainage Products

1800® Series Pop-Up Spray Heads, U-Series Nozzles, PA-8S and PA-8S-PRS Shrub Adapters, 1300 and 1400 Bubblers, 5000 Series Rotors, 5500 Series Rotors, 8005 Series Rotors, Falcon® 6504 Series Rotors, PEB/PESB/PESB-R Plastic Valves, DV/DVF and ASVF Plastic Valves, VB Series Valve Boxes and XF Series Dripline\* – **5 years**

C2 Power Unit – **2 years**

Pump Start Relays – **1 year for controls/electronics, 2 years for enclosure**

All other Landscape Irrigation and Drainage products – **3 years**

#### II. Golf Products, Agricultural Products, and Pump Stations

For complete information and details please visit: [rainbird.com/corporate/CustomerSatisfactionPolicy](http://rainbird.com/corporate/CustomerSatisfactionPolicy)

#### III. All Other Products - 1 year

XLR Series Rotors

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