

## Wayne CDU790

# WAYNE CDU790 Sump Pump Instruction Manual

Model: CDU790 | Brand: Wayne

### INTRODUCTION

The WAYNE CDU790 is a 1/3 HP submersible sump pump designed for efficient and reliable water removal from basements and other areas prone to flooding. Constructed with durable cast iron and stainless steel, this pump is built for long-lasting performance. Its integrated vertical float switch and top suction design ensure optimal operation, preventing airlocks and minimizing clogging from debris. This manual provides essential information for the proper installation, operation, and maintenance of your WAYNE CDU790 sump pump.

### KEY FEATURES



Figure 1: The WAYNE CDU790 1/3 HP Submersible Sump Pump.

- **Indoor Use Only:** Ideal for keeping basements dry during heavy water flow, capable of pumping up to 4,600 gallons per hour (GPH).

- **Tough And Durable:** Features corrosion-resistant epoxy coated steel motor housing, stainless steel fasteners, and a cast-iron volute for extended life in demanding sump pump applications.
- **Efficient Design:** The top suction design effectively eliminates air lock and minimizes clogging caused by debris in the sump pit.
- **Easy Installation:** Designed for quick setup, typically within 15 minutes, without the need for drilling a weep hole or complex plumbing changes.
- **Integrated Vertical Float Switch:** Tested for 1 million cycles, providing reliable and long-lasting automatic operation.
- **1-1/2" NPT Discharge:** Ensures compliance with standard building codes for discharge connections.
- **Assembled in the USA:** Proudly assembled in the USA, ensuring quality and dependable, ultra-quiet performance.



## FEATURES/BENEFITS



START-TO-FINISH IN ABOUT 15 MINUTES



UP TO 10X TIMES MORE THAN COMPETITORS



PERFORMANCE THAT LASTS FOR YEARS

Figure 2: Key features of the WAYNE sump pump, highlighting easy installation, durability, and US assembly.

## 1/3 HP CAST IRON AND COATED STEEL SUBMERSIBLE SUMP PUMP



Figure 3: Detailed view of the sump pump's components and design benefits.

### SETUP AND INSTALLATION

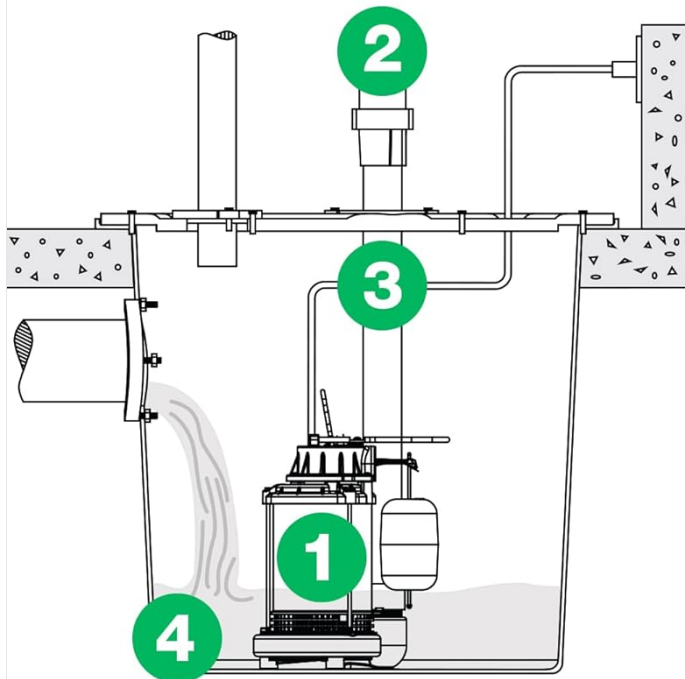
Proper installation is crucial for the optimal performance and longevity of your WAYNE CDU790 sump pump. Follow these steps carefully:

1. **Prepare the Sump Basin:** Ensure the sump basin is clean and free of debris. The pump is designed for 11-inch diameter or larger sump basins. A minimum basin height of 22 inches is required.
2. **Position the Pump:** Place the pump on the bottom of the basin, ensuring it is stable and facing away from the inlet pipe. The integrated vertical float switch should have clear movement without obstruction.
3. **Install Discharge Plumbing:** Connect the 1-1/2 inch NPT discharge pipe to the pump. Install a check valve to prevent back-flow of water into the sump pit.
4. **Install Gate/Ball Valve (Optional but Recommended):** If desired, install a gate or ball valve in the discharge line to allow for easy pump removal or maintenance without draining the entire system.
5. **Secure Power Cord:** Secure the power cord along the discharge pipe to prevent it from interfering with the float switch or becoming submerged unnecessarily.



6. **Test the Pump:** Fill the basin with water to activate the pump and ensure it is working properly. Observe the float switch operation and water discharge.

## INSTALLATION INSTRUCTIONS



Note: Minimum basin height of 22 inches required

### STEP 1

Clean basin and place pump on bottom, facing away from inlet

### STEP 2

Install discharge plumbing and check valve to prevent back-flow

### STEP 3

Install gate/ball valve if needed and secure power cord to discharge pipe

### STEP 4

Fill basin and test pump to ensure that it is working properly

Figure 4: Illustrated installation instructions for the sump pump.



Figure 5: The pump features an easy-carry handle for portability and simple installation.

## OPERATION

The WAYNE CDU790 sump pump operates automatically via its integrated vertical float switch. When water levels in the sump basin rise, the float switch will lift, activating the pump. The pump will then discharge water through the connected plumbing until the water level drops, causing the float switch to lower and deactivate the pump. This automatic cycle ensures your basement remains dry without constant manual intervention.

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Video 1: Product Overview of the WAYNE Sump Pump, demonstrating its features and quiet operation.

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Video 2: Demonstration of a similar WAYNE sump pump (CDU800 series) in operation, showcasing its performance and quietness.

## MAINTENANCE

Regular maintenance helps ensure the long-term reliability of your sump pump. Perform the following checks periodically:

- **Inspect the Sump Pit:** Regularly check the sump pit for any debris, dirt, or sediment that could obstruct the pump's operation or clog the intake. Clean as necessary.
- **Test the Float Switch:** Pour water into the sump pit to manually activate the pump. Ensure the float switch moves

freely and activates/deactivates the pump correctly.

- **Check Discharge Pipe:** Verify that the discharge pipe is free of obstructions and that water is flowing freely away from your home.
- **Inspect Power Cord:** Check the power cord for any signs of damage, fraying, or wear.
- **Listen for Unusual Noises:** During operation, listen for any unusual noises, vibrations, or signs of strain from the pump, which could indicate a problem.

## TROUBLESHOOTING

If your WAYNE CDU790 sump pump is not operating as expected, consider the following common troubleshooting steps:

- **Pump Not Turning On:**
  - Check if the pump is plugged in and receiving power.
  - Ensure the float switch is not obstructed and can move freely to activate the pump.
  - Verify that the circuit breaker has not tripped.
- **Pump Running Continuously:**
  - Check if the float switch is stuck in the "on" position or is obstructed.
  - Inspect the check valve for proper function; a faulty check valve can cause water to flow back into the pit.
  - Ensure there is no continuous water source feeding into the sump pit.
- **Pump Not Pumping Water:**
  - Check for clogs in the intake screen or discharge pipe.
  - Ensure the pump is fully submerged in water when it activates.
  - Verify that the impeller is not damaged or obstructed.
- **Unusual Noises:**
  - Foreign objects in the impeller can cause grinding or rattling noises. Disconnect power and inspect.
  - Air trapped in the pump or discharge line can cause gurgling sounds. Ensure the top suction design is clear.

For more detailed troubleshooting or if issues persist, refer to the official user manual or contact Wayne customer support.

## SPECIFICATIONS

Specification	Detail
Brand	Wayne
Model	CDU790
Horsepower	1/3 HP (0.3 hp)
Maximum Flow Rate	4,600 GPH (63 Gallons Per Minute)

Maximum Lifting Height	10 Feet
Voltage	120 Volts
Material	Cast Iron, Stainless Steel
Product Dimensions	10.5"L x 9"W x 11"H
Item Weight	16 Pounds
Discharge Size	1-1/2" NPT
Country of Origin	China (Assembled in USA)

PRODUCT DIMENSIONS


LENGTH: 10.5 IN.

WIDTH: 9 IN.

HEIGHT: 11 IN.

WEIGHT: 22 LBS.

POWER CORD: 8 FT.



FLOW RATE

HP	DISCHARGE HEAD	0'	5'	10'	15'	20'
1/3	Gallons per minute	77	64	51	37	20

Figure 6: Product dimensions and flow rate details for the CDU790.

WARRANTY AND SUPPORT

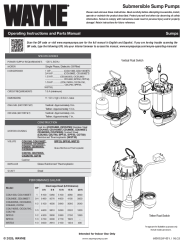
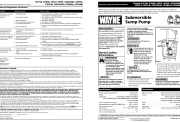

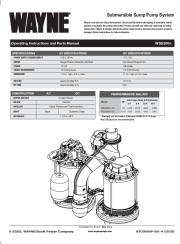
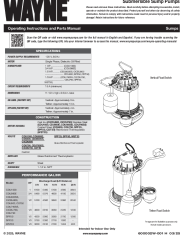
The WAYNE CDU790 sump pump comes with a **3-Year Limited Warranty**, ensuring dependable performance. For detailed



warranty information, technical support, or service inquiries, please refer to the official documentation or contact Wayne customer service.

- **User Manual (PDF):** [Download User Manual](#)
- **Installation Manual (PDF):** [Download Installation Manual](#)
- **Visit Wayne Store:** [Wayne Official Store on Amazon](#)

Related Documents - CDU790

	<p><a href="#">Wayne Submersible Sump Pumps: Installation, Operation, and Maintenance Manual</a></p> <p>Comprehensive installation manual for Wayne submersible sump pumps, covering operation, safety, troubleshooting, and limited warranty information. Includes specifications and performance data for various models.</p>
	<p><a href="#">Wayne Submersible Sump Pump Operating Instructions and Parts Manual</a></p> <p>This manual provides operating instructions, troubleshooting guidance, and parts lists for Wayne submersible sump pumps, including models FLS790, FLS800, SPF33, SPF50, SSCDU800, SSPF50, CDU790, CDU790HH, CDU800, and CDU980. It covers installation, operation, maintenance, safety precautions, and warranty information.</p>
	<p><a href="#">Wayne Submersible Sump Pump Operating Instructions and Parts Manual</a></p> <p>Comprehensive guide for Wayne submersible sump pumps (FLS790, FLS800, SPF33, SPF50, SSCDU800, SSPF50, CDU790, CDU790HH, CDU800, CDU980), covering operation, installation, maintenance, troubleshooting, and parts. Includes safety warnings and limited warranty information.</p>
	<p><a href="#">WAYNE WSS30Vn Submersible Sump Pump System: Operating Instructions and Parts Manual</a></p> <p>Comprehensive guide for the WAYNE WSS30Vn Submersible Sump Pump System, covering installation, operation, safety precautions, troubleshooting, maintenance, and warranty information.</p>
	<p><a href="#">Wayne Submersible Sump Pumps: Installation, Operation, and Parts Manual</a></p> <p>Comprehensive installation, operation, troubleshooting, and warranty guide for Wayne Submersible Sump Pumps, including specifications, performance data, and maintenance instructions.</p>



Comprehensive guide for Wayne submersible sump pumps, covering installation, operation, troubleshooting, and maintenance. Includes specifications, diagrams, and warranty information for various models.