

## Flame King YSN-301

# Flame King YSN-301 30 Pound Steel Propane Tank Cylinder Instruction Manual

Model: YSN-301

## 1. SAFETY INFORMATION

Propane is a flammable gas. Improper handling or use of propane cylinders can result in fire, explosion, serious injury, or death. Always follow these safety guidelines:

- **Read all warnings and instructions** provided with the propane tank and any appliance connected to it.
- **Store cylinders outdoors** in a well-ventilated area, away from direct sunlight, heat sources, and ignition sources.
- **Never store propane cylinders indoors** or in enclosed spaces like garages or sheds.
- **Do not use or store near open flames**, pilot lights, or other ignition sources.
- **Always transport cylinders securely** in an upright position in a well-ventilated vehicle.
- **Check for leaks** using a soapy water solution before each use. Never use a flame to check for leaks.
- **Ensure the cylinder is equipped with an Overfill Protection Device (OPD) valve** This device prevents overfilling, which is a critical safety feature and required by law in many regions.
- **This cylinder is DOT and Transport Canada certified**, ensuring it meets safety standards for transportation and use in the US and Canada.
- **Do not modify or tamper** with the cylinder or its valve.

**In case of a gas leak, immediately move the cylinder to an open area, extinguish all flames, and contact emergency services.**

## 2. PRODUCT OVERVIEW

The Flame King YSN-301 is a 30-pound steel propane tank cylinder designed for various applications, including RVs, trailers, grills, and outdoor heaters. It features a robust construction and essential safety mechanisms.

- **Capacity:** 30 pounds (approximately 7 gallons) of propane.
- **Material:** Constructed from high-grade welded steel.
- **Finish:** Powder-coated for enhanced rust prevention and durability.

- **Valve:** Equipped with a Type 1 Overfill Protection Device (OPD) valve.
- **Condition:** Shipped empty, pre-purged, and vacuum-sealed, ready for its initial propane fill.
- **Certifications:** X-ray and hydrostatic tested, DOT and Transport Canada certified.





Figure 1: Flame King YSN-301 30 Pound Steel Propane Tank Cylinder.

## 30LB Propane Cylinder w/Premium OPD Valve

- ✓ Capacity: 30 Pounds
- ✓ Comes Empty, Pre-purged
- ✓ Vacuum Sealed and Ready for Filling
- ✓ X-Ray and Hydrostatic Tested
- ✓ DOT and TC Certified
- ✓ High-Grade Steel-Welded Construction
- ✓ Powder Coated for Long Lasting Durability





Figure 2: Key features of the 30LB Propane Cylinder, including capacity, pre-purged status, testing, and construction material.

### 3. SETUP

---

#### 3.1 Initial Inspection

Upon receiving your Flame King YSN-301 cylinder, perform a visual inspection:

- Check for any visible damage, dents, or corrosion on the cylinder body or valve.
- Ensure the valve is securely attached and free from obstructions.
- Verify that the plastic sleeve indicating "EMPTY PROPANE CYLINDER" is present. This sleeve must be removed before filling.

### 3.2 Filling the Cylinder

The Flame King YSN-301 cylinder is shipped empty and pre-purged. It must be filled by a qualified propane supplier.

1. Transport the empty cylinder to a certified propane filling station.
2. Inform the attendant that the cylinder is new, empty, and pre-purged.
3. The attendant will remove the plastic sleeve and fill the cylinder according to safety regulations, utilizing the Overfill Protection Device (OPD) valve.
4. After filling, ensure the valve is tightly closed before transport.

### 3.3 Connecting to an Appliance

To connect the cylinder to a propane appliance (e.g., grill, RV system, heater):

1. Ensure the appliance valve and the cylinder valve are both in the OFF position.
2. Connect the appliance's regulator hose to the cylinder's Type 1 OPD valve. Turn the coupling nut clockwise until it is hand-tight. Do not overtighten.
3. Perform a leak test (see Section 4.2).



Figure 3: Close-up view of the Type 1 OPD valve on the Flame King propane cylinder.

## 4. OPERATING INSTRUCTIONS

---

### 4.1 Opening and Closing the Valve

The cylinder valve controls the flow of propane. It should be opened slowly and fully for proper operation of

most appliances.

- **To Open:** Turn the valve handle counter-clockwise slowly until fully open.
- **To Close:** Turn the valve handle clockwise firmly until fully closed. Always close the valve when the cylinder is not in use or when disconnecting from an appliance.

## 4.2 Leak Testing

Always perform a leak test after connecting the cylinder to an appliance or if you suspect a leak.

1. Mix a solution of equal parts liquid dish soap and water.
2. Ensure all appliance controls are OFF.
3. Slowly open the cylinder valve.
4. Apply the soapy solution to all connections, including the cylinder valve outlet and the regulator connection.
5. Look for bubbles forming in the solution. Bubbles indicate a gas leak.
6. If bubbles appear, immediately close the cylinder valve and tighten the connections. Repeat the leak test. If leaks persist, do not use the cylinder or appliance and contact a qualified technician.
7. After confirming no leaks, rinse the connections with water.

## 5. MAINTENANCE

---

Proper maintenance ensures the longevity and safe operation of your propane cylinder.

- **Regular Inspection:** Periodically inspect the cylinder for signs of rust, dents, or other damage. If significant damage is found, do not use the cylinder and have it inspected by a qualified professional.
- **Cleaning:** Keep the exterior of the cylinder clean. Use mild soap and water to remove dirt or grime. Avoid abrasive cleaners.
- **Valve Protection:** When not in use, ensure the valve is closed and, if available, use a protective cap or plug for the valve outlet to prevent debris from entering.
- **Recertification:** Propane cylinders have a limited lifespan before requiring recertification. Typically, cylinders are valid for 12 years from the date of manufacture (stamped on the cylinder collar) before needing to be re-qualified by a certified inspector. Many filling stations will not fill an expired cylinder.
- **Storage:** Store empty or full cylinders upright in a well-ventilated outdoor area, away from heat sources, ignition sources, and out of reach of children.

## 6. TROUBLESHOOTING

---

### 6.1 No Gas Flow to Appliance

- **Cylinder Valve Closed:** Ensure the cylinder valve is fully open.
- **Appliance Valve Closed:** Check that the appliance's gas valve is open.
- **Empty Cylinder:** The cylinder may be empty. Disconnect and have it refilled by a qualified supplier.
- **Excess Flow Device Activated:** If the cylinder valve was opened too quickly, the excess flow device in the regulator might have activated, restricting gas flow. Close both the cylinder and appliance valves, wait a few minutes, then slowly reopen the cylinder valve, followed by the appliance valve.
- **Blocked Regulator/Hose:** Inspect the regulator and hose for kinks or blockages.

### 6.2 Detecting a Gas Leak

If you smell propane, immediately follow the safety guidelines in Section 1. Perform a leak test as

described in Section 4.2.

### 6.3 Cylinder Not Filling

If a filling station refuses to fill your cylinder:

- **Expired Recertification:** Check the date of manufacture on the cylinder collar. If it's past 12 years, the cylinder requires recertification.
- **Damaged Cylinder:** The cylinder may have visible damage that makes it unsafe to fill.
- **Missing OPD Valve:** Ensure the cylinder has an OPD valve, as it is legally required for filling in many areas.

## 7. SPECIFICATIONS

Detailed specifications for the Flame King YSN-301 30 Pound Steel Propane Tank Cylinder:

Attribute	Detail
Material	Steel
Brand	Flame King
Item Dimensions (L x W x H)	12.3 x 12.3 x 23.7 inches
Exterior Finish	Powder-coated steel
Outlet Connection Type	Standard Propane Connection (Type 1 OPD)
Number of Ports	1
Specification Met	DOT, Transport Canada
Item Weight	24.6 pounds
Item Model Number	YSN-301
UPC	689984695763, 899003000311, 604945337803





Figure 4: Dimensions of the 30LB Flame King propane tank compared to a standard 20LB tank.

## 8. WARRANTY AND SUPPORT

Specific warranty details for the Flame King YSN-301 propane tank are not provided within this document. For warranty information, product support, or to contact customer service, please refer to the official Flame King website or the documentation included with your purchase.

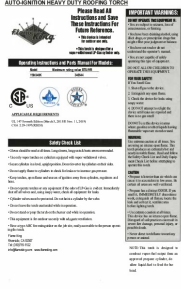
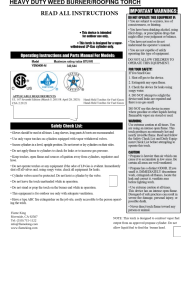

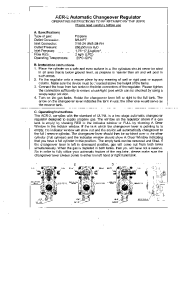
You can visit the Flame King store online for additional product information and support resources: [Flame King Store](#)

## Related Documents - YSN-301



### [Flame King CHS20T Outdoor Portable Propane Heater - Owner's Manual](#)

Comprehensive owner's installation, safety, and operation manual for the Flame King CHS20T 20,000 BTU/Hr Outdoor Portable Thermostatic Propane Heater. Includes setup, safety precautions, troubleshooting, and parts list.

	<p><a href="#">Flame King YSN340K Auto-Ignition Heavy Duty Roofing Torch: Operating Instructions and Safety Guide</a></p> <p>Comprehensive operating instructions, safety warnings, and maintenance guidelines for the Flame King YSN340K auto-ignition heavy duty roofing torch. Learn how to safely connect, operate, and store the propane torch.</p>
	<p><a href="#">Heavy Duty Weed Burner/Roofing Torch YSN340K-AI - Operating Instructions and Safety Manual</a></p> <p>Comprehensive operating instructions, safety guidelines, and maintenance information for the Flame King Heavy Duty Weed Burner/Roofing Torch, Model YSN340K-AI. Includes connection, lighting, shut-off, and storage procedures.</p>
	<p><a href="#">Flame King YSNPQ810CGA Self-Lighting Outdoor Torch Manual &amp; Safety Guide</a></p> <p>Comprehensive operating instructions, safety precautions, maintenance, and troubleshooting for the Flame King YSNPQ810CGA self-lighting outdoor propane torch. Learn how to safely use and care for your torch.</p>
	<p><a href="#">ACR-2 Automatic Changeover Regulator Operating Instructions and Specifications</a></p> <p>Detailed operating instructions, specifications, installation guide, and safety warnings for the ACR-2 Automatic Changeover Regulator by Flame King. Learn how to safely install and operate your propane gas regulator.</p>





[Flame King CHS20T Outdoor Portable Propane Heater - Owner's Manual](#)

Comprehensive owner's installation, safety, and operation manual for the Flame King CHS20T 20,000 BTU/Hr Outdoor Portable Thermostatic Propane Heater. Includes setup, safety precautions, troubleshooting, and parts list.