Ingersoll Rand R37341-600-VS

ARO R37341-600-VS Air Regulator User Manual

Model: R37341-600-VS | Brand: Ingersoll Rand

1. Introduction

This manual provides essential information for the safe and effective installation, operation, and maintenance of your ARO R37341-600-VS Air Regulator. The ARO-Flo 2000 Series Air Regulator is designed to provide controlled, consistent air pressure for pneumatic equipment connected to an air system. Please read this manual thoroughly before use and retain it for future reference.

2. Safety Information

WARNING: Failure to follow these safety instructions may result in serious injury or property damage.

- Always depressurize the air system before installing, adjusting, or performing maintenance on the regulator.
- Ensure all connections are secure and leak-free before operating the system.
- Do not exceed the maximum inlet pressure of 250 psi (17.2 bar).
- Use appropriate personal protective equipment (PPE) such as safety glasses.
- Install the regulator in a well-ventilated area.
- Do not modify the regulator. Use only genuine replacement parts.
- Ensure the operating temperature range of 23°F to 140°F (-5°C to 60°C) is maintained.

3. Product Overview

The ARO R37341-600-VS is a 1/2" NPT air line regulator designed for precise pressure control in pneumatic systems. It features a flush-mount pressure gauge for easy monitoring and an easy-to-grip knob for pressure adjustment.

R37341-600-VS

Ingersoll Rand

1/2" NPT (F) Air Line Regulator

Filtro de línea de aire de 1/2" NPT (H)
Filtre de conduite d'air 1/2 po-NPT (F)



WARRANTY 2



Figure 3.1: Front view of the ARO R37341-600-VS Air Regulator packaging, highlighting the product and its gauge.



Figure 3.2: Side view of the regulator, illustrating the pressure adjustment knob with "PUSH TO LOCK" and "PULL TO ADJUST" markings.

Key Features:

- 1/2" NPT Port for versatile connection.
- Flush-mount pressure gauge with a 0-140 psig regulator pressure range.
- Easy-to-grip knob for precise pressure adjustment.
- Settable gauge markers for visual reference of desired pressure range.
- Maximum inlet pressure of 250 psig.
- Air flow capacity of 210 SCFM at 90 psig.

4. Setup and Installation

Proper installation is crucial for the performance and longevity of your air regulator. Follow these steps carefully:

1. **Depressurize System:** Ensure the air supply to the system is turned off and all downstream pressure is relieved.
2. **Select Location:** Install the regulator downstream of the compressor and any air dryer or filter, but upstream of the equipment it will supply. Choose a location that allows for easy access for adjustments and maintenance.

3. **Prepare Connections:** The regulator features 1/2" NPT ports. Apply appropriate thread sealant (e.g., PTFE tape or pipe dope) to the male threads of your connecting pipes or fittings.
4. **Install Regulator:** Thread the regulator into the air line, ensuring the flow direction arrow (if present) matches the air flow. Tighten connections securely but do not overtighten, which can damage the threads.
5. **Mounting (Optional):** If desired, the regulator can be mounted using a bracket (sold separately) by utilizing the plastic nut located above the adjustment knob.
6. **Check for Leaks:** Once installed, slowly restore air pressure to the system and check all connections for leaks using a soapy water solution. Bubbles indicate a leak.



Figure 4.1: Regulator side view, showing the NPT port for connection to the air line.

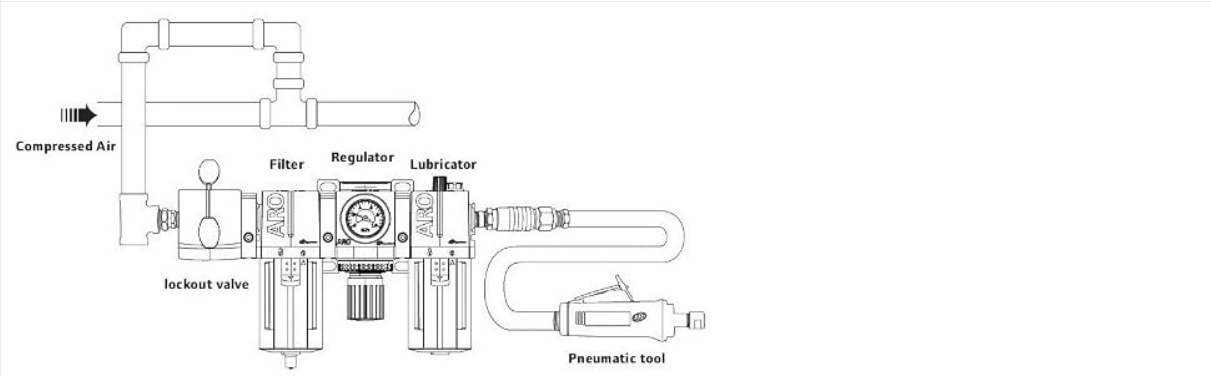


Figure 4.2: Example installation diagram for an air line regulator.

5. Operating Instructions

The ARO R37341-600-VS Air Regulator is designed for straightforward operation to maintain a consistent output pressure.

1. **Unlock Adjustment Knob:** Pull the adjustment knob upwards to unlock it.

2. **Adjust Pressure:** Turn the knob clockwise to increase the output pressure or counter-clockwise to decrease it. Observe the flush-mount pressure gauge to set the desired pressure. The regulator has a pressure range of 0-140 psig.
3. **Lock Adjustment Knob:** Once the desired pressure is set, push the adjustment knob downwards to lock it in place. This prevents accidental changes to the pressure setting.
4. **Vent Excess Air:** When lowering the pressure, the regulator will automatically vent excess air to achieve the new setting.

Note: For optimal performance, ensure the inlet pressure is always higher than the desired outlet pressure.

6. Maintenance

Regular maintenance ensures the reliable operation and extends the lifespan of your regulator.

- **Periodic Inspection:** Regularly inspect the regulator for any signs of damage, wear, or air leaks.
- **Leak Detection:** If a leak is suspected, especially around the adjustment knob or gauge face, depressurize the system immediately.
- **Cleaning Internal Components (if leaking around knob):**
    a. Depressurize the air system completely.
    b. Use a 10mm Allen key to turn the plastic top cover counter-clockwise approximately 1/8 of a turn and remove it.
    c. Carefully remove the spring and the plunger assembly.
    d. Clean the plunger thoroughly and wipe down the mating surfaces inside the regulator. Remove any debris. A cotton swab can be used to clean the hole where the plunger sits.
    e. Apply a small amount of appropriate O-ring grease to the O-rings on the plunger.
    f. Reinstall the plunger, spring, and top cover. Ensure the cover is securely fastened.
- **Gauge Care:** The gauge window is made of plastic. Avoid harsh chemicals when cleaning.

7. Troubleshooting

Problem	Possible Cause	Solution
Air leak around adjustment knob or gauge face	Debris or wear on internal O-rings/seals, loose top cover.	Depressurize system. Remove top cover, clean plunger and O-rings, apply O-ring grease, and reassemble (refer to Maintenance section). Ensure top cover is tightened.
Regulator not holding pressure	Internal seal failure, debris, or improper adjustment knob lock.	Ensure adjustment knob is pushed down to lock. Check for leaks as described above. If problem persists, internal components may require replacement by a qualified technician.
Difficulty achieving a good seal on NPT threads	Insufficient thread sealant or improper tightening.	Ensure adequate thread sealant (PTFE tape or pipe dope) is applied. Tighten connections firmly, but avoid overtightening.

8. Specifications

Model Number	R37341-600-VS

Port Size	1/2" NPT
Max. Inlet Pressure	250 psig (17.2 bar)
Regulator Pressure Range	0-140 psig (0-9.6 bar)
Air Flow	210 SCFM @ 90 psig (5,947 l/min @ 6.2 bar)
Temperature Range	23°F - 140°F (-5°C - 60°C)
Item Dimensions (L x W x H)	9 x 3.5 x 3.3 inches
Item Weight	1 Pound
Brand	Ingersoll Rand (ARO-Flo Series)
UPC / GTIN	663023079905

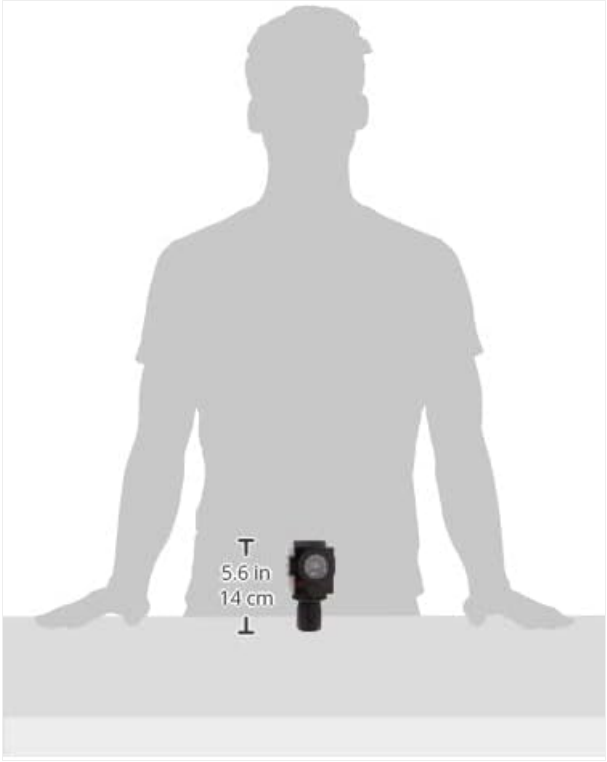


Figure 8.1: Dimensional drawing of the regulator.

9. Warranty and Support

This ARO R37341-600-VS Air Regulator comes with a**2 Year Limited Warranty** from Ingersoll Rand. For warranty claims, technical support, or to purchase replacement parts, please contact Ingersoll Rand customer service or visit their official website.
Manufacturer: Ingersoll Rand
Please retain your proof of purchase for warranty validation.