

**Model N-J – 100 HP**

**Parts Description, Installation & Operation**

**GENERAL** The N-J type regulator is an LPG liquid withdrawal high pressure regulator. This regulator provides excellent fuel delivery with liquid-cooled engines up to 100 HP.

**WARNING!** The N-J should be installed and maintained per these instructions and all applicable federal, state, and local laws and codes.

**Special Note in regards to NFPA Pamphlet 58:** For indoor applications by NFPA definition, a regulator is not considered a positive shut-off valve. An approved automatic shut-off device is required to be installed. This will shut off the fuel supply should the engine fail while unattended. Shut-off devices come in vacuum- or solenoid-actuated configurations.

**OPERATION** Liquid propane enters the regulator and then is vaporized using heat from the engine’s coolant. Tank pressure is reduced to approx. 1.5 psi. As negative pressure is transmitted from the carburetor to the regulator, the regulator releases propane vapor to the carburetor. Some regulators are equipped with a primer button. Correctly installed regulator should not require priming. If priming is required, a maximum duration of only 1 second should be used.

**INSTALLATION** The N-J should be mounted as close to the carburetor as possible, with the fuel outlet placed in the lowest position for best flow.

**SERVICE** The N-J should be periodically checked for leakage. If the unit requires service, we suggest you take it to a qualified service technician. If not available, Woodward will furnish a list of repair facilities or provide service information.



U.L. Listed†

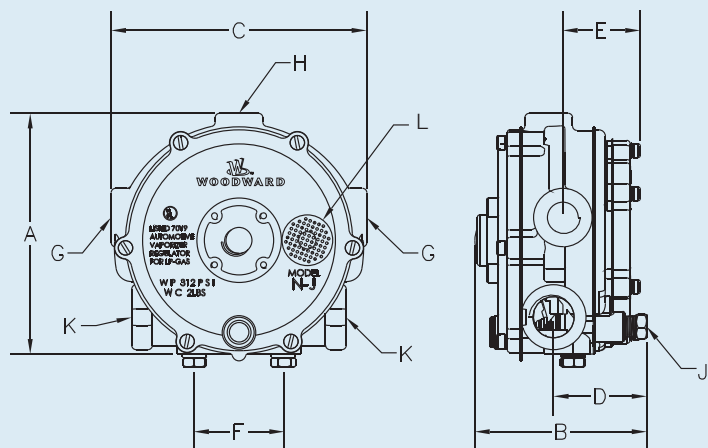


**N-J Series**

- Propane liquid withdrawal vaporizing regulator
- For liquid-cooled engines up to 100 HP
- Ideal for mobile industrial equipment applications
- Rated to 312 psi maximum inlet pressure

**REGULATOR SPECIFICATIONS**

- A. Overall Height . . . . . 4<sup>3</sup>/<sub>8</sub>" (111.1 mm)
- B. Overall Depth . . . . . 3" (76.2 mm)
- C. Overall Width . . . . . 4<sup>5</sup>/<sub>8</sub>" (117.5 mm)
- D. Back of Regulator to Center of Vapor Fuel Outlet . . . . . 1<sup>5</sup>/<sub>8</sub>" (41.3 mm)
- E. Back of Regulator to Center of Water Outlet . . . . . 1<sup>3</sup>/<sub>8</sub>" (34.9 mm)
- F. Mounting Holes Center to Center . . . . . 1<sup>5</sup>/<sub>8</sub>" (41.3 mm)
- G. Coolant Inlet & Outlet NPT . . . . . 3/8" (9.5 mm)
- H. Liquid Fuel Inlet NPT . . . . . 1/4" (6.4 mm)
- J. Primary Test Port NPT . . . . . 1/8" (3.2 mm)
- K. Vapor Fuel Outlet NPT . . . . . 1/2" (12.7 mm)
- L. Vent/Balance Line Connect NPT . . 1/8" (3.2 mm)



**PARTS LISTING**

Item	Part No.	Description	Qty.
1*	<b>N00-6443</b>	<b>N-S1-59, SCREW, 8-32 X 5/8" SEMS</b>	<b>6 (RK2)</b>
2	N00-7004	N-S7-4, Screen, Atmospheric Vent (Part of Item 3)	1
3	N00-4523A	N-AC1-34, Cover Assembly, Secondary: (N-C1-34, N-S2-21, N-W1-27, N-S7-4)	1
4	N00-7505	N-W1-27, Washer, Hand Primer (Part of Item 3)	1
5*	<b>N00-4722A</b>	<b>N-AD1-26, DIAPHRAGM ASSEMBLY, SECONDARY, SILICONE</b>	<b>1</b>
6*	<b>N00-6434</b>	<b>N-S1-42, SCREW, 8-32 X 3/8" SEMS</b>	<b>1</b>
7	N00-5651A	N-AL1-37, Lever Assembly, Secondary Regulator	1
8	N00-5904	N-P1-8, Pin, Secondary, Fulcrum	1
9*	<b>N00-6812</b>	<b>N-S4-27, SEAT, SECONDARY REGULATOR</b>	<b>1</b>
10*	<b>N00-6618**</b>	<b>N-S2-35, SPRING, BLUE SECONDARY</b>	<b>1</b>
	<b>N00-6621**</b>	<b>N-S2-38, SPRING, ORANGE SECONDARY</b>	<b>1</b>
11	N00-4229A	N-AB1-33, Body Assembly	1
12	N00-6402	N-S1-5, Screw 1/4-20 x 5/8" SEMS	2
13	N00-6105	N-P3-14, Plug 1/2 NPT	1
14*	<b>N00-6804</b>	<b>N-S4-16, SEAT, PRIMARY REGULATOR</b>	<b>1</b>
15*	<b>N00-5256</b>	<b>N-G1-85, Gasket, Body to Plate</b>	<b>1</b>
16	N00-6009	N-P2-26, Plate, Converter Body Cover	1
17	N00-6104	N-P3-13, Plug 1/8" Pipe, Hex Head	1
18	N00-6711	N-S2-36, Spring, Primary Valve	1
19*	<b>N00-5907</b>	<b>N-P1-14, PIN, PRIMARY VALVE</b>	<b>1</b>
20*	<b>N00-4717A</b>	<b>N-AD1-22, DIAPHRAGM ASSEMBLY, PRIMARY</b>	<b>1</b>
21	N00-4521	N-C1-33, Cover, Primary Regulator	1
22*	<b>N00-6406</b>	<b>N-S1-10, SCREW, 8-32 X 1" SEMS</b>	<b>7 (RK2)</b>

\* Indicates Repair Kit Components

\*\* Two outlet fuel flow initiation pressures are available. Orange secondary spring (N00-6621) requires approximately -0.5" of water column to initiate fuel flow. Blue secondary spring (N00-6618) requires approximately -1.5" of water column.

**REPAIR KIT:** (Components shown in blue)

**N00-6313A** N-RK-J-2, Repair Kit with Silicone Diaphragm  
Blue and Orange Secondary Springs

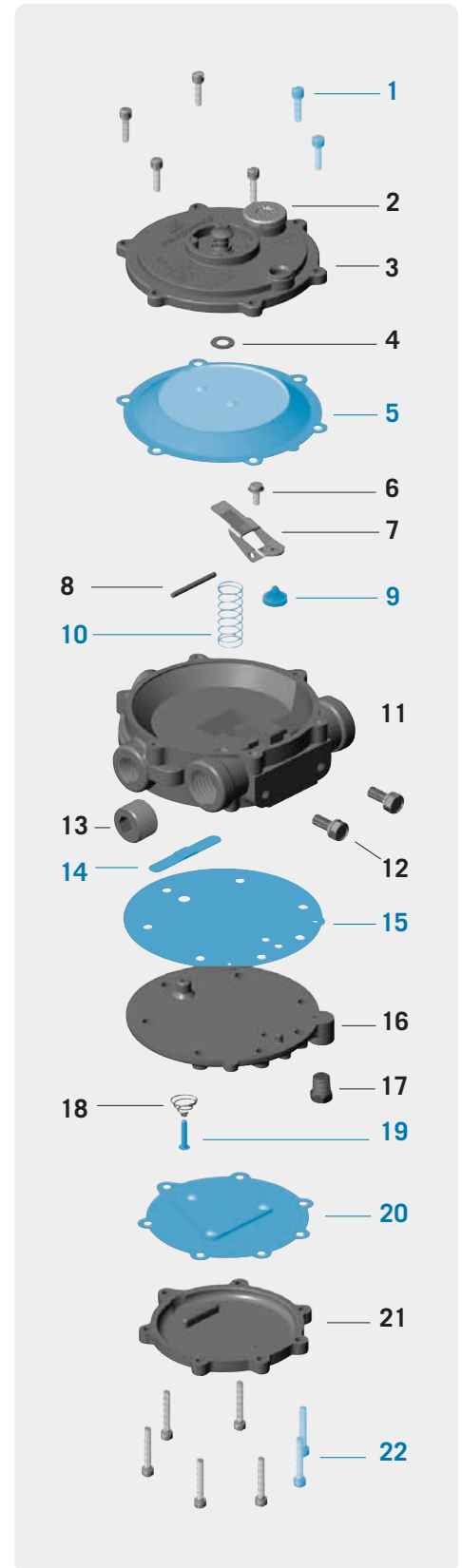
**ORDERING INFO**

Part No.	Model No.	Vacuum			Primer	Check Valve	Inline Filter	UL Listed†
		H2O	Spring	Diaphragm				
<b>N00-0005A</b>	N-JB-2	1.5	Blue	Silicone			•	
<b>N00-0009A</b>	N-JB-2	1.5	Blue	Silicone	•			
<b>N00-0010A</b>	N-JO-2*	1.5	Blue	Silicone			•	
<b>N00-0014A</b>	N-JO-2	0.5	Orange	Silicone			•	
<b>N00-0024A</b>	N-JO-C734	0.5	Orange	Silicone	•	•	•	
<b>N00-0040A</b>	N-JB-L549	1.5	Blue	Silicone	•	•	•	

(\*) Blank Cover

Note: While only certain parts are available for purchase, all parts are listed for reference purposes.

† See ordering info chart for U.L. Listed models.



Note: Parts in blue are components of Repair Kit (N-RK-J-2).