

**Model N-H420 Regulator – 400 HP**  
**Parts Description, Installation & Operation**

**GENERAL** The N-H420 two-stage regulator is an LPG liquid withdrawal high pressure regulator with a heat exchanger that will vaporize enough fuel for up to 400 HP engines.

**WARNING!** The N-H420 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** With the N-H420's improved vaporization characteristics, liquid propane enters the regulator and then is vaporized using heat from the engine's coolant. Tank pressure is reduced to approximately 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-H420 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-H420 should be periodically checked for leakage. If the unit requires service, we suggest you take it to a qualified service technician. If not available, we will furnish a list of repair facilities or provide service information.



U.L. Listed

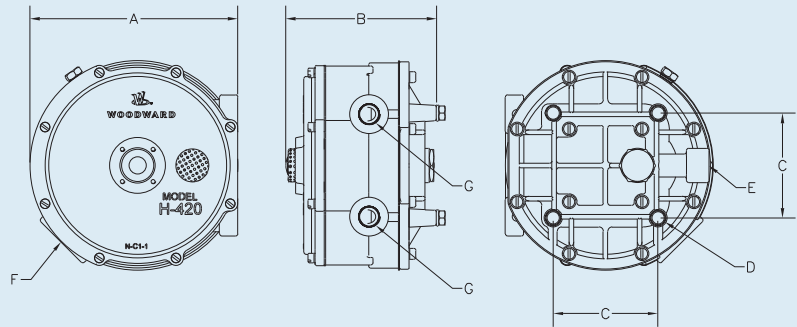


N-H420 Series

- Propane liquid withdrawal vaporizing regulator
- For liquid-cooled engines up to 400 HP
- Compact, low-profile design
- Rated to 312 psi maximum inlet pressure

**REGULATOR SPECIFICATIONS**

- A. Overall Width . . . . . 5<sup>11</sup>/<sub>16</sub>" (144.5 mm)
- B. Overall Depth . . . . . 4<sup>1</sup>/<sub>8</sub>" (104.8 mm)
- C. Mounting Holes  
Center to Center 2<sup>7</sup>/<sub>8</sub>" x 2<sup>7</sup>/<sub>8</sub>" (73 mm x 73 mm)
- D. Mounting Hole Diameter . . . . . 1/4"-20 (4)
- E. Fuel Inlet NPT . . . . . 1/4" (6.4 mm)
- F. Fuel Outlet NPT . . . . . 1" (25.4 mm)
- G. Coolant Inlet and Outlet NPT . . . 3/8" (9.5 mm)



**PARTS LISTING**

Item	Part No.	Description	Qty.
1*	N00-6443	COVER SCREW, 8-32 X 5/8"	8 (RK4)
2	N00-7004	Screen, Secondary	1
3	N-C1-1A	Cover Assembly, Secondary	1
4*	N-D1-2A	DIAPHRAGM ASSEMBLY, SECONDARY, SILICONE	1
5	N00-6443	Cover Screw, 8-32 x 5/8"	8
6	N-P1-2	Pin, Secondary Lever Fulcrum	1
7	N-L1-1	Lever, Secondary	1
8*	N-V1-1A	VALVE, SECONDARY	1
9	N-S3-2	Spring, Secondary (Blue)**	1
10	N-S3-3	Spring, Secondary (Orange)**	1
11	N-C1-2	Cover, Primary Diaphragm	1
12	N-S3-4	Spring, Primary Regulator	2
13*	N-D1-3A	DIAPHRAGM ASSEMBLY, PRIMARY	1
14	N-B1-1A	Body Assembly	1
15	N00-6104	Plug, 1/8" Pipe	1
16	N-P1-3	Pin, Primary Valve Operating	1
17*	N-G1-1	GASKET, GAS & WATER CHAMBER	1
18	N-C1-3	Cover, Gas & Water Chamber	1
19*	N00-6400	COVER SCREW, 10-24 X 5/8"	12 (RK2)
20	N00-6402	Mounting Screw, 1/4"-20 x 5/8"	4
21*	N-V1-2A	VALVE, PRIMARY REGULATOR	1
22	N-S3-5	Spring, Valve Closing	1
23*	N-O1-1	O-RING, LP-GAS INLET	1
24	N-P3-2	Plug, LP-Gas Inlet	1

\* Indicates Repair Kit Components

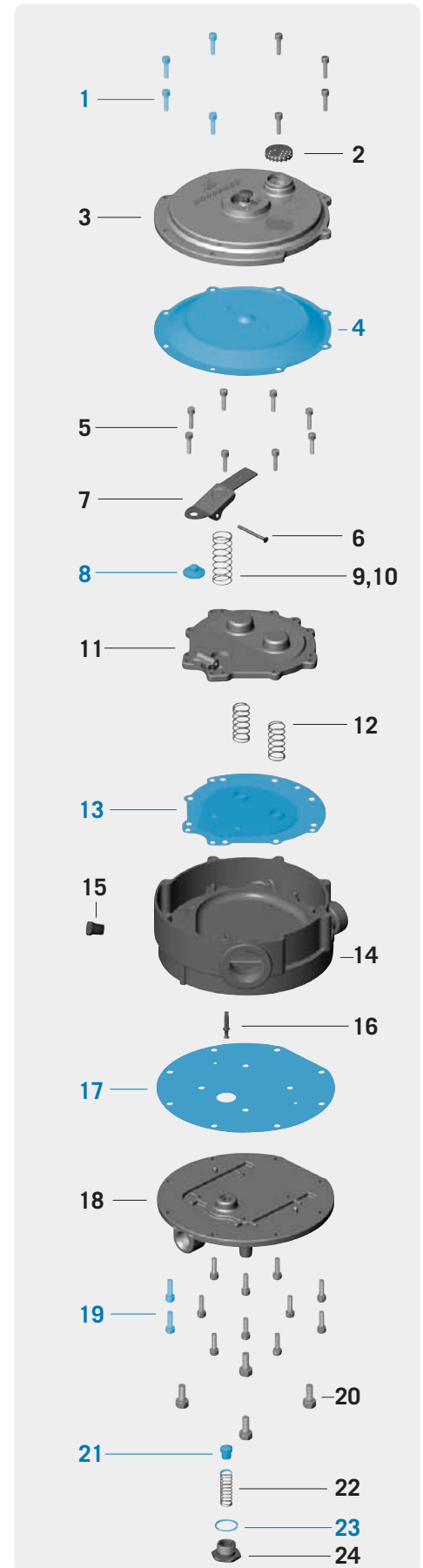
\*\* Two outlet fuel flow initiation pressures are available. Orange secondary spring (N-S3-3) requires approximately negative 0.5 inches of water pressure to initiate fuel flow. Blue secondary spring (N-S3-2) requires approximately negative 1.5 inches of water pressure.

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

**N-RKH420SA** Repair Kit with Silicone Diaphragm

**ORDERING INFO**

Part No.	Description
N-H420-SA	N-H420 Regulator, Blue Spring with Silicone Diaphragm (UL Listed)
N-H420-OSA	N-H420 Regulator, Orange Spring with Silicone Diaphragm (UL Listed)



Note: Parts in blue are components of Repair Kit (N-RKH420SA).

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