

Model N-H420-NG — 350 HP (261 kW)

DESCRIPTION The N-H420-NG regulator is designed for use with stationary engines fueled by natural gas.

OPERATION Natural gas enters the regulator primary chamber and the pressure of the incoming gas is reduced to approximately 1.5 psi (10.34 kPa).

The zero governor N-H420-NG will not pass fuel without a vacuum signal from the carburetor. Its orange secondary spring (N-S3-3) requires approximately -0.5 inH₂O (-1.245 mbar) to initiate fuel flow.

The positive pressure N-H420-NG works well in venturi applications where the vacuum signal to the regulator outlet may be weak at low engine speeds. It will flow fuel at a volumetric rate of approximately 1 CFM with the outlet at atmospheric pressure. Flow is interrupted when approximately 8 inH₂O (19.927 mbar) backpressure is developed at the outlet.

Streamline™



N-H420-NG



CAUTION — INSTALLATION & SERVICE

Only trained, certified technicians should perform installation, service or replacement of fuel delivery components.



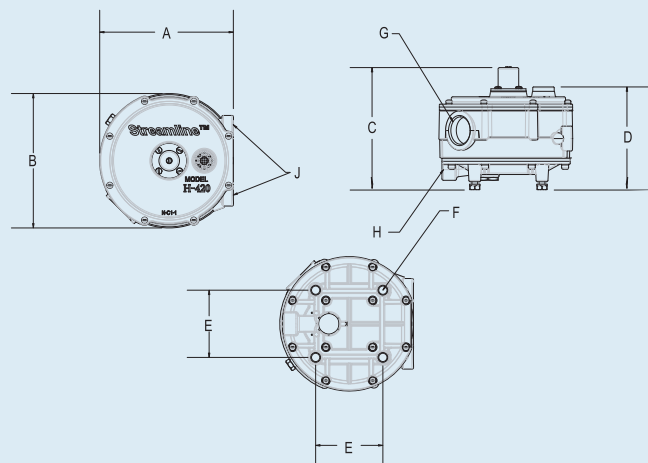
NOTE — NFPA CODES & STANDARDS

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.

- Mounts vertically or horizontally
- For liquid-cooled engines up to 350 HP (261 kW)
- Positive pressure version flows fuel at 1.0 CFM with outlet at atmospheric pressure
- Zero governor version with orange secondary spring initiates fuel flow at -0.5 inH₂O (-1.245 mbar)
- Can be made tamper proof

REGULATOR SPECIFICATIONS

- A. Overall Width 5³/₄" (146.1 mm)
- B. Overall Length 5" (127.0 mm)
- C. Depth (N-H420-SNGA) . . . 4¹/₈" (104.8 mm)
- D. Depth (N-H420-SONGA) . . 4⁹/₁₀" (124.5 mm)
- E. Mounting Holes
Center to Center 2⁷/₈" (73.0 mm)
- F. Mounting Screws (4) 1/4"-20 x 5/8"
- G. Fuel Outlet NPT 1" (25.4 mm)
- H. Fuel Inlet NPT 1/4" (6.4 mm)
- J. Coolant Inlet and Outlet NPT . . 3/8" (9.5 mm)



PARTS LISTING

Item	Part No.	Description	Qty.
1	N00-6416	Screw – N-S1-22, 6-32 X 1/4" (N-H420-SNGA only)	4
2	N-C2-4	Cap – Spring Retainer (N-H420-SNGA only)	1
3	N-S2-9	Screw – Spring Adjust (N-H420-SNGA only)	1
4	N-N1-1	NUT – Spring Adjust (N-H420-SNGA only)	1
5*	N00-6443	SCREW – N-S1-59 COVER, 8-32 X 5/8" SEMS 8 (RK 4)	8
6	N00-5255	Gasket – N-G1-84, Spring Cap (N-H420-SNGA only)	1
7	N00-7004	Screen – Secondary Vent	1
8	N-C1-1-1	Cover – Secondary (N-H420-SNGA only)	1
	N-C1-1	Cover – Secondary (N-H420-SONGA only)	1
9	N-S3-6	Spring – Positive Pressure (N-H420-SNGA only)	1
10*	N-D1-2A	DIAPHRAGM ASSEMBLY, SECONDARY, SILICONE 1	1
11	N00-6443	Screw – N-S1-59 Cover, 8-32 X 5/8" SEMS	8
12	N-P1-2	Pin – Secondary Lever Fulcrum	1
13	N-L1-1	Lever – Secondary	1
14*	N-V1-1A	VALVE – SECONDARY 1	1
15	N-S3-3	Spring, Secondary Orange (N-H420-SONGA only)	1
16	N-C1-2	Cover – Primary Diaphragm	1
17	N-S3-4	Spring – Primary Regulator	2
18*	N-D1-3A	DIAPHRAGM ASSEMBLY, PRIMARY 1	1
19	N00-6104	Fitting – 1/8" NPT Hex Pipe Plug	1
20	N-B1-1CA	Body – Sub-Assembly	1
21	N-P1-3	Pin – Primary Valve Operating	1
22*	N-G1-1	GASKET – GAS & WATER CHAMBER 1	1
23	N-C1-3	Cover – Gas & Water Chamber	1
24*	N-V1-2A	VALVE – PRIMARY 1	1
25	N-S3-5	Spring – Primary Seat	1
26*	N-O1-1	O-RING – LP-GAS INLET 1	1
27	N-P3-2	Plug – LP-GAS Inlet	1
28*	N00-6400	SCREW – N-S1-3, COVER, 10/24 X 5/8" SEMS12 (RK 2)	12
29	N00-6402	Screw – 1/4-20 UNC-2A X 5/8" Hex	4

* Indicates Repair Kit Components

** Can be made tamper proof

REPAIR KIT: (Components marked with (*) and shown in blue)

N-RKH420SA Repair Kit with Silicone Diaphragm

ORDERING INFO

Part No.	Description
N-H420-SNGA	Natural Gas Regulator, Adjustable Positive Pressure
N-H420-SONGA	Natural Gas Regulator, Zero Governor w/ Orange Spring (-0.5 inH2O [-1.245 mbar])

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

