

Model N-LPR Series Regulator – 25 HP

GENERAL The N-LPR is designed for sensitivity and simple operation. It is used with low pressure gaseous fuels, where dependable starting is required. Because of its extreme sensitivity, the N-LPR offers excellent results in most remote starting applications (standby power generators, etc.) if installed and maintained properly. Suitable for engines up to 25 HP.

WARNING! The N-LPR 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 The N-LPR is an automatic zero regulator. The engine creates a vacuum which acts through the outlet of the N-LPR on the diaphragm. Atmospheric pressure then forces the diaphragm toward the vacuum, depressing the lever and pulling the valve seat away from the orifice which allows fuel to flow as long as the demand persists. When the vacuum ceases, a spring force pushes on the lever and forces the seat valve against the orifice shutting off the fuel flow. **It is important to remember that fuel should not flow through the N-LPR when the engine is not running.** A properly adjusted N-LPR requires a vacuum of less than 0.35" of water column to start the opening sequence. Due to this sensitivity, most installations do not need priming to start unless low cranking speed or restricted and lengthy piping are required.

If priming is necessary and a manual primer is installed, use only 1 or 2 second bursts of fuel and immediately start the engine.

If there is a choke on the carburetor, do not use it as this will probably cause flooding and hard starting.

INSTALLATION The N-LPR should be mounted as close to the carburetor as possible with the outlet on top (the arrow on the cover pointing up) and the diaphragm in a vertical position. This helps to minimize the effects of gravity on diaphragm travel. The unit should also be placed for easy access to the primer if provided.

There are two sets of mounting holes provided. Either set of mounts will adequately support the N-LPR. The bottom set of holes has a 1-3/4" (44.5 mm) bolt spacing. The mounting bosses on cover are spaced 5-3/4" (146.1 mm) apart for use with 5/16" (7.9 mm) bolts.

Before installing the fuel supply line, be sure that the gas pressure is no more than the maximum inlet pressure shown on the front of the N-LPR. If the pressure is greater, leakage could result in a fire hazard and/or hard starting. The piping to the inlet should be of sufficient size to allow full fuel flow to the N-LPR. This is very important in natural gas installations, as any restrictions can affect engine performance.

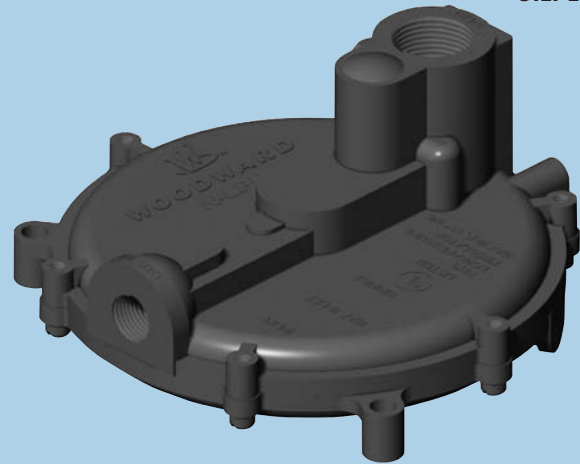
If a solenoid is used ahead of the N-LPR in the low pressure line, it should have an orifice at least 7/16" (11.1 mm) in diameter.

Flexible piping to the inlet should be used to prevent cracking from vibration if the N-LPR is mounted on the engine or other vibrating surface.

SERVICE The N-LPR 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.



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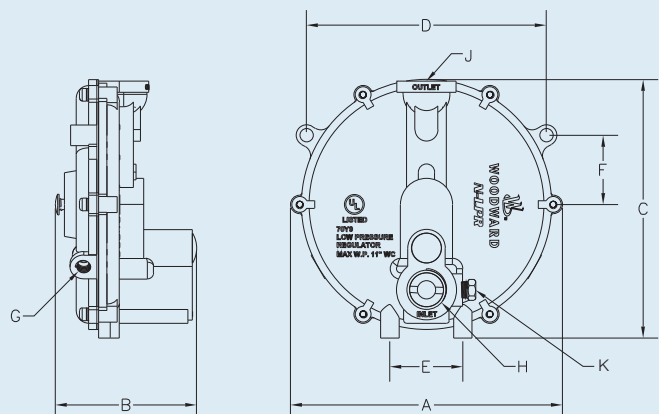


N-LPR Series

- Sensitive, low pressure vapor regulator with precise break-off setting
- 11" W.C. (6 oz.) maximum inlet pressure

REGULATOR SPECIFICATIONS

- A. Overall Width 6¼" (158.8 mm)
- B. Overall Depth 3½" (92.1 mm)
- C. Overall Height 6½" (165.1 mm)
- D, E. Mounting Holes 5¾"; 1¾"
Center to Center (146.1mm; 44.5 mm)
- F. Mounting Holes
Distance from Center 1 21/32" (42.1 mm)
- G. Air Vent NPT 1/8" (3.2 mm)
- H. Vapor Fuel Inlet NPT 3/4" (19.1 mm)
- J. Vapor Fuel Outlet NPT 3/8" (9.5 mm)
- K. Test Port NPT 1/8" (3.2 mm)



PARTS LISTING

Item	Part No.	Description	Qty.
1*	N-C11-1	CAP, ADJ. SCREW, TR	1
2	N-S2-18	Screw, Lock, Adj. Spring	1
3	N-S2-11-LPR	Screw, Pressure Adjustment	1
4	N-J1-3	Jet	1
5*	N-W1-6	SEAL, JET	1
6*	N-S3-14	SPRING	1
7	N2-1011	Plug, 1/8 NPT, Slotted Head	1
8	N-B1-3-LPR	Standard Body	1
9*	N-S5-1	SEAT	1
10*	N-W1-5-LPR	WASHER, SEAT BACKUP	1
11	N-L1-5A	Lever Assembly	1
12	N-P1-11-LPR	Pin, Lever Fulcrum	1
13	N-S10-11	Screw, #4-40 x 1/4" Pan Head	2
14	N-P1-12	Pin, Connector	1
15*	N-D1-7A	DIAPHRAGM ASSEMBLY, SILICONE	1
16	N00-7505	N-W1-27, Washer, Primer	1
17	N-C1-7-LPR	Cover, Back	1
18	N-S2-21-LPR	Spring, Primer	1
19	N-R11-2	Pin, Primer	1
20*	N00-6400	SCREW, 10-24 X 5/8" SLOTTED FILISTER HEAD WITH SPLIT LOCKWASHER, SEMS	6 (RK4)

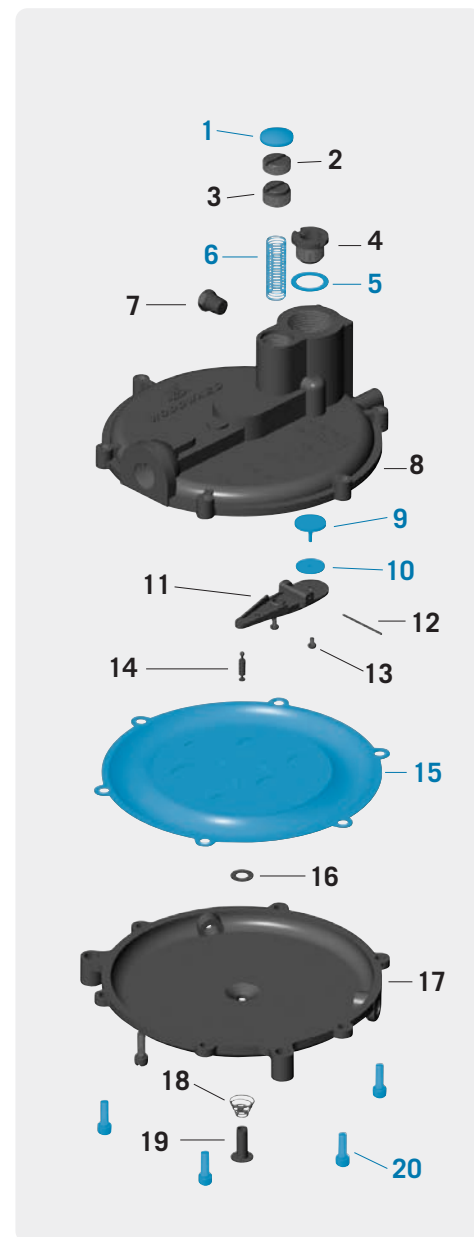
* Indicates Repair Kit Components

REPAIR KIT: (Components shown in blue)

N-RK-LPR Repair Kit with Silicone Diaphragm

ORDERING INFO

Part No.	Maximum Inlet Pressure	Tamper-Resistant	Primer	UL Listed
N-LPR-1A	11" WC (6 oz.)	•		•
N-LPR-2A	11" WC (6 oz.)		•	•
N-LPR-3A	11" WC (6 oz.)	•	•	•
N-LPR-4A	11" WC (6 oz.)			•



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

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