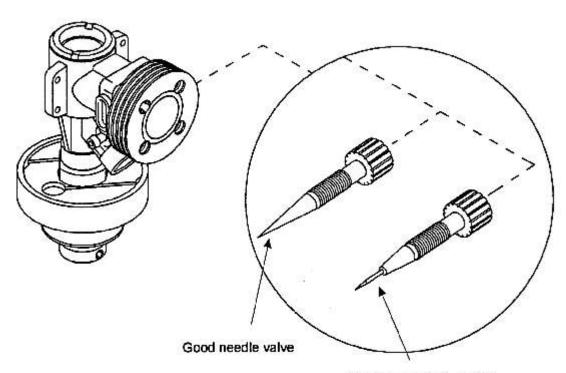
Lite Machines Corporation

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Needle Valve Damage

It is possible to damage the needle valve on the Norvel Vmax-6 engine by overtightening the needle valve in the spraybar assembly. Overtightening the needle valve can result in a notch or groove around the tapered end of the needle valve. This notch or groove prevents the needle valve from finely metering the fuel into the carburetor, and makes engine starting almost impossible. Even a small groove will make needle valve adjustments difficult, and engine operation erratic.

To determine if a needle valve is damaged, compare it to the drawings below. If the needle valve is notched or grooved, replace both the needle valve and spraybar assembly, since the interior of the spraybar will likely be damaged also.



Bad needle valve (notch damage exaggerated for clarity)