# 425 Mixer Adjustment

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*Figure 1. 425 mixer installed with electronic throttle body*

Some installations of engines with a 425 mixer may experience symptoms of not being able to achieve desired engine speed (or pivot voltage) or lower manifold vacuum than expected. First ensure the engine is sized appropriately for the load and fuel pressure measures 7" H2O when the engine is off and fuel is on. Once this has been verified and the engine still doesn't achieve the desired engine speed, another potential cause for this is there isn't enough fuel being delivered to the engine due to improper adjustment of the mixer. This sheet outlines the procedure for adjusting the mixer.

The mixer has two mixer adjustment screws: one for idle and the other for when the engine is under load. These are shown in *Figure 2*. Note the difference in size of allen wrench to adjust each.

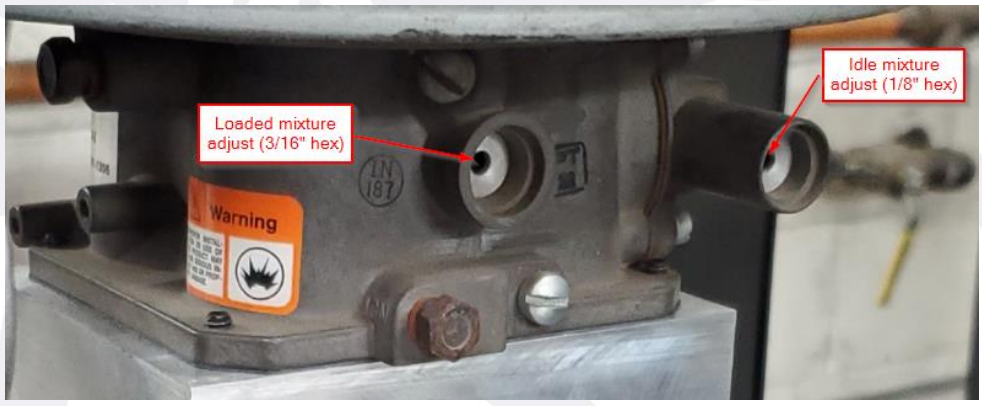


*Figure 2. 425 mixture adjustment screw locations*

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Direction of adjustments are as follows:

- Clockwise (IN) = leaner mixture
- Counterclockwise (OUT) = richer mixture

Take care not to adjust the idle adjust screw in too far as damage to the diaphragm can occur.

In the case of not being able to achieve the desired engine speed, as many as 5-6 turns of the loaded mixture adjustment screw may be required. Only turn the screw as much is as required to achieve the desired engine speed. Turning it too much could result in higher-than-normal exhaust temperatures.

If available, the air-fuel ratio can be verified with a wide-band O2 sensor air fuel ratio meter. Some models will display the air-fuel ratio directly while others will display a lambda value.

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| Revision | Date | Description of change (s) | Initials |
|---|---|---|---|
| A | Aug 15, 2024 | Initial Release | AJV |

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