

What is a "burnt valve"?

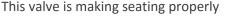
Most Model T owners know the term "burnt valve" or "burned valve" but have never experienced the condition. For those who have never had the condition occur here is my attempt to describe the term "burnt valve".

What is a burnt valve? The most common definition that I was able to find on the web regarding a burnt valve states: A burnt valve can happen for one of many reasons, but the underlying issue is, the valve is not seating correctly and allows hot engine gases during the combustion phase to leak past the seal which is formed by the valve and seat. When the seal is lost, the hot exhaust gases escape past the valve (can happen to either the intake or the exhaust valve, but is much more common on the exhaust) and wreak havoc. The burnt valve is usually not the cause of the issue, but more so the outcome of a different issue.

Common causes: As leaded fuel's burned, it leaves a deposit on the combustion chamber areas, most notably the valve seats on both valves and heads, and valve stems. These deposits prevent the valve from seating, thus the exhaust gas leaks past and eventually burns the valve and seat. Also, unleaded gas leaves gummy deposits on the stem, thus slowing down valve action.

Provided the lash was set to specs when the valves were installed, another cause is the bolt with nut for adjustable lifter has loosened, causing an incorrect lash, and allowing the gasses to leak past the seat. Any condition that causes the valve not to seat will cause the condition (ex: worn valve stem, worn cam lobe, etc.). View Mike Bender's valve installation video







This valve is burnt and leaking



This is obviously burnt and showing hotspots

In the following photos, Ralph Williams and Gary Elam are replacing burnt valve on Gary's 26 T.





