



Before installation, please read the following information carefully to assure the best performance and maximum life from your valves.

Do not use any type of lapping compound or valve facing equipment at any time during the life of the valve. This valve uses a hard, yet thin coating on all wear surfaces that could be damaged or removed during these processes, rendering the part unusable.

Valve seat compatibility: Original equipment valve seats are detrimental to the life of a titanium valves based on the OE valve seats hardness and thermal conductivity. We recommend using Xceldyne copper-alloy valve seats.

Valve guide compatibility: Original equipment valve guides also have poor characteristics when it comes to valve wear. The materials are iron-derivatives, and have poor thermal conductivity, and hardness properties. We recommend using the Xceldyne bronze-alloy guides and honing the I.D. to the following clearances:

-Intake valve-to-guide clearance .0005"-.0007"

-Exhaust valve-to-guide clearance .0010"-.0013"

Seat and guide alignment: Correct seat to guide alignment (concentricity) is critical for a proper valve-to-seat seal which promotes valve life considerably. We recommend a professional cylinder head or engine specialist for a worry-free installation of all of these parts. The correct equipment used and tolerances adhered to can make a substantial difference in how long your valvetrain lasts.

Valve spring compatibility: The proper seat and open pressure on the valve spring is crucial! Failure to maintain the proper pressure thru the motion of the valve at today's high-rpm can cause valve float and undue valve wear possible leading to failure. In most applications the original equipment spring is inadequate. We recommend replacing with a purpose-built spring designed for extended high-rpm usage such as the spring offered by CV-Xceldyne.

If you have any questions about the valve you have purchased, or any of the other parts available from Xceldyne, please call our **Tech-Support line** toll-free at **800-874-1223** and request the **Powersports division**.