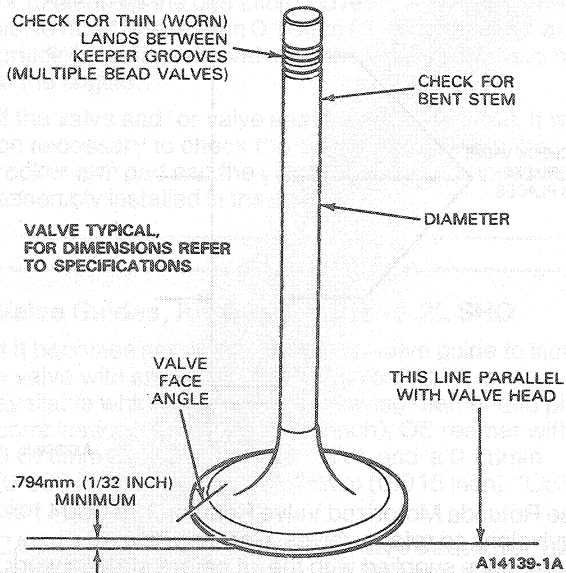


## OVERHAUL (Continued)

The valve refacing operation should be closely coordinated with the valve seat refacing operations so that the finished angles of the valve face and of the valve seat will be to specification and provide a compression-tight fit.

Ensure refacer grinding wheels are properly dressed. Refer to the following illustration for critical valve dimensions.



## Valve Seats, Refacing

## Tools Required:

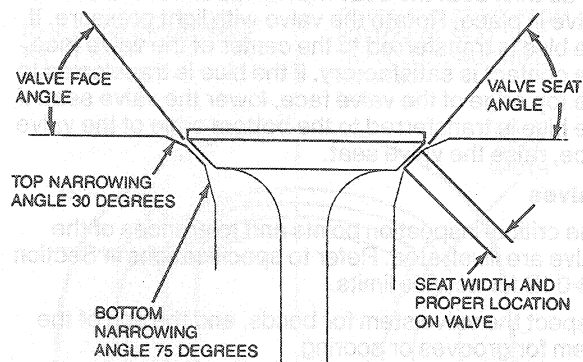
- Rotunda Valve Seat Cutter Kit 139-00061

## 3.0L/3.2L SHO

Use Rotunda Valve Seat Cutter Kit 139-00061 or equivalent, to recondition valve seats. Carefully review the instruction booklet provided with the kit before starting work.

Reconditioning of valve seat should be closely coordinated with refacing of valve so that finished seat and valve face will be concentric and specified angle will be maintained. This is important so that valve and seat will have a compression-tight fit.

## OVERHAUL (Continued)



Select proper size pilot and insert it into finished valve guide. Using the 75 degree cutter, make a light cut until a clean line can be seen all the way around bottom of seat angle. Once this is done, use the 30 degree cutter until there is a clean line all the way around top of seat. Then use the 45 degree cutter until seat is clean, free from pits and has an even width all the way around.

Check seat location and width by coating face of freshly refaced valve with Prussian Blue and set valve in place. With light pressure on valve head, turn valve 1/4-turn and remove. Wipe Prussian Blue from valve and put it back in place. With light pressure on valve, turn it 1/4-turn and remove. Be careful not to touch valve face when removing. Look at valve face. There should be a line of blue about 1/3 of the way down face from margin, all the way around valve face.

If line is not in proper position, the following steps must be taken:

- If line is too close to margin, use the 30 degree cutter to lower top edge of seat.
- If line is too far from margin, use the 45 degree cutter to raise top edge of seat.

After moving contact point, always recheck work with Prussian Blue. Then check seat width with a seat width scale. Use the 75 degree cutter to narrow seat width.

## Valve Spring Tension

## Tools Required:

- Valve Clutch Spring Tester TOOL-6513-DD

Inspect the valve spring, valve spring retainers, locks and sleeves for wear or damage. Discard any damaged parts.