

OVERHAUL (Continued)

To do this, coat the seat with Prussian Blue and set the valve in place. Rotate the valve with light pressure. If the blue is transferred to the center of the valve face, the contact is satisfactory. If the blue is transferred to the top edge of the valve face, lower the valve seat. If the blue is transferred to the bottom edge of the valve face, raise the valve seat.

Valves

The critical inspection points and tolerances of the valve are illustrated. Refer to specifications in Section 03-01B for service limits.

Inspect the valve stem for bends, and the end of the stem for grooves or scoring.

Inspect the valve face and the edge of the valve head for pits, grooves or scores. Inspect the stem for a bend condition and the end of the stem for grooves or scores. Check the valve head for signs of burning or erosion, warpage and cracking. Minor pits, grooves, etc., may be removed. Discard severely damaged valves.

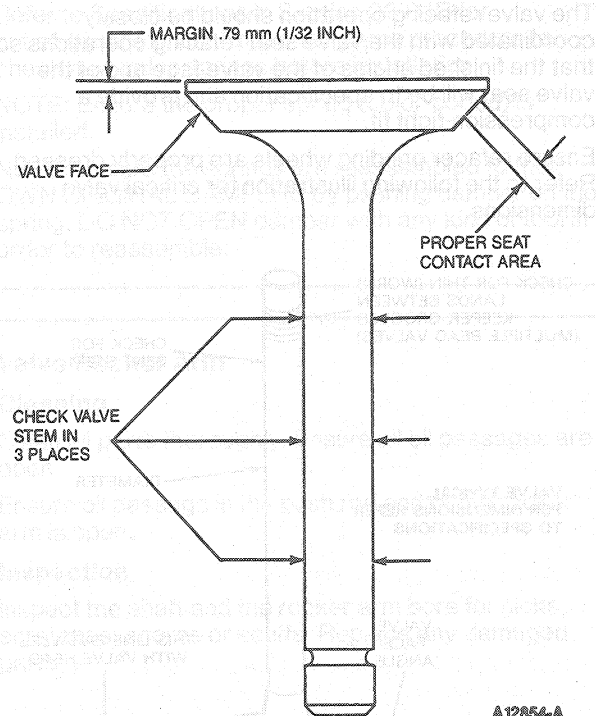
Inspect the valve spring assembly, valve spring retainers, locks and sleeves and discard any visually damaged parts.

Valves, Refacing**Tools Required:**

- Rotunda Motorized Valve Refacer 139-0004 1

3.0L / 3.2L SHO

Using a micrometer, check valve stem in three places to ensure it is within specification. Refer to Section 03-01B for specifications. If the valve stem is not within specifications, or if the valve is damaged, **DISCARD VALVE**. Minor pits, grooves, or runout in the valve face may be removed by refacing.



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Use Rotunda Motorized Valve Refacer 139-00041 or equivalent, to reface valves. Carefully review instructions supplied with the kit before starting work.

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

If valve face runout is excessive or it is necessary to remove pits and grooves, reface valve to a 45 degree angle. Remove only enough material to correct runout or to remove pits and grooves. If edge of valve head (margin) is less than 0.79, (1/32 inch) thick after refacing, replace valve. Lapping of valve and seat is not recommended. Remove any grooves or score marks from valve stem end and chamfer it as necessary. Do not remove more than 0.23mm (0.010 inch) from end of valve stem. It will be necessary to check valve clearance after refacing valve and valve seat.

Except 3.0L / 3.2L SHO

CAUTION: Discard any excessively worn or damaged valve train parts.

Minor pits, grooves, etc., may be removed. Discard valves that are severely damaged if the face runout cannot be corrected by refinishing or stem clearance exceeds specification. Refer to Section 03-01A (3.0L), 03-01B (3.0L / 3.2L SHO) or 03-01C (3.8L) for specifications.

Refer to Engine Service in the Rotunda catalog for a description of the various types of valve resurfacing equipment available.