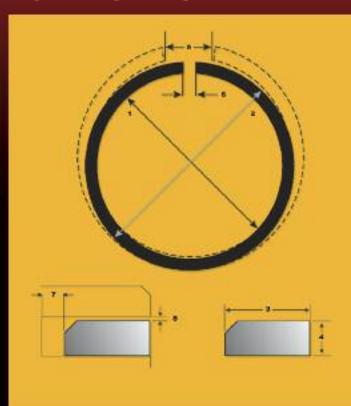
NOMENCLATURE



ENGINEERING

- **1. Inside Diameter:** Inside diameter of the ring when fitted to the bore diameter
- **2. Outside Diameter:** Outside diameter of the ring when fitted to the bore diameter
- 3. Radial Width: Ring width in the radial direction
- **4. Axial Width:** Ring height or the thickness in the axial direction

CLEARANCES

- 5. Free Gap: Uncompressed end gap clearance
- **6. End Gap:** End gap clearance when the ring is fitted to the bore diameter
- **7. Back Clearance:** Gap between the inside of the ring and the back of the ring groove when the ring is flush mounted
- **8. Groove Clearance:** Distance between the ring axial height and the ring groove width when flush mounted

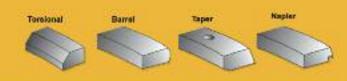
RING SHAPES

Torsional: Flat rectangular shape with I.D. bevel

Barrel Face: Describes the curved face of the ring that makes contact with the cylinder wall; available on top compression rings

Taper Face: The angled face of a second compression ring

Napier: A hooked shape design on the lower face of some second compression rings; aids in removing excess oil from the cylinder walls



Ring Face D-wall Ring Asial Sides Tornional Twist

RING TERMINOLOGY

Ring Face: Front face of the ring that makes contact with the cylinder wall

Ring Axial Sides: Top and bottom surfaces of the ring

Positive Twist: An asymmetrical change used in a top ring cross section that causes it to twist in an upward direction; it aids ring sealing

Reverse Twist: An asymmetric change used in a second ring cross section causing it to twist downward; it enhances its oil scrapping properties

D-wall: The Society of Automotive Engineers (S.A.E.) specification that's used to calculate the radial width of a standard automotive piston ring using the following formula: bore diameter ÷ 22 = radial thickness, e.g., 4.125" ÷ 22 = .188"

Back-cut: Description used for a compression ring that has less than S.A.E. standard D-Wall radial thickness; is used to reduce natural radial ring tension

