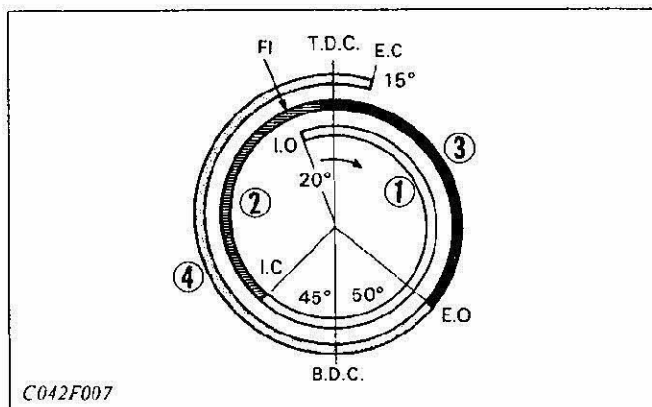


(1) Valve Guide (EA300 Series)

The valve guides are cast iron and reamer-finished after being pressed into the cylinder head. The lower area of the exhaust valve guide has a carbon cutter which prevents carbon adhesion to the valve.

- (1) Exhaust Valve Guide
- (2) Carbon Cutter
- (3) Intake Valve Guide



(2) Valve Timing

The valve opening and closing timing is extremely important for effectively intaking air into the cylinder and sufficiently discharging unnecessary exhaust gas.

An appropriate timing can be obtained by aligning the alignment marks on the crank gear, idle gear and cam gear.

Intake valve open (I.O)	0.35 rad. before T.D.C. (20° before T.D.C.)
Intake valve close (I.C)	0.79 rad. after B.D.C. (45° after B.D.C.)
Exhaust valve open (E.O)	0.87 rad. before B.D.C. (50° before B.D.C.)
Exhaust valve close (E.C)	0.26 rad. after T.D.C. (15° after T.D.C.)

T.D.C. Top Dead Center

B.D.C. Bottom Dead Center

- (1) Intake
- (2) Compression
- (3) Combustion (Power)
- (4) Exhaust
- FI Fuel Injection

EA300 EA300-N	0.37 rad (21°) before T.D.C.
EA300-NB1	0.40 rad (23°) before T.D.C
EA400-N EA400-NB	0.35 rad (20°) before T.D.C