OS FS 20 Engine

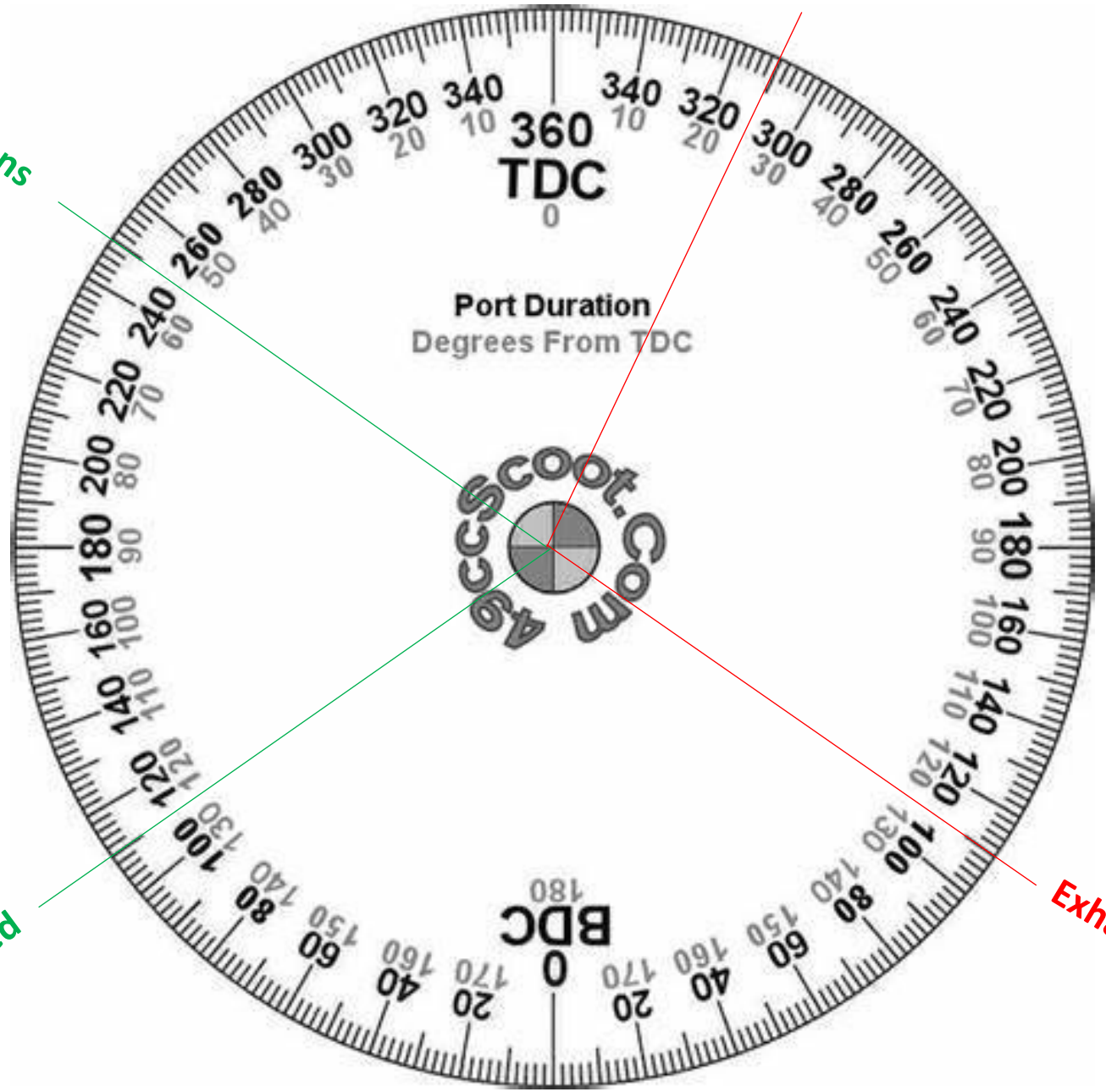
Clockwise rotation

Intake Opens

Exhaust Closed

Intake Duration: 290°

Exhaust Duration: 260°



Intake Open: 55° BTDC

Intake Closed: 55° ABDC

Exhaust Open: 55° BBDC

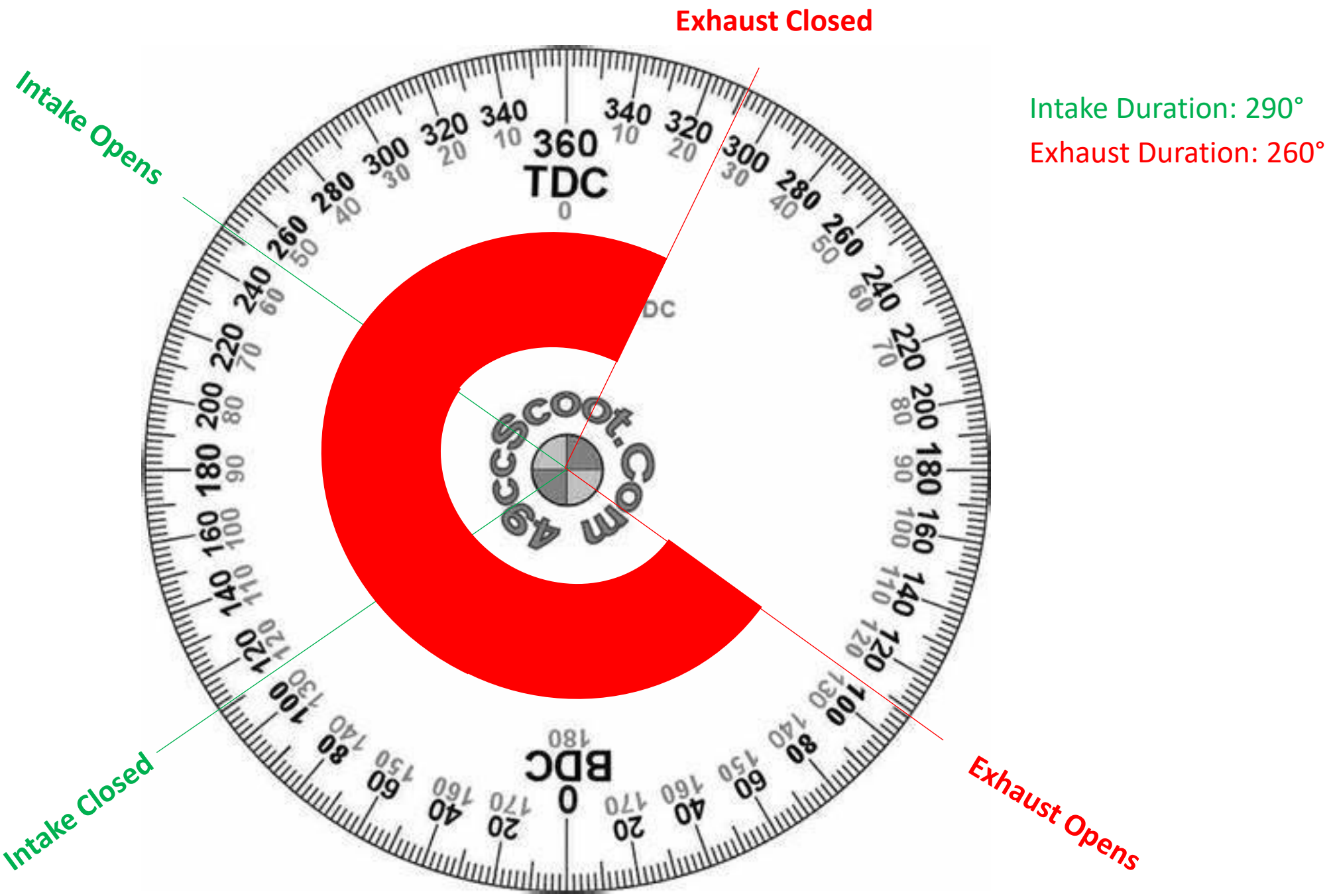
Exhaust closed: 25° ATDC

Intake Closed

Exhaust Opens

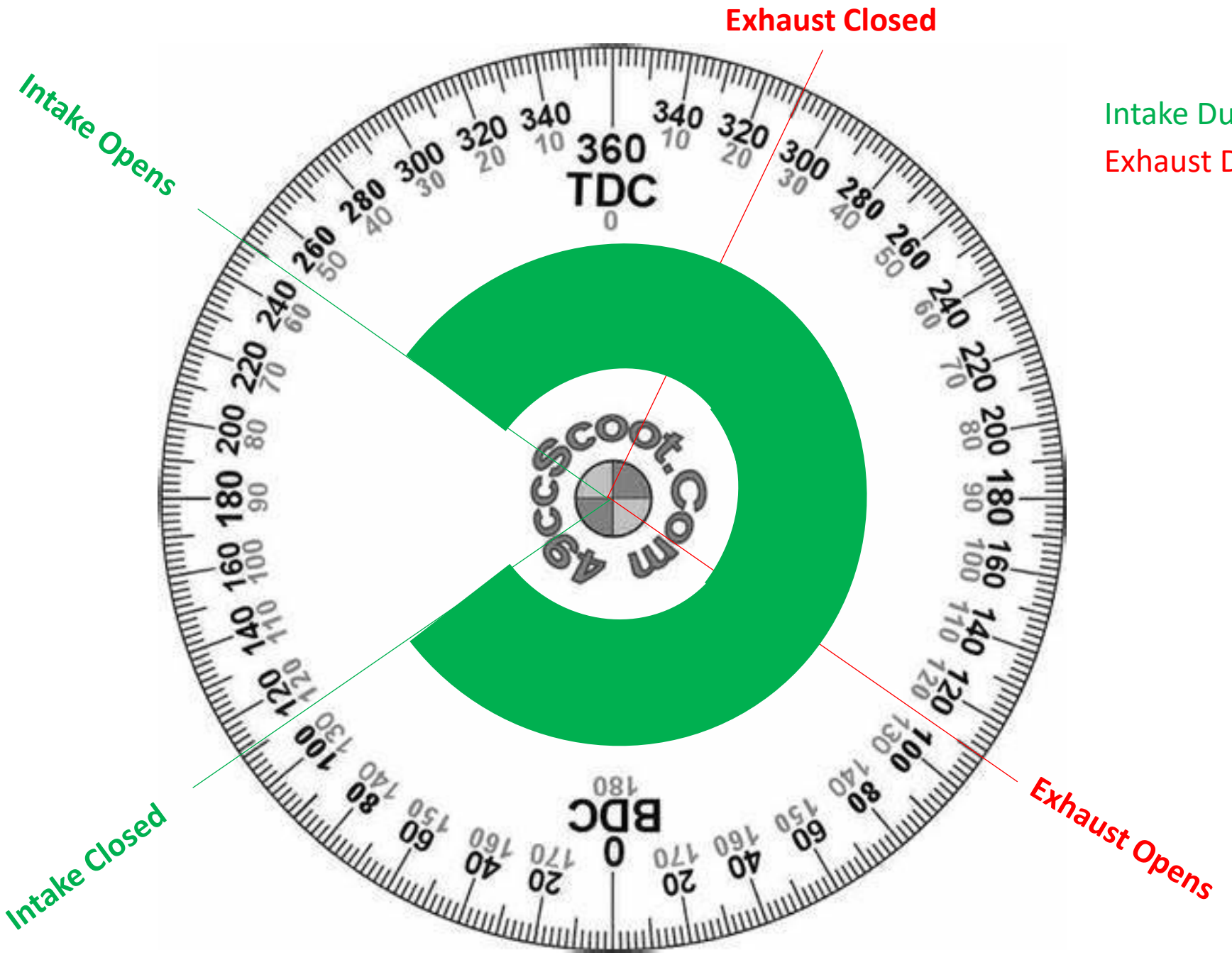
OS FS 20 Engine

Clockwise rotation



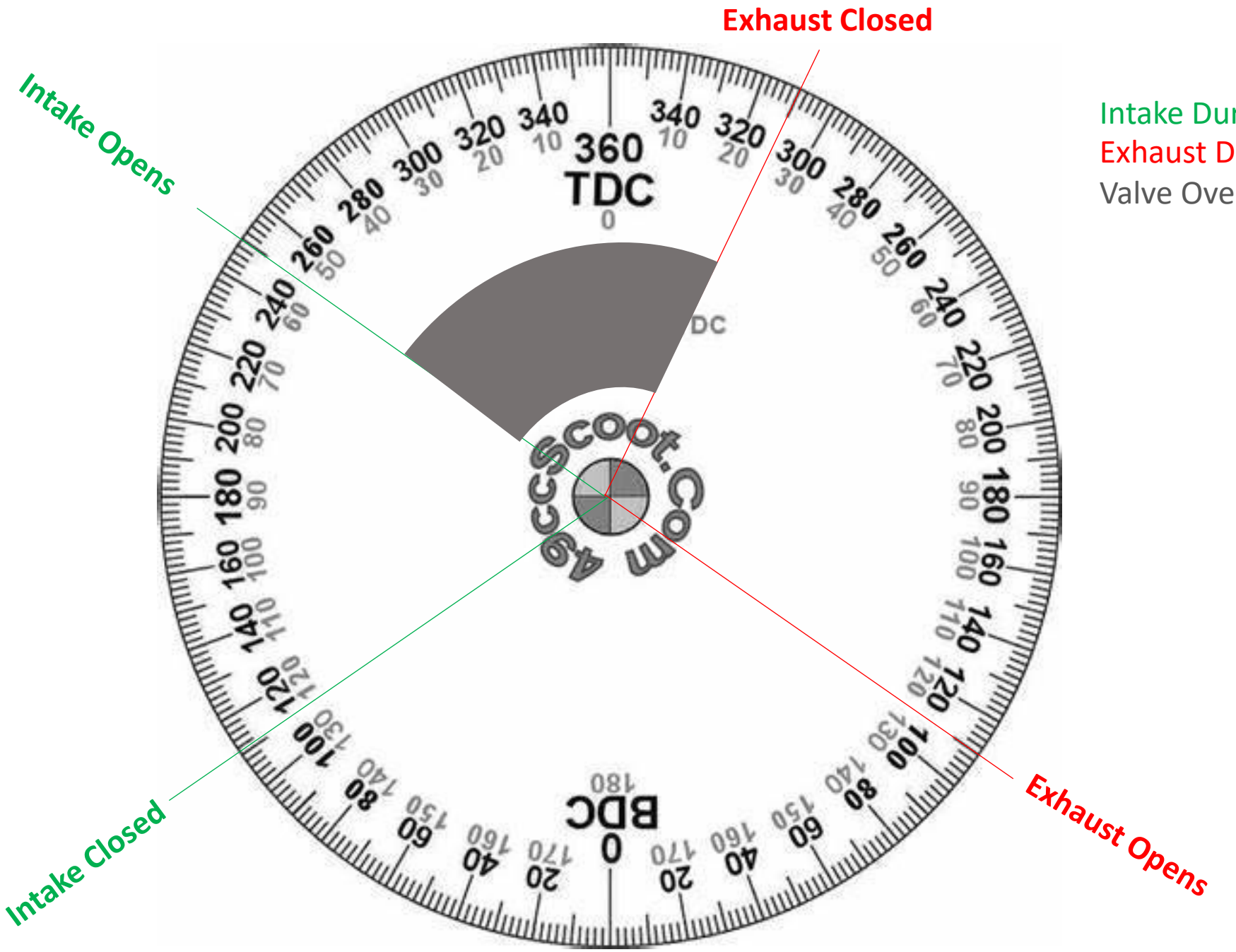
OS FS 20 Engine

Clockwise rotation



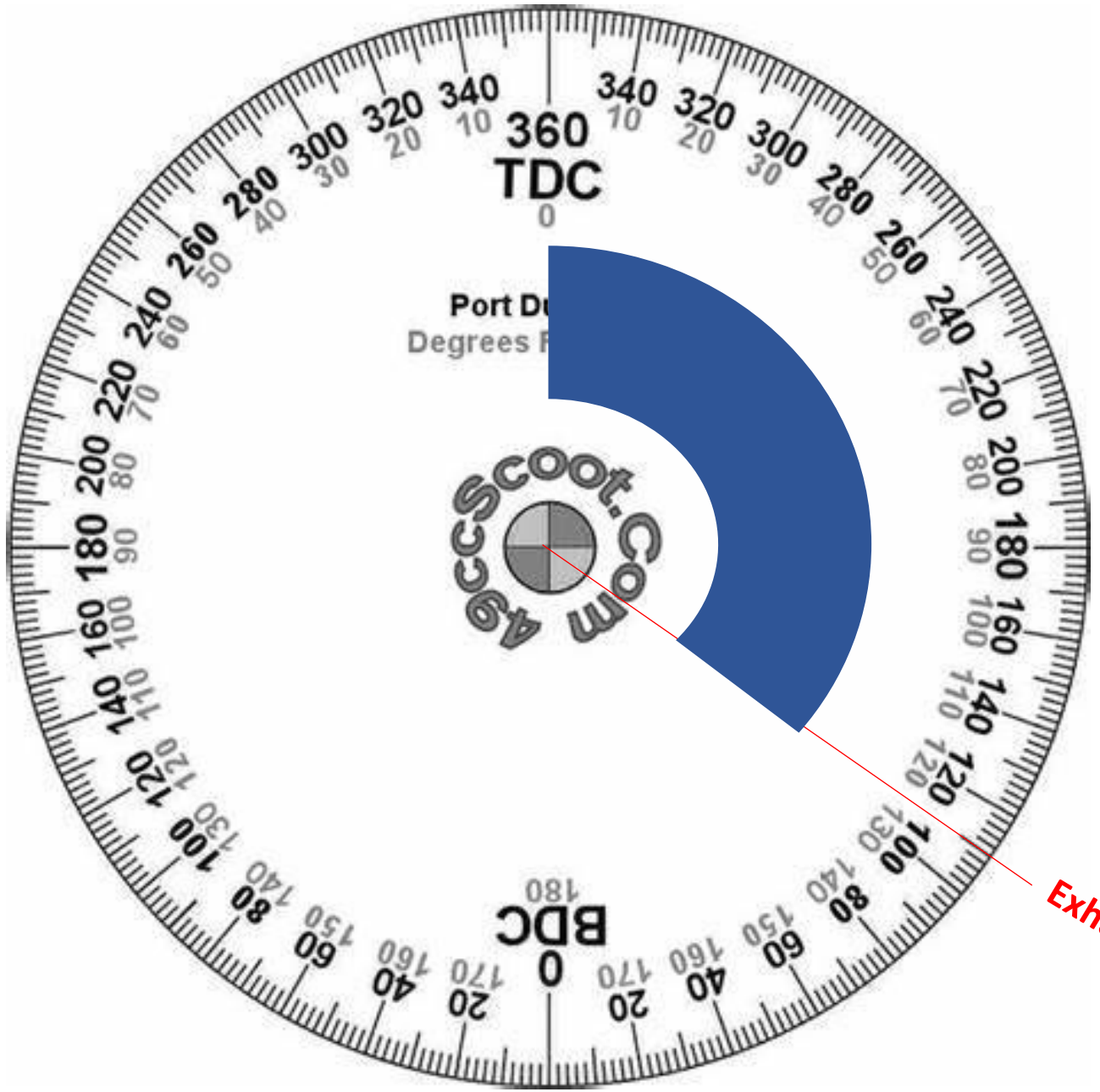
OS FS 20 Engine

Clockwise rotation



OS FS 20 Engine

Clockwise rotation



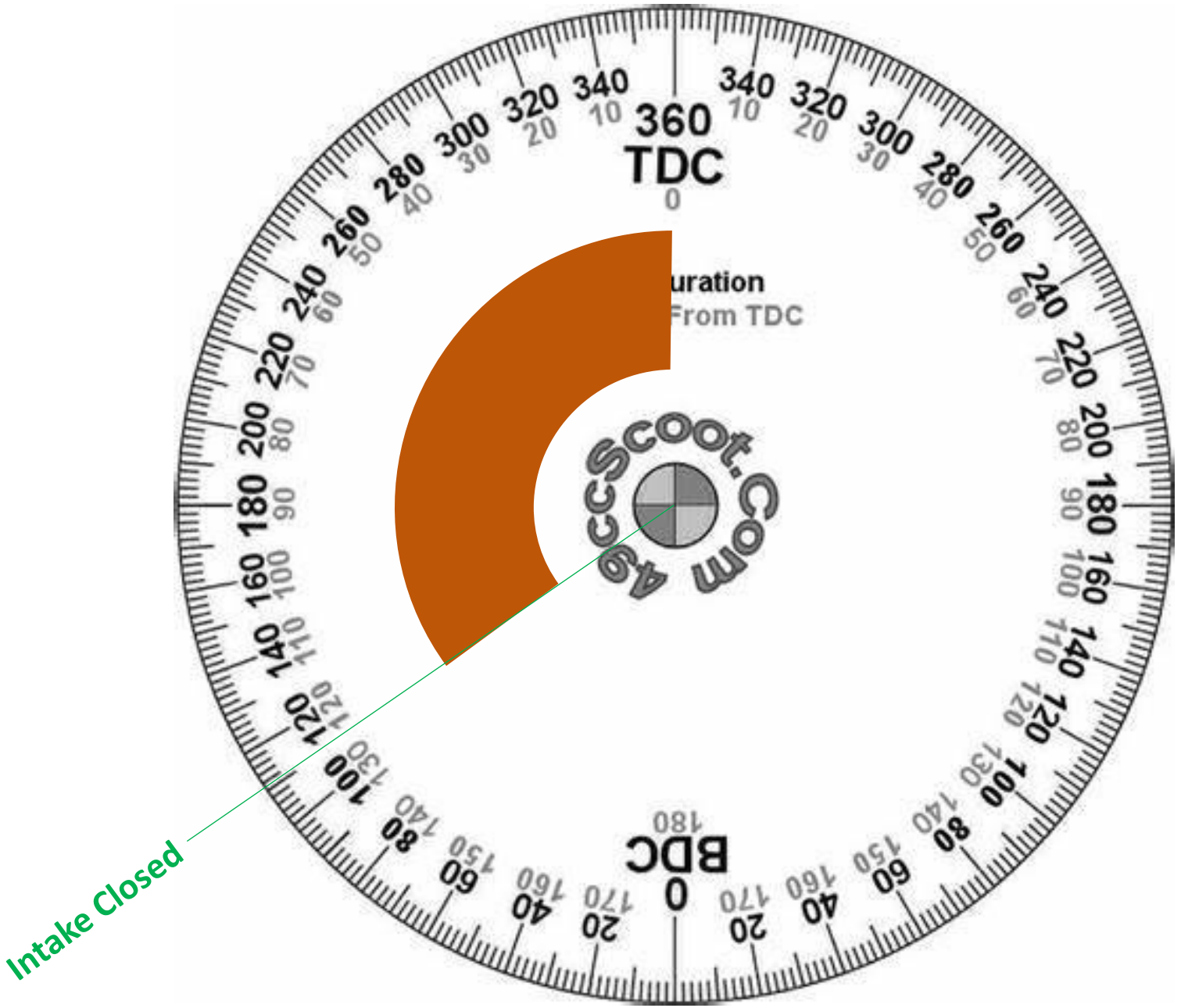
Intake Duration: °290

Exhaust Duration: 260°

Power Stroke: 125°

OS FS 20 Engine

Clockwise rotation



Intake Duration: °290

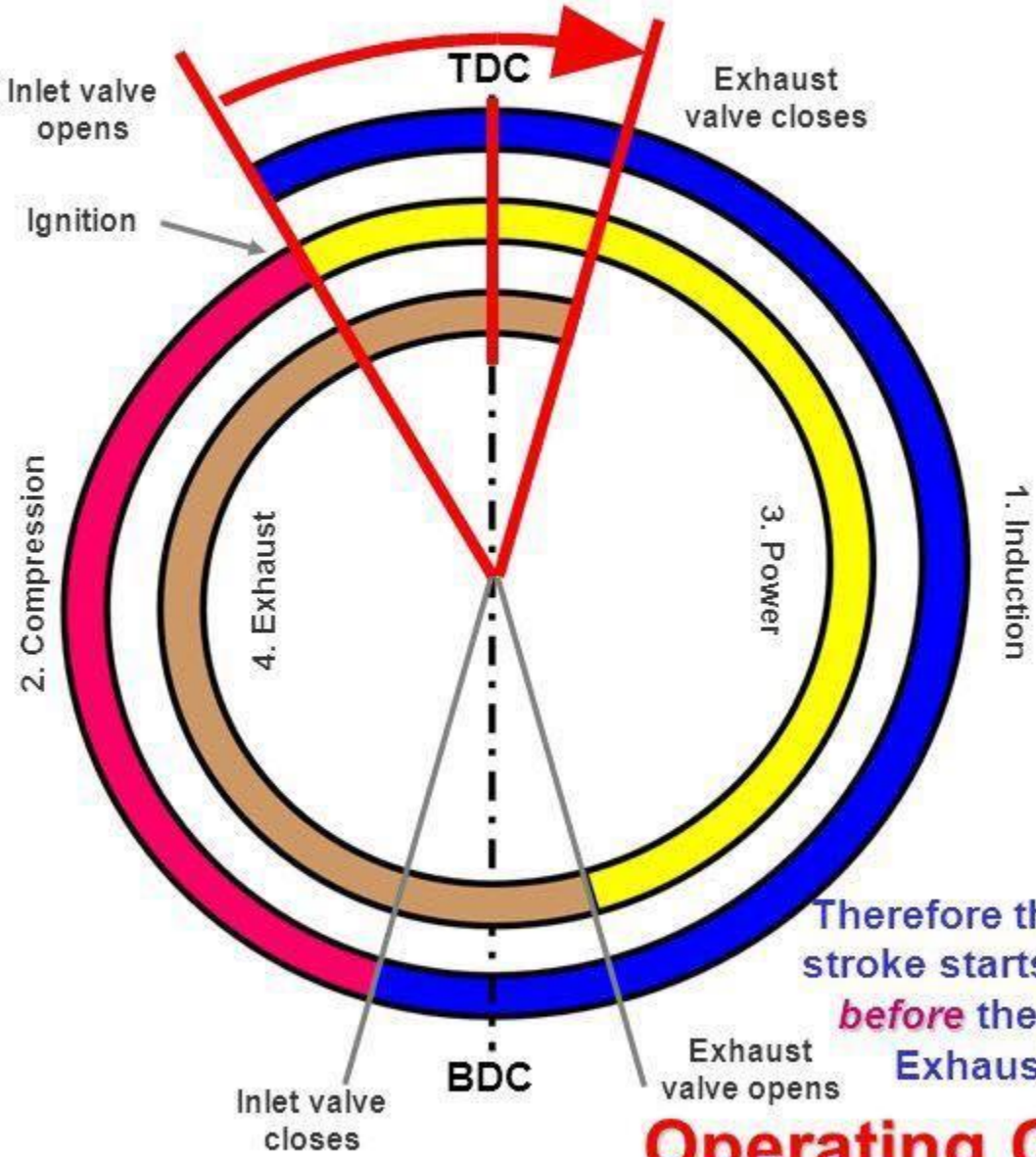
Compression: 125°

Power Stroke: 125°

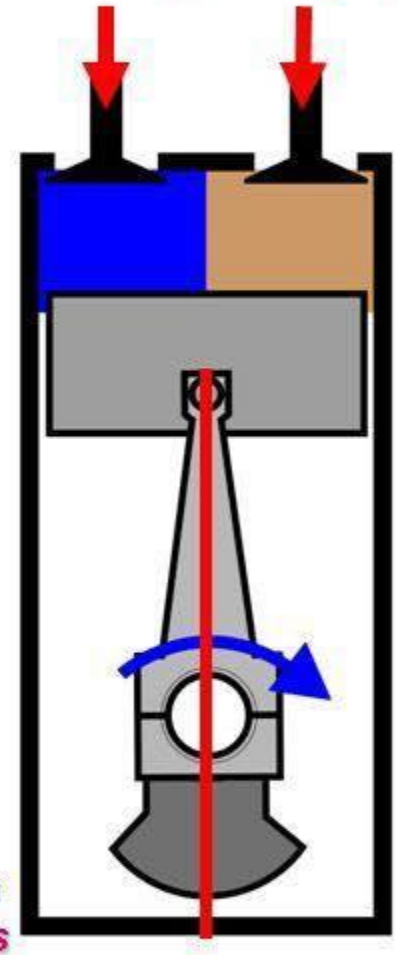
Exhaust Duration: 260°

Valve Overlap - Stroke 4 to 1

This is called 'Valve Overlap'

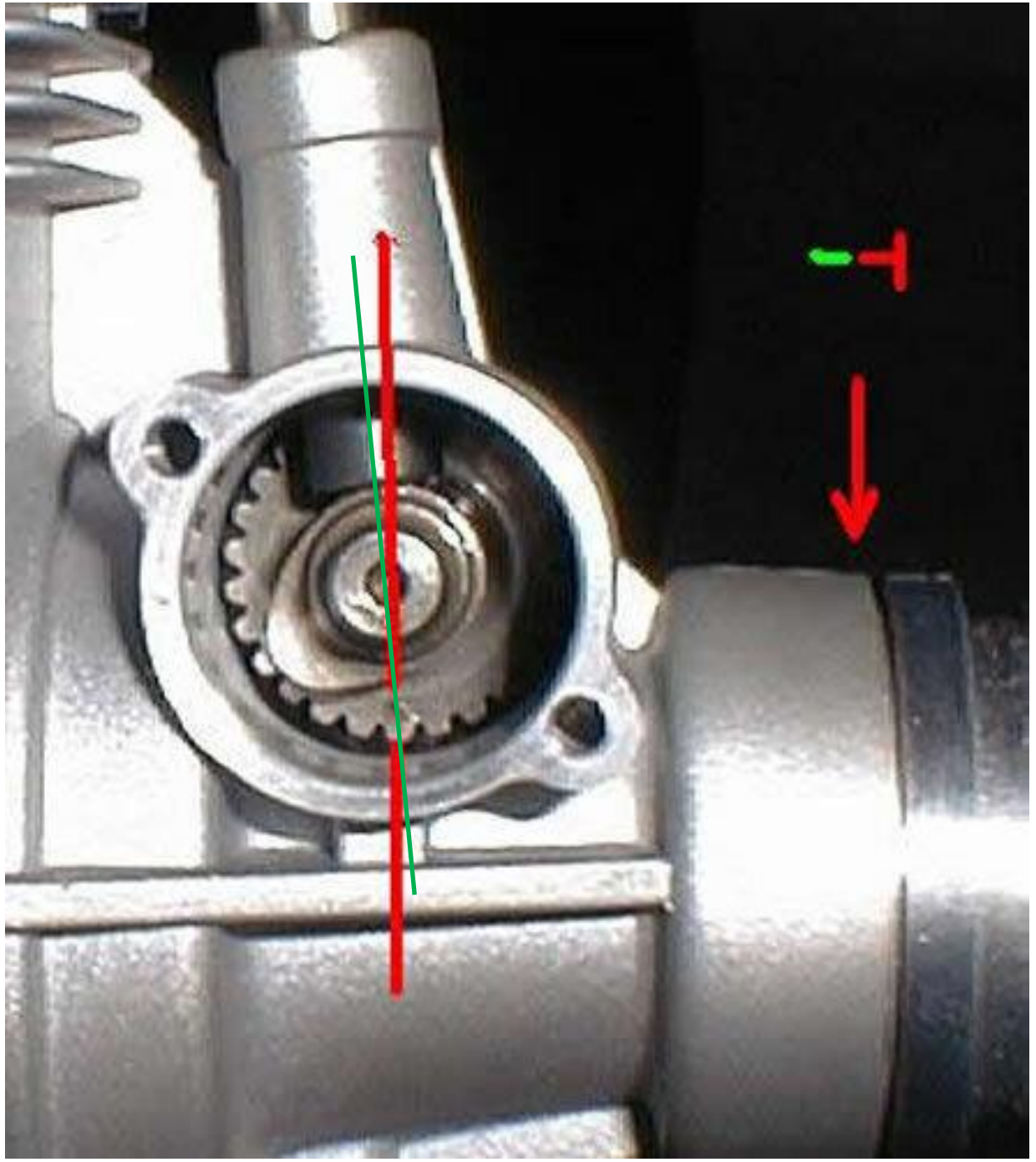


Both the inlet and exhaust valves are partially open



Therefore the Induction stroke starts *45 degrees before* the end of the Exhaust stroke

Operating Cycle



Proper alignment (green) is with the pushrod tubes, not 90° to the crankcase web (TF)