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2.61 Internal Combustion Engines Spring 2008

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## Hydrocarbon Pathway - Steady State, cruise condition



## HC Sources: Magnitudes and Percent of Total Engine-out Emissions

<u>Source</u>	<u>% Fuel Escaping</u> Normal Combustion	Fraction Emitted as EOHC	<u>% Fuel as HC</u> <u>Emissions</u>	% of Total EOHC Emissions
Crevices	5.2	0.15*	0.682*	42.6
Quench	0.5	0.15	0.074	4.6
Oil Layers	1.0	0.09**	0.090**	5.6
Deposits	1.0	0.30	0.300	18.7
Liquid Fuel	1.2	0.30	0.356	22.2
Valve Leakage	0.1	1.00	0.100	6.3
Total	9.0		1.60	100

Blowby (0.6%) subtracted
Amount to crank case (0.7%) subtracted