The Comparison

	ENGINES BASED ON R.V.C.R	CONVENTIONAL ENGINES
1	**RUNS ON ANY FUEL OF CHOICE**. Run it on lightest **LNG, TO – PETROL, TO DIESEL, TO heaviest HFO**.	**CANNOT CHANGE OVER FUEL** . Rigid on fuel,(want to use another fuel then replace engine.)
2	**RUNS ON SINGLE AND DUAL STROKE** and eliminates all extra strokes required	**2 OR 4 STROKES REQUIRED** For completing operating process.
3	Can vary and adjust compression ratio to reduce consumption for **ANY FUEL** at any load.	Cannot vary compression ratio and is rigid hence not as fuel efficient as V.C.R.
4	**NO RECIPROCATING PISTON**, no gudgeon, no connecting rod, no crosshead and no piston rod required.	Piston, gudgeon, con rod essential, hence large weight and size.
5	**THE ELIMINATION OF PISTON** etc eliminates all reversal of forces and inertia and out of balance forces	Reversal of mass and forces the biggest disadvantage. Causes vibration, slapping, wear tear.
6	**ELIMINATION OF OUT OF BALANCE FORCES** means no more multi cylinder required. One unit engine for any size.	Above 500 cc all automotive engines require multiple pistons. This means multiples of requisite components, more and more weight, larger size and space consumed.
7	**NO FLY WHEEL** required hence engine still lighter and compact. (limited to certain applications)	Fly wheel essential biggest contributor to weight. The metal cost is another factor.
8	**NO CRANK CASE** required. Hence volume of engine further reduced	Large crankcase increases size and explosion risks.
9	**NO CRANK CASE HAZARDS LIKE EXPLOSION NO REQUIREMENT** of crank case safety gear	Requires additional safety gear
11	NO REPLACEMENT OF LINER REQUIRED ON WEAR AND TEAR as liner the shape of liner is like a hollow doughnut. And can be reconditioned.	REPLACEMENT OF LINER a major cost factor
12	all external bearings **HENCE LIFE INCREASED** **MULTI FOLD.**	life limited by exposure to heat and vibration
13	**THIRD DIMENSION** by the way of radius available For size	ONLY BORE AND STROKE ratio and size available