

## Race Kart Engine Works Price Sheet: 2014JA01

<b>ITEM #</b>	<b>DESCRIPTION 2014</b>	<b>PRICE/UN</b>
KW-ES-001	Block, assemble short block.	\$65.00
KW-ES-002	Block, bore & sleeve. Complete machining approximately \$250.00 plus sleeve. Flanged sleeves only rec	\$75.00/hr.
KW-ES-003	Block, hone, maximum M0.75/.030".	\$75.00
KW-ES-003A	Block, bore & hone over M1.0/.040". Large bore applications.	\$135.00
KW-ES-004	Block, inspect. Bore size, cracks and defects.	\$15.00
KW-ES-005	Block, decking.	\$60.00
KW-ES-005A	Block or head O-ringing for gasket sealing. M0.81/.032" annealed stainless wire.	\$60.00
KW-ES-005B	O-ringing when block or head resurfaced during/with same set-up as resurface.	\$40.00
KW-ES-006	Block, cleaning.	\$15.00
KW-ES-007	Block, custom machining. ie: rod clearance, cover doweling, gasket surface machining, plug tapping, etc	\$75.00/hr.
KW-ES-008	Crankcase, cover, cleaning.	\$5.00
KW-ES-009	Crankcase, cover, inspection. Cam & crank bearing bore & seal, warps, etcetera.	\$5.00
KW-ES-010	Crankshaft, polish journal & seal surfaces.	\$15.00
KW-ES-011	Crankshaft, straighten.	\$30.00
KW-ES-012	Crankshaft, balancing. Balance with two pieces of heavy metal approximately \$280.00.	\$75.00/hr.
KW-ES-013	Connecting rod, check clearances to crankshaft and piston pin.	\$15.00
KW-ES-014	Connecting rod, elliptical bore to increase diagonal clearance.	\$TBD
KW-ES-015	Piston, inspect.	\$10.00
KW-ES-016	Piston, machine top surface for pin height correction.	\$50.00
KW-ES-017	Piston, horizontal gas porting, six (6) places @ M1.0/.040" diameter.	\$60.00
KW-ES-018	Piston, ring drag test.	\$20.00
KW-ES-019	Piston ring, file fit end gap. per ring.	\$5.00
KW-ES-020	Piston, contour machine skirt to clear crankshaft. Honda GX160 to GX200.	\$30.00
KW-ES-021	P/N not used.	
KW-ES-022	Camshaft, inspect for lift and wear.	\$10.00
KW-ES-023	Camshaft, degree camshaft only, no adjusting.	\$50.00
KW-ES-024	Camshaft, degree camshaft and twist crankshaft gear to change cam timing.	\$75.00
KW-ES-025	Crack inspection. Magnetic and non magnetic material.	\$75.00/hr.
KW-ES-026	Cylinder head, chemical clean to remove carbon. AKRA/ASN legal.	\$20.00
KW-ES-027	Cylinder head, assemble only. Honda & Clone, no valve spring install height inspection.	\$7.50
KW-ES-028	Cylinder head, clean. Remove carbon by media blast. Not legal AKRA/ASN Box Stock.	\$10.00
KW-ES-029	Cylinder head, inspect. Valves, guides, seats and guides for wear and defects.	\$15.00
KW-ES-030	Cylinder head, lap intake & exhaust valves to seats. Minor lapping, not for repair.	\$7.50
KW-ES-031	P/N not used. Formally used for grind valves. This service is not available at this time.	
KW-ES-032	Cylinder head, custom machine valve seats each.	\$30.00

Race Kart Engine Works Price Sheet: 2014JA01

KW-ES-033	Cylinder head, resurfacing. Maximum M0.50/.020".	\$25.00
KW-ES-033A	Cylinder head, resurfacing. Extra M0.50/.020" per cut.	\$10.00
KW-ES-034	Cylinder head, CC chamber.	\$15.00
KW-ES-034A	Cylinder head, CC chamber second time to verify volume after resurface or multiply CCing events.	\$15.00
KW-ES-035	Cylinder head, compression ratio calculation. Does not include CCing. All specs must readily available.	\$20.00
KW-ES-036	Cylinder head, valve guide, remove and replace only. Reaming/honing or machining extra @\$75.00/hr.	\$7.50
KW-ES-037	Cylinder head, machine two valve spring seats to fit customers valve spring.	\$20.00
KW-ES-037A	Cylinder head, inspect two valve spring assemble heights. Machining and shims extra.	\$20.00
KW-ES-038	Cylinder head, set up rocker arm geometry. Machining and custom pushrod fabrication extra.	\$50.00
KW-ES-038A	Cylinder head, machine two rocker stud bosses to correct rocker arm geometry. Customer specs.	\$20.00
KW-ES-038B	Cylinder head, custom pushrod length fabrication, two pushrods. Customer specs.	\$20.00
KW-ES-039	P/N not used. Formally used for pushrod adjust.	
KW-ES-040	Carburetor, rebuild. Includes basic cleaning. Parts extra.	\$25.00
KW-ES-041	Carburetor, blueprint. ASN & BSP rules apply. New part labour price, if cleaning req'd; add \$10.00. Parts	\$45.00
KW-ES-042	Dynamometer, testing. Single test only, average of five runs will be done.	\$120.00
KW-ES-042A	Dynamometer, testing. Custom R&D runs.	\$75.00/hr.
KW-ES-043	P/N not used. Formally used for dynamometer custom testing.	
KW-ES-044	Rebuild, engine. BSP/Honda previously built by: KWC, RKEW or KSE only, Plus required parts & machin	\$125.00
KW-ES-044A	Rebuild, engine. BSP/Honda previously built by: Other builders. Plus required parts & machining.	\$150.00
KW-ES-045	Rebuild/New Build, engine to spec rules. Plus required parts & machining. All specs to rule limits & legal.	\$250.00
KW-ES-046	Rebuild/New Build, engine to SA spec rules. Plus required parts & machining. All specs to rule limits & leg	\$300.00
KW-ES-047	Rebuild/New Build, engines for Junior Dragster, modified, etcetera. Call for quote. Basic labour charge. N\$50.00/hr.	
KW-ES-048	Engine inspection. Leak-down test only.	\$15.00
KW-ES-048A	Engine inspection. Disassemble engine.	\$25.00
KW-ES-048B	Engine inspection. Disassemble engine, inspect, create parts list and quote. Refundable if repair is over \$	\$50.00
KW-ES-049	P/N not used. Formally used engine inspection.	
KW-ES-050	Special Services, ultra-sonic, media blast and chemical cleaning available. Call for quote.	TBD
KW-ES-051	Exhaust, wrap 15"/M380 to 26"/M660 header pipe.	\$25.00
KW-ES-051A	Exhaust, wrap 10"/M250 to 14"/M355 header pipe. ie. BSP pipe.	\$20.00
KW-ES-052	Cylinder head, hand port & polish intake and exhaust short turns. Honda GX & Clone series starting at: N	\$100.00
KW-ES-052A	Cylinder head, machined ports. Intake and exhaust. Honda GX200 only. NOTE: 4	\$200.00
KW-ES-053	Special Services, Heli-Coil bolt hole. First hole, M6 to M8. 1/4" to 3/8"	\$20.00
KW-ES-053A	Special Services, Heli-Coil bolt hole. Additional hole, M6 to M16 each.	\$10.00
KW-ES-053B	Special Services, Heli-Coil bolt hole. First hole, M10 to M14 each. 7/16" to 1/2"	\$30.00
KW-ES-053C	Special Services, custom bolt hole repair. Call for quote.	TBD
KW-ES-054	P/N not used. Formally used for Heli-Coil repair.	

Race Kart Engine Works Price Sheet: 2014JA01

KW-ES-055	Special Services, welding, TIG/MIG/GAS. Plus gas and materials.	\$75.00/hr.
KW-ES-056	Engine, replace camshaft. Remove and replace only.	\$25.00
KW-ES-057	Engine, check ignition timing. Must have existing timing mark visible. Verifies flywheel not moved.	\$15.00
KW-ES-058	Special Services, machine flywheel keys. Minimum 8 pieces, each.	\$3.00
KW-ES-058A	Special Services, machine flywheel keys. Minimum 16 pieces, each.	\$2.50
KW-ES-059	Special Services, drill bolt for lock wire or seal. Less than 10 pieces, each.	\$2.00
KW-ES-059A	Special Services, drill bolt for lock wire or seal. More than 10 pieces, each.	\$1.50
KW-ES-060	Special Services, machine for oil drain magnet and install, each.	\$3.50
KW-ES-061	Miscellaneous shop supplies. 2% of labour charge.	2%
KW-ES-062	Engine, inspect & seal for legal spec. Includes seal and written report.	\$60.00
KW-ES-063	General labour performed. Per hour.	\$50.00/hr.
NOTE: 1	'Blueprinted' engine. Any sanctioning body rules can apply. ie. AKRA/WKA/ASN/Grand Bend/Brian Stewart.	
NOTE: 2	Custom design engine to your fuel requirements and rule specs. All custom engines include engineering calculations.	
NOTE: 3	Custom engine labour only. Machining,engineering, parts are all extra.	
NOTE: 4	Must have valve seats machined at same time. For pricing 'Cylinder head, custom machine valve seats'.	