

RICHARD GOODE AEROBATICS

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WORLD LEADERS IN RUSSIAN SPORTING AIRCRAFT & ENGINES

In partnership with Aerometal Kft, Hungary

Price List 2020

- Typically, all overhauled components will receive an EASA “form 1” document – the highest European qualification for an aviation component.
- “Core exchange” prices are those we offer for an old component/ancillary that is worn, but complete and not damaged.
- Core exchange parts **MUST** be sent to Aerometal at the following address: Marcell Marczy, Aerometal Kft., Ipari Park HRSZ:3508/19, Asboth Oszkar utca 4., 2038 Soskut, Hungary, Tel. +36706763869. Please **DO NOT** send them to us at Rhodds Farm.
- Prices in Euros unless otherwise stated, but we have an easy and cheap way for you to pay in your currency and we get paid in Euros.
- With every component/ancillary that requires gaskets or extra fitting parts for installation, these are always included
- Prices are net and we may need to add VAT if we are selling to private customers in Europe who are not registered for EU VAT

Electrical: M14P/PF & AI14

Part	Price	Core Exchange
M9F & M-9 magneto. <i>Totally overhauled with new bearing, new coil, new points, and new “pencil”. According to conventional Russian practise, we do not include the magneto cap – the Bakelite disc into which the plug leads are fitted – as this is part of the ignition system. We do have supplies of these, please see below</i>	€1,220.00	€230.00
M9 – 35M magneto. <i>Totally overhauled, as the M9F magneto (above), plus the additional overhaul of the complex counterweight mechanism</i>	€1,280.00	€230.00
Points. <i>Finally, we are making our own points. Very high quality and machine-tested for over 2,000 hours!!</i>	€220.00	
Coil. <i>We have made a significant investment to design and produce dramatically improved coils, and, critically, with an external</i>		

<i>capacitor which gets over the historic problems of capacitor failure through heat and age. Importantly these coils are now fully certified by UK CAA and EASA, who control all aviation in Europe. They are unconditionally guaranteed for three years, but we conservatively expect them to last at least 20 years. Additionally, as part of the testing programme, it has been demonstrated that the spark is 20% stronger than with a standard coil, leading to easier starting; less plug-fouling and smoother running.</i>	€430.00	€30.00
Magneto "pencil"	€80.00	
Magneto cap. <i>Used, but crack tested.</i>	€125.00	
Magneto rotors. <i>Used, but crack tested.</i>	€155.00	
New magneto rotors. <i>We have invested significant time and money, and all design work is completed, and we will be making completely new magneto rotors with our partner who is producing our new coils in China. We expect the first rotors in the middle of June 2020. And the cost will be slightly less than I used ones at Euro 145.</i>	€145.00	
Isolator	€65.00	
Automotive plug conversion kit. <i>Our new kit with the "Thunderbolt" very low resistance leads, improving performance and limiting radio interference. Also includes the much improved modifications from Aerometal. Totally complete with everything needed, including latest NGK spark plugs. Approved by EASA; UK CAA and French DGAC</i>	€595.00	
Electric start conversion. <i>Cost when fitted to an engine during overhaul.</i>	€3,300.00	
Electronic ignition. <i>Net cost if fitted to an engine undergoing overhaul.</i>	US\$9200.00	
Tacho-generator	€540.00	€130.00
Overhaul	Price	Core Exchange
M9F & M-9 magneto. <i>Totally overhauled with new bearing, new coil, new points and new "pencil". On occasions, we need to change the rotor. If we do, we charge an additional €145 and of course we will return the cracked rotor with the magneto.</i>	€990.00	€230.00
M9-35M magneto. <i>As the M9F magneto (above), plus overhauling the complex counterweight mechanism</i>	€1,050.00	
Coil	€400.00	
Magneto check. <i>Physical check, individual test of components and then 2 hour test in high-temperature test cell; new paperwork.</i>	€290.00	
Tacho-generator	€410.00	

Fuel System: M14P/PF & AI14

Part	Price	Core Exchange
Carburettor AK14P & K-14A. <i>Zero-timed. We do not include the composite gasket for installation of the carburettor, since these are almost always reusable. But an additional one can be included for €80.</i>	€890.00	€230.00
Carburettor membranes (2) for M 14 and AI 14 engines	€195.00	

Part	Price	Core Exchange
Suction jets, each. <i>Sizes 0.8mm to 1.9mm.</i>	€17.00	
Acceleration jets, each. <i>Sizes 0.6mm to 0.9mm</i>	€17.00	
Fuel pump 702ML (for M14) & 702M (for AI14). <i>Zero-timed.</i>	€320.00	€95.00
Fuel pump membrane.	€70.00	
Overhaul	Price	Core Exchange
Carburettor AK14P & K-14A . <i>Including new membranes; mechanical overhaul; new paint. We do not include the composite gasket for installation of the carburettor, since these are almost always reusable. But an additional one can be included for €60.</i>	€660.00	
Carburettor check. <i>To check an unused carburettor, including new membranes and test bench session.</i>	€390.00	
Fuel pump 702ML & 702M. <i>Please see below for price for internal blades</i>	€225.00	
Fuel pump internal blades (4). <i>Replaced during overhaul if originals not useable</i>	€100.00	

Cylinders: M14P/PF& AI14

Part	Price	Core Exchange
Cylinders. <i>Used, complete, with valves, valve gear, etc.</i>	€800.00	
Set of gaskets for reinstalling all 9 cylinders	€345.00	
New exhaust valves	€210.00	€30.00
Overhauled exhaust valves. <i>Hard chromed stem to new dimensions & new "seat".</i>	€135.00	€30.00
Overhauled inlet valves. <i>Good condition and to correct dimensions</i>	€110.00	€20.00
Valve guide	€115.00	
Valve cover gasket	€4.00	
Valve cover wire	€12.00	
Set of 5 new Russian piston rings	€160.00	
M14P R1 Russian pistons. <i>Set, complete with rings, pins and plugs.</i>	€3,180	
SPC pistons. <i>Set, complete with rings, pins and plugs.</i>	€2,980.00	
Barrett Pistons. <i>Set, complete with rings, pins and plugs.</i>	€3,590.00	
Exhaust nuts	€27.00	
Exhaust Olive (gasket), standard size, 10mm thick	€28.00	
Exhaust Olive, special size, any thickness	€38.00	
Intake tube gaskets	€4.00	
Set of exhaust clamps (7)	€690.00	
Exhaust stub. <i>About 8cms</i>	€20.00	
Connecting rod	€245.00	
Big manifold oil drain plugs, for fitting oil drain system	€42.00	
Air start valves, totally overhauled	€95.00	

Part	Price	Core Exchange
Air start pipe (from distributor to air start valve). <i>Fully checked and nickel plated</i>	€40.00	
New baffle "pads", including rivets to attach to baffles	€30.00	
Overhaul	Price	Core Exchange
Cylinders, price per cylinder. <i>Including honing; fitting pistons; overhauled valves; new valve oil seal; new heat resistant paint, etc.</i>	€1,020.00	
Honing (per cylinder)	€135.00	
Exhaust valves. <i>Hard chromed stem to new dimensions & new "seat"</i>	€160.00	

Ancillaries: M14P/PF & AI14

Part	Price	Core Exchange
Compressor AK-50A & AK-50P12, zero-timed. <i>Including new pistons and cylinders if not to new tolerances.</i>	€1,060.00	€190.00
Compressor drive coupling	€80.00	€40.00
Compressor air filter & retaining clip	€7.00	
Air compressor gasket	€5.00	
Propeller governor. R2	€495.00	€165.00
Oil cooler. <i>Standard Yak and Sukhoi.</i>	€1,050.00	€225.00
Large oil cooler. <i>50% more cooling capacity. Same fittings as standard. Used but fully overhauled.</i>	€950.00	
Oil pump MM-14A. <i>Zero-timed.</i>	€380.00	€95.00
Airstart distributor	€280.00	€85.00
Generator GSR-3000 & GSK-1500M	€705.00	€145.00
Overhaul	Price	Core Exchange
Generator GSR-3000 & GSK-1500M	€560.00	
Compressor AK-50A & AK-50P12. <i>Total overhaul including new pistons and cylinders if not to new tolerances.</i>	€870.00	
Compressor drive coupling	€40.00	
Propeller governor. R2	€330.00	
Oil cooler. <i>Standard Yak and Sukhoi.</i>	€650.00	
Oil pump	€225.00	
Airstart distributor	€165.00	
Air bottle pressure testing. <i>Including x-ray and crack test; boroscope inspection; electronic measurement of precise wall thickness (results given); pressure test to 100 bar; recertification and EASA form 1.</i>	€205.00	

Gearbox & Pyramid: M14P/PF & AI14

Part	Price	Core Exchange
New propeller shaft/flange. <i>Russian or SAE.</i>	€900.00	
Overhauled propeller shaft/flange. <i>Russian or SAE.</i>	€600.00	
Upated MT governor springs (2). <i>For better aerobatic performance</i>	€30.00	
Gearbox oil seal rings	€76.00	
Gearbox satellite gear, each	€146.00	
Micro-polishing gears in drive gearbox and ancillary/supercharger gearbox	€600.00	
Propeller adapter. <i>Russian engine to SAE prop</i>	€650.00	
Reverse adapter. <i>SAE engine to Russian prop</i>	€650.00	
Gearbox, after total overhaul	€3,250.00	€1,850.00
Overhaul	Price	Core Exchange
Gearbox painting and new data plate	€295.00	
Ground-strike: full shock load test and inspection	€925.00	
Gearbox total overhaul	€1,400.00	
Full ground-strike test and inspection, for both gearbox and "pyramid" – supercharger and all accessory drives	€1,850.00	
Ground-strike: dismantling, inspection, disassembly of gearbox, pyramid, crankcase, cylinders and 3 hour dynometer test run. But excluding any repair	€5,800.00	
Ground-strike: total disassembly, total inspection and x-ray, reface valves, inspect and test all ancillaries, 3 hour test run. But excluding any repair	€6,900.00	
Prop shaft/flange overhaul	€360.00	
Pyramid overhaul: overhaul of complete "pyramid"; supercharger; accessory case; accessory gearbox	€2,950.00	€1,100.00
Pyramid total overhaul and conversion to PF specification.	€6,450.00	€1,100.00
Additional cost of converting engine to "PF" specification during overhaul	€3,500.00	

Airframe Parts

Part	Price	Core Exchange
Wing tip sights for Sukhoi	€215.00	
Yak 18T aileron bracket	€290.00	
Yak 18T door pins	€205.00	
Overhaul	Price	Core Exchange
Yak 50/52/18T undercarriage actuator overhaul. <i>Please note there will be extra charges if we need to replace major items such as end cap; pistons; etc. But we will dismantle the old unit and provide a detailed quote with no obligation.</i>	€480.00	

Overhaul	Price	Core Exchange
Yak undercarriage cockpit selector overhaul	€250.00	

General

Part	Price	Core Exchange
Flexible hoses. <i>Our established price for all hoses to include crack test & x-ray of metal ends; machining to fit Aeroquip 303 hose; anodizing; assembly; pressure test; fireproof cover; EASA form 1. There are often two flexible hoses in a complete set which are permanent factory installed "pressurised" hose ends which we cannot replace. So we need to purchase complete new hoses from a specialised factory – cost of these is an additional €190.</i>	€95.00/hose	
Engine lifting eye	€195.00	
Tools. <i>Complete set of 11 necessary tools for all work on M14 engines.</i>	€525.00	
Intake tubes, after OH	€65.00	€15.00
Engine mount rubbers. <i>(16 for engine set). Each</i>	€24.00	
Engine mounting bolt complete with stud, 2 nuts & 3 washers	€33.00	
Pushrod tube hoses, set of 18 @ €4 each	€72.00	
Pushrod tube clamps, set of 36 @ €3 each	€108.00	
M 14 P engine, after total zero-time overhaul. Please contact us for full details	€31,500.00	
M 14 PF engine, after total zero-time overhaul. Please contact us for full details	€35,000.00	
Zero-timed V-530 propeller	€7,600.00	
Shipping box for V-530 propeller	€300.00	
Treated wooden shipping crate	€300.00	
Legs and brackets for shipping crate	€180.00	
Unassembled shipping crate	€225.00	
Overhaul	Price	Core Exchange
Engine overhaul to zero-time condition. Please contact us for full details	€26,500.00	
Overhaul of V-530 propeller	€4,750.00	
Remove and check cylinders	€1,650.00	
Engine dynamometer test. <i>Full three hour test run on the dynamometer, with all results given to the customer</i>	€1,500.00	
Preservation, long term	€560.00	
Preservation, short term	€260.00	
Chip detector cable sensor	€105.00	