

The New

KL BULLDOG

CRUDE OIL TRACTOR



**"A TRIUMPH OF
AUSTRALIAN
ENGINEERING SKILL"**

THE new K.L. Bulldog Tractor combines ALL the features that every tractor owner values most. Its un-failing efficiency, rugged power and economy of operation, coupled with its simple design which automatically reduces maintenance and replacements to a minimum, are the factors that stamp the new K.L. Bulldog as the ideal tractor for power farming under even the toughest conditions.

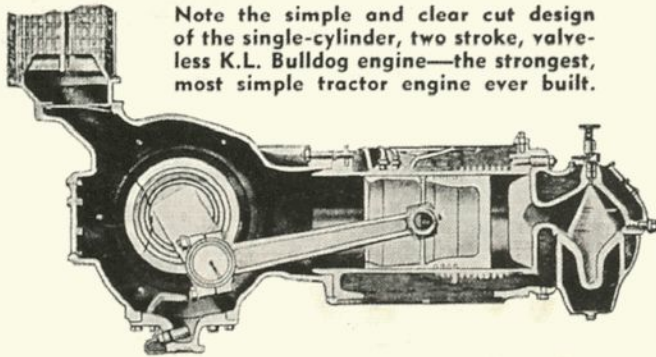
Manufactured by

**K.L. TRACTORS LIMITED
SPRINGVALE, VIC.**

www.LANZ-BULLDOG-Homepage.de

HERE ARE THE FEATURES YOU'VE

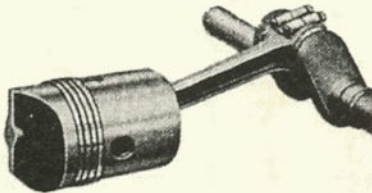
★ K.L. BULLDOG'S Simple Trouble-Free ENGINE



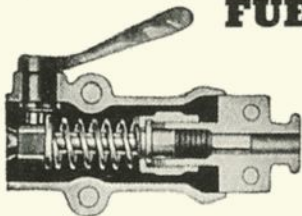
Note the simple and clear cut design of the single-cylinder, two stroke, valveless K.L. Bulldog engine—the strongest, most simple tractor engine ever built.

★ K.L. BULLDOG'S Slow-Speed PISTON

The large piston and bearing surfaces of the K.L. Bulldog moving at slow speeds and operating under low pressure in the cylinder, reduce wear and maintenance to a minimum.



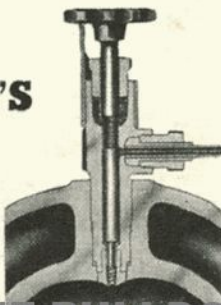
★ K.L. BULLDOG'S Low Pressure FUEL PUMP



The simple K. L. Bulldog single cylinder plunger type fuel pump operates at only 150lb per square inch.

★ K. L. BULLDOG'S ATOMIZER

... injects finely atomized fuel into the combustion chamber. Simple and easily adjusted to varying loads.



ALL COMBINED IN THE NEW

The K.L. Bulldog Tractor engine is of horizontal, valveless, single cylinder, two stroke, hot bulb type, with crankcase compression to take care of combustion and scavenging. In 2-cycle type of engine, the piston not only performs its conventional duty in the cylinder, but also creates crankcase compression.

FIRST CYCLE.—During the power stroke the air in the crankcase is compressed by the backward movement of the piston. Just before the termination of the power stroke the piston uncovers the exhaust ports on the near side, and, a little later, the air intake ports on the off-side of the cylinder. Air under pressure from the crankcase rushes through the air intake ports, and, guided by the deflector type piston head, drives out the product of the combustion through the exhaust ports and leaves the cylinder full of pure air.

SECOND CYCLE.—The piston moves forward, compressing fresh air, while fuel in a finely atomized spray, is injected through the atomizer by the fuel pump into the combustion chamber. The charge is not exploded, but, by the combustion of the hot bulb and the compression, a gradual combustion takes place, resulting in smooth, consistent running very similar to that of a steam engine.

STARTING.—The hot bulb is heated by the blow lamp for about three minutes, while the operator is greasing and filling up. A few strokes given the fuel pump hand lever, a swing of the starting wheel, and the tractor starts simply and easily. The blow lamp is then removed and extinguished.

CONSTRUCTION.—The engine is designed to operate on

TYPE.—All Australian manufacture. Of block construction, consisting of cylinder, crankcase, gear case and rear axle housing.

ENGINE.—Horizontal, Single Cylinder, two stroke, without valves, carburettor or magneto. Bore 8.86", stroke 10.24", R.P.M. 600.

POWER RATING.—40 B.H.P. (This gives a draw-bar pull equivalent to a team of 10 to 12 good horses.)

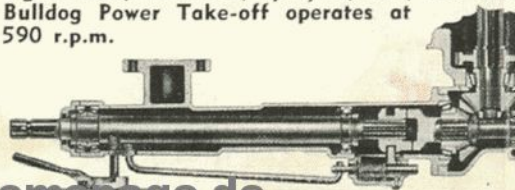
WORKING SPEEDS.—1st gear, 2½; 2nd, 3½; 3rd, 4½; 4th, 6½; 5th, 9.0; 6th, 12.0 m.p.h. Reverse: 3.0 and 8½ m.p.h.

GOVERNOR.—Centrifugal spring loaded type, mounted on crankshaft—keeps engine speed constant.

LUBRICATED
feed lub
plunger
pump dri
pressure
in crank
IGNITION
COOLING
without
changeo
AIR FILT
oil soake
EXHAUST
ensures

★ K.L. BULLDOG'S Power TAKE-OFF

Fitted as optional standard equipment for driving binders, combines, sprayers, etc., the K.L. Bulldog Power Take-off operates at 590 r.p.m.



YOU'VE BEEN WAITING TO GET!..

K.L. BULLDOG CRUDE OIL TRACTOR

cheapest fuels, such as crude,—residual,—gas,—vegetable oils and alcohol. It is conspicuous for the absence of carburettor, magneto, spark plugs, valves, cam shaft and other intricate working parts common to tractor engines. The cylinder casing is made of High Tensile Cast Iron. The cylinder head is fitted with a fusible safety plug which protects the engine from over-heating. All reciprocating parts are well balanced and a heavy flywheel on each end of the crankshaft ensures a high degree of uniformity, and makes the engine an ideal power unit. Four rings are fitted to the piston. The connecting rod is of drop forged heat treated steel with bronze backed big end bearing held in place by four machined steel big end bolts.

LUBRICATION.—A lubricator consisting of individual and adjustable plunger pumps for every lubricated part, circulates cool, clean oil through the separate leads to the main bearings, crank pin, cylinder, piston and gudgeon pin. The lubrication system is absolutely foolproof. The excess oil is returned from the bottom of the crankcase by a geared pump to the lubricator after passing through an oil filter. With this system there is no crankcase dilution, and there is consistent viscosity. This system of pumping fresh oil to main and big end bearings ensures 100% lubrication.

AIR CLEANER.—A large oil soaked fibre padding provides 100% clean air to the engine.

COOLING SYSTEM.—The cooling system is of thermosyphon water circulation without a pump; a double radiator, of interchangeable sections, with a powerful fan running on adjustable

tapered roller bearings between them. The water consumption is practically nil.

BELT PULLEY is on the off side, directly coupled to crankshaft, and transmits full engine power. Large diameter ensures minimum of slippage.

TRANSMISSION of power from engine to draw bar in a straight line through straight spur gears, specially heat treated, carried on shafts mounted on roller bearings, which are held in permanent alignment by the rigid one piece High Tensile Cast Iron gear box. Interchangeable bronze washers on differential level gear seatings. Entire transmission enclosed in one housing and running in oil.

NO BEVEL GEARS in power transmission.

EASILY HANDLED in confined spaces.

VERY ROOMY PLATFORM with convenient and fully adjustable swinging draw bar.

ADJUSTABLE TAPERED ROLLER BEARINGS on front axle.

FUELS.—Low-grade crude or fuel oils.

GENERAL.—The K.L. Bulldog Tractor has ample reserve power available to carry peak loads. All gears and shafts are forged from special steel, accurately machined and heat treated. The cylinder, cylinder-head, piston, crankcase, gearcase and rear axle housings are of high tensile iron castings. All shafts and axles run on ball or roller bearings, and large thrusts are taken up by thrust ball bearings. All moving parts are enclosed in dust-proof oil-tight casings, and are readily accessible. The controls are easily handled from the driving seat, which is well located and gives splendid vision ahead.

GENERAL SPECIFICATIONS

CTION of engine is by positive force rication, with individual and adjustable pumps for every part lubricated. Fuel veng gear and all other parts have high greasing. Return oil is filtered by filter ase.

4.—Hot bulb.
5.— Radiator-Thermosyphon principle pump, but with fan and easily interchangeable radiator sections.

6.—K.L. high efficiency filter with d padding and air intake extension.

7.—A very efficient spark arrester hat live exhaust sparks cannot escape.

CLUTCH.—Friction clutch, operated by foot pedal.

TRANSMISSION.—Sliding spur gear transmission with 6 forward speeds and 2 reverse, with roller bearings throughout. Ball type selector.

BRAKES.—Gear hand brake, transmission shaft brake.

FRONT AXLE.—Unsprung with forked ends (Elliot type).

FRONT WHEELS.—Pneumatic 7.50" x 18".

REAR WHEELS.—Pneumatic 13.50" x 28". Wide base tyres and rims optional at extra cost.

SAFETY GUARDS.—Descending at rear and curving outwards to protect driver.

PLATFORM.—On gear box, shielded by end plate and safety guards.

DRAW BAR.—Two hitches, the upper being for trailers; the lower is the swinging draw-bar which is fitted as standard equipment.

POWER TAKE-OFF.—Belt Pulley: 27" diam. x 7". 600 r.p.m. Shaft: 590 r.p.m.

TANK CAPACITY.—20 Imperial gallons.

DIMENSIONS.—Overall length 134", overall width 70", overall height (to top of radiator cap) 65", ground clearance 121", turning radius 167", service weight (std. equipment), 7900lb.

REGULAR EQUIPMENT.—Blow lamp, grease gun, tool box with full set of tools.

★ K.L. BULLDOG'S Amazing ECONOMY!

Operating on the cheapest of fuels, a K.L. Bulldog Tractor can save its owner up to £100 per year on fuel costs alone. K.L. Bulldog is built to SUIT tractor conditions. Its slow speed engine with ample reserves of power chops the fuel consumption and maintenance costs of other types of complicated tractors to a new low level.



www.LANZ-BULLDOG-Homepage.de

KL
BULLDOG
Crude Oil
TRACTORS



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