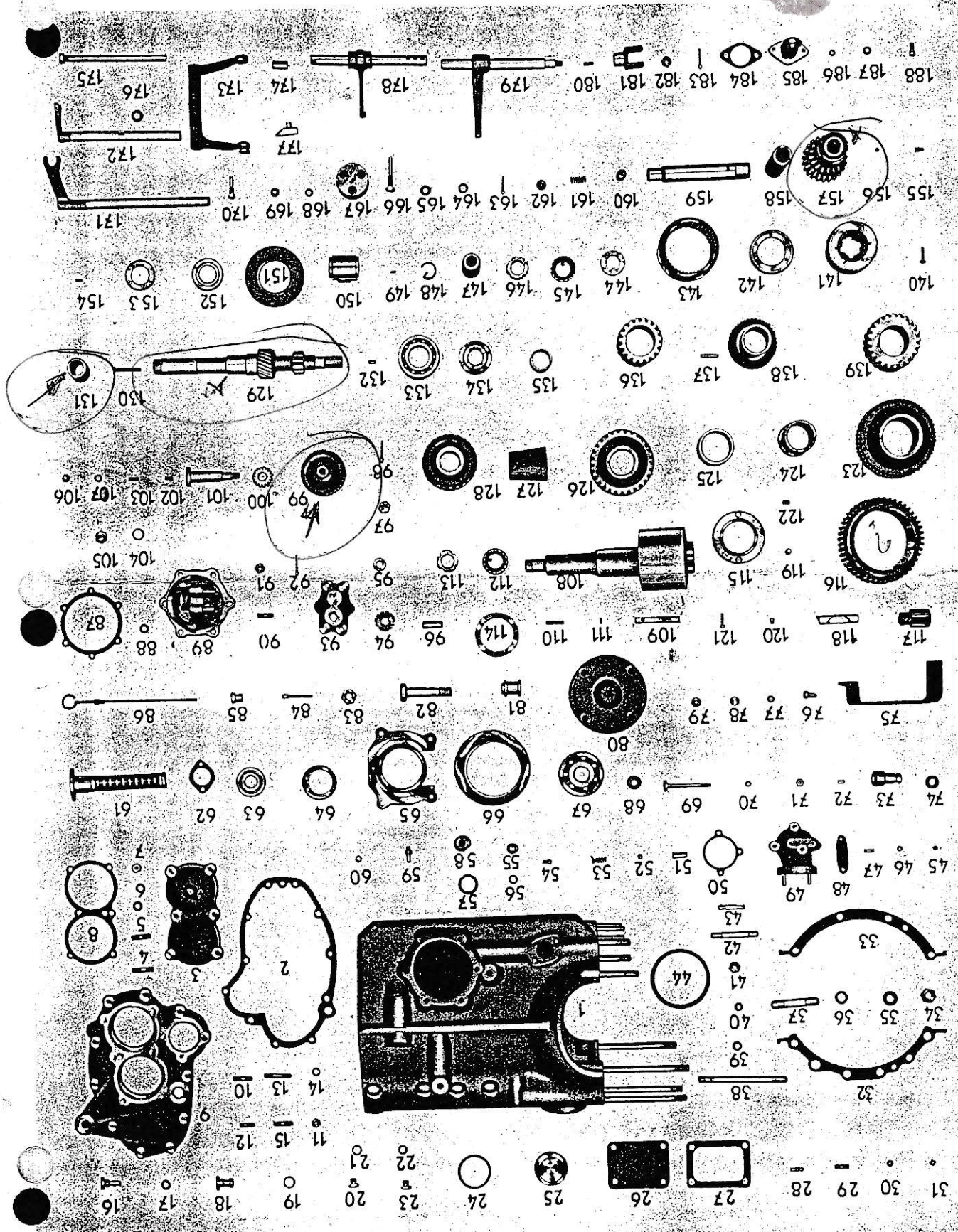




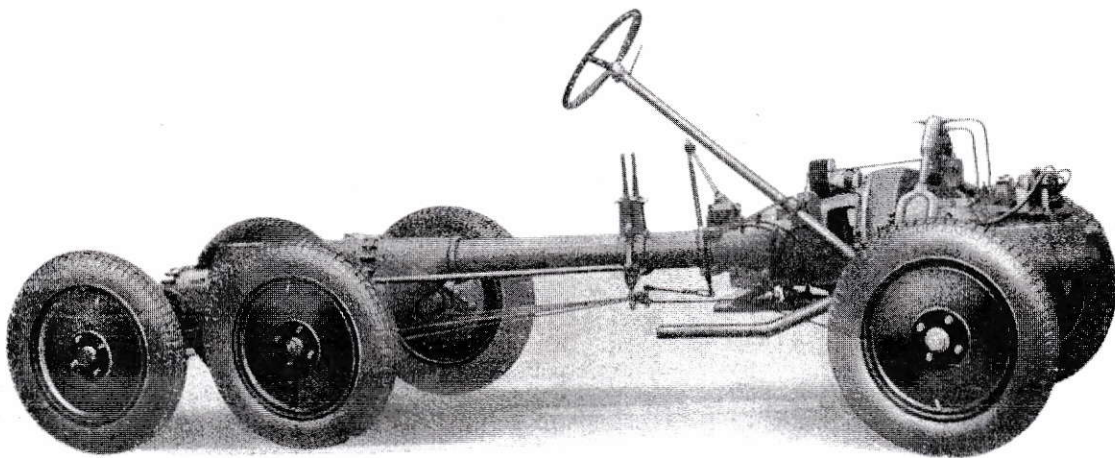
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1 1/2 TONS

FREIGHT CAR TYPE 26/30 - 6/24 HP.



TATRA-WORKS

MOTOR CARS AND RAILWAY-CARRIAGES
BUILDING COMPANY, LIMITED.

TECHNICAL DESCRIPTION OF A SIX WHEELED 1½ T. CHASSIS — TYPE 26a.

ENGINE: The engine is an air cooled 4-cylinder one, keeping four times and having a bore of 75 mm, with a stroke of 95 mm, Capacity of cylinders 1.68 litres, power of motor according to the usual tax formula 6 HP, the real effect, 24 HP.

The four Cast Iron Cylinders are arranged horizontally in the Aluminium Engine Case, in such a manner, that they form two groups of two cylinders each, the latter being placed under an angle of 180° each other.

CRANK SHAFT: The crank shaft is a double through crank shaft, which is collocated in the engine case resting on a slide -and (on the fly- wheel side) a ballbearing. The masses moving to and fro are fully, equilibrated in their dynamical effect by means of counterweights. Connecting roads of two cylinders lying opposite to each other are in connecting with the crank-pins.

CAM SHAFT: The cam shaft is arranged in the lower part of the motor case, that serves at the same time as an oil-tank. The cam shaft, by means of pushing-rods steers the valves arranged hanging inside the cylinder. The whole mechanism, that is, the cam shaft with valve lever shaft, valve lever, oil-pump, and driving wheel can be easily taken out.

LUBRICATION: The lubrication is of a circular system and is effected by means of a toothed wheel oil pump fixed to the cam shaft. The oil after passing a first oil-filter is pressed through a second (delivery) oil-filter and comes now in contact with the thin walls of the suction pipe. Thus, the gas-mixture sucked — in is warmed up, whereas the oil is cooled and led through a oil-controller to the crank-shaft. An oil-gauge allows the controlling the quantity of oil contained in the motor case.

IGNITION: High tension magneto-ignition with automatic ignition moment adjustment.

COOLING: By a paddle-wheel added to the fly-wheel and with effect of a forge-blow, a fresh air current is produced which is conducted by two conduits to the two cylinder heads. The cooling is so efficient that we do not require the air current produced by the driving of the car and that the motor could be kept in activity even in a resting car with its maximal load.

STARTER: The car is equipped with an electric starter; besides the crank-handle is provided for the event of electric starter being out of order.

LIGHTING: A dynamoelectric lighting outfit is provided.

CLUTCH: Dry plate multiple disc-clutch, worked with the left pedal

DRIVING GEAR: gate type of gear control: 4 forward speeds (the fourth by direct engagement) and 1 reverse speed. The gear lever is in the centre of the left of the driver.

REAR AXLE: Driving is effected by noiseless spiral bevel gear with differential. The transmission on the two rear-axles is done by means of rigid shaft without any joints because the rear axle casing is connected rigidly with the gear box by supporting tube.

SPRINGING: There is a cross spring arranged in the front. On the rear wheels the springing is done by two half elliptical springs attached by joints, both wheels being thus just equally loaded.

STEERING: Irreversible steering by screw and nut which can easily be adjusted.

BRAKES: There are two inner jaw-brakes working independently from each other, acting on the braking cylinder and on all six-wheels at once.

The foot brake working on all six wheels and the hand brake only on the four rear wheels. Thus immediately stop is assured even in the event of failure of a single part of the braking mechanism.

WHEELS AND TYRES: The car is equipped with tyres 45x14".

FUEL TANK: A Fuel tank for 10 gallons is arranged below the motor hood. The fuel is brought to the carburetter by natural slope.

The lower part of the motor case serves as oil-tank. (Capacity 1 gallon.)

EQUIPMENT: Two tyred spare-wheels, electric hooter, tachometer, motor clock, bulb-horn and all the necessary spare parts and tools.

TECHNICAL PARTICULARS:

Bore	75 mm
stroke 95 mm
capacity of cylindres	1.68 lit.
effect of motor	6-24 HP.
consumption of petrol per 100 m. p. h. about 5 gl.
consumption of oil per 100 m. p. h. about	0.91 bs.
wheel-base of the lorry	102" + 33½"
wheel base of the bus	114" + 33½"
width of track	51"
maximum length	166" rsp.177"
maximum width	59"
minimum distance between bottom of car and ground	9"
highest speed obtainable according to that type of frame and the load per hour	35 m. p. h.

The chassis described above can be made lighter with a wheel-base of 86.5" plus 32" and with tyres 27 x 4.75. The chassis of this design has 8 forward speeds and 2 reserve speeds.

The reduction gear box with two speeds mounted in a cross piece of the two rear axle casings.

Highest speed 40 m. p. h.

