

20 cubic yard capacity

Leyland Boxer *Colectomatic*



Boxer BX 1600

Engine

6354-2 heavy-duty diesel engine, six-cylinder, water-cooled, 126 bhp at 2,800 rpm. Maximum torque 274 lb/ft (376 kgm) at 1,250 rpm.

Bore	3 $\frac{7}{8}$ in	98.4 mm
Stroke	5 in	127 mm
Cubic capacity	354 in	5.8 litres
Compression ratio	16:1	
Sump capacity	24 pints	13.63 litres

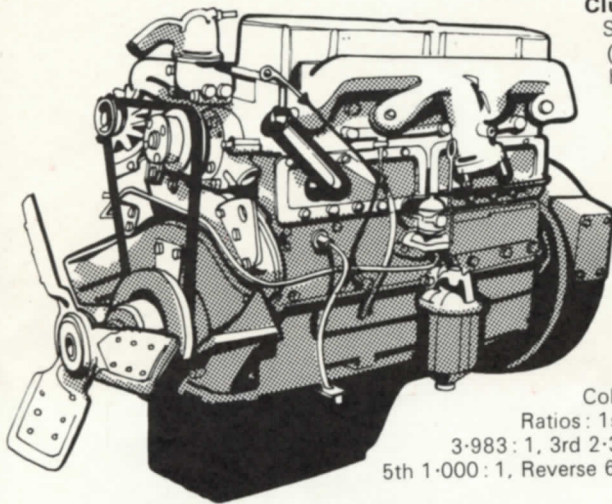
Clutch

Single dry plate, 13 in (330 mm) with hydraulic actuation.

Gearbox

Five-speed synchromesh ENV SMA475 Mk IV (direct drive) incorporating SAE side PTO facing for light-duty work and fitted with layshaft rear-mounted "full torque" PTO for operating Colectomatic equipment.

Ratios: 1st 6.923:1, 2nd 3.983:1, 3rd 2.375:1, 4th 1.469:1, 5th 1.000:1, Reverse 6.809:1.



Propeller shaft

Tubular balanced shafts with Hardy-Spicer needle roller bearing universal joints.

Chassis

Pressed steel parallel channel section side-members with Alligator-type crossmembers, all-bolted construction. Maximum depth of frame 10 in (254 mm), flanges 3.31 in (84 mm), thickness .22 in (5.6 mm). Frame width 34 in (864 mm). An extremely robust chassis frame construction.

Front axle

Heavy-duty I section beam, forged and heat treated. Hubs mounted on taper roller bearings.

Rear axle

A steel fabrication, with Maudslay pressed case and Maudslay single-speed driving head with fully-floating drive shafts and hubs. Axle ratio 6.5:1. Capacity 22,400 lb (10,160 kgs).

Steering gear

Cam and peg type, ratio 24:1. Universally-jointed steering column with

20 in dia. (508 mm) dished twin-spoke steering wheel. Power-assisted steering is standard.

Brakes

The brake circuit is a full air system employing diaphragm/piston units on the front axle, with single diaphragm spring brake units on the rear axle. The foundation brakes are Lockheed, one leading, one trailing shoe, cam operated. The total frictional area is 788 sq in (5,084 cm²). The air compressor is a Clayton type SC6.

The service brake is a split system foot operated from a dual concentric brake valve, both circuits being fully independent and fed from separate compartments in the storage reservoirs and individually protected by their own non-return valves. The secondary system operates through the lock actuator circuit. The lock actuator valve also applies the parking brake which operates on both front and rear wheels.

The system is "fail-safe" and the brakes cannot be released until the correct air pressure is attained. Air pressure gauges and an audible low-pressure buzzer warning device are fitted as standard.

Suspension

Symmetrical semi-elliptical springs front and rear. Front, 10 leaves, 54 in (1,371 mm) x 4 in (101.6 mm). Rear, 13 leaves, 58 in (1,473 mm) x 3.5 in (89 mm). Hydraulic telescopic double-acting shock absorbers on the front are fitted as standard. Rear shock absorbers, lever type, are optional.

Wheels and tyres

D22.5 tubeless tyres on all wheels are fitted as standard on 10-stud fixing one-piece disc wheels, B7.5 x 22.5, with a 6 in (152 mm) offset.

Electrical

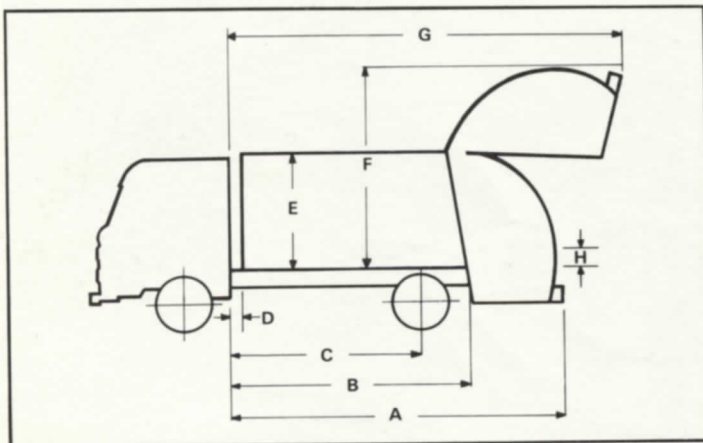
12-volt system, negative earth. Alternator, Lucas type 16ACR, with built-in control box; starter motor, M50 type, co-axial; headlamps, pre-focus double filament; combined side/flasher, stop and tail lights. All wiring to BS1862 specification. Heavy-duty battery, 12-volt, 128 ampere-hour, at 20-hour rate.

Fuel tank

Capacity 37 gallons (168 litres).

Plating data

Front axle 6 tons, rear axle 10 tons, gwv 16 tons.



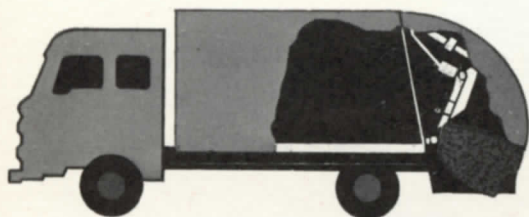
Standard Cab (three seats)

A — Length, cab to rear, tailgate closed	219 $\frac{1}{2}$ in
B — Length, cab to end of body floor	162 $\frac{1}{2}$ in
C — Cab-to-axle	120-132 in
D — Cab clearance	2 in
E — Body height above truck frame	83 in
F — Body height, tailgate raised	131 in
G — Length, cab to rear, tailgate raised	264 $\frac{1}{2}$ in
H — Truck frame to loading sill	5 in
Body width	95 $\frac{1}{2}$ in
Approximate weight (body only)	9,700 lb
Chassis weight approx. (kerbside)	9601 lb
Overall vehicle length, tailgate closed	298 in
Overall vehicle length, tailgate raised	343 in
Truck frame to ground, chassis unladen	39 in
Chassis wheelbase	162 in*

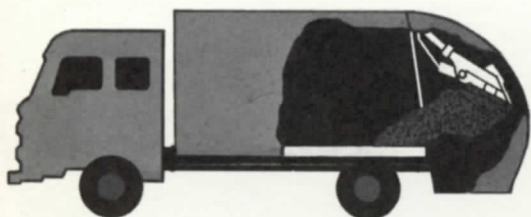
Crew Cab

9840 lb
321 in
366 in
182 in

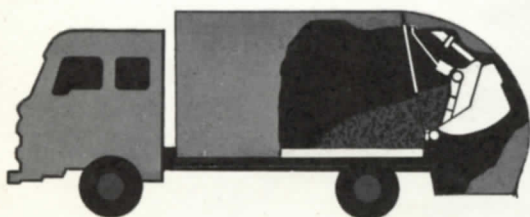
Fast, safe loading cycle speeds collection



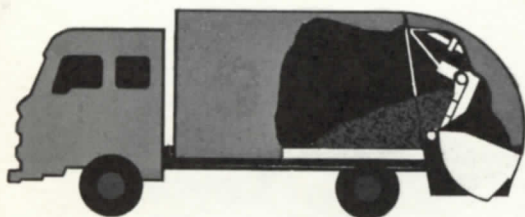
1. When hopper is full, operator pushes button to start loading cycle. Packer plate automatically moves back and upward as hopper rises.



2. Packer plate meets hopper at top position, starts to bulldoze refuse forward into body with rolling action that sweeps hopper clean.

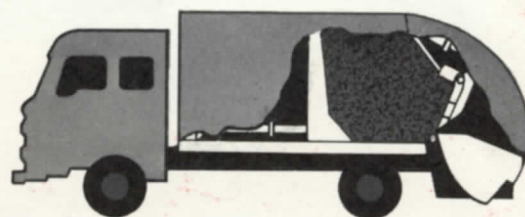


3. When packer plate reaches forward position in packing cycle, hopper returns to loading position.

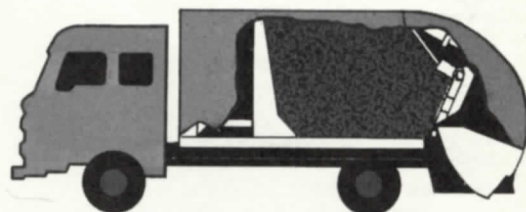


4. Hopper in loading position, the Colectomatic is ready for another load. Packer plate remains in forward position, holding refuse securely in body. Entire cycle is complete in 12 seconds!

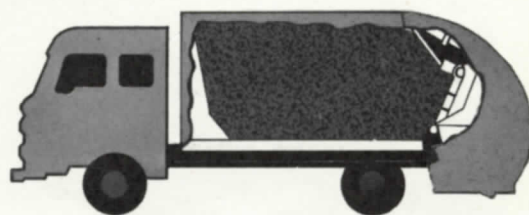
Revolutionary 'DUO-PRESS' compaction offers bigger loads



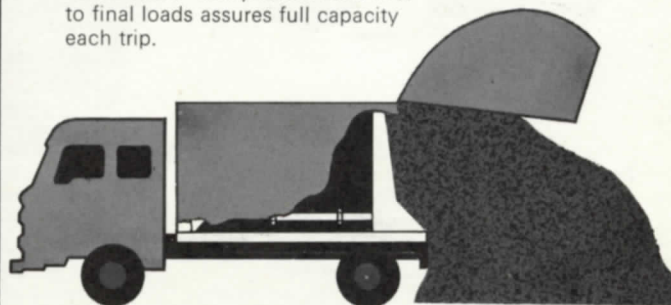
1. At start of collection route, ejection plate can be positioned at rear of body. Packer plate then forces first loads against ejection plate.



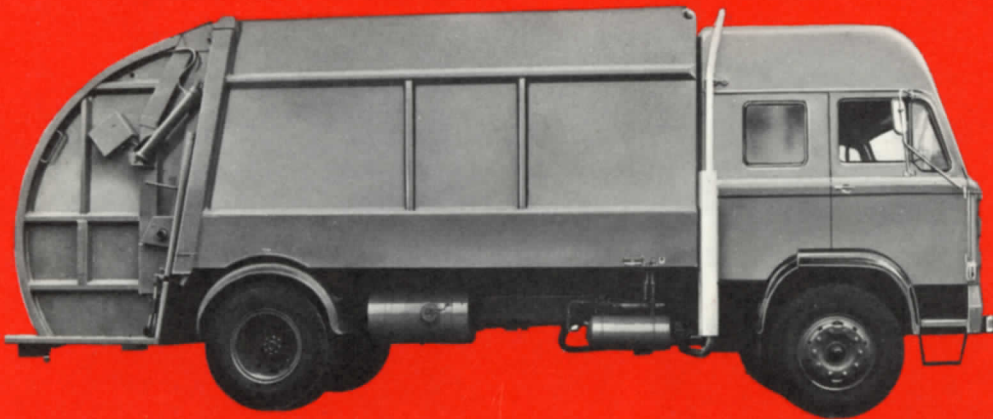
2. Compaction continues with each loading cycle, squeezing material between packer plate and ejection plate, until hydraulic relief valve allows ejection plate to move forward in body. No operator attention required.



3. With body completely full, entire load is uniformly compacted between packer and ejection plates. "Duo-Press" compaction from first to final loads assures full capacity each trip.



4. At disposal point, operator simply raises tailgate, flips ejection control — and ejection plate pushes tightly compacted load out of body, in one powerful, smooth stroke.



Tailgate and packing mechanism

are raised to expose big, wide opening during ejection cycle; can't interfere with discharge.

Waterproof seal

prevents liquids from leaking out of the load. Side and bottom closure of the tailgate is sealed; liquid can't drip out or into hopper.

Ejection controls

are placed conveniently at front of body. Operator can eject entire load swiftly, completely – return to collection route minutes faster than ordinary dumping methods permit.

Positive ejection

of tightly packed load sweeps entire body clean in seconds. With tailgate raised, powerful ejection plate bulldozes load of refuse out at rear of body.



Best for the route

The Colectomatic loads more refuse each trip – and high-pressure, exclusive "Duo-Press" compaction can be used to put a powerful, two-way squeeze on each hopperful as it enters the body, automatically compressing each load between the packer plate and the ejection plate until the body is full. No operator manipulation of ejector controls required.

Best in the workshop

Designed throughout for ease of maintenance. Service exchange scheme for major components. Factory-trained advisors.

Best at the disposal point

Raise the tailgate, flip the controls, and the Colectomatic's ejection plate bulldozes the entire load out of the body in one smooth stroke. Raised-body dumping is eliminated so there's no tendency for front wheels to leave the ground. Tailgate stays high, clear of refuse. Discharging at incinerators, clearance is no problem because the body stays down, out of the way of ceiling and doors.

The Manufacturers reserve the right to revise the specifications contained in this brochure without notice.



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