



**SERIES 15/120**

**Refuse Collector.**

**Purpose Built**

**TSR**

**Chassis**

# Chassis Specification

(Subject to alteration without notice)

**ENGINE: PERKINS SIX 354 DIESEL.** 6 cylinder, 4 stroke, direct injection. Bore 3.875 in. Stroke 5 in. Cubic capacity 354 cu. in. (5.8 litres) Develops 106 b.h.p. at 2,400 r.p.m. governed speed. **Cylinder Block and Crankcase** integrally cast in high-duty iron. Dry type, renewable, pressed in liners are fitted. **Air Cleaner:** An efficient oil-bath air cleaner is fitted on the induction manifold. **Cold Starting:** A "Thermostat" heater is fitted to the induction for easy starting.

**COOLING SYSTEM** A centrifugal water pump at front of engine is driven by a vee belt which also drives a 4-bladed fan of 18 ins. dia. and alternator.

**GEAR BOX** Assembled with engine and clutch in complete unit. Five forward speeds and one reverse. 1st- and 2nd-speed gears are wide-faced straight-toothed. The 3rd-, 4th- and 5th-speed gears have helical gears for quiet running. All gears are of case-hardened nickel-chrome steel and all forward gears except first, are in constant mesh.

<b>Ratio:</b>	1st gear	6.988 to 1	2nd gear	4.308 to 1	3rd gear	2.655 to 1
	4th gear	1.605 to 1	5th gear	Direct	Reverse	6.343 to 1

The gear change lever is turret mounted on the gear box.

**CLUTCH** 14-in. dia. dry-plate Borg & Beck with low unit pressure on linings, ball-bearing release, hydraulic operation and external lubrication.

**RADIATOR** Flat-tube type with integral tanks and concealed filler. Pressurised water system. A thermometer is provided in the instrument panel to enable driver to control water temperature.

**TRANSMISSION** Through balanced tubular propeller shafts supported by spherical centre bearing mounted on rubber bushes. Hardy Spicer heavy-duty needle-roller bearings are incorporated throughout and a sliding shaft in the rear section.

**REAR AXLE** Static load capacity at ground of 10 tons. Spiral bevel wheel and pinion of heavy construction with fully floating axle shafts. Ratio 6.83 to 1.

**FRONT AXLE** Axle bed is 'I' section alloy-steel stamping 3½ in. deep by 2½ in wide carrying stub axles 2¼ in. dia. of highest grade steel stampings with hardened swivel pins

**STEERING (Power Assisted)** Drag Link mounted power steer cylinder complete with reactive Power Steering Valve. Power Steer Pump engine driven.

**BRAKES** Air pressure hydraulic actuation. Girling wedge-type on all wheels. Front brake shoes 15½ in. dia. X 5 in. wide. Rear brake shoes 15½ in. X 6 in. wide. Total lining area 660 sq. in. Handbrake is of Power Assisted Air/Hydraulic Type with Failsafe System to meet Department of Environment Regulations. All brake are independently adjustable, the system provides maximum braking efficiency with minimum pedal pressure. Air pressure obtained by a single cylinder compressor fitted to engine.

**CHASSIS FRAME AND ENGINE MOUNTING** Manganese steel frame pressings 8½ in. deep X ¼ in. thick X 3 in. flanges. Frame and all cross-members of all bolted construction. Frame cross-members are top-hat or tubular section having a high torsional value. Gear box is removable without disturbing the gear box rear cross-member. Front tubular cross-member incorporates engine front mounting brackets which accommodate rubber sandwich mountings. Rear engine mountings incorporate conical rubber torque and vibration dampers in brackets, attached directly to main frame. The chassis frame is flitched 2¼ in. X ¾ in. top and bottom.

**ROAD SPRINGS** semi-elliptic front and rear. Front and rear springs 48 in. centres X 3 in. wide. All spring leaves are shot peened on tension side. Spring deflection in conjunction with rubber spring aids to ensure a comfortable ride under all loading conditions and reduced roll to an absolute minimum. Springs mounted on hardened pins fitted with lubrication nipples.

**FUEL TANK** 16 Imperial gallons capacity attached to chassis frame on the offside

**WHEELS AND TYRES** Pressed steel disc three-piece type wheels. Rim size 7.0 X 20. Rim offset 6 in. 8 wheel studs 7/8 in. dia. Tyres 9.00 X 20 X 14 ply. Spare wheel carrier fitted to the nearside of chassis.

**ELECTRICAL SYSTEM** 12-volt negative earth voltage control system. Axial type starter motor. Alternator 25 amp. max. continuous output with low cut-in speed. Two 6-volt batteries 120 amp./hr. capacity, the batteries being located on the offside of the chassis and fitted with a hinged guard cover. Two flat-beam dipping headlamps built into panel. Two side lamps and flashing direction indicators front and rear, twin stop/tail lamps and reflectors. Electric horn and twin windscreens wipers.

**INSTRUMENT PANEL** Built into fascia board and removable for adjustment and maintenance. Speedometer with milage recorder, oil-pressure gauge, air-pressure gauge, ammeter, water temperature gauge, switches for lights and starter. Horn, flashing indicator switch and dipper on separate arm secured to steering column.

**FRONT BUMPER** A heavy-duty front bumper is securely bolted to the chassis and so arranged that it can be removed.

**TOWING EYES** Two brackets are provided on front of chassis, and bolted direct to and in line with chassis frame.

**CHASSIS LUBRICATION** by grouped nipple system and oil-gun nipples. A.C.L. or Airdromic automatic chassis lubrication also available.

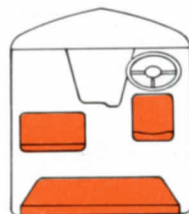
# Cab Specification

The TSR chassis offers comfortable accommodation for crew members in a flexibly mounted composite fibre-glass and coach-built cab with steel non-slip floor.

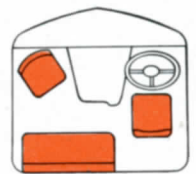
Seating accommodation: Four door cab model; driver and six loaders. Two door model: driver and four loaders.

All models fitted with interior light twin wind-screen wipers and washers, heater and demister; twin rear view mirrors is standard equipment.

Options include hand washing equipment and cab salvage rack.

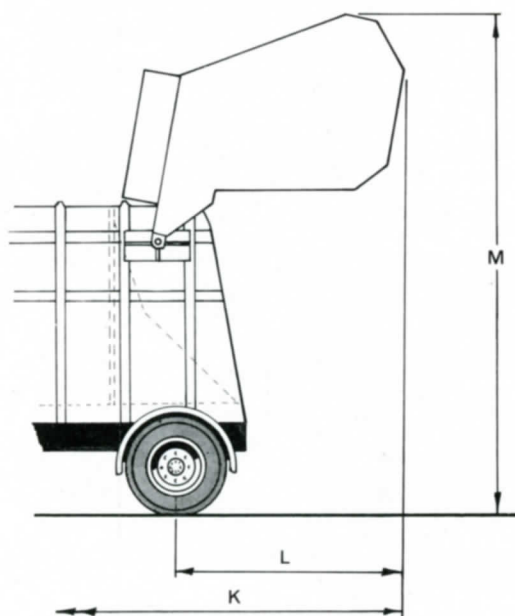
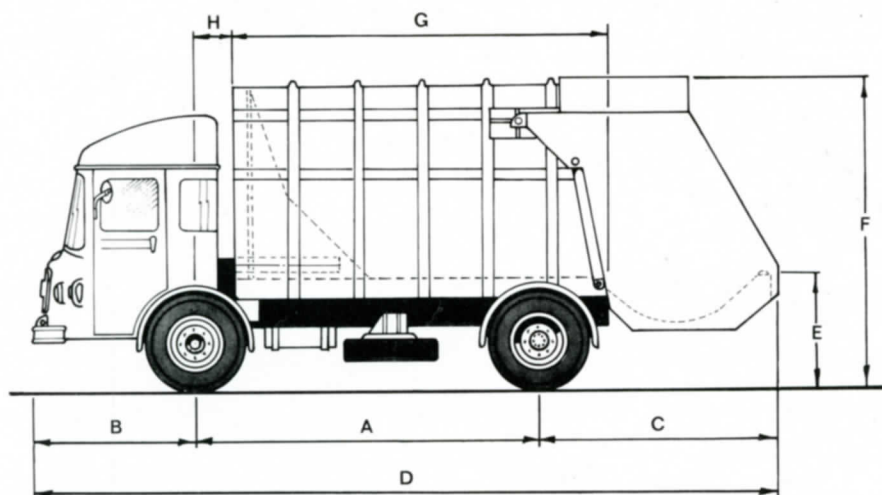


4 Door model



2 Door model

## General Data (2 door model)



	ft.	in.	mm
A Wheelbase	11	9	3581
B Front overhang	5	3	1600
C Rear overhang	8	2	2489
D Overall length	25	2	7670
E Rave height	4	0	1219
F Overall height	10	10	3302
G Body length	12	8	3860
H Body front to front axle	1	4	0465
K Overall length	25	2	7670
L Rear overhang	8	2	2489
M Overall height	17	0	5181
Overall width	7	10	2387
Body inside width	6	10	2082
Body inside height	6	8	2032
Ground clearance under axle	0	9	0228
Turning circle to outer tyre	46	0	14,020
Swept turning circle	49	0	14,935
Body air space	15	cu. yds.	11.4 cu. m

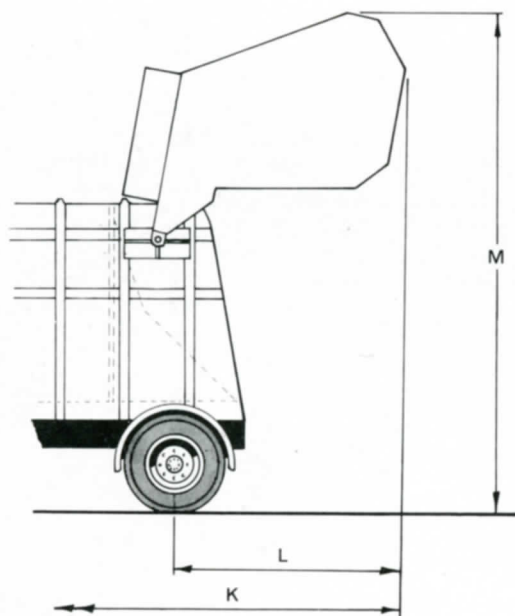
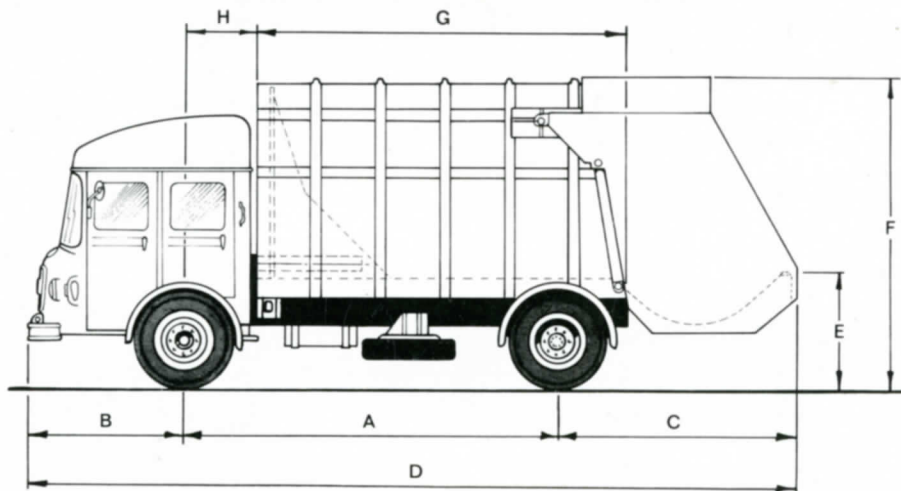


**TSR model with**

**Power Assisted Steering for greater  
Efficiency and ease of Operation**



## General Data (4 door model)



	ft.	in.	mm
A Wheel base	12	10	3911
B Front overhang	5	3	1600
C Rear overhang	8	2	2489
D Overall length	26	3	8001
E Rave height	4	0	1219
F Overall height	10	10	3302
G Body length	12	8	3860
H Body front to front axle	2	6	0762
K Overall length	26	3	8001
L Rear overhang	8	2	2489
M Overall height	17	0	5181
Overall width	7	10	2387
Body inside width	6	10	2082
Body inside height	6	8	2032
Ground clearance under axle	0	9	0228
Turning circle to outer tyre	50	0	15,240
Swept turning Circle	53	0	16,159
Body air space	15	cu. ft.	11.4 cu. m

### Plated loads—all models

	Tons	Kg
Front axle	4.25	4318
Rear Axle	10	10,160

	Tons	Kg
Gross vehicle weight	14.00	14,229
Unladen weight	8.00	8,128

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