



AVELING-BARFORD

SN35 35 TON DUMP TRUCK

AUTOLIT



Automobile - Truck - Motorcycle 1900 to Present
ORIGINAL Sales Brochures, Manuals, Books, Posters,
Catalogs, and MUCH More. World's largest selection!

SN35 specification

ENGINE—Choice of

General Motors 12V-71 N 65 twelve-cylinder vee-form 2 stroke diesel engine; 476 b.h.p. at 2,100 r.p.m.; bore 4½" (116 mm) stroke 5" (127 mm) giving displacement of 851.2 cu. ins. (13,960 c.c.) Maximum torque 1,300 lb. ft. (179.7 kgm.) at 1,300 r.p.m. Alternator fitted, ACS24 CAV.

or
Rolls-Royce C8TF1 eight-cylinder turbo-charged diesel engine; 450 b.h.p. at 2,100 r.p.m.; bore 5½" (130 mm) stroke 6" (152 mm) giving displacement of 990 cu. ins. (16,222 c.c.) Maximum torque 1,200 lb. ft. (165.5 kgm.) at 1,050 r.p.m. Alternator fitted, ACS24 CAV.

ELECTRICAL SYSTEM

24 volt system (Neg. earth) 4 x 6-volt batteries, 222 amp. hr. capacity (20 hr. rating).

AIR FILTRATION

"Rotopanic" two stage dry type air cleaner.

STANDARD TRANSMISSION

CLUTCH (General Motors engine)

Borg and Beck 17" (432 mm.) dia. twin dry plate type. Air assisted. Total surface area 636 sq. ins. (4,100 cm²).

CLUTCH (Rolls-Royce engine)

Borg and Beck 18" (457 mm.) dia. twin dry plate type 18/508. Air-assisted. Total surface area 620 sq. ins. (4,000 cm²).

GEARBOX (Mechanical)

Providing six forward speeds and one reverse under control of one hand lever. All gears, except reverse, are in constant mesh, helical with sliding dog engagement. Gears are of case-hardened alloy steel. Specially designed for off-highway operation, the gearbox is remotely mounted for easy removal and access to clutch for servicing.

GEARBOX RATIOS

Gear	Ratio	ROAD SPEEDS	
		M.P.H.	K.P.H.
1st	3.285 : 1	3.8	6.2
2nd	3.28 : 1	6.1	9.8
3rd	2.175 : 1	9.2	14.8
4th	1.68 : 1	13.5	21.7
5th	1.0 : 1	20.0	32.7
6th	.694 : 1	30.0	48.2
Reverse	4.725 : 1	4.23	6.8

OPTIONAL TRANSMISSION

Allison Torqmatic CL8T 5060. Full torque shifting transmission incorporating hydraulic torque converter with lock-up clutch and Torqmatic brake. Power shift gearbox having six forward speeds and one reverse speed.

TORQUE CONVERTER — T.C.590. Single stage.

RATIO — 2.5 : 1.

GEARBOX RATIOS

Gear	Ratio	ROAD SPEEDS	
		M.P.H.	K.P.H.
1st	4.0 : 1	9	14.5
2nd	2.68 : 1	13.5	21.7
3rd	2.01 : 1	18	28.9
4th	1.35 : 1	27	43.3
5th	1.0 : 1	36	57.9
6th	.67 : 1	54	86.8
Reverse	5.12 : 1	3.0	4.8

REAR AXLE

Extra heavy-duty specially developed for arduous "off-highway" duty. Fully floating half shafts, spiral bevel differential, and planetary reduction gear in road wheel hubs. Cast steel housing is mounted semi-rigidly to chassis through eight shock springs on the mounting bolts.

RATIOS:	Spiral bevel differential	3.70 : 1
	Planetary gears	4.84 : 1
	Total	18.28 : 1

FRONT AXLE

Straight bed, forged alloy steel, "I" section. Mounted to chassis by longitudinal semi-elliptical springs bearing on curved spring pads and contained by longitudinal, slotted, rubber-bushed radius rods.

HUB MOUNTING—Taper roller bearings

Inner bearing—4½" (116 mm.) dia.

Outer bearing—3½" (89 mm.) dia.

BRAKES

SERVICE AND PARKING

All wheel brakes are air-actuated through diaphragm type chambers which incorporate "Fail Safe" spring brake arrangement.

Contained in a separate chamber attached to each diaphragm chamber, is an extremely powerful coil spring which is held compressed by air pressure in the braking system. If the air pressure falls below 30 p.s.i. (2.1 kg/cm²) the brakes are automatically applied by the springs, thus providing full four-wheel "Fail Safe" braking. A second protected air reservoir in the system provides an emergency air supply to release the brakes to allow the machine to be moved to a service area. In the event of a complete failure of the air system, the brakes can be released manually by an adjusting nut at the rear of each chamber.

For parking, operation of a small valve located in the cab, exhausts air from the spring chamber, thus applying the brakes.

Two 30 in. (762 mm.) chambers fitted to front brakes.

Two 38 in. (974 mm.) chambers fitted to rear brakes.

Brake sizes:

Front—19½" x 7" (495 x 178 mm.)

Rear—18½" x 8" (465 x 203 mm.)

TORQMATIC RETARDER

Available only when Allison Transmission fitted.

EXHAUST BRAKE

Available only with Rolls-Royce engine and standard transmission.

TYRES

STEERING—16.00 x 25—28 ply standard.
16.00 x 25—32-ply—optional.

DRIVING—18.00 x 25—32 ply.

RIMS—13.00 x 25.

Various tread patterns and Premium Tread tyres available. Tubeless tyres also available.

STEERING

"Rass" power steering with twin rams.

Turning radius 30 ft. (9144 mm.).

AUTOLIT



Automobile - Truck - Motorcycle 1900 to Present
ORIGINAL Sales Brochures, Manuals, Books, Posters,
Catalogs, and MUCH More. World's largest selection!