

RATINGS

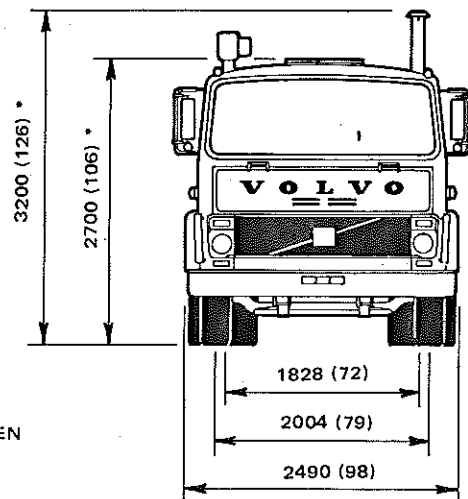
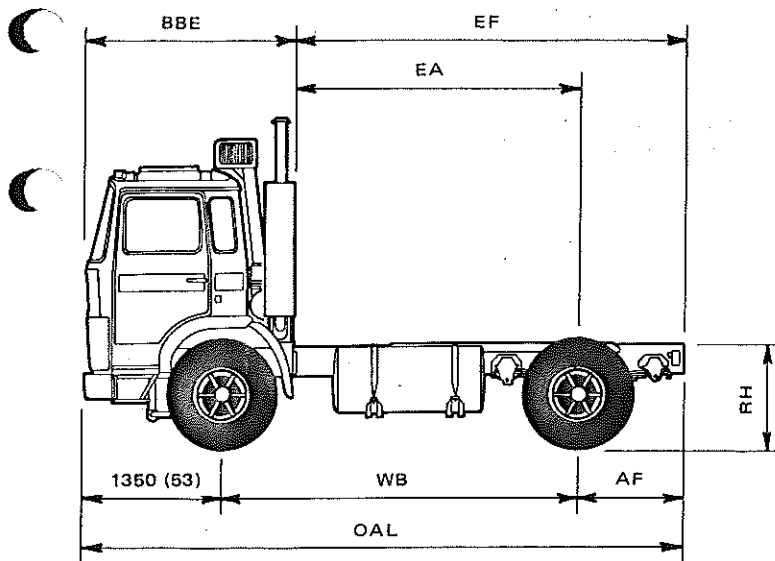
GROSS VEHICLE MASS (GVM) – TONNES (lbs)

	STANDARD G.V.M.		Alt. G.V.M.	
	14.12.	(31,114)	14.61	(32184)
FRONT AXLE	FAT 6.5	6.50	(14320)	
FRONT TYRES	10.00-20 14 ply	5.48 12080	11.00-20 14 ply	5.97 (13150)
RATING-FRONT	5.48	(12080)	5.97	(13150)
REAR AXLE	RAEV 85	10.0	(22000)	
REAR TYRES	10.00-20 12 ply	8.64	(19034)	
RATING REAR		8.64	(19034)	

GROSS COMBINATION MASS (GCM)

Gearbox MT653 32.0 tonnes (70528 lbs)

R52 32.0 tonnes (70528)



*UNLADEN

CHASSIS DIMENSIONS MM (inch)

WB	Wheelbase	3400 (134)	5200 (205)
BBE	Bumper Back of exhaust	2017 (80)	2017 (80)
EA	Back of exhaust to centre of bogle	2733 (108)	4533 (178)
EF	Back of exhaust to end of frame	3743 (147)	6681 (263)
AF	Rear Overhang	1010 (40)	2148 (85)
OAL	Overall length	5760 (227)	8698 (342)
RH	Height at centre bogle –	Laden	988 (39)
		Unladen	1110 (44)
Turning circle kerb to kerb		12100 (40 ft.)	17600 (58 ft.)

Note RH to top of turntable subframe for WB-3400
RH laden figure includes tyre deflection (est)

CHASSIS WEIGHTS KG (lb)

Front axle	3540 (7802)	3510 (7736)
Rear axle	1580 (3482)	2060 (4540)
Total chassis weight	5120 (11284)	5570 (12276)

Note Chassis weight includes: R52 gearbox RAEV 85, 10.00-20 tyres, oil, water, tools but no fuel or spare wheel.

OPTIONAL ALTERNATIVE/EQUIPMENT KG (lb)

		Front	Rear	Total
Fuel Tanks (Full)	3400	152	171	323
	5200	213	110	323
Power Take-off		+10	–	10
Rear Mudguards (8000 list 89755)	–	–	40	40
MT653 Gearbox		10	–	10

STANDARD EQUIPMENT

ENGINE -- TD70F

Six cylinder four stroke direct injection turbo-charged diesel engine fitted with exhaust pressure regulator, air charge intercooler.

Gross Power:
174 kw @ 2400 rpm
(230 BHP)

Gross Torque:
825 Nm @ 1400 rpm
(610 ft. lbf)

Net Power:
162 kw @ 2400 rpm
(220 BHP)

Net Torque:
800 Nm @ 1400 rpm
(592 ft. lbf)

Gross Output according to:-
BSAU 141a, ISO 2534, SAE J270
Net Output according to:-
BSAU 141a, ISO 1585, SAE J270 DIN 70020
part 6 1976

Capacity: 6.7 litres (408 cu. ins.)
Bore: 104.77 mm (4.12 ins.)
Stroke: 130 mm (5.12 ins.)
Compression Ratio: 14.5:1
Oil Capacity: 19 litres (4.19 imp. gals.)
Cooling System Capacity: 31 litres (6.83 imp. gals.)

Exhaust: Single outlet vertical silencer mounted on left side.
Air Cleaner: Dry element type with cyclone pre-cleaner and high restriction indicator.

CLUTCH -- KF214C

350 mm (14 in.) dia. twin dry plate with torsion dampening springs.
Hydraulic clutch control with air servo operation.
Total Area: 2650 sq. cm (412 sq. ins.)

GEARBOX -- R52

8 speed fully synchromesh range change gearbox.
Oil Capacity: 8.81 (1.94 imp. gals.)
Ratios:

1st	10.18
2nd	7.02
3rd	5.03
4th	3.78
5th	2.69
6th	1.86
7th	1.33
8th	1.00
Reverse	10.01

AXLE -- FRONT

Drop forged I-Beam
Capacity: 6500 kg (14,320 lbs)

AXLE REAR -- RAEV85

Single reduction hypoid bevel and helical geared differential with air operated difflock.
Ratios: 4.25
4.86
Capacity: 13,000 kg (28,652 lbs)
Oil Capacity:
13 litres (2.9 imp. gals.)

SUSPENSION -- FRONT FFJ-P2

Parabolic leaf springs with double acting hydraulic shock absorbers and hollow rubber springs. Anti-roll stabilizer bar.
Length: 1780 mm
Width: 100 mm
No. of leaves: 3

SUSPENSION REAR BFJ-K1 (3,400 w'base)

Semi-elliptical conventional leaf spring.
Length: 1410 mm (55.5 ins.)
Width: 100 mm (3.94 ins.)
No. of leaves: 9
Capacity: 10,000 kg (22,000 lbs)

SUSPENSION REAR BFJ-K1D (HB 5200)

Semi-elliptical conventional leaf spring with helper spring.
Length: main 1760 mm (69.3 ins.)
helper 1300 mm (51.2 ins.)
Width: 100 mm (3.94 ins.)
Capacity: 10,000 kg (22,000 lbs)

FRAME -- RAM 8 (3,400 w'base)

Pressed channel section of high tensile steel with cold riveted crossmembers 'L' section turntable mounting members fitted.
Frame Width: 800 mm (31.5 ins.)
Web Height: 273 mm (10.75 ins.)
Flange Width: 85 mm (3.35 ins.)
Thickness: 6 mm (0.25 ins.)
Aluminium bumper bar.

FRAME -- RAM 3 (5,200 w'base)

Steel rolled channel section with cold riveted crossmembers.
Frame Width: 800 mm (31.5 ins.)
Web Height: 273 mm (10.75 ins.)
Web Thickness: 7 mm (0.27 ins.)
Flange Width: 85 mm (3.35 ins.)
Flange Thickness: 13 mm (0.50 ins.)
Aluminium bumper bar.

STEERING

Fully integral power steering recirculating ball and nut.
Steering Wheel dia: 500 mm (20 ins.)
Ratio: 18.6:1
Turns lock to lock: 4.2 (approx.)
Front wheel steering lock angle, inner wheel : 50°

BRAKES

Service: Compressed air with separate circuits for front and driving wheels. Hand control for trailer brakes.
Parking: Air operated spring brakes operating on drive axle.
Exhaust: Electro-pneumatic operated by foot switch.
Brake Size:
Front 413 x 152 mm (16.25 x 6.0 ins.)
Rear 394 x 203 mm (15.5 x 8.0 ins.)
Brake Area:
Front 2415 cm² (374 in²)
Rear 3050 cm² (472 in²)
Total 5465 cm² (846 in²)
Compressor: Tufflo 501 Capacity 250 l/min (8.80 cfm) at 2100 engine rpm and back pressure of 7 kg/cm² (103 psi)
Reservoir Capacity: 4 x 30 litre
Total 120 litres (4.23 cu. ft.)

CAB

Construction: All steel safety cab with hydraulic tilt to 52°. Cab mounted on rubber bushes at front and on coil springs and shock absorbers at rear. Full sound and thermal insulation.

Equipment: Fully sprung driver's and passenger's seat, electrically operated two speed wipers with three arms and intermittent switch, halogen head lamps, 5 roof marker lights, twin air horns, roof hatch. Fire extinguisher.

Heating & Cooling: Thermostatically controlled heater and demister. (Integrated air conditioning optional).

Instrumentation: Speedometer, tachometer, water temperature gauge, voltmeter, engine oil

and air pressure gauges, fuel level gauge. Warning lamps for high water temp, low water level, low oil pressure, low air pressure, battery charging, starter element, cab lock, differential lock, blocked air cleaner, high beam, park brake, gearbox overdrive and direction indicator.

Finish: Choice of four colours, crystal white, Volvo red, Chrome yellow, Powder beige.

ELECTRICAL

24 volt starting and lighting with insulated return system with corrosion resistant plug-connectors outside cab. Four 12 volt battery and isolation switch.

Alternator: 1300 w
Battery Capacity: 4 x 62 Ahr
Starter Motor: 4 kw

FUEL SYSTEM

Single 622 mm dia. (24.5 ins.) aluminium tank of 390 litres (86 imp. gals.) capacity. Mounted on left side.

PROPELLOR SHAFT

1600 series

WHEELS AND TYRES

Six spoke American Spider hubs with demountable rims. 7 off tyres supplied.

Rim Size: 7.50 x 20
Tyre Size: 10.00 x 20 - 14 ply front
10.00 x 20 - 12 ply rear
10.00 x 20 - 14 ply spare

Spare wheel and tyre.

OPTIONAL EQUIPMENT

CAB

Air Conditioning	89770
Cab Fan	89812
Radio	89771
External Sunvisor	89772
Tachograph	89775
Windscreen Stoneguard	89810

GEARBOX -- MT653

Automatic Transmission with torque converter
Automatic lock-up on two highest speeds.
Oil Capacity: 16.5 litres (3.63 imp. gals.)
Ratios:

1st	8.04
2nd	3.58
3rd	2.09
4th	1.39
5th	1.00
Reverse	

Torque Amplification at Stall = 1.86

POWER TAKE-OFF

R52
Rear 8KU 5048 (89779)
MT653 Side SKMT095 (89778)
All P.T.O.s are compressed air operated from cab.

MISCELLANEOUS

Rear Axle Mudguards	89756
Tubeless Tyres & Rims	
Michelin Rims	89758
Firestone Rims	89759
McKay Rims	89780
Trailer Air and Electric (Prime mover only)	
- Pogo stick - coiled hose	89799
- Pogo stick - rubber hose	89800
- Turntable mounted	89801
Turntable Kits:	
Malco	89793
York Big D	89792
Franklin Ballrace	89794
Optional 5.43 rear axle ratio.	
Additional 275L Fuel Tank	89832

VOLVO AUSTRALIA PTY. LTD.
TRUCK DIV. MOOREBANK 2170 NSW

The factory reserves the right to modify design, specifications and optional equipment specified herein without prior notification.

Metric and Imperial dimensions are equivalent within implied limit.

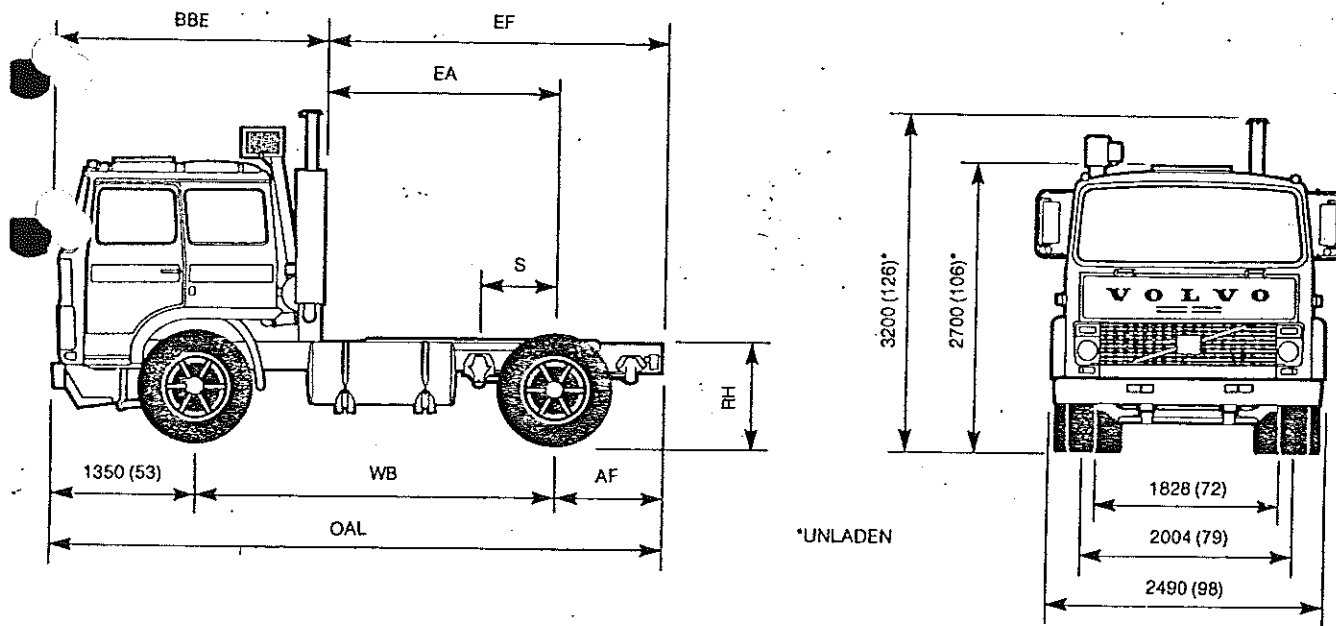
RATINGS

GROSS VEHICLE MASS (GVM) — TONNES (lbs)

	STANDARD G.V.M.		All. G.V.M.	
	14 12	(31,120)	14 90	(32,840)
FRONT AXLE	FAT 65		65	
FRONT TYRES	10 00x20 14-ply	5.48 (12,078)	11R 22.5 TUBELESS	5.83 (12,849)
RATING — FRONT	5.48 (12,078)		5.83 (12,849)	
REAR AXLE	RAEV 85		10.0	
REAR TYRES	10 00x20 12 ply	8.64 (19,043)	11R-22.5 TUBELESS	10.5 (23,142)
RATING — REAR	8.64 (19,043)		10.0 (22,000)	

GROSS COMBINATION MASS (GCM)
Gearbox MT653 32.0 tonnes (70,528 lbs)
R52, SR62 36.5 tonnes (80,446 lbs)

9.27



CHASSIS DIMENSIONS MM (Inch)

Wheelbase	3400 (134)	5200 (205)
BBE Bumper Back of exhaust	2614 (103)	2614 (103)
EA Back of exhaust to centre of bogie	2136 (84)	3936 (155)
EF Back of exhaust to end of frame	3146 (124)	6084 (240)
A Rear Overhang	1010 (40)	2148 (85)
Overall length	5760 (227)	8698 (342)
RH Height at centre bogie — Laden	982 (38)	998 (39)
— Unladen	1109 (43)	1116 (44)
Turning Circle kerb to kerb	12900 (42.3 ft.)	16600 (54.5 ft.)

Note RH to top of turntable subframe for WB-3400
RH laden figure includes tyre deflection (est).

S = Centre of Axle to load centre of gravity. This calculation is dependant on individual truck tare weight; after optional equipment is fitted and fuel tanks to maximum capacity. This figure should always be calculated in acc. with the salesman's manual.

CHASSIS WEIGHTS KG (lbs)*

Front Axle	3640 (8022)	3760 (8287)
Rear Axle	1725 (3802)	1965 (4331)
Total chassis weight	5365 (11824)	5725 (12618)

Note Chassis weight includes R52 gearbox, RAEV 85, 10.00-20 tyres, oil and water, but no fuel or spare wheel.

OPTIONAL ALTERNATIVE/EQUIPMENT KG (lb)

		Front	Rear	Total
Fuel Tanks (Full)	3400	+155 (341)	+168 (370)	+323 (711)
	5200	+213 (469)	+110 (242)	+323 (711)
Power Take-off		+10 (22)	—	+10 (22)
MT653 Gearbox		+10 (22)	—	+10 (22)
SR62		+110 (243)	+55 (121)	+165 (364)

*Tare weights shown are approximate

STANDARD EQUIPMENT

ENGINE — TD70F

Six cylinder four stroke direct injection turbo-charged diesel engine fitted with exhaust pressure regulator, air charge intercooler.

Gross Power:

174 kw @ 2400 rpm
(236 HP metric)

Gross Torque:

825 Nm @ 1400 rpm
(610 ft. lbf)

Net Power:

162 kw @ 2400 rpm
(220 HP metric)

Net Torque:

800 Nm @ 1400 rpm
(592 ft. lbf)

Gross Output according to:—

BSAU 141a, ISO 2534, SAE J270

Net Output according to:—

BSAU 141a, ISO 1585, SAE J270 DIN 70020

part 6 1976

Economy speed range 1300-2100 rpm

Capacity: 6.7 litres (408 cu. ins.)

Bore: 104.77 mm (4.12 ins.)

Stroke: 130mm (5.12 ins.)

Compression Ratio: 14.5:1

Oil Capacity: 21 litres (4.6 imp. gals.)

Cooling System Capacity: 31 litres (6.83 imp. gls.)

Exhaust: Single outlet vertical silencer mounted on left side.

Air Cleaner: Dry element type with safety element and cyclone pre-cleaner and high restriction indicator.

CLUTCH — KF214C R52

CLUTCH — KF214F SR62

356 mm (14 in.) dia. twin dry plate with torsion dampening springs.

Hydraulic clutch control with air servo operation.

Total Area: 2650 sq. cm (412 sq. ins.)

GEARBOX — R52

8 speed fully synchromesh range change gearbox.

Oil Capacity: 8.8 litres (1.94 imp. gals.)

Ratios:	1st	10.18
	2nd	7.02
	3rd	5.03
	4th	3.78
	5th	2.69
	6th	1.86
	7th	1.33
	8th	1.00
	Reverse	10.01

OPTIONAL GEARBOX — SR62

8 speed fully synchromesh range change gearbox with splitter to give 16 forward speeds. Pre-selection air operated splitter control.

Oil Capacity: 14.7 litre (3.2 imp. gals.)

Ratios:	1st	11.22/9.46
	2nd	7.84/6.61
	3rd	5.50/4.64
	4th	3.93/3.31
	5th	2.86/2.41
	6th	2.00/1.68
	7th	1.40/1.18
	8th	1.00/0.84
	Reverse	10.29/8.67

OPTIONAL GEARBOX — MT653

Automatic Transmission with torque converter
Automatic lock up on two highest speeds.

Oil Capacity: 22.5 litres (4.95 imp. gals.)

Ratios:	1st	8.04
	2nd	3.58
	3rd	2.09
	4th	1.39
	5th	1.00
	Reverse	5.67

Torque Amplification at Stall = 1.86

Fitted with oil cooler and filter.

AXLE — FRONT

Drop forged I Beam

Capacity: 6500 kg (14,326 lbs.)

AXLE — REAR — RAEV85

Single reduction hypoid bevel and helical geared differential with air operated difflock.

Ratios: 4.25:1, 4.63:1
(5.43:1 Opt.)

Capacity: 13,000 kg (28,652 lbs.)

Oil Capacity: 13 litres (2.9 imp. gls.)

SUSPENSION — FRONT FFJ—P2

Parabolic leaf springs with double acting hydraulic shock absorbers and hollow rubber springs. Anti-roll stabilizer bar.

Length: 1780 mm

Width: 100 mm

No. of leaves: 3

SUSPENSION — REAR BFJ—K1 (3400 w'base)

Semi-elliptical conventional leaf spring.

Length: 1410 mm (55.5 ins.)

Width: 100 mm (3.94 ins.)

No. of leaves: 9

Capacity: 10,000 kg (22,000 lbs.)

SUSPENSION REAR BFJ—K1D (5200 w'base)

Semi-elliptical conventional leaf spring with helper spring.

Length: main 1760 mm (69.3 ins.)
helper 1300 mm (51.2 ins.)

Width: 100 mm (3.94 ins.)

Capacity: 10,000 kg (22,000 lbs.)

FRAME — RAM 8 (3400 w'base)

Pressed channel section of high tensile steel with cold riveted crossmembers 'L' section turntable mounting members fitted.

Frame Width: 800 mm (31.5 ins.)

Web Height: 273 mm (10.75 ins.)

Flange Width: 85 mm (3.35 ins.)

Thickness: 6 mm (0.25 ins.)

Aluminium bumper bar.

FRAME — RAM 3 (5200 w'base)

Steel rolled channel section with cold riveted crossmembers.

Frame Width: 800 mm (31.5 ins.)

Web Height: 273 mm (10.75 ins.)

Web Thickness: 7 mm (0.28 ins.)

Flange Width: 85 mm (3.35 ins.)

Flange Thickness: 13 mm (0.51 ins.)

Aluminium bumper bar.

STEERING

Fully integral power steering recirculating ball and nut.

Steering Wheel dia: 500 mm (20 ins.)

Ratio: 18.6:1

Turns lock to lock: 4.2 (approx)

Front wheel steering lock angle, inner wheel: 50°

BRAKES

Service: Compressed air with separate circuits for front driving wheels.

Hand Control for trailer brakes.

Parking: Air operated spring brakes operating on drive axle.

Exhaust: Electro-pneumatic operated by foot switch.

Brake Size:

Front 413 x 152 mm (16.25 x 6.0 ins.)

Rear 394 x 203 mm (15.5 x 8.0 ins.)

Brake Area:

Front 2415 cm² (374 in²)

Rear 3050 cm² (472 in²)

Total 5465 cm² (846 in²)

Compressor:

Tuffo: 501

Capacity: 250 lit /min (8.80 cfm) at 2000 rpm

Pressure: 7 kg/cm² (100 psi)

Working Pressure: 6.5-7.9 kg/cm² (93-112 psi)

Reservoir Capacity: 4 x 30 litre

Total 120 litres (4.23 cu. ft.)

CAB

Construction: All steel safety cab with hydraulic lift to 52°. Cab mounted on rubber bushes at front and on coil springs and shock absorbers at rear. Full sound and thermal insulation.

Equipment: Fully sprung driver's and fixed passenger's seat; electrically operated two speed wipers with three arms and intermittent switch, halogen head lamps, 5 roof marker lights, single air horn, roof hatch, Fire extinguisher.

Heating & Cooling: Thermostatically controlled heater and demister. (Integrated air conditioning optional.)

Instrumentation: Speedometer, tachometer, water temperature gauge, voltmeter, engine oil and air pressure gauges, fuel level gauge. Warning lamps for high water temp; low water level, low oil pressure; low air pressure; battery charging; starter element; cab lock; differential lock; blocked air cleaner; high beam; park brake; gearbox overdrive and direction indicator.

Finish: Choice of five colours. Crystal white, Volvo red, Chrome yellow, Arnhem ivory, Soft blue.

Chassis Colour: Brown.

ELECTRICAL

24 volt starting and lighting with insulated return system with corrosion resistant plug-in connectors outside cab. Four 61 Ahr 12 volt batteries and isolation switch.

Alternator: 1300 w

Battery Capacity: 122 Ahr (at 24 volts)

Starter Motor: 4 kw (5.3 hp)

FUEL SYSTEM

Single 622 mm dia. (24.5 ins.) aluminium tank of 390 litres (86 imp. gls.) capacity. Mounted on left side.

PROPELLOR SHAFT

1600 series. (Teflon coated splines.)

WHEELS AND TYRES

Six spoke American Spider hubs with de-mountable rims. 7 off tyres supplied.

Rim Size: 7.50 x 20

Tyre Size: 10.00 x 20 — 14 ply front

10.00 x 20 — 12 ply rear

10.00 x 20 — 14 ply spare

WHEELS AND TYRES — ALTERNATIVE

Six spoke American Spider hubs with demountable rims. 7 off tyres supplied.

Rim Size: 8.25 x 22.5

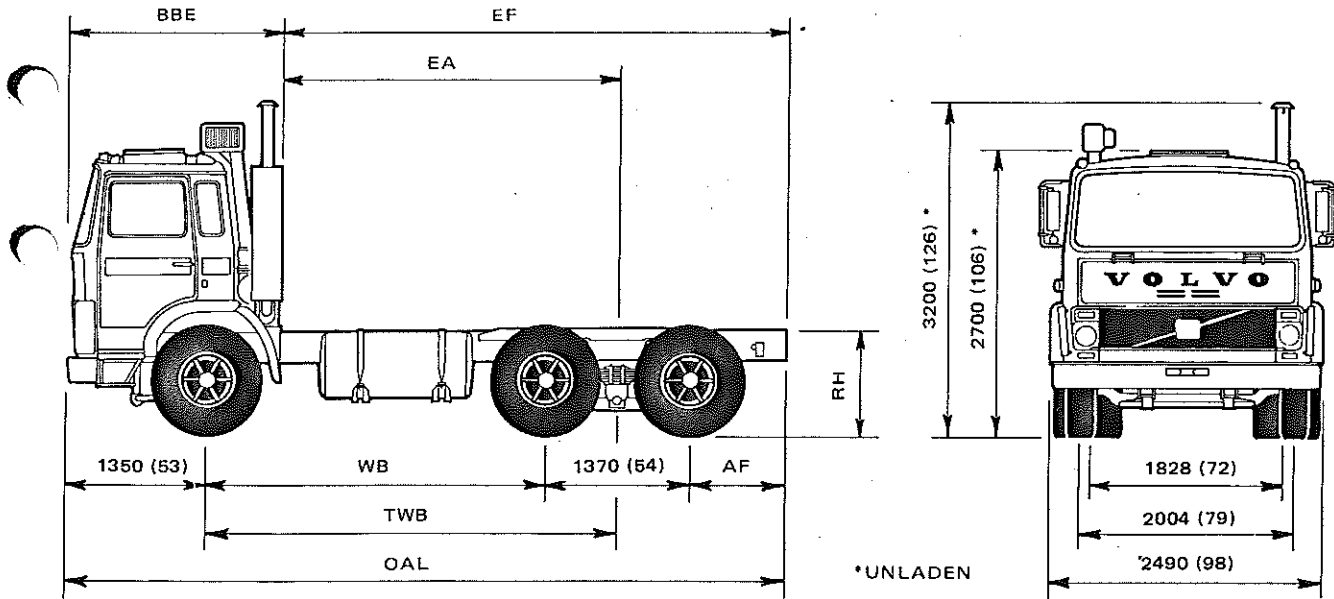
Tyre Size: 11R-22.5 — 16 ply (front, rear, spare)

RATINGS

GROSS VEHICLE MASS (GVM) – TONNES (lbs)

	STANDARD G.V.M.		Alt. G.V.M.	
	22.72	(50,080)	23.21	(51,154)
FRONT AXLE	FAT 6.5	6.50		(14,320)
FRONT TYRES	10.00x20 14-ply	5.48 (12,080)	11.00x20 14-ply	5.97 (13,150)
RATING-FRONT	5.48	(12,080)	5.97	(13,154)
REAR AXLE	SP40	18.16		(40,000)
SUSPENSION	UA380	17.24		(38,000)
REAR TYRES	10.00x20 - 12 ply	17.28		(38,080)
RATING-REAR		17.24		(38,000)

GROSS COMBINATION MASS (GCM)
 Gearbox MT653 32.0 tonnes (70,528 lbs)
 SR62 36.5 tonnes (80,446)



CHASSIS DIMENSIONS MM (inch)

Code	Description	3200 (126)	3600 (142)	4800 (189)
WB	Wheelbase	3200 (126)	3600 (142)	4800 (189)
TWB	Theoretical Wheelbase	3885 (153)	4285 (169)	5485 (216)
BBE	Bumper Back of exhaust	2017 (80)	2017 (80)	2017 (80)
EA	Back of exhaust to centre bogie	3218 (126)	3618 (142)	4818 (190)
EF	Back of exhaust to end of frame	4811 (189)	5211 (205)	8311 (327)
AF	Rear overhang	908 (36)	908 (36)	2808 (110)
OAL	Overall length	6828 (269)	7228 (285)	10328 (407)
RH	Height at centre bogie	Laden	997 (39)	992 (39)
		Unladen	1055 (42)	1050 (41)
Turning circle kerb to kerb		13500 (44 ft.)	14700 (48 ft.)	18400 (60 ft.)

Note RH to top of turntable mounting angles for WB = 3200
 RH Laden figure includes tyre deflection.

CHASSIS WEIGHTS KG (lb)

Component	3200 (126)	3600 (142)	4800 (189)
Front axle	3760 (8287)	3770 (8309)	3760 (8287)
Rear axle	2980 (6567)	2990 (6590)	3230 (7119)
Total chassis weight	6740 (14854)	6760 (14899)	6990 (15406)

Note Chassis weight includes:- SR62 gearbox, SP40 Rear Axle, 10.00-20 tyres, oil, water and tools but no fuel or spare wheel.

OPTIONAL ALTERNATIVE/EQUIPMENT KG (lb)

Equipment	Front	Rear	Total
Fuel Tanks (full)	3200	173	323
	3600	188	323
	4800	217	323
Power Take-off	10	—	10
Rear Mudguards (8000 list 89756)	105	—	105
RTA380 Suspension (8000 list 89828)	—	36	36
Steel 52 ins. Beam (8000 list 89829)	—	104	104
MT653 Gearbox	-110	-45	-155

STANDARD EQUIPMENT

ENGINE – TD70F

Six cylinder four stroke direct injection turbo-charged diesel engine fitted with exhaust pressure regulator, air charge intercooler.

Gross Power:

174 kw @ 2400 rpm
(230 BHP)

Gross Torque:

825 Nm @ 1400 rpm
(610 ft. lbf)

Net Power:

162 kw @ 2400 rpm
(220 BHP)

Net Torque:

800 Nm @ 1400 rpm
(592 ft. lbf)

Gross Output according to:—

BSAU 141a, ISO 2534, SAE J270

Net Output according to:—

BSAU 141a, ISO 1585, SAE J270 DIN 70020
part 6 1976

Capacity: 6.7 litres (408 cu. ins.)

Bore: 104.77 mm (4.12 ins.)

Stroke: 130 mm (5.12 ins.)

Compression Ratio: 14.5:1

Oil Capacity: 19 litres (4.19 imp. gls.)

Cooling System Capacity: 31 litres (6.83

imp. gls.)

Exhaust: Single outlet vertical silencer mounted on left side.

Air Cleaner: Dry element type with cyclone pre-cleaner and high restriction indicator.

CLUTCH – KF214F

350 mm (14 in.) dia. twin dry plate with torsion dampening springs.

Hydraulic clutch control with air servo operation.

Total Area: 2660 sq. cm (412 sq. ins.)

GEARBOX – SR62

8 speed fully synchromesh range Volvo gearbox with splitter to give 16 forward speeds. Pre-selection air operated splitter control.

Oil Capacity: 14.7 litre (3.2 imp. gls.)

Ratios: 1st 11.22/9.46

2nd 7.54/6.61

3rd 5.50/4.64

4th 3.93/3.31

5th 2.86/2.41

6th 2.00/1.68

7th 1.40/1.18

8th 1.00/0.84

Reserve 10.29/8.67

Provision for right hand side and rear mounted

Power take-offs.

AXLE – FRONT

Drop forged I-Beam

Capacity: 6500 kg (14,320 lbs.)

AXLE – REAR – SP40

Rockwell Single Reduction Tandem drive with power divider.

Model: SP40

Capacity: 18,160 kg (40,000 lbs.)

Ratios: MT650 SR62

4.44 4.87

5.29 5.29

Oil Capacity:

First Axle 19 litres (4.1 imp.gls.)

Second Axle 17 litres (3.7 imp.gls.)

SUSPENSION – FRONT FFJ–P2

Parabolic leaf springs with double acting hydraulic shock absorbers and hollow rubber springs. Anti-roll stabilizer bar.

Length: 1780 mm

Width: 100 mm

No. of leaves: 3

SUSPENSION – REAR UA380

Hendrickson suspension with aluminium walking beam and semi-elliptical leaf springs.

Model: UA380

Capacity: 17,240 kg (38,000 lbs.)

No. of leaves: 11

FRAME – RAM3

Steel rolled channel section with cold riveted crossmembers 'L' section turntable mounting members fitted to WB3200 variant.

Frame Width: 800 mm (31.5 ins.)

Web Height: 273 mm (10.75 ins.)

Web Thickness: 7 mm (0.27 ins.)

Flange Width: 85 mm (3.35 ins.)

Flange Thickness: 13 mm (0.50 ins.)

Aluminium bumper bar.

STEERING

Fully integral power steering recirculating ball and nut.

Steering Wheel dia: 500 mm (20 ins.)

Ratio: 18.6:1

Turns lock to lock: 4.2 (approx)

Front wheel steering lock angle, inner wheel: 50°

BRAKES

Service: Compressed air with separate circuits for front driving wheels.

Hand Control for trailer brakes.

Parking: Air operated spring brakes operating on front axle and first driving axle.

Exhaust: Electro-pneumatic operated by foot switch.

Brake Size:

Front 413 x 152 mm (16.25x6.0 ins.)

Rear 419 x 178 mm (16.5x7.0 ins.)

Brake Area:

Front 2415 cm² (374 in²)

Rear 5600 cm² (868 in²)

Total 8015 cm² (1242 in²)

Compressor: Tuflo 501 Capacity 250 l/min

(8.80 cfm) at 2100 engine rpm and back

pressure of 7 kg/cm² (103 psi.)

Reservoir Capacity: 3 x 30 litre + 1 x 50

litre Total 140 litres (4.94 cu. ft.)

CAB

Construction: All steel safety cab with hydraulic tilt to 52° Cab mounted on rubber bushes at front and on coil springs and shock absorbers at rear. Full sound and thermal insulation.

Equipment: Fully sprung driver's and passenger's seat, electrically operated two speed wipers with three arms and intermittent switch, halogen head lamps 5 roof marker lights, twin air horns, roof hatch. Fire extinguisher.

Heating & Cooling: Thermostatically controlled heater and demister. (Integrated air conditioning optional.)

Instrumentation: Speedometer, tachometer, water temperature gauge, voltmeter, engine oil and air pressure gauges, fuel level gauge. Warning lamps for high water temp, low water level, low oil pressure, low air pressure, battery charging, starter element, cab lock, power divider, blocked air cleaner, high beam, park brake, gearbox splitter and direction indicator.

Finish: Choice of four colours, crystal white, Volvo red, Chrome yellow, Powder beige.

ELECTRICAL

24 volt starting and lighting with insulated return system with corrosion resistant plug-in connectors outside cab. Four 12 volt batteries and isolation switch.

Alternator: 1300 w

Battery Capacity: 4 x 62 Ahr

Starter Motor: 4 kw

FUEL SYSTEM

Single 622 mm dia (24.5 ins.) aluminium tank of 390 litres (86 imp. gls.) capacity. Mounted on left side.

PROPELLOR SHAFT

1700 series with 1700 series inter-axle shaft.

WHEEL AND TYRES

Six spoke American Spider hubs with demountable rims. 11 of tyres supplied.

Rim Size: 7.50 x 20

Tyre Size: 10.00 x 20 – 14 ply front

10.00 x 20 – 12 ply rear

10.00 x 20 – 14 ply spare

Spare wheel and tyre.

OPTIONAL EQUIPMENT

CAB

Air conditioning 89770

Cab Fan 89812

Radio 89771

External Sunvisor 89772

Tachograph 89775

Windscreen Stoneguard 89810

GEARBOX – MT653

Automatic Transmission with torque converter Automatic lock up on two highest speeds.

Oil Capacity: 16.5 litres (3.63 imp. gls.)

Ratios: 1st 8.04

2nd 3.58

3rd 2.09

4th 1.39

5th 1.00

Reserve

Torque Amplification at Stall = 1.86

SUSPENSION

RTA 380 suspension 89828

52 ins. steel beam 89829

POWER TAKE-OFF

SR62

SKU 6077 (89767)

Rear

BKU 6059 (89768)

Rear Highspeed

BKU 6093 (89769)

MT653 Side

SKMT 095 (89778)

All P.T.O.s are compressed air operated from cab.

MISCELLANEOUS

Rear Axle Mudguards 89756

Tubeless Tyres & Rims

Michelin Rims 89758

Firestone Rims 89759

McKay Rims 89780

Trailer Air and Electric (Prime mover only)

– Pogo stick – coiled hose 89799

– Pogo stick – rubber hose 89800

– Turntable mounted 89801

Turntable Kits:

Malco 89793

York Big D 89792

Franklin Ballrace 89794

Optional 5.83 rear axle Ratio 89802

R52 gearbox S - note

Additional 275L Fuel Tank 89832

VOLVO AUSTRALIA PTY. LTD.
TRUCK DIV. MOOREBANK 2110 NSW

The factory reserves the right to modify design, specifications and optional equipment specified herein without prior notification.

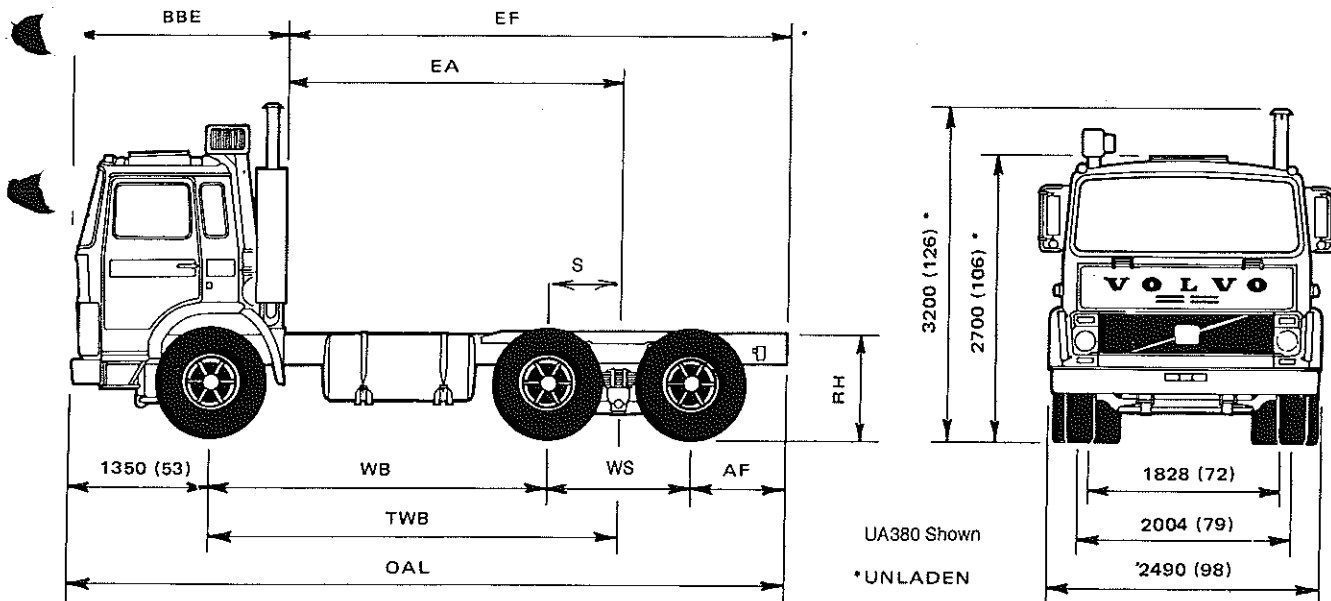
Metric and Imperial dimensions are equivalent within implied limit.

RATINGS

GROSS VEHICLE MASS (GVM) — TONNES (lbs)

	STANDARD G.V.M.		Alt. G.V.M.	
	22.72 (50,076)		23.00 (50,692)	
FRONT AXLE	FAT 6.5	6.50		(14,326)
FRONT TYRES	10.00x20 14-ply	5.48 (12,078)	11R 22.5 TUBELESS	5.83 (12,849)
RATING — FRONT	5.48	(12,078)	5.83	(12,849)
REAR AXLE	S38H	17.24		(38,000)
SUSPENSION	UA380	17.24 (38,000)	R102W	18.15 (40,000)
REAR TYRES	10.00x20 12 ply	17.27 (38,063)	11R-22.5	21.1 (46,504)
RATING — REAR		17.24		(38,000)

GROSS COMBINATION MASS (GCM)
Gearbox MT653 32.0 tonnes (70,528 lbs)
SR62 36.5 tonnes (80,446 lbs)



CHASSIS DIMENSIONS MM (inch)

		UA380	R102W	UA380	R102W	UA380	R102W
WB	Wheelbase	3200 (126)	3200 (126)	3600 (142)	3600 (142)	4800 (189)	4800 (189)
TWB	Theoretical wheelbase	3885 (153)	3860 (152)	4285 (169)	4260 (168)	5485 (216)	5460 (215)
BBE	Bumper back of exhaust	2014 (79)	2014 (79)	2014 (79)	2014 (79)	2014 (79)	2014 (79)
EA	Back of exhaust to centre bogie	3221 (127)	3196 (126)	3621 (143)	3596 (142)	4821 (190)	4796 (189)
EF	Back of exhaust to end of frame	4814 (189)	4814 (189)	5214 (205)	5214 (205)	8314 (327)	8314 (327)
AF	Rear Overhang	908 (35.7)	958 (37.7)	908 (35.7)	958 (37.7)	2808 (111)	2858 (112)
OAL	Overall length	6628 (269)	6828 (269)	7228 (285)	7228 (285)	10328 (407)	10328 (407)
RH	Height at centre bogie — Laden	979 (38.5)	1008 (39.7)	974 (38.3)	1003 (39.6)	974 (38.3)	1003 (39.4)
	— Unladen	1007 (39.6)	1055 (41.5)	1002 (39.4)	1050 (41.3)	1002 (39.4)	1050 (41.3)
Turning Circle	kerb to kerb	14950 (49 ft.)	14950 (49 ft.)	15950 (52.3 ft.)	15950 (52.3 ft.)	19100 (62.6 ft.)	19100 (62.6 ft.)
Note	RH to top of turntable mounting angles for WB = 3200			WS — Wheel Spacing R102W	1320 (52)		
	RH Laden figure includes tyre deflection			UA380	1370 (54)		

CHASSIS WEIGHTS KG (lbs) *

	UA380	R102W	UA380	R102W	UA380	R102W
Front Axle	3760 (8287)	3760 (8287)	3760 (8287)	3760 (8287)	3760 (8287)	3760 (8287)
Rear Axle	2980 (6567)	2840 (6259)	2990 (6590)	2850 (6281)	3230 (7119)	3090 (6810)
Total chassis weight	6740 (14854)	6600 (14546)	6750 (14877)	6610 (14568)	6990 (15406)	6850 (15097)

Note Chassis weights include SR62 gearbox, S38H rear axle, 10.00x20 tyres, oil and water, but no fuel or spare wheel.

S = Centre of Axle to load centre of gravity. This calculation is dependant on individual truck tare weight; after optional equipment is fitted and fuel tanks to maximum capacity. This figure should always be calculated in acc. with the salesman's manual.

OPTIONAL ALTERNATIVE/EQUIPMENT KG (lb)

		Front	Rear	Total
Fuel Tanks (Full)	3200	+176 (388)	+147 (323)	+323 (711)
	3600	+190 (418)	+133 (293)	+323 (711)
	4800	+219 (482)	+104 (229)	+323 (711)
Power Take-off		+10	—	+10
MT653 Gearbox		-110 (242)	-45 (99)	-155 (341)

*Tare weights shown are approximate.

STANDARD EQUIPMENT

ENGINE — TD70F

Six cylinder four stroke direct injection turbo-charged diesel engine fitted with exhaust pressure regulator, air charge intercooler.

Gross Power:

174 kw @ 2400 rpm
(230 BHP)

Gross Torque:

825 Nm @ 1400 rpm
(610 ft. lbf)

Net Power:

162 kw @ 2400 rpm
(220 BHP)

Net Torque:

800 Nm @ 1400 rpm
(592 ft. lbf)

Gross Output according to:—

BSAU 141a, ISO 2534, SAE J270

Net Output according to:—

BSAU 141a, ISO 1585, SAE J270 DIN 70020
part 6 1976

Capacity: 6.7 litres (408 cu. ins.)

Bore: 104.77 mm (4.12 ins.)

Stroke: 130mm (5.12 ins.)

Compression Ratio: 14.5:1

Oil Capacity: 19 litres (4.19 imp. gals.)

Cooling System Capacity: 31 litres (6.83 imp. gals.)

Exhaust: Single outlet vertical silencer mounted on left side.

Air Cleaner: Dry element type with cyclone pre-cleaner and high restriction indicator.

CLUTCH — KF214F

350 mm (14 in.) dia. twin dry plate with torsion dampening springs.

Hydraulic clutch control with air servo operation.

Total Area: 2650 sq. cm (412 sq. ins.)

GEARBOX — SR62

8 speed fully synchromesh range Volvo gearbox with splitter to give 16 forward speeds. Pre-selection air operated splitter control.

Oil Capacity: 14.7 litre (3.2 imp. gals.)

Ratios: 1st 11.22/9.46

2nd 7.84/6.61

3rd 5.50/4.64

4th 3.93/3.31

5th 2.86/2.41

6th 2.00/1.68

7th 1.40/1.18

8th 1.00/0.84

Reserve 10.29/8.67

OPTIONAL GEARBOX — MT653

Automatic Transmission with torque converter

Automatic lock up on two highest speeds.

Oil Capacity: 16.5 litres (3.63 imp. gals.)

Ratios: 1st 8.04

2nd 3.58

3rd 2.09

4th 1.39

5th 1.00

Reverse 5.67

Torque Amplification at Stall = 1.86

AXLE — FRONT

Drop forged I Beam

Capacity: 6500 kg (14,326 lbs.)

AXLE — REAR — S38H

Rockwell Single Reduction Tandem drive with power divider.

Model: S38H

Capacity: 17240 kg (38,000 lbs.)

Ratios: SR62: — 4.87:1, 5.29:1 (Std.); 6.17:1 (Opt.)

MT653: — 4.44:1, 5.29:1 (Std.); 6.17:1

(Opt.)

Oil Capacity:

First Axle 19 litres (4.1 imp. gals.)

Second Axle 17 litres (3.7 imp. gals.)

SUSPENSION — FRONT FFJ—P2

Parabolic leaf springs with double acting hydraulic shock absorbers and hollow rubber springs. Anti-roll stabilizer bar.

Length: 1780 mm

Width: 100 mm

No. of leaves: 3

SUSPENSION — REAR UA380

Hendrickson suspension with aluminium walking beam and semi-elliptical leaf springs.

Model: UA380

Capacity: 17,240 kg (38,000 lbs.)

No. of leaves: 11

SUSPENSION — REAR R102W

Reycos: 4 spring with; centre rocker; four torque rods; two each axle.

Spring length: 1000 mm

Width: 76 mm

Leaves/thickness: 13 x 10 mm

Spring rate: 1120 N/mm

Capacity: 18,160 kg (40,000 lbs.)

FRAME — RAM3

Steel rolled channel section with cold riveted crossmembers 'L' section turntable mounting members fitted to WB3200 variant.

Frame Width: 800 mm (31.5 ins.)

Web Height: 273 mm (10.75 ins.)

Web Thickness: 7 mm (0.28 ins.)

Flange Width: 85 mm (3.35 ins.)

Flange Thickness: 13 mm (0.51 ins.)

Aluminium bumper bar.

STEERING

Fully integral power steering recirculating ball and nut.

Steering Wheel dia: 500 mm (20 ins.)

Ratio: 18.6:1

Turns lock to lock: 4.2 (approx)

Front wheel steering lock angle, inner wheel: 50°

BRAKES

Service: Compressed air with separate circuits for front driving wheels.

Hand Control for trailer brakes.

Parking: Air operated spring brakes operating on front axle and first driving axle.

Exhaust: Electro-pneumatic operated by foot switch.

Brake Size:

Front 413 x 152 mm (16.25 x 6.0 ins.)

Rear 419 x 178 mm (16.5 x 7.0 ins.)

Brake Area:

Front 2415 cm² (374 in²)

Rear 5600 cm² (868 in²)

Total 8015 cm² (1242 in²)

Compressor:

Tuffo: 501

Capacity: 250 lit/min (8.80 cfm) at 2000 rpm

Pressure: 7 kg/cm² (100 psi)

Working Pressure: 6.5-7.9 kg/cm² (93-112 psi)

Reservoir Capacity: 3 x 30 litre + 1 x 50 litre

Total 140 litres (4.94 cu. ft.)

CAB

Construction: All steel safety cab with hydraulic tilt to 52° Cab mounted on rubber bushes at front and on coil springs and shock absorbers at rear. Full sound and thermal insulation.

Equipment: Fully sprung driver's and fixed passenger's seat; electrically operated two speed wipers with three arms and intermittent switch, halogen head lamps 5 roof marker lights, single air horns, roof hatch. Fire extinguisher.

Heating & Cooling: Thermostatically controlled heater and demister. (Integrated air conditioning optional.)

Instrumentation: Speedometer, tachometer, water temperature gauge, voltmeter, engine oil and air pressure gauges, fuel level gauge. Warning lamps for high water temp; low water level; low oil pressure; low air pressure; battery charging; starter element; cab lock; power divider; blocked air cleaner; high beam; park brake; gearbox splitter and direction indicator.

Finish: Choice of colours, Crystal white, Volvo red, Chrome yellow, Arnhem ivory, Soft blue.

Chassis Colour: Brown.

ELECTRICAL

24 volt starting and lighting with insulated return system with corrosion resistant plug-in connectors outside cab. Four 61 Ahr 12 volt batteries and isolation switch.

Alternator: 1300 w

Battery Capacity: 122 Ahr (at 24 volts)

Starter Motor: 4 kw (5.3 hp)

FUEL SYSTEM

Single 622 mm dia. (24.5 ins.) aluminium tank of 390 litres (86 imp. gals.) capacity. Mounted on left side.

PROPELLOR SHAFT

1700 series with 1700 series inter-axle shaft. (Teflon coated splines.)

WHEEL AND TYRES

Six spoke American Spider hubs with de-mountable rims. 11 off tyres supplied.

Rim Size: 7.50 x 20

Tyre Size: 10.00 x 20 — 14 ply front

10.00 x 20 — 12 ply rear

10.00 x 20 — 14 ply spare

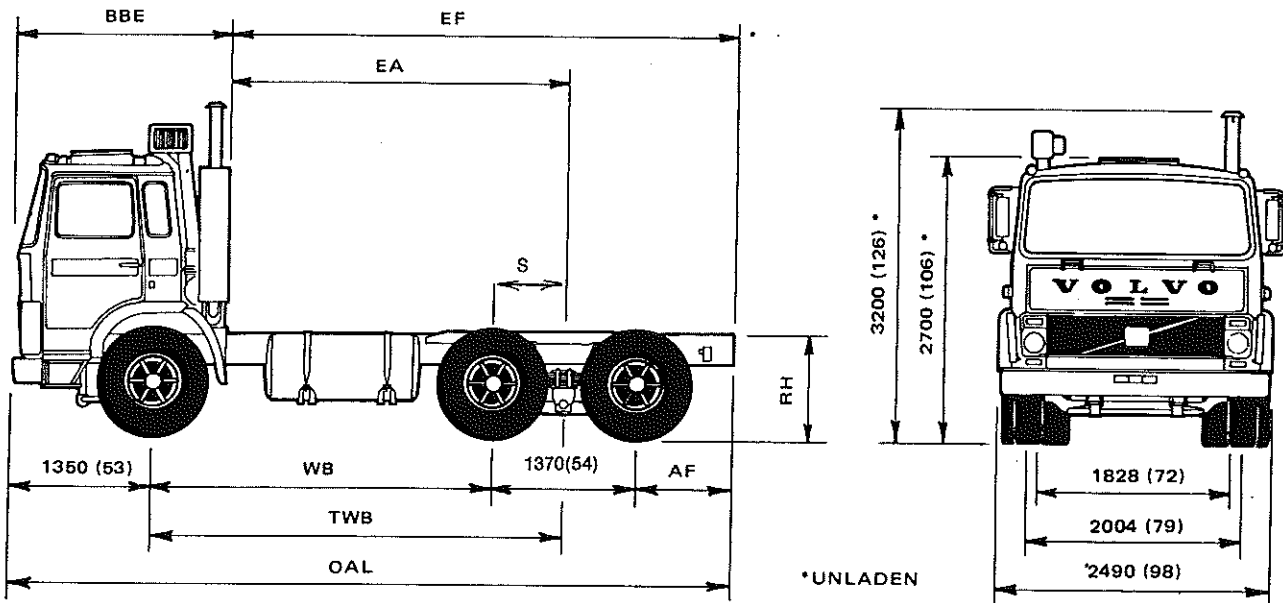
VOLVO

F7G-6x4RW

RIGID APPLICATION ONLY

RATINGS — TONNES (lbs.)

FRONT AXLE	5.62 T (12.390)
REAR AXLE	15.43 T (34.000)
GROSS VEHICLE MASS	21.05 T (46.407) 10.00 x 20 tyres
	21.43 T (47.244) 11R x 22.5 tyres (alternative)



CHASSIS DIMENSIONS MM (Inch)

WB	Wheelbase	3600 (142)	4800 (189)
TWB	Theoretical wheelbase	4285 (169)	5485 (216)
BBE	Bumper back of exhaust	2014 (79)	2014 (79)
EA	Back of exhaust to centre bogie	3621 (143)	4821 (190)
EF	Back of exhaust to end of frame	5214 (205)	8314 (327)
AF	Rear Overhang	908 (35.7)	2808 (111)
OAL	Overall length	7228 (285)	10328 (407)
RH	Height at centre of bogie — Laden	974 (38.3)	974 (38.3)
	— Unladen	1002 (39.4)	1002 (39.4)
Turning Circle	kerb to kerb	15950 (62.3 ft.)	19100 (62.6 ft.)

Note RHLaden figure includes tyre deflection

S = Centre of Axle to load centre or gravity. This calculation is dependent on individual truck tare weight; after optional equipment is fitted and fuel tank to maximum capacity. This figure should always be calculated in acc. with the salesman's manual.

CHASSIS WEIGHTS KG (lbs.)*

Front Axle	3535 (7791)	3555 (7835)
Rear Axle	2875 (6336)	3125 (6887)
Total chassis weight	6410 (14127)	6680 (14722)

Note Chassis weights include R52 gearbox, S34H rear axle, 10.00x20 tyres, oil and water, but no fuel or spare wheel.

OPTIONAL ALTERNATIVE/EQUIPMENT KG (lbs.)

		Front	Rear	Total
Fuel Tank (Full)	3600	136 (299)	90 (199)	226 (498)
	4800	156 (344)	70 (154)	226 (498)

*Tare weights shown are approximate.

STANDARD EQUIPMENT

ENGINE — TD70G

Six cylinder four-stroke, direct-injection diesel engine with turbo supercharging. Exhaust pressure regulator and starting heater fitted as standard.

POWER at 2400 r.p.m.

Gross 157kW (213 h.p. metric)
Net 147 kW (200 h.p. metric)

TORQUE at 1400 r.p.m.

Gross 700 Nm (517 lbs.ft.)
Net 680 Nm (502 lbs.ft.)
Economy speed range 1300-2100 r.p.m.
Displacement 6.7 litres (408 cu. ins.)
Bore 104.77 mm (4.12 ins.)
Stroke 130 mm (5.12 ins.)
Compression 14.5:1
Oil capacity 19 litres (4.19 imp. gals.)
Cooling system capacity 31 litres (6.8 imp. gals.)

Gross output according to BSAU 141a, ISO 2534 and SAE J270. Net output according to BSAU 141a, 1585, DIN 70020, part 6 1976 and SAE J270. Smoke requirements according to BSAU 141a, ECE reg. 24, U.S. Federal Register and Australian Design Rule 30.

Exhaust: Single outlet vertical silencer mounted on left side.

Air Cleaner: Dry element type with safety element and cyclone pre-cleaner and low pressure indicator.

CLUTCH — KF214C

356 mm (14 in.) dia. twin dry plate with torsion dampening springs.
Hydraulic clutch control with air servo operation.
Total Area: 2650 sq. cm (412 sq. ins.)

GEARBOX — R52

8 speed fully synchromesh range change gearbox.

Oil Capacity: 8.8 (1.94 imp. gals.)
Ratios: 1st 10.18
2nd 7.02
3rd 5.03
4th 3.78
5th 2.69
6th 1.86
7th 1.33
8th 1.00
Reverse 10.01

AXLE — FRONT

Forged I Beam
Capacity: 6500 kg (14326 lbs.)

AXLE — REAR — S34H

Rockwell Single Reduction Tandem drive with power divider. Oil lubricated hubs.

Model: S34H
Capacity: 15426 kg (34000 lbs.)
Ratios: — 4.87:1, 5.29:1, 5.83:1

Oil Capacity:
First Axle 19 litres (4.1 imp. gals.)
Second Axle 17 litres (3.7 imp. gals.)

AXLE — REAR — DT 380 — ALTERNATIVE

Eaton dual range tandem drive with power divider.

Model: DT 380
Capacity: 17240 kg (38000 lbs.)
Ratios: 4.88:6.65, 5.29:7.29

SUSPENSION — FRONT FFJ-K1

Conventional semi-elliptical leaf springs with double acting hydraulic shock absorbers and hollow rubber springs.

Length: 1780 mm
Width: 100 mm
No. of leaves 8
Capacity: 6500 kg (14326 lbs.)

SUSPENSION — REAR RTA 380

Hendrickson suspension with aluminium walking beam and semi-elliptical leaf springs.

Model: RTA 380
Capacity: 17240 kg (38000 lbs.)
No. of leaves/ thickness: 2 x 12.6 mm
9 x 11.3 mm

SUSPENSION — REAR — ALTERNATIVE

RTA 380 — Heavy Duty

Hendrickson suspension with aluminium walking beam and semi-elliptical leaf springs.

Capacity: 17240 kg (38000 lbs.)
No. of leaves/ thickness: 10 x 14.2 mm

FRAME — RAM3

Steel rolled channel section with cold riveted crossmembers.

Frame Width: 800 mm (31.5 ins.)
Web Height: 273 mm (10.75 ins.)
Web Thickness: 7 mm (0.28 ins.)
Flange Width: 85 mm (3.35 ins.)
Flange Thickness: 13 mm (0.51 ins.)
Aluminium bumper bar.

STEERING

Fully integral power steering recirculating ball and nut.

Steering Wheel dia. 500 mm (20 ins.)
Ratio: 18.6:1
Turns lock to lock: 4.2 (approx.)
Front wheel steering lock angle, inner wheel: 50°.

BRAKES

Service: Compressed air with separate circuits for front driving wheels.

Parking: Air operated spring brakes operating on front axle and first driving axle.

Exhaust: Electro-pneumatic operated by foot switch.

Brake Size:
Front 413 x 152 mm (16.25 x 6.0 ins.)
Rear 419 x 178 mm (16.5 x 7.0 ins.)

Brake Area:
Front 2415 cm² (374 in.²)
Rear 5600 cm² (868 in.²)
Total 8015 cm² (1242 in.²)

Compressor:
Capacity: 250 lit./min. (8.80 cfm) at 2000 rpm
Pressure: 7 kg/cm² (100 psi)
Working Pressure: 6.5-7.9 kg/cm² (93-112 psi)
Reservoir Capacity: 3 x 30 litre + 1 x 50 litre
Total 140 litres (4.94 cu. ft.)

CAB

Construction: All steel safety cab with hydraulic tilt to 52°. Cab mounted on rubber bushes at front and on coil springs and shock absorbers at rear. Full sound and thermal insulation.

Equipment: Fully sprung driver's and fixed passenger's seat; electrically operated two speed wipers with three arms and intermittent switch, halogen head lamps, roof marker lights, roof hatch. Fire extinguisher.

Heating & Cooling: Thermostatically controlled heater and demister.

Instrumentation: Speedometer, tachometer, water temperature gauge, voltmeter, engine oil and air pressure gauges, fuel level gauge. Warning lamps for high water temp; low water level; low oil pressure; low air pressure; battering charging; starter element; cab lock; power divider; blocked air cleaner; high beam; park brake and direction indicator.

Finish: Choice of colours. Crystal white, Volvo red, Chrome yellow, Arnhem ivory, Soft blue.
Chassis Colour: Brown.

ELECTRICAL

24 volt starting and lighting with insulated return system with corrosion resistant plug-in connectors outside cab. Four 61 Ahr 12 volt batteries and isolation switch.

Alternator: 1300 w
Battery Capacity: 122 Ahr (at 24 volts)
Starter Motor: 4 kw (5.3 hp)

FUEL SYSTEM

Single 622 mm dia. (24.5 ins.) aluminium tank of 275 litres (60 imp. gals.) capacity. Mounted on left side.

PROPELLOR SHAFT

1700 series with 1700 series Inter-axle shaft. (Teflon coated splines.)

WHEEL AND TYRES

Six spoke American Spider hubs with demountable rims. 11 rims, 10 tyres.

Rim Size: 7.50 x 20
Tyre Size: 10.00 x 20 - 14 ply front
10.00 x 20 - 12 ply rear

WHEELS AND TYRES — ALTERNATIVE

Six spoke American Spider hubs with demountable rims and steel radial pattern tyres. 11 rims, 10 tyres.

Rim Size: 8.25 x 22.5
Tyre Size: 11R - 22.5 - 16 ply (front, rear)

ENGINE FAN — ALTERNATIVE

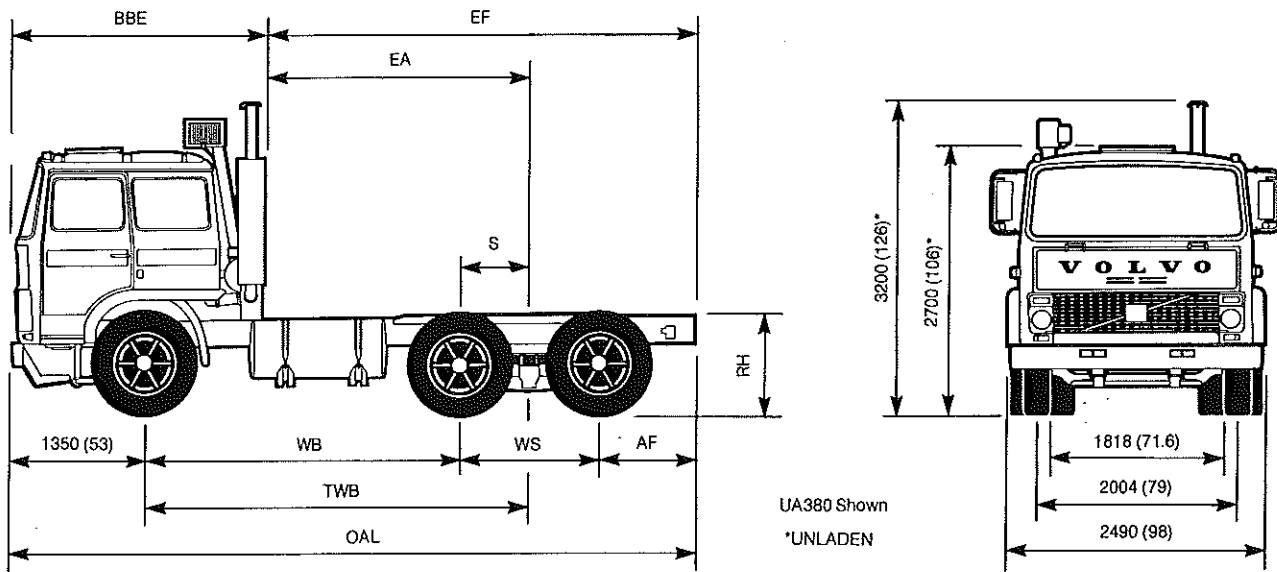
Thermostatically controlled engine fan for increased fuel efficiency.

RATINGS

GROSS VEHICLE MASS (GVM) — TONNES (lbs)

	STANDARD G.V.M.		Alt. G.V.M.	
	22.72 (50,074)		23.00	(50,692)
FRONT AXLE	FAT 6.5		6.50 (14,326)	
FRONT TYRES	10.00x20 14-ply	5.48 (12,078)	11R 22.5 TUBELESS	5.83 (12,849)
RATING — FRONT	5.48 (12,078)		5.83 (12,849)	
REAR AXLE	S38H		17.24 (38,000)	
SUSPENSION	UA380	17.24 (38,000)	R102W	18.15 (40,000)
REAR TYRES	10.00x20 12 ply 17.27 (38,063)		11R-22.5 TUBELESS 21.1 (46,504)	
RATING — REAR	17.24 (38,000)		17.24 (38,000)	

GROSS COMBINATION MASS (GCM)
Gearbox MT653 32.0 tonnes (70,528 lbs)
SR62 36.5 tonnes (80,446 lbs)



UA380 Shown
*UNLADEN

CHASSIS DIMENSIONS MM (Inch)

	UA380	R102W	UA380	R102W	UA380	R102W
WB Wheelbase	3200 (126)	3200 (126)	3600 (142)	3600 (142)	4800 (189)	4800 (189)
TWB Theoretical wheelbase	3885 (153)	3860 (152)	4285 (169)	4260 (168)	5485 (216)	5460 (215)
BBE Bumper back of exhaust	2614 (103)	2614 (103)	2614 (103)	2614 (103)	2614 (103)	2614 (103)
EA Back of exhaust to centre bogie	2621 (103.2)	2596 (102)	3021 (119)	2996 (118)	4221 (166)	4196 (165)
EF Back of exhaust to end of frame	4214 (166)	4214 (166)	4614 (182)	4614 (182)	7714 (304)	7714 (304)
AF Rear Overhang	908 (35.7)	958 (37.7)	908 (35.7)	958 (37.7)	2808 (111)	2858 (112)
OAL Overall length	6828 (269)	6828 (269)	7228 (285)	7228 (285)	10328 (407)	10328 (407)
RH Height at centre bogie — Laden	979 (38.5)	1008 (39.7)	974 (38.3)	1003 (39.6)	974 (38.3)	1003 (39.4)
— Unladen	1007 (39.6)	1055 (41.5)	1002 (39.4)	1050 (41.3)	1002 (39.4)	1050 (41.3)
Turning Circle kerb to kerb	14950 (49 ft.)	14950 (49 ft.)	15950 (52.3 ft.)	15950 (52.3 ft.)	19100 (62.6 ft.)	19100 (62.6 ft.)
Note	RH to top of turntable mounting angles for WB = 3200 RH Laden figure includes tyre deflection		WS — Wheel Spacing R102W 1320 (52) UA380 1370 (54)			

CHASSIS WEIGHTS KG (lbs)*

	UA380	R102W	UA380	R102W	UA380	R102W
Front Axle	3760 (8287)	3760 (8287)	3775 (8320)	3775 (8320)	3795 (8364)	3795 (8364)
Rear Axle	3120 (6876)	2980 (6568)	3135 (6909)	2995 (6601)	3385 (7461)	3245 (7152)
Total chassis weight	6880 (15163)	6740 (14855)	6910 (15229)	6770 (14921)	7180 (15825)	7040 (15516)

Note Chassis weights include SR62 gearbox, S38H rear axle, 10.00x20 tyres, oil and water, but no fuel or spare wheel.

S = Centre of Axle to load centre of gravity. This calculation is dependant on individual truck tare weight; after optional equipment is fitted and fuel tanks to maximum capacity. This figure should always be calculated in acc. with the salesman's manual.

OPTIONAL ALTERNATIVE/EQUIPMENT KG (lb)

		Front	Rear	Total
Fuel Tanks (Full)	3200 3600 4800	+176 (388) +190 (418) +219 (482)	+147 (323) +133 (293) +104 (229)	+323 (711) +323 (711) +323 (711)
Power Take-off		+10	—	+10
MT653 Gearbox		-110 (242)	-45 (99)	-155 (341)

*Tare weights shown are approximate.

STANDARD EQUIPMENT

ENGINE — TD70F

Six cylinder four stroke direct injection turbo-charged diesel engine fitted with exhaust pressure regulator, air charge intercooler.

Gross Power:
174 kw @ 2400 rpm
(236 HP metric)

Gross Torque:
825 Nm @ 1400 rpm
(610 ft. lbf)

Net Power:
162 kw @ 2400 rpm
(220 HP metric)

Net Torque:
800 Nm @ 1400 rpm
(592 ft. lbf)

Gross Output according to:—
BSAU 141a, ISO 2534, SAE J270
Net Output according to:—
BSAU 141a, ISO 1585, SAE J270 DIN 70020
part 6 1976
Economy speed range 1300-2100 rpm

Capacity: 6.7 litres (408 cu. ins.)
Bore: 104.77 mm (4.12 ins.)
Stroke: 130mm (5.12 ins.)
Compression Ratio: 14.5:1
Oil Capacity: 21 litres (4.6 imp. gals.)
Cooling System Capacity: 3½ litres (6.83 imp. gals.)
Exhaust: Single outlet vertical silencer mounted on left side.

Air Cleaner: Dry element type with safety element and cyclone pre-cleaner and high restriction indicator.

CLUTCH — KF214F

356 mm (14 in.) dia. twin dry plate with torsion dampening springs.
Hydraulic clutch control with air servo operation.
Total Area: 2650 sq. cm (412 sq. ins.)

GEARBOX — SR62

8 speed fully synchromesh range Volvo gearbox with splitter to give 16 forward speeds. Pre-selection air operated splitter control.

Oil Capacity: 14.7 litre (3.2 imp. gals.)
Ratios:

1st	11.22/9.46
2nd	7.84/6.61
3rd	5.50/4.64
4th	3.93/3.31
5th	2.86/2.41
6th	2.00/1.68
7th	1.40/1.18
8th	1.00/0.84
Reserve	10.29/8.67

OPTIONAL GEARBOX — MT653

Automatic Transmission with torque converter Automatic lock up on two highest speeds.

Oil Capacity: 22.5 litres (4.95 imp. gals.)
Ratios:

1st	8.04
2nd	3.58
3rd	2.09
4th	1.39
5th	1.00
Reserve	5.67

Torque Amplification at Stall = 1.86
Fitted with oil cooler and filter.

AXLE — FRONT

Drop forged I Beam
Capacity: 6500 kg (14,326 lbs.)

AXLE — REAR — S38H

Rockwell Single Reduction Tandem drive with power divider.

Model: S38H
Capacity: 17240 kg (38,000 lbs.)
Ratios: SR62:—4.87:1, 5.29:1, (6.17:1 Opt.)
MT653:—4.44:1, 5.29:1, (6.17:1 Opt.)

Oil Capacity:
First Axle 19 litres (4.1 imp. gals.)
Second Axle 17 litres (3.7 imp. gals.)

SUSPENSION — FRONT FFJ—P2

Parabolic leaf springs with double acting hydraulic shock absorbers and hollow rubber springs. Anti-roll stabilizer bar.

Length: 1780 mm
Width: 100 mm
No. of leaves: 3

SUSPENSION — REAR UA380

Hendrickson suspension with aluminium walking beam and semi-elliptical leaf springs.

Model: UA380
Capacity: 17,240 kg (38,000 lbs.)
No. of leaves: 11

SUSPENSION — REAR R102W

Reycos: 4 spring with; centre rocker; four torque rods; two each axle.

Spring length: 1000 mm
Width: 76 mm
Leaves/thickness: 13 x 10 mm
Spring rate: 1120 N/mm
Capacity: 18,160 kg (40,000 lbs.)

FRAME — RAM3

Steel rolled channel section with cold riveted crossmembers 'L' section turntable mounting members fitted to WB3200 variant.

Frame Width: 800 mm (31.5 ins.)
Web Height: 273 mm (10.75 ins.)
Web Thickness: 7 mm (0.28 ins.)
Flange Width: 85 mm (3.35 ins.)
Flange Thickness: 13 mm (0.51 ins.)
Aluminium bumper bar.

STEERING

Fully integral power steering recirculating ball and nut.

Steering Wheel dia: 500 mm (20 ins.)
Ratio: 18.6:1
Turns lock to lock: 4.2 (approx)
Front wheel steering lock angle, inner wheel:50°

BRAKES

Service: Compressed air with separate circuits for front driving wheels.

Hand Control for trailer brakes.

Parking: Air operated spring brakes operating on front axle and first driving axle.

Exhaust: Electro-pneumatic operated by foot switch.

Brake Size:
Front 413 x 152 mm (16.25 x 6.0 ins.)
Rear 419 x 178 mm (16.5 x 7.0 ins.)

Brake Area:
Front 2415 cm² (374 in²)
Rear 5600 cm² (868 in²)
Total 8015 cm² (1242 in²)

Compressor:

Tuffo: 501
Capacity: 250 lit./min (8.80 cfm) at 2000 rpm
Pressure: 7 kg/cm² (100 psi)
Working Pressure: 6.5-7.9 kg/cm² (93-112 psi)
Reservoir Capacity: 3 x 30 litre + 1 x 50 litre
Total 140 litres (4.94 cu. ft.)

CAB

Construction: All steel safety cab with hydraulic tilt to 52° Cab mounted on rubber bushes at front and on coil springs and shock absorbers at rear. Full sound, and thermal insulation.

Equipment: Fully sprung driver's and fixed passenger's seat; electrically operated two speed wipers with three arms and intermittent switch, halogen head lamps 5 roof marker lights, single air horns, roof hatch. Fire extinguisher.

Heating & Cooling: Thermostatically controlled heater and demister. (Integrated air conditioning optional.)

Instrumentation: Speedometer, tachometer, water temperature gauge, voltmeter, engine oil and air pressure gauges, fuel level gauge. Warning lamps for high water temp; low water level; low oil pressure; low air pressure; battery charging; starter element; cab lock; power divider; blocked air cleaner; high beam; park brake; gearbox splitter and direction indicator.

Finish: Choice of colours, Crystal white, Volvo red, Chrome yellow, Arnhem Ivory, Soft blue.

Chassis Colour: Brown.

ELECTRICAL

24 volt starting and lighting with insulated return system with corrosion resistant plug-in connectors outside cab. Four 61 Ahr 12 volt batteries and isolation switch.

Alternator: 1300 w
Battery Capacity: 122 Ahr (at 24 volts)
Starter Motor: 4 kw (5.3 hp)

FUEL SYSTEM

Single 622 mm dia. (24.5 ins.) aluminium tank of 390 litres (86 imp. gals.) capacity. Mounted on left side.

PROPELLOR SHAFT

1700 series with 1700 series inter-axle shaft. (Teflon coated splines.)

WHEEL AND TYRES

Six spoke American Spider hubs with de-mountable rims. 11 off tyres supplied.

Rim Size: 7.50 x 20
Tyre Size: 10.00 x 20 — 14 ply front
10.00 x 20 — 12 ply rear
10.00 x 20 — 14 ply spare

WHEELS AND TYRES — ALTERNATIVE

Six spoke American Spider hubs with demountable rims and steel radial pattern tyres. 11 off supplied.

Rim Size: 8.25 x 22.5
Tyre Size: 11R - 22.5 — 16 ply (front, rear, spare)

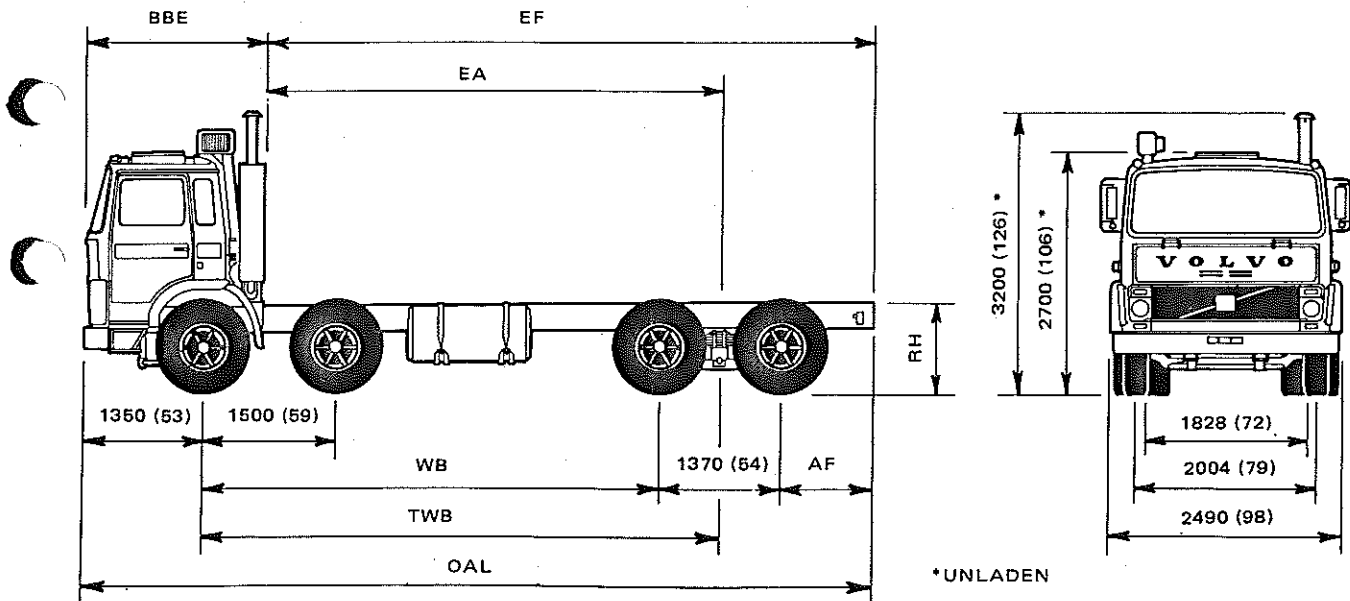
RATINGS

GROSS VEHICLE MASS (GVM) – TONNES (lbs)

		GVM	
		27.24	(60040)
FRONT AXLE	FAT 12	12.0	(26448)
FRONT TYRES	10.00-20 14 ply	10.96	(24155)
RATING-FRONT		12.0	(26448)
REAR AXLE	SP40	18.16	(40000)
SUSPENSION	UA380	17.24	(38000)
REAR TYRES	10.00-20 12 ply	17.28	(38080)
RATING-REAR		17.24	(38000)

GROSS COMBINATION MASS (GCM)

Gearbox MT653	32.0 tonnes (70,528 lbs)
SR62	36.5 tonnes (80,446 lbs)



CHASSIS DIMENSIONS MM (inch)

WB	Wheelbase	5200 (205)	5600 (220)
TWB	Theoretical Wheelbase	5885 (231)	6285 (247)
BBE	Bumper Back of exhaust	2017 (80)	2017 (80)
EA	Back of exhaust to centre of bogie	5218 (205)	5618 (221)
EF	Back of exhaust to end of frame	6068 (274)	7863 (310)
AF	Rear Overhang	1065 (42)	1560 (61)
OAL	Overall length	8985 (354)	9880 (389)
RH	Height at centre bogie – Laden	992 (39)	992 (39)
	Unladen	1050 (41)	1050 (41)
Turning Circle kerb to kerb		21500 (70.5 ft.)	22800 (898 ft.)

Note RH laden figure includes tyre deflection.

CHASSIS WEIGHTS KG (lb)

Front Axle	5030 (11086)	5055 (11140)
Rear Axle	2852 (6285)	2890 (6370)
Total chassis weight	7882 (17371)	7945 (17510)

Note Chassis weight includes SR62, SP40 rear axle, 10.00-20 tyres, oil, water and tools but no fuel or spare wheel.

OPTIONAL ALTERNATIVE/EQUIPMENT KG (lb)

		Front	Rear	Total
Fuel Tanks (Full)	5200	197	126	323
	5600	205	118	323
Power Take-off		10	–	10
Rear Mudguards (8000 list 89756)		–	105	105
RTA 380 Suspension (8000 list 89828)				
Steel 52 ins. Beam (800 list 89829)			104	104
MT653 Gearbox		–145	–10	–155

STANDARD EQUIPMENT

ENGINE -- TD70F

Six cylinder four stroke direct injection turbo-charged diesel engine fitted with exhaust pressure regulator, air charge intercooler.

Gross Power:
174 kw @ 2400 rpm
(230 BHP)

Gross Torque:
825 Nm @ 1400 rpm
(610 ft. lbf)

Net Power:
162 kw @ 2400 rpm
(220 BHP)

Net Torque:
800 Nm @ 1400 rpm
(592 ft. lbf)

Gross Output according to:--
BSAU 141a, ISO 2534, SAE J270
Net Output according to:--
BSAU 141a, ISO 1585, SAE J270 DIN 70020
part 6 1976

Capacity: 6.7 litres (408 cu. ins.)

Bore: 104.77 mm (4.12 ins.)

Stroke: 130 mm (5.12 ins.)

Compression Ratio: 14.5:1

Oil Capacity: 19 litres (4.19 imp. gls.)

Cooling System Capacity: 31 litres (6.83 imp. gls.)

Exhaust: Single outlet vertical silencer mounted on left side.

Air Cleaner: Dry element type with cyclone pre-cleaner and high restriction indicator.

CLUTCH -- KF214F

350 mm (14 in.) dia. twin dry plate with torsion dampening springs.

Hydraulic clutch control with air servo operation.

Total Area: 2650 sq. cm (412 sq. ins.)

GEARBOX -- SR62

8 speed fully synchromesh range change gearbox with splitter to give 16 forward speeds. Pre-selection air operated splitter control.

Oil Capacity: 14.7 litre (3.2 imp. gls.)

Ratios:

1st	11.22/9.46
2nd	7.54/6.61
3rd	5.50/4.64
4th	3.93/3.31
5th	2.86/2.41
6th	2.00/1.68
7th	1.40/1.18
8th	1.00/0.84
Reverse	10.29/8.67

Provision for right hand side and rear mounted Power take-offs.

AXLE -- FRONT

Drop forged I Beam

Capacity: 12,000 kg (26,450 lbs)

AXLE -- REAR -- SP40

Rockwell Single Reduction Tandem drive with power divider.

Model: SP40

Capacity: 18,160 kg (40,000 lbs)

Ratios:

MT650	SR62
4.44	4.87
5.29	5.29

Oil Capacity:

First Drive Axle 19 litres (4.1 imp.gls.)

Second Drive Axle 17 litres (3.7 imp.gls.)

SUSPENSION -- FRONT FFJ-K1

Conventional semi-elliptical leaf springs with double acting hydraulic shock absorbers and hollow rubber springs.

Length: 1st axle 1597 mm (62.87 ins.)

2nd axle 1300 mm (51.18 ins.)

Width: 100 mm (3.94 ins.)

No. of leaves:

1st axle 6

2nd axle 8

SUSPENSION -- REAR UA380

Hendrickson suspension with aluminium walking beam and semi-elliptical leaf springs.

Model: UA380

Capacity: 17,240 kg (38,000 lbs)

No. of leaves: 11

FRAME -- RAM 3

Steel rolled channel section with cold riveted crossmembers

Aluminium bumper bar.

Frame Width: 800 mm (31.5 ins.)

Web Height: 273 mm (10.75 ins.)

Web Thickness: 7 mm (0.27 ins.)

Flange Width: 85 mm (3.35 ins.)

Flange Thickness: 13 mm (0.50 ins.)

STEERING

Fully integral power steering recirculating ball and nut.

Steering Wheel dia.: 500 mm (20 ins.)

Ratio: 25.5:1

Turns lock to lock: 4.2 (approx.)

Front wheel steering lock angle, inner

wheel : 50°

BRAKES

Service: Compressed air with separate circuits for front and driving wheels. Hand Control for trailer brakes.

Parking: Air operated spring brakes operating on 2nd steer axle and first drive axle.

Exhaust: Electro-pneumatic operated by foot switch.

Brake Size:

Front 413 x 152 mm (16.25 x 6.0 ins.)

Rear 419 x 178 mm (16.5 x 7.0 ins.)

Brake Area:

Front 4830 cm² (748 in²)

Rear 5600 cm² (868 in²)

Total 10430 cm² (1616 in²)

Compressor: Tuflo 501 Capacity 250 l/min

(8.80 cfm) at 2100 engine rpm and back

pressure of 7 kg/cm² (103 psi)

Reservoir Capacity: 1 x 30 litre + 2 x 40

litre + 1 x 50 litre Total 160 litres.

CAB

Construction: All steel safety cab with hydraulic tilt to 52°. Cab mounted on rubber bushes at front and on coil springs and shock absorbers at rear. Full sound and thermal insulation.

Equipment: Fully sprung driver's and passenger's seat, electrically operated two speed wipers with three arms and intermittent switch, halogen head lamps, 5 roof marker lights, twin air horns, roof hatch. Fire extinguisher.

Heating & Cooling: Thermostatically controlled heater and demister. (Integrated air conditioning optional.)

Instrumentation: Speedometer, tachometer, water temperature gauge, voltmeter, engine oil and air pressure gauges, fuel level gauge. Warning lamps for high water temp, low water level, low oil pressure, low air pressure, battery charging, starter element, cab lock, power divider, blocked air cleaner, high beam, park brake, gearbox overdrive and direction indicator.

Finish: Choice of four colours, crystal white, Volvo red, Chrome yellow, Powder beige.

ELECTRICAL

24 volt starting and lighting with insulated return system with corrosion resistant plug-connectors outside cab. Four 12 volt batteries and isolation switch.

Alternator: 1300 w

Battery Capacity: 4 x 62 Ahr

Starter Motor: 4 kw

FUEL SYSTEM

Single 622 mm dia (24.5 ins.) aluminium tank of 390 litres (86 imp. gls.) capacity. Mounted on left side.

PROPELLOR SHAFT

1700 series with 1700 series inter-axle shaft.

WHEELS AND TYRES

Six spoke American Spider hubs with demountable rims. 13 off tyres supplied.

Rim Size: 7.50 x 20

Tyre Size: 10.00 x 20 - 14 ply front

10.00 x 20 - 12 ply rear

10.00 x 20 - 14 ply spare

Spare wheel and tyre.

OPTIONAL EQUIPMENT

CAB

Air conditioning	89770
Cab Fan	89812
Radio	89771
External Sunvisor	89772
Tachograph	89775
Windscreen Stoneguard	89810

GEARBOX -- MT653

Automatic Transmission with torque converter Automatic lock-up on two highest speeds.

Oil Capacity: 16.5 litres (3.63 imp. gls.)

Ratios:

1st	8.04
2nd	3.58
3rd	2.09
4th	1.39
5th	1.00

Reverse

Torque Amplification at Stall = 1.86

SUSPENSION

RTA 380 suspension	89828
52 ins. steel beam	89829

POWER TAKE-OFF

SR62	
Side	SKU 6077 (89767)
Rear	BKU 6059 (89768)
Rear Highspeed	BKU 6093 (89769)
MT653 Side	SKMT095 (89778)

All P.T.O.s are compressed air operated from cab.

MISCELLANEOUS

Rear Axle Mudguards	89756
Tubeless Tyres & Rims	
Michelin Rims	89758
Firestone Rims	89759
McKay Rims	89780
Optional 5.83 rear axle ratio	89802
Optional 275L Fuel Tank	89833

VOLVO AUSTRALIA PTY. LTD.
TRUCK DIV. MOOREBANK 2170 NSW

The factory reserves the right to modify design, specifications and optional equipment specified herein without prior notification.

Metric and Imperial dimensions are equivalent within implied limit.

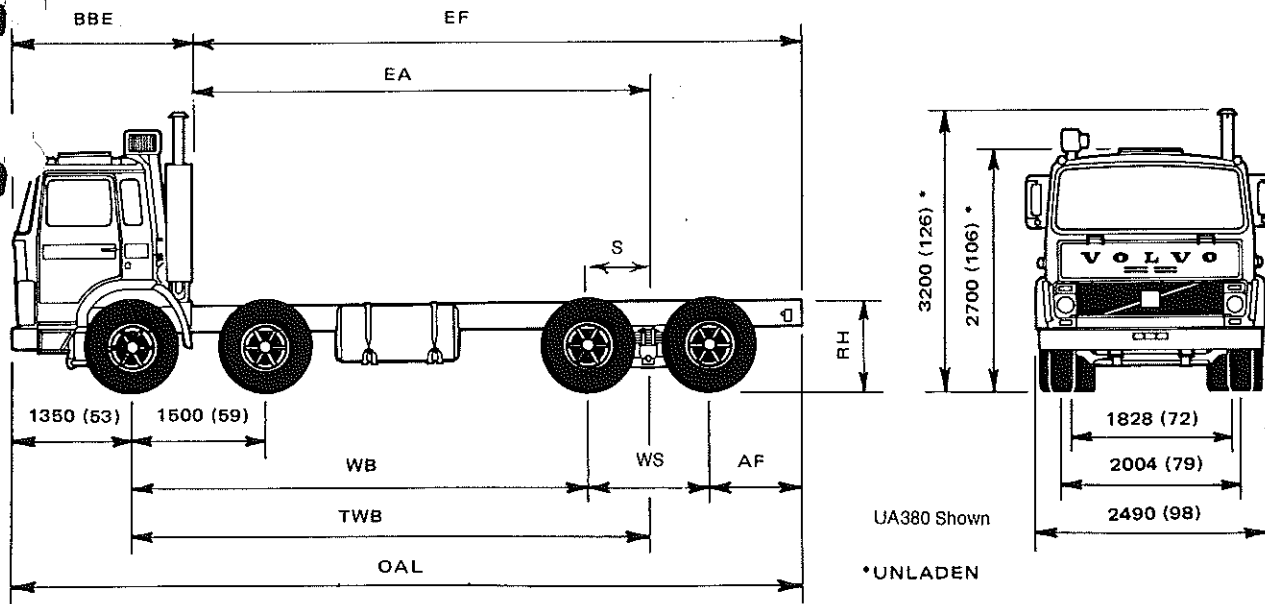
RATINGS

GROSS VEHICLE MASS (GVM) — TONNES (lbs)

	STANDARD G.V.M.		Alt. G.V.M.	
	27.0 (59,508)		27.0 (59,508)	
FRONT AXLE	FAT 10	10.0		(22,040)**
FRONT TYRES	10.00x20 14-ply	10.96 (24,156)	11R 22.5 TUBELESS	11.63 (25,716)
RATING — FRONT		10.0		(22,040)
REAR AXLE	S38H	17.24		(38,000)
SUSPENSION	UA380	17.24 (38,000)	R102W	18.15 (40,000)
REAR TYRES	10.00x20 12 ply	17.27 (38,063)	11R-22.5	21.1 (46,504)
RATING — REAR		17.24		(38,000)

GROSS COMBINATION MASS (GCM)
 Gearbox MT653 32.0 tonnes (70,528 lbs)
 SR62 36.5 tonnes (80,446 lbs)

Chassis Frame Related



CHASSIS DIMENSIONS MM (Inch)

		UA380	R102W	UA380	R102W
WB	Wheelbase	5200 (205)	5200 (205)	5600 (220)	5600 (220)
TWB	Theoretical wheelbase	5885 (231)	5860 (230)	6285 (247)	6260 (246)
BBE	Bumper back of exhaust	2014 (79)	2014 (79)	2014 (79)	2014 (79)
	Back of exhaust to centre of bogie	5221 (206)	5196 (204)	5621 (221)	5596 (220)
	Back of exhaust to end of frame	6971 (274)	6971 (274)	7866 (310)	7866 (310)
AF	Rear Overhang	1065 (41.9)	1115 (43.9)	1560 (61.4)	1610 (63.4)
OAL	Overall length	8985 (354)	8985 (354)	9880 (389)	9880 (389)
RH	Height at centre bogie — Laden	974 (38.3)	1003 (39.4)	974 (38.3)	1003 (39.4)
	— Unladen	1002 (39.4)	1050 (41.3)	1002 (39.4)	1050 (41.3)
Turning Circle	kerb to kerb	20150 (66 ft.)	20150 (66 ft.)	21150 (69.3 ft.)	21150 (69.3 ft.)

Note RH laden figure includes tyre deflection.

WS — Wheel Spacing R102W 1320 (52)
 UA380 1370 (54)

CHASSIS WEIGHTS KG (lbs)*

	UA380	R102W	UA380	R102W
Front Axle	5030 (11086)	5030 (11086)	5055 (11141)	5055 (11141)
Rear Axle	2852 (6285)	2712 (5977)	2890 (6370)	2750 (6061)
Total chassis weight	7882 (17371)	7742 (17063)	7945 (17511)	7805 (17202)

Note Chassis weight includes SR62, S38H rear axle, 10.00-20 tyres, oil and water, but no fuel or spare wheel.

S = Centre of Axle to load centre of gravity. This calculation is dependant on individual truck tare weight; after optional equipment is fitted and fuel tanks to maximum capacity. This figure should always be calculated in acc. with the salesman's manual.

OPTIONAL ALTERNATIVE/EQUIPMENT KG (lb)

		Front	Rear	Total
Fuel Tanks (Full)	5200	+197	+126	+323
	5600	+205	+118	+323
Power Take-off		+10	—	+10
MT653 Gearbox		-145	-10	-155

*Tare weights shown are approximate

STANDARD EQUIPMENT

ENGINE — TD70F

Six cylinder four stroke direct injection turbo-charged diesel engine fitted with exhaust pressure regulator, air charge intercooler.

Gross Power:
174 kw @ 2400 rpm
(230 BHP)

Gross Torque:
825 Nm @ 1400 rpm
(610 ft. lbf)

Net Power:
162 kw @ 2400 rpm
(220 BHP)

Net Torque:
800 Nm @ 1400 rpm
(592 ft. lbf)

Gross Output according to:—
BSAU 141a, ISO 2534, SAE J270

Net Output according to:—
BSAU 141a, ISO 1585, SAE J270 DIN 70020
part 6 1976

Capacity: 6.7 litres (408 cu. ins.)

Bore: 104.77 mm (4.12 ins.)

Stroke: 130mm (5.12 ins.)

Compression Ratio: 14.5:1

Oil Capacity: 19 litres (4.19 imp. gals.)

Cooling System Capacity: 31 litres (6.83 imp. gals.)

Exhaust: Single outlet vertical silencer mounted on left side.

Air Cleaner: Dry element type with cyclone pre-cleaner and high restriction indicator.

CLUTCH — KF214F

350 mm (14 in.) dia. twin dry plate with torsion dampening springs.

Hydraulic clutch control with air servo operation.

Total Area: 2650 sq. cm (412 sq. ins.)

GEARBOX — SR62

8 speed fully synchromesh range change gearbox with splitter to give 16 forward speeds. Pre-selection air operated splitter control.

Oil Capacity: 14.7 litre (3.2 imp. gals.)

Ratios: 1st	11.22/9.46
2nd	7.84/6.61
3rd	5.50/4.64
4th	3.93/3.31
5th	2.86/2.41
6th	2.00/1.68
7th	1.40/1.18
8th	1.00/0.84
Reverse	10.29/8.67

OPTIONAL GEARBOX — MT653

Automatic Transmission with torque converter

Automatic lock up on two highest speeds.

Oil Capacity: 16.5 litres (3.63 imp. gals.)

Ratios: 1st	8.04
2nd	3.58
3rd	2.09
4th	1.39
5th	1.00
Reverse	5.67

Torque Amplification at Stall = 1.86

AXLE — FRONT

Drop forged I Beam

Capacity: 12,000 kg (26,448 lbs.)

AXLE — REAR —S38H

Rockwell Single Reduction Tandem drive with power divider.

Model: S38H

Capacity: 17240 kg (38,000 lbs.)

Ratios: SR02: — 4.67:1, 5.29:1 (Std.); 6.17:1 (Opt.)
MT663: — 4.44:1, 5.29:1 (Std.); 6.17:1 (Opt.)

Oil Capacity:
First Drive Axle 19 litres (4.1 imp. gals.)
Second Drive Axle 17 litres (3.7 imp. gals.)

SUSPENSION — FRONT FFJ—K1

Conventional semi-elliptical leaf springs with double acting hydraulic shock absorbers and hollow rubber springs.

Length: 1st axle 1597 mm (62.87 ins.)
2nd axle 1300 mm (51.18 ins.)

Width: 100 mm

No. of leaves:
1st axle 6
2nd axle 8

SUSPENSION — REAR UA380

Hendrickson suspension with aluminium walking beam and semi-elliptical leaf springs.

Model: UA380

Capacity: 17,240 kg (38,000 lbs.)

No. of leaves: 11

SUSPENSION — REAR R102W

Reycos: 4 spring with; centre rocker; four torque rods; two each axle.

Spring length: 1000 mm

Width: 76 mm

Leaves/thickness: 13 x 10 mm

Spring rate: 1120 N/mm

Capacity: 18,160 kg (40,000 lbs.)

FRAME — RAM3

Steel rolled channel section with cold riveted crossmembers.

Frame Width: 800 mm (31.5 ins.)

Web Height: 273 mm (10.75 ins.)

Web Thickness: 7 mm (0.28 ins.)

Flange Width: 85 mm (3.35 ins.)

Flange Thickness: 13 mm (0.51 ins.)

Aluminium bumper bar.

STEERING

Fully integral power steering recirculating ball and nut.

Steering Wheel dia: 500 mm (20 ins.)

Ratio: 25.5:1

Turns lock to lock: 5.7:1

Front wheel steering lock angle, inner wheel: 50°
first axle, 42.5° second axle

BRAKES

Service: Compressed air with separate circuits for front driving wheels.

Hand Control for trailer brakes.

Parking: Air operated spring brakes operating on second steer axle and first driving axle.

Exhaust: Electro-pneumatic operated by foot switch.

Brake Size:
Front 413 x 152 mm (16.25 x 6.0 ins.)
Rear 419 x 178 mm (16.5 x 7.0 ins.)

Brake Area:
Front 4830 cm² (748 in²)
Rear 5600 cm² (868 in²)
Total 10430 cm² (1616 in²)

Compressor:
Tufo: 50 l

Capacity: 250 lit/min (8.80 cfm) at 2000 rpm

Pressure: 7 kg/cm² (100 psi)

Working Pressure: 6.5-7.9 kg/cm² (93-112 psi)

Reservoir Capacity: 1 x 30 litre + 2 x 40 litre + 1 x 50 litre Total 160 litres.

CAB

Construction: All steel safety cab with hydraulic tilt to 52°. Cab mounted on rubber bushes at front and on coil springs and shock absorbers at rear. Full sound and thermal insulation.

Equipment: Fully sprung driver's and fixed passenger's seat; electrically operated two speed wipers with three arms and intermittent switch, halogen head lamps, 5 roof marker lights, single air horns, roof hatch. Fire extinguisher.

Heating & Cooling: Thermostatically controlled heater and demister. (Integrated air conditioning optional.)

Instrumentation: Speedometer, tachometer, water temperature gauge, voltmeter, engine oil and air pressure gauges, fuel level gauge. Warning lamps for high water temp; low water level; low oil pressure; low air pressure; battery charging; starter element; cab lock; power divider; blocked air cleaner; high beam; park brake; gearbox overdrive and direction indicator.

Finish: Choice of colours, Crystal white, Volvo red, Chrome yellow, Arnhem Ivory, Soft blue.

Chassis Colour: Brown.

ELECTRICAL

24 volt starting and lighting with insulated return system with corrosion resistant plug-in connectors outside cab. Four 61 Ahr 12 volt batteries and isolation switch.

Alternator: 1300 w

Battery Capacity: 122 Ahr (at 24 volts)

Starter Motor: 4 kw (5.3 hp)

FUEL SYSTEM

Single 622 mm dia. (24.5 ins.) aluminium tank of 390 litres (86 imp. gals.) capacity. Mounted on left side.

PROPELLOR SHAFT

1700 series with 1700 series inter-axle shaft.

WHEELS AND TYRES

Six spoke American Spider hubs with de-mountable rims. 13 off tyres supplied.

Rim Size: 7.50 x 20

Tyre Size: 10.00 x 20 — 14 ply front
10.00 x 20 — 12 ply rear
10.00 x 20 — 14 ply spare