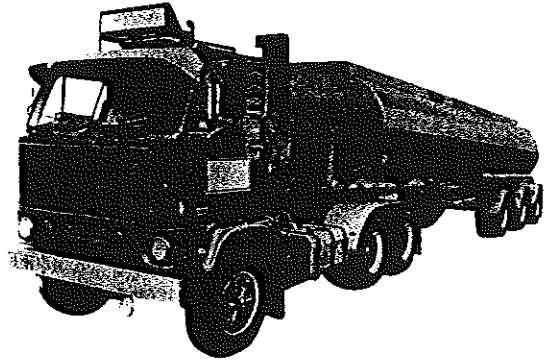


# VOLVO

## G 89 6x4



### MAXIMUM GROSS VEHICLE WEIGHT

25,000 kg (25 tons)

### MAXIMUM GROSS COMBINATION WEIGHT

65,000 kg (65 tons)

with hub reduction

100,000 kg (100 tons)

## STANDARD EQUIPMENT

### AXLE, FRONT

6,500 kg (14,330 lb.) capacity drop forged special steel

### AXLE, REAR G 89A 30R:

17,250 kg (38,000 lb.) capacity Rockwell SQHD axles, 4.6, 5.3, 5.8, 6.1:1 ratios.

Power divider and lockout equipped.

### G 89 35V and 49V:

20,000 kg (44,100 lb.) capacity Volvo axles 4.9, 5.4:1 ratios.

Power divider with diff. lock. Diff. locks on each axle.

### BRAKES, PARKING

Air operated spring brakes operating directly on driving wheels.

### BRAKES, SERVICE

Air operated with 3 separate circuits for the driving wheels, front wheels and trailer wheels. Separate hand control for trailer wheels.

Air compressor: 280 litres/min. @ 7 kg/cm<sup>2</sup>  
(10 cu. ft./min. @ 100 lb./sq. in.)

Tank capacity: 110 litres (3.7 cu. ft.)

Working pressure: 7-8 kg/cm<sup>2</sup> (100-114 lb./sq. in.)

Brake lining area G 89A 30R: 7,460 cm<sup>2</sup> (1192 sq. in.)

G 89 35V and G 89 49V: 8,515 cm<sup>2</sup> (1320 sq. in.)

Foot switch operated exhaust brake.

### CAB

All steel tilt cab, insulated, with sleeper bunk. Two-piece laminated wind screen. Two Bostrom, sprung, adjustable seats. Thermostat-controlled heater/demister, opening quarter vents and roof vent.

Instruments: Speedometer, odometer, tachometer, fuel, oil pressure, temperature, air gauges. Warning lamps for, beam, charge rate, indicators, oil pressure, temperature, air pressure, diff. lock, park brake and P.T.O.

engagement. Choice of four colours or primer. Impact tested with non-burst doors. Rear cab suspension is by rubber springs and hydraulic shock absorbers. Variable speed wipers and washers.

### CLUTCH

380 mm (15") twin dry plate with torsion damping springs. Hydraulic control system with servo assistance. Lining area: 2,650 cm<sup>2</sup> (412 sq. in.)

### ELECTRICAL SYSTEM

12/24 Volt with alternator, 980 W. Four 107 amp./hr 6V batteries, total 214 AH. 4.5kW (6hp) starter motor.

### ENGINE

TD 120 A 6 cyl. turbo charged diesel 130 x 150 mm (5.125" x 5.91") bore x stroke 12 litre (732 cu. in.) capacity, 4 stroke.

Power: 243 kW (330 bhp) (DIN) @ 2,200 rpm

Torque: 1255 Nm (919 lb. ft.) (DIN) @ 1,300 rpm

15:1 compression ratio. RAC rating: 62 hp.

Six individual, interchangeable heads.

Donaldson Cyclopac air cleaner and stackpipe.

### FRAME

Pressed steel channel, 864 mm (34") wide, 241 mm x 86 mm (9.5" x 3.4") section, 9.5 mm (0.37") material thickness, reinforcement over bogie on tractor units.

### FUEL SYSTEM

Two 320 litre (70 gall.) aluminium tanks.

Mechanical fuel pump.

### STEERING

Recirculating ball and nut type, with built-in servo unit.

Approx. 3.7 turns lock to lock.

Steering wheel diameter: 500 mm (20").

### SUSPENSION, FRONT

Semi-elliptical leaf springs 1400 mm x 102 mm (55" x 4").

Double-acting hydraulic shock absorbers and Aeon rubber springs.

### SUSPENSION, REAR

G 89 A 30R Hendrickson RTA 340

G 89 35V, G 89 49V Volvo single point inverted semi-elliptical spring type with centre trunnion pivot.

### TRANSMISSION

Volvo SR 61 fully synchromesh gearbox. Basic 8 speed range change unit with splitter section giving 16 forward speeds. High-low range change by toggle switch on gear lever. Splitter section controlled by toggle switch on console. Gear ratios:

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

### WHEELS AND TYRES

(11) American spoke, cast wheels: 7.5" x 20"

(11) Tyres: 10.00" x 20" 12 ply.

# OPTIONAL EQUIPMENT

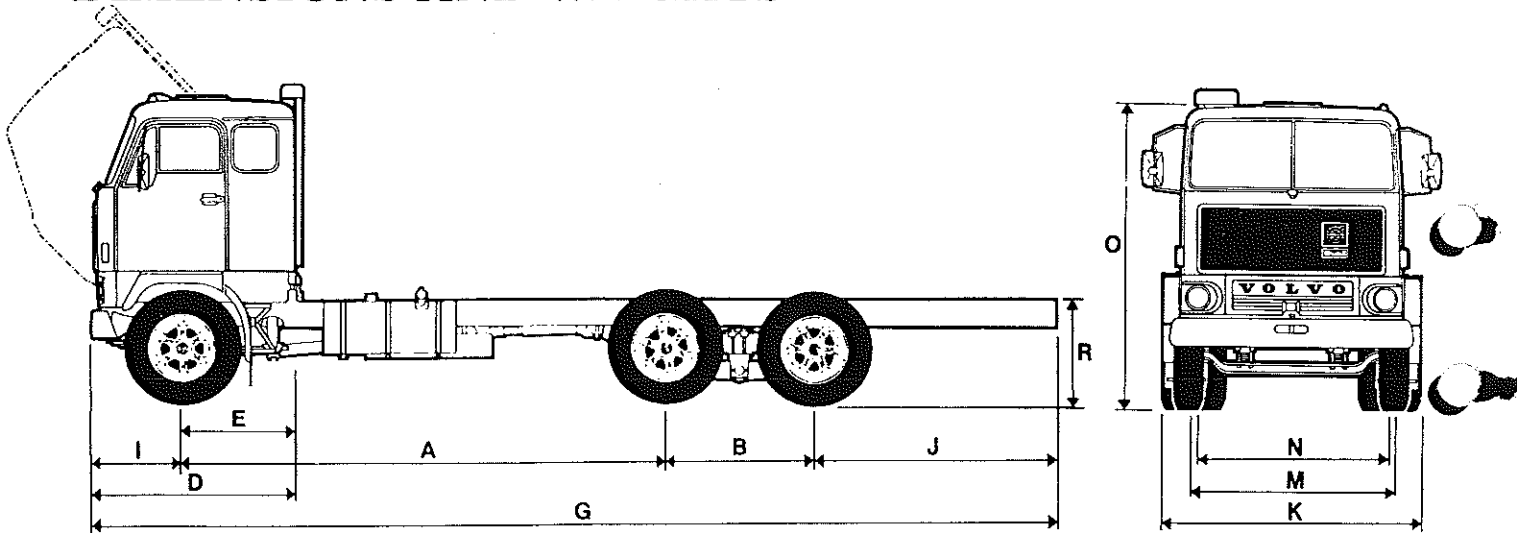
Hydraulic cab tilt.  
Hub reduction with  
6.14:1 diff. ratio

**Power take-off, rear**  
Speed, SR 61 — 0.56/0.66 x engine speed  
Torque — 590 Nm (60 kgf m = 434 lbft.)  
(Max. 15 min. 980 Nm (100 kgf m = 720 lbft.)  
Direction of rotation — Opposite  
The power take-off units are compressed-air  
operated from the cab.  
Covers for power take-off on right-hand side  
and rear end.

**Power take-off, rear (high speed)**  
Speed, SR 61 — 0.88/1.05 x engine speed  
Torque — 250 Nm (25 kgf m = 180 lbft.)  
(Max. 15 min. 350 Nm (35 kgf m = 260 lbft.)  
Direction of rotation — Same as that of the  
engine.

**Power take-off, side**  
Speed, SR 61 — 0.73/0.87 x engine speed  
Torque — 350 Nm (35 kgf m = 250 lbft.)  
Direction of rotation — Same as that of the  
engine

## DIMENSIONS AND WEIGHTS



### Length measurements, mm (in.)

	G 89-30	G 89-35	G 89-49
A Wheelbase	3,000 (118)	3,500 (138)	4,900 (193)
Mean wheelbase	3,656 (143)	4,185 (165)	5,568 (219)
B Bogie wheelbase	1,270 (50)	1,370 (54)	1,370 (54)
D Front bumper — rear edge of cab, rest cab	1,915 (75.5)	1,915 (75.5)	1,915 (75.5)
E Centre of front axle — rear edge of cab, rest cab	1,060 (41.5)	1,060 (41.5)	1,060 (41.5)
G Overall chassis length	6,155 (242)	7,100 (280)	9,600 (378)
I Front overhang	855 (33.5)	855 (33.5)	855 (33.5)
J Rear overhang, rest cab	1,030 (40)	1,375 (54)	2,475 (97.5)
Platform, length rest cab, min. approx.	—	4,670 (184)	7,210 (284)
max. approx.	—	4,920 (194)	7,530 (296)
Turning circle diameter	15,000 (49 ft)	15,400 (50.5 ft)	20,000 (65.5 ft)

The platform length concerns a fixed platform on a standard chassis at the stated chassis weight. Calculated with 150 mm (6") between the cab and the inner edge of the headboard. Other equipment can result in different values.

Width measurements, mm (in.)	Wheels Tyres	7.5x20" 10.00-20"	Height measurements, mm (in.)	Tyres	10.00-20"
Overall width front		2,480 (97.5)	O Cab roof — ground (unladen)		2,915 (115)
K Overall width rear		2,476 (97.5)	R Frame — ground (loaded)		965 (38)
M Track front		2,021 (79.5)	(The R-measurement applies above the driving axle)		
N Track rear		1,840 (72.5)			

### Weights, kg (lb.)

	*G 89-30	G 89-35	G 89-49
Chassis weight, front axle	3,850 (8,488)	3,765 (8,300)	4,130 (9,105)
Chassis weight, bogie	3,150 (6,950)	4,115 (9,060)	4,420 (9,744)
Chassis weight, total	7,000 (15,435)	7,880 (17,360)	8,550 (18,850)
Max. front axle pressure	6,500 (14,350)	6,500 (14,350)	6,500 (14,330)
Max. bogie pressure	15,422 (34,000)	20,000 (44,100)	20,000 (44,092)
Max. GVW	21,000 (46,300)	25,000 (55,125)	25,000 (55,125)
Payload including superstructure approx.	14,000 (30,870)	17,100 (37,700)	16,450 (36,270)

Chassis weights include: TD 120 A engine, ten spoke wheels 7.50x20" with 10.00-20" tyres, 320 dm<sup>3</sup>/litres (70 imp. galls.) fuel tanks as well as water, oil, fuel, but not spare wheel or spare wheel holder.

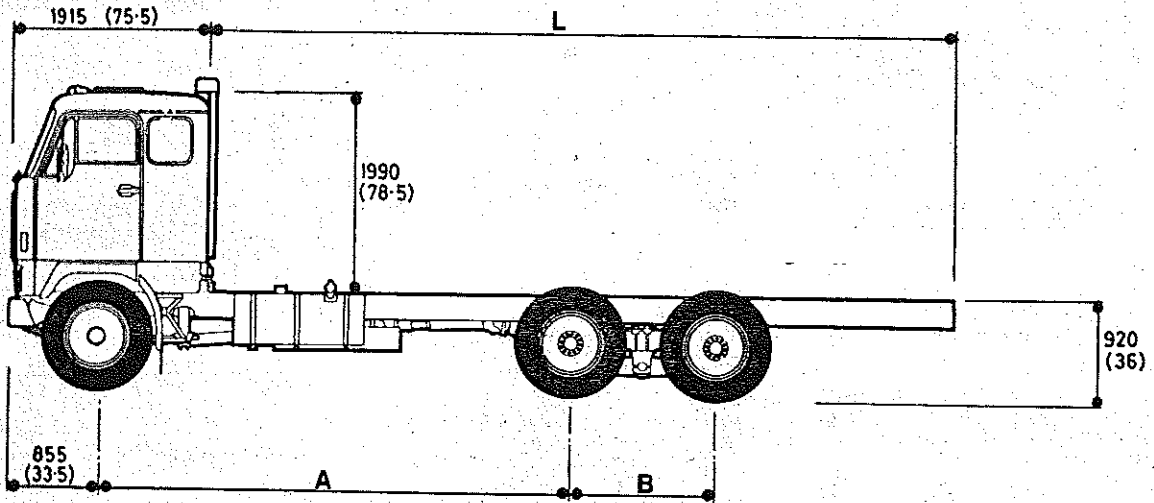
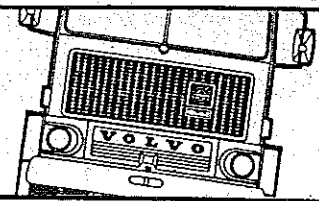
\*GVW G 89 30R : 21,000 kg (21 tons)  
\*GCW G 89 30R : 38,500 kg (38.5 tons)

### Weight modifications, kg (lb.)

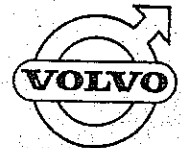
	Front	Bogie	Total
Spare wheel holder	—	—	+ 15 (33)
Spare wheel with tyre 10.00-20"	—	—	+ 120 (264)
Rear pto.	+ 10 (22)	—	+ 10 (22)
Side pto.	+ 10 (22)	+ 5 (11)	+ 15 (33)
Hub reduction	—	+ 220 (485)	+ 220 (485)



# Volvo G.89 A

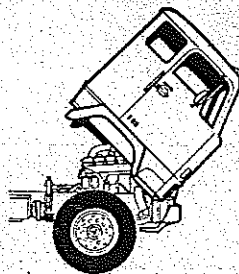


	G 89-4X2 HIGH PERFORMANCE TRACTOR		G 89-6X4V GENERAL PURPOSE TANDEM		G 89A-6X4R HIGHWAY 6X4 TRACTOR	
A	3500 (138)	3500 (138)	4900 (193)	3100 (122)		
	3538 (140)	5200 (205)	7750 (303)	4800 (189)		
TURN CIRCLE	13.2M (43')	15.4M (50.5')	20M (60.5')	15.0M (49')		
B		1370 (54)		1280 (50)		
FENDER WIDTH	2483 (98)	2483 (98)		2483 (98)		
REAR TRACK	1840 (72.5)	1840 (72.5)		1810 (71)		
G.V.W.	19500 (43000)	26000 (57300)		20000 (48350)		
G.C.W.	52000 (114400)	54432 (120000)		38600 (85000)		
FRONT TARE	3980 (8850)	3890 (8560)	3900 (8580)	3910 (8600)		
REAR TARE	2220 (4900)	3850 (8460)	4100 (9020)	3090 (6800)		
TARE	6200 (13750)	7740 (17020)	8000 (17600)	7000 (15400)		
FRT. PRESSURE	6500 (14350)	6500 (14350)		6500 (14350)		
RR. PRESSURE	13000 (28700)	20000 (44100)		15450 (34000)		
PRICE						



ALL WEIGHTS AND DIMENSIONS ARE SHOWN MM OR KG (INCHES OR POUNDS). WEIGHTS ARE ESTIMATES ONLY AND EXCLUDE FUEL. DEPENDING ON OPTIONAL EQUIPMENT USED GCW'S MAY BE INCREASED IN SOME CASES.

## Sleeper cab is standard equipment:



All steel, insulated, tilting, sleeper cab  
Equipment includes: 2-piece laminated windscreen. Variable speed air operated wipers and electric washers. Dual sprung seats. (Bostrom fully adjustable) thermostat controlled heater, demister opening quarter vents and roof vent.

Instruments include: speedo, odometer, rev counter fuel, oil pressure, temperature, air gauges.

Warning lamps for charge rate, beam, direction, oil pressure, temp., air pressure diff lock; park brake and P.T.O. engagement. Choice of four optional cab colours

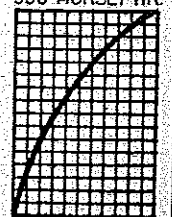


**R.A.C. Rating:** 62 HP  
**Lubrication System:** 6:1 GAL. FORCE FED system and magnetic plug  
**Block:** Alloy cast iron  
**Heads:** Six individual steel/interchangeable  
**Air Cleaner:** Donaldson Cyclopac & Stackpipe  
**Turbocharger:** Holset

Output at 37 r/s (2200 r.p.m.)  
DIN . . . . . kW 243 (b.h.p. 330)  
SAE . . . . . kW 243 (b.h.p. 330)  
Torque at 22 r/s (1300 r.p.m.)  
DIN . . . . . Nm 1255 (kgm 128/lb.ft. 927)  
SAE . . . . . Nm 1245 (kgm 127/lb.ft. 919)  
Bore . . . . . mm 130.175 (5.125")  
Stroke . . . . . mm 150 (5.91")  
Capacity . . . . . (litres) 12 (732 cu.in.)  
Compression ratio . . . . . 15:1  
Six-cylinder, four-stroke Diesel engine with overhead valves and direct injection.  
Oil capacity . . . . . (litres) 27 (47.5 Imp. pints. = 57 US pints.)  
Oil cooler  
Cooling system capacity . . . . . (litres) 47 (10.3 Imp. galls. = 12.4 US galls.)

## New TD120 Turbo-6 develops 330 hp

330 HORSEPOWER



1100 1300 engine RPM 2200  
927 (b.h.p. TRQ)

# Volvo G89 range:

Quick reference guide to variable model specifications:

	66 GAL. FUEL TANK	140 GAL. FUEL TANK	28700 LB. R. AXLE	38000 LB. R. AXLE	44100 LB. R. AXLE	SINGLE REDUCT'N	DOUBLE REDUCT'N	HUB REDUCTION	2 STAGE/HELP SUSP	4 POINT WALK BEAM	HENDRICKSON 340	TRUNNION MOUNTED	7.5 TRILEX WHEELS	SPIDER WHEELS	15X7 REAR BRAKES	15X8 REAR BRAKES
4X2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
6X4V	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
6X4R	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	• STANDARD ○ OPTIONAL															

## Clutch

Twin dry plate with torsion damping springs . . . . . mm 381 (inches 15)  
Total facing area . . . . . cm<sup>2</sup> 2650 (412 sq. in.)  
Hydraulic control system with servoassistance.

## SR 61 gearbox

Fully-synchronized 8-speed basic unit with splitter section which gives 16 forward speeds. Control is by means of a toggle switch on the side of the radio console.

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

Covers for power take-off on right-hand side and rear end.

Oil capacity, SR 61 . . . . . (litres) 11.5  
(20.2 Imp. pints. = 24.2 US pints.)

## Power take-off, rear

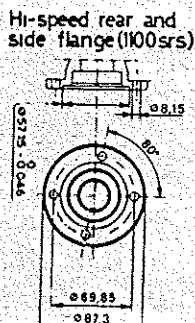
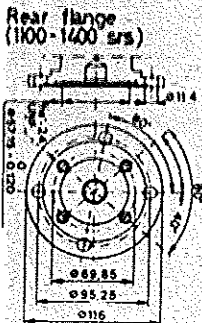
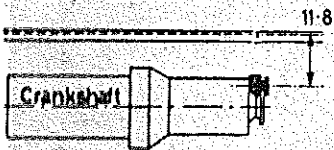
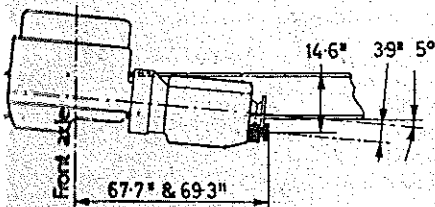
Speed SR 61 . . . . . 0.55/0.66 x engine speed  
Torque . . . . . 590 Nm (60 kgm/434 lb.ft.)  
[980 Nm (100 kgm/723 lb.ft.) for max 15 min.]  
Direction of rotation . . . . . opposite to that of engine

## Power take-off, rear (high speed)

Speed SR 61 . . . . . 0.88/1.05 x engine speed  
Torque . . . . . 250 Nm (25 kgm/180 lb.ft.)  
[350 Nm (35 kgm/253 lb.ft.) for max 15 min.]  
Direction of rotation . . . . . same as that of engine

## PTO locations.

The power take-offs are compressed air controlled from the driving seat.



## Electrical equipment

Voltage . . . . . V 24  
Battery capacity . . . . . Ah 150  
Alternator . . . . . W 980  
Starter motor . . . . . kW 5 (h.p. 6.5)

## Frame

Frame width . . . . . mm 864 (34")  
Side-members of pressed U-section.  
Web height (constant) . . . . . mm 241 (9.5")  
Flange width . . . . . mm 86 (3.4")  
Material thickness . . . . . mm 9.5 (0.37")  
Double frame above bogie unit.  
Material thickness . . . . . mm 9.5 (0.37")  
Section moduli . . . . . 15.9 / 27.8 ins<sup>3</sup>

## Fuel tank

Dual 70 imp. gallon (83 U.S. gall. or 320 litre)  
Aluminium one each side of frame.

## Front axle

Drop-forged special steel. Heat-treated.  
14,350 lb capacity I beam

## Steering gear

Servo steering, of recirculating balls and nut type, with built-in servo unit.  
Approx. 3.7 turns of steering wheel from lock to lock (46° on the inner wheel).  
Steering wheel diameter . . . . . mm 500 (20")

## Rear axle All single speed hypoid

### Differential lock

Electro-pneumatically controlled from dashboard.

### 4 x 2:

28,700 lb capacity double redn. (ratios 4.9, 5.4)

Oil capacity . . . . . (litres) 13  
(22.9 Imp. pints. = 27.5 US pints.)

### 6 x 4 STD

44,100 capacity, single reduction 4.9, 5.4 ratios—Hüb reduction optional

Oil capacity . . . . . dm<sup>3</sup> (litres) 28  
(49.2 Imp. pints. = 59 US pints.)

### 6 x 4 HIGHWAY

38,000 lb Rockwell SQHD (ratios 5.3, 4.6, 5.8, 6.1)

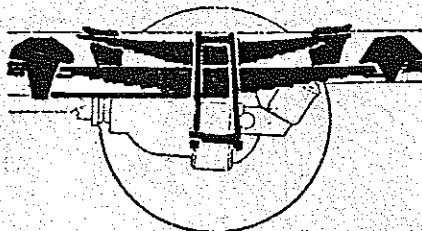
### Springs

Semi-elliptical leaf springs.

Dimensions, mm (in.)	Length	Width
Front springs . . . . .	1600—1400 (63—55")	102 (4")
Rear springs 4 x 2: . . . . .	1650 (65")	89 (3.5")

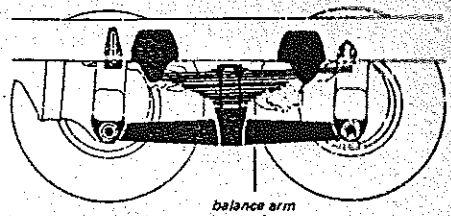
2 stage leaf with hollow rubber helpers

The rear springs have threaded spring bolts and are of interlocking design.



6 x 4 STD 4-point mounted with rocker beam

6 x 4 HIGHWAY Hendrickson RT 340



WE ARE ALWAYS PREPARED TO EXAMINE REQUIREMENTS FOR ANY SPECIAL VEHICLES. AN EXAMPLE OF WHAT CAN BE ARRANGED IS A 6X2 DERIVATIVE OF THE G894X2.

## Shock absorbers

Double-acting hydraulic telescopic shock absorbers front.

## Brakes

Footbrake: Compressed air brakes with separate circuits for the driving wheels, front wheels, trailing wheels and trailer brakes. Trailer brakes with separate hand control.

Tank capacity 30+30+1 (30+20) = 110 litres. (1.0+1.0+1 (1.0+0.7) = 3.7 cu.ft.)  
Compressor: Capacity 280 dm<sup>3</sup> (litres)/min at 7.0 kg/cm<sup>2</sup> working pressure. (10 cu.ft./min. at 100 lb./sq.in.). Brake system working pressure 7.0—8.0 kg/cm<sup>2</sup> (100—114 lb./sq.in.).

Parking brake: Air operated spring brake operating direct on rear driving wheels.

Take-up is variably adjustable by control on instrument panel.

Exhaust brake: Electro-pneumatically controlled by foot switch.

		FRONT	REAR	TOTAL
4 X 2	Size	16X6X.75	15X8X.75	
	Area in.2	374	473	847
	Area cm2	2415	3050	5465
6X4V	Size	16X6X.75	15X8X.75	
	Area in.2	374	946	1320
	Area cm2	2415	6100	8515
6X4R	Size	16X6X.75	15X7X.75	
	Area in.2	374	830	1204
	Area cm2	2415	5350	7765

## Wheels

Dual rear wheels. Spare wheel & tyre.

Spoke wheels . . . . . 20 X 7.5

Tyres . . . . . 1000-20-12P

Volvo reserves the right to change specifications without notice.

With the Compliments of

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P.O. Box 122, Moorebank, N.S.W.  
And Distributors throughout Australia.

