

PORSCHE

914

SERVICE and TRAINING
INFORMATION

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MODEL 74

PORSCHE + AUDI
A DIVISION OF VOLKSWAGEN OF AMERICA INC.

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914/2.0

MODEL '74

In essence the model 74 changes of the VW-Porsche 914/2.0 ltr. are limited to the compliance with the safety regulations issued by the different countries and a few furnishing details such as:

Sport steel rims
Changed symbols for the control switches
Reduced forward longitudinal adjustment of the seats
Three-point safety belts

Additional rear bumper horns
Starter detention interlocked with safety belts

more attractive
improved readability

(mandatory in Germany effective 1.1.74)
(USA only)
(USA only)

Details as to the equipment furnished may be learned from the survey chart.



Chart of 914/2.0 vehicle types, model 74

Order type No.						Sales type nomenclature	Area of delivery	Engine	HP	Gearbox	No. of speeds.
Numeral								Swept volume ltr.		Type	
1	2	3	4	5	6	Basic equipment	world-wide except North America	2.0	100	914/12	5
Type	Model	Design	Equipment	Engine	Gearbox						
4	7	3	2	1	4						
4	7	3	3	1	4	Comfort equipment	world-wide except North America	2.0	100	914/12	5
4	7	3	4	4	4	Basic equipment	North America only	2.0	95	914/12	5
4	7	3	5	4	4	Comfort equipment	North America only	2.0	95	914/12	5

**DESCRIPTION OF STANDARD AND APPEARANCE GROUP
OF TYP 914 MODEL YEAR 1974**

Index 2 = Standard equipment worldwide – 2,0 ltr.

Black bumpers with chromed grills, Sport-wheels (Steel)
5 1/2 x 15 with tires 165 HR 15,
laminated windshield,
Vinyl covered roll bar with chrome strips and pile type carpet
Shoulder/Lap Belts

Index 3 = Appearance group, worldwide 2,0 ltr.

Black bumpers with chromed grills, Sport-wheels (Steel)
5 1/2 x 15 with tires 165 HR 15, laminated windshield,
Vinyl covered roll bar with chrome strips and pile type carpet,
Iodine head lights,
leatherette covered steering wheel,
dual tone horn, center console with instruments
and leather boot for shift lever.
Automatic Seat Belts

Index 4 = Standard equipment USA/Canada 2,0 ltr.

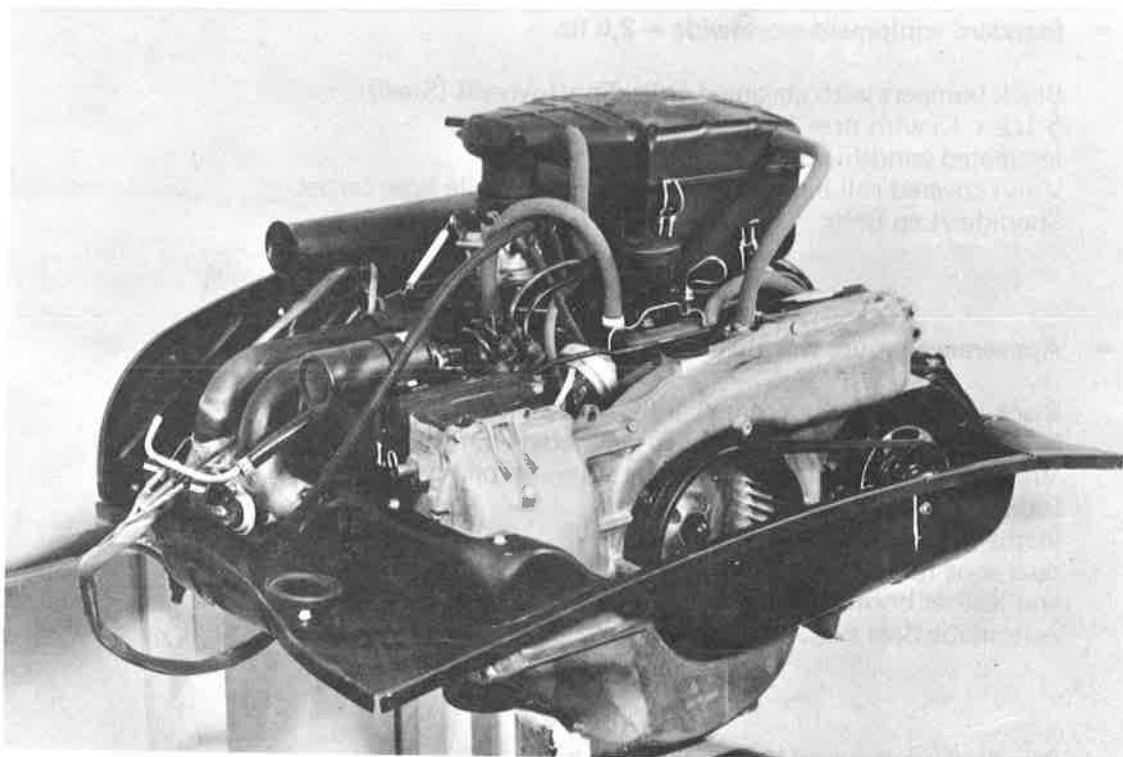
Black bumpers with chromed grills,
Sport-wheels (Steel)
5 1/2 x 15 with tires 165 HR 15
Vinyl covered roll bar with chrome strips and pile type carpet

Index 5 = Appearance group USA/Canada 2,0 ltr.

Black bumpers with chromed grills, Sport-wheels (Steel)
5 1/2 x 15 with tires 165 HR 15,
Vinyl covered roll bar with chrome strips and pile type carpet,
leatherette covered steering wheel, fog lights in front bumper,
dual tone horn, center console with instruments and
leather boot for shift lever

ENGINE

The engines of the 914/2.0 ltr. vehicle types were subjected to minor corrections only. The technical data remained unchanged.



Technical data 914 Model 74

Engine (code letter)		95 HP (GA)	100 HP (GB)
Number of cylinders		4	4
Bore/mm (inch)		94 (3.701)	94 (3.701)
Stroke/mm (inch)		71 (2.793)	71 (2.793)
Displacement/cu. cm (cu. inch)		1971 (120.27)	1971 (120.27)
Compression ratio		7.6 : 1	8.0 : 1
Engine capacity			
DIN 70020 — HP (kW)		95 (70) b. 4900	100 (73.5) b. 5000
max. torque			
DIN 70020 — kpm (Nm)		15.0 (147) b. 3500	16 (157) b. 3500
Litre capacity — HP/l (KW/l)		48 (35)	51 (37)
Required fuel octanes ROZ		91	95
Standard fuel consumption (l/100 km)		8.0	7.8
Engine weight kg (lbs)		app. 140 (308)	app. 140 (308)
Oil quantity required		app. 3.5 l HD-oil as per API-classification SD or SE	
Electrical system			
Operating voltage	V	12	12
Battery capacity	Ah	45	45
Alternator output	W	700	700
Firing order		1—4—3—2	1—4—3—2
Ignition timing		27° from top D.C. at 3500 Rpm	27° from top D.C. at 3500 Rpm
Spark plug gap		Bosch W 175 T 2 (0.7)	Bosch W 175 T 2 (0.7)
		Beru 175/14/3 (0.7)	Beru 175/14/3 (0.7)
Grade of suppression		VDE 0879 Part 1	VDE 0879 Part. 1
		resp. ECE Regl. No. 10	resp. ECE Regl. No. 10

Engine index (Numeral 5)

Index	Swept volume ltr.	Fuel system	HP	Country
1	2.0	Electronic Injection	100	world-wide except North America
4	2.0	Electronic Injection	95	North America

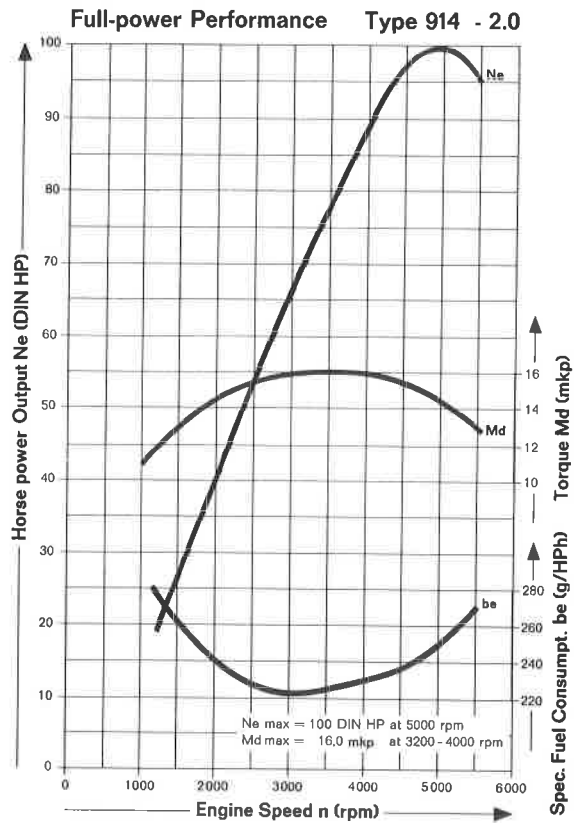
Gearbox index (Numeral 6)

Index

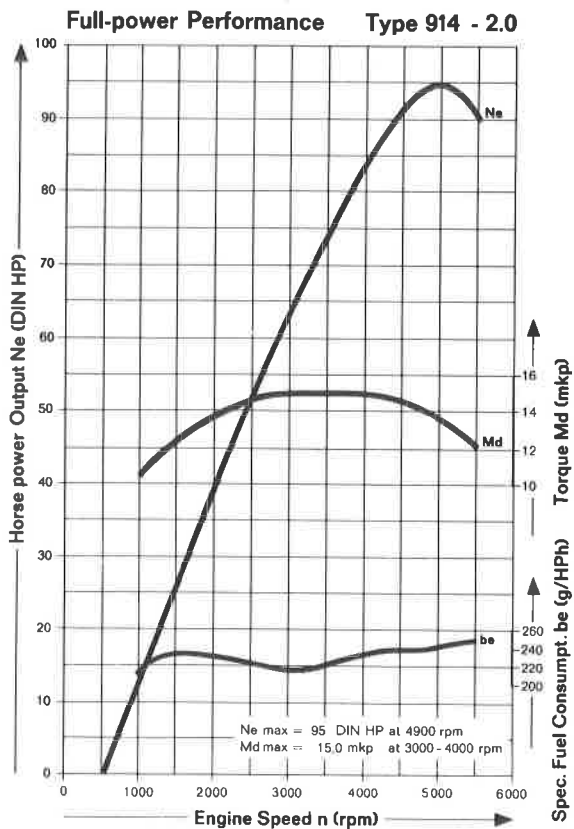
4 5-speed gearbox

Composition of chassis No.

chassis No.	47	42	900 001
	type series	model year	sequential No.
		32 = 1973	
		42 = 1974	



The 100 HP maximum output are obtained at 5000 rpm engine speed. Maximum torque of 16 mkg is obtained within the speed range 3200 to 4000 rpm.



The USA version reaches 95 HP at 4900 rpm and a torque of 15 mkg from 3000 to 4000 rpm.

914/2.0 I – 1974



Engine

The throttle of the USA engines is equipped with an additional spring on the throttle valve shaft to ensure throttle valve return to the idling position.

The accelerator bowden cable was changed for improved operation.

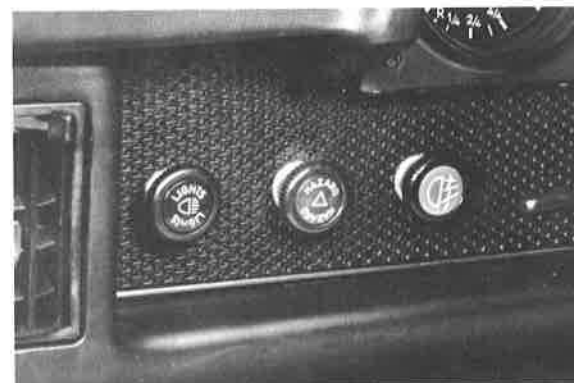


Body and chassis

The vehicles delivered to the USA are equipped with rubber horns on the rear bumpers.



The basic equipment of all vehicles includes sport steel rims. The rim offset is 41 mm.



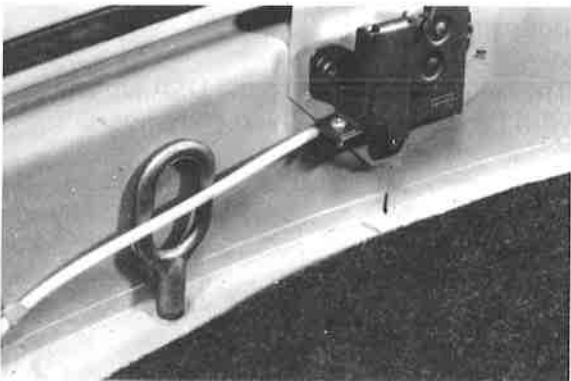
The symbols of some controls were changed. The changes apply to:

Control button for headlights and foglights . . .



and to the heating/fresh air controls.

The indicating range with the combination instrument and oil temperature indicator was changed to 30°C – 170°C (previously 60°C – 200°C). The remote control thermometer remained unchanged.



The new tow eye is now mounted in a bore of the front partition.



The front tow eye, mounted to the front bottom, was changed in design. The space between the tow eye and front bottom was increased.



The lateral defroster nozzles are now equipped with a lever in place of the previously used knurl (for lateral adjustment) in order to simplify the operation.



The longitudinal seat adjustment of the two seats in forward direction was reduced.



All vehicles have three-point safety belts as standard equipment (mandatory by law in Germany as of 1.1.74). Automatic belts are available as optional equipment.



All vehicles delivered to the USA are equipped with a safety belt warning system.

The warning system prevents the engine from starting as long as the belts are not properly applied.

A logic relay located underneath the passenger's seat controls the warning system.

Design

The warning system consists of:

seat contacts in the two seats,
lock contacts in the two safety belt locks,
a logic relay with a buzzer underneath the passenger's seat,
a red warning light "FASTEN SEAT BELTS"
in the instrument panel.

Function

Starting the engine requires:

1. The belts must be fastened when the seats carry a **load**.
(Same conditions apply for the passenger's seat — if heavy items such as luggage are placed on the passenger's seat, the belt must be fastened).

Important:

The "logic sequence": loading of seat — fastening belt — starting — must be adhered to.

If this sequence is not maintained, the engine will not start (interruption of starter circuit).

2. If the engine has been running, it can be restarted within 2 min. \pm 1 min after being stopped, without the belts being fastened.
3. The engine will start when the seats are **not loaded** (e. g. from the outside).

When the engine operates, optical and acoustic signals will be given if:

1. The seat is loaded but the belt is not fastened.
2. The "logic sequence" is not maintained.
3. The seat with belt fastened is unloaded for longer than 10 sec. and then reloaded.

(These warning signals operate only while the emergency brake is disengaged — they can be stopped by repeating the procedure in the "logic sequence").

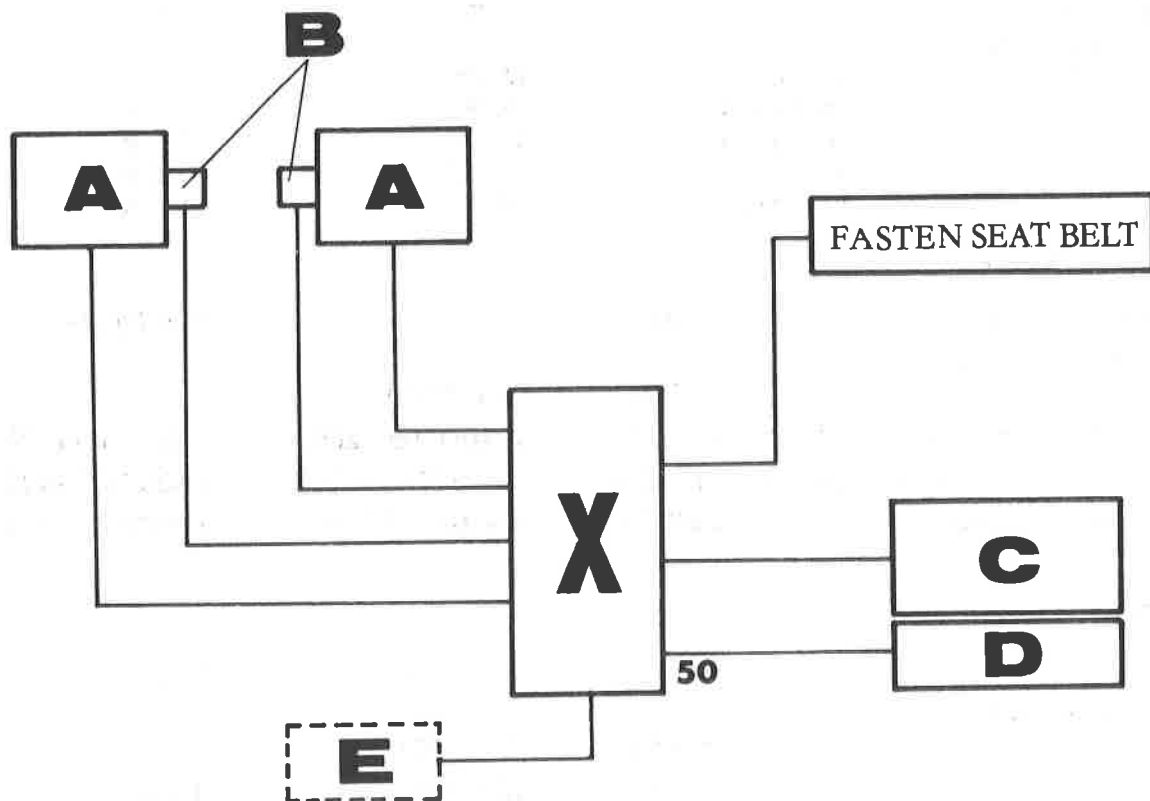
Operation of logic relay

The logic relay (X) is controlled by the following components:

- | | | |
|--------------------------|---------------------------|-----|
| by the seats | — seat contacts | (A) |
| by the safety belts | — lock contacts | (B) |
| by the engine | — oil pressure | (C) |
| (by the emergency brake) | — emergency brake contact | (E) |

The control pulses received are computed; the logic relay controls:

the power for the starter (D) via terminal 50 as well as the optical acoustic warning system.



Power transmission

95 HP

100 HP

Clutch

single disc dry clutch

Transmission

1st speed

11/34 $i = 3.090$

=

2nd speed

18/34 $i = 1.889$

=

3rd speed

23/29 $i = 1.261$

=

4th speed

27/25 $i = 0.926$

=

5th speed

31/22 $i = 0.710$

=

reverse speed

11/16

20/43 $i = 3.127$

=

ring/pinion gear

7/31 $i = 4.429$

=

Weight of gearbox

app. 47 kg ready for installation
including oil and starter

Required quantity of oil

app. 2.5 ltr. gear oil SAE 90,
specification MIL-L-2105 BClimbing capacity
(calculated values)

Vehicle mass kg

1095

1085

empty as per DIN

+ half permissible load

1st speed

65.0 %

70.5 %

2nd speed

34.0 %

36.0 %

3rd speed

20.5 %

21.5 %

4th speed

14.0 %

14.0 %

5th speed

9.0 %

9.5 %

Masses and forces

Vehicle empty as per DIN

kg (lbs)

950 (2095)

Vehicle empty as per DIN
for USA and Canada

kg (lbs)

970 (2139)

Permissible total forces (static)

kp/N/lbs

1220/11968/2690

1220/11968/2690

Permissible front axle force (static)

kp/N/lbs

650/6377/1433

650/6377/1433

Permissible rear axle force (static)

kp/N/lbs

650/6377/1433

650/6377/1433

Vehicle dimensions

Length

mm

3985

Length with bumper horns
(USA)

mm (inch)

4095 (161.2)

Width

mm (inch)

1650 (65.0)

1650 (65.0)

Height unloaded

mm (inch)

1230 (48.4)

1230 (48.4)

Ground clearance at permissible
total weight

mm (inch)

with tyres 165 x 15/5 1/2 x 15

130 (5.118)

130 (5.118)

Filling capacities

Fuel tank

ltr.

62 (6 reserve)

62 (6 reserve)

Brake fluid

ltr.

app. 0.35

app. 0.35

Windscreen washer

ltr.

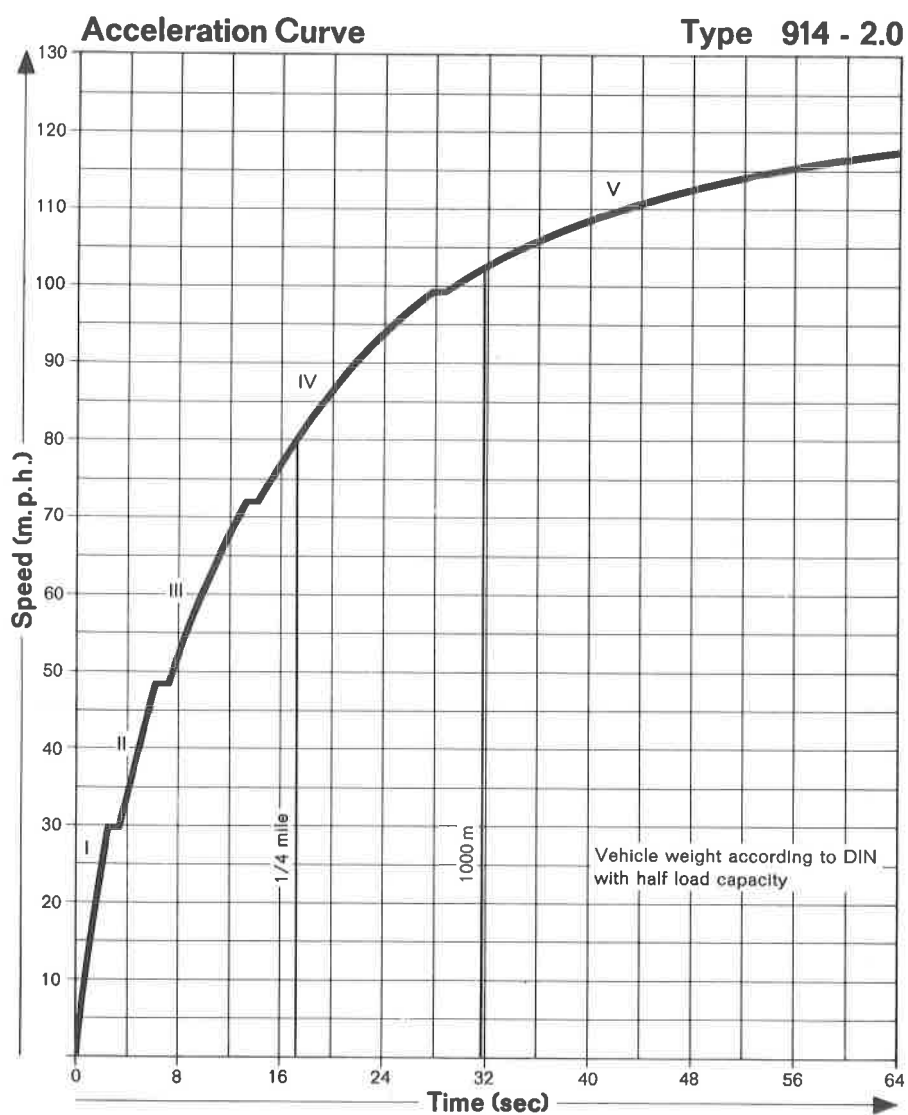
app. 2.5

app. 2.5

Chassis/Wheel Position			95 HP	100 HP
Steering reduction ratio			17.78 : 1	17.78 : 1
Front axle:	camber		0° ± 20'	0° ± 20'
	toe		+ 20' ± 10'	+ 20' ± 10'
	caster		6° ± 30'	6° ± 30'
Rear axle:	camber		- 30' ± 20'	- 30' ± 20'
	toe		0° ± 15'	0° ± 15'
Tyre pressure cold, front/rear				
	kp/sq. cm		1.8/2.0	=
	psi		26/29	=
Dimensions				
Wheel base	mm (inch)		2450 (96.50)	2450 (96.50)
Track	mm (inch)			
	front	5 1/2 x 15	1343 (52.874)	1343 (52.874)
	rear	5 1/2 x 15	1383 (54.449)	1383 (54.449)
Turn circle	m (ft)		app. 11.0 (36.0)	app. 11.0 (36.0)
Performance				
Max. speed	km/h (mph)		185 (115)	190 (118)
Acceleration 0 — 100 km/h (Vehicle empty as per DIN + half permissible load)	sec.		11.0	10.5
Kilometer with standing start (Vehicle empty as per DIN + half permissible load)	sec.		32.5	32.0
Mass per unit of power kg/HP resp.kg (kW) as per DIN 70020 (950 kg)				9.5 (12.9)
Mass per unit of power kg/HP resp. (kg/kW) as per SAE J 245 Net Power (970 kg)			10.7 (14.2)	

Performance

		95 HP	100 HP
Max. speed	km/h (mph)	185 (115)	190 (118)
Acceleration 0 – 100 km/h (Vehicle empty as per DIN + half permissible load)	sec.	11.0	10.5
Kilometer with standing start (Vehicle empty as per DIN + half permissible load)	sec.	32.5	32.0
Mass per unit of power kg/HP resp. kg (kW) as per DIN 70020 (950 kg)			9.5 (12.9)



Transmission Diagram

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