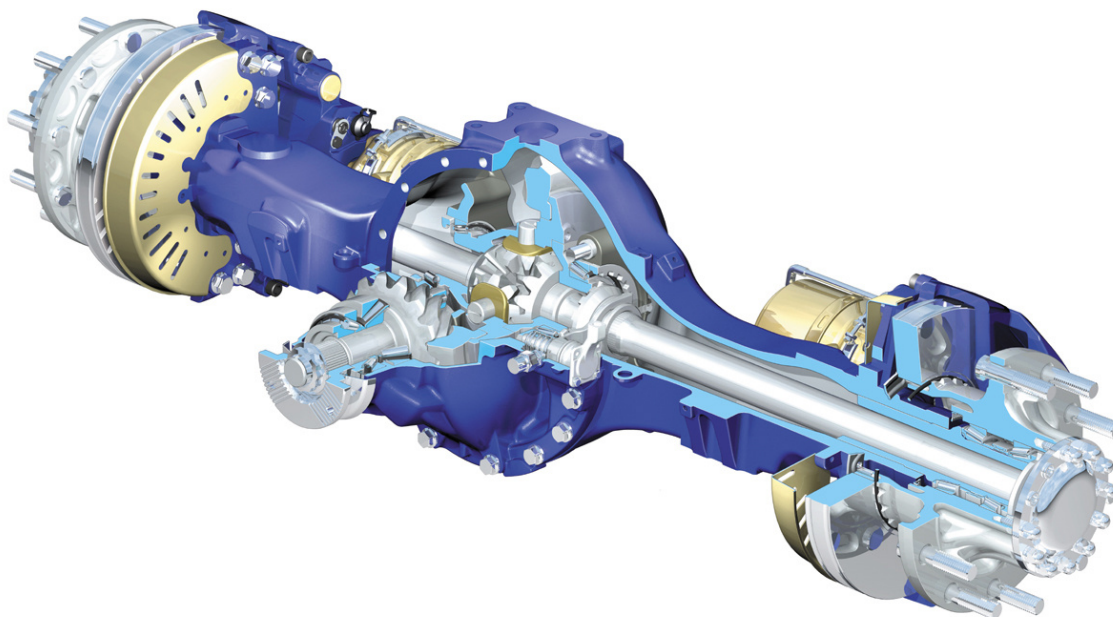


FACT SHEET

REAR AXLE

RSS1344C Rear single reduction axle - axle load 13 tonnes, GCW 44 tonnes



The RSS1344C is a solo axle with hypoid single reduction designed for an electric drive unit torque of 2600 Nm. The maximum axle weight and gross combination weight are 13 and 44 tonnes respectively.

The rear axle is intended for high-speed transport on good roads. It has a strong and compact design, low weight, low friction losses and well-suited gear ratio alternatives, all contributing to the best energy efficiency. The rear axle casing is made of nodular iron and the axle has ample ground clearance.

In a single reduction rear axle, rotational speed is reduced in one single step in the final drive, which makes great demands on its components. Therefore, the RSS1344C has a hypoid final drive, which means that the pinion's centre line is offset in relation to the centre of the crown wheel. This design makes it possible for more teeth to mesh simultaneously, resulting in a strong, quiet and very reliable final drive.

FEATURES AND BENEFITS

- Single reduction hypoid gear with robustly dimensioned gears, shafts, and bearings for great strength and quiet operation.
- Induction hardened drive shafts with great strength and elasticity.
- Maintenance-free unit bearings for increased service life and simplified service.
- A reliable differential lock offers high vehicle availability.
- Long oil change interval means low running costs and less environmental burden.

FACT SHEET

REAR AXLE

RSS1344C Rear single reduction axle - axle load 13 tonnes, GCW 44 tonnes

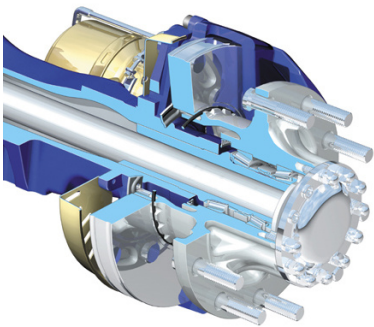
The RSS1344C is fitted with a differential lock to improve manoeuvrability when the road surface is slippery. The differential lock can be operated conveniently and reliably with a switch on the instrument panel, which enhances driver comfort and efficiency. When approved synthetic oil is used, the maximum oil change interval is 450 000 km or every third year.

Sturdy hypoid gear for top reliability

The RSS1344C has a single reduction gear of hypoid type where the entire drive ratio step-down takes place between the pinion and the crown wheel. Both the crown wheel and pinion are subjected to considerable force and are therefore of sturdy dimensions. They are made of special steel which is case-hardened to provide an extra-hard and durable surface, at the same time as the core itself is tough yet elastic so as to be able to absorb shock loads.

Unit bearings provide increased service life and easier service

The wheel bearings are designed as maintenance-free unit bearings. The bearing installation consists of tapered roller bearings, which are permanently lubricated from the factory and equipped with efficient seals.



The wheel hub with bearings is fitted and removed as a unit, which facilitates the work. It is not necessary to adjust bearing play.

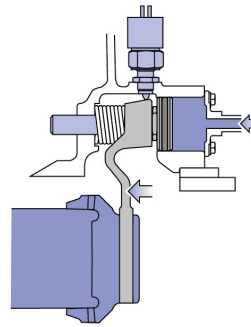
Functionally reliable differential lock ensures high availability

The differential lock provides good manoeuvrability on slippery surfaces. It is robustly dimensioned to withstand maximum stresses and loads.

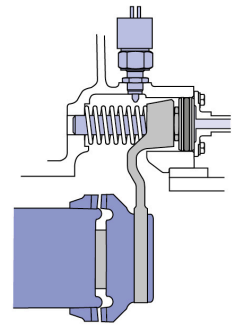
The differential lock is of the “curvic coupling” type, consisting of a splined clutch of hardened steel that locks one of the

drive shafts with the differential housing.

The differential lock can be engaged easily and directly from the driver’s seat. This is done with the aid of a switch on the dashboard. This switch activates a solenoid valve that supplies compressed air to an operating cylinder in the final drive. A lamp lights up on the dashboard to indicate that the differential lock is engaged. The lamp lights up only when the differential lock is engaged, and it takes place when the lamp sensor is directly activated mechanically by the movement of the engagement arm.



Differential lock engaged.



Differential lock disengaged.

FACT SHEET

REAR AXLE

RSS1344C Rear single reduction axle - axle load 13 tonnes, GCW 44 tonnes

Gear ratios

The RSS1344C is available with the following gear ratios.

Gear ratio	Volvo FM	Volvo FH
3.70:1	●	●
4.11:1	●	-
4.63:1	●	-
5.29:1	●*	-

● Available, - Not available

* Only for 4x2.

SPECIFICATION

Designation.....RSS1344C
 Type.....Single reduction, hypoid
 Weight, incl. drive shafts, hubs and disc brakes (approx.)..... 665 kg
 Weight, incl. drive shafts, hubs and oil (approx.).....555 kg
 Crown wheel, diameter..... 461*/458** mm
 Drive shafts, diameter.....55.5 mm
 Max. electric drive unit torque.....2600 Nm
 Max. axle load..... 13 tonnes
 Max. gross combination weight.....44 tonnes
 Oil change volume..... 11 l

* Gear ratio 6.17:1

** Gear ratio 3.70:1