

# Group W - Lubrication and Maintenance

## Type 220

### Oil and Grease for the Various Car Units

#### Engine

Max. filling 6 liters (12.7 US pints; 10.5 Imp. pints),  
min. filling 3.5 liters (7.4 US pints; 6.15 Imp. pints).  
For details regarding viscosity and class of oil see the Instruction Manual.

#### Cooling Water Pump

10 cc (0.6 cu.in.) of SAE 90 hypoid oil as for the rear axle.

#### Distributor

BOSCH Ft 1 v 8 lubricating grease for grease cup,  
BOSCH Ft 1 v 4 lubricating grease for hollow space of breaker sliding piece,  
Engine oil for felt in cam bore.

#### Generator

Engine oil.

#### Transmission

1.4 liters (2.9 US pints; 2.5 Imp. pints) of thin transmission oil (Transmission Fluid).

#### Rear Axle

2.6 liters (5.5 US pints; 4.6 Imp. pints); summer and winter: SAE 90 hypoid oil.

#### Front Wheel Hubs

80 g (2.82 oz.) of anti-friction bearing grease per hub.

#### Steering

ZF Ross steering: 0.175 liters (0.37 US pints, 0.31 Imp. pints)	}	SAE 90 hypoid oil as for the rear axle
Daimler-Benz steering: 0.4 liters (0.85 US pints, 0.7 Imp. pints)		

#### Central Lubricating System

0.4 liters (0.85 US pints; 0.7 Imp. pints) of hypoid oil as for the rear axle.

#### Hydraulic Brake

0.5 liters (1.05 US pints; 0.9 Imp. pints) of original ATE blue brake fluid or Lockheed brake fluid.

#### Direction Indicator Switch

1 g (0.035 oz.) of M 1/2 Kollag grease.

#### Starter Cable, Heater Cable

Shell Ambroleum control cable grease.

#### Lubricating Nipples on Propeller Shaft

Anti-friction bearing grease.

## **Type 220a**

### **Oil and Grease for the Various Car Units**

#### **Engine**

Max. filling 6 liters (12.7 US pints; 10.5 Imp. pints),  
min. filling 3.5 liters (7.4 US pints; 6.15 Imp. pints).

#### **Distributor**

Engine oil for oiler and felt in cam bore,  
BOSCH Ft 1 v 4 for hollow space of breaker sliding piece.

#### **Cooling Water Pump**

10 cc (0.6 cu.in.) of SAE 90 hypoid oil as for the rear axle.

#### **Generator**

Engine oil.

#### **Transmission**

1.4 liters (2.9 US pints; 2.5 Imp. pints); summer and winter: SAE 90 hypoid oil.

#### **Rear Axle**

2.25 liters (4.75 US pints; 4.0 Imp. pints); summer and winter: SAE 90 hypoid oil.

#### **Front Wheel Hubs**

65 g (2.3 oz.) of anti-friction bearing grease per hub.

#### **Steering**

0.3 liters (0.65 US pints; 0.5 Imp. pints) of SAE 90 hypoid oil as for the rear axle.

#### **Hydraulic Brake**

0.5 liters (1.05 US pints; 0.9 Imp. pints) of original ATE blue brake fluid or Lockheed brake fluid.

#### **Direction Indicator Switch**

1 g (0.035 oz.) of M 1/2 Kollag grease.