








Grader PG 10 HA

For reliable, precise route maintenance

-  **High maneuverability in confined spaces**
-  High traction force for **exact grading results**
-  **Excellent visibility**
-  **Low operating costs** thanks to deliberate design
-  **High precision** as a result of easy operation

Technical data

5520-00-000 - Rev.08

MAIN FEATURES

Compact grader for use in underground mining

Hydraulically operated mouldboard with wear-resistant, replaceable main and side cutting edges

Low-profile cab with optimized view of the middle section

OPERATION CONDITIONS

Operating temperature -20 °C *up to +40 °C

Permissible longitudinal gradient max. 35 %

Operating altitude above sea level < 1,500 m

*note cold start limit temperature of the diesel engine

CHASSIS

Divided chassis with articulated joint and steering axle

Rigid mounted rear and front axle and oscillating front axle

Towing eyes front and rear

Lifting eyes for assembly and shaft transport

Counterweight attached to front frame*

*can be supplemented / replaced by options

WEIGHTS AND PERMITTED AXLE LOADS

Total operating weight 10,500 kg*

Front axle load, loaded 5,000 kg

Rear axle load, loaded 7,500 kg

*depending on selected options

MOULDBOARD

Working width 3,055 mm

Side shift +/- 500 mm

Mouldboard height 500 mm

Working depth, max. 310 mm

Cutting angle adjustment 41° to 62°

Slewing angle +/- 45°

DIESEL ENGINE

Diesel - Deutz / BF4M 1013 EC

Exhaust stage EU stage 2 / EPA Tier 2

Power 115 kW at 2,300 rpm

Exhaust system Catalyser with measuring points

Generator / Starter 28 V, 55 A / 24 V, 4 kW

Cold start limit temperature -15 °C

Fuel prefilter and fuel fine filter with water separator

Engine monitoring and operating data on diagnostic display

Dry air filter with pre-filter

FUEL SYSTEM

Fuel tank capacity 170 l

Electric level indicator

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DRIVE LINE

Hydrostatic drive	
Drive under load switchable and reversible	
All wheel drive	
Speed	0-20 km/h
Tow capacity	70 kN

AXLES

Manufacturer	Dana
Front axle	
• Type	212
• Differential	open
Rear axle	
• Type	112
• Differential	100%

SERVICE BRAKE

Hydraulic service brake as two-circuit pump-storage brake system

Oil-immersed multiple-disc brakes

PARKING BRAKE SYSTEM

Spring-applied, hydraulically released (SAHR)

Hand pump to release the brake in case of system failure

AUXILIARY BRAKE

One circuit of the service brake

TIRES

Tire size	12.00x20
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HYDRAULIC SYSTEM

Tank capacity	110 l
Inspection glasses for min/max indication	
Temperature sensor	
Mechanical valve control of working hydraulic by bowden cable	
All hydraulic fittings in DIN type	

DRIVER'S CANOPY

Open drivers canopy

- ROPS-/FOPS certification
- 3-Point-(3-P) entrance from both sides through half doors
- Windshields front and rear
- Wipers and washing plant for the windshields
- All switches and controls are located within the reach of the operator

Driver's seat

- With lap belt
- Synthetic leather cover
- Adjustment of back rest and seat

STEERING

Hydraulic-articulated steering with two double-acting hydraulic cylinders controlled by valve lever

Hydraulically assisted steering of the front axle controlled by steering-wheel

FINISH

Driver's canopy	RAL 7016
Chassis	RAL 1007
Drive components	RAL 9005

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ELECTRIC SYSTEM

Operating voltage	24 V
Battery	2x 12 V, 110 Ah
Lockable main switch	
Emergency stop button, 1x in the drivers canopy, 1x outside	
Reverse alarm signal	
In case of driver absence occurs automatically:	
<ul style="list-style-type: none"> Switching the traction drive in neutral gear Activation of the parking brake 	

LIGHTING (LED)

Two front headlights with high- and low-beam, parking light and indicator
Two taillights at the rear with back light and brake light
Two reversing lights
Two indicators rear
Four working lights at the cabin roof, front
Two working lights at the cabin roof, rear
Flash beacon

Accessories

ACCESSORIES AND EQUIPMENT (INCLUDED)

Frame articulation locking device
Central lubrication block
Portable fire extinguisher
Wheel chocks
Tool kit with bag
Safety helmet and ear protection
Triangular safety reflector
First-aid kit

DOCUMENTATION

A printed version of the operating instructions in the document box on the vehicle
Operating instructions, spare parts list and wiring diagrams in electronic form via online access



Accessories (options)

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OTHER OPTIONS

Hydraulic fittings in JIC type

Paus Connect

- Telemetry unit for data transfer to the Paus Connect Cloud
- Data transmission via existing WLAN and/or mobile phone networks
- Intermediate storage of all data in the absence of connectivity (up to 30 days)
 - Access to the Paus Connect Cloud
 - Remote diagnosis/remote maintenance
 - Statistical application evaluation
 - Vibrational monitoring
 - Two-way communication
 - Authorisation of machine use
 - User administration with controlled data access
 - Individual evaluations and statistics
- Direct access at the machine to read out data transfer

Central automatic lubrication system

Extended tool kit

Hand pump for filling the hydraulic tank

Spare wheel

External power socket (according to VG 96917)

Extended sealing of connectors

Service packages for 2,000 operating hours

Service packages for 3,000 operating hours

Additional one operating instructions and spare part list in national language in printed form

Further equipment and options on request

DRIVE

Cold start equipment -30 °C (self-sufficient)

Cold start equipment -50 °C
(electrical preheating, externally supplied)

Diesel engine, Manufacturer / Type **Cummins / QSB 4.5**

Exhaust stage EU stage IIIA / EPA Tier 3

Power 127 kW at 2,500 rpm

Exhaust system Catalyser with measuring points

Generator / Starter 28 V, 80 A / 24 V, 4 kW

Cold start limit temperature -23 °C

Fuel prefilter and fuel fine filter with water separator

Engine monitoring and operating data on diagnostic display

Dry air filter with pre-filter

Diesel engine, Manufacturer / Type **Cummins / B 4.5**

Exhaust stage EU stage V / EPA Tier 4F

Power 123 kW at 2,200 rpm

Exhaust system DOC, DPF and SCR

Fuel prefilter and fuel fine filter with water separator

Engine monitoring and operating data on diagnostic display

Dry air filter with pre-filter

Diesel engine, Manufacturer / Type **Deutz / TCD 2013 L04 2V**

Exhaust stage EU stage IIIA / EPA Tier 3

Power 126 kW at 2,300 rpm

Exhaust system Catalyser with measuring points

Generator / Starter 28 V, 80 A / 24 V, 4.0 kW

Fuels with a sulphur content < 50 mg/kg only

Accessories (options)

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WORK EQUIPMENT

Mouldboard with working width 2,500 mm

Mouldboard extension 375 mm

Blade with carbide pins for mouldboard

Floating position, electrically switchable for mouldboard

Suspension for mouldboard

Front blade:

- Hydraulic operated
- Mechanical parallel drive
- Working depth 80 mm
- Working width 2,100 mm

Ripper

- Tow-frame hydraulic operated, mounted front axle
- 5 pcs. ripper with removable teeth's
- Working width: 1,500 mm

Further equipment and options on request

Safety

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All machines are designed and manufactured in accordance with the latest safety standards, including the currently valid European Machinery Directive and the ISO standard for mobile machines for underground mining. This means that even the basic version of the machines provides a high level of safety for the operator, which can be supplemented as required with additional optional safety equipment.

The standard equipment includes the following safety features:

- ROPS/FOPS canopy(s)
- Braking system („fail-safe“)
- Emergency stop button
- 3-point safety entrance
- etc.

Safety (options)

SAFETY EQUIPMENT

Button for brake test

Driver's seat with 3-point (3-P) belts

Seat contact monitoring driver's seat

Belt monitoring driver's seat

Reverse signal acknowledgeable

Rear view camera system

Direction lights red / green

HRD fire suppression with automatic release

HRD fire suppression with manual release

Portable fire extinguisher made from ANSUL

COMFORT EQUIPMENT

Closed cabin:

- With heating and ventilation
- Door with sliding window

Air conditioning unit (only in combination with a closed cabin)

Installation slot 1-DIN

(only in combination with a closed cabin):

- For radio or communication radio
- According to DIN ISO 7736 and ISO 10487

Further equipment and options on request

Service

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CUSTOMER SERVICE

Repairs and maintenance work are central points in customer service. Here, Paus is broadly positioned and offers its customers and dealers worldwide an extensive service program. Thus, trained employees are available under our service hotline as well as competent contact persons at our dealers on site.

PAUS CONNECT

Cloud, which captures and display all data, messages and location.

Your advantages:

- Faster service
- Life cycle cost management

More information on page 5

SPARE PARTS

We attach great importance to a high availability of Paus spare parts. In addition to maintenance and service parts, which are available at any time, customers and dealers have the possibility to obtain spare parts for engines, axles, gearboxes, etc. easily and quickly through us. Benefit from our online catalog with elaborated spare parts lists.



Dimensions

DIMENSIONS

Length	approx. 7,700 mm
Width	approx. 2,050 mm
Height	approx. 2,225 mm

TURNING RADIUS

Outside	approx. 5,450 mm
Inside	approx. 2,100 mm

Dimensions

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