

BG605A

MOTOR GRADER

- Ashok Leyland BSIV CEV Compliant Engine (H6 Series)
- Power Shift Transmission with Auto / Manual Mode
- High Productivity
- Easy Operation
- Operator Comfort



Gross Power : 118 kW @ 2200 rpm

Blade Length : 3665 mm

Operating Weight
(with Canopy) : 14,750 kg
(with ROPS Cabin) : 15,500 kg
(with Ripper & counter Weight) : 17,250 kg

BG605A

MOTOR GRADER

Salient Features :

Product :

- BEML BG605A Motor Grader has been fitted with Bharat Stage IV Compliant Ashok Leyland H6 Series Engine.

Performance :

- With its high engine horse power and operating weight BG605A is ideal for heavy duty road construction/ maintenance jobs at mining and at demanding job sites.

Productivity :

High Power engine, coupled with high performance blade ensure high productivity. Automatic / Manual gear shifting provides high maneuverability.

Comfort :

Front Frame mounted operator's compartment enables ease of viewing the machines traveling direction. Operator's comfort is enhanced by adjustable suspension seats & rubber pad mounted operator's compartment.



ENGINE

Make	Ashok Leyland
Model	H6C4160
Type	H Series, Six cylinders Inline Diesel engine, 4 Stroke, Compression Ignition.
Power (Gross)	118 kW @ 2200 rpm
Maximum torque	650 Nm @ 1400 - 1600 rpm
Bore x Stroke	ø 105 x 113 mm
Displacement	5.76 l
No of Cylinders	6, Inline
Electricals	
Alternator	24 V, 55A
Starting motor	24 V, 4.5 kW
Battery	2 x 12 V, 200 Ah



TRANSMISSION

Make	ZF
Type	Powershift Transmission
Travel Speed (kmph)	
Range	1st 2nd 3rd 4th 5th 6th
Forward	6 9 14 21 31 48
Reverse	6 14 42
Max. drawbar pull	7500 kg
Max Speed (kmph)	Forward : 48 Reverse: 42



AXLES

Front axle	
Type	Elliot - type
Oscillation angle	15° (each side)
Front wheel lean Angle	23° (each side)
Rear Axle	
Full floating Tandem axle is made of forged heat treated steel.	



FINAL DRIVE

Type	Double reduction final drives of spur and spiral bevel gears with electric over hydraulically controlled differential lock - unlock device and , roller-chain tandem drives for four rear wheels.
Tandem	Tandem case swings upto 13° assuring high machine stability and positive traction during operation.



STANDARD EQUIPMENT

Engine coolant temperature gauge, Engine oil pressure gauge, Transmission oil temperature gauge, Transmission pressure gauge, Fuel gauge, ROPS canopy, Ammeter, Headlights, Speedometer, Stop and tail lamp, Turn signal lights, Rear view mirrors, Electric horn, Tool kit with tool box, Tachohour meter, Air pressure gauge, Back-up light, Back-up alarm, Cold start system, Front pull hook, High beam indicator lamp, Voltmeter and Dust indicator.

OPTIONAL ATTACHMENTS

1. Scarifier

V-type, 2-stage adjustable, hydraulically controlled

Number of teeth	11 no's
Digging width	1225 mm
Max. digging depth	390 mm
Max. lift above ground	465 mm
Scarifier base	1000 mm
Scarifier load	4895 kg
Digging angle	

Standard	66°
Maximum/Minimum	72° / 60°

Additional weight	635 kg
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2. Front Dozer Blade

Front arc, box-section type, hydraulically controlled

Blade Length x Height	2500 mm x 935 mm
Max. drop below ground	175 mm
Max. lift above ground	545 mm
Blade base	1825
Digging angle	55°
Additional weight	935 kg

3. Rear Mounted Ripper with counter weight

No. of shanks	3 no's
Max. digging depth	460 mm
Max. Lift above ground	550 mm
Max. Digging width	2195 mm
Additional Weight	1930 kg

4. Miscellaneous

ROPS cab (additional weight)	765 kg (approx.)
Tyre inflation kit	



HYDRAULIC SYSTEM

Type	Four gear pumps powering the work equipment, steering and transmission, differential lock - unlock and hydraulic circuits.
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Capacity

1. Work Equipment	78 ℓ/min
2. Steering	49ℓ / min
3. Transmission	85 ℓ/min
4. Diff. Lock & Unlock	14 ℓ/min

Hydraulic Motor

Type	Orbit type hydraulic motor
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Output Power (For blade rotation)	18 kW (24.5 hp)
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Capacity	70 ℓ/min
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Hydraulic Cylinders

Type	Double acting piston type, each connected to pilot check valve for positive cylinder action.
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Operation	Qty. (Nos.)
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Blade lifting	2
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Blade side Shifting (Without pilot check valve)	1
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Frame articulation	2
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Draw bar side shifting	1
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Front wheel leaning	1
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Front wheel Steering	2
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Control Valves

Type	5-way spool type & 4-way spool type with built-in relief valve.
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Relief Valve Settings

Work Equipment	175 kg/cm ²
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Steering	140 kg/cm ²
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Transmission	31 kg/cm ²
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Differential	25kg/cm ²
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STEERING

Type	Orbitrol, Full Hydraulic Steering System
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Cylinders

Type	Double acting
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Quantity	2 nos.
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Max. Steering Angle	40° left & right of front wheels
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Frame Articulation Angle	25° Left and Right
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Min. Turning radius	7.4 m
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BRAKES

Service brake	Foot operated, oil disk brakes, Air actuated on four wheels and sealed for adjustment-free operation. Two cross brake lines for sure braking.
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Parking brake	Hand operated internal expanding, shoe type, duo-servo type actuated on transmission output shaft.
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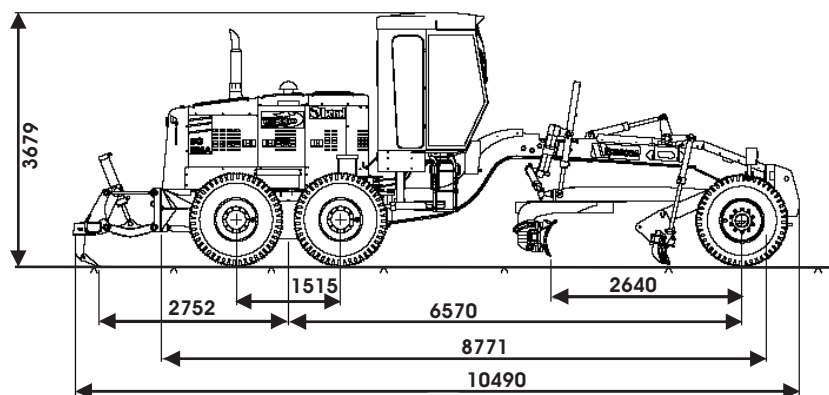
TYRES

Standard Fitment	14.00 x 24 - 16 PR (Tube type) G-2 type tyre
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Optional Fitment	14.00 x 24 - 16 PR (Tube type) G-3 Rock type tyre
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Rims	10.00 VA x 24
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Inflation Pressure	2.8 kg/cm ² (40 PSI)
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Material and specifications are subject to change without notice, Illustrations may include optional equipment & accessories



COOLANT AND LUBRICANT CAPACITY

Systems

Capacity (ℓ)

Coolant	55
Fuel tank	250
Engine	26
Transmission	36
Tandem case (each side)	36
Final drive case	30
Hydraulic oil	58



BLADE RANGE

All blade movements and position can be hydraulically controlled from the operator's seat.

Max. lift above ground	400 mm
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Max. drop below ground	500 mm
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Max. Shoulder Reach

Left	1670 mm
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Right	1955 mm
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Max. bank cutting angle	90°
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Cutting Angle standard	36°
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Maximum	71°
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Minimum	24°
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BLADE EQUIPMENT

Draw Bar

Type	A-shaped, U-section press formed and welded construction for maximum strength.
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Circle

Type	Internal gear type hydraulically controlled with 6 guide shoes for 360° smooth rotation.
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Circle diameter (outer)	1410 mm
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Mould Board

Type	Box-section construction with wear resistant steel, hydraulic blade side shift and tip control, cutting edges and side edges are attached.
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Length x Height x Thickness	3665 mm x 540 mm x 20 mm
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Blade base	2640 mm
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Blade load	6185 kg
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Cutting edges

Type	Tungsten carbide tipped cutting edges
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No. of cutting edges	4
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Length x Height x Thickness	914 mm x 152 mm x 27 mm
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FRAMES

Box section front frame, two box section rear frames are of steel-plate welded construction. One-piece-frame design for the front frame in which hydraulic pipings are installed.

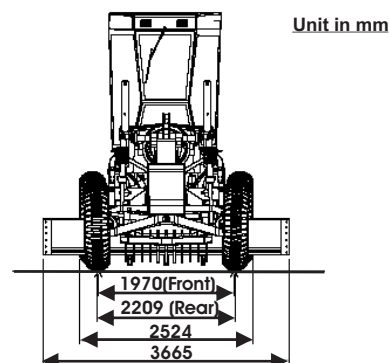


OPERATING MASS

On front wheels	3700 kg
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On rear wheels	12100 kg with cabin
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Total Mass (approx.)	15800 kg with cabin
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Ground Clearance ..325mm

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