

Product Specifications

LeeBoy 685D Motor Grader

The following specifications are based on the 685D Motor Grader manufactured by LeeBoy. Because of continuous equipment research and development, we reserve the right to change these specifications. For more information, questions or assistance preparing specifications, please contact your local LeeBoy Dealer.

1. Dimensions

- a. Length: 22' 3"
- b. Width: 7' 8"
- c. Height with cab and beacon: 10' 2"; with beacon flipped down: 9' 7"
- d. Wheelbase (front tire to mid-tandem): 16' 1"
- e. Base weight: 16,000 lbs

2. Engine:

- a. Cummins Tier 4 Final diesel engine, water-cooled turbocharged
- b. 130 hp (97 kW) @ 2,200 RPM
- c. Fuel capacity: 45 gallon
- d. Hydraulic reservoir: 30 gallons
- e. Electric start
- f. Two 12 volt batteries, 135 amp alternator

3. Traction Drive:

- a. Hydrostatic drive using a variable pump that drives a variable motor connected to a 2-speed tandem axle
- b. Variable volume hydrostatic drive system provides infinite speed selection in each of the two-speed ranges
- c. Working range: @ 2,200 RPM 0-10 mph (0-16 kph)
- d. Travel range: @ 2,200 RPM 0-20 mph (0-32 kph)
- e. Tandems oscillate a minimum of $\pm 15^{\circ}$
- f. Tandem drive, Dana style and gear driven, not chain-driven
- g. *Optional: All wheel drive*

4. Tires:

- a. Equipped with six 15 x 19.5, TL, G-2, 8-ply pneumatic tires

5. Brakes:

- a. Foot operated primary and service brakes
- b. Hydrostatic traction drive system secondary brakes
- c. Control panel switch actuated parking brakes
- d. Spring apply, hydraulic release parking brakes automatically apply when ignition is in "off" position or if system pressure is lost
- e. Pump is de-stroked for secondary braking

6. Moldboard:

- a. 11' x 21" x 5/8" moldboard
- b. Replaceable end bits and cutting edge
- c. Float controls, cuts 1' 2" below grade with 13" of ground clearance

- d. Tilts 30°, shifts 3' left or right
- e. 30" in diameter heavy-duty circle
- f. Circle is centered with six adjustable bolts
- g. Circle rotates 64° by two hydraulic cylinders
- h. Circle turn cushion valve protects components from damage
- i. Moldboard height controlled by two hydraulic cylinders mounted to ball joints at turntable
- j. Fully enclosed turntable
- k. Each trunnion mounted to frame by six Excelite bushings

7. Drawbar:

- a. Drawbar: 4" x 6" x 0.5" tube

8. Rear Hitch:

- a. 15 ton, heavy-duty, forged rear pintle hitch

9. Lighting:

- a. Two rear LED working lights
- b. Two front LED moldboard lights
- c. Two front headlights, signals, flashers
- d. Two rear LED tail lights, signals
- e. Amber LED strobe beacon

10. Operator Station:

- a. Fully cushioned, fully adjustable suspension seat
- b. Adjustable operator's pedestal
- c. Vandal protection kit
- d. Choice of ROPS/FOPS cab or ROPS/FOPS canopy
- e. Cab includes heat, front wiper, front washer and defroster
- f. Clear, unobstructed view of work area
- g. Two external convex 7.5" diameter side mirrors and single rearview mirror
- h. Color graphic control screen with digital readouts. Review and monitor system vitals including: coolant temperature, hydraulic oil temperature, fuel level, voltmeter, tachometer, hour meter, DEF level, percent engine load, and engine diagnostics

11. Articulated Frame:

- a. Steel channel and rectangle tubing, articulated 24° in each direction
- b. Pivot shaft 2.5" diameter, supported by two tapered roller bearings

12. Front Axle:

- a. Fully welded steel plate design
- b. 40° oscillating axle supported by tapered roller bearings and bushings with wheel lean of 15° left or right (30° total)
- c. Ground clearance: 14" at the center

13. Turning Radius:

- a. 22' to center of outside front tire with frame articulated

14. Controls:

- a. Industry standard control levers control left and right-hand moldboard lift, front attachment lift, moldboard side shift, circle side shift, moldboard tilt, circle turn, articulation, front wheel lean and rear-mount scarifier control

15. Additional Standard Equipment:

- a. Back-up alarm
- b. High temperature, low oil pressure shut down
- c. Horn
- d. Slow-moving vehicle sign
- e. 12V DC power outlet
- f. Mounting provisions for Topcon control system sensors

16. Optional Equipment:

- a. All-wheel drive
- b. Air conditioning (cab only)
- c. Front-mounted V-bar scarifier, includes float control
- d. Rear-mounted scarifier, includes 9 ripper shanks w/ teeth
- e. 8' front blade
- f. Front blade mounted flip-down 4 shank scarifier, requires 8' front blade option
- g. Dead engine steering
- h. Cold weather engine package
- i. Rear wiper and washer (cab only)
- j. 12' moldboard
- k. Circle side shift
- l. Radio/CD/Bluetooth w/ dual speakers and remote
- m. Back-up/reverse camera with color display
- n. Topcon options:
 - Topcon Ready Package provides control valve with hydraulic plumbing, sensor cables, and bolt-on brackets for Topcon components. (Requires customer-supplied Topcon control box, smart knobs, and sensors)
 - Complete factory-installed Topcon System Five, 2D control system

17. Training, Support and Company

- a. Training and support manuals
- b. Optional on-site operator training by Dealer
- c. Two-year, unlimited hours warranty against any manufacturer defects
- d. Extended warranty available
- e. 55+ years manufacturing experience
- f. ISO 9001 Certified
- g. Sourcewell Contract #052417-VTL
- h. Manufactured in the USA

