

# GLADIATOR

## MECHANICAL STREET SWEEPER



[www.WayneSweepers.com](http://www.WayneSweepers.com)

### GENERAL

- Mounted on cabover or conventional chassis
- Axle capacities:
  - Front 12,000 lb (5,443 kg)
  - Rear 21,000 lb (9,525 kg)
  - GVWR 33,000 lb (14,968 kg)
- Dual steering
- Rear air suspension

### ENGINE

- John Deere Power Tech
- Model PE5030HF270
- Turbocharged
- 5 cylinder in-line diesel, 4 cycle
- Displacement: 186 cu in (3.05 L)
- 4.1" stroke
- 3.4" bore
- 18:2:1 compression ratio
- 99 hp @ 2,800 rpm (intermittent)
- 84 hp @ 2,800 rpm (continuous)
- 243 lb-ft @ 1,400 rpm (peak torque)
- Dual stage dry type air cleaner
- Automatic throttle control

### FUEL SYSTEM

- 70 gal (265 L) Fuel capacity
- Twin tanks filled from either side
- Return splitter valve equalized tank levels

### INSTRUMENT PANEL & CONTROLS

- Single button control of sweeping functions
- Back lit control panel
- Hopper position indicator lights
- Broom position indicator lights
- Conveyor stall indicator light / Audible alarm
- Water tank low level indicator / Audible alarm
- Low pressure / High temperature shut-down
- Auxiliary engine integrated shut-down system
- Auxiliary engine low oil pressure indicator light
- Hydraulic temperature warning indicator light
- Auxiliary engine coolant temperature gauge
- Auxiliary engine oil pressure gauge
- Auxiliary engine tachometer / Hour meter

### PAINT

- High-gloss polyurethane
- Phosphate treatment

### MAIN BROOM

- Diameter: 35' (889 mm)
- Length: 60" (1,524 mm)
- Core: Compression Lock 8" x 60" (203 mm x 1,524 mm)
- Type: Heavy duty polypropylene tube broom
- Drive: Hydraulic Direct Drive activated from cab
- Suspension: Independent hydraulic pressure control
- Automatic wear compensation
- Mounting: Full floating
- Bearings: Sealed, self-aligning
- Drag Shoe: Rubber mounted chromium carbide or tungsten

### GUTTER BROOMS

- Location: Behind cab
- Diameter: 44" (1,117 mm)
- Type: Universal fit 5 segments; co-polymer blocks, disposable wire bristles
- Flex: Free floating digger
- Drive: Direct hydraulic, relief valve protected
- Suspension: Independent hydraulic pressure control
- Automatic wear compensation
- Adjustments: In cab remote for tilt, forward, reverse and lift
- Center Deflector: Free floating polypropylene bristle

### CONVEYOR

- Type: Squeegee with replaceable flights reinforced tow belt drive
- Drive: Reversible hydraulic driven
- Lift Control: Hydraulic
- Tension: Pneumatic load sensing
- Clearance: Adjustable 4"-10" (102 mm-254 mm)
- Width: 60" (1,524 mm)
- Cleaning: Built-in hydrant flush with internal high pressure jets

### HOPPER

- Volumetric Capacity: 5 cu yds
- Material Volume: 4 cu yds
- Lift Control: Hydraulic in cab
- Dumping: Right side dump
- Lifting Method: Double scissor with twin hydraulic cylinder
- Dump Capacity: 12,000 lbs (5443 kg)
- Dump Height: Variable 24" to 136" (9,609 mm-3,454 mm)
- Maximum Dump Angle: 48 degrees

### HYDRAULIC SYSTEM

- Pump: Variable displacement piston pump with piggy back gear pump
- Drive: Direct drive off auxiliary engine
- Controls: Electric over hydraulic
- 4 Hydraulic Motors: Heavy duty with relief valve protection
- 12 volt emergency auxiliary back-up pump

### HYDRA-KOOL

- Compact Cooler - Filter - Reservoir Unit
- Oil cooler with hydraulic driven fan built in
- Hi-flow integral 10 micron filter
- 20 gal reservoir capacity
- Electronic temperature and level sensor
- 10 micron filler-breather
- Filter element condition indicator

### WATER SYSTEM

- Capacity of Tank: 340 gal (1,287 L)
- Tank Composition: Dual polyethylene tanks
- Fill System: Hydrant fill with air gap
- Filter suction line 80 mesh
- Stainless Steel Spray Bars: 6 front bumper, 3 per gutter broom, 4 main broom
- In-cab independent control
- Hydraulic driven water pump
- Water system line purge

### ELECTRICAL/CONTROL SYSTEM

- 12 volt negative ground system
- 70 amp alternator on auxiliary engine
- Electronic circuit protection
- CANBUS full diagnostic system
- Minimized wiring with CANBUS system
- Multiplexing System:
  - Diagnostic LED's
  - Vehicle data network interface
  - Remote Diagnostics

### LIGHTING SYSTEM

- Combination LED stop / tail lights
- Combination LED strobe / turn lights
- Compartment LED Lights
- Directional light bar
- 5 Rear marker lights
- 8 Side marker lights
- 2 Main broom LED spotlights
- 1 LED spotlight per gutter broom
- Automatic back-up lights / Audible alarm

ENGINEERED FOR PERFORMANCE



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# WAYNE



**POWERFUL MAIN BROOM:**

The Gladiator's 60" rear broom features a direct drive hydraulic motor that is interchangeable with the gutter broom and conveyer motors. The full floating design along with its automatic wear compensation ensures longer broom life and better debris collection.

**POWERFUL AUXILLARY ENGINE:**

The Gladiator features a powerful 99 horsepower, 5 cylinder John Deere engine with easy service access.



**HIGH DUMP HOPPER:**

The Gladiator's 12,000 lb rated scissors lift is capable of raising the 5 cubic yard hopper to a variable dump height of up to 138 inches.



**EASY TO USE CONTROLS:**

The Gladiator features a user friendly 5.7" color LCD control screen. On-screen diagnostics allow users to quickly diagnose issues. Meanwhile, the unit's hydraulic system is quickly fine tuned to adapt to any road debris type.



**DYNAMIC GUTTER BROOMS:**

The Gladiator's powerful and agile gutter brooms can articulate to remove debris from hard-to-reach areas. The 44" brooms provide a total sweep path of 12 feet.



**Standard Features:**

- 5 cubic yard Hopper (4 cubic yard Material Volume)
- 99 HP John Deere Auxiliary Engine
- Squeegee type conveyor system with replaceable flights
- 340 Gallon Water Tank
- 60" Main Broom with 35.5" Diameter
- 44" Diameter Dual Gutter Brooms
- Interchangeable broom and conveyor motors
- Rear Air Suspension
- 12,000lbs Scissor Lift Capacity
- Advanced Load Sensing Hydraulics
- Multiplexed Control System with Color LCD Display

**A Proven Workhorse,**

especially suited for construction and milling applications. It features a John Deere auxiliary engine, 5 cubic yard hopper, an advanced load sensing hydraulic system, and versatile 44" dual gutter brooms.



**GLADIATOR**