## Sweeping Path

- **Pickup Head Only**
  - 90" (2,286mm)
- **Pickup Head and one gutter broom**
  - 117" (2,972mm)
- **Pickup Head and two gutter brooms**
  - 144" (3,658mm)

### Chassis

- Mounts on various chassis to meet requirements

### Sweeper Body

- **Construction**: Welded 10-gauge steel plate with 3/16 steel hopper floor
- **Safety Prop**: Dual steel bars located under body

### Instrumentation

- **Sweeper Engine**
  - Tachometer
  - Hourmeter
  - Voltmeter
  - Temperature gauge
  - Oil pressure gauge

### Standard Engine

- **Model / Type**: 4045T In-line 4-cylinder
- **Aspiration**: Turbo-charged diesel
- **Manufacturer**: John Deere
- **Displacement**: 119 HP (86 KW)
- **Torque**: 317 ft-lb (430 Nm)
- **Air Cleaner**: Precleaner: Centrifugal type; Air Cleaner: Dry type with safety element
- **Oil Filter**: Full-flow / Spin on
- **Stroke**: 4.20" (106mm)
- **Bore**: 5.00" (127mm)
- **Compression Ratio**: 19 to 1
- **Air Cleaner Design**: Three-point automatic
- **Air Cleaner Type**: Dry type with safety element

### Electrical System

- **Voltage**: 12 Volt
- **Sweeper Engine Alternator**: 65 Amps

### Dust Control System

- **Type**: High Pressure / Low volume
- **Capacity**: 250 Gallon (944 L)
- **Tank Construction**: Polyethylene
- **Fill Diameter**: 2.5" (63.5mm)
- **Fill Hose Diameter**: 2.50" (63.5mm)
- **Fill Hose**: 25 foot (7.62m)
- **Paint**: One coat of sealer / primer and two coats of Dupont Imron Elite polyurethane in standard white color

### Side Brooms

- **Type**: Vertical steel digger
- **Location**: Right, Left, forward of pickup head
- **Drive**: Hydraulic
- **Suspension**: Torque-sensing spring
- **Wear Adjustment**: Manual
- **Speed**: Variable, non-reversing
- **Seeds**: 5 each side, disposable
- **Tilt Angle Adjustment**: Manual with optional

### Dust Control System cont’d

- **Nozzles**: Electric, in-cab
  - 2 on each broom
  - 5 around suction head
  - 2 inside suction nozzle
  - 2 on front axle
  - 2 inside hopper
- **Water Level Gauge**: For heavy / light material
- **Blower System**: Closed-face radial
  - Direct via 5 groove, banded power belt
  - Hardin Steel, to 1.5 grams or less on 2 sides
- **Diameter**: 32.75" (832mm)
- **Housing Lining**: Bolt-in corded rubber
- **Mounting**: 2 regreaseable sealed bearings
- **Vacuum Enhancer**: For heavy / light material
- **Dust Control System cont’d**: Electric; in-cab
  - Nozzles: 2 on each broom
  - 5 around suction head
  - 2 inside suction nozzle
  - 2 on front axle
  - 2 inside hopper
- **Water Level Gauge**: In-cab

### Blower System

- **Type**: Closed-face radial
  - Direct via 5 groove, banded power belt
  - Hardin Steel, to 1.5 grams or less on 2 sides
- **Diameter**: 32.75" (832mm)
- **Housing Lining**: Bolt-in corded rubber
- **Mounting**: 2 regreaseable sealed bearings
- **Vacuum Enhancer**: For heavy / light material

### Debris Hopper

- **Volumetric Capacity**: 8.4 cubic yards
- **Useable Capacity**: 6.4 cubic yards
- **Dump Angle**: 53 degrees
- **Floor Angle**: 3 degrees
- **Lifting**: Twin hydraulic cylinders
- **Hopper Door**: Open / Close / lock hydraulically
- **Inspection Doors**: 1 on each side of hopper
- **Screws**: Sawtooth Drop Down

### Hydraulic System

- **Type**: Dual output 2 section
  - Pump Capacity: 6.5 gpm @1800RPM (24.6L / min.) per section
  - for 13.0 gpm total
  - Drive: Direct gear
  - Maximum Pressure: 2000psi (137 bar)
- **Reservoir**: 25 gallons (94 liters)
- **Filter**: 10 micron, spin-on
- **Protection**: Pressure relief valve
- **Controls**: Electric-hydraulic

### Auxillary Hydraulic System

- **Type**: Gear type, driven by electric motor
- **Function**: Raise/lower hopper door, open/close hopper door, raise/lower brooms and pickup head

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**NOTE**: Specifications are subject to change without notice. Specifications may vary depending on chassis type.
### Warranty Support

Schwarze people are on duty to support you and your equipment.

Schwarze regenerative air sweepers are guaranteed to be free from defects due to faulty materials and/or workmanship for a period of 12 months, or 1200 hours. Liability is limited to replacement of defective parts at factory or authorized dealer. The standard warranties of the chassis and sweeper engine manufacturer shall apply.

### Parts Availability

Schwarze original equipment parts are available when you need them.

### Trusted Dealers

Trusted dealers will support your before and after-purchase needs.

### Empowered and Responsive

Schwarze People are valued for their commitment to our future.

### Schwarze Products

Engineered for enhanced sweeping performance and low ownership cost.

### Customer Support

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### A7 Tornado™

8.4 Cubic Yard Regenerative Air Street Sweeper

**Standard 12V DC Hydraulic Pump:**

Able to raise and lower the sweeping head without use of aux. engine

**8.4 Cubic Yard Hopper Capacity:**

Increased hopper capacity equates to increased production and less dumps

**Saw tooth Screens:**

Increased screen surface area creates more productivity, eliminates the need for a screen vibrater, lower cost of operation

**Bolt in Pressure & Transition Tubes:**

Ease of maintenance (reduced cost of ownership)

**Abrasion Resistant Steel in Critical Wear Areas:**

Longer life expectancy equates to reduced cost of ownership

**Four Point Protection™:**

Optional stainless steel hopper package for long lasting performance

**Sweeps in ReverseSM:**

Eliminates the need for the operator to raise the sweeping head to reverse

**Optional Equipment:**

- Gutter Broom Extension OverrideSM: Increased usability of gutter brooms and expands the versatility in various applications, while eliminating the need for a center broom
- In Cab Hydraulic Tilt
- Whisper Wheel™ Fan System: 70% quieter, uses 20% less fuel and 7% more powerful than an open face fan design
- Saw tooth Screens: Increased screen surface area creates more productivity, eliminates the need for a screen vibrater, lower cost of operation
- Optional Equipment: Mechanic-Pneumatic Powerhood (broom assist head), in-cab tilt controls for gutter brooms
- Optional Equipment: In Cab Hydraulic Tilt
- Optional Equipment: In-Cab Hydraulic Tilt
- Optional Equipment: Saw tooth Screens: Increased screen surface area creates more productivity, eliminates the need for a screen vibrater, lower cost of operation
- Optional Equipment: Gutter Broom Extension OverrideSM: Increased usability of gutter brooms and expands the versatility in various applications, while eliminating the need for a center broom
- Optional Equipment: Whisper Wheel™ Fan System: 70% quieter, uses 20% less fuel and 7% more powerful than an open face fan design

**Value**

- **PM 10 Certified:**
  - Meets AQMD 1186 requirements to pick up and contain harmful particulates
- **Optional Equipment:**
  - One to three remote cameras with in-cab video monitor and sound suppression system

**Perfomance**

- **90°x36° Sweeping Head:**
  - Increased productivity with a larger area of influence (quicker transfer, no bulldozing)
- **8” auxiliary hand hose, extra 350 gallon polyethylene water tank:**

**Quality**

- **Noise Level:**
  - Reduced operator stress and increased ability to operate in noise sensitive areas
- **Sweeps in ReverseSM:**
  - Eliminates the need for the operator to raise the sweeping head to reverse
- **Whisper Wheel™ Fan System:**
  - 70% quieter, uses 20% less fuel and 7% more powerful than an open face fan design
- **Financing Available**
- **Abrasion Resistant Steel in Critical Wear Areas:**
  - Longer life expectancy equates to reduced cost of ownership
- **Optional Equipment:**
  - 8” auxiliary hand hose, extra 350 gallon polyethylene water tank
- **In Cab Hydraulic Tilt
**
- **Whisper Wheel™ Fan System:**
  - 70% quieter, uses 20% less fuel and 7% more powerful than an open face fan design
- **Noise Level:**
  - Reduced operator stress and increased ability to operate in noise sensitive areas
- **Optional Equipment:**
  - One to three remote cameras with in-cab video monitor and sound suppression system

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The Schwarze A7 Tornado™ is a chassis mounted, regenerative air street sweeper with an 8.4 cubic yard hopper. With over 20 years of successful operation throughout the world, the A7 Tornado™ is a heavy duty workhorse that will provide a high quality option with a low cost of ownership. Come to the people you know for the products you trust.

Additional from Schwarze Industries, Inc.
Sweeping Path

Pickup Head Only 90" (2,286mm)
Pickup Head and one gutter broom 117" (2,972mm)
Pickup Head and two gutter brooms 144" (3,658mm)

Chassis

Mounts on various chassis to meet requirements

Sweeper Body

Construction Welded 10-gauge steel plate with 3/16 steel hopper floor
Dual steel bars located under body

Safety Prop

Dual steel bars located under body

Instrumentation

Sweeper Engine

Telemeter, hourmeter, voltmeter, temperature gauge, oil pressure gauge

Standard Engine

Model / Type 4045T 4 cylinder
Aspiration Turbo-charged diesel
Manufacturer John Deere
Displacement 275 cu. in. (4.5L)
Torque 317ft-lb (430Nm)
Air Cleaner Prochronal; Centrifugal type; Dry type with safety element
Air Filter Full-flow / Spin on
Pressure 500 psi (122kPa)
Bore 4.20" (106mm)
Compression Ratio 19.0 to 1

Electrical System

Voltage 12 Volt
Sweeper Engine Alternator 65 Amps

Dust Control System

Type High Pressure / Low volume
Capacity 250 Gallon (946 L)
Tank Construction Polyethylene
Filter Material 200 mesh, cleanable
Filter Element Polyester
Filter Area 2.87 ft² (0.27 m²)
Filter Hose 25 foot (76 m)

Dust Control System cont’d

Controls Electric, in-cab
Nozzles 2 on each broom
5 around suction head
2 inside suction nozzle
2 on front axle
2 inside hopper
Water Level Gauge
Blower System

Type Closed-face radial
Drive Direct via 5 groove, banded power belt
Hardin Steel
Diameter 32.75" (832mm)
Housing Lining Bolt-in corded rubber
Mounting 2 regreaseable sealed bearings
Vacuum Enhancer For heavy / light material

Pickup Head

Type Dual chambered
Operating Direction Forward and reverse
Suspension Adjustable spring balanced
Head Area 1,240 sq. in. (12.64cm²)
Section Heights 5/8" (15.5mm)
Skids Double wide trolley carbide
Construction Abrasion-resistant steel/steel and outlet transitions

Paint

One coat of sealer / primer and two coats of Dupont Imron Elite polyurethane in standard white color

Side Brooms

Type Vertical steel digger
Location Right, Left, forward of pickup head
Diameter 44" (1117.60 mm)
Drive Hydraulic
Suspension Torque-sensing spring
Wear Adjustment Asternic
Pressure Manual
Speed Variable, non-reversing
Segments 5 each side, disposable
Tilt Angle Adjustment in-cab controls

Debris Hopper

Volumetric Capacity 8.4 cubic yards
Useable Capacity 5.5 cubic yards
Dumplage 3 degrees
Lifting Four hydraulic cylinders
Inspection Doors 4 on each side of hopper
Screens Sawtooth Drop Down

Blower System

Type Closed-face radial
Drive Direct via 5 groove, banded power belt
Construction Hardox Steel
Diameter 32.75" (832mm)
Housing Lining Bolt-in corded rubber
Mounting 2 regreaseable sealed bearings
Vacuum Enhancer For heavy / light material

Hydraulic System

Type Dual output 2 section
Pump Capacity 6.5 gpm @1800RPM (24.7L / min.) per section
Drive Direct gear
Maximum Pressure 2900psi (193 bar)
Reservoir 25 gallons (94 liters)
Filter 10 micron, spin on
Protection Pressure relief valve
Controls Electric, hydraulic

Auxiliary Hydraulic System

Type Gear type, driven by electric motor
Function Rain/flower hopper, open/close hopper door, raise/lower brooms and pickup head

NOTE: Specifications are subject to change without notice. Specifications may vary depending on chassis type.