



AVAILABLE IN
ENGINE 1
SINGLE ENGINE CONFIGURATION

**PATENT
PENDING**



A7 Tornado SE™

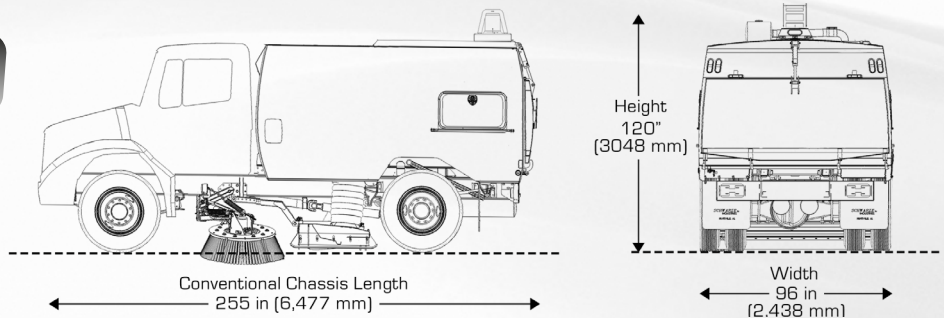
The Schwarze A7 Tornado Single Engine is a heavy-duty, chassis mounted, single engine regenerative air street sweeper with an 8.4 cubic yard hopper. It follows over 20 years of successful operation throughout the United States and around the world of the A7 Tornado twin engine sweeper. The A7 Tornado is the most popular street sweeper in the Schwarze lineup, with its standard high flow saw tooth screens, high efficiency whisper wheel blower and proven blast orifice pickup head, the Schwarze A7 tornado is the standard of the sweeping industry.

The Schwarze A7 Tornado SE has no performance compromise from its twin engine version and can perform most typical sweeping at a low single engine speeds allowing for low noise and operational costs. When full power is needed for heavy jobs like construction and spring cleanup the A7 Tornado SE comes through with the same amount of sweep power available on the twin engine A7 Tornado.

Designed to operate exactly like the twin engine model, little if any additional operator and technician training is required. The Schwarze exclusive selectable "sweeps in reverse" feature allows unparalleled ability to clean all surfaces.



**PATENT PENDING SINGLE
ENGINE TECHNOLOGY
WITHOUT THE LOSS OF
PERFORMANCE**



*TYPICAL MEASUREMENTS SHOWN , EXACT DIMENSIONS DEPENDING ON OPTIONS AND TRUCK MANUFACTURER

SWEEPING PATH

| | |
|-------------------|------------------|
| Pickup head only | 90 in (2286 mm) |
| Head and 1 broom | 117 in (2972 mm) |
| Head and 2 brooms | 144 in (3658 mm) |

CHASSIS

Freightliner M2 106

SWEEPER BODY

| | |
|--------------|---------------------------------------|
| Construction | Welded 10-gauge stainless steel plate |
| Safety props | Lift spacers |

CHASSIS AND SWEEPER POWER

| | |
|-------------------|--|
| Model/type | ISB 6.7 in-line 6 cylinder |
| Emissions | GHG21 turbo-charged diesel |
| Manufacturer | Cummins Corp |
| Displacement | 6.7 liter (409 c.i.) |
| Brake horsepower | 240 hp (180 kw) @ 2500 rpm |
| Torque | 560 ft. lb (759 Nm) @1100 rpm |
| Air cleaner | High capacity dry type with safety element and restriction indicator |
| Oil filter | Full-flow/spin-on |
| Stroke | 5 in (127 mm) |
| Bore | 4.20 in (106 mm) |
| Compression ratio | 19 to 1 |
| Safety shutdown | Cummins automatic |
| Throttle control | Electronic |

SWEEPER/CHASSIS ELECTRICAL

| | |
|-------------------|---------|
| Voltage | 12 V |
| Engine alternator | 160 amp |

DUST CONTROL SYSTEM

| | |
|-------------------|---|
| Type | High pressure/low volume |
| Capacity | 470 gallon (1786 L); options to 570 gallons (2166 liters) |
| Tank construction | Polyethylene |
| Pump Inlet filter | 50 mesh; cleanable |
| Fill diameter | 2.5 in (63.5 mm) |
| Fill hose | 25 ft (7620 mm) |
| 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 | In-cab |

INSTRUMENTATION

| | |
|---------|--|
| Sweeper | Flat panel display; spray water level; hydraulic oil temperature: sweep mode; sweep in reverse; vacuum enhancer position; hopper position, sweeper diagnostics; sweep power; broom speed |
|---------|--|

FAN SYSTEM

| | |
|-----------------|---|
| Type | Closed-face radial |
| Drive | Hot shift PTO via 5 groove; banded power belt |
| Construction | AR steel |
| Balance | 1.5 grams on 2 sides |
| Diameter | 32.75 in (832 mm) |
| Housing lining | Bolt-in corded rubber |
| Mounting | 2 regreasable sealed bearings |
| Vacuum enhancer | For heavy/light material; in-cab indicator |

PICKUP HEAD

| | |
|---------------------|--|
| Type | Dual chambered full-width blast orifice |
| Operating direction | Forward and reverse |
| Suspension | Adjustable spring balanced |
| Length | 90 in (2286 mm) |
| Pressure hose diam | 14 in (355.6 mm) |
| Suction hose diam | 14 in (355.6 mm) |
| Hose construction | 3/8 in (9.5 mm) wire-reinforced molded rubber |
| Head area | 3240 sq in (20903 sq cm) |
| Controls | Hydraulic raise and lower |
| Skids | Double wide tungsten carbide |
| Construction | Abrasion-resistant steel inlet and outlet transitions. |

SIDE BROOMS

| | |
|-----------------------|-------------------------------------|
| Type | Vertical steel digger |
| Location | Right; left; forward of pickup head |
| Diameter | 44 in (1118 mm) |
| Drive | Hydraulic |
| Suspension | Torque-sensing spring |
| Wear adjustment | Automatic |
| Pressure | Manual |
| Speed | Variable; non-reversing |
| Segments | 5 each side; disposable |
| Tilt angle adjustment | In-cab controls |

DEBRIS HOPPER

| | |
|---------------------|--------------------------------------|
| Volumetric capacity | 8.4 cu yd (6.4 cu m) |
| Usable Capacity | 7.0 cu yd (5.4 cu m) |
| Dump angle | 51 degrees |
| Floor angle | 3 degrees |
| Lifting | Twin hydraulic cylinders |
| Hopper dump door | Hydraulic open, close, lock |
| Inspection doors | 1 on each side, pressure vessel lock |
| Hopper dump height | 40 in (1016 mm) |
| Debris screens | Sawtooth drop down |

HYDRAULIC SYSTEM

| | |
|-------------------|----------------------------------|
| Type | Variable displacement |
| Max Pump capacity | 27 gpm @ 1800 rpm (103 lpm) |
| Drive | Belt |
| Maximum pressure | 2750 psi (190 bar) |
| Reservoir | 25 gal (94 L) |
| Filter | 10 micron; in-tank with DP gauge |
| Protection | Pressure relief valve |
| Controls | Electro-hydraulic |

AUXILIARY HYDRAULIC SYSTEM

| | |
|----------|--|
| Type | Gear type; driven by electric motor |
| Function | Lower hopper; open/close hopper door; raise brooms and pickup head |

PAINT

| | |
|---|---|
| One coat of sealer/primer and two coats of in standard white color. | |
| Paint | White; Sherwin Williams Genesis G2 #100268977 |

Note: Design and specifications subject to change without notice.



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