



435[®]
AIR SWEEPER



GENERAL SPECIFICATIONS

MODEL 435[®] REGENERATIVE AIR SWEEPER[®]
FINAL TIER 4 AUXILIARY ENGINE/CONVENTIONAL CAB CHASSIS

SWEEPER AUXILIARY ENGINE

Engine Kubota V2403-CR-TE4B, 4 cyl. (Final Tier 4)
Displacement..... 148.5 in³ (2.4 L)
Power..... 56 hp (41.7 kW) @ 2100 RPM
Net torque..... 140 lb-ft (190 Nm) @ 2100 RPM
Air cleaner Heavy duty, w/pre-cleaner
Oil filter Spin on, full flow
Cooling Liquid
Diesel auxiliary engine fuel tank shared with chassis engine
Fuel tank capacity..... 52 gal (197 L)
Auxiliary engine protection system
Fuel/water separator

BLOWER, RUBBER LINED

Aluminum alloy, high volume, open face turbine
Purpose Creates air blast and suction
Bearings Anti-friction
Housing Abrasion resistant, replaceable liner
Drive Heavy duty power band

DUST SEPARATOR, RUBBER LINED

Type Cyclonic, multipass, centrifugal separation
Cylindrical area..... 20 x 22.5 in (508 x 1549 mm)
Location Adjacent to hopper
Particulate removal achieved through 22.5 in (572 mm) skimmer slot into skimmer hood
Inspection/cleanout port w/extended plug handle

HOPPER

Capacity (volumetric)..... 4.0 yd³ (3.06 m³)
Capacity (useable)..... 3.1 yd³ (2.37 m³)
Construction Welded steel plate
Dump door opening..... 77.25 x 70 in (1962 x 1778 mm)
Dumping method Hydraulic with tilt up
Dumping height 82.5 in (2095 mm)
Dump clearance height..... 165.5 in (4204 mm)
Dump door hydraulically opened/closed
Hopper screen lifts with door for easy cleaning
Abrasion protection package
Hopper drip edge extension

STORAGE COMPARTMENTS

Rear (2) Total of 26.6 ft³ (.075 m³) capacity
Front storage compartment not available

PICK-UP HEAD

Type Dual chamber
Function Delivers air blast and suction
Width (inside dimension) 78 in (1981 mm)
Head area..... 2028 in² (1.31 m²)
Suspension 4 springs, 2 drag links
Skids..... DUO-SKID[®], long life carbide
Suction hose diameter..... 12 in (305 mm)
Pressure hose diameter 12 in (305 mm)
Pressure bleeder Integral for leaf/light material pickup
Reverse pick-up head system

HYDRAULIC SYSTEM

Operates gutter brooms, dump door and pick-up head
Drive Gear driven from auxiliary engine
Capacity..... 5 GPM (18.925 LPM)
Reservoir 13.5 gal (51.1 L) w/80 mesh suction strainer, sight/temperature gauge, oil cooler
Filter..... 10 micron in-line
Hydraulic oil Extended life

GUTTER BROOMS, TWIN, Patented

Standard equipment includes floodlight and parabolic mirror
Drive Constant speed non-reversible hydraulic motor
Adjustment..... Adjustable for down pressure, pattern and wear
Down pressure Automatically adjusts to requirement
Flexibility..... All directions, Integral anti-damage "swing away" relief valve
Broom..... Steel wire vertical digger 36 in (914 mm)

DUST CONTROL SYSTEM

Water spray nozzles for dust suppression
Pump Electric diaphragm
Reservoir Polyethylene, 150 gal (567.7 L)
Filter..... 80 mesh in-line
Low water shut-off Safety shut-off with low water warning light in cab
Spray nozzles At gutter brooms and inside hopper
Fire hydrant and garden hose connections
Hydrant fill hose w/storage area 20 ft (6 m)

CONTROL SYSTEM

BlueLogic[®] Control System

Multiplexed electrical system includes hardware and TYMCO designed software that integrates the in-cab controls to the auxiliary engine and all sweeper functions; as well as provides intelligent safety features and on-board diagnostics (OBD) for the auxiliary engine and sweeper through the BlueLogic display.

BlueLogic Display

Pedestal mounted touchscreen display provides sweeper and auxiliary engine data to the operator and includes hour meters (trip and total) for the auxiliary engine, gutter brooms, pick-up head, blower, and water pump; sweeper odometer (records curb miles swept and sweeping hours), service reminders, custom reminders, overspeed warning, low water audible alarm, dust control system winterization guide, and OBD.

Interior Components

Leaf pressure bleeder control, BlueLogic display, auxiliary fuse panel, illuminated control switches: pick-up head, gutter brooms, auxiliary engine RPM, dust control water system nozzles, safety lights

Exterior Components

Dump switch, BlueLogic multiplex module

SAFETY/WARNING DEVICES

Alternating LED rear flashers (2)
Back-up alarm
Hopper safety prop

OPTIONAL EQUIPMENT

Auto Sweep Interrupt (ASI)
Auxiliary hand hose 6 in dia. (152 mm)
Auxiliary hydraulic system
Camera/monitor system
Gutter broom tilt adjuster(s) (left, right, or twin)
Gutter broom variable speed
Gutter broom drop-down
High output water system
Hi/Low pressure washdown system
Hopper drain system
Hopper deluge system
Light bar, cab mounted, LED
Linear actuator - pressure bleeder with gauge
Low emissions package (required for South Coast AQMD Rule 1186, not applicable with high output water system)
Magnet front bumper mounted, light duty
Pick-up head curtain lifter
Shop air purge, dust control system
Sound Reduction Engineering (SRE[®])
Stainless steel options:
Hopper:
Hopper weldment
Hopper door
Hopper screen
Inspection door
Skimmer hood
Suction inlet tube
Blower housing
Dust separator
Hopper drain
Hopper inspection door
Hopper screen
Auxiliary hand hose hardware
Paint color (other than TYMCO standard white)

Special options are available for your individual requirements. Contact your local dealer or TYMCO.

CONVENTIONAL CAB CHASSIS AVAILABLE

Freightliner M2-106