



435[®]
AIR SWEEPER

GENERAL SPECIFICATIONS



MODEL 435[®] MID-SIZE REGENERATIVE[®] AIR SWEEPER
DIESEL AUXILIARY ENGINE / DIESEL CONVENTIONAL CAB CHASSIS

SWEEPER AUXILIARY ENGINE

Engine Kubota V2403-CR-TE4B FT4, 4 cyl.
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 with WIF sensor
Fuel filters 10 µm primary, 5 µm secondary

BLOWER, RUBBER COATED

Aluminum alloy, high volume, open face turbine
Bearings (2) Anti-friction
Housing Steel w/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 (51 x 57 cm)
Location Adjacent to hopper
Particulate removal achieved through 22.5 in (57 cm) skimmer slot into skimmer hood
Inspection/cleanout port

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 (196 x 178 cm)
Insection door (1) Right side of hopper
..... 8.5 x 8.5 in (21.5 x 21.5 cm)
Dump method Hydraulic tilt
Dump direction Rear
Dump floor angle 37°
Dump height 82.5 in (209.5 cm)
Dump clearance height..... 165.5 in (420 cm)
Dump door hydraulically opened/closed
Hopper screen lifts with door for easy cleaning
Abrasion protection package

STORAGE COMPARTMENTS

Rear (2) 13.3 ft³ (0.38 m³) (ea.) capacity
Front storage compartment not available

PICK-UP HEAD

Type..... Dual chamber
Width (inside dimension) 78 in (198 cm)
Pick-up head area 2028 in² (1.31 m²)
Suspension 4 springs, 2 drag links
Skids..... DUO-SKID[®], long life carbide
Suction hose diameter..... 12 in (30.5 cm)
Pressure hose diameter 12 in (30.5 cm)
Pressure bleeder Cable operated

Removeable suction tube
Reverse pick-up head system

GUTTER BROOMS, TWIN, Patented

Drive Constant speed non-reversible hydraulic motor
Adjustment..... Adjustable for down pressure, pattern and wear
Down pressure Automatic
Flexibility..... Integral anti-damage "swing away" relief valve
Broom Steel wire vertical digger 43 in dia. (109 cm)
Floodlights (2) LED
Parabolic mirrors (2) 10.5 in (26.67 cm) dia.

HYDRAULIC SYSTEM

Operates gutter brooms, dump door and pick-up head
Drive Gear driven from auxiliary engine
Flow rate..... 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 10W ISO 46
Cooler Air to oil

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 audible and visual indicator in cab
Spray nozzles At gutter brooms and inside hopper
Fire hydrant hose connection
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 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

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 Control Module (BCM)

SAFETY/WARNING DEVICES

Alternating LED rear flashers (2)
Rear view camera system
Back-up alarm
Hopper safety prop

OPTIONAL EQUIPMENT

Auto Sweep Interrupt (ASI)
Auxiliary hand hose 6 in (15 cm) dia.
Auxiliary hydraulic system
Camera/monitor systems:
Additional camera views:
Pick-up head view
Gutter broom view - left and/or right
CurbView camera system
Gutter broom tilt adjuster(s) (left, right, or twin)
Gutter broom variable speed
Gutter broom drop-down
High output water system
Hi/Low 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)
Magnet: Light or standard duty
Pick-up head curtain lifter
Shop air purge, dust control system
Sound Reduction Engineering (SRE[®])
Stainless steel (non-magnetic) 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. Contact your local dealer or TYMCO.

CONVENTIONAL CAB CHASSIS AVAILABLE

Freightliner M2-106