



435[®]
AIR SWEEPER



GENERAL SPECIFICATIONS



MODEL 435[®] MID-SIZE REGENERATIVE[®] AIR SWEEPER
DIESEL AUXILIARY ENGINE / DIESEL CABOVER 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 fuel supplied from chassis fuel tank
Fuel tank capacity.....30 gal (113 L)
Auxiliary engine protection system
Fuel/water separator with separate fuel filter
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)
ConstructionWelded steel plate
Dump door opening77.25 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 directionRear
Dump floor angle37°
Dump height72 in (183 cm)
Dump clearance height.....154 in (391 cm)
Dump door hydraulically opened/closed
Hopper screen lifts with door for easy cleaning
Abrasion protection package

STORAGE COMPARTMENTS

Front 55 ft³ (1.5 m³) capacity
Rear (2) 13.3 ft³ (0.38 m³) (ea.) capacity

PICK-UP HEAD

Type.....Dual chamber
Width (inside dimension) 78 in (198 cm)
Pick-up head area2028 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
Reverse pick-up head system

GUTTER BROOM, LEFT, 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 36 in (91 cm)
Floodlight..... LED
Parabolic mirror 10.5 in (26.67 cm) dia.

HYDRAULIC SYSTEM

Operates gutter broom(s), dump door and pick-up head
Drive Gear driven from auxiliary engine
Flow rate5 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 broom(s) and inside hopper
Fire hydrant and garden hose connections
Hydrant fill hose.....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 broom(s), 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 broom(s),

auxiliary engine RPM, dust control water system nozzles, safety lights

Exterior Controls

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 view - pick-up head

CurbView camera system

COMDEX package Up to 145 gal (549 L)

Requires Isuzu 132.5 in wheelbase

Gutter broom(s) (right or twin)

Gutter broom tilt adjuster(s) (left, right, or twin)

Gutter broom variable speed

Gutter broom drop-down

Requires Isuzu 150 in wheelbase

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, front bumper mounted, light 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.

CABOVER CHASSIS AVAILABLE

Isuzu NQR Diesel - 150 in wheelbase (WB)

Isuzu NQR Diesel- 132.5 in WB (COMDEX)

Isuzu NPR-XD Diesel - 132.5 in WB

(COMDEX)