



**435**<sup>®</sup>  
AIR SWEEPER



**GENERAL SPECIFICATIONS**



**MODEL 435<sup>®</sup> MID-SIZE REGENERATIVE<sup>®</sup> AIR SWEEPER**  
**DIESEL AUXILIARY ENGINE / DIESEL CABOVER CHASSIS**

**SWEEPER AUXILIARY ENGINE**

Engine ..... Kubota V2403-CR-TE4B FT4, 4 cyl.  
Displacement ..... 148.5 in<sup>3</sup> (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 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 yd<sup>3</sup> (3.06 m<sup>3</sup>)  
Capacity (useable) ..... 3.1 yd<sup>3</sup> (2.37 m<sup>3</sup>)  
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 ..... 72 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 ft<sup>3</sup> (1.5 m<sup>3</sup>) capacity  
Rear (2) ..... 13.3 ft<sup>3</sup> (0.38 m<sup>3</sup>) (ea.) capacity

**PICK-UP HEAD**

Type ..... Dual chamber  
Width (inside dimension) ..... 78 in (198 cm)  
Pick-up head area ..... 2028 in<sup>2</sup> (1.31 m<sup>2</sup>)  
Suspension ..... 4 springs, 2 drag links  
Skids ..... DUO-SKID<sup>®</sup>, 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 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 broom(s) and inside hopper  
Fire hydrant and garden hose connections  
Hydrant fill hose ..... 20 ft (6 m)

**CONTROL SYSTEM**

**BlueLogic<sup>®</sup> 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<sup>®</sup>)

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)