



**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

**BLOWER, RUBBER LINED**

Aluminum alloy, high volume, open face turbine  
Bearings ..... 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 (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 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 (1962 x 1778 mm)  
Dump method..... Hydraulic with tilt up  
Dump height..... 72 in (1829 mm)  
Dump clearance height..... 154 in (3912 mm)  
Dump door hydraulically opened/closed  
Hopper screen lifts with door for easy cleaning  
Abrasion protection package  
Hopper drip edge extension

**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 (1981 mm)  
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 (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 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

**GUTTER BROOM, LEFT, Patented**

Includes LED floodlight and parabolic mirror  
Drive ..... Constant speed non-reversible hydraulic motor  
Adjustment..... Adjustable for down pressure, pattern and wear  
Down pressure ..... Automatic  
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 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 to the operator 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**

Leaf pressure bleeder control, BlueLogic display, 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**

Additional camera views - pick-up head, left gutter broom, right gutter broom  
Auto Sweep Interrupt (ASI)  
Auxiliary fuse panel  
Auxiliary hand hose 6 in dia. (152 mm)  
Auxiliary hydraulic system  
COMDEX package ..... Up to 145 gal (549 L)  
Requires Isuzu 132.5 in wheelbase  
CurbView camera system  
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 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)  
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 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.*

**CABOVER CHASSIS AVAILABLE**

Isuzu NQR - 150 in wheelbase  
Isuzu NQR - 132.5 in wheelbase (COMDEX)  
Isuzu NPR-XD - 132.5 in wheelbase (COMDEX)