



# 600<sup>®</sup> CNG

AIR SWEEPER

## GENERAL SPECIFICATIONS



# MODEL 600<sup>®</sup> REGENERATIVE<sup>®</sup> AIR STREET SWEEPER

## CNG AUXILIARY ENGINE / CNG CHASSIS

### SWEEPER AUXILIARY ENGINE

Engine ..... KEM/GM Vortec 5700 CNG  
Displacement ..... 350 in<sup>3</sup> (5.7 L)  
Power ..... 124 HP @ 2400 RPM (92 kW)  
Net torque ..... 284 lb-ft @ 2100 RPM (385 Nm)  
Air cleaner ..... Heavy duty, w/pre-cleaner, scavenge vacuum hose, and in-cab air restriction indicator w/gauge.  
Oil filter ..... Spin on, full flow  
Auxiliary engine fuel rack shared with chassis  
CNG fuel rack capacity ..... 60 DGE (227 DLE)  
Auxiliary engine shutdown system  
Fuel/water separator

### BLOWER, RUBBER LINED

Aluminum alloy, high volume, open face turbine  
Bearings ... (2) sealed lifetime lube, anti-friction  
Bolt-on housing ..... Steel w/abrasion resistant, replaceable liner  
Drive ..... Heavy duty power band

### DUST SEPARATOR, HIGH CAPACITY

Type ..... Cyclonic, multipass, centrifugal separation  
Size ..... 20 x 61 in cylindrical area (508 x 1549 mm)  
Located adjacent to blower within hopper  
Particulate removal achieved through 61 in (1549 mm) skimmer slot into skimmer hood  
Hinged inspection door opened from hopper exterior  
Abrasion resistant housing w/replaceable wear resistant liner

### HOPPER

Capacity (volumetric) ..... 7.3 yd<sup>3</sup> (5.6 m<sup>3</sup>)  
Capacity (useable) ..... 6 yd<sup>3</sup> (4.6 m<sup>3</sup>)  
Construction ..... Welded steel plate with integral stiffeners  
Floor angle ..... 22°  
Dump door opening ..... 84 x 44 in (2134 x 1118 mm)  
Dump method ..... Hydraulic with raker bar  
Dump height ..... 36 in (914 mm)

### PICK-UP HEAD

Type ..... Dual chamber  
Width (inside dimension) ..... 87 in (2210 mm)  
Std. pick-up head area ..... 2610 in<sup>2</sup> (1.68 m<sup>2</sup>)  
BAH<sup>®</sup> option area ..... 3567 in<sup>2</sup> (2.3 m<sup>2</sup>)  
Suspension ..... 4 springs, 2 drag links  
Skids ..... DUO SKID<sup>®</sup>, long-life carbide  
Suction hose diameter ..... 14 in (356 mm)  
Pressure hose diameter ..... 14 in (356 mm)  
Pressure bleeder ..... Integral for leaf/light material pickup  
Reverse pick-up head system

### GUTTER BROOM, TWIN, Patented

Includes LED floodlights and parabolic mirrors  
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 ..... 43 in dia. (1092 mm) steel wire, vertical digger

### HYDRAULIC SYSTEM

Operates gutter broom(s), dump and pick-up head  
Drive ..... Belt driven from auxiliary engine  
Flow rate ..... 8 GPM (30.3 LPM)  
Reservoir ... 25 gal (94.6 L) w/80 mesh suction strainer, sight/temperature gauge, cooler  
Filter ..... 3 micron in-line

### DUST CONTROL SYSTEM

Water spray nozzles for dust suppression  
Pump ..... Electric diaphragm  
Reservoirs ..... Polyethylene 220 gal (833 L), total minimum  
Filter ..... 80 mesh in-line  
Low water shut-off ..... Safety shut-off with audible and visual indicator in cab  
Spray nozzles:  
Around pick-up head ..... 4  
Gutter brooms (each) ..... 2  
Hopper (inside) ..... 1  
Hydrant fill hose w/storage area ..... 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 brooms, pick-up head, blower, water pump, and BAH broom if applicable; 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 Control Module (BCM)

### SAFETY/WARNING DEVICES

Alternating LED rear flashers (2)  
Rear view camera system  
Back-up alarm  
SAE Class 1/California Title 13 amber beacon light with limb guard - LED

### OPTIONAL EQUIPMENT

AOD water pump w/washdown hose/spray gun  
Abrasion protection package  
Additional camera views - pick-up head, left gutter broom, right gutter broom  
Auto Sweep Interrupt (ASI)  
Auxiliary hand hose 8 in dia. (203 mm)  
Auxiliary hand hose hydraulic boom assist  
Auxiliary hand hose catch basin cleaning package  
Auxiliary hydraulic system  
Broom Assist Pick-up Head (BAH<sup>®</sup>)  
COMDEX (extra water and tool box) 330 gal (1249 L) total capacity (171" WB Autocar chassis only)  
Gutter broom tilt adjuster(s) (left, right, or twin)  
Gutter broom variable speed  
Gutter broom drop-down  
High output water system  
Hopper deluge system  
Hopper drain system  
Linear actuator - pressure bleeder w/gauge (Standard on cabover chassis)  
Liquid recovery system  
Low emissions package (required for South Coast AQMD Rule 1186)  
Magnet, light, standard, or heavy duty  
Pick-up head curtain lifter  
Pick-up head deluge  
Shop air purge, dust control system  
Spark resistant skids  
Stainless steel options:  
Hopper:  
Hopper weldment  
Dump door  
Inspection doors  
Raker plate  
High capacity dust separator  
Hopper screen  
Blower housing  
High capacity dust separator  
Hopper drain  
Paint color (other than TYMCO standard white)

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

### CHASSIS AVAILABLE

Freightliner M2-112 CNG - 176 in wheelbase  
Autocar Xpert CNG - 157 in wheelbase  
Autocar Xpert CNG - 171 in wheelbase

# MODEL 600<sup>®</sup> REGENERATIVE<sup>®</sup> AIR STREET SWEEPER

## CNG AUXILIARY ENGINE / CNG CHASSIS



**FREIGHTLINER M2-112  
CNG**



**AUTOCAR XPERT CNG**



**AUTOCAR XPERT CNG  
with COMDEX Extra Water**

<b>CAB/CHASSIS</b>			
GVWR	33,000 lb (14,969 kg)	33,000 lb (14,969 kg)	33,000 lb (14,969 kg)
Front Axle	12,000 lb (5443 kg) w/12,000 lb (5443 kg) front springs and dust shields	12,000 lb (5443 kg) w/12,500 lb (5700 kg) front flatleaf suspension w/shock absorbers	12,000 lb (5443 kg) w/12,500 lb (5700 kg) front flatleaf suspension w/shock absorbers
Rear Axle	21,000 lb (9525 kg) w/23,000 lb (10,432 kg) rear variable rate multi-leaf springs w/leaf spring helper	21,000 lb (9525 kg) w/21,000 lb (9525 kg) rear air suspension w/shock absorbers	21,000 lb (9525 kg) w/21,000 lb (9525 kg) rear air suspension w/shock absorbers
Gear ratio	6.14 (single speed)	6.14 (single speed)	6.14 (single speed)
Frame	120,000 PSI (3447.38 bar)	120,000 PSI (8273.71 bar)	120,000 PSI (8273.71 bar)
Engine	Cummins L9N	Cummins L9N	Cummins L9N
Displacement	543 in <sup>3</sup> (8.9 L)	543 in <sup>3</sup> (8.9 L)	543 in <sup>3</sup> (8.9 L)
Power	250 hp (186 kW) @ 2200 RPM	250 hp (186 kW) @ 2200 RPM	250 hp (186 kW) @ 2200 RPM
Torque	730 lb-ft (990 Nm) torque @ 1300 RPM	730 lb-ft (990 Nm) torque @ 1300 RPM	730 lb-ft (990 Nm) torque @ 1300 RPM
Transmission	Allison 3500 RDS 6-speed automatic transmission with PTO provision, synthetic fluid, temperature gauge in cab, and push button shifter	Allison 3500 RDS 6-speed automatic transmission with PTO provision, synthetic fluid, temperature gauge in cab, and push button shifter	Allison 3500 RDS 6-speed automatic transmission with PTO provision, synthetic fluid, temperature gauge in cab, and push button shifter
Alternator	160 amp	160 amp	160 amp
Batteries	(2) 12 volt, 2000 CCA, maintenance free	(2) 12 volt, 1900 CCA, maintenance free w/ disconnect switch	(2) 12 volt, 1900 CCA, maintenance free w/ disconnect switch
Wheelbase	176 in (4470 mm)	157 in (4343 mm)	171 in (4343 mm)
Turning diameter (wall-to-wall)	50.5 ft (15.39 m) (approximate)	55.66 ft (16.97 m) (approximate)	59.13 ft (18.02 m) (approximate)
Turning diameter (curb-to-curb)	48.2 ft (14.69 m) (approximate)	50.74 ft (15.47 m) (approximate)	54.13 ft (16.50 m) (approximate)
Fuel tanks	(4) Cylinders 15 DGE (56.78 DLE) each = 60 total DGE (227 DLE) shared with sweeper, located behind cab with fuel heating system and single fuel line shutoff valve with pressure regulator.	(4) Cylinders 15 DGE (56.78 DLE) each = 60 total DGE (227 DLE) shared with sweeper, located behind cab with fuel heating system and single fuel line shutoff valve with pressure regulator.	(4) Cylinders 15 DGE (56.78 DLE) each = 60 total DGE (227 DLE) shared with sweeper, located behind cab with fuel heating system and single fuel line shutoff valve with pressure regulator.
Tires (2-front, 4-rear)	Tubeless 11R x 22.5	Tubeless 11R x 22.5	Tubeless 11R x 22.5
Steering	Integral power assisted dual steering w/cruise control, 18 in (457 mm) steering wheel, dual gauges and tilt/telescoping steering column installed by Fontaine Modification Company.	Integral hydraulic power assist steering w/16 in (406 mm) diameter steering wheel – tilt/ telescopic steering column(s). Optional dual steering installed by Autocar.	Integral hydraulic power assist steering w/16 in (406 mm) diameter steering wheel – tilt/ telescopic steering column(s). Optional dual steering installed by Autocar.
Brakes	4 wheel air ABS w/18.7 CFM (0.53 m <sup>3</sup> /minute) air compressor	4 wheel air ABS w/18.7 CFM (0.53 m <sup>3</sup> /minute) air compressor	4 wheel air ABS w/18.7 CFM (0.53 m <sup>3</sup> /minute) air compressor
Instruments & lights	Full package as required	Full package as required	Full package as required
Seats	Basic high back air suspension seats with mechanical lumbar and integrated cushion extension.	Adjustable, individual high back air suspension seats	Adjustable, individual high back air suspension seats
Air dryer	Yes w/heater	Yes w/heater	Yes w/heater
Cruise control	Yes	Yes	Yes
Mirrors	Electric remote controlled and heated	Electric remote controlled and heated	Electric remote controlled and heated
Air conditioned cab	Yes, w/fresh air filter for cab filtration	Yes	Yes
Windows and door locks	Power	Power windows, manual door locks	Power windows, manual door locks
Exhaust system	Horizontal	Left hand outboard frame mounted vertical topstack	Left hand outboard frame mounted vertical topstack
Audio system	AM/FM/WB auxiliary input stereo radio w/digital clock	AM/FM/WB radio, CD/MP3 player, Bluetooth, USB and auxiliary input stereo w/digital clock	AM/FM/WB radio, CD/MP3 player, Bluetooth, USB and auxiliary input stereo w/digital clock
Daytime running lights	Yes	Yes	Yes

### **SWEEPING WIDTH (Approximate)**

Pick-up head only	87 in (2210 mm)	87 in (2210 mm)	87 in (2210 mm)
With 1 gutter broom	110 in (2794 mm)	110 in (2794 mm)	110 in (2794 mm)
With 2 gutter brooms	142 in (3606 mm)	142 in (3606 mm)	142 in (3606 mm)

### **OVERALL DIMENSIONS (Approximate)**

Length (sweeper body & chassis only)	296 in (7518 mm)	270 in (6858 mm)	284 in (7213 mm)
Width (between outside tips of stowed twin gutter broom bristles)	121 in (3073 mm)	121 in (3073 mm)	121 in (3073 mm)
Height (w/o cab bar light/beacon)	115 in (2921 mm) @ fuel rack eye bolts	118 in (2997 mm) @ auxiliary engine	118 in (2997 mm) @ auxiliary engine
Empty weight (sweeper body & chassis only)	19,400 lbs (8800 kg)	21,675 lbs (9832 kg)	21,975 lbs (9968 kg)

*Dimensions and weight may vary with equipment.*

*Cab/Chassis specifications above provided by truck manufacturer. Consult factory for additional specifications and other available truck chassis.*