

**ATTACHMENT E**

**Sweepers-Miscellaneous, Parking lot, Sidewalk, Light, and other, complete floor cleaning machines**

If you have different discounts for options, you WILL have to list the items. If you need more space, attach sheets or use Microsoft Excel.

BRAND	MODEL (Standard base unit)	Percentage discount OFF PARTS	Base Price
Tymco	210 Ford F350 Gas	1 %	\$ 97,500 <sup>00</sup>
	210 Ford F350 Diesel		\$ 105,500 <sup>00</sup>
	210 Ford F450 Gas		\$ 101,000 <sup>00</sup>
	210 Ford F450 Diesel		\$ 108,750 <sup>00</sup>
	210 Isuzu NPR-HD Gas		\$ 102,250 <sup>00</sup>
	210 Isuzu NPR-HD Diesel		\$ 111,000 <sup>00</sup>
	Freight - Per Unit		2500 <sup>00</sup>

Attachments/Accessories: 1 %  
 Options: 1 % Installation Charge: \$ Two Hourly Labor Rate: \$ 175<sup>00</sup>  
 Multiple Unit discount: 1 % (In addition to the equipment discount) based on 2 Units purchased  
 OEM Repair Parts: 1 % After Market Parts: 0 % Financing of Lease Purchase interest rate: Market  
 Extended Warranty offered? Yes  No If yes, please attach information for the extended warranty purchase. Discount offered N/A %

Vendors, please explain your ordering process in an attached document and any promotional events that might provide for a discount off the price listed.

Note: These are Regenerative Air Sweepers



## GENERAL SPECIFICATIONS



# MODEL 210<sup>®</sup> REGENERATIVE<sup>®</sup> AIR PARKING LOT SWEEPER DIESEL AUXILIARY ENGINE / DIESEL CONVENTIONAL CAB 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  
Auxiliary engine fuel tank independent from chassis fuel tank  
Aux. engine fuel tank capacity ..... 19 gal (72 L)  
Auxiliary engine protection system  
Fuel/water separator

### BLOWER

Aluminum alloy, high volume, open face turbine  
Purpose .....Creates air blast and suction  
Bearings ..... Anti-friction  
Housing ..... Steel w/abrasion resistant, replaceable liner  
Drive ..... Heavy duty power band

### DUST SEPARATOR

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) .....2.4 yd<sup>3</sup> (1.83 m<sup>3</sup>)  
Capacity (useable) .....2.1 yd<sup>3</sup> (1.61 m<sup>3</sup>)  
Construction .....Welded steel plate  
Dump door opening.....52 x 23 in (1321 x 584 mm)  
Dump door hydraulically opened/closed  
Dumping method ..... Hydraulic with tilt up  
Dumping height (F-450)..... 58 in (1473 mm)  
Dumping height (F-350)..... 55 in (1397 mm)  
Dumping clearance height.....  
(F-450) ..... 142 in (3607 mm)  
(F-350) ..... 139 in (3531 mm)  
Hopper drip edge extension

### PICK-UP HEAD

Type ..... Dual chamber  
Function .....Delivers air blast and suction  
Width (inside dimension) ..... 78 in (1981 mm)  
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 (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 ..... 8 gal (30.3 L) w/80 mesh suction strainer, sight/temperature gauge, oil cooler  
Filter..... 10 micron in-line  
Hydraulic oil ..... Extended life

### GUTTER BROOM, LEFT, Patented

Standard equipment includes LED floodlight and parabolic mirror  
Drive .....Constant speed non-reversible hydraulic motor  
Adjustment..... Adjustable for down pressure, pattern and wear  
Down pressure .....Automatically adjusts to requirement  
Flexibility .....All directions, Integral anti-damage "swing away" relief valve  
Broom..... Poly wafer 36 in (914 mm)

### 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 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 (if applicable), sweeper odometer (records curb miles swept and sweeping hours), service reminders, custom reminders, overspeed warning, low water audible alarm (if applicable), 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 (if applicable), safety lights

#### Exterior Components

Dump switch, BlueLogic multiplex module

### SAFETY/WARNING DEVICES

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

### OPTIONAL EQUIPMENT

Abrasion protection package  
Amber beacon light, LED  
Auto Sweep Interrupt (ASI)  
Auxiliary fuse panel  
Auxiliary hand hose 6 in (152 mm) dia.  
Backpack blower storage box  
Dust control system .....30 gal (113 L)  
Gutter broom(s) ..... Right (in lieu of left) or twin  
Broom.....Poly or steel wire digger  
32 in (812.8 mm) (Ford F-450 only)  
Hopper drain system  
Hopper slide-out screen  
Hopper up alarm  
Light bar, cab mounted, LED  
Linear actuator - pressure bleeder with gauge  
Low emissions package (required for South Coast AQMD Rule 1186, not applicable with high output water system)  
Magnet, front bumper mounted, light duty  
Rubber lined blower  
Shop air purge, dust control system  
Sound Reduction Engineering (SRE<sup>®</sup>)  
Stainless steel options:  
Hopper:  
Hopper weldment  
Hopper door  
Inspection door  
Skimmer hood  
Slide-out hopper screen  
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.*

### CONVENTIONAL CAB CHASSIS AVAILABLE

Ford F-450 Diesel  
Ford F-350 Diesel

# MODEL 210<sup>®</sup> REGENERATIVE<sup>®</sup> AIR PARKING LOT SWEEPER

## DIESEL AUXILIARY ENGINE / DIESEL CONVENTIONAL CAB CHASSIS



**FORD F-450  
DIESEL**



**FORD F-350  
DIESEL**

<b>CAB/CHASSIS</b>		
GVWR	16,500 lb (7484 kg)	14,000 lbs (6350 kg)
Front axle	7000 lb (3175 kg), w/ 4800-7000 lb (2177-3175 kg) front springs (varies based on configuration), shock absorbers, stabilizer bar	5250 lb (2381 kg), w/ 4850-5250 lb (2200-2381 kg) front springs (varies based on configuration), stabilizer bar
Rear axle	12,000 lb (5443 kg), w/12,000 lb (5443 kg) rear springs, shock absorbers, stabilizer bar	9750 lb (4423 kg), w/9750 lb (4423 kg) rear springs, shock absorbers, stabilizer bar
Gear ratio	4.10	3.73
Frame	7.04 SM (36,000 PSI)	7.04 SM (36,000 PSI)
Engine	Ford, 6.7L V8 turbo diesel	Ford, 6.7L V8 turbo diesel
Displacement	409 in <sup>3</sup> (6.7 L)	409 in <sup>3</sup> (6.7 L)
Power	330 hp (243 kW) @ 2600 RPM	330 hp (243 kW) @ 2600 RPM
Torque	825 lb-ft (1119 Nm) @ 1600 RPM	825 lb-ft (1119 Nm) @ 1600 RPM
Cooling	Radiator and transmission oil, heavy duty	Radiator and transmission oil, heavy duty
Transmission	10-Speed TorqShift <sup>®</sup> automatic transmission w/overdrive, electronic control, Ford live-drive power takeoff (PTO) provision	10-Speed TorqShift <sup>®</sup> automatic transmission w/overdrive, electronic control, Ford live-drive power takeoff (PTO) provision
Alternator	220 amp	220 amp
Batteries	12 volt heavy duty batteries - (2) 750 CCA maintenance free	12 volt heavy duty batteries - (2) 750 CCA maintenance free
Wheelbase	145.3 in (3691 mm)	145.3 in (3691 mm)
Turning diameter (wall-to-wall)	44.4 ft (13.53 m) (approximate)	52.1 ft (15.88 m) (approximate)
Turning diameter (curb-to-curb)	42.5 ft (12.95 m) (approximate)	50.1 ft (15.27 m) (approximate)
Fuel	Diesel	Diesel
Fuel tank (separate from sweeper fuel tank)	26.5 gal (100 L), mid-ship mounted (L.H.) only	26.5 gal (100 L), mid-ship mounted (L.H.) only
Diesel exhaust fluid tank	6 gal (22.71 L)	6 gal (22.71 L)
Tires (2-front, 4-rear)	(6) 225/70R19.5G all season	(6) LT245/75R 17E all season
Steering	Left side power steering w/tilt & telescoping steering column. Dual steering not available.	Left side power steering w/tilt & telescoping steering column. Dual steering not available.
Brakes	Power brakes with four (4) wheel anti-lock; disc – front and rear	Power brakes with four (4) wheel anti-lock; disc – front and rear
Instruments & lights	Fuel, transmission temperature, engine coolant temperature, turbo gauges; speedometer, odometer and tachometer	Fuel, transmission temperature, engine coolant temperature, turbo gauges; speedometer, odometer and tachometer
Tow hooks (front)	Yes	Yes
Seats	40/20/40 split HD vinyl seats	40/20/40 split HD vinyl seats
Cruise control	Yes	Yes
Mirrors	Black, manual telescoping trailer tow (fold-away)	Black, manual telescoping trailer tow (fold-away)
Air conditioned cab	Yes	Yes
Windows and door locks	Power	Manual (power optional; special order)
Exhaust system	Horizontal	Horizontal
Audio system	AM/FM/MP3 stereo radio w/Sync <sup>®</sup> and digital clock	AM/FM/MP3 stereo radio w/Sync <sup>®</sup> and digital clock
Daytime running lights	No	No
<b>SWEEPING WIDTH (Approximate)</b>		
Pick-up head only	78 in (1981 mm)	78 in (1981 mm)
With 1 poly gutter broom	98 in (2489 mm)	98 in (2489 mm)
With 2 poly gutter brooms	118 in (2997 mm)	118 in (2997 mm)
<b>OVERALL DIMENSIONS (Approximate)</b>		
Length (sweeper body & chassis only)	231.5 in (5880 mm)	231.5 in (5880 mm)
Width (outside stowed poly wafer gutter broom bristle tip to end of opposite rear fender (single gutter broom) or opposite stowed gutter broom bristle tip (twin gutter broom))	96 in (2438 mm)	96 in (2438 mm)
Height (w/o cab bar light/beacon)	81 in (2054 mm) @ blower housing	78 in (1981 mm) @ blower housing
Empty weight (sweeper body & chassis only)	11,220 lbs (5089 kg)	10,720 lbs (4863 kg)
<i>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.</i>		



**210**<sup>®</sup>  
AIR SWEEPER



**GENERAL SPECIFICATIONS**



**MODEL 210<sup>®</sup> REGENERATIVE<sup>®</sup> AIR PARKING LOT SWEEPER  
GASOLINE AUXILIARY ENGINE / GASOLINE CONVENTIONAL CAB CHASSIS**

**SWEEPER AUXILIARY ENGINE**

Engine ..... EDI/Ford MSG-425 EFI, 4 cyl.  
Displacement..... 152.5 in<sup>3</sup> (2.5 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  
Auxiliary engine fuel tank independent from chassis fuel tank  
Aux. engine fuel tank capacity ..... 19 gal (72 L)  
Auxiliary engine protection system  
Fuel filter

**BLOWER**

Aluminum alloy, high volume, open face turbine  
Purpose ..... Creates air blast and suction  
Bearings ..... Anti-friction  
Housing ..... Steel w/abrasion resistant, replaceable liner  
Drive ..... Heavy duty power band

**DUST SEPARATOR**

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) ..... 2.4 yd<sup>3</sup> (1.83 m<sup>3</sup>)  
Capacity (useable) ..... 2.1 yd<sup>3</sup> (1.61 m<sup>3</sup>)  
Construction ..... Welded steel plate  
Dump door opening ..... 52 x 23 in (1321 x 584 mm)  
Dump door hydraulically opened/closed  
Dumping method ..... Hydraulic with tilt up  
Dumping height (F-450)..... 58 in (1473 mm)  
Dumping height (F-350)..... 55 in (1397 mm)  
Dumping clearance height.....  
(F-450) ..... 142 in (3607 mm)  
(F-350) ..... 139 in (3531 mm)  
Hopper drip edge extension

**PICK-UP HEAD**

Type ..... Dual chamber  
Function ..... Delivers air blast and suction  
Width (inside dimension) ..... 78 in (1981 mm)  
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 (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 ..... Belt driven from auxiliary engine  
Flow rate..... 5 GPM (18.925 LPM)  
Reservoir ..... 8 gal (30.3 L) w/80 mesh suction strainer, sight/temperature gauge, oil cooler  
Filter..... 10 micron in-line  
Hydraulic oil..... Extended life

**GUTTER BROOM, LEFT, Patented**

Standard equipment includes LED floodlight and parabolic mirror  
Drive ..... Constant speed non-reversible hydraulic motor  
Adjustment..... Adjustable for down pressure, pattern and wear  
Down pressure ..... Automatically adjusts to requirement  
Flexibility..... All directions, Integral anti-damage "swing away" relief valve  
Broom..... Poly wafer 36 in (914 mm)

**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 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 (if applicable), sweeper odometer (records curb miles swept and sweeping hours), service reminders, custom reminders, overspeed warning, low water audible alarm (if applicable), 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 (if applicable), safety lights

**Exterior Components**

Dump switch, BlueLogic multiplex module

**SAFETY/WARNING DEVICES**

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

**OPTIONAL EQUIPMENT**

Abrasion protection package  
Amber beacon light, LED  
Auto Sweep Interrupt (ASI)  
Auxiliary fuse panel  
Auxiliary hand hose 6 in (152 mm) dia.  
Backpack blower storage box  
Dust control system ..... 30 gal (113 L)  
Gutter broom(s) ..... Right (in lieu of left) or twin  
Broom..... Poly or steel wire digger  
32 in (812.8 mm) (Ford F-450 only)  
Hopper drain system  
Hopper slide-out screen  
Hopper up alarm  
Light bar, cab mounted, LED  
Linear actuator - pressure bleeder with gauge  
Low emissions package (required for South Coast AQMD Rule 1186, not applicable with high output water system)  
Magnet, front bumper mounted, light duty  
Rubber lined blower  
Shop air purge, dust control system  
Sound Reduction Engineering (SRE<sup>®</sup>)  
Stainless steel options:  
Hopper:  
Hopper weldment  
Hopper door  
Inspection door  
Skimmer hood  
Slide-out hopper screen  
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.*

**CONVENTIONAL CAB CHASSIS AVAILABLE**

Ford F-450 Gasoline  
Ford F-350 Gasoline

# MODEL 210<sup>®</sup> REGENERATIVE<sup>®</sup> AIR PARKING LOT SWEEPER

## GASOLINE AUXILIARY ENGINE / GASOLINE CONVENTIONAL CAB CHASSIS



**FORD F-450  
GASOLINE**



**FORD F-350  
GASOLINE**

<b>CAB/CHASSIS</b>		
GVWR	16,500 lb (7484 kg)	14,000 lbs (6350 kg)
Front axle	7000 lb (3175 kg), w/ 4800-7000 lb (2177-3175 kg) front springs (varies based on configuration), shock absorbers, stabilizer bar	5250 lb (2381 kg), w/ 4850-5250 lb (2200-2381 kg) front springs (varies based on configuration), stabilizer bar
Rear axle	12,000 lb (5443 kg), w/12,000 lb (5443 kg) rear springs, shock absorbers, stabilizer bar	9750 lb (4423 kg), w/9750 lb (4423 kg) rear springs, shock absorbers, stabilizer bar
Gear ratio	4.88	3.73
Frame	7.04 SM (36,000 PSI)	7.04 SM (36,000 PSI)
Engine	Ford, 7.3L 2V DEVCT NA PFI V8	Ford, 7.3L 2V DEVCT NA PFI V8
Displacement	445 in <sup>3</sup> (7.3 L)	445 in <sup>3</sup> (7.3 L)
Power	350 hp (257 kW) @ 3900 RPM	350 hp (257 kW) @ 3900 RPM
Torque	468 lb-ft (634 Nm) @ 3900 RPM	468 lb-ft (634 Nm) @ 3900 RPM
Cooling	Radiator and transmission oil, heavy duty	Radiator and transmission oil, heavy duty
Transmission	10-Speed TorqShift <sup>®</sup> automatic transmission w/overdrive, electronic control, Ford live-drive power takeoff (PTO) provision	10-Speed TorqShift <sup>®</sup> automatic transmission w/overdrive, electronic control, Ford live-drive power takeoff (PTO) provision
Alternator	240 amp	240 amp
Batteries	12 volt heavy duty battery - (1) 750 CCA maintenance free	12 volt heavy duty battery - (1) 750 CCA maintenance free
Wheelbase	145.3 in (3691 mm)	145.3 in (3691 mm)
Turning diameter (wall-to-wall)	44.4 ft (13.53 m) (approximate)	52.1 ft (15.88 m) (approximate)
Turning diameter (curb-to-curb)	42.5 ft (12.95 m) (approximate)	50.1 ft (15.27 m) (approximate)
Fuel	Gasoline	Gasoline
Fuel tank (separate from sweeper fuel tank)	26.5 gal (100 L), mid-ship mounted (L.H.) only	26.5 gal (100 L), mid-ship mounted (L.H.) only
Tires (2-front, 4-rear)	(6) 225/70R19.5G all season	(6) LT245/75R 17E all season
Steering	Left side power steering w/tilt & telescoping steering column. Dual steering not available.	Left side power steering w/tilt & telescoping steering column. Dual steering not available.
Brakes	Power brakes with four (4) wheel anti-lock; disc – front and rear	Power brakes with four (4) wheel anti-lock; disc – front and rear
Instruments & lights	Fuel, transmission temperature, engine coolant temperature, oil pressure gauges; speedometer, odometer and tachometer	Fuel, transmission temperature, engine coolant temperature, oil pressure gauges; speedometer, odometer and tachometer
Tow hooks (front)	Yes	Yes
Seats	40/20/40 split HD vinyl seats	40/20/40 split HD vinyl seats
Cruise control	Yes	Yes
Mirrors	Black, manual telescoping trailer tow (fold-away)	Black, manual telescoping trailer tow (fold-away)
Air conditioned cab	Yes	Yes
Windows and door locks	Power	Power
Exhaust system	Horizontal	Horizontal
Audio system	AM/FM/MP3 stereo radio w/Sync <sup>®</sup> and digital clock	AM/FM/MP3 stereo radio w/Sync <sup>®</sup> and digital clock
Daytime running lights	No	No
<b>SWEEPING WIDTH (Approximate)</b>		
Pick-up head only	78 in (1981 mm)	78 in (1981 mm)
With 1 poly gutter broom	98 in (2489 mm)	98 in (2489 mm)
With 2 poly gutter brooms	118 in (2997 mm)	118 in (2997 mm)
<b>OVERALL DIMENSIONS (Approximate)</b>		
Length (sweeper body & chassis only)	231.5 in (5880 mm)	231.5 in (5880 mm)
Width (outside stowed poly wafer gutter broom bristle tip to end of opposite rear fender (single gutter broom) or opposite stowed gutter broom bristle tip (twin gutter broom))	96 in (2438 mm)	96 in (2438 mm)
Height (w/o cab bar light/beacon)	81 in (2054 mm) @ blower housing	78 in (1981 mm) @ blower housing
Empty weight (sweeper body & chassis only)	11,220 lbs (5089 kg)	10,720 lbs (4863 kg)
<i>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.</i>		



# 210<sup>®</sup>

AIR SWEEPER

## GENERAL SPECIFICATIONS



# MODEL 210<sup>®</sup> REGENERATIVE<sup>®</sup> AIR PARKING LOT 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

Aluminum alloy, high volume, open face turbine  
 Purpose .....Creates air blast and suction  
 Bearings ..... Anti-friction  
 Housing ..... Steel w/abrasion resistant, replaceable liner  
 Drive .....Heavy duty power band

### DUST SEPARATOR

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).....2.4 yd<sup>3</sup> (1.83 m<sup>3</sup>)  
 Capacity (useable).....2.1 yd<sup>3</sup> (1.61 m<sup>3</sup>)  
 Construction .....Welded steel plate  
 Dump door opening .....52 x 23 in (1321 x 584 mm)  
 Dump door hydraulically opened/closed  
 Dumping method ..... Hydraulic with tilt up  
 Dumping height ..... 57 in (1447 mm)  
 Dumping clearance height.... 141 in (3582 mm)  
 Hopper drip edge extension

### PICK-UP HEAD

Type .....Dual chamber  
 Function ..... Delivers air blast and suction  
 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 ..... 8 gal (30.3 L) w/80 mesh suction strainer, sight/temperature gauge, oil cooler  
 Filter..... 10 micron in-line  
 Hydraulic oil .....Extended life

### GUTTER BROOM, LEFT, Patented

Standard equipment includes LED floodlight and parabolic mirror  
 Drive .....Constant speed non-reversible hydraulic motor  
 Adjustment..... Adjustable for down pressure, pattern and wear  
 Down pressure .....Automatically adjusts to requirement  
 Flexibility .....All directions, Integral anti-damage "swing away" relief valve  
 Broom..... Poly wafer 36 in (914 mm)

### 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 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 (if applicable), sweeper odometer (records curb miles swept and sweeping hours), service reminders, custom reminders, overspeed warning, low water audible alarm (if applicable), 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 (if applicable), dust control system winterization guide, safety lights

#### Exterior Components

Dump switch, BlueLogic multiplex module

### SAFETY/WARNING DEVICES

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

### OPTIONAL EQUIPMENT

Abrasion protection package  
 Amber beacon light, LED  
 Auto Sweep Interrupt (ASI)  
 Auxiliary fuse panel  
 Auxiliary hand hose 6 in dia. (152 mm)  
 Backpack blower storage box  
 Cabover storage box (n/a with COMDEX)  
 Dust control system .....30 gal (113 L)  
 COMDEX water ..... 60 gal (227 L)  
 COMDEX water .....102.5 gal (388 L)  
 Hi/Low pressure washdown system  
 Gutter broom(s) ..... Right (in lieu of left) or twin  
 Broom.....Poly or steel wire digger 32 in (812.8 mm)  
 Gutter broom tilt adjuster(s) (left, right, or twin)  
 Hopper drain system  
 Hopper slide-out screen  
 Hopper up alarm  
 Light bar, cab mounted, LED  
 Linear actuator - pressure bleeder with gauge  
 Low emissions package (required for South Coast AQMD Rule 1186, not applicable with high output water system)  
 Magnet, front bumper mounted, light duty  
 Pick-up head front curtain lifter (diesel only)  
 Portering shelf  
 Rubber lined blower  
 Shop air purge, dust control system  
 Sound Reduction Engineering (SRE<sup>®</sup>)  
 Stainless steel options:  
 Hopper:  
 Hopper weldment  
 Hopper door  
 Inspection door  
 Skimmer hood  
 Slide-out hopper screen  
 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 NPR-HD Diesel

# MODEL 210<sup>®</sup> REGENERATIVE<sup>®</sup> AIR PARKING LOT SWEEPER

## DIESEL AUXILIARY ENGINE / DIESEL CABOVER CHASSIS



**ISUZU NPR-HD  
DIESEL**

<b>CAB/CHASSIS</b>	
GVWR	14,500 lb (6583 kg)
Front axle	6830 lb (3098 kg), 6830 lb (3098 kg) spring capacity, front shock absorbers and stabilizer bar
Rear axle	11,020 lb (4999 kg), 9880 lb (4481 kg) spring capacity, rear shock absorbers
Gear ratio	4.555
Frame	Carbon steel 7.20 SM (44,000 PSI) 316,800 lb-ft/in
Engine	Isuzu 4HK1-TC, turbo diesel
Displacement	317 in <sup>3</sup> (5.19 L)
Power	215 hp (160 kW) @ 2550 RPM
Torque	452 lb-ft (613 Nm) @ 1850 RPM
Cooling	Radiator w/integrated transmission oil cooler
Transmission	Aisin A465 6-speed automatic
Alternator	140 amp
Batteries	12 volt heavy duty batteries - (2) 750 CCA maintenance free
Wheelbase	132.5 in (3366 mm)
Turning diameter (wall-to-wall)	44.0 ft (13.4 m) (approximate)
Turning diameter (curb-to-curb)	38.7 ft (11.8 m) (approximate)
Fuel	Diesel
Fuel tank, rear mounted in-rail	30 gal (113 L) (shared with sweeper)
DEF tank	4.2 gal (16 L)
Tires (2-front, 4-rear)	215/85R 16E
Steering	Left side power steering w/tilt & telescoping steering column. Dual steering not available.
Brakes	Vacuum assisted hydraulic brakes - dual circuit w/anti-lock brake system
Instruments & lights	Full package as required
Seats	High back driver's seat with two occupant passenger seat
Cruise control	Yes
Mirrors	Exterior with integral convex mirror
Air conditioned cab	Yes
Windows & door locks	Power
Exhaust system	Vertical
Audio system	AM/FM CD/WMA/MP3/USB stereo radio w/digital clock
Daytime running lights	Yes
<b>SWEEPING WIDTH (Approximate)</b>	
Pick-up head only	78 in (1981 mm)
With 1 vertical digger gutter broom	98 in (2489 mm)
With 2 vertical digger gutter brooms	118 in (2997 mm)
<b>OVERALL DIMENSIONS (Approximate)</b>	
Length (sweeper body & chassis only)	228 in (5791 mm)
Width (outside stowed vertical digger gutter broom bristle tip to end of opposite rear fender - 1 gutter broom)	101 in (2565 mm)
Width (between outside tips of stowed vertical digger gutter broom bristles - twin gutter brooms)	111 in (2819 mm)
Height (w/o cab bar light/beacon)	102 in (2591 mm) @ chassis exhaust
Empty weight (sweeper body & chassis only)	10,100 lbs (4581 kg)
<i>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.</i>	



**210**<sup>®</sup>  
AIR SWEEPER



**GENERAL SPECIFICATIONS**



**MODEL 210<sup>®</sup> REGENERATIVE<sup>®</sup> AIR PARKING LOT SWEEPER  
GASOLINE AUXILIARY ENGINE / GASOLINE CABOVER CHASSIS**

**SWEEPER AUXILIARY ENGINE**

Engine ..... EDI/Ford MSG-425 EFI, 4 cyl.  
Displacement..... 152.5 in<sup>3</sup> (2.5 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  
Auxiliary engine fuel tank independent from chassis fuel tank  
Aux. engine fuel tank capacity ..... 19 gal (72 L)  
Auxiliary engine protection system  
Fuel filter

**BLOWER**

Aluminum alloy, high volume, open face turbine  
Purpose ..... Creates air blast and suction  
Bearings ..... Anti-friction  
Housing ..... Steel w/abrasion resistant, replaceable liner  
Drive ..... Heavy duty power band

**DUST SEPARATOR**

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)..... 2.4 yd<sup>3</sup> (1.83 m<sup>3</sup>)  
Capacity (useable)..... 2.1 yd<sup>3</sup> (1.61 m<sup>3</sup>)  
Construction ..... Welded steel plate  
Dump door opening ..... 52 x 23 in (1321 x 584 mm)  
Dump door hydraulically opened/closed  
Dumping method ..... Hydraulic with tilt up  
Dumping height ..... 57 in (1447 mm)  
Dumping clearance height.... 141 in (3582 mm)  
Hopper drip edge extension

**PICK-UP HEAD**

Type ..... Dual chamber  
Function ..... Delivers air blast and suction  
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 ..... Belt driven from auxiliary engine  
Flow rate..... 5 GPM (18.925 LPM)  
Reservoir ..... 8 gal (30.3 L) w/80 mesh suction strainer, sight/temperature gauge, oil cooler  
Filter..... 10 micron in-line  
Hydraulic oil ..... Extended life

**GUTTER BROOM, LEFT, Patented**

Standard equipment includes LED floodlight and parabolic mirror  
Drive ..... Constant speed non-reversible hydraulic motor  
Adjustment..... Adjustable for down pressure, pattern and wear  
Down pressure ..... Automatically adjusts to requirement  
Flexibility..... All directions, Integral anti-damage "swing away" relief valve  
Broom..... Poly wafer 36 in (914 mm)

**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 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 (if applicable), sweeper odometer (records curb miles swept and sweeping hours), service reminders, custom reminders, overspeed warning, low water audible alarm (if applicable), 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 (if applicable), dust control system winterization guide, safety lights

**Exterior Components**

Dump switch, BlueLogic multiplex module

**SAFETY/WARNING DEVICES**

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

**OPTIONAL EQUIPMENT**

Abrasion protection package  
Amber beacon light, LED  
Auto Sweep Interrupt (ASI)  
Auxiliary fuse panel  
Auxiliary hand hose 6 in dia. (152 mm)  
Backpack blower storage box  
Cabover storage box (n/a with COMDEX)  
Dust control system ..... 30 gal (113 L)  
COMDEX water ..... 60 gal (227 L)  
COMDEX water ..... 102.5 gal (388 L) (Requires Isuzu NPR-HD)  
Hi/Low pressure washdown system  
Gutter broom(s) ..... Right (in lieu of left) or twin  
Broom..... Poly or steel wire digger 32 in (812.8 mm)  
Gutter broom tilt adjuster(s) (left, right, or twin)  
Hopper drain system  
Hopper slide-out screen  
Hopper up alarm  
Light bar, cab mounted, LED  
Linear actuator - pressure bleeder with gauge  
Low emissions package (required for South Coast AQMD Rule 1186, not applicable with high output water system)  
Magnet, front bumper mounted, light duty  
Portering shelf  
Rubber lined blower  
Shop air purge, dust control system  
Sound Reduction Engineering (SRE<sup>®</sup>)  
Stainless steel options:  
Hopper:  
Hopper weldment  
Hopper door  
Inspection door  
Skimmer hood  
Slide-out hopper screen  
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 NPR-HD Gasoline  
Isuzu NPR Gasoline (Requires factory approval)

# MODEL 210<sup>®</sup> REGENERATIVE<sup>®</sup> AIR PARKING LOT SWEEPER

## GASOLINE AUXILIARY ENGINE / GASOLINE CABOVER CHASSIS



**ISUZU NPR-HD GASOLINE**



**ISUZU NPR GASOLINE  
(Requires factory approval)**

<b>CAB/CHASSIS</b>		
GVWR	14,500 lb (6583 kg)	12,000 lb (5443 kg)
Front axle	6830 lb (3098 kg), 8440 lb (3828 kg) spring capacity, front shock absorbers and stabilizer bar	6830 lb (3098 kg), 8440 lb (3828 kg) spring capacity, front shock absorbers and stabilizer bar
Rear axle	11,020 lb (4999 kg), 12,900 lb (5851 kg) spring capacity, rear shock absorbers	11,020 lb (4999 kg), 12,900 lb (5851 kg) spring capacity, rear shock absorbers
Gear ratio	4.88	4.88
Frame	Carbon steel 7.20 SM (44,000 PSI) 316,800 lb-ft/in	Carbon steel 7.20 SM (44,000 PSI) 316,800 lb-ft/in
Engine	GMPT L96 (Gen IV) V8 Vortec 6000	GMPT L96 (Gen IV) V8 Vortec 6000
Displacement	365 in <sup>3</sup> (6.0 L)	365 in <sup>3</sup> (6.0 L)
Power	297 hp (221 kW) @ 4300 RPM	297 hp (221 kW) @ 4300 RPM
Torque	372 lb-ft (504 Nm) @ 4000 RPM	372 lb-ft (504 Nm) @ 4000 RPM
Cooling	Engine oil cooler and a transmission fluid cooler mounted in front of radiator	Engine oil cooler and a transmission fluid cooler mounted in front of radiator
Transmission	6-speed GM 6L90 automatic	6-speed GM 6L90 automatic
Alternator	145 amp	145 amp
Batteries	12 volt heavy duty batteries - (2) 750 CCA maintenance free	12 volt heavy duty batteries - (2) 750 CCA maintenance free
Wheelbase	132.5 in (3366 mm)	132.5 in (3366 mm)
Turning diameter (wall to wall)	46.0 ft (14.0 m) (approximate)	46.0 ft (14.0 m) (approximate)
Turning diameter (curb to curb)	40.7 ft (12.4 m) (approximate)	40.7 ft (12.4 m) (approximate)
Fuel	Gasoline	Gasoline
Fuel tank, rear mounted in-rail	30 gal (113 L) (separate from sweeper)	30 gal (113 L) (separate from sweeper)
Tires (2-front, 4-rear)	225/70R 19.5G	215/85R 16E
Steering	Left side power steering w/tilt & telescoping steering column. Dual steering not available.	Left side power steering w/tilt & telescoping steering column. Dual steering not available.
Brakes	Vacuum assisted hydraulic brakes - dual circuit w/anti-lock brake system	Vacuum assisted hydraulic brakes - dual circuit w/anti-lock brake system
Instruments & lights	Full package as required	Full package as required
Seats	High back driver's seat with two occupant passenger seat	High back driver's seat with two occupant passenger seat
Cruise control	Yes	Yes
Mirrors	Exterior with integral convex mirror	Exterior with integral convex mirror
Air conditioned cab	Yes	Yes
Windows & door locks	Power	Power
Exhaust system	Horizontal	Horizontal
Audio system	AM/FM CD/WMA/MP3/USB stereo radio w/digital clock	AM/FM CD/WMA/MP3/USB stereo radio w/digital clock
Daytime running lights	Yes	Yes
<b>SWEEPING WIDTH (Approximate)</b>		
Pick-up head only	78 in (1981 mm)	78 in (1981 mm)
With 1 vertical digger gutter broom	98 in (2489 mm)	98 in (2489 mm)
With 2 vertical digger gutter brooms	118 in (2997 mm)	118 in (2997 mm)
<b>OVERALL DIMENSIONS (Approximate)</b>		
Length (sweeper body & chassis only)	228 in (5791 mm)	228 in (5791 mm)
Width (outside stowed left hand vertical digger gutter broom bristle tip to end of auxiliary engine cooler - 1 gutter broom)	102 in (2591 mm)	102 in (2591 mm)
Width (between outside tips of stowed vertical digger gutter broom bristles - twin gutter brooms)	111 in (2819 mm)	111 in (2819 mm)
Height (w/o cab bar light/beacon)	91 in (2311 mm) @ top of cab	90 in (2286 mm) @ top of cab
Empty weight (sweeper body & chassis only)	9440 lbs (4282 kg)	9370 lbs (4250 kg)
<i>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.</i>		

### ATTACHMENT E

## Sweepers-Miscellaneous, Parking lot, Sidewalk, Light, and other, complete floor cleaning machines

If you have different discounts for options, you WILL have to list the items. If you need more space, attach sheets or use Microsoft Excel.

BRAND	MODEL (Standard base unit)	Percentage discount OFF PARTS 1 %	Base Price
Tyco	210H Ford F350 Gas		\$ 88,750 <sup>00</sup>
	210H Ford F350 Diesel		\$ 96,750 <sup>00</sup>
	210H Ford F450 Gas		\$ 92,250 <sup>00</sup>
	210H Ford F450 Diesel		\$ 100,000
	Freight per unit		2,500 <sup>00</sup> EA

Attachments/Accessories: 1 %  
Options: 1 % Installation Charge: \$ Inc Hourly Labor Rate: \$ 175<sup>00</sup>  
Multiple Unit discount: 1 % (In addition to the equipment discount) based on 2 Units purchased  
OEM Repair Parts: 1 % After Market Parts: 0 % Financing of Lease Purchase interest rate: Market  
Extended Warranty offered? Yes X No If yes, please attach information for the extended warranty purchase. Discount offered N/A %

Vendors, please explain your ordering process in an attached document and any promotional events that might provide for a discount off the price listed.

Note: This is a regenerative Air Sweeper



## GENERAL SPECIFICATIONS



# MODEL 210h<sup>®</sup> REGENERATIVE<sup>®</sup> AIR PARKING LOT SWEEPER HYDROSTATIC DRIVE / DIESEL CONVENTIONAL CAB CHASSIS

### HYDRAULICS hDRIVE<sup>®</sup> POWER SYSTEM

Main pump type ..... Piston pump  
Reservoir ..... 17 gal (64 L)  
Main system pressure ... 3500 psi (24,132 kPa)  
Main pump drive ..... Direct drive  
from transmission PTO, operates blower,  
dump door, and pick-up head  
Broom pump ..... Vane type  
Belt driven from blower shaft  
Filter ..... 10 micron in-line  
Hydraulic oil ..... Extended life  
Cooler ..... Air to oil  
w/thermostatically controlled electric fan  
Hydraulic level/temperature shutdown system  
Hydraulic oil filter restriction indicator  
Hydraulic oil sight/temperature gauge

### BLOWER

Aluminum alloy, high volume, open face turbine  
Purpose ..... Creates air blast and suction  
Bearings ..... Anti-friction  
Housing ..... Steel w/abrasion resistant,  
replaceable liner  
Drive ..... Hydraulic direct drive

### DUST SEPARATOR

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) ..... 2.4 yd<sup>3</sup> (1.83 m<sup>3</sup>)  
Capacity (useable) ..... 2.1 yd<sup>3</sup> (1.61 m<sup>3</sup>)  
Construction ..... Welded steel plate  
Dump door opening ..... 52 x 23 in  
(1321 x 584 mm)  
Dump door hydraulically opened/closed  
Dumping method ..... Hydraulic with tilt up  
Dumping height (F-450) ..... 58 in (1473 mm)  
Dumping height (F-350) ..... 55 in (1397 mm)  
Dumping clearance height .....  
(F-450) ..... 142 in (3607 mm)  
(F-350) ..... 139 in (3531 mm)  
Hopper drip edge extension

### PICK-UP HEAD

Type ..... Dual chamber  
Function ..... Delivers air blast and suction  
Width (inside dimension) ..... 78 in (1981 mm)  
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 (305 mm)  
Pressure hose diameter ..... 12 in (305 mm)  
Pressure bleeder ..... Integral for  
leaf/light material pickup  
Reverse pick-up head system

### GUTTER BROOM, LEFT, Patented

Standard equipment includes LED floodlight  
and parabolic mirror  
Drive ..... Constant speed  
non-reversible hydraulic motor  
Adjustment ..... Adjustable for  
down pressure, pattern and wear  
Down pressure ..... Automatically  
adjusts to requirement  
Flexibility ..... All directions, Integral  
anti-damage "swing away" relief valve  
Broom ..... Poly wafer 36 in (914 mm)

### CONTROL SYSTEM

**BlueLogic<sup>®</sup> Control System**  
Multiplexed electrical system includes  
hardware and TYMCO designed software  
that integrates the in-cab controls to all  
sweeper functions; as well as provides  
intelligent safety features, assists in  
troubleshooting through LED input/output  
diagnostics, and controls the hDrive Power  
System. Specific to the 210h, BlueLogic  
communicates with the truck to engage  
the PTO and maintain the blower at a  
constant speed (low or high), and monitors  
and controls the hydraulic oil level and  
temperature shutdown system.

### Interior Components

Leaf pressure bleeder control, illuminated  
control switches: pick-up head, gutter broom,  
blower on/off (2 speeds), dust control water  
system nozzles (if applicable), safety lights

### Exterior Components

Dump switch, BlueLogic multiplex module

### SAFETY/WARNING DEVICES

Rear view camera system  
Back-up alarm  
Alternating LED rear flashers (2)  
BlueLogic<sup>®</sup> Control System provides several  
safety interlocks which includes stopping the  
blower when the hopper is raised/hopper door  
is opened, shutting down the hydraulic system  
when hydraulic oil temperature is too high or  
the level is too low and disengaging the PTO  
when excessive ground speed is met (default  
is 18 mph). It also provides ASI, which will lift  
the gutter broom when the transmission is  
placed in reverse.  
Hopper safety prop

### OPTIONAL EQUIPMENT

Abrasion protection package  
Amber beacon light  
Auxiliary fuse panel  
Auxiliary hand hose 6 in dia. (152 mm)  
Backpack blower storage box  
Dust control system ..... 30 gal (113 L)  
Gutter broom ..... Right (in lieu of left)  
Broom ..... Poly digger  
32 in (812.8 mm) (Ford F-450 only)  
Hopper drain system  
Hopper slide-out screen  
Hydraulic tank heater  
Light bar, cab mounted, LED  
Magnet, front bumper mounted, light duty  
Rubber lined blower  
Shop air purge, dust control system  
Stainless steel options:  
Hopper:  
Hopper weldment  
Hopper door  
Inspection door  
Skimmer hood  
Slide-out hopper screen  
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.*

### CHASSIS AVAILABLE

Ford F-450 Diesel  
Ford F-350 Diesel

# MODEL 210h<sup>®</sup> REGENERATIVE<sup>®</sup> AIR PARKING LOT SWEEPER

## HYDROSTATIC DRIVE / DIESEL CONVENTIONAL CAB CHASSIS



**FORD F-450  
DIESEL**



**FORD F-350  
DIESEL**

<b>CAB/CHASSIS</b>		
GVWR	16,500 lb (7484 kg)	14,000 lbs (6350 kg)
Front axle	7000 lb (3175 kg), w/ 4800-7000 lb (2177-3175 kg) front springs (varies based on configuration), shock absorbers, stabilizer bar	5250 lb (2381 kg), w/ 4850-5250 lb (2200-2381 kg) front springs (varies based on configuration), stabilizer bar
Rear axle	12,000 lb (5443 kg), w/12,000 lb (5443 kg) rear springs, shock absorbers, stabilizer bar	9750 lb (4423 kg), w/9750 lb (4423 kg) rear springs, shock absorbers, stabilizer bar
Gear ratio	4.10	3.73
Frame	7.04 SM (36,000 PSI)	7.04 SM (36,000 PSI)
Engine	Ford, 6.7L V8 turbo diesel	Ford, 6.7L V8 turbo diesel
Displacement	409 in <sup>3</sup> (6.7 L)	409 in <sup>3</sup> (6.7 L)
Power	330 hp (243 kW) @ 2600 RPM	330 hp (243 kW) @ 2600 RPM
Torque	825 lb-ft (1119 Nm) @ 1600 RPM	825 lb-ft (1119 Nm) @ 1600 RPM
Cooling	Radiator and transmission oil, heavy duty	Radiator and transmission oil, heavy duty
Transmission	10-Speed TorqShift <sup>®</sup> automatic transmission w/overdrive, electronic control, Ford live-drive power takeoff (PTO) provision	10-Speed TorqShift <sup>®</sup> automatic transmission w/overdrive, electronic control, Ford live-drive power takeoff (PTO) provision
Alternator	220 amp	220 amp
Batteries	12 volt heavy duty batteries - (2) 750 CCA maintenance free	12 volt heavy duty batteries - (2) 750 CCA maintenance free
Wheelbase	145.3 in (3691 mm)	145.3 in (3691 mm)
Turning diameter (wall-to-wall)	44.4 ft (13.53 m) (approximate)	52.1 ft (15.88 m) (approximate)
Turning diameter (curb-to-curb)	42.5 ft (12.95 m) (approximate)	50.1 ft (15.27 m) (approximate)
Fuel	Diesel	Diesel
Fuel tank (separate from sweeper fuel tank)	26.5 gal (100 L), mid-ship mounted (L.H.) only	26.5 gal (100 L), mid-ship mounted (L.H.) only
Diesel exhaust fluid tank	6 gal (22.71 L)	6 gal (22.71 L)
Tires (2-front, 4-rear)	(6) 225/70R19.5G all season	(6) LT245/75R 17E all season
Steering	Left side power steering w/tilt & telescoping steering column. Dual steering not available.	Left side power steering w/tilt & telescoping steering column. Dual steering not available.
Brakes	Power brakes with four (4) wheel anti-lock; disc – front and rear	Power brakes with four (4) wheel anti-lock; disc – front and rear
Instruments & lights	Fuel, transmission temperature, engine coolant temperature, turbo gauges; speedometer, odometer and tachometer	Fuel, transmission temperature, engine coolant temperature, turbo gauges; speedometer, odometer and tachometer
Tow hooks (front)	Yes	Yes
Seats	40/20/40 split HD vinyl seats	40/20/40 split HD vinyl seats
Cruise control	Yes	Yes
Mirrors	Black, manual telescoping trailer tow (fold-away)	Black, manual telescoping trailer tow (fold-away)
Air conditioned cab	Yes	Yes
Windows and door locks	Power	Manual (power optional; special order)
Exhaust system	Horizontal	Horizontal
Audio system	AM/FM/MP3 stereo radio w/Sync <sup>®</sup> and digital clock	AM/FM/MP3 stereo radio w/Sync <sup>®</sup> and digital clock
Daytime running lights	No	No
<b>SWEEPING WIDTH (Approximate)</b>		
Pick-up head only	78 in (1981 mm)	78 in (1981 mm)
With 1 poly gutter broom	98 in (2489 mm)	98 in (2489 mm)
With 2 poly gutter brooms	n/a	n/a
<b>OVERALL DIMENSIONS (Approximate)</b>		
Length (sweeper body & chassis only)	231.5 in (5880 mm)	231.5 in (5880 mm)
Width (outside stowed poly wafer gutter broom bristle tip to end of opposite rear fender)	96 in (2438 mm)	96 in (2438 mm)
Height (w/o cab bar light/beacon)	81 in (2054 mm) @ blower housing	78 in (1981 mm) @ blower housing
Empty weight (sweeper body & chassis only)	11,220 lbs (5089 kg)	10,720 lbs (4863 kg)
<p><i>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.</i></p>		



## GENERAL SPECIFICATIONS



# MODEL 210h<sup>®</sup> REGENERATIVE<sup>®</sup> AIR PARKING LOT SWEEPER HYDROSTATIC DRIVE / GASOLINE CONVENTIONAL CAB CHASSIS

### HYDRAULICS hDRIVE<sup>®</sup> POWER SYSTEM

Main pump type ..... Piston pump  
Reservoir ..... 17 gal (64 L)  
Main system pressure ... 3200 psi (22,063 kPa)  
Main pump drive ..... Direct drive  
from transmission PTO, operates blower,  
dump door, and pick-up head  
Broom pump ..... Vane type  
Belt driven from blower shaft  
Filter ..... 10 micron in-line  
Hydraulic oil ..... Extended life  
Cooler ..... Air to oil  
w/thermostatically controlled electric fan  
Hydraulic level/temperature shutdown system  
Hydraulic oil filter restriction indicator  
Hydraulic oil sight/temperature gauge

### BLOWER

Aluminum alloy, high volume, open face turbine  
Purpose ..... Creates air blast and suction  
Bearings ..... Anti-friction  
Housing ..... Steel w/abrasion resistant,  
replaceable liner  
Drive ..... Hydraulic direct drive

### DUST SEPARATOR

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) ..... 2.4 yd<sup>3</sup> (1.83 m<sup>3</sup>)  
Capacity (useable) ..... 2.1 yd<sup>3</sup> (1.61 m<sup>3</sup>)  
Construction ..... Welded steel plate  
Dump door opening ..... 52 x 23 in  
(1321 x 584 mm)  
Dump door hydraulically opened/closed  
Dumping method ..... Hydraulic with tilt up  
Dumping height (F-450) ..... 58 in (1473 mm)  
Dumping height (F-350) ..... 55 in (1397 mm)  
Dumping clearance height .....  
(F-450) ..... 142 in (3607 mm)  
(F-350) ..... 139 in (3531 mm)  
Hopper drip edge extension

### PICK-UP HEAD

Type ..... Dual chamber  
Function ..... Delivers air blast and suction  
Width (inside dimension) ..... 78 in (1981 mm)  
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 (305 mm)  
Pressure hose diameter ..... 12 in (305 mm)  
Pressure bleeder ..... Integral for  
leaf/light material pickup  
Reverse pick-up head system

### GUTTER BROOM, LEFT, Patented

Standard equipment includes LED floodlight  
and parabolic mirror  
Drive ..... Constant speed  
non-reversible hydraulic motor  
Adjustment ..... Adjustable for  
down pressure, pattern and wear  
Down pressure ..... Automatically  
adjusts to requirement  
Flexibility ..... All directions, Integral  
anti-damage "swing away" relief valve  
Broom ..... Poly wafer 36 in (914 mm)

### CONTROL SYSTEM

#### BlueLogic<sup>®</sup> Control System

Multiplexed electrical system includes  
hardware and TYMCO designed software  
that integrates the in-cab controls to all  
sweeper functions; as well as provides  
intelligent safety features, assists in  
troubleshooting through LED input/output  
diagnostics, and controls the hDrive Power  
System. Specific to the 210h, BlueLogic  
communicates with the truck to engage  
the PTO and maintain the blower at a  
constant speed (low or high), and monitors  
and controls the hydraulic oil level and  
temperature shutdown system.

#### Interior Components

Leaf pressure bleeder control, illuminated  
control switches: pick-up head, gutter broom,  
blower on/off (2 speeds), dust control water  
system nozzles (if applicable), safety lights

#### Exterior Components

Dump switch, BlueLogic multiplex module

### SAFETY/WARNING DEVICES

Rear view camera system  
Back-up alarm  
Alternating LED rear flashers (2)  
BlueLogic<sup>®</sup> Control System provides several  
safety interlocks which includes stopping the  
blower when the hopper is raised/hopper door  
is opened, shutting down the hydraulic system  
when hydraulic oil temperature is too high or  
the level is too low and disengaging the PTO  
when excessive ground speed is met (default  
is 18 mph). It also provides ASI, which will lift  
the gutter broom when the transmission is  
placed in reverse.  
Hopper safety prop

### OPTIONAL EQUIPMENT

Abrasion protection package  
Amber beacon light  
Auxiliary fuse panel  
Auxiliary hand hose 6 in dia. (152 mm)  
Backpack blower storage box  
Dust control system ..... 30 gal (113 L)  
Gutter broom ..... Right (in lieu of left)  
Broom ..... Poly digger  
32 in (812.8 mm) (Ford F-450 only)  
Hopper drain system  
Hopper slide-out screen  
Hydraulic tank heater  
Light bar, cab mounted, LED  
Magnet, front bumper mounted, light duty  
Rubber lined blower  
Shop air purge, dust control system  
Stainless steel options:  
Hopper:  
Hopper weldment  
Hopper door  
Inspection door  
Skimmer hood  
Slide-out hopper screen  
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.*

### CHASSIS AVAILABLE

Ford F-450 Gasoline  
Ford F-350 Gasoline

**ATTACHMENT B**

**Mechanical Sweepers**

**Commercial Cab-Chassis-Mount design**

If you have different discounts for options, you WILL have to list the items. If you need more space, attach sheets or use Microsoft Excel.

BRAND	MODEL (Standard base unit)	Percentage off discount OFF PARTS	BASE PRICE
Tymco	435	1%	
	Tsuzu NOR add Dual Drive		\$ 140,000 <sup>00</sup> 10,500 <sup>00</sup>
	435		
	Freightliner m2 w/ Dual Drive		162,500
	Freight - Each Unit		\$ 2,500 <sup>00</sup>

Attachments/Accessories: 1 %  
 Options: 1 % Installation Charge: \$ Inc Hourly Labor Rate: \$ 175<sup>00</sup>  
 Multiple Unit discount: 1 % (In addition to the equipment discount) based on 2 Units purchased  
 OEM Repair Parts: 1 % After Market Parts: 0 % Financing of Lease Purchase interest rate: Market  
 Extended Warranty offered? Yes N/A % No If yes, please attach information for the extended warranty purchase. Discount offered N/A %

Vendors, please explain your ordering process in an attached document and any promotional events that might provide for a discount off the price listed.

Note: These are Regenerative Air Sweepers



**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  
Purpose .....Creates air blast and suction  
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)  
Dumping method ..... Hydraulic with tilt up  
Dumping 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) ..... Total of 26.6 ft<sup>3</sup> (0.64 m<sup>3</sup>) capacity

**PICK-UP HEAD**

Type .....Dual chamber  
Function ..... Delivers air blast and suction  
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**

Standard equipment includes LED floodlight and parabolic mirror  
Drive .....Constant speed non-reversible hydraulic motor  
Adjustment..... Adjustable for down pressure, pattern and wear  
Down pressure .....Automatically adjusts to requirement  
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 multiplex module

**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 fuse panel  
Auxiliary hand hose 6 in dia. (152 mm)  
Auxiliary hydraulic system  
Cabover dual steering (Isuzu NQR only)  
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 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, not applicable with high output water system)  
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)

# MODEL 435<sup>®</sup> MID-SIZE REGENERATIVE<sup>®</sup> AIR SWEEPER

## DIESEL AUXILIARY ENGINE / DIESEL CABOVER CHASSIS



**ISUZU NQR**



**ISUZU NQR  
with COMDEX**



**ISUZU NPR-XD  
with COMDEX**

<b>CAB/CHASSIS</b>			
GVWR	17,950 lbs (8142 kg)	17,950 lbs (8142 kg)	16,000 lbs (7257 kg)
Front axle	6830 lb (3098 kg), 8440 lb (3828 kg) front spring capacity, front shock absorbers and stabilizer bar	6830 lb (3098 kg), 8440 lb (3828 kg) front spring capacity, front shock absorbers and stabilizer bar	6830 lb (3098 kg), 8440 lb (3828 kg), front spring capacity, front shock absorbers and stabilizer bar
Rear axle	14,550 lb (6600 kg), 14,550 lb (6600 kg) rear spring capacity, rear shock absorbers	14,550 lb (6600 kg), 14,550 lb (6600 kg) rear spring capacity, rear shock absorbers	11,020 lb (4999 kg), 14,308 lb (6490 kg) rear spring capacity, rear shock absorbers
Gear ratio	5.125	5.125	4.777
Frame	7.20 SM (44,000 PSI)	7.20 SM (44,000 PSI)	7.20 SM (44,000 PSI)
Engine	Isuzu 4HK1-TC, turbo diesel	Isuzu 4HK1-TC, turbo diesel	Isuzu 4HK1-TC, turbo diesel
Displacement	317 in <sup>3</sup> (5.19 L)	317 in <sup>3</sup> (5.19 L)	317 in <sup>3</sup> (5.19 L)
Power	215 hp (160 kW) @ 2550 RPM	215 hp (160 kW) @ 2550 RPM	215 hp (160 kW) @ 2550 RPM
Torque	452 lb-ft (613 Nm) @ 1850 RPM	452 lb-ft (613 Nm) @ 1850 RPM	452 lb-ft (613 Nm) @ 1850 RPM
Cooling	Radiator w/integrated transmission oil cooler	Radiator w/integrated transmission oil cooler	Radiator w/integrated transmission oil cooler
Transmission	Aisin A465 6-speed automatic	Aisin A465 6-speed automatic	Aisin A465 6-speed automatic
Alternator	140 amp	140 amp	140 amp
Batteries	Dual (2) 750 CCA	Dual (2) 750 CCA	Dual (2) 750 CCA
Wheelbase	150 in (3810 mm)	132.5 in (3366 mm)	132.5 in (3366 mm)
Turning diameter (wall-to-wall)	50.2 ft (15.30 m) (approximate)	44.9 ft (13.69 m) (approximate)	44.9 ft (13.69 m) (approximate)
Turning diameter (curb-to-curb)	45.3 ft (13.81 m) (approximate)	40 ft (12.19 m) (approximate)	40 ft (12.19 m) (approximate)
Fuel	Diesel	Diesel	Diesel
Fuel tank, rear mounted in-rail	30 gal (113 L) (shared with sweeper)	30 gal (113 L) (shared with sweeper)	30 gal (113 L) (shared with sweeper)
DEF tank	4.2 gal (16 L)	4.2 gal (16 L)	4.2 gal (16 L)
Tires (2-front, 4-rear)	225/70R-19.5F	225/70R-19.5F	225/70R-19.5F
Steering	Left side power steering w/tilt & telescoping steering column. Optional dual steering available without tilt & telescoping steering columns.	Left side power steering w/tilt & telescoping steering column. Optional dual steering available without tilt & telescoping steering columns.	Left side power steering w/tilt & telescoping steering column. Dual steering not available.
Brakes	Dual circuit power assisted hydraulic, disc front, self-adjust drum rear, anti-lock brake system	Dual circuit power assisted hydraulic, disc front, self-adjust drum rear, anti-lock brake system	Dual circuit power assisted hydraulic, disc front, self-adjust drum rear, anti-lock brake system
Instruments & lights	Full package as required	Full package as required	Full package as required
Seats	High back driver's seat with two occupant passenger seat	High back driver's seat with two occupant passenger seat	High back driver's seat with two occupant passenger seat
Cruise control	Yes	Yes	Yes
Mirrors	Exterior with integral convex mirror	Exterior with integral convex mirror	Exterior with integral convex mirror
Air conditioned cab	Yes	Yes	Yes
Windows & door locks	Power	Power	Power
Exhaust system	Vertical	Vertical	Vertical
Audio system	AM/FM CD/WMA/MP3/USB stereo radio w/ digital clock	AM/FM CD/WMA/MP3/USB stereo radio w/ digital clock	AM/FM CD/WMA/MP3/USB stereo radio w/ digital clock
Daytime running lights	Yes	Yes	Yes
<b>SWEEPING WIDTH (Approximate)</b>			
Pick-up head only	78 in (1981 mm)	78 in (1981 mm)	78 in (1981 mm)
With 1 vertical digger gutter broom	98 in (2489 mm)	98 in (2489 mm)	98 in (2489 mm)
With 2 vertical digger gutter brooms	118 in (2997 mm)	118 in (2997 mm)	118 in (2997 mm)
<b>OVERALL DIMENSIONS (Approximate)</b>			
Length (sweeper body & chassis only)	246 in (6248 mm)	228 in (5791 mm)	228 in (5791 mm)
Width (outside stowed vertical digger gutter broom bristle tip to end of opposite rear fender - 1 gutter broom)	101 in (2565 mm)	101 in (2565 mm)	101 in (2565 mm)
Width (between outside tips of stowed vertical digger gutter broom bristles - twin gutter brooms)	111 in (2819 mm)	111 in (2819 mm)	111 in (2819 mm)
Height	102 in (2591 mm) @ chassis exhaust	102 in (2591 mm) @ chassis exhaust	102 in (2591 mm) @ chassis exhaust
Empty weight (sweeper body & chassis only)	13,160 lbs (5969 kg)	12,760 lbs (5788 kg)	12,760 lbs (5788 kg)
<i>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.</i>			



**435**<sup>®</sup>  
AIR SWEEPER

**GENERAL SPECIFICATIONS**



**MODEL 435<sup>®</sup> MID-SIZE REGENERATIVE<sup>®</sup> AIR SWEEPER**  
**DIESEL AUXILIARY ENGINE / DIESEL CONVENTIONAL CAB 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 auxiliary engine fuel tank shared with chassis engine  
Fuel tank capacity..... 52 gal (197 L)  
Auxiliary engine protection system  
Fuel/water separator

**BLOWER, RUBBER LINED**

Aluminum alloy, high volume, open face turbine  
Purpose .....Creates air blast and suction  
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)  
Dumping method ..... Hydraulic with tilt up  
Dumping height .....82.5 in (2095 mm)  
Dump clearance height..... 165.5 in (4204 mm)  
Dump door hydraulically opened/closed  
Hopper screen lifts with door for easy cleaning  
Abrasion protection package  
Hopper drip edge extension

**STORAGE COMPARTMENTS**

Rear (2) ..... Total of 26.6 ft<sup>3</sup> (.075 m<sup>3</sup>) capacity  
Front storage compartment not available

**PICK-UP HEAD**

Type .....Dual chamber  
Function ..... Delivers air blast and suction  
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 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

**GUTTER BROOMS, TWIN, Patented**

Standard equipment includes LED floodlights and parabolic mirrors  
Drive .....Constant speed non-reversible hydraulic motor  
Adjustment..... Adjustable for down pressure, pattern and wear  
Down pressure .....Automatically adjusts to requirement  
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 brooms and inside hopper  
Fire hydrant and garden hose connections  
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, 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, 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 multiplex module

**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 dia. (152 mm)  
Auxiliary hydraulic system  
Gutter broom tilt adjuster(s) (left, right, or twin)  
Gutter broom variable speed  
Gutter broom drop-down  
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, not applicable with high output water system)  
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.*

**CONVENTIONAL CAB CHASSIS AVAILABLE**

Freightliner M2-106

# MODEL 435<sup>®</sup> MID-SIZE REGENERATIVE<sup>®</sup> AIR SWEEPER

## DIESEL AUXILIARY ENGINE / DIESEL CONVENTIONAL CAB CHASSIS



**FREIGHTLINER M2-106**

<b>CAB/CHASSIS</b>	
GVWR	25,500 lb (11,557 kg)
Front axle	8,000 lb (3,628 kg) front axle and suspension
Rear axle	17,500 lb (7,938 kg) w/21,000 lb (9,525 kg) 52 in (1,321 mm) variable rate multi-leaf spring rear suspension with leaf spring helper
Gear ratio	5.57
Frame	50,000 PSI (5515.81 bar)
Engine	Cummins B6.7
Displacement	409 in <sup>3</sup> (6.7 L)
Power	200 hp @ 2300 RPM
Torque	520 lb-ft (705 Nm) @ 1600 RPM
Transmission	Allison 2500 RDS, 6-speed automatic transmission w/double overdrive and PTO provision w/synthetic oil and transmission temperature gauge in cab
Alternator	160 amp
Batteries	(2) 12 volt, 1900 CCA, maintenance free
Wheelbase	153 in (3875 mm)
Turning diameter (wall-to-wall)	35.9 ft (10.94 m) (approximate)
Turning diameter (curb-to-curb)	33.9 ft (10.33 m) (approximate)
Fuel	Diesel
Fuel tank	52 gal (197 L) (shared with sweeper)
DEF tank	6 gal (22.7 L)
Tires (2-front, 4-rear)	255/70R x 22.5
Steering	Integral dual power assisted w/18 in (457 mm) diameter steering wheel w/tilt and dual gauges installed by Fontaine Modification Company
Brakes	4 wheel air ABS w/18.7 CFM (0.53 m <sup>3</sup> /minute) air compressor
Instruments & lights	Full package as required
Dual gauge package	Yes
Seats	Adjustable, individual high back air seats w/lumbar support and cloth inserts for operator comfort
Air dryer	Yes w/heater
Cruise control	Yes
Mirrors	Remote controlled heated and electric mirrors (2)
Air conditioned cab	Yes, w/fresh air filter for cab filtration
Windows and door locks	Power
Exhaust system	Single, horizontal; after-treatment device & right side horizontal tail pipe
Audio system	AM/FM auxiliary input stereo radio w/digital clock
Daytime running lights	Yes
<b>SWEEPING WIDTH (Approximate)</b>	
Pick-up head only	78 in (1981 mm)
With 1 gutter broom	104 in (2642 mm)
With 2 gutter brooms	130 in (3302 mm)
<b>OVERALL DIMENSIONS (Approximate)</b>	
Length (sweeper body & chassis only)	242.5 in (6160 mm)
Width (between outside tips of stowed twin vertical digger gutter broom bristles)	114 in (2896 mm)
Height (w/o cab bar light/beacon)	98.5 in (2502 mm) @ cab
Empty weight (sweeper body & chassis only)	15,250 lbs (7042 kg)
<i>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.</i>	

# MODEL 210h<sup>®</sup> REGENERATIVE<sup>®</sup> AIR PARKING LOT SWEEPER

## HYDROSTATIC DRIVE / GASOLINE CONVENTIONAL CAB CHASSIS



**FORD F-450  
GASOLINE**



**FORD F-350  
GASOLINE**

<b>CAB/CHASSIS</b>		
GVWR	16,500 lb (7484 kg)	14,000 lbs (6350 kg)
Front axle	7000 lb (3175 kg), w/ 4800-7000 lb (2177-3175 kg) front springs (varies based on configuration), shock absorbers, stabilizer bar	5250 lb (2381 kg), w/ 4850-5250 lb (2200-2381 kg) front springs (varies based on configuration), stabilizer bar
Rear axle	12,000 lb (5443 kg), w/12,000 lb (5443 kg) rear springs, shock absorbers, stabilizer bar	9750 lb (4423 kg), w/9750 lb (4423 kg) rear springs, shock absorbers, stabilizer bar
Gear ratio	4.88	3.73
Frame	7.04 SM (36,000 PSI)	7.04 SM (36,000 PSI)
Engine	Ford, 7.3L 2V DEVCT NA PFI V8	Ford, 7.3L 2V DEVCT NA PFI V8
Displacement	445 in <sup>3</sup> (7.3 L)	445 in <sup>3</sup> (7.3 L)
Power	350 hp (257 kW) @ 3900 RPM	350 hp (257 kW) @ 3900 RPM
Torque	468 lb-ft (634 Nm) @ 3900 RPM	468 lb-ft (634 Nm) @ 3900 RPM
Cooling	Radiator and transmission oil, heavy duty	Radiator and transmission oil, heavy duty
Transmission	10-Speed TorqShift <sup>®</sup> automatic transmission w/overdrive, electronic control, Ford live-drive power takeoff (PTO) provision	10-Speed TorqShift <sup>®</sup> automatic transmission w/overdrive, electronic control, Ford live-drive power takeoff (PTO) provision
Alternator	240 amp	240 amp
Batteries	12 volt heavy duty battery - (1) 750 CCA maintenance free	12 volt heavy duty battery - (1) 750 CCA maintenance free
Wheelbase	145.3 in (3691 mm)	145.3 in (3691 mm)
Turning diameter (wall-to-wall)	44.4 ft (13.53 m) (approximate)	52.1 ft (15.88 m) (approximate)
Turning diameter (curb-to-curb)	42.5 ft (12.95 m) (approximate)	50.1 ft (15.27 m) (approximate)
Fuel	Gasoline	Gasoline
Fuel tank (separate from sweeper fuel tank)	26.5 gal (100 L), mid-ship mounted (L.H.) only	26.5 gal (100 L), mid-ship mounted (L.H.) only
Tires (2-front, 4-rear)	(6) 225/70R19.5G all season	(6) LT245/75R 17E all season
Steering	Left side power steering w/tilt & telescoping steering column. Dual steering not available.	Left side power steering w/tilt & telescoping steering column. Dual steering not available.
Brakes	Power brakes with four (4) wheel anti-lock; disc – front and rear	Power brakes with four (4) wheel anti-lock; disc – front and rear
Instruments & lights	Fuel, transmission temperature, engine coolant temperature, oil pressure gauges; speedometer, odometer and tachometer	Fuel, transmission temperature, engine coolant temperature, oil pressure gauges; speedometer, odometer and tachometer
Tow hooks (front)	Yes	Yes
Seats	40/20/40 split HD vinyl seats	40/20/40 split HD vinyl seats
Cruise control	Yes	Yes
Mirrors	Black, manual telescoping trailer tow (fold-away)	Black, manual telescoping trailer tow (fold-away)
Air conditioned cab	Yes	Yes
Windows and door locks	Power	Power
Exhaust system	Horizontal	Horizontal
Audio system	AM/FM/MP3 stereo radio w/Sync <sup>®</sup> and digital clock	AM/FM/MP3 stereo radio w/Sync <sup>®</sup> and digital clock
Daytime running lights	No	No
<b>SWEEPING WIDTH (Approximate)</b>		
Pick-up head only	78 in (1981 mm)	78 in (1981 mm)
With 1 poly gutter broom	98 in (2489 mm)	98 in (2489 mm)
With 2 poly gutter brooms	n/a	n/a
<b>OVERALL DIMENSIONS (Approximate)</b>		
Length (sweeper body & chassis only)	231.5 in (5880 mm)	231.5 in (5880 mm)
Width (outside stowed poly wafer gutter broom bristle tip to end of opposite rear fender)	96 in (2438 mm)	96 in (2438 mm)
Height (w/o cab bar light/beacon)	81 in (2054 mm) @ blower housing	78 in (1981 mm) @ blower housing
Empty weight (sweeper body & chassis only)	11,220 lbs (5089 kg)	10,720 lbs (4863 kg)
<i>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.</i>		

**ATTACHMENT B  
Mechanical Sweepers**

**Commercial Cab-Chassis-Mount design**

If you have different discounts for options, you WILL have to list the items. If you need more space, attach sheets or use Microsoft Excel.

BRAND	MODEL (Standard base unit)	Percentage off discount OFF PARTS	BASE PRICE
Tranco	500 X Freightliner m2	1 %	\$ 286,250 <sup>00</sup>
	500 X International MK		286,250 <sup>00</sup>
	Freight - Each unit		\$ 25 00 <sup>00</sup>

Attachments/Accessories: 1 %  
 Options: 1 % Installation Charge: \$ Inc Hourly Labor Rate: \$ 175<sup>00</sup>  
 Multiple Unit discount: 1 % (In addition to the equipment discount) based on 2 Units purchased  
 OEM Repair Parts: 1 % After Market Parts: 0 % Financing of Lease Purchase interest rate: Market  
 Extended Warranty offered? Yes XNo If yes, please attach information for the extended warranty purchase. Discount offered N/A %

Vendors, please explain your ordering process in an attached document and any promotional events that might provide for a discount off the price listed.

Note: These are Regenerative Air Sweepers



**500x<sup>®</sup>**  
AIR SWEEPER

**GENERAL SPECIFICATIONS**



**MODEL 500x<sup>®</sup> HIGH DUMP REGENERATIVE<sup>®</sup> AIR STREET SWEEPER  
DIESEL AUXILIARY ENGINE / DIESEL CONVENTIONAL CAB CHASSIS**

**SWEEPER AUXILIARY ENGINE**

Engine ..... John Deere 4045 turbo FT4, 4 cyl.  
Displacement..... 275 in<sup>3</sup> (4.5 L)  
Power..... 115 hp (86 kW) @ 2200 RPM  
Net torque..... 373 lb-ft @ 1500 RPM (506 Nm)  
Air cleaner ..... Heavy duty, w/pre-cleaner, and  
in-cab air restriction indicator w/gauge.  
Oil filter ..... Spin on, full flow  
Auxiliary engine fuel tank shared with chassis  
Diesel fuel tank capacity..... 50 gal (189 L)  
DEF tank..... Dedicated  
Capacity (volumetric)..... 5.4 gal (20.6 L)  
Capacity (useable)..... 3.8 gal (14.4 L)  
Auxiliary engine protection system  
Fuel/water separator and separate fuel filter  
Open crankcase ventilation (OCV) filter

**BLOWER, RUBBER LINED**

Aluminum alloy, high volume, open face turbine  
Purpose ..... Creates blast and suction  
Bearings ....(2) sealed lifetime lube, anti-friction  
Housing ..... Isolation mounted, steel  
with abrasion resistant, replaceable liner  
Housing seal ..... Heavy rubber section,  
non-wiping, spring actuated Tilt-N-Seal<sup>®</sup> design  
Drive ..... Fixed displacement,  
heavy duty, bent axis hydraulic motor

**DUST SEPARATOR**

Type .....Cyclonic, multipass,  
centrifugal separation  
Size..... 28 x 48 in (711 x 1219 mm)  
Location..... Inside hopper  
Particulate removal achieved through dual  
skimmer slots into hopper  
Abrasion resistant housing w/replaceable liner  
Self-opening, self-emptying when hopper tilts

**HOPPER, STAINLESS STEEL**

Volumetric capacity.....5.7 yd<sup>3</sup> (4.3 m<sup>3</sup>)  
Useable capacity .....4.0 yd<sup>3</sup> (3.06 m<sup>3</sup>)  
Construction ..... Welded non-magnetic  
stainless steel plate w/integral stiffeners  
Floor dump angle..... 50°  
Dump door opening..... 68 x 57 in  
(1727 x 1448 mm)  
Dump door..... Self-locking  
Chute .....72 x 48 in (183 x 122 cm)  
stainless steel lined  
Chute reach..... 22 in (56 cm) w/o side shift  
Dumping direction..... Right side  
Lifting method..... Two stage scissor lift, dual  
hydraulic cylinders w/integral holding valves  
Lift capacity..... 10,000 lbs (4536 kg)  
Dump height ..... Variable  
Minimum ..... 24 in (610 mm)  
from bottom of chute to ground  
Maximum ..... 132 in (11 ft) (3353 mm)  
from bottom of chute to ground  
Overall..... 262 in (21 ft 8 in) (6655 mm)  
Dump tilt slope..... 50°  
Hopper screen..... 2 piece stainless steel  
screen w/access for cleaning top side  
Hopper drain system

**BROOM ASSIST PICK-UP HEAD (BAH<sup>®</sup>)**

Type ..... Dual chamber with broom assist  
Function ..... Delivers air blast and suction  
Width ..... 87 in (2210 mm)  
Pick-up head area ..... 3567 in<sup>2</sup> (2.3 m<sup>2</sup>)  
Broom..... 12 x 79 in (305 x 2007 mm)  
enclosed in rear of pick-up head

Suspension..... 4 springs 2 drag links  
Suction hose..... 12 in diameter (305 mm)  
Pressure hose ..... 14 in diameter (356 mm)  
Skids..... DUO SKID<sup>®</sup>, long-life carbide  
Pressure bleeder..... Integral for  
leaf/light material pick-up.  
Reverse pick-up head system

**GUTTER BROOMS, TWIN, Patented**

Standard equipment includes LED floodlight  
and parabolic mirror  
Drive .....Variable speed  
non-reversible hydraulic motor  
Adjustment..... Adjustable for down  
pressure, pattern and wear  
Down pressure ..... Automatically  
adjusts to requirement  
Flexibility ..... All directions, integral  
anti-damage "swing away" relief valve  
Brooms..... 43 in dia. (1.1 m) steel wire,  
vertical diggers  
Hydraulic tilt ..... Twin gutter brooms  
adjust for curb depth

**HYDRAULIC SYSTEM**

Drive ..... Direct drive  
Blower pump..... Heavy duty variable  
displacement piston pump, hydrostatically  
drives blower  
Sweeper pump ..... Variable displacement  
piston pump, operates gutter brooms, pick-up  
head, stabilizers, hopper lift, hopper dump, and  
hopper door.  
Blower pump flow rate ..... 26 GPM (100 LPM)  
Sweeper pump flow rate ..... 11 GPM (42 LPM)  
BAH pump ..... Gear pump,  
operates Broom Assist Head broom motor  
BAH pump flow rate..... 8 GPM (30 LPM)  
Reservoir ..... 34 gal (129 L)  
Return filter ..... 3 micron,  
spin-on, in-line return  
Charge loop filter ..... 10 micron  
Vent filter..... 10 micron spin-on  
Cooler..... Air to oil  
integral with auxiliary engine heat exchanger  
Hydraulic level/temperature shutdown system  
Hydraulic oil filter restriction indicator - in cab  
Hydraulic oil sight/temperature gauge  
Auxiliary hydraulic system

**DUST CONTROL SYSTEM**

Water spray nozzles for dust suppression  
Pump ..... Electric diaphragm  
Reservoirs ... Polyethylene, 250 gallons (946 L)  
Filter..... 80 mesh stainless steel, in-line  
Low water shut-off ..... Safety shut-off  
with audible and visual indicator in cab  
Spray nozzles:  
Pick-up head..... 4  
Gutter brooms (each)..... 2  
Hopper ..... 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; dump cycle counter,  
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, blower  
RPM, dump cycle, variable speed gutter  
brooms, dust control water system nozzles,  
safety lights.

**Exterior Components**

BlueLogic multiplex modules

**STORAGE COMPARTMENT**

Location .....Rear left, beneath auxiliary engine  
Dimensions..... 18 x 18 x 30 in  
(457 x 457 x 762 mm)

**SAFETY/WARNING DEVICES**

BlueLogic Control System utilizes solid-state  
proximity switches to help provide several  
safety systems: Right and left stabilizers  
automatically deploy before raising the hopper  
and retract after lowering the hopper, stabilizers  
down warning system, transmission interlock  
when stabilizers are down, blower actuation  
interlock, and minimum dump interlock. Other  
devices include alternating LED rear flashers,  
front mounted SAE Class 1/California Title 13  
amber beacon light (LED) w/ limb guard, rear  
view camera system, back-up alarm, scissor  
lift safety props, dump door/tilt cylinder safety  
props, and shop prop.

**OPTIONAL EQUIPMENT**

AOD water pump w/washdown hose/spray gun  
Abrasion protection package  
Auto Sweep Interrupt (ASI)  
Auxiliary hand hose, 8 in (203 mm) diameter  
Gutter broom, drop down  
High output water system  
Hi/Low pressure washdown system  
Hopper load indicator alarms  
Hopper vibrator - electric  
Linear actuator - pressure bleeder w/gauge  
Low emissions package (required for South  
Coast AQMD Rule 1186)  
Magnet, light, standard, or heavy duty  
Pick-up head front curtain lifter  
Shop air purge, dust control system  
Sweeper deluge system, includes hopper and  
pick-up head deluge w/6 in (152 mm) cleanout  
port  
Screen vibrator - pneumatic  
Paint color (other than TYMCO standard white)

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

**CHASSIS AVAILABLE**

International 4300  
International MV607  
Freightliner M2-106

# MODEL 500x<sup>®</sup> HIGH DUMP REGENERATIVE<sup>®</sup> AIR STREET SWEEPER

## DIESEL AUXILIARY ENGINE / DIESEL CONVENTIONAL CAB CHASSIS



**INTERNATIONAL 4300**



**INTERNATIONAL MV607**



**FREIGHTLINER M2-106**

<b>CAB/CHASSIS</b>			
GVWR	33,000 lb (14,982 kg)	33,000 lb (14,982 kg)	33,000 lb (14,982 kg)
Front Axle	10,000 lb (4536 kg) w/10,000 lb (4536 kg) front suspension	10,000 lb (4536 kg) w/10,000 lb (4536 kg) front suspension	10,000 lb (4536 kg) w/10,000 lb (4536 kg) front suspension
Rear Axle	23,000 lb (10,442 kg), w/23,000 lb (10,442 kg) Hendrickson™ air suspension	23,000 lb (10,442 kg), w/23,000 lb (10,442 kg) Hendrickson™ air suspension	23,000 lb (10,442 kg), w/23,000 lb (10,442 kg) Hendrickson™ air suspension
Gear ratio	6.17/8.40 (two speed)	6.17/8.40 (two speed)	6.17/8.42 (two speed)
Frame	80,000 psi	80,000 psi	80,000 psi
Engine	Cummins B6.7	Cummins B6.7	Cummins B6.7
Displacement	409 in <sup>3</sup> (6.7 L)	409 in <sup>3</sup> (6.7 L)	409 in <sup>3</sup> (6.7 L)
Power	200 hp @ 2400 RPM	200 hp @ 2400 RPM	200 hp @ 2400 RPM
Torque	520 lb-ft (705 Nm) @ 1600 RPM	520 lb-ft (705 Nm) @ 1600 RPM	520 lb-ft (705 Nm) @ 1600 RPM
Transmission	Allison 2500 RDS 6-speed automatic transmission with PTO provision, synthetic fluid, and temperature gauge in cab	Allison 2500 RDS 6-speed automatic transmission with PTO provision, synthetic fluid, and temperature gauge in cab	Allison 2500 RDS 6-speed automatic transmission with PTO provision, synthetic fluid, and temperature gauge in cab
Alternator	160 amp	160 amp	160 amp
Batteries	(2) 12 volt, 1900 CCA, maintenance free	(2) 12 volt, 1900 CCA, maintenance free	(2) 12 volt, 1900 CCA, maintenance free
Wheelbase	156 in (3962 mm)	156 in (3962 mm)	158 in (4025 mm)
Turning diameter (wall-to-wall)	45.3 ft (13.81 m) (approximate)	45.3 ft (13.81 m) (approximate)	45.5 ft (13.78 m) (approximate)
Turning diameter (curb-to-curb)	43.2 ft (13.17 m) (approximate)	43.2 ft (13.17 m) (approximate)	43.9 ft (13.38 m) (approximate)
Fuel	Diesel	Diesel	Diesel
Fuel tank	50 gallons (189 L) (shared with sweeper)	50 gallons (189 L) (shared with sweeper)	50 gallons (189 L) (shared with sweeper)
DEF tank	7 gal (26.5 L)	7 gal (26.5 L)	6 gal (22.7 L)
Tires (2-front, 4-rear)	Tubeless radial 11 R x 22.5, 14 ply	Tubeless radial 11 R x 22.5, 14 ply	Tubeless radial 11 R x 22.5, 14 ply
Steering	Integral dual power assisted w/18 in (457 mm) diameter steering wheel w/tilt and dual gauges installed by Fontaine Modification Company.	Integral dual power assisted w/18 in (457 mm) diameter steering wheel w/tilt and dual gauges installed by Kaffenbarger Truck Equipment Company.	Integral dual power assisted w/18 in (457 mm) diameter steering wheel w/tilt and dual gauges installed by Fontaine Modification Company.
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	Adjustable, individual high back air seats w/ lumbar support and cloth inserts for operator comfort	Adjustable, individual high back air seats w/ lumbar support and cloth inserts for operator comfort	Adjustable, individual high back air seats w/ vinyl inserts
Air dryer	Yes w/heater	Yes w/heater	Yes w/heater
Cruise control	Yes	Yes	Yes
Mirrors	Electric remote and heated	Electric remote and heated	Electric remote and heated
Air conditioned cab	Yes, w/fresh air filters (primary and secondary) for cab filtration	Yes, w/fresh air filters (primary and secondary) for cab filtration	Yes, w/fresh air filter for cab filtration
Windows and door locks	Power	Power	Power
Exhaust system	Single, horizontal; after-treatment device, frame mounted right side, under cab w/horizontal tail pipe	Single, horizontal; after-treatment device, frame mounted right side, under cab w/horizontal tail pipe	Single, horizontal; after-treatment device, frame mounted right side, under cab w/horizontal tail pipe
Audio system	AM/FM auxiliary input stereo radio w/digital clock	AM/FM auxiliary input stereo radio w/digital clock	AM/FM/WB auxiliary input stereo radio w/digital clock
Daytime running lights	Yes	Yes	Yes

### GENERAL 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	Up to 142 in (3607 mm)	Up to 142 in (3607 mm)	Up to 142 in (3607 mm)

### OVERALL DIMENSIONS (Approximate)

Length (sweeper body & chassis only)	288 in (7315 mm)	288 in (7315 mm)	286 in (7264 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)	113 in (2870 mm) @ hopper door hinge	113 in (2870 mm) @ hopper door hinge	113 in (2870 mm) @ hopper door hinge
Empty weight (sweeper body & chassis only)	22,960 lbs (10,414 kg)	22,960 lbs (10,414 kg)	22,960 lbs (10,414 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.*

**ATTACHMENT B  
Mechanical Sweepers**

**Commercial Cab-Chassis-Mount design**

If you have different discounts for options, you WILL have to list the items. If you need more space, attach sheets or use Microsoft Excel.

BRAND	MODEL (Standard base unit)	Percentage off discount OFF PARTS	BASE PRICE
Tyco	500 x CNG Freightliner m2	1 %	\$ 364,750 <sup>00</sup>
	CNG Powered		
	Freight End unit		\$ 2500 <sup>00</sup>

Attachments/Accessories: 1 %  
 Options: 1 % Installation Charge: \$ Inc Hourly Labor Rate: \$ 175<sup>00</sup>  
 Multiple Unit discount: 1 % (In addition to the equipment discount) based on 2 Units purchased  
 OEM Repair Parts: 1 % After Market Parts: 0 % Financing of Lease Purchase Interest rate: Market  
 Extended Warranty offered? Yes N/A % No If yes, please attach information for the extended warranty purchase. Discount offered N/A %

Vendors, please explain your ordering process in an attached document and any promotional events that might provide for a discount off the price listed.

Note: This is a CNG Powered Regenerative Air Sweeper



# 500x<sup>®</sup> CNG

AIR SWEEPER

## GENERAL SPECIFICATIONS



# MODEL 500x<sup>®</sup> HIGH DUMP REGENERATIVE<sup>®</sup> AIR STREET SWEEPER

## CNG AUXILIARY ENGINE / CNG CONVENTIONAL CAB CHASSIS

### SWEEPER AUXILIARY ENGINE

Engine ..... KEM/GM Vortec 5700 CNG  
 Displacement ..... 350 in<sup>3</sup> (5.7 L)  
 Power ..... 136 HP (101 kW) @ 2650 RPM  
 Net torque ..... 284 lb-ft (385 Nm) @ 2100 RPM  
 Air cleaner ..... Heavy duty, w/pre-cleaner, and in-cab air restriction indicator w/gauge.  
 Oil filter ..... Remote mount, spin on, full flow  
 Auxiliary engine fuel rack shared with chassis  
 CNG fuel rack capacity ..... 60 DGE (227 DLE)  
 Auxiliary engine shutdown system  
 Remote engine oil cooler

### BLOWER, RUBBER LINED

Aluminum alloy, high volume, open face turbine  
 Purpose ..... Creates blast and suction  
 Bearings ... (2) sealed lifetime lube, anti-friction  
 Housing ..... Isolation mounted, steel with abrasion resistant, replaceable liner  
 Housing seal ..... Heavy rubber section, non-wiping, spring actuated Tilt-N-Seal<sup>®</sup> design  
 Drive ..... Fixed displacement, heavy duty, hydraulic motor

### DUST SEPARATOR

Type ..... Cyclonic, multipass, centrifugal separation  
 Size ..... 28 x 48 in (711 x 1219 mm)  
 Location ..... Inside hopper  
 Particulate removal achieved through dual skimmer slots into hopper  
 Housing ... Abrasion resistant, replaceable liner  
 Self-opening, self-emptying when hopper tilts

### HOPPER, STAINLESS STEEL

Volumetric capacity ..... 5.7 yd<sup>3</sup> (4.3 m<sup>3</sup>)  
 Useable capacity ..... 4.0 yd<sup>3</sup> (3.06 m<sup>3</sup>)  
 Construction ..... Welded non-magnetic stainless steel plate w/integral stiffeners  
 Floor dump angle ..... 50°  
 Dump door opening ..... 68 x 57 in (1727 x 1448 mm)  
 Dump door ..... Self-locking  
 Chute ..... 72 x 48 in (183 x 122 cm) stainless steel lined  
 Chute reach ..... 22 in (56 cm) w/o side shift  
 Dumping direction ..... Right side  
 Lifting method ..... Two stage scissor lift, dual hydraulic cylinders w/integral holding valves  
 Lift capacity ..... 10,000 lbs (4536 kg)  
 Dump height ..... Variable  
 Minimum ..... 24 in (610 mm) from bottom of chute to ground  
 Maximum ..... 132 in (11 ft) (3353 mm) from bottom of chute to ground  
 Overall ..... 262 in (21 ft 8 in) (6655 mm)  
 Dump tilt slope ..... 50°  
 Hopper screen ..... 2 piece stainless steel screen w/access for cleaning top side  
 Hopper drain system

### BROOM ASSIST PICK-UP HEAD (BAH<sup>®</sup>)

Type ..... Dual chamber with broom assist  
 Function ..... Delivers air blast and suction  
 Width ..... 87 in (2210 mm)  
 Pick-up head area ..... 3567 in<sup>2</sup> (2.3 m<sup>2</sup>)  
 Broom ..... 12 x 79 in (305 x 2007 mm) enclosed in rear of pick-up head  
 Suspension ..... 4 springs 2 drag links  
 Suction hose ..... 12 in diameter (305 mm)  
 Pressure hose ..... 14 in diameter (356 mm)

Skids ..... DUO SKID<sup>®</sup>, long-life carbide  
 Pressure bleeder ..... Integral for leaf/light material pick-up.  
 Reverse pick-up head system

### GUTTER BROOMS, TWIN, Patented

Standard equipment, includes LED floodlights and parabolic mirrors  
 Drive ..... Variable speed non-reversible hydraulic motor  
 Adjustment ..... Adjustable for down pressure, pattern and wear  
 Down pressure ..... Automatically adjusts to requirement  
 Flexibility ..... All directions, integral anti-damage "swing away" relief valve  
 Brooms ..... 43 in dia. (1.1 m) steel wire, vertical diggers  
 Hydraulic tilt ..... Twin gutter brooms adjust for curb depth

### HYDRAULIC SYSTEM

Drive ..... Direct drive  
 Blower pump ..... Heavy duty variable displacement piston pump, hydrostatically drives blower  
 Sweeper pump ..... Variable displacement piston pump, operates gutter brooms, pick-up head, stabilizers, hopper lift, hopper dump, and hopper door.  
 Blower pump flow rate ..... 26 GPM (100 LPM)  
 Sweeper pump flow rate ..... 11 GPM (42 LPM)  
 BAH pump ..... Gear pump, operates Broom Assist Head broom motor  
 BAH pump flow rate ..... 8 GPM (30 LPM)  
 Reservoir ..... 34 gal (129 L)  
 Return filter ..... 3 micron, spin-on, in-line return  
 Charge loop filter ..... 10 micron  
 Vent filter ..... 10 micron spin-on  
 Cooler ..... Air to oil  
 Hydraulic level/temperature shutdown system  
 Hydraulic oil filter restriction indicator - in cab  
 Hydraulic oil sight/temperature gauge  
 Auxiliary hydraulic system

### DUST CONTROL SYSTEM

Water spray nozzles for dust suppression  
 Pump ..... Electric diaphragm  
 Reservoirs ... Polyethylene, 250 gallons (946 L)  
 Filter ..... 80 mesh stainless steel, in-line  
 Low water shut-off ..... Safety shut-off with audible and visual indicator in cab  
 Spray nozzles:  
 Pick-up head ..... 4  
 Gutter brooms (each) ..... 2  
 Hopper ..... 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; dump cycle counter, 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, blower RPM, dump cycle, variable speed gutter brooms, dust control water system nozzles, safety lights.

### Exterior Components

BlueLogic multiplex modules

### STORAGE COMPARTMENT

Location ..... Rear left, beneath auxiliary engine  
 Dimensions ..... 18 x 18 x 30 in (457 x 457 x 762 mm)

### SAFETY/WARNING DEVICES

BlueLogic Control System utilizes solid-state proximity switches to help provide several safety systems: Right and left stabilizers automatically deploy before raising the hopper and retract after lowering the hopper, stabilizers down warning system, transmission interlock when stabilizers are down, blower actuation interlock, and minimum dump interlock. Other devices include alternating LED rear flashers, front mounted SAE Class 1/California Title 13 amber beacon light (LED) w/ limb guard, rear view camera system, back-up alarm, scissor lift safety props, dump door/tilt cylinder safety props, and shop prop.

### OPTIONAL EQUIPMENT

AOD water pump w/washdown hose/spray gun  
 Abrasion protection package  
 Auto Sweep Interrupt (ASI)  
 Auxiliary hand hose, 8 in (203 mm) diameter  
 Gutter broom, drop down  
 High output water system  
 Hopper load indicator alarms  
 Hopper vibrator - electric  
 Linear actuator - pressure bleeder w/gauge  
 Low emissions package (required for South Coast AQMD Rule 1186)  
 Magnet, light, standard, or heavy duty  
 Pick-up head front curtain lifter  
 Shop air purge, dust control system  
 Sweeper deluge system, includes hopper and pick-up head deluge w/6 in (152 mm) cleanout port  
 Screen vibrator - pneumatic  
 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

# MODEL 500x<sup>®</sup> HIGH DUMP REGENERATIVE<sup>®</sup> AIR STREET SWEEPER

## CNG AUXILIARY ENGINE / CNG CONVENTIONAL CAB CHASSIS



**FREIGHTLINER M2-112 CNG**

<b>CAB/CHASSIS</b>	
GVWR	33,000 lb (14,982 kg)
Front Axle	10,000 lb (4536 kg) w/10,000 lb (4536 kg) front suspension
Rear Axle	23,000 lb (10,442 kg), w/23,000 lb (10,442 kg) Hendrickson™ air suspension
Gear ratio	6.17/8.42 (two speed)
Frame	120,000 psi
Engine	Cummins L9N
Displacement	543 in <sup>3</sup> (8.9 L)
Power	250 hp (186 kW) @ 2200 RPM
Torque	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
Alternator	160 amp
Batteries	(2) 12 volt, 2000 CCA, maintenance free
Wheelbase	176 in (4,470 mm)
Turning diameter (wall-to-wall)	50.5 ft (15.39 m) (approximate)
Turning diameter (curb-to-curb)	48.2 ft (14.69 m) (approximate)
Fuel	CNG
Fuel tanks	(4) Type IV 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 radial 11 R x 22.5, 14 ply
Steering	Dual with gauges, w/18 in (457 mm) diameter steering wheel, full power w/tilt installed by Fontaine Modification Company
Brakes	4 wheel air ABS w/18.7 CFM (0.53 m <sup>3</sup> /minute) air compressor
Instruments & lights	Full package as required
Seats	Adjustable, high back basic air seats - driver and passenger w/3 chamber air lumbar, vinyl w/cloth inserts, mechanical & integrated cushion extension
Air dryer	Yes w/heater
Cruise control	Yes
Mirrors	Electric remote controlled and heated
Air conditioned cab	Yes, w/fresh air filter for cab filtration
Windows and door locks	Power
Exhaust system	Single horizontal muffler w/horizontal tailpipe; RH mounted
Audio system	AM/FM/WB auxiliary input stereo radio w/digital clock
Daytime running lights	Yes
<b>GENERAL SWEEPING WIDTH (Approximate)</b>	
Pick-up head only	87 in (2210 mm)
With 1 gutter broom	110 in (2794 mm)
With 2 gutter brooms	Up to 142 in (3607 mm)
<b>OVERALL DIMENSIONS (Approximate)</b>	
Length (sweeper body & chassis only)	308 in (7823 mm)
Width (between outside tips of stowed twin gutter broom bristles)	121 in (3073 mm)
Height (w/o cab bar light/beacon)	123 in (3124 mm) @ beacon light cage
Empty weight (sweeper body & chassis only)	25,300 lbs (11,476 kg)
<i>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.</i>	

ATTACHMENT B  
Mechanical Sweepers

Commercial Cab-Chassis-Mount design

If you have different discounts for options, you WILL have to list the items. If you need more space, attach sheets or use Microsoft Excel.

BRAND	MODEL (Standard base unit)	Percentage off discount OFF PARTS %	BASE PRICE
Tymco	1000		
	Freightliner M2		\$ 230,750 <sup>00</sup>
	2 speed axle		\$ 1,000.00
Tymco	600		
	International MV		\$ 230,750 <sup>00</sup>
	2 speed axle		\$ 1,000.00
	Freight - Each unit		\$ 2500 <sup>00</sup>

Attachments/Accessories: 1 %  
Options: 1 % Installation Charge: \$ Inc Hourly Labor Rate: \$ 175<sup>00</sup>  
Multiple Unit discount: 1 % (In addition to the equipment discount) based on 2 Units purchased  
OEM Repair Parts: 1 % After Market Parts: 0 % Financing of Lease Purchase interest rate: Market  
Extended Warranty offered? Yes  No  If yes, please attach information for the extended warranty purchase. Discount offered N/A %

Vendors, please explain your ordering process in an attached document and any promotional events that might provide for a discount off the price listed.

Note: These are regenerative Air Sweepers



**600**<sup>®</sup>  
AIRSWEEPER

**GENERAL SPECIFICATIONS**



**MODEL 600<sup>®</sup> REGENERATIVE<sup>®</sup> AIR STREET SWEEPER**  
**DIESEL AUXILIARY ENGINE / DIESEL CONVENTIONAL CAB CHASSIS**

**SWEEPER AUXILIARY ENGINE**

Engine ..... John Deere 4045 turbo FT4, 4 cyl.  
Displacement ..... 275 in<sup>3</sup> (4.5 L)  
Power ..... 99 HP @ 2200 RPM (74 kW)  
Net torque ..... 315 lb-ft @ 1600 RPM (427 Nm)  
Air cleaner ..... Heavy duty, w/pre-cleaner, scavenge vacuum hose, and in-cab air restriction indicator w/gauge.  
Remote oil filter ..... Spin on, full flow  
Auxiliary engine fuel tank shared with chassis  
Diesel fuel tank capacity ..... 51 gal (193 L)  
DEF tank ..... Dedicated  
Capacity (volumetric) ..... 5.4 gal (20.6 L)  
Capacity (useable) ..... 3.8 gal (14.4 L)  
Auxiliary engine protection system  
Fuel/water separator and separate fuel filter  
Open crankcase ventilation (OCV) filter

**BLOWER, RUBBER LINED**

Aluminum alloy, high volume, open face turbine  
Purpose ..... Creates blast and suction  
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)  
Dumping method ..... Hydraulic with raker bar  
Dumping height ..... 36 in (914 mm)

**PICK-UP HEAD**

Type ..... Dual chamber  
Function ..... Delivers air blast and suction  
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**

Standard equipment includes LED floodlights and parabolic mirrors  
Drive ..... Constant speed non-reversible hydraulic motor  
Adjustment ..... Adjustable for down pressure, pattern and wear  
Down pressure ..... Automatically adjusts to requirement  
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 ..... Gear 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  
Temperature shutdown system

**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 multiplex module

**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  
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  
Gutter broom tilt adjuster(s) (left, right, or twin)  
Gutter broom variable speed  
Gutter broom drop-down  
Hi/Low pressure washdown system  
High output water system  
Hopper deluge system  
Hopper drain system  
Lateral airflow nozzle  
Linear actuator - pressure bleeder w/gauge  
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.*

**CONVENTIONAL CAB CHASSIS AVAILABLE**

International 4300  
International MV607  
Freightliner M2-106

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

## DIESEL AUXILIARY ENGINE / DIESEL CONVENTIONAL CAB CHASSIS



**INTERNATIONAL 4300**



**INTERNATIONAL MV607**



**FREIGHTLINER M2-106**

<b>CAB/CHASSIS</b>			
GVWR	31,000 lb (14,061 kg)	31,000 lb (14,061 kg)	31,000 lb (14,061 kg)
Front Axle	10,000 lb (4536 kg) w/10,000 lb (4536 kg) front suspension	10,000 lb (4536 kg) w/10,000 lb (4536 kg) front suspension	10,000 lb (4536 kg) w/10,000 lb (4536 kg) taper-leaf front suspension
Rear Axle	21,000 lb (9525 kg) w/31,000 lb (14,061 kg) Vari-rate rear suspension w/4,500 lb (2041 kg) auxiliary rubber springs	21,000 lb (9525 kg) w/31,000 lb (14,061 kg) Vari-rate rear suspension w/4,500 lb (2041 kg) auxiliary rubber springs	21,000 lb (9525 kg) w/ 23,000 lb (10,433 kg) variable rate multi-leaf spring w/leaf spring helper
Gear ratio	6.43 (single speed), 6.17/8.42 (two speed)	6.50 (single speed), 6.17/8.42 (two speed)	6.43 (single speed), 5.577/6.60 (two speed)
Frame	50,000 PSI (3447.38 bar)	50,000 PSI (3447.38 bar)	80,000 PSI (5515.81 bar)
Engine	Cummins B6.7	Cummins B6.7	Cummins B6.7
Displacement	409 in <sup>3</sup> (6.7 L)	409 in <sup>3</sup> (6.7 L)	409 in <sup>3</sup> (6.7 L)
Power	200 hp @ 2400 RPM	200 hp @ 2400 RPM	200 hp @ 2400 RPM
Torque	520 lb-ft (705 Nm) @ 1600 RPM	520 lb-ft (705 Nm) @ 1600 RPM	520 lb-ft (705 Nm) @ 1600 RPM
Transmission	Allison 2500 RDS 6-speed automatic transmission with PTO provision, synthetic fluid, and temperature gauge in cab	Allison 2500 RDS 6-speed automatic transmission with PTO provision, synthetic fluid, and temperature gauge in cab	Allison 2500 RDS 6-speed automatic transmission with PTO provision, synthetic fluid, and temperature gauge in cab
Alternator	160 amp	160 amp	160 amp
Batteries	(2) 12 volt, 1900 CCA, maintenance free	(2) 12 volt, 1900 CCA, maintenance free	(2) 12 volt, 1900 CCA, maintenance free
Wheelbase	165 in (4191 mm)	165 in (4191 mm)	165 in (41200 mm)
Turning diameter (wall-to-wall)	47.5 ft (14.48 m) (approximate)	47.5 ft (14.48 m) (approximate)	47.4 ft (14.45 m) (approximate)
Turning diameter (curb-to-curb)	45.3 ft (13.81 m) (approximate)	45.3 ft (13.81 m) (approximate)	45.7 ft (13.93 m) (approximate)
Fuel	Diesel	Diesel	Diesel
Fuel tank (shared with sweeper)	51 gal (193 L) (shared with sweeper)	51 gal (193 L) (shared with sweeper)	51 gal (193 L) (shared with sweeper)
DEF tank	7 gal (26.5 L)	7 gal (26.5 L)	6 gal (22.7 L)
Tires (2-front, 4-rear)	Tubeless 11R x 22.5	Tubeless 11R x 22.5	Tubeless 11R x 22.5
Steering	Integral dual power assisted w/18 in (457 mm) diameter steering wheel w/tilt and dual gauges installed by Fontaine Modification Company.	Integral dual power assisted w/18 in (457 mm) diameter steering wheel w/tilt and dual gauges installed by Kaffenberger Truck Equipment Company.	Integral dual power assisted w/18 in (457 mm) diameter steering wheel w/tilt and dual gauges installed by Fontaine Modification Company.
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	Adjustable, individual high back air seats w/ lumbar support and cloth inserts for operator comfort	Adjustable, individual high back air seats w/ lumbar support and cloth inserts for operator comfort	Adjustable, high back air seats – driver and passenger vinyl w/cloth inserts and mechanical lumbar
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 filters (primary and secondary) for cab filtration	Yes, w/fresh air filters (primary and secondary) for cab filtration	Yes, w/fresh air filter for cab filtration
Windows and door locks	Power	Power	Power
Exhaust system	Single, horizontal; after-treatment device, frame mounted right side, under cab w/horizontal tail pipe	Single, horizontal; after-treatment device, frame mounted right side, under cab w/horizontal tail pipe	Single, horizontal; after-treatment device, frame mounted right side, under cab w/horizontal tail pipe
Audio system	AM/FM auxiliary input stereo radio w/digital clock	AM/FM auxiliary input stereo radio w/digital clock	AM/FM/WB auxiliary input stereo radio w/digital clock
Daytime running lights	Yes	Yes	Yes
<b>SWEEPING WIDTH (Approximate)</b>			
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)
<b>OVERALL DIMENSIONS (Approximate)</b>			
Length (sweeper body & chassis only)	278 in (7061 mm)	278 in (7061 mm)	273 in (6934 mm)
Width (between outside tips of stowed twin gutter broom bristles)	121 in (3073 mm)	121 in (3073 mm)	121 in (3073 mm)
Height	118 in (2997 mm) @ auxiliary engine	118 in (2997 mm) @ auxiliary engine	118 in (2997 mm) @ auxiliary engine
Empty weight (sweeper body & chassis only)	19,020 lbs (8627 kg)	19,020 lbs (8627 kg)	19,020 lbs (8627 kg)
<i>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.</i>			





# 600<sup>®</sup> CNG<sup>®</sup>

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  
 Purpose ..... Creates blast and suction  
 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)  
 Dumping method ..... Hydraulic with raker bar  
 Dumping height ..... 36 in (914 mm)

### PICK-UP HEAD

Type ..... Dual chamber  
 Function ..... Delivers air blast and suction  
 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

Standard equipment includes LED floodlights and parabolic mirrors  
 Drive ..... Constant speed non-reversible hydraulic motor  
 Adjustment ..... Adjustable for down pressure, pattern and wear  
 Down pressure ..... Automatically adjusts to requirement  
 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 multiplex module

#### 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  
 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 (COMDEX)

# MODEL 600® REGENERATIVE® 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 in³ (8.9 L)	543 in³ (8.9 L)	543 in³ (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) Type IV 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) Type IV 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) Type IV 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 m³/minute) air compressor	4 wheel air ABS w/18.7 CFM (0.53 m³/minute) air compressor	4 wheel air ABS w/18.7 CFM (0.53 m³/minute) air compressor
Instruments & lights	Full package as required	Full package as required	Full package as required
Seats	Adjustable, high back premium air seats - driver and passenger w/3 chamber air lumbar; forward and rear cushion tilt; vinyl w/cloth inserts	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.*

**ATTACHMENT C**

**Airport/Runway Sweepers**

If you have different discounts for options, you WILL have to list the items. If you need more space, attach sheets or use Microsoft Excel.

BRAND	MODEL (Standard base unit)	Percentage discount OFF PARTS	BASE PRICE
Tyco	HSP Freightliner M2	1%	\$ 237,500 <sup>00</sup>
	HSP International M2		\$ 237,500 <sup>00</sup>
	Freight - Each Unit		\$ 2500 <sup>00</sup>

Attachments/Accessories: 1 %

Options: 1 % Installation Charge: \$ Inc Hourly Labor Rate: \$ 175<sup>00</sup>

Multiple Unit discount: 1 % (In addition to the equipment discount) based on 2 units purchased

OEM Repair Parts: 1 % After Market Parts: 0 % Financing of Lease Purchase interest rate: Market

Extended Warranty offered? Yes  No  If yes, please attach information for the extended warranty purchase. Discount offered N/A %

Vendors, please explain your ordering process in an attached document and any promotional events that might provide for a discount off the price listed.

Note! This is a High Speed Runway Regenerative Air Sweeper



## GENERAL SPECIFICATIONS

# MODEL HSP® REGENERATIVE® AIR AIRPORT RUNWAY SWEEPER DIESEL AUXILIARY ENGINE / DIESEL CONVENTIONAL CAB CHASSIS

### SWEEPER AUXILIARY ENGINE

Engine ..... John Deere 4045 turbo FT4, 4 cyl.  
 Displacement ..... 275 in<sup>3</sup> (4.5 L)  
 Power ..... 99 HP @ 2200 RPM (74 kW)  
 Net torque ..... 315 lb-ft @ 1600 RPM (427 Nm)  
 Air cleaner ..... Heavy duty, w/pre-cleaner, scavenge vacuum hose, and in-cab air restriction indicator w/gauge.  
 Remote oil filter ..... Spin on, full flow  
 Auxiliary engine fuel tank shared with chassis  
 Diesel fuel tank capacity ..... 51 gal (193 L)  
 DEF tank ..... Dedicated  
 Capacity (volumetric) ..... 5.4 gal (20.6 L)  
 Capacity (useable) ..... 3.8 gal (14.4 L)  
 Auxiliary engine protection system  
 Fuel/water separator and separate fuel filter  
 Open crankcase ventilation (OCV) filter

### BLOWER, RUBBER LINED

Aluminum alloy, high volume, open face turbine  
 Purpose ..... Creates blast and suction  
 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)  
 Dumping method ..... Hydraulic with raker bar  
 Dumping height ..... 36 in (914 mm)

### PICK-UP HEAD, HSP, Patented

Type ..... Dual chamber  
 Function ..... Delivers air blast and suction  
 Width (inside dimension) ..... 87 in (2210 mm)  
 Pick-up head area ..... 2784 in<sup>2</sup> (1.79 m<sup>2</sup>)  
 Suspension ..... 4 springs, 2 drag links  
 Skids ..... DUO SKID®, long-life carbide  
 Suction hose diameter ..... 10 in (254 mm)  
 Pressure hose diameter ..... 14 in (356 mm)  
 Pressure bleeder ..... Integral for leaf/light material pickup

### GUTTER BROOM, TWIN, Patented

Standard equipment includes LED floodlights and parabolic mirrors  
 Drive ..... Constant speed non-reversible hydraulic motor  
 Adjustment ..... Adjustable for down pressure, pattern and wear  
 Down pressure ..... Automatically adjusts to requirement  
 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 ..... Gear 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  
 Temperature shutdown system

### 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® 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, 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, 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 multiplex module

### 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  
 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  
 COMDEX (extra water and tool box) 330 gal (1249 L) total capacity  
 Gutter broom tilt adjuster(s) (left, right, or twin)  
 Gutter broom variable speed  
 Gutter broom drop-down  
 Hi/Low pressure washdown system  
 High output water system  
 Hopper deluge system  
 Hopper drain system  
 Lateral airflow nozzle  
 Linear actuator - pressure bleeder w/gauge  
 Liquid recovery system  
 Magnet, light, standard, or heavy duty  
 Pick-up head curtain lifter  
 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.*

### CONVENTIONAL CAB CHASSIS AVAILABLE

International MV607  
 Freightliner M2-106

# MODEL HSP® REGENERATIVE® AIR AIRPORT RUNWAY SWEEPER

## DIESEL AUXILIARY ENGINE / DIESEL CONVENTIONAL CAB CHASSIS



**INTERNATIONAL MV607**



**FREIGHTLINER M2-106**

<b>CAB/CHASSIS</b>		
GVWR	31,000 lb (14,061 kg)	31,000 lb (14,061 kg)
Front Axle	10,000 lb (4536 kg) w/10,000 lb (4536 kg) front suspension	10,000 lb (4536 kg) w/10,000 lb (4536 kg) taper-leaf front suspension
Rear Axle	21,000 lb (9525 kg) w/31,000 lb (14,061 kg) Vari-rate rear suspension w/4,500 lb (2041 kg) auxiliary rubber springs	21,000 lb (9525 kg) w/ 23,000 lb (10,433 kg) variable rate multi-leaf spring w/leaf spring helper
Gear ratio	6.50 (single speed), 6.17/8.42 (two speed)	6.43 (single speed), 5.57/7.60 (two speed)
Frame	50,000 PSI (3447.38 bar)	80,000 PSI (5515.81 bar)
Engine	Cummins B6.7	Cummins B6.7
Displacement	409 in³ (6.7 L)	409 in³ (6.7 L)
Power	200 hp @ 2400 RPM	200 hp @ 2400 RPM
Torque	520 lb-ft (705 Nm) @ 1600 RPM	520 lb-ft (705 Nm) @ 1600 RPM
Transmission	Allison 2500 RDS 6-speed automatic transmission with PTO provision, synthetic fluid, and temperature gauge in cab	Allison 2500 RDS 6-speed automatic transmission with PTO provision, synthetic fluid, and temperature gauge in cab
Alternator	160 amp	160 amp
Batteries	(2) 12 volt, 1900 CCA, maintenance free	(2) 12 volt, 1900 CCA, maintenance free
Wheelbase	165 in (4191 mm)	165 in (41200 mm)
Turning diameter (wall-to-wall)	47.5 ft (14.48 m) (approximate)	47.4 ft (14.45 m) (approximate)
Turning diameter (curb-to-curb)	45.3 ft (13.81 m) (approximate)	45.7 ft (13.93 m) (approximate)
Fuel	Diesel	Diesel
Fuel tank (shared with sweeper)	51 gal (193 L) (shared with sweeper)	51 gal (193 L) (shared with sweeper)
DEF tank	7 gal (26.5 L)	6 gal (22.7 L)
Tires (2-front, 4-rear)	Tubeless 11R x 22.5	Tubeless 11R x 22.5
Steering	Integral dual power assisted w/18 in (457 mm) diameter steering wheel w/tilt and dual gauges installed by Kaffenbarger Truck Equipment Company.	Integral dual power assisted w/18 in (457 mm) diameter steering wheel w/tilt and dual gauges installed by Fontaine Modification Company.
Brakes	4 wheel air ABS w/18.7 CFM (0.53 m³/minute) air compressor	4 wheel air ABS w/18.7 CFM (0.53 m³/minute) air compressor
Instruments & lights	Full package as required	Full package as required
Seats	Adjustable, individual high back air seats w/lumbar support and cloth inserts for operator comfort	Adjustable, high back air seats – driver and passenger vinyl w/cloth inserts and mechanical lumbar
Air dryer	Yes w/heater	Yes w/heater
Cruise control	Yes	Yes
Mirrors	Electric remote controlled and heated	Electric remote controlled and heated
Air conditioned cab	Yes, w/fresh air filters (primary and secondary) for cab filtration	Yes, w/fresh air filter for cab filtration
Windows and door locks	Power	Power
Exhaust system	Single, horizontal; after-treatment device, frame mounted right side, under cab w/horizontal tail pipe	Single, horizontal; after-treatment device, frame mounted right side, under cab w/horizontal tail pipe
Audio system	AM/FM auxiliary input stereo radio w/digital clock	AM/FM/WB auxiliary input stereo radio w/digital clock
Daytime running lights	Yes	Yes
<b>SWEEPING WIDTH (Approximate)</b>		
Pick-up head only	87 in (2210 mm)	87 in (2210 mm)
With 1 gutter broom	110 in (2794 mm)	110 in (2794 mm)
With 2 gutter brooms	142 in (3606 mm)	142 in (3606 mm)
<b>OVERALL DIMENSIONS (Approximate)</b>		
Length (sweeper body & chassis only)	278 in (7061 mm)	273 in (6934 mm)
Width (between outside tips of stowed twin gutter broom bristles)	121 in (3073 mm)	121 in (3073 mm)
Height	118 in (2997 mm) @ auxiliary engine	118 in (2997 mm) @ auxiliary engine
Empty weight (sweeper body & chassis only)	19,020 lbs (8627 kg)	19,020 lbs (8627 kg)
<i>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.</i>		