

**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	BASE PRICE Before Discount
		3 %	
Tymco	500 X		
Freightliner	m2	106	\$ 253,350 <sup>00</sup>
OPTIONAL Chassis			
International	DT	Deduct	(\$ 2,000.00)
International	ISB	add	\$ 1,000.00
Freight			1950 <sup>00</sup> Ea

Attachments/Accessories: 3 % Inc in

Options: 3 % Installation Charge: \$ Base Hourly Labor Rate: \$ 140<sup>00</sup>

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

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

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: Dual Steering Standard  
CNG available Call for Specifications



# 500x<sup>®</sup>

AIR SWEEPER

## GENERAL SPECIFICATIONS



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

## FINAL TIER 4 AUXILIARY ENGINE/CONVENTIONAL CAB CHASSIS

### SWEPPER AUXILIARY ENGINE

Make ..... John Deere, 4045 turbo, 4 cyl.  
(Final Tier 4)  
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  
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 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 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 ..... 26 GPM (100 LPM)  
Sweeper pump flow ..... 11 GPM (42 LPM)  
BAH pump ..... Gear pump, operates Broom Assist Head broom motor  
BAH pump flow ..... 8 GPM (30 LPM)  
Reservoir ..... 34 gal (129 L)  
Return filter..... 3 micron absolute, 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  
Reservoir ..... Polyethylene 250 gallon (946 L)  
Filter..... 80 mesh stainless steel, in-line  
Low water shut-off ..... Safety shut-off with low water warning light in cab  
Spray nozzles:  
Pick-up head..... 4  
Gutter brooms (each)..... 2  
Hopper ..... 1  
Hydrant fill hose w/storage area ..... 20 ft (6 m)

### CONTROLS

Inside cab (lighted)  
Pick-up head, left and right gutter brooms, left and right gutter broom tilt, ignition, blower on/off (variable), dust control system, all safety lights, hopper dump/tilt, pressure bleeder, auxiliary fuse panel  
**BlueLogic<sup>®</sup> Display**  
High resolution, color LCD multi-function

touchscreen display that provides the operator feedback on the status of the sweeper and auxiliary engine. The display provides information for all safety equipment, as well as lifetime and trip hours for sweeper equipment such as the gutter brooms, pick-up head, pick-up head broom, and blower. The display also provides service hours for the auxiliary engine and hydraulic system fluids and filters. Additionally, the sweeper odometer records lifetime and trip curb miles swept.

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

Multiplexed electrical control system which provides intelligent safety features and assists in sweeper troubleshooting with on board diagnostics (OBD). Specific to the Model 500x, BlueLogic pauses the dust control system when the blower is turned off, maintains blower at constant speed and monitors the hydraulic level/temperature shutdown system. BlueLogic also provides several safety interlocks on Model 500x, i.e. disabling the transmission if stabilizers are down and disabling blower when hopper is raised/hopper door is open.

### STORAGE COMPARTMENT

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

### SAFETY/WARNING DEVICES

Solid state proximity switches, right and left side stabilizers (automatically engage when lifting hopper), blower actuation interlock, minimum dump interlock, stabilizer down warning system, alternating LED rear flashers, front mounted SAE Class 1/California Title 13 amber beacon light with limb guard - LED, back-up alarm, scissor lift safety props, shop prop, and transmission interlock when stabilizers down.

### OPTIONAL EQUIPMENT

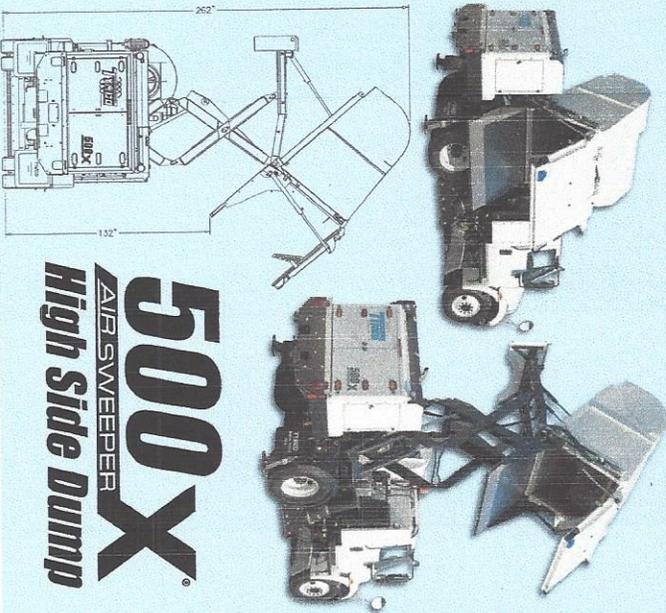
AOD water pump w/washdown hose/spray gun  
Abrasion protection package  
Air purge, water system  
Auto sweep interrupt w/overspeed interrupt  
Auxiliary hand hose, 8 in (203 mm) diameter  
Camera/monitor system  
Engine block heater  
Gutter broom, drop down  
High output water system  
Hi/Low pressure 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  
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  
Freightliner M2-106

From The People Who **Invented** Regenerative Air Sweeping!



# 500X<sup>®</sup>

AIR SWEEPER

## High Side Dump

The TYMCO Model 500X<sup>®</sup> High Side Dump REGENERATIVE AIR Sweeper is the most innovative product of its kind on the market today. Developed to fulfill the requirements of municipalities, highway departments and contractors who have the need for high dump sweeper applications; the 500X<sup>®</sup> comes fully equipped with features unmatched in the industry. The Model 500X<sup>®</sup> features a variable dump height from 2 feet to 11 feet from the tip of the discharge chute to the ground with the hopper fully tilted, enabling the 500X<sup>®</sup> to dump into various size containers. The fast 68 second dump cycle means more time sweeping, less time dumping.

Sweeper Photo-graphic may contain optional equipment. Consult your dealer for more information.

## Superior Training

We want you to understand the Regenerative Air System and your TYMCO Sweeper completely, so you can get optimal performance from your equipment investment. That's why, for more than thirty years, we've offered two-day scheduled training schools at our facility in Waco, Texas. Managers, owners, operators and mechanics get hands-on training and answers to specific questions. Enrollment levels are kept low, so you and your team will get personal attention as well as the opportunity to learn from the experiences of other attendees through the interaction of the class.

When your operators and mechanics are thoroughly trained and knowledgeable about the TYMCO Sweeper, you get better performance and a lower cost per operating hour:

- TYMCO offers full two-day schools
- Choose from over 30 schools scheduled per year
- Yearly class schedules and class agendas are available
- Learn through demonstrations on an operational sweeper
- Special schools arranged for large groups

• Register to attend on [tymco.com](http://tymco.com)

Specifically designed for training, our 3300 square foot, temperature controlled facility provides ample space for demonstrations on an operational sweeper and system components. We also provide daily ground transportation from the hotel to our training facility, and lunch is on us.



Model 500X Air Sweeper

### Convenient Dealer Service Centers

In over 50 U.S. locations and dozens of others worldwide, you receive on-site, spot parts and service from TYMCO's network of dealers.



Specifications subject to change without notice.

**MODEL HSP<sup>®</sup>**  
High Speed Sweeper for Airport Runways

**MODEL 600<sup>®</sup> CNG**  
Compressed Natural Gas Model

**MODEL DST-6<sup>®</sup>**  
Dustless Sweeping Technology

REGENERATIVE AIR SWEEPERS

[www.tymco.com](http://www.tymco.com)

**1-800-258-9828**

**MODEL 435<sup>®</sup>**  
Mid-Size Street Sweeper

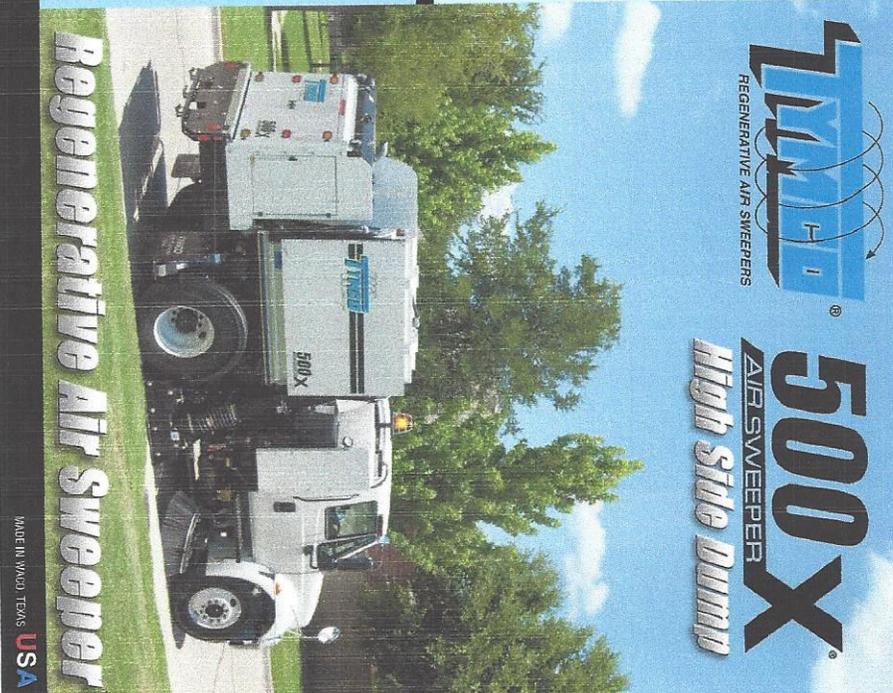
**MODEL 600<sup>®</sup> COMDEX<sup>®</sup>**  
Complete Design Street Sweeper

**MODEL DST-4<sup>®</sup>**  
Dustless Sweeping Technology

**MODEL 210<sup>®</sup>**  
Single Drum Sweeper

TYMCO REGENERATIVE AIR SWEEPERS are South Coast AQMD Rule 1186 PM<sub>10</sub> Certified

2013 EPA Emission of 0.15 gpm/hp



# TYMCO<sup>®</sup>

REGENERATIVE AIR SWEEPERS

# 500X<sup>®</sup>

AIR SWEEPER

## High Side Dump

Regenerative Air Sweeper

MADE IN WACO TEXAS USA

# BlueLogic® Control System

The BlueLogic Control System is the TMCO multiple electronics platform LED diagnostics among other advanced features.



In-cab controls are center mounted and illuminated for ease of operation from either driving position. A selection menu feedback on swapper functions.



The high resolution color display delivers on-board diagnostics for the TMCO BlueLogic Control System and the auxiliary engine's ECU (Engine Control Unit). Service reminders for engine fluids and filters are also included.

The TMCO patented dual 41' boom are both variable speed and lifting. The booms are illuminated for night sweeping.

The Brown, Army, Backing Head (BAH) provides an on-demand boom for applications where a center boom may be desired. In-cab controls allow for boom assisted sweeping only when needed, reducing boom wear.



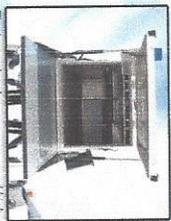
No Grease Filings - Less Maintenance



Blower system utilizes an adjustable long and lift between the hopper and driver's hood. The hydraulically driven blower does not operate during the dump cycle and is recessed during lifting to ensure the driver's housing.

The dust control system features a 250 gallon capacity reservoir with a hydrolift fill and low level indicators. A full level sensor and system does not operate when the blower is disengaged, thereby saving water.

The large 5.7 cubic yard hopper offers a variable dump height from 3 feet to 11 feet (24 inches to 132 inches) allowing dumping into various size and type containers.



The heavy duty hopper, screens and high capacity dual support are constructed from heavy duty steel. The hopper is designed with integral openings for cleaning above the screens without the use of drop down screens or access panels. The large hopper door allows mechanical access for an air and wolveright seal.

The hopper drain system allows for sweeping in wet weather.

The heavy duty motor lift assembly has a 10,000 lb. lift capacity. All pivot on the lift are self-lubricating and never require greasing. Integral counterbalance holding valve ensure controlled lowering of the lift assembly and serve as radiation safety locks.



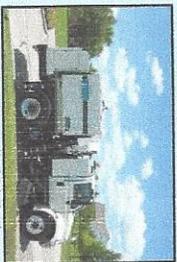
The powerful 115 HP diesel auxiliary engine is located at the rear of the unit while also allowing easy ground level access. Compressed Natural Gas (CNG) auxiliary engine also available.



## TMCO Regenerative Air Greases Deeper™



The TMCO Model 500X has a large stainless steel discharge chute, which projects debris into the middle of the container without the need of a side stiffener. The chute is designed to load 15 bags in a row, providing easy damage should it come in contact with the debris container.



International Conventional Cab Chassis



Freightliner Conventional Cab Chassis



Freightliner Conventional Cab Chassis CNG (Compressed Natural Gas Powered)

- **Chassis Features**
- Dual Steering with TIK and Dual Instrumentation
- Excellent Visibility, Maneuverability and Accessibility
- Dual Adjustable High Back Air Suspension Seats
- Remote Controlled Heated Power Mirrors

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