

RFB# 3-160513TV

TYMCO 500X SWEEPER OPTIONS

STAINLESS STEEL CHIP SEAL SCREENS		\$ 1,650.00
HI / LOW WASH DOWN SYSTEM		\$ 550.00
LED ARROW STICK I.L.O. MODOT ARROW BOARD	DEDUCT	\$ (2,550.00)
DROP DOWN GUTTER BROOMS		\$ 715.00
DELETE HOPPER LOAD INDICATOR	DEDUCT	\$ (300.00)
DELETE BROOM ASSIST HEAD	DEDUCT	\$ (1,350.00)
DELETE VARIABLE SPEED GUTTER BROOMS	DEDUCT	\$ (715.00)
DELETE TILT ADJUSTERS EACH	DEDUCT	\$ (425.00)
DELETE ASI	DEDUCT	\$ (733.00)
LINEAR ACTUATOR W/ GAUGE- PRESSURE BLEEDER		\$ 333.00
DOUBLE DUO SKIDS WITH FRONT EXTENSIONS		\$ 1,130.00

TYMCO 500X CHASSIS OPTIONS

FREIGHTLINER M2-106 I.L.O. IHC	INCLUDES 2 SPEED AXLE	\$ 3,800.00
TRUCK PARTS & SHOP MANUALS		\$ 750.00
ENGINE BLOCK HEATER		\$ 550.00
CAB MOUNTED LED LIGHT BAR		\$ 950.00



500x[®]

AIR SWEEPER

GENERAL SPECIFICATIONS



MODEL 500x[®] REGENERATIVE AIR SWEEPER[®]

FINAL TIER 4 AUXILIARY ENGINE/CONVENTIONAL CAB CHASSIS

SWEEPER AUXILIARY ENGINE

Make John Deere, 4045 turbo, 4 cyl.
(Final Tier 4)
Displacement 275 in³ (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 engine
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[®] 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 yd³ (4.3 m³)
Useable capacity 4.0 yd³ (3.06 m³)
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 drain system

BROOM ASSIST PICK-UP HEAD (BAH[®])

Type Dual chamber with broom assist
Function Delivers air blast and suction
Width 87 in (2210 mm)
Pick-up head area 3567 in² (2.3 m²)
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[®], long-life carbide
Pressure bleeder Integral for leaf/light material pick-up.

GUTTER BROOMS, DUAL, 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 Dual 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[®] 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.

BlueLogic[®] 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 and transmission interlock when stabilizers down.

OPTIONAL EQUIPMENT

AOD water pump w/washdown hose/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
Reverse pick-up head system
Sweeper deluge system, includes hopper and pick-up head deluge w/6 in (152 mm) cleanout port
Sweeper odometer
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 - DT or Cummins ISB
Freightliner M2-106

MODEL 500x[®] REGENERATIVE AIR SWEEPER[®]

FINAL TIER 4 AUXILIARY ENGINE/CONVENTIONAL CAB CHASSIS



INTERNATIONAL 4300-DT

**INTERNATIONAL 4300 -
CUMMINS ISB**

FREIGHTLINER M2-106

CAB/CHASSIS

GVW	33,000 lb (14,982 kg)	33,000 lb (14,982 kg)	33,000 lb (14,982 kg)
Front Axle	10,000 lb (4540 kg)	10,000 lb (4540 kg)	10,000 lb (4540 kg)
Rear Axle	23,000 lb (10,442 kg), w/Hendrickson™ air suspension	23,000 lb (10,442 kg), w/Hendrickson™ air suspension	23,000 lb (10,442 kg), w/Hendrickson™ air suspension and shock absorbers
Gear ratio	6.43 (single speed), 6.17/8.40 (two speed)	6.43 (single speed), 6.17/8.40 (two speed)	6.43 (single speed), 5.38/7.50 (two speed)
Frame	13.42 sm (80,000 psi) with special frame piercing	80,000 psi	80,000 psi
Engine	MaxxForce DT	Cummins ISB	Cummins ISB
Displacement	466 in³ (7.6 L)	409 in³ (6.7 L)	409 in³ (6.7 L)
Power	215 hp @ 2200 RPM	200 hp @ 2300 RPM	200 hp @ 2300 RPM
Torque	560 lb-ft (759 Nm) @ 1300 RPM	520 lb-ft (705 Nm) @ 1600 RPM	520 lb-ft (705 Nm) @ 1600 RPM
Transmission	Allison 2500 RDS-P 6-speed automatic transmission with PTO provision, synthetic fluid, and temperature gauge in cab	Allison 2500 RDS-P 6-speed automatic transmission with PTO provision, synthetic fluid, and temperature gauge in cab	Allison 2500 RDS-P 6-speed automatic transmission with PTO provision, synthetic fluid, and temperature gauge in cab
Alternator	160 amp	160 amp	160 amp
Batteries	(2) 12 v dual 1850 CCA maintenance free	(2) 12 v dual 1850 CCA maintenance free	(2) 12 v dual 1900 CCA maintenance free
Wheelbase	152 in (3861 mm)	169 in (4292 mm)	169 in (4292 mm)
Turning diameter (wall to wall)	44.5 ft (13.56 m)	48.5 ft (14.78 m)	49.2 ft (15.00 m)
Turning diameter (curb to curb)	42.3 ft (12.89 m)	46.3 ft (14.11 m)	47.8 ft (14.60 m)
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	n/a	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	Dual with gauges, w/18 in (457 mm) diameter steering wheel w/full power w/tilt	Dual with gauges, w/18 in (457 mm) diameter steering wheel w/full power w/tilt	Dual with gauges, w/18 in (457 mm) diameter steering wheel w/full power w/tilt
Brakes	Full air with 13.2 CFM (0.37 m³/minute) air compressor	Full air with 18.7 CFM (0.53 m³/minute) air compressor	Full air with 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, 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	Yes	Yes
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
Exhaust system	Single, horizontal; after-treatment device, frame mounted right side, under cab w/horizontal tail pipe	LH outboard frame mounted vertical after-treatment system	LH outboard frame mounted vertical after-treatment system
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

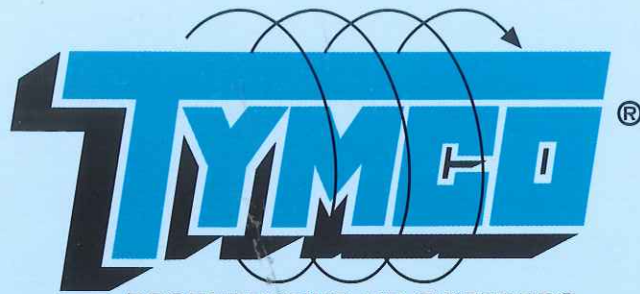
GENERAL SWEEPING WIDTH (Approximate)

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)	280 in (7112 mm)	297 in (7543 mm)	294 in (7467 mm)
Width (w/2 gutter brooms)	96 in (2438 mm)	96 in (2438 mm)	96 in (2438 mm)
Height (w/o bar light)	113 in (2870 mm) @ hopper door hinge	114 in (2896 mm) @ chassis exhaust	114 in (2896 mm) @ chassis exhaust
Empty weight (sweeper body & chassis only)	23,600 lbs (10,704 kg)	23,855 lbs (10,820 kg)	23,720 lbs (10,759 kg)

*Dimensions and weight may vary with equipment.
Consult factory for additional specifications and other available truck chassis.*



REGENERATIVE AIR SWEEPERS

500X[®]

AIR SWEEPER



High Side Dump
REGENERATIVE AIR SWEEPER[®]

For More Information, Call 1-800-258-9626

MADE IN WACO, TEXAS **USA**

500X[®]

AIR SWEEPER

High Side Dump



STANDARD FEATURES:

- ① The large 5.7 cubic yard, heavy duty hopper is constructed of non-magnetic stainless steel. A variable dump height from 2 feet to 11 feet allows dumping into various size and type containers.
- ② The large hopper door allows easy dumping and is hydraulically and mechanically locked for an air and watertight seal.
- ③ The large stainless steel discharge chute projects debris into the middle of the dump container without the need of a hopper side shift. The chute is designed to float 45 degrees upward, preventing major damage should it come in contact with the debris container.
- ④ The heavy duty scissor lift assembly has a 10,000 lb. lift capacity. All pivots on the lift are self-lubricating and never require greasing. Integral counterbalance holding valves ensure controlled lowering of the lift assembly and serve as redundant safety locks.
- ⑤ Dual stabilizers automatically deploy before the dump cycle begins assuring unit stability throughout the dumping procedure.
- ⑥ TYMCO's exclusive Tilt-N-Seal[™] blower system utilizes an adjustable spring balance design which ensures long seal life between the hopper and blower housing. The hydraulically driven blower does not operate during the dump cycle and is accessible without having to remove the blower housing.
- ⑦ Service doors swing open to allow ground level access to the rear mounted sweeper power unit.
- ⑧ TYMCO's patented dual 43 inch vertical digger gutter brooms are both variable speed and tilting. The brooms are illuminated for night sweeping. All broom functions are controlled from inside the cab by the operator.
- ⑨ The dust control system features a 250 gallon capacity rustproof reservoir with a hydrant fill hose, auto shut-off and low level indicators. Additionally, the dust control system does not operate when the blower is disengaged; thereby saving water.
- ⑩ The time tested, heavy duty Broom Assist Pick-up Head (BAH[®]) is controlled from inside the cab and provides extra cleaning power when needed.
- ⑪ The hopper drain system allows for sweeping in wet weather.
- ⑫ The electrical system incorporates "state of the art" multiplex diagnostic capability and integral solid-state circuit protection. *(not shown)*
- ⑬ The Model 500x[®] standard light package includes: behind the cab mounted strobe, two rear mounted LED stop/turn/signal lights, one work light for night time hopper dumping illumination, two rear mounted work lights and four rear mounted LED flashers.



TYMCO Regenerative



The Tilt-N-Seal™ blower system ensures long seal life between the hopper and blower housing.



The stainless steel hopper and screen is designed with integral openings for cleaning above the screen without the use of drop-down screens or access panels.



The powerful 115 HP John Deere Tier 2 diesel auxiliary engine is located at the rear of the sweeper, reducing cab noise and heat, while also allowing easy access and ground level service.



In cab controls are center mounted and illuminated for ease of operation from either driving position.



The operator friendly cab features dual steering with tilt and dual instrumentation.



Air Cleans Deeper™



The standard Model 500x[®] chassis is a 33,000 lbs. GVW International chassis featuring:

- A 200 HP turbo-charged engine (50 state emissions)
- Rear air ride suspension (23,000 lbs.) provides constant ride height and stability
- Dual steering with tilt and dual instrumentation
- Air conditioned cab
- Cab air filtration system
- Air ride seats
- Power and heated West Coast mirrors with LED clearance lights

(Contact factory for other available chassis)



The Model 500x sweeper unit never requires greasing, reducing maintenance down-time and maintenance costs.



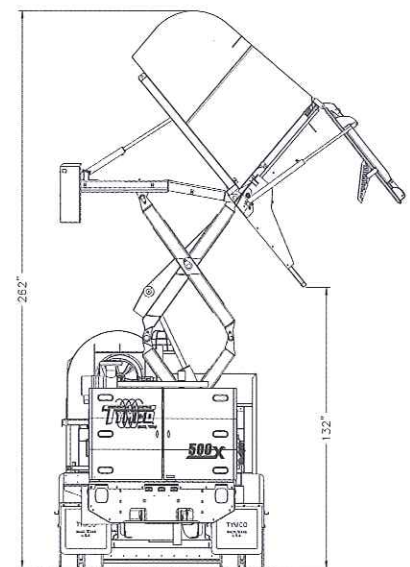
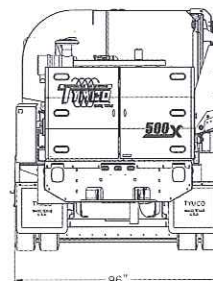
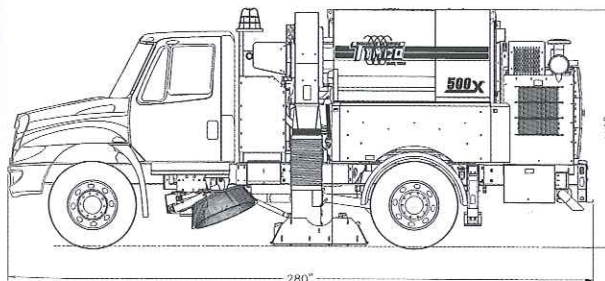
The TYMCO Model 500x[®] has a large stainless steel discharge chute, which projects debris into the middle of the container without the need of a side shift. The chute is designed to float 45 degrees upward, preventing major damage should it come in contact with the debris container.

OVERALL DIMENSIONS

(Approximate)

Length	280" (23' 4") (7112 mm)
Width	96" (8') (2438 mm)
Height	112" (9' 4") (2845 mm)
Dump height	Variable
Maximum...132" (11') (3353 mm) from bottom of chute to ground	
Minimum.....24" (2') (610 mm) from bottom of chute to ground	
Maximum overall clearance height	262" (21' 10") (6655 mm)
Empty weight	21,000 lbs. (9,534 kg)

Dimensions and weight may vary with equipment



Taking **REGENERATIVE AIR** to New Heights!

The TYMCO Model 500x® 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® comes fully equipped with features unmatched in the industry. Once again, TYMCO is sure to revolutionize the way the world sweeps.



The Model 500x® 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® to dump into various size containers. The fast 68 second dump cycle means more time sweeping, less time dumping.



TYMCO invented the REGENERATIVE AIR sweeper and continues to lead the field because of our commitment to engineering state-of-the-art equipment that is specifically designed for maximum performance, reliability, ease of operation and safety.



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 twenty 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.



Model 600 Illustration

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 25 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 our web site

Specifically designed for training, our 3500 square foot, temperature controlled facility provides ample space for demonstrations on an operational sweeper and systems components. We also provide daily ground transportation from the hotel to our training facility, and lunch is on us.

Convenient Dealer Service Centers

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



This product is protected by numerous U.S. and Foreign Patents.

Specifications subject to change without notice.



MODEL HSP®
High Speed Performance for Airport Runways



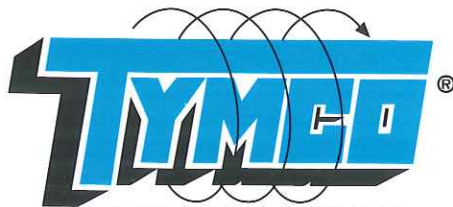
MODEL 600®
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MODEL DST-4®
Dustless Sweeping Technology



MODEL 600®
Standard Cab



MODEL 210®
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MODEL 435®



Equipment

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