

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<sup>®</sup>**  
AIR SWEEPER

**GENERAL SPECIFICATIONS**



**MODEL 500x<sup>®</sup> REGENERATIVE AIR SWEEPER<sup>®</sup>**  
**FINAL TIER 4 AUXILIARY ENGINE/CONVENTIONAL CAB CHASSIS**

**SWEEPER 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 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<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 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.

**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<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.

**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 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<sup>®</sup> REGENERATIVE AIR SWEEPER<sup>®</sup>

## FINAL TIER 4 AUXILIARY ENGINE/CONVENTIONAL CAB CHASSIS



**INTERNATIONAL 4300-DT**

**INTERNATIONAL 4300 -  
CUMMINS ISB**

**FREIGHTLINER M2-106**

<b>CAB/CHASSIS</b>			
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 in <sup>3</sup> (7.6 L)	409 in <sup>3</sup> (6.7 L)	409 in <sup>3</sup> (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 m <sup>3</sup> /minute) air compressor	Full air with 18.7 CFM (0.53 m <sup>3</sup> /minute) air compressor	Full air with 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	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<sup>®</sup>

AIR SWEEPER



*High Side Dump*

# REGENERATIVE AIR SWEEPER<sup>®</sup>

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

MADE IN WACO, TEXAS **USA**

# 500X<sup>®</sup>

## 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<sup>™</sup> 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<sup>®</sup>) 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<sup>®</sup> 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<sup>®</sup> 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.*



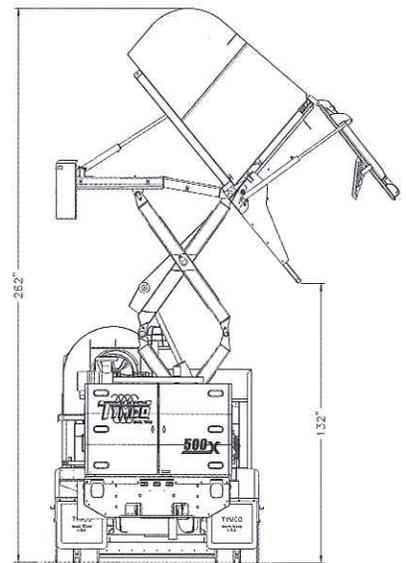
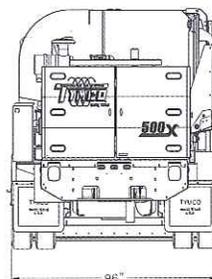
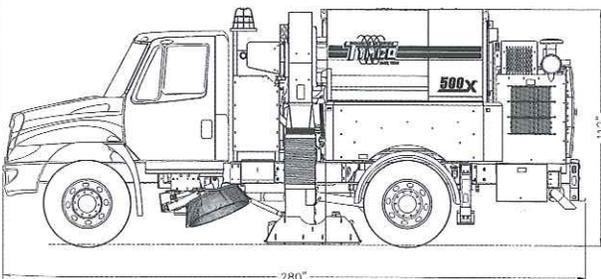
*The TYMCO Model 500x<sup>®</sup> has a large stainless steel discharge chute, which projects debris into the middle of the container without the need of a side shift. The chute is designed to float 45 degrees upward, preventing major damage should it come in contact with the debris container.*

## 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<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. Once again, TYMCO is sure to revolutionize the way the world sweeps.



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.

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®**  
Cabover



**MODEL DST-4®**  
Dustless Sweeping Technology



**MODEL 600®**  
Standard Cab



REGENERATIVE AIR SWEEPERS  
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Equipment

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