



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 in³ (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
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 yd³ (5.6 m³)
Capacity (useable) 6 yd³ (4.6 m³)
Construction Welded steel plate with integral stiffeners
Floor angle 22°
Dump door opening 84 x 44 in (2134 x 1118 mm)
Dump method Hydraulic with raker bar
Dump height 36 in (914 mm)

PICK-UP HEAD, HSP, Patented

Type Dual chamber
Width (inside dimension) 87 in (2210 mm)
Pick-up head area 2784 in² (1.79 m²)
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

Includes LED floodlights and parabolic mirrors
Drive Constant speed non-reversible hydraulic motor
Adjustment Adjustable for down pressure, pattern and wear
Down pressure Automatic
Flexibility All directions integral anti-damage "swing away" relief valve
Broom 43 in dia. (1092 mm) steel wire, vertical digger

HYDRAULIC SYSTEM

Operates gutter broom(s), dump and pick-up head
Drive 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 Control Module (BCM)

SAFETY/WARNING DEVICES

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

OPTIONAL EQUIPMENT

AOD water pump w/washdown hose/spray gun
Abrasion protection package
Additional camera views - pick-up head, left gutter broom, right gutter broom
Auto Sweep Interrupt (ASI)
Auxiliary hand hose 8 in dia. (203 mm)
Auxiliary hand hose hydraulic boom assist
Auxiliary hand hose catch basin cleaning package
Auxiliary hydraulic system
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 (LAN)
Linear actuator - pressure bleeder w/gauge
Liquid Recovery System (LRS)
Magnet, light, standard, or heavy duty
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