

Data Sheet for Hino 300 Series
XZU730L-WKFTLV3(4x2)
Road Sweeper 4 m³

Chassis Model : Hino 3916	
Year Model: 2022 or newer	
Country of Manufacturer : Japan For Chassis & Turkish for Sweeper	
Dimensions (For Chassis & Body) mm	
Overall Length (OL)	6,720
Overall Width (OW)	2,550
Overall Height (OH)	2,495
Wheel base (WB)	3,900
Weights (For Chassis & Body) Kg	
Chassis mass	2,600
Sweeper Body	3,850
Loading capacity (Payload)	2,050
Gross Vehicle Mass (GVMR)	8,500
Engine	
Model & Emission	HINO N04C-WH – EURO3
Type	Diesel , Turbocharged and intercooled, 4 cycle , inline 4 Cylinder, overhead valve , water cooled . Suitable for weather and dusty area in Iraq& local fuel.
Combustion system	Compression ignition, Four Stroke .
Displacement (L)	4.009 L
Compression ratio	18.0 : 1
Maximum Power /Speed	113 kW (154PS) @2,800 rpm (JIS Gross). 110 kW (150PS) @2,800 rpm (ISO Net).
Maximum Torque /Speed	422 Nm (43.1kgfm) @1,400 rpm (JIS Gross). 420 Nm (42.9kgfm) @1,400 rpm (JIS Net).
Fuel System(Fuel injection pump)	Electronic control common rail type.
Clutch	
Type	Dry single plate with damper springs, automatic gap adjuster.
Gear Box	
Model	RE61 , manual 6 speeds , with overdrive.

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Front Axle	
Type	Reversed Elliot, " I " section beam.
Capacity (kg)	3,020
Rear Axle	
Type	Full-floating, single reduction, single speed by hypoid gearings.
Capacity (kg)	5,760
Steering	
Type	LHD, Telescopic and tilt steering column , recirculating ball integral power steering.
Tire & Wheel	
Front & Rear	7.50R16 , rib type tread.
No. of Tires	7 (including 1 spare tire).
Wheels	16x6.00GS with 6 studs.
Suspension	
Front	Semi-elliptic tapered leaf springs with double acting shock absorbers.
Rear	Semi-elliptic main and auxiliary tapered leaf spring with double acting shock absorber.
Braking System	
Service Brake	Dual circuit hydraulic , vacuum assist , Disc Brakes, ABS Equipped.
Parking Brake	Mechanical, internal expanding acting on transmission output shaft.
Exhaust Brake	Equipped.
Electrical	
No. of Batteries	2 x 12 V ,60Ah.
Alternator	24 V ,60Ah.
Horn	Electric Horn.
Fuel tank	
Capacity	100 L
Fuel filter	Primary with (water separator) and secondary filter.
CABIN	

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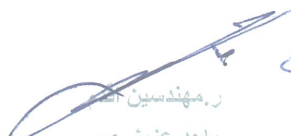
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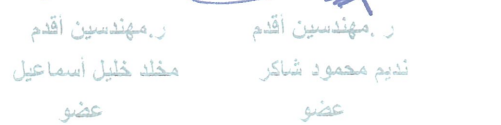
Type	Forward control, all steel welded construction , High roof , mechanical tilt with torsion assist.
Front Windshield	Heat absorbing , Laminated glass.
Seating capacity	Three.
Front seat	4-way adjustable, driver seat , fixed back passenger seat integrated type .
Seat cover	Fabric type.
Seatbelt	3 Point ELR (emergency locking retractor) belt with pre-tensioner on driver and outer passenger seat. 2 point NR (Non Retractor) belt on center passenger seat.
SRS Airbag system	Equipped (Driver & Passenger side).
Sun visor	Equipped (both side).
Windshield wiper	2-speed with wash intermittent.
Outside rear view mirror	Equipped
Inside Mirror	Equipped
Air condition	Equipped with clean air filter .
Car Audio	Radio with CD Player (2 speakers).
Cigar lighter	Equipped.
Door Lock	Equipped.
Instrument	
Speedometer	Equipped (Km/h).
Tachometer	Equipped.
Coolant temperature gauge	Equipped.
Fuel gauge	Equipped.
Brake warning	Brake fluid level and vacuum pressure warning lamp & buzzer.
Seatbelt warning	Equipped (driver & outer passenger seat).
Cab tilt warning lamp	Equipped (with indicator light and buzzer).


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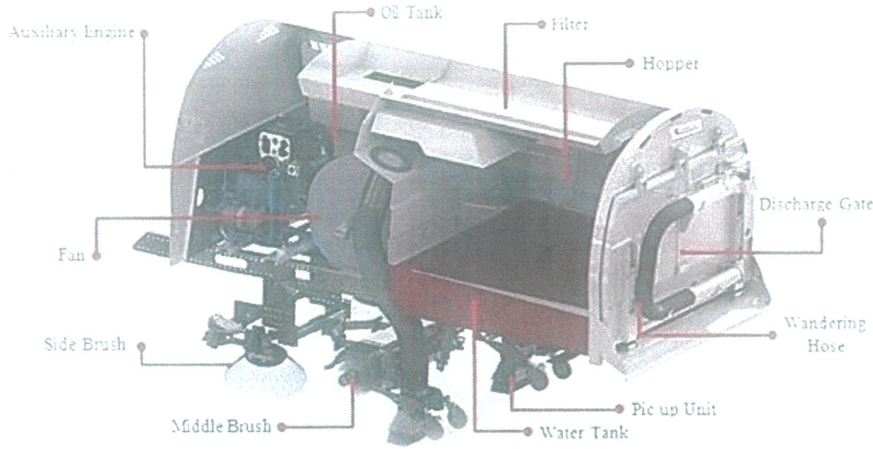

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General Technical specifications for 4 m³ Road Sweeper

ملاحظة: الجزء التخصصي ترك قبول مواصفاته الى الجهة المستفيدة وليس من مسؤولية اللجنة.



Make: KATMERCILER

GENERAL SPECIFICATIONS

Sweeper body weight.....	3850 Kg
Vehicle sweeping width.....	2200 -2750 mm
Sweeping performance.....	25,000 – 30,000 m ² /h
Sweeping speed.....	.05 / 30 km/h
Garbage Capacity	4 m ³
Water Capacity.....	1,200 lt.
Water pump (brush watering system).....	.minimum 3 bar.
Circular brush.....	400 mm
Cylindrical brush.....	1,300 mm
Vacuum fan.....	3,000 rpm
Engine Output.....	83Kw gross @ 2200 rev/min
Engine Brand.....	Perkins
Hydraulic oil tank.....	Not less than 60 liter

1- Garbage Tank

Capacity	4.0 m ³
<ul style="list-style-type: none"> - The floor of the garbage tank will be built with chromium nickel sheets (CrNi) and the joints will be properly and evenly welded - The garbage canister will be lifted up and down with the aid of a hydraulic cylinder. - The garbage canister will be designed to tilt with an angle of 30 degrees during unloading. - The rear lid will feature a thick sealing to ensure leak tightness. 	

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- Connection of the fan and the hydro motor will feature bedding on the motor compartment surface with the vacuum fan.
- Vacuum fan will be equalized at 3,000 RPM
- Front portion of the garbage canister will be the engine department. This section, called the engine department, will be constructed with sound insulation features. Engine department will be independent of the garbage tank.

2- Water Tank

Water Tank Volume at least 1,200 liters

- Water storage tank will be independent of the garbage. This water tank will be built with chromium nickel sheets(CrNi) and have at least 1,200 liters of volume. Its inner walls will be polyester coated to prevent rusting.
- Under the water tank a suction filter will be put allowing the operator to remove and install it back easily.
- Inside the water tank an emptying or filling valve will be installed. A filter will be installed at the filler opening.
- The water tank will feature a level indicator.
- Spray nozzles installed at the upper section of the side brushes and in the vacuum channel will be made of rust-free materials.

3- AUXILIARY Engine

- Brand : Perkins
- Number of Cylinders : 4
- The auxiliary engine gross output : water cooled TURBO diesel , 83Kw @ 2200 rev/min .
- The auxiliary engine gross torque : 418 N.m
- Engine (Bore X Stroke): 105mm X 127mm
- The auxiliary engine will be equipped with automatic gas and controlled from the cabin.
- The engine will have the required oil, diesel fuel, and air filters.
- The engine will be equipped with an operating and time clock.
- Required engine gauges (oil, fuel, air, battery, and charge level) will be installed on the control panel in the cabin.

4- VACUUM SUCTION FAN

- The fan will make its suction through the suction channel located at the upper surface of the garbage hopper
- The fan will be of closed type and with helix wings.
- Auxiliary motor to couple of the fan will be moved with redactor or torque convertor.
- The fan suction hose will be of spring type
- The vacuum fan will be controlled from the cabin.

5- HYDRAULIC PUMP & TANK

- The hydraulic pump will never switch to pressurizing other than the time sweeping is being done
- The tank will be of at least 60 liters.

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- The pressure gauge, oil and heat level indicators will be installed on the tank for the system pressure.
- A filter system will exist on the liquid suction and return lines.

6- FRONT CIRCULAR BRUSH

- A steel wire brush in circular shape will be installed behind the both front right and left wheels of the vehicle. The hydro motor will be of at least 250 cm³ volume. The angles of these brushes will be adjustable.
- Circular brush will have a pressing/clearance adjusting system.
- The pressing force will be adjusted based on the conditions of any given garbage mass.
- The Circular brush will be of 400 mm diameter.
- All motions of the brush will be controlled from the cabin panel. There will be spray nozzles around the brush.
- The operating brush either the right one or the left will be lighted through a projector for night time operation.
- The circular brush will be of free oscillation which will allow it to run at a position depending on the slope and roughness of any given street. The circular brushes will be offered optionally with steel alloy and plastic.
- Lowering and lifting speed of the circular brushes will be adjustable. The circular brushes will be offered optionally with steel alloy and plastic
- Lowering and lifting speed of the circular brushes will be adjustable.

7- MIDDLE SECTION HORIZONTAL CYLINDRICAL BRUSH

- A cylindrical brush of at least 300 mm diameter and 1,300 mm length will be installed between the two frames.
- The cylindrical brush will be driven by the hydro motor.
- The cylindrical brush will be made of polypropylene
- The cylindrical brush will have free oscillation and operate synchronously with the circular brush.

8- CONTROL PANEL & THE GAUGES

- Control arms and switches will be available at the driver cabin of the vehicle to switch on an off the auxiliary engine, circular brushes, cylindrical main brush, hydraulic pumps.
- Required lighting and warning buttons will be available on the control panel.
- All the cords used in the control panel will have socket connectors and identifying labels.
- Function of each switch on the control panel will be clearly identified with a legible label.

9- WATER SYSTEM

- There will be a water pump independent of the auxiliary engine.
- Through a distribution valve, the water pump will canalize the water to the brushes as well as the suction cup and the garbage canister.
- Spray nozzles will be switching on and off through an electric operated valve

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10- PORTABLE HOSE

- A portable hose of 4 m length will be available at the rear door of the vehicle.
- The portable hose installed on the rear door of the vehicle will feature pipe for easy portability.

11- HYDRAULIC CYLINDERS

- Hydraulic cylinder will be made of honed steel pipe and chromium shaft.
- Hydraulic cylinder will be controlled through and electro-hydraulic valve.

12- VACUUM SUCTION SYSTEM

- The vacuum suction system will be over the 2 wheels featuring a suction line and a pressure line.
- The Vacuum suction system will be moving up and down pneumatically and will become free upon touching the ground.
- There will be a bucket with Wheel, during suction this bucket will be opening and closing automatically.
- There will be a lid on the vacuum suction system on the suction line
- The vacuum suction system will be equipped with spray nozzles There will be lid on the pressure line of the vacuum suction system.
- The vacuum suction system will be equipped with spry nozzles

13- SAFETY SYSTEMS:

- The equipment will be manufactured for use on the motor ways and all the available safety systems will be applied.
- Running and operating manuals on the safety systems will be supplied together with the vehicle.
- All the moving parts of the vehicle will be safe and conforming to the safety norms of the motor ways.
- Safety labels on the vehicle will have distinguishing colors.
- Camera system equipped on both sides.

14- ENGINE COMPATMENT AND THE LIDS:

- The engine compartment will have total sound insulation.
- Engine radiator shroud will be in contact with the hood and it will be placed in a way that it would suck air from outside at only one spot.

15- PAINTING

All the equipment will be painted in two coats of the desired color over the prime. Interior walls of the garbage tank will be painted in two coats of anti-rust.

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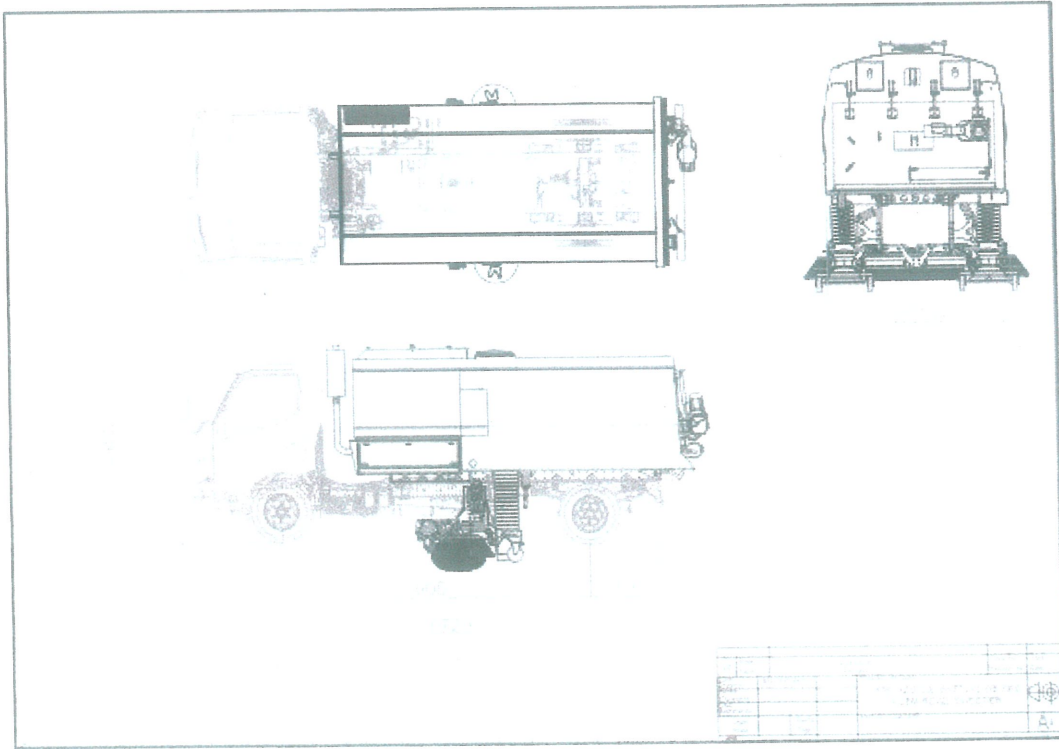
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16- WARNING SIGNS

- 360 degrees rotating beacons will be installed in the front or rear parts of the vehicles.
- A warning system of a flashing arrow sign will be installed in the rear section of the vehicle.
- A projector will be installed to light up the circular brush and the area to be swept off



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