

Maintenance Plan for Sunwin Bus SWB6859EV01G Pure Electric Bus

Vehicle Model	SWB6859EV01G	Maintenance level	Maintenance level	Interval period	Nature of work	
Production No.	03-525		First maintenance	5,000 km/1 month	Cleaning/inspecting/refilling/lubricating/replacing/tightening	
			Level I maintenance	7,500 km/1.5 months	Cleaning/washing/inspecting/testing/refilling/lubricating/replacing/tightening	
			Level II maintenance (semi-annual)	30,000 km/6 months	Cleaning/washing/inspecting/testing/refilling/lubricating/replacing/adjusting/tightening	
			Level II maintenance (annual)	60,000 km/12 months	Cleaning/washing/inspecting/testing/refilling/lubricating/replacing/adjusting/tightening	
Version No.	V1.0	Special maintenance	Special interval	Complying with special requirements		
Maintenance Content	First maintenance	Level I maintenance	Level II maintenance (semi-annual)	Level II maintenance (annual)	Special maintenance	Nature of work
Drive motor	Jing-Jin Electric					
Motor exterior	—	●	●	●	/	Cleaning
Sealing of motor high-voltage wire junction box	—	●	●	●	/	Inspecting
Motor high-voltage harness and connectors - external	—	●	●	●	/	Checking/tightening
Motor low-voltage connectors	—	●	●	●	/	Checking/tightening
Motor coolant piping and interfaces	—	●	●	●	/	Checking/tightening
Motor fixing bracket	—	—	●	●	/	Checking/tightening
Motor high-voltage connector bolts - internal	—	—	—	●	/	Tightening
Motor insulation resistance	—	—	—	●	/	Testing
Motor controller	Jing-Jin Electric					
Motor controller exterior	—	●	●	●	/	Cleaning
Sealing of controller high-voltage wire junction box	—	●	●	●	/	Inspecting
Motor controller high-voltage harness and connectors - external	—	●	●	●	/	Checking/tightening
Motor controller low-voltage connectors	—	●	●	●	/	Checking/tightening
Motor controller coolant piping and interfaces	—	●	●	●	/	Checking/tightening
Motor controller fixing bracket	—	—	●	●	/	Checking/tightening
Motor controller insulation resistance	—	—	—	●	/	Testing
High-voltage connector bolts - internal	—	—	—	●	/	Tightening
Cooling system	Qingdao					
Radiator exterior & fan	—	●	●	●	/	Inspecting/cleaning
Interior of radiator	—	—	—	—	120,000 km/24 months	Cleaning
Leakage of cooling system pipelines	—	●	●	●	/	Checking/tightening
Coolant	—	●	●	●	/	Inspecting/refilling
Coolant	—	—	—	—	120,000 km/24 months	Replacing
Battery	Camel 120Ah					
Inspecting for missing battery terminal protective sleeve	—	●	●	●	/	Inspecting
Inspecting for loose battery terminal bolts	—	●	●	●	/	Inspecting
Terminal posts	—	●	●	●	/	Lubricating
Low-voltage electrical	Sunwin					
Inspecting for loose low-voltage harness and connectors	—	●	●	●	/	Checking/tightening
Inspecting for loose bolts at low-voltage electrical ground points	—	●	●	●	/	Checking/tightening
Inspecting low-voltage terminal bolts on distribution board	—	●	●	●	/	Checking/tightening
Inspecting for loose low-voltage handbrake terminal bolts	—	●	●	●	/	Checking/tightening
Power battery pack	Catl 229kwh water-cooled (Songz independent water-cooling)					
Inspecting for box damage	—	●	●	●	/	Inspecting
Battery box pressure equalization valve	—	●	●	●	/	Inspecting
Power battery BDU-MSD	—	—	●	●	/	Inspecting
Power battery high-voltage wire fixing bracket	—	—	●	●	/	Checking/tightening
Battery box positive and negative terminal bolts	—	—	●	●	/	Checking/tightening
Inspecting fixation between battery box and vehicle body	—	—	●	●	/	Checking/tightening
Battery high and low-voltage harness and connectors	—	—	●	●	/	Checking/tightening
Power battery BDU insulation resistance	—	—	—	●	/	Testing
Power battery insulation resistance	—	—	—	●	/	Testing
High-voltage heating harness	—	—	—	●	/	Testing
Power battery coolant	—	—	—	●	/	Inspecting/refilling
Power battery coolant	—	—	—	—	120,000 km/24 months	Replacing
Defroster	New Nanfeng					
Body damage inspection	—	●	●	●	/	Cleaning/inspecting
Air inlet and heating pipeline	—	●	●	●	/	Inspecting

Defroster insulation resistance	—	—	—	•	/	Testing
Battery high-voltage harness and connectors - external	—	•	•	•	/	Inspecting
Charging interface	Jonhon					
Charging interface power contact element	—	•	•	•	/	Inspecting/cleaning/replacing
Charging interface insulation resistance	—	—	—	•	/	Testing
Auxiliary power system	Intelligent Control					
Inspecting for exterior damage	—	•	•	•	/	Cleaning
Sealing of high-voltage wire junction box	—	•	•	•	/	Inspecting
High voltage wiring harness and connectors - external	—	•	•	•	/	Checking/tightening
Low voltage plug-in	—	•	•	•	/	Checking/tightening
ACU insulation resistance	—	—	—	•	/	Testing
Housing - body ground wire	—	•	•	•	/	Checking/tightening
Coolant piping and interfaces	—	•	•	•	/	Checking/tightening
Inspecting for loose fixing brackets	—	—	•	•	/	Checking/tightening
Inspecting high-voltage quick connector bolts	—	—	—	•	/	Tightening
Drive shaft	Golden					
Universal joints at axle end & motor end	•	•	•	•	/	Lubricating
Drive axle	Dongfeng Dana 9.5T					
Drive axle exterior	—	•	•	•	/	Cleaning
Breather plug	—	•	•	•	/	Inspecting
Differential oil	•	—	•	•	/	Replacing
Differential oil seal	—	—	•	•	/	Inspecting
Oil filler plug	•	—	•	•	/	Inspecting
Oil drain plug	•	—	•	•	/	Inspecting
Suspension shock absorber	—	•	•	•	/	Inspecting
Brake	Knorr-Bremse					
Brake pad	—	—	•	•	/	Inspecting
Disk brake	—	—	•	•	/	Inspecting
Brake caliper self-adjusting mechanism	—	—	—	•	/	Inspecting
Brake pipeline system	Sunwin					
Air dryer filter element	—	—	—	•	/	Replacing
Gas cylinder water drainage	—	•	•	•	/	Cleaning
Electric air compressor	Ruili					
Air compressor exterior	—	•	•	•	/	Cleaning
High and low-voltage harness and connectors	—	•	•	•	/	Inspecting
Oil and gas pipelines	—	•	•	•	/	Inspecting
Air compressor air filter element	—	•	•	—	/	Cleaning
Air compressor air filter element	—	—	—	•	/	Replacing
Air compressor muffler filter element	—	•	•	—	/	Cleaning
Air compressor muffler filter element	—	—	—	•	/	Replacing
Air compressor oil & oil filter	—	•	—	—	/	Inspecting
Air compressor oil & oil filter	•	—	•	•	/	Replacing
Bolts and fixing bolts at all positions	—	•	•	•	/	Inspecting
Shock absorbing pad & safety valve	—	•	•	•	/	Inspecting/replacing
Breather tube	—	•	•	•	/	Inspecting/cleaning
Radiator and cooling fan	—	•	•	•	/	Inspecting
Front axle	Dongfeng Dana 5.5T					
Front axle exterior	—	•	•	•	/	Cleaning
Kingpin (four points on left and right)	•	•	•	•	/	Lubricating
Tie rod ball joint	—	•	•	•	/	Lubricating
Tie rod ball joint dust cover	—	•	•	•	/	Cleaning/inspecting
Shock absorber	—	•	•	•	/	Inspecting
Steering gear	Sunwin					
Tie rod and drag link ball joint	•	•	•	•	/	Lubricating
Steering power system	Quanxing Machining					
Power steering pump exterior	—	•	•	•	/	Cleaning
Oil inlet and outlet pipelines	—	•	•	•	/	Checking/tightening
Steering power oil filtration	•	—	—	•	/	Replacing

Fixed bracket	—	—	●	●	/	Checking/tightening
High and low voltage wiring harnesses and connectors	—	●	●	●	/	Checking/tightening
Power steering fluid	●	—	●	●	/	Replacing
Insulation resistance value of steering motor	—	—	—	●	/	Testing
Suspension	ZF					
Air bag	—	●	●	●	/	Cleaning/inspecting
ECAS solenoid valve	—	—	—	●	/	Cleaning/inspecting
Air bag altitude valve and adjustment lever	—	—	—	●	/	Checking/adjusting
Tire	Goodyear					
Inspecting tire pressure	●	●	●	●	/	Inspecting
Inspecting tire bolt torque	●	●	●	●	/	Checking/tightening
Cross diagonal tire rotation	—	—	—	—	30,000 Km～50,000 Km	Checking/adjusting
Roof	Sunwin					
Exterior inspection of roof-mounted power battery	—	●	●	●	/	Cleaning/inspecting
Removing roof debris	●	●	●	●	/	Cleaning/inspecting
Passenger door	Huashen Pneumatic front and rear double inward-swinging doors					
Appearance	—	●	●	●	/	Cleaning/inspecting
Door shaft floor, base, and tumbler fixing bolts	—	●	●	●	/	Checking/tightening
Upper bracket fixing bolts	—	●	●	●	/	Checking/tightening
Roller bracket fixing bolts	—	●	●	●	/	Checking/tightening
Gas pipeline and joints	—	●	●	●	/	Checking/tightening
Emergency valve at the passenger door	—	●	●	●	/	Inspecting
Chassis tightening	Sunwin					
Front V-type thrust rod bolts	●	●	●	●	/	Checking/tightening
Front ball pin type suspension rod bolts	●	●	●	●	/	Inspecting
Front longitudinal thrust rod bolts	●	●	●	●	/	Checking/tightening
Front stabilizer bar bolts	●	●	●	●	/	Checking/tightening
Front & rear shock absorber bolts	●	●	●	●	/	Checking/tightening
Front & rear air bags	●	●	●	●	/	Inspecting
Steering drag link ball joint nuts	●	●	●	●	/	Checking/tightening
Steering gear swing arm bolts	●	●	●	●	/	Checking/tightening
Rear cantilever bolts	●	●	●	●	/	Checking/tightening
Rear stabilizer bar bolts	●	●	●	●	/	Checking/tightening
Rear stabilizer bar suspension rod bolts	●	●	●	●	/	Checking/tightening
Cotter pin	●	●	●	●	/	Inspecting
Upper longitudinal thrust rod bolts on rear axle	●	●	●	●	/	Checking/tightening
Lower V-type thrust rod bolts on rear axle	●	●	●	●	/	Checking/tightening
Splint bolts	●	●	●	●	/	Checking/tightening
Drive motor fixing bolts	●	●	●	●	/	Checking/tightening
Rubber bushing of stabilizer bar	●	●	●	●	/	Inspecting/replacing