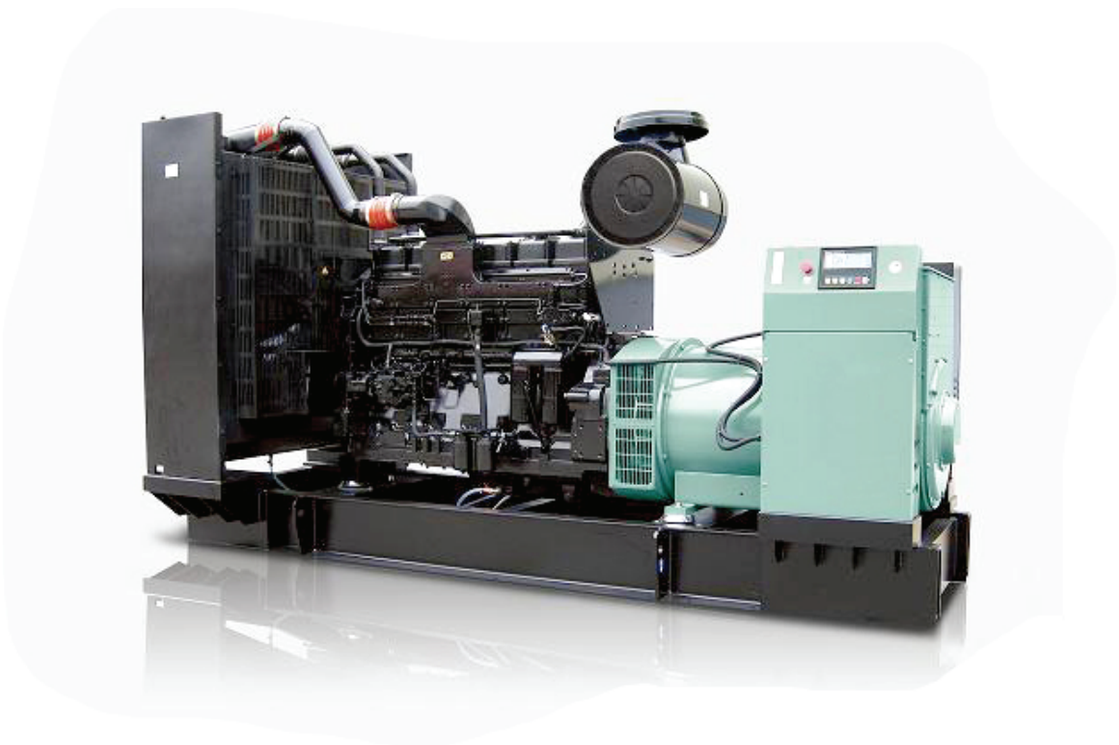
SICER®

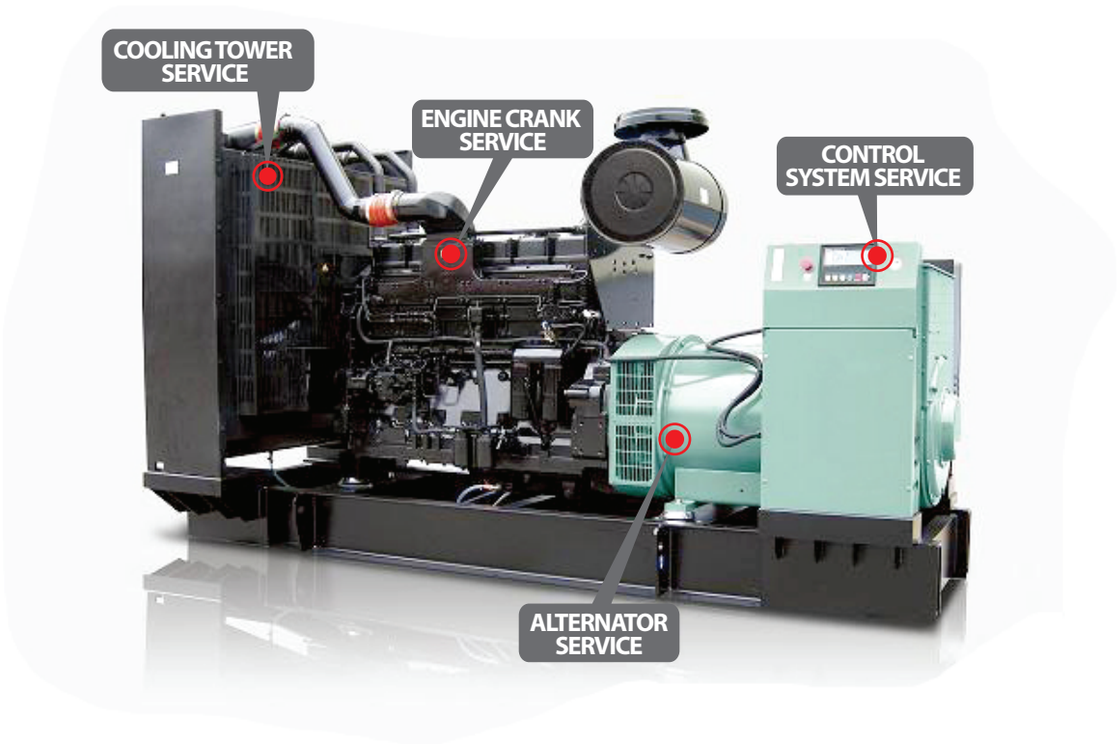
GENERATOR CUSTOMERS SERVICE AGREEMENT

Your Progress & Patience are not tempted



GENERATOR SERVICE AGREEMENT

The most effective way of ensuring your electric power systems perform at peak performance. Customer support agreements greatly reduce the risk, disruption and loss of revenue caused by unscheduled downtime thus decreasing your cost of owning and operating. Customer support agreements ensure your service, maintenance and repairs are performed by highly skilled professionals, giving you more time to concentrate on driving your business forward.



Types of Agreements

1	Inspection Service Agreement
2	Full Maintenance Service Agreement

1 WHAT DOES AN INSPECTION SERVICE AGREEMENT INCLUDE?

ANNUAL INSPECTION
This consists of a visual walk around inspection of the generator set using an extensive checklist and performed by a highly skilled service technician who will also provide key recommendations in line with factory guidelines and standards.

MAINTENANCE PARTS
At every service interval, your Sicher Dealer will provide all the parts you need to perform your generator set service as detailed in the Operations & Maintenance Manual delivered with your generator set.

SCHEDULED OIL SAMPLING
Services involve an analysis of engine fluids in our specialized laboratories. By checking the results against manufacturer's wear tables, potential problems can be identified and corrective action taken. Your Sicher Dealer will maintain a full record of all service and repair work, along with fluid analysis lab results.

SM ELECTRONIC GENERATOR SET DATA MONITORING
During the annual inspection visit, your Dealer will connect service diagnostic tools into your generator set to diagnose and calibrate the various electronic control systems.

RECOMMENDED ACTIONS
analysis, electronic diagnostics and the annual inspection, your Sicher Dealer will make recommendations to help you maintain your installation in perfect condition. This will enable you to focus on your core activity and optimize your owning and operating costs.

2 WHAT DOES A FULL MAINTENANCE SERVICE AGREEMENT INCLUDE?

MAINTENANCE SERVICE AGREEMENT
All the standard elements of a Maintenance Service Agreement are included in the Full Service Agreement.

MAINTENANCE PARTS
At every service interval, your Sicher Dealer will provide all the parts you need to perform your generator set service as detailed in the Operations & Maintenance Manual delivered with your
generator set.

REPAIRS AND PLANNED OVERHAULS
With a Full Service Agreement, any repair or before failure overhaul work will be undertaken by highly skilled service technicians, using the right tools and genuine parts, which have the highest specifications in the industry and are readily available. Only Sicher Dealers have specialized training and access to manufacturer's specifications to optimize your owning and operating costs. Original parts and labor are included in the agreement.

TOTAL FLEXIBILITY
Full Service Agreements are extremely flexible and can be further tailored to your needs to include other products and services.

COMPLETE PEACE OF MIND
With a Full Service Agreement, you have greater generator set availability, increased operational efficiency and complete control over costs. A Full Service Agreement means you can concentrate on growing your business, leaving specialists trained by manufacturers to take care of everything.

SICHER®

COMPARISON CHART

	INSPECTION SERVICE	FULL SERVICE
Annual inspection	✓	✓
Maintenance parts	✓	✓
Scheduled Oil Sampling	✓	✓
Electronic data monitoring	✓	✓
Recommended actions	✓	✓
Maintenance labor	✗	✓
Periodic inspections	✗	✓
Documented service history	✗	✓
Repair parts	✗	✓
Repair labor	✗	✓
Waste oil and filter disposal	✗	✓

WORK CHART

INSPECTION SERVICE

1.1	Inspect for any freight damage (components straight, straight, etc.)
1.2	Verify manuals present
1.3	Check that generator is secured to pad and hold down bolts are tightened
1.4	Inspect all belts for ensure proper alignment and tensions
1.5	Check governor rod movement and clearance.
1.6	Verify fluid levels (oil, coolant, battery, governor, etc)
1.7	Visually inspect the vibration damper
1.8	Check that Rain Cap is in place and functional
1.9	Verify correct AC and DC wire sizes and connections
1.11	Verify proper sized battery(ies) in place Connect battery cables
1.13	Check fuel and exhaust plumbing
1.14	Verify adequate air flow and ventilation
1.17	Check block heater, battery charger, etc. properly matched with utility voltage
1.18	Verify electrical connections made at battery charger, block heater, etc.
1.19	Verify remote start wires are pulled and connected to generator and transfer switch
1.20	Verify communications wires are pulled and properly terminated correctly inside control panel, remote annunciator,, and transfer switch
1.21	Remove fuse from Generator Control Panel, connect starter battery, and re-insert fuse
1.22	Verify grounding rod installed
1.23	Close AC circuit breaker to block heater and battery charger
1.24	Verify block heater is operational - Feel heater hose for heat and listen for activity
1.25	Verify battery charger is operations and record DC voltage and DC amperage
1.26	Verify all AC electrical connections are tight at circuit breaker and transfer switch
1.27	Inspect louvers and mechanical linkages. Ensure properly wired to engine run relay to ensure power is applied when unit starts
1.28	Check all hoses, clamps, and fittings for leaks or damages
1.29	Check all electrical connections on the generator, wiring, wire ties, clamps, and terminal ends
1.30	Check all electrical plugs ensuring each plug is seated correctly
1.31	Verify the AUTO/OFF/MANUAL switch is in “OFF” position

WORK CHART

FULL SERVICE

2.0 PREPARATION FOR GENERATOR START

2.1 Disable transfer switch to prohibit transfer.

2.2 Bleed fuel system of air (diesel)

2.3 Open generator main line circuit breaker

3.0 RUNNING CHECKS

3.1 If Diesel unit: Unplug B+ at the Diesel solenoid valve. Momentarily apply battery voltage to the solenoid and record the inlet static Diesel pressure at the secondary regulator with manometer. Reconnect wire at Diesel solenoid valve.

3.2 Test overcrank circuit. Cause unit to complete full crank/rest cycle and latch out on an "OVER-CRANK" condition. Record number of crank cycles completed

3.3 While manually holding governor linkage, start engine, bring up to speed slowly and record:

- 3.3.1 Fuel pressure (inches W.C./PSI) WITHOUT load pressure
- 3.3.2 DC alternator output volts and amps
- 3.3.3 AC output frequency (HZ) to correct no-load setting
- 3.3.4 AC output voltages
- 3.3.5 Test ALL automatic shutdowns – low oil pressure, low coolant level, high coolanttemperature, and overspeed
- 3.3.6 Overspeed set-point
- 3.3.7 Engine coolant temperature (hot running)
- 3.3.8 Engine oil pressure (hot running)
- 3.3.9 Check for coolant, fuel, oil, and exhaust leaks and open louvers

3.4 Check for proper voltage and phase rotation at transfer switch

3.5 Transfer customer load to generator

- 3.5.1 Record full load voltages
- 3.5.2 Record full load amperage
- 3.5.3 Record full load frequency
- 3.5.4 If Diesel unit: Record fuel pressure (Inches W.C./PSI)

4.0 Brief and train customer on sfae operation of generator and factory recommended maintenance procedures