



Startup Notification

Follow the startup checklist on the back of this form. Then complete the form.

This form is required for coverage under the DDC/MTU Power Generation limited warranty and must be completely filled out at time of initial startup. The distributor and owner representative must sign the notification form. **Signing this form represents acceptance of unit and that all information on the startup form is correct.** Return a copy of the completed form to DDC/MTU Power Generation within 60 days of the startup date.

Startup Date

mo. _____ day _____ yr. _____

Authorized Manufacturer's Representative Performing Startup		Owner Name/Unit Location			
Telephone		Telephone			
Company Name		Company Name/Owner			
Address		Address of Unit Location			
City		City			
State		State			
ZIP/Postal Code		ZIP/Postal Code			
Country		Country			
		Round-trip miles from nearest authorized DDC/MTU Power Generation servicing distributor to the power system equipment:			
Generator Set and Engine Nameplate Information					
	Generator Set No. 1	Engine No. 1	Generator Set No. 2	Engine No. 2	
Serial No.					
Model No.					
Spec No.					
Application Information (one item in each column must be checked)					
<input type="checkbox"/> Industrial <input type="checkbox"/> Residential/Commercial		<input type="checkbox"/> Mobile/Towable/Trailer-Mounted <input type="checkbox"/> Stationary		<input type="checkbox"/> Prime <input type="checkbox"/> Rental <input type="checkbox"/> Standby	
Transfer Switch and Switchgear Nameplate Information					
	ATS No. 1	ATS No. 2	ATS No. 3	ATS No. 4	Switchgear
Serial No.					
Spec No.					
Contactor Serial No.					
Model No.					
DDC/MTU Power Generation Representative's Name (print)			Owner Representative's Name (print)		
DDC/MTU Power Generation Representative's Signature and Date mo. _____ day _____ yr. _____			Owner Representative's Signature and Date mo. _____ day _____ yr. _____		

Form Distribution:

Mail WHITE copy to:
DDC/MTU Power Generation
N7650 County Trunk LS
Sheboygan, WI 53083

PINK copy: Distributor

YELLOW copy: Owner's Representative

Generator Set/Transfer Switch Installation Checklist

This document has generic content and some items may not apply to some applications. Check only the items that apply to the specific application. Read and understand all of the safety precautions found in the Operation and Installation Manuals. Make the following installation checks before performing the Startup Checklist.

Note: Use this form as a general guide, along with any applicable codes or standards. Comply with all applicable codes and standards. Improper installation voids the warranty.

Equipment Room or Weather Housing		Does Not Apply	
	Yes	No	Apply
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.	Is the equipment installed in a fire-resistant room (made of non-combustible material) or in an outdoor weather housing?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Is there adequate clearance between the engine and floor for service maintenance?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Is there emergency lighting available at the equipment room or weather housing?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Is there adequate heating for the equipment room or outdoor weather housing?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Is the equipment room clean with all materials not related to the emergency power supply system removed?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Is the equipment room protected with a fire protection system?		
Engine and Mounting			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Is the mounting surface(s) properly constructed and leveled?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Is the mounting surface made from non-combustible material?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Was the generator-to-engine alignment performed after attaching the skid to the mounting base? Generator sets with two-bearing generators require alignment.		
Lubrication			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Is the engine crankcase filled with the specified oil?		
Cooling and Ventilation			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Is the cooling system filled with the manufacturer's specified coolant/antifreeze and purged of air?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Is there adequate inlet and outlet air flow (electric louvers adjusted and ventilation fan motor(s) connected to the corresponding voltage)?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	Is the radiator duct properly sized and connected to the air vent or louver?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	Are flexible sections installed in the cooling water lines?		
Fuel			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	Is there an adequate/dedicated fuel supply?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	Are the fuel filters installed?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.	Are the fuel tanks and piping installed in accordance with applicable codes and standards?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	Is there adequate fuel transfer tank pump lift capacity and is the pump motor connected to the corresponding voltage?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.	Is the fuel transfer tank pump connected to the emergency power source?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.	Are flexible fuel lines installed between the engine fuel inlet and fuel piping?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	Is the specified gas pressure available at the fuel regulator inlet?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.	Does the gas solenoid valve function?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23.	Are the manually operated fuel and cooling water valves installed allowing manual operation or bypass of the solenoid valves?		
Exhaust			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.	Is the exhaust line sized per guidelines and does it have flexible connector(s)? Is the flexible connector(s) straight?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.	Is there an exhaust line condensate trap with a drain installed?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26.	Is the specified silencer installed and are the hanger and mounting hardware tightened?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.	Is a heat-isolating thimble(s) installed at points where exhaust lines pass through combustible wall(s) or partition(s)?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28.	Is the exhaust line free of excessive bends and restrictions? Is the backpressure within specifications?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.	Is the exhaust line installed with a downward pitch toward the outside of the building?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30.	Is the exhaust line protected from entry by rain, snow, and animals?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31.	Does the exhaust system outlet location prevent entry of exhaust gases into buildings or structures?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32.	Are individuals protected from exposure to high temperature exhaust parts and are hot parts safety decals present?		
AC Electrical System			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.	Does the nameplate voltage/frequency of the generator set and transfer switch match normal/utility source ratings?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.	Do the generator set load conductors have adequate ampacity and are they correctly connected to the circuit breakers and/or the emergency side of the transfer switch?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.	Are the load conductors, engine starting cables, battery charger cables, and remote annunciator leads installed in separate conduits?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.	Is the battery charger AC circuit connected to the corresponding voltage?		
Transfer Switch, Remote Control System, Accessories			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37.	Is the transfer switch mechanism free of binding? Note: Disconnect all AC sources and operate the transfer switch manually.		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.	Are the transfer switch AC conductors correctly connected? Verify lead designations using the appropriate wiring diagrams.		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39.	Is all other wiring connected, as required?		
Batteries and DC Electrical System			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40.	Does the battery(ies) have the specified CCA rating and voltage?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41.	Is the battery(ies) filled with electrolyte and connected to the battery charger?		

Generator Set/Transfer Switch Startup Checklist

This document has generic content and some items may not apply to some applications. Check only the items that apply to the specific application. Read and understand all of the safety precautions found in the Operation and Installation Manuals. Complete the Installation Checklist before performing the initial startup checks. Refer to Service Bulletin 616 for Warranty Startup Procedure Requirements regarding generator set models with ECM-controlled engines.

Does Not Apply	Yes		Does Not Apply	Yes	
<input type="checkbox"/>	<input type="checkbox"/>	1. Verify that the engine is filled with oil and the cooling system is filled with coolant/antifreeze.	<input type="checkbox"/>	<input type="checkbox"/>	29. Close the normal source circuit breaker or replace fuses to the transfer switch.
<input type="checkbox"/>	<input type="checkbox"/>	2. Prime the fuel system.	<input type="checkbox"/>	<input type="checkbox"/>	30. Check the normal source voltage, frequency, and phase sequence on three-phase models. The normal source must match the load.
<input type="checkbox"/>	<input type="checkbox"/>	3. Open all water and fuel valves. Temporarily remove the radiator cap to eliminate air in the cooling system. Replace radiator cap in step 21.	<input type="checkbox"/>	<input type="checkbox"/>	31. Open the normal source circuit breaker or remove fuses to the transfer switch.
<input type="checkbox"/>	<input type="checkbox"/>	4. Place the generator set master switch in the OFF/RESET position. Observe Not-in-Auto lamp and alarm, if equipped, on the controller.	<input type="checkbox"/>	<input type="checkbox"/>	32. Manually transfer the load to the normal source.
<input type="checkbox"/>	<input type="checkbox"/>	5. Press the lamp test, if equipped on controller. Do all the alarm lamps on the panel illuminate?	<input type="checkbox"/>	<input type="checkbox"/>	33. Close the generator set main line circuit breakers, close the safeguard breaker, and/or replace the fuses connected to the transfer switch.
<input type="checkbox"/>	<input type="checkbox"/>	6. Open the main line circuit breakers, open the safeguard breaker, and/or remove fuses connected to the generator set output leads.	<input type="checkbox"/>	<input type="checkbox"/>	34. Place the generator set master switch in the RUN position.
<input type="checkbox"/>	<input type="checkbox"/>	7. Turn down the speed control (electronic governor) or speed screw (mechanical governor).*	<input type="checkbox"/>	<input type="checkbox"/>	35. Check the generator set voltage, frequency, and phase sequence on three-phase models. The generator set must match normal source and load.
<input type="checkbox"/>	<input type="checkbox"/>	8. Verify the presence of lube oil in the turbocharger, if equipped. See the engine and/or generator set operation manual.	<input type="checkbox"/>	<input type="checkbox"/>	36. Place the generator set master switch in the OFF/RESET position.
<input type="checkbox"/>	<input type="checkbox"/>	9. Place the generator set master switch in the RUN position. Allow the engine to start and run for several seconds.	<input type="checkbox"/>	<input type="checkbox"/>	37. Open the generator set main line circuit breakers, open the safeguard breaker, and/or remove the fuses connected to the transfer switch.
<input type="checkbox"/>	<input type="checkbox"/>	10. Verify that the day tank, if equipped, is energized.	<input type="checkbox"/>	<input type="checkbox"/>	38. Reconnect the power switching device and logic controller wire harness at the inline disconnect plug at the transfer switch.
<input type="checkbox"/>	<input type="checkbox"/>	11. Place the generator set master switch in the OFF/RESET position. Check for oil, coolant, and exhaust leaks.	<input type="checkbox"/>	<input type="checkbox"/>	39. Close the normal source circuit breaker or replace fuses to the transfer switch. Place the generator set master switch to the AUTO position.
<input type="checkbox"/>	<input type="checkbox"/>	12. Turn on the water/oil heaters and fuel lift pumps.	<input type="checkbox"/>	<input type="checkbox"/>	40. Close the generator set main line circuit breakers, close the safeguard breaker, and/or replace the fuses connected to the transfer switch.
<input type="checkbox"/>	<input type="checkbox"/>	13. Check the battery charger ammeter for battery charging indication.	<input type="checkbox"/>	<input type="checkbox"/>	41. Place the transfer switch in the TEST position (load test or open normal source circuit breaker). NOTE: Obtain permission from the building authority before proceeding. This procedure tests transfer switch operation and connects building load to generator set power.
<input type="checkbox"/>	<input type="checkbox"/>	14. Place the generator set master switch in the RUN position. Verify whether there is sufficient oil pressure. Check for oil, coolant, and exhaust leaks.	<input type="checkbox"/>	<input type="checkbox"/>	42. Readjust frequency to 50 or 60 Hz with total building loads.*
<input type="checkbox"/>	<input type="checkbox"/>	15. Close the safeguard circuit breaker. Adjust the engine speed to 50/60 Hz if equipped with an electronic governor or to 52.8/63 Hz if equipped with a mechanical governor.*	<input type="checkbox"/>	<input type="checkbox"/>	43. Verify that the current phase is balanced for three phase systems.
<input type="checkbox"/>	<input type="checkbox"/>	16. If the speed is unstable, adjust according to the appropriate engine and/or governor manual.*	<input type="checkbox"/>	<input type="checkbox"/>	44. Release the transfer switch test switch or close the normal circuit breaker. The transfer switch should retransfer to the normal source after appropriate time delay(s).
<input type="checkbox"/>	<input type="checkbox"/>	17. Adjust the AC output voltage to match the load voltage using the voltage adjusting control. See the generator set/controller operation manual.	<input type="checkbox"/>	<input type="checkbox"/>	45. Allow the generator set to run and shut down automatically after the appropriate cool down time delay(s).
<input type="checkbox"/>	<input type="checkbox"/>	18. Allow the engine to reach normal operating coolant temperature.	<input type="checkbox"/>	<input type="checkbox"/>	46. Set the plant exerciser to the customer's required exercise period, if equipped.
<input type="checkbox"/>	<input type="checkbox"/>	19. Check the operating temperature on city water-cooled models and adjust the thermostatic valve as necessary.	<input type="checkbox"/>	<input type="checkbox"/>	47. Verify that all options on the transfer switch are adjusted and functional for the customer's requirements.
<input type="checkbox"/>	<input type="checkbox"/>	20. Manually overspeed the engine to cause an engine shutdown (68-70 Hz on 60 Hz models and 58-60 Hz on 50 Hz models). Place the generator set master switch in the OFF/RESET position.*	<input type="checkbox"/>	<input type="checkbox"/>	48. If possible, run the building loads on the generator set for several hours or perform the load bank test if required.
<input type="checkbox"/>	<input type="checkbox"/>	21. Check the coolant level, add coolant as necessary, and replace the radiator cap. Verify that all hose clamps are tight and secure.	<input type="checkbox"/>	<input type="checkbox"/>	49. Verify that all the wire connections from the generator set to the transfer switch and optional accessories are tight and secure.
<input type="checkbox"/>	<input type="checkbox"/>	22. Place the generator set master switch in the RUN position.	<input type="checkbox"/>	<input type="checkbox"/>	50. Verify that the customer has the appropriate engine/generator set and transfer switch literature. Instruct the customer in the operation and maintenance of the power system.
<input type="checkbox"/>	<input type="checkbox"/>	23. Verify the engine low oil pressure and high coolant temperature shutdowns.*	<input type="checkbox"/>	<input type="checkbox"/>	51. Fill out the startup notification at this time and send the white copy to the Generator Warranty Dept. Include the warranty form if applicable.
<input type="checkbox"/>	<input type="checkbox"/>	24. Check the overcrank shutdown.*			
<input type="checkbox"/>	<input type="checkbox"/>	25. Place the generator set master switch in the OFF/RESET position.			
<input type="checkbox"/>	<input type="checkbox"/>	26. Open the normal source circuit breaker or remove fuses to the transfer switch.			
<input type="checkbox"/>	<input type="checkbox"/>	27. Disconnect the power switching device and logic controller wire harness at the inline disconnect plug at the transfer switch.			
<input type="checkbox"/>	<input type="checkbox"/>	28. Manually transfer the load to the emergency source.			

* Some models with an Engine Electronic Control Module (ECM) may limit or prohibit adjusting the engine speed or testing shutdowns. Refer to appropriate documentation available from the manufacturer.