

CUSTOMER ORIENTATION CHECKLIST

To be conducted between salesman/installer and the customer at the conclusion of the installation. The customer must be shown the following components and a brief explanation of how to operate and maintain the system.

Check off each item as you go.

1. **Location and operation of Control Panel inside the truck.** Make sure you explain or demonstrate the following points:

An owner's manual and installation instructions are to be given to the customer.

Mention that before starting the generator, ALL appliances and A/C are to be turned off, except battery-charger.

Starting Procedure – The START rocker switch has a 3 function feature. By continuously holding the rocker switch in the START position, the following sequence will take place:

1. The **red** LED light will illuminate for 8 seconds while the glow plug is activated.
2. Then the **green** LED light will illuminate to show that the glow plug and engine starter is engaging for a maximum 17-second duration. **When you hear the engine come to life, let go of the switch.**
3. To prevent starter burn-up, there is a 5 second delay programmed into the switch before another start cycle can begin.

**For cold weather starts, there is a manual preheat override by simply pushing the manual glow/stop rocker switch down for 30 seconds before applying sequence 1 and 2 above.

Press the rocker switch “up” for start, “down” for stop.

Air Conditioning/Heating rheostat temperature adjustment dial.

Air/Heat mode switch.

Curtains in sleeper to be “closed” when using the system. (System is not designed to cool or heat the driver's compartment.)

Location of plug-in receptacles in bunk. (System has electrical limitations; do not overload too many appliances at once.) Refer to the owner's manual for a chart on appliance power usage ratings.

2. **Location of electric battery charger.**

Explain the following points:

- Battery charger works like an alternator to charge batteries.
- The generator has 12-volt components such as a fan, water pump, compressor clutch, fuel solenoid, fuel pump and evaporator blower. The 60-amp battery charger compensates for all this by charging the truck batteries and adding 30-amps. The battery charger gets its power from the 120-volts supplied by the generator, and converts it into 12-volts.
- The battery charger has its own internal regulator on how fast the trickle charge or boost charge is going into the truck batteries.
- Keep the battery charger plugged-in at all times. Failure to do so will result in the truck batteries going dead after extended use.**

3. **Junction Box with Breakers:**

Explain the following points:

- This works just like a breaker-panel box in a house. Live 120-volt electrical current is manufactured by the generator and fed via a main power feed cable into the panel box.
- The breakers on the panel box can easily be switched on or off with your fingers. Breakers switched “ON” means power will be delivered to the appliance or receptacle. Breakers switched “Off” will shut the power off to that receptacle.
- Never perform any electrical repairs or maintenance with the generator on. Live voltage is deadly and dangerous.**
- If using a block heater, plug the block heater cord into the same receptacle as the battery charger. [Receptacle is attached to the electrical panel breaker box.]
- There is NO shore power transfer switch for this system. In order for shore power electricity to energize receptacles in the truck, the large 3-prong (30-amp, 125-volt) plug coming from the generator must be disconnected first. This will ensure no back feed of electrical current reaching the generator.

4. **The Under-bunk dedicated air conditioner/heater unit:**

Explain the following points:

- This under-bunk unit is dedicated to the generator for its heat and air conditioning supply. It is not tied into the truck's main engine.
- Hot water coolant from the Kubota engine is routed into the unit for winter heating requirements. It is recommended in the cold months to run the generator under a load, (meaning plug the block heater in and if additional load is required, turn on the marker running lights so that the Kubota is under a load and able to generate heat in the water supply). This will ensure maximum cab warmth. [See document entitled "*Cold/Hot Weather Tech Tips*".]
- The air conditioning function is operated by using the dial on the control panel and the rocker switch.
- In hot summer months, the generator A/C compressor will cycle on and off. The maximum obtainable temperature differential between outside and inside cab temperatures is usually 20-25 degrees. [See "*Hot Weather Tech Tips*".]
- All trucks have unique variables that can affect air conditioning temperature performance. Insulation, dark color paint schemes, condo sleepers versus flat tops, window glass heat and individual human body sensitivity are factors.
- It is important to not restrict any of the air vent louvers or openings. Many people assume that plugging one opening will cause air to redirect through the other openings. This hinders airflow performance and is counter-productive.

5. **The Generator Power-plant:**

Explain and discuss the following points:

- Location of the oil pressure and water temperature safety switch.
- Engine break-in period – for the first 500 hours, ensure that the generator is under a 60-85% exercise load in order that the piston and rings seat properly.
- Air filter element – how to access the filter foam by lifting the filter cover and demonstrating how to clean the filter foam. Instructions for filter cleaning is labeled on the front of the filter enclosure.
- Ensure all safety procedures are explained. NEVER work on the engine when it is running.**
- Locate the fuel filters and show how to clean the cartridge, and show the fuel flow cock lever open/closed position, also instruct to change the in-line fuel filter as required by visual inspection.
Locate dipstick and oil fill gallery opening. Oil level must be filled precisely to the top hash mark on the dipstick. First oil change to be done after first 50 hours. If the unit is equipped with the remote oil filter option, oil change intervals take place every 500 hours. Locate the manual trigger switch for the remote oil pump and explain that it is used to prime the oil through the system. Important: If your generator unit does NOT have the optional oil filter option, change the oil every 100 hours. Use 5W-40 diesel grade oil year round.
- Identify the generator component. The generator windings rotate with a copper bundle inside making electrical 120-volts. Keep water out of the generator interior as much as possible.
- Locate and identify the condenser and radiator fan assembly on the back of the generator enclosure. These components must be kept clean of road debris, oil, grease etc., using a light degreaser and low-pressure water mist spray. (Do not use a high-pressure wand, or you will flatten the fins on the radiator/condenser.)

IMPORTANT INFORMATION THE CUSTOMER SHOULD KNOW

To keep your generator system functioning properly and to avoid any unnecessary repairs, the following key points should be noted.

DO's:

- **READ SAFETY INSTRUCTIONS AND ALL OTHER CHAPTERS IN THE OWNER'S MANUAL AT LEAST TWICE.**
- **Allow 500 hours of exercise workload to break in the new engine under a 60-85% load.**
- **Regular maintenance of fluids and filters. Oil & filters are cheap, engines are not.**
- **First oil change to be done at 50 hours.**
- **Keep fluids filled to their proper levels. Oil that is down 1/3 quart is too low!**
- **Periodic inspection to detect hose/wire abrasion, or loose wires etc.**
- **Keep your gen-set clean from salt, dirt, oil, fuel and general debris.**
- **Inspect compressor belt and/or main drive belt for proper tension.**
- **Replace worn hoses and belts immediately. Do not wait for breakage.**
- **Use proper mix of anti-freeze coolant not to exceed 45% ethylene glycol.**
- **Keep a maintenance journal to record routine service intervals.**
- **Use proper replacement parts as noted in owner's manual.**
- **Ensure that fuel tanks are kept at least 1/3 full. (Fuel pick up tubes are 4-5 inches from the bottom of the tank and may suck up air if the truck is parked on a slope.)**
- **Make sure radiator fins and fan blades are kept clean. Radiators that are clogged with oil, debris, grease etc. may cause the engine to overheat.**
- **Remove ice and snow build-up from the radiator fan blades in winter months. Locked up fan blades could cause engine over-heating shutdown.**
- **Generally keep gen-set loads between 50-85% as much as possible.**
- **Use the glow plug for 9 seconds before starting engine.**

DON'T's

- **DO NOT Start the generator under an electrical load. Turn OFF all block heaters, cab heaters, microwaves etc. before starting the Gen-set. You may resume appliance load after the engine is running.**
- **DO NOT pile tools, clothes or other heavy items on top of the battery charger, breaker box, or air conditioning duct hoses.**
- **DO NOT Overload the Gen-set by turning on too many things at the same time. Calculate your appliance wattage consumption to stay within generator output limits or budget between electric appliances back & forth if necessary. Heat loads are often heavy users of power. Check your appliance labels for power requirements. (Refer to the Trouble Shooting Guide section of your Installation Instructions for a 110-Volt Power Consumption Chart.)**
- **DO NOT add engine oil additives. These can gum up switches causing sensor failures. Use only recommended lubricants as per the Kubota engine manual.**
- **DO NOT block off any air discharging from air conditioner vent ducts assuming the air will be stronger coming out the other duct openings – this is a false idea that restricts air-flow and lowers air conditioning performance.**
- **DO NOT attempt any repairs unless you are a certified mechanic, electrician or air conditioning mechanic. Moving parts and or voltage can cause injury and/or death.**
- **DO NOT alter the system engineering in any way. Years of development and experience have gone into the design and choice of components for important reasons. You may damage the unit or cause malfunction that is not covered by warranty. Any damage or repairs caused by you shall be at your expense.**
- **DO NOT overfill the crankcase with oil. Use the dipstick as a proper measurement and stay at the top “hash mark” of the dipstick. Use 5W-40 diesel grade oil year round.**
- **DO NOT USE ETHER – YOU WILL RUIN THE ENGINE AND VOID THE WARRANTY!**

Proceed to the following page.....

This ORIENTATION DOCUMENT is to be signed by the customer after the installer/salesperson has explained its important points.

I, INSTALLER, have conducted a thorough orientation of the system to the customer

Dealer name & Address: _____

Dealer Phone number: _____

Signature: _____

I, the customer have been given the orientation session, an owner's manual and the installation instructions on the generator and have read this document in its entirety.

Signature: _____ Date: _____

Mail this last page to:

**Warranty Department
P.O. Box 40550
Fort Worth, Texas 76140**