



PowerPallet Operation Quick Reference Guide

Start-up Check List

- Charcoal in the GEK reactor
- Filled feedstock hopper
- Gas filter & air filter
- Air tight seals & connections
- Engine oil/coolant
- Battery Charged
- Thermocouples
- System pressure drop
- O2 sensor
- CO meter
- Biomass auger feed
- Clearance around system (ie: flare and exhaust stack)
- CO meter
- Recommended tools

Before proceeding: Please read the *PowerPallet Operation Manual 10kWPP & 20kWPP* and *PowerPallet Setup, Maintenance, and Troubleshooting* documentation for complete operation details and guidance.

For further information, visit our website www.gekgasifier.com. For technical assistance, please contact support@allpowerlabs.org.

Quick Start-up Instructions

Start-up:

1. Turn power On
2. Open Flare Gas Valve
3. Turn on Gas Blower for 1-2 WC on P_{react}
4. Light Reactor w/ propane torch through Ignition Port
5. Cap Ignition Port when T_{red} is climbing and >60C
6. Increase Gas Blower to 4 WC
7. Increase Air Blower until the flare lights and the flame is pulled down into the burner and not seen above the top of the Flare Stack.
8. Increase Gas Blower to reach >800C but <1000C. Adjust air blower as needed.
9. Turn off blowers, close Flare Gas Valve, and open Engine Gas Valve.
10. Crank the engine. Engine will start when air is purged from the gas line.

Shutdown:

1. Turn off engine, or turn off Air and Gas Blowers
2. Close Engine and Flare Gas Valves
3. Make sure Air Inlet on the GEK Gasifier is closed.



ALL Power Labs
personal scale power

ALL Power Labs, Inc
Berkeley, CA
sales@allpowerlabs.org
support@allpowerlabs.org

Rev.:09/14/2012