

Rig Uncrating & Setup Checklist

1. Pre-Uncrating

- Verify shipment matches **Bill of Lading**
- Inspect crate for visible **damage**
- Take **photos** of any damage before opening
- Contact **Midwest Washing Equipment** immediately if damage is found
- Gather tools: utility knife, crowbar, impact driver, wrenches, PPE

2. Uncrating

- Remove **banding/straps** carefully
- Open crate top and side panels
- Inspect rig for **shipping damage** (frame, tanks, reels, hoses, fittings)
- Confirm all **accessories/parts** are included (hoses, wands, manuals, chemical injectors, remotes, etc.)
- Remove rig from pallet using **forklift or pallet jack** (ensure balanced lifting points)
- Place rig on **truck, trailer, van, or other vehicle**
- Use **best securing method, if required** (grade 8 bolts, brackets, or approved tie-down system) to ensure rig is safely mounted

3. Electrical Setup

- Install **battery** (if not included, install customer-supplied battery)
- Install **battery cables** (red = positive, black = ground)
- Check **fuses and breakers** are properly seated
- Turn **power switch ON** (if fuse panel included)
- Verify **electric components function**: hose reels, remotes, lights (if present), etc.

4. Fuel & Oil

- Check **engine oil level**
- Check **pump oil level**
- Fill **fuel tank** with clean fuel
- If **heater is included**, fill with **clean diesel**

5. Plumbing & Tank Setup

- Visually inspect all **hoses** for kinking, pinching, or damage
- Check all **hose clamps are tight** – use **5/16" nut driver** for best tightening
- Fill **chemical and soap tanks** with products to be used
- Connect **water inlet hose** (city fill or buffer tank)

- Confirm all **pickup lines inside tanks are submerged**
- Pull all **hose completely off each reel** for initial testing

6. Startup & Testing

- Connect **gun and wand** for initial test – run **with no nozzle installed**
 - Use only **HP gun & wand** for **high-pressure system**
 - Use only **Soft Wash gun & wand** for **soft wash system**

For rigs with a Hydro-Mixer:

- Startup with **only the water valve fully open**
- Check each union cap on the valves (top & bottom) for hand tightness
- Hold trigger open until water flows smoothly with **no air in the lines**
- Once water flows smoothly:
 - Test **chemical and soap valves** for proper draw
 - If **flush valve** is present, confirm flow in both **water** and **chem** positions
 - If **remote system** is present, ensure **remote turns on and pulls liquid**

For Pumps with Engine:

- If pump is **electric**, skip to **Electric Pump Startup Steps**
- Make sure **fuel valve is ON**
- Set **choke ON**
- Turn **key until engine starts**
- Turn **choke OFF** once engine is running smoothly

Electric Pump Startup Steps:

- Ensure **battery power is ON**
- Flip **pump switch ON** at control panel
- Verify pump is running smoothly with steady water flow
- Confirm pump **shuts off when trigger is released**
- Confirm pump **starts when trigger is pulled**

Gas Engine Soft Wash Pump Startup Steps:

- Confirm pump goes into **closed loop bypass** when trigger is released
- Verify there are **no leaks** in bypass lines or fittings
- ⚠ *Gas engine soft wash pumps are closed loop bypass systems. Limit trigger-off time to **3–5 minutes**. Any longer and the pump should be turned **OFF** to prevent overheating.*

High Pressure Pump Startup Steps:

- Run engine at **full throttle**
- Confirm **smooth water flow** into the pump (no air)

- Check for **steady pressure** at the gun
- Install **HP nozzle** and test spray pattern
- Release trigger and confirm **bypass is flowing back to the water tank**

Hot Water Burner Test (if equipped):

- Turn **burner switch ON**
- Allow system to reach **operating temperature**
- Confirm **burner ignites** and maintains flame
- Verify water heats consistently under flow
- Check for **smoke, fuel leaks, or unusual burner noise**
- Turn **burner OFF** and run **cold water for 3–5 minutes** to properly **cool down the unit**
- Confirm burner shuts down safely

Continue Testing:

- Inspect entire rig for **leaks, vibrations, or unusual noises**
- **Regularly visually inspect rig for leaks, hose rubs, pinch points...**
- Regularly check tightness of hose clamps and union caps on metering valves.

7. Final Checks

- Record **serial numbers** for rig & components (if applicable)
- Review **operator manual** with crew
- Verify **safety decals & instructions** are visible
- ▼ **Shutdown Best Practice:** If unit is equipped with a **hot water burner**, always turn burner **OFF** and run **cold water for 3–5 minutes** before shutting system down
- It's best practice to release pressure from gun/hose while shutting down gas engine soft wash pumps (P40 or AR45).
- Always release pressure from gun after shutting off high pressure pump and electric pumps.
- File **setup completion checklist** with rig records