BRUTE JETTERS

OWNERS MANUAL



BRUTE Digital Manual

BRUTE Training Videos

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JETTERS NORTHWEST

LETS "GET" JETTING

THANK YOU FOR CHOOSING JETTERS NORTHWEST FOR YOUR NEW HYDRO-JETTER!



We know the job isn't always easy. Long hours, tight crawl spaces, and backups that most people would run from—yet you take it on with grit, precision, and professionalism. You keep lines open, businesses running, and crews moving. That deserves real respect.

When you choose Jetters Northwest, you're not just buying equipment. You're getting a team that's fully invested in your success. Guidance, accessories, nozzles, expertise—whatever keeps you working, we're here for you. If you're stalled on the job, call us. If you're gearing up for a big project, we'll help you pick the right setup. From first startup to the thousands of hours that follow, we stay in your corner.

So from all of us at Jetters Northwest, thank you for trusting us to be part of your work. Serving the pros who keep everything flowing is a responsibility we take seriously. Every line you clear is a win—and we're proud to back the people who make it happen.

Please carefully review & study all Operation and Maintenance procedures in this Manual. By learning & following these instructions your *Brute* Jetter can provide years of trouble-free and profitable service. We also HIGHLY encourage you to watch the *Brute Video-Training Series (use the QR code on cover page to connect)*, as well as many other educational videos on our "*Get*"*Jetting* YouTube -channel.

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CRITICAL SAFETY INFORMATION

Ultimately, the Operator of the Jetter is responsible for the safety of themselves and the people around the work area. We recommend that all operators become very familiar with the contents of these manuals **before operating the *Brute* Jetter**. In this manual we will review basic operation, safety, and maintenance. **However, we cannot anticipate every possible circumstance that may involve potential hazard;** these instructions and warnings within are guidelines for safe and proper operation.

Improper or unsafe use of high-pressure water-jetting equipment can cause serious injury or even death to person(s) operating and/or nearby.

Always wear proper P.P.E.*
**Personal Protective Equipment* includes Safety-Glasses, Gloves, Boots, protective clothing, etc. A face-shield and other armor may be required for further protection.

HIGH-PRESSURE WATER-JET INJURY WARNING:



High-pressure water jet injuries pose a significant risk due to the water's ability to cause deep internal damage even if the external wound appears small. The risk is heightened by the potential for equipment failure, such as a ruptured hose, and the danger of injected materials, contaminated water, or debris.

IN THE EVENT OF ANY WATER-JET OR JOBSITE INJURY:

- **Seek medical attention immediately** for injury inflicted by a high-pressure water-jet! ***Do not delay*** – ***water injected into the blood stream can be fatal!*** *Open wounds infected with sewage can become serious or fatal.*
- **Inform the cause of the injury promptly** to the E.M.T.s or person(s) at admitting, as well as the nurses/physicians/doctors/etc.; *it's that important!*

WARNING: A hazard that could result in death, serious injury, or substantial property damage.

CAUTION: A hazard that could result in minor personal injury or property damage.

WARNING



Explosive Fuel can cause fires and severe burns.
Stop engine before filling fuel tank.

Explosive Fuel!
Gasoline is extremely flammable and its vapors can explode if ignited. Store gasoline only in approved containers, in well ventilated, unoccupied buildings, away from sparks or flames. Do not fill the fuel tank while the engine is hot or running, since spilled fuel could ignite if it comes in contact with hot parts or sparks from ignition. Do not start the engine near spilled fuel. Never use gasoline as a cleaning agent.

WARNING



Accidental Starts can cause severe injury or death.
Disconnect and ground spark plug lead **before servicing.**

Accidental starting can cause severe injury or death - *disable engine before servicing!* *Before working on the engine or equipment, disable the engine as follows: 1) Disconnect the spark plug lead(s). 2) Disconnect negative (-) battery cable from battery.*

CALIFORNIA PROPOSITION 65 WARNING

Engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

WARNING



Rotating Parts can cause severe injury.
Stay away while engine is in operation.

Rotating Parts!
Keep hands, feet, hair, and clothing away from all moving parts to prevent injury. Never operate the engine with covers, shrouds, or guards removed.

CAUTION



Electrical Shock can cause injury.
Do not touch wires while engine is running

Electrical Shock!
Never touch electrical wires or components while the engine is running. They can be sources of electrical shock.

WARNING



Carbon Monoxide can cause severe nausea, fainting or death.
Do not operate engine in closed or confined area.

Lethal Exhaust Gases!
Engine exhaust gases contain poisonous carbon monoxide. Carbon monoxide is odorless, colorless, and can cause death if inhaled. Avoid inhaling exhaust fumes, and never run the engine in a closed building or confined area.

WARNING



Hot Parts can cause severe burns.
Do not touch engine while operating or just after stopping.

Hot Parts!
Engine components can get extremely hot from operation. To prevent severe burns, do not touch these areas while the engine is running, or immediately after it is turned off. Never operate the engine with heat shields or guards removed.

WARNING



Explosive Gas can cause fires and severe acid burns.
Charge battery only in a well ventilated area. Keep sources of ignition away.

Explosive Fuel!
Batteries produce explosive hydrogen gas while being charged. To prevent a fire or explosion, charge batteries only in well ventilated areas. Keep sparks, open flames, and other sources of ignition away from the battery at all times. Keep batteries out of the reach of children. Remove all jewelry when servicing batteries. Before disconnecting the negative (-) ground cable, make sure all switches are OFF. If ON, a spark will occur at the ground cable terminal which could cause an explosion if hydrogen gas or gasoline vapors are present.

⚠ CRITICAL SAFETY INFORMATION ⚠

More safety "musts" & tips:

- **Do not allow untrained or unauthorized personnel to operate the jetter!**
- **Never** run the jetter in the presence of spilled fuel and/or fuel vapors!
- **Never** place any flammable items near the jetter! (e.g. fuels, solvents, paper, wood, cardboard, etc.).
- **NEVER** fill fuel tank when the jetter is running or when engine is hot!
- **Never** point a nozzle or a high-pressure water jet at any person!
- **Never** attempt to drink water from the jetter's nozzle, hose(s), etc.!
- **Never** attempt to clean your boots, clothes, etc. with the jetter's water!
- **Never** put your hands or any body part near a spraying water-jet!
- **Never** leave the jetter running unattended! Always maintain a safe environment for passersby & others! Fence off any potentially unsafe work areas!
- **Never** make unauthorized adjustments or modifications to your jetter!
- **Never** run or adjust your jetter in a manner that alters or exceeds factory ratings!
- **Never** feed your jetter with hot water, or run in excess of 140 degrees F., unless officially authorized in writing by Jetters Northwest
- **Never** replace parts or hoses with any item that is not rated for the jetter's full pressure & flow output! We only suggest OEM factory parts or exact replacement parts.
- **Never** run the unit with a damaged jetting hose! Prior to operating the jetter, inspect hoses for cuts, kinks, holes, etc. Repair or replace any & all damaged hoses!
- **ALWAYS** insert the jetting nozzle & hose a few feet into the pipe BEFORE startup!
- **ALWAYS** use a *Trigger-Valve* or *Foot-Valve control* if using a "forward-jets only" nozzle!
- **ALWAYS** use the Anti-Turnaround Extension when working in 8-inch & larger pipe diameters to prevent the nozzle from turning around & coming back at the operator!
- **ALWAYS safely secure the jetter prior to transport in/on your vehicle, trailer, forklift, etc. via hardware and/or adequate ratchet-straps, or the like.**

SPECIFICATIONS

Model	GPM	PSI	Engine	Standard Hose
JNW-4009	9	4000	*Kohler* 26.5-HP EFI-GAS	3/8” x 300 ft.
JNW-3012	12	3000	*Kohler* 26.5-HP EFI-GAS	1/2” x 300 ft.
JNW-3508LP	8.5	3500	*Kohler* 25 HP PROPANE	3/8” x 300 ft.
(alt.) JNW 3010LP	10	3000	*Kohler 25 HP PROPANE*	3/8" x 300ft.
(alt.) JNW 4007LP	7.5	4000	*Kohler 25 HP PROPANE*	3/8" x 300ft.

BRUTE CONFIGURATION OPTIONS

All *Brute* Jetters are designed to be configurable as either a Portable "CART" or Mountable "SKID". Further, your jetter's Hose-Reel might be powered by a 12-volt motor, or simply have a Hand-Crank for rewind. *Brute* jetters can be fed water from a hose-bib directly to its built-in 12-gallon *"Buffer" Tank*, or you can draw water from a larger auxiliary *Water-Tank* (included on POWERSLIDE Brutes, otherwise sold separately), which is especially useful at jobsites with weak water-supply pressure, or at “dry” locations that you’ll need to bring water with you to the job.

Larger auxiliary *Water-Tank Packages (w/ hoses)* are available in several sizes: 60-gallon Portable "*Tool-Bin Tank*", 55-gallon "*Space-Saver Tank*”, as well as *"Skid-Mounted" Tank Packages* in 100-gallon, 150-gallon, 200-gallon, and 300-gallon capacities. Larger-capacity Water-Tanks are available upon request.

PRACTICE PROCEDURES

We highly recommend that you become familiar and skilled with your jetter BEFORE using it in a customer's pipe! Use a "practice" pipe and follow the steps in the Controls and Operation section of this manual – plus **open & watch the video-links** – for directions for proper setup & use.

SETUP & INSTALLATION

When your new jetter arrives, a few things need to be done prior to use: For safety during shipping, the battery's negative terminals are disconnected, and the fuel tank on your jetter has never been filled with fuel (your jetter was tested using a detached fuel tank); **review the included ENGINE MANUAL for your engine's specific fuel-type requirement**, and for more detailed engine-information. When adding fuel to a gasoline tank, *NEVER fill the gas tank when the engine is running or hot*! Fill the gas-tank only to the level indicated by the baffle inside the tank's fill-neck, and then tighten the gas-cap until it clicks (does not apply to propane-fueled models). Do Not overfill; if fuel is spilled on or near the jetter, wipe off as much as you can, and then allow any leftover fuel to evaporate before starting the engine. ***Failure to follow these instructions may result in fire.***

THE FOLLOWING ITEMS ARE INCLUDED WITH MOST *BRUTE* JETTERS

4-NOZZLE SET [“Standard” Nozzles] (also includes an Orifice Cleaning Tool):

- **PENETRATOR**: Has 1 front-jet and 6 rear-jets ("1x6"). This is the "multi-purpose" nozzle for typical jetting jobs. The forward-jet blasts out in front of the nozzle, while the rear-jets have multiple spray-angles to impact debris that is stuck to the pipe-walls, & flush it away.
- **FLUSHER**: Has 5 rear-jets but no front-jet ("0x6"). Great nozzle to use for jetting "upstream"; the 20-degree shallow-angled rear-jets blast away and "pull" debris back toward the hose-entry point. This nozzle has excellent "hose-pulling power", thus can pull the itself deep into pipes, plus it can be useful to punch through blockages with sheer impact by pulling the hose/nozzle back a foot or two from a blockage, then letting it go so the nozzle can ram into and through the obstuction.

SETUP & INSTALLATION - CONTINUED

STANDARD NOZZLES CONTINUED

- **PUSHER**: Has 3 front-jets and 6 rear-jets ("3x6"). Used for blasting away at clogs and for "pushing" debris downstream/away from you (especially when pulling debris back toward you is not an option). This nozzle has poor “hose-pulling power" because the 3 forward-jets oppose the 6 thrust-jets.
- **SPINNER** (aka Rotator): has 2 rotating rear-jets ("0x2") at a 45-degree angle that are useful for clearing soft/sloppy grease & sludge buildup from the pipe, and for "polishing" the pipe after cleaning to remove leftover debris, especially prior to a final camera inspection. Excellent hose-pulling power.



ACCESSORIES (typically shipped together in a zip-bag)

- **Nozzle-Safety Anti-Turnaround Extension-Pipe** (aka Nozzle-Extension): useful in pipes 8-inch and larger to prevent the nozzle from (A) turning around/coming back at the operator and (B) from wandering up a side-lateral. Simply connect the Nozzle-Extension in-between the jetting-nozzle and the jetting-hose to "extend" the nozzle, making it too long to turn back around in the pipe or wander out of the main. NOTE: larger pipes require a longer Extension to prevent the nozzle from turning around or wandering into lateral lines.
- **Accessory Adapter**: used for connecting Jetters Northwest Accessories to the end of the jetting- hose (such as Portable Hose-Reels, Mini-Hoses, Washdown-Gun, Foot-Control, etc.).

SETUP & INSTALLATION - CONTINUED

Brute **Jetter "types": (a) Mountable "SKID" or (b) Portable "CART":**

Your *Brute* Jetter is designed for use as either (A) a "SKID" for mounting to your service-vehicle as a "built-in" jetter, or (B) a Portable "CART" jetter with Wheels/Tires/Axles, Retractable-Handles, & Foot-Brake ("Portability Kit"). *If your needs change in the future, your Brute jetter can be changed from SKID to CART, or vice-versa*. ALSO: your *Brute* can draw water from its on-board "buffer" *Water-Tank*, or from a larger *Auxiliary Water-Tank*.

If you need help (or parts) to convert your *Brute* Jetter from Mountable-SKID to Portable-CART configuration (or vice-versa), or if you need a larger *Water-Tank* (or parts for connecting to your existing larger water-tank), or if you need information on Nozzles/Accessories/Hose/Parts/etc. please contact your local dealer, or Jetters Northwest at 1(877) 901-1936 or info@jettersnorthwest.com.

PORTABLE CART *BRUTE* MODELS

Portable "CART" models include pre-installed Wheels/Tires, Retractable-Handles, and a foot-actuated Wheel-Brake ("Portability Kit")

- The Wheel-Brake is designed to keep the jetter from rolling while on the ground on a job – it is not designed to keep the jetter from shifting in a moving vehicle; the unit must be secured for transportation. When operating on a slight grade, test to ensure the Wheel-Brake will hold the unit while jetting. The brake can be adjusted both by moving the mounting-bracket up or down, or by altering tire-pressure (do not exceed each tire's maximum air-pressure).



SETUP & INSTALLATION - CONTINUED

PORTABLE CART *BRUTE* MODELS - CONTINUED

- The Retractable-Handles can be adjusted up or down to best fit the operators' height. Finding the proper height will make the machine more comfortable to maneuver. We suggest a height that allows the mover's arms to be straight with the rear-wheels 2"-3" off the ground when the operator is standing up straight.

MOUNTABLE SKID MODELS

Brute Jetters come equipped with an Exhaust Deflector/Extension Tube (on right side of the jetter when facing the hose/reel), which is used to direct the engine-exhaust out of an open door in the cargo-area of your van or enclosed-trailer.



***IMPORTANT*:**
(a) make sure the exhaust doesn't heat up flammable and/or sensitive materials in and around the jetter – leave at least 8-inches of clearance-space around the Exhaust-Extension and its outlet (20cm), and (b) make sure that the exhaust fumes freely leave the vehicle's cargo-area so that the jetter's engine consumes clean air only (more info on ventilation is below).

NOTE: BEFORE Mounting Your SKID Brute Jetter:
If installed in an enclosed van/trailer: the jetter must be provided adequate ventilation. This is typically accomplished by having the doors in 2 locations open to provide airflow from one door to another. Provide at least 12 inches of open space between the engine's fan-intake and any obstruction. **Failure to provide adequate ventilation (a) can result in vapor-lock causing the engine to shut down, (b) prevent re-starting, and/or (c) cause catastrophic engine-failure due to excess heat.**

SETUP & INSTALLATION - CONTINUED

MOUNTABLE SKID MODELS - CONTINUED

- **For bolting to the floor of a truck, van, or trailer,** all *Brute* jetters include four slots in its base. We suggest securing the jetter to your vehicle's floor/deck with "thru-bolts" and locking-nuts, along with large washers above the frame and under the vehicle's floor/deck. Those washers underneath must be wide enough and strong enough to never "rip through" a thin/weak point in the vehicle's floor or deck. If the washers are questionable, consider adding 1/4-inch thick plate or the like between the nuts/washers and the vehicle's underside. Any washers or plates must also provide an adequately strong surface to tension the nuts/bolts against, and must keep the jetter secure during the bumps and jolts of transportation.



If the vehicle-structure or mounting-location prevents using thru-bolts, you may use thread-inserts for 2 of the 4 mounting-points; if you can't find at least 2 places for thru-bolts you should choose a different mounting position or location that will allow at least 2 thru-bolts.

  - Adding "Strut-Channel" (such as Unistrut®) between the jetter and the floor/deck can provide a more versatile mounting-surface if needed (purchase locally).
  - **We also offer "Slide-Base" options on rollers which allow the mounted jetter to be extended out the door for operation and service-access, and then rolled back in and locked in place.**
  - **NOTE:** *Do not modify or extend the exhaust-piping or route it any other way without written permission from Jetters NorthWest; restriction to the exhaust can void the engine's warranty and/or cause poor jetter performance!*

CONTROLS & OPERATIONS

This section covers the essentials for safe startup and control of the jetter, including the required pre-operation checks, startup steps for gas and propane engines, and proper use of the engine throttle. The 3 primary jetting-system controls are also covered: the *Flow-Control Valve (aka Jetting On/Off Valve),* the *Pressure-Regulating "Unloader" Valve*, and the *Pulsation Control Valve*. The information to follow is to provide the operator the basic instructions to setup and start the machine correctly, then safely manage jetting flow and pressure.

PRE-OPERATION CHECKS

BEFORE starting your Jetter please make a habit of performing the following maintenance and safety checks:

- **Check the Engine's oil-level using the oil dipstick:** on gasoline-engine models the dipstick-handle is located at the top of the engine near the air cleaner housing and the muffler. On propane-engine models the dipstick is a wire handle located on the starter side of the engine (left side of the machine from the control-panel end).
- **Visually check the oil level in the Pump via the "sight-gauge" on its side;** the oil-level should be halfway up the sight glass and have a translucent color. *Milky or cloudy oil-condition indicates need for immediate service.*
- **Visually check the oil level in the Gearbox/Transmission (in between the engine and pump) via the "sight-gauge" on its side;** ensure the oil is visible *but less than halfway up the sight glass* and looks translucent. **Excess oil in the gearbox will automatically bleed out the fill-cap.**
- **Visually check for damage to the jetting hose; *do not use the jetter if damage is present or if the hose's inner-braid is visible - bodily injury or damage may occur!*** Kinks or bubbles in the hose are danger signs as well.
- **BEFORE STARTING: be SURE that (A) the red handle of the *Flow-Control Valve* is in the down "safety" position and (B) ensure that the hose and nozzle are securely inside of the pipe to be cleaned!**
  - **NOTE**: *the jetter was likely shipped with anti-freeze in the pumping system, which will get pumped out on the first startup, thus you might want to pump the antifreeze out the open hose-end into a container or sewer-drain before installing a jetter-nozzle (spraying water/antifreeze mix out the nozzle will create a "foamy" spray which makes a mess if the hose is not in the sewer).*

CONTROLS & OPERATIONS - CONTINUED

SET THE WATER TANK-VALVES BEFORE ADDING WATER

TO DRAW WATER (OR ANTIFREEZE) FROM THE BUILT-IN "BUFFER" TANK:

- Pull the *Buffer-Tank Knife-Valve* (black or red handle under tank) to the fully "out" position (*see photo pg.17*), then push the *Bypass-Return Valve* (yellow handle) all the way down to vertical, pointing straight toward the ground.

TO DRAW WATER FROM A LARGER "AUXILIARY" TANK (or *Powerslide* Tank):

- Push the *Buffer-Tank Knife-Valve* (black or red handle under the jetter's built-in tank) to the fully "in" position (*see photo pg.17*), then lift the *Bypass-Return Valve* (yellow handle) up to horizontal, pointing straight back.

Connect a suitable water-supply to the tank of choice:

- Your *Brute* is a "high-flow" jetter, so **we recommend a 3/4-inch commercial-grade "kink-free" hose for water-supply** at no more than 50-feet in length. *Longer, skinnier, and/or kinked hoses restrict incoming water to the jetter.*
- Connect your water-supply hose; all JNW Water-Tanks have garden-hose fitting for hose-connection. Turn on the water-supply and allow the tank to fill; the tank's Float-Valve will stop the incoming water when the tank is full (similar to a toilet-tank's fill-valve). *Leave the hose on and connected*; the Float-Valve will automatically open when the jetter begins to draw in water.

ENGINE STARTING, THROTTLING, & OFF

(this is for "manual" start/stop. For Wireless Remote Control see page 14)

TO START THE JETTER'S ENGINE:

- Make sure the red-handled *Flow-Control Valve* is in the bypass-to-tank "safety" position; *the red handle should be fully down*.
- Place the throttle-toggle at approximately half-speed, then insert the key.
- Turn and hold the key in the start position to start the engine, letting the key go when the engine starts. *Do not crank the engine for longer than 10 seconds at a time if the engine does not start*; allow the starter to rest at least 15 seconds between starting attempts. It may take a while for the fuel-system to prime on initial startup, or after long periods of storage.
- Reduce throttle to approximately ⅓ RPM and allow the engine warm up for about 2 minutes before jetting, which also allows the pump to prime.

CONTROLS & OPERATIONS CONTINUED

ENGINE THROTTLE CONTROL:
The Throttle for adjusting engine-RPM is mounted on the Control Panel's right side, as either a Toggle-Switch (on Wireless-Remote models) or a Lever (on basic models). When jetting with the jetter's full-sized hose and nozzles, raising or lowering the throttle will raise/lower water-flow to the nozzle, which in turn raises/lowers PSI. *Note:* if you add a smaller hoses/nozzles and/or a shutoff valve (e.g. Foot-Control) downstream of the jetter's main hose, run the engine up near full throttle and then make pressure adjustments with the *Pressure-Regulating Unloader Valve* (see below); this avoids "bogging down" the engine.

FLOW CONTROL VALVE (MANUAL JETTING ON/OFF CONTROL):

The *Flow Control Valve* (aka "Red-Handled Valve" or "Jetting On/Off Valve") is located below the Hose-Reel and just to the left of the Control Panel. When the red handle is in the "down" position the jetter will not build pressure – the *Flow Control Valve* will send all water-flow back to the tank; this is the "safety" position - no pressure. When the red handle is all the way "up" the Valve will direct all water-flow to the jetting hose/nozzle to build pressure and actively hydro-jet the pipeline. We suggest using this *Flow-Control Valve* along with the engine's throttle in the following manner for safe and efficient jetting:

- **To begin jetting - *SAFETY FIRST:* securely tighten a nozzle onto the hose-end, then insert the jetting hose/nozzle several feet securely inside the pipe to be cleaned;** *do not start the jetting-flow with an unsecured hose or nozzle!* At this point the engine should be running at low to half throttle while warming up. Lift the red handle all the way up to the "jetting" position to start water-flow to nozzle. When pressure begins to elevate on the gauge, increase throttle toward full speed until the desired pressure is reached. ***Do not exceed the maximum operating pressure of your jetter at any time*** *- no matter what size hose or nozzle you are jetting with!* The jetter's maximum-pressure specification should be clearly marked near the pressure-gauge on the jetter's control-panel by the JNW factory. *IMPORTANT: see the instructions for Pressure-Regulator Adjustment via the Unloader Valve on the next page.*

CONTROLS & OPERATIONS CONTINUED

- **To stop jetting:** lower the engine RPM using the throttle, which allows the pressure to drop to a lower PSI, then lower the red handle to the “down” position in a smooth and full motion. ***Safety Tip: do not remove the nozzle from the pipe until the pressure has completely dissipated!*** NOTE: if you are using a shutoff-valve or foot-pedal control downstream of the jetter’s main hose, or when using low-flow mini-hose/nozzle: (A) lower the red handle down first, before lowering the throttle, then (B) before removing the nozzle from the pipe – you must open any downstream shutoff-valve or foot-pedal to release the trapped pressure from the hose – ***do not remove the nozzle from the pipe until the pressure has completely dissipated!***

Important notes regarding use of the Flow Control Valve:

- **Always** move the red-handle on the *Flow-Control Valve* all the way “up” to start jetting *and* all the way “down” to stop jetting - *do not run in-between…*
- **Never** use the red-handled *Flow-Control Valve* to regulate pressure – *that will wear it out prematurely and then it will not hold pressure!*

PRESSURE-REGULATING 'UNLOADER' VALVE:

- Your jetter is equipped with an adjustable *Pressure-Regulating Unloader Valve* with a blue-colored knob on the left side of the Control Panel. Its job is two-fold: to regulate pressure by adjusting the pressure-setting that allows water to be diverted water back to the tank instead of toward the jetting-nozzle, and to "relieve" pressure by diverting all of the water-flow back to the tank in the event of a plugged-up nozzle or a closed-off discharge. This also allows for the use of a valve downstream of the main jetting-hose *(e.g. ball-valve, foot-pedal, trigger-gun, etc.)* to control water-flow on/off. To adjust pressure, simply turn the knob clockwise to increase pressure, or counterclockwise to decrease pressure. ***IMPORTANT tip for smooth pressure-regulation:*** *when increasing pressure, STOP turning the knob clockwise any time the gauge-pressure stops increasing AND* ***always finish any adjustment up by turning counterclockwise until the gauge-pressure drops slightly*** – this ensures the "pressure-relief sensitivity" of the Unloader-Valve is always correct. ***NEVER allow the jetter to run at a higher pressure than the maximum rating of the machine*** *- exceeding maximum pressure can be dangerous – and voids your warranty!*

CONTROLS & OPERATIONS CONTINUED

PULSATION CONTROL VALVE (AKA "HOSE-JUMP" SYSTEM):

The *Pulsation System* is included on your jetter "pulses" the jetting-hose to break drag-friction with the pipe-wall when needed to help the hose/nozzle move further up the line. Pulse-intensity is controlled by the black "X-shaped" knob that is located on the Control Panel; turn the knob counterclockwise to increase pulsation / turn clockwise to decrease or stop pulsation.

***Pulsation-Control should ONLY be used "as needed" for these purposes*:**

(a) To help the hose get further into the pipeline: use pulsation in short/light bursts to get through turns or leave *sightly* cracked reduce hose-drag. *Always close off Pulsation before pulling the hose/nozzle back toward the pipe-entry.*

(b) To help release a nozzle that is stuck in the pipe: let the hose/nozzle pull a few feet further into the pipe, twist the Pulse-Control wide open, throttle-down the engine, then attempt to pull the hose/nozzle back past the hangup-point.

- **DO NOT use Pulsation during normal jetting operations**! *Pulsation reduces GPM/PSI cleaning-power and increases vibration.*
- **NEVER use the *Pulsation-Control* to adjust jetting pressure!** *It is NOT a Pressure-Regulator!*

WIRELESS REMOTE CONTROL

Description: a popular upgrade-option to a *Brute* Jetter, the **JNW *Deluxe Wireless Remote Control*** has a range of over ¼ mile to control [a] **Water-Flow (jetting) On/Off**, [b] **Engine On/Off & Throttle Up/Down**, and [c] on "ES" & *Powerslide* models it controls the **Hose-Reel Motor On/Off**. Buildings and other obstructions may reduce its usable range, but connectivity complaints are RARE. *For safety, we recommend having the jetter within both visible and audible range when operating remotely.*



WIRELESS REMOTE CONTROL CONT.

To operate using Remote Control:
Before working remotely, we suggest you start/run the engine for warm-up per the previous instructions. This can be done using the remote to start the engine, but always start with the red-handled *Flow-Control Valve* in the down position *(returns all water to tank - no pressure)*.

TO START THE ENGINE VIA WIRELESS REMOTE-CONTROL

- **DO NOT use the key-switch!** The key is not needed for wireless remote-controlled operation! If using the remote system, please remove the key and stow away in a safe spot. *Safety note:* ***NEVER use the wireless-remote for control when Pressure-Washing with a Trigger-Gun/Spray-Wand!***
- Turn the Toggle Switch "on" to enable Wireless Remote use (on the Control Panel below the key-starter). *Always turn the toggle switch "off" when done.*
- Place the r*ed-handled Flow-Control Valve* in the down (safety) position.
- **Start the engine remotely:** [a] Press the "ON/OFF" button ONCE to enable starting (the red LED should come on and you will may hear the fuel pump run), and then [b] press and hold the "Engine Start" button until the engine starts (about 3-5 seconds). *Do not crank the starter for longer than 10 seconds at a time*; if the engine does not start then let the starter rest 10-15 seconds between attempts (NOTE: the engine may be priming itself with fuel).
- IF ENGINE DOESN'T CRANK: note that the remote's "PRESSURE ON/OFF" Valve (remote jetting-control) must be OFF to start the engine. If the "Engine-Start" button doesn't turn-over the engine: stop, push the "PRESSURE ON/OFF" button ONCE to close the valve, then try starting again. If you can't tell whether the Pressure Button is on or off, go back to the jetter and turn the remote toggle-switch OFF, then ON again to reboot.
- If you are using a smaller hose/nozzle for jetting smaller pipes, or an on/off valve downstream of the main hose, back the PSI-Regulator off 2 full turns.
- After about 2 minutes of warm up, lift the red-handle of the *Flow-Control Valve* into the up ("pressure") position. ***For safety, be sure that the Remote-actuated Flow-Control is in the "OFF" position, or have the hose-end open (without a nozzle installed) & held securely BEFORE lifting the red handle***.

WIRELESS REMOTE CONTROL CONT

- See below for using the "PRESSURE ON/OFF" button to turn water-flow on and off to the jetting hose/nozzle (jetting on/off).
- If you shut down the engine remotely (see below), you can still re-start the engine; see step 4 (and step 5, if necessary)

REMOTE "PRESSURE ON/OFF" JETTING OPERATION:

1. **To begin jetting - SAFETY FIRST:** securely tighten a nozzle onto the hose-end, then **insert the jetting hose/nozzle several feet securely inside the pipe to be cleaned**; do not start jetting with an unsecured hose or nozzle!
2. Use the **"PRESSURE ON/OFF" button** to start and stop the jetting-flow; the "Pressure On/Off" button will cycle the *Water-Jetting Valve* to its alternate (Jetting -or- Recirculating) positions. The system may take a few seconds to build pressure; wait a moment before pressing the button to re-try. You will typically see the jetting-hose stiffen as pressure builds, and then relax as the pressure subsides. Also, the remote Transmitter will 'beep' indicating that the jetter's Receiver is within range each time you press the button.

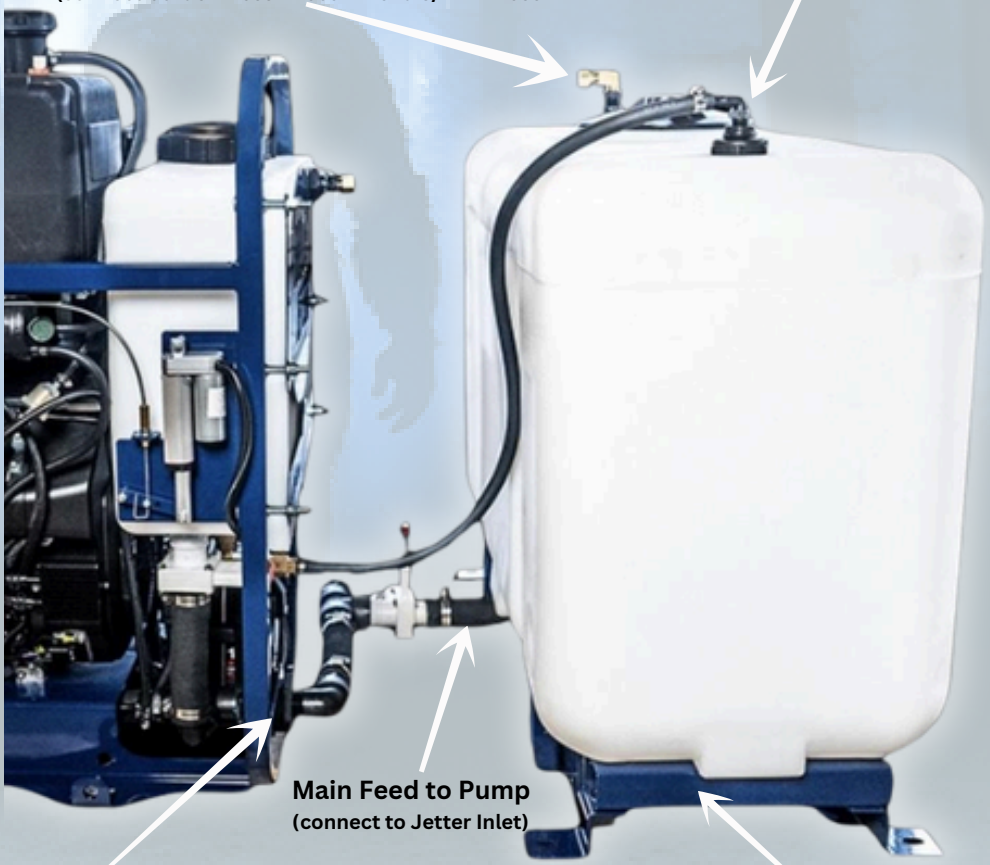
REMOTE THROTTLE/PRESSURE – UP & DOWN:

The Engine Throttle is remote-controlled "up" and "down" via the buttons which are marked with a **"tortoise" to lower the RPM** & a **"hare" to raise RPM.** These will also raise/lower pressure when using the main jetting hose. *Hold each button for at least 1 second to get a throttle-response.*

SHUT DOWN VIA REMOTE CONTROL:

1. Press the "PRESSURE ON/OFF" button to shut off the water-flow before shutting down the engine – this makes restarting with the remote easier. Throttle down prior to pressing “off” if possible (extends control-valve life)
2. Pressing the engine "ON/OFF" button when running will shut down the engine - whether under pressure or not. ***This is the best “emergency stop”.***
3. To restart, follow the instructions starting with step 4 of the Start Engine instructions on the previous page.
4. After use, [a] place the red-handled *Flow-Control Valve* back in the “down” (safety) position to release all pressure, and [b] move the Toggle-Switch on the panel to the “off” position **(*leaving the toggle-switch or key-switch in the on position will drain the battery*)**.

AUXILIARY JNW WATER TANK CONNECTIONS

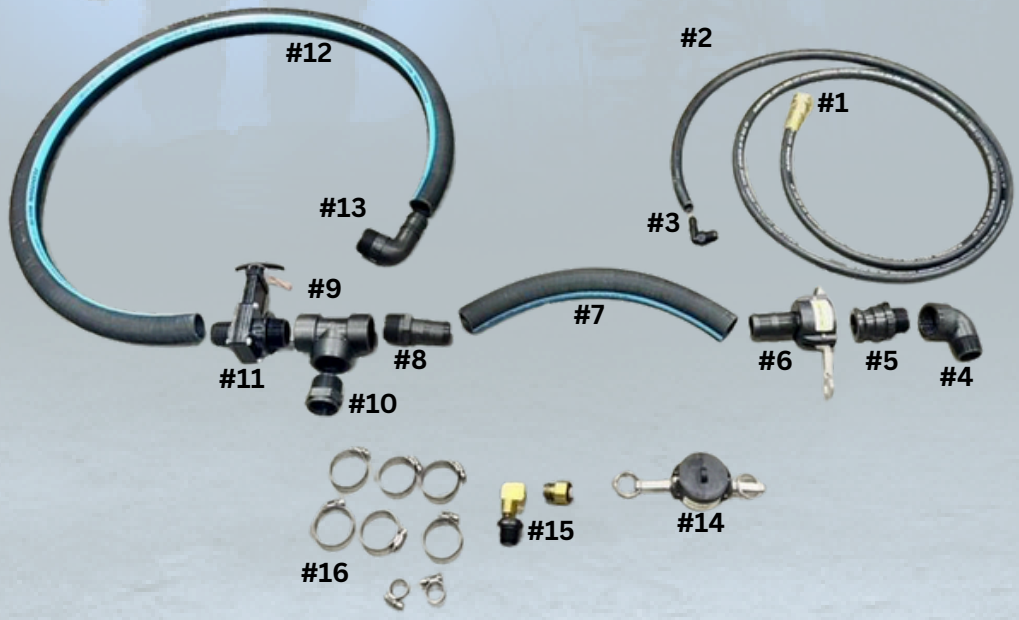


MAKING CONNECTIONS TO AN OPTIONAL JNW AUXILIARY WATER TANK PACKAGE

INSTRUCTIONS TO MAKE CONNECTIONS BETWEEN THE WATER-TANK & THE *BRUTE* JETTER:

If you ordered an External/Auxiliary Water Tank package with your *Brute,* follow the diagram, component-list, and instructions on the next 3 pages to connect the hoses, fittings, and valves in the proper order for easy quick-coupling to your *Brute* jetter.

For a step-by-step video-demonstration on making all tank-to-jetter connections click here or scan the QR code to the right:



AUXILIARY WATER TANK COMPONENTS

	Inventory ID	Component	Qty Required	UOM
# 1	**BYPASS HOSE & ASSEMBLY**			
	P.105505 P.105584 P.104822	1/2" CRIMP SLEEVE, Hose barb, brass, 1/2" MPT x 1/2" barb, & 1/2" FPT X Hose barb, brass, 1/2" MPT x 1/2" barb 1/2" FPT X QC SOCKET - STEEL	1.00 1.00 1.00	EA EA EA
# 2	**P.105730**	Multi-purpose hose, 1/2", black	10	FT
# 3	**P.105550**	Hose barb, 90-degree, polypropylene, 1/2" MPT x 1/2" barb	1	EA
# 4	**P.105285**	Elbow, street, 90-degree, polypropylene, 1-1/4" MPT x 1-1/4" FPT	1	EA
# 5	**P.104315**	Camlock, polypropylene, 1-1/4" MPT x 1-1/2" male cam	1	EA
# 6	**P.104318**	Camlock, polypropylene, 1-1/2" barb x 1-1/2" female cam	1	EA
# 7	**P.105774**	Suction hose, 1-1/2", black	18	IN
# 8	**P.105568**	Hose barb, polypropylene, 1-1/2" MPT x 1-1/2" barb	1	EA
# 9	**P.105185**	Pipe tee, polypropylene, 1-1/2" FPT	1	EA
# 10	**P.104620**	Pipe bushing, reducer, polypropylene, 1-1/2" MPT x 1-1/4" FPT	1	EA
# 11	**P.103530**	Gate valve, schedule 40 PVC, black, 1.5" MPT x 1.5" hose barb	1	EA
# 12	**P.105774**	Suction hose, 1-1/2", black	6	FT
# 13	**P.105571**	Hose barb, 90-degree, polypropylene, 1-1/2" MPT x 1-1/2" barb	1	EA
# 14	**P.104319**	Camlock, cap, polypropylene, 1-1/2"	1	EA
# 15	**WATER FILL ASSEMBLEY**			
	P.104629 P.105296 P.104361	Pipe nipple, reducer, polypropylene, 1" MPT x 3/4" MPT Elbow, street, 90-degree, brass, 1/2" MPT x 1/2" FPT Adapter kit, brass, 1/2" MPT x FGH, includes gasket and spring	1.00 1.00 1.00	EA EA EA
# 16	**NONSTOCK**	**HOSE CLAMPS**	8	EA

CONNECTING AN EXTERNAL/AUXILIARY TANK

INSTRUCTIONS TO MAKE THE CONNECTIONS BETWEEN THE WATER-TANK AND YOUR *BRUTE* JETTER:

NOTE: we recommend that you seal all threaded connections to follow with a good pipe-thread sealant such as RectorSeal True Blue Pipe Sealant:

- Remove the 1¼ inch threaded ***Drain-Plug*** from the back-end of your *Brute* jetter; set it aside (you'll install that ***Drain-Plug*** elsewhere later in step 5).
- Thread & seal the 1½-inch 90-degree Elbow (**#13**) fitting (barb x thread) into the female-fitting under the *Water-Tank*; make sure to finish tightening the elbow so it points in the direction you'll want its water-hose to go to create the "Main Feed to Pump" (as shown on page 17).
- Connect the 6-foot long 1½-inch *Suction-Hose* (**#12**) to the elbow, making sure that the Hose pushes all the way down on the Elbow's shank. Secure the connection with two of the large *Band-Clamps*; tighten with a 5/16" nut-driver. *Be careful not to over-tighten & strip the worm-gear clamp which may result in a water-leak & air-suction point which is bad for the jetter's pump!* Feel free to cut the hose to a shorter length if that better suits your installation-layout (use hacksaw to cut thru its steel core).
- Connect the open end of that *Suction-Hose* to the *Knife-Valve's* (**#11**) hose-barb by using 2 more *Band-Clamps* and repeating the process. This *Knife-Valve* must be open for water to flow to the jetter.
- Locate the 1½ inch *Tee* fitting (**#9**) and thread+seal one end of that Tee onto the *Knife-Valve's* threads. Next, connect the threads of the 1½-inch *Hose-Barb Fitting* (**#8**) into one of the two remaining Tee-ports; choose either the "run" port of the tee (which will allow the two *Suction-Hoses* to run in a straight-line) *or* choose the "branch" port of the tee (which will allow the two *Suction-Hoses* to make a 90-degree turn). Next, connect the 18-inch long x 1½" *Suction-Hose* to that hose-barb fitting and secure with 2 more Band-Clamps as previously described, and then install the *Female Cam-Coupler/Hose-Barb* fitting (**#6**) to the other end of that 2nd *Suction Hose*, and secure with the 2 remaining *Band-Clamps* , repeating the previous process.
- Thread+seal the 1½"x 1 ¼" *Bushing* (**#10**) and the ***Drain-Plug*** into the remaining port of the Tee. *Your Water-Tank/Suction-Hose assembly is now jetter-ready.*

CONNECTING AN AUXILIARY TANK - CONTINUED

DRAIN-HOSE EXTENSION OPTION: If you wish to extend the drain to the door of your vehicle we suggest connecting a second Knife-Valve (purchase locally) into the remaining tee-port (instead of the bushing/plug) to act as a handy drain-control, and then adding another 1½" hose-barb fitting, clamps, and 1½" hose which you can extend out toward the door; using inexpensive 1½" "Lay-Flat" roll-up hose works nicely for this purpose.

- Next, thread+seal the 1½"x 1¼" *Male Cam-Coupler* (**#5**) either directly into your *Brute* jetter's water-inlet port (where you removed the *Drain Plug*) -***or***- connect the 1¼" *90-degree Street-Elbow* (**#4**) between the *Male Cam-Coupler* and the jetter's water-inlet port if you need to create a 90-degree turn to enable connection of the *Water-Tank's Suction-Hose* from one side of the jetter or the other. *(Discard the 90-degree Street Elbow if it is not needed)*
- Finally, connect the *Female Cam-Coupler* on the Water-Tank's Suction-Hose to the Jetter's *Male Cam-Coupler*. *Your Water-Tank assembly should now be connected to the Brute Jetter's water-inlet and ready to hold water*.

INSTRUCTIONS FOR CONNECTING THE BYPASS-RETURN HOSE, WATER-SUPPLY FITTINGS, & FINAL BRUTE+TANK SETUP:

- Assemble the *Water-Supply Fitting Package* (**#15**) to the larger 3/4-inch port on top of the *Water-Tank*; first the *¾"x ½" Bushing*, then the *¾" Street-Elbow*, and finally the *Garden-Hose Female-Swivel with filter-screen*. Aim the final assembly the direction most handy for you to connect a water-supply hose.
- Thread+seal the small plastic *½" Hose-Barb/90-degee Elbow Fitting* (**#3**) into the other port on top of the *Water-Tank*, pointing its hose-barb the direction that you'll want the *Bypass-Return Hose* to go. Next, connect the 10-foot *Bypass-Return Hose* (**#2**) onto that hose-barb (cut the hose shorter if desired to avoid kinks or tangling). Secure the connection with the small *Band-Clamps*.
- Quick-Connect the loose end of the *Bypass-Return Hose* to the male-coupler that protrudes from the *Yellow-Handled Bypass Valve* at the tail of the *Brute* Jetter. Give the hose a tug to make sure the connection is secure.
- *Lift the Yellow-Handle all the way up to horizontal* so that bypass-water will flow into the Bypass-Return Hose & back to the larger Auxiliary Water-Tank.
- Look to the left of the *Yellow-Handled Valve* for the "T-Handle" of the *Buffer-Tank Knife Valve*; *push the T-Handle all the way in* to close-off the jetter's *Buffer-Tank* - now the jetter will draw water from your Auxiliary *Water-Tank*.

Your Brute Jetter & Water-Tank are now connected & ready!

TROUBLESHOOT / OBTAIN SERVICE

Before calling or otherwise obtaining service on your *Brute* Jetter, here are a few things you can check yourself to solve common problems or issues:

NOTE: when testing the Jetter's operation & performance please use one of the three "static" nozzles (non-spinning) from your original nozzle-set.

1. **If the engine has a problem or will not start, please refer to the Engine Manual provided with your jetter, and/or call your local Kohler or Honda Engine Service Center** (depending on which brand engine is on your jetter)**.**
2. Check the oil in the engine, pump, and gearbox; fill to the specified level if needed. Inspect the condition of the oil; is it low, overfull, discolored, etc.?
3. **If pressure is low,** 1st make sure the *Pulsation Control Valve* is in the "off" position (closed), then:
   a. Clean the Water-Filter/Strainer, & make sure the seal-ring is undamaged.
   b. Check in the *Water-Tank* for debris that is stopping outflow to the pump.
   c. Try a different jetting nozzle to see if pressure improves. Re-adjust the *Pressure Regulating Unloader Valve* if necessary.
   d. Check the Tachometer (on the front panel); at full throttle it should read around 3,550-RPM when jetting under pressure. If RPM is low the throttle-cable may need re-adjustment, or the engine may need service *(increasing throttle increases flow, and then flow through the Nozzle creates pressure, thus the engine must reach around 3,550-RPM build full pressure).*

If the steps above do not resolve the problem, then please call Jetters Northwest at 1(877)-901-1936 (or your local dealer) for assistance with troubleshooting, repair, or to ask where to obtain service locally. **For engine-issues please refer to the Engine's dealer locator for a list of authorized repair-centers near you at:**

- KOHLER: engines.kohlerenergy.com/en/dealers
- HONDA: engines.honda.com/support-and-service/service-support

JETTER PARTS, SERVICE, & ACCESSORIES:

For replacement parts and/or service please contact your local dealer or Jetters Northwest at 1(877) 901-1936, or shop online for parts at **jettersnorthwest.com**

INFORMATIVE VIDEO TRAININGS & TIPS

***"Get" Jetting with Jonesie* (on *YouTube*):**

For training videos scan the QR Code to the right or click this link: **youtube.com/jettersnorthwest**

CONNECTING & USING ACCESSORIES

Your *Brute* jetter was supplied with an *Accessory Adapter*, which threads onto the the jetting-hose (instead of a jetting-nozzle) for attaching Jetters Northwest Accessories such as our **Mini-Hoses, Portable Hose/Reels, Foot-Control Kit, Pressure-Wash Trigger/Wand,** and more via the “Quick-Coupler" on the *Accessory Adapter* (standard USA pressure-washer type).

To use: **Connect the *Accessory-Adapter's* threaded "swivel" end to the threaded end of the main jetting hose** (remove the jetting nozzle first) and tighten the fittings together with 2 wrenches (thread sealer or Teflon-tape is NOT required). The *Accessory Adapter's* female Quick-Coupler can then be attached to your Accessory's male-coupler by pulling back on the Adapter-coupler's "collar" and then inserting the male-side that's attached to the Accessory; push together firmly and be sure the collar snaps all the way forward to provide a safe/secure connection. ***SAFETY FIRST: pull on the connection to ensure that it is secure!***

IMPORTANT Procedure to avoid “Pressure Spikes” when using Accessories:
Adjustment to the jetter's *Pressure-Regulating Unloader-Valve* is required to allow safe and proper use of Mini-Hoses/Nozzles and/or a "downstream" Shutoff-Valve: *Twist the **Pressure-Regulating Unloader-Valve's** knob counter-clockwise at least 2 full turns before jetting with a downstream Shutoff-Valve or Mini-Hose to avoid a "pressure-spike"!* (see instructions on page 13 – do not exceed maximum pressure!)

***Common types of Shutoff-Valves for "downstream” On/Off control of a jetter’s water-flow to an Accessory** (connects to end of jetter’s main hose):*

1. **High-Pressure Ball-Valve:** Included with most of our Portable Hose-Reels, this can be quick- disconnected for use with other hoses and reels.
2. **Foot Pedal Valve:** Controls jetting-flow on/off via "foot-control"; this is often considered the safest type because it shuts off the jetting automatically when you step off the valve.
3. Pressure Washer type **Trigger-Valve:** Works like the *Foot Pedal Valve* except it is hand-operated.

SAFETY NOTE: when choosing an "auxiliary" Shut-Off Valve MAKE SURE it is rated to handle the jetter's maximum PRESSURE capability AND the jetter's maximum FLOW (GPM/lpm) capability!

CONNECTING & USING ACCESSORIES

OPERATION WHEN USING A “DOWNSTREAM" SHUTOFF-VALVE:

- Once the chosen Accessory and *Shutoff-Valve* of choice is connected, lower the *red handled valve* all the way down to the "safety" position and close the downstream *Shutoff-Valve*.
- Be sure the jetting hose/nozzle is securely a few feet inside the pipe to be cleaned!
- Start the jetter's engine & warm it up as described on pages 11 and 15
- Back off the ***Pressure-Regulating Unloader-Valve's*** blue knob 2-3 turns to prevent the unit from going over the max pressure (see instructions on page 12) – ***NEVER exceed the jetter’s maximum pressure!***
- Raise the Engine's Throttle to maximum
- Lift the *Flow-Control Valve's* red handle all the way to the UP (pressure) position

The pressure-gauge should run up to full pressure and then return to a zero reading once the *Pressure-Regulating Unloader Valve* releases pressure. While holding the jetting-hose, open your “downstream” *Shutoff-Valve* to begin jetting. When water is discharging from the nozzle into the pipe and the gauge is reading pressure, you can then adjust the *Pressure-Regulating Unloader Valve* to your desired setting. ***Again, do not exceed the rated maximum pressure*!**

SAFETY PROCEDURE for SHUT-DOWN:
When finished, **DO NOT remove the jetting nozzle & hose from the pipe UNTIL (a) you have bled off ALL pressure into the pipe, and (b) you have killed the jetter's engine!** The *Shutoff-Valve* can hold "Trapped Pressure" that will not read on the jetter's Pressure-Gauge, so lower the **red handled valve** down and open your *Shutoff- Valve* before removing the hose/nozzle from the pipe you were jetting!

MAINTENANCE

With proper maintenance your *Brute* Jetter will offer years of trouble-free service. Please follow the below Jetter Maintenance-Schedule **as well as** the Maintenance-Schedule in your engine's Manual (some instructions in the engine's Manual will be repeated here):

- **20-25 Hour Break-In Service:**
  - Change the engine oil and filter: Drain and fill with new 10W-30 Engine oil or other as recommended in the engine manual (oil recommendation may change depending on conditions). Change the screw-on Oil Filter with a genuine factory oil filter during the 3-year engine-warranty period (do not use an aftermarket factory-equal filter until after the warranty expires). **IMPORTANT:** the filter in these systems regulates the oil-pressure, so DO NOT use a filter unless you are certain it is correct for the engine!
  - Change the Pump oil: Drain and fill with new SAE 30wt. Non-Detergent lubricating oil
  - Change the oil in the Gearbox-transmission (in between the pump and engine): Drain and fill with new 80-90wt. Gear Oil
- **Every 100 Hours**
  - Change Engine Oil
  - Check/Clean/Gap Spark Plugs
  - Check/Replace Air Filter
  - Clean Spark Arrestor (if installed)
- **Every 200 Hours**
  - Repeat 100 Hour Service, and...
    - Replace the engine's Oil Filter
    - Replace the engines' Air Cleaner
- **Every 250-300 Hours**
  - Change oil in the Pump and the Gearbox/transmission
- **Every 500 Hours**
  - Refer to Engine Manual for 500 Hour Service, and other long-term recommended services

WINTERIZATION & STORAGE

For protection from freezing or during long-term storage we recommend running an Anti-freeze solution through the pumping system to purge out water. We recommend an environmentally friendly "RV-grade" antifreeze or Windshield-Washer Fluid with a "-50 degrees below zero" temperature rating (*engine-coolant is NOT recommended*).

NOTE: If your jetter is connected to a auxiliary water-tank (typical of Powerslide & many "Skid" units) then your Brute's built-in 12-gallon "buffer" water-tank can be used as an "Anti-Freeze Tank" for storage and recovery of anti-freeze solution.

Click Here or Scan the QR Code to watch the *Brute* Winterization Video:

FOR EFFECTIVE WINTERIZATION PLEASE SELECT THE CONFIGURATION BELOW THAT BEST MATCHES YOUR JETTER & FOLLOW ITS INSTRUCTIONS:

(A) FOR **PORTABLE OR MOUNTED MODELS THAT ONLY USE THE 12-GALLON BUILT-IN WATER TANK** (NO *AUXILIARY TANK* IS CONNECTED):

- **Drain the system of water as much as possible, then:** [1] remove the 1¼" plug from the *External Suction Port* (located down low at the tail end of the jetter). [2] Open the suction *Knife-Valve* below the *Water Buffer-Tank* to drain it. [3] Remove and dump the water from the Strainer-Filter bowl (located below the Control Panel). [5] Re-install the Strainer-Filter bowl – and the *drain plug* – before the next step.
- Add 7 or more gallons of a Anti-freeze a solution to the *Water Buffer-Tank*.
- Place the red handle of the *Flow Control Valve* in the down (return-to-tank) position.
- Start the engine and lower the engine speed to an idle
- Open the *Pulsation-Valve* on the panel counterclockwise 3 full turns to purge water from the Pulsation System; leave valve open for about 10 seconds then close the *Pulsation-Valve*
- Remove the jetter nozzle, then hold the end of the jetting-hose securely and direct it toward the ground. Lift the red handle of the *Flow Control Valve* into the up (flow on) position; clear water will begin to flow from the end of the jetting hose. When you see the colored antifreeze come out the hose, immediately lower down the red handle of the Flow Control Valve and turn off the engine; your jetter is now winterized.

WINTERIZATION & STORAGE

(B) FOR **MOUNTED OR PORTABLE MODELS** THAT ARE **CONNECTED TO A LARGE "AUXILIARY" WATER-TANK**, ENABLING THE 12-GALLON BUILT-IN TANK TO BE USED AS AN ANTI-FREEZE TANK ONLY:

- **Drain the system of water as much as possible:** Drain the *Auxiliary Water-Tank* (you should have a *drain-plug* or a *drain-valve* in line between the tank and the jetter). Next, remove and dump any water from the Strainer-Filter bowl (located below the front Control Panel), and then re-install the Strainer-Filter bowl. Before the next step, close the *Tank-Drain Valve* (or reinstall the *drain-plug*).
- Add 7 or more gallons of Anti-freeze solution to the jetter's built-in 12-gallon *Antifreeze/Buffer-Tank*.
- IMPORTANT: Close the *Shut-Off Valve* between the jetter and your main/auxiliary *Water Tank* (a valve should be installed in a convenient location between the auxiliary water tank and the jetter's inlet).
- Open the *Knife-Valve* under the *Anti-Freeze/Buffer Tank*, allowing solution to flow to the pump, and on through the hoses and fittings to be winterized.
- Locate the *Yellow-Handled Bypass Valve* under that *Antifreeze-Tank*; lower the handle all the down to a vertical position; this will direct bypass-return flow to the *Antifreeze/Buffer Tank*.
- Place the red handle of the *Flow-Control Valve* in the up (flow on) position.
- **Remove the nozzle from the end of the jetting hose.**
- Direct the jetting hose-end to a safe location to discharge water.
- Start the engine and lower the engine speed to an idle, clear water will begin to discharge from the end of the hose.
- When you see the anti-freeze coming out the end of the hose, lower the red handled *Flow-Control Valve* back down to the return-to-tank position. You will now be circulating anti-freeze through the pump and back to the tank.
- Open the *Pulsation-Valve* on the panel counterclockwise 3 full turns to purge water from the Pulsation System; leave valve open for about 5-10 seconds then close the *Pulsation-Valve*.
- Lift the Yellow-Handle of the 3-way *Bypass Valve* back up the original horizontal position & run 5-10 seconds more to purge water from the *Bypass-Hose* that returns to the main/auxiliary *Water-Tank*.
- Turn off the engine; your Jetter is now winterized.

WINTERIZATION & STORAGE

TO RECOVER ANTI-FREEZE SOLUTION FOR FUTURE USE & RE-PREP FOR JETTING:

(a) For **Portable or Mounted models only using the 12-gallon built-in Water Tank** (no auxiliary tank is connected):

- Obtain a 5-gallon bucket with sealable lid to pump the Anti-Freeze solution into.
- **Be sure to remove the nozzle from the end of the jetting hose**.
- Hold the jetting hose-end securely and direct it toward the bucket to discharge anti-freeze.
- Start the engine and lower the engine speed to an idle, then raise the red handle of the *Flow-Control Valve*; Anti-Freeze solution will begin to discharge from the end of the hose.
- When the jetter stops discharging Anti-Freeze, lower the *red-handled valve* & kill the engine.
- Add water to the *Buffer-Tank*, then repeat the process to purge anti-freeze from the jetting-hose. Be ready to lower the *red-handled valve* when water starts to exit the jetting-hose; your jetter is now primed with water and ready to resume jetting operations.

(b) For **Mounted or Portable models** that are **connected to a large "Auxiliary" Water-Tank**, using the 12-gallon built-in tank as an *Anti-Freeze Tank* only:

1. Close the *Gate Valve* under the *Anti-Freeze Tank*, then open the *Shut-Off Valve* between the jetter and the *Water Tank*. Fill your *Water Tank* with enough water to start and run the jetter (the amount of water needed will depend on the size and style of tank). **IMPORTANT: the yellow handle on the 3-way *Bypass-Valve* (under the *Anti-Freeze Tank*) should still be in the up/horizontal position, directing flow back to the *Water Tank***.
2. Place the red handle of the *Flow-Control Valve* in the up (flow on) position.
3. Be sure to remove the nozzle from the end of the jetting hose.
4. Direct and secure the jetting hose-end toward/into the open top of the *Anti-Freeze Tank*.
5. Start the engine and lower the engine speed to an idle; anti-freeze will begin to discharge from the end of the hose, re-filling the *Anti-Freeze Tank*.
6. When you see clear water coming out the end of the hose, lower the red handle of the *Flow-Control Valve* back down to the return-to-tank position; your jetter is now primed with water and ready to resume jetting operations.

TROUBLESHOOTING CHART

Problem	Potential Cause	Solution
Low Pressure	Nozzle worn, orifices oversized or missing.	Replace nozzle, and/or re-orifice with properly sized jets to build full pressure.
	Inadequate water supply.	Find another source or add secondary supply hose.
	Air leak in inlet-plumbing between the tank and the pump.	Disassemble, reseal and reassemble. Replace cracked fittings if needed.
	Pressure gauge inoperative or not registering accurately.	Cross-check with a new gauge; replace worn or damaged gauge if needed.
	Regulator / unloader valve improperly adjusted, stuck, or the valve is worn out.	Adjust regulator / unloader valve. Repair or replace if necessary.
	Inlet water-filter/strainer clogged/restricted, or its seal-ring is worn or missing.	Clean filter/strainer more frequently. Inspect the seal-ring; replace if damaged.
	Worn high pressure seals in pump.	Replace all seals in pump.
	Fouled or dirty inlet or discharge valves in the pump.	Clean inlet and discharge valve assemblies.
	Worn inlet or discharge valves in the pump.	Replace worn valves.
	Leaky hose or fitting.	Repair or replace hose or fitting.
Pump runs extremely rough, pressure very low, or loud knocking noise in pump.	Restricted water inlet or air entering the inlet plumbing.	Clear restriction, check for air tight seal at fittings & filter.
	Fouled or worn out inlet and/or discharge valve(s) inside pump.	Clean out debris stuck in valve(s) or replace worn out valve(s).
	Plugged water filter on jetter.	Clean or replace filter.
Water leakage from under the manifold.	Worn pump seals(s) in pump(s), and/or cracked plunger in pump.	Replace seals, and/or install new plunger(s).
Oil leaking in the area of crankshaft	Worn crankshaft seal or bearing-case O-ring.	Replace crankshaft seal or bearing case O-ring as needed.
Frequent or premature failure of the pump seals	Scored plunger(s) in pump. Pumping dirty water. Excessive temp. of water being pumped. Running pump dry.	Replace plunger(s) in pump. Ensure water supply is rust-free & clean. Maximum water temperature 100 deg F. DO NOT run pump without water.

WARRANTY POLICY

FOR JETTERS NORTHWEST EQUIPMENT

WHAT IS COVERED: Jetters Northwest ("JNW") warranties new items of our manufacture from defects in materials or workmanship for a period of one year from date of delivery to the 1st customer. This policy is limited to products manufactured by JNW. Products that we purchase from other manufacturers, such as the engine and the pump, are covered by their own warranties which may go beyond our one year. Refer to the original manufacturer's policy for warranty details on these types of products:

- **KOHLER & HONDA Engines: 3-YEAR Limited Warranty**
- **UDOR Pumps: 5-Year Limited Warranty**

WHAT IS NOT COVERED: The warranty shall not apply to product malfunctions or failures resulting from misuse, abuse, neglect, loss, damage caused by disasters (such as fire, flood, lightning, earthquake, vehicle-crash, etc.), interaction with products not approved by JNW, or improper repairs to any part of the equipment. Improper repairs shall include repairs made by other than JNW authorized agents, or repairs utilizing parts or materials not equal to those furnished by **JNW.** ***JNW will NOT pay for unauthorized repairs*.** The warranty shall not cover failure due to normal wear, such as *Pressure-Control Valves. Jetting hoses, Nozzles, and Hose-Fittings are not covered as they are subject to pipe conditions, thus considered "wear items".*

WHAT JNW WILL DO: Should a JNW manufactured product prove defective during the warranty period, the customer is required to notify the selling dealer or JNW immediately. The defective components or parts shall be securely packaged, including a packing list identifying the components or parts, and description of the defect and shipped to the JNW Service Department within ten working days. **Return-shipping costs are the responsibility of the customer.**

WARRANTY POLICY - CONTINUED

After determination of warranty eligibility, JNW will, at its option, repair or replace the defective components or parts and return them to the customer. We shall also pay – if pre-authorized by JNW – reasonable labor to repair any items found to be defective, and/or refer the customer to the nearest warranty center (especially for engine warranties and the like).

JNW SHALL NOT BE LIABLE FOR ANY LOSS, INCONVENIENCE, INJURY, OR DAMAGE, INCLUDING DIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OF OR INABILITY TO USE ANY JNW PRODUCT, OR ANY BREACH OF WARRANTY, EXPRESSED OR IMPLIED.

QUESTIONS? Call or E-mail us, RE: “Jetter Warranty"

JETTERS NORTHWEST

Sewer & Drain Jetting Equipment Manufacturing & Sales

16750 Woodinville-Redmond Rd, #C-101 / Woodinville, WA 98072, USA

Phone (206) 283-5252 1(877) 901-1936 Fax (206) 284-8638

www.jettersnorthwest.com info@jettersnorthwest.com

RESOURCES

Popular Options: *JETTERS NORTHWEST Accessories, Nozzles, Hoses, Parts & More*

YouTube Training: **"Get" Jetting with Jonesie**

BRUTE Training **Watch the 8 part training series**

Connecting Your Auxiliary Tank: **step by step walkthrough**

BRUTE Winteriztion Video

JNW Portable water tank packages

Digital Owners Manual: BRUTE Jetters

Owners Manual: UDOR Pump & Gearbox

Owners Manual: Gasoline Engine - Kohler ECH749

Owners Manual: Propane Engine - Kohler PCH740

POPULAR JETTING TOOL OPTIONS



REAPER ATTACK NOZZLES



WARTHOG SCOURING NOZZLES



GREASE HOG NOZZLES



HAND-CARRY HOSE REEL



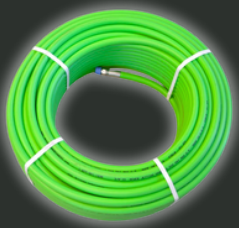
DOLLY HOSE REEL



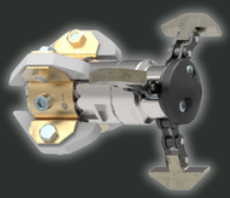
1/4" MINI-HOSE & REEL



TYGER-TAIL HOSE GUIDE



JETTER HOSES



CHAIN SCRAPER NOZZLES

WATER TANK OPTIONS

JNW MOUNTABLE AUXILIARY WATER TANK PACKAGES

Need more water on board? Our auxiliary tank packages come in 55, 100, 150, and 200 gallon sizes so you can keep jetting longer without pausing for tank-refill. The larger 100, 150, & 200 gallon sizes ride in a “cradle” skid with lift pockets, vertical retention risers, and mounting tabs for solid bolt-down. ALL JNW tanks include a Hose and Fittings Kit for easy connection to your jetter with 6' suction hose and 6' bypass hose, and quick-couplers. A built-in Float-Valve shuts off incoming water when the tank is full, giving you a smart, scalable upgrade for serious jobs.



JNW AUXILIARY WATER TANKS

JNW PORTABLE WATER TANK PACKAGE

Boost your portable jetter’s run time with the **60-gallon** Portable Water Tank, set up “jetter-ready” right out of the box. This rugged, wheeled tool-bin tank includes all hoses, fittings, and couplers for quick connection to your jetter, plus a built-in float valve that shuts off incoming water when the tank is full. It’s an easy way to add water capacity at sites with weak supply.



JNW PORTABLE WATER TANK

Check out the portable water tank in action by clicking here or scanning the QR code below:

POPULAR JETTING EQUIPMENT



ELECTRIC MINI JETTERS

DRAIN INVADER ELECTRIC JETTERS
COMPACT. LIGHTWEIGHT. HANDY.

Built for the unsung heroes of plumbing, the DRAIN INVADER **X** & **HD** Series deliver pro-grade electric jetting power for 3" & smaller pipes. The **X** is lighter to carry (or rides easily on its snap-on cart), while the **HD** packs industrial durability with a brass-end pump and an adjustable pressure & amp-draw control. Compact, exhaust-free, and ready for your “mini-jetting” jobs.

HATHORN® INSPECTION CAMERAS
RUGGED. CLEAR. RELIABLE.

Hathorn® inspection cameras are built for contractors who need clear visuals and tough, jobsite-ready gear day in and day out. These systems deliver sharp, easy-to-see video, intuitive controls, and dependable recording so you can document every job with confidence. The Wi-Fi models view easily on your mobile devices. With rugged construction and a focus on real-world usability, Hathorn cameras help you quickly locate problems, impress customers, and move on to the next call.



INSPECTION CAMERAS

JNW BRUTE “HOT-BOX”
ADD HOT-WATER CAPABILITY TO YOUR JETTER



HOTBOX JETTING HEATER

The BRUTE Hot Box delivers on-demand hot water (up to 160°, depending on your jetter’s GPM) for faster hydro-excavation, washdown, and jetting. This heavy-duty, tankless unit quick-connects in-line to your cold-water jetter, hydro-excavator, and/or pressure washer, and features a high-efficiency Schedule 80 coil in its fuel-efficient combustion chamber. Diesel/home-heating-oil fired, the HOT-BOX is available in 350,000 and 480,000 BTU models, draws only 6 amps of 115V power, and dependably is Made in the USA.

CONTACT US

Need help with your *Jetters Northwest* equipment? Our team is here for you pros who keep things flowing. From setup and maintenance tips to troubleshooting and replacement parts, you'll get straight answers and customer-first support every time.

- ***Phone***

1(877) 901-1936

- ***Message***

info@jettersnorthwest.com

- ***Website***

www.JettersNorthwest.com

- ***Address***

16750 Redmond - Woodinville Rd NE C-101, Woodinville, WA 98072, United States

- ***Follow Us***


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