

Valve Maintenance Trailer Specifications

Select Engine	30 HP kohler air cooled gas engine with 12 volt starter	YES	NO	Specify
Select Engine	38 HP kohler air cooled gas engine with 12 volt starter	YES	NO	Specify
Select Engine	49 HP Deutz air cooled Diesel engine with 12 volt starter	YES	NO	Specify
Controls	Controls must be on the curb side and include hour meter, water pressure gauge, anti-freeze selector valve, water tank fill, switches for water pump on-off, hydraulics on-off, vacuum door open-close, work lights on-off. Strobe light must turn on when the engine key switch is on.	YES	NO	Specify
Select Vacuum	Must be belt driven positive displacement rotary lobe vacuum / blower operating at 500 cfm at 12" of Hg.	YES	NO	Specify
Select Vacuum	Must be belt driven positive displacement rotary lobe vacuum / blower operating at 500 cfm at 16" in of Hg. (available with 38HP engine)	YES	NO	Specify
Select Vacuum	Must be belt driven positive displacement rotary lobe vacuum / blower operating at 800 cfm at 15" in of Hg. (available with 38HP & 49 HP engine)	YES	NO	Specify
Vacuum Clutch	Must have a 12VDC drive clutch for powering the Vacuum Blower and an on off switch on the curb side control panel.	YES	NO	Specify
Air Filters	81 sq.ft. of .5 micron wet-dry vacuum filtration with a vibrating self cleaning design and access to wash the filters each time the vacuum door is opened.	YES	NO	Specify
Vacuum hose	30 feet of 3" vacuum hose connected to a 4" vacuum tank inlet to reduce hose clogging at the vac tank attachment.	YES	NO	Specify
Vacuum Wand	5 ft. long x 3" non-conductive vacuum wand with an anti-clogging ultra high velocity suction end.	YES	NO	Specify
Select Vacuum Tank	A 150 gal. vacuum tank must be positioned at a fixed 45 degree angle (not requiring a tilt to dump mechanism) . The sloped vacuum tank also reduces slosh during highway travel because of the reduced surface area of the liquid, thus improving safety while towing.	YES	NO	Specify
Select Vacuum Tank	A 230 gal. vacuum tank must be positioned at a fixed 45 degree angle (not requiring a tilt to dump mechanism) . The sloped vacuum tank also reduces slosh during highway travel because of the reduced surface area of the liquid, thus improving safety while towing.	YES	NO	Specify
Select Vacuum Tank	A 300 gal. vacuum tank must be positioned at a fixed 45 degree angle (not requiring a tilt to dump mechanism) . The sloped vacuum tank also reduces slosh during highway travel because of the reduced surface area of the liquid, thus improving safety while towing.	YES	NO	Specify
Vacuum Tank	The vacuum tank unloading door must be powered and remote operated (not requiring an operator to manually unlock or open the access door)	YES	NO	Specify
Vacuum Tank	The vacuum tank access powered door must have a drag bar attached for assisting in the unloading of dirt.	YES	NO	Specify
Vacuum Tank	A .1875" thick UHMW coating must be on the inside bottom of the vacuum tank for protection of the vacuum tank and for ease of removing and cleaning of the vacuum tank.	YES	NO	Specify
Vacuum Tank	A 6" stainless steel ball float system shall be used to insure positive shutoff of the vacuum when the vacuum tank is full.	YES	NO	Specify
Vacuum Tank	two Halogen work lights	YES	NO	Specify
Vacuum Tank	Strobe light	YES	NO	Specify
Select Water Storage	A 150 gal. water tank (available with 150 gal vac tank) must be positioned at a fixed 45 degree angle under the vacuum tank, thus concentrating the weight over the trailer axles. The sloped water tank also reduces slosh during highway travel because of the reduced surface area of the liquid, thus improving safety while towing.	YES	NO	Specify
Select Water Storage	A 200 gal. water tank (available with 230 gal. or 300 gal. vac tank) must be positioned at a fixed 45 degree angle under the vacuum tank, thus concentrating the weight over the trailer axles. The sloped water tank also reduces slosh during highway travel because of the reduced surface area of the liquid, thus improving safety while towing.	YES	NO	Specify
Water Storage	The 150 gal. or 200 gal. water tank must have a 3" valved water fill, a 1.5" water fill supply line with a 3" air gap , a 1.5" valved drain and a 3/4" hydrant spigot for hand washing.	YES	NO	Specify
Water Pump	A belt driven, clutch operated, tri-plex water pump operating at 4.7 gpm at 3,000 psi and having a low level switch positioned in the water tank which will disengage the clutch under a condition of low water level.	YES	NO	Specify
Water system	A water hose reel with locking mechanism with 50 feet of 3/8" hose	YES	NO	Specify
Water system	5' long water wand with a turbo pulse digging nozzle	YES	NO	Specify
Water system	3' long water wand with a wash down nozzle	YES	NO	Specify
Vacuum Excavator	The Vacuum excavation assembly must have a baked on powder coat paint.	YES	NO	Specify
Select Trailer	3,500 lb. GVWR rated trailer with a single 3,500lb torsion axle , electric brakes, 5 lug 15" wheels with 205/75R15 wheels. (for the 150 gal. vac tank)	YES	NO	Specify
Select Trailer	7,000 lb. GVWR rated trailer with a single 7,000lb torsion axle , electric brakes, 8 lug 16" wheels with 235/75R16 wheels. (for the 230 or 300 gal. vac tank)	YES	NO	Specify
Wiring and Lighting	All lights and wiring D.O.T. compliant	YES	NO	Specify
Hitch	2 5/16" ball hitch	YES	NO	Specify
Jack Stand	10K lb. 15" lift Bulldog drop leg jack	YES	NO	Specify
Tool Box	36"L x 20"D x 18"H diamond plate aluminum tool box	YES	NO	Specify
Trailer Paint	The trailer assembly must have a baked on powder coat paint.	YES	NO	Specify

VALVE EXERCISING / valve turner

Select Valve Exerciser Head	Hydraulic driven valve turner with a rated maximum torque of 500 ft.lb. of torque and a variable rpm range of 0-30 rpm and a rotation counting accuracy of .1 revolution.	YES	NO	Specify
Select Valve Exerciser Head	Hydraulic driven valve turner with a rated maximum torque of 1,000 ft.lb. of torque and a variable rpm range of 0-30 rpm and a rotation counting accuracy of .1 revolution.	YES	NO	Specify
Valve stem rotation speed	Valve stem rotation speed, direction of rotation and torque must be finger tip adjustable with a single joy stick.	YES	NO	Specify
Preset the maximum allowable torque	The operator must be able to set a maximum allowable torque by simply closing a ball valve, observing the maximum torque value on a display and then adjusting the maximum allowable torque with the turn of a single knob.	YES	NO	Specify
Valve Exerciser Head	The valve turner head must be able to tilt 30 degrees in order to couple to a utility valve stems which is not completely vertical.	YES	NO	Specify
Valve Exerciser Head	The valve turner head must be able to rotated up to 90 degrees in order to couple to a fire hydrant cap and to loosen and remove the cap.	YES	NO	Specify
Valve Exerciser Head	The valve turner head must be able to be easily disconnected from the boom arm and have at least 30 feet of quick connectable hydraulic hoses in order to use the valve turner as a hand held portable valve turner for reaching valves at a distance of up to 40 feet from the valve maintenance trailer	YES	NO	Specify
Valve Exerciser Head	The hydraulics must be quick coupled to the valve turner so that the hydraulics may be quickly disconnected from the valve turner and then be coupled to other hand held hydraulic tools such as a hydraulic driven submergible water pump.	YES	NO	Specify
Valve Exerciser Head	The valve turner hydraulic flow rate and pressure must be compatible with common commercial hydraulic hand tools. (8 gpm at 2,000 psi)	YES	NO	Specify
Valve Exerciser Head	A 5' to 9' telescoping valve key must be provider.	YES	NO	Specify
Valve Exerciser Head	The valve turner must be fitted with a female fire hydrant receiver so that it may quickly open a fire hydrant or exercise an in ground utility valve without adding or changing adapters.	YES	NO	Specify
Valve Exerciser Head	The valve turner must display the rotation count to the nearest tenth of a revolution and display the torque.	YES	NO	Specify
Valve Exerciser Head	The valve exerciser must have a baked on powder cost paint	YES	NO	Specify

Articulated Boom				
Articulated Boom arm	The articulated boom arm must have in excess of 320 degrees of horizontal travel .	YES	NO	Specify
Articulated Boom arm	The articulated boom arm must have in excess of 60 degrees of vertical travel in order to reach over obstructions and into ditches.	YES	NO	Specify
Articulated Boom arm	The articulated arm must have two elbows in order to reach around obstructions.	YES	NO	Specify
Select manual telescoping Boom arm	The articulated boom must have a telescoping arm for extending its reach and for ease of positioning a valve exerciser over a utility valve.	YES	NO	Specify
Select Powered telescoping Boom arm	The articulated boom must have a POWERED telescoping arm for extending its reach and for ease of positioning a valve exerciser over a utility valve.	YES	NO	Specify
Articulated Boom arm	The articulated boom must have a reach of 13 feet .	YES	NO	Specify
Select manual Articulated Boom arm	The articulated arm for vertical movement must have a weight adjustment counter balance. OR	YES	NO	Specify
Select Powered Articulated Boom arm	The articulated arm for vertical movement must have in combination, an air spring counter balance and a 12 volt powered linear actuator for adjusting the elevation of the valve turner.	YES	NO	Specify
Articulated Boom arm	The articulated arm, 12 volt powered linear actuator for adjusting the elevation of the valve turner must be capable of being operated by a user friendly switch located on the valve turner handle.	YES	NO	Specify
Select Remote Control Articulated Boom arm	The articulated arm, 12 volt powered linear actuator for adjusting the telescoping and elevation of the valve turner must be operated by a remote control.	YES	NO	Specify
Articulated Boom arm	The articulated boom assembly must have a baked on powder coat paint, and the elbows must be of the permanently lubricated, oil impregnated brass bushing design.	YES	NO	Specify

Electronic Data Gathering & Documentation				
Electronic Data Documentation	The data documentation electronics must include a digital display rated from -40F to +140F, an RFID reader, a GPS receiver, a utility valve identifier number entry, a reset button and an automated data gathering program which automatically collects and stores all valve turning data to a flash drive memory stick.	YES	NO	Specify
Electronic Data Documentation	Must provide a operators RFID tag for each operator trained to operate the valve turner.	YES	NO	Specify
Electronic Data Documentation	Must provide a supervisor RFID tag for each operator qualified to establish a maximum allowable valve turning torque.	YES	NO	Specify
Electronic Data Documentation	The Data Documentation electronics must include an RFID reader which will only allow a trained operator with his RFID tag to activate the system.	YES	NO	Specify
Electronic Data Documentation	When a valve is ready to be exercised, an operators RFID tag must activate the data documentation electronics which then automatically documents who the operator is and down loads from a built in GPS, the valve exercising date, starting time, latitude, longitude and elevation along with the torque required to rotate the valve and counts the valve rotations with an accuracy of 1 tenth of a rotation.	YES	NO	Specify
Electronic Data Documentation	The data documentation electronics must automatically store all data to a weather tight removable flash drive memory stick which may be used to transfer data to a central utility computer with a GIS program.	YES	NO	Specify
Electronic Data Documentation	The data documentation electronics must display the foot pounds of torque used to rotate a valve stem and count the number of rotations with an accuracy of one tenth of a rotation.	YES	NO	Specify
Electronic Data Documentation	The data documentation electronics must be Microsoft windows compatible and display the data in both Excel raw data form and in a use friendly graph form.	YES	NO	Specify

OPTIONS

Vacuum Hose Reel	a Vacuum hose reel with 100 feet of 3" vacuum hose	YES	NO	Specify
Hydraulic Hose Reel	A Hydraulic Hose Reel with 30 ft. of hydraulic hose and quick connects	YES	NO	Specify
Jack Hammer	A 70lb. Class hydraulic jack hammer with a user friendly jack hammer stand	YES	NO	Specify
Submersible Water pump	A 300 gpm hydraulic driven submersible water pump with a user friendly mounting stand. The pump shall have a S.S. vortex impeller, handle 2.5" solids and pump 300gpm of water at 30' of head	YES	NO	Specify
Fire hydrant tester	A fire hydrant flushing and pressure testing system to include 20 feet of 2.5" fire hose, a 2.5" pressure test gauge, and a water pressure dissipater with diffuser.	YES	NO	Specify
Remote Control	A powered remote control system for the water ON-OFF, vacuum ON-OFF, Hydraulics ON-OFF, Boom arm UP-DOWN & IN-OUT	YES	NO	Specify
Jetter Hose Reel	A powered jetter hose reel with 250 ft. Of .5" jetter hose & 4 Jetters	YES	NO	Specify
Water Heater	A gas fired 5 gpm at 180 degree hot water heater	YES	NO	Specify

