Draft Commander 3000®

Mobile Fire Pump Testing & Training Specifications

Municipal/County/Rural/Commercial/Industrial

CUSTOMIZED WITH YOUR COMPANY INFORMATION

MODEL NUMBER DC1911-3000 AT/AL/MC

Fully Loaded
Draft Commander 3000®

Weis Fire & Safety Equipment, LLC
Phone: (888) 689-9347
www.**DraftCommander**.com

The ***Draft Commander 3000®*** recycles over thousands of gallons of water in just a single fire pump test and while training fire fighters and fire pump engineers.

U.S. Patent No. 7,827,860 B2

Draft Commander 3000® Specifications

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STANDARD DRAFT COMMANDER 3000®

The ***Draft Commander 3000®*** performs a true pump test from draft creating a suction lift requiring the use of a primer as per NFPA 1911-2017 Edition, Section 21.7.7. This makes sure the engine and fire pump are performing with the correct horsepower and the fire pump is pumping the correct GPM. This service test is done by working from a suction lift throughout the test flowing clean clear water, as per NFPA 1911, up to 3000 GPM. The ***Draft Commander 3000®*** offers the fire department a cost-effective means of complying with annual pump test requirements as defined by ISO and the National Fire Protection Association (NFPA 1911 - 2017 Edition). By doing these tests it helps to receive maximum credit points to help maintain the lowest insurance rates possible and that the fire apparatus is performing as intended for the safety of firefighters and protection of property. The ***Draft Commander 3000®*** offers many other functions besides fire pump service testing, such as training operations of the fire engine pump and different revolutions of flowing water, while using the same water over and over, while training Fire Pump Engineers and Firefighters.

Custom Designed Heavy Duty D.O.T. Rated Transporter

- The aluminum transporter is specially designed and manufactured only for the *Draft Commander 3000®* to maintain a low profile for minimal wind resistance, weight distribution, and safety.
- Transporter to have an 82 ½" width heavy duty main frame bed rail with a ½" extruded mainframe bed railing.
- The front left and right of the transporter to be equipped with two large storage compartments manufactured of heavy-duty diamond plate aluminum with an adjustable tracking shelf in each compartment for additional storage of equipment. Each compartment to be 30" wide by 30" deep by 55" high with a door opening of 26½" wide by 53" high. Each door to be equipped with a three-point latch and lock.
- There is to be a minimum of 24" between the front of the reservoir and the front left and right storage compartments. This is to gain access to the front cooling ventilator and for mounting the Spare Tire.
- Transporter to have two (2) 5,200 lb. rubber torsion axles with 9,900 GVWR equipped with electric brakes.
- One (1) set of mud flaps to be installed on transporter.
- Transporter to be built with four (4) 7000 lb. capacity screw type jacks to support transporter when the reservoir is filled with water. Jacks to be located: two (2) on left side and two (2) on right side.
- Transporter to have one (1) 10,000 lb. tongue jack.
- Equipped with ST225/75R15 Load Range E 10 ply radial transporter tires. Rims to be Aluminum 15" 6-bolt pattern.
- ICC Lights, work lights, stop, and turn signal lights all to be LED.
- Transporter to have one (1) rear crossbar 15" high above the reservoir with stop, tail, and turn signal lights. All lights to be LED.
- 3M reflective and DOT white and red reflective tape to be installed on the front, rear, and both sides of transporter.
- Floor of transporter to be 1" extruded tongue and groove aluminum and reinforced by 2" by 3" by 3/16" aluminum tubing.
- One (1) standard RV 7 pin electrical connector to be installed on transporter.
- Fenders of transporter to be 3/16" aluminum tread plate and equipped with steps to enter the smooth bore flow tip compartments on top of reservoir.
- Overall weight, without water, does not exceed 6,500 lbs.
- Overall height not to exceed 87 inches; over all width not to exceed 102 inches; over all length not to exceed 28 feet (336 inches).
- Hitch to be a 2 5/16" adjustable ball coupled with a steel reinforcement hitch. Pintel hitch optional.

Draft Commander 3000® Reservoir – 3000 Gallon Capacity

- Reservoir to be manufactured of heavy-duty poly throughout the *Draft Commander 3000®,* externally and internally, which is to include the bottom, sides, top, and suction and discharge compartments.
- Reservoir to be "T" shaped and attached and mounted to the transporter so it cannot shift but will flex with the transporter during transport. NEVER transport the *Draft Commander 3000®* with water in the reservoir – reservoir should ALWAYS be empty during transport.
- The drafting pit section of the reservoir has four (4) anti-swirl plates and a water temperature gauge to monitor water temperature.
- The top of the *Draft Commander 3000®* reservoir to be painted with two (2) coats of white polyurethane paint that is UV rated to enhance the cooling system.
- Rear of reservoir to be covered in a UV rated Red and Yellow Reflective Chevron that offers exceptional visibility.
- One (1) UV rated vinyl net mesh cover to be installed on top of open area of reservoir tank to keep reservoir clean. Cover to be a white net type material to remove air and heat from reservoir with twist disconnects to hold down net and for ease of removal.
- The water reservoir is to have a section that is an independent suction drafting pit that receives water flow through a special designed integrated section of the reservoir. This removes cavitation/disturbance and air from the water that is entering the reservoir with high volume and pressure being pumped out of the drafting pit section of the apparatus being tested. Therefore, when the water reaches the draft pit section of the reservoir, it will maintain the correct water depth preventing water disturbance and air swirls that can cause the apparatus to lose prime.
- The right and left of the reservoir to be laminated with an oraject 3951 RA 2-mil gloss white injet vinyl and UV rated premium cast PIC gloss. This vinyl offers the highest level of conformability which offers superior level of UV protection. Pointed in the laminate is the *Draft Commander 3000®* logo.
- The ventilator located on the top front of the reservoir is to be 27" long by 14" wide by 17" high and is to be manufactured of blue polypropylene plastic. The vent lid is to be equipped with stainless steel rod hinges and devices to hold vent door open for ventilation and cooling the water when the *Draft Commander 3000®* is in use. Vent lid to have a stainless-steel lock for when transporting and/or not in use.
- Reservoir to have an integrated water-cooling system to help maintain a stable water temperature with two (2) 2½" inlets and one (1) 4" discharge to discharge warm water from reservoir.
- One (1) 4" warm water discharge to be located at the front right side of reservoir and controlled with a 2½" NST gate valve with male threads and capped.
- All internal anti-water flow cavitation compartment sections to be made of ½" or larger heavy-duty poly and supported and welded to withstand large volumes of water that flow to the suction drafting pit compartment.
- Reservoir clean out sump drain to be equipped with one (1) 2½" drain and controlled with a 2½" gate valve that discharges at the right rear of reservoir.
- Two (2) water level site windows to be built into each rear side of the reservoir.

Drafting Tubes and Drafting Swivels

- Two (2) 6" drafting tubes are located in the draft pit section of *Draft Commander 3000®* reservoir and are equipped with specially designed aluminum powder coated heavy duty 45° 6" 360° elbow swivels.
- On top of the 360° elbow swivels a suction vacuum breaker is to be installed and to be controlled at the rear of the transporter on each elbow.
- Swivels are to be equipped with grease zerks for maintenance purposes.
- Swivels are to be designed so an apparatus can be positioned at the left or right side of the *Draft Commander 3000®* when pump testing or conducting training exercises.

17ft. Hard Suction Hoses

- Two (2) 17 ft. sections of 6" flexible hard suction hose to be pre-connected to the drafting tubes and are to be stored on top of the *Draft Commander 3000*® reservoir. One end to be attached to the 360° elbow swivel and the other end to be a 6" NST long handle swivel female.
- Hard suction hoses are to be clear to allow greater visibility of the water and making sure there is no air in the suction tubes during testing.
- Two (2) hard suction hose trays are to be mounted at left and right front of reservoir on top of the front aluminum compartments. Trays to be 46" length by 8½" wide by 4½" deep and manufactured of 1/8" aluminum plate. Trays to have hold down straps to secure the hard suction hose when not in use.
- Hard suction hose support rails to be installed on the top left and right of the *Draft Commander 3000*® reservoir. The hard suction hose support rails are to be 15" in height and manufactured of 2" aluminum tubular radius corners. These are to support the hard suction hoses when pump testing from the right or left of the transporter.
- Two (2) Hard Suction Hose Support Bars to be mounted on each side of the reservoir: (1) on the left side and (1) on the right side. Support bars are to fold out to a 45° angle to help distribute the weight of the water and hard suction hose while pump testing.

10ft. Hard Suction Hoses

- Two (2) 10 ft. sections of 6" hard suction hose to be stored on each side of the unit between the fender wells and the reservoir. Hard suction hoses are to be clear to allow greater visibility of the water and making sure there is no air in the suction tubes during testing.
- Couplings on the hard suction hoses are to be 6" NST long handle swivel female at one end and 6" RL Male with NST threads on the other end.

Water Temperature Gauge

- One (1) 3" water temperature gauge with 12" stem that reads 0-250° F to be installed in the suction drafting pit compartment at the left rear of the reservoir.

Smooth Bore Tips and Tip Compartments

- Two (2) heavy duty smooth bore flow tip compartments with dimensions of 20" wide by 7" high by 7" depth to be located on top of reservoir in front of each pitot compartment to hold all flow tips: one (1) on the left side and one (1) on the right side. The left side compartment to be color coded YELLOW and right-side compartment to be color coded RED.
- Each smooth bore flow tip has an individual labeled storage space inside each compartment.
- Compartment doors to be equipped with quick release hold downs and chrome grab handles.
- Two (2) sets of flow tips to include one of each: 1", 1¼", 1½", 1¾", 2", 2¼", and 2½". One set of flow tips are to be stored inside each of the flow tip compartments.

Rear Storage Compartment

- One (1) rear storage compartment to be mounted on the left rear of the transporter and is to be 30" wide by 29" deep by 44" high with a door opening of 23½" wide by 38" high.
- Compartment door to be lockable and equipped with a three-point latch.
- Compartment to be manufactured of heavy-duty diamond plate aluminum.

Powder Coated Aluminum Inlet Manifolds for Flowing Water and Pitot GPM Readings

- Two (2) 4" manifolds to be installed on the rear of the *Draft Commander 3000*® reservoir and attached to the tubes that feed to the pitot compartments: one (1) on the left side and one (1) on the right side. Left manifold is to be color coded YELLOW and the right manifold to be color coded RED.
- Each manifold to be equipped with 5" Storz male and caped with three (3) 45º 2½" swivels. All NST threads are standard.
- Each inlet manifold to be equipped with a quarter turn ball valve to drain the manifold.
- Two (2) large pitot compartments with hinged poly doors for changing out smooth bore flow tips are to be located on top of the *Draft Commander 3000*® reservoir behind each smooth bore flow tip compartment. The left side compartment door to be color coded YELLOW and right-side compartment door to be color coded RED.
- Each pitot compartment to be equipped with quick disconnects so that pitot tubes can be attached to monitoring station.
- Each pitot compartment to be equipped with splash guards and defuser tips.
- Two (2) pitot tubes to be installed: one (1) in the left side flow station compartment and one (1) in the right-side flow station compartment.
- Two (2) NFPA Pressure Relief Valves to be installed on each rear manifold. The NFPA Pressure Relief Valves are to regulate pressure exceeding 135 PSI. They are to begin dripping water at 120 PSI and then shift into a full discharge at 135 PSI.

Draft Commander Master Monitor Station

- One (1) Master Monitor Station to be standard on all *Draft Commander 3000*® units. Monitor dimensions are to be 20" wide by 18" tall by 6" depth.
- One (1) aluminum telescoping tripod to be attached to the base of the aluminum monitoring station.
- Master Monitor Station to be equipped with two (2) 3½" pitot gauges 0-160 PSI, one (1) 3½" vacuum gauge 0-30 inches, and one (1) 3½" pressure gauge 0-400 PSI. Each gauge is to be equipped with quick disconnects. All gauges are to be mounted in the monitoring station and labeled. All pressure gauges to be glycerin filled and "Kem-X" freeze and clog proof. All gauges are to be calibrated and come with a calibration certificate and serial number. *KPA reading gauges are available upon request.*
- Pitot gauges to have color coded bezels: left side YELLOW and right-side RED.
- The pitot gauge is to be equipped with two (2) 30 ft. high pressure BLUE hoses: one (1) for each pitot with quick disconnects. Each fitting is to be color coded: left pitot hook-up to be YELLOW and right pitot hook-up to be RED.
- Master Monitor comes with two (2) 15 ft. high pressure **BLACK** hoses for the UL vacuum and pressure plugs on the apparatus. One (1) end of hose to be equipped with a quick disconnect and the other end of the hose to be equipped with a threaded swivel male to attach to the UL ports on the apparatus.
- One (1) large 5½" wide by 13" tall converter chart is to be installed on the back side of the pump test station box showing size of tips, flow gallons per minute, and PSI reading for each tip used.
- One (1) large 20" wide by 18" high fire pump test flow chart is to be installed on the front side of monitor station. The chart is to illustrate and give instructions for pressure settings, pitot readings, and equipment needed to perform a pump service test on 500-2,500 GPM apparatus from draft.

Additional Supplied Equipment

- Six (6) 50 ft. sections of 3" fire hose with 2½" couplings. Three (3) Red Hoses and three (3) Yellow Hoses. The fire hoses are to be 600# test and double jacket. Hoses to be stored in rear storage compartments.
- One (1) 6" male by 5" female NST thread light weight adapter; One (1) 6" male by 4½" female NST thread light weight adapter; One (1) 6" male by 4" female NST thread light weight adapter; One (1) 5" Storz by 2½" swivel female adapter.
- One (1) heavy duty rubber mallet.
- One (1) 9" T-Handled Allen Wrench used to change out pitot blade.
- Two (2) spanner wrenches and one (1) hydrant wrench with holder.
- One (1) 6" Waterway 30˚ Elbow specially designed for the *Draft Commander 3000*® and is to be used to take and relieve strain from the hard suction hose and coupling when pump testing and to help provide a better water flow.
- One (1) Mounted Spare Tire with Custom UV Rated Cover for environmental protection to be mounted on front of trailer.
- One (1) *Draft Commander 3000*® Owner's/Operation/Training Manual with a Draft Commander Training Video to be provided at time of delivery
- Note: *All threads are standard NST threads. Other types of threads are optional and available upon request.*

Additional Information

- The *Draft Commander 3000*® is designed to test fire pumps up to 3,000 GPM. The unit is also designed to pump test two fire apparatus trucks simultaneously up to 1500 GPM each. When pump testing two trucks, the Optional Draft Commander Mini Monitor Station is needed.
- A list of *Draft Commander 3000*® *Mobile Fire Pump Testing & Training* owners to be provided at request of customer.
- The *Draft Commander 3000*® *Mobile Fire Pump Testing & Training* unit has been in service and field tested for over fifteen years.
- When the Optional Handline Nozzle Tester is purchased, one (1) 4" discharge tube will be installed through the left rear of the reservoir. The handline nozzle frame is to be permanently mounted on tube for when flowing 50-600 GPM nozzles and for when testing handline fire nozzles for GPM and PSI accuracy.

Optional Equipment Available for Purchase

Draft Commander Custom Designed Fire Hose Tester

- Designed to safety test fire hoses up to 6" in diameter as per NFPA 1962 recommendations. Custom Designed Hose Tester to be preconnected to the reservoir and permanently mounted on the right rear of the transporter.
- Gas driven with 5.5 (163 cc) Honda Motor.
- Equipped with a 2½" swivel inlet to aid the ability to quickly fill the testing fire hose through the large heavy-duty stainless-steel manifold with four (4) independently ¼ turn controlled stainless steel ball valves.
- Each 1½" NST male testing outlet to be equipped with 1½" female by 2½" male adaptors.
- The discharge manifold to be equipped with a stainless steel, liquid filled, 0-600 lb. master gauge.
- Each of the four independently ¼ turn controlled stainless steel ball valves to be equipped with a 0-600 lb. gauge.
- One (1) 1½" male NST cap with a ¼ turn bleeder valve; One (1) 2½" male NST cap with a ¼ turn bleeder valve; One (1) 5" Storz with a ¼ turn bleeder valve.
- All outlet and inlets to be independently controlled with ¼ turn ball valves.

Draft Commander Training Kit for Training Firefighters and Fire Pump Engineers

- One (1) Style 9900 Akron Pocket FireCalc for calculating different flow rates, friction loss, engine pressure, reaction force, and much more.
- One (1) DC15NT 1½" shut off pistol grip nozzle with 15/16" smooth bore insert flowing 185 GPM at 50 PSI at tip of nozzle.
- One (1) DC15NT 1½" shut off pistol grip nozzle with 7/8" smooth bore insert flowing 200 GPM at 75 PSI at tip of nozzle.
- Two (2) DC15TG300 1½" Inline Pressure Gauges with 1½" female swivel NST by 1½" male NST threads for the above two nozzles.
- One (1) DC25NT 2½" master stream shut off nozzle with 1 1/8" smooth bore insert flowing 376 GPM at 100 PSI at tip of nozzle.
- One (1) DC25TG200 2½" Inline Pressure Gauge with 2½" female swivel NST by 2½" male NST for the above 2½" master stream shut off nozzle.
- Three (3) brass 2½" NST male by 1½" NST female with O-ring adaptors for adapting nozzles to the Draft Commander Manifolds.
- One (1) 5" Storz by 2½" swivel female adaptor.
- Two (2) 10ft. sections of 1¾" DJ 600lb test fire hose coupled with light weight 1½" couplings with NST threads female swivel RL on one end and male on the other end.

Additional Optional Equipment

- Draft Commander Gauge Test Kit used to verify Master Pitot, Pressure, and Vacuum Gauges are accurate and calibrated. Comes complete with (1) Pitot Gauge 0-160 PSI, (1) Pressure Gauge 0-400 PSI, (1) Vacuum Gauge 0-30", and all the necessary fittings required to conduct testing. Can also be used on Apparatus Master Gauge Panel.
- 6" Waterway 30˚ Elbow specially designed for the *Draft Commander 3000*® and is to be used to take and relieve strain from the hard suction hose and coupling when pump testing and to help provide a better water flow. *One comes standard on unit.*
- Draft Commander Full Size Custom Designed Cover that is UV rated with double reinforcements on the corners to help prevent wear and tear. Adjustable straps are located at the bottom to make for a tight or loose fit. Highly recommended when storing the *Draft Commander 3000*®, inside or outside, for environmental protection.
- Draft Commander Fire Hydrant Pump is permanently mounted at front left of reservoir and is designed to simulate training firefighters and fire pump engineers pumping from a hydrant with residual pressure/GPM.
- Draft Commander Mini Monitor Station used when pump testing two fire apparatus simultaneously.
- 6" Drafting Tube with 90˚ elbow equipped with 6" swivel female NST threads. Also known as the 3rd Suction. The drafting tube is permanently mounted to the top of the *Draft Commander 3000*® and used only when needed to perform pump testing on 3500 GPM to 4000 GPM fire apparatus.
- Draft Commander Handline Nozzle Tester designed to test 1½" to 2½" handline fire nozzles with ranges of 50-600 GPM as recommended by NFPA 1962 Standards. The handline nozzle tester frame is permanently mounted to an additional 4" internal discharge line at the rear of the reservoir. Comes with a Sho-Flow Meter or McCrometer, In-Line Gauge, Safety Strap, and a 2½" by 1½" Reducer that are stored in front storage compartment.
- Draft Commander Hard Suction Hose Vacuum Tester to be used when testing the vacuum retention and structural integrity of hard suction hose.
- The Draft Commander Receiver is permanently mounted on rear of reservoir and is designed to recycle millions of gallons of water during training exercises when training fire pump engineers and firefighters.
- Draft Commander 6" Wet Hydrant equipped with a 6" Suction Valve to be used to simulate pumping from a fire hydrant. A primer is not needed.

Optional Equipment

The purchase of optional equipment will give you the capability to do so much more!

Draft Commander Gauge Test Kit

Available to test apparatus and Draft Commander Master Monitor gauges for accuracy. All gauges come with a calibration certificate with serial numbers.
Mod.# TPMVG-14

Draft Commander Mini Monitor Station

Allows you to perform a pump test on two trucks simultaneously. The station comes complete with vacuum, pressure, and pitot gauges. Gauges come with serial numbers & calibration certificates.
Mod.# DC-MMS

Draft Commander Fire Hose Tester

Designed to safety test fire hoses up to 6" in diameter per NFPA 1962, and is mounted on the rear of the Draft Commander transporter.
Mod.# DC-FHT

6" Suction Drafting Tube (3rd Suction)

With the added 6" suction drafting tube, you can increase your pump test up to 4000 plus GPM. The draft tube is permanently mounted into the reservoir on the Draft Commander transporter.
Mod.# DC-3SDT

True 6" Waterway 30° Elbow Specially Designed for Draft Commander

The 6" 30° Elbow is used to take and relieve strain from the hose and couplings and provides a better water flow.
Mod. # DC-6-Elbow-30

Draft Commander Handline Nozzle Tester

The Draft Commander Handline Nozzle Tester is designed to accurately test the flow and pressure of handline fire nozzles with ranges 30-500 GPM per NFPA 1962 Standards.
Mod.# DC-HLNT-SS-1962

Draft Commander Full Size Custom Cover

The Draft Commander Custom Designed Cover is UV rated and has double reinforcements on the corners to help prevent wear and tear. It is equipped with adjustable straps at the bottom.
Mod.# DC-CC

Portable Vacuum Tester

Designed to test the vacuum retention and structural integrity of hard suction hose per NFPA 1962. It comes with several couplings for compatibility with different sizes of hard suction hose.
Mod.# DC-HSHVT

Adhesive Pump Service Test Placards

Adhesive Custom Draft Commander Fire Service Test Placards show the last time a fire apparatus was pump service tested as per latest NFPA 1911 standards.
Mod.# DC-PTP

Draft Commander Receiver

The Draft Commander Receiver can be installed on a new Draft Commander 3000® or as a retrofit on an existing model. It trains fire pump engineers & firefighters the same as actual firefighting, while recycling millions of gallons of water during training.
Mod. # DC-RECEIVER

Fire Hydrant Pump

The Fire Hydrant Pump is designed to simulate training firefighters & fire pump engineers pumping from a hydrant with residual pressure/GPM.
Mod.# DC-FHP

Draft Commander 3000® Trainer

The Draft Commander 3000® Trainer for Fire Pump Engineer and Firefighter Training performs in the same manner as our Standard Draft Commander 3000®, but also gives you the capability to enhance your department's training.
Mod. # DC1911-3000 TRAINER

Custom Hose Roller

Rolls 1 1/2" - 3" fire hose. Roll hose from the back of your Draft Commander with the Trailer Hitch Mounting Bracket - NOT INCLUDED
Proudly Made in the USA
Mod.# DC-MC-HR

Call for pricing & availability: 888-689-9347
www.draftcommander.com