



## Draft Commander 3000®

*Mobile Fire Pump Testing & Training Specifications  
Municipal/County/Rural/Commercial/Industrial*

**MODEL NUMBER DC1911-3000 AT/AL/MC**



# Draft Commander 3000® Specifications

## MODEL NUMBER DC1911-3000 AT/AL/MC

The *Draft Commander 3000®* performs a true pump test from draft creating a suction lift requiring the use of a primer as per NFPA 1911-2012 Edition, Section 18.7.5.1. 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 using flowing clean clear water, as per NFPA-1911, up to 3000 GPM. Also, pump test two fire apparatus trucks simultaneously up to 1500 GPM each with the means of testing fire trucks at desired location, at any time, during various seasons of the year. 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 2012 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 all while training Fire Pump Engineers and Firefighters.

### Purpose Specific Engineered Aluminum Heavy Duty DOT Rated Transporter:

- The aluminum transporter is specially designed and manufactured only for the *Draft Commander 3000®* in order to maintain a low profile for minimal wind resistance, weight distribution, and safety.
- Transporter has 80” width heavy duty main frame bed rail with a ½” extruded mainframe bed railing.
- The front left and right of the transporter is 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 is 30” wide by 30” deep by 55” high and has a door opening of 30” wide by 56” high. Each door is to be equipped with a three point hatch. The front of each compartment is designed to act as a stone/gravel shield to the front of *Draft Commander 3000®* when being towed.
- There is to be a minimum of 24” between the front left and right compartments and the front of the *Draft Commander 3000®* reservoir. This space is for mounting an optional spare tire and to gain access to the front cooling ventilator.
- Two (2) 7,000 lbs rubber torsion axles with 15,400 GVWR equipped with electric brakes.
- Axles are mounted to 2” by 3” by ¼” steel tube axle subframe.
- Aluminum transporter designed and engineered for distribution of the weight of the *Draft Commander 3000®* and its components.
- One (1) set of mud flaps to be installed on transporter.
- Equipped with (4) four 7000 lb. capacity screw type jacks to support transporter when the reservoir is filled with water. Jacks are located: two (2) on left side and two (2) on right side.
- One (1) 12,000 lb. tongue jack.
- Equipped with ST235/80R16E 10 ply radial transporter tires, ICC Lights, work lights, stop, and turn signal lights. All lights to be LED. Rims to be aluminum 16” 8-bolt pattern.
- Equipped with a crossbar at rear 15” high above the *Draft Commander 3000®* with stop, tail, and turn signal lights. All lights to be LED.
- 3M reflective and DOT white/red reflective tape on front, rear, and sides of unit.
- Floor of transporter to be 2” extruded tongue and groove aluminum and reinforced by 2” by 4” by ½” aluminum tubing. *Note: Wood or steel flooring is not acceptable.*
- Folding rear step and work area of transporter to be 16” deep by 77” wide.
- Standard RV 7 pin electrical connector.

- Fenders of transporter to be 3/16 aluminum tread plate and equipped with steps for entering the pitot nozzle smooth bore tip compartments.
- OAW (less water) not to exceed 6,500 lbs.
- Over all height not to exceed 70 inches (low profile).
- Over all width not to exceed 102".
- Overall length not to exceed 27 feet.
- Hitch to be a 2 5/16 adjustable ball coupled with steel reinforcement hitch. Pintel hitch optional.

**3000 Gallons Capacity Draft Commander 3000® Reservoir:**

- Reservoir is manufactured of heavy duty poly throughout the *Draft Commander 3000®* externally and internally which includes bottom, sides, top, and suction and discharge compartments.
- Reservoir is "T" shaped and attached to the transporter and mounted so it cannot shift and will flex with the transporter.
- The drafting pit section of the reservoir to have four (4) anti-swirl plates and a water temperature gauge to monitor water temperature.
- The top, front, and rear 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.
- One (1) UV rated vinyl net cover for top of open area of reservoir tank to keep reservoir clean. Cover to be white and to be net type material to remove air and heat from reservoir with twist disconnects to hold down net and for ease of removal.
- The mobile drafting water reservoir to have a section which is an independent suction drafting pit in the reservoir, and receives water flow through a special designed integrated section of the reservoir which removes cavitations/disturbance and air from the water, so when water is entering the reservoir from high volume and pressure of water being pumped out of the drafting pit section from the apparatus being tested. Thus when the water reaches the draft pit section it will maintain the correct water depth preventing water disturbance and air swirls causing the apparatus to loose prime.
- The right and left of the *Draft Commander 3000®* to be laminated with oraject 3951 RA 3-mil gloss white injet vinyl UV rated premium cast PIC gloss cold over laminate highest level of conformability which offers superior level of UV protection. Pointed in the laminate is the Draft Commander 3000® logo.  
*Note: Lettering and/or logos can be added upon request to each side.*
- Ventilators are located at the front and rear center of the reservoir. Front ventilator is 27" long x 14" wide x 17" high. Rear ventilator is 27" x 14" x 7½". Both are manufactured of Blue Polypropylene Plastic.
- Ventilators are to be equipped with full length Blue Polypropylene Plastic doors and equipped with Polypropylene Rod Hinges and devices to hold doors open for ventilation.
- Ventilator doors to be equipped with a close fastener for when transporting.
- 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.
- The 4" warm water discharge is located at 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 equipped with 2½" drain and controlled with a 2½" gate valve and to discharge at right rear of transporter.
- The mobile fire pump testing and training unit to be designed to test fire pumps up to 3,000 GPM plus. The unit is to also be designed to fire pump test two fire apparatus trucks simultaneously up to 1500 GPM each. When pump testing two units, the optional Draft Commander Mini Monitor Station is needed.
- One (1) liquid site water gauge installed at rear of reservoir drafting pit and one (1) at front of discharge receiving area.
- Lifetime warranty on tank reservoir in the US only.

### Drafting Tubes:

- Two (2) 6" drafting tubes located in draft pit section of *Draft Commander 3000*® reservoir and equipped with special designed aluminum powder coated heavy duty 45° 6" 360° elbow swivels.  
*Note: Swivel and dry hydrant elbows manufactured of PVC will not be accepted.*
- The swivels are equipped with grease zerks for maintenance purposes.
- The swivels are designed so you can position the apparatus at the rear, left, or right side.

### Special Designed 45° Heavy Duty Powder Coated Drafting Swivels:

- On top of 360° elbow swivels a suction vacuum breaker to be installed and to be controlled at the rear of the transporter on each elbow.

### Hard Suction Hose:

- Two (2) 17 ft. of 6" flexible hard suction hose preconnected to the drafting tubes and stored on top of the *Draft Commander 3000*®. One end attached to the 360° elbow swivel and the other end equipped with 6" long handle swivel NST female.
- Two (2) hard suction trays to have hold down straps to secure the hard suction hose.
- The trays to be made of 1/8" aluminum plate 46" length by 8½" wide by 4½" depth and mounted on top of each left and right front storage compartments.
- Hard suction hose is clear which allows greater visibility of the water and making sure there is no air in the suction tubes.
- Hard suction hose supports are to be installed from the left front of the the *Draft Commander 3000*® reservoir and wrap around the back of the reservoir back up to the right front of the reservoir. The hose supports are 15" in height and are manufactured of 2" aluminum tubular radius corners. This is to support the hard suction hose when fire pump testing from the right, left, and rear of the transporter.
- Mounted on rear of transporter is to be a cross over support bar that is inaugurated on the left and right of the unit to help support the hard suction hose. Cross over bar is to be equipped with stop, tail, and turn signal lights, along with two left and right work lights. All lights are LED.
- Two Suction Hose Support Bars, (1) on the left side and (1) on the right side of the *Draft Commander 3000*® reservoir. These are to fold out to 45° angle distributing the weight of the water and hard suction hose while performing a Fire Pump Service Test.

### Extra Hard Suction Hoses:

- Two (2) 10 ft. of 6" flexible hard suction hose. The hose is clear which allows greater visibility of the water.
- Couplings on the hard suction hose: one (1) 6" swivel female L.H. N.S.T. thread at one end and 6" male L.H. N.S.T. threads on the other end.
- Hard suction hoses to be stored one on each side of the tank between the fender wells and the tank body.

### Mobile Pump Testing & Training Unit Equipped With:

- One (1) 3" water temperature gauge showing 0-200 degrees installed in the suction drafting pit compartment of the reservoir of the mobile test unit left rear.

### Smooth Bore Tip Compartments:

- Two (2) heavy duty smooth bore tip compartments located in front of pitot compartments to hold all flow tips.(1) on left side and (1) on right side of unit with dimensions of 20" wide by 7" high by 7" depth.
- Each nozzle tip to have individual compartments labeled with the size of tips.
- Doors to be equipped with quick release hold downs.

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

- Two (2) 4” manifolds: one on each side at rear of *Draft Commander 3000*® reservoir and attached to the tubes that feed to the pitot compartments. Left manifold color coded **YELLOW** and the right manifold color coded **RED**.
- Each manifold to be equipped with 5” storz male and capped with three (3) 45° 2½” swivels. All NST threads are standard.
- Each inlet manifold to be equipped with quarter turn ball valve to drain the manifold.
- Two (2) large pitot compartments with hinged poly door for changing various nozzles. Left pitot compartment door is color coded **YELLOW** and the right pitot compartment door is color coded **RED**.
- Pitot compartments to be equipped with splash guard and defuser tip.
- Each pitot compartment to have chrome grab handle.
- Pitot compartments to be equipped with quick disconnects so pitot tube can be attached to monitoring station.
- Pitot tubes to be installed in the flow station compartments, one each on left and right side of reservoir.
- One (1) set of flow tips 1”, 1¼”, 1½”, 1¾”, 2”, 2¼”, and 2½” are to be mounted inside each smooth bore tip compartment.

### Mobile Pump Testing & Training Monitor Station:

- Monitor station dimensions are 20” wide by 18” tall by 6” depth.
- One (1) aluminum telescoping tri-pod attached to the aluminum monitoring station equipped with two (2) 3½” pitot gauges 0-1100 KPA/0-160 PSI, one (1) 3½” vacuum apparatus gauge 0-30 inches, and one (1) 3½” apparatus pressure gauge 0-2800 KPA/0-400 PSI
- Each gauge is equipped with quick disconnects.
- All gauges to be calibrated. All pressure gauges to be glycerin filled and “Kem-X” freeze and clog proof. Calibration Certificates will be furnished with each gauge.
- Pitot gauges have color coded bezels, left side **YELLOW** and right side **RED**.
- The pitot gauge is equipped with two (2) 30 ft. high pressure **BLUE** hoses – one (1) for each pitot with quick disconnects. Each fitting is color coded. **YELLOW** for the left pitot hook-up and **RED** for the right pitot hook-up.
- Two (2) 10 ft. high pressure **BLACK** hoses for the UL vacuum and pressure plugs on the apparatus. One (1) end equipped with quick disconnects and the other end threaded swivel male to attach to the UL ports on the apparatus.
- All gauges are mounted in the monitoring station and labeled. A large 5½” wide by 13” tall smooth board converter chart shall be etched on the face of the pump test station showing size of tips, flow gallons per minute, and PSI reading for each tip used.
- One (1) etched fire pump test flow chart 20” wide by 18” high. Chart is to illustrate and give instructions for pressure settings, pitot readings, and equipment needed to perform a service test on 500-2,500 GPM from draft. Located on front of monitor station.

### Hose Storage Compartment and Misc. Equipment:

- One (1) large compartment 65” wide by 24” tall by 28” depth with “V” type bottom to store fire hose used for testing the fire apparatus. Large enough to store six (6) sections of 3” fire hose in 50 ft. sections of coiled hose, spanner wrench, mallet, tools, etc.
- Compartment to be ventilated and equipped with aluminum tread plate door with pneumatic openers, stainless steel hinges, and stainless steel handles.
- Compartment to be made of ½” aluminum treaded plate.
- Each door to be equipped with chrome lift handles and equipped with magnetic hold downs.

**Additional Supplied Equipment:**

- Six (6) 50 ft. sections of 3” fire hose with 2½” couplings. Hose to be 600# test and double jacket. Three (3) Red Hoses and three (3) Yellow Hoses.
- 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) heavy duty rubber mallet.
- One (1) 9” T-Handled Allen Wrench used to change out pitot blade.
- Two (2) spanner wrenches and hydrant wrench with holder.
- One (1) 5” Storz by 2½” swivel female adapter.
- Note: All threads are standard NST threads. Other type of threads are optional and available upon request.

**Additional Information:**

- A list of 35 or more mobile pump testing unit users will be provided as per the *Draft Commander 3000®* Mobile Fire Pump Testing & Training Specifications.
- Operation and Training Manual, PowerPoint, and Draft Commander Video, will be provided upon delivery of the mobile pump testing unit.
- The mobile pump testing and training unit has been in service and field tested for over ten years.
- Descriptive information such as literature and brochures of these specifications to be furnished.
- Hands on personnel training and operations to be included in purchase of unit.



## Recommended Optional Equipment

### Draft Commander Training Kit for Training Firefighters and Fire Pump Engineers

- One (1) each Style 9900 Akron Pocket FireCalc for calculating different flow rates, friction lose, 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 1½” male NST for the above 2½” master stream shut off nozzle.
- Three (3) brass 2½” NST male by 1½” NST female with O-ring adaptor 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.
  - **NOTE:** Hoses are to be used if training department desires. If attaching training nozzles to 1¾” fire hose from the Fire Apparatus, install the 10ft. sections to tip of the training nozzle shut off to the Draft Commander Manifold. This will give Firefighters more room to work with and more nozzle discharge reaction.

### Draft Commander Fire Hose Tester / Pressure Washer

- Gas driven with 5.5 (163 cc) Honda Motor.
- Designed to safety test fire hoses up to 6” in diameter. Equipped with a 2½” swivel inlet which aids the ability to quickly fill the testing hose and bleed the fire hoses through the large 1½” heavy duty manifold with four 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, gauge that ensures accurate readings.
- One (1) 1½” male NST cap w 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.
- The fire hose tester/pressure washer to be mounted at the right rear of the reservoir and preconnected to the *Draft Commander 3000*® water source for testing fire hose and mounted so it can be removed to operate independently.

### Additional Recommended Optional Equipment:

- One (1) Mini Draft Commander 3000® Mobile Fire Pump Testing & Training Monitor Station, model number MW1911-3000. Needed to perform pump testing simultaneously on two fire apparatus.
- Draft Commander Gauge Testing Kit used to verify the Draft Commander Monitor 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 test.
- 6” drafting tube with 90° elbow equipped with 6” swivel female NST threads. The drafting tube is permanently mounted to the *Draft Commander 3000*® and used only when needed. Needed to perform pump testing on 3500 GPM to 4000 GPM fire apparatus.
- Mounted Spare Tire on trailer with a Custom Designed Cover that is UV rated for environmental protection.
- *Draft Commander 3000*® 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. Cover is recommended to use when storing the *Draft Commander 3000*® for environmental protection.
- *Draft Commander 3000*® 6” Wet Hydrant equipped with a 6” Suction Valve to be used to simulate as pumping from a fire hydrant. A primer is not needed.

# Draft Commander 3000®

## Optional Equipment



The **Draft Commander Fire Nozzle Testing Appliance for GPM and PSI Accuracy** allows you to service test a variety of fire nozzles to ensure they meet their required flow standards per NFPA 1962-2013 Ed. - Ch. 5

*Mod.# DC-FNTA-1962*



The **Draft Commander Training Kit** is available for training your Fire Pump Engineers and Firefighters. It includes training nozzles, gauges, adapters, and fire hoses necessary to properly train your department.

*Mod.# DC-TK*



The **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.

*Mod.# DC-MMS*



The **Draft Commander 300GPM Transfer Pump Unit** is designed to allow the Draft Commander to be used as a stationary water supply, transferring water to firefighting units.

*Mod.# DC-PTU*



The **Draft Commander Gauge Testing Kit** is available to test apparatus and Draft Commander monitor gauges for accuracy. All gauges have the manufacturer span calibration certificate with serial numbers.

*Mod.# TPMUG-14*



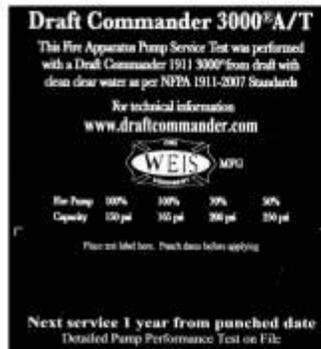
Designed to safely test fire hoses up to 6" in diameter, our **Draft Commander Fire Hose Tester** can be mounted on the Draft Commander and can be removed to operate independently.

*Mod.# DC-FHT*



The **Draft Commander Monitor Station** can be added as a double for the standard equipped Draft Commander Monitor Station and can be used together to perform pump testing on two trucks simultaneously.

*Mod.# DC-SMS*



The **Adhesive Custom Draft Commander Fire Service Test Placard** shows the last time a fire apparatus was pump service tested as per latest NFPA 1911 standards.

*Mod.# DC-PTP*

# Draft Commander 3000®

## Optional Equipment



The **6" Vacuum Butterfly Suction Valve** is used when performing the tank to pump flow test, and is also used during firefighter engineer training.

*Mod.# DC-VBSV*



The **Draft Commander Red/Yellow or Blue/White Chevron** offers exceptional visibility and is very effective when maneuvering around the Draft Commander for fire pump testing.

*Mod.# DC-Chevron-Red  
Mod.# DC-Chevron-Blue*



The **6" Wet Hydrant with Suction Valve** is used during fire pump engineer training to enable the flow of water without using a primer on the fire engine.

*Mod.# DC-WHSV*



The **Custom Aluminum Wheels** can be included as an alternative to the standard rims, preventing corrosion and providing much greater longevity than its steel counterpart. They come in an attractive, clean-cut style.

*Mod.# DC-AWT*



With the added **6" suction drafting tube**, you can increase your pump test up to 4000 plus GPM. The portable draft tube can be permanently mounted into the draft reservoir or mounted on the Draft Commander transporter.

*Mod.# DC-3SDT*



The **Draft Commander Custom Designed Full Cover** is UV rated and has double reinforcement on the corners to help prevent wear and tear. It is equipped with adjustable straps at the bottom.

*Mod.# DC-CC*



The specially designed **Siamese valve** is for pump testing 1750 GPM (max. of 2000 GPM) from one side of a fire apparatus. (6" NST swivel female LH by NST male by 6" NST male.)

*Mod.# DC-6x6Siamese*



The **Mounted Spare Tire with Custom Cover** can be a helpful feature in case of a flat tire or blow-out. The tire cover is UV rated and made of durable material.

*Mod.# DC-MST-CC*