



STANDARD MODEL

SUPPORT EQUIPMENT

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Disclaimer

Firebreak Equipment CC will not be held responsible or liable for any incidental or consequential damages or for any loss or injury arising in connection with the use or inability to use this product. Correct use of the Blackline Burner and Blackline Afterburner is the sole responsibility of the user. Follow all the safety precautions normally taken when burning a firebreak.

If in doubt, contact us for assistance via our website at www.firebreak.co.za

Overview of Support Equipment

The Blackline Standard Model is pulled by a **low-gear vehicle**.

The Standard Model requires the following auxiliary equipment (not provided by Firebreak Equipment):

- A **propane tank** with fittings for liquid withdrawal
- An independent **water supply** (water sprayer) with water tank, pump, and (preferably) 2 high-pressure handguns

The auxiliary equipment cannot be carried on the Blackline Burner or Afterburner. It is carried either on the towing vehicle (possibly requiring a **platform** such as a modified three-point hitch) **or** on a **trailer** directly behind the towing vehicle.

Propane Tank

The ignition devices on the Blackline Burner are fueled by liquid petroleum gas (LPG). Gas consumption is approximately 10 lb. per hour.

Required	A DOT LPG (propane) tank with a liquid withdrawal valve
Recommended	A 100-lb. tank

Note: The Blackline Burner comes with a gas supply hose fitted with a quick coupler. [This version only: The gas supply hose is currently fitted with metric connectors. To allow for connection to an imperial gas tank, an imperial connector will have to be retrofitted.]

Water Supply

A supply of water that can be delivered at pressure is required for creating the wet lines on either side of the burning chamber. This same water supply is also used for controlling residual flames left behind the chamber (by means of high-pressure handguns).

Required	A water tank/pump assembly with <ul style="list-style-type: none">• Pump pressure: 44–217 psi• Pump delivery rate: Minimum of 5.8 gpm
Recommended	A commercial crop sprayer with <ul style="list-style-type: none">• Tank capacity: ± 150 gallons• In-line filters• Two high-pressure handguns

Notes:

- To support the Blackline Burner's water supply line as well and the recommended two high-pressure handguns, the sprayer requires a manifold with 3 outlets.
- The larger the water tank, the less often it will have to be refilled. Water consumption can be reduced by adding a chemical fire retardant.
- A Power Take-Off (PTO) pump is often used when the water pump is carried on the three-point hitch of a tractor.

Example: A 150-gallon *Scorpion Commercial Skid Sprayer* (see <http://www.agsouthco.com/skid.html>)

Note: The Blackline Burner comes with a water supply hose fitted with a quick coupler. [This version only: The water hose is currently fitted with metric connectors. To allow for connection to an imperial water supply, an imperial connector will have to be retrofitted.]

Towing Vehicle

The towing vehicle must be able to maintain a slow, steady speed of approximately 750 yards per hour. To achieve this, the vehicle needs to have a low gear range.

Required	A low-gear vehicle of <ul style="list-style-type: none">• minimum 80 hp if the water supply is carried on the back of vehicle or <ul style="list-style-type: none">• minimum 60 hp if the water supply is carried on a trailer
Recommended	or <ul style="list-style-type: none">• A 60 hp tractor with a trailer• A refurbished military 6X6

Notes:

- A refurbished military 6X6 is ideal because the propane tank and water supply can be carried on the vehicle itself. In some cases these vehicles may already come fitted with their own water tank and pump.
- The horsepower required will also be influenced by the kind of terrain being covered.

Examples:

- Refurbished military 6X6 vehicles available in South Dakota:
http://www.state.sd.us/doa/Wildland_Fire/Home_Page. (Go to 'Site Index' and under 'Rural Fire Assistance' click 'Fire Equipment Shop').

Platform for Auxiliary Equipment

The auxiliary equipment can be carried either on the towing vehicle or on a trailer behind the towing vehicle.

Required	Water supply and propane tank must be carried <ul style="list-style-type: none">• on the towing vehicle or <ul style="list-style-type: none">• on a trailer behind the towing vehicle
Recommended	<ul style="list-style-type: none">• A modified three-point hitch on a tractor or <ul style="list-style-type: none">• A trailer directly behind a tractor or <ul style="list-style-type: none">• An open-back military 6X6 vehicle

Notes:

- A three-point hitch can be fitted with a platform (for the water supply) and a sturdy vertical post (for the propane tank).
- If the towing vehicle has an open back (like a pick-up truck), a skid sprayer can easily be slipped into the back.
- A 1-ton trailer can carry a 150-gallon water tank and the propane tank.