# Owners Manual For Red Dragon Alfalfa Field Flamers Models TD 12 LPS & TD 14 LPS



**Operating Instructions** 

Adjust spray bar support (11/2" x 11/2" angle) to clear foliage. (No. 5 hole from bottom for alfalfa that has been cut.)

Adjust the spray bar so that the liquid propane spray, using orifices in pipe as a guide, is pointing down slightly at an angle. Liquid spray should strike the ground about 18" behind the spray bar. If proper ignition is not maintained it may be necessary to turn the spray bar down slightly. Directing the spray into the ground too near the spray bar may cause flames to fold back over the flamer, damaging the hose and controls.

Adjust pressure to maintain even liquid spray across the entire area; pressure reading on the gauges will depend on atmospheric temperature. Approximately 40 lbs. pressure at 30 degrees F., approximately 80 lbs. pressure at 90 degrees F.

Atmospheric temperatures control speed of travel and fuel consumption. At 30 degrees F., travel speeds should be about 3 to 5 MPH. At 90 degrees F., travel speeds may be increased to 6 to 8 MPH. Wet ground decreases travel speed. Heavy foliage will decrease travel speeds.

When temperatures are in the 100-degree F. range, it is only necessary to increase the temperature of the plant 120 degrees F. to create steam from the moisture in the plants. On a 30-degree F. day, it is necessary to increase the temperature 190 degrees F. to obtain the same results.

Field flaming should be confined to days when the wind velocity does not exceed 10 miles per hour. Care should be taken when flaming with the wind so as not to damage the hose and control assembly.

Your Liquid Spray Field Flamer will give excellent results under proper operating conditions.

CAUTION: Clean fuel is essential for the proper operation of the Flamer. ALWAYS FLOW FUEL THROUGH LINE BEFORE MAKING CONNECTION to flamer being certain all debris is removed. REMOTE CONTROL SOLENOID may need cleaning if it becomes inoperative. Remove solenoid coil and plunger. Clean thoroughly in solvent and inspect passageways. Clean passageways with soft wire if necessary. ALWAYS leak check connections with soapy water solution and correct any leaks!

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 Bolt the 2 (1<sup>1</sup>/2" x 1<sup>1</sup>/2" x 6' angle iron) spray bar mounts together. See pictures 1 & 1b.

#### Picture 1



### Picture 1b



### Picture 2



# Picture 3



### Picture 5

Picture 5b



- 2) Place skids six (6) feet apart with the holes towards the inside. See picture 2. Bolt the assembled spray bar mount to the skids in the 5th hole from the bottom. See picture 3. This will be the proper height adjustment for freshly cut alfalfa.
- **3)** Bolt each pilot torch mounting pipe (1" x 5<sup>1</sup>/<sub>2</sub>") in 3rd and 4th holes from the top. See picture 4.

### Picture 4



**4)** Connect the two pilot torch mounting pipes together using 3/8" x 2" bolt and lock nut. See picture 5 and 5b.

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- 5) Slide spray bars into the spray bar mounts so the elbows are on the top and the spray holes point down at a 45° angle. See picture 6. Note: there is a left and a right spray bar. Do not tighten set screws.
- 6) Bolt front brace (11/2" x 11/2" x 71", 3/8" angle iron) in between skids in the top hole of the three smaller holes so that 2 holes are facing upward and 2 holes are facing forward located on the front brace. Lock nut each side so it can swivel. See picture 7.
- 7) Bolt on tongue (51" x 2") so control bracket holder is on top. Place control head into holder and secure with 3/8" x 2" bolt and lock nut. See pictures 8, 9 & 9b.

### Picture 6



### Picture 7



### Picture 8



Picture 9 shows control head with pull valve. Picture 9b shows control head with solenoid valve.

#### Picture 9



Picture 9b



- **8)** Bolt on braces (27<sup>1</sup>/4" x 1") with loops on top, from front brace to tongue. See picture 10.
- **9)** Slide pilot torches (LT 3-12) onto mounting pipe and adjust so flame strikes ground approximately 18" back of spray bar. Tighten set screws. Using thread sealant, tighten brass elbows into torches so they face inward. See pictures 11 & 11b.

### Picture 11



# Picture 10



## Picture 11b



- 10) Slide 35" nipple through top hole of skid and using thread sealant tighten nipple into torch elbows. Repeat for other side.
- 11) Slide 431/2" nipple through 2nd hole from the top of the skid and using thread sealant, tighten into elbow of spray bar. Repeat for the other side.
- 12) Using thread sealant, tighten 4' hoses to 42" nipples and the 5' hoses to 35" nipples.
- 13) Slide hose through rings on braces and tighten 4' hose to rear brass tee and 5' hoses to front brass tee (no sealant needed).
- **14)** Attach 25' supply hose to manifold system and the other end to tank valve.
- **15)** Attach plug-in (and tighten screw see picture 12) from wiring harness to solenoid and alligator clips to power source, or attach rope to pull valve.
- **16)** (On **TD 14 LPS** Only) Remove plug from tees on end of spray bars. Replace with 11" nipples.

### Picture 12





