



TDRFORCE[®]

green power for life

FL-540B

**Liquid Transfer Pump
Operating Instruction**

Specifics

FL-540B			
Input Voltage	110-120V	Power	330 W
Frequency	60Hz	AMPS	3.2A
Connection	1" + 3/4"	Flow Rate	10.5 GPM
Working Pressure	22 psi	Max Head	36 ft



OPERATION MANUAL

1.INSPECTION

-After unpacking the pump, please check if it has been damaged during transport. If so, please contact *TDRFORCE* online services at the first time.

2.INSTALLATION

- Make sure that the main voltage corresponds to the voltage specified on the motor rating plate.
- Place the pump as near as possible to the suction tank.
- Do not submit the pump body to mechanical stress.
- The pump must be sheltered from weather (sun- rain- wind- snow- chill).
- The motor must be absolutely grounded before any other operation.
- The suction pipe diameter must always be bigger than the suction port. Always fit a foot valve with strainer on the suction pipe. Both suction and delivery pipe must be well fastened.

3.STARTING THE PUMP

- Check that the pump does not run out of the operating data.
- For the proper functioning of the system,allow a 20-minute stop for every 20 minutes of dispensing. Operation of the pump without dispensing is only admitted for periods of no longer than 3 minutes.
- The pump could be only used in fresh water & urea circulating and transferring.
- We recommend that the pump remains switched off whenever the system is not in use.

4.MAINTENANCE

- The dispensing system was designed and built to require a minimal amount of maintenance.
- Before carrying out any maintenance work, disconnect the dispensing system from any electrical and hydraulic power source.
- During maintenance,the use of personal protective equipment (PPE)is compulsory.
- Whenever there is risk of frost, empty the plumb system.
- Check that the pipe connections are not loose to prevent any leaks.
- Check and keep the filter installed on the suction line clean. Check the pump body and keep it clean and free of any impurities.
- Check that the electrical supply cables are in good condition.

POSSIBLE WORKING DEFECTS

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
THE MOTOR IS NOT TURNING	Lack of electric power	Check the electrical connections and the safety systems.
	Rotor jammed	Check for possible damage or obstruction of the rotating components.
	Motor problems	Contact the Service Department
THE MOTOR TURNS SLOWLY WHEN STARTING	Low voltage in the electric power line	Bring the voltage back within the anticipated limits
LOW OR NO FLOW RATE	Low level in the suction tank	Refill the tank
	Foot valve blocked	Clean and/or replace the valve
	Filter clogged	Clean the filter
	Excessive suction pressure	Lower the pump with respect to the level of the tank or increase the cross-section of the tubing
	High loss of head in the delivery circuit (working with the by-pass open)	Use shorter tubing or of greater diameter
	By-pass valve blocked	Contact the Service Department
	Air entering the pump or the suction tubing	Check the seals of the connections
	A narrowing in the suction tubing	Use tubing suitable for working under suction pressure
	Low rotation speed	Check the voltage at the pump. Adjust the voltage and/or use cables of greater cross-section
	The suction tubing is resting on the bottom of the tank	Modify tubing properly.
	Freezing of the pump or motor.	Thaw the pump and check for damage. Starting a frozen pump can cause damage to the motor and to the pump itself
	Leaks in the pump outlet pipe.	Check the seal at the pipe's connections and inspect the pipe for possible damage.
	Cavitation occurring	Reduce suction pressure
INCREASED PUMP NOISE	Irregular functioning of the by-pass	Dispense until the air is purged from the by-pass system.
	Presence of air in the liquid to be pumped.	Verify the suction connections
LEAKAGE FROM THE PUMP BODY	Pump damage	Contact the Service Department

Warranty Card

Customer contact, please keep it properly.

Dear customer:

Thank you for choosing products of *TDRFORCE*. In order to provide you with more satisfactory service and better protect your rights, please read this regulation carefully and keep the warranty card properly.

Regulations:

1. For any quality issue of *TDRFORCE* product within 180 days after sale, we offer no-hassel return service for our customers;
2. Please contact our Amazon online customer service or sales04@tdrshine.com before return;
3. Valid evidence of purchase will be essential such as order ID or warranty card;
4. Valid evidence showing product problems shall be provided in the contact such as videos, photos or detailed descriptions.
5. Warranty card shall be filled out and attached with the return product.

Please notice:

The following situations are not applicable to our no-hassel return policy.

1. Product damage caused by installation or use not in accordance with the instruction manual;
2. Product beyond 180 days after sale;
3. Product return with no reason;
4. Product damage caused by self-disassembly or sabotage;
5. Product damage caused by force majeure such as earthquakes, fires, etc.

Buyer's Name: _____

Tele: _____

E-mail: _____

Order ID: _____

Return Address: _____

Product Problem Description:
