

WARRANTY

1. This pump has a WARRANTY of 12 months from date of purchase covering faulty workmanship or materials within the product.
2. Warranty is limited to the repair or replacement of the faulty part as instructed by the manufacturer.
3. The warranty does not cover: Inadequate or improper use, negligence, abuse, alteration or the wrong installation of the product, use of non-original spare parts or normal wear from use.
4. Equipment must be sent freight paid to factory or designated service centre for evaluation.

SAFETY

These instructions are a guide only and do not override any local regulations or safety guides.

Take all necessary precautions when using this equipment and wear appropriate safety wear. Gloves and Safety Glasses are recommended.

The manufacturer reserves the right to update its products and instructions manuals due to product development or change.

All dimensions and Specifications are approximate and descriptive only and are subject to alterations without notice.

POWER CABLE ALTERATION—CONNECTION

*If you require longer power cable than standard, cable with minimum cross section as shown in table must be used. Ensure all connections are soldered. Ensure battery has sufficient capacity to maintain current required for pump. **IMPORTANT**— If these instructions aren't adhered to pump failure may result and warranty will be void.*

| CABLE LENGTH | CABLE SECTION |
|--------------|--------------------|
| 2m | 2.5mm ² |
| 4m | 6mm ² |
| 6m | 10mm ² |

INSTRUCTIONS



QUALITY 12 VOLT POWERED DIESEL TRANSFER PUMP

BT46SK 12 VOLT KIT - MANUAL NOZZLE
BT46SKA 12 VOLT KIT - AUTO NOZZLE

OPTIONS:

Automatic nozzle
Fuel Filter
Fuel Meter



PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

BT46 12 VOLT FUEL PUMP KITS

Thank you for your purchase of your Equipco Diesel Transfer pump.

EQUIPMENT DESCRIPTION

The pump is a safe priming rotating vane type equipped with integral by-pass valve and is positive-displacement in function. The 12 volt DC motor is a sealed non-ventilated type with 30 minute duty cycle.

INSTALLATION INSTRUCTIONS

The unit is designed for mounting direct to a tank or drum, as a manual carry pump or installed as part of equipment.

1. Carefully clean inlet and outlet ports and remove dust and residual packing material.
2. Standard Vertical Kit: Please ensure pump is mounted horizontally. Screw suction pipe assembly on to pump, seal with thread tape or similar and tighten securely. Fit hose to pump horizontal outlet and attach hose to nozzle connection. Ensure all connections are leak proof and tight. Cut suction pipe to correct depth and mount drum connector to suction point. Carefully check that thread is not crossed and tighten screw connections
3. Take care with suction and delivery pipework to avoid stress transmitted by pipes to the pump ports. Be sure suction strainer is fitted to protect pump or accessories and remove all threading residual material and scale from storage tank and pipes.
4. In the case of mobile storage tanks, ensure baffle is fitted to protect suction pipe from surge damage.
5. Before connecting delivery piping or hose, partially fill pump casing with diesel to facilitate first priming.
6. Refer to back page for power cable alterations.
7. Risks due to extreme temperature. Remember that a very low temperature (-10°C) can freeze the Diesel oil inside the pump. This situation can cause serious damage to the motor pump unit. A very high temperature (above 45°C) may cause the plastic parts in the unit to expand. The unit should be placed in a well ventilated place and protected from the sun. Also the pump unit should be protected from rain and the possibility of water damage.

NOTE: A suction strainer must be fitted to protect pump from possible damage. Failure to do this will void warranty claims.

TROUBLE SHOOTING GUIDE

Motor does not run

| POSSIBLE CAUSES | CORRECTIVE ACTION |
|------------------------|--|
| 1. No electrical power | Check supply current, connections and fuses |
| 2. Blocked rotor | Remove pump cover and check for obstructions |
| 3. Motor failure | Contact repair centre |

No or

| POSSIBLE CAUSES | CORRECTIVE ACTION |
|-------------------------|--|
| Problem in suction pipe | Check for blockage or air leaks |
| Opened by-pass valve | Remove and check for obstructions |
| Blocked hose or nozzle | Check pump outlet, hose and nozzle |
| Vanes worn | Remove pump cover and replace vanes |
| Clogged strainer | Clean strainer in suction pipe and internal pump |
| Excessive suction head | Lower pump level Max 4.5 Metre |
| Low pressure in system | Use shorter pipes or with larger diameter |
| Automatic nozzle option | Install foot valve to correct priming problem |

| POSSIBLE CAUSES | CORRECTIVE ACTION |
|------------------------|--------------------------------|
| Low voltage current | Verify inlet voltage |
| Blockage inside pump | Disassemble and clean the pump |
| Motor failure | Contact repair centre |

low Pump Delivery

| POSSIBLE CAUSES | CORRECTIVE ACTION |
|--------------------------------|---|
| Narrow Suction / Delivery hose | Increase size of hose or pipe |
| Blocked filter | Remove and clean filter |
| Pumping of oils | Pump must only be used with diesel fuel |
| Motor breakdown | Contact repair centre |

Motor stops or has burning smell

| POSSIBLE CAUSES | CORRECTIVE ACTION |
|------------------------|-----------------------------------|
| Connections Loose | Verify all connections are sealed |
| Pump seal failure | Replace seal |

MAINTENANCE

Your pump has been designed and built to require minimum maintenance. Check the pump casing and pipe joints frequently for leaks. Keep pump and unit clean and shelter from adverse weather conditions. Every 3 months check and clean the suction strainer as necessary.

ATTENTION

IT IS THE IN-STALLERS RESPONSIBILITY TO CONNECT THE UNIT USING PIPEWORK OR HOSE APPROVED FOR USE WITH DIESEL FUEL.

MAKE SURE ANY ADDITIONAL ACCESSORIES SUCH AS DELIVERY FILTERS OR FILLING DEVICES ETC., ARE SUITABLE FOR USE WITH FUEL TRANSFER.

For vertical suction length over 2 Metres a foot valve with filter is required to ensure priming function.

For suction lengths over 2.7 Metres or a horizontal suction length over 4.5 Metres use a pipe for hose with minimum 1" (25mm) bore.

TECHNICAL FEATURES

- BT46 Pump of grey foundry cast iron
- Self suction. Eccentric with a auto adjustable vanes
- Flow 40 LPM max
- With recirculation by-pass valve
- Motor: 140 watt 12 volt 140 watt 24 volt
- By-pass pressure: 1.5-1.9 bar
- Consumption: 18-24A (12DC) - 9-17A (24VDC)
- RPM 4200 RPM
- Inlet/Outlet Pipe: 1" Gas (BSP)
- IP-55 Protection
- With clamps for the connection to battery 12 or 24VDC
- NOTE: When you use an automatic nozzle, the flow shall be reduced.

KIT CONTENTS

BT46SK / BT46SKA (Please ensure pump is mounted horizontally)

Composed of:

- BT46 Pump
- 4 Mtrs rubber hose
- Manual or auto nozzle with swivel
- 2 piece poly suction pipe with socket
- Rotating drum / tank connector
- Lockable nozzle holster



BT46M

Composed of:

- BT46 Pump
- 4 Mtrs rubber hose
- Manual nozzle



BT46

Composed of:

- BT46 12 / 24 Volt pump only
- Cable, clamps and fuse

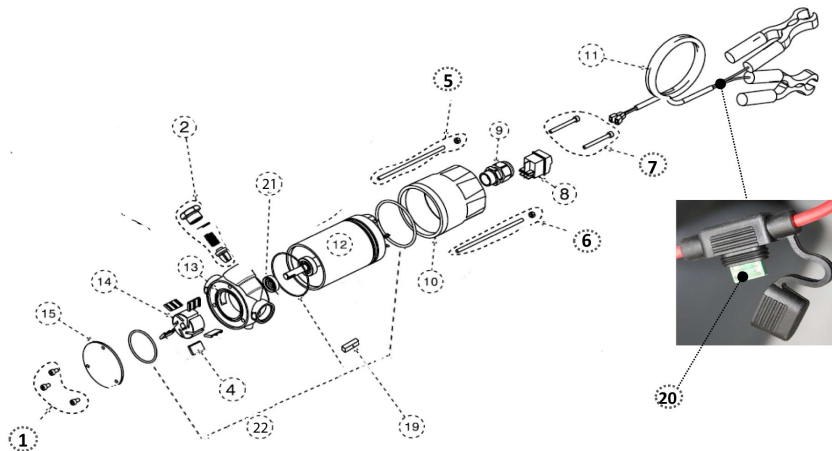


OPTIONS

Automatic Nozzle
Filter
Flow Meter

BT46 PARTS BREAKDOWN

| POSITION | ITEM CODE | DESCRIPTION | QTY |
|----------|-----------|---|-----|
| 1 | 140758 | ZINC PLATED SCREW CHC M5x8 | 3 |
| 2 | 142078 | BYPASS KIT | 1 |
| 4 | 142081 | KIT VANES | 5 |
| 5 | 140836 | ZINC PLATED THREADED ROD M5 L.135 | 2 |
| 6 | 140879 | ZINC PLATED NUT M5 | 2 |
| 7 | 140764 | ZINC PLATED SCREW CHC M5x50 | 2 |
| 8 | 140409 | ON/OFF SWITCH 12V 30A | 1 |
| 9 | 140295 | CABLE GLAND M20x1.5 | 1 |
| 10 | 141531 | SWITCH CAP 12V | 1 |
| 11 | 140227 | CABLE WITH CLAMPS LG4M 2x2.5mm ² | 1 |
| 12 | 141672 | MOTOR 12 V 5000T 140 W | 1 |
| 12 | 141673 | MOTOR 24 V 5000T 140 W | 1 |
| 13 | 141389 | PUMP BODY 12/24V-40L | 1 |
| 14 | 141827 | PUMP ROTOR | 1 |
| 15 | 141456 | STEEL COVER | 1 |
| 19 | 141570 | SHAFT KEY 3X3X10 | 1 |
| 20 | 140356 | MINI FORK FUSE 30A 12 VOLT | 1 |
| 20 | 140357 | MINI FORK FUSE 15A 24 VOLT | 1 |
| 21 | 142082 | SEAL KIT | 1 |
| 22 | 142083 | FACE O-RING KIT | 3 |



ELECTRICAL CONNECTIONS

The motor is supplied with a 2 Mtr long power cable with clamps for connection to the battery.

Red—Positive Pole (+)

Black—Negative Pole (-)

Ensure correct voltage battery is being used to power unit. Maximum variation allowed for voltage is $\pm 5\%$ of rated value. A start-stop switch is standard with a rated fuse for motor protection.

30 Amp fuse—12 volt

15 Amp fuse—24 volt

It is the installers responsibility to make the electrical installation in accordance with the applicable local codes and safety regulations.

START UP AND OPERATION

Ensure that amount of Diesel in suction tank is greater than amount to be pumped. Never run the pump dry as serious damage could result and void the warranty.

- (1) Check voltage of power source is same as that of the pump.
- (2) Always connect rod terminal to + pole. Black terminal to - pole
- (3) Never touch different polarity terminals together as a spark may occur causing a fire or explosion. Damage to pump motor also may occur.
- (4) Take the nozzle out from the holder checking it is closed.
- (5) Operate the starting switch. The bypass allows the pump to operate with a closed nozzle for short periods of time. 30 seconds maximum.
- (6) Insert the nozzle into container or tank to be fitted.
- (7) Holding the nozzle firmly, operate the lever to dispense fuel.
- (8) Release nozzle lever to stop dispensing.
- (9) Switch the pump off and put nozzle back in the holder.

Pump duty cycle is for 30 minutes means that pump must be

IMPORTANT

minutes maximum. This allowed to cool for at least 30 minutes before using again. Failure to follow this direction could cause motor failure.

ATTENTION

In hot weather it is recommended to open the nozzle once the pump is stopped to release stored pressure.

Likewise in extreme cold temperatures drain the hose and nozzle when not in use. Failure to do this could cause overpressure due to expansion and damage the pump.

WARNING

This pump is for use with Diesel Fuel only.
Do not use for transfer of petrol, petroleum products or any other fluid with a flash point below 55° C (130° F).
The motor is not of explosion proof type.