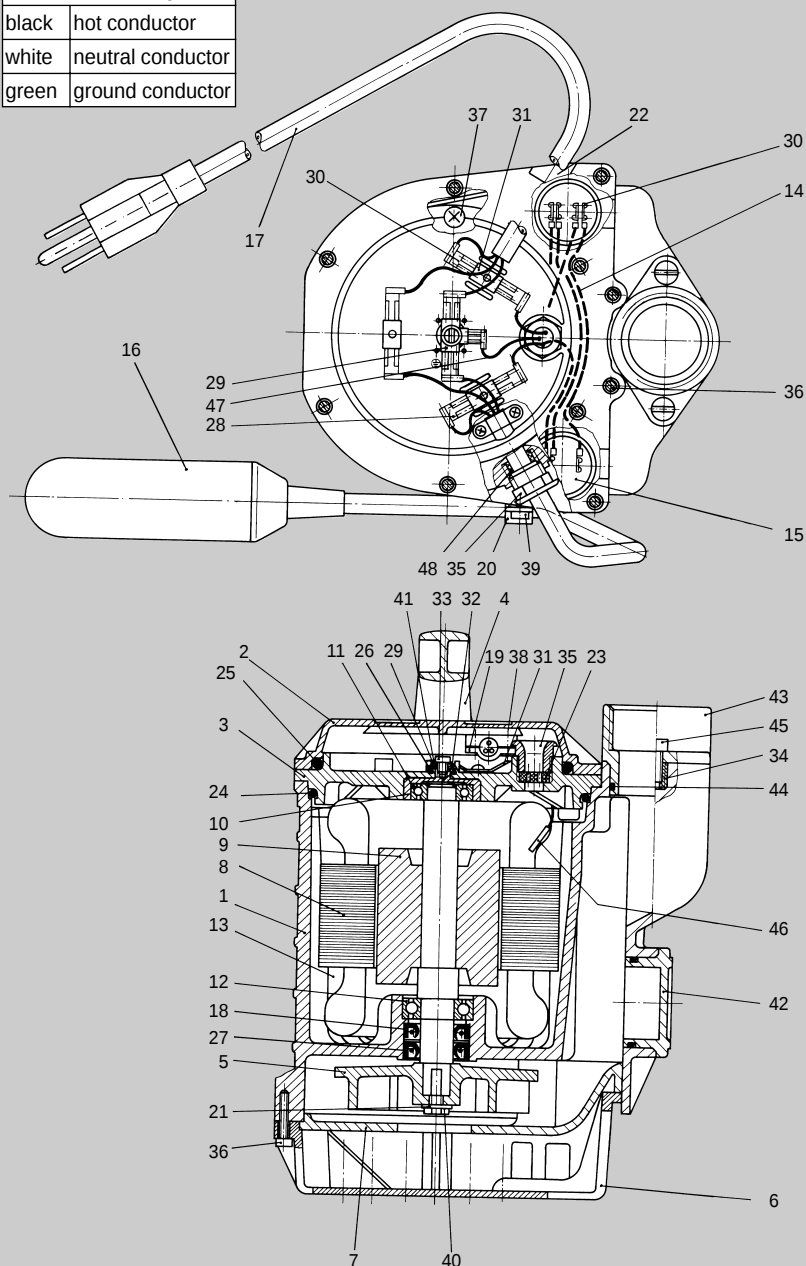


Service Manual for GF 32-9, IGF 32-9 and TIGF 32-9



PERFECTA PUMP™
Electrical Submersible Pump

Power cable wire guide	
black	hot conductor
white	neutral conductor
green	ground conductor



Pos.	Part no.	Description
21	099-084	lock washer 6.4
22	099-047	Cable grommet for power cord
22	099-047T	Cable grommet for power cord (TIGF 32-9NL)
23	099-016	Sealing ring 14 x 5.5
24	099-027	O-ring 125 x 5
25	099-028	O-ring 105 x 5
26	099-029	O-ring 6 x 2
27	099-060	Oil seal ring 15 x 30 x 7, Perbunan
27	099-062	Oil seal ring 15 x 30 x 7, Viton
28	099-086	Insulation cap
29	099-048	Terminal, 3-prong
30	099-049	Terminal plug
31	099-061	Terminal, 2-prong
32	099-050	Washer 4.0
33	099-051	Screw 4 x 6
35	099-025	Cable entry
36	099-054	Screw 4.2 x 22
36	099-054T	Screw 4.2 x 22 (TIGF 32-9NL)
37	099-055	Screw 4.2 x 60/50
38	099-056	Screw 2.9 x 8
39	099-057	Screw 2.9 x 12
40	099-058	Screw 6 x 12
40	099-058T	Screw 6 x 12 (TIGF 32-9NL)
41	099-053	Washer 4.0
42	099-066	Discharge cap
43	099-067	1 1/4" NPT discharge female flange
44	099-071	O-ring 35 x 2.5
45	099-082	Screw 6 x 12
45	099-082b	Self tapping screw
47	099-039	Terminal wire
48	099-076	Cable grommet for float switch
	099-030T	O-ring kit, pos. 24, 25, 44 (TIGF 32-9NL ONLY)

float switch wire guide	
blue	hot conductor
brown	neutral conductor
yellow/green	ground conductor

Parts list for the PERFECTA pump

Pos.	Part no.	Description	Pos.	Part no.	Description
2	099-109	Top cover (no level)	13	099-038	Oil Tellus T-68
2	099-103	Top cover (with level)			IMPORTANT - replacement oil must be same or equal as not to damage NORYL material.
3	099-003	Motor housing cover	15	099-151	Run Capacitor
4	099-068	Handle	16	100-032	Float switch
5	099-079	Impeller	17	099-104	Power cable
6	099-007	Strainer	17	099-104T	Power cable (TIGF 32-9NL)
7	099-015	Suction cover plate	18	099-062	Oil seal ring 15 x 30 x 7, Viton
9	099-022	Rotor (GF 32-9)	19	099-031	Cable clamp
9	099-022T	Rotor (TIGF 32-9NL)	20	099-030	Cable clamp for float switch
9	099-098	Rotor (IGF 32-9)			
11	099-036	Ball bearing (upper)			
12	099-037	Ball bearing (lower)			

⚠ WARNING **ALWAYS DISCONNECT PUMP FROM ELECTRICAL SOURCE BEFORE SERVICING!**

NOT FOR USE IN FLAMMABLE LIQUIDS!

IMPORTANT: IN ANY CORROSIVE ENVIRONMENT, CONSULT FACTORY OR YOUR DISTRIBUTOR BEFORE INSTALLATION OR USE.

Trouble shooting

Pump shuts off:

Adjust float switch
Check impeller for free rotation and clogging
Check pump passage, hose or pipe for kink or clog.

Pump is heating up:

Check impeller for free rotation
Check voltage

Pump Performance Low:

Check for blockage
Check impeller for excessive wear

SERVICE:

Tool needed

Phillips screwdrivers (#1 and #2) vice grip, 10 mm wrench, ballbearing puller, and 17 mm wrench.

A. Disassembly of pump top.

(Check wires, rotor, stator, ball bearings and oil). Remove (pos 39) handle screws (pos 4). Remove handle. Remove (pos 37) top cover screws (pos 2) and open top cover. Disconnect wires, remove motor housing cover (pos 3). Inspect the quality of the oil. If milky or whitish in color, check seals and replace (both seals and oil) if necessary. To remove rotor, ball bearings and seals, follow steps described in B. Disassemble pump bottom before proceeding. Once impeller is off, pull out rotor. Inspect bearings, replace if necessary. Press out lip seals. Inspect and replace as necessary.

B. Disassembly of pump bottom

(strainer, suction cover, impeller) Remove strainer screws (pos 36), remove strainer (pos 6) and suction cover (pos 7). Hold impeller with vise grip and remove impeller screw (pos 40). Remove impeller (pos 5). Impeller vanes should have sharp edges to maximize performance. Replace impeller if vanes are rounded or dull.

Inspection of pump bottom parts.

Look at lower lip seal parts (pos 27) for visible wear. If damaged or worn replace both lip seals. To replace lip seals, disassemble top portion of pump first and remove the oil (see A., disassembly of pump top).

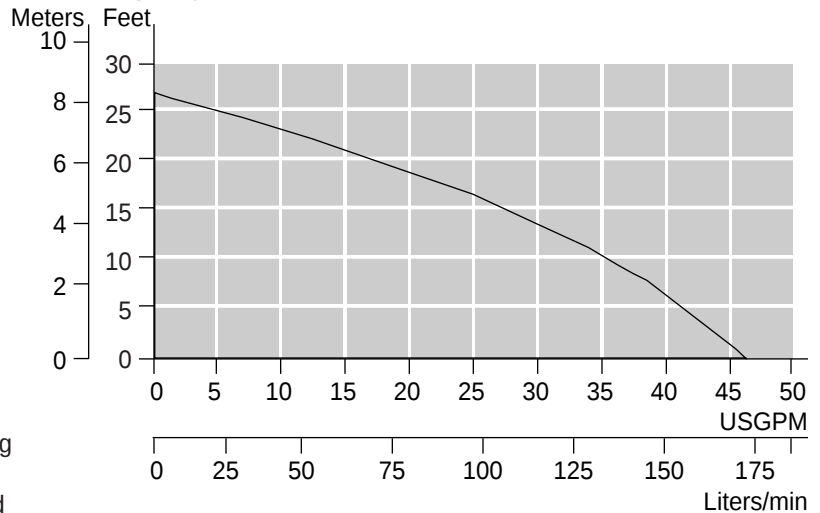
Note: Both seal openings should face down.

C. Important Notes on Re-assembly of Pump

All O-rings should be lubricated with a silicone based grease, or lubricated with same oil as in motor, before assembly. Replace ball bearings to shaft. To re-install inner cover, lubricate bearing holder. Use a plastic or rubber mallet to lightly tap until cover is in place. It is important that the bearing is in the absolute center of the bearing holder when closing the top cover. If not centered, the shaft will not turn freely.

WEB ADDRESSES:
<http://www.bjmc corp.com>
<http://www.bjmpumps.com>
<http://www.alltestpro.com>

Capacity Curve



Technical data

GF 32-9

Pump Material:	Noryl GTX 830, 304 S.S Rotor shaft and 316 S.S Hardware
Seal System:	2 seals (1 viton, 1 perbunan)
Motor Voltage:	115 V, 60 Hz, single-phase std
Max. Power Consumption:	500 watt
Motor horsepower:	0.4 HP
Running amps:	4.5 amps
Max. Submersion Depth:	33' (10 m) or limited to length of cable
Overall Dimensions:	7.2" (185 mm)
Height Including Handle:	9.8" (250 mm)
Weight:	13.5 lbs (6.2 kgs)
Power Cord:	22' submersible
Level Regulator:	Automatic on/off mechanical float switch std
Oilfilled Motor:	Shell Tellus T68 or equal
Thermal Breaker:	Capacitor

IGF 32-9

Pump Material:	Noryl GTX 830, 316 SS Shaft & Hardware
Seal System:	2 viton seals
All other components are the same as for GF 32-9. Please see above.	

TIGF 32-9NL

Same as for IGF 32-9 except that all exposed metal parts made of titanium.

WARRANTY REGISTRATION CARD

(Please Print Legibly)

Date Purchased _____ Model _____ Serial No. _____

Owner's Name _____

Address _____ City _____ State _____ Zip _____

Dealer's Name _____

Type of Operation: ☐ Continuous ☐ Intermittent

Application: ☐ Mining ☐ Const. ☐ Industrial ☐ Commercial ☐ Rental

☐ Other (Explain) _____ Temp°: _____

Pumping: ☐ High/Silt Content ☐ Corrosive Liquids ☐ Clear Water

Signature of Owner: _____

Specify: _____

BJM CORP.

123 Spencer Plains Rd. • P. O. BOX 1138
Old Saybrook, CT 06475 • TEL. (860) 399-5937
WEB ADDRESS: <http://www.bjmcorp.com>
<http://www.bjmpumps.com>
<http://www.alltestpro.com>

BJM Corp. warrants each new pump against defects in workmanship and material for the period of 90 DAYS. It will replace or repair for the original purchaser, any genuine parts found to be defective upon return to its factory at CT (or other place as designated by it), transportation prepaid by purchaser. The labor involved in replacing defective parts is not warrantable.

Other equipment and accessories are warranted only to the extent of the original manufacturer's warranty.

This warranty does not cover any pump which has been damaged due to careless handling, improper use or application, improper power supply, use in unsuitable liquids, or faulty installation. Alteration or repair by other than BJM Corp. (or designated service facility) voids this warranty.

BJM Corp. assumes no liability for damages, losses, inconveniences, direct, or consequential, any kind in respect to the use or operation of the pumps or any equipment or accessory used in connection herewith.

This warranty encompasses the entire understanding between the purchaser and BJM Corp. and no other person is authorized to extend or alter the terms of the warranty.

This warranty is effective only when the warranty certificate card is properly completed and returned to BJM Corp. at the time of purchase.

BJM Corp.

KEEP FOR YOUR RECORDS

Date Purchased: _____

Model: _____ Serial No.: _____

Dealer Name: _____

BJM CORP.

123 Spencer Plains Rd.
P. O. BOX 1138
Old Saybrook, CT 06475
TEL. (860) 399-5937
FAX (860) 399-7784

Please complete and
send back to:

BJM CORP.