

Tartan 37 Technical Resources

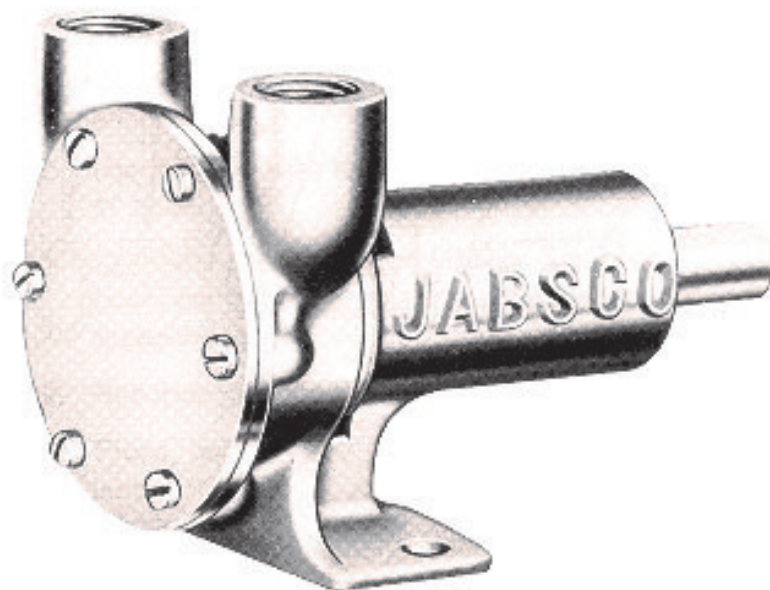
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Chapter 3: Engine, transmission and prop

Section 2: W50 Raw Water Pump Rebuild

Suggested by Mike Koverman #261 Duet

Source: Allied Seawind Owners Site



Model 5320-0011 Self-Priming Pump

Body: Bronze Construction

Impeller: Jabsco Neoprene Compound with Brass Extended Insert

Shaft: Steel

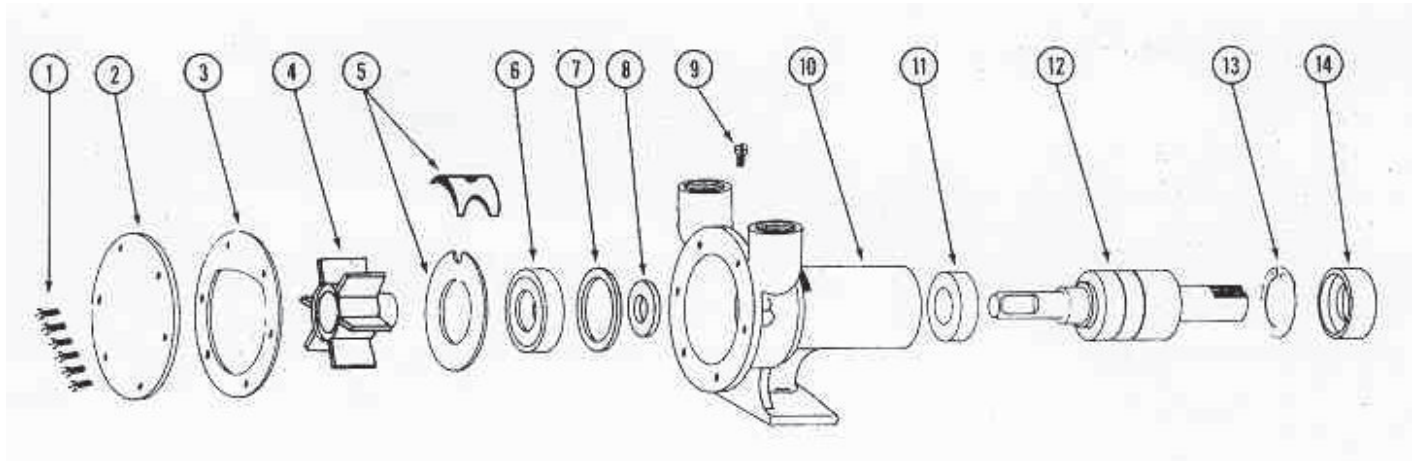
Wearplate: Replaceable

Shaft Seal: Lip Type

Bearings: Sealed Fan Shaft Bearing

Ports: 3/8" NPT Vertical

Weight: 3 lb (approx.)



Key	Description	Part Number	Quantity
1	Screw, End Cover	91002-0020	6
2	End Cover	11830-0000	1
3	*Gasket, End Cover	2995-0000	1
4	*Impeller with Brass Insert	5616-0001	1
5	Cam and Wearplate Assembly	7895-0001	1
6	*Seal, Shaft	92700-0420	1
7	*O-Ring	92000-0540	1
8	Slinger	879-0000	1
9	Screw, Cam	91002-0090	1
10	Body	4484-0000	1
11	Bearing Seal, Inner	93000-0070	1
12	Shaft and Bearing Assembly	6020-0000	1
13	Retaining Ring, Bearing to Body	91701-0040	1
14	Bearing Seal, Outer	92700-0310	1
Not Shown:	Key, Pump Drive	9215-0010	1

*Parts Contained in Service Kit 90044-0001

SERVICE INSTRUCTIONS

IMPELLER REPLACEMENT

1. Remove end cover screws, end cover and gasket.
2. Grasp impeller hub with pliers and withdraw impeller from pump. Inspect extended insert of impeller. If deeply grooved by seal, the impeller and seal should be replaced.

3. Wipe shaft clean. Apply a light film of water pump grease to shaft and outer surfaces of impeller extended insert. Direct impeller insert onto shaft with a turning motion in the intended direction of rotation, until ding in insert contacts shaft flat. Push impeller into bore until flush with gasket face.
4. Immerse gasket in water for a moment before installation. Install gasket, end cover and screws.

SEAL REPLACEMENT

5. Remove end cover, gasket and impeller.
6. Loosen cam screw several turns. Tap screw firmly to break bond between cam and body. Remove and clean both cam and screw.
7. Use hooked wire to remove wearplate from impeller bore. Inspect wearplate. Replace if worn.
8. Use hooked wire to dislodge shaft seal from body. (If seal will not dislodge by pulling on it at several places, it may be necessary to press out shaft and seal.) Remove O-ring from groove in seal bore. Wipe seal bore clean.
9. Insert O-ring in groove of seal bore.
10. Apply a liberal amount of water pump grease to lip of seal. Dip seal in water then push into seal bore with lip facing impeller bore.
11. Position wearplate in back of impeller bore, with nipple towards impeller bore.
12. Coat top surface of cam and cam screw threads with sealant. Position cam in body with nipple of wearplate and slot of cam aligned. Install and tighten cam screw.
13. Install impeller, gasket and end cover as in Steps 3 and 4.

BEARING AND SHAFT ASSEMBLY REPLACEMENT

14. Remove end cover, gasket, impeller, cam, wearplate and seal as in Steps 1, 2, 6, 7 and 8.
15. Use hooked wire to remove slinger from impeller end of shaft.
16. Carefully insert screwdriver between outside diameter of outer bearing seal and pump bearing bore, then pry seal from bore.
17. Remove bearing-to-body retaining ring.
18. From impeller end of pump, press shaft out of pump.
19. Remove inner bearing seal by pressing away from impeller bore. Clean residue from bearing bore.

20. Apply liberal amount of grease to lip of inner bearing seal. Dip seal in water and press it into bearing bore with lips facing impeller bore.
21. Lubricate shaft next to bearing with water pump grease. Press shaft and bearing assembly into bearing bore. **DO NOT PRESS AGAINST SHAFT.** Press against outer race of bearing. Press assembly into bore from bearing bore end of body,
22. Install retaining ring in groove next to bearing. Flat side of ring should be next to bearing race.
23. Lubricate shaft exposed in bearing bore with grease. Lubricate lip of outer bearing seal. Press seal into bearing bore with lip facing away from bearing.
24. Slide slinger onto shaft through impeller and seal bores. Position slinger in drain slot area.
25. Install seal, wearplate, cam, impeller, gasket and end cover as in Steps 9, 10, 11, 12, 3 and 4.

