

SEASTAR™

MOTOR REPLACEMENT

DC Power Units, Part #HA1230

⚠ WARNING

BEFORE starting with the following instructions, ensure that the area is completely vented and free of fumes. Failure to do so may result in a fire/explosion resulting in property damage, personal injury and/or death.

⚠ WARNING

Allow sufficient time for motor to cool prior to performing the instructions noted below.

Removing Old Motor

1. Disconnect power to the DC Power Unit (located at battery or other onboard power source).

⚠ CAUTION

Failure to disconnect main power lead may result in irreparable damage to the DC Power Unit.

- 2.** Remove the six Phillips head screws from the controller rear cover and remove the rear cover. (See figure A1.)
- 3.** Disconnect the motor leads from the circuit board by removing the two Phillips head screws. (See figure A.)
- 4.** Loosen and pull back the wire retaining nut (See figure A) then pull the motor leads out of the electronics enclosure.
- 5.** Remove and discard the two motor through bolts. (See figure B.)
- 6.** Pulling UPWARDS, remove and discard the old end cover, motor shell, armature and bottom bearing. (See figure B.)

NOTICE

The motor bottom plate (See figure B), should remain attached to the DC Power Unit. DO NOT attempt to remove the bottom plate.

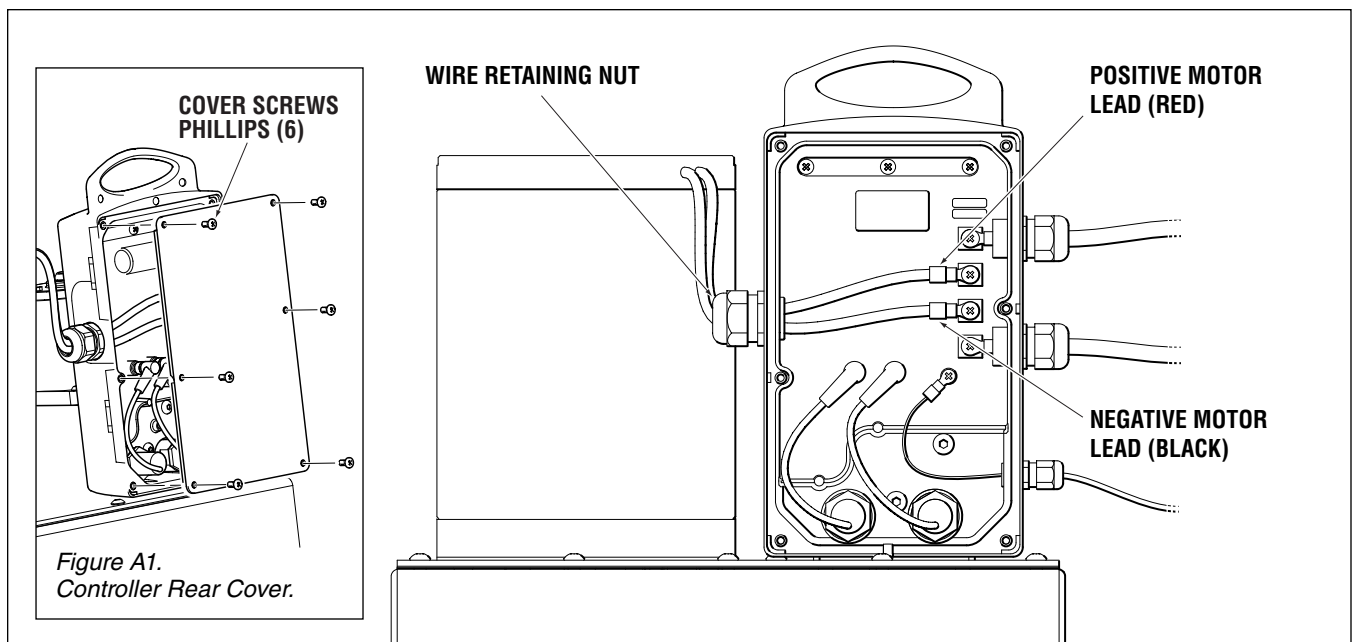


Figure A. Disconnecting Motor Leads.



NOTICE

In some cases, the bottom motor bearing (see figure B) may pull off of the shaft and stay mounted in the bottom motor plate. In this case the bearing must be removed from the bottom plate prior to installing new motor.

NOTICE

DO NOT discard shaft key as it is required for re-installation. If shaft key falls out, reinstall key into keyway on pump shaft using a dab of grease to hold in place.

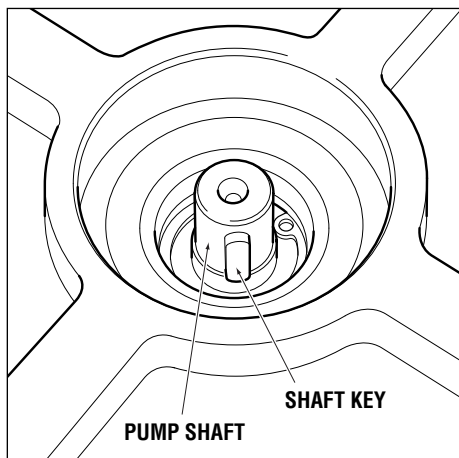


Figure B1. Shaft Key location.

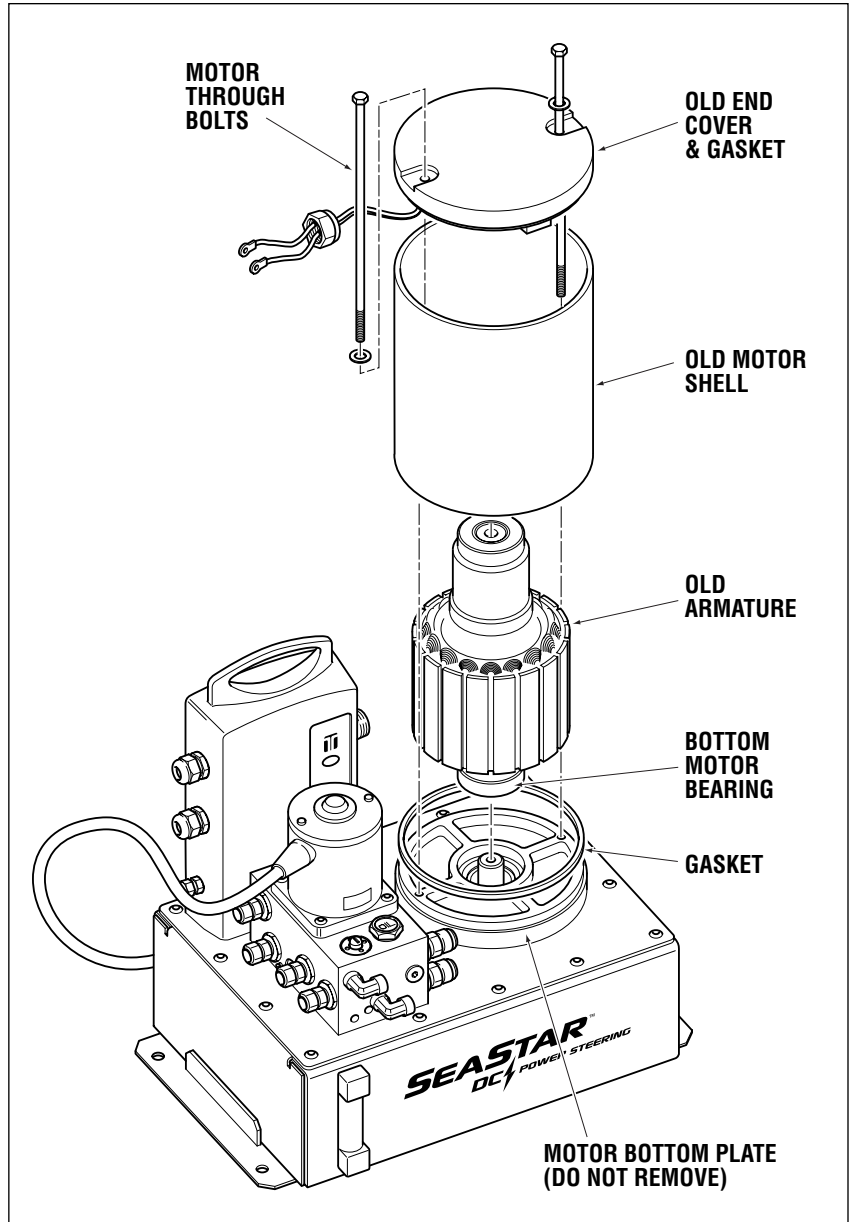


Figure B. Removal of Old Motor.

Installing New Motor

1. Install NEW gasket onto motor bottom plate (see figure C). If NEW gasket is lost or damaged the old gasket, if not damaged, may be re-used.
2. Apply a small amount of the supplied thread locker to the threads of the two motor through bolts (see figure C).
3. Confirm that the shaft key is properly seated (see figure B1) then install replacement motor onto shaft ensuring that the key engages.
4. Rotate replacement motor to align through bolts with old motor bottom plate holes (approximately 9 and 3 o'clock positions).
5. Tighten motor mount bolts to 50 in/lbs.



CAUTION

DO NOT reverse motor polarity or damage to unit may result.

NOTICE

Ensure you match the part number of the older decal with the newer decal (DC1000, or DC2000).

6. Feed motor leads into electronics controller. **DO NOT** tighten wire nut at this time.
7. Connect Red (+) and Black (-) motor leads to the positive and negative controller terminals respectively. (See figure A.) Torque screws to 25 in/lbs.
8. Tighten wire retaining nut hand tight.
9. Re-install controller rear cover and six cover screws.
10. Take note of old decal number on old motor shell. Clean new motor free of residue and affix new decals ('Identification' and 'Caution Hot') included with this kit onto the new motor shell.
11. Re-connect power to DC Power Unit.
12. BEFORE operating boat. Confirm proper operation of steering system by turning steering wheel hard over to hard over several times.

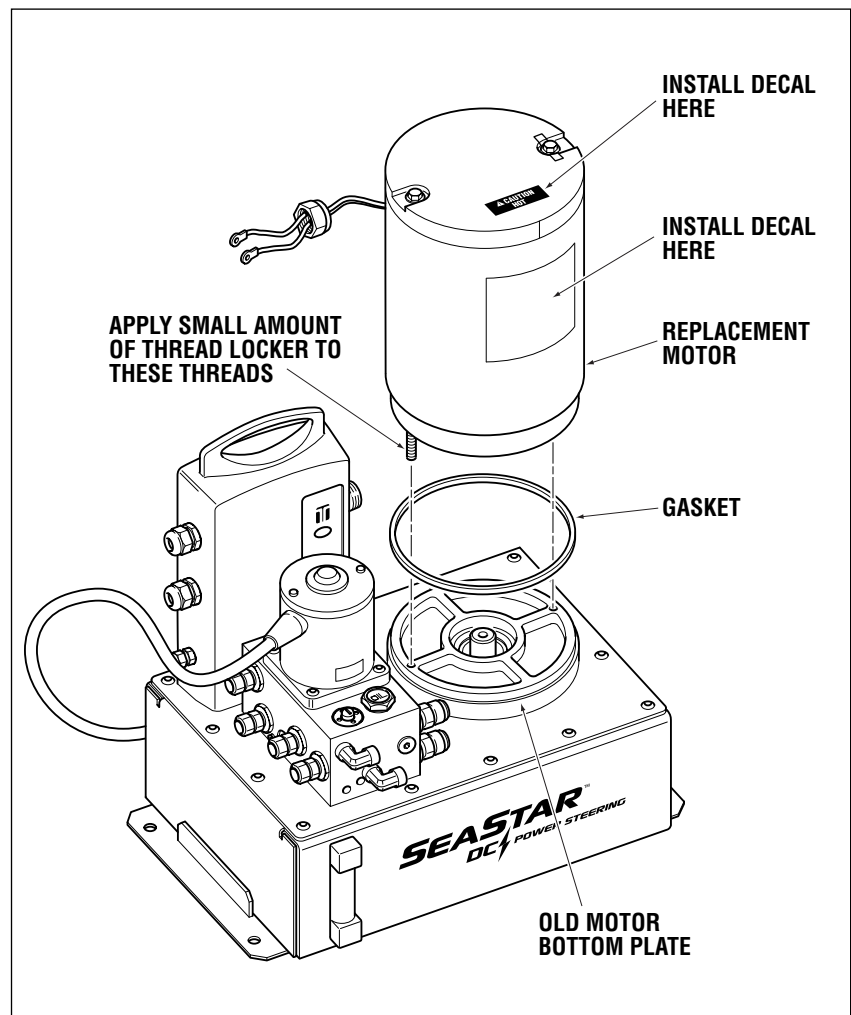


Figure C. Replacement Motor Installation.