



BEARING REPLACEMENT for H6 ROLLER BEARING SYSTEM

These instructions will assist in the replacement of bearings in your Autoprop. You must follow these instructions to ensure that your Autoprop is service correctly and to give you reliable and trouble free service.

WARNING:

Do NOT attempt to change out your bearings without understanding these instructions clearly.

Should you have any difficulties with following the procedure, contact your USA Autoprop dealer: AB Marine, Inc (401-847-7960) / sales@AB-Marine.com

Tools Required:

Peg Spanner	TRI-0168	Grease / CRC #SL3110
Tab Spanner	H5-TRI-022	Thread locking compound
Nut Spanner	H5-TRI-0197	Prop Puller
Torque wrench w/sockets		Grease Nipple TRI-0164
Flat head screw driver		

BLADE REMOVAL:

It is recommended that the propeller be removed from the shaft when working on the bearing replacement operation.

1. Remove the (6) grease channel screws items (#1) and (#7). Discard if damaged
2. Using the peg spanner, unscrew the retaining cap (#2). Leverage on the end of the peg spanner may be required initially to "crack the seal"
3. You will now have access to the bearing mechanism. Release the one tab (#4) that is locked into the locking nut (#5). Using the tab spanner undo the locking screw/tab screw. **This is a left hand thread and so will need to be undone by rotating clock-wise.**
4. Using the nut spanner, TRI-0197, undo the locking nut (#5) by turning **anti-clockwise**. Some force may be required as at factory assembly this nut is fitted using thread-locking compound.
5. With both the locking screw (#4) and the lock nut (#5) removed you will now be able to lift the blade and bearing off of the hub assembly. There maybe some hydraulic pressure holding the blade down caused by the residual grease on the unit.
6. With the blade detached from the hub, clean off all excess grease.
7. Remove the taper roller bearing and race (#6) from the blade. Turn the blade upside down and tap the race and bearing with a screw driver on the underside to release.
8. Inspect the Ecopur Seal (#8) ... if damaged or worn remove from the propeller blade using pliers, and replace with a new one.
9. Remove the thrust race and bearings (#9). Remove excess grease.
10. Remove all excess grease from the hub races and the blades

Blade Assembly:

1. Clean the hub and blades thoroughly. Check that the grease holes (**#7**) are clean. Also check that the seal grooves are clean and not damaged.
2. Fit the outer half of the roller bearing into the propeller blade. Be sure that it is properly seated in the blade.
3. Fit the Ecopur Seal (**#8**), into the blade. Start by fitting the seal into the blade by hand... when you cannot press it in further then place the seal face on a smooth radius surface. Press the blade onto the surface and slowly rotate the blade until the seal is fitted in place all the way around. If the seal becomes damaged it will not work correctly and you will get water into the bearings ... not good!!
4. Now fit the thrust bearing (**#9**), into the blade and hub. Note that the races are of different inside diameters. *IMPORTANT...Fit the largest inside diameter race into the blade. If not fitted correctly you will restrict the grease flow into the propeller.* Place the captured balls & race into the hub.
5. Place the roller bearing (**#6**), into the fitted race on the blade. Place the blade assembly over the hub post.
6. Using a small amount of thread locking compound install the locking nut (**#5**), onto the hub post. Tighten the locking nut to **20NM**, using a torque wrench. Spin the blade by hand, to seat the bearings, and check the tension again on the nut to **20NM**.
7. Using a little thread locking compound, install the tab screw (**#4**) into the centre post. ***This is a left hand thread.***
8. With the tab screw snug to the locking nut ...align one of the tabs into one of the slots in the locking nut (**#5**). Now bend into the slot.
9. Refit the Bearing Cap (**#2**) into the blade tightly. You may apply a small amount of locking compound to this thread before attaching.
10. Be sure that all 6 x each of the grease channel screws (**#1 - #7**) are removed. Using the grease gun and nipple, pump grease into the grease channel in the retaining cap (**#2**). Rotate the blades to distribute the grease evenly. Grease may also exhaust out of the seal. This is normal for this type of seal. When full of grease and no air bubbles are apparent insert the grease channel screws (**#1**), M5x6 ...
11. The blade is now assembled and should rotate freely although with some resistance due to the grease and the seal fit.
12. Repeat the process for the other blades.
- 13.

Grease Type:

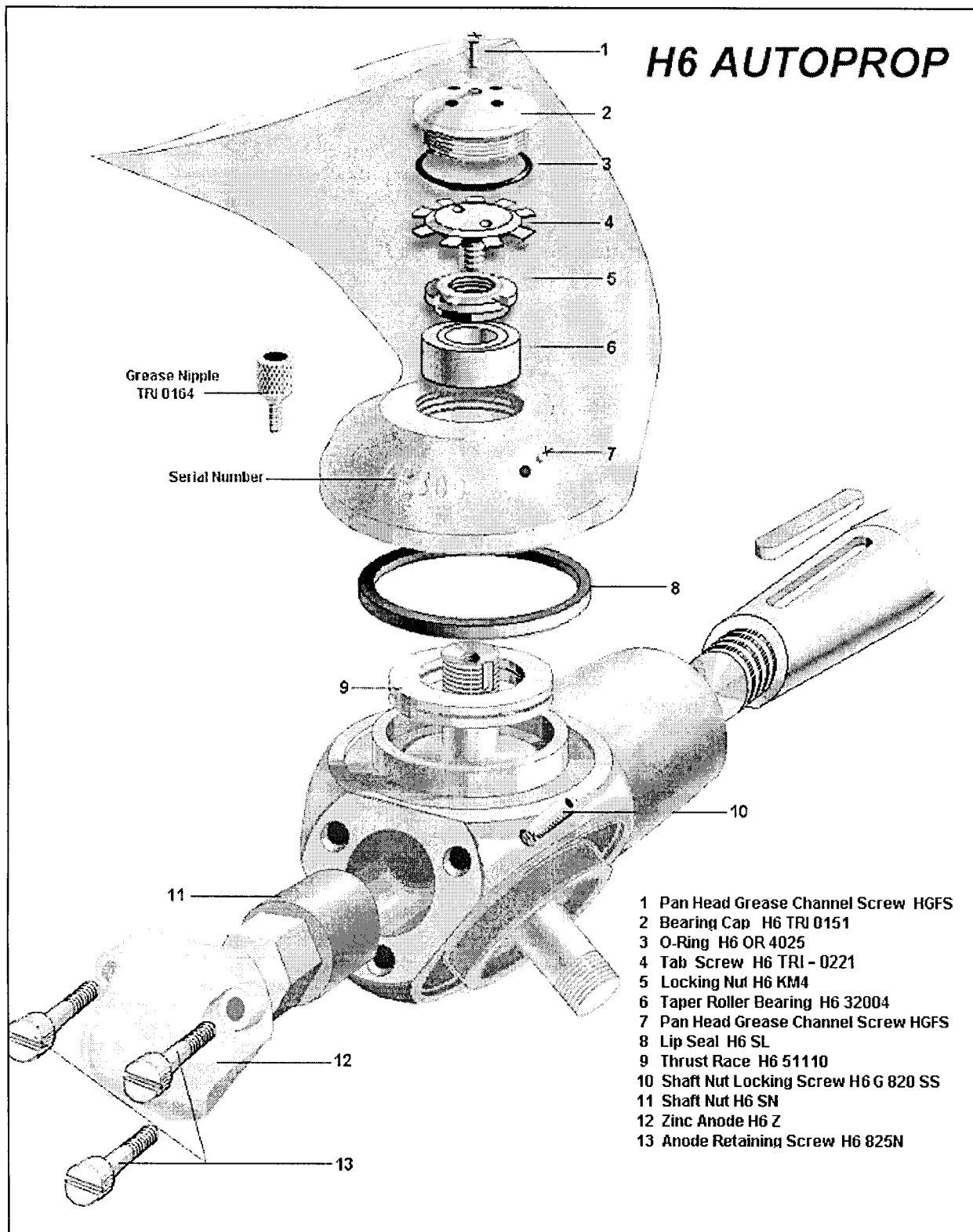
S.K.F. type (LGWA2) or in USA use CRC new generation grease #SL3110. This is generally obtainable from places like NAPA Auto parts, but also available from our office.

Recommended Parts Required:

Item #3	"O" Ring	3 each
Item #6	Roller bearing	3 each
Item #4	Tab screw	3 each
Item #5	Lock nut	3 each
Item #1 / #7	Grease channel screw	6 each
Item #8	Ecopur lip seal	3 each
Item #9	Ball bearing + race	3 each

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