Instructions for servicing the Stabilizer

This instruction sheet was constructed for stabilizer owners who want to service their own damper. We always recommend sending your unit to Scotts for service to insure proper and thorough service. If you decide to try it yourself and are not sure of anything please call so you’re not sorry after it’s too late.

Recommended oils: / Bel-Ray HVi light or 3w / Spectro Very light / PJ1 2.5wt
Recommended special tools: bullet tool for seal installation / link arm pulling tool / Scotts Stabilizer oil with injector tip

OIL CHANGE ONLY:
1) Remove all ten Allen or Torx head bolts holding the top cap on the body. (see diagram # 1). If they are corroded, a swift blow with a punch that matches the head diameter will normally loosen them up.
2) With the bolts out, twist the cap sideways to break it loose and lift cap off (oil will come out). (diagram # 2)
3) Empty the oil and clean thoroughly with solvent or contact cleaner. Clean all valving holes in cap and blow out with pressurized air making sure to aim the forced air away from your face.
4) Clean the top seal thoroughly, re-grease and reinstall top & screws. (We recommend use of bullet tool).
5) Remove both bleed hole bolts (bottom of damper diagram # 3). Move the vane all the way to one hole, fill the damper by injecting oil into the opposite hole forcing air out the other hole at the same time. (diagram # 4). Scotts offers a tapered tip damper oil bottle for injecting oil, making this operation easier.
6) Reinstall both bleed screws. Manipulate the link arm side to side and feel for any air in the system. Remove one bleed screw and hold upright so air will rise to the open bleed hole. Add oil as necessary.
7) Continue to switch bleed holes until the majority of air is gone. Optimum is to have only one small air bubble remaining when finished. IMPORTANT: If the unit is totally filled with oil (no expansion area) it can fade when it gets hot! You must allow a very small expansion area for the oil as it expands as the operating temperatures rises.

CHANGING SEALS:
8) Changing seals: Perform steps 1 through 3 first, then proceed to # 8. Remove the 15mm nut on bottom. (see diagram # 5).
9) Remove link arm by using special tool # 9007-03 a 3-bolt Puller. (see diagram # 6 & # 12). NOTE: Do not be tempted to thread bolts through the arm and push against the body, doing so can damage the body and seal housing of your stabilizer.
10) Drive the "shear pin" out from the protruding main shaft with a drift pin punch. (see diagram # 7).
11) Now by pushing on the main shaft, remove vane from body (diagram # 8). We recommend that you measure the vane (.709") and the body (.7095") to be sure the tolerances are correct to insure proper valving.
12) Grease and install new seals into the machined recess in body and cap. SCOTTS uses a special "bullet tool" to insure easy seal installation and damage free assembly. This tool can be purchased from Scotts. Using the special "bullet tool" (diagram # 12) on the threaded end of the main vane, install the vane into the body through the seal in one fluid motion, it should snap into position (diagram # 9). Now insert the bullet tool into the seal in the cap, expanding the seal to the tool's largest diameter (diagram # 10). Slide the cap over the upper shaft of the vane in one clean motion, hesitation will force you to start over; it must slide together clean with no resistance. Without the bullet tool and grease you risk damage to the seal.
13) Proceed from step 5 now for refilling and bleeding.
14) Installation of the link arm requires 2 sockets (diagram #11). One larger than the O.D. of the main shaft threads on the bottom so it will clear the threads as the link arm goes on and the other one smaller than the O.D. of the main shaft on the top. Be careful not to allow either socket to move off center as you squeeze them in a vise or you could damage the damper (see diagram #11).
1. Remove the 10 top cap screws
2. Twist cap sideways to remove
3. Locate and remove bottom bleed screws
4. Purging the stabilizer with oil injector
5. Remove the 15mm nut on the bottom
6. Using the special puller remove the linkarm
7. Using a drift remove the shear pin
8. Push the vane out from the bottom
9. Re-install the vane using the bullet tool
10. Using the bullet tool, install the top cap
11. Using the appropriate size sockets install the link arm carefully.
12. The link arm tool and bullet tool