# Mercury 44XS "Dry Out" Instructions

### Essential things to carry to every race and test session:

- < > Full box of Zip-Lock Freezer bags, 1 qt. size
- < > Full Spray Can of WD-40 (better yet, one of those Bonus Size, "25% Extra Free" cans)
- <> Two bottles of Isopropyl Alcohol gas de-icer, such as Iso-Heat, Isobar, etc.
- < > Full spray can of LPS #3
- < > Large roll of paper towels
- < > Small soft stainless steel wire brush Ace Hardware
- <> Mercury "internal thread" type flywheel puller and crankshaft protector cap
- <> Last, but not least, a copy of these Instructions (put 'em in plastic)

#### Get it onshore

Get the boat to shore, and turned right side up. Drain it as you work on the motor

- < > Remove the cowl
- < > Remove spark plugs
- <> Activate the kill switch or ground the kill switch terminal on switchbox
- < > REMOVE PROP!!!

Carefully inspect in and around carbs for sand or mud

If sand, mud, etc. is in carbs., proceed to Disassemble Motor. DO NOT ROTATE FLYWHEEL.

### Get it running

If no sand, mud is present, rotate flywheel slowly, carefully feeling and listening for anything amiss. If everything seems OK, no tight spot, no binding, no clunk, then proceed:

- < > Rope motor repeatedly to clear water from cylinders
- <> Tilt motor all way up so carbs drain fuel out front vent holes
- < > Remove fuel tank & drain fuel
- < > DO NOT disassemble carbs
- <> Add one bottle of gas de-icer, refill fuel tank and reconnect fuel line to motor
- <> Pump up squeeze bulb to fill carbs
- <> Tilt motor up again and drain carbs. Refill carbs. Drain. Repeat 3-5 times
- <> Fill squirt can / bottle with fuel. Open throttle
- <> Squirt fuel into both carbs while roping motor repeatedly
- <> Replace plugs. Turn kill switch on. Fire motor. As soon as motor fires, shut off
- <> Put boat in water. Fire motor, squirting fuel into carbs until it continues to run. Shut off
- <> Remove top bearing oiler hose at lower end. Fire motor, run a few minutes, reconnect
- <> Install test wheel or prop and run motor easy at first, then bring speed up

Run for 30 min. minimum or if you can make the next heat, race it. Nothing dries it out better... If motor has any unusual vibration or shows obvious distress, Stop, and disassemble motor.

Note: motor may seem OK when you turned flywheel, but depending on how hard it went in, it may have bent rods, as these motors have a lot of inertia from the flywheel. Listen, feel for any problem.

## Collect all drained fuel and dispose of it in a safe and evironmentally responsible manner.

### **Disassemble Motor**

Start by removing all the external components, such as carbs, fuel pump, throttle, starter, flywheel, stator, switch box, coils, intake port cover, etc. Bag all the small parts and fasteners after cleaning. The WD- in WD-40 means water displacing. Rinse everything clean with WD-40, then bag parts.

- <> Remove center main bearing, reed cage, end caps and crankcase cover bolts
- <> Remove cover. Remove end caps. Liberally spray WD-40 through the bearings
- < > Remove crankshaft. Spray liberally with WD-40
- <> Spray cylinder bores liberally with WD-40, drain, wipe, then spray with LPS #3
- <> Disassemble the crank train, rinsing clean with WD-40 and bagging components.
- <> Mark the bags top reedcage, bottom reedcage etc. Don't lose dowel pins.
- <> Disassemble each rod individually. Rinse needle bearings, etc. on towel with WD-40
- < > Label & bag each piston / rod assembly, but first brush and rinse the mating surface of the rod and cap, replace rod screws, carefully align cap to rod and torque to 15 ft. lbs.
- < > Rinse crankshaft liberally with WD-40, then spray it down with LPS #3 and wrap it

Pack all parts into a box for transport after spraying LPS #3 into each bag where rust is a concern (Piston assy's, etc). Reinstall crankcase cover on block, secure with two bolts. Reinstall block on lower unit. Secure with two nuts. Reinstall cowl. Now it can ride home in your trailer...

Get it to your shop or to your motor builder as soon as possible, for thorough cleaning, inspection and reassembly. Be sure to check rods for straightness...

Remember, rust attacks the hardened steel surfaces (crankshaft, bearings, etc) worst. Softer steel or iron surfaces (rods, cylinder bores, etc) also rust quickly, but the hard surfaces are first priority... Get everything dried and rust protected as quickly as you can.

This information is provided as a service to the APBA D Stock Class drivers/owners by Jerry Wienandt, Trident Racing