

# Haul-out Checklist

## BEFORE HAULING - TRIAL RUN

- TAKE READINGS AT 500 RPM INCREMENTS, FIVE-MINUTE INTERVALS.
- RUN FOR 30 MINUTES AT 80% LOAD (OR 10% BELOW MAXIMUM RPM).
- RUN AT WIDE OPEN THROTTLE (WOT) FOR 10 MINUTES AND CHECK TEMPS, SMOKE, VIBRATION.
- CHECK SHAFT-SEAL DRIP RATE. IF CONVENTIONAL STUFFING BOX, TAKE TEMP OF HOUSING AT CRUISE. (SHOULD NOT BE HIGHER THAN 20 DEGREES ABOVE SEAWATER TEMP OR 130 MAX.)
- FOR ALL SEALS, PULL INJECTION HOSE OFF AND CHECK FOR GOOD FLOW OF WATER.

## IMMEDIATELY AFTER HAUL OUT - STRUCTURAL

- SIGHT BOTTOM FOR BLISTERS WHILE PAINT IS WET. IF BLISTERS ARE PRESENT, CHECK BOTTOM WITH MOISTURE METER.
- LOOK FOR AREAS THAT REMAIN DAMP AFTER SURROUNDING AREAS HAVE DRIED (CAN INDICATE A PROBLEM IN THE LAMINATE).

## WHILE ON LAND - BELOW THE WATERLINE

### INSPECT BOTTOM PAINT:

- IF FLAKING, CONSIDER SODA BLASTING.
- IF SODA BLASTING, GOOD TIME TO APPLY A BARRIER COAT.

### APPLYING ABLATIVE PAINT:

- IF EXISTING, BUILD UP THIN SPOTS WITH 2-3 COATS BEFORE PAINTING BOTTOM.
- IF NEW, FIRST COAT SHOULD BE A DIFFERENT COLOR TO INDICATE WHEN GETTING THIN.

### INSPECT THRU-HULLS AND SEACOCKS:

- COUNT HOLES IN BOTTOM AND ACCOUNT FOR SAME NUMBER OF SEACOCKS INSIDE THE BOAT.
- OPEN AND CLOSE EACH SEACOCK WHILE ON LAND AND SERVICE ANY FROZEN ONES.
  - > EXERCISE ALL SEACOCKS 3-4 TIMES PER YEAR.
- BRONZE SHOULD HAVE A GOLDEN HUE. IF PINK, THERE IS A CORROSION PROBLEM. PINK = WEAKENED.
  - > IF PINK, HAVE A MARINE ELECTRICIAN CHECK EFFECTIVENESS OF SACRIFICIAL ANODES AND FOR STRAY CURRENT (DC).
- CHECK FOR PITTING OF THE HARDWARE - POINTS TO STRAY CURRENT CORROSION (DC).
- LOOK FOR "HALOS" AROUND THRU-HULLS (DISTORTIONS IN THE PAINT) INDICATIVE OF EXCESSIVE SACRIFICIAL ANODES OR AC STRAY CURRENT

### INSPECT POWER TRAIN:

#### PROP

- THIN NUT BELONGS AGAINST THE PROP
- PROP COLOR - GOLDEN HUE, NO PINK

## BELOW THE WATERLINE (CONT'D.)

- CHECK CLEARANCE OF BLADES USING A GUIDE CLAMPED TO RUDDER. IF ENGINE HAD VIBRATION DURING TRIAL RUN, CONSIDER PROP SCAN.
- PROPELLER SHOULD ROTATE EASILY (IF NOT, ALIGNMENT OR BEARING PROBLEM)
- NO MORE THAN ONE SHAFT DIAMETER DISTANCE BETWEEN FORWARD END OF PROP HUB AND AFT END OF CLOSEST BEARING

### CHECK CUTLASS BEARINGS:

- NO SIDE-TO-SIDE MOVEMENT OF SHAFT
- LOOK FOR DRIED OR CRACKED RUBBER. CHECK SHAFT SEALS.
- CONVENTIONAL STUFFING BOX
  - > REPACK IF TEMPS AND DRIP RATE WERE UNACCEPTABLE DURING TRIAL RUN.
- CHECK FACE SEAL (PSS).
  - > IF INJECTION NIPPLE IS NYLON, REPLACE WITH STAINLESS.
  - > REPLACE HOSE EVERY SIX YEARS OR IF CRACKED.
  - > INSPECT AND CLEAN BETWEEN SEAL AND ROTOR.

### SACRIFICIAL ANODES:

- INSPECT FOR REMAINING METAL. IF ZINC AND NOT EATEN AWAY, CONSIDER CHANGING TO ALUMINUM.
  - > ZINC: ONLY EFFECTIVE IN SALT WATER. TRACE METALS HARMFUL TO ENVIRONMENT
  - > ALUMINUM: EFFECTIVE IN SALT OR BRACKISH AND BETTER FOR ENVIRONMENT
  - > MAGNESIUM: USE ONLY IN FRESH WATER
  - > DON'T MIX TYPES ON ONE BOAT
  - > OK TO HAVE ALUMINUM ON HULL AND ZINCS FOR INTERNAL ENGINE COMPONENTS
- INSTALL A GALVANIC ISOLATOR TO PROTECT YOUR ANODES FROM OTHER BOATS IN A MARINA.

## HULL, ABOVE THE WATERLINE

### PROTECT GELCOAT

- CLEAN AND WAX ANNUALLY.
- KEEP COMPOUNDING TO A MINIMUM (SANDS AWAY THE GELCOAT).
- CORED HULLS: MOISTURE-METER CHECK EVERY THREE YEARS

### DECK AND CABIN

#### PROTECT GELCOAT

- CHECK WITH MOISTURE METER EVERY THREE YEARS.
  - > RENEW HARDWARE BEDDING EVERY 7-10 YEARS OR AS INDICATED BY MOISTURE CHECK.

### AFTER LAUNCHING

- CHECK ALL SEACOCKS FOR LEAKS AND EASE OF MOVEMENT.
- FOR DRIPLESS SHAFT SEALS W/BELLOW HOSE, COMPRESS BELLOW TO RELEASE ENTRAPPED AIR.
- REPEAT WIDE-OPEN-THROTTLE TEST AND RECORD RESULTS.

