



## Keel Fatigue Inspection Checklist

Inspection Area	What to Check	Method	Notes
Keel Bolts	Corrosion, elongation, cracking	Visual + torque test	Use dye penetrant if cracks suspected
Backing Plates	Deformation, delamination	Visual + tap test	Look for moisture ingress or rust trails
Keel-Hull Interface	Stress cracks, movement	Tip swing test	Observe from inside and outside simultaneously
Internal Hull Structure	Matrix cracking, delamination	Visual + moisture meter	Focus around keel floors and stringers
External Hull (around keel)	Paint blistering, gelcoat cracks	Visual	Especially after grounding or hard sailing
Previous Repairs	Quality and integrity	Visual + documentation review	Check for unsealed repairs or filler use
Keel Welds (if fabricated)	Fatigue cracks, corrosion	Dye penetrant or magnetic particle	Especially at weld toes and transitions
Grounding History	Any known impacts	Owner log + interview	Triggers mandatory inspection under Cat 1–3
Moisture Intrusion	Signs of water ingress	Moisture meter	Especially around bolt holes and stub laminate