

HYUNDAI SEASALL RATING CATEGORIES FOR MARINE ENGINE

Rating	Definition
S5 Pleasure Duty	- Full power operation restricted to within 10% of total use period Continual operation at Full Power limited to 0.5 hrs per every 12 hrs. - Cruising speed (RPM) at engine RPM < 90% of rated speed (RPM) - Operating less than 400 hours per year
S4 Special Pleasure Duty / Special Light Duty Commercial	- Full power operation restricted to within 20% of total use period Continual operation at Full Power limited to 1 hr per every 12 hrs - Cruising speed (RPM) at engine RPM < 90% of rated speed (RPM) - Operating less than 1,500 hours per year
S3 Light Duty Commercial	- Full power operation restricted to within 20% of total use period Continual operation at Full Power limited to 2 hrs per every 12 hrs. - Cruising speed (RPM) at engine RPM < 90% of rated speed (RPM) - Operating less than 1,500 hours per year
S2 Medium Duty Commercial	- Full power operation restricted to within 30% of total use period Continual operation at Full Power limited to 4 hrs per every 12 hrs. - Cruising speed (RPM) at engine RPM < 90% of rated speed (RPM) - Operating less than 3,000 hours per year
S1 Heavy Duty Commercial	- Uninterrupted and unlimited use at full power.

APPLICATION OF WARRANTY COVERAGE

Warranty coverage is available only to retail customers who purchase from a dealer authorized by Hyundai SeasAll to distribute the product in the country in which the sale occurred, and then only after the Hyundai SeasAll specified pre-delivery inspection process is completed and documented. Warranty coverage becomes available upon proper registration of the product by the authorized dealer. Routine maintenance outlined in the Installation and Operation Manual must be performed in a timely fashion in order to obtain warranty coverage. Hyundai SeasAll reserves the right to make any warranty coverage contingent upon proof of proper maintenance.

This warranty may be rendered invalid at Hyundai SeasAll's discretion based upon:

- 1) Modifications not authorized by Hyundai SeasAll
- 2) Handling errors
- 3) Improperly performed Pre-Delivery Inspection
- 4) Unsuitable fuels, coolant or lubricants
- 5) Using the engine outside of the specified duty cycle rating
- 6) Overloading
- 7) Improperly performed repairs
- 8) Improper maintenance interval(s)
- 9) No submitted Pre-Delivery Inspection Card and Warranty Registration Card

DURATION OF WARRANTY

Leisure Applications

Engine	Rating	Base Engine		Extended Major Components (Includes Base Engine Warranty)	
		years	hours	years	hours
S270/D170/R200/U125	S5	2	1,000	4	2,000
**H380/L500	S5	2	-	4	5,000

** Operating less than 1,500 hours per year and Full Power operation < 10% of total use period

- Warranty period is limited by Years or Hours whichever occurs first.
- Major Components : Engine Block Casting, Crankshaft Forging, Connecting Rods, Camshaft Forging, Transmission Cover/Housing, Flywheel Housing, Intake Manifold, Fresh Water Pump Housing and Oil Pan.
- Cylinder Liner or Cylinder Bore scratches are not included in extended major part warranty coverage.

Commercial Applications

Engine	Rating	Base Engine		Extended Major Components (Includes Base Engine Warranty)	
		years	hours	years	hours
S270/R200/D170/U125	S4	1	1,000	3	2,000
S220/D150	S3	1	1,500	3	6,500
H380/L500	S1	1	5,000	3	10,000
M70/M100/M140					
Q280/Q330/Q385/Q405					

- Warranty period is limited by Years or Hours whichever occurs first.
- Major Components : Engine Block Casting, Crankshaft Forging, Connecting Rods, Camshaft Forging, Transmission Cover/Housing, Flywheel Housing, Intake Manifold, Fresh Water Pump Housing and Oil Pan.

- Cylinder Liner or Cylinder Bore scratches are not included in extended major part warranty coverage.

Hyundai SeasAll Rating Categories For Marine Auxiliary Engines

(Ratings in accordance with *ISO 8528*)

Standby Power	<ul style="list-style-type: none"> ● Operating less than 500 hours per year with average 90% of the declared Standby Power ● No Overload capacity is available for this rating
Prime Power	<ul style="list-style-type: none"> ● Average power operation does not exceed 70% of the declared Prime Power ● A 10% overload is permissible for 1 hour per 12 hours of operation. ● Maximum Prime Power shall not exceed 500 hours per year.