



# S30 Diesel Outboard



**HYUNDAI SEASALL**

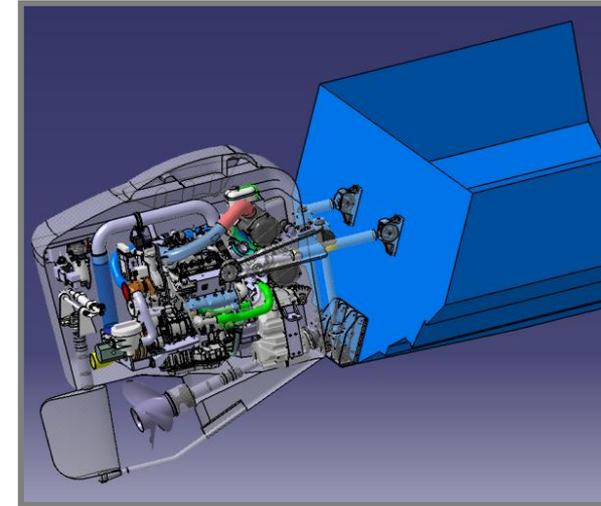
# Overview

## Feature

- Combined engine with driveshaft encased in a pod that carries the propeller, rudder, trim system and steering system
- Unique transom is needed compared to conventional outboards

## Benefit

- Easy installation
- Advantages of simplicity, safety, robustness and fuel economy as compared with gasoline outboard
- P.T.O option with hydraulic gear pump



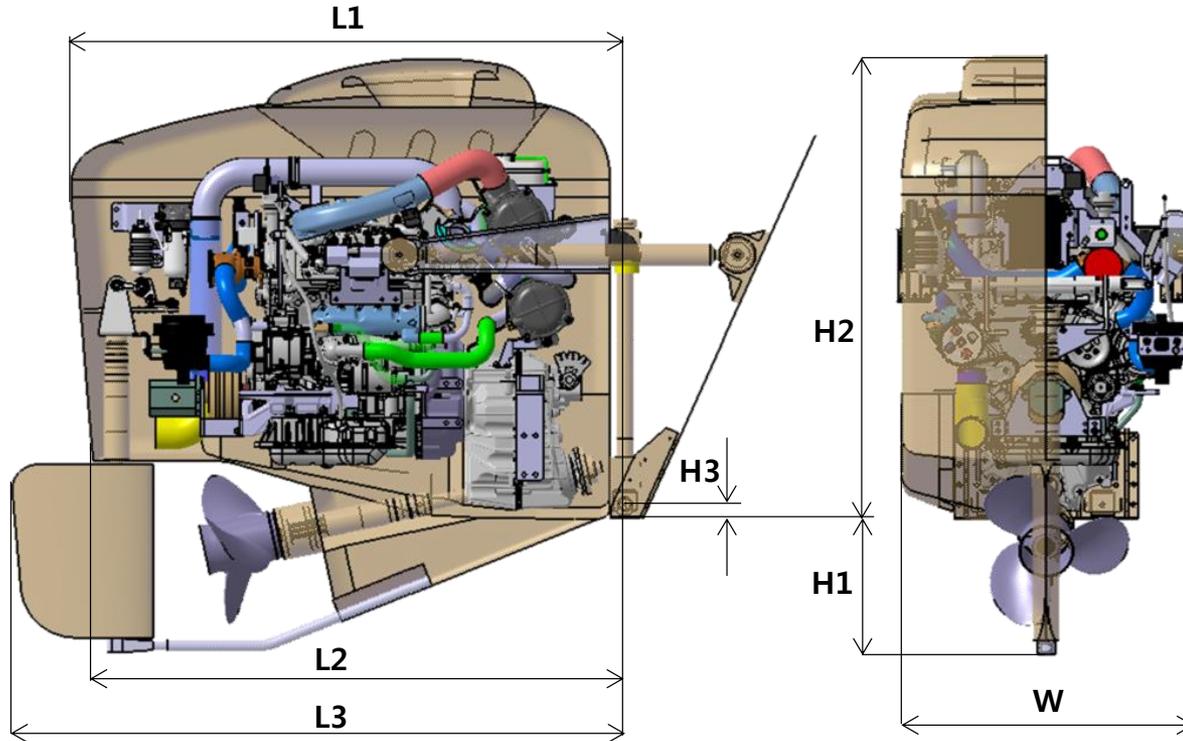
## Specification

Tolerance : ±5%

Engine Model	S270		
Output	270PS(199kW)@3,800rpm		
Bore X Stroke	84mm X 89mm		
Configuration	24-valve,E-VGT with intercooler, Fresh water cooling		
Transmission	ZF68IV		
Gear Ratio	1.746	2.0	Available 1.56
Propeller	19~21P	21~23P	BRAVO2X
Fuel consumption	54.6 L/hr		

# Overview

## □ Dimension

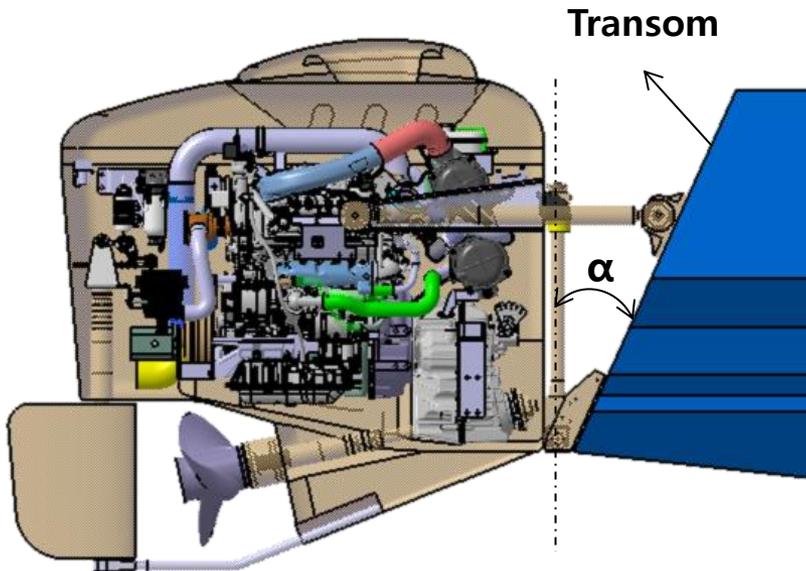


L (mm)	L1	1,516
	L2	1,456
	L3	1,677
W(mm)		780
H (mm)	H1	1,275
	H2	380
	H3	40
Dry Weight(kg)*		625

\* Include sts. propeller, cylinder and main bracket. Not PTO option model.

# Installation-1

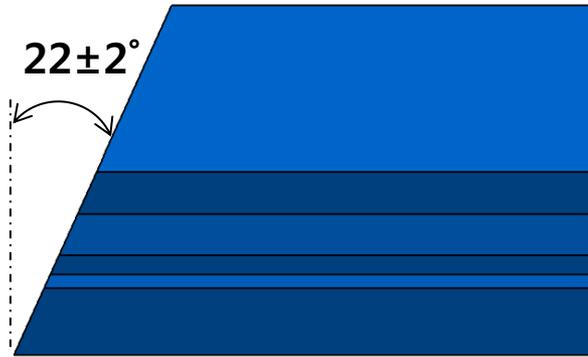
- Easy installation and removal
  - Required only twin rigid bar mounted
  - Separately connected wiring harness, fuel and steering hydraulic hose
- Transom angle ( $\alpha$ ) :  $22\pm 2^\circ$ 
  - Unique transom needed compared to conventional outboards
- Transom thickness : 45~50mm



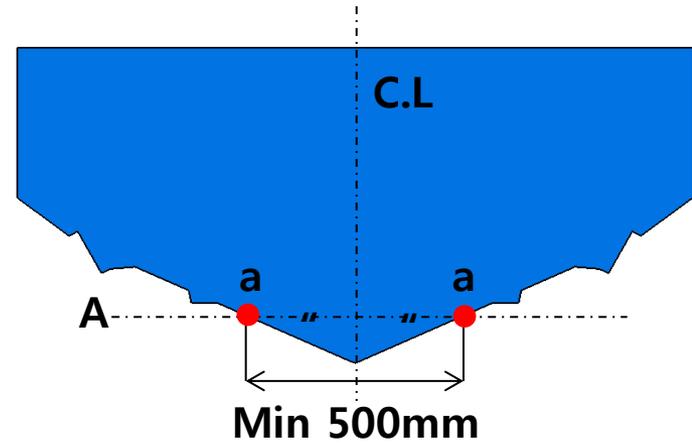
# Installation-2

- Install a transom for S30OB

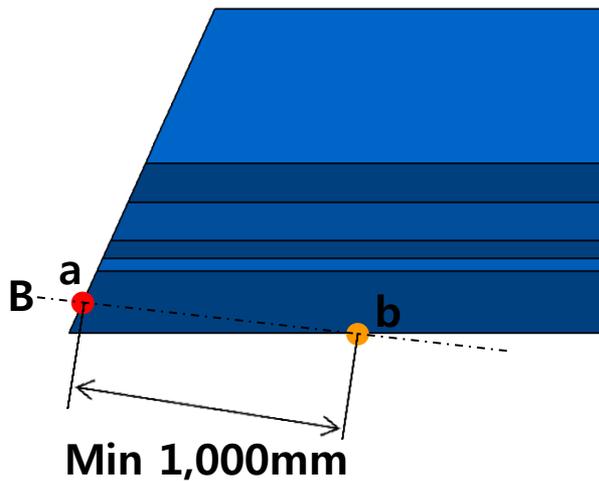
1. Make a transom with  $22\pm 2^\circ$  angle.



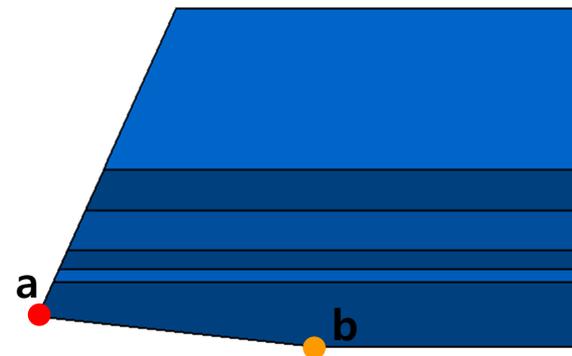
2. Find a "a" point and make a "A" line.



3. Find a "b" point and make a "B" line.

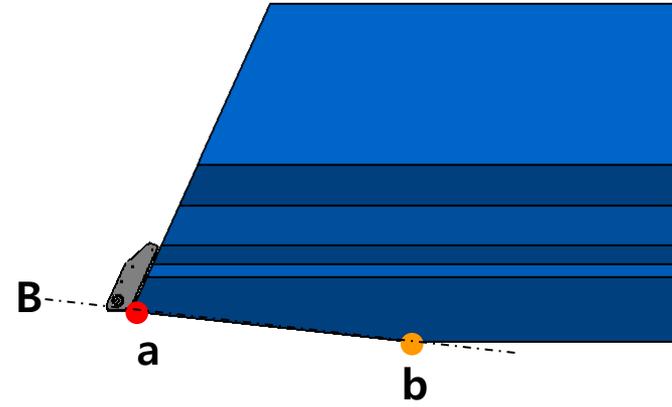
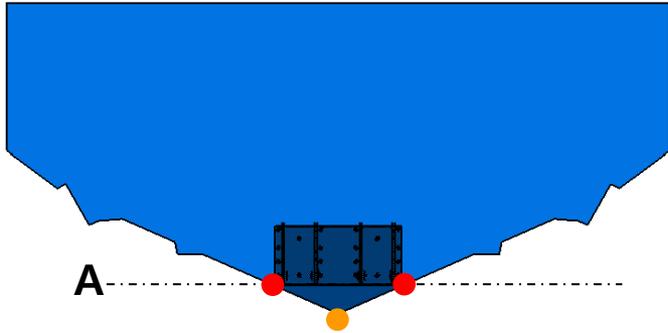


4. Cut transom and keel follow "A,B" lines.



# Installation-3

## 5. Install a main bracket



# Trim System

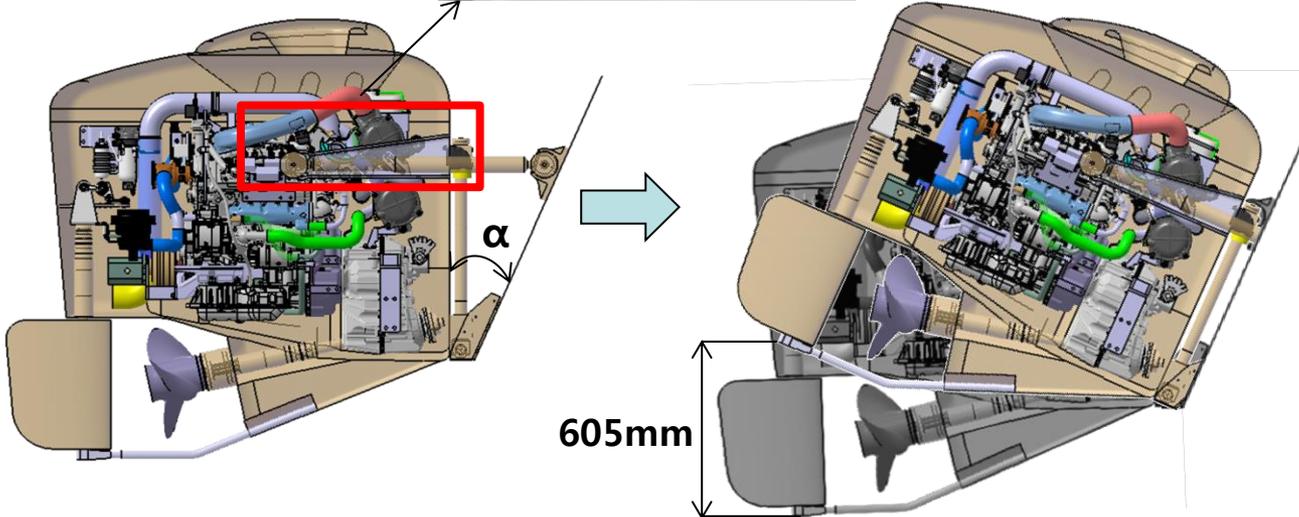
- Trim pump spec.
  - Motor : 12V, 1.6kW
  - Pump : 23 cc/rev
  - Tank : 9 ℓ



- Trim angle ( $\alpha$ ) : 24.5°
  - -2° ~ 22.5° range



Trim cylinder



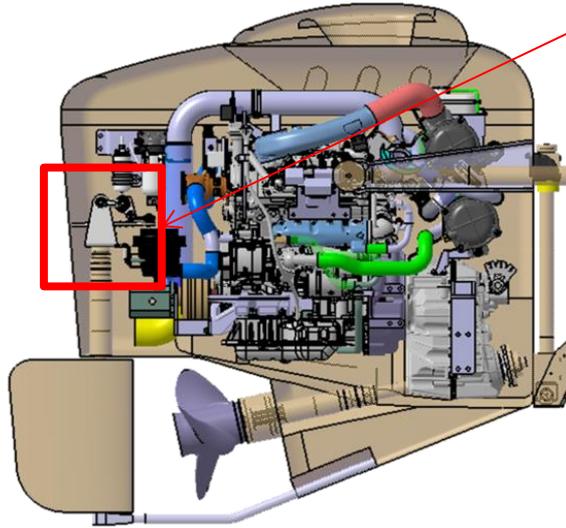
<up>



<down>

# Steering System

- Hydraulic helm pump and outboard cylinder system
  - Not engine driven p/steering pump
  - Supplying rudder angle indicator
- Rudder angle : 45°



Steering cylinder

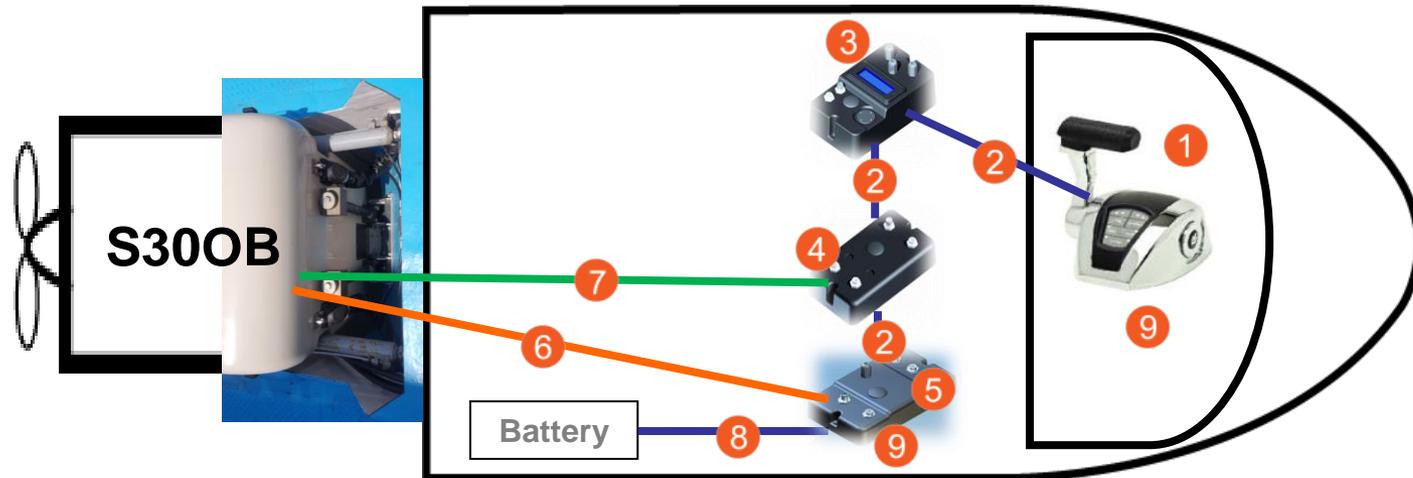


# Control System

## □ Ultraflex electric control system

→ Every parts are installed in wheelhouse

→ Just two wiring harness(throttle and shift cable) is connected to pod

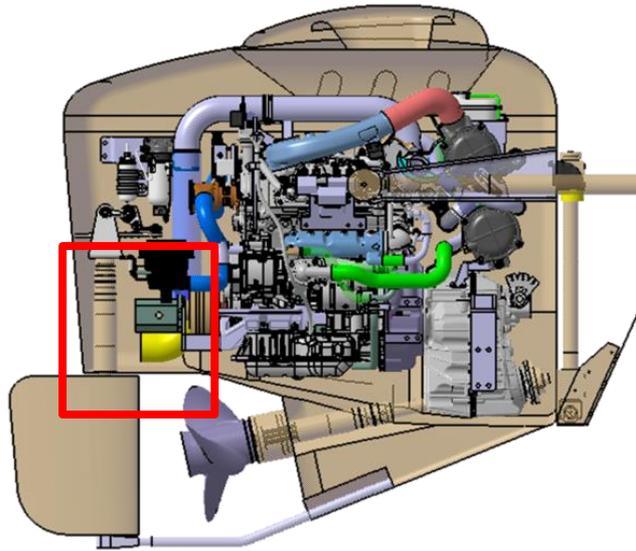
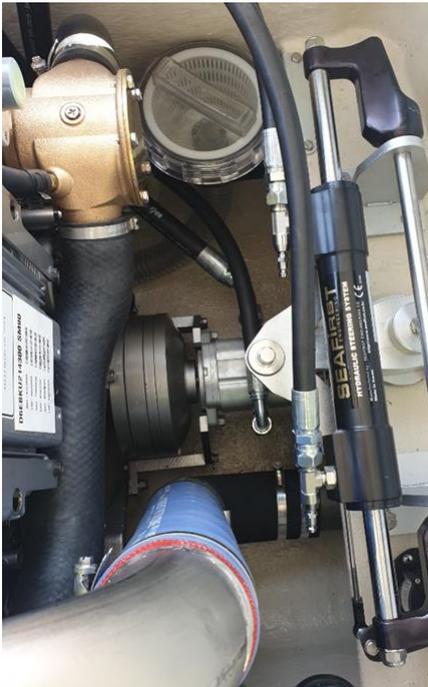


No	Description	Qty
1	Single control without trim	1
2	CAN Cable 1m	3
3	Control Unit	1
4	V-Throttle Hyundai unit	1

No	Description	Qty
5	Shift Unit	1
6	Shift Cable (solenoid) 7m	1
7	V-Throttle Hyundai Cable 6m	1
8	Main Power Supply Cable 7m	1
9	Network Terminators	1

# Option System – P.T.O

- Electric clutch and hydraulic gear pump
  - Crank pulley directly connected
- Pump spec.
  - displacement : 35 cm<sup>3</sup>/rev
  - flow @ 1,500rpm : 50.2lpm
  - max pressure : 170bar
  - max speed : 2,000rpm



# TEST BOAT #1 + S250-OB PROTO#1



Date	31 Jul 2018
L.O.A	8.5m
Total weight	2ton
Engine output	250PS
Drive/ratio	ZF63IV 2:1
Propeller	Solas Titan3
	3 blade 23pitch
	Stainless steel
Max speed	30knot



# TEST BOAT #1 + S250-OB PROTO#1



# TEST BOAT #2 + S270-OB PROTO#2



Date	7 Oct 2018
L.O.A	10.6m
Total weight	3ton
Engine output	270PS
Drive/ratio	ZF63/68IV 2:1
Propeller	Solas Titan3
	3 blade 23pitch
	Stainless steel
Max speed	27knot



# TEST BOAT #2 + S270-OB PROTO#2

