

**S • DRIVE**  
**Transmission**



**Manuale d'installazione - Installation handbook**

## DESCRIZIONE

La trasmissione Sail Drive Lombardini Marine è costruita utilizzando ingranaggi in acciaio temprato e cementato; il corpo frizione è in bronzo a forma di doppio cono; il dispositivo di innesto è del tipo a servocomando meccanico.

## DESCRIPTION

Lombardini Marine Sail Drive transmission is made with hardened and casehardened steel gears; clutch is bronze made and has double-cone shape; coupling device is mechanical servo control type.



## PRECAUZIONI AL MONTAGGIO

Prima del montaggio proteggere l'albero scanalato con grasso idrofugo. L'allineamento del motore e della trasmissione deve essere orizzontale.



## ASSEMBLY PRECAUTIONS

Before installing protect the splined shaft with waterproof grease. Engine and transmission alignment must be horizontal.



## IMPORTANTE

In navigazione, un brusco passaggio dalla posizione marcia avanti a quella di marcia indietro, senza sosta al punto di folle, potrebbe causare seri danni agli ingranaggi ed alla testa della trasmissione.



## IMPORTANT

During sailing, a sudden change from forward to rear speed, without stopping on the neutral position, may be cause of serious damages to gears and head transmission.



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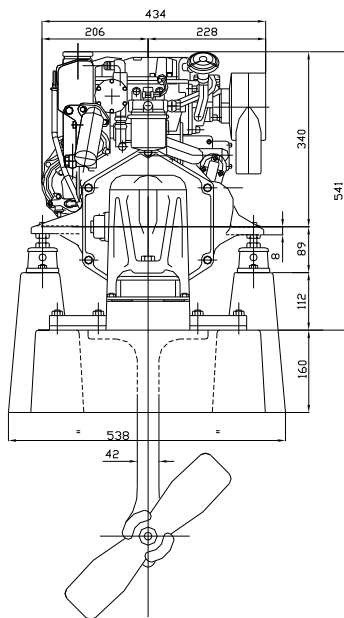


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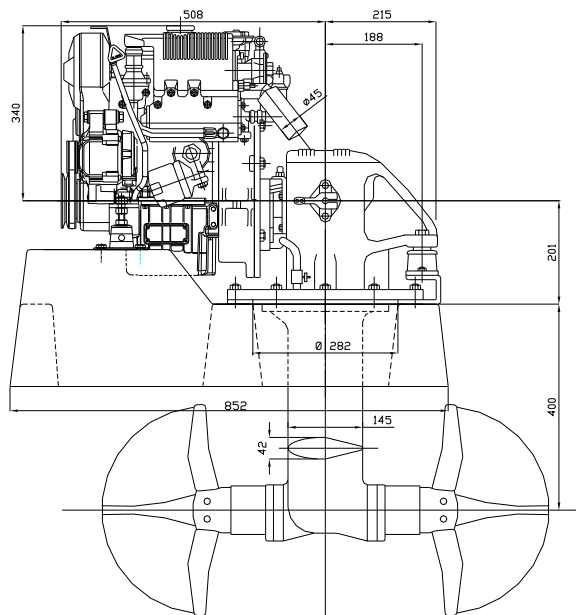
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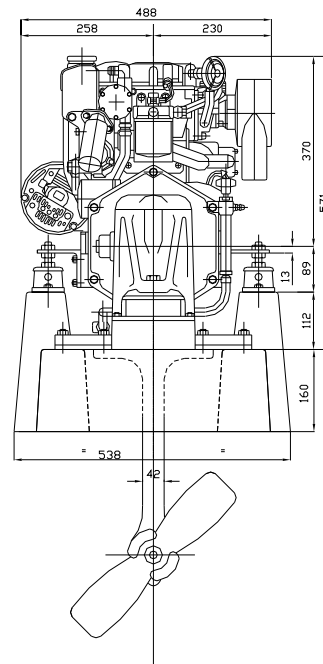
**DIMENSIONI D'INGOMBRO "FOCS"**  
**OVERALL DIMENSIONS "FOCS"**



**LDW 502 SD**

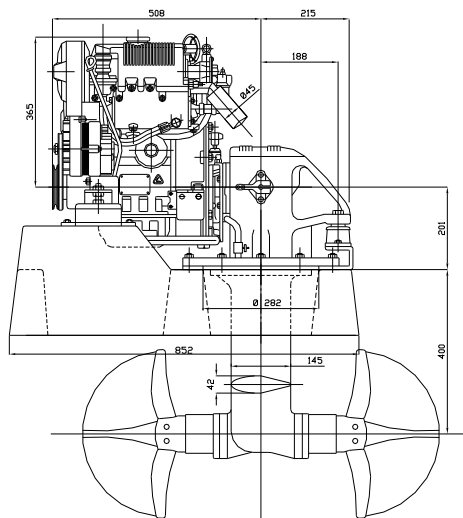
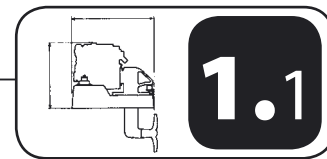


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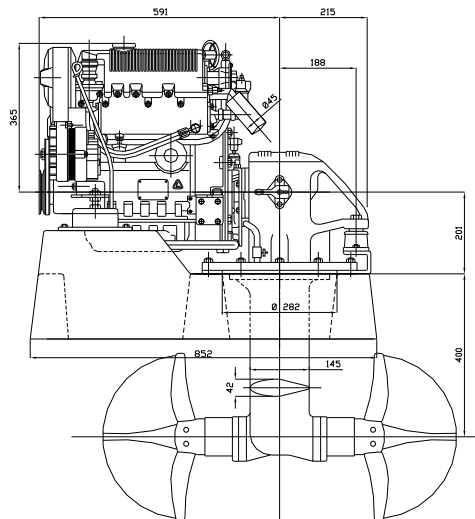


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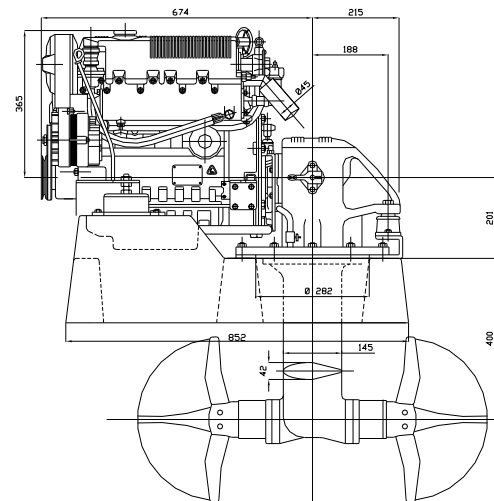
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**OVERALL DIMENSIONS "FOCS"**



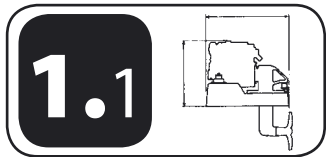
**LDW 702 SD**



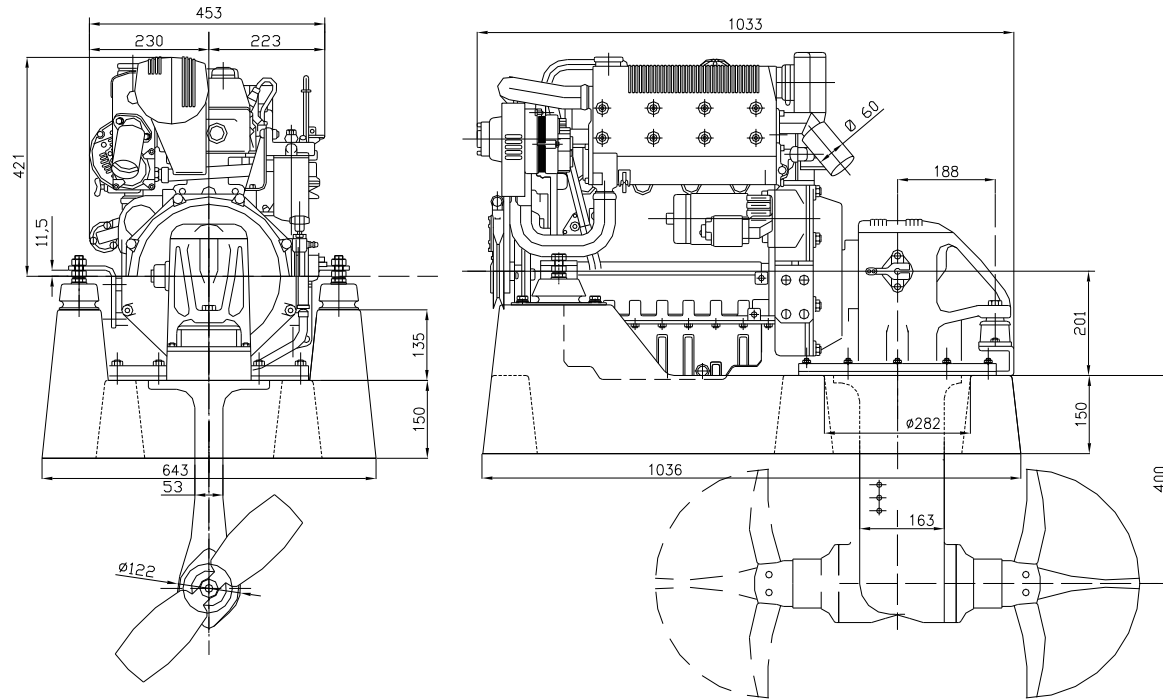
**LDW 1003 SD**



**LDW 1404 SD**

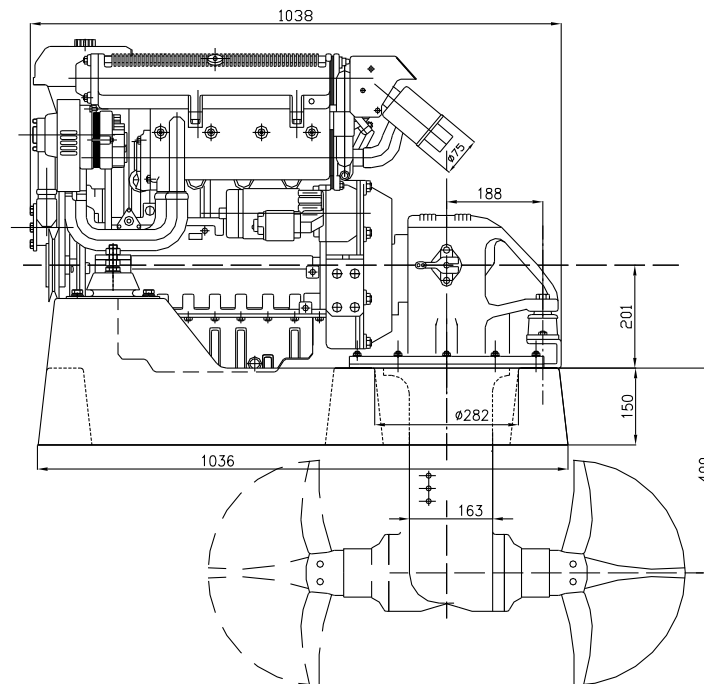
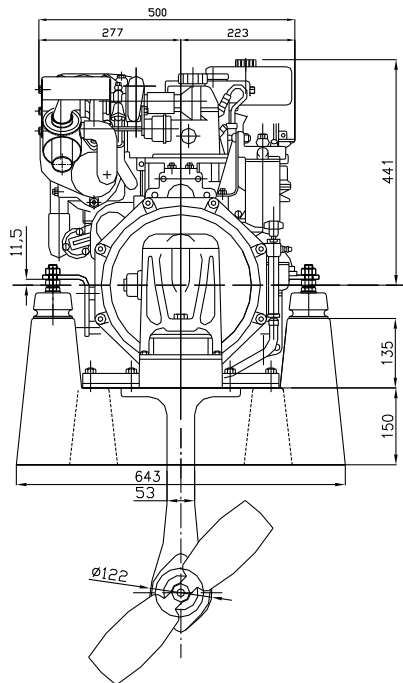
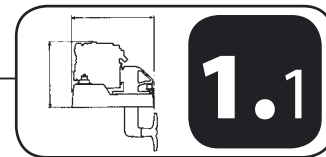


**DIMENSIONI D'INGOMBRO "CHD"**  
**OVERALL DIMENSIONS "CHD"**



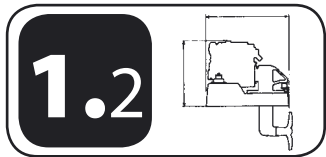
**LDW 1904 SD - LDW 2204 SD**

**DIMENSIONI D'INGOMBRO "CHD"**  
**OVERALL DIMENSIONS "CHD"**



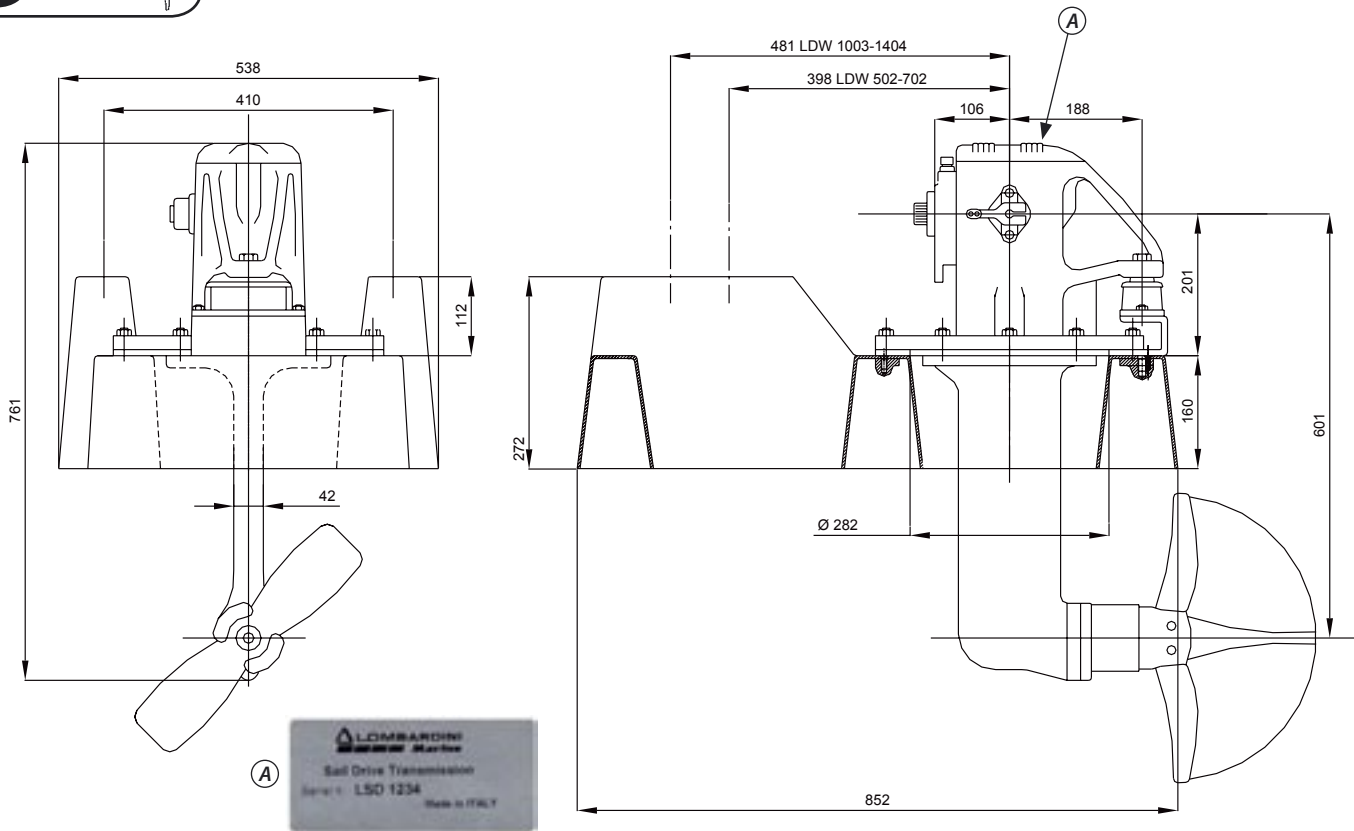
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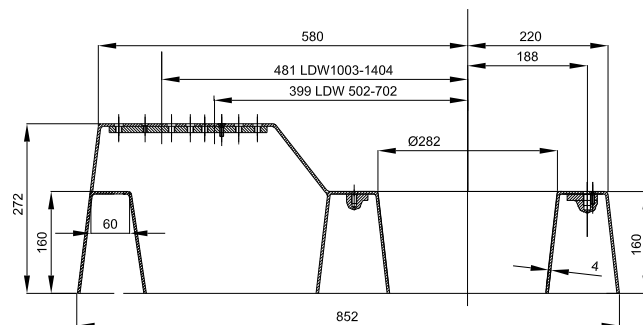
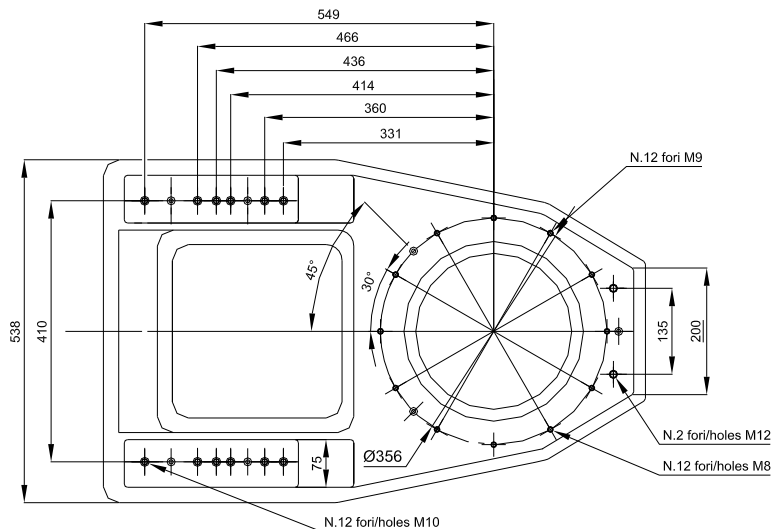
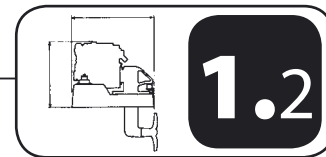


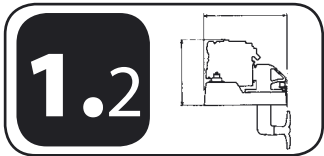


# S-DRIVE "FOCS"

## DIMENSIONI D'INGOMBRO OVERALL DIMENSIONS

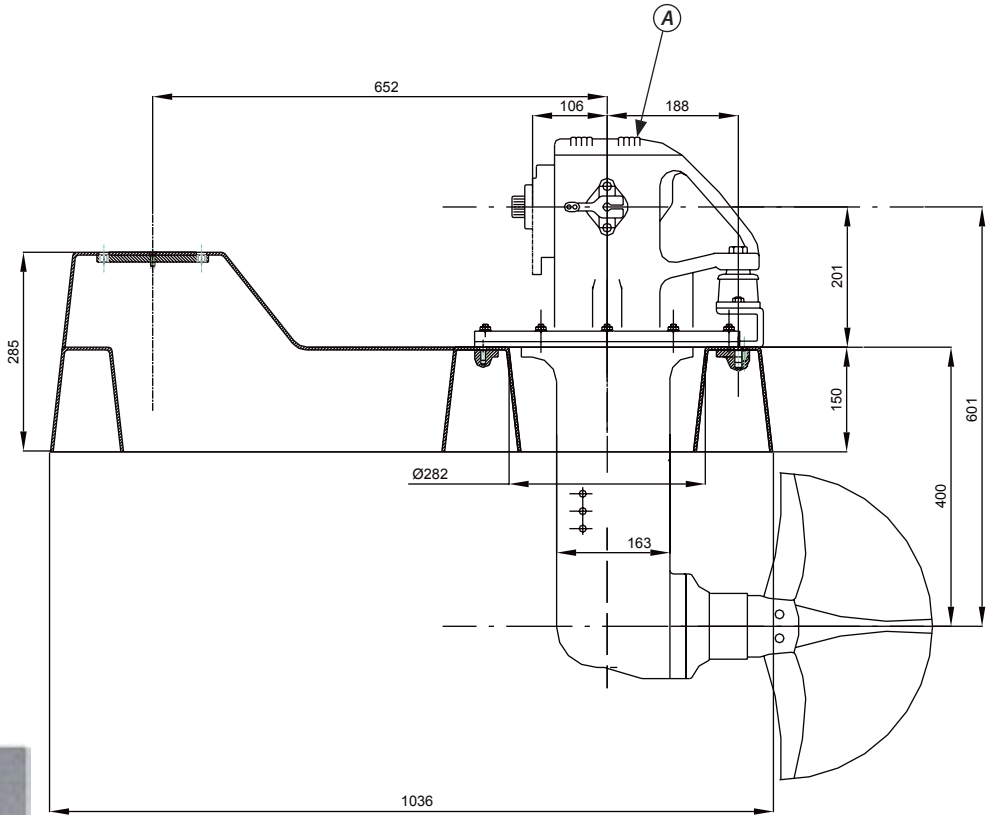
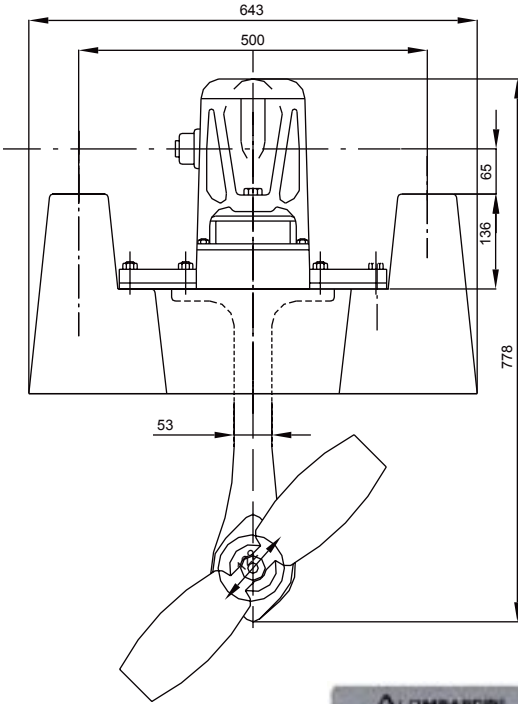






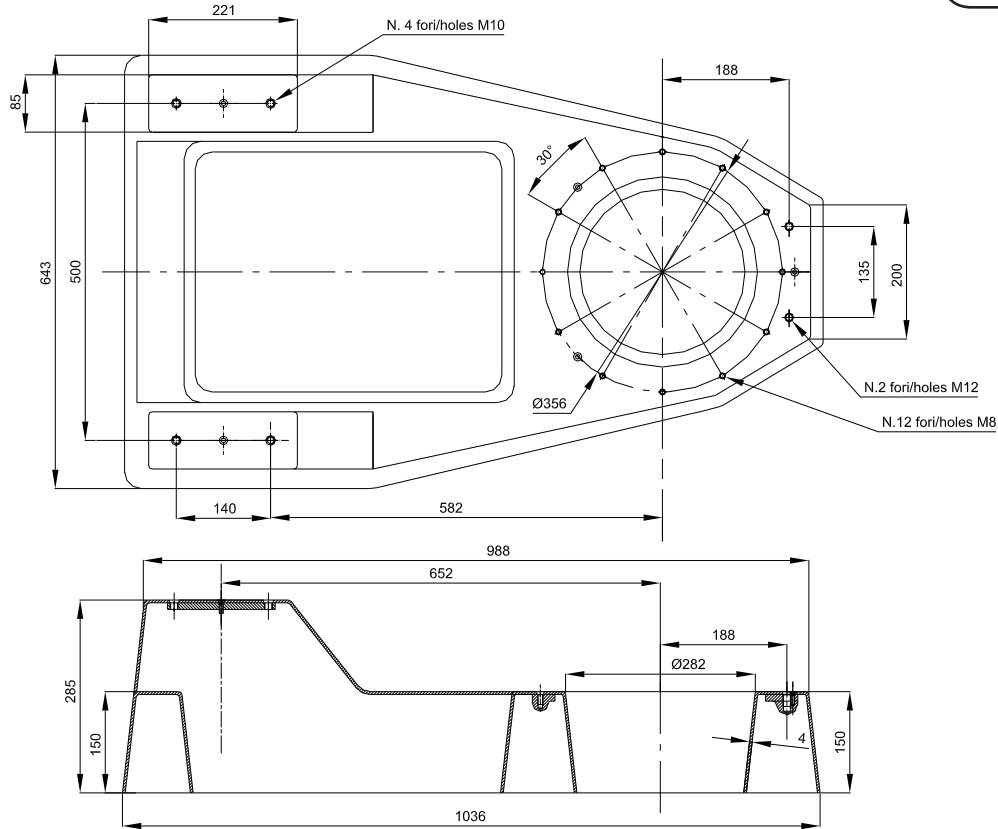
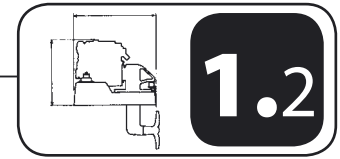
# S-DRIVE "CHD"

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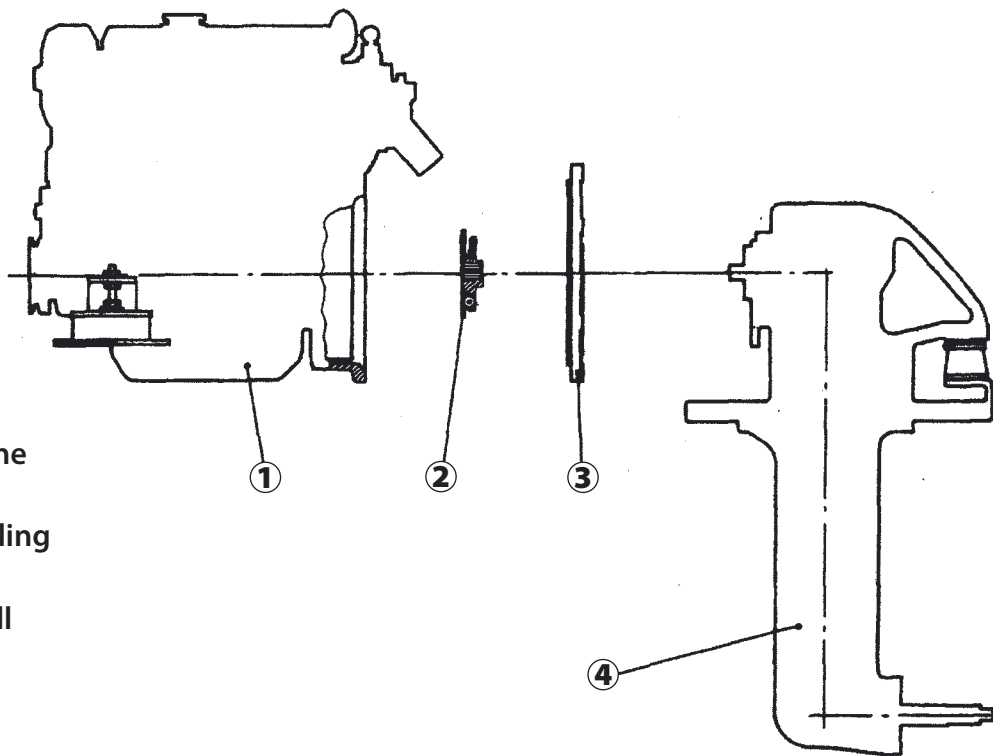
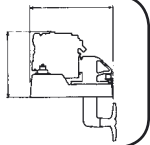


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# 1.3

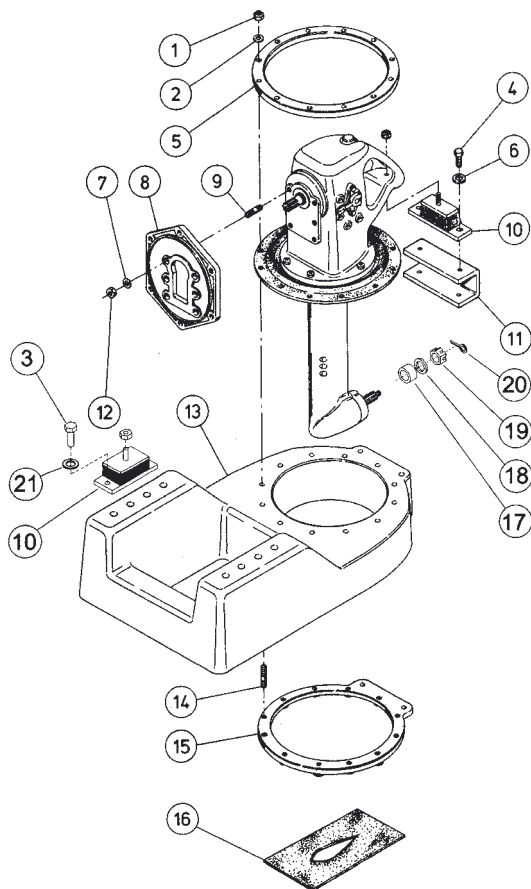


❶ Motore / Engine

❷ Giunto / Coupling

❸ Campana / Bell

❹ S. Drive

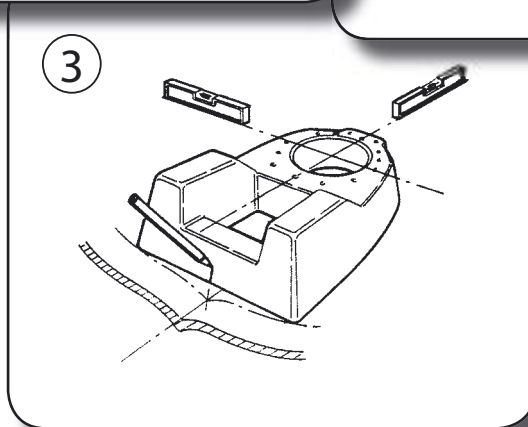
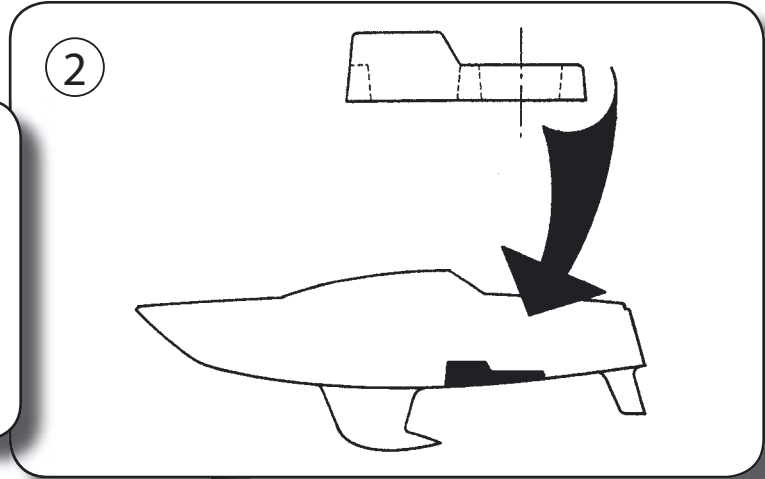
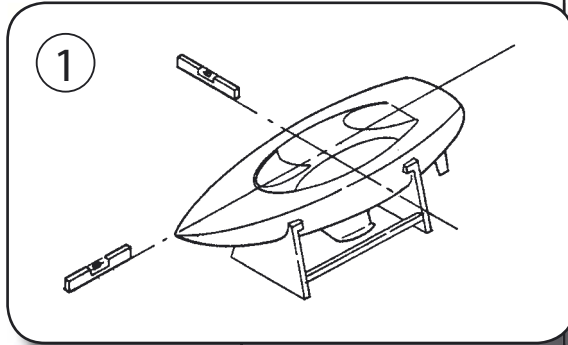


1	dado autobloccante	Stopnut	12	0032030870	0032030870
2	Rondella ø8	Washer ø8	12	0076252040	0076252040
3	Bullone M10	Bolt M10	4	0017801010	0017801010
4	Bullone M12	Bolt M12	2	0017801190	0017801190
5	Anello superiore	Upper ring	1	0013013410	0013013410
6	Rondella piana ø12	Plain washer ø12	2	0076250260	0076250260
7	Rondella elastica ø8	Plain washer ø8	6	0075550290	0075550290
8	Anello flangiatura	Coupling flange	1	0011700130	0011700260
9	Prigioniero M8	Stud M8	6	0067800190	0067800100
10	Supporto elastico	Flexible mounting	3	*	**
11	Distanziale supporto	Mounting spacer	1	0089033120	0089033120
12	Dado M8	Nut M8	6	0032401400	0032401400
13	Basamento in vetroresina	Fiberglass engine bed	1	0015162400	0015109060
14	Prigioniero M8x45	Stud M8x45	12	0067801530	0067801530
15	Anello inferiore (vedi n. 13)	Lower ring (see n. 13)	1	0013013400	0013013400
16	Guarnizione fondo barca	Boat bottom seal	1	0047755210	0047756000
17	Anello	Coupling	1	0035270970	0035270970
18	Rondella	Washer	1	0077011930	0077011930
19	Dado	Nut	1	0033002400	0033002400
20	Coppiglia	Split pin	1	0028000810	0028000810
21	Rondella	Washer	4	0076252110	0076252110

\* Per/for LDW 702 - 1003 - 1404 n. 3 0086361250  
Per/for LDW 502 n. 1 0086361250 n. 2 0086361500

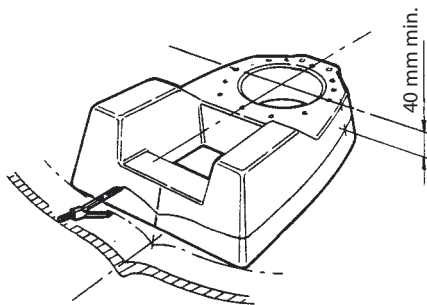
\*\* Per/for CHD n. 1 0086361250 n. 2 0086361380

2.1

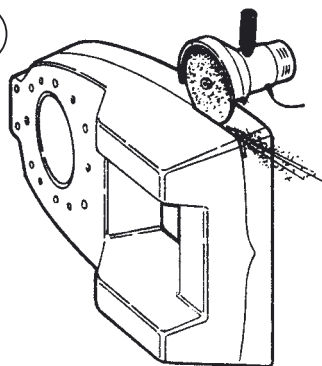




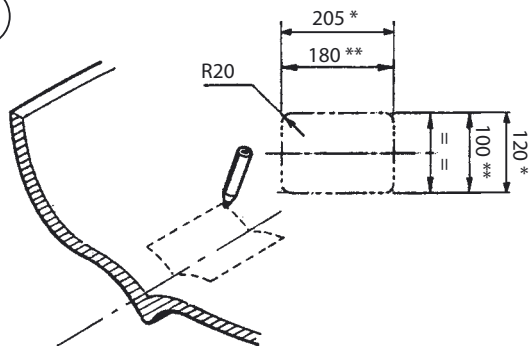
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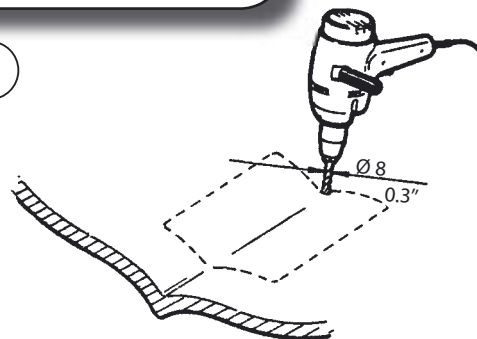
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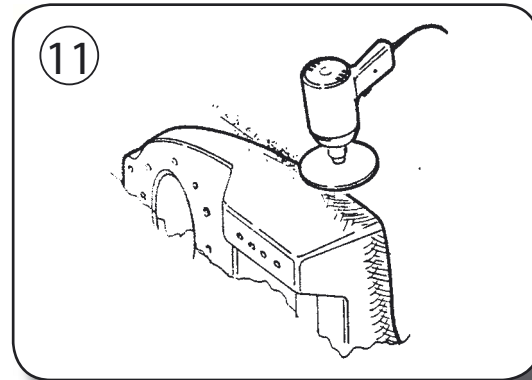
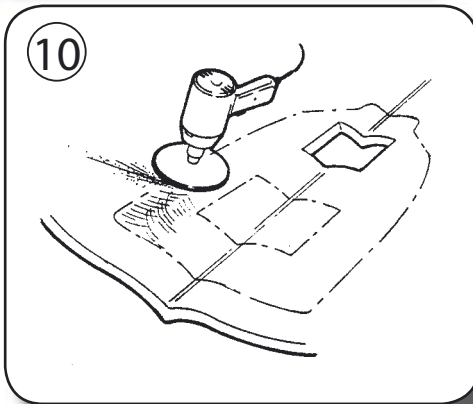
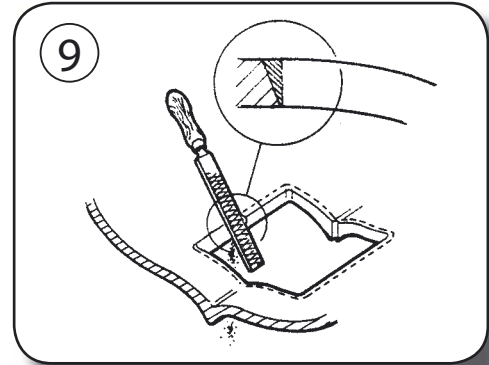
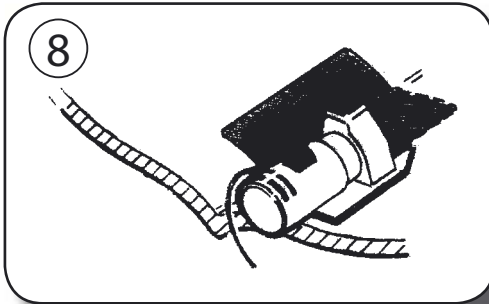


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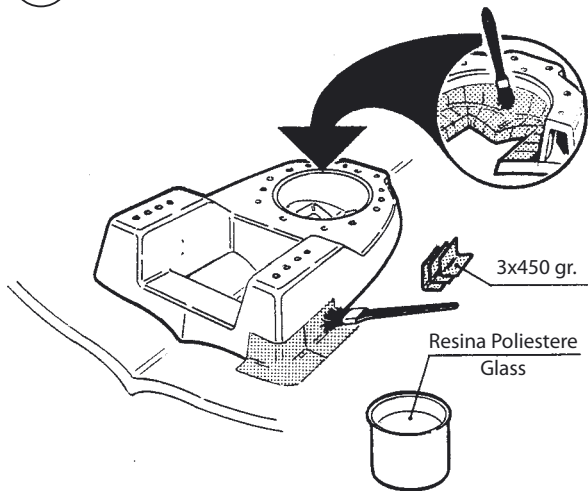


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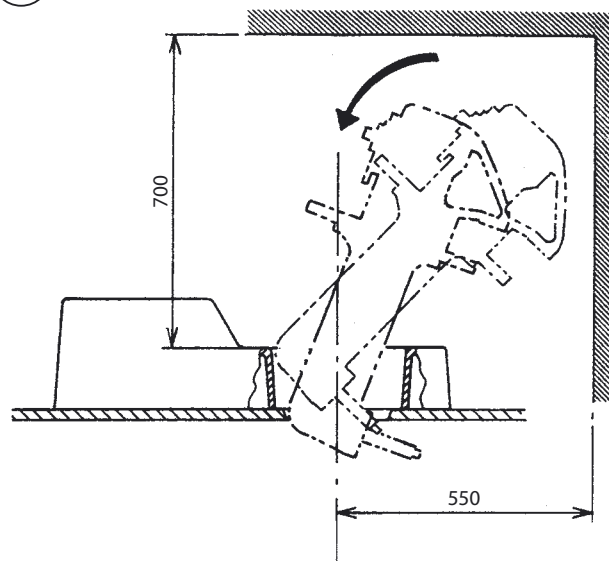




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13

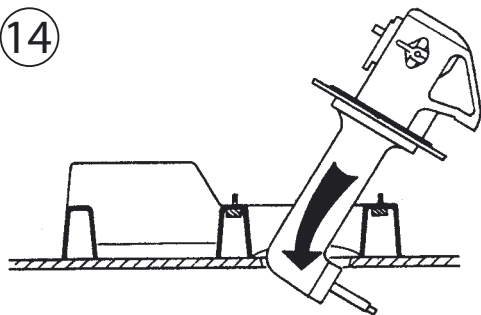


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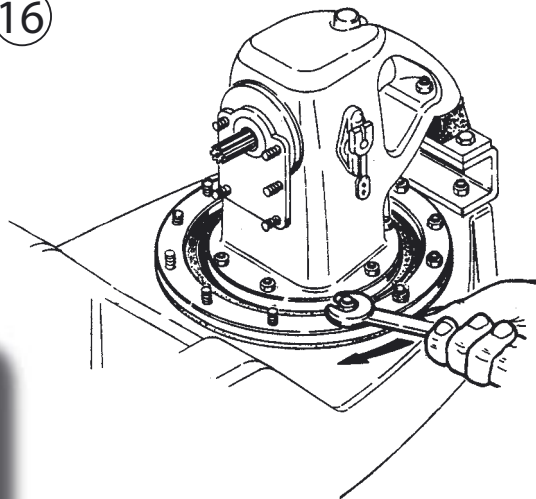


POSIZIONAMENTO SAIL DRIVE  
SAIL DRIVE FITTING

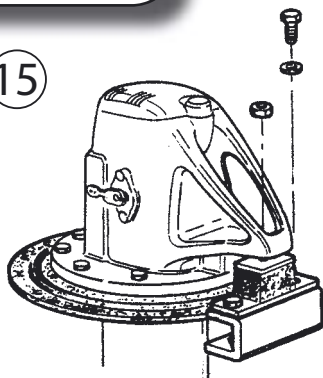
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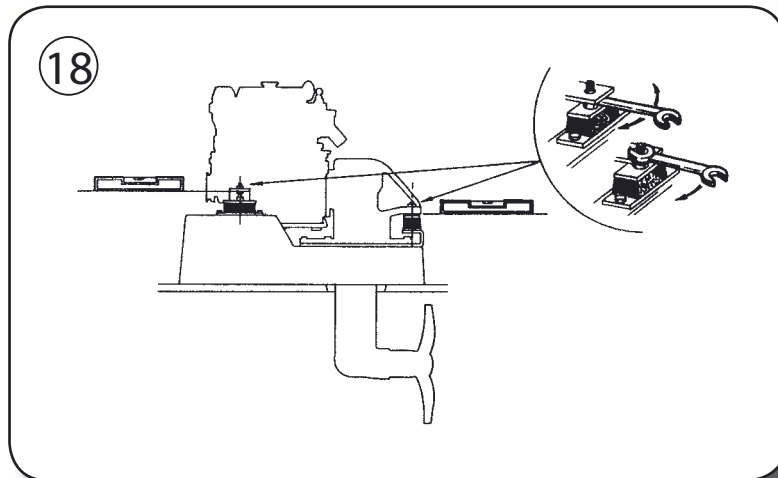
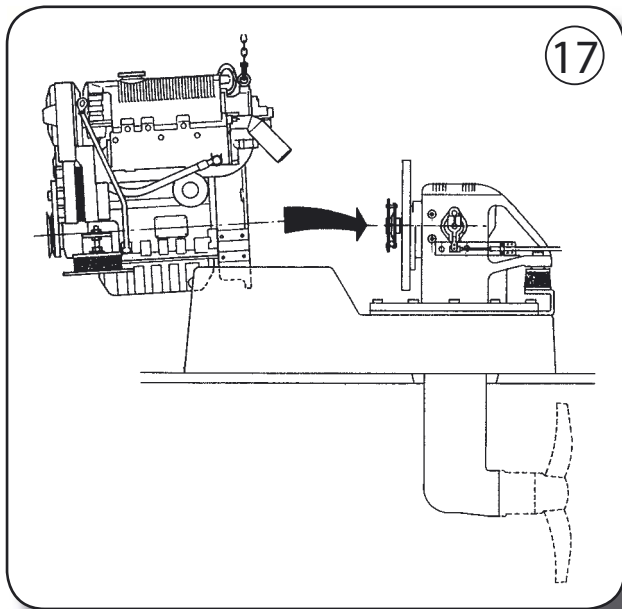
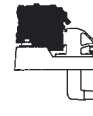


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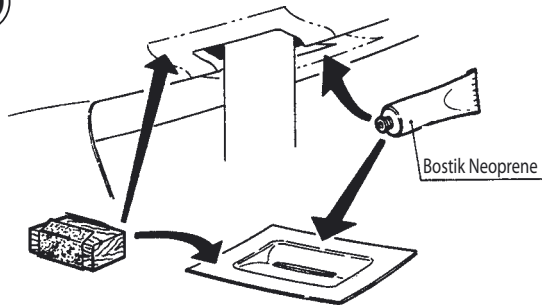




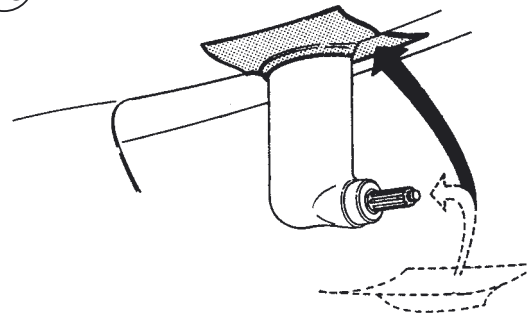
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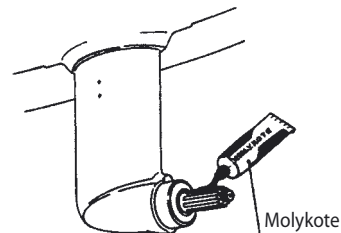
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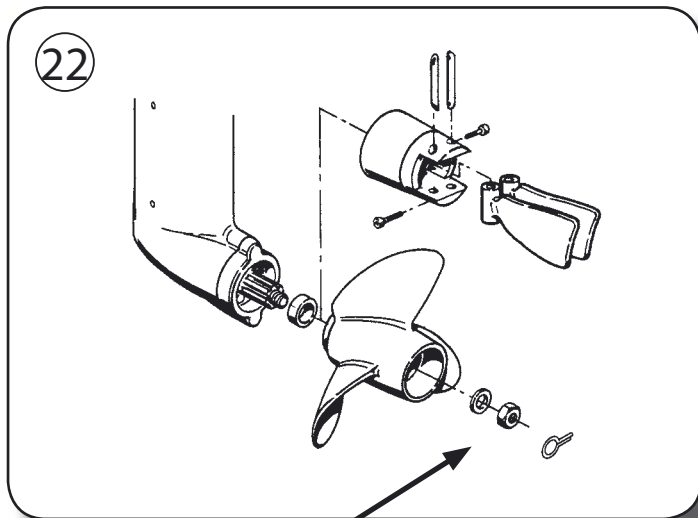
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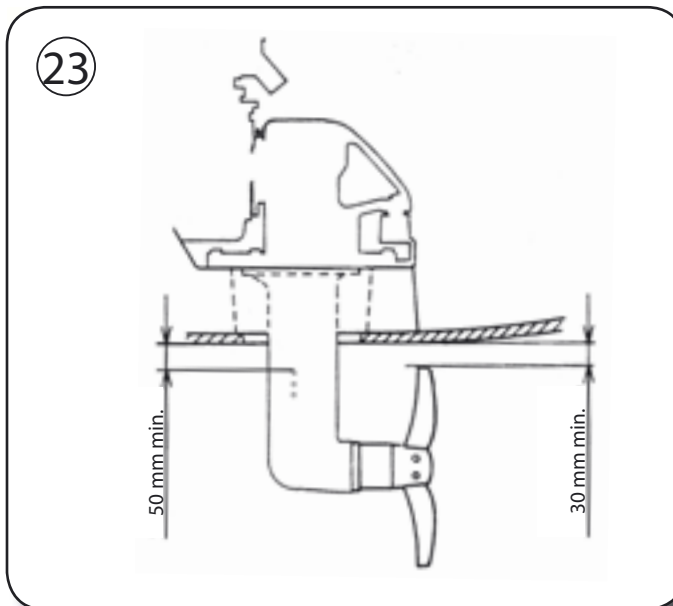
21



Tra lo scafo ed il piede lasciare una luce di almeno 20 mm  
Between hull and leg provide at least 20 mm clearance



Serrare a 15 Kgm  
Tighten to 15 Kgm



# 5.3

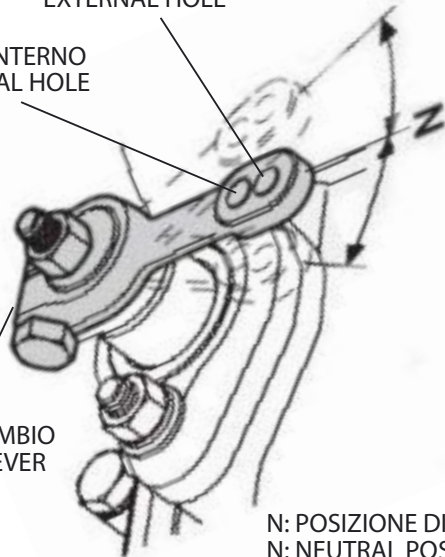


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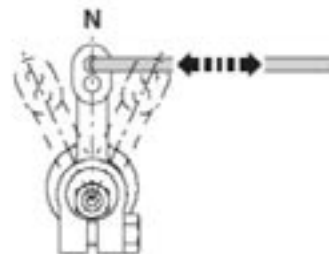
FORO ESTERNO  
EXTERNAL HOLE

FORO INTERNO  
INTERNAL HOLE

LEVA CAMBIO  
GEAR LEVER



N: POSIZIONE DI FOLLE  
N: NEUTRAL POSITION



CONTROLLARE CHE IL CAVO DI COMANDO SIA IDONEO PER CONSENTIRE TUTTA LA CORSA DELLA LEVA DEL CAMBIO E CHE LA LEVA SIA AL CENTRO QUANDO È IN POSIZIONE DI FOLLE.

CHECK THAT COMMAND CABLE IS SUITABLE TO ALLOW THE COMPLETE TRAVERSE OF THE GEAR LEVER AND THAT LEVER IS IN CENTRAL POSITION WHEN CLUTCH IS NEUTRAL.

CONTROLLARE LA CORSA DEL CAVO DI COMANDO:

70 mm minimo sul foro esterno

60 mm minimo sul foro interno

CHECK THE COMMAND CABLE TRAVERSE:

70 mm minimum on the external hole

60 mm minimum on the internal hole

25

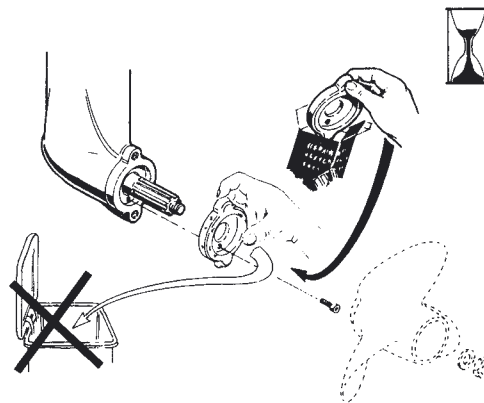


**ATTENZIONE:**  
DURANTE LA NAVIGAZIONE A VELA CON MOTORE SPENTO ED ELICA A PALE FISSE, PREDISPORRE IL SAIL DRIVE IN POSIZIONE DI RETROMARCIA.

**ATTENTION:**  
DURING SAILING WITH ENGINE STOPPED AND FIXED BLADES PROPELLER, SET SAIL DRIVE WITH REVERSE SPEED ENGAGED.

**IMPORTANTE:** CONTROLLARE COSTANTEMANTE L'USURA DELL'ANODO E SOSTITUIRLO QUANDO IL SUO VOLUME SI È RIDOTTO DEL 50%. IN OGNI CASO SOSTITUIRE L'ANODO ALMENO UNA VOLTA OGNI ANNO.

**IMPORTANT:** THE ANOD SHOULD BE INSPECTED REGULARLY AND CHANGE WHEN IT HAS DECREASED BY MORE THAN 50% OF ORIGINAL SIZE. IN ANY CASE, REPLACE IT AT LEAST ONCE A YEAR



Da smaltire in conformità alla normativa vigente

Dispose of anode in compliance with enforced rules

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**SENSO DI ROTAZIONE DELLE ELICHE AMMESSO  
RATOTION SENSE OF PROPELLER ALLOWED**

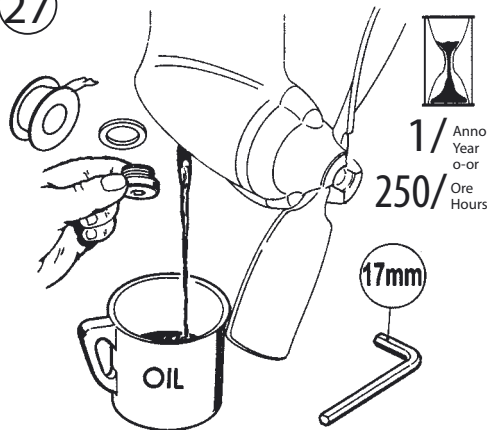
Sail Drive - Motori "FOCS"	<b>Sinistrorse o Destrorse</b>
Sail Drive - "FOCS" Engine	<b>Left Handed (LH) or Right Handed (RH)</b>
Sail Drive - Motori "CHD"	<b>Sinistrorse</b>
Sail Drive - "CHD" Engine	<b>Left Handed (LH)</b>

**ELICHE TESTATE DA LOMBARDINI MARINE  
IDONEE PER ESSERE MONTATE SUI SAIL DRIVE:  
PROPELLERS TESTED BY LOMBARDINI MARINE  
SUITABLE FOR BEING FITTED ON SAIL DRIVE:**

Eliche Radice a 2 pale fisse/Radice 2 blades fixed propellers  
 Eliche Radice a 3 pale fisse/Radice 3 blades fixed propellers  
 Eliche Radice a 2 pale abbattibili/Radice 2 blades folding propellers  
 Eliche J-prop/J-prop propellers  
 Eliche Gori/Gori propellers  
 Eliche Varifold a 3 pale abbattibili/Varifold 3 baldes folding propellers

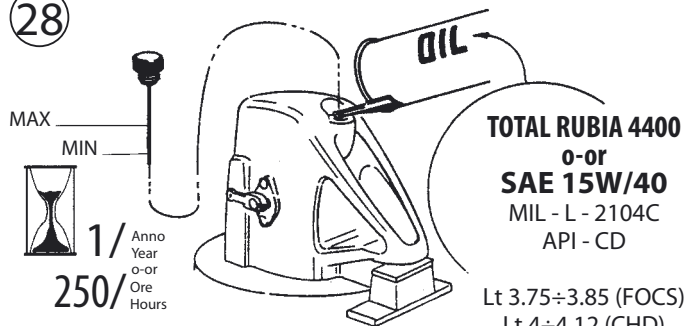


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N.B. AL RIMONTAGGIO DEL TAPPO INSERIRE O-RING E TEFLON  
NOTE BEFORE PLUG'S REASSEMBLY INSERT O-RING AND TEFLON

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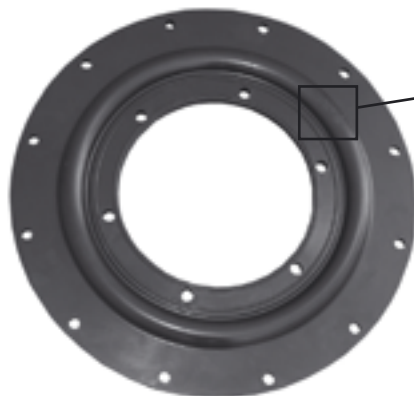


N.B. CONTROLLARE IL LIVELLO CON ASTA COMPLETAMENTE AVVITATA  
NOTE CHECK THE LEVEL WITH OIL DIPSTICK COMPLETELY SCREWED



6.2

29



7/  
Anni  
Years

20 06

L'anno di fabbricazione della membrana è stampato sulla sua superficie esterna.

Manufacturing year of rubber membrane is marked on external surface



Rispettare, in ogni caso, il contratto di assicurazione in vigore, che potrebbe imporre una clausola per la sostituzione ogni 5 anni.

In any case, observe the insurance contract provisions, which could establish the replacement each 5 years.





 **LOMBARDINI**  
 **Marine** is a division of:

 **LOMBARDINI**

Capitale Soc. € 44.000.000,00 int. vers.  
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Cas. Post. 1074 - Tel. 0522.3891 - Teleg.: Lombarmotor  
Internet: [www.lombardini.it](http://www.lombardini.it)  
R.E.A. 227083 - Reg. Imp. Cod. Fisc./P. IVA 01829970357 - CEE Code: IT 01829970357

**Stabilimento:**

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Fax +39 0746 221122  
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web-page: [www.lombardinimarine.com](http://www.lombardinimarine.com)

**Ufficio commerciale:**

**Sales Office**

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Via Cav. del Lavoro A. Lombardini, 2  
Tel. +39 0522 934598  
Fax +39 0522 935343  
e-mail: [sales@lombardinimarine.com](mailto:sales@lombardinimarine.com)  
web-page: [www.lombardinimarine.com](http://www.lombardinimarine.com)