



merCruiser
SERVICE
MANUAL

Number 6

Sterndrive Units
R-MR-Alpha One-
Alpha One SS

**MerCruiser #6 Sterndrive Units
R MR Alpha One Alpha One SS**

90-12934--2

**MerCruiser #6 Sterndrive Units
R MR Alpha One Alpha One SS**

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Models Covered in This Manual

Transom Assemblies

Model	Serial Number
MC 120R/140B/185R/488R/898R/228R/260R	6216687 – 6849289
MC 120MR/140MR/170MR/185MR/190MR/200MR/230MR/260MR/300 Tempest MR	6849290 – 0A471374
MC Alpha One/Alpha One SS	0A471375 and Above

Sterndrive Units

MC 120R-260R		
Original Ratio	Ratio If Serviced With 13:21 Gears	Serial Number
1.98:1	1.94:1	6237861-6854392
1.84:1	1.81:1	6225577-6862701
1.65:1	1.62:1	6268065-6810537
1.50:1	1.47:1	6229158-6847029
1.32:1	1.29:1	6231571-6663947

MC 120 MR - 300 TEMPEST MR		
Original Ratio	Ratio If Serviced With 13:28 Gears	Serial Number
1.98:1	1.94:1	6854393-0A476746
1.84:1	1.81:1	6862702-0A470164
1.65:1	1.62:1	6810538-0A475786
1.50:1	1.47:1	6847030-0A479506

MC ALPHA ONE / ALPHA ONE SS			
Original Ratio	Ratio If Serviced With 13:28 Gears	R.H. Serial Number	L.H. Serial Number
1.98:1	1.98:1	0A476747 and Above	0C881740 and Above
1.84:1	1.84:1	0A470165 and Above	0C884040 and Above
1.65:1	1.65:1	0A475787 and Above	0C881790 and Above
1.50:1	1.50:1	0A479507 and Above	0C852908 and Above
1.32:1	1.32:1	0A613927 and Above	
Alpha One SS 1.50:1/1.32:1	1.50/1.32:1	0A545004 and Above	


Sea Ray Sterndrive Units and Transom Assembly (Oyster White)

Original Ratio	Ratio If Serviced With 13:21 Gears	Serial Number
1.98:1		0B803866-0C348031
1.84:1		0B800854-0C343526
1.50:1		0B796473-0C340666
1.32:1		0B804807-0C340030
Transom Assembly		0B815811-0C340333

When making repairs to Sea Ray (Oyster White) sterndrives, follow procedures as outlined for corresponding MerCruiser models as shown in the cross-reference chart below.

Sea Ray	MerCruiser
3.0L	3.0L Alpha One
4.3L2	4.3L Alpha One
4.3L4	4.3LX Alpha One
5.7L	5.7L Alpha One
SRX 5.7L	350 Magnum Alpha One
SRX 7.4L	454 Magnum Alpha One

Notice

Throughout this publication, “Warnings” and “Cautions” (accompanied by the International HAZARD symbol ) are used to alert the mechanic to special instructions concerning a particular service or operation that may be hazardous if performed incorrectly or carelessly. — OBSERVE THEM CAREFULLY! These “Safety Alerts” alone cannot eliminate the hazards that they signal. Strict compliance to these special instructions when performing the service, plus “common sense” operation, are major accident prevention measures.

DANGER

DANGER - Immediate hazards which will result in severe personal injury or death.

WARNING

WARNING - Hazards or unsafe practices which COULD result in severe personal injury or death.

CAUTION

CAUTION - Hazards or unsafe practices which could result in minor personal injury or product or property damage.

IMPORTANT: Indicates information or instructions that are necessary for proper operation and/or maintenance.

Notice To Users of This Manual

This service manual has been written and published by the service department of the manufacturer to aid our dealers’ mechanics and company service personnel when servicing the product described herein. It is assumed that these personnel are familiar with the servicing procedures of this product, or like or similar products. That they have been trained in the recommended servicing procedures of these products which includes the use of mechanics’ common hand tools from other suppliers.

We could not possibly know of and advise the service trade of all conceivable procedures by which a service might be performed and of all possible hazards and/or result of each method. We have not

undertaken any such wise evaluation. Therefore, anyone who uses a service procedure and/or tool which is not recommended by the manufacturer, first must completely satisfy himself that neither his nor the product’s safety will be endangered by the service procedure selected.

All information, illustrations, and specifications contained in this manual are based on the latest product information available at time of publication.

As required, revisions to this manual will be sent to all dealers contracted by us to sell and/or service these products.

Replacement Parts

⚠ WARNING

Electrical system components on gasoline engines and MerCruiser Stern Drives are designed and manufactured to comply with U.S. Coast Guard Rules and Regulations to minimize risks of fire or explosion.

Use of replacement electrical system components, which do not comply to these rules and regulations, could result in a fire or explosion hazard and should be avoided.

When servicing electrical systems, it is extremely important that all components are properly installed and tightened. If not, any electrical component opening would permit sparks to ignite fuel vapors from fuel system leaks, if they exist or develop.

⚠ WARNING

Electrical system components on diesel engines are not external ignition protected. **DO NOT STORE OR UTILIZE GASOLINE ON BOATS EQUIPPED WITH THESE ENGINES, UNLESS PROVISIONS HAVE BEEN MADE TO EXCLUDE GASOLINE VAPORS FROM ENGINE COMPARTMENT (ref: 33 CFR).** Failure to comply could result in fire, explosion and/or severe personal injury.

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Important
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