

# Approval Drawing

Shipyard: Sanoyas Hishino Meisho Corporation

Hull No.: 1291

**Model RR4.2**

**F.R.P Rigid Rescue boat**



**Fassmer-Marland Ltd.**

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Approved by	
Checked by	
Drawn by	
Date	

# **RR4.2 Rigid Rescue Boat**

## **Specification and Drawings**

# INDEX

	Description	Drawing No.
A.	<b>Specification</b> 1. General 2. Principal Particulars 3. Construction Details 4. Equipment	
B.	General Arrangement Plan	FM420200
C.	Boat support	FM420212
D.	Arrangement of outboard engine	FM420225
E.	Arrangement of battery charger system	FM420235
F.	Lubrication Oil Chart	--

## **RIGID RESCUE BOAT**

### **TYPE RR 4.2**

#### Main Particulars

Length w/o engine	4.23 m
Breadth	1.75 m
Measur. Height	0.82 m
Persons	6



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## 1. Construction

The boat is constructed in chine frame form with square stern. It is provided with sufficient freeboard especially in the foreship area. The foreship is additionally provided with a high raised cover and a breakwater.

The V-shaped hull together with the sharp foreship and wide waterline combines good behaviour in heavy sea also at high speeds with excellent stability characteristics.

## 2. Approval

	1291
Classification	NK
Flag	PANAMA
Certification	NK

## 3. Tests

All necessary tests as hoisting arrangement test, overload test, trial trip and function tests to be executed at Fassmer yard.

## 4. On-Board-Testing

Commissioning of the boat at the customer is not included in the scope of delivery unless otherwise agreed in the commercial contract.

## 5. Hull c/w inner liner

To be built with isophtalic gelcoat outside, colour: orange RAL 2004, followed by alternating glass mats and rowings in orthophtalic fire retardant polyester resin.

Hull to be strengthened with longitudinal laminated girders. All fitting areas are reinforced by corrosion-resistant backplates. Hull and inner liner are glued and screwed flange-like together in the gunwale area.

All laminates in high quality hand-lay-up-method without use of sandwich materials.

## 6. Hull air cases

Air cases formed by hull and inner liner to be filled with approved polyurethane foam providing good stability even flooded, good insulation and safety against sinking of the boat when having been damaged.

## 7. Draining

One bailing pipe in a recess on the aft end of the cockpit provides self bailing facilities for the boat. Bailing pipe must not be closed to prevent flooding of the stowed boat.

**8. Ladders and steps**

A removable rope ladder can be fitted on either side to enter the boat from the water.

**9. Handrails**

Outside: Four handgrips on gunwale.

Bottom: Four handgrips at the bottom for righting up a capsized boat. Further rope for righting up the capsized boat with 2 persons acc. new IMO-Test Resolution MSC.81(70) is fitted.

**10. Towing bollards**

Two clamps for life raft towing aft.

**11. Flooring**

Areas destined for walking are equipped with antislip surface. No wooden flooring to reduce maintenance.

**12. Seats**

3 seats are provided on the aft equipment box. Further persons and stretcher will be placed on floor. Each position is marked.

**13. Inventory stowage**

An inventory box is fitted on the aft end of the boat with a water sheltered cover. Access through one large top hatch. Support for portable fuel tank is integrated in this box. Ventilation for fuel tank is provided.

**14. Hoisting arrangement**

The boat is equipped with a 3-point-suspension made of galvanised steel wires. Height from base line to lifting ring 1.6 m.

**15. Painter fitting**

Stainless steel painter fitting at fore-ship to release painter also under tension. Also suitable for towing or mooring of boat.

**16. Sliding skates**

Elastic foam fenders provided at the ship's side giving best protection to the crew during impacts against the shipside.

As the fender system is arranged above the water line it can be permanently installed and has not to be released and retrieved from sea for driving and manoeuvring.

**17. Colours**

Colour in- and outside orange RAL 3031.

**18. Lettering**

Ship's name and home port to be fitted on the forward cover and on each side of the bow. If requested by administration call sign of ship is also fitted on top of the cover.

**19. Retroreflective material**

To be fitted on gunwale to be seen from top and from the sides, additionally on hull just below the gunwale and on the bottom for a capsized boat.

**20. Fuel tank**

Portable fuel tank stored and lashed in the aft equipment box which is provided with ventilation. Fuel tank capacity sufficient for more than 4 working hours at 6 knots.

**21. Search light**

One watertight approved search light provided together with 12V gel-type battery in portable box.

**22. Compass**

Approved compass installed sheltered in recess in gunwale beside helmsman. Lighting provided by cyalume lightsticks.

**23. Radar reflector**

Fitting for mounting of radar reflector (part of loose inventory) provided.

**24. Deck equipment**

2 clamps for fender and rope ladder attachment.

**25. Engine TOHATSU PETROL OUTBOARD 15 HP**

Outboard petrol engine with reverse and reduction gear.

A propeller protection is provided.

Engine emergency stop is integrated.

**26. Steering**

Boat is steered by the helmsman aft by turning the outboard engine with the integrated tiller.

**27. Electric system**

No electric system provided, therefore no battery charging facilities are necessary on board of the ship.

**28. Equipment and engine spares list**

See next page

## Specification of Rigid rescue boat RR4.2



### RR4.2 EQUIPMENT LIST

G23-00

ITEM	NAME	Illustration	Material	QTY/ Boat	Part Nr.	REMARK
1	Buoyant Oar		Wood	2	R23-01	1.6m
2	Boat Hook		SUS	1	R23-02	1.7m
3	Buoyant Bailer		Plastic	1	R23-03	with lanyard
4	Bucket		Plastic	1	R23-04	with lanyard
5	Compass		Plastic	1	R23-05	Fitted inside of boat
6	Sea anchor		Canvas	1	R23-06	with 15m rope
7	Painter		Polypropylene Rope	1	R23-07	Dia 16mm 50 m in length
8	Towing Line		Polypropylene Rope	1	R23-08	Dia 16mm 50m in length
9	Waterproof Electric Torch		Plastic	1	R23-09	with spare bulb + battery
10	Whistle		Plastic	1	R23-10	
11	Anti-Seasickness Medicine		--	6 doses/ person	R23-11	<i>6 persons Dealer Supply</i>
12	Jack Knife		SUS	1	R23-12	

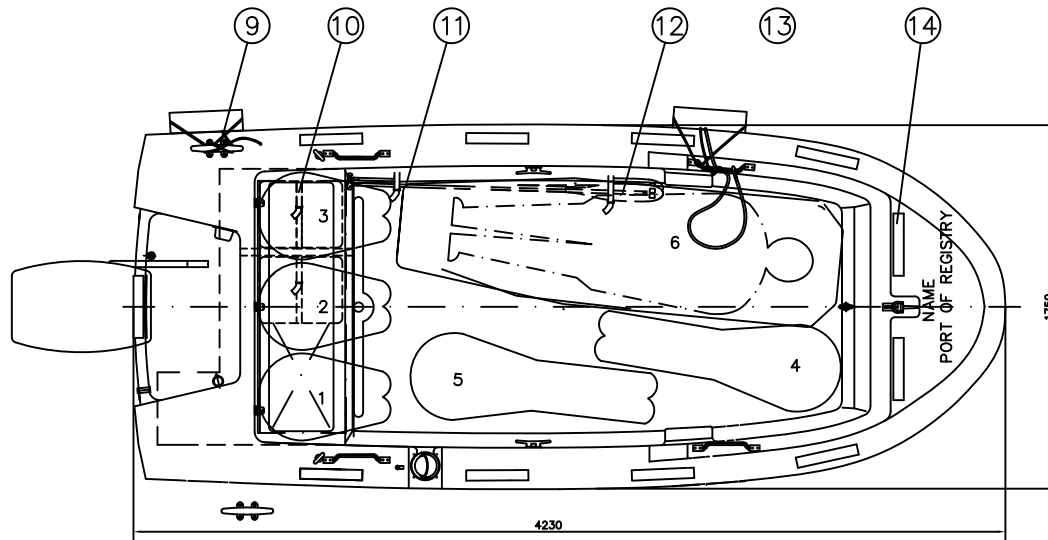
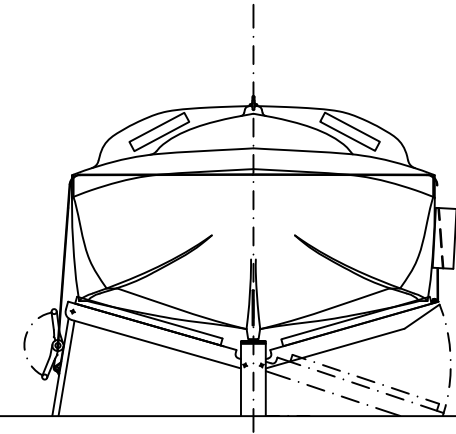
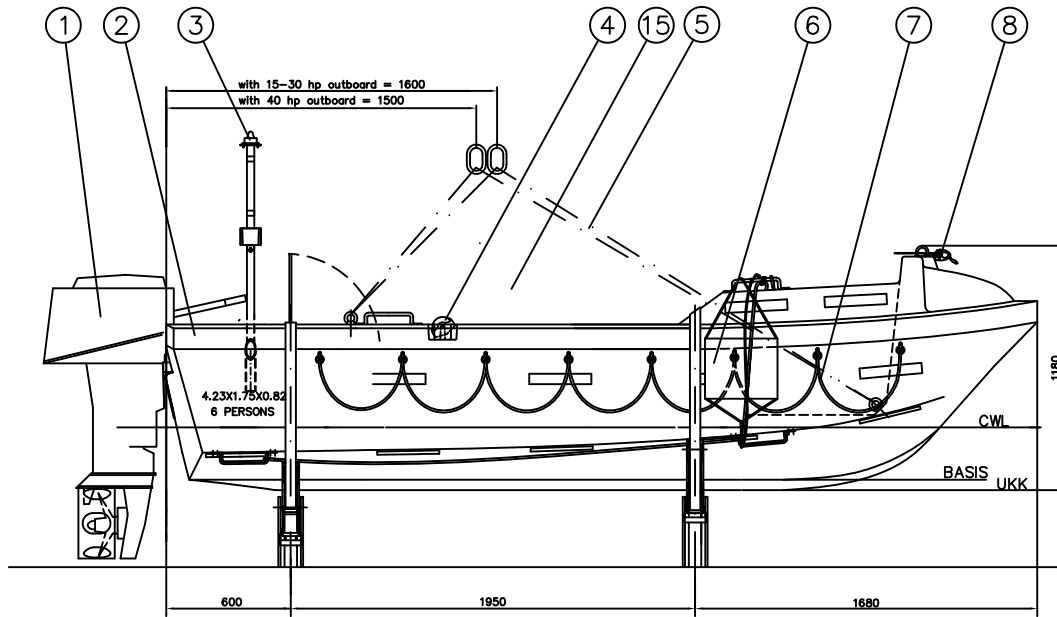


## Specification of Rigid rescue boat RR4.2

ITEM	NAME	Illustration	Material	QTY/ Boat	Part Nr.	REMARK
13	Buoyant Rescue Quoit		Rubber/ Polypropylene rope	2	R23-13	With 30m buoyant line
14	Search Light		Rubber	1	R23-14	Approved type Fitted inside of boat
15	Portable Fire Extinguisher		Steel	1	R23-15	Approved type <i>Dealer Supply</i>
16	Radar Reflector		Polypropylene / wood	1 set	R23-16	Approved type
17	Thermal protective aids		Polycarbonate	2	R23-17	Approved type
18	Rope Ladder For Embarkation		Plastic	1	R23-18	
19	Safety Lightstick		--	1	R23-19	
20	Tool bag		--	1	R23-20	
21	Socket Wrench Handle		--	1	R23-21	
22	Straight edge		--	1	R23-22	
23	Pliers		--	1	R23-23	
24	Socket Wrench		--	1	R23-24	10 X 13 mm
25	Socket Wrench		--	1	R23-25	21mm

## Specification of Rigid rescue boat RR4.2

ITEM	NAME	Illustration	Material	QTY/ Boat	Part Nr.	REMARK
26	Thermostat Gasket 346-01032-0		--	1	R23-26	
27	Gasket for oil filling screw 332-60006-0		--	2	R23-27	
28	Lower unit gasket set 398-87321-0		--	1	R23-28	
29	Flushing Kit 336-60007-0		--	1	R23-29	
30	Water Pump Repair Kit 362-87322-0		--	1	R23-30	
31	Spark Plug HS-10		--	2	R23-31	
32	Fuel Tank 25ltr 3C7-70177-0		--	2	R23-32	
33	First-aid Outfit		--	1	R23-33	Approved type <i>Dealer Supply</i>
34	Lithium battery		--	1	R23-34	



**BOAT SPECIFICATION**

LENTH	4,23 m
WIDTH	1,75 m
DEPTH	0,82 m
HEIGHT OVERALL	1.18m
PERSONS MAX.	6
WEIGHT WITHOUT PERSON	
WITH 15hp OUTBOARD	450 kg
OPTIONAL:	
WITH 30hp OUTBOARD	460 kg
WITH 40hp OUTBOARD	470 kg

No	NAME	MATERIAL	QUANTITY	MASS	REMARK
15	STEER CONSOLE 驾驶台	GRP 玻璃钢	1		option
14	RETRO REFLECTIVE TAPE 反光带	NYLON 尼龙	30		
13	HAND GRIP 把手	AL 铝	8		
12	BOAT HOOK 船钩	ST.STEEL 不锈钢	1		
11	OAR 桨	WOOD 木	2		
10	EQUIPMENT BOX 工具箱	GRP 玻璃钢	1		
9	CLAMP 羊角	ST.STEEL 不锈钢	2		
8	PAINTER RELEASE 油漆释放	ST.STEEL 不锈钢	1		
7	LIFELINE 救生绳	SYNTHETIC 尼龙	2		
6	SKATE 滑板	GRP 玻璃钢	2		
5	HOISTING WIRE 吊绳	NY.STEEL 钢丝绳	1		
4	COMPASS 罗盘	PLASTIC 塑料	1		
3	POSITION LIGHT 示位灯	PLASTIC 塑料	1		with column
2	HULL 船体	GRP 玻璃钢	1		
1	ENGINE OUTBOARD 挂机	-	1		

GENAERAL ARRANGEMENT  
RR4.2 总布置图

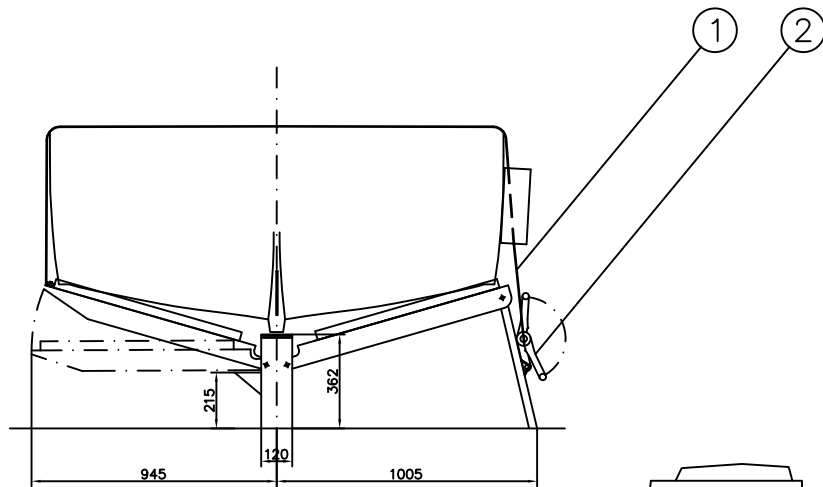
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PROJECTION

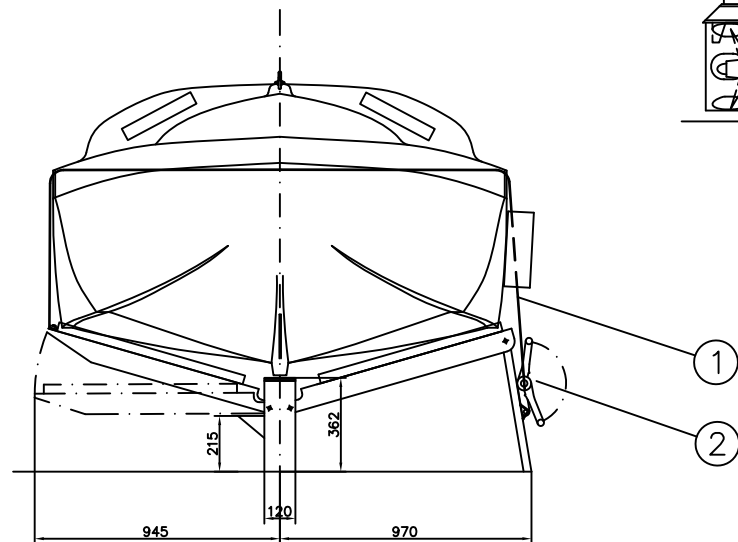
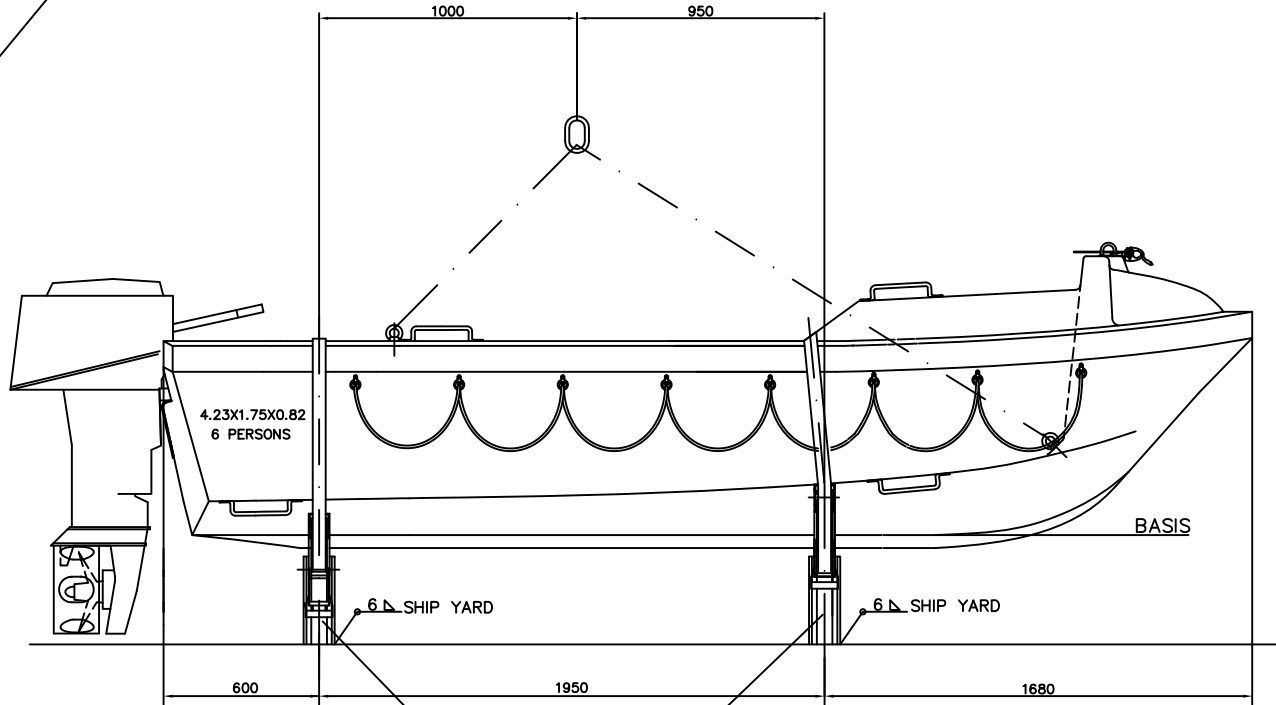


Fassmer Marland Ltd. ZhongShan China

Scale	Date	Drawing by	Checked by	DWG. NO
A3 1:25	05.07.10	Kenneth Gu	James Qian	FW420200



FORE SUPPORT SECTION

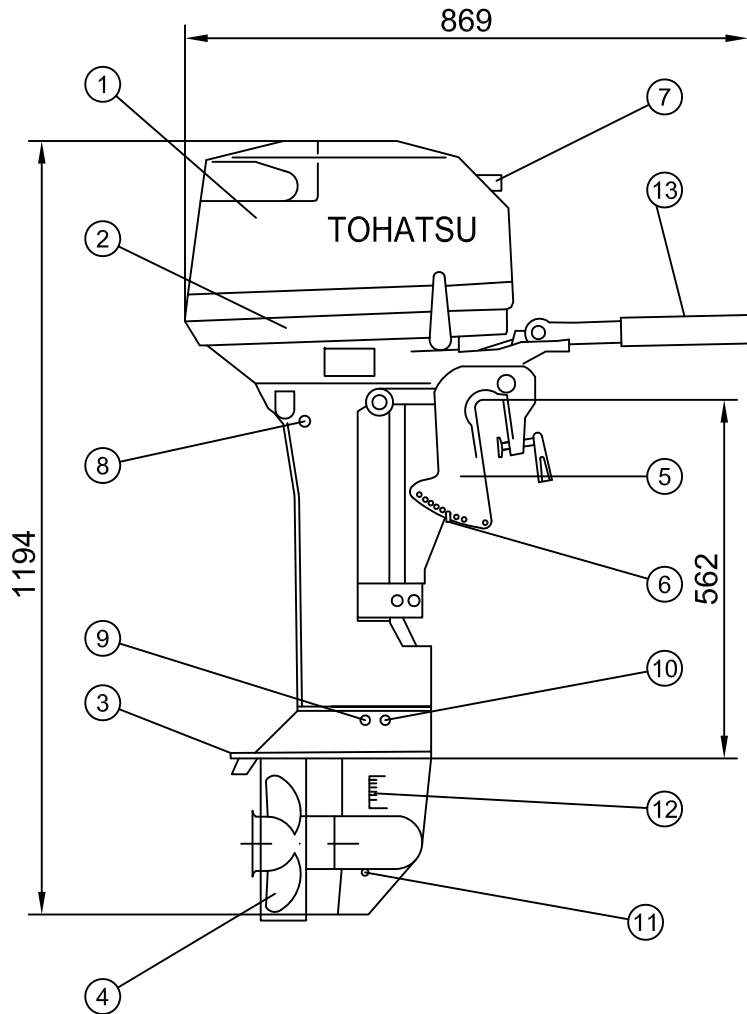
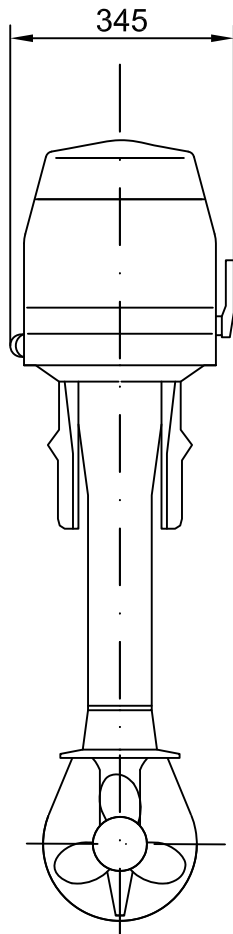


AFT SUPPORT SECTION

4	FORE SUPPORT	前支架	GALV.STEEL 镀锌	1		
3	AFT SUPPORT	后支架	GALV.STEEL 镀锌	1		
2	BACKLE	绑紧扣	ST.STEEL 不锈钢	2		
1	LASHING BELT	扎带	POLYESTER	2		
No	NAME		MATERIAL	QUANTITY	MASS	REMARK

BOAT SUPPORT RR4.2 支架						
Ver	Description	Date	Sign	Check	PROJECTION	
Fassmer Marland Ltd.ZhongShan China						
Scale:	Date:	Drawing by	Checked by	DWG.NO		
A3 1:25	05.07.10	Kenneth Gu	James Qian	FM420212		

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ENGINE MAKER 生产商	TOHATSU CORPORATION
ENGINE MODEL 型号	M 15D2 (LONG SHAFT)
OUT PUT 功率	11KW (15Hp)
ENGINE TYPE 类型	2-STROKE/2-CYLINDER
BORE/STROKE 缸径/行程	55mm x 52mm
OPERATION RANG 转速	5800 RPM
EXHAUST SYSTEM 排烟系统	THROUGH HUB EXHAUST
COOLING SYTEM 冷却系统	POWERED WATER COOLING
STARTING SYSTEM 启动系统	RECOIL STARTER
SPARK PLUG 点活塞	NGK B7HS-10
MASS 重量	42 kg

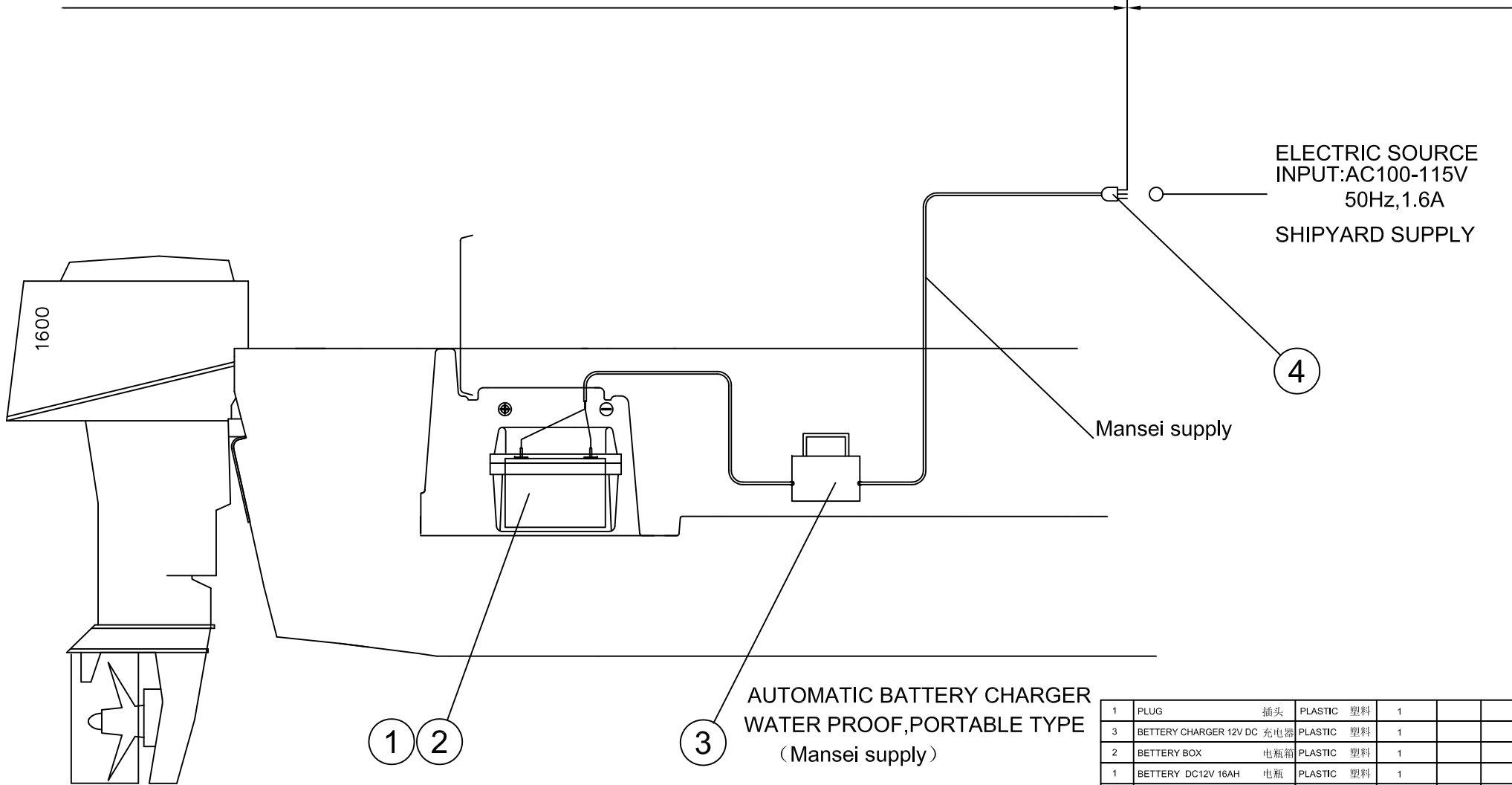
13	THROTTLE GRIP	操作手柄	-	1		option
12	WATER STRAINER	滤水口	-	1		
11	OIL PLUG (UNDER)	下油塞	-	1		
10	WATER PLUG	水口塞	-	1		
9	OIL PLUG (UPPER)	上油塞	-	1		
8	COOLING WATER CHECK PORT	冷却水检查	-	1		
7	STARTER HANDLE	启动手柄	-	1		
6	THRUST ROD	调整杆	-	1		
5	STERN BRACKET	挂臂	-	1		
4	PROPELLER	螺旋桨	-	1		
3	ANTI VENTILATION PLATE	防进气板	-	1		
2	MOTOR COVER (LOWER)	下箱体	-	1		
1	MOTOR COVER (UPPER)	上箱体	-	1		
No	NAME	MATERIAL	QUANTITY	MASS	REMARK	

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GENAERAL ARRANGEMENT OF OUTBOARD ENGINE		RR4.2 M 15D2 TOHATSU		舷外机总图	
PROJECTION		<b>Fassmer Marland Ltd.ZhongShan China</b>			
Scale:	A3 1:8				
Date:	06.07.10	Drawing by:	Checked by:	DWG.NO	
Ver:		Kenneth Gu	James Qian	FM420225	

BOAT MAKER SUPPLY 随艇配送



SHIPYARD SUPPLY 船东提供



**AUTOMATIC BATTERY CHARGER**  
**WATER PROOF, PORTABLE TYPE**  
 (Mansei supply)

1	PLUG	插头	PLASTIC 塑料	1		
3	BATTERY CHARGER 12V DC 充电器		PLASTIC 塑料	1		
2	BATTERY BOX	电瓶箱	PLASTIC 塑料	1		
1	BATTERY DC12V 16AH	电瓶	PLASTIC 塑料	1		
No	NAME		MATERIAL	QUANTITY	MASS	REMARK

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ARRANGEMENT OF BETTERY CHARGE SYSTEM						
RR4.2 充电系统布置						
PROJECTION		 <b>Fassmer Marland Ltd. ZhongShan China</b>				
						
Scale:	Date:	Drawing by:	Checked by:	DWG.NO		
A3 1:25	05.07.10	Kenneth Gu	James Qian	FM420235		

# Specification of Rigid rescue boat RR4.2



## SPARE PARTS FOR ELECTRIC PARTS

G23-00

ITEM	NAME	Illustration	Material	QTY/ Boat	Part Nr.	REMARK
1	Fuse		--	1	G23-01	10A
2	Bulb for position light		--	1	G23-02	5.2V/0.5A
3	Bulb for search light		--	1	G23-03	PAR 36 12V/75W



**Fr. Fassmer GmbH & Co. KG**  
 Rettungsbootsbau • Rettungsbootsbau  
 Anlagenbau • Faserverbundtechnik

**Schmierstofftabelle für Rettungsboote mit TOHATSU-Außenbordmotor**  
**lubricant selection table for rescue boats with TOHATSU outboard engine**  
**00.0000-530.02.01.1**

Hinweis: Vergleichbare Schmierstoffe anderer Hersteller können ebenfalls verwendet werden!  
Remark: Equivalent lubricants of other manufacturers can also be used!

			Herstellermarke / manufactures brand												
Oil Spec.	Engine	Quantity	ARAL	BP	Castrol	CHESTERTON	Chevron	elf	Esso	KLÖBER	Mobil	MOLYDUVAL	Shell	VOLVO PENTA	
<b>Engine oil</b> genuine TOHATSU engine oil 2-stroke engine oil TCW 3	9.9 / 15 / 18	Gemisch gem. Motor-Handbuch fuel mix ratio acc. handbook manufacturer													
	25 / 30 / 40														
	M40 / M50														
	M60 / M70 / M90														
	M120 / M140														
<b>Gear oil</b> genuine TOHATSU gear oil gear oil SAE 80-90 API GL5	9.9 / 15 / 18	370ml													
	25 / 30	280ml													
	40	420ml													
	M40 / M50	500ml													
	M60 / M70 / M90 M120 / M140	900ml													
<b>Grease</b> refer to instruction book of engine manufacturer	9.9 / 15 / 18	initially filled													
	25 / 30 / 40														
	M40 / M50														
	M60 / M70 / M90														
	M120 / M140														
<b>Power trim oil</b> refer to instruction book of engine manufacturer	M40 / M50	initially filled with NISSEN ATF DEXTRON													
	M60 / M70 / M90														
	M120 / M140														

00.0000-530.02.01.1

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