



Australian 2.4mR RONSTAN fit-out guide

Peter Russell, V2, 2007

SYSTEM	PART	FITTINGS	ROPE	COMMENTS
hull	identification	ISAF plaque to rule Boat name/number and club to YAI rule		
	seat	proprietary seat with PNP68C hinge fixed to cockpit floor RF5121 cleat with pulley rope fixed to control console	4mm rope	Rope attached to control console and through seat to cleat
	steering pedals	2 x RF20171 lead blocks fixed to hull side as steering rope guide to rudder head 2 x RF20184 blocks with loop mount fixed to underside deck forward of control console as steering rope guide pedals with 2 x PNP68C hinges fixed to cockpit floor	3mm rope	8mm ply pedals or similar
	steering tiller	4 x RF2071 lead blocks fixed to hull side as steering rope guide to rudder head RF3133 universal joint with 12mm aluminium tube tiller including 2 x RF498 saddles for steering rope fixing	3mm rope	
	hand pump	45LPM (12GPM) hand pump with associated plumbing		
	electric pump	4150LPH (1100GPH) electric pump with associated plumbing		
	compass	Digital compass/ <i>timer</i>		TacktickT060 Micro Compass
	kit bag	Personal race equipment, sailing instructions, spare rope, multi-tool and telltales		
	race codes	International flags and race flags		
	mast	mast step	To suit mast section	
mast plug		To suit mast section		
forestay		RF488 chain plate with RF614 shackle for forestay attachment RF20711HL exit box for forestay mast entry RF20111 block with RF20101 block as 3:1 forestay purchase RF20711 exit box for forestay tensioner mast exit RF20175 pivoting lead cleat on mast	2mm 7x19 wire 4mm control line	Forestay tensioner fixed to mast plug 3:1 system
sidestays		2 x RF2331 stay adjusters fixed to traveller system 2 x 400mm long RC6190-1.0 series 19 I beam traveller system with 2 x RC61901 loop top cars 2 x RF20101 loop head blocks shackled to cars with RF615A slotted pin shackles 2 x RF20151A cheek mount blocks fixed to deck 2 x RF5001 cam cleat and 2 x RF5005 fairlead fixed to cockpit coaming	2.5mm 1x19 wire 4mm control line	2 x RM 1325 toggle with 2 x RM 740 exit plate to sidestay 2:1 system
spreaders		To suit mast section		Length 280mm Deflection 115mm

SYSTEM	PART	FITTINGS	ROPE	COMMENTS
	backstay	R6180 captive pin shackle fixed to backstay RF453 lead block fixed to hull deck as backstay entry guide RF20171 lead block fixed to hull as backstay guide RF20111 block with RF20184 single loop mounted block fixed to underside of deck and RF20184 single loop mounted block fixed to underside of deck forward of control console as 3:1 backstay system RF20171 lead block with RF5001 cam cleat and RF5005 fairlead on control console	2mm backstay 4 mm control line	Mast crane to suit mast section Mast crane 200mm RF20202 bolted to foredeck in front of console 3:1 system
	gooseneck	RF2527 gooseneck with RF2528 boom socket		Boom socket to suit boom section
	mast ram	RF20151A cheek mount fixed to underside deck RF5001 cam cleat and RF5005 fairlead fixed to underside deck RF1316 tie ball as puller	5mm	5mm deck tie point
	mainsail halyard	2 x RF20711 exit boxes for main halyard mast entry/exit CL211 MK2AN clamcleat on mast RF498 saddle with RF666 block as halyard guide	4mm	
	jib halyard	RF20184 block for jib halyard mast entry RF20711 exit box for jib halyard mast exit CL211 MK2AN clamcleat on mast RF498 saddle with RF666 block as halyard guide	4mm	5mm tapered mast entry under forestay exit box
	tack tie	rope tie	3mm rope	Rope attached to mainsail tack cringle
	J preventer	rope preventer	3mm rope	
	wind indicator	WXD wind indicator		Mount off crane
downhaul	mainsail	RF20171 lead block on deck adjacent mast as downhaul guide PNP54B through bush in cockpit coaming RF5001 cam cleat and RF5005 fairlead on upper control console	3mm rope	Rope attached to gooseneck and then through mainsail tack cringle 2:1 system
	jib	RF20101 block attached to forestay shackle PNP54B through bush in cockpit coaming RF5001 cam cleat and RF5005 fairlead on upper control console	3mm rope	Rope through jib tack cringle and attached to forestay shackle 2:1 system
outhaul	mainsail	RF20101 block with R6180 captive pin shackle fixed to mainsail clew cringle and boom tie RF20711 exit box in boom CL211 MK2AN clamcleat on boom	4mm rope	4mm boom tie point 4mm tapered boom exit 2:1 system
vang	vang	RF134 saddle on boom RF30 spinnaker ring on mast RF20202 double block with RF20212 double block with becket fixed to mast step as 4:1 system RF20101 block added in cascade to make 4:1 system RF20711 exit box in control console RF5001 cam cleat and RF5005 fairlead on control console	6mm vang 4mm control line	Bolt fix boom saddle through boom with backing plate 8:1 system

SYSTEM	PART	FITTINGS	ROPE	COMMENTS
mainsheet	mainsheet	RF134 saddle on boom with RF20101 block RF20101 on mast rope tied to gooseneck RF20184 block with loop mount fixed to mast RF5001 cam cleat and RF5005 fairlead on control console	5mm rope	6mm boom tie point 10mm tapered boom entry/exit 2:1 system
	traveller	600mm long RC1190-1.0 series 19 ball bearing traveller system with RC11910 control sheave car and RC11980 end caps 2 x RF20151A cheek mount block fixed to underside deck as guide blocks 2 x RF20184 single loop mounted block fixed to underside deck forward of control console as guide blocks 2 x RF5001 cam cleats and RF5005 fairleads fixed to control console	4mm rope	Traveller rope attached to deck and through guide block to control console 2:1 system
jibsheets	jibsheets	2 x RF20711 exit boxes as jibsheet lead through deck 2 x RF20171 lead blocks fixed to control console as jibsheet guide 2 x RF5001 cam cleats and RF5005 fairlead fixed to control console	4mm rope	Mount exit block at height required for correct sheeting angle
	barber haulers	2 x RF20101 single loop head blocks 2 x PNP121 deck eyes fixed to deck as barber hauler guide PNP54B through bush in cockpit coaming 2 x RF5001 cam cleats and RF5005 fairlead fixed to upper control console		
jib pole	pole launcher	RF20101 single loop head block fixed to boom at gooseneck as 2:1 shock cord retriever guide RF20711 exit box fixed to boom end as retriever exit RF20711 exit box fixed to jibpole end as launcher exit RF20100 swivel shackle head block fixed to mast with RF498 saddle above gooseneck as launcher guide RF20711 exit box fixed to deck as launcher exit RF20171 lead block fixed to control console as launcher guide RF5001 cam cleat and RF5005 fairlead fixed to control console	6mm shock cord pole retriever 3mm shock cord topping lift 3mm control line	Consider 1:2 system Consider topping lift 1:1 system

NOTES

Shackles – we usually use strip captive pin shackles similar to RWO R6180
Consider colour coding for each sail system control lines
Correct all rope alignments with spacers/wedges as required
Refer to www.ronstan.com for full catalogue details





Australian 2.4mR RONSTAN fit-out schedule

PART	NUMBER	COMMENTS
RC61901	2	
RC6190-1.0	1	2 x 400mm long
RC61980	---	
RC11910	1	
RC1190-1.0	1	1 x 600mm long
RC11980	2	
RF5001	15	
RF5003	---	Optional end cap (or use bolt head)
RF5005	15	
CL211 MK2AN	3	
RF5121	1	
PNP186	---	Optional through bush
PNP54B	4	
PNP121	2	
RF20100	1	
RF20101	11	
RF20111	2	
RF20151A	5	
RF20184	8	
RF20202	1	
RF20212	1	
RF20711	11	
RF20711HL	1	
RF2379	---	Optional lead block
RF20171	10	
RF453	1	
RF666	2	
RF20175	1	
RF615A	2	
RF614	1	
RF499,	---	Optional saddle
RF498	5	
RF134	2	
RF1050	---	Separate eye becket
RF488	1	
RF2331	2	
RF2527	1	
RF2528	1	
RF30	1	
PNP68C	3	
RF3133	1	With 12mm aluminium tiller
WXD	1	
RF1318	---	Optional stoppers for control lines
RF1316	1	
Notes	2 to 4 shackles required (subject to tie or shackle halyard fixing) Other equipment <ul style="list-style-type: none"> • Hand pump • Electric pump • Compass • Race code flags • Kit bag Mast fittings – base, plug, spreaders, crane, stay exits to suit section required	

RC61901 Series 19mm, Cars, I-Beam Traveller System, Loop top

Length	51.0 mm	
Max. Working Load	250 kg	
Breaking Load	650 kg	
Weight	115 g	

RC6190-1.0 Series 19mm, Track, I-Beam Traveller System

Length	996 mm	
Width	19 mm	
Weight	830 g	

RC61980 Series 19mm, Track, I-Beam Traveller System, Track end

Weight	10 g	
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RC11910 Series 19mm, Cars, Ball Bearing & Slide Rod Traveller Systems, 2 control sheaves

Length	85.0 mm	
Qty. Balls	60	
Max. Working Load	500 kg	
Breaking Load	1240 kg	
Weight	125 g	

RC1190-1.0 Series 19mm, Track, Ball Bearing Traveller System

Length	996 mm	
Width	19.0 mm	
Weight	310 g	


RC11980 Series 19mm, Track, Ball Bearing Traveller System, End cap

Length	30.0 mm	
Width	26.0 mm	
Weight	6 g	


RF5001 Fibre Reinforced T-Cleat, Cam Cleat, Small, red

Rope Diam.	2 - 8 mm	
Height	20.0 mm	
Width	24.0 mm	
Length	48.0 mm	
Fastener Diam.	M4 mm	
Fastener Hole Centres	27.0 mm	
Max. Working Load	75 kg	
Breaking Load	150 kg	
Weight	20 g	


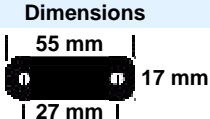
RF5003 Saddle, flared top, suits small C-Cleat and T-Cleat

Weight	4 g	
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RF5005 Front mounted fairlead, suits small C-Cleat and T-Cleat

Weight	7 g	
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CL211 MK2AN – Clamcleat, Racing Junior Mk2

Rope Diam.	3 - 6 mm	
Weight	23 kg	
<p>Dimensions</p> 		

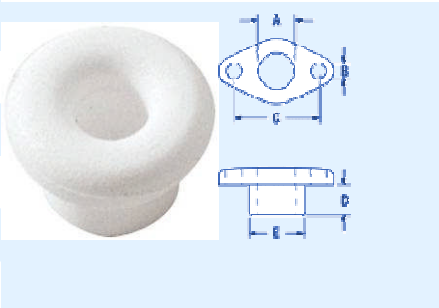
RF5121 Cleat, with pulley

Weight	46 g	
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PNP186 Through bush, screw-on

A	7.0 mm	
B	3.0 mm	
C	28.0 mm	
D	5.0 mm	
E	16.0 mm	
Weight	5 g	

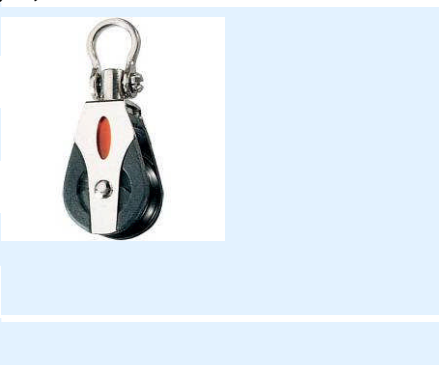
PNP54B Through bush, push/glue in

A	4.0 mm	
B	- mm	
C	- mm	
D	6.0 mm	
E	12.0 mm	
Weight	1 g	

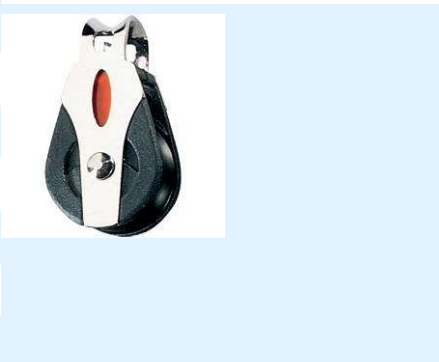
PNP121, Deck eye, plastic, ss liner

A	8.0 mm	
B	4 mm	
C	20.0 mm	
Weight	4 g	

RF20100 Series 20mm, Ball Bearing Blocks, Single, swivel shackle head

Sheave Diam.	20 mm	
Max. Rope Diam.	6 mm	
Max. Wire Diam.	- mm	
Pin Diam.	3.0 mm	
Max. Working Load	250 kg	
Breaking Load	550 kg	
Weight	20 g	


RF20101 Series 20mm, Ball Bearing Blocks, Single, loop head

Sheave Diam.	20 mm	
Max. Rope Diam.	6 mm	
Max. Wire Diam.	- mm	
Pin Diam.	- mm	
Max. Working Load	250 kg	
Breaking Load	550 kg	
Weight	16 g	


RF20111 Series 20mm, Ball Bearing Blocks, Single, becket, loop head

Sheave Diam.	20 mm	
Max. Rope Diam.	6 mm	
Max. Wire Diam.	- mm	
Pin Diam.	- mm	
Max. Working Load	250 kg	
Breaking Load	550 kg	
Weight	18 g	

RF20151A Series 20mm, Ball Bearing Blocks, Single, cheek, rivet mount

Sheave Diam.	20 mm	
Max. Rope Diam.	6 mm	
Max. Wire Diam.	- mm	
Pin Diam.	- mm	
Max. Working Load	200 kg	
Breaking Load	550 kg	
Weight	17 g	

RF20184 Series 20mm, Ball Bearing Blocks, Single, loop mount

Sheave Diam.	20 mm	
Max. Rope Diam.	6 mm	
Max. Wire Diam.	- mm	
Pin Diam.	- mm	
Max. Working Load	250 kg	
Breaking Load	550 kg	
Weight	22 g	

RF20202 Series 20mm, Ball Bearing Blocks, Double, 2-axis shackle head

Sheave Diam.	20 mm	
Max. Rope Diam.	6 mm	
Max. Wire Diam.	- mm	
Pin Diam.	4.0 mm	
Max. Working Load	350 kg	
Breaking Load	700 kg	
Weight	42 g	

RF20212 Series 20mm, Ball Bearing Blocks, Double, becket, 2-axis shackle head

Sheave Diam.	20 mm	
Max. Rope Diam.	6 mm	
Max. Wire Diam.	- mm	
Pin Diam.	4.0 mm	
Max. Working Load	350 kg	
Breaking Load	700 kg	
Weight	44 g	

RF20711 Exit Boxes, Ball bearing, single, cover plate

Sheave Diam.	20 mm	
Max. Rope Diam.	6 mm	
Max. Wire Diam.	- mm	
Fastener Diam.	4.0 mm	
Max. Working Load	250 kg	
Breaking Load	1000 kg	
Weight	22 g	

RF20711HL Exit Boxes, High load, single, cover plate

Sheave Diam.	20 mm	
Max. Rope Diam.	6 mm	
Max. Wire Diam.	3 mm	
Fastener Diam.	4.0 mm	
Max. Working Load	275 kg	
Breaking Load	1000 kg	
Weight	22 g	

RF2379 Lead Blocks, Single upright

Sheave Diam.	13 mm	
Max. Rope Diam.	5 mm	
Max. Wire Diam.	- mm	
Fastener Diam.	4.0 mm	
Max. Working Load	250 kg	
Breaking Load	500 kg	
Weight	20 g	

RF20171 Lead Blocks, Single upright

Sheave Diam.	20 mm	
Max. Rope Diam.	6 mm	
Max. Wire Diam.	- mm	
Fastener Diam.	4.0 mm	
Max. Working Load	250 kg	
Breaking Load	550 kg	
Weight	18 g	

RF453 Lead Blocks, Single, upright lead

Sheave Diam.	22 mm	
Max. Rope Diam.	3 mm	
Max. Wire Diam.	3 mm	
Fastener Diam.	5.0 mm	
Max. Working Load	160 kg	
Breaking Load	350 kg	
Weight	30 g	

RF666 Series 16 & 19mm, Utility Blocks, Single, loop head

Sheave Diam.	19 mm	
Max. Rope Diam.	5 mm	
Max. Wire Diam.	- mm	
Pin Diam.	- mm	
Max. Working Load	150 kg	
Breaking Load	400 kg	
Weight	10 g	

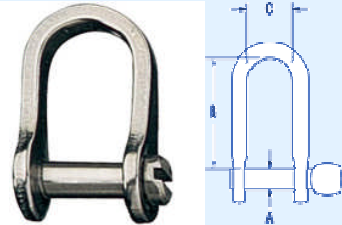
RF20175 Cleat Bases, Pivoting lead, cleat

Rope Diam.	2 - 6 mm
Max. Working Load	150 kg
Breaking Load	300 kg
Weight	79 g



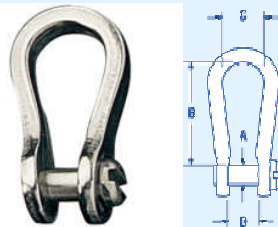
RF615A Standard Dee Shackles, Slotted pin

A	4.0 mm
B	13.0 mm
C	8.0 mm
P.L. Breaking Load	800 kg
U.D.L. Breaking Load	1000 kg
Shackle Pin Product No.	-
Weight	7 g



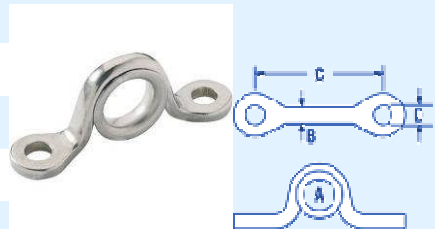
RF614 Miscellaneous Shackles, Special, slotted pin

A	4.8 mm
B	19.0 mm
C	10 mm
D	5.0 mm
P.L. Breaking Load	1400 kg
U.D.L. Breaking Load	1400 kg
Weight	5 g



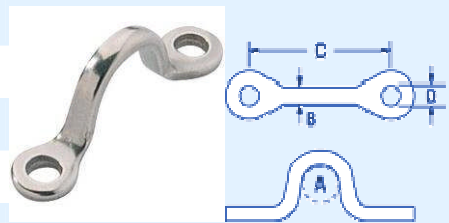
RF499, Saddle, ss eye

A	9.4 mm
B	4.9 mm
C	28.0 mm
D	4.1 mm
Weight	4 g



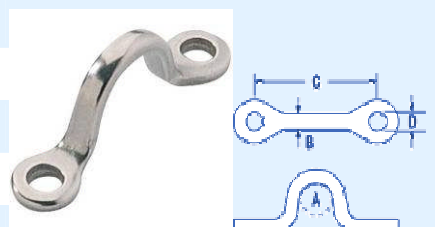
RF498 Saddle

A	10.0 mm
B	3.5 mm
C	28.0 mm
D	4.0 mm
Weight	4 g



RF134 Saddle


A	14.0 mm
B	4.8 mm
C	36.5 mm
D	5.0 mm
Weight	5 g



RF1050 Eye becket

Length	- mm	
Width	- mm	
Weight	6 g	


RF488 Chain plate

Width	19.0 mm	
Length	127.0 mm	
Fastener Diam.	5.0 mm	
Weight	53 g	

RF2331 Stay adjusters, fine tune, channel style

Pin Diam.	4.8 mm	
Increment Length	4.0 mm	
Qty. Adjustment Settings	17	
Adjustment Length	64.0 mm	
Length	115.0 mm	
Weight	65 g	

RF2527 Fixed Gooseneck

Weight	90 g	
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RF2528 Boom Socket

Weight	36 g	
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RF30 Spinnaker Pole Rings, Curved base

Material Diam.	6.4 mm	
Ring Diam.	30.0 mm	
Mast Diam.	60.0 mm	
Weight	45 g	


PNP68C Hinge

Width	53.0 mm	
Length	100.0 mm	
Weight	37 g	


RF3133 Urethane universal joint

Weight	35 g	
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WXD Wind Indicators, Windex, Dinghy

Weight	72 g	
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RF1318 Tie Balls, (colour subject to colour scheme)

Outside Diam.	16.0 mm	
Max. Rope Diam.	4 mm	
Weight	2 g	

RF1316 Tie Balls, (colour subject to colour scheme)

Outside Diam.	25.0 mm	
Max. Rope Diam.	5 mm	
Weight	7 g	