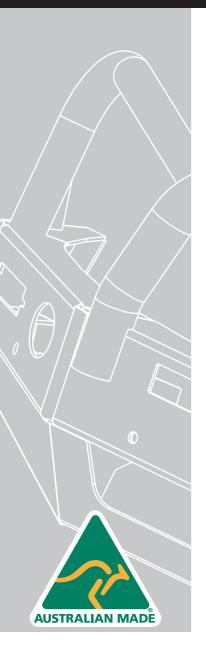


# Safer Lighter Stronger

PN:EAT300SY P2T300SY





# Fitting Guide & Owners Manual

TOYOTA LANDCRUISER
300 SERIES
7-2021 ON

3 HOOP BAR, 2 POST BAR VEHICLE FRONTAL PROTECTION SYSTEM (VFPS) FOR AIR BAG & ADR COMPLIANT VEHICLES

# Index

### Pages 4-5

ECB's Benefits

### Pages 6-7

**Product Care** 

Stage 1 - Vehicle Testing and Preparation

Stage 2 - Lower bumper plastics

Stage 3 - Lower bumper clips

### Pages 8-9

Stage 4 - Inner guards

Stage 5 - Radiator cover

Stage 6 - Disconnect electrics

Stage 7 - Grille

Stage 8 - Disconnect flare fronts

Stage 9 - Bumper removal

### Pages 10-11

Stage 10 - Bumper support

Stage 11 - Tie Down removal

Stage 12 - Grille support

Stage 13 - Camera removal

Stage 14 to 15 - Camera wiring

### Pages 12-13

Stage 16 - Camera refitment

Stage 17 - Parking sensor relocation

Stage 18 - Parking sensor extensions

Stage 19 - Fog light relocation

Stage 20 - Indicator/ Parking light fitment

Stage 21 - Clip lock trim

### Pages 14-15

Stage 22 - Bumper trim

Stage 23 - Grille Trim

Stage 24 - Chassis mounts

Stage 25 - Chassis supports

Stage 26 - Recovery hook

### Pages 16-17

Stage 27 - Winch Cradle

Stage 28 - Battery removal

Stage 29 - Battery tray

Stage 30 - Engine bay wiring

Stage 31 - Secure wiring

Stage 32 - Firewall

### Pages 18-19

Stage 33 - Light Connections

Stage 34 - Earth Connection

Stage 35 - P/S Foot well trim

Stage 36 - P/S Door Scuff Plate

Stage 37 - P/S Kick Panel

Stage 38 - P/S Door pillar trim

### Pages 20-21

Stage 39 - P/S Lower console trim

Stage 40 - P/S Console trim

Stage 41 - Knee airbag

Stage 42 - Glove compartment

Stage 43 - D/S Foot well trim

Stage 44 - D/S Door scuff plate

# Index

### Pages 22-23

Stage 45 - D/S Kick panel

Stage 46 - D/S Console trim

Stage 47 - D/S Door pillar trim

Stage 48 - Switch panel trims

Stage 49 - Instrument cluster trims

Stage 50 - Instrument cluster

### Pages 24-25

Stage 51 - Center top dash trim

Stage 52 - Dash wiring

Stage 53 - Light Switch (if fitting)

Stage 54 - Reassemble D/S and Center dash

Stage 55 - Cabin connection and mounting

Stage 56 - P/S Dash reassembly

### Pages 26-27

Stage 57 - Apply vinyl wrapping

Stage 58 - Install and align Protection Bar

Stage 67 - Connect electrics

Stage 68 - Side underbelly guards

Stage 69 - Center underbelly guard

Stage 70 - Inner guard trim

Stage 71 - Connect, check and test

### Pages 28-29

Final Checks Installation Kit

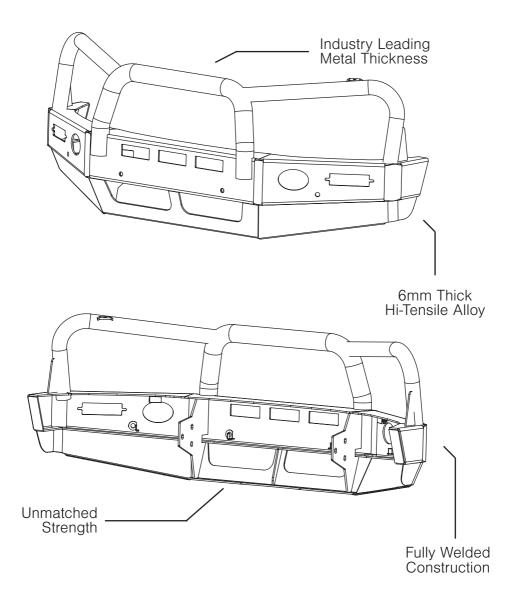
### **Pages 30-31**

Finished Product
Warranty Registration

### Pages 32-33

Notes

# The Features of ECB



# **ECB's Benefits**

### **Built to Perform - Not to a Price**

ECB are proud to claim that their channels are not jigsaw puzzles that are bolted together, or even multiple sections welded together. Where any welding is required, it is done to the highest standards by qualified welders, not machines.

### **Anti-Corrosive Nature of Alloy**

The composition of ECB's alloy has a very high resistance to corrosion. Rust not only looks unappealing but greatly reduces the strength of the metal. Rust can and will weaken the structural integrity of a steel bullbar effectively rendering it useless over time.

### Australian Made

Established in 1971, we utilise decades of experience designing, engineering and building products in Australia to suit Australian conditions. We can ensure the best quality controls and help support the local economy and employ over 90 proud Australians.

### **Weight Saving Benefits**

An ECB alloy bullbar is typically half the weight of a steel bullbar. Unnecessary suspension upgrades are not required. The reduced weight also contributes to increased fuel economy and less wear and tear on tyres, suspension and braking components.

### **Welds That Work**

ECB uses only the strongest welds and welding techniques to ensure every product is as structurally sound as possible. MIG (Metal Inert Gas) welding techniques are employed ensuring the welds are as thick as the thickest section of alloy's being joined together.

### **Lifetime Warranty**

ECB provide a lifetime warranty and consumer guarantee on all of our manufactured products. This guarantee highlights the confidence in our ability and provides complete peace of mind for your purchase for the lifetime you own your vehicle.

# **Product Care**

### **Polished Products**

Being a premium mirror polished finish, regular maintenance will be required to keep that iconic ECB shine. We recommend using our own brand of Aluminium Polish. This formula has been tried and tested and in our opinion is the world's best standard.

**Directions:** Apply a small quantity of Aluminium Polish to a clean soft cloth and rub the metal surface. The longer the rubbing the brighter the surface becomes. Wipe off Aluminium Polish with clean soft cloth. Also suitable for motorised buffing machines.

Note: There are more specific details on the polish bottle. Please read before use.

### **Powdercoated Products**

Our powdercoated finishes are very low maintenance. Infact there is actually very little you will ever need to do for this product. Just clean it as you would your car and it will stay looking good as new.

### **ECB Aluminium Polish**

When you're looking for that showroom finish look for your polished automotive products, you can depend on the no compromise quality of East Coast Bullbars Aluminium Polish. This specifically designed product is the best polish available and we guarantee that this \$#!+ works. Within our decades of manufacturing polished alloy products we have trialled a large range of different polishes on the market and believe without a doubt that nothing beats the finish quality of East Coast Bullbars Aluminium Polish.

East Coast Bullbars Aluminium Polish is excellent for use by hand and is ideal for polished bullbars, nudge bar and stainless steel products. This polish will clean, polish and protect your product from the elements whilst bringing your products back to that showroom finish look.



### Stage 1

- Test drive vehicle to ensure all driver assists are correctly working and to gauge effectiveness. Park on a flat level surface.
- · Apply parking brake and lift bonnet.
- Unwrap ECB Protection bar and disconnect mounts. Discard bolts.
- Ensure these instructions are left with the vehicle owner and/or operator.



NOTE: Disconnection of electronic parts of this vehicle may disable all safety features, which will require a Toyota dealership to reset settings. As every vehicle is different, disconnection of the battery may not work for every vehicle.



 From under front of vehicle, remove outer plastic covers, five (5) 10mm head bolts and one (1) 12mm nylon nut.



### Stage 3

From lower edge of bumper, remove four
 (4) 10mm head bolts.





### Stage 4

 Under front wheel arch remove two (2) push pull clips and one (1) T25 Torx screw (per side) from inner guards.



### Stage 5

 Remove seven (7) push clips from top radiator cover plastic trim and remove.



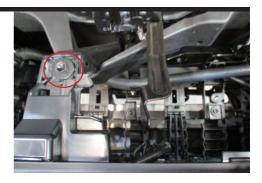
- Disconnect parking sensors/sonar and camera if fitted. Harness on driver side between grille and headlight.
- Disconnect headlight washer hose on passenger side between grille and headlight.





### Stage 7

 Between headlights, remove three (3) 10mm head bolts from rear of grille.



### Stage 8

- Reach between inner guard and guard to release two (2) lower clips on flares.
- · Gently pull flares away from outer guard.
- Remove one (1) push pull clip per side from guard/bumper join.



- Gently pull outer wing away from guard and under headlights to release from attachment clips.
- Pull centre of grille to release from attachment clips.
- · Remove bumper.



### Stage 10

 Bumper support remove four (4) 17mm bolts top and bottom of alloy bumper support.
 Remove alloy bumper support.





### Stage 11

 Remove original tie down hooks from underside of cross member, two (2) 17mm head bolts.



### Stage 12

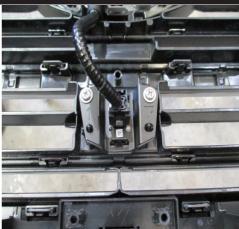
 Remove grille support, six (6) 10mm head bolts. Pull up and forward to release.



### Stage 13

- Disconnect camera and remove two (2) philips head screws.
- · Unclip outer plastic camera housing.





### Stage 14

- Remove wiring from clips across top rear of grille.
- Using a sharp knife or similar, carefully slit covering tape ensuring wiring inside is not damaged.
- Remove camera wiring back to join where loom separates from top to bottom. Cover wiring with Convoluted tubing (supplied). Retape top loom and run wiring down to bottom of grille with other loom. Attach loom to lower section of grille.



### Stage 15

- Remove camera wiring back to join where loom separates from top to bottom.
- Cover wiring with Convoluted tubing (supplied).
   Retape top loom and run wiring down to bottom of grille with other loom.
- Attach loom to lower section of grille using zip ties supplied.

Cut grille for 2 Post and Triple Tube Bar shown.



### Stage 16

- · Place camera into Protection Bar.
- Align camera to hole in cross brace. Secure camera to mount using two (2) self drilling screws.

Ensure top of camera mount is parallel to cross brace.



### Stage 17

- · Remove parking sensors from bumper.
- Place sensor housings into protection bar as they were removed from the bumper.

**NOTE:** Failure to place the sensors in the correct location as per the location in the original bumper, will cause the system to fail as the sensors are different from centre to outer.



### Stage 18

 Connect parking sensor extensions (supplied).



### Stage 19

- · Unclip outer housing from behind the fog lights.
- Remove three (3) philips head screws per side.
   Remove fog lights.
- Secure into welded bracket in protection bar using M6 x 25mm bolts, flat washers and Nyloc nuts. Nut to rear of protection bar.
- · Align lights and tighten.



### Stage 20

 Fit ECB LED indicator/park lights into protection bar as per instructions supplied with the LED indicator kit.

NOTE: Ensure park light is to top.

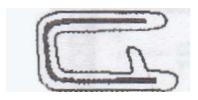


### Stage 21

 Attach 6mm clip lock trim (supplied) to top of ECB protection bar.

**NOTE:** Trim off lower edge on an angle so trim will sit flush with end of protection bar.







### Stage 22

- Using paper masking tape, mask area to be cut, to avoid damage.
- As printers vary, check and measure template to ensure correct sizing.
- From this instruction, using sharp scissors, carefully cut out template.
- Mark and cut bumper using jigsaw, hack saw or similar.

**CAUTION:** Double check all marked lines before trimming.

- Trim bumper just below intercooler intake on bottom of intercooler.
- Place 3mm clip lock on trimmed bumper along flare and side bumper. Trim rear from clip lock trim to cross between flare and bumper.





- Trim lower section from grille. At sides leave clips so grille is able to secure to outer bumper.
- Refit bumper in reverse as per steps 4 to 8.



### Stage 24

- Install steel mounting brackets to end of chassis rail with steel spacer plate between mount and chassis rail. Install using M12 x 1.25 x 40mm bolts, flat washer and spring washer into bottom holes with captive nuts.
- Place support bracket to inside of chassis rail. Secure to top hole using M12 x 1.25 x 50mm bolt, flat washer, spring washer and M12 x 1.25 nut. In bottom hole use M10 x 1.5 x 50mm bolt, flat washer, spring washer and M10 x 1.5 nut.
- · Finger tighten only.



- Place lower support into position using M10 x 1.5 x 50mm bolt, flat washer, spring washer and M10 x 1.5 nut through front of chassis rail. Finger tighten only.
- Install outer support brackets as per inner bracket.
- In top hole through rail and tow hook, use M12x 1.75 x 120mm bolt, flat washer, spring washer and M12 x 1.75 nut.
   Finger tighten only.
- In bottom hole under rail, secure with M12 x 1.25 x 40mm bolt, flat washer and spring washer. Finger tighten only.



- Remove M12 x 50mm bolt from under chassis rail. Remove nut and washers only from 120mm bolt through chassis rail.
- Loosen only sway bar from vehicle to give 8 to 10mm gap, four (4) 17mm head bolts. Remove bolts completely from, one side.
- Place 8mm spacer under rear of sway bar mount and reinstall original equipment bolt.
- Install Rated recovery hook to vehicle using original bolt for Sway bar, M12 x 1.25 x 40mm bolt, spring
  washer and flat washer in tow point holes in cross member. Check bolts in holes for fit. Do not fully
  install other bolts at this time.
- · Finger tighten only. Repeat for opposite side.



### Stage 27

 Fit winch cradle between mounting brackets. Two bottom holes secure with M12 x 1.25 x 40mm bolts, flat washer, spring washer and M12 x 1.25 nut.

**NOTE:** rear hole is through crash can. Finger tighten only.

- Check inside measurement of mounts in protection bar and use measurement to the outside of steel mounting brackets.
- · Align cradle and mounts and tighten all bolts.

**NOTE:** check upper holes in cradle to ensure alignment with mount.



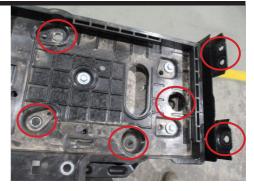
### Stage 28

- From inside front lower corner of battery, remove two 12mm head bolts from battery tie down.
- · Remove tie down and battery.



### Stage 29

 Remove battery tray to give access to fire wall wiring entry. Seven (7) 12mm head bolts.



### Stage 30

- Feed wiring harness into area under locking mechanism at front of vehicle.
- Attach to wiring harness under top of radiator support where possible using zip ties supplied.
- Run dropper for lights behind headlight and attach to radiator support in required areas. Ensure dropper is clear of intercooler radiator.
- · Attach wiring harness to original equipment harness and fixtures in engine bay where possible.
- · Ensure harness is clear of sharp edges and possible rub points to avoid possible damage.

### Stage 31

 Feed wiring harness through area behind headlight, following OEM wiring harness under air box intake, around to inside of fuse box following OEM wiring to the firewall entry.



- Cut end of nipple from firewall bung and feed wiring into vehicle.
- From inside of vehicle, locate wiring and ensure it is not wound around OEM wiring or restricted by other wiring/parts.
   This connects to inner (cabin) wiring harness.
- Seal firewall bung into vehicle using silicon and a zip tie around the body of the bung.



### Stage 33

- · Disconnect headlights and remove.
- On headlight wiring, the remove convoluted tubing. Find specified wire as per the instructions supplied with the wiring harness and join into wiring harness.
- · Refit headlights to vehicle.



### Stage 34

- Remove black cover from earth terminals under light.
- Connect earth of harness to earth bolt.
   Refit black earth cover.



### Stage 35

 From under glove compartment in passenger side footwell, remove lower cover, four (4) press clips.

**NOTE:** squeeze clip to front of vehicle to release.

 Pull lower cover rearward when clips released to remove from vehicle.





### Stage 36

 Inside passenger side footwell, remove door scuff plate.



### Stage 37

 From footwell, remove one plastic nut from kick panel. Pull trim to rear of vehicle to remove.



### Stage 38

 Remove pillar trim between glovebox and door under outer vent. Gently pull trim directly outward toward door to release clips.



### Stage 39

- On lower side of center console, remove fill trim. Slide fingers under trim at lower rear and gently lever out from console. There are four clips holding it to the console.
- Slide trim to rear to remove front sliding clips.



### Stage 40

- On center console, tape shown areas to avoid scratches.
- Pull top side trim directly rearward to remove. Part has six (6) clips holding it to the console.



TIP: Take a 400mm piece of 50mm paper masking tape and fold 100mm at end back on itself. Stick the remainder to the trim. This can then be used as a handle to allow better leverage to pull the trim backward.

- On knee airbag, remove three (3) 10mm head bolts. Carefully remove airbag from glove box by pulling plastic trim rearward at join to bottom of glove box.
- Remove black wiring clip on yellow wiring harness behind passenger knee airbag to air conditioning fan housing. DO NOT DISCONNECT. Place on floor to inside side of footwell.
- CAUTION: Care needs to be taken not to drop, shock or damage this unit.
   THIS IS A CRITICAL SAFETY ITEM.



### Stage 42

 Remove glove compartment, four (4) 10mm head bolts. Top two (2) bolts are behind plastic covers inside top of glove box.



### Stage 43

 On driver side of vehicle, remove lower dash cover from footwell, two (2) 8mm screws and three (3) squeeze clips.



### Stage 44

 Remove driver door scuff plate by pulling up to remove.



### Stage 45

 On kick panel, remove one plastic nut and pull rearward to remove.



### Stage 46

- On centre console, tape shown areas to avoid scratches.
- Pull top side trim directly rearward to remove. Part has six (6) clips holding it to the console.
- · Disconnect wiring from rear of switch.



### Stage 47

 Remove pillar trim between switch panel and door opening under outer vent (see photo). Gently pull trim directly outward toward door to release clips.



### Stage 48

Remove switch panel trim from both sides
of steering column. Carefully pull directly
rearward on corners of trim. Some of the
clips can be seen on the outside of the
right hand side of the door's side trim.
A small flat blade screwdriver can be
used to release these clips by gentle
levering center attachment pin whilst
pulling trim.



### Stage 49

- · Remove instrument cluster outer trim.
- Caution: Soft joiner area between cluster and steering column is attached to the cluster trim. Carefully remove the soft trim from the top of the steering column.





### Stage 50

 Remove instrument cluster, four (4) 10mm head bolts. Carefully disconnect from wiring.



### Stage 51

- From above centre display screen, remove venting style trim from top of dash. Lever small screwdriver under front outer edge and lever up. Clips are on outside edges of trim, 3 per side, two at front and rear.
- · Disconnect harness and remove.



### Stage 52

 Run wiring harness across from passenger side to driver side, across dash support tube. In center, wiring needs to be fed under radio and above HVAC tubing on both sides.



- If fitting Accessory light to the product: Now is the best time to install the switch to the switch panel on the left hand side of the steering wheel.
- Zip tie harness into position on vehicle.
   Coil any extra wire and ensure it will not vibrate or rattle.

### Stage 54

 Reassemble dash on driver side of vehicle ensuring all electrical connections are refitted and dash is correctly assembled.



### Stage 55

- Assemble computer to cabin wiring harness on matching connector.
- Using alcohol swab (supplied), clean face of OEM ECU attached to lower pillar next to air conditioning unit.
- Attach VHB tape to cabin computer and attach to side of OEM ECU.
- Connect 2 pin plug on cabin wiring loom to matching plug on OEM loom in vehicle.





### Stage 56

 Reassemble dash on passenger side of vehicle ensuring all electrical connections are refitted and dash is correctly assembled

**NOTE:** Care needs to be taken when running the wiring behind the knee airbag ensuring that it does not affect it's positioning or stress the casing.

All wiring must be secured to ensure there are not future rattles.



### Stage 57

- Clean remaining coloured sections of bumper with soap and water and follow after dry with isoprophyl alcohol.
- Peel rear from vinyl sheet and apply to area on lower section of bumper under grille using a credit card style applicator, sharp knife and heat gun.
- Smooth area to be bubble free on completed item. Edges should be turned under and attached to rear where possible.



### Stage 58

- Fit protection bar to mounting brackets.
   For the middle rear hole use M12 X 1.25 X 50mm bolt, flat washer, spring washer and M12 x 1.25 nut. In other holes use M12 x 1.25 x 40mm bolt, flat washer, spring washer and M12 X 1.25 nut.
- Align protection bar with vehicle and tighten all bolts.



### Stage 59

• Connect indicator/park/DRL, fog lights, all parking sensors and camera (if fitted).

### Stage 60

 Attach side underbelly guards to top of end skirt and lower leg of channel using M6 x 25mm bolts, flat washers and Nyloc nuts.



### Stage 61

- Place centre underbelly guard to top of mid skirt and secure front holes using M6 x 25mm bolts, flat washers and Nyloc nuts.
- In rear holes of centre underbelly use M12 x 1.25 x 40mm bolts, flat washers and spring washers securing underbelly guards and tow hooks together.
- On wings of centre guard, drill a 6.5mm hole and secure with M6 x 25mm bolt, flat washers and Nyloc nut.



### Stage 62

Push inner guards up into wheel well.
 Mark and trim inner guards. Tuck inner guards behind the rear of the underbelly guard and behind side of alloy Protection bar.



### Stage 63

### RECONNECT BATTERY

- Test drive vehicle to ensure all safety features are working correctly.
- Place warning sticker on inside rear of drivers door



# Final Checks

### **Ensure Number Plate is Clearly Visible**

Note: When fitting/refitting the licence plate to the vehicle, ensure there is no obstruction to licence plate vision in accordance with local authorities. If required relocate licence plate to an alternate location.

### **Further VFPS Notes**

- Do not attach VFPS to the vehicle using anchorages not intended for this purpose (e.g. engine mounting bolts).
- Do not use this product for any vehicle make or model, other than those specified by the VFPS manufacturer.
- 3. Do not remove the plague or label from the VFPS.
- 4. Do not modify the structure of the VFPS in any way.
- 5. No accessory or fitment should project forward of the VFPS forward profile.
- 6. Ensure these instructions are left with the vehicle owner and/or operator.

### **Important Information**

Periodically check bolts and nuts for correct tightness, especially if traveling on rough roads.

# WARNING

Maximum load 5000Kg per recovery hook, 8000Kg with bridle strap connecting both points

Incorrect use of recovery hooks may result in Vehicle Damage, Personal injury or Death

- Inspect and discard damaged or worn equipment before each use
- · Use of an bridle strap is recommended
- Pull angle should not exceed the maximum turning angle of wheels, damage to vehicle may result
- Maximum shackle rating 4.75t complying with AS2741
   ECB recommends taking a 4WD safety course before use

# **Installation Kit**

### **Installation Kit**

1 - Pair steel mounting brackets	2 - M12 x 1.75 nuts	
2 - Mounting bracket spacers	6 - M10 x 1.5 x 50mm bolt	
1 - Winch cradle	12 - M10 Flat washers	
1 - Control box mount	- M10 Spring washers	
1 - Horn relay bracket	6 - M10 x 1.5 Nuts	
1 - Center underbelly guard	21 - M6 x 25mm Bolts	
1 - Pair side underbelly guards	42 - M6 Flat washers	
1 - Pair outer support brackets	21 - M6 Nyloc nuts	
1 - Pair inner support brackets	2 - 8-18 x 12mm self drilling screws	
1 - Pair lower support brackets	2 - Parking sensor extension harness (IC21TOLCSP1H)	
1 - Recovery hooks left & Right	1 - Indicator/park/DRL (ICLED105ECB)	
2 - suspension spacer plates	1 - 2800 mm length 6mm clip lock	
2 - M12 x 1.75 x 120mm Bolts	2 - 550mm length 3mm clip lock	
6 - M12 x1.25 x 50mm Bolts	4 - parking sensor housings (in Channel)	
20 - M12 x1.25 x 40mm Bolts	1 - Wiring kit (IC21TOLCIPHDH)	
46 - M12 x 29 x 2.5mm Flat washers	2 - Black vinyl wrapping stickers	
28 - M12 spring washers	1 - Recovery hook Warning label	
16 - M12 x 1.25 nuts	25 - 150mm Zip ties	

# **Finished Product**





# **Warranty Registration**

Name: _		
Address:		
Product:	EAT300SY/ P2T300SY	
Email: _		
Phone: _		
	er Number: s on the silver label oduct.	
	nis registration you automatically subscribe to ECB's scribe at any time.	mail outs
For online regis	er Online tration please go online to www.ecb.com.au/warrant questions please contact our national office on 1800	

PO Box 122, Margate, QLD 4019



PN: EAT300SY/ P2T300SY
Please post to: PO Box 122,
Margate QLD 4019

# **Notes** Full Name Date

REPLACES: N/A REVISED: 07.09.22

### Endnotes:

02.03.22 - Created by Steve Scott

29.03.22 - Formated by Kevin Aland

30.03.22 - Checked by Annabelle Casinillo

01.04.22 - Checked by Steve Davies

01.04.22 - Checked by Nikki Wright

00.00.00 - Completed by

# Safer Lighter Stronger

29 Snook St, Clontarf QLD 4019 PO Box 122, Margate QLD 4019

