

ICECO



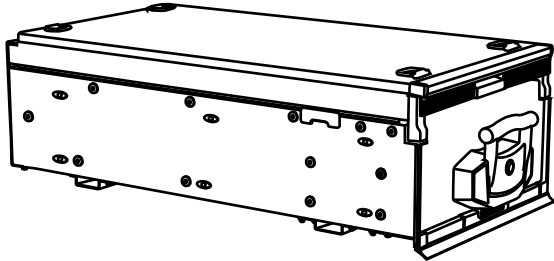
Drawer System DS27/DS15

Please email us at: official@icecofreezer.com

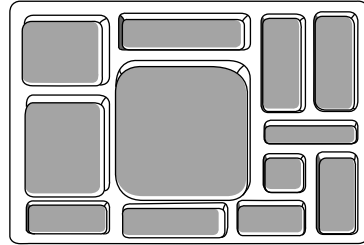
Catalogue

1	Supply Details	1
2	Specification	2
3	Dimension	3
4	General Guide	4
	• 4.1 Installation	4
	• 4.2 Operation	4
	• 4.3 General Care and Maintenance	5
5	Installation Instruction	6
	• 5.1 Frame Preparation	8
	• 5.2 Position Mount Rails	11
	• 5.3 Vehicle Specific Installation	15
	• 5.4 Reassembly	17
6	Optional Side-by-side Drawers Installation	18
7	Notes For Custom & Individual	22

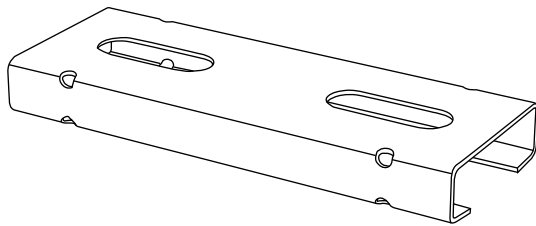
1 Supply Details



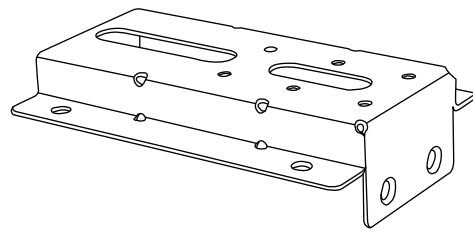
**DS27/DS15 Roller Drawer
With Roller Floor x1**



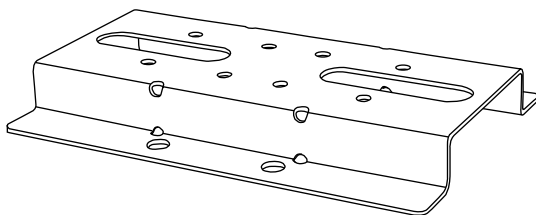
Accessories Package x1



**"C" Connecting Section x1
(Included in the Accessories Package)**



Reinforced Section A x2



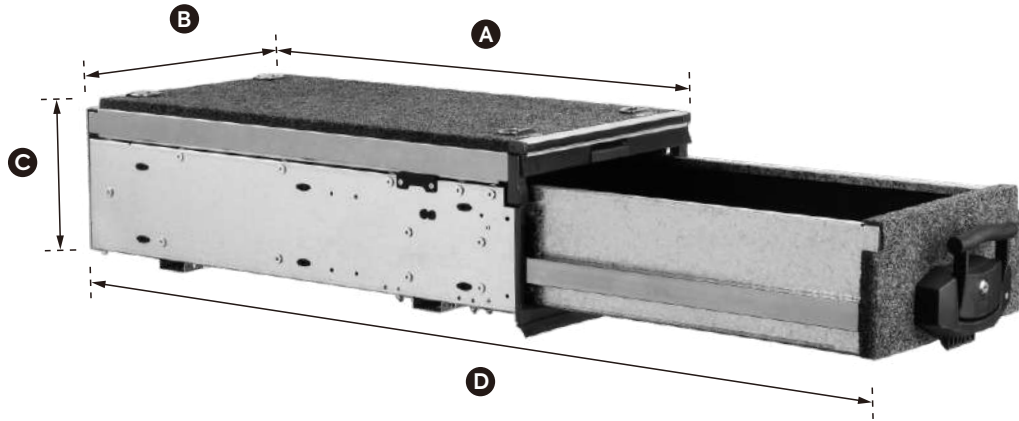
Reinforced Section B x1

2 Specification

MODEL	Drawer System DS27	Drawer System DS15
External Specs (LxWxH)	35.4 x 17.7 x 10.8 inches (899 x 450 x 274 mm)	35.4 x 17.7 x 5.9 inches (899 x 450 x 150 mm)
Internal Specs (LxWxH)	33 x 14.9 x 7.4 inches (840 x 380 x 190 mm)	33 x 14.1 x 2.9 inches (840 x 360 x 75 mm)
Net Weight	71.2 lbs (32.3 kg)	49.4 lbs (22.4 kg)

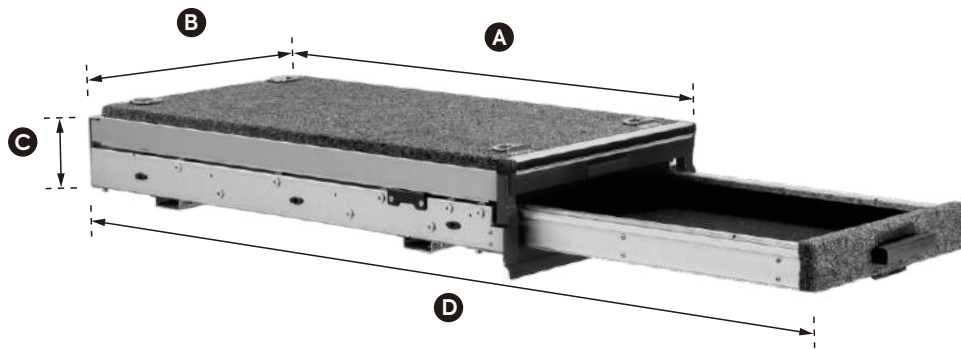
3 Dimension

Drawer System DS27



A	B	C	D
35.4 in (899 mm)	17.7 in (450 mm)	10.8 in (274 mm)	58.2 in (1480 mm)

Drawer System DS15



A	B	C	D
35.4 in (899 mm)	17.7 in (450 mm)	5.9 in (150 mm)	55.1 in (1400 mm)

4 General Guide

4.1 Installation

- 4.1.1 This product must be installed as per these instructions.
- 4.1.2 Use only hand held tools for installation, electric or air tools may damage screw heads, cross threads or slip and damage interior of the vehicle.
- 4.1.3 It is recommended that trained personnel install this product.
- 4.1.4 These instructions are correct as at publication. ICECO cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer.
- 4.1.5 Some installations will require marking and drilling of bolt holes. Please use safe power tool practices, double check measurements prior to drilling and ensure clearance under the drilling surface.
- 4.1.6 During installation, it is the duty of the installer to check correct operation / clearances of all components.eg: tail gate, doors, etc.

4.2 Operation

- 4.2.1 Drawers and Roller Floors should only be opened / operated on level ground.
- 4.2.2 Always use Slam Latch handles to open and close Drawers or Roller Floors.
- 4.2.3 Remove the key from the slam shut handles lock before closing the vehicles tailgate or rear doors to avoid damage to the key and the vehicles interior. m Latch handles to open and close Drawers or Roller Floors.
- 4.2.4 A Cargo Barrier should be installed where possible to provide occupant protection.

4.2.5 Drawer contents should be spread evenly throughout the drawer and not exceed 100Kg.

4.3 General Care and Maintenance

4.3.1 Using a clean rag, wipe and clean off excess grease from bearings and drawer rails.



Do not use degreasers or cleaning fluids when cleaning bearings and rails.

4.3.2 Every three months, spray a small amount of CRC (or similar) onto Drawer and Roller Floor Runners. Operate Drawer or Roller floor several times, then wipe the runners clean with a rag to remove built up dust and dirt from bearings. Maintenance should be carried out more regularly in harsh or dusty environments.

4.3.3 Dirt or mud on the carpet surfaces should be allowed to dry. Once dry use a stiff brush to loosen the dirt and then vacuum.

4.3.4 Light dust can be brushed off or vacuumed.

4.3.5 The drawer materials are water resistant, however if liquid is spilt onto or into a drawer or roller floor, it should be immediately dried.

5 Installation Instruction

NOTE THE FOLLOWING

- ⚠ Do not elongate any holes.
- ⚠ Please keep all the accessories you using during the installation.
- ⚠ Read and understand all instructions before proceeding.
- ⚠ Throughout these instructions *rear refers to rear of vehicle *front refers to front of vehicle.
- ⚠ The instruction diagrams all correspond to the textual descriptions below the instruction diagrams.

General Instruction

Frame Preparation

The modules must be prepared for installation by temporarily removing drawers, trays, roller floor tops and fixed tops. Follow steps below.

Vehicle Preparation

Follow the Vehicle specific instructions to install the base frame into vehicle. Installation locations vary from vehicle to vehicle. Depending on the specifics of the vehicle you need to install, match the holes already in the vehicle with the drawer. You need to match as many holes as possible, and if the vehicle's original holes aren't enough, you'll need to punch the holes yourself.

Reassembly

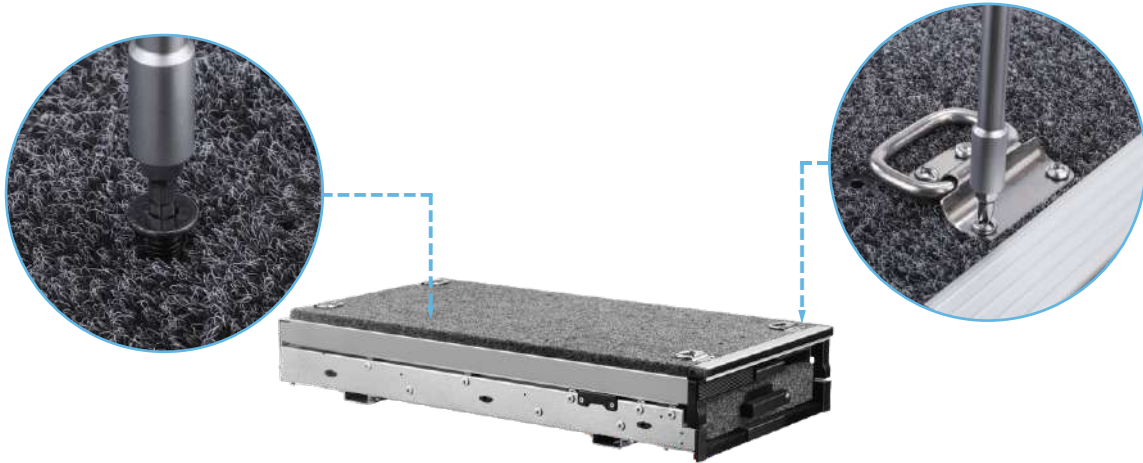
You should have the drawer system (the base frame) prepared and bolted into the vehicle before attempting this step. Restore a complete drawer system by installing all the parts removed in the first step in sequence to the drawer system on the car.

Optional Stacker Drawer Installation

If you need to install two or more combination drawer systems, then your first step needs to be an additional session. After getting the individual drawer systems ready, you need to connect the drawer systems. After connecting the multiple drawer systems, you should start the Installation from 5.2 position mount rails.

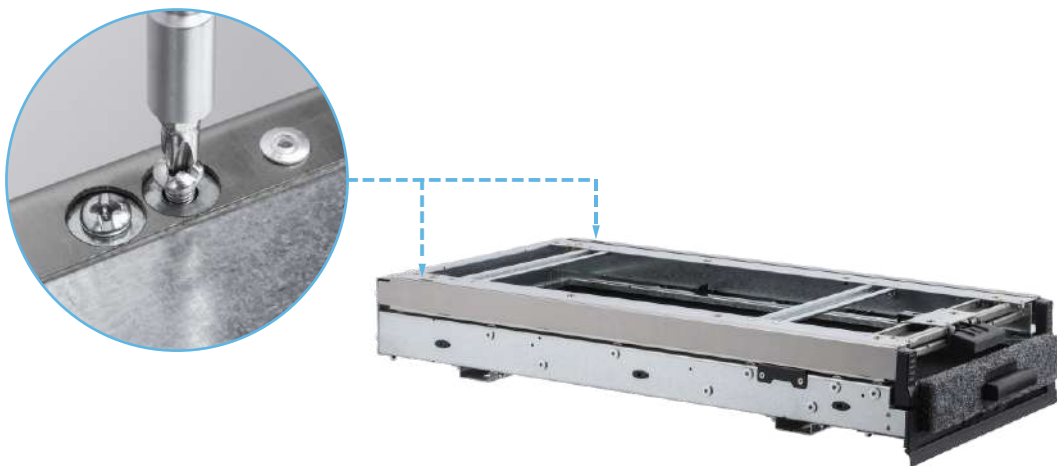
5.1 Frame Preparation

The modules must be prepared for installation by temporarily removing drawers, trays, roller floor tops and fixed tops. Please follow these steps.



5.1.1 REMOVE THE FIXED TOP:

Using a 4mm Allen key, remove the fixed floor by removing the countersunk setscrews from both sides of the floor. Retain hardware for reinstallation.



5.1.2 REMOVE THE ROLLER FLOOR TOP:

Using a Philips head screw driver, remove the four screws retaining the anti rattle roller floor stops.

Roll floor out clear of framework, floor stops will fall free. Retain stops and hardware for reinstallation. (There are stops on the left and right hand side.)

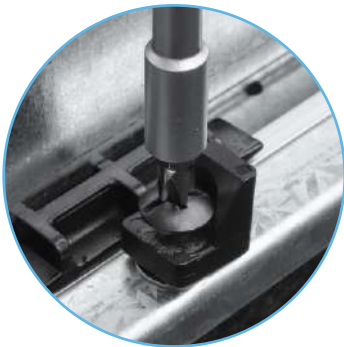


5.1.3 REMOVE THE DRAWER:

(If it is DS27)

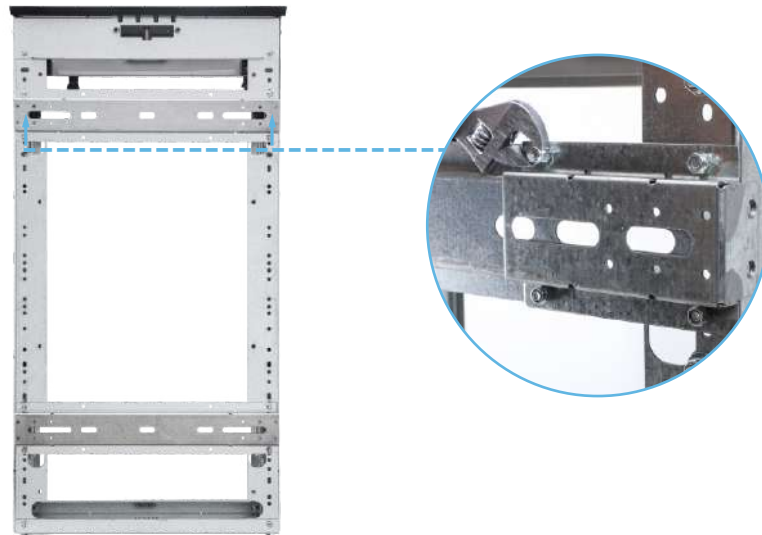
Working from the inside of the drawer, use a 10mm socket and ratchet to remove the four "anti-rattle" drawer stopper retaining bolts from the front of the drawer.

Roll the drawer out of the frame and the drawer stops will fall free. Wipe off the shipping grease from the bearings and drawer guides with a clean rag. (Retain the stops and hardware for reinstallation.)



(If it is DS15)

Working from the inside of the drawer, use a 10mm socket and ratchet or Philips head screwdriver to remove the two "anti-rattle" drawer stopper retaining bolts from both sides of the drawer.



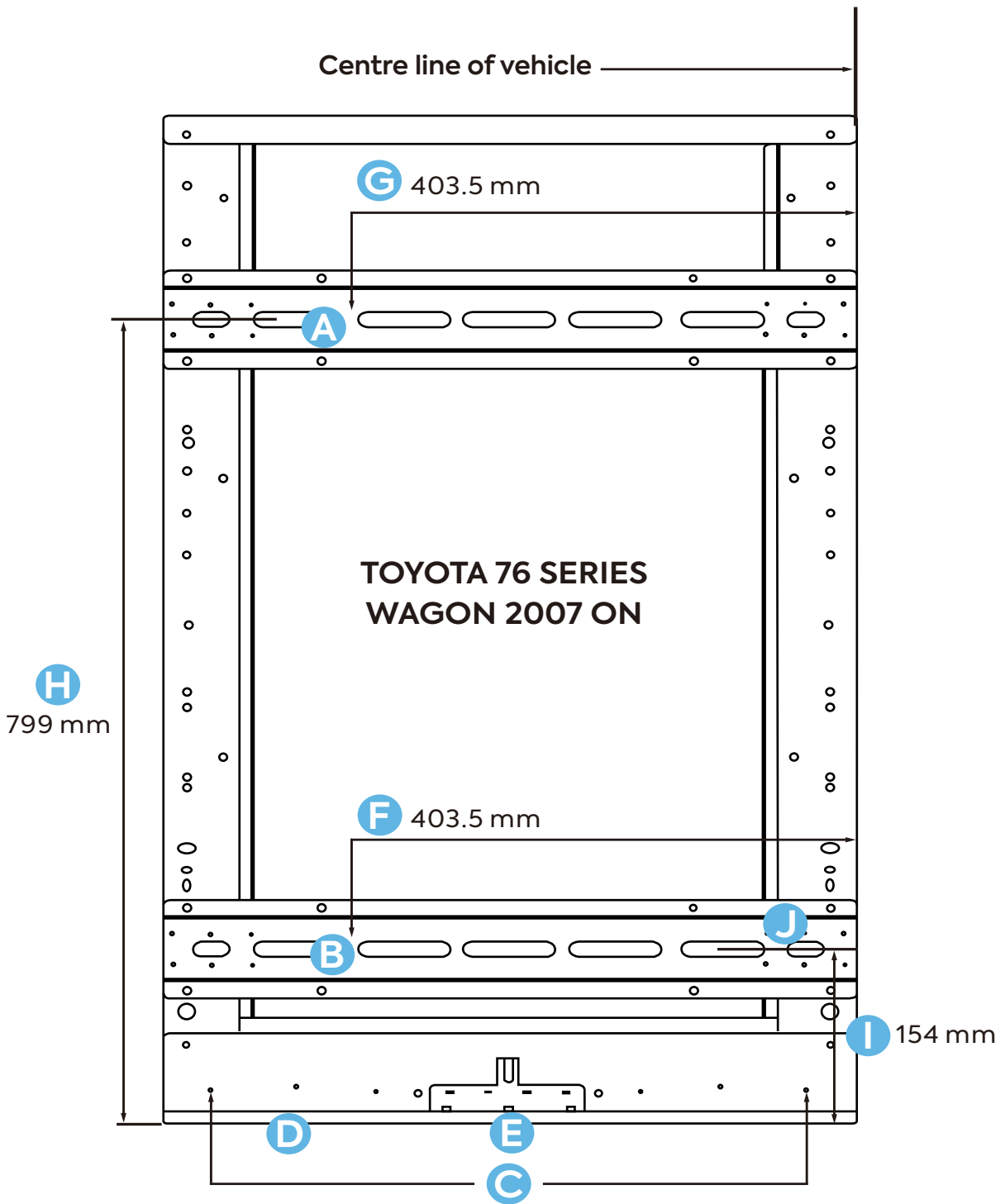
5.1.4 REINFORCE THE MOUNT RAILS


You will need to flip the mount rails over and operate them on the bottom of the drawer. Loosen the existing screws on both sides of the front or rear keels. Then install the reinforcement parts on each side of the front or rear keels.

 Ensure you have completed the 5.2 Position Mount Rails

5.2 Position Mount Rails

Vehicle Specific Diagram



 **1. Use measurements from the vehicle specific diagram for this step. The diagram is at the end of the vehicle specific instructions.**

2. This step involves determining where the bottom of the drawer system will be mounted based on the measurements from the vehicle specific diagram that corresponds to the vehicle in which it will be installed.

3. The measurements from the vehicle specific diagram vary from vehicle to vehicle. In this manual we will provide specific diagrams and measurements for a few common vehicles.

5.2.1 Determine the position of Mount Rails (keels of the bottom of the drawer system)

- In this manual we will use the model of TOYOTA 76 SERIES WAGON 2007 ON as an example to demonstrate the following steps for locating the rail position and vehicle preparation.
- Determine the front and rear keel positions based on the model of the vehicle to be installed. According to the TOYOTA 76 SERIES WAGON 2007 ON model shown in the instruction manual, the rear keel (keel near the drawer handle end) is installed at a position 154mm from the top plastic of the drawer handle, and the front keel is installed at a position 799mm from the top plastic of the drawer handle.
- Starting at the bottom, measure from the outer edge of the rear plastic trim, marking along the bearing grooves.
- If necessary: remove and reposition the front and rear suspension rails so that the centerline of the rail is on the marked measurement - refer to the detail drawing for measurements.

 **Ensure bolts heads are inside and nuts are outside of framework.**

5.2.2 If the vehicle to be installed is not one of the models already in the manual, you can first check the distribution of the holes in the vehicle to be installed and place the bottom of the drawer system on the vehicle according to the hole positions. You can then adjust the rebar positions to correspond to as many holes as possible. Require two fixed positions for each of the front and rear keel. As for the TOYOTA 76 SERIES WAGON 2007 ON model, 403mm from the edge of the box to the center is the first place to place the holes. And then check the rest of the keel to see if there are any corresponding holes or if they are in the way of the vehicle's parts. For other vehicle models, you can refer to vehicle-specific instructions and measurements of the vehicle's condition to determine the fixed hole positions.

5.2.3 If there is no hole on the vehicle, such as a pickup truck, you can perforate it by yourself according to your needs and the distribution of vehicle parts. The accessory screws are included in the package for threading the holes.

A . Front Mount Rail Spacers

Clip together 2 X 10mm spacers to form a **20 mm** spacer and locate between floor ribs under front mount rail. Remove pins from top spacer.

Insert **M10 X 60mm bolt** through 40mm x 75mm flat washer, mount rail and spacer. Use weatherproof plates and nuts underneath vehicle. A 10 mm hole will need to be drilled in the vehicle floor.

B . Rear Mount Rail Spacers

Clip together 2 X 10mm spacers to form a **20 mm** spacer and locate between floor ribs under front mount rail. Remove pins from top spacer.

Insert **M10 X 60mm bolt** through 40mm x 75mm flat washer, mount rail and spacer. Use weatherproof plates and nuts underneath vehicle. A 10 mm hole will need to be drilled in the vehicle floor.

C . 20mm Spacer Required

D . Do Not Remove Trim

E . Attach 24 mm Spacer. Remove pins from spacer


J . 198mm to metal section on rear door.

TOYOTA 76 SERIES WAGON 2007 ON

A	20mm Spacers	F	403.5 mm
B	20mm Spacers	G	403.5 mm
C	20mm Spacers	H	799 mm
D	Do Not Remove Trim	I	154 mm
E	24mm Spacers	J	198 mm

5.3 Vehicle Specific Installation

Ensure you have completed 5.1 & 5.2 Frame preparation & Position Mount Rails before following this vehicle specific instruction.

 **Confirm measurements and check for items such as fuel lines, break lines, fuel tanks, spare tires and non standard accessories before drilling holes in vehicle. It is the responsibility of the fitter to ensure that drilling on the vehicle will not damage vehicle components.**

5.3.1 With an assistant, carefully lift the frame into the vehicle taking care not to scratch the vehicle.

5.3.2 Positioning in vehicle – Center Left to right.

If fitting an optional Side Floor, maneuver assembly to ensure the gap between side floor and vehicle walls is equal on both sides – this centers the frame in the vehicle.

If NOT fitting an optional Side Floor, position the assembly central in the vehicle. Confirm for equal measurements on each side between the assembly and vehicle body.

5.3.3 Positioning frame in vehicle – Front to rear.

If fitting an optional Extension Floor, maneuver assembly to ensure the gap between side floor and rear of vehicle equal on both sides and there is sufficient freedom for the removable top panels to be released and removed.


If NOT fitting an extension floor. With the rear door of the vehicle closed, position the frame in the vehicle by measuring 198mm from the centre of the rear mount rail to a metal surface of the door. (according to the TOYOTA 76 SERIES WAGON 2007 ON model)

5.3.4 Locate the four points marked on the mount rails in step 1.6 at 403.5 mm from the centre bearing channel (Figure "F" & "G" in the vehicle specific diagram).

These are the points that will be drilled for retaining bolts.

5.3.5 Check frame is central in vehicle and where fitted, optional Floor and site floors are free to operate and equally spaced to the vehicle body.

Using a short body electric or battery powered drill and 10mm drill bit drill straight down through holes marked at 403.5 mm, through the floor mat to the underside of vehicle. Ensure the frame does not move while drilling holes.

 Ensure all clear under vehicle floor before drilling any holes. It is the responsibility of the fitter to ensure that drilling through the vehicle floor will not damage vehicle components. Check for items such as fuel lines, break lines, fuel tanks, spare tires and non standard accessories.

5.3.6 Remove all drill swarf from vehicle and apply a rust preventive coating to drilled holes from underside of vehicle.

5.3.7 Position the four (4) 20 mm spacer blocks under the mount rails and line the hole up with the drilled hole in the floor and the mount rail. (Figure "F" & "G" in the vehicle specific diagram)

5.3.8 Bolt frame down through drilled holes using four (4) M10x60mm bolts, M10x70x40 flat plates inside the vehicle and weatherproof plates and Nyloc nuts on underside of vehicle.

5.3.9 Followed by the step 4 of Reassembly to complete the installation.

5.4 Reassembly

Ensure you have completed the 5.3 of vehicle specific instructions supplied with the optional side floor kit before proceeding.


You should have the drawer system (the base frame) prepared and bolted into the vehicle before attempting this step.

5.4.1 DRAWERS REPLACEMENT:

Roll drawers in past the second top bearing and slide the drawer stops back into original position. Bolt Drawer Stops back on using original 6mm bolts.

Ensure 6mm flat washers are still under bolt heads. Stops are fitted to left and right hand sides.

Stops are fitted to left and right hand sides.

 **NOTE:** orientation of drawer stops "arm" faces rear of vehicle and nylock nuts inserted in drawer stops face outwards away from drawer body to engage 6mm bolts.

5.4.2 ROLLER FLOOR TOP REPLACEMENT:

Slide top back into chassis. Ensure the Roller Floor top is extended to expose the front of the tray. Reinstall the tray stops into their original locations on the top rail, using original hardware.

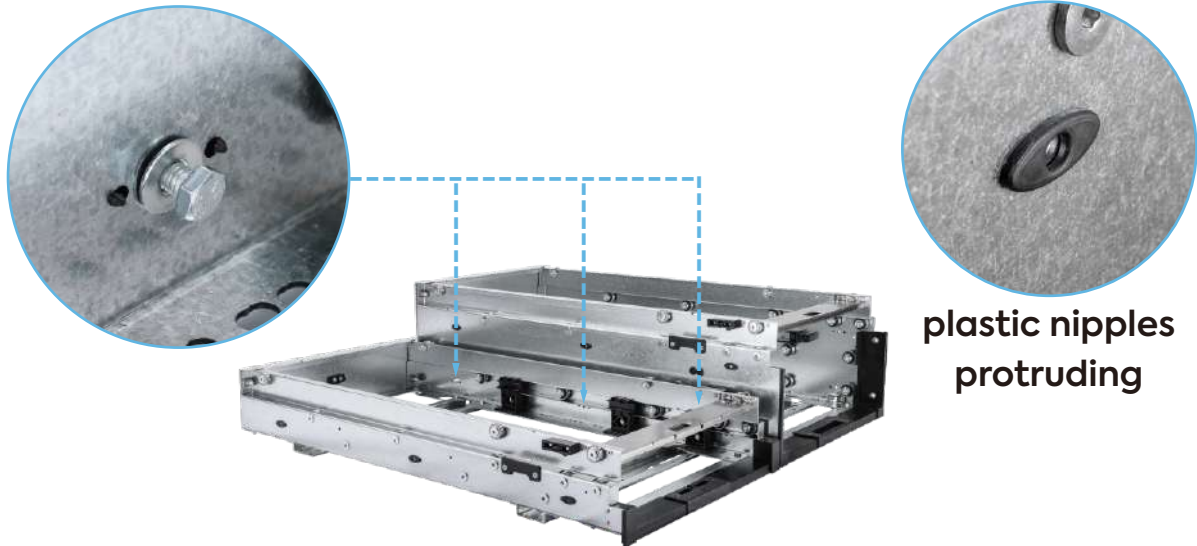
Stops are installed on both left and right hand side.

5.4.3 FIXED TOP REPLACEMENT:

Ensure top is oriented in the correct direction.

Using a 4mm Allen key, replace the fixed floor using the original countersunk setscrews.

6 Optional Side-by-side Drawers Installation



- 6.1** Place modules side by side on a work surface. Use hardware from both module fit kits. Use 6mm flat washers under the heads of bolts and nyloc nuts.

DRAWER to DRAWER – Using six (6) 6mm x 20mm bolts, twelve (12) flat washers and six (6) nylock nuts, bolt through the six (6) sets of 6mm holes along top and bottom sides of bearing channels.

ROLLER FLOOR to DRAWER / ROLLER FLOOR – Using three (3) 6mm x 20mm bolts, six (6) flat washers and three (3) nylock nuts, bolt through the three (3) sets of 6mm holes along the sides of bearing channels.

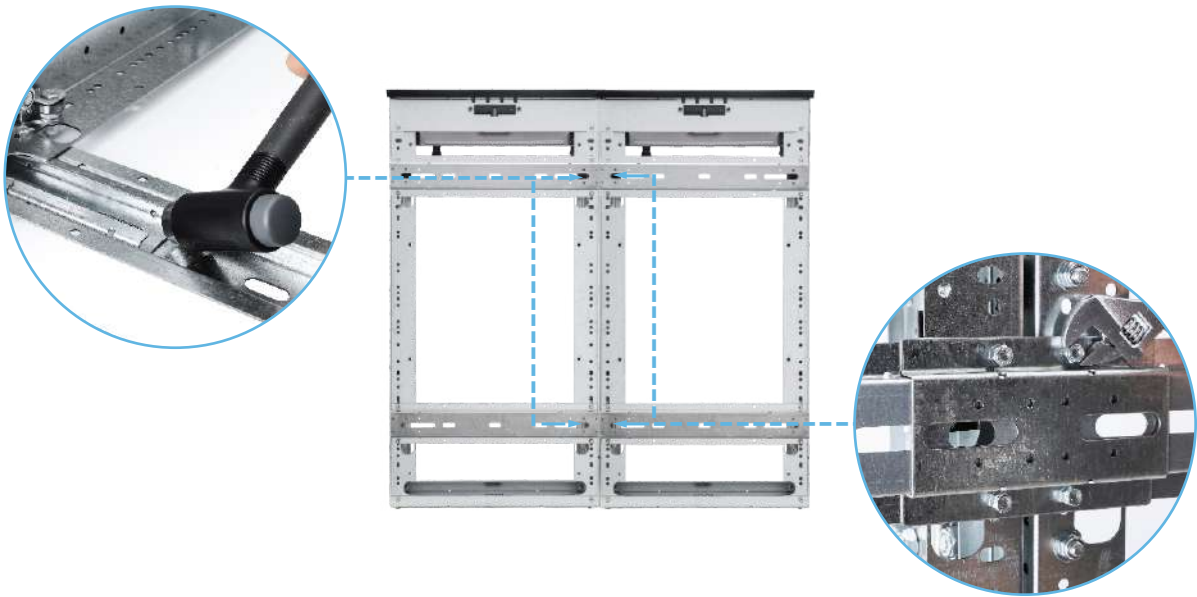
⚠ NOTE: The 6mm holes in the frame have two (2) plastic nipples protruding on either side.



6.2 Relocation of the mount rails: It may be necessary to relocate the lower mounting rails attached to the underside of the frame. Look up the mount rails measurements for your vehicle on the vehicle-specific diagram. Refer to section 4.2 Position Mount Rails for specific procedures.

According to the existing holes in the installation vehicle and the distribution of the main parts of the vehicle, determine the location of the mount rails in advance (the mount rails of the two drawer systems should be on the same level).

Then mark the location of the mount rails in the vehicle, if the original holes are not enough also need to be punched in advance (the front mount rail and mount rail are required to have two fixed holes).

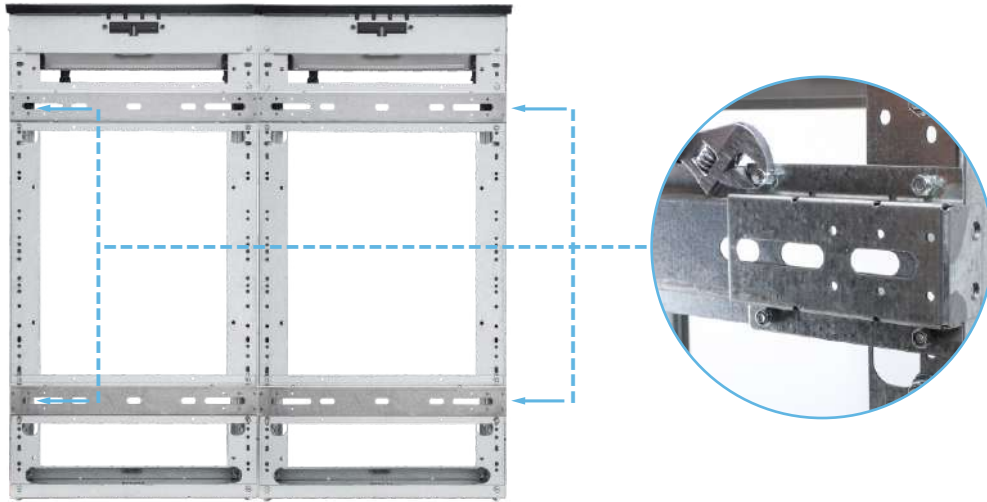


6.3 LOCK MOUNT RAILS TOGETHER

INSERT C SECTION JOINERS

Using a hammer, knock the "C" section Joiner Channels into the hat sections until both sides of the joiner protrudes evenly into each frame.

Using a ratchet, 10mm socket and 10mm ring spanner, install reinforced section B at the bottom of the two drawer frames where the mount rails connects.



6.4 REINFORCE THE MOUNT RAILS

You will need to flip the mount rails over and operate them on the bottom of the drawer. Loosen the existing screws on both sides of the front and the rear keels. Then install the reinforcement parts on each side of the front and the rear keels.

6.5 MARK LOCATION FOR MODULE TO VEHICLE FASTENING BOLTS.

Measure and mark bolt down positions on top side of front and rear Mount Rails. Measure from the centre bearing channel and repeat for left and right modules.

Refer detail drawing for Vehicle Specific Instruction

⚠ Ensure that the first step of frame preparation is completed, i.e. removing the top panel, slides, and drawers before merging the two drawer systems.

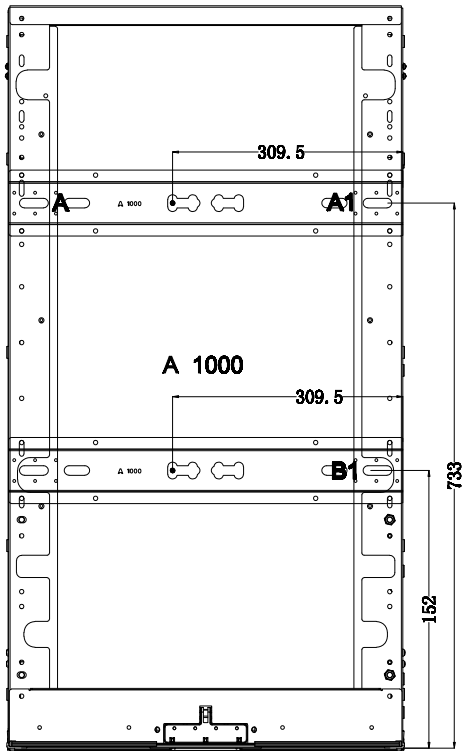
After combining the drawer systems, install them in the vehicle in the same manner as for a single drawer. Position the drawer system according to the holes in the vehicle where it will be installed and secure the drawer system to the holes in the vehicle where it will be installed with screw fittings.

Then reassemble according to 5.4 Reassembly.

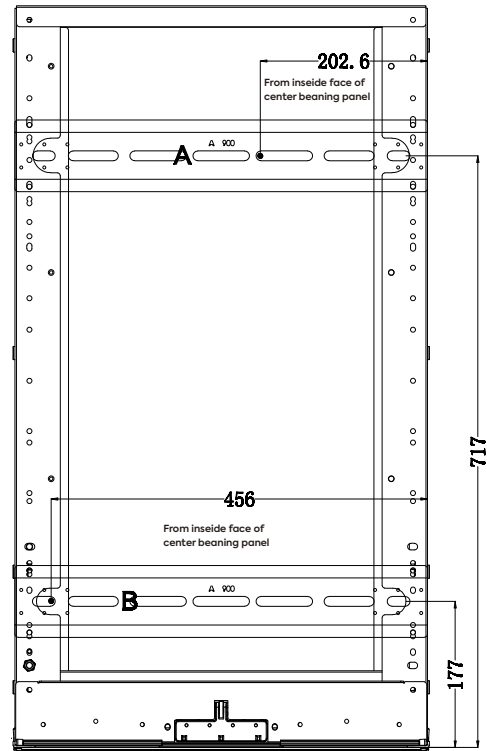
7 NOTES FOR CUSTOM & INDIVIDUAL

The below steps should be considered when installing an outback solutions modular drawer as a single module or into a vehicle where vehicle specific instructions are not available.

- 7.1** Location: Outback Solutions Modular Roller Drawers are typically installed in the rear cargo area of the vehicle. Ensure there is sufficient space to fit the modules (s) you have selected and that drawer handles are clear of doors and tailgates. Drawer modules can also be installed onto the tray of a cab chassis vehicle provided the vehicle has a canopy or cover to protect the drawer (s) from the weather.
- 7.2** Mount Rail locations: Both *front and *rear Mount Rails can be relocated to a number of pre drilled points along the frame, allowing adjustment for different vehicles. Locate the Mount Rails so as to provide support to the drawer and provide four convenient points to bolt through the floor of the vehicle.
- 7.3** Spacers: Plastic spacers are provided and can be clipped together to create different height spacers. Follow steps 1.7, 1.8 and 1.9 for spacer installation. With a custom or individual module installation, select spacer's heights that result in all points contacting the vehicle floor evenly. Ensure spacers provide sufficient height so as the mount rails or drawer frame does not contact the floor directly.
- 7.4** Drilling and bolting: Every installation must have a minimum of four 10 mm bolts to anchor the roller drawer system into the vehicle. With a single module installation two 10mm bolts must be used through each mount rail. In a double installation one bolt per mount rail is sufficient.
- 7.5** Side Floor Blank: Blank side floor kits are available for many drawer modules. These are designed to be cut down to size for custom installations where a dedicated side floor is not already available.

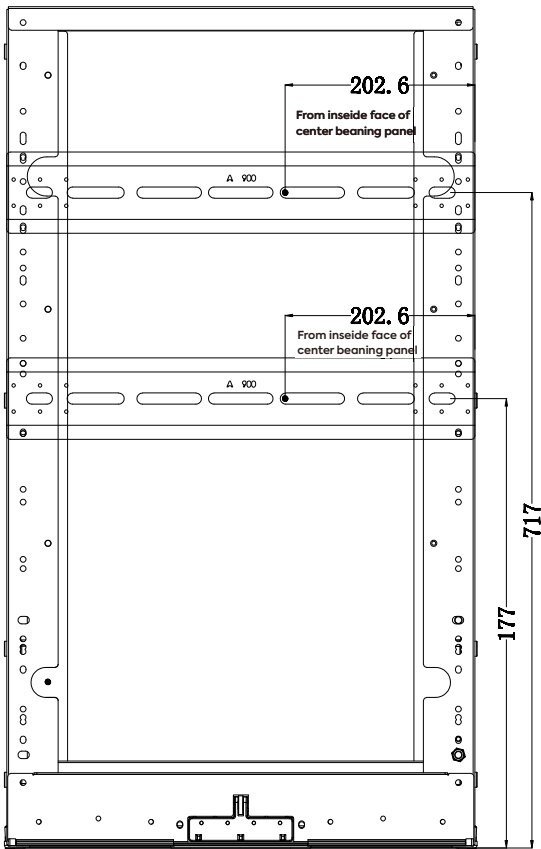


LX470 LEXUS



TOYOTA LANDCRUISER

TRD Off-Road 4Runner 18.....on
 Superb
 Seats for seven
 Need to remove the seat.



TOYOTA FORTUNER

A FORTUNER FK

ICECO

Cooler Than A Cooler