

MIT S ALLOY

EXPLORE WITH NO LIMITS

TRAY FITTING PROCEDURE

TOYOTA LANDCRUISER 79 SERIES DUAL CAB

1999 – CURRENT



AUSTRALIAN MADE
AND OWNED

MIT S ALLOY

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VEHICLE SPECIFIC HARDWARE

CHECKLIST

TOYOTA LANDCRUISER 79 SERIES DUAL CAB

1999 - CURRENT

QTY	DESCRIPTION	PART NO°	CHECKED OFF
TRAY SPECIFICATIONS			
1	TRAY – 960H X 1765L X 1870W		
N/A	FRONT BOX		
2	REAR BOX – 900L X 180W		
2	35" GUARDS – GUSSETED FRONT / INTERNAL FUEL FILLER LOCATION – DRIVER SIDE REAR		
MOUNTS			
2	A – F (FRONTS)	A - F	
4	A – R (REARS)	A - R	
1	UNIVERSAL MOUNTING KIT		
2	MUDFLAPS + HARDWARE		
FUEL HARDWARE			
1000mm	51mm / 2" ID FUEL HOSE		
1100mm	16mm / 5/8" ID FUEL HOSE		
2	60-63mm HOSE CLAMPS		
2	13-25mm HOSE CLAMPS		
1	63mm ID P CLAMP		
1	M10 x 30mm ZINC BOLT		
1	M10 ZINC NYLOC		
2	M10 ZINC WASHERS (3/8 x 1 x 16g)		
1	LC FUEL BRACKET (MOUNTED TO DRIVERS SIDE)		
2	M6 X 20MM SS BOLTS		
2	M6 SS SPRING WASHERS		
2	M6 SS FLAT WASHERS		
FLUX 3D CAMERA RELOCATION – IF REQUESTED ON THE INVOICE			
N/A	UNLESS STATED OTHERWISE	CB003	
FLUX 3D REVERSE SENSOR RELOCATION – IF REQUESTED ON THE INVOICE			
N/A	UNLESS STATED OTHERWISE		
FLUX 3D CROSSLANE RELOCATION – IF REQUESTED ON THE INVOICE			
N/A	UNLESS STATED OTHERWISE		
ELECTRICAL			
1	LC PATCH HARNESS		
PARTY PACK AND DOCUMENTATION			
1	HAT, STUBBIE COOLER, BOTTLE OPENER		

FITMENT PROCEDURES

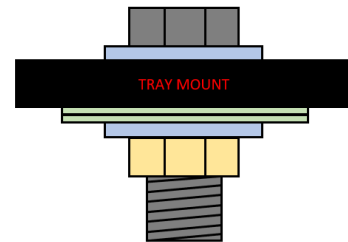
FITTING THE TRAY MOUNTS

Using the mounts provided in the kit, fit each mount to the existing tub mounts on the vehicle. Reference the letter indicator on each mount to ensure proper fitment location:

- ❖ F = FRONT.
- ❖ M1 = MIDDLE CLOSEST TO FRONT.
- ❖ M2 = MIDDLE CLOSEST TO REAR.
- ❖ R = REAR.

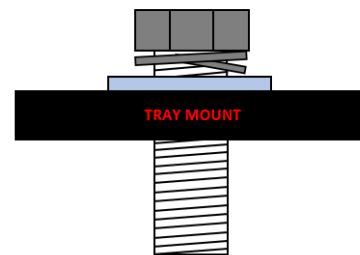
When fitting mounts without a captive nut on the vehicle, use the following hardware:

- ❖ 1 x - M12 x 40mm Course Thread ZN Hex Bolt.
- ❖ 2 x - M12 ZN Hardened Washer.
- ❖ 2 x - ½ x 2 x 16G ZN Panel Washers.
- ❖ 2 x - M12 ZN Nyloc Nut.



When fitting mounts with a captive nut on the vehicle, use the following hardware:

- ❖ 1 x - M12 x 40mm Fine Thread ZN Hex Bolt.
- ❖ 1 x - M12 ZN Spring Washer.
- ❖ 1 x - M12 ZN Hardened Washer.



All the relevant hardware should be provided inside the kit.

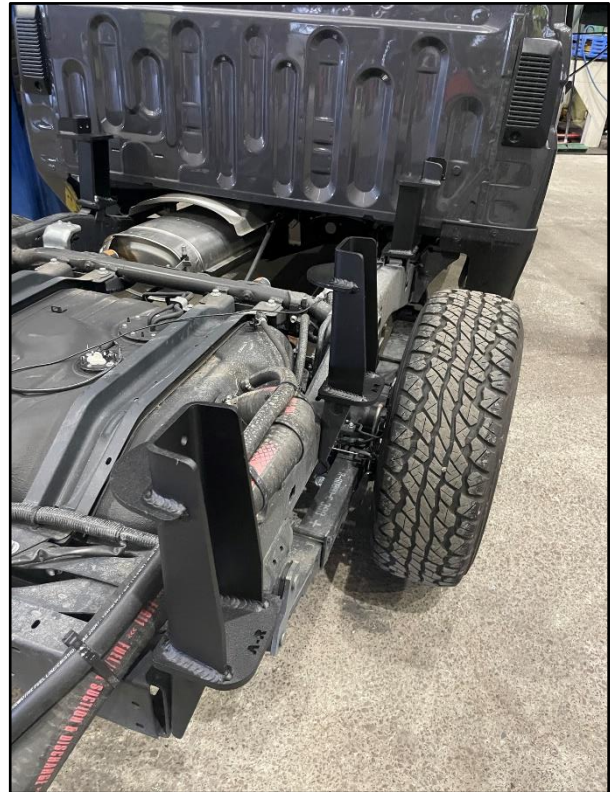
FITTING THE TRAY MOUNTS

Tighten each mount till they are only just a little more than finger tight. Once done, you can hit each mount towards the outsides of the car to ensure you have a minimum gap of 1040mm between each mount before lifting the tray onto them.

For a Dual Cab 79 the required mounts are as follows:

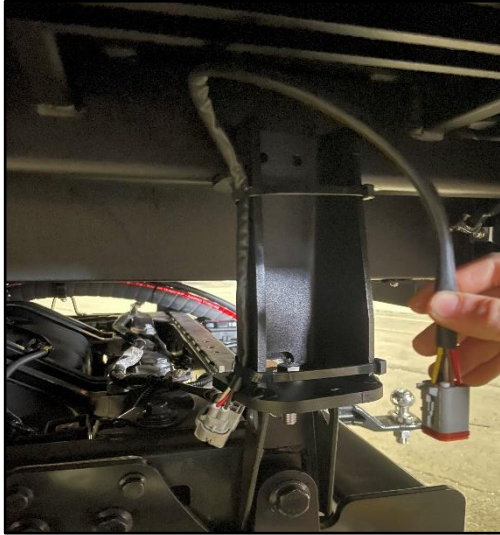
A - F for the front mounts (x 2)

A - R for the rear mounts (x 4)



WIRING PREPARATION

Take the time while the tray is off to cable tie and tidy up any loose wiring along the chassis rail. This includes securing the fuel cap cable from the tub, the lighting harness, camera harness and any wiring that may be fitted to the vehicle. Prepare the taillight harness by using cable ties to secure it to the tray mounts when on the vehicle. Refer to the image below.



FUEL PREPARATION

Before the tray goes on it is also a good idea to change over the fuelling setup. This will give you more room to change over with ease. Start by removing all factory fuel components and place aside for later. Install the new lengths of supplied hose with the matching clamps to ensure hoses are on tight. The P clamp can then be wrapped around the main fuel hose and bolted down to the small bracket on the chassis for support. If necessary, cable tie the breather hose to the main hose for aesthetics and support. Refer to the image below.



LIFTING THE TRAY AND CANOPY

When lifting the tray and canopy onto a vehicle, the ideal way to lift is using a jib crane, rated slings and steel poles in each of the lifting points on the canopy. This allows you to have maximum manoeuvrability. Ensure when using slings, you have blankets or foam to cover the doors as the slings may damage them.

The other option if there is no forklift jib available is to set the package up in the hoist with the arms under each corner of the package, this allows you to reverse the car under carefully and then lower the package onto the back of the car.

When undergoing either process, we recommend using a spotter to both watch and help guide the package on the mounts safely.



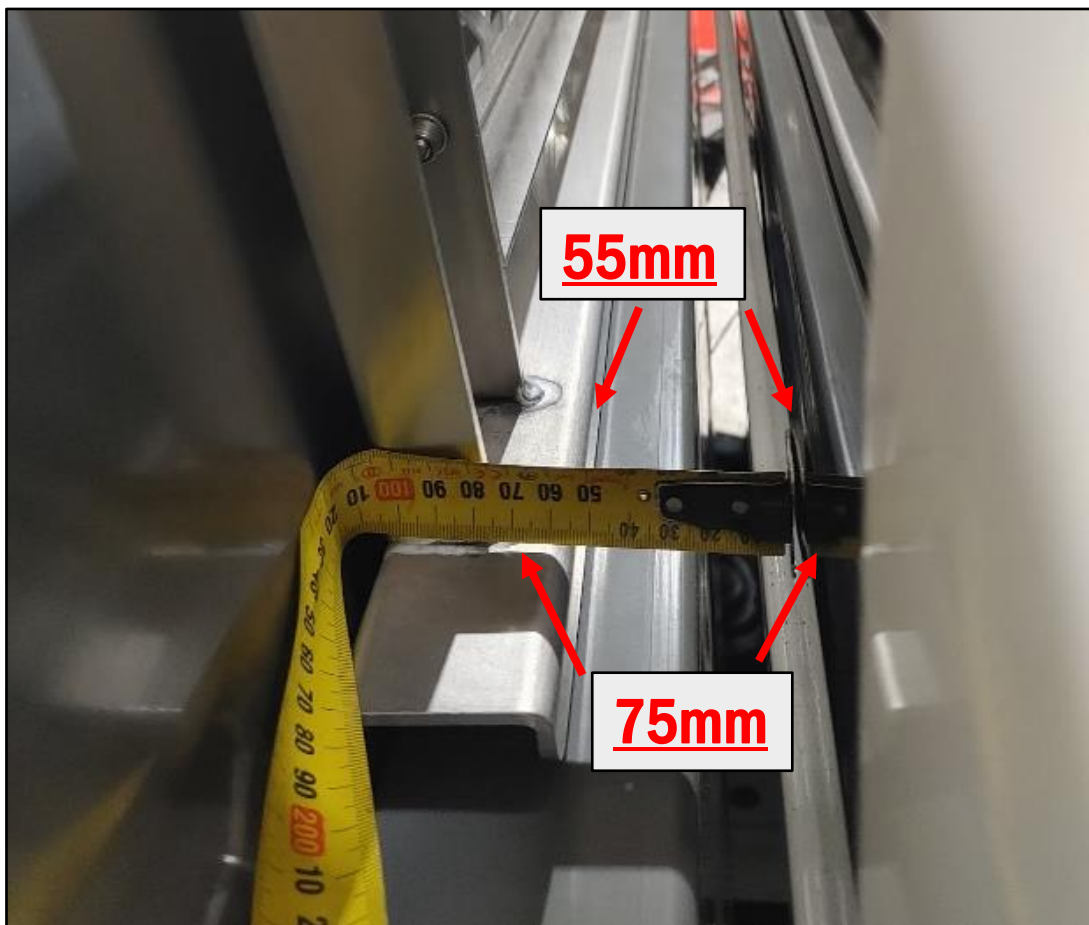
LINING UP AND BOLTING THE TRAY

NORTH SOUTH MEASUREMENT

When lining up the tray, first do a visual check and make sure the tray isn't twisted on the mounts. If so, straighten the tray and ensure all the mounts are sitting evenly on either side of tray chassis rails.

Once everything is visually lined up, take your first measurement between the headboard mesh upright and the rear wall below the back window, and needs to be **75mm** as depicted in the reference photo below.

Measure between the tray and cab on both the driver's side and passenger side, ensuring you measure the same reference point and get the same measurements each side.



LINING UP AND BOLTING THE TRAY

EAST WEST MEASUREMENT



When measuring the east west (side to side) you need a straight edge to hold against the outside of the headboard so you can measure between the straight edge and the chassis rail as shown in the reference photos below.

Before placing a straight edge against the headboard, protect the surface from scratches by running a line of masking tape up the headboard on either side of the tray



When measuring, pick the same corresponding point on either side of the vehicle's chassis, this allows you to be as accurate as possible when measuring. You are aiming to have the measurements on either side of the tray to be as close as possible to each other. Measure and bolt the front mounts before moving onto the middle and rear mounts.

When making small adjustments side to side, you might find you have more control by hitting the mount in using a soft blow mallet towards the direction you need to go vs pulling or pushing on the tray by hand.

Once you are happy with the measurements, hit one mount in flush with the tray, tighten it up to 130nm then proceed to hit the opposite mount in flush with the tray and tighten it up to 130nm.

As you adjust each of the mounts re-check all measurements taken to ensure you haven't moved the tray in another direction. Do this before drilling the tray chassis out so you have a perfectly square tray in all directions to the vehicle.

LINING UP AND BOLTING THE TRAY

EAST WEST MEASUREMENT

Double check you north south measurements, then bolt the front mounts to tray Referring to BOLTING THE MOUNTS TO TRAY section on page 9.

Once you are happy with the tray being square and have drilled the 4 holes for the front mounts, you can place your loctited bolts in and tighten. Refer to page 11 for more information as needed.

Measure east west of the rear of the tray, this time using the straight edge on the tray chassis rail and measuring to the rear tow bar either side or vehicle chassis rail as per the reference photo.

Again, once the measurements side to side are the same, hit the middle and rear mount in flush with the tray chassis, tighten to 130nm and bolt the mounts to the tray referencing the BOLTING THE MOUNTS TO TRAY section on page 11 of this procedure.

Ensure you double check all measurements once again before drilling out the holes.

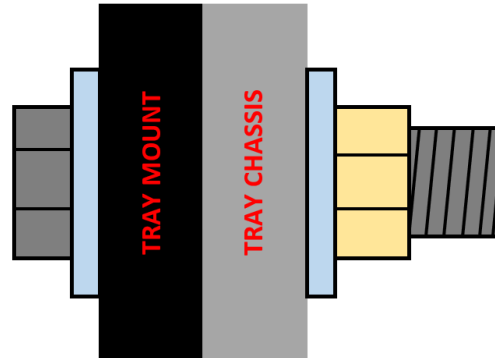


LINING UP AND BOLTING THE TRAY

BOLTING THE MOUNTS TO TRAY

Drill and bolt your front mounts first once they are lined up and tight. Use a 10mm drill bit to drill through the predrilled holes on the mounts into the tray chassis. Bolt each one using the following hardware:

- ❖ x1 - M10 X 30mm ZN hex bolt
- ❖ x2 - M10 hardened ZN washers
- ❖ x1 - M10 ZN nyloc nut
- ❖ Loctite



Tighten each bolt up to 60nm. Repeat this process on the middle and rear mounts once those mounts have been set and tensioned.

Once every M10 bolt is tensioned, go around and witness mark each one. This is both a check for the person tightening the bolts, as well as visual check for someone else checking them. You

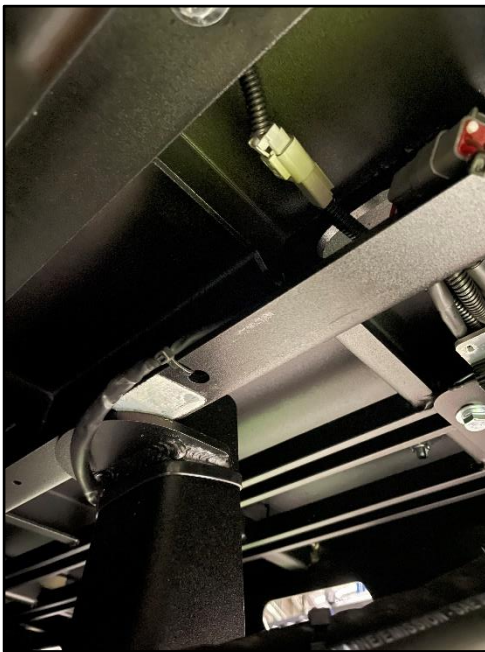


WIRING AND FUEL FITMENT

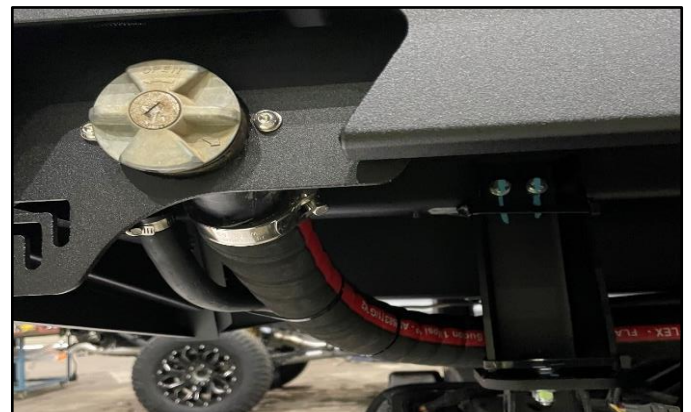
A Landcruiser 79 by far has the easiest wiring out of all the vehicles we fit. All that is required is to plug in the supplied patch harness into the vehicle side plug, and into the Deutsch plug on the tray. To make for even less wiring, the factory number plate bracket and harness can both be removed.

Once plugged in at both ends, the harness can then be neatly cable tied. By running the cable up the back of the mount and inside the chassis rail with cable ties, you can neatly hide the wiring whilst also protecting it.

Below are some images to show how the wiring should be run to ensure it's neatness.



The fuel filler can also now be mounted using the supplied M6 hardware. Fit the factory filler neck which has been cut down as shown in the image below to the fuel bracket on the tray. With the neck fitted, the fuel hose and breather can be fitted with the supplied clamps. Ensure there are no kinks in the fuel hose or breather, there are cable ties holding the hose together for aesthetics and function purposes, and all clamps are fitted tightly.



GUARDS AND BOXES



When setting your first guard on the tray in relation to the wheel, ensure you set it while the car is off the hoist at rest, or at the height the car will be sitting when aftermarket suspension is fitted.

As the suspension travels up and down, the axle moves back and forth. By doing this, you are ensuring the guard is sitting as centre as possible when the car is at rest.

Once you are happy with the location of the first guard, fit it to the underside of the tray using:

- ❖ 4 x M10 spring nuts
- ❖ 4 x M10 x 25mm zinc bolts
- ❖ 4 x M10 zinc spring washers
- ❖ 4 x 3/8 x 1 1/2 x 16G zinc washers.

Mirror this on the other side of the tray with the other guard. Use a measuring tape to ensure both guards set at the same point.

Before all the bolts are tightened up, ensure the guard is centre on the wheels and hard up against the rope rails.



GUARDS AND BOXES



Once the guards are fitted and the bolts tensioned, hold and set the toolbox in place on the back of the guard and mark the bolt locations on the Unistrut with a paint pen.

Remove the toolbox and fit the 4 x M10 spring nuts at each of the paint pen marks on the Unistrut.

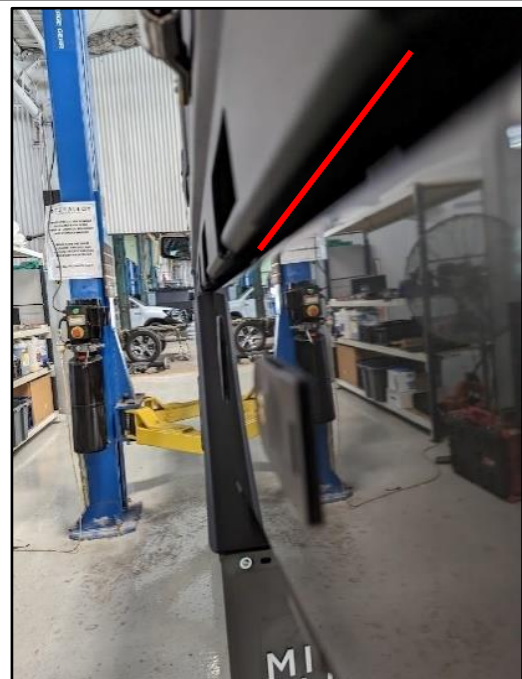
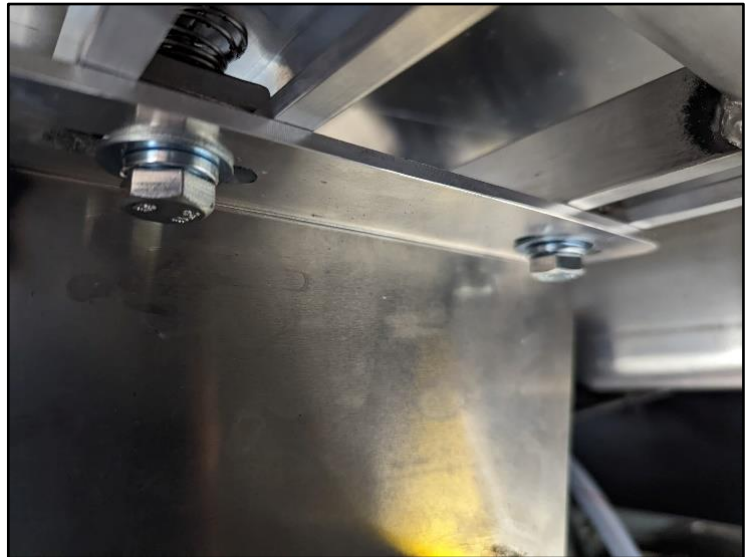
Fit the toolbox into place using the:

- ❖ 4 x M10 x 25mm Zinc Bolts
- ❖ 4 x M10 Zinc Spring Washers
- ❖ 4 x 3/8 x 1 x 16G Zinc Washers.

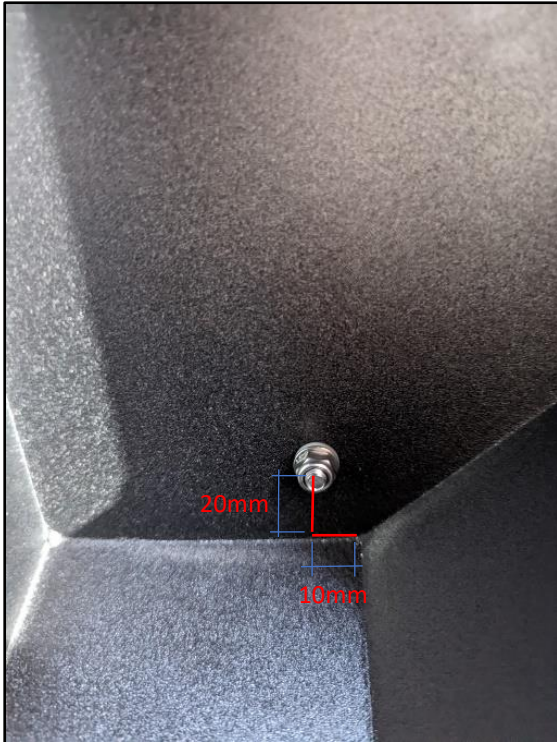
Keep the bolts finger tight and push the toolbox hard against the back of the guard.

Adjust the toolbox side to side so that the outer edge of the door on the box lines up just inside the inner fold of the rope rail. This ensures the box door is protected slightly by being just inside the rope rail, and it means its in the most aesthetically pleasing position.

Once you're happy with the toolbox adjustment, tension all the bolts and repeat this process on the other side of the car.



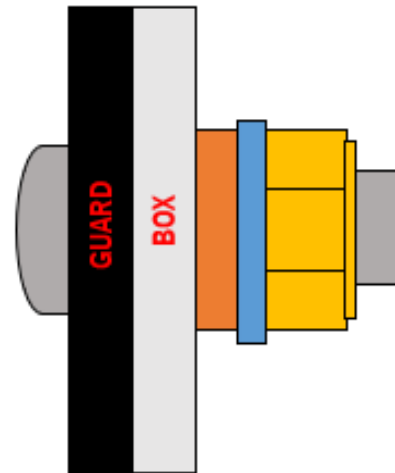
GUARDS AND BOXES



Once all the guards are set and tight, drill a M6 hole from the inside of the box, using the pre-drilled hole into the backside of the guard.

Debur your hole and then bolt the box to the guard using:

- ❖ 1 x M6 x16mm stainless steel button head bolt
- ❖ 1 x M6 nylon washer
- ❖ 1 x M6 stainless flat washer
- ❖ 1 x M6 stainless steel nyloc nut.



Go around and check that all the box locks are tight and adjusted so that the door pulls in hard against the box seal. This all can be done using a 10mm spanner.



60LITRE TAP ASSEMBLY

There are two tap locations depending on whether the car has blind spot monitoring or not.

BLIND SPOT MONITORS – The tap will be a straight tap bracket and come down from the rear pull out drawer camera bracket. You will need to position it in a location that won't interfere with anything, then mark and drill so that you can secure it with the M6 mounting Hardware provided.

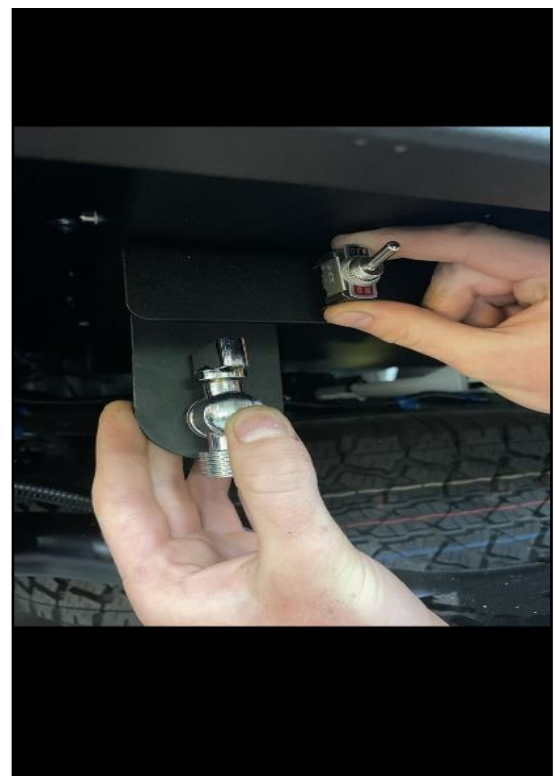
NO BLIND SPOT MONITORING – The tap bracket being used is a 90° bracket that gets positioned at the bottom back edge of the passenger side under tray toolbox. The customer can opt to have it on the driver's side if they want, but the universal spot is on the passenger side. Mark the location, drill and mount using the M6 mounting hardware provided.

When running the hose and power for the switch to the tap at the rear of the tray, ensure the cable management holes in the chassis are used. Neatly tuck and mount the cable and hose inside the channel using either cable ties or small P clamps.

Keep in mind that depending on factors like aftermarket rear bars or tow bars, the tap location may need to change to accommodate these features.

Tap mounted on back of box in bottom corner. Still ensuring it clears the cross-traffic sensor.

Tap being mounted on the camera bracket where the cross-traffic bracket is mounted on the box.



CLEANING AND FINAL CHECKS

When cleaning the tray and canopy, take into consideration whether its milled, 2 Pac or powder coated.

- ❖ For milled / raw alloy surfaces, we clean any fold lines off with thinners and then clean the tray with WD40 and a microfibre rag, when cleaning milled, ensure your wiping with the grain on the alloy to minimise the risk of scratching. Small scratches can be taken out with purple polish but will start to shine the alloy if you're not careful.
- ❖ For Powder coated surfaces, we use either Windex / window cleaner or quick detailer like Bowden's Boss Gloss, along with a microfibre cloth.
- ❖ For painted surfaces, we use a quick detailer such as Bowden's Boss Gloss, as it has a lubricant in it to prevent swirl marks and scratches.

While cleaning, take the time to look over the product and make sure there's no defects, things missing, or loose. Finish your clean by collecting all the keys from the undertray boxes and rear pull out drawer and putting them with the party pack in the cab. Make sure to run through the invoice to ensure everything is supplied and correct.