OFF-ROAD

SHIELD

TOYOTA HILUX N70 2005-2015

BULL-BAR INSTALLATION INSTRUCTIONS

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STEP 1:

Unpack and Organise Components

Carefully unpack all Shield Offroad bullbar components, including mounting brackets, protection plates, wiring harnesses and installation hardware.

Lay out all components neatly in a clean, organised workspace, as shown in the reference photo.

Before beginning installation, check that all supplied components and hardware are present.



STEP 2:

Front bumper – Remove the complete factory front bumper assembly.

Front support bar – Unbolt and remove the factory front bumper support bar.

Side bumper retainers – Remove the bumper retaining brackets located near the front guards on both sides.

Internal plastic trims – Remove the plastic trims and covers from inside the front bumper area.

Important: Once all components have been removed, the front of the vehicle should match the reference photos before proceeding with the bullbar installation.

Installation Tip: Keep all factory bolts, clips and removed components organised in case they are required later.



STEP 3:

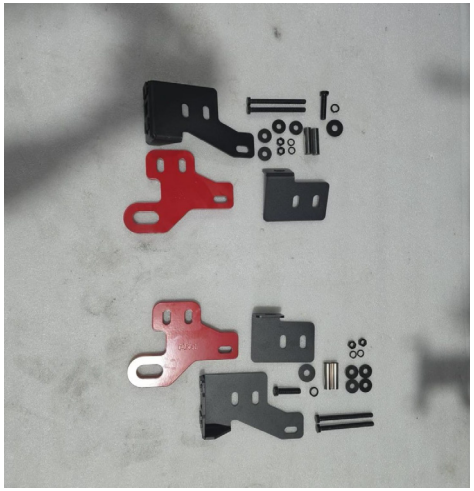
Fit the Cradle Mounting Brackets

Now it is time to fit the cradle mounting components.

Start by fitting the red recovery points together with the mounting brackets.

The right-side bracket set is fitted to the passenger side of the chassis

The left-side bracket set is fitted to the driver side of the chassis



STEP 4:

Fit Passenger Side Recovery Point and Brackets

We will now fit the passenger-side recovery point and mounting brackets.

Position the red recovery point against the black mounting bracket as shown in the reference photo.

Slide the two bolts through the recovery point and into the black bracket.

Once assembled, slide the bracket assembly through the chassis holes on the passenger side.

Make sure the assembly is inserted in the same orientation shown in the photos.

Tip: Leave the hardware loose at this stage so the bracket can be adjusted and aligned during the next step.



STEP 5:

Repeat the same installation process on the driver side of the chassis.

Fit the red recovery point and outer mounting bracket.

Insert the mounting bolts through the recovery point and chassis.

Install the internal chassis sleeves.

Position the inner chassis bracket over the protruding bolts.

Fit the supplied flat washers, spring washers and nuts.

STEP 6:

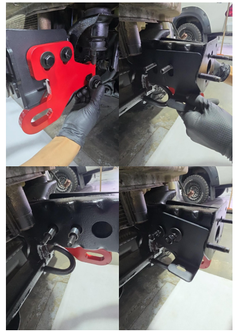
Install the internal chassis sleeves over the two long bolts, positioning them inside the chassis holes as shown in Photo 2.

Fit the inner chassis bracket over the two protruding bolts on the inside of the chassis, as shown in Photo 3.

Install the washers and nuts onto both bolts, making sure to use a flat washer and spring washer with each nut, as shown in Photo 4.

Leave the mounting hardware slightly loose for final alignment before tightening to the specified torque.

Important: Always use the supplied spring washers where specified to help prevent the mounting hardware from loosening.



STEP 7:

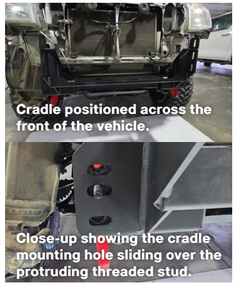
Carefully lift the cradle into position at the front of the vehicle.

Align the mounting holes on both sides of the cradle with the factory threaded studs protruding from the chassis mounting points.

Slide the cradle onto the factory threaded studs, as shown in the reference photos.

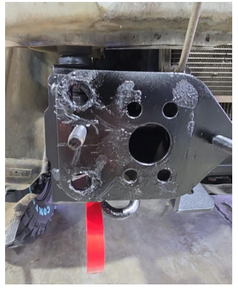
Ensure the cradle is supported, correctly positioned and aligned on both sides.

Important: Do not fully tighten any mounting bolts or nuts yet. Keep all hardware hand-tight to allow for final cradle adjustment and alignment.



STEP 8:

Note - On some Toyota Hilux N70 models, the existing chassis mounting holes may be too small to accommodate the supplied mounting bolts.



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STEP 9:

With the cradle positioned correctly over the factory threaded studs, secure it using the following steps:

Fit the factory nuts onto the original threaded studs protruding through the cradle mounting brackets.

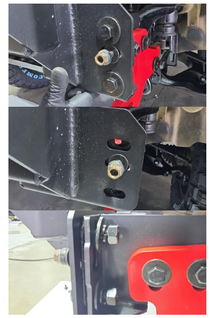
Insert the supplied bolts through the remaining two mounting holes on the cradle bracket.

On the back of each bolt, fit the supplied flat washer, spring washer and nut.

Hand-tighten all nuts and bolts to hold the cradle in position.

Repeat the same process on the opposite side of the vehicle.

Important: Do not fully tighten any mounting hardware at this stage. All bolts and nuts must remain hand-tight only to allow for final cradle and bullbar alignment.



STEP 10:

Secure the Lower Cradle Mounting Points

Once the cradle is positioned and the side mounting bolts are fitted, secure the lower mounting points.

Locate the mounting hole underneath the cradle on each side of the vehicle.

Insert a supplied bolt through the lower cradle mounting hole.

Fit a flat washer, spring washer and nut onto the opposite end of the bolt.

Repeat the same process on the other side of the cradle.



STEP 11:

Before tightening any mounting bolts, make sure the bullbar cradle is correctly centred on the vehicle.

Using a measuring tape, check the cradle's position relative to the vehicle's chassis or other matching reference points on both sides.

Compare the measurements on the driver and passenger sides.

Adjust the cradle left or right until both measurements are equal and the cradle is sitting level.

Check that all mounting brackets are properly aligned.

Important: Do not fully tighten the mounting bolts until the cradle is correctly centred and aligned.



STEP 12:

Indicator light: Identify the green wire connected to the factory indicator bulb.

Splice an additional wire into this green wire to provide a feed for the bullbar indicator.

Park light: Identify the green wire connected to the factory park light bulb.

Splice a separate additional wire into this green wire to provide a feed for the bullbar park light.

Solder both wire connections securely and insulate each connection using electrical tape or suitable automotive heat-shrink.

Route the two new wires towards the front of the vehicle, ready to connect to the bullbar lights.

Repeat the same process on the opposite side of the vehicle.



STEP 13:

Remove Plastic Trim Beneath Headlights

Before fitting the bullbar, permanently remove the factory plastic support trim located directly underneath each headlight.



STEP 14:

Before fitting the bullbar, we need to feed the bullbar wiring harness and switch cable through the vehicle's firewall into the cabin.

Locate the factory rubber grommet in the firewall, as shown in Photo 2.

Carefully feed the bullbar switch wiring through the existing rubber grommet into the vehicle's cabin.

Pull through enough wiring to reach the intended switch location inside the vehicle.



STEP 15:

With the wiring harness fed through the firewall, we can now position the bullbar wiring connectors at the front of the vehicle.

Feed the bullbar wiring harness through the front of the vehicle, behind the radiator support area.

Route the wiring neatly across the front of the vehicle.

Position the bullbar wiring plugs on both the driver and passenger sides, ready to connect to the bullbar lights.

Ensure the connectors are easily accessible when the bullbar is fitted.



STEP 16:

Choose a suitable location on the dashboard for the switch. We recommend using one of the unused factory switch blanks, as shown in the photos.

Drill a hole approximately 20 mm in diameter in the selected blank panel, ensuring there is sufficient clearance behind it and no factory wiring or components in the way. Check the switch's required hole size before drilling.

Feed the wiring through the back of the hole, pulling enough cable through to connect the switch.

Reconnect the three wiring terminals to the switch in their correct positions, as shown in Photo 3.

Insert the switch into the drilled hole, pressing it into position until securely fitted.

Check that the switch sits neatly and securely in the dashboard



STEP 17:

Lay the bullbar on a clean, protected surface to prevent scratches or damage.

Starting at one end, carefully press the rubber trim onto the upper inner edge of the bullbar, as shown in Photo 1.

Continue fitting the rubber trim along the entire inner edge of the bullbar, following its shape and curves.

Ensure the trim is seated firmly and evenly, with no loose sections or gaps.

Check that the rubber trim is properly fitted before lifting the bullbar onto the vehicle.



STEP 18:

Prepare Bullbar Light Wiring

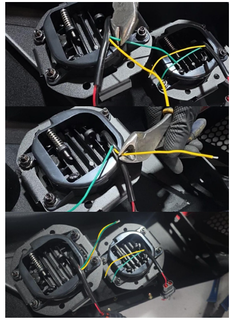
Before fitting the bullbar onto the vehicle, prepare the wiring for the integrated bullbar lights.

Expose the light wiring – Carefully split open the black rubber outer sheath on the wiring for both lights to expose the individual coloured wires.

Outer light (closest to the vehicle's guard) – Locate and cut the green wire, as shown in the reference photos.

Inner light (closest to the centre of the bullbar) – Locate and cut the yellow wire, as shown in the reference photos.

Repeat the same process for the lights on the opposite side of the bullbar.



STEP 19:

Install Bullbar Spotlight Mounting Brackets

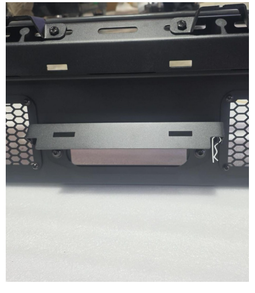
Before fitting the bullbar onto the vehicle, install the supplied spotlight mounting brackets.



STEP 20:

Install Number Plate Swivel Bracket

Before fitting the bullbar onto the vehicle, install the number plate swivel bracket.



STEP 20:

With the cradle installed and the bullbar prepared, we can now fit the Shield Offroad bullbar onto the vehicle.

Use two people to lift the bullbar, with one person supporting each end.

Carefully lift and slide the bullbar onto the mounting cradle.

Align the mounting holes on the bullbar with the corresponding holes on the cradle.

Insert 3 supplied bolts on each side, making a total of 6 mounting bolts.

Fit the supplied flat washers, spring washers and nuts onto each bolt.

Hand-tighten the mounting hardware to hold the bullbar in position.



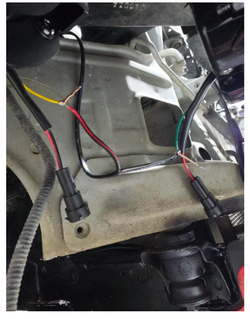
STEP 21:

Photo Reference:

The supplied photo shows the bullbar light wiring being connected to the factory indicator and park light feeds.

Important: The earlier wire-cutting instructions identified the outer green wire and inner yellow wire, which differs from these connection instructions. Confirm the correct light functions and wire colours before final soldering.

Installation Tip: Once connected, test both indicators and park lights to ensure they operate correctly on both sides.



STEP 22:

Once the indicator and park light wiring is completed, secure all the electrical connections behind the bullbar.

Connect the wiring plugs from the bullbar lights to the corresponding wiring harness plugs.

Ensure all connectors are pushed together firmly and properly locked into place.

Secure the wiring harness to a suitable fixed mounting point on the vehicle body using cable ties.

Keep all wiring neatly tucked away from sharp edges, moving parts and hot components.

Repeat the same process on both the driver and passenger sides.



STEP 23:

Align the mounting holes with the designated holes underneath the bullbar.

Secure the skid plates using the supplied bolts, flat washers and spring washers.

Repeat the same process on both the driver and passenger sides.

Once the skid plates are fitted, carefully trim the excess factory plastic inner guard liner so it fits neatly behind the skid plate.

Tuck the remaining plastic liner behind the skid plate, ensuring it is properly secured and does not hang down or contact the tyres.



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STEP 24:

Locate the supplied silver bash plate and the three mounting bolts, flat washers and spring washers, as shown in Photo 1.

Position the bash plate underneath the front bullbar, aligning it with the mounting holes.

Use the 3 supplied bolts to secure the front of the bash plate to the bullbar.

Reuse the original factory bolts to secure the rear of the bash plate to the vehicle's existing mounting points.

Align the bash plate correctly and tighten all mounting bolts securely to the specified torque.



STEP 25:

With the bullbar and bash plates installed, we can now secure the bullbar wiring relay and connect the power supply.

Mount the wiring relay – Locate a suitable mounting point on the vehicle body inside the engine bay, as shown in Photo 2.

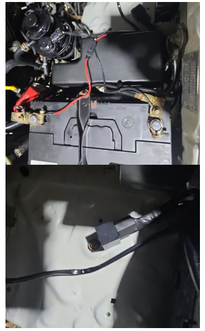
Secure the relay using a bolt, ensuring it is firmly mounted and protected from excessive heat and moisture.

Connect the positive wire (red) to the positive (+) battery terminal through the supplied inline fuse.

Connect the negative wire (black) to the negative (−) battery terminal.

Ensure both battery connections are secure.

Neatly route and cable-tie any loose wiring, keeping it clear of moving parts, sharp edges and hot components.



STEP 26:

Refit Front Grille and Complete Installation

With the bullbar, skid plates, bash plate and wiring installed, we can now complete the installation.

Refit the factory Toyota front grille into its original position.

Secure the grille using the original factory bolts and clips.

Ensure the grille is correctly aligned and sits neatly behind the Shield Offroad bullbar.

Check that the grille and bullbar have adequate clearance and do not rub against each other.

Carry out a final inspection of the installation.



STEP 27:

Done! Enjoy your new bull-bar and thanks for shopping with Shield Off-Road.

