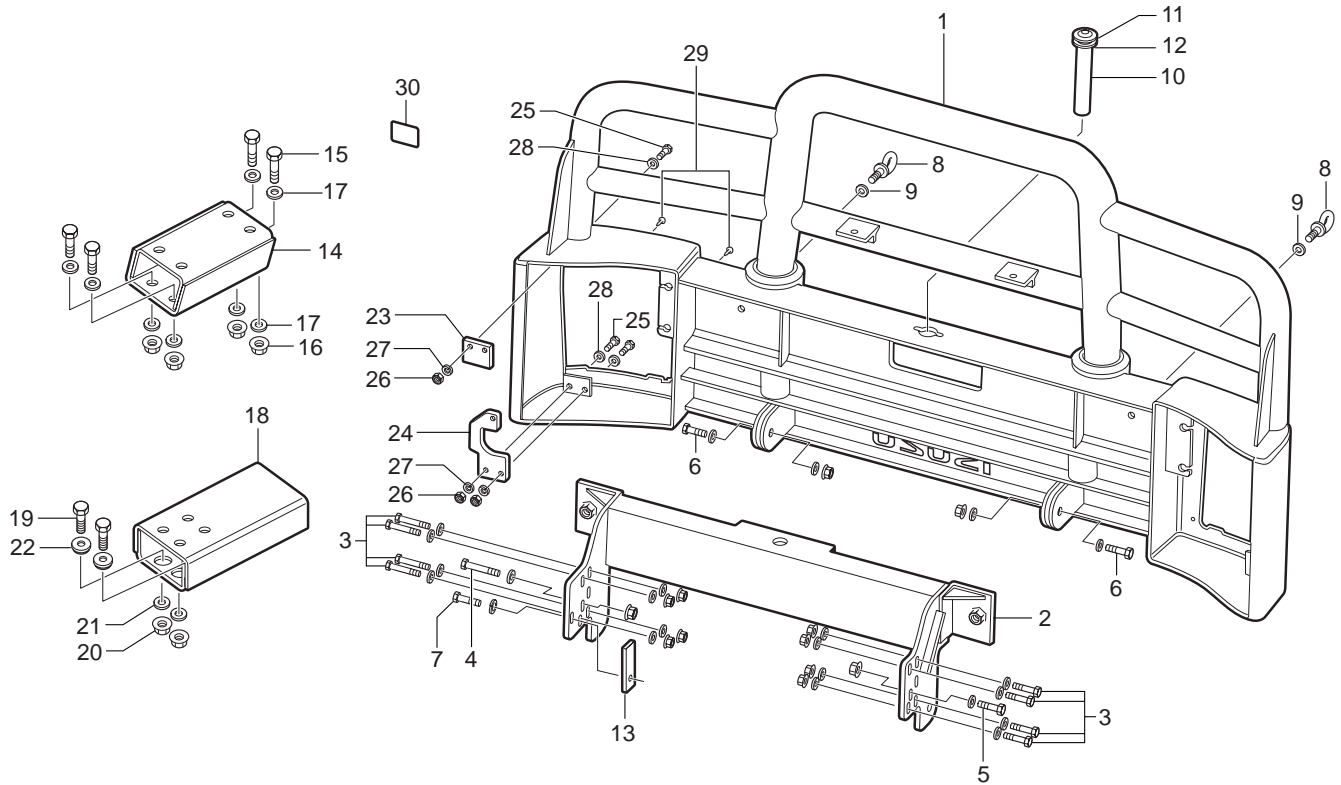




FX, FY Series Bullbar Installation Instructions

Bullbar Part Nos. B4IS5699TSYF

02-NOV-18



ITEM	QTY	DESCRIPTION
1	1	Bullbar
2	1	Mount (Bullbar Mounting Bracket)
3	8	1/2" x 2" UNC Bolt Grade 8 H/T Washer (x2) and Nyloc Nut
4	1	5/8" x 3 1/2" UNC Bolt Grade 8 H/T Washer and Nyloc Nut
5	1	5/8" x 2" UNC Bolt Grade 8 H/T Washer and Nyloc Nut
6	2	5/8" x 2 1/2" UNC Bolt Grade 8 H/T Washer (x2) and Nyloc Nut
7	1	16 x 60 mm x Metric 1.5mm Zinc Plated Bolt and Spring Washer
8	2	Eye Bolt 3/4" UNC Grade 8 H/T
9	2	Washer 3/4" Zinc Plated
10	1	Towpin (where fitted)
11	1	Nylon Washer
12	1	Selloc Pin
13	1	Spacer Plate
14	2	Step Extension Bracket (FUPS Outer Spacer Bracket)
15	8	12 x 40 mm Metric Bolt 8.8 ZP 1.75 mm Thread Pitch
16	8	12 mm Nyloc Nut ZP 1.75 mm Thread Pitch
17	16	1/2" Flat Washer ZP
18	2	FUPS Extension Bracket (FUPS Centre Spacer Bracket)
19	8	1/2" x 1 1/2" UNC Bolt Grade 8 ZP
20	8	1/2" x UNC Nyloc Nut ZP
21	8	1/2" Flat Washer ZP
22	8	Machined Boss (Stepped Spacer Washer)
23	2	Rectangle Light Bracket (Headlight Assembly Mounting Bracket - Upper)
24	2	Hook Light Bracket (Headlight Assembly Mounting Bracket - Lower)
25	6	8 mm x 25 mm Bolt
26	6	8 mm Nut
27	6	8 mm Spring Washer
28	10	8 mm Flat Washer
29	4	Self Tapping Screw
30	2	Warning Label

NOTE: TP suffix denotes tow pin type bullbar.

FY Series Bullbar Installation

INSTALLATION PRECAUTIONS

Follow all standard workshop and occupational health and safety practices during the installation of the bullbar.

Safety glasses, safety boots and hearing protection must be used.

Do not attempt to fit the bullbar to the vehicle alone, get assistance.

GENERAL INFORMATION

Before starting the ISUZU FY Series bullbar installation, thoroughly read through these installation instructions and then follow the fitting sequence as described.

Check and note any existing marks or damage to the vehicle.

Check the Bullbar kit is complete, there is no damage and all parts listed are included.

Where possible leave the protection materials on the bullbar until installation is complete to avoid damage to the polished aluminium surfaces.

Take all possible precautions to avoid damage to the bullbar, headlights and the underrun protection device during fitting.

Ensure all torque specifications are followed.

At the completion of the installation check the operation of the headlights and indicators.

At the completion of the installation ensure the warning labels are fitted.

ABBREVIATIONS

- LHS - Left Hand Side
- RHS - Right Hand Side
- FUPS - Front Underrun Protection System

Tools required

- Torque Wrench
- Ratchet
- Small flat blade screwdriver
- Phillips head screwdriver
- Sockets: 12mm, 17mm, 24mm, 1/2", 3/4", 15/16"
- Socket extension
- Spanners: 3/4", 17mm
- T25 torx bit
- Power drill
- 3mm drill bit
- Trolley jack (or similar)
- Pallet trolley (or similar)

PREPARATION

Bumper Fascia Removal

1. Remove the (1) T25 torx screw from the LHS bumper fascia plastic cover.
[T25 torx bit]
2. Remove the cover (discard).
3. Repeat for the RHS.

4. Remove the (1) upper LHS bumper fascia mounting bolt (discard).
[14mm Socket]
5. Repeat for the RHS.

6. Remove the (1) lower LHS bumper fascia mounting bolt and nut (discard).
[14mm Socket]
7. Repeat for the RHS

8. Remove the (3) front LHS bumper fascia mounting bolts (discard).
[14mm Socket]
9. Repeat for the RHS.

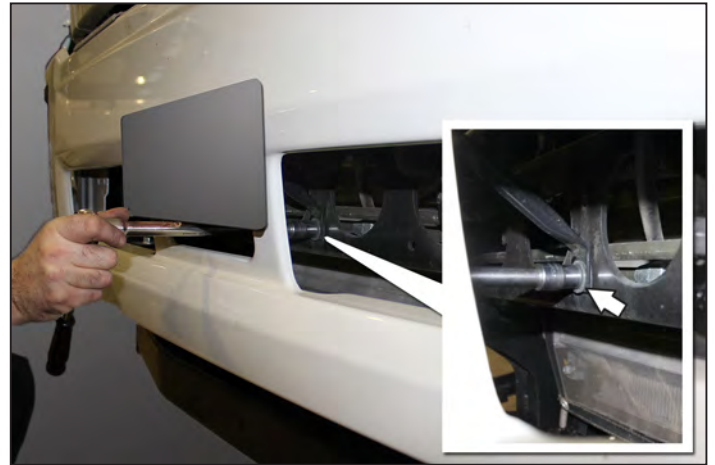


FY Series Bullbar Installation

10. Remove the (2) upper LHS bumper fascia mounting bolts (discard).
[14mm Socket]
11. Remove the (1) upper RHS bumper fascia mounting bolt and (1) nut (discard).
[14mm Socket]



12. Support the bumper fascia and through the centre lower bumper fascia opening remove the mounting (1) bolt (discard).
[14mm Socket]



13. Lift off the bumper fascia.

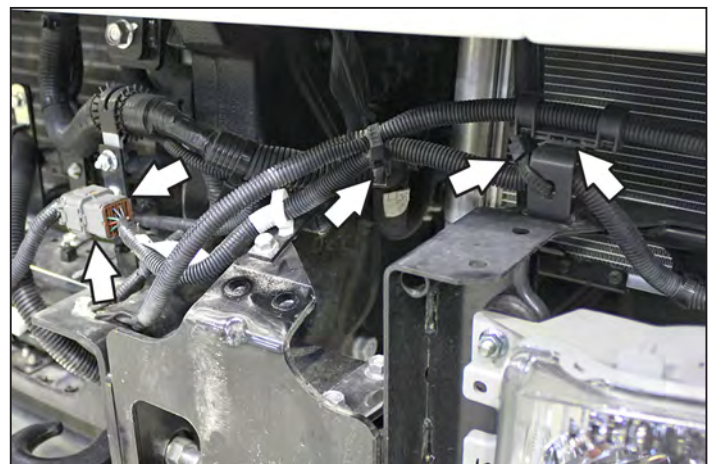


Headlight Assembly Removal LHS

WIRING

1. Unclip the (2) cable ties and detach the (1) rear harness retainer.
[Flat blade screwdriver]
2. Unplug the headlight assembly wiring connector and detach from the mounting bracket.

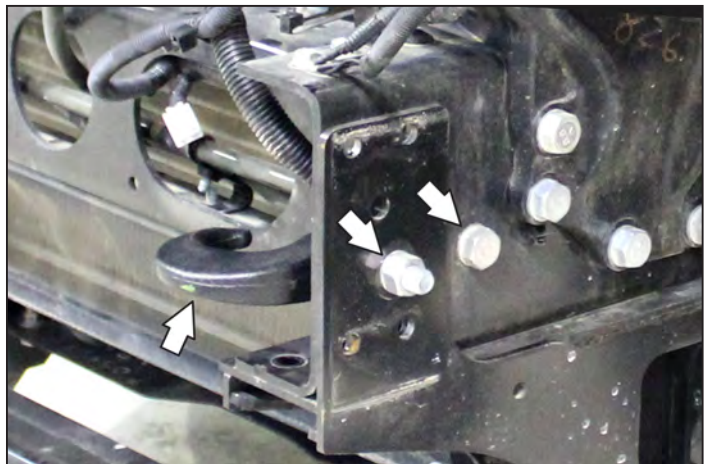
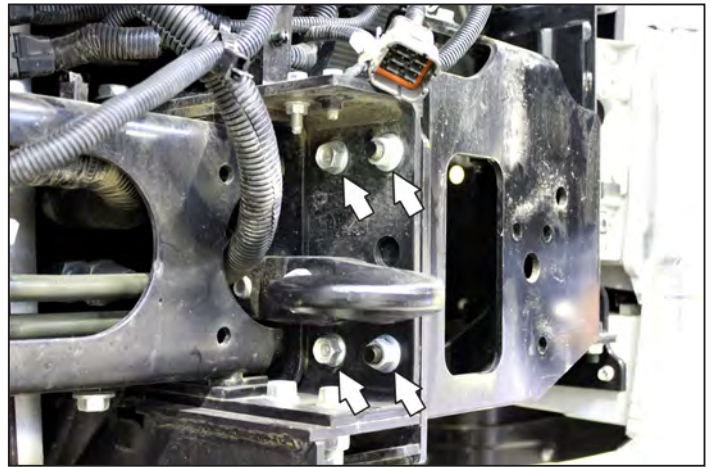
NOTE: Disconnect any ancillary wiring as required.



FY Series Bullbar Installation

HEADLIGHT MOUNTING BRACKET

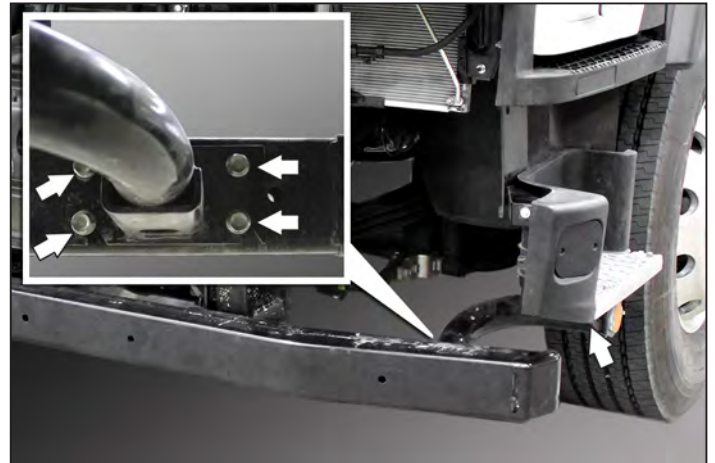
1. Detach the wiring harness retainer from the headlight assembly mounting bracket.
2. Remove the (2) bolts and (2) nuts securing the LHS headlight assembly. [17mm socket]
3. Carefully lift off the headlight assembly and store safely (discard fasteners).
4. Repeat for the RHS headlight assembly.
5. Tow hook removal - LHS only. Remove the (1) bolt and nut [24mm socket] and (1) bolt [17mm socket] securing the tow hook (retain tow hook, discard bolts and nut).



FY Series Bullbar Installation

Side Step Removal LHS

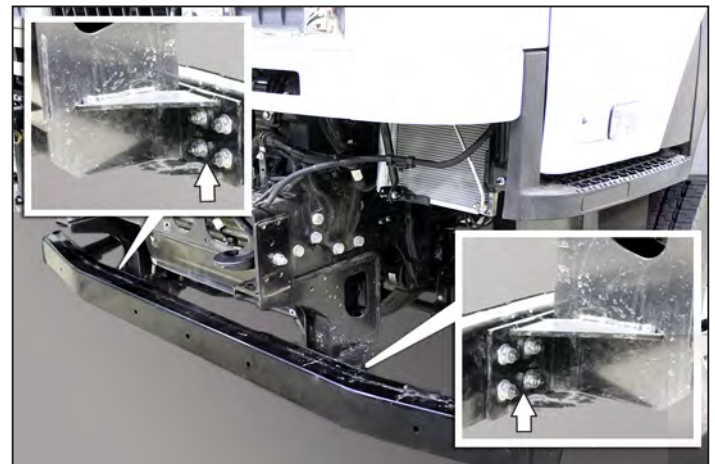
1. Remove the (2) upper bolts securing the side step to the front underrun protection system (FUPS) (retain bolts). [17mm socket]
2. Loosen the (2) lower bolts securing the side step to the FUPS (to allow the side step to slide off the FUPS) (retain bolts).
3. Slide the side step off the FUPS and store safely (retain).
4. Repeat for the RHS side step.



FUPS Removal

IMPORTANT: 2 people are required to unbolt and lift off the FUPS.

1. Remove the (4) LHS nuts securing the FUPS (retain nuts). [17mm socket]
2. Remove the (4) RHS nuts securing the FUPS (retain nuts). [17mm socket]
3. Lift off the FUPS and place carefully to avoid scratching the front surface.

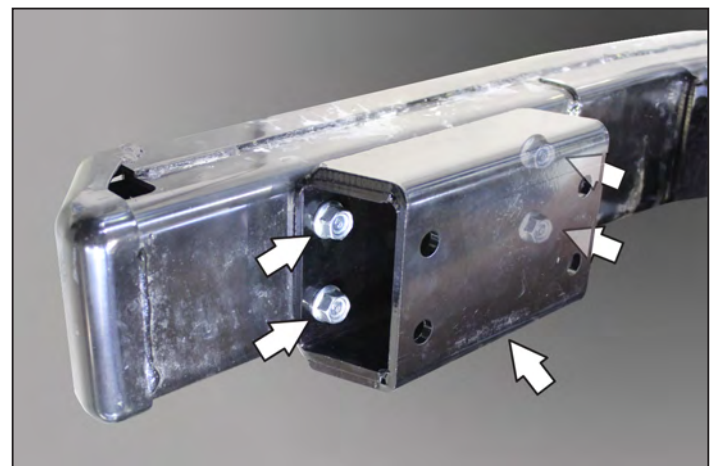


BULLBAR INSTALLATION

FUPS Spacer Bracket Installation

IMPORTANT: Ensure correct orientation of spacer brackets.

1. Fit the LHS FUPS outer spacer bracket to the FUPS using the (4) original bolts (**Torque to 85Nm**). [17mm socket]
2. Repeat for the RHS outer spacer bracket.
3. Fit the LHS FUPS centre spacer bracket over the studs on the FUPS and secure using the (4) original nuts (**Torque to 85Nm**). [17mm socket]
4. Repeat for the RHS centre spacer bracket.



FY Series Bullbar Installation

FUPS Installation

IMPORTANT: A trolley jack or similar and 2 people are required to fit the FUPS.

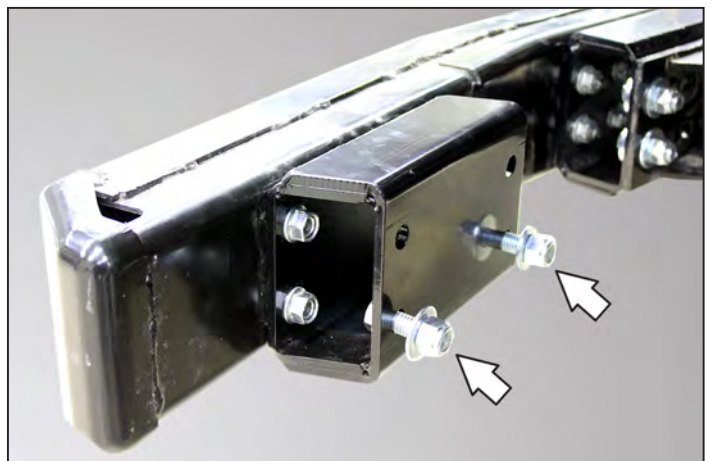
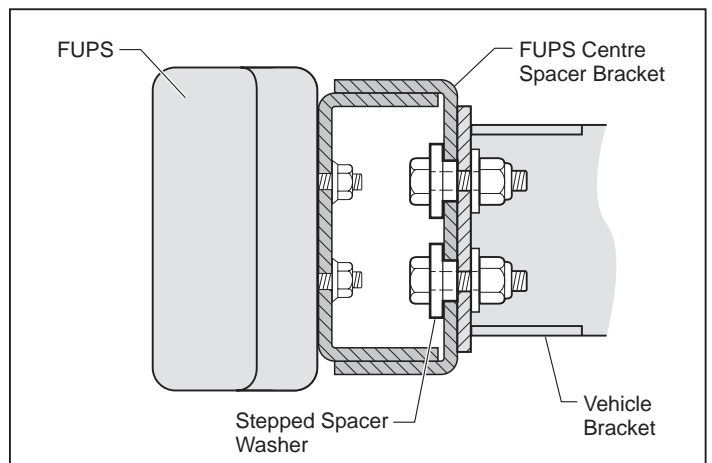
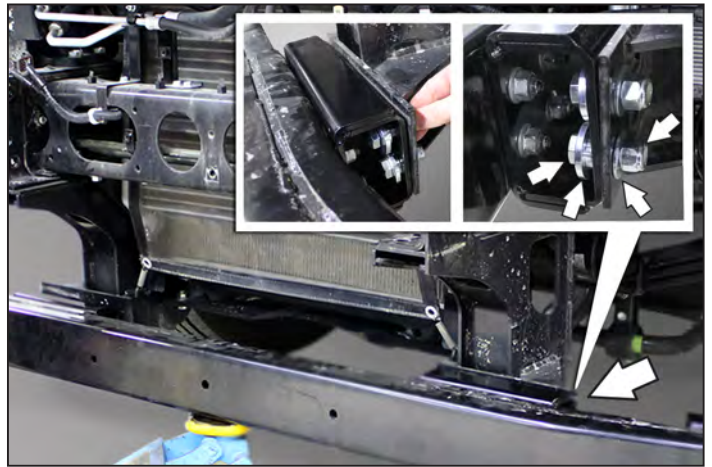
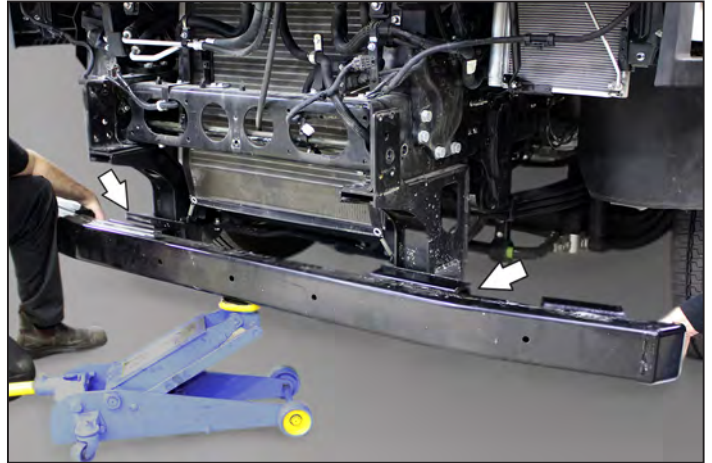
1. Secure the FUPS to the LHS of the vehicle loosely using (4) $\frac{1}{2}$ " x $1\frac{1}{2}$ " bolts, (4) stepped spacer washers, (4) $\frac{1}{2}$ " flat washers and (4) $\frac{1}{2}$ " nyloc nuts. [$\frac{3}{4}$ " socket]

IMPORTANT: Ensure the stepped spacer washers are aligned and positioned correctly in the mounting holes (refer to the illustration).

2. Repeat on the RHS of the vehicle.
3. Tighten the LHS and RHS FUPS mounting bolts ($\frac{3}{4}$ " spanner may be required to support bolt) **(Torque to 130Nm).**

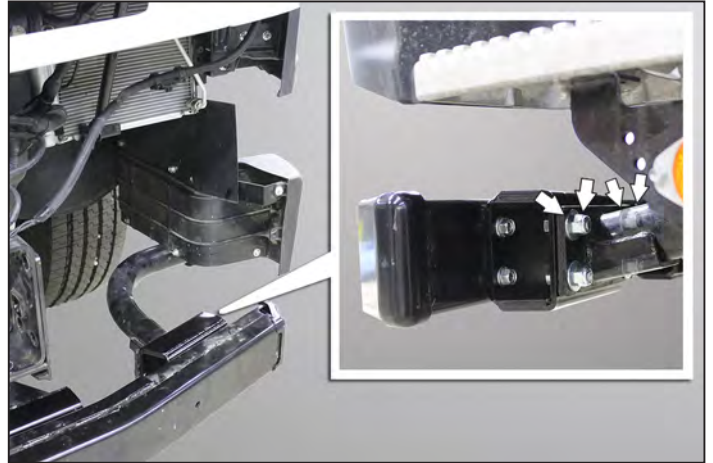
Side Step Installation LHS

1. Loosely fit the lower (2) 12 x 40 mm metric bolts, (4) $\frac{1}{2}$ " flat washers and (2) 12 mm nyloc nuts to the FUPS outer spacer bracket to allow the side step to be located.



FY Series Bullbar Installation

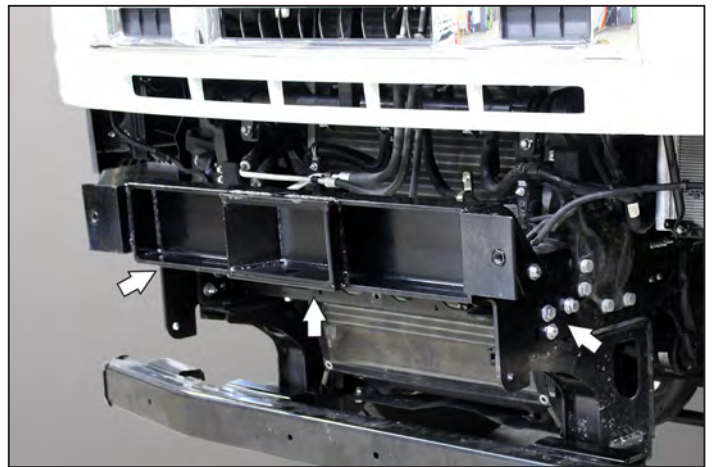
2. Slide the side step over the (2) installed lower bolts. Fit the upper (2) 12 x 40 mm metric bolts, (4) 1/2" flat washers and (2) 12 mm nyloc nuts.
3. Tighten the (4) mounting nuts (17mm spanner may be required to support bolt) **(Torque to 120Nm)**.
[17mm socket]
4. Repeat for the RHS side step.



Bullbar Mounting Bracket Installation

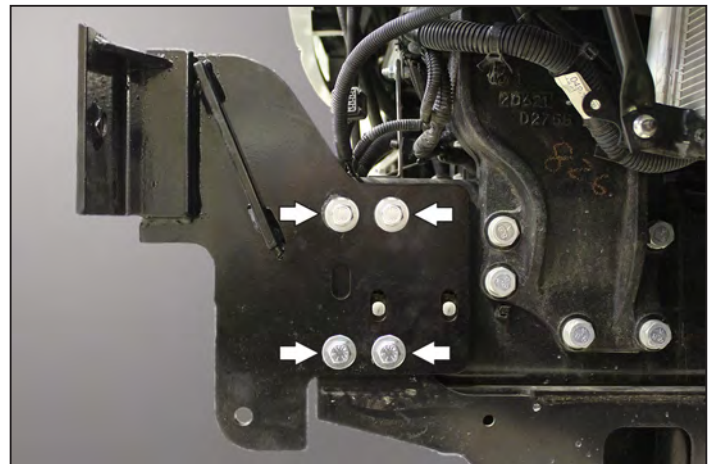
IMPORTANT: 2 people are required to lift and locate the bullbar mounting bracket.

1. Remove the bullbar mounting bracket from the bullbar.
2. Locate the bullbar mounting bracket and **loosely** fit the fasteners to the LHS and RHS as follows:-



a. LHS:

In the two top and bottom mounting holes use (4) 1/2" x 2" UNC bolts, (8) flat washers and (4) nyloc nuts (nyloc nuts inboard). Do not tighten at this stage.
[3/4" socket]

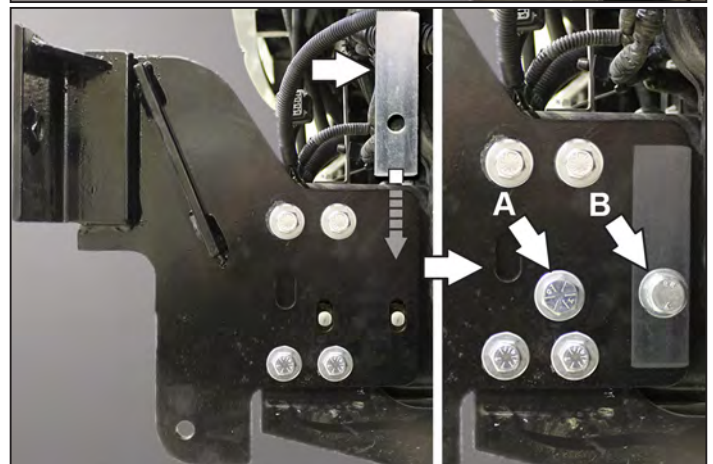


b. Refit the tow hook to the middle mounting holes using:

Forward hole **[A]** - (1) 5/8" x 3 1/2" UNC bolt, (2) flat washers and (1) nyloc nut
[1 5/16" socket]

Rear hole **[B]** - Spacer plate (**fit between bullbar mounting bracket and vehicle bracket**), (1) 16 x 60mm bolt and (1) 16mm spring washer.
[24mm socket]

NOTE: Ensure the spacer plate is correctly located.



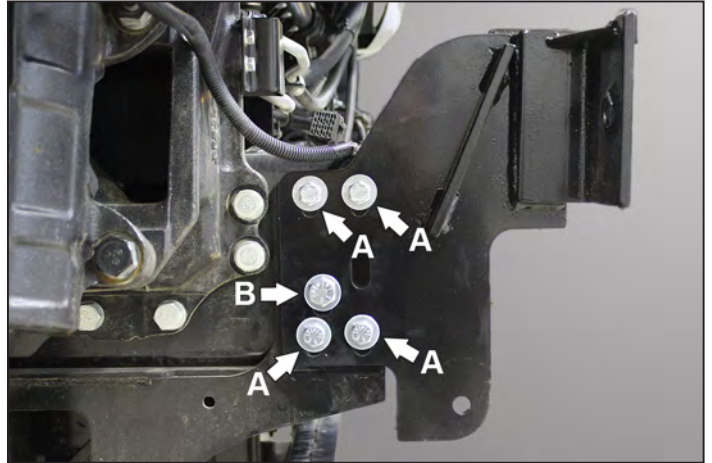
FY Series Bullbar Installation

c. RHS:

In the two top and bottom mounting holes [A] use (4) 1/2" x 2" UNC bolts, (8) flat washers and (4) nyloc nuts (nyloc nuts inboard). [3/4" socket]

d. In the middle mounting hole [B] use (1) 5/8" x 2" UNC bolt, (1) flat washer and (1) nyloc nut [15/16" socket]

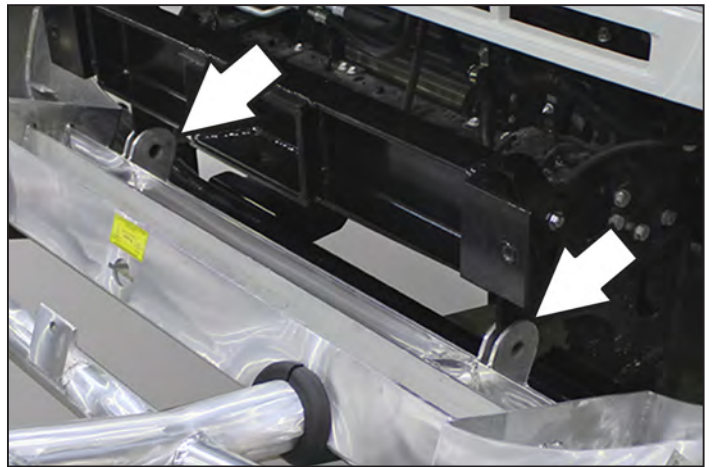
e. Check the horizontal and vertical alignment of the bullbar mounting bracket then tighten all LHS and RHS mounting bolts using spanner and torque wrench (5/8" - Torque to 200Nm, 1/2" - Torque to 130Nm, 16mm - Torque to 200Nm).



Bullbar Installation

IMPORTANT: A pallet trolley or similar and 2 people are required to fit the bullbar.

1. Position the bullbar over the lower mounting brackets.

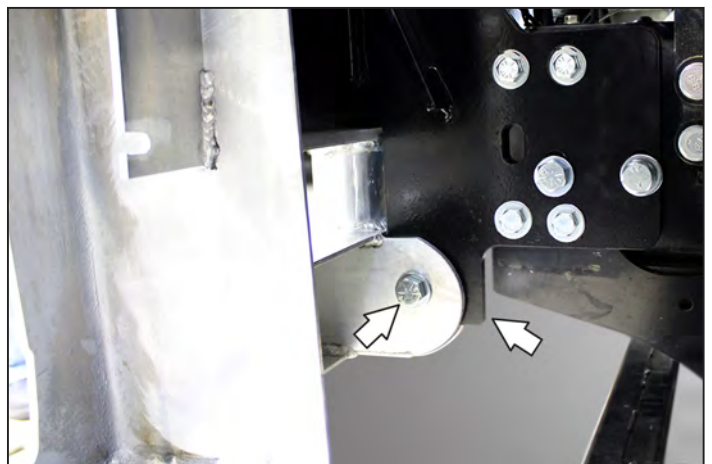


2. Temporarily secure with the (2) eye hooks.



3. Secure the lower LHS bullbar mount using (1) 5/8" x 2 1/2" UNC bolt, (2) flat washers and (1) nyloc nut (nyloc nut inboard). Tighten until the nyloc nut engages and the flat washers are firm against the brackets but loose enough to allow the bullbar to tilt freely. [15/16" socket]

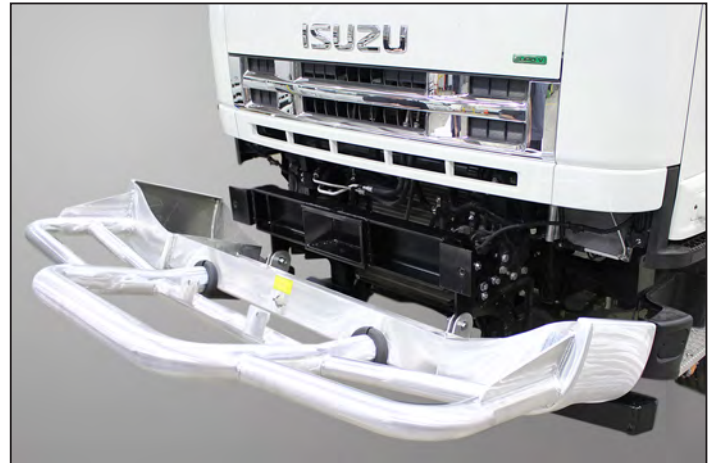
4. Repeat for the lower RHS bullbar mount.



FY Series Bullbar Installation

Headlight Surround Installation LHS

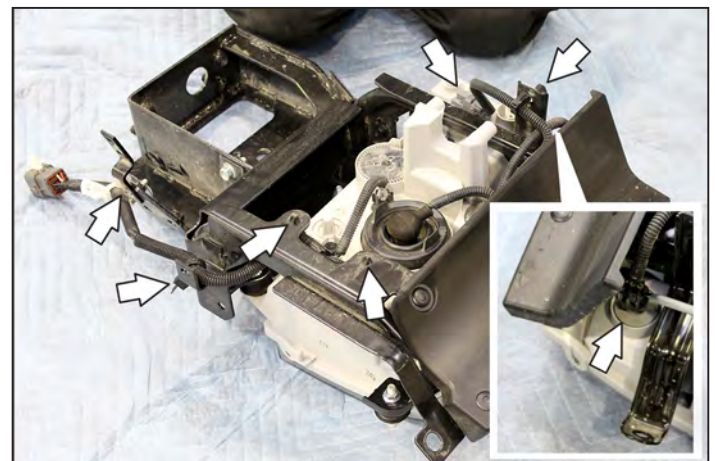
1. Remove the (2) eyehooks and carefully lower the bullbar.
2. Unclip the LHS headlight surround from the bumper fascia, (8 clips - retain).
3. Repeat for the RHS.
4. Align the locating lugs and press fit the LHS headlight surround into the bullbar and secure with the original clips (8 places).
5. Repeat for the RHS.



Headlight Assembly Installation LHS

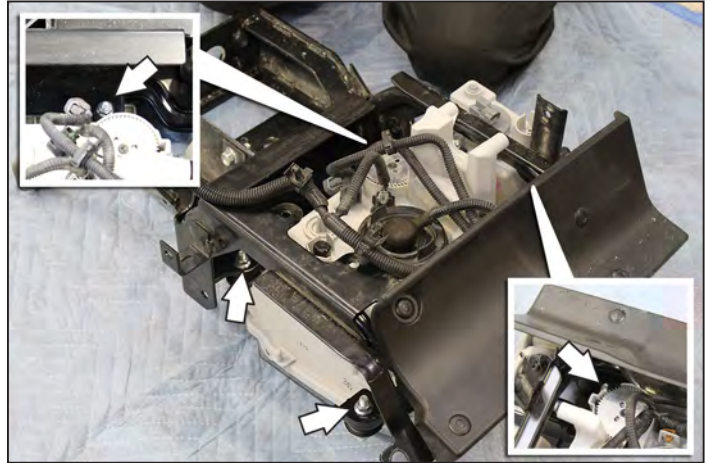
Remove the headlight assembly from the original mounting brackets as follows:

1. Unclip the wiring harness (4) places and unclip (1) cable tie.
2. Disconnect the (2) wiring connectors.

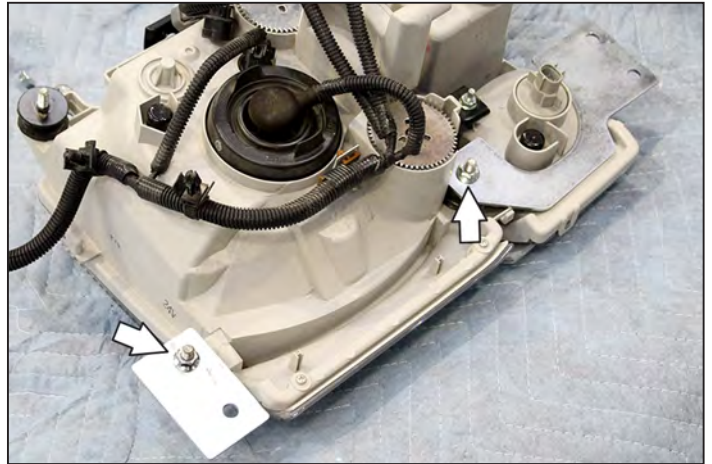


FY Series Bullbar Installation

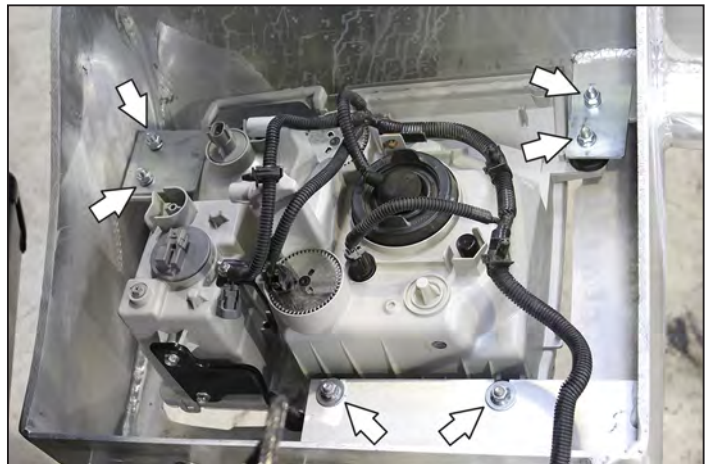
- Remove the (4) retaining nuts (retain).
[12mm socket]
- Lift the headlight off the mounting bracket.



- Fit the upper and lower mounting brackets to the headlight assembly loosely using the (2) original nyloc nuts.
[12mm socket]



- Position the headlight assembly into the bullbar.
- Secure the lower mounting bracket to the bullbar using (2) 8 x 25mm bolts, (2) 8mm flat washers, (2) 8mm spring washers and (2) 8mm nuts.
[12mm socket]
- Secure the upper mounting bracket to the bullbar using (1) 8 x 25mm bolts, (1) 8mm flat washers, (1) 8mm spring washers and (1) 8mm nuts.
[12mm socket]
- Secure the headlight to the inner bullbar mounting bracket using (2) original nyloc nuts and (2) 8mm flat washers.
- Ensure the headlight is aligned correctly and tighten all mounting bolts (**Torque to 20Nm**).
- Reconnect the (2) wiring connectors.

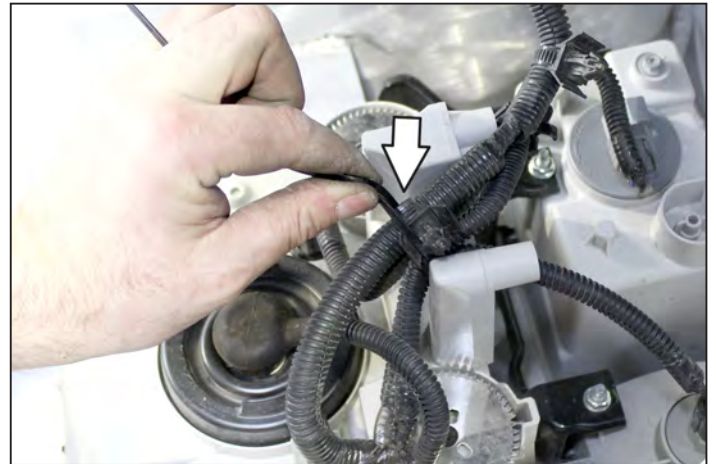


FY Series Bullbar Installation

12. Reconnect the main headlight wiring connector to the vehicle connector. Ensure the wiring harness will not foul when the bullbar is raised.
13. Repeat for the RHS headlight installation.



14. Secure the wiring harness as shown with the cable tie supplied. Ensure there is enough slack to avoid damaging the harness when the bullbar is raised.



15. Raise the bullbar and secure with the (2) eyehooks and (2) 3/4" washers. Tighten firmly.



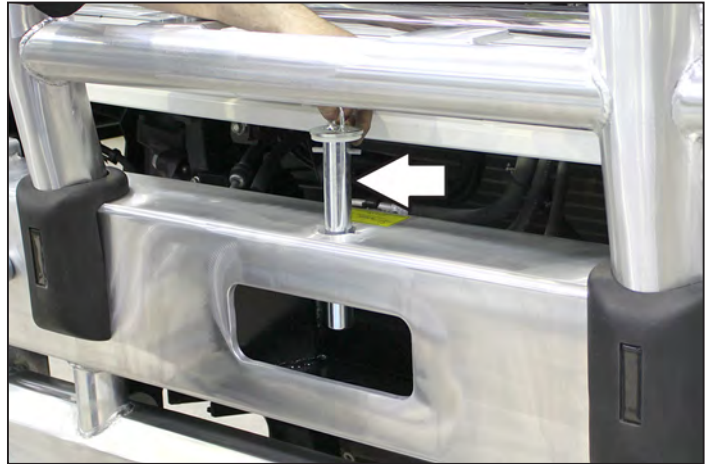
16. In the positions shown, drill (2) 3mm pilot holes through the LHS headlight surround and bullbar. Secure with (2) self-tapping screws supplied. Repeat for the RHS.
[3mm drill bit, power drill, phillips head screwdriver]



FY Series Bullbar Installation

Towpin (where fitted)

1. Locate the towpin in the bullbar and turn to secure.



Warning labels

1. Place (1) self adhesive warning label at the rear of the cabin in the location shown.
2. Place (1) self adhesive warning label on the inside of the driver's door in the location shown.

