



HINO

Australia

GA72102001
P2HN6706SYF



E13
Engine vehicle

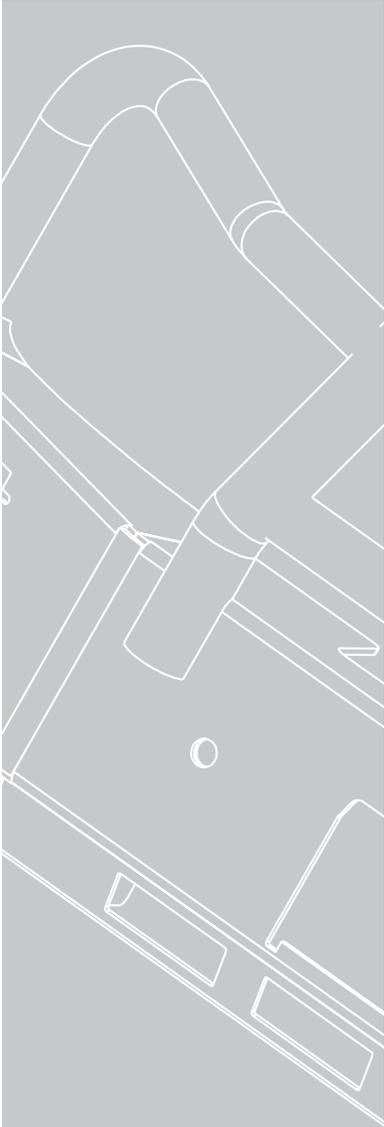


A09
Engine vehicle

Fitting Guide

HINO 700
5/2021 on

E13 and A09 Low Profile Bullbar
VEHICLE FRONTAL PROTECTION SYSTEM (VFPS)
FOR AIR BAG & ADR COMPLIANT VEHICLES



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Supplied Product Assemblies

NOTE: These instructions are to be used as a guide for installation of this component to the specified HINO model. Please ensure you check the component is applicable before installation. This work should be done by a qualified installer/technician and all care must be taken to ensure all steps are completed. Failure to do so may risk conformity to HINO component warranty and/or compliance. If you have any issues or concerns with this installation please contact 1300 01 HINO.

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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 Protection bar and disconnect steel mounting brackets. Retain all bolts for refitment.
- Ensure these instructions are left with the vehicle owner and/or operator.



Stage 2

- Carefully pull out on outer chrome mold beside sonar unit to release clips from plastic grille section.
- Remove chrome molding on each side.



Stage 3

For E13 vehicle:

- Remove six (6) 10mm head bolts from grille and pull out at bottom to release clips.
- Pull down on grille to remove.

For A09 Vehicle:

- Remove six (6) 10mm head bolts from grille and pull out at bottom to release clips.
- Remove from vehicle.



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Stage 4

- Remove four (4) 10mm head bolts from under side of bumper center at top of spoiler.
- Pull out on top edge of bumper centre to unclip six (6) clips from plastic
- From lower edge of bumper center, remove six (6) blue locking tabs.
- Remove bumper center. Please note: the Spoiler remains on vehicle.



Stage 5

- Remove three (3) 17mm head bolts and two (2) 12mm head bolts from outer grille backing (per/side) (pull headlight corner plastics forward to access 12mm head bolts)
- Lift up on sides sliding grille backing out from behind headlight corner plastics.



17mm and 12mm bolts shown with headlight corner plastics removed for photo

Stage 6

- Remove four (4) 12mm head nuts from oil line bracket on bottom of front cross member.
- Remove two (2) 12mm head nuts from lower oil line bracket.
- Allow both sets of oil lines to hang.



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Stage 7

- On drivers side chassis rail remove four (4) 22mm head bolts.
- Disconnect wiring loom clip and release from locator for ease of access.
- If required, bend wiring plug locator bracket upwards for ease of fitment.



Stage 8

- On passenger side remove two (2) 19mm head bolts from tow hook.
- Remove tow hook.
- Remove two (2) 22mm head bolts from chassis rail.



22mm head bolt location

Stage 9

On Drivers side:

- Install steel mounting bracket onto chassis rail using four (4) M16 x 2 x 50mm bolts, flat washers and nyloc nuts.

On passenger side

- Install steel mounting bracket onto chassis rail with two (2) M16 x 2 x 50mm bolts, flat washers and nyloc nuts in bottom holes.
- Attach tow hook to top holes and fix with two (2) M14 x 1.5 x 90mm bolts, flat washers and nyloc nuts.



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Stage 10

- Using mounting bracket as a guide, drill front holes in front cross member to 10mm.
- **Blow filings clear and treat all exposed metal with a rust inhibitor.**
- Fix front holes with two (2) M10 x 1.5 x 35mm bolts, flat washers and nyloc nuts. Tighten all bolts.



Stage 11

- Remove one (1) rear 22mm head bolt from inner chassis rail (per side).
- Replace with M16 x 1.5 x 70mm set screws (supplied) Tighten all bolts.



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Stage 12

- Install support mount onto long bolt (fitted in previous step) with M16 flat washer to top of steel mount and existing nut, M16 flat washers and nyloc nuts.
- Fit support mount onto rear of chassis mount using one (1) M10 x 1.5 x 40mm bolts, flat washers and nyloc nuts.
- Tighten all bolts.



Stage 13

- Refit all oil lines with original nuts and bolts ensuring they do not rub on steel mounting brackets.



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Stage 14

- Reposition electrical bracket as close as possible to the original position.
- Reconnect electrical harness and refit to repositioned chassis bracket.



Stage 15

- Using steel mounting brackets as a guide, mark grille backing and trim with jig saw or similar tool to fit around steel mounting brackets



Fitted photo taken after trimming grille backing in next step.

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Stage 16

- Remove plastic rib from rear grille backing.
- Using mounting bracket as a guide, drill a M6 hole through grille backing.
- Attach grille backing to side of steel mount with one (1) M6 x 30mm bolt, flat washers and nyloc nuts (supplied) (per side).



Stage 17

- Using steel mounting bracket as a guide mark and trim area around lower bumper to fit over steel mount.
- Refit lower section of bumper using original equipment.



Stage 18

- Refit grille using original equipment.



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Stage 19

- Remove rib from rear of chrome mold on each side.
- Refit chrome molding.



Stage 20

- Remove bumper reflector from side of bumper by removing one (1) 8mm head nut and relocate to side of protection bar using original nut. (Per/side)



Stage 21

- Tilt cab to access back of headlight. (Ensure no objects are loose in cab before tilting).



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Stage 22

- Disconnect main wiring connector from rear of headlight
- Using Hino wiring harness (supplied), plug one end into headlight wiring and reconnect other end to headlight.
- Feed wiring through step in bumper to park / indicator in protection bar.
- Remove bulb from indicator light from headlight, 1/4 turn anticlockwise. Remove bulb and replace without bulb to headlight.
- Tilt cabin back to operating position.



Indicator bulb

Stage 23

- Fit protection bar onto steel mount and fix with three (3) M12 x 1.75 x 40mm bolts, flat washers, and nyloc nuts (per/side)
- Ensure the headlight tubes are clear of headlights.

For A09 Engined Vehicle:

- Tilt bonnet to ensure rear corner of bonnet clears headlight tube.

For E13 Engined Vehicle:

- Carefully open door to check clearance under door. A minimum of 15mm gap is required.
- Align and tighten all bolts.



Headlight clearance all vehicles

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A09 Engined vehicle



A09 Engined vehicle
Check distance to corner of bonnet
from headlight loop of Protection Bar



E13 Engined vehicle



E13 Engined vehicle
Ensure distance between door and bullbar is
minimum 15mm

Stage 24

- Check all electrical equipment for correct operation.
- Zip tie wiring to original wiring to stop excessive vibration leaving only enough to reach park / indicator light.
- Check radar calibration to ensure correct operation.

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Supplied Product Assemblies

Fig.1 - 1x Bullbar assembly

Fig.2 - 1x Pair steel mounting brackets (Fitted to Bar)

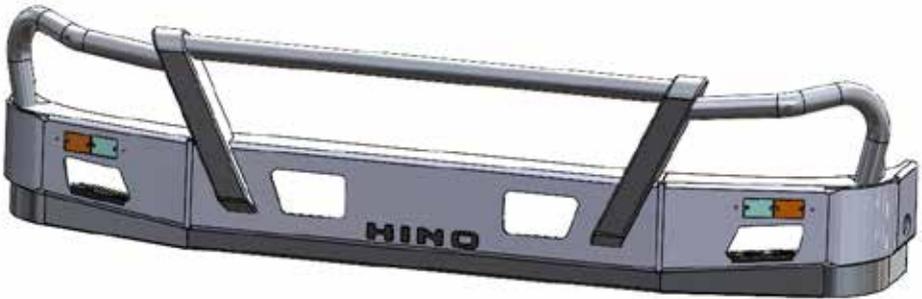
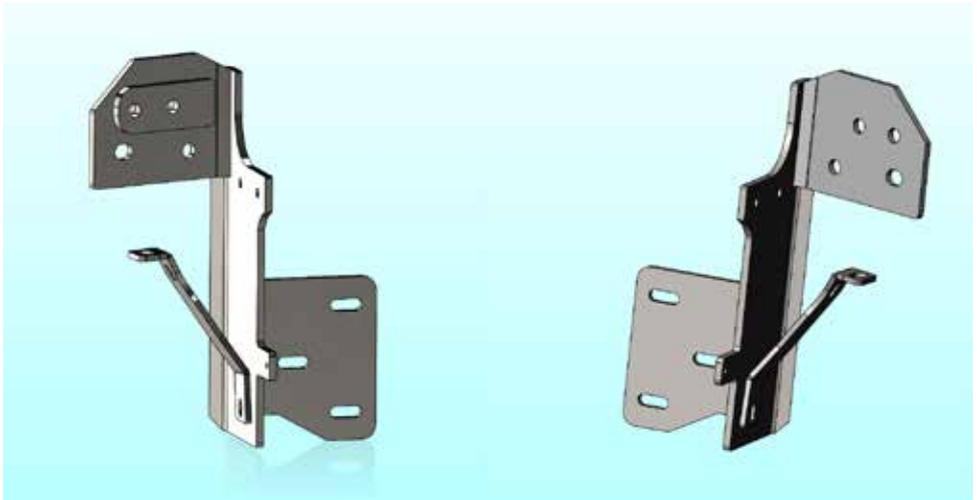


Figure 1 - Bullbar assembly



Left Hand Bracket

Right Hand Bracket

Figure 2 - 1 Pair Steel mounting brackets (fitted to bar)

Fitting Kit

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Pre-fitted bolts and Parts

1 - Pair Steel mounting brackets	4 - 3/16 x 3/4 stainless threaded PK screws (Used for indicator installation)
1 - Pair Steel support mounts	4 - 3/16 stainless nyloc nuts (Used for indicator installation)
1 - Pair Park / Indicators (IC87270 - 24 Narva Halogen)	2 - Black Plastic steps
4 - M12 x 1.75 x 40 bolts (discard when removed)	4 - M6 x 25mm black combi bolts (used to attach steps)
8 - M12 flat washers (discard when removed)	4 - M6 washers (used to attach steps)
4 - M12 x 1.75 Nyloc nuts (discard when removed)	4 - M6 nyloc nuts (used to attach steps)
2 - M10 x 1.5 x 40 bolts (discard when removed)	1 - Hino Lettering
4 - M10 flat washers (discard when removed)	8 - 4mm Star lock fasteners (used to attach lettering)
2 - M10 x 1.5 Nyloc nuts (discard when removed)	

Fitting Kit

6 - M16 x 2 x 50mm bolts	6 - M12 x 1.75 Nyloc nuts
2 - M16 x 1.5 x 70mm set screws	4 - M10 x 1.5 x 35mm bolts
18 - M16 flat washers	2 - M10 x 1.5 x 40mm bolts
6 - M16 x 2 Nyloc nuts	12 - M10 flat washer
2 - M16 x 1.5 Nyloc nuts	6 - M10 x 1.5 nuts
2 - M14 x 1.5 x 90mm bolt (Grade 10.9)	2 - M6 x 30mm bolt
4 - M14 flat washer	4 - M6 flat washers
2 - M14 x 1.5 nyloc nut	2 - M6 nyloc nuts
6 - M12 x 1.75 x 40mm bolts	1 - Hino Indicator/ Park Harness kit (IC21HN70LOIPH)
12 - M12 flat washers	4 - 200mm zip ties

Torque Guide

Diameter	Thread Pitch	Recommended Assembly Setting	
M6	1.0mm	9.1Nm	6.8lbft
M10	1.5mm	44Nm	33lbft
M12	1.25mm	76Nm	56lbft
M14	1.5mm	185Nm	136lbft
M16	1.5mm	189Nm	139lbft
M16 ¹	2mm	180Nm ¹	133lbft ¹
7/8	9 TPI	Hand tightened firmly only as over tightening will damage nylon washer	

Notes:

1. M16 bolts used to secure bullbar to steel mount require to be tightened only to touch the alloy mount firmly. Overtightening of this bolt will result in damage to the bullbar and possible inability to align bullbar correctly to vehicle.

Finished Product



REPLACES: N/A
REVISED: 06.07.21