

CHASSIS ENGINEERING GUIDELINES

(ISSUE A, AUGUST 2018)

DESIGN GUIDELINES FOR:
FUSO ENDURO FZ 4x2

MODELS:
FZY1 WF

APPLICATIONS - TRACTOR

These recommendations have been prepared for design engineers and body builders as a guide to assist when selecting and specifying chassis modification and/or body fitment.

These guidelines should be read in conjunction with the Mitsubishi Fuso Truck & Bus Body Equipment Mounting Directives available on the FUSO Body Builder Portal.

CHASSIS FRAME MATERIAL

Hot Rolled Steel, 500 MPa tensile, 460 MPa yield. Refer to chassis section modulus drawing for each model.

LOAD CONSIDERATIONS

TRACTOR

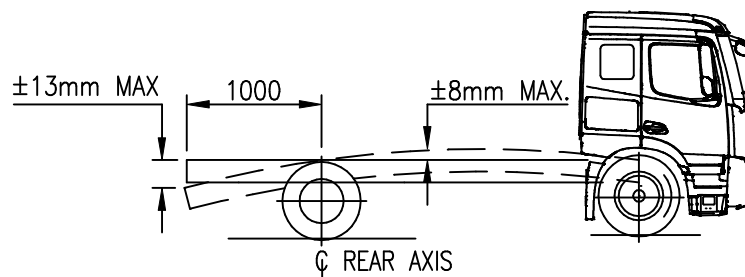
POINT LOAD Considered as a concentrated load applied through the fifth wheel position ahead of the rear axis.

MAXIMUM DESIGN STRESS

Recommended maximum design stress = 35% of chassis yield stress (161 MPa) for sections of frame that are unmodified or do not contain stress raisers. Appropriate allowance should be made for details in the frame that have been modified or contain stress raisers. Refer to the body builders manual for stress levels using static load applications.

MAXIMUM CHASSIS DEFLECTION

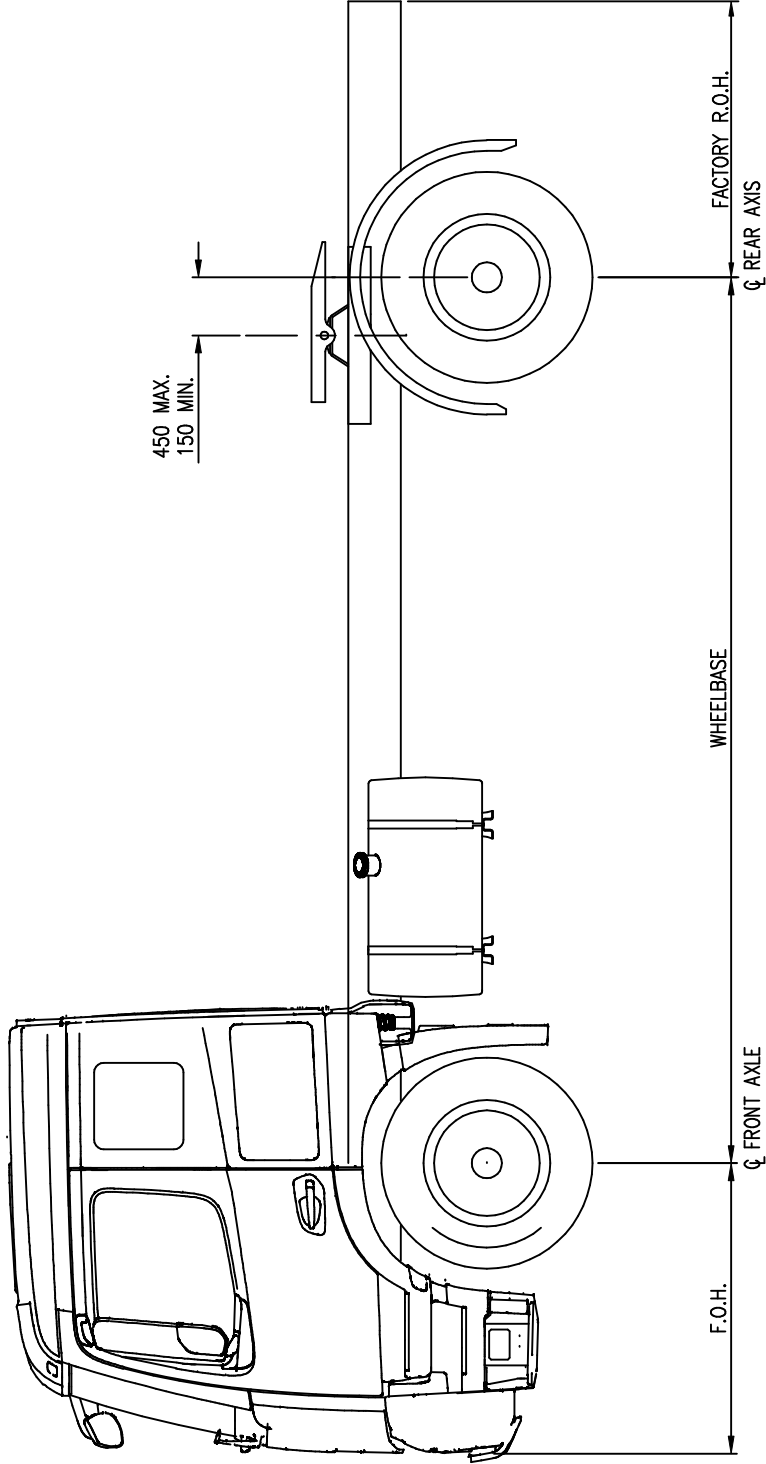
CASE 1	Between front and rear axis. Maximum permissible deflection: $\pm 8\text{mm}$.
CASE 2	Rear overhang. Maximum permissible deflection: 13mm at 1000mm or greater, rear of rear axis.



This specification sheet applies to vehicles supplied by Fuso NZ for the New Zealand market. REF: J22974 / FZ-ENDUROSUA.DWG
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NOTES:

- 01) THE FITTING OF A FIFTH WHEEL AND ANY WORK ON THE CHASSIS FRAME MUST BE CARRIED OUT IN ACCORDANCE WITH THE FUSO GUIDELINES FOR THIS MODEL AND GOOD INDUSTRY PRACTICE.
- 02) FOR FIFTH WHEEL APPLICATIONS, A SUBFRAME, ATTACHMENT ANGLES, OR CHASSIS REINFORCEMENT IS REQUIRED, AND THIS REQUIREMENT SHOULD BE DETERMINED BY ENGINEERING CALCULATION AND ASSESSMENT USING NZS5450 AND THE FUSO GUIDELINES.
- 03) THIS DRAWING IS FOR USE AS A GUIDE ONLY, TO ASSIST WHEN SELECTING AND SPECIFYING CHASSIS MODIFICATION AND/OR BODY FITMENT.



MODEL	WHEELBASE	F.O.H.	FACTORY R.O.H.
FZY1WF	3600mm	1460mm	970mm

ISSUE DATE	FIRST ISSUE	CHANGES MADE
A 17/8/2018	K.H.	BY



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FZY1WF 4 X 2 TRACTOR
SAMPLE TRACTOR UNIT LAYOUT - 3600mm W/BASE

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