

CANTER

DELIVERING
lower cost-of-ownership

Models

Technology

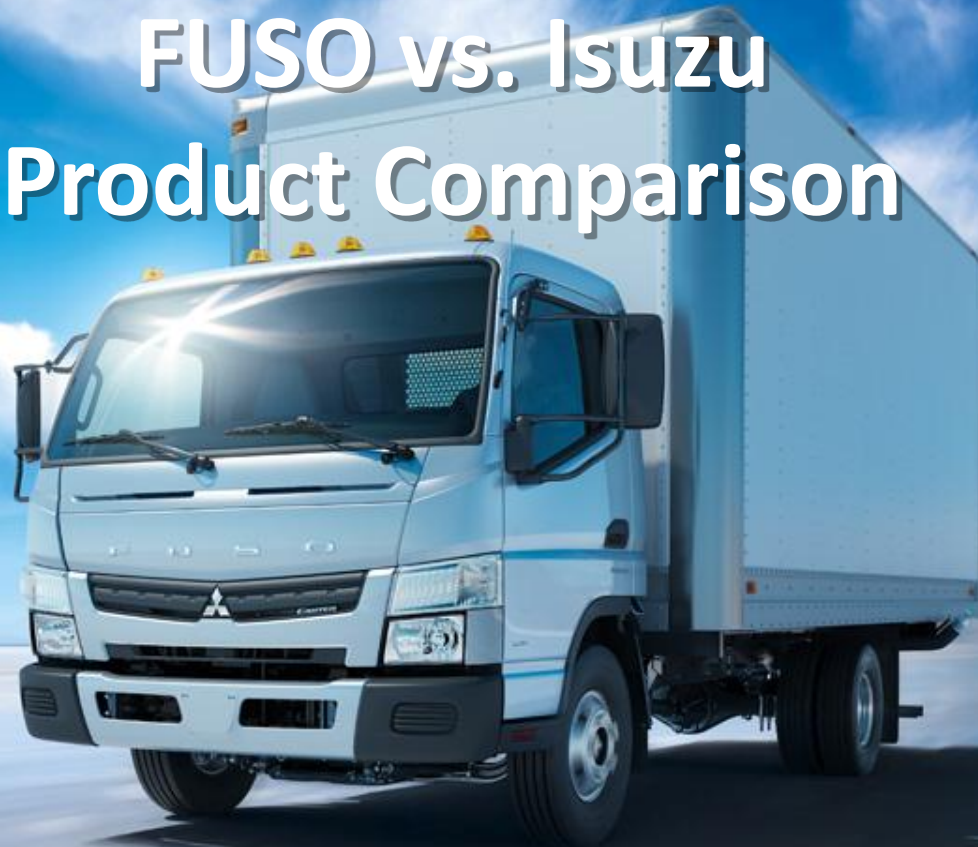
Frames

Cab/Body

Costs

Warranty

FUSO vs. Isuzu Product Comparison



The Canter[®] FE/FG Series

Models

Technology

Frames

Cab/Body

Costs

Warranty

- Completely reengineered from the wheels up
- Advanced engine, transmission and emissions technologies
- Excellent fuel economy



The Canter[®] FE/FG Series

Models

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Cab/Body

Costs

Warranty

- Increased payload capacity
- Less frequent maintenance than Isuzu
- Better warranty than Isuzu



Models Comparison

Models

Technology

Frames

Cab/Body

Costs

Warranty

The Lineups

Isuzu NPR, NRR, NQR,
largely carry over from 2010



FUSO Canter FE,
nearly all-new for 2012



Models Comparison

Models

Technology

Frames

Cab/Body

Costs

Warranty

The Lineups

Isuzu



FUSO Canter FG4X4

nearly all-new for 2012



Models Comparison



Models

The Lineups

Technology

Isuzu

FUSO

Frames

Model/GVWR (pounds)

Model/GVWR (pounds)

Cab/Body

NPR ECO-MAX 12,000

FE125 12,500

NPR-HD 14,500

FE160 15,995

Costs

NQR 17,950

FE180 17,995

Warranty

NRR 19,500

Models Comparison



FUSO GVWR and axle ratings higher in Classes 3 and 4.

Models

Technology

Frames

Cab/Body

Costs

Warranty

Isuzu		FUSO Canter	
GVWR	front/rear axle	GVWR	front/rear axle
12,000	5,360/8,840	12,500	5,360/9,880 (higher than Isuzu)
14,500	5,360/9,880	15,995	6,835/12,700 (higher than Isuzu)
17,950	6,830/12,980	17,995	6,835/12,700
19,500	7,275/13,660		

(All ratings in lbs.)

Engines

Models

Technology

Frames

Cab/Body

Costs

Warranty

Isuzu Diesel



4JJ1-TC 3.0-liter
[150 hp, 282 lb.-ft.]
(NPR ECO-MAX)



4HK1-TC 5.2-liter
[215 hp, 452 lb.-ft.]

FUSO Diesel



4P10 3.0-liter
[161 hp, 295 lb.-ft.]

Engines

Models

Technology

Frames

Cab/Body

Costs

Warranty

Isuzu Diesel
4HK1-TC

vs.

FUSO Diesel
4P10

Unlike FUSO's 4P10, Isuzu's diesel has:

- No electronic control valve on EGR system
- No Bosch Piezo fuel injection
- No hydraulic valve lifters (mechanical lifters require adjustment)
- A narrow-peak torque curve
- 10,000-mile service intervals



Engines

Models

Technology

Frames

Cab/Body

Costs

Warranty

Strengths of the FUSO 4P10

- Best of European and Japanese engineering
- Evolution of F1C, proven in 350,000 trucks worldwide
- Lighter engine weight contributes to more payload
- Twin-cam, 4 valves per cylinder
- Industry's widest horsepower and torque curves
- 18,000-mile service intervals
- Precision fuel system
- Enhanced fuel economy



Engines

Models

Technology

Frames

Cab/Body

Costs

Warranty

Engine electrical systems

Isuzu

110-amp alternator

FUSO Canter

140-amp alternator



Engines

Models

Technology

Frames

Cab/Body

Costs

Warranty

Engine emissions control with SCR

Isuzu

- Basic system
- Very intrusive Diesel Particulate Filter
- Only 60,000 units in service over the last three years



FUSO Canter

- Pioneered, proven by Daimler
- Compact system, easier for body builders to work with
- In service in more than 260,000 Freightliner, Mercedes-Benz, Western Star and FUSO vehicles throughout the world



Transmissions

Models

Technology

Frames

Cab/Body

Costs

Warranty

6-speed transmission

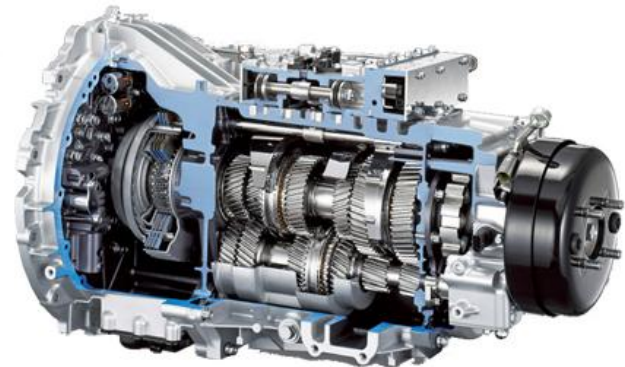
Isuzu

vs.

FUSO

Aisin® automatic

DUONIC® automated manual



Transmissions

Models

Technology

Frames

Cab/Body

Costs

Warranty

6-speed transmission

Isuzu Aisin® automatic



- Good but outdated technology
- Average fuel economy
- Mechanically inefficient torque converter for coupling and creep
- Must be completely replaced for service repair

Transmissions

Models

Technology

Frames

Cab/Body

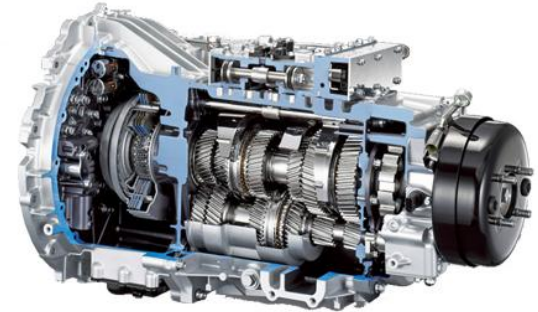
Costs

Warranty

6-speed transmission

FUSO DUONIC® automated manual

- Efficiency of a manual, convenience of an automatic
- Near 100% efficiency for maximum fuel economy in all driving conditions
- Offers Park position and creep capabilities, like an automatic
- Ability to manually select each gear for enhanced control
- ECO mode enables even higher fuel economy in heavy traffic
- Engineered with the 4P10; matched specs for unequalled drivability



Braking Systems

Models

Technology

Frames

Cab/Body

Costs

Warranty

Isuzu

- Basic front disc/rear drum type service brakes

FUSO

- Advanced dual-caliper front and rear disc brakes
- Brake override system (cancels throttle pedal input when brake pedal is applied, for enhanced safety)



Frame Rails

Models

Technology

Frames

Cab/Body

Costs

Warranty



Frame Rails

Models

Technology

Frames

Cab/Body

Costs

Warranty

Isuzu NPR-HD, NQR, NRR

- Just 44,000 PSI yield strength
- 7.20 cu.-in.-per-rail section modulus (only at point of frame behind cab)
- 316,800 lb.-in. RBM
- 6.07 cu.-in. section modulus on NPR ECO-MAX
- 267,080 lb.-in. RBM on NPR ECO-MAX
- Tapered aft of rear axle

Frame Rails

Models

Technology

Frames

Cab/Body

Costs

Warranty

Isuzu NPR ECO-MAX

- Undersized frame width—just 29.5”
- Problematic for body builders
- Limits available bodies that will fit
- Potentially more expensive to transfer/install
- With 4JJ1 engine, limits body sizes due to frontal area restrictions

Frame Rails

Models

Technology

Frames

Cab/Body

Costs

Warranty

FUSO Canter

- 33.5" standard width on all FE models
- Lighter than previous FE (higher payload)
- 56,565 PSI yield strength (29% higher)
- 7.08 cu.-in.-per-rail section modulus (cab to end of frame)
- 400,410 lb.-in. RBM (26% higher and 33% higher than NPR ECO-MAX)
- Non-tapered rails on FE models provide even and uninterrupted strength

Corrosion-resistance

Models

Technology

Frames

Cab/Body

Costs

Warranty

Isuzu

- Base-painted, then assembled

FUSO Canter

- Three-layer process:
 - Exclusive steel shot blast for enhanced corrosion resistance, and electrodeposition coating
 - Frame assembled
 - Second coat on frame assembly with high-gloss paint after final inspection

Rear Suspensions

Models

Technology

Frames

Cab/Body

Costs

Warranty



Rear Suspensions

Models

Technology

Frames

Cab/Body

Costs

Warranty

Isuzu

- Cast brackets with reverse spring shackles
- Rubber bushings; cannot be lubricated
- Hangers riveted to frame; increases labor to remove, replace (as for repair or wheelbase change)
- No rear stabilizer bar

Rear Suspensions

Models

Technology

Frames

Cab/Body

Costs

Warranty

FUSO Canter

- Boxed spring hangers plus parabolic helpers (for better handling)
- Greasable metal bushings with lubrication fittings (for longer life)
- Spring hangers bolted at patterned hole locations (for quick repair or relocation for wheelbase reduction)
- Rear stabilizer bar (on FE160, FE180 models)

Cab, Payload and Body Lengths

Models

Technology

Frames

Cab/Body

Costs

Warranty



GVRW

Models

Technology

Frames

Cab/Body

Costs

Warranty

Gross Combination Weight Rating

Isuzu

Model/GCWR (pounds)

NPR ECO-MAX 18,000

NPR-HD 20,500

NQR 23,500

NRR 25,500

FUSO

Model/GCWR (pounds)

FE125 20,215 (12% adv.)

FE160 23,710 (16% adv.)

FE180 25,710 (9% adv.)

*n/a (but FE180 still has
210-pound/1% advantage)*

Payload and Body Lengths

Models

Technology

Frames

Cab/Body

Costs

Warranty

Isuzu N-Series vs. FUSO Canter	Maximum Payload (lbs.)	FUSO Advantage	Maximum Body Length (nominal, ft.)	FUSO Advantage (ft.)
NPR ECO-MAX	6,453		18	
Canter FE125	7,345	892 (14%)	18	
NPR-HD	8,336		20	
Canter FE160	10,535	2,199 (26%)	23	3 (15%)
NPR-HD Crew Cab	7,635		16	
Canter Crew Cab	9,880	2,245 (29%)	19	3 (19%)
NQR	11,371		22	
Canter FE180	12,535	1,164 (10%)	23	1 (5%)
NRR*	12,785		24	

*No Canter equivalent, but the NRR costs substantially more than the FE180, yet carries only 250 pounds more payload. A very expensive trade-off.

Cab Interiors

Models

Technology

Frames

Cab/Body

Costs

Warranty



Cab Interiors

Models

Technology

Frames

Cab/Body

Costs

Warranty

Isuzu

- No remote door locks
- Doors swing out 90° into traffic
- Tight space between driver's seat/accelerator
- Floor-mounted gear shift impedes movement within cab and intrudes into center passenger space
- Old-style controls, levers and vents

Cab Interiors

Models

Technology

Frames

Cab/Body

Costs

Warranty

FUSO Canter

- Standard remote door locks (convenient fob activation) with driver/passenger door unlocking for enhanced safety
- Key engine immobilizer (May reduce insurance costs)
- Forward-swing hinges open doors just 72° (wide opening with easier, safer entry/exit)
- More floor space between seat and pedals
- Advanced instrument panel features multi-information display
- Positive-feel knobs and switches
- High-mount circular universal direction vents, large control dials permit operation even with work gloves
- Unique dash-mounted shifter enhances drive ergonomics, does not intrude into passenger space, and permits cab traversability



Life Cycle Cost

Models

Technology

Frames

Cab/Body

Costs

Warranty



CANTER FE/FG SERIES



Life Cycle Cost

Models

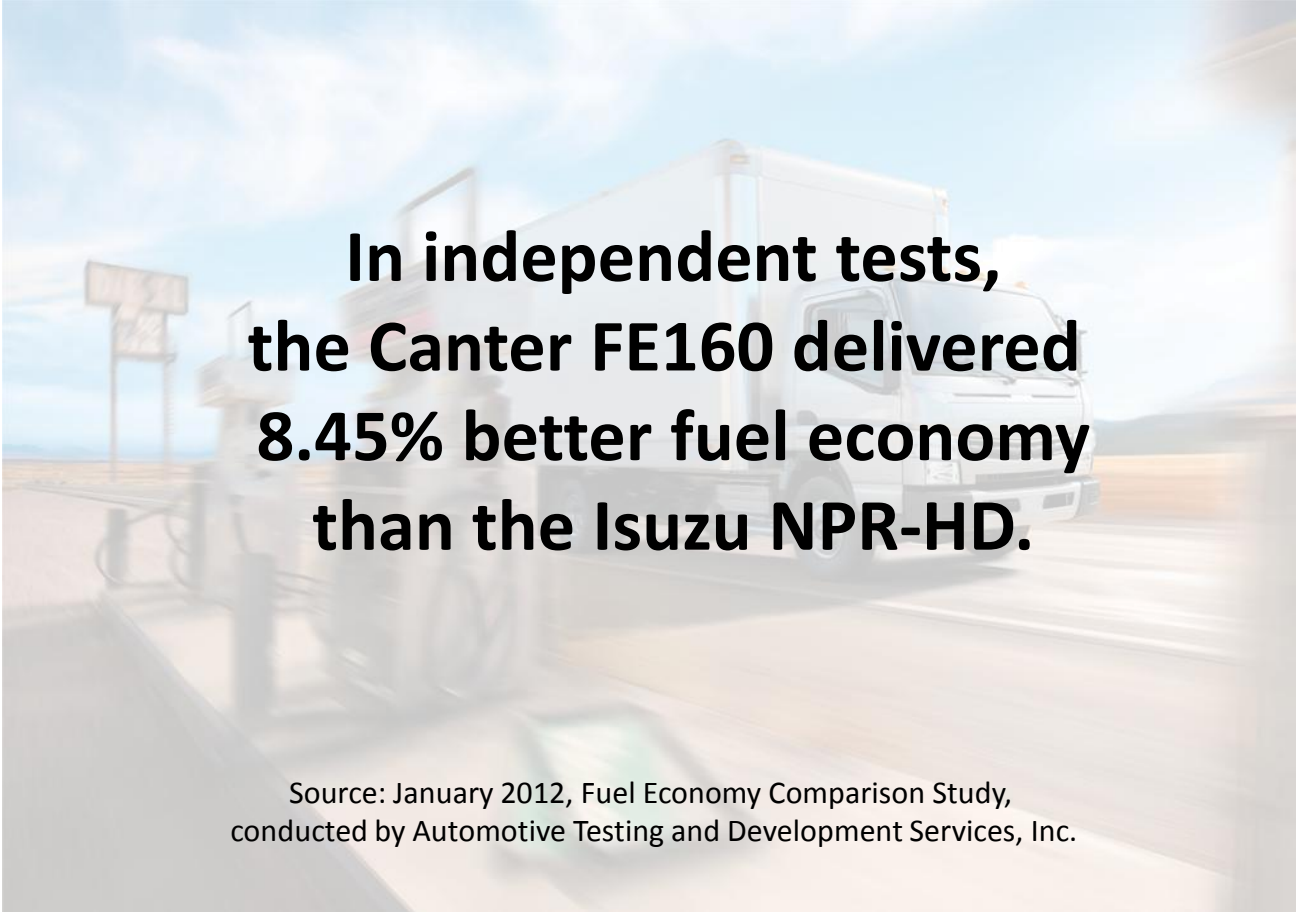
Technology

Frames

Cab/Body

Costs

Warranty



**In independent tests,
the Canter FE160 delivered
8.45% better fuel economy
than the Isuzu NPR-HD.**

Source: January 2012, Fuel Economy Comparison Study,
conducted by Automotive Testing and Development Services, Inc.

Life Cycle Cost



- Models
- Technology
- Frames
- Cab/Body
- Costs
- Warranty

(In miles)	Isuzu	FUSO Canter
Base service interval	10,000	18,000
Engine oil	10,000	18,000 (use with CJ-4 standard nonsynthetic oil)
Engine oil filter	10,000	18,000
Fuel filter	10,000	18,000
Intake exhaust valve clearance inspection	As required	Unnecessary (hydraulic lifter/adjuster}
Wheel bearing grease - Inspect and repack	26,000	36,000
Brake fluid	100,000	24 months (unlimited mileage)
Tire rotation	10,000	18,000

Warranty

Models

Technology

Frames

Cab/Body

Costs

Warranty



FUSO has the best warranty

- Models
- Technology
- Frames
- Cab/Body
- Costs
- Warranty

	Isuzu	FUSO Canter
3-year bumper-to-bumper	●	●
4-year rust-through	●	●
5-year emissions	●	●
5-year powertrain	●	●
	Extra cost	(Up to 175,000 mi./280,000 km)
Covered bolt-on items		
Alternator	●	●
Starter motor	●	●
Water pump	●	●
Turbocharger	●	●
Exhaust and intake manifolds	●	●
Injectors and related lines	●	●



Standard



Not available, even at extra cost

The Canter[®] FE/FG Series

Models

Technology

Frames

Cab/Body

Costs

Warranty

Lower cost-of-ownership and superior features set the new standard in medium-duty trucks.

