

# VOLVO TRUCKS

## EMERGING TECHNOLOGY

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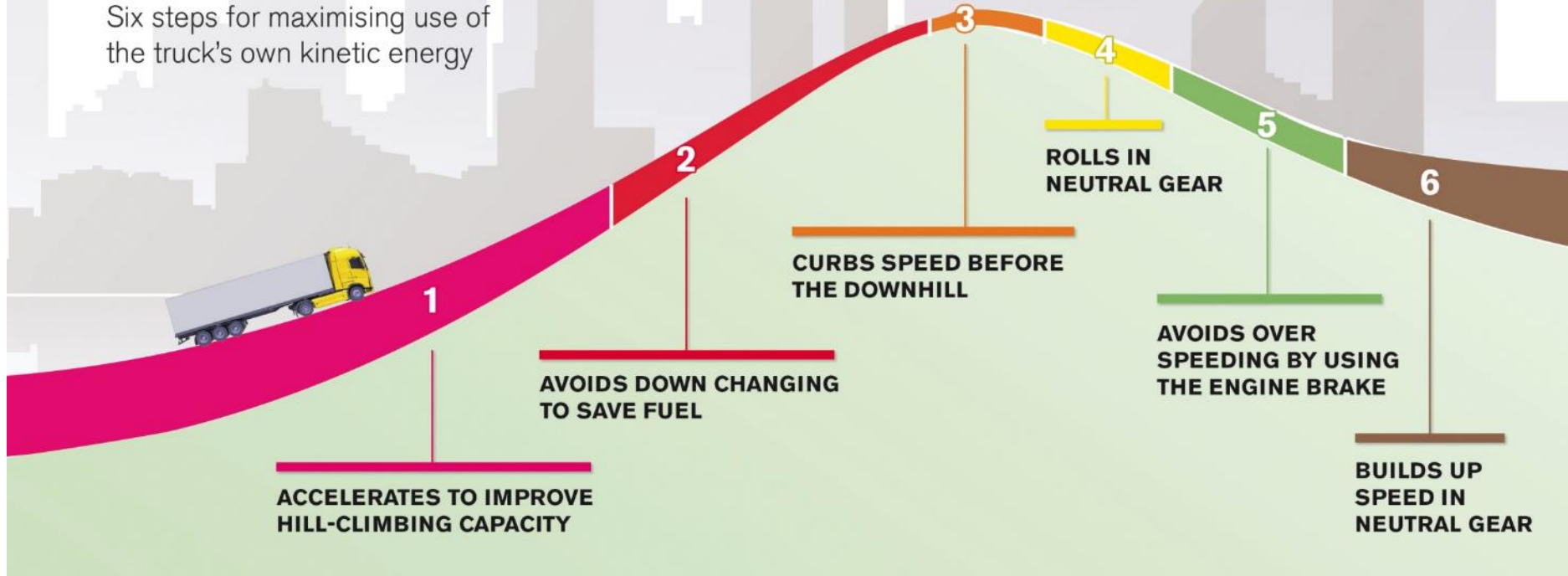
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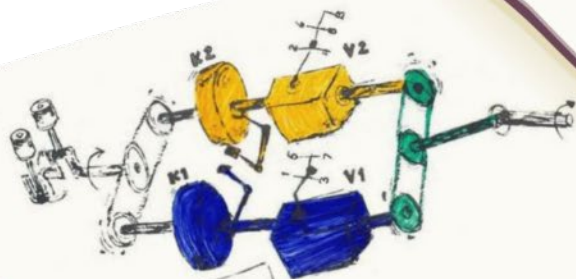
## HOW IT WORKS: I-SEE

Six steps for maximising use of the truck's own kinetic energy









Märk väl!!!  
Endast en kopping åt gången  
må vara ansluttn  
växelväxel.

# I-SHIFT DUAL CLUTCH

# 2

17





I-Shift Dual Clutch



### **I-SHIFT**

4X2 TRACTOR, 540HP  
39 TON GCW  
ECONOMY PROGRAM  
KICK-DOWN  
FULL THROTTLE

### **I-SHIFT DUAL CLUTCH**

4X2 TRACTOR, 540HP  
39 TON GCW  
ECONOMY PROGRAM  
KICK-DOWN  
FULL THROTTLE







### **I-SHIFT**

4X2 TRACTOR, 540HP  
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# VOLVO DYNAMIC STEERING EVOLUTION

Lane Keep Assist and Remote Control













## Remote driving

Volvo FM/FH trucks can be ordered from factory with a preparation variant supporting remote driving of the truck in speeds up to 10 km/h. The Volvo variant name for this preparation variant is EXSTER.

To order the variant EXSTER, the truck must in addition to BBM (variant ECBB-HIG), also be built with the Volvo dynamic steering system, VDS (variant ACTST-TO), EBS (variant BSYS-EBS) and an AMT-gearbox.

The variant EXSTER includes enabled support for external request on the BB-CAN for:

Steering angle request;

Second accelerator;

Request of forward, neutral and revers gears;

Proportional braking with the service brakes;

Remote control of the parking brake;

Brake and park feature.



**Note:** The variant EXSTER includes preparations in the truck to support requests for remote driving as CAN-signals from a Bodywork ECU (BBU) over the BB-CAN bus. The variant EXSTER does not include any radio receivers, hand control units or similar components. It has to be secured from the bodybuilder and by the user that these functions are used in a safe way, without causing any additional risks. It has also to be secured that the truck in all conditions can be stopped in a safe way, also during fault condition. Of these reasons is it required from Volvo that an independent, redundant emergency brake function that also stops the engine is installed by the bodybuilder.





# VBI - VOLVO BODYBUILDER INSTRUCTIONS



Home >> Body Builder Instructions >> FM,FH

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<a href="#">Body Builder Instructions</a>	<a href="#">Body Building Types</a>	01-SEP-16
<a href="#">FM,FH</a>	<a href="#">Welding</a>	01-SEP-16
<a href="#">FL,FE</a>	<a href="#">Fasteners</a>	01-OCT-18
<a href="#">VM</a>	<a href="#">Pre-punched Holes</a>	01-SEP-16
<a href="#">Chassis Drawings</a>	<a href="#">Extra Holes</a>	01-SEP-16
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**Section Property Calculator**

Variant Selection

Product Class FH/FM version  
FST8080  
FRAME300

Categories to add  
Side Rail  
Liner  
U  
L  
Box

Added Sections  
1-Side Rail  
2-Liner

Edit Delete Redraw  
Help Reset Print

Graphics Scaling  
0.7

section input form

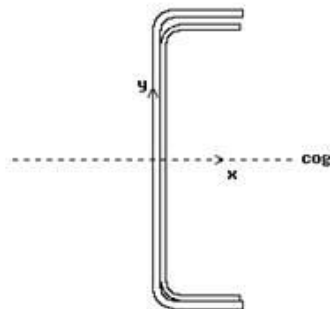
## Section Properties

**VOLVO**

2019 August 20

	Per Side ( x1)	Total ( x2)
Area	5664 mm <sup>2</sup>	11327 mm <sup>2</sup>
Center of gravity	-1.28 mm	-1.28 mm
Moment of inertia	6484.44 cm <sup>4</sup>	12968.89 cm <sup>4</sup>
Section Modulus, top (y=151.28 mm rel. cog)	428.64 cm <sup>3</sup>	857.29 cm <sup>3</sup>
Section Modulus, bottom (y=-148.72 mm rel. cog)	436.01 cm <sup>3</sup>	872.02 cm <sup>3</sup>
Max. moment , upper (y=150 mm)	158.60 kNm	317.20 kNm
Max. moment, lower (y=-150 mm)	161.32 kNm	322.65 kNm

Reinforcement	Name	A	I <sub>y</sub>	Z	H	Design Stress	Comments
Total ( x2)		0 mm <sup>2</sup>	0.00 cm <sup>4</sup>	0 mm	0 mm	0 MPa	





# VERA

Autonomous electric vehicle

# 4





# Thank you

