



VEHICLE MANUFACTURER	FORD
MODEL	RANGER
YEAR OF MANUFACTURE	2007-2012
ENGINE TYPE	DURATORQ
TRANSMISSION	MAZDA 4X2
VOLTAGE	12V



STONERIDGE DIGITAL KIT FOR THIS VEHICLE: 7800-079

PARTS LIST	QUANTITY	STONERIDGE PART NO.
SE5000 TACHOGRAPH	1	5002KRM
CD / TACHOGRAPH FACIA	1	6800-089
SENDER	1	9954-255
SENDER CABLE	1	7754-404
Shroud sealing kit	1	7800-006
DRIVER QUICKGUIDE	1	102022P/01
INSTALLATION KIT	1	7450-330
ADAPTOR KIT	1	7963-057
SIGNAL CONDITIONER	1	7800-041
CD/RADIO PLAYER	1	6800-090
APPLICATION SHEET	1	6800-303
TACHO MOTION KIT	1	7800-225
ISO HARNESS	1	6800-088

Ensure that 2nd Source of motion is set to C3 Enabled and C3 Speed Factor is set correctly within Sensor Test within MKIII Programmer on the Optimo.

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A KRM series SE5000 programmed using the SE5000 Configuration System can also be used in this vehicle.

To configure the SE5000 KRM using the SE5000CS, select the Ranger 2007-2012 icon within the Ford manufacturer type.

FITTING INFORMATION



KITAS 2 SENDER

STONERIDGE ADAPTOR

COMPLETE UNIT



1. Locate the original speed sensor



2. Disconnect the cable by pressing in on the tab and remove the original sensor by removing the nut using a 10mm socket.

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3. Remove the gear by sliding off the circlip.



4. Connect the original sensor back up And cable tie it securely out of the way.



5. Fit the gear onto the Stoneridge Adaptor, ensuring the new circlip is fitted.



6. Install Stoneridge Adaptor ensuring security screw provided is fitted securely.

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7. Screw Kitas 2 sender onto the Stoneridge Adaptor and seal the sender to the gearbox using the security wire and security screw.



- **9**. Feed the sender cable through the Blind grommet on the driver's side in engine bay.
- **11**. The Facia can then be clicked out of the surrounding panelling by prising it off.
- **12.** Remove the 2 screws which holds in the hazard warning button and also the 3 screws which holds in the Air Conditioning buttons.
- **13.** Unclip the white CD connector and slide out the aerial connection



8. Run sender cable along the gearbox Following the other cables ensuring it is cable tied regularly and at the opposite side to exhaust.



10. Remove original CD facia by removing the 3 knobs, then removing the 2 screws.



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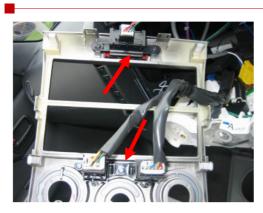
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 Fit the Hazard Warning and Air Conditioning buttons into the new CD / Tachograph facia.



16. Locate the fuse box to the bottom right hand side of the steering wheel.

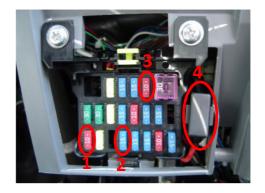
18. Use the wires from the following fuses to power the tachograph:-Wire from rear of fuse marked 1 goes to connector A1 of tachograph through a 1 amp fuse, marked 4.Wire from rear of fuse marked 2 goes to connector A2 of tachograph.Wire from rear of fuse marked 3 goes to Connector A3 of tachograph



 Install the tachograph cage before Clipping on the new facia and ensure the 2 screws are secure before replacing the knobs.



17. Remove the fuse box by unscrewing the 2 screws and unclipping the clasp at The bottom.



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Whilst we have endeavoured to ensure the accuracy of the information supplied, Stoneridge Electronics cannot be held responsible for any errors or omissions. It is the installer's responsibility to ensure compliance with specific vehicle manufacturers repair procedures, especially with regard to the procedure for disconnection/reconnection of the battery. Failure to comply with the vehicle manufacturers instructions may result in personal injury and/or component damage/data

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19. The Ground connections for A5 and A6 of the tachograph can be picked up from the common ground bolt near the accelerator.



21. The sender cable and A & D connectors are fed behind cluster to the new facia.

23. The CD/Radio can now be connected and installed using the ISO harness.

- 24. The D6 on the tachograph must be set To Speedometer using the MKII Programmer and the Speedo output factor should be set to 4971.
- **25**. The Tachograph is now ready for calibration



20. Attach the signal conditioner between the Blue wire with Silver flashes behind cluster and D6 of the tachograph



22. The tachograph can now be connected and installed.



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- **26**. The 2nd Source of motion is obtained By using the GPS Module and cable Harness as shown.
- **28**. The GPS Module should be placed in a suitable area within the cab, preferably in an area next to the windscreen.



27. The cable harness is connected directly Inline with the tachograph power cable When connecting to the tachograph as shown.

PROGRAMMING PARAMETERS FOR FITTING THIS VEHICLE WITH AN SE5000 KRM SERIES TACHOGRAPH

Note. Read the parameters of the tachograph to be replaced, and note all connections to the tachograph, paying particular attention to Vpulse, dual axle configuration, D8 serial data, Revs input etc.

The below vehicle settings are the default vehicle settings which should be applied. However, individual vehicle specifications may vary.

Default setting for D6 outputs that can be switched between ISO & Open collector (o/c) is ISO.

The vehicle must be calibrated in an approved manner after fitting.

The road speed limiter must be calibrated after a replacement tachograph is fitted. The illumination of the KRM series tachograph can be changed between White & Green, please select the colour best suited to the vehicle illumination.

If you are in doubt regarding the replacement of any tachograph with a KRM series product please call: Workshop Support on 0870 887 9200 option2, option1. or email workshop.support@stoneridge.com

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TACHOGRAPH	CANBUS	CAN TYPE	CAN TERMINATION	ILLUMINATION	REVS INPUT	SPEED LIMITER SETTING	D6
5002KRM	OFF	N/A	N/A	A2	C3	90km/H	ISO

READ ALL DATA LOG						
PARAMETER	VALUE/SETTING	PARAMETER	VALUE/SETTING			
W-FACTOR		Def. KEY ON/OFF				
K-FACTOR		RPM FACTOR				
L-FACTOR		D4 PIN FUNCTION				
TYRE SIZE		D5 PIN FUNCTION				
VIN		D6 PIN FUNCTION				
VRN		D7 PIN FUNCTION				
VEH. REG. NATION		SERIAL DATA OUT (D8)				
PREF. LANGUAGE		C1 PIN FUNCTION				
CURRENT TIME		FILTER PIN B3				
CURRENT DATE		CAN TRIP RESET				
INSTALL DATE		CAN WAKE UP				
ACTIVATION TIME	READ ONLY. –DATE FORMAT / UNACTIVATED	RD CAN CONFIG				
SERVICE DELAY		ADD. EVENT REC.				
ODOMETER		ENG. SPEED REC.				
O/P SHAFT FACTOR		VRESD				
SPEEDO OP FACTOR		VEH. SPEED REC.				
RESET HEARTBEAT		VRVSD				
LOW SPEED LIMIT		PRE-OVERSPEED				
BACKLIGHT SELECT		PRE-NEXT CALIBRATION				
ILLUMINATION LEVEL		WARRANTY TIME				
ILLUMINATION OFF		LOW POWER BAND				

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