

FORD Standard Transient Pulse Generator

ISS-T1321

Simulator to generate Transient Pulse as required in FORD's EMC standard (EMC-CS-2009) for surge test onto automotive electronic devices. The generation waveforms are Pulse A1 / A2-1 / A2-2 / C1 / C2 surges standardized as RI130 & CI220, and Waveform F fluctuation standardized as CI260.



Basic specifications

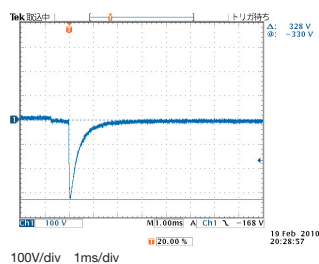
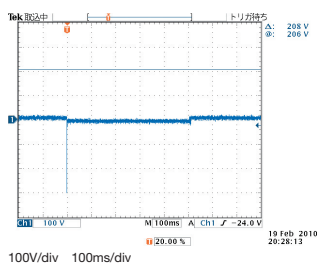
Parameter	Specification
DC Max Input Voltage	DC 13.5 V
DC Max Output Current	10 A・50 A (depends on waveform selection)
DC Input Breaker	50 A
Test Timer	1 ~ 999S (memorizes last test settings for up to 3 months)
Switching Relay	KUP-1415-12 (by Potter & Brumfield) displays the relaying accumulation * replacement recommended after 100 hours.
Emergency Stop	Red colored mushroom shape type. (push-lock-turn-reset type) Pulse output stop / DC output stop.
Power supply	AC 100 V-AC 240 V $\pm$ 10 % 50 VA
Dimensions	Approx. W430 mm $\times$ D322 mm $\times$ H 200 mm (protrusion excluded)
Weight	Approx. 12 kg

Output waveform and Current value

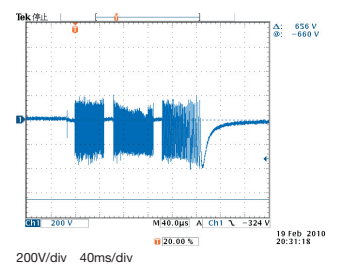
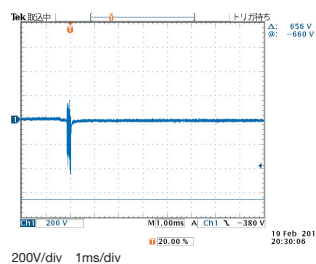
Test item	Output waveform	Mode	Required injection time *1	Max output current	Output termina
RI130	A2-1	2	60s	*2	C, D terminals(BNC terminals)
		3			
	A2-2	2			
		3			
CI220	A1	1	120s	10	DC LINE OUT (C, D terminals are short circuited)
		2	20s		
	A2-1	1	20s		
		2			
		3			
	A2-2	2			
		3			
	C-1	2			
		3			
	C-2	2			
3					
CI260	Waveform F	-	60s	10	DC LINE OUT (C, D terminals are open)

*1 : Injection times are variable. *2: Direct connection to 15-N1583 coupling test fixture.

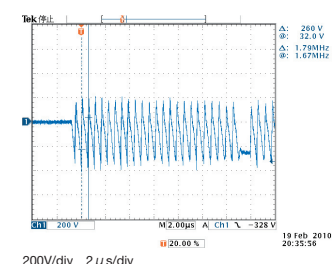
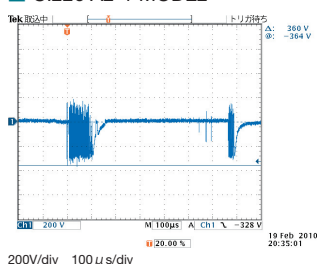
CI220 A1 MODE1



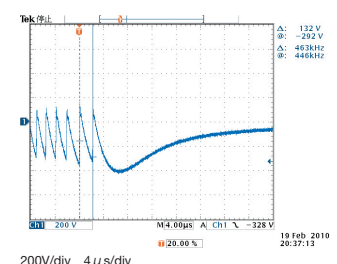
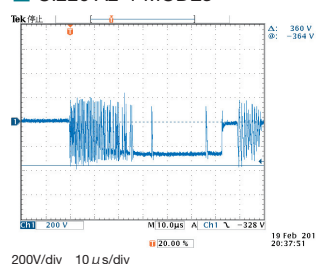
CI220 A2-1 MODE1



CI220 A2-1 MODE2

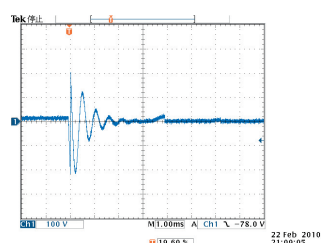
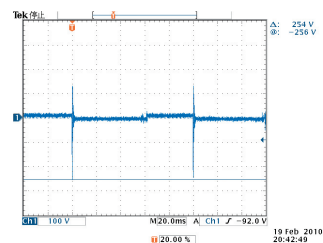


CI220 A2-1 MODE3

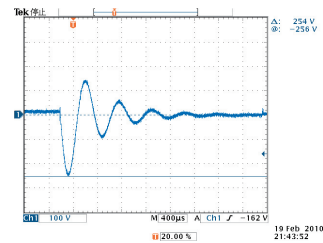
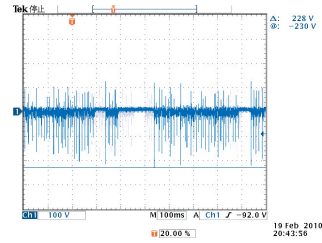


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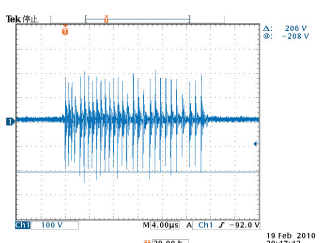
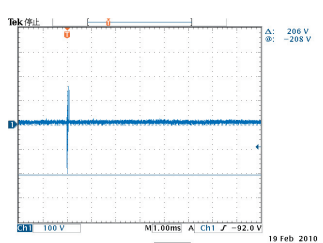
CI220 A2-2 MODE2



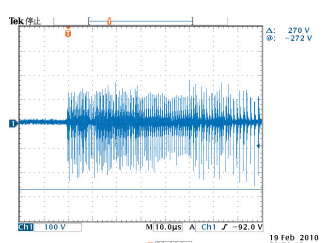
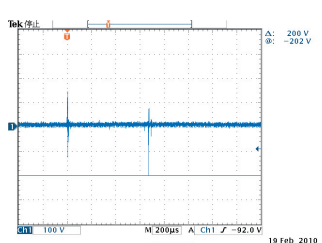
CI220 A2-2 MODE3



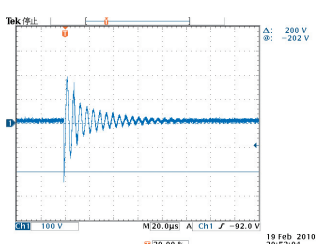
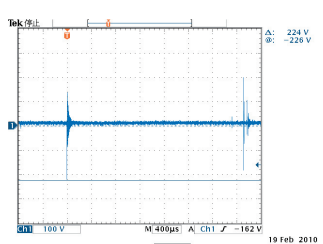
CI220 C1 MODE2



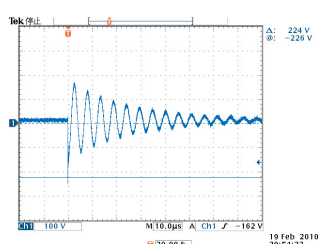
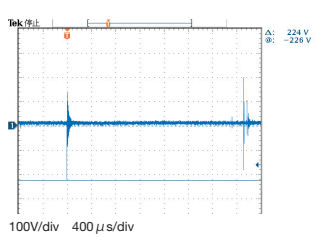
CI220 C1 MODE3



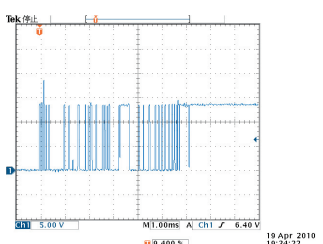
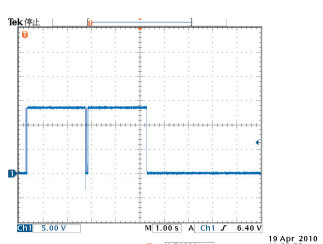
CI220 C2 MODE2



CI220 C2 MODE3



CI260 Waveform F

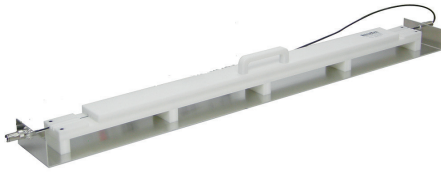


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Test Fixture for FORD standard RI130/RI150

15-N1583

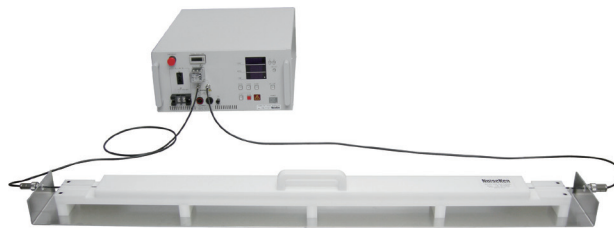
Harness injection fixture to perform RI130 / RI150 test required in FORD Standard EMC-CS-2009
(Allows to perform RI130 test in combination with ISS-T1321).



Test fixture overall appearance

Basic specifications

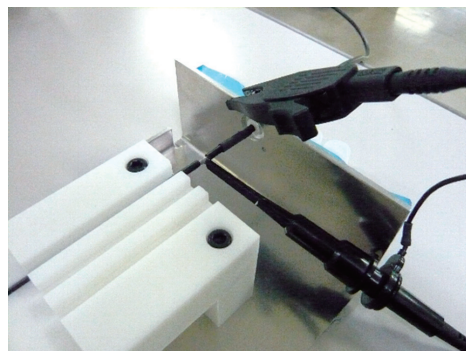
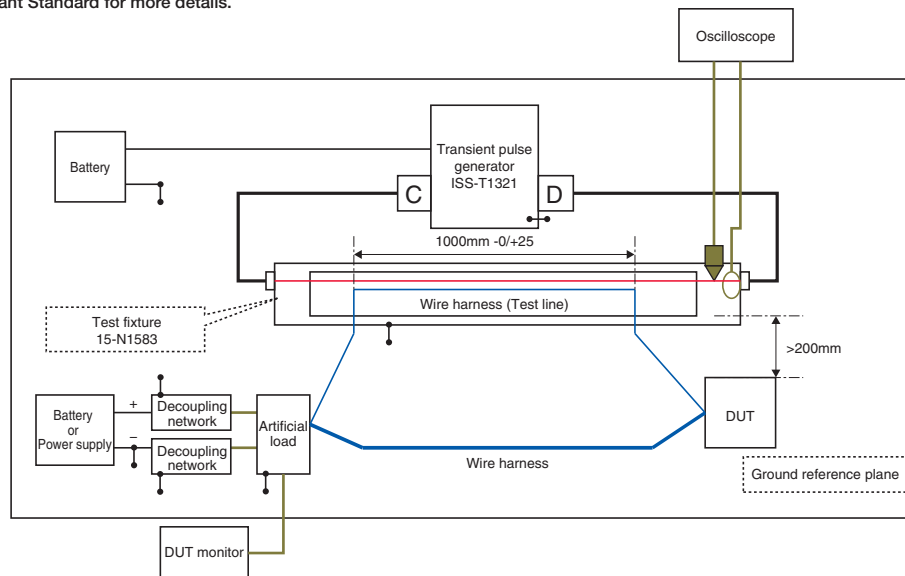
Connector	N Type (Female contact)
Source wire	AWG 14 copper wire (with cover)
Dimensions	(W)1306 × (H)72 × (D)152 mm (protrusions excluded)
Weight	Approx. 7.5 kg
Equipped cable	Connection cable to ISS-T1321 × 2 pcs.



Connection setup

[Test setup] RI130

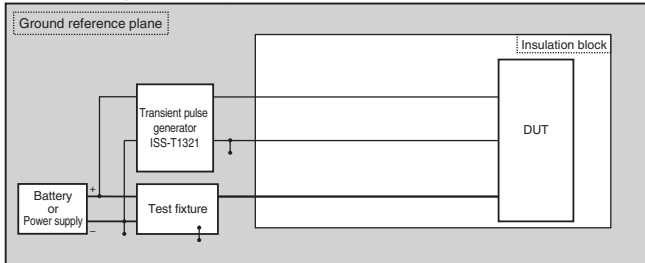
* Please refer to the relevant Standard for more details.



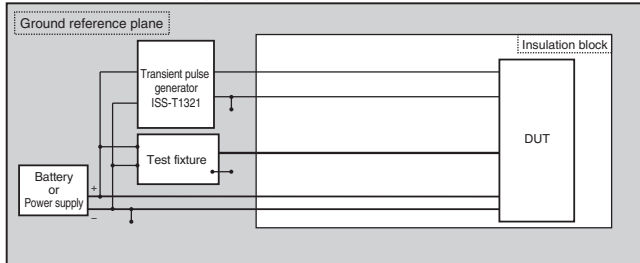
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■ 【Test setup】 CI220

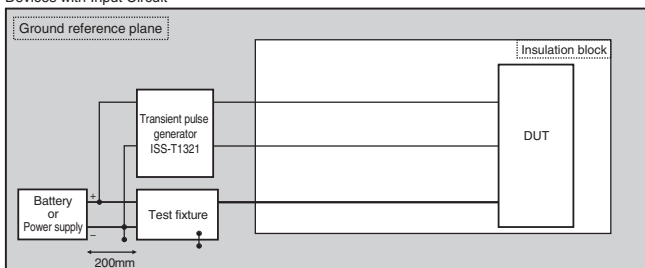
- Devices with a Single Power Supply Circuit



- Devices with Two Power Supply Connections



- Devices with Input Circuit



* Please refer to the relevant Standard for more details.

FORD Standard CI250 Transformer Unit

06-N1588

Ground offset transformer for conducting the CI250 test specified in the FORD standard "EMC-CS-2009".

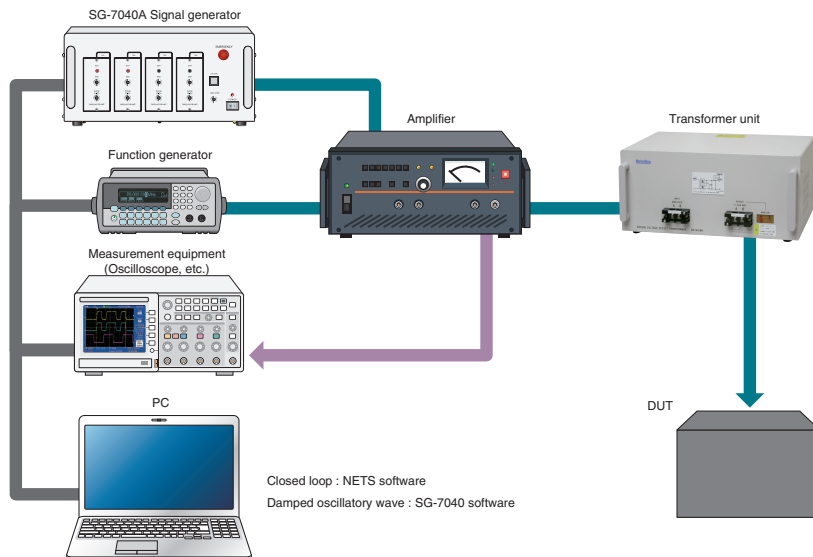
The test is performed in combination with the DC voltage fluctuation test system (SG-7040A System).



Overall appearance

Basic specifications

Frequency Characteristics	30 Hz ~ 250 kHz
Input Signal	200 W max
Output Current	DC 50 A max
Coupling Ratio	4 : 1 (Input : Output)
Dimensions	Approx. (W)430 × (D)322 × (H)200 mm (protrusion excluded)



We can also offer testing and measuring instruments complying with other standards.