DM

DIAGNOSIS MANUAL
COMMON RAIL SYSTEM

V3800-CR-TE4,
V3800-CR-TIE4
(FOR TRACTOR)

Kubota

KiSC issued 09, 2020 A

5. DIAGNOSTIC PROCEDURE BY DTC

[1] DTC LIST

Name		NE-G phase shift
ISO 14229 P-Code		P0016
J1939-73	SPN	636
	FMI	7
DTC Name		NE-G phase shift
Management Unit for Detected Part		NEGUM
Detection item		• Large phase shift between NE (crankshaft position sensor) pulse and G (camshaft position sensor) pulse
DTC Set Preconditions		• Engine is operating above low idle speed • Battery voltage is normal • Sensor supply voltage VCC# is normal • NE signal is normal • G signal is normal • Coolant temperature is 10 °C (50 °F) or higher
DTC set parameter		(Approximate) • Phase difference between NE pulse and G pulse is within ±0.26 rad (±15 °)
Time to action or number of error detection		• 10 times or more
System Action		• None
Behaviour During Malfunction		(Invalid G signal) • Engine hesitates at start-up
Engine Warning Light		• ON
Recovery from error		• Diagnostic counter =zero

9Y1200192CRS0607US0

Name		No communication with EGR	CAN1 Bus off
ISO 14229 P-Code		U0076	U0077
J1939-73	SPN	523578	523604
	FMI	2	2
DTC Name		No communication with EGR	CAN1 Bus off
Management Unit for Detected Part		CANOPENEGR	CANB1
Detection item		• No communication with EGR	• CAN1 +B / GND short circuit or high traffic error
DTC Set Preconditions		• Battery voltage is normal • Starter Switch signal (ECU: B-54 terminal) is not activated	• Battery voltage is normal • Key switch is ON
DTC set parameter		• Interruption of CAN	• CAN1 Bus off
Time to action or number of error detection		• 1.3 sec. or more	• 2 sec. or more
System Action		• Output limitation: Approximately 75 % of normal condition • EGR stop	• Output limitation: Approximately 75 % of normal condition • EGR stop
Behaviour During Malfunction		• Insufficient output • Worsening exhaust gas performance	• Insufficient output • Transmitted data is invalid
Engine Warning Light		• ON	• ON
Recovery from error		• Key switch turn OFF	• Key switch turn OFF

9Y1200192CRS0660US0

(7) Intake Air Volume: Low (DTC P0101 / 132-1)

Behaviour during malfunction:
- Insufficient output

Detection item:
- Engine inlet air mass flow rate lacking (Disconnect turbo blower intake hose)

DTC set preconditions:
- Engine is operating [1000 min^{-1} (rpm) or higher]
- Coolant temperature is 15 °C (59 °F) or higher (Coolant temperature sensor is normal)
- MAF sensor is normal
- EGR valve is normal
- Intake throttle valve is normal
- Battery voltage is normal

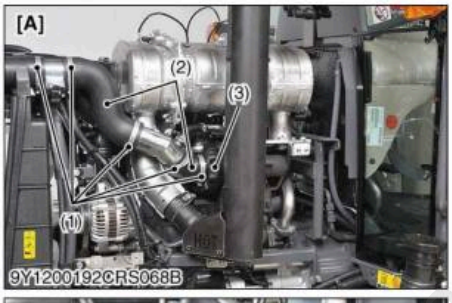
DTC set parameter:
- Engine Inlet Air Mass Flow Rate: less than half of target value

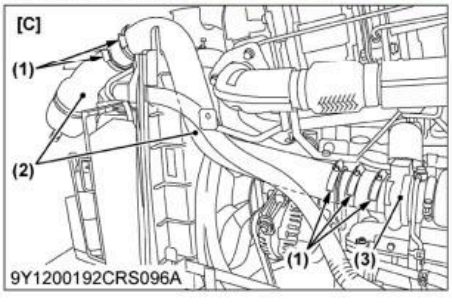
Engine warning light:
- ON

System action:
- Output limitation: Approximately 50 % of normal condition
- Speed limitation (Accelerator limitation: 50 %)
- EGR stop

Recovery from error:
- Key switch turn OFF

9Y1200192CRS0675US0





1. Check the Air Intake System

1. Check in accordance with "6.[1] AIR INTAKE SYSTEM INSPECTION PROCEDURE". (Refer to page 1-S300)

■ **NOTE**
- **Check if the suction hose of the turbo blower does not come off. If the hose comes off, install it.**
- **Check the clogging condition of the air cleaner. If it is very dirty, replace the new one.**

OK	Go to "2. DTC Judgment".
NG	Repair in accordance with "6.[1] AIR INTAKE SYSTEM INSPECTION PROCEDURE". (Refer to page 1-S300)

(1) Hose Clamp
(2) Hose
(3) Turbocharger

[A] M60 Series
[B] M-GX Series
[C] M5 Utility Narrow Series and M5-AUS Series.

9Y1200192CRS0925US0

(38) Common 2 System Injector Drive Circuit Open (DTC P2149 / 523524-2)

Behaviour during malfunction:
- Insufficient output
- Large vibration
- Worsening exhaust gas performance
- Engine stops in some case

Detection item:
- Wiring harness open circuit

DTC set preconditions:
- Engine is operating
- Battery voltage is normal
- During injection
- CPU is normal

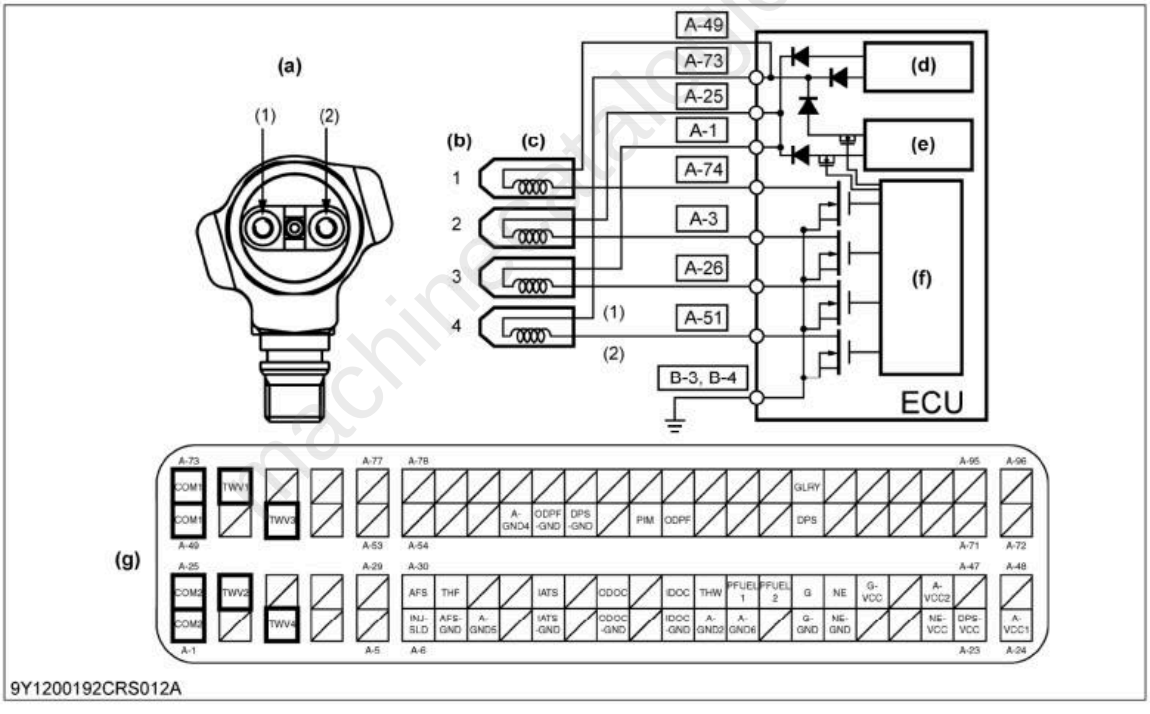
DTC set parameter:
- When wiring harness open circuit

Engine warning light:
- ON

System action:
- Output limitation: Approximately 50 % of normal condition
- Speed limitation (Accelerator limitation: 50 %)
- EGR stop

Recovery from error:
- Key switch turn OFF

9Y1200192CRS0799US0



9Y1200192CRS012A

(1) Terminal COMMON
(2) Terminal TWV

(a) Terminal Layout
(b) Engine Cylinder No.
(c) Injector
(d) Rated Amperage Circuit
(e) High Voltage Generation Circuit
(f) Control Circuit
(g) ECU Connector 1 (A: 96 Pin)

9Y1200192CRS0704US0

Full Version Available

Kubota V3800-CR-TIE4 Engine Diagnosis Manual

This is a short preview. The complete manual contains all chapters, wiring diagrams, torque specifications and full service procedures.