1. CHECK USING THE DTC CHECK SHEET

DTC check sheet

	(A)	(B)						(C)															(D)						
			EGI	CVT	VDC	BIU	A/B	A/C	EPS	KPS	MET	MFD	HL	STR	DCCD	EGI	CVT	VDC	BIU	A/B	A/C	EPS	KPS	MET	MFD	HL	STR	DCCD	CAN-HS
		U0073	U0100	U0101	U0122	U0140	U0151	U0164	U0131	U0327	U0155	U0156	U0181	U0126	U1135	U0401	U0402	U0416	U0422	U0452	U0424	U0420	U0427	U0423	U0457	U0482	U0428	U1436	U1201
VDC		-		-	-	-	-	-	-	-	_	-	-	_	_	-	_	-	-	-	-	-	-	-	_	-	_	_	-
HL			_	_			-	-	-	-	_	_	_	-	-	_	_	_		-	-	_	_	-	_	_	_	_	-
KPS							-	-	-	-		_	-	-	-		-	_		-	-	-	_	-	_	_	-	-	-
BIU						-	-		-			_	_	1	1				_	-		_			-	-	-	-	-
MFD			-	_	1	ı	ı	-	ı	ı	ı	1	-	-	-	_	1	-	-	_	_	_	1	ı	1	1	1	1	
A/C							1	_	1	1		1	_	-	-					_	_	_	1		1	-	1	1	_
MET											ı	-		-		_			_	_	_	_	1	1	1	-	1	1	_
STR		_	_	_	1	1	1	-	1	1	1		_	-	-	_	1	_	_	_	_	_	1	1	1	-	1	1	_
CVT				_			_		-	-		_	_	-	-		_			_		_	-		_	_	_	_	_
A/B			_	_	_	_	_	-	-	_	-	_	_	-	-	_	_	_	_	_	_	_	-	_	_	_	_	_	_
EPS				_		-	-	-	_	-		_	-		-		_		_	_	_	_	_	_	_	_	_	_	-
DCCD							-	-	_	-		_	-	_	_		_			_	_	_	_		_	_	_	_	
EGI			_				-	-	-	-		_	_	_	_	_				_	_	_	-		_	-	-	_	_

(A) Installation check VDC: VDC CM STR: Steering angle sensor

 (B)
 Bus off detection
 BIU: Body integrated unit
 CVT: TCM

 (C)
 Data no-receive detection
 MFD: High grade MFD
 A/B: AB CM

 (D)
 Data abnormal detection
 A/C: A/C control panel
 DCCD: DCCD CM

MET: Combination meter EGI: ECM

EPS: Electric power steering CM

1) Module installation check

- (1) Write "-" marks in the field for installation check if the vehicle to be inspected does not have relevant module.
- (2) Write "-" marks in all blank fields on the same row that the "-" mark has filled in.
- 2) Bus off detection / data not received

NOTF:

It becomes impossible for CAN diagnostic module to read DTC, if there is a current malfunction of open harness (data not received). If this occurs, perform the "Check using the check sheet of communication for initializing" <Ref. to LAN(diag)-13, CHECK USING THE CHECK SHEET OF COMMUNICATION FOR INITIALIZING, COMMUNICATION FOR INITIALIZING IMPOSSIBLE, Subaru Select Monitor.>, and use this sheet to confirm that the corresponding part becomes the past malfunction.

- (1) Mark "X" in the field corresponding to the DTCs that has been detected by each module in the check sheet.
- (2) Identify and repair the faulty part by referring to the example of DTC data not received and the DTC matrix. <Ref. to LAN(diag)-73, EXAMPLE OF DTC DATA NOT RECEIVED, LIST, List of Diagnostic Trouble Code (DTC).> <Ref. to LAN(diag)-75, DTC MATRIX, LIST, List of Diagnostic Trouble Code (DTC).>

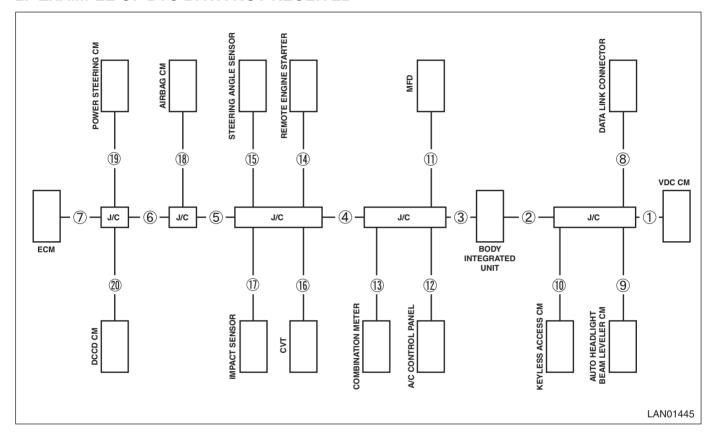
3) Data abnormal detection

NOTE:

If any "BUS OFF" or "NO-RECEIVE DATA" condition is detected, perform the diagnosis for these problems first.

- (1) If several modules detect the DTC for the same module, replace the detected module.
- (2) If one module detects the DTC, replace the module of the detected side.
- (3) If it does not return to the normal operation, re-install the module which has been replaced, and replace the module of the detected side.
- (4) If it does not return to the normal operation, replace both modules.

2. EXAMPLE OF DTC DATA NOT RECEIVED



LAN SYSTEM (DIAGNOSTICS)

• Vicinity of No. 7 ECM (engine type: EJ)

	(A)	(B)						(C)															(D)						$\overline{}$
	()	(-)	EGI	CVT	VDC	BIU	A/B	A/C	EPS	KPS	MET	MFD	H	STR	DCCD	EGI	CVT	VDC	BIU	A/B	A/C	EPS	KPS	MET	MFD	H	STR	DCCD	CAN-HS
		U0073	U0100	U0101	U0122	U0140	U0151	U0164	U0131	U0327	U0155	U0156	U0181	U0126	U1135	U0401	U0402	U0416	U0422	U0452	U0424	U0420	U0427	U0423	U0457	U0482	U0428	U1436	U1201
VDC		-	X	-	-	-	-	-	-	-	-	-	-	_	_	_	-	-	-	-	-	-	-	-	-	-	-	-	_
HL			-	_			-	_	-	-	-	-	-	_	_	_	_	_		_	_	-	_	_	_	_	_	-	-
KPS			X				_	-	-	-		-	-	_	_		_	_		_	_	-	_	_	_	_	_	-	-
BIU			X			_	_		_			_	_	_	_				_	_		_			_	_	_	_	-
MFD			-	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	
A/C			X				_	_	_	_		_	_	-	-					_	-	_	_		-	-	-	-	-
MET			X								_	_		_		_			-	-	_	-	-	_	-	-	-	-	_
STR		_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	-	_	-	-	_	-	-	_	-	-	-	-	_
CVT			X	_			_		_	_		_	-	_	_		_			-		-	-		-	-	-	_	_
A/B			-	_	_	-	_	-	_	_	_	_	_	_	_	_	_	-	_	_	-	_	_	-	_	_	_	-	_
EPS			X	_		_	-	_	_	_		_	_		_		_		_	_	_	_	_	_	_	_	_	-	_
DCCD			X	-			_	_	_	-		_	_	_	_		_			_	_	_	_		_	_	_	-	\Box
EGI			-				_	-	-	-		-	-	_	_	-				-	-	-	-		-	-	-	-	_

LAN01469

LAN01468

• Vicinity of No. 15 steering angle sensor

	(A)	(B)						(C)															(D)						
			EGI	CVT	VDC	BIU	A/B	A/C	EPS	KPS	MET	MFD	爿	STR	DCCD	EGI	CVT	VDC	BIU	A/B	A/C	EPS	KPS	MET	MFD	HL	STR	DCCD	CAN-HS
		U0073	U0100	U0101	U0122	U0140	U0151	U0164	U0131	U0327	U0155	U0156	U0181	U0126	U1135	U0401	U0402	U0416	U0422	U0452	U0424	U0420	U0427	U0423	U0457	U0482	U0428	U1436	U1201
VDC		_		_	-	-	-	-	-	-	_	_	-	-	-	_	_	-	-	-	_	_	-	-	-	-	_	-	_
HL			_	_			_	-	-	-	_	_	-	-	-	-	-	-		-	_	_	-	-	-	-	_	-	_
KPS							-	-	-	-		-	-	_	_		-	-		-	-	-	-	-	-	-	-	-	_
BIU						-	-		-			-	-	-	-				-	-		-			_	_	-	_	-
MFD			-	-	-	-	-	-	-	-	-	-	-	_	_	-	-	_		-	-	-	-	-	_	_	-	_	
A/C							-	-	-	-		-	-	_	_					-	-	-	-		_	_	-	_	_
MET											-	-		_		-			-	-	-	-	-	-	_	_	-	_	_
STR		-	-	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
CVT				_			-		_	_		_	_	_	_		_			_		_	_		_	_	_	_	_
A/B			-	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
EPS				_		_	-	-	_	_		_	_	X	_		_		_	_	_	_	-	_	_	_	_	_	_
DCCD				-			-	_	_	-		-	-	-	_		_			-	_	_	-		_	_	_	_	
EGI			-				-	_	-	-		-	-	_	_	_				_	_	_	-		_	_	_	_	_

LAN(diag)-74

LAN SYSTEM (DIAGNOSTICS)

3. DTC MATRIX

NOTE:

Perform the following procedure when using this chart in which the detailed trouble mode corresponds to the trouble status.

- 1. Search the trouble mode that corresponds to the vehicle status from the chart.
- 2. Perform the repair that corresponds to the trouble mode.

	Condition	a		DTC rea	ading resul	t from eac	ch module	using Sub	aru Selec	t Monitor
Modules (Which module vicinity)	Detailed location (Which location)	Trouble mode (What kind)	Vehicle status (Current status)	ECM	TCM					AHL
	Trouble mod	de 1				Ve	hicle statu	us 1		
	Trouble mod	de 2				Ve	hicle statu	ıs 2		
	Trouble mod	de n				Ve	hicle statu	ıs n		
	Condition	n					Indicator			
Modules (Which module vicinity)	Detailed location (Which location)	Trouble mode (What kind)	Vehicle status (Current status)	READY	HYBRID	:	:	:	:	OTHER WARNING INDICATIONS
	Trouble mod	de 1				Ve	hicle statu	ıs 1		
	Trouble mod	de 2				Ve	hicle statu	ıs 2		
	· · · · · · · · · · · · · · · · · · ·									

LAN SYSTEM (DIAGNOSTICS)

1. CAN communication circuit open (DTC)

NOTE:

- If the module has a limit of DTC memory and the number of DTC occurrence exceeds the limit, older DTCs are preferentially stored.
- "Trouble exists" is referred to as the status before performing inspection and repair. "Trouble existed" is referred to as the status before performing DTC clear after repair.

	Cond	dition				DT	C reading r	esult from e	each module	e using Sub	aru Select	Monitor				
Control module	Detailed location	Trouble mode	Vehicle status	EGI	CVT	VDC	BIU	A/B	A/C	EPS	KPS	MET	MFD	HL	STR	DCCD
	Hi side		Trouble exists	Current U0122 Past Same as above	Current U0122 Past Same as above	Communi- cation failure	Current U0122 Past Same as above	Current None Past None	Current U0122 Past Same as above	Current U0122 Past Same as above	Current U0122 Past Same as above	Current U0122 Past Same as above	Current None Past None	Current U0122 Past Same as above	Current None Past None	Current U0122 Past Same as above
VDC Vicinity	Lo side Both sides	Open circuit	Trouble existed	Current None Past U0122	Current None Past U0122	Current None Past U0073 U0100 U0126 U0140	Current None Past U0122	Current None Past None	Current None Past U0122	Current None Past U0122	Current None Past U0122	Current None Past U0122	Current None Past None	Current None Past U0122	Current None Past None	Current None Past U0122
			Trouble exists	Current None Past None	Current None Past None	Current None Past None	Current U0327 Past Same as above	Current None Past None	Current None Past None	Current None Past None	Communi- cation failure	Current U0327 Past Same as above	Current None Past None	Current None Past None	Current None Past None	Current None Past None
KPS Vicinity	Hi side Lo side Both sides	Open circuit	Trouble existed	Current None Past None	Current None Past None	Current None Past None	Current None Past U0327	Current None Past None	Current None Past None	Current None Past None	Current None Past U0100 U0101 U0122 U0140 U0155	Current None Past U0327	Current None Past None	Current None Past None	Current None Past None	Current None Past None
HL	Hi side		Trouble exists	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current U0181 Past Same as above	Current None Past None	Communi- cation failure	Current None Past None	Current None Past None
Vicinity	Lo side Both sides	Open circuit	Trouble existed	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past U0181	Current None Past None	Current None Past U0122 U0140	Current None Past None	Current None Past None
BIU (VDC side)	Hi side Lo side	Open	Trouble exists	Communi- cation failure	Communi- cation failure	Current U0073 U0100 U0101 U0126 U0140 Past Same as above	Communi- cation failure	Communi- cation failure	Communi- cation failure	Communi- cation failure	Current U0100 U0101 U0140 U0155 Past Same as above	Communi- cation failure	Communi- cation failure	Current U0140 Past Same as above	Communi- cation failure	Communi- cation failure
Vicinity	Both sides	circuit	Trouble existed	Current None Past U0122	Current None Past U0122	Current None Past U0073 U0100 U0101 U0126 U0140	Current None Past U0122 U0327	Current None Past None	Current None Past U0122	Current None Past U0122	Current None Past U0100 U0101 U0140 U0155	Current None Past U0122 U0327	Current None Past None	Current None Past U0140	Current None Past None	Current None Past U0122
BIU (EGI side)	Hi side Lo side		Trouble exists	Communi- cation failure	Communi- cation failure	Current U0100 U0101 U0126 Past Same as above	Current U0100 U0101 U0164 U0155 Past Same as above	Communi- cation failure	Communi- cation failure	Communi- cation failure	Current U0100 U0101 U0155 Past Same as above	Communi- cation failure	Communi- cation failure	Current None Past None	Communi- cation failure	Communi- cation failure
Vicinity	Both sides	circuit	Trouble existed	Current None Past U0122 U0140	Current None Past U1235 U0122 U0140	Current None Past U0100 U0101 U0126	Current None Past U0100 U0101 U0164 U0155	Current None Past None	Current None Past U0122 U0140	Current None Past U0122	Current None Past U0100 U0101 U0155	Current None Past U0122 U0140	Current None Past None	Current None Past None	Current None Past None	Current None Past U0122 U0140

LAN SYSTEM (DIAGNOSTICS)

	Conc						DTC readii	ng result fro	m each mo	dule using	Subaru Sel	ect Monitor				
Control module	Detailed location	Trouble mode	Vehicle status	EGI	CVT	VDC	BIU	A/B	A/C	EPS	KPS	MET	MFD	HL	STR	DCCD
	الدام ال		Trouble exists	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Commu- nication failure	Current None Past None	Current None Past None	Current None Past None
MFD Vicinity	Hi side Lo side Both sides	Open circuit	Trouble	Current None	Current None	Current None	Current None	Current	Current None	Current None	Current None	Current None	Current None Past	Current	Current None	Current None
			existed	Past None	Past None	Past None	Past None	Past None	Past None	Past None	Past None	Past None	U0073 U1201	Past None	Past None	Past None
			Trouble	Current None	Current U0164	Current None	Current U0164	Current None	Commu-	Current None	Current None	Current U0164	Current None	Current None	Current None	Current None
	Lli oido		exists	Past None	Past Same as above	Past None	Past Same as above	Past None	nication failure	Past None	Past None	Past Same as above	Past None	Past None	Past None	Past None
A/C Vicinity	Hi side Lo side Both sides	Open circuit	Trouble existed	Current None Past None	Current None Past U0164	Current None Past None	Current None Past U0164	Current None Past None	Current None Past U0073 U0100 U0155	Current None Past None	Current None Past None	Current None Past U0164	Current None Past None	Current None Past None	Current None Past None	Current None Past None
				None	00164	None	00164	None	U0140 U0122	None	None	00164	None	None	None	None
			Trouble exists	Current U0155 Past Same as above	Current U0155 Past Same as above	Current None Past None	Current U0155 Past Same as above	Current None Past None	Current U0155 Past Same as above	Current U0155 Past Same as above	Current U0155 Past Same as above	Commu- nication failure	Current None Past None	Current None Past None	Current None Past None	Current U0155 Past Same as above
MET Vicinity	Hi side Lo side Both sides	Open circuit	Trouble existed	Current None Past U0155	Current None Past U0155	Current None Past None	Current None Past U0155	Current None Past None	Current None Past U0155	Current None Past U0155	Current None Past U0155	Current None Past U0073 U0100 U0122 U0131 U0140 U0151	Current None Past None	Current None Past None	Current None Past None	Current None Past U0155
			Trouble exists	Current None	Current None	Current U0126	Current None	Current None	Current None	Current U0126 Past	Current None	Current None	Current None	Current None	Commu- nication	Current None
STR Vicinity	Hi side Lo side Both	Open circuit	GAISIS	Past None Current	Past None Current	Past None Current	Past None Current	Past None Current	Past None Current	Same as above Current	Past None Current	Past None Current	Past None Current	Past None Current	failure Current	Past None Current
Violity	sides	oouit	Trouble existed	None Past None	None Past None	None Past U0126	None Past None	None Past None	None Past None	None Past U0126	None Past None	None Past None	None Past None	None Past None	None Past None	None Past None
			Trouble exists	Current U0101 Past Same as above	Commu- nication failure	Current None Past None	Current U0101 Past Same as above	Current None Past None	Current U0101 Past Same as above	Current None Past None	Current U0101 Past Same as above	Current U0101 Past Same as above	Current None Past None	Current None Past None	Current None Past None	Current None Past None
CVT Vicinity	Hi side Lo side Both sides	Open circuit	Trouble existed	Current None Past U0101	Current None Past U0100 U0122 U0140 U0155	Current None Past None	Current None Past U0101	Current None Past None	Current None Past U0101	Current None Past None	Current None Past U0101	Current None Past U0101	Current None Past None	Current None Past None	Current None Past None	Current None Past None

LAN SYSTEM (DIAGNOSTICS)

	Cond	ition				DT	C reading i	esult from e	each modul	e using Sub	aru Select	Monitor				
Control module	Detailed location	Trouble mode	Vehicle status	EGI	CVT	VDC	BIU	A/B	A/C	EPS	KPS	MET	MFD	HL	STR	DCCD
A/B	Hi side Lo side	Open	Trouble exists	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Commu- nication failure	Current None Past None	Current None Past None	Current None Past None	Current U0151 Past Same as above	Current None Past None	Current None Past None	Current None Past None	Current None Past None
Vicinity	Both sides	circuit	Trouble existed	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past U0151	Current None Past None	Current None Past None	Current None Past None	Current None Past None
	Hi side		Trouble exists	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Commu- nication failure	Current None Past None	Current U0131 Past Same as above	Current None Past None	Current None Past None	Current None Past None	Current None Past None
EPS Vicinity	Lo side Both sides	Open circuit	Trouble existed	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past U0122 U0126 U0073	Current None Past None	Current None Past U0131	Current None Past None	Current None Past None	Current None Past None	Current None Past None
			Trouble exists	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current U1135 Past Same as above	Current None Past None	Current None Past None	Current None Past None	Commu- nication failure
DCCD Vicinity	Hi side Lo side Both sides	Open circuit	Trouble existed	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past None	Current None Past U1135	Current None Past None	Current None Past None	Current None Past None	Current None Past U0073 U0100 U0122 U0140 U0155 U1201
	Hi side		Trouble exists	Commu- nication failure	Current U0100 Past Same as above	Current U0100 Past Same as above	Current U0100 Past Same as above	Current None Past None	Current U0100 Past Same as above	Current None Past Same as above	Current U0100 Past Same as above	Current U0100 Past Same as above	Current None Past None	Current None Past None	Current None Past None	Current U0100 Past Same as above
EGI Lo side Op	Open circuit	Trouble existed	Current None Past U0073	Current None Past U0100	Current None Past U0100	Current None Past U0100	Current None Past None	Current None Past U0100	Current None Past None	Current None Past U0100	Current None Past U0100	Current None Past None	Current None Past None	Current None Past None	Current None Past U0100	

LAN SYSTEM (DIAGNOSTICS)

2. CAN communication circuit open (indicator)

NOTE:

"Trouble exists" is referred to as the status before performing inspection and repair. "Trouble existed" is referred to as the status before performing DTC clear after repair.

O: Illum			Blink	×:	Off																			_															
	Condit	ion	ı		٠.		_	_	_	Ind	icat	or	_	_	_	_	_	_		-	Con	dition	1				_	_	_	In	dica	tor	$\overline{}$	$\overline{}$			$\overline{}$	_	\dashv
Control module	Detailed location	Trouble mode	Vehicle status	CHECK ENGINE	AT OIL TEMP	AUTO HEADLIGHT BEAM LEVELER	BRAKE	VDC	EMPTY	CHARGE WARNING	VDC OFF	OIL PRESSURE	ABS	EPB	EPS	AWD	HILL HOLD	ACCESS KEY WARNING	SECURITY INDICATOR BEMAINING FILE GALIGE	Control module	Detailed location	Trouble mode	Vehicle status	CHECK ENGINE	AT OIL TEMP	AUTO HEADLIGHT BEAM LEVELER	AIRBAG	BRAKE	ישי	CHARGE WARNING	VDC OFF	OIL PRESSURE	ABS	EPB	EPS	AWD	HILL HOLD	SECURITY INDICATOR	REMAINING FUEL GAUGE
VDC	Hi side Lo side	Open	Trouble exists	0			0	0			\circ		0				0			MET	Hi side		Trouble exists	0			0				c	,	0		0		0		0
Vicinity	Both sides	circuit	Trouble existed										T	1						Vicinity	Both sides	circuit	Trouble existed						1	Ī			П	П			1		×
SMT	Hi side		Trouble exists			T						1	T	1				1		STR	Hi side		Trouble exists							T	T		П	П			0	T	П
Vicinity	Lo side Both sides	Open circuit	Trouble existed			T			П			ı	T	1				1	T	Vicinity	Lo side Both sides	Open circuit	Trouble existed					1	T	T	ı		П	П			1	T	П
A. II	Hi side		Trouble exists		(П			1	T	1				1	T	CVT	Hi side		Trouble exists	0	Δ					T	T		П	П		Δ	0	T	П
AHL Vicinity	Lo side Both sides	Open circuit	Trouble existed			Ť			П			1	T	1				1		Vicinity	Lo side Both sides	Open circuit	Trouble existed					1	†	T	T		П	П			T	T	П
BIU (VDC	Hi side	0	Trouble exists	0	Δ	Ť	0	0				1	T	1		(0	1		A/B	Hi side		Trouble exists				0	1	Ť	T			П	П			T	T	П
side) Vicinity	Lo side Both sides	Open circuit	Trouble existed			Ť						1	T	1				1		Vicinity	Lo side Both sides	Open circuit	Trouble existed					1	1	T			П	П			T	T	П
BIU (EGI	Hi side		Trouble exists	0	Δ	Ť	0	0			0	1	T	1		(0	1		EPS	Hi side		Trouble exists						1	T			П	П	0		T	T	П
side) Vicinity	Lo side Both sides	Open circuit	Trouble existed			Ť						1	T	1				1		Vicinity	Both sides	Open circuit	Trouble existed						T	T	ı		П	П			T	T	П
MFD	Hi side Lo side	Oper	Trouble exists				T		П			1	T	1	1		1	1	T	DCCD	Hi side	Open	Trouble exists					1	Ť	Ť	T	l	П			Δ	1	T	П
Vicinity	Both sides	Open circuit	Trouble existed				T		П			1	T	1	1	T	1	1	Ì	Vicinity	Both sides	circuit	Trouble existed					1	Ť	Ť	T		П				1	T	П
A/C	Hi side	0	Trouble exists		1	İ	T		П			1	T	1	1	T	1	1	Ì	EGI	Hi side	0	Trouble exists	0	Δ					c	,		П				0	Ť	П
Vicinity	Lo side Both sides	Open circuit	Trouble existed																	Vicinity	Lo side Both sides	Open circuit	Trouble existed																