

# WAVEFORM OF POWER SUPPLY STAGE

No	WAVEFORM	NOTE	No	WAVEFORM	NOTE	No	WAVEFORM	NOTE
Ⓐ			Ⓑ		TP1001	Ⓒ		TP1001
Ⓓ		TP1001	Ⓔ		CHASSIS GND	Ⓕ		CHASSIS GND
Ⓖ		CHASSIS GND	Ⓖ		CHASSIS GND	Ⓖ		CHASSIS GND
Ⓙ		TP1001						

NOTE: WAVEFORMS MEASURED IN STOP MODE.

## POWER SUPPLY CHECKING PROCEDURE 1

SYMPTOM	FLOW OF TROUBLESHOOT→							
No Power (Secondary circuit)	CHECK POINT	Ⓚ	Ⓔ	Ⓕ	Ⓖ	Ⓖ		
	IF NO.	↓	↓					
	CHANGE	PR1001	* NOTE1				* NOTE2	

\* NOTE1: If voltage is not correct, check primary circuit.

\* NOTE2: If all voltage is correct, check System Control circuit or adjust Gear phase.

SYMPTOM	FLOW OF TROUBLESHOOT→							
No Power (Primary circuit)	CHECK POINT	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓙ		
	IF NO.	↓	↓					
	CHANGE	* NOTE1	F1001 Q1001 * NOTE2 Q1002					

\* NOTE1: Check AC cord.

\* NOTE2: Change Q1001, Q1002 and F1001 at the same time.

SYMPTOM	FLOW OF TROUBLESHOOT→							
	CHECK POINT							
	IF NO.							
	CHANGE							

NOTE: Please use blank brackets to note additional information.

# POWER SUPPLY CHECKING PROCEDURE 2

## (1). SHORT-CIRCUIT AND REPLACEMENT PARTS ON POWER LINE.

	CONDITION OF SHORT-CIRCUIT	DAMAGEABLE PARTS BY SHORT-CIRCUIT
(1)	5V ➡ GND	*PR1001, *D1008, Q1005
(2)	37V ➡ GND	*D1005, *R1010
(3)	14V ➡ GND 12V ➡ GND	D1006, *D1015, Q1051, *Q1052 D1051, D1052, D1053, C1012, *PR1054
(4)	-30V ➡ GND	*R1011, *D1007, *R1055
(5)	37V ➡ 14V	D1006, *D1015, Q1051, *Q1052 D1051, D1052, D1053, *PR1054
(6)	-30V ➡ 5V	REPLACE THE ALL OF PARTS OF (1) AND (4)
(7)	14V ➡ 12V	*Q1051, *Q1052, D1051, D1052, D1053, *PR1054
(8)	37V ➡ POWER DOWN(L)	*Q1005

\*NOTE1: When parts are short circuited, supplying the Power for a long time may cause the fuse to blow.

\*NOTE2: In case of trouble on Power Pack only, no need to check 1050 series parts.

\*NOTE3: Parts with \* mark are most susceptible to damage in case of short circuit. Please check them first.

## (2). IN CASE OF FUSE(F1001) BLOW.

Replace Parts F1001, Q1001, Q1002, D1001(Very rarely has problems), C1012, D1015.

Cause ➡ It may be caused by a short-circuit of 5V or 14V.

## (3). JUST AFTER TURNING POWER ON, ABNORMAL NOISE CAN BE HEARD FROM POWER SUPPLY UNIT.

Replace Parts D1015, D1008, D1007, R1011, C1012.

Cause ➡ It may be caused by a short-circuit of 5V, -30V, 14V.

In such a condition, supplying the Power for a long time causes the fuse to blow.