

JPS

Jupiter STD General Question



VERSION : 2014/07/30

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1. 硬體相關問題

1.1 干擾 相關問題

1.1.1 干擾：編碼器 相關問題

Q01：當執行 BP2P 找原點後，當觸發絕對位置 100mm 後，再返回絕對位置 0mm 後，持續反覆 20 次後發現一開始的 0mm 的原點已經偏離了？

A01：1. 首先請先確認當 BP2P 觸發 100mm 後，機構實際上量測是否也是 100mm

2. 檢查當馬達運轉時，依據下列說明檢查：

2-1. 檢查 BP2P 的觀測值如下：

- Pr.416：機構位置/長度 觀測值
- Pr.426：馬達當下的行程(位置/長度)

2-2. 檢查 PID 設定：若沒有增加 PID 修正，有誤差時不修正，一定位置不準。

- Pr.174：Position-P-Gain(Low gain)
- Pr.242：Speed-P-Gain(Low gain)
- Pr.243：Speed-I-Gain(Low gain)
- Pr.177：Position-P-Gain(High gain)
- Pr.246：Speed-P-Gain(High gain)
- Pr.247：Speed-I-Gain(High gain)

2-3. 檢查 Pr.196：編碼器每轉脈波數

- 若編碼器是 2500PPR，則 Pr.196 必須是穩定的 2500X4 倍頻=10000 (PPR)
- 若上述條件發生後，可參考本公司扼流圈嘗試排除干擾

<http://www.jps.com.tw/tw/product-detail.php?category=13&series=68&model=139&active=1>

2. 韌體相關問題

2.1 STD 系列相關

2.1.1 數位輸出/輸入 相關問題

Q01：為什麼當 DIx(102)：伺服激磁 啟動時，DOx(002)：伺服就位 有時會無法輸出

A01：首先需確認當 DIx(102)：伺服激磁 啟動時，驅動器偵測到回授轉速是否=0，

由於程式判斷以上兩條件都成立，DOx(002)：伺服就位 才會輸出

如驅動器偵測到回授轉速≠0，判斷可能是因為馬達尚未停止、機台震動或是干擾..等原因

(版本=CB21)將程式內部設定更改為回授轉速>10 RPM 時不會輸出

如無法改善的話，可能是干擾過大或是機台劇烈震動導致，需改善機台本身

2.2 PCMD 系列相關

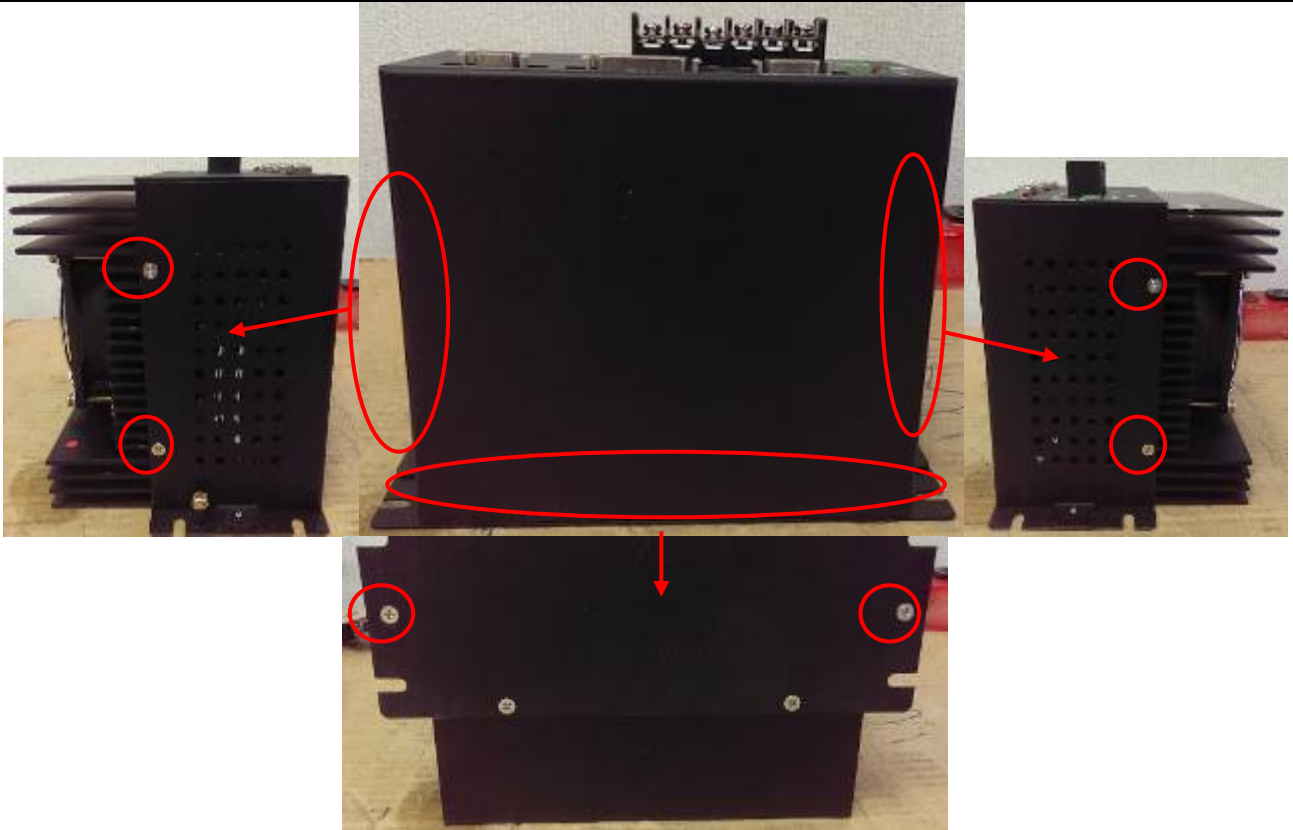
2.3 BP2P 系列相關

3. 維修替換 建議動作

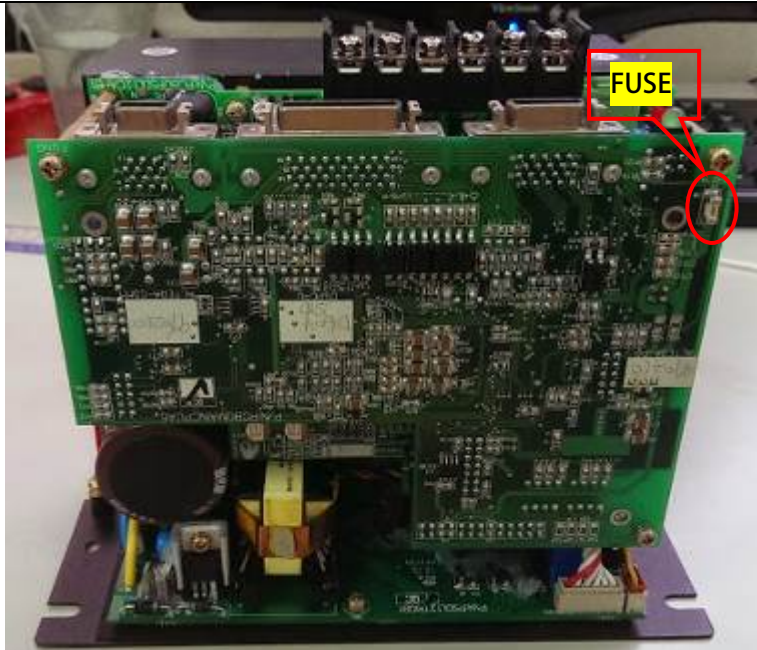
3.1 風扇替換

	<ol style="list-style-type: none">1. 拆除需更換風扇的 4 顆螺絲
	<ol style="list-style-type: none">2. 將風扇拉出3. 剪斷舊風扇線4. 準備新的風扇 ⇒剪斷風扇接頭 ⇒風扇線撥線 ⇒風扇線套上熱縮套管5. 焊接風扇線 ⇒將紅線對紅線，黑線對黑線焊接上去 ⇒將熱縮套管把焊點套住
	<ol style="list-style-type: none">6. 將風扇裝上 ⇒風扇底下的箭頭朝下及朝右 ⇒鎖上風扇螺絲

3.2 FUSE 替換



1. 拆除驅動器外殼的 6 顆螺絲



2. 拆除外殼
3. 更換 FUSE

FUSE 規格		
廠牌	安培數	料號
Littelfuse	1A	LF-451001MRL

101 Hardware Group

1.1 Noise Related Question

1.1.1 Noise : Encoder Related Question

Q01 : When execute search home function of BP2P mode , after absolutely trigger 100mm , then trigger back to position 0mm , found different zero position form first times after coutinely 20 times ?

A01 : 1. first check BP2P trigger100mm , then measureactual machine is 100mm,too °

2. check as below :

2-1. check BP2P monitor below :

- Pr.416 : machine position/length monitor
- Pr.426 : motor current position/length

2-2. check PIDsetting : if didn' t add PID adjustment , the accuracy will not well °

- Pr.174 : Position-P-Gain(Low gain)
- Pr.242 : Speed-P-Gain(Low gain)
- Pr.243 : Speed-I-Gain(Low gain)
- Pr.177 : Position-P-Gain(High gain)
- Pr.246 : Speed-P-Gain(High gain)
- Pr.247 : Speed-I-Gain(High gain)

2-3. check Pr.196 : ECODER pulses per revolution

- If encoder =2500PPR , then Pr.196 must be $2500 \times 4 = 10000$ (PPR)
- If the condition exists , please try noise-choke of JPS company

<http://www.jps.com.tw/tw/product-detail.php?category=13&series=68&model=139&active=1>

102 Firmware Group

102.1 STD Series

102.1.1 Digital Input/Output Related Question

Q01 : Why DIx (102) : SERVO-ON start , DOx (002) : Servo-READY sometimes can not active

A01 : First check when DIx (102) : SERVO-ON actived , Is the feedback speed = 0 rpm ,

Because of if DOx (002) : Servo-READY will be actived , when detects feedback speed $\neq 0$ °

maybe because the motor is still runing 、vibration or interference .. other reasons °

(Version = CB21) : released version change the program , please refer to below :


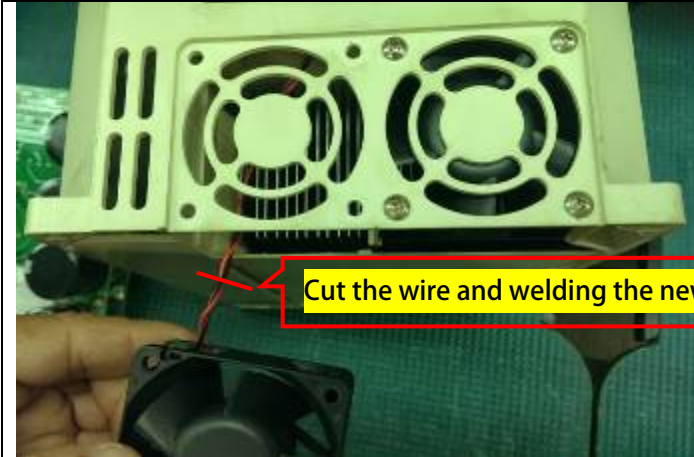

DOx (002) will be actived when feedback speed ≤ 10 RPM

102.2 PCMD Series

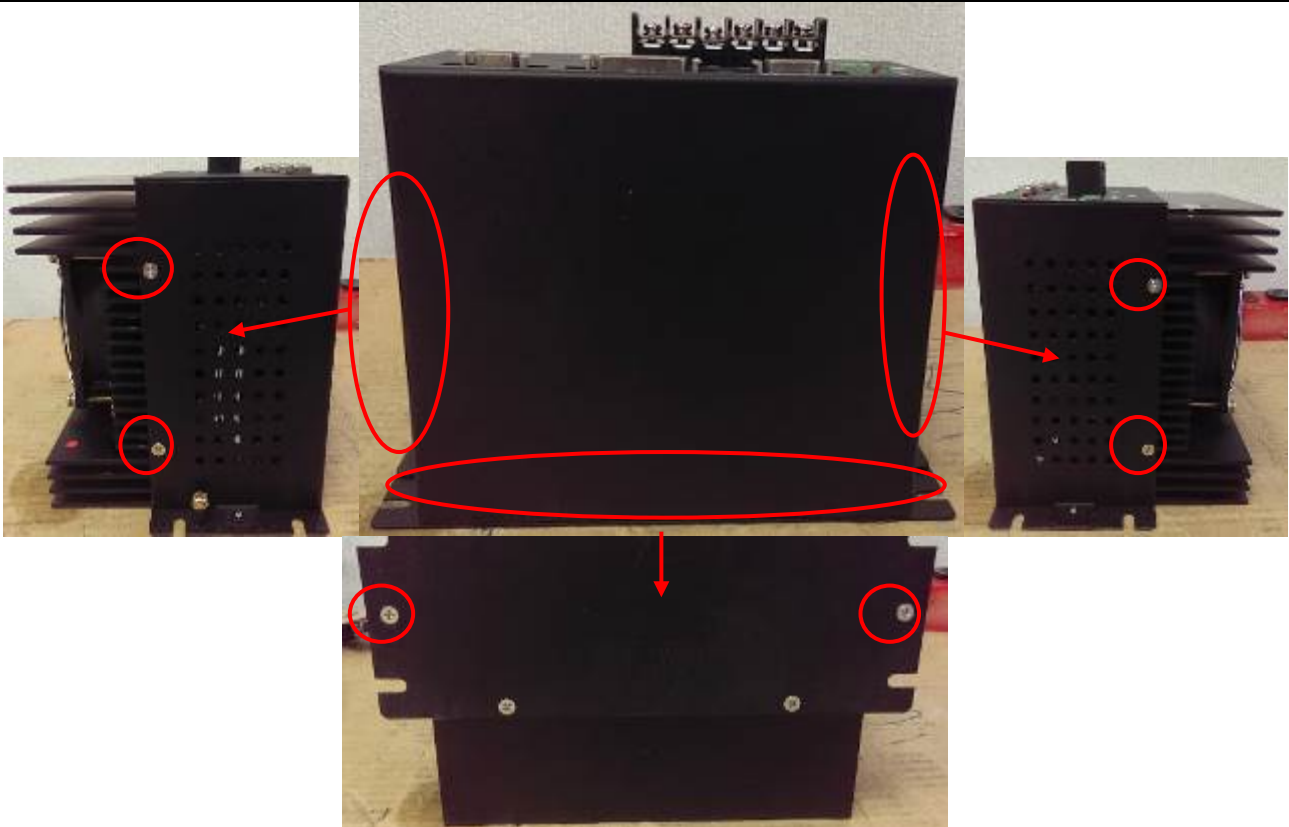
102.3 BP2P Series

103. Recommended Action Replace the maintenance

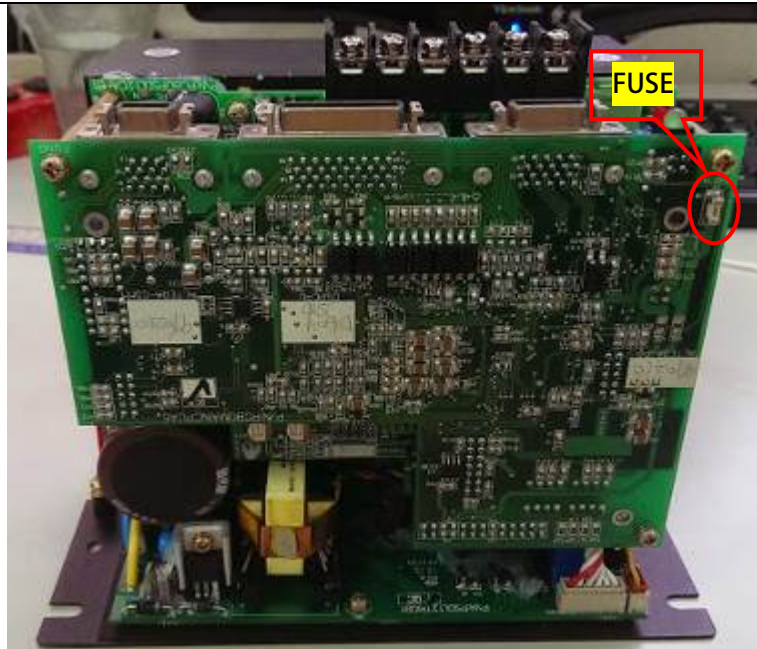
103.1 Replace fan

	<ol style="list-style-type: none"> 1. Remove the fan screws
 <p>Cut the wire and welding the new fan</p>	<ol style="list-style-type: none"> 2. Unplug the fan 3. Cut the old fan wire 4. Prepare a new Fan <ul style="list-style-type: none"> ⇒ Cut the fan wire ⇒ Strip the fan wire ⇒ Put on The fan casing wire 5. Welding The fan wire <ul style="list-style-type: none"> ⇒ welding wire with same color ⇒ Put on casing joints
	<ol style="list-style-type: none"> 6. Fitted with the fan <ul style="list-style-type: none"> ⇒ The fan direction , follow the picture ⇒ Lock the screw

103.2 Replace FUSE



1. Remove the driver screws



2. Remove the driver shell

3. Replace the fuse

FUSE Specification		
Brands	Ampere	Number
Littelfuse	1A	LF-451001MRL