Aclass

進給器 安裝及使用說明書
POWER TABLE FEED INSTALLATION & OPERATION MANUAL

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安裝或使用前請詳細閱讀說明書
PLEASE READ THE OPERATION MANUAL BEFORE USE.

閱讀後請妥善收藏保管
KEEP THE MANUAL AND INSTALLATION DIRECTIONS AFTER PERUSAL.
◆安裝前注意事項 (CAUTION BEFORE INSTALLATION)

● 安裝前務必將銑床之電源關閉，進給器（POWER TABLE FEED）亦不可接通電源。
   (避免發生觸電，對人員造成傷害)

● Please be sure the power is off before installation. Even the power table feed not
   connected to the power. To avoid the accident caused during installation.

● 本產品採用AC 110V 60Hz之電源，若與使用地區或國家之電源不符合時，須自行
   設備變壓器。（避免使用錯誤電源，燒毀機體線路及電路機板)

● This power table feed has AC 110V / 60Hz circuit. Please be sure the input power is
   compliance with the power table feed. If the input power at user’s place is not AC 110V
   / 60Hz, please prepare the transformer. (To avoid burn down to the wires & circuit board
   caused by the wrong power supply).

● 除消耗品及維修零件部份，不可強行拆裝此機體。（避免機件誤裝、遺漏、線路誤
   接或短路造成機器及人員之損傷)

● Except the consumable parts or maintenance parts, do not disassemble the power table
   feed. To avoid any injury to operator and damage to machine caused by the wrong
   assembly, omission, wrong connection and short circuit.

◆安裝方法 (INSTALLATION)

X軸-左右向適用 (AVAILABLE FOR TABLE TRAVEL)

● 前置作業
   1. 從銑床上拆下把手固定螺帽，把手（轉輪）、平行壓頭鍵及尺標刻度盤。
   2. 鬆開原有固定座之固定螺絲（M6×P1.0-4pcs），輕敲固定座從螺桿上取下。

● INSTALLATION
   1. Disassembly handle fix screws, handle (hand wheel), parallel socket key and dial from
      the milling machine.
   2. Loosen fix screws (M6xP1.0 - 4 pcs) from fix stand. Gently knock fix stand in order to take
      out the fix stand from the axis screw.

● 安裝進給器＜圖一＞
   1. 將工件固定擱移到最左邊。
   2. 在X軸固定座打入所附Φ5彈簧銷（2pcs）定位。
   3. 安裝X軸固定座，以剛才拆下之固定螺絲（M6×P1.0-4pcs）鎖緊。
   4. 將X軸內圈套上螺桿，推到最內處。
   5. 將進給器機體對正定位彈簧銷套上X軸內圈輕輕敲入，安裝基準面貼合X軸固定座以
      所附六角承窪螺絲（M6×P1.0×25-2pcs）鎖緊。
● INSTALL THE POWER TABLE FEED (FIG.1)

1. Move worktable to the left end.
2. Push the spring pin (Ø5 - 2 pcs) into X-axis fix stand for positioning.
3. Install X-axis fix stand, tighten up with fix screws (M6 × P1.0 - 4 pcs).
4. To set X-axis bushing onto the axis screw and push bushing to the end.
5. To set power table feed at the right position & align with spring spin, set X-axis bushing & gently knock in. Surface attach to the X-axis fix stand. Then tighten up with inner hex socket screw (M6 × P1.0 × 25 - 2 pcs).

● 安装驅動組件及間隙調整＜圖一、圖二＞

1. 將小間隙墊圈(Ø26.2 × Ø16.2) 套上螺桿，建議先使用0.25t 3片。
2. 在螺旋之螺槽中放入平行埋頭螺，對準螺槽再套入銅質傘齒輪(72齒)。
3. 旋下下方之齒輪蓋，握住進給器軸心(見圖十一) 將傘齒輪推到底，並左右搖動檢查間隙(＜圖二＞A) 2.0～2.2mm 加減間隙墊圈，直到間隙正確為止。
4. 套上大間隙墊圈(Ø43.4 × Ø33.4) 建議先使用0.25t 2片，然後裝上尺標刻度盤。
5. 檢查尺標刻度盤與機體端面之間隙尺寸(0.5～0.75mm)，若不在此範圍內請重覆4、5步驟，直到間隙尺寸正確為止。
6. 鎖上固定環，將尺標刻度盤固定。
7. 裝上把手(或轉輪)，鎖上固定螺帽。
8. 轉動把手及輪檢查是否會碰觸到進給器機體，並感覺齒輪轉動時是否平順，若有明顯之齒間咬合聲即表示步驟3之間隙不正確，須重複3～8步驟，直到平順為止。

● INSTALL THE DRIVING SET & BACKLASH ADJUSTMENT (FIG.1\ FIG.2)

1. To add shim (Ø26.2 × Ø16.2) onto axis screw. It is suggested to use 0.25t - 3pcs at beginning.
2. To set parallel key into key way of axis screw, align with the key way, to set the bevel gear (72T).
3. Disassembly the lower gear housing, hold power table feed shaft center(refer to FIG.11), push bevel gear to the end, and check the backlash. (FIG.2A) To add few shims (2.0 ~ 2.2mm) for proper backlash.
4. To set the shim (Ø43.4 × Ø33.4). It is suggested to use 0.25t - 2 pcs, and then set the dial.
5. To check backlash (0.5 ~ 0.75mm) between dial and surface of power table feed. If it's not in the range, please repeat the procedures step 4 to step 5 until the proper backlash is obtained.
6. To lock fix ring and dial.
7. To set handle (or hand wheel), tighten fix nut.
8. Rotate the handle few times and check whether it is interfere to power table feed. Also check whether the gear rotated smoothly. If any noise of gear mesh, it shows the backlash checked in step 3 is not correct. Please repeat the procedures from step 3 to step 8 until gear rotating is smooth.
安裝極限開關<圖三>
1. 將極限開關組鎖緊(M8×P1.25 - 2pcs)。
2. 以所附螺絲(M8×P1.25×35)鎖緊定位片及定位桿(左右各一)，請依照各別須要自行調整位置。
3. 將電纜線適度的整理固定，務必預留工件固定後移動之最大距離。

 INSTALL THE LIMIT SWITCH (FIG.3)
1. Tighten limit switch unit. (M8 × P1.25 - 2pcs)
2. According to the distance required, to set stop block & stop set in position with screw (M8 × P1.25 × 35).
3. Arrange and sort the cable. Be sure to keep the maximum travel distance for worktable movement.

Y軸-前後向適用 (AVAILABLE FOR CROSS TRAVEL)

前置作業
1. 從銑床上拆下把手固定螺帽，把手(轉軸)、平行螺母及尺標刻度盤。
2. 鬆開原有固定座之固定螺絲(M6×P1.0 - 3pcs)，取下原有固定座。

PREPARATION
1. Disassembly handle fix nut, handle (hand wheel), parallel socket key and dial from milling machine.
2. Loosen fix screws (M 6 × P 1.0 - 3pcs) from fix stand. Take out fix stand from axis screw.

安裝進給器<圖四>
1. 將Y軸車臂移到最內側。
2. 安裝Y軸固定座，以剛才拆下之固定螺絲(M6×P1.0-3pcs)鎖緊。
3. 將Y軸內圈套上螺桿，推到最內處。
4. 將進給器機體套上Y軸內圈，安裝基準面貼合Y軸固定座以所附螺絲(M6×P1.0 × 25-2pcs)鎖緊。
INSTALL THE POWER TABLE FEED (FIG.4)
1. Move cross table to the column end.
2. Install Y-axis fix stand, tighten up with fix screws (M6×P1.0 - 3 pcs).
3. To set Y-axis bushing onto axis screw and push bushing back.
4. To set power table feed at the right position and align with spring spin, set Y-axis bushing & gently knock in. Surface attach to Y-axis fix stand. Then tighten up with inner hex socket screw (M6×P1.0×25 - 2 pcs)

安装驱动组件及间隙调整<图四、图五>
1. 将延长轴与螺栓锁紧，对正延长轴键槽之延伸方向在螺纹锁合处钻孔Φ4.0并以弹簧销(Φ4×14)插入固定。（必要时请自行切削延长轴之长度）
2. 将小间隙垫圈(Φ26.2×Φ18.2)套上螺栓，建议先使用0.25±3片。
3. 在延长轴之键槽中放入平行垫头键，对准键槽再套入锁紧环键环(72齿)。
4. 拆下下方之齿轮盖，握住进给器轴心(见图11)将齿轮推到底，先左右摇晃检查
5. 小间隙垫圈，直到间隙尺寸正确为止。
6. 套上大间隙垫圈(Φ43.4×Φ33.4)建议先使用0.25±2片，然后装上尺寸刻度盘。
7. 检查尺寸刻度盘与机体端面之间隙尺寸(0.5~0.75mm)，若不在此范围则请重覆5、6步骤，直到间隙尺寸正确为止。
8. 铭上固定环，将尺寸刻度盘固定。
9. 装上把手垫圈(可视实际需要自行决定要或不要)、把手(或转轮)，锁上固定螺丝。
10. 转动把手几圈检查是否能碰触到进给器机体，并感觉齿轮转动时是否平顺，若有明显之齿间卡合则表示步骤4之间隙不正确，须重覆4~9步骤，直到平顺为止。

INSTALL THE DRIVING SETS & BACKLASH ADJUSTMENT (FIG.4/FIG.5)
1. Tighten up extension shaft with axis screw. To align with the direction of key way of extension shaft, drill a through hole Φ4.0 at the screw, then set into spring pin (Φ4×14) (if necessary, can cut the length of extension shaft)
2. To add shims (Φ26.2×Φ16.2) onto the axis screw. It is suggested to use 0.25t - 3pcs at beginning.
3. To set parallel key into the key way of extension shaft, align with the key way, to set the bevel gear (72T).
4. Disassembly the lower gear cover, holding the power table feed shaft center (refer to Fig.11), push bevel gear to the end, and check backlash. (FIG.5A), to add few shims (2.0 - 2.2mm) for proper backlash. If it's not in the range, please repeat the procedures step 2, step 3 & step 4 until proper backlash is obtained.
5. To set the shim (Φ43.4×Φ33.4). It is suggested to use 0.25t - 2 pcs, then to set the dial.
6. To check backlash (0.5~0.75mm) between dial and surface of power table feed. If it's not in the range, please repeat the procedures step 5 & step 6 until proper backlash is obtained.
7. To lock fix ring and dial.
8. To set handle washer <If necessary> / handle (or hand wheel), tighten fix nut.
9. Rotate the handle few times, to check whether it is interfere with power table feed. Also check whether the gear rotate smoothly. If any noise from gear mash, it shows the backlash checked in step 4 is not correct. Please repeat the procedures from step 4 to step 9 until gear rotating is smoothly.
安裝極限開關（圖六）
1. 於銑床Y軸車軸下方中心位置鑽孔攻牙（M8×P1.25，攻牙深度20mm）。
2. 依圖示以後鉚螺絲（M8×P1.25×15-2pcs）鎖緊極限開關，必要時請自行加裝固定架。
3. 先依自己的須要模擬Y軸車軸的行程，決定銑條之前後位置及極限開關裝設預定之位置決定高度，進行銑床Z軸車軸之鑽孔攻牙（M6×P1.0，攻牙深度25mm）。
4. 將所附之2支定位銑條，依圖示以螺絲（M6×P1.0×25-4pcs）鎖緊於銑床Y軸上，
   （2支定位銑條務必成一直線）
5. 以螺絲（M8×P1.25×35）-2pcs鎖緊定位片及定位桿（前後各一），請依照各別須要自行調整位置。
6. 將電纜線過度的整理固定，務必預留工件移動之最大距離。

 INSTALL THE LIMIT SWITCH (FIG.6)
1. On the center position of cross table, to drill 2 holes (M8 × P1.25, tapping depth 20mm).
2. Refer to drawing, tighten limit switch with screw (M8 × P1.25 × 15-2 pcs), please apply extra bracket (not supplied) if necessary.
3. According to travel of cross table, to decide the position of aluminum track, also the height of limit switch. To drill 4 holes (M6 × P1.0, tapping depth 25mm) on knee.
4. By using screws (M6 × P1.0 × 25-4 pcs), tighten two aluminum tracks onto the knee of milling machine. (Two aluminum tracks must be aligned to each other)
5. According to the distance required, to set stop block & stop set in position with screws (M8 × P1.25 × 35-2 pcs)
6. Arrange and sort the cable. Be sure to keep the maximum travel distance for cross table movement.

Z軸上下向適用 (AVAILABLE FOR KNEE TRAVEL)
● 前置作業
1. 從銑床上拆下把手、平行壓頭鍵、把手連動環、尺標刻度環及其他結構件。
2. 鬆開原有固定座之固定螺絲（M6 × P1.0-3 pcs），現取下原有固定座。
● PREPARATION
1. Disassembly handle fix screws, handle (hand wheel), parallel socket key and dial from the milling machine.
2. Loosen fix screws (M6 × P1.0-3 pcs) from fix stand. Take out fix stand from axis screw.
1. **INSTALL THE POWER TABLE FEED (FIG. 7)**
   1. Move knee to the lowest position.
   2. Install Z-axis fix stand, tighten up fix screws (M6 × P1.0 - 3 pcs).
   3. To set Z-axis extension shaft onto Z-axis screw, until the bearing is pressed.
   4. To set power table feed onto extension shaft and close to fix stand. And tighten up with inner hex socket screws (M6 × P1.0 × 25 - 2 pcs).

2. **INSTALL THE DRIVING SETS & BACKLASH ADJUSTMENT (FIG. 7/ FIG. 8)**
   1. To add Z shim (Ø31.0 × Ø22.2) onto extension shaft. It is suggested to use 0.25t - 3 pcs at beginning.
   2. To set parallel key (4 × 4 × 25) into key way of extension shaft, align with the key way, to set the bevel gear (72T).
   3. Disassemble the lower gear cover, holding the power table feed shaft center (refer to fig. 11), push bevel gear to the end, and check backlash. (FIG. 8A), to add few shims (2.0 - 2.2mm) for proper backlash. If it's not in the range, please repeat the procedures step 1, step 2 & step 3 until proper backlash is obtained.
   4. To set the shim (Ø43.4 × Ø33.4). It is suggested that to use 0.25t - 2 pcs, then to set the dial.
   5. To check backlash (0.5 - 0.75mm) between the dial and surface of power table feed. If it’s not in the range, please repeat procedures step 4 & 5 until the proper backlash is obtained.
   6. To lock fix ring and dial.
7. To set handle (or hand wheel), tighten the dial. Rotate handle few times, to check whether it is interfere with power table feed. Also check whether the gear rotate smoothly. If there any noise from gear mesh, it shows the backlash in step 3 is not correct. Please repeat the procedures from step 3 to step 7 until gear rotating is smoothly.

8. Drill a through hole (Φ5) at position as FIG.8 B, then set with spring pin (Φ5 × 30).
安裝極限開關<圖九>

1. 於Z軸車身靠近直立主車身之接縫處鑽孔（M8×P1.25，攻牙深度20mm）。
2. 以所附螺絲（M8×P1.25×15-2pcs）鎖緊極限開關，必要時請自行加裝固定架。
3. 先依自己的須要模擬工作模的行程，決定鋸條之上下位置，<圖九>進行直立主
車身之鑽孔（M6×P1.0，深度25mm）
4. 將所附之鋸條，以螺絲（M6×P1.0×25-2pcs）鎖緊於銑床上，必要時請自行加裝
固定架。
5. 以螺絲（M8×P1.25×35-2pcs）分別鎖緊上下兩組定位片及定位桿，請依自己須
要自行調整高低位置。
6. 將電線線適度的整理固定，務必預留工作行程之最大距離。

INSTILL THE LIMIT SWITCH (FIG. 9)

1. On the position of knee ( close to column ), drill 2 holes ( M8×P1.25, tapping depth 20mm).
2. Tighten the limit switch with screw ( M8×P1.25×15-2 pcs).
3. Refer to FIG.9, according to the travel of knee upward & downward, to decide the position
of aluminum track, also the height of limit switch. To drill 4 holes ( M6×P1.0, tapping depth
25mm) on column.
4. By using screw ( M6×P1.0×25-2 pcs), tighten the two aluminum tracks onto the column
of milling machine. (Two aluminum tracks must be aligned). please apply extra bracket ( not
supplied ) if necessary.
5. According the distance required, to set the stop strain & stop set in position with screw
( M8×P1.25×35-2 pcs).
6. Arrange and sort cable. Be sure to keep the maximum travel distance for knee move ment.

X/Y/Z適用 (AVAILABLE FOR TABLE / CROSS / KNEE TRAVEL)

電源接通

※本機設計使用110V 50/60Hz交流電，若與使用地區之電源不同時，使用者務必自
備變壓器轉換為110V 50/60Hz方可使用。

1. 直接插上110V 50/60Hz之交流電源即可。
※請注意電源線經過之處應避免高溫、潮溼的地區及尖銳的異物，
更不可以重物直接壓在電源線之上。
● POWER CONNECTING

※ This power table feed has AC 110V 50/60Hz circuit. Please be sure input power is compliance with the power table feed.

If input power at user's place is not AC 110V 50/60Hz, please prepare the transformer.
1. Just simply connect to 110V 50/60Hz AC power.

※ Please avoid cable track explore in the circumstance with high temperature, high humidity or any sharp pieces around.

● 檢查與確認

1. 尺動開關位置在"FEED"，速度調整鈕稍微調離"0"之位置，進給旋鈕指向"0"之位置。
2. 打開電源開關(ON)，轉動"進給旋鈕"向左(或向右)，看是否動作正常。
3. 在工作固定擋向左／向右進行中，按壓左極限(右極限)按鈕，看是否正常停止，鬆開後又繼續動作。

● CHECKING & CONFIRMING

1. Set "jog switch" at "FEED" position, "speed adjust knob" slight away from "0" position. "feed knob" at "0" position.
2. Turn on "ON" switch. Turn "feed knob" to left (or right), to check whether the movement is at normal status.
3. During worktable travels left / right, press left limit switch button (or right limit switch button), to check whether it is stop at normal status, loosen and then repeat the operation.

◆ 使用說明<圖十> OPERATION (FIG.10)

● 電源開關及過載復歸按鈕

1. 電源開關右按ON，左按OFF。ON時會有紅色燈顯示。
2. 另外右側扇圓形之紅色小按鍵，即為過載復歸鍵，當機器負載過大或危險點時，按鍵會跳出切斷電源，使用者必須減小切削負載後，再按下過載復歸鍵，即可正常運轉。

● POWER SUPPLY SWITCH AND RESET SWITCH

1. The right side of power switch is "ON". The left side is OFF. The red light will shown when press "ON".
2. The red round button on right side is "reset switch". When machine is overload, "reset button" will jump up to cut off the power. The operator must reduce cutting load, then press "reset switch". The machine can be operated again.

● 進刀旋鈕及快送按鈕

1. 進刀起動後，轉動進給旋鈕，左轉則左向進給，右轉則右向進給。
2. 中間紅色之按鈕為快送按鈕，按下不放，刀具以最快速度向左(右)移動，鬆開後，則維持原來速度方向繼續工作。

● FEED KNOB AND RAPID BUTTON

1. After power is "ON", turn "feed knob". Turn left for left side feeding, turn right for right side feeding.
2. The button in the middle is "rapid button". The tool travel rapidly to left side (right) if kept pressing the button. The power table feed will back to normal speed when release the button.
● SPEED ADJUST KNOB
1. The speed can be adjusted according to operator's requirement. The speed range is 0 to 9 (stop to highest speed).

● JOG SWITCH
1. Normally, "jog switch" should be at "FEED" position. For jog movement, just switch to "0" position. Kept holding the switch, don't release the switch until it travels to the position required.

Note: To stop jog operating, must turn "FEED KNOB" to "0" (OFF) position. Then move "JOG SWITCH" to "FEED" position.

※ 使用寸動開關務必遵循上述之動作順序養成習慣，否則容易造成錯誤動作。

※ Be sure to follow the procedure required for jog operation. To avoid any damage caused by the wrong operation.

![Diagram of control panel with labels](image-url)
◆ MAINTENANCE

- Gear lubrication: (Fig. 11)
  Every 6 months, open the gear cover, and check if lubrication for spiral gears is sufficient. It is suggested to take graphite type lubrication, do not use silicon type lubrication.

- Checking for gear wear out: (Fig. 11)
  To check the gear shape of spiral gear (made of plastic 107T) is wore out. If gear wore out badly, please replace a new gear. The procedure to replace the gear at follows:
  1. Loosen the gear cover (press the edge of hooks on both sides, and pull down.)
  2. Loosen C type ring, sequentially take out washer / Poule disk set (Occlusion soft set / Poule disk) / Pin / abrasive washer / Gear york set (spiral gear / York set) / thrust bearing.
  3. Disassembly Gear york set, replace spiral gear, then install it back by sequentially.
  ※ Occlusion soft set and surface of York set must be kept clean, can not attached with oil. If there are any oil, please clean it by volatile solvent, do not clean by water.

- Carbon brush wear: (Fig. 12)
  Every 6 months, open carbon brush cap, to check brush is wore out. If the length of brush is less than 5mm, the brush must be replace immediately. (2 sets at the front & back.)
<table>
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<th>檢查 (Checking)</th>
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<tr>
<td>電源指示燈不亮，</td>
<td>1. 電源插頭是否鬆脫？</td>
<td>● 重新插好插頭。</td>
</tr>
<tr>
<td>且進給器不動作。</td>
<td>2. 電源開關是否確實在ON的位置上。</td>
<td>● Check power connecting &amp; plug.</td>
</tr>
<tr>
<td>ON/OFF light is not ON, power table feed is not working.</td>
<td>2. ON/OFF switch at ON position.</td>
<td>● 將電源開關按在ON之位置。</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(紅色燈點亮)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Press the switch to ON position.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Red light is ON)</td>
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<tr>
<td></td>
<td>3. 過載保護器是否動作了？</td>
<td>● 減輕加工刀具之負荷，再按下過載復歸鍵，重新啟動進給器。</td>
</tr>
<tr>
<td></td>
<td>(跳起來)</td>
<td>● To reduce tool load, press reset switch, restart the power table feed.</td>
</tr>
<tr>
<td></td>
<td>3. Reset switch is jump up.</td>
<td></td>
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<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>1. 寸動開關是否在&quot;FEED&quot;的位置？</td>
<td>● 將進給旋鈕撥至&quot;0&quot; (OFF) 的位置，將寸動開關撥到&quot;FEED&quot;位置，再重新啟動進給器。</td>
</tr>
<tr>
<td></td>
<td>1. Check jog switch at &quot;FEED&quot; position?</td>
<td>● Turn feed knob to &quot;0&quot; OFF position.</td>
</tr>
<tr>
<td></td>
<td>2. 速度調整旋鈕是否在&quot;0&quot;的位置？</td>
<td>Jog switch to &quot;FEED&quot; position, restart the power table feed again.</td>
</tr>
<tr>
<td></td>
<td>2. Speed adjust knob at &quot;0&quot; position?</td>
<td>● 將速度調整鈕順時針轉動直到理想速度為止。</td>
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<tr>
<td></td>
<td></td>
<td>● Turn the speed adjust knob clockwise direction until the required speed achieved.</td>
</tr>
<tr>
<td>(多年使用以後)</td>
<td>1. 打開齒輪蓋，檢查馬達軸心與齒輪軸心未正常連動。</td>
<td>● 離合器磨耗失效，更換轉軸組及吸附軟鐵組。 (圖十一)</td>
</tr>
<tr>
<td>使用中進給器無力，</td>
<td>1. Open gear cover, check the motor shaft &amp; gear shaft not engaged.</td>
<td>● Clutch wore out, to replace yolk set and occlusion soft set (FIG. 11)</td>
</tr>
<tr>
<td>或常無故打滑。</td>
<td>2. 打開齒輪蓋，檢查齒輪，齒形崩損。</td>
<td>● 更換齒輪。 (圖十一)</td>
</tr>
<tr>
<td>After few years operation, the power table feed loosing or sliding.</td>
<td>2. Open gear cover and check whether gear shape is wore out.</td>
<td>● Replace gear. (FIG. 11)</td>
</tr>
<tr>
<td></td>
<td>3. 碳刷是否已磨耗完畢？</td>
<td>● 以起子旋開碳刷蓋同時更換兩個碳刷。</td>
</tr>
<tr>
<td></td>
<td>(約剩下5mm)</td>
<td>● Open the carbon brush cap and replace two carbon brushes.</td>
</tr>
<tr>
<td></td>
<td>3. Carbon brush wore out. (Less than 5mm.)</td>
<td></td>
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◆ ACCESSORIES SPECIAL FOR X-AXIS

- **X-AXIS FIX STAND**

- **BEVEL GEAR**

- **FIX RING**

- **STOP BLOCK**

- **STOP SET**

- **SCREW**
  - M8 \( \times \) 25 \( \times \) 35: 2 pcs
  - M5 \( \times \) 10 \( \times \) 25: 2 pcs
  - 5 \( \times \) 20: 2 pcs
  - 1/4\( \times \) 1 pcs

- **SHIM**
  - SMALL SHIM: 6 pcs
  - SMALL SHIM: 2 pcs
  - LARGE SHIM: 4 pcs
<table>
<thead>
<tr>
<th>No.</th>
<th>零件名稱</th>
<th>PART NAME</th>
<th>PART NO.</th>
<th>X</th>
<th>Y</th>
<th>Z</th>
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<td>1</td>
<td>機組箱</td>
<td>TOP HOUSING</td>
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<td>2</td>
<td>螺絲軸承</td>
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<td>旋臂盒組</td>
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<td>最大扭力（MAX TORQUE）</td>
<td>转速（RPM）</td>
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<td>APF-500</td>
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