



FA/FD type

展刀搪溝頭

FACING HEAD

使用說明書

INSTRUCTION MANUAL

Original instructions



重要 Important Notes :

- 請仔細閱讀本說明書，充分瞭解之後再使用本製品。
本說明書請妥善保管，製品使用者變更時，請將此說明書交給新的使用者。
- Before you use the product. Please read this instruction carefully.
Keep the instruction carefully. If the user of the product altered,
please hand the instruction to the new user.



◎序言

為了確保你的安全, 在使用你的展刀搪溝頭之前, 請務必詳閱本說明書內所記載之警告事項, 並特別注意文中此  圖形符號下之說明。

◎ INTRODUCTION

To ensure safe operation of your Facing head, please read this instruction manual and pay particular attention to instructions marked with  including **IMPORTANT** instructions concerning chuck performance.



若未依照此符號底下的說明來操作機械將引起立即的危險, 導致重大傷害或死亡。

Indicates an imminently hazardous situation which, if not avoided, could result in death or serious injury.



若未依照此符號底下的說明來操作機械將引起潛在的危險, 導致重大傷害或死亡。

Indicates an potentially hazardous situation which, if not avoided, could result in death or serious injury.



若未依照此符號底下的說明來操作機械將引起潛在的危險, 導致中輕度的傷害。

Indicates an potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



依照此符號底下的說明事先了解製品的性能, 可避免不正確的操作夾頭。

Indicates for chuck performance and avoiding errors of mistake.

目 錄

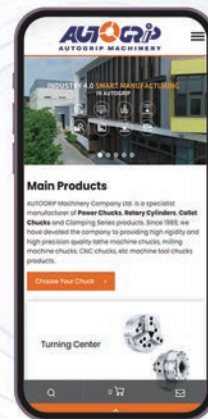
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瀏覽官網，即刻掌握最新訊息!

**BROWSE THE WEBSITE AND
INSTANTLY GRASP INFORMATION!**

 | **AUTOGRIP 佳賀精機**



*2D圖檔(PDF、DWG格式)、3D圖檔(STEP格式) 可以從官網下載。

*You can download the outline drawing (in pdf or dwg format) and 3D step at AUTOGRIP WEB.

 領英(LinkedIn)



 公眾號



 佳賀精機 AUTOGRIP



 AUTOGRIP MACHINERY

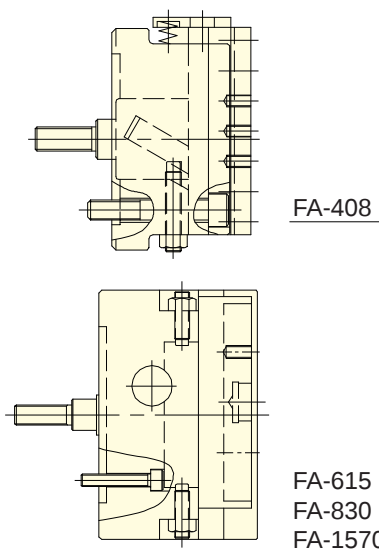


 AUTOGRIP佳賀固力普



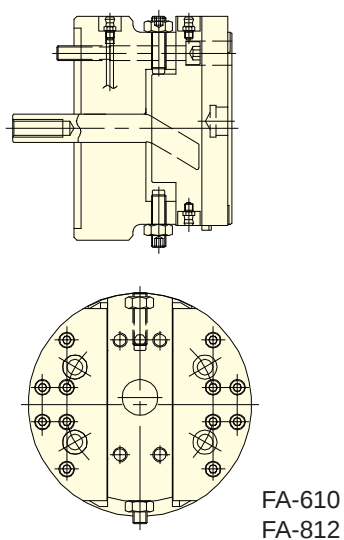
1. 展刀搪溝頭

1.1. 展刀搪溝頭規格



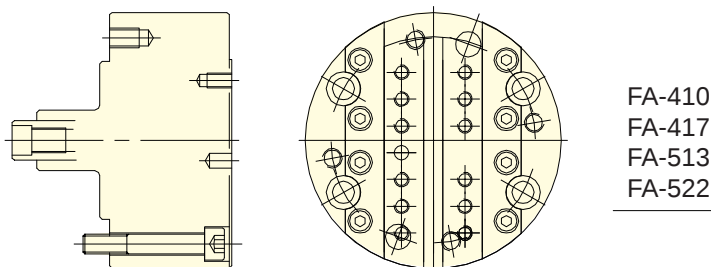
1. Facing head

1.1. Specification of single-slide facing head (FA-type)



型號	楔心行程	滑座行程	最高迴轉數	容許最大入力	重量	適用迴轉缸	最大使用壓力
Model	Plunger stroke (mm)	Slider stroke (mm)	Max. speed min ⁻¹ (r.p.m.)	MAX D.B. PULL kN (kgf)	Weight (kg)	Matching cylinder	Max. pressure MPa (kgf/cm ²)
FA-408	14	8	1600	2.8(280)	4.2	RS-6520N	1.0(10)
FA-615	15	15	1200	3.3(340)	11.9	RS-6520N	1.2(12)
FA-830	30	30	800	5.0(510)	23.9	RS-6530N	1.8(18)
FA-1570	70	70	500	18.2(1855)	167	RS-1080N	2.6(26)

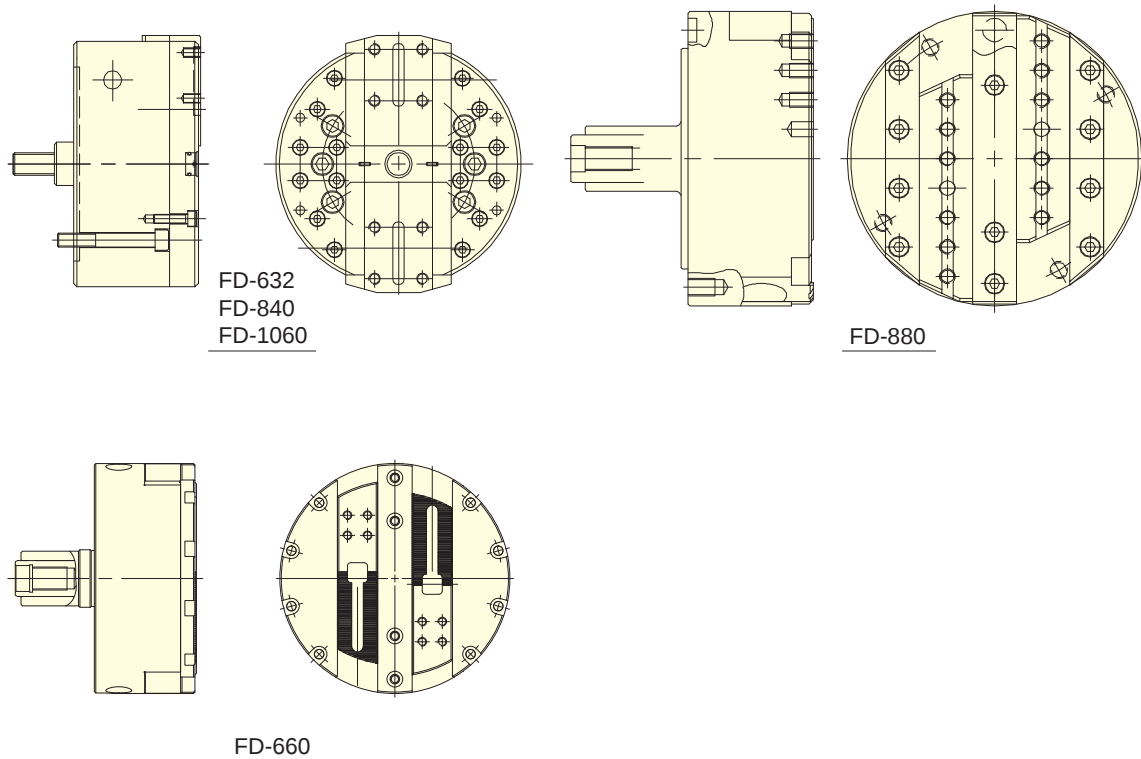
型號	楔心行程	滑座行程	最高迴轉數	容許最大入力	重量	適用迴轉缸	最大使用壓力
Model	Plunger stroke (mm)	Slider stroke (mm)	Max. speed min ⁻¹ (r.p.m.)	MAX D.B. PULL kN (kgf)	Weight (kg)	Matching cylinder	Max. pressure MPa (kgf/cm ²)
FA-610	18	10	1200	2.8(280)	14.5	RS-6520N	1.0(10)
FA-812	21	12	800	4.4(450)	28.5	RS-6530N	1.6(16)



型號	楔心行程	滑座行程	最高迴轉數	容許最大入力	重量	適用迴轉缸	最大使用壓力
Model	Plunger stroke (mm)	Slider stroke (mm)	Max. speed min ⁻¹ (r.p.m.)	MAX D.B. PULL kN (kgf)	Weight (kg)	Matching cylinder	Max. pressure MPa (kgf/cm ²)
FA-410	20.3	10	2500	1.2 (120)	2.8	RS-6520N	0.4 (4.2)
FA-417	20.3	17	2500	1.2 (120)	2.8	RS-6520N	0.4 (4.2)
FA-513	26.2	13	1600	1.8 (185)	5.0	RS-6520N	0.6 (6.5)
FA-522	26.2	22	1600	1.8 (185)	4.8	RS-6520N	0.6 (6.5)

1.2. 雙向展刀搪溝頭規格

1.2. Specification of double-slide facing head(FD-type)

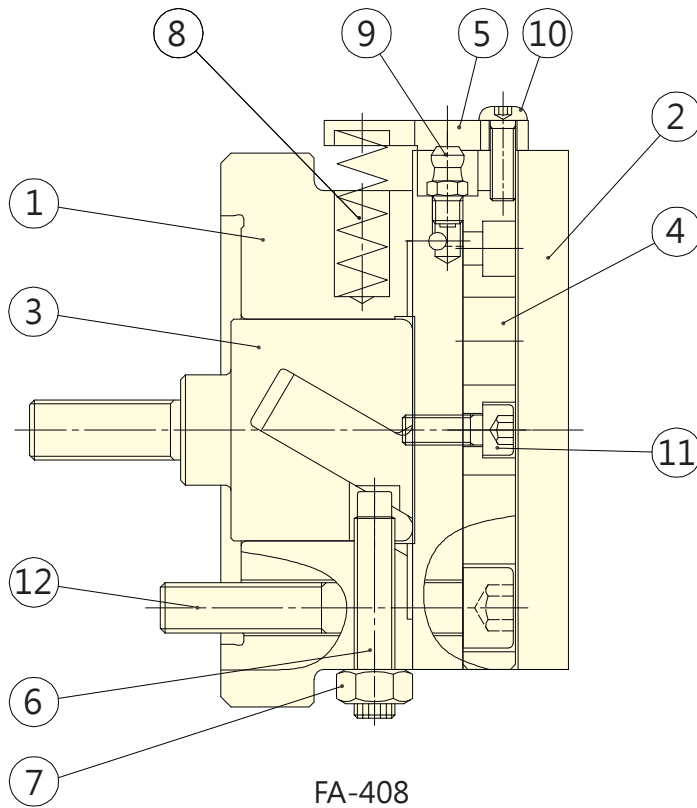


型號	楔心行程	滑座行程 (直徑)	最高迴轉數	容許最大入力	最大進給速度	重量	適用迴轉缸	最大使用壓力
Model	Plunger stroke (mm)	Slider stroke (mm)	Max. speed min ⁻¹ (r.p.m.)	MAX D.B. PULL kN (kgf)	Max. feed speed mm/min.	Weight (kg)	Matching cylinder	Max. pressure MPa (kgf/cm ²)
FD-632	20	32	3200	16.9(1720)	300	13.6	RS-1030N	2.4(24)
FD-840	25	40	2500	20.6(2100)	240	30	RS-1030N	3.0(30)
FD-1060	35	60	1800	20.6(2100)	200	41.5	RS-1040N	3.0(30)

型號	楔心行程	滑座行程 (直徑)	最高迴轉數	容許最大入力	重量	適用迴轉缸	I
Model	Plunger stroke (mm)	Slider stroke (mm)	Max. speed min ⁻¹ (r.p.m.)	Max. D.B. PULL kN (kgf)	Weight (kg)	Matching cylinder	Moment of inertia
FD-660	38	60	4000	18.3(1870)	12	RS-1040N	0.03
FD-880	48	80	2500	10.3(1050)	17	RS-1080N	0.081

1.3. 展刀搪溝頭零件表
型號 TYPE FA-408

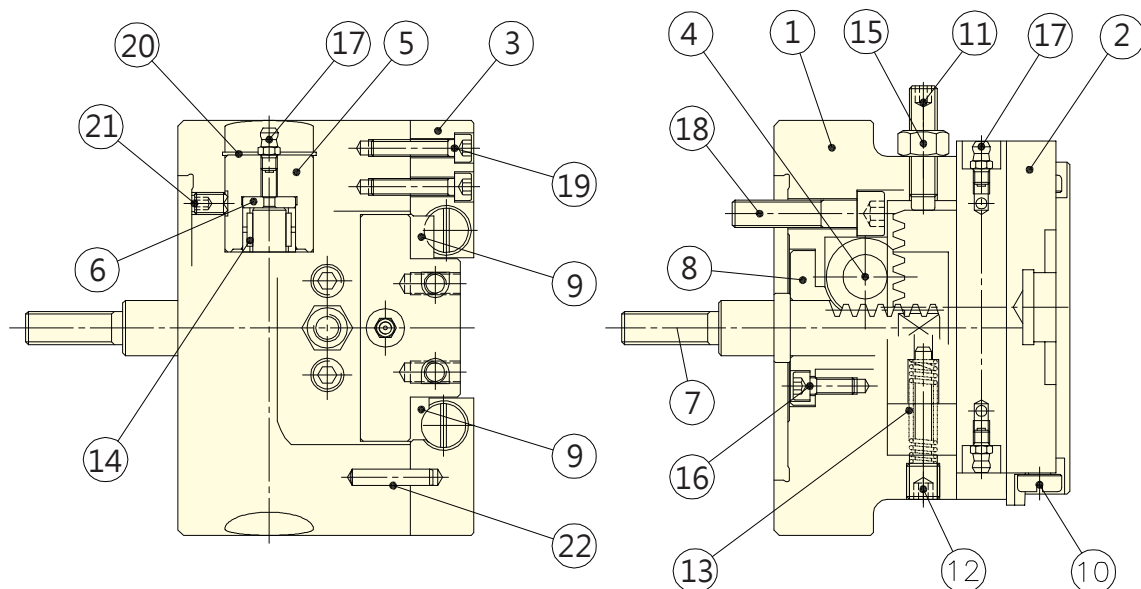
1.3. Parts list of single-slide facing head
(FA-408)



FA-408

No.	零件名稱	Name of parts	Q'ty
1	展刀頭本體	Body	1
2	刀座滑塊	Slide	1
3	中仁	Wedge plunger	1
4	壓板	Face plate	2
5	彈簧擋塊	Spring block	1
6	定位螺絲	Stoper screw	1
7	防鬆螺帽	Nut	1
8	彈簧	Spring	1
9	油嘴	Grease nipple	1
10	六角孔半圓頭螺絲	Hex. socket button screw	3
11	六角孔圓頭螺栓	Hex. socket cap bolt	10
12	夾頭安裝螺栓	Chuck mounting bolt	4

型號 TYPE FA-615

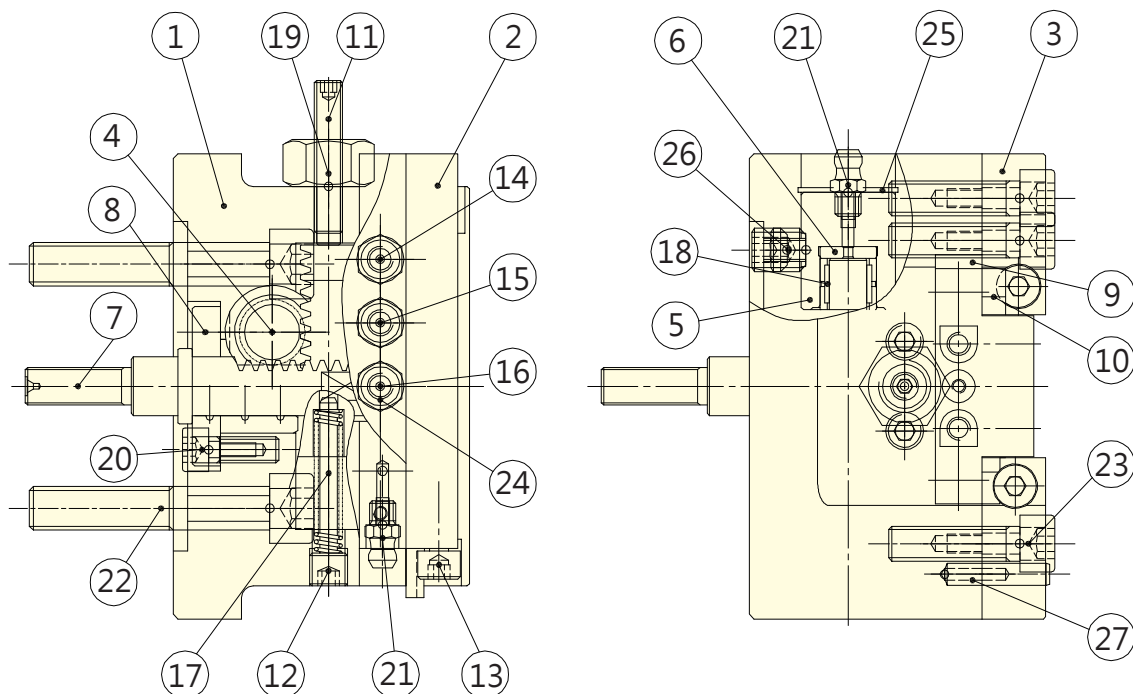


FA-615

No.	零件名稱	Name of parts	Q'ty
1	展刀頭本體	Body	1
2	刀座滑塊	Slide	1
3	壓板	Face plate	2
4	齒輪	Gear	1
5	齒輪軸受	Housing	2
6	軸受墊圈	Washer	2
7	齒條	Rack	1
8	齒條襯套	Metal	1
9	調隙板	Gib	2
10	調隙螺栓	Adjusting screw	4
11	定位螺絲	Stoper screw	2

No.	零件名稱	Name of parts	Q'ty
12	彈簧導銷	Spring guide pin	2
13	壓縮彈簧	Spring	2
14	針狀軸承	Needle roller bearing	2
15	防鬆螺帽	Nut	2
16	圓頭內六角螺栓	Hex. socket cap bolt	3
17	黃油嘴	Grease nipple	4
18	圓頭內六角螺栓	Hex. socket cap bolt	3
19	圓頭內六角螺栓	Hex. socket cap bolt	12
20	C 型扣環 (孔用)	Retaining ring C type -internal	2
21	無頭內六角螺栓	Hex. socket set screw	2
22	定位銷	Pin	4

型號 TYPE FA-830

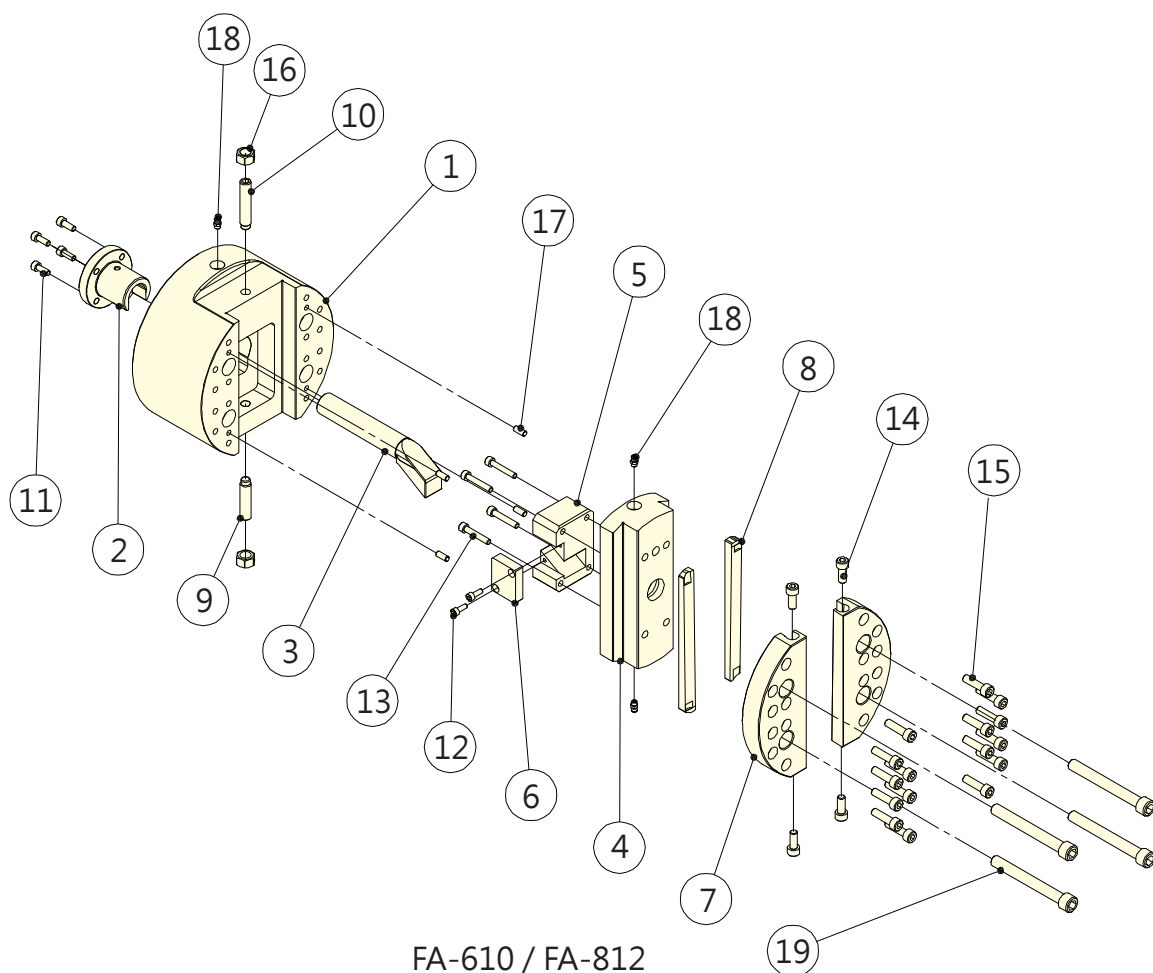


FA-830

No.	零件名稱	Name of parts	Q'ty
1	展刀頭本體	Body	1
2	刀座滑塊	Slide	1
3	壓板	Face plate	2
4	齒輪	Gear	1
5	齒輪軸受	Housing	2
6	軸受墊圈	Washer	2
7	齒條	Rack	1
8	齒條襯套	Metal	1
9	調隙板	Adjusting plate	1
10	調隙板 2	Gib	2
11	定位螺絲	Stoper screw	2
12	彈簧導銷	Spring suide pin	2
13	調隙螺栓	Adjusting screw	4

No.	零件名稱	Name of parts	Q'ty
14	調隙螺栓 2-1	Setting screw	2
15	調隙螺栓 2-2	Setting screw	2
16	調隙螺栓 2-3	Setting screw	1
17	壓縮彈簧	Spring	2
18	針狀軸承	Needle roller bearing	2
19	防鬆螺帽	Nut	2
20	圓頭內六角螺栓	Hex. socket cap blot	3
21	黃油嘴	Grease nipple	4
22	圓頭內六角螺栓	Hex. socket cap blot	6
23	圓頭內六角螺栓	Hex. socket cap blot	16
24	防鬆螺帽	Nut	5
25	C 型扣環 (孔用)	Retaining ring C type -internal	2
26	無頭內六角螺栓	Hex. socket set screw	4
27	定位銷	Pin	4

型號 TYPE FA-610/FA-812

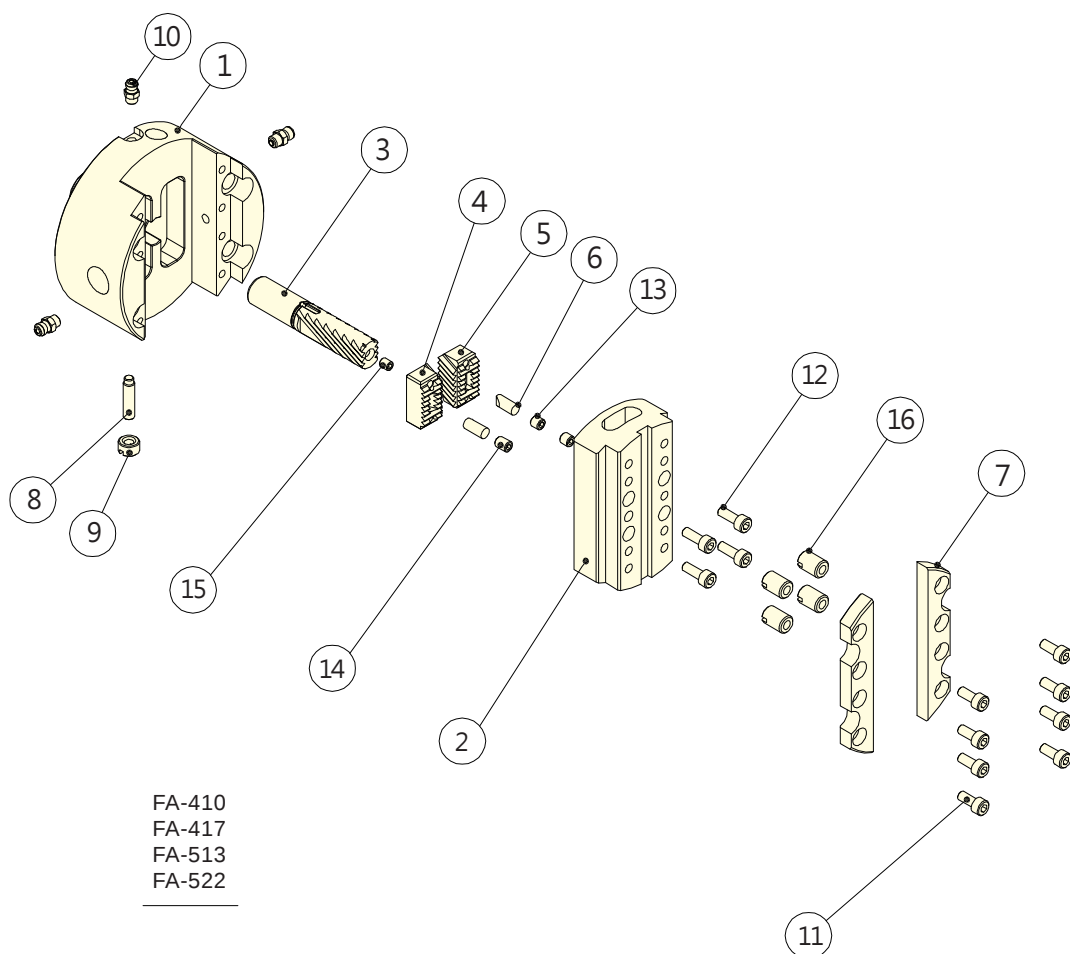


FA-610 / FA-812

No.	零件名稱	Name of parts	Q'ty
1	展刀頭本體	Body	1
2	拉桿襯套	Metal	1
3	斜楔拉桿	Draw wedge	1
4	刀座滑塊	Slide	1
5	斜楔母塊	Female wedge	1
6	楔塊固定板	Set plate	1
7	壓板	Face plate	2
8	調隙板	Gib	2
9	定位螺絲	Stoper screw	1
10	定位螺絲	Stoper screw	1

No.	零件名稱	Name of parts	Q'ty
11	圓頭內六角螺栓	Hex. socket cap blot	4
12	圓頭內六角螺栓	Hex. socket cap blot	2
13	圓頭內六角螺栓	Hex. socket cap blot	4
14	調隙螺栓	Adujisting screw	4
15	圓頭內六角螺栓	Hex. socket cap blot	16
16	定位螺帽	Nut	2
17	定位銷	Pin	4
18	黃油嘴	Grease nipple	3
19	圓頭內六角螺栓	Hex. socket cap blot	4

型號 TYPE FA-410/FA-417 /FA-513 / FA-522



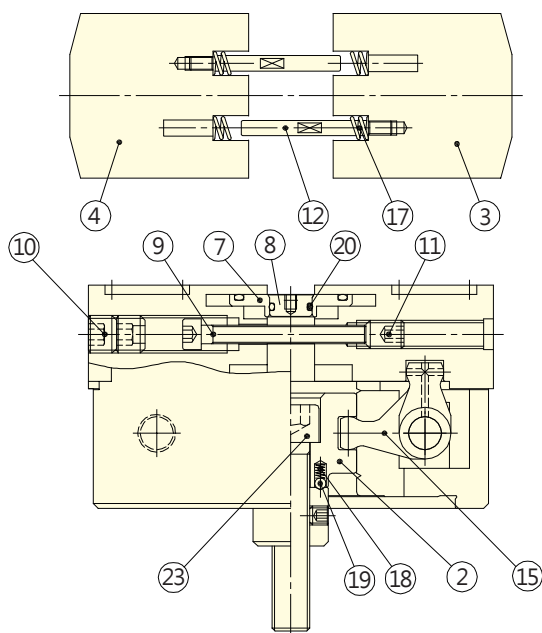
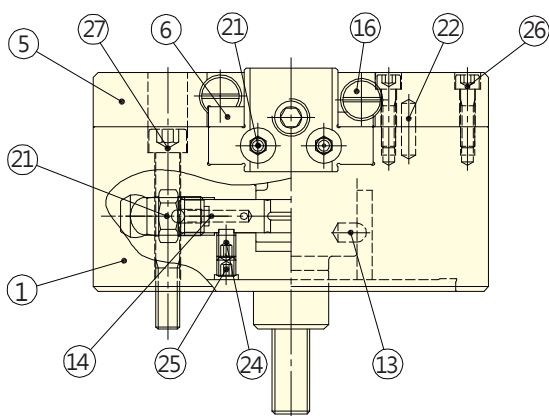
No.	零件名稱	Name of parts	Q'ty
1	本體	Body	1
2	刀座滑塊	Slide	1
3	驅動桿	Drive rod	1
4	左驅動排齒	Left drive teeth	1
5	右驅動排齒	Right drive teeth	1
6	排齒導銷	Pin	2
7	壓板	Face plate	2
8	定位螺絲	Stoper screw	2

No.	零件名稱	Name of parts	Q'ty
9	螺帽	Nut	2
10	黃油嘴	Grease nipple	3
11	圓頭六角孔螺栓	Hex. socket cap blot	8
12	圓頭六角孔螺栓	Hex. socket cap blot	4
13	無頭六角孔螺絲	Hex. socket set screw	2
14	無頭六角孔螺絲	Hex. socket set screw	1
15	無頭六角孔螺絲	Hex. socket set screw	1
16	自攻螺牙套	Self-Tapping Inserts	4

1.4. 雙向展刀搪溝頭零件表

型號 TYPE FD-632/FD-840/FD-1060

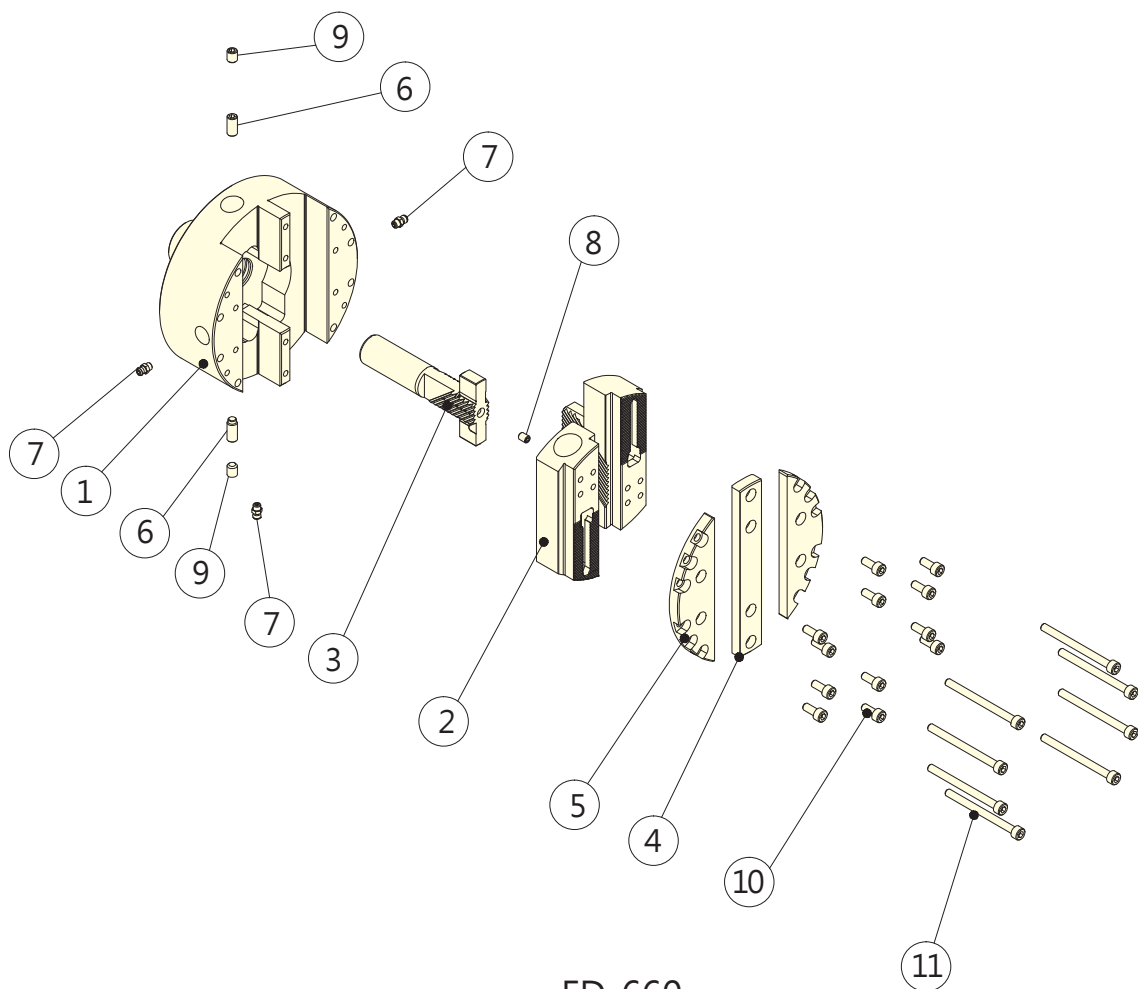
1.4. Parts list of double-slide facing head



FD-632/FD-840/FD-1060

No.	零件名稱	Name of parts	Q'ty
1	展刀頭本體	Body	1
2	中仁	Wedge plunger	1
3	主爪一	Slide-NO.1	1
4	主爪二	Slide-NO.2	1
5	壓板	Face plate	2
6	調隙板	Adjusting plate	2
7	防塵蓋	Cover	1
8	中孔塞	Central hole plug	1
9	定位螺絲	Stoper screw	1
10	後定位螺絲	Stoper screw	1
11	前定位螺絲	Stoper screw	1
12	彈簧導銷	Spring suide pin	2
13	中仁定位銷	Wedge plunger pin	1
14	曲柄銷	Crank pin	2

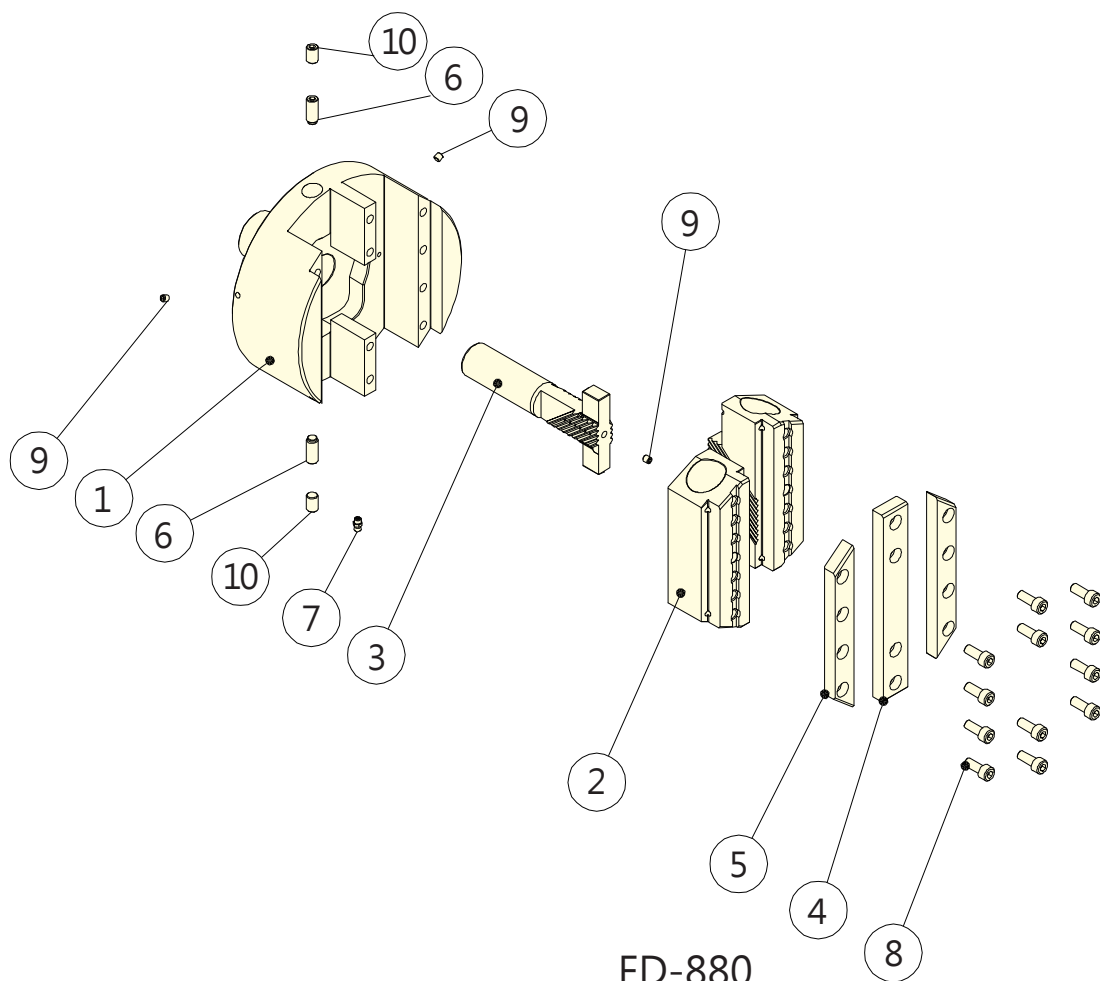
No.	零件名稱	Name of parts	Q'ty
15	曲柄	Crank	2
16	調隙螺栓	Adjusting screw	4
17	壓縮彈簧	Spring	2
18	壓縮彈簧	Spring	1
19	鋼珠	Steel ball	1
20	"O" 型環	O-ring	1
21	黃油嘴	Grease nipple	6
22	定位銷	Pin	4
23	連結螺栓	Draw screw	1
24	曲柄銷固定螺栓	Crank pin stoper	2
25	無頭內六角螺栓	Hex. socket set screw	3
26	圓頭內六角螺栓	Hex. socket cap blot	16
27	圓頭內六角螺栓	Hex. socket cap blot	6



FD-660

No.	零件名稱	Name of parts	Q'ty
1	展刀頭本體	Body	1
2	刀座滑塊	Slide	2
3	驅動桿	Drive rod	1
4	壓板	Face plate	1
5	側壓板	Face plate	2
6	定位螺絲	Stoper screw	2
7	黃油嘴	Grease nipple	3
8	固定螺絲	Hex. socket set screw	1
9	固定螺絲	Hex. socket set screw	2
10	圓頭內六角螺栓	Hex. socket cap bolt	12
11	圓頭內六角螺栓	Hex. socket cap bolt	8

型號 TYPE FD-880

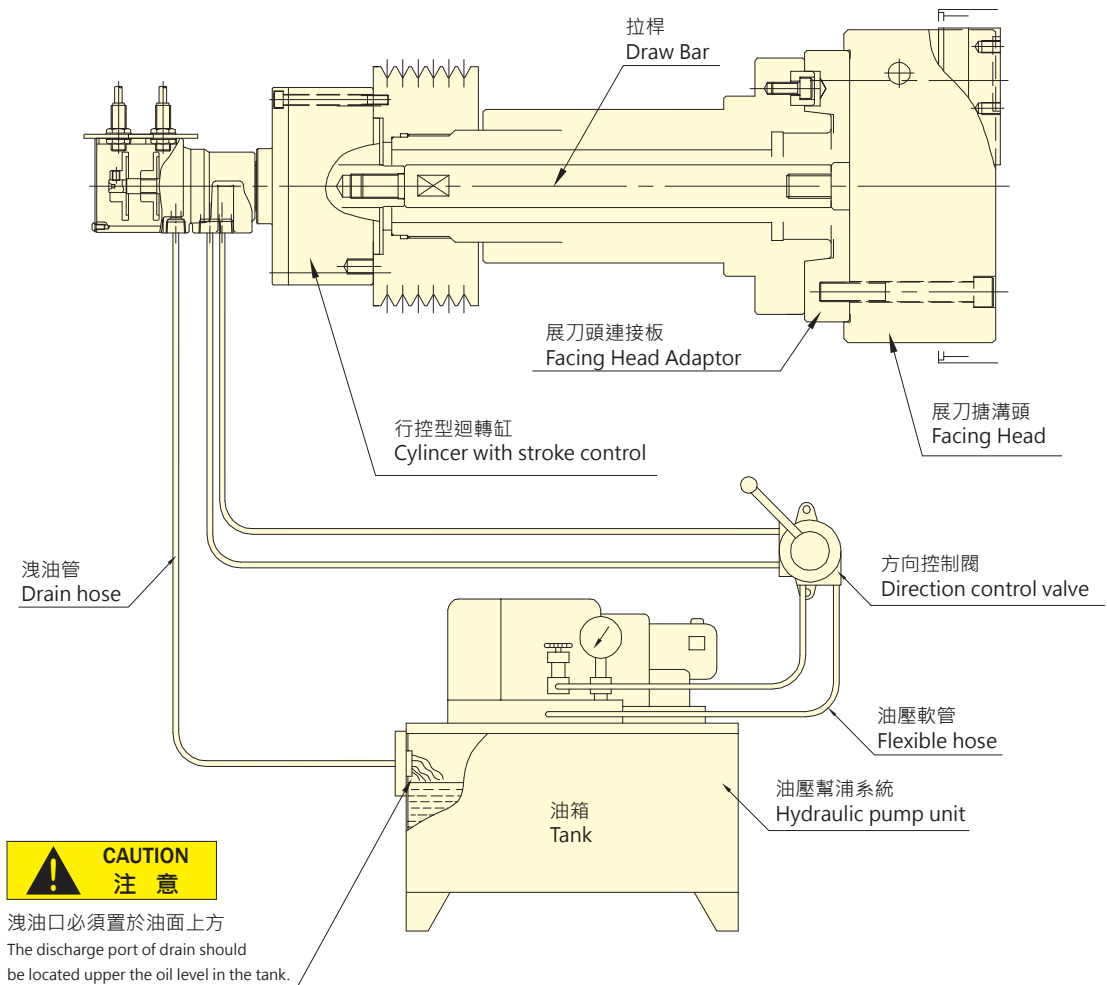


FD-880

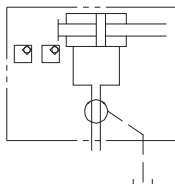
No.	零件名稱	Name of parts	Q'ty
1	本體	Body	1
2	刀座滑塊	Slide	2
3	驅動桿	Drive rod	1
4	壓板	Face plate	1
5	側壓板	Face plate	2
6	定位螺絲	Stoper screw	2
7	黃油嘴	Grease nipple	1
8	圓頭內六角螺栓	Hex. socket cap bolt	12
9	固定螺絲	Hex. socket set screw	3
10	固定螺絲	Hex. socket set screw	2

2. 裝配概要圖

2. Assembly drawing

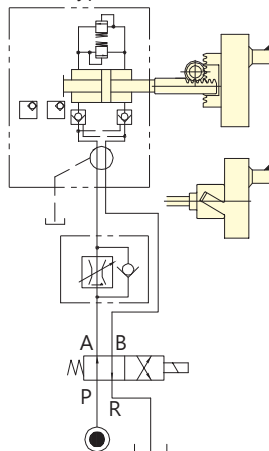


行控型迴轉油壓缸
Rotating Cylinder
with stroke control
RS-N-Type



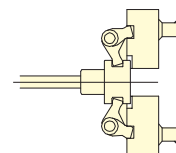
四口二位切換閥
4-ports 2-positions
controlled valve

附逆止閥行控型迴轉油壓缸
Rotating Cylinder
with stroke control and Safety Device
RS-Type



單向展刀擡溝頭
FA-Type
Single-slide
Facing Head

FA-408



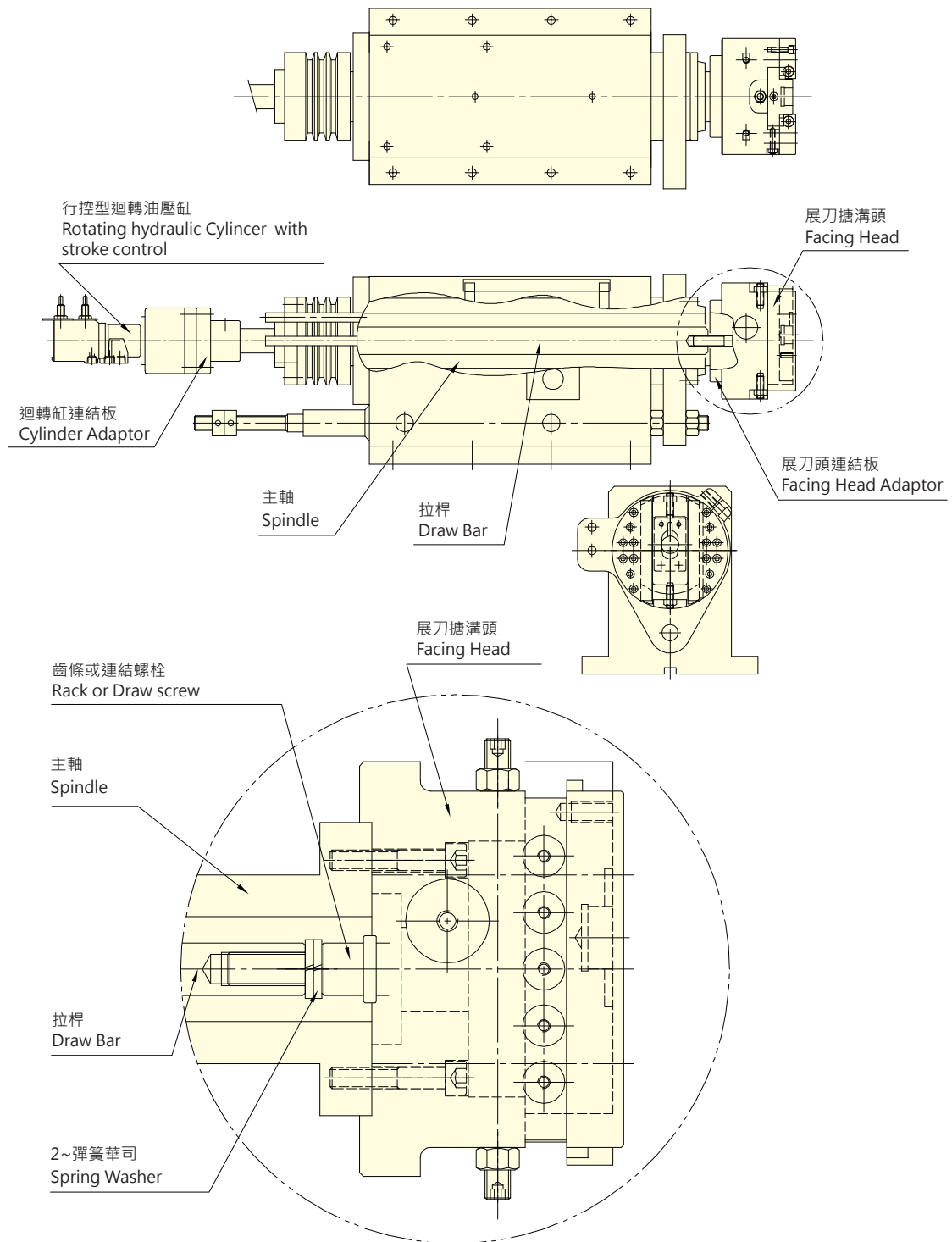
雙向展刀擡溝頭
FD-Type
Double-slide
Facing Head

3. 安裝

3.1. 展刀搪溝頭的安裝步驟

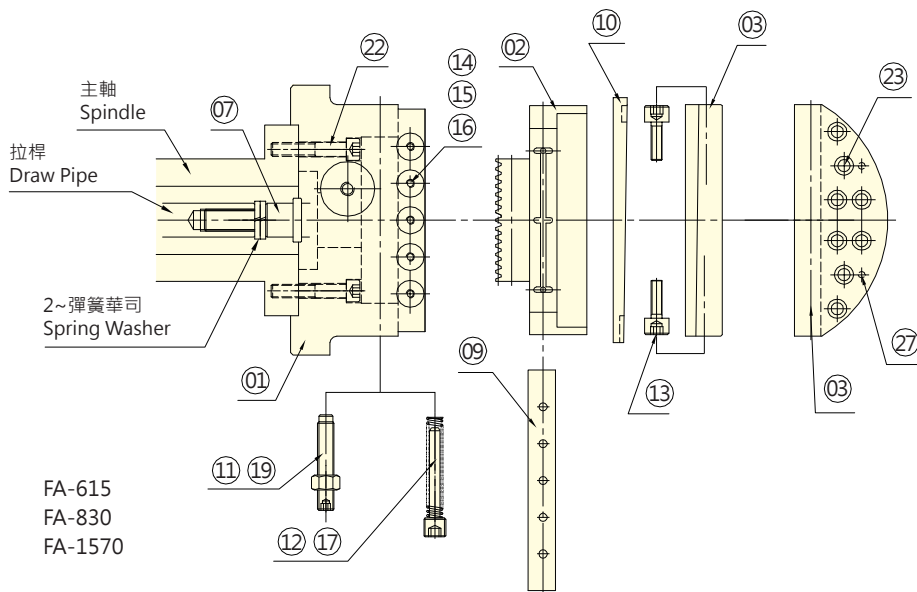
3. Mounting

3.1. Mounting steps of single-side facing head



拉桿和齒條鎖固時，需配合兩只彈簧華司鎖緊。

Use 2 spring washers along with tightening the draw pipe and the rack.



展刀搪溝頭安裝順序

1. 將定位螺栓 (11) 和螺帽 (19) 及彈簧導銷 (12) 和彈簧 (17) 先取下。
2. 依序將壓板 (03) , 調隙板 2 (10) , 刀座滑塊 (02) , 調隙板 (09) 取下。(拆解時注意螺絲 (23) 和定位銷 (27) 不要遺失了)
3. 將展刀搪溝頭 (01) 和主軸鎖固 (6~ 圓頭內六角螺絲 (22)), 並將齒條 (07) 和拉桿鎖固。(拉桿和齒條 (07) 鎖固時, 需配合兩只彈簧華司鎖緊, 請參照附圖一)。
4. 先裝上刀座滑塊 (02) 及調隙板 (09) , 再裝上調隙板 2 (10) 及壓板 (03)。(請確認所有螺絲 (23) 和定位銷 (27) 皆有裝上)
5. 調整 (14)、(15)、(16) 與 (13) , 使調隙板 (09) 與調隙板 2 (10) 與刀座滑塊 (02) 之間配合平滑順暢。
6. 鎖上彈簧導銷 (12) 和彈簧 (17) 。
7. 鎖上定位螺栓 (11) 和螺帽 (19) 並調整至所需行程即可。

附圖一 (拉桿和齒條鎖固時注意事項)
拉桿和齒條鎖緊後適度鬆開, 使齒條和齒輪垂直且展刀搪溝頭固定螺絲孔和主軸螺絲孔對齊無誤後, 再將展刀搪溝頭和主軸鎖緊。

Mounting steps of facing head

1. Remove the stopper screw (11) , nut (19) , spring guide pin (12) and spring (17) .
2. Remove the face plate (03) , adjusting plate 2 (10) , slide (02) and adjusting plate (09) in order. (Be sure to keep the screw (23) and pin (27) .
3. Mount the facing head (01) to the spindle (6~Hex. Socket cap bolt (22)) and connect the rack (07) and the draw pipe.(Use 2 spring washers along with tightening the draw pipe and rack (07) . Please refer to the Fig.1.)
4. Mount the slide (02) and adjusting plate (09) , then mount adjusting plate 2 (10) and face plate (03) .(Make sure all screw (23) and pin (27) are mounted.)
5. Adjust (14)、(15)、(16) and (13) , to coordinate the adjusting plate (09) with adjusting plate 2 (10) and slide (02) smoothly.
6. Integrate the spring guide pin (12) and the spring (17) .
7. Tighten the stoper screw (11) and nut (19) , and adjust to the required stroke.

• Fig.1 (Important items for tightening the draw pipe and rack)
Tighten the draw pipe and rack, then loose moderately. When the rack and the gear are vertical and the facing head nut hole is aimed at the spindle nut hole, lock the facing head along with the spindle.

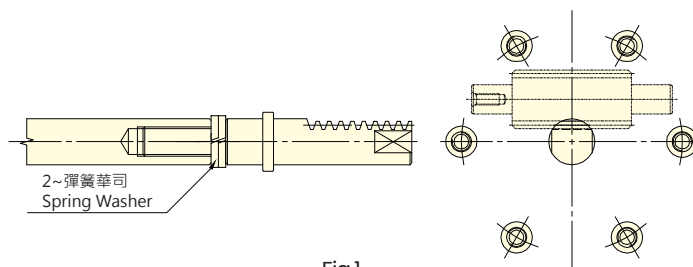
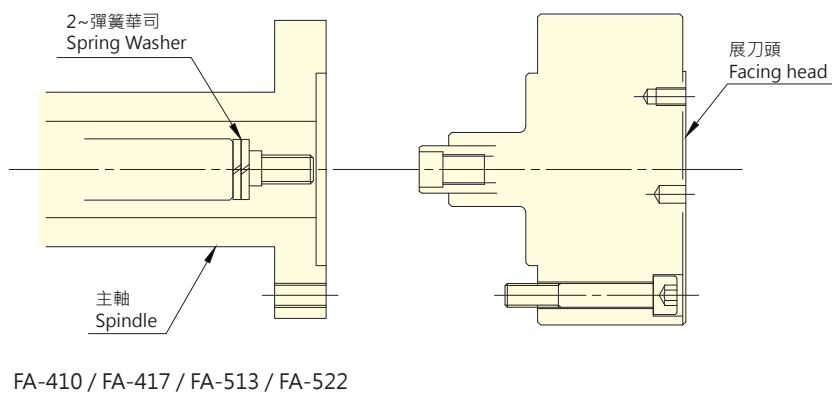
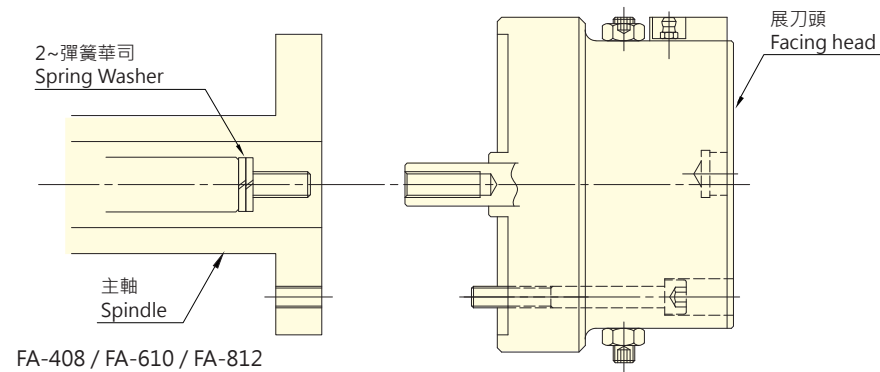


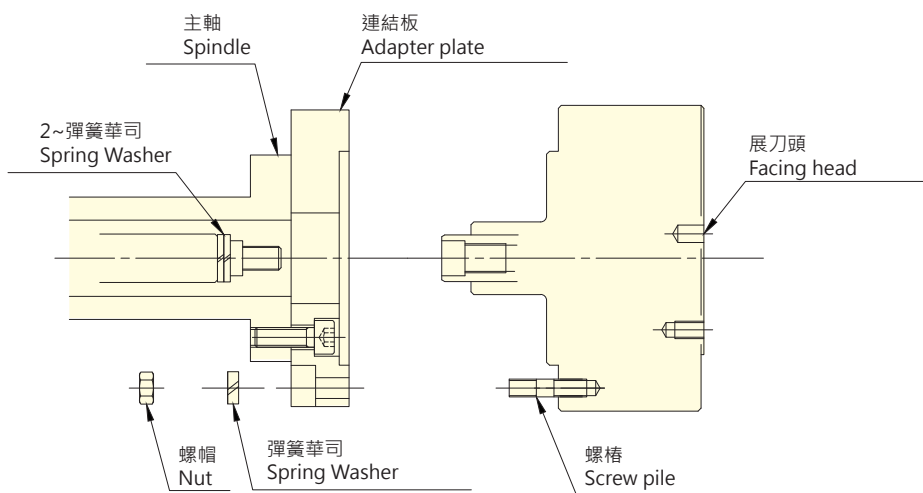
Fig.1

(FA-408/FA-610/FA-812/FA-410/FA-417/ FA-513 / FA-522)



1. 使用六角扳手將展刀頭裝於主軸上。

1. Use a hex wrench to attach the chuck to the spindle.

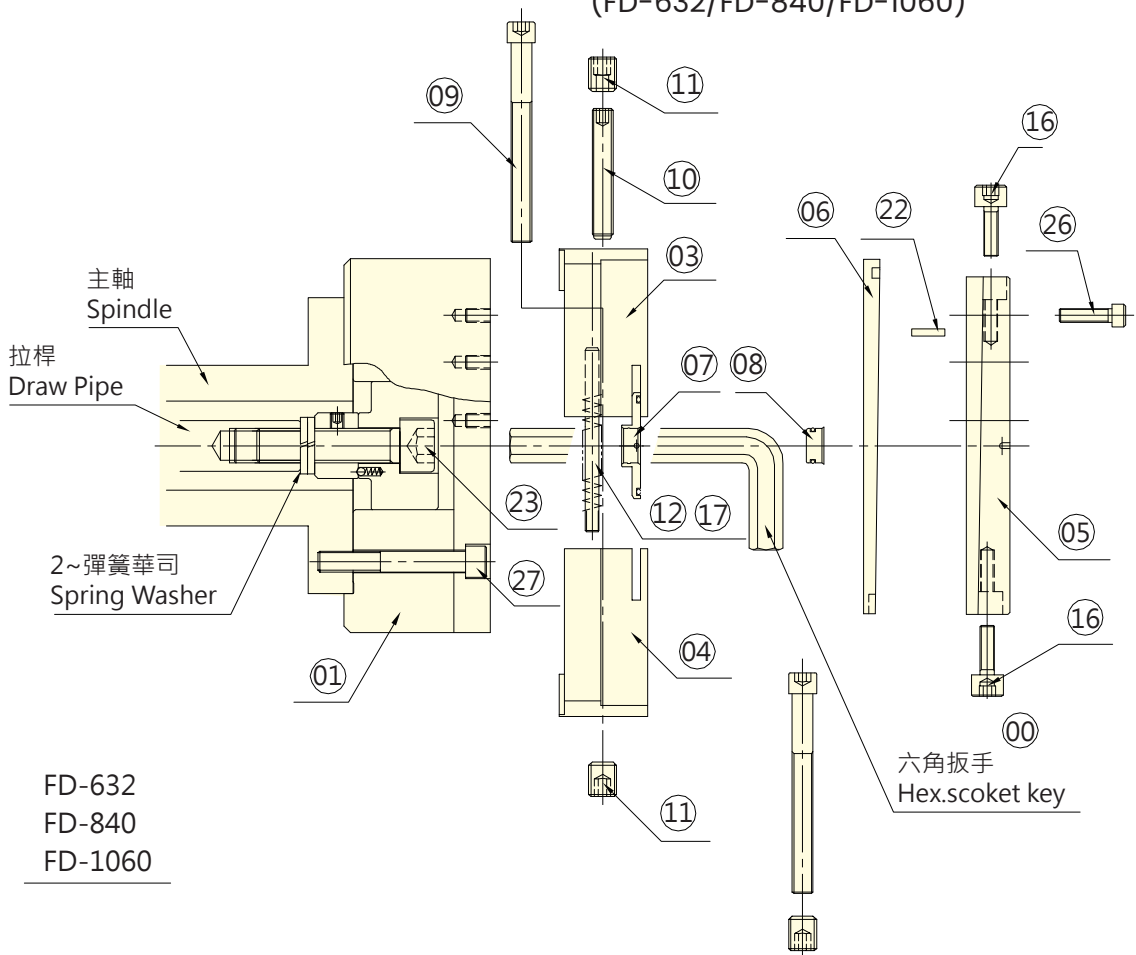


1. 將連結板裝於主軸上。
2. 將螺樁鎖於展刀頭本體上。
3. 使用開口扳手將展刀頭裝於連結板上。

1. Attach the adapter plate to the spindle.
2. Lock the screw pile on the body of the chuck.
3. Use an open-end wrench to attach the Facing head to the Adapter plate.

3.2. 雙向展刀搪溝頭安裝步驟 (FD-632/FD-840/FD-1060)

3.2. Mounting steps of double-slide facing head (FD-632/FD-840/FD-1060)



雙展刀搪溝頭安裝順序

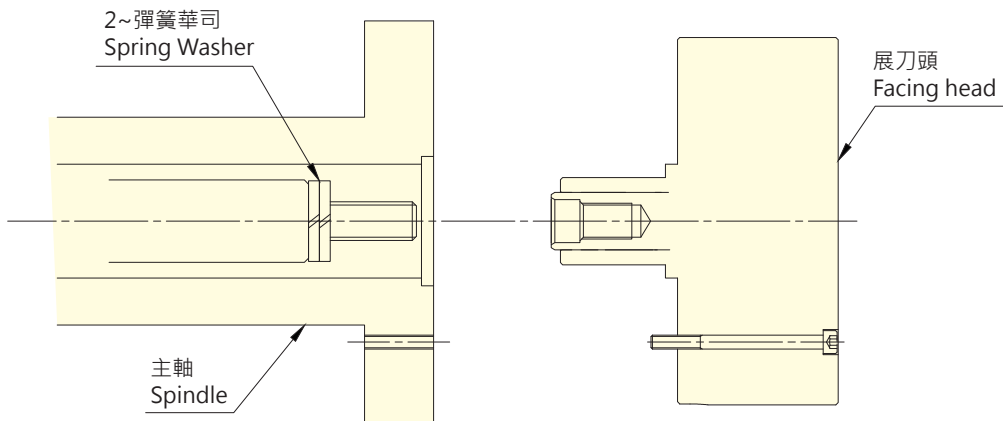
1. 將定位螺栓和螺絲⑨、⑩、⑪及彈簧導銷和彈簧⑫、⑬先取下。
2. 依序將壓板⑤，刀座滑塊③、④，調隙板⑥取下。
(拆解時注意螺絲⑫和定位銷⑭不要遺失了)
3. 使用六角扳手①將展刀搪溝頭①和主軸鎖固
(6~圓頭內六角螺絲⑫) 並將螺栓⑫和拉桿鎖固。
4. 先裝上刀座滑塊③、④及調隙板⑥，再裝壓板⑤。(請確認所有螺絲⑫和定位銷⑭皆有裝上)
5. 調整⑮，使調隙板⑥與刀座滑塊③、④之間配合平滑順暢。
6. 鎖上彈簧導銷⑫和彈簧⑬。
7. 鎖上定位螺栓和螺絲⑨、⑩、⑪並調整至所需行程即可。

Mounting steps of facing head

1. Remove the stopper screw, nuts ⑨, ⑩, ⑪, spring guide pin and spring ⑫, ⑬.
2. Remove the face plate ⑤, slide ③, ④ and adjusting 08 plate. (Be sure to keep the screw ⑫ and pin ⑭.)
3. Mount the facing head to the spindle (6-hex. Socket cap bolt ⑫) with a hexagon wrench ① and tighten the screw 23 and draw pipe.
4. Mount the slide ③, ④ and adjusting plate 06, then the face plate ⑤. (Make sure all screw ⑫ and pin ⑭ are mounted.)
5. Adjust ⑮ to coordinate the adjusting plate ⑥ with the slide ③, ④ smoothly.
6. Integrate the spring guide pin ⑫ and the spring ⑬.
7. Tighten the stoper screw and screws ⑨, ⑩, ⑪ and adjust to required stroke.

安裝步驟 (FD-660/FD-880)

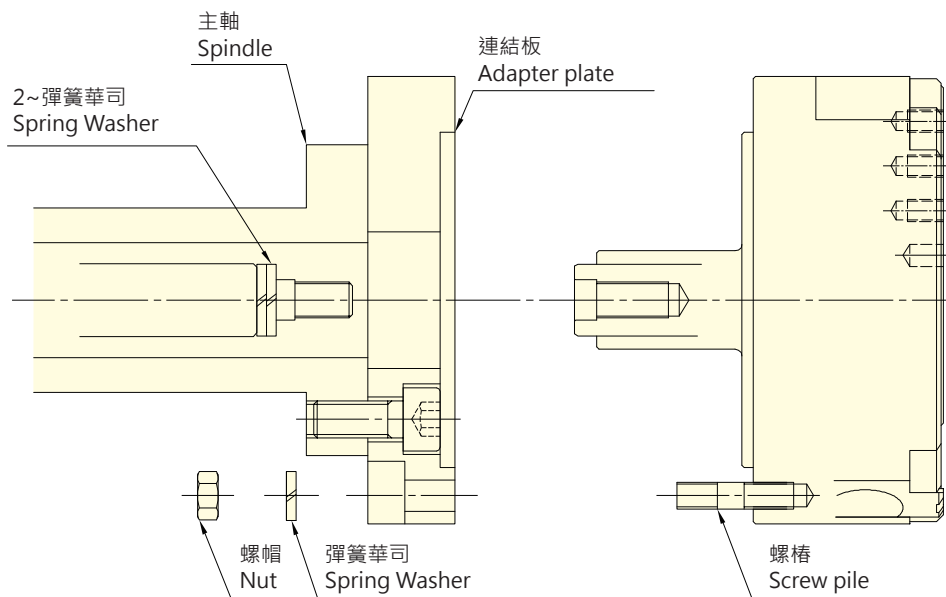
Mounting steps of double-slide facing head(FD-660/FD-880)



FD-660

1. 使用六角扳手將展刀頭裝於主軸上。

1. Use a hex wrench to attach the chuck to the spindle.



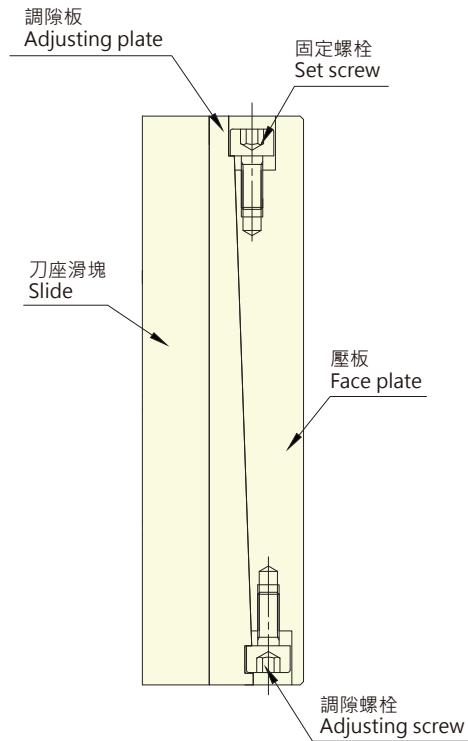
FD-880

1. 將連結板裝於主軸上。
2. 將螺樁鎖於展刀頭本體上。
3. 使用開口扳手將展刀頭裝於連結板上。

1. Attach the adapter plate to the spindle.
2. Lock the screw pile on the body of the chuck.
3. Use an open-end wrench to attach the Facing head to the Adapter plate.

3.3. 調隙板調整說明

3.3. Stroke setting of Adjusting plate



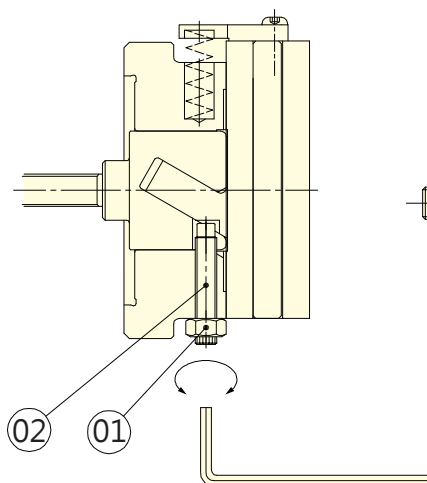
依加工條件調整至刀座滑塊動作順暢

Adjust to coordinate the adjusting plate with the slide , smoothly.

- (1) 鬆開固定螺栓。
- (2) 調整調隙螺栓至刀座滑塊動作順暢。
- (3) 鎖緊固定螺栓。

- (1) Loose the Set screw .
- (2) Adjust the adjusting screw to the slide of the tool holder to move smoothly.
- (3) Tighten the Set screw .

3.4. 展刀搪溝頭行程調整說明



FA-408

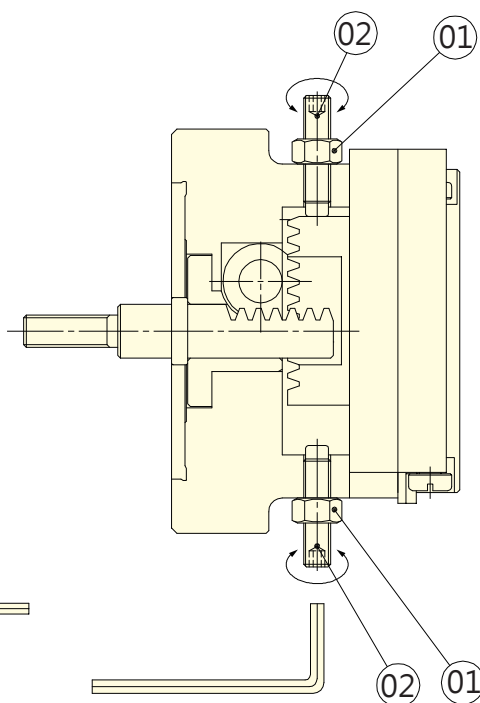
1. 將①防鬆螺帽調鬆或取下。
2. 調整②定位螺絲螺絲至所需之爪距。
3. 再將①防鬆螺帽鎖緊。



CAUTION
注意

- 調整行程時，不可超過行程，若超過行程將導致零件損壞。

3.4. Stroke setting of double-slide facing head



FA-615 / FA-830

1. Loose or remove the nut ①.
2. Adjust the stopper screw ② to the required stroke.
3. Tighten the nut ①.

- Adjusting the stroke must not exceed its limit. Exceeding the stroke limit may result in damage to the components."

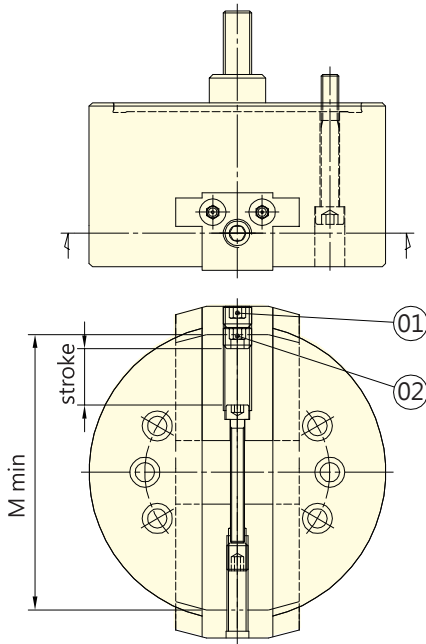
型號 Model	FA-408	FA-610	FA-812	FA-615	FA-830	FA-1570
行程 (直徑) Stroke(Dia.)	8	10	12	15	30	70

IMPORTANT 留 意 事 項

註：展刀頭行程採用機械式調整，藉由定位螺絲來設定並控制尺寸精度，其重複精度可在 0.03mm 以內，如應用上欲採用伺服器取代迴轉缸控制行程，並不建議使用。

The Facing Head stroke adjustment by mechanism and control precision of dimension through stopper screw, that could be control precision within 0.03mm in tolerance. So, we are not recommend apply if use serve replace rotating cylinder to control stroke.

3.5. 雙向展刀搪溝頭行程調整說明 型號 FD-632 Type



最小爪距調整設定 M min.

1. 將止付螺絲①調鬆或取下。
2. 調整②調整螺絲至所需之行程。
3. 再將止付螺絲①鎖緊。

Minimal stroke setting.

1. Loose or remove the stopper screw ①.
2. Adjust ② to the required stroke.
3. Then tighten the stopper screw ①.



CAUTION
注意

- 調整行程時，不可超過行程，若超過行程將導致零件損壞。

型號 Model	FD-632
行程 (直徑) Stroke(Dia.)	32

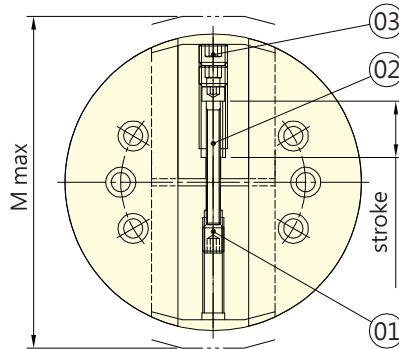
IMPORTANT 留意事項

註：展刀頭行程採用機械式調整，藉由定位螺絲來設定並控制尺寸精度，其重複精度可在 0.03mm 以內，如應用上欲採用伺服器取代迴轉缸控制行程，並不建議使用。

The Facing Head stroke adjustment by mechanism and control precision of dimension through stopper screw, that could be control precision within 0.03mm in tolerance. So, we are not recommend apply if use serve replace rotating cylinder to control stroke.

3.5. Stroke setting of double-slide facing head

FD-632
爪距(行程)調整示意圖



最大爪距調整設定 M max.

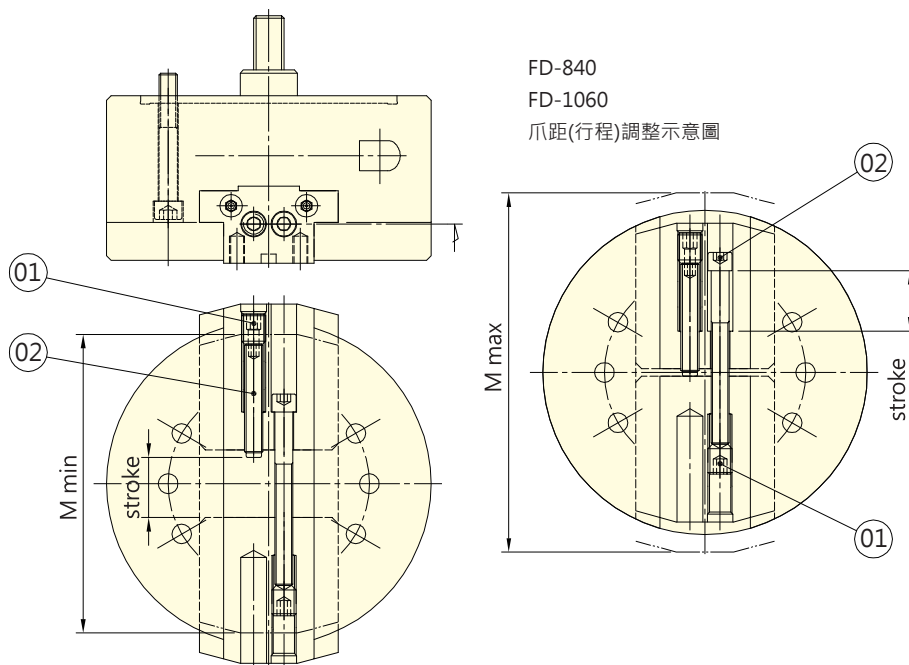
1. 將止付螺絲①調鬆，止付螺絲③取下。
2. 調整②調整螺絲至所需行程。
3. 再將止付螺絲①鎖緊。

Maximal stroke setting.

1. Loose or remove the stopper screw ①, and remove the stopper screw.
2. Adjust ② to the required stroke.
3. Then tighten the stopper screw ①.

- Adjusting the stroke must not exceed its limit. Exceeding the stroke limit may result in damage to the components."

型號 FD-840、FD-1060 Type



最小爪距調整設定 M min.

1. 將止付螺絲(01)調鬆或取下。
2. 調整(02)調整螺絲至所需之行程。
3. 再將止付螺絲(01)鎖緊

Minimal stroke setting.

1. Loose or remove the stopper screw (01) .
2. Adjust (02) to the required stroke.
3. Then tighten the stopper screw (01) .



CAUTION
注意

- 調整行程時，不可超過行程，若超過行程將導致零件損壞。

最大爪距調整設定 M max.

1. 將止付螺絲(01)調鬆或取下。
2. 調整(02)調整螺絲至所需之行程。
3. 再將止付螺絲(01)鎖緊。

Maximal stroke setting.

1. Loose or remove the stopper screw (01) .
2. Adjust (02) to the required stroke.
3. Then tighten the stopper screw (01) .

- Adjusting the stroke must not exceed its limit. Exceeding the stroke limit may result in damage to the components."

型號 Model	FD-840	FD-1060
行程 (直徑) Stroke(Dia.)	40	60

IMPORTANT 留意事項

註：展刀頭行程採用機械式調整，藉由定位螺絲來設定並控制尺寸精度，其重複精度可在 0.03mm 以內，如應用上欲採用伺服器取代迴轉缸控制行程，並不建議使用。

The Facing Head stroke adjustment by mechanism and control precision of dimension through stoper screw,that could be control precision within 0.03mm in tolerance. So, we are not recommend apply if use serve replace rotating cylinder to contral stroke.

4. 潤滑及保養



WARNING 警告

- 長時間定期地潤滑可保持展刀搪溝頭壽命。錯誤的潤滑將導致精度不良,磨損及卡住,故必須潤滑展刀搪溝頭。

潤滑的處所	潤滑油種類	潤滑週期
使用潤滑油槍將潤滑油注入每一個主爪周圍的油嘴。	二硫化鉬潤滑油	每日一次,但如果夾頭在高速旋轉或大量的水性切削液於加工中使用時,需要更多的潤滑,請依照不同的情況來決定。

- 加工完後務必以風槍或類似的工具清潔展刀搪溝頭本體及滑道面。
- 避免因生鏽而降低夾持力,需使用防銹之切銷油。



CAUTION 注意

- 每六個月 (或每 10 萬次) 取下展刀搪溝頭做一次徹底之清潔 (切削鑄鐵則每二個月至少一次)。
檢查零件有無損壞或磨損,如嚴重時立即更換新品。
- 組裝前須充份潤滑。

4. Lubrication and Maintenance

- To maintain the Facing head for a long period of time, it is necessary to lubricate the chuck on a regular basis. Inadequate lubrication causes malfunction at low hydraulic pressure, reduces gripping force and affects gripping accuracy, and causes wear and seizure. Consequently, securely lubricate the Facing head.

Section to be lubricated	Grease useds	Lubrication cycle
Apply grease from the grease nipple at the periphery end of each master jaw with a grease gun.	Moly Kote EP Grease (DOW CORNING CO.,LTD)	Once a day. However, when the chuck is operated at high speed rotation or a large amount of water soluble cutting oil is used, more of lubricated is needed according to service conditions.

- After machining, clean the Facing head body and slideway with air gun, etc.
- Use rust prevention coolant oil so that rust does not reduce gripping force.

- Disassemble and clean the Facing head at least once per 6 months or every 100,000th used (once every two months for the casting) See if parts are worn or cracked and replace it if required.
- Lubricated the chuck before reassembling.

5. 故障排除

- 如展刀搪溝頭故障，請停下來檢查，依下列情況來處理。

不正常情況	可能原因	對策
展刀搪溝頭不能動作	展刀搪溝頭零件損壞	分解展刀搪溝頭及更換損壞零件。
	滑動部位被卡住。	分解展刀搪溝頭及取出被卡住的部位，以油石修整之或更換。
	油壓缸沒有動作	檢視油壓系統，如減壓閥、洩壓閥 ... 等。
齒輪或中仁的全行程不足	內部積存了太多的雜屑。	分解展刀搪溝頭後清理。
	液壓油雜屑過多。	分解油壓缸後清理，並清理液壓油箱，更換新的液壓油。
刀座滑塊震動加工面粗糙度不良	刀座滑塊槽間隙過大。	調整調隙板至適當間隙或將調隙板取下重新鏤花，或調隙板厚度已不定，請更換調隙板。
	刀座滑塊與刀具固定不良，或使用過長的刀具。	調整刀座滑塊與刀具固定好並使用適當前刀具。
刀座滑塊定位精度不良	齒輪與刀座滑塊之間有砂塵，切削，毛邊 ... 等干涉。	取下刀座滑塊並目完全清理。
	定位螺絲沒有鎖緊或拉桿鬆脫。	重新調整設定並依適當力矩鎖緊，拉桿鎖緊並加防鬆墊圈。

備註：

簡單的故障請自行處理，如無法自行處理或特殊狀況時，可通知您的經銷商或寄回本公司處理。

5. Troubleshooting

- If the chuck malfunctions, stop the lathe and try the following countermeasures.

Problem	Possible Reasons	Countermeasures
Facing head will not work	Facing head part is damaged	Disassemble Facing head and replace part.
	Slidway seizes.	Disassemble and repair Facing head damaged part with oil stone or make change.
	Hydraulic cylinder is not working.	Examine the hydraulic system, pressure reduction valve, over valve etc.
Insufficient Gear or Wedge plunger total stroke.	Too much swarf in chuck.	Disassemble and clean Facing head.
	Too much miscellaneous bits of hydraulic oil.	Disassemble hydraulic cylinder and clean hydraulic tank, replace new hydraulic oil.
Slide Vibrations, processing roughness is bad	The notch interval of Slide is too big.	Adjusting gib to suitable interval or take the gib to shovel afresh, or depth of the gib is insufficient, please replace gib.
	Slide and cutter fixed is bad, or use longer cutter.	Adjusting Slide and cutter to fixed and use the suitable cutter.
Slide retaining reservation Poor accuracy	Foreign mater is caught in serrations between Gear and Slide, dust...ect.	Remove top Slide and clean serrations thoroughly.
	Sloper bolts are inadequately tightened or Draw pipe is loose.	Afresh adjust the institute and tighten bolts to correct torque, locking. Draw pipe and add to the washer.

Remark :

If no distributor or agent locally, then contact AUTOGRIP Machinery Co., Ltd.

On receipt of the product, we will inform you immediately of repair schedule. Please call us if you find any problems.



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We reserve the right to modify without prior notice.



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