

550
-006
-007
-012

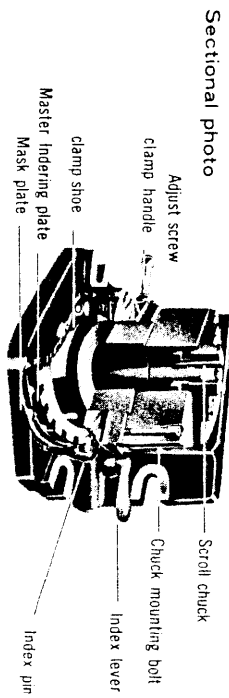
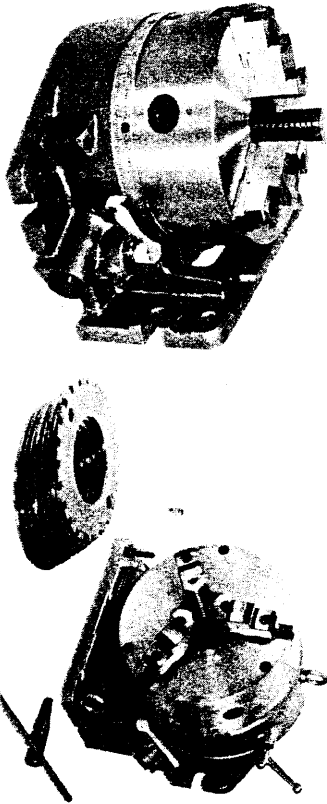
Accu-Dex.

Standard Accessories:

- Special scroll chuck (6" for 550-006
- " " (8") for 550-007
- " " (12") for 550-012
- mask plates
- tooth numbers 2, 3, 4, 6, 8 and 12)
- 1 each — in case of stock No. 550-006, 550-007
- (tooth numbers 2, 3, 4, 6, 8, 12, 16 and 24) each — in case of 550-012

Note:

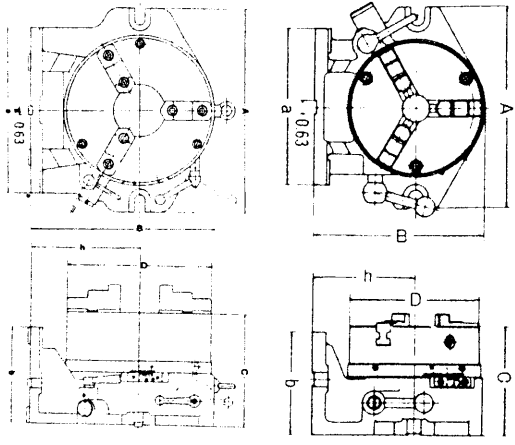
This special adjustable type scroll chuck provided with a 2-piece interchangeable jaw mechanism will largely facilitate centering work.



Dimensional drawings

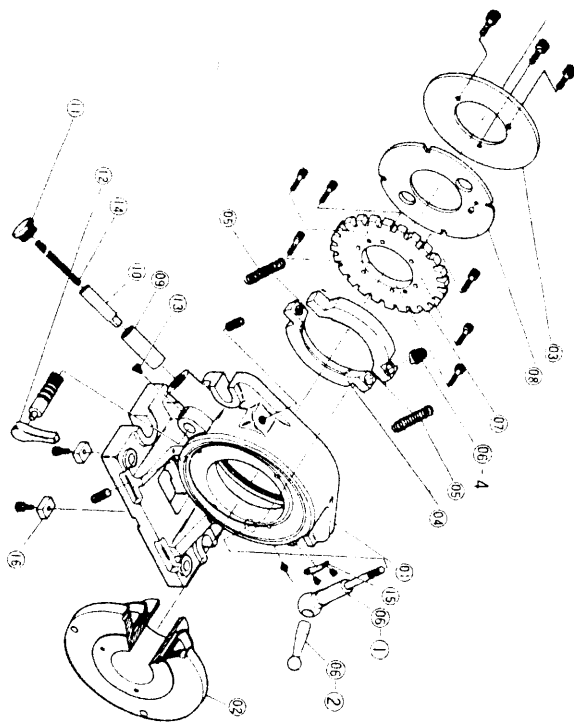
Stock No.	Divisional number	Inch								Inner jaw	Outer jaw	Diameter of hole (chuck)	Diameter of hole (turret)	Net weight kg. lbs.
		A	B	a	b	A	C	D						
550-006	2, 3, 4, 6,	296	218	220	130	131	156.2	107	4-42	10-136	44	36	32.5	
		10.24	8.58	8.66	5.12	5.12	6.15	6.17	0.16-1.65	0.39-6.14	1.73	1.41	71.6	
550-007	R. 12, 24	312	254	258	148	149	251.3	210	4-62	10-180	62	63	60	
		12.28	10.16	10.16	5.83	5.86	6.82	8.27	0.16-2.44	0.39-7.08	2.48	2.48	110.2	
550-012	2, 3, 4, 6, 8,	442	398	350	200	228	231.1	310	5-106	15-266	110	104.5	146	
		17.00	15.27	13.78	7.87	8.98	9.10	12.20	0.2-4.25	0.59-10.43	4.33	4.0	222.0	

Inch mm. inches



Exploded view

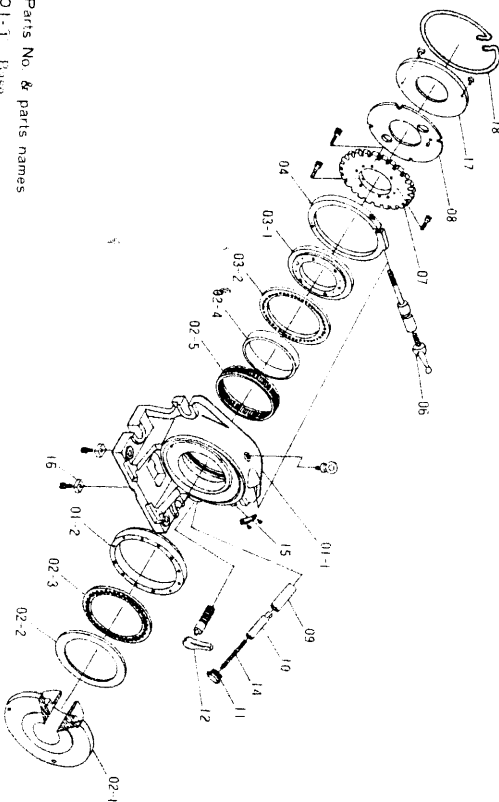
(550-006, 007)



- Parts No. & parts names
- 01 Base
 - 02 Turret
 - 03 Thrust plate
 - 04 Clamp shoe
 - 05 Clamp shoe spring
 - 06 Clamp handle
 - 07 Master index plate
 - 08 Mask plate

- 09 Bushing
- 10 Index pin
- 11 Index pin cover
- 12 Pinion handle
- 13 Set screw for pinion handle
- 14 Index pin spring
- 15 Vernier
- 16 Guide Block

(550-012)



- Parts No. & parts names
- 01-1 Base
 - 01-2 Thrust ring A (Outer ring)
 - 02-1 Turret
 - 02-2 Thrust ring B
 - 02-3 Retainer A
 - 02-4 Inner ring
 - 02-5 Needle bearing
 - 03-1 Thrust plate

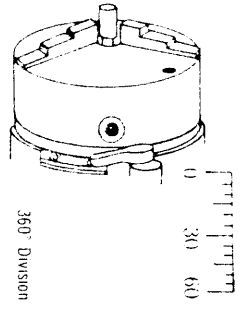
- 03-2 Retainer B
- 04 Clamp ring
- 05 Clamp handle
- 06 Master index Plate
- 07 Mask plate
- 08 Bushing
- 09 Index pin
- 10 Index pin cover
- 11 Index pin cover
- 12 Pinion handle
- 14 Index pin spring
- 15 Vernier
- 16 Guide block
- 17 Cover Plate
- 18 Returning spring

(A) Angle read-out

To read the angle, the turret is provided with a full 360° graduation, and equipped with a vernier which can read up to five minutes.

(B) The special type chuck and jaws
As shown in the illustration, the chuck's jaws are composed of "two-piece jaws" they are easily interchangeable.

550-006...6" adjustable type scroll chuck.
550-007...8" " "
550-012...12" " "



(C) Index plate

The master index plate for single-purpose indexing is divided into 24 equal parts, and by using a mask plate in place, positions of 2, 3, 4, 6, 8, 12, and 24 can be easily indexed so that no operational error may be found.

The master index plate (Stock No. 550-012) is divided into 48 equal parts, and by using a mask plate in place, positions of 2, 3, 4, 6, 8, 12, 16, 24 and 48 can be easily indexed.

(1) How to index (In case of trisection)

First remove the thrust plate 03 located at the reverse side of the body by loosening its three clamping bolts.
Remove the returning spring of Stock No. 550-012.

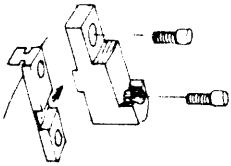


Fig. 1

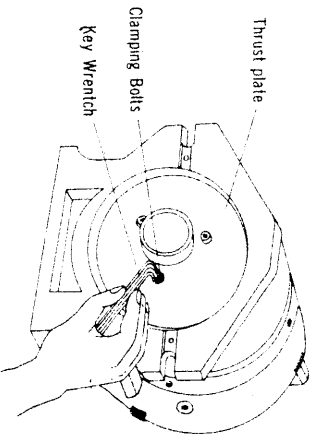


Fig. 2

(2) On removing the cover, there may be found the master index plate

Insert the mask plate that has been trisected into the said master index plate.
The guide boss of the mask plate should be well adjusted to the guide hole of the index plate.

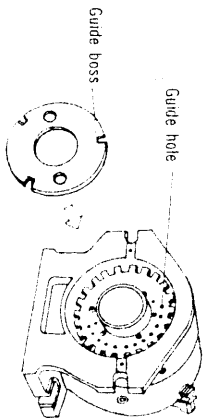


Fig. 3

(3) Mount the workpiece on the chuck.

Incomplete centering will have an ill effect on the dividing accuracy.

Especially in case of fitting unhardened jaws to the scroll chuck or fitting them again after their removal, be sure to carry out centering.

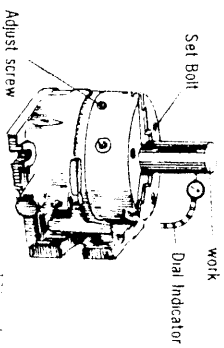


Fig. 4

(4) In the indexing operation, first loosen the clamp handle, then pull the index lever toward yourself, remove the index pin from the groove, and press the lever downward as it is. As shown in the illustration, this procedure signifies that, when pressing 12 downward, the head of screw 13 is going to enter the pinion shaft so that 12 is no longer rotatable, thus the index pin will become inevitably left in such a state as it has retracted inside.

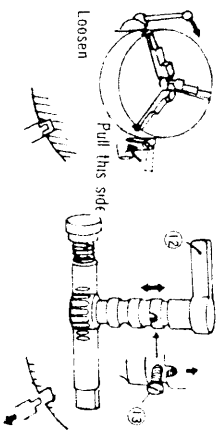


Fig. 5

- (5) Next, after slightly rotating the table, raise the lever upward and give the index pin an additional turn so that the index pin will automatically fall in the groove. The index lever will return to the original state by means of a spring when released.

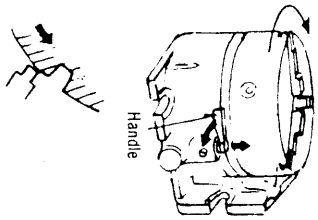


Fig. 6

- (6) Before machining begins, tighten the clamp handle and tightly clamp unit to the table. This procedure is essential for quality work.

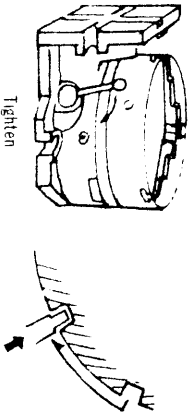


Fig. 7

How to change the master index plate

Remove the Thrust plate, and also take off six hexagon socket head bolts for the master index plate setting, then insert two screw stocks whose length is 2" or so into tapped holes for master index plate removal (M8, P1.25 in case of using 550-006, and M10, P1.5 in case of using 550-007, 550-012) and set the master index plate afloat by rotating either screw stock at the same time so that the plate will come off.

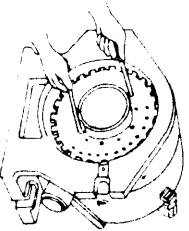


Fig. 8

Clamp shoe adjustment (in case of [550-007])

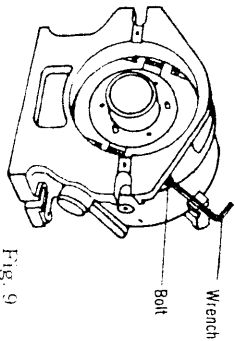


Fig. 9

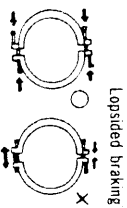


Fig. 11

- In case of [550-007]
When the clamp shoe is too tight loosen bolts at both sides with a spanner wrench, and properly adjust the brake shoe retracting the spring. To prevent the clamp shoe from producing a lopsided braking force, rotate simultaneously the counterpart spring holder located at the opposite side.

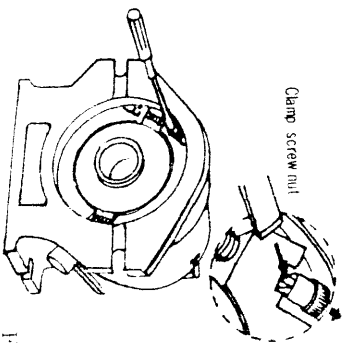


Fig. 10

Clamp Handle Position Adjustment

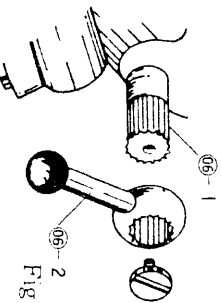


Fig. 12

- In case of [550-006]
When there is something wrong as the position of the clamp handle 06-2 in the machine proper, remove the set-screws pull out the handle knob section alone because of its serration construction, then reinsert it along the groove after slightly moving its angle, and reclamp with the set-screws. (Fig. 12)
 - In case of [550-012]
Pull the clamp handle 06-2 of Stock No. 550-012 toward you, and the handle position can be freely changed.
- Method of Centering**
While holding the test bar or workpiece, put a dial gauge to its circumference to read the run-out. Loosen the three chuck mounting bolts and adjust the run-out to become zero on the dial gauge by using three additional adjusting bolts. After the run-out has become zero, tighten the three chuck mounting bolts and then fix the chuck to the turret by tightening these bolts.

Mechanism of 550-012

- (1) Since the inner turret is supported by bearings, it rotates smoothly even when workpiece is held.
- (2) How to adjust clamp handle position
If the handle is improperly positioned when it is clamped, pull the grip alone of the handle toward you to free the grip.
Then, turn the handle to a desired position and release it.
- (3) How to change mask plate
Detach the returning spring to remove the cover plate easily, and the mask plate can be changed.

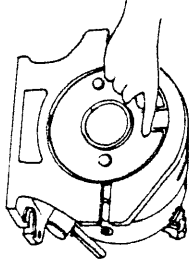


Fig. 13

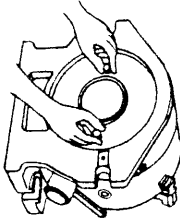


Fig. 14

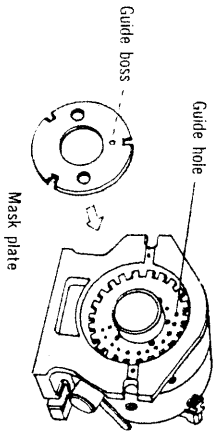


Fig. 15

Special Accessories

● Tailstock

- 553-300 for NO.550-006
min 3.94" (100mm)
~max 5.31" (135mm)
- 553-301 for NO.550-007
min 5.31" (135mm)
~max 6.69" (170mm)
- 553-311 for NO.550-012
min 6.69" (170mm)
~max 9.05" (230mm)

● Face plate

- 553-222
for NO.550-006
Outer Dia 8" (203mm)
- 553-302
for NO.550-007
Outer Dia 10" (254mm)
- 553-350
for NO.550-012
Outer Dia 15" (380mm)

Special Accessories on order

Master index plate producing 20-, 30-tooth types, etc.
In case of 20-tooth type : 2, 4, 5, 10 and 20 available.
In case of 30-tooth type : 2, 3, 5, 6, 10, 15 and 30 available.

