

# FINE U-NUT TOOL SET 00-10

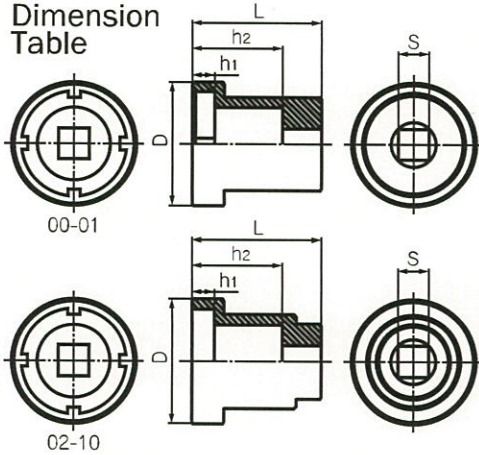
FINE U-NUT / M10 - M50 Tightening Tool Set Made Especially for **FINE U-NUT**

## Set Contents

Sockets (for sizes M10 to M20)	5(9.52mm socket size)
Sockets (for sizes M25 to M50)	6(12.7mm socket size)
Ratchet handle (3/8")	1(9.52 x 225mm)
Ratchet handle (1/2")	1(12.7 x 390mm)
Extension bar (3/8")	1(9.52 x 75mm)
Extension bar (1/2")	1(12.7 x 150mm)
Steel case	1(400 x 150 x 70 mm)



## Dimension Table



Ratchet Handle			
Part No.	Total Length	Socket Size	Maximum Torque
FUTR-3/8	225mm	9.52(3/8")	176N·m
FUTR-1/2	390mm	12.70(1/2")	490N·m

Extension Bar			
Part No.	Total Length	Socket Size	Maximum Torque
FUTE-3/8	75mm	9.52(3/8")	137N·m
FUTE-1/2	150mm	12.70(1/2")	382N·m

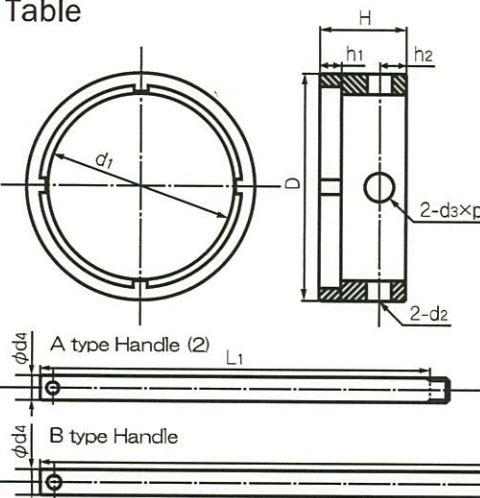
Socket Part No.	FINE U-NUT Applicable Size	D	L	h <sub>1</sub>	h <sub>2</sub>	S
FUT#00	M10×P0.75	23.0	36.0	4.4	24.0	9.52
FUT#01	M12×P1.0	27.0	37.0	4.6	25.0	
FUT#02	M15×P1.0	31.0	38.0	5.7	26.0	
FUT#03	M17×P1.0	34.0	39.0	5.6	27.0	
FUT#04	M20×P1.0	38.5	40.0	6.9	28.0	
FUT#05	M25×P1.5	45.5	46.5	8.1	30.5	12.70
FUT#06	M30×P1.5	53.0	50.0		34.0	
FUT#07	M35×P1.5	60.5	53.5	9.2	37.5	
FUT#08	M40×P1.5	67.0	57.0	10.2	41.0	
FUT#09	M45×P1.5	74.5	60.5	11.2	44.5	
FUT#10	M50×P1.5	80.0	64.0	12.2	48.0	

Unit: mm

# FINE U-NUT Clamping Socket Handle (11-20)

Clamping tool dedicated each size of FINE U-NUT M55 - M100

## Dimension Table

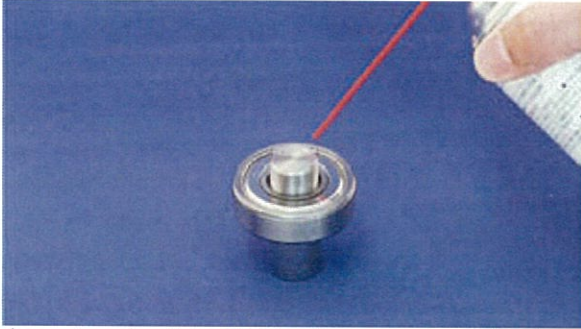


Socket Part No.	FINE U-NUT Applicable Size	Socket							A type Handle (Part No.)	B type Handle (Part No.)
		D	d <sub>1</sub>	H	h <sub>1</sub>	h <sub>2</sub>	d <sub>2</sub>	d <sub>3</sub> ×p	φd <sub>4</sub> ×L <sub>1</sub>	φd <sub>4</sub> ×L <sub>2</sub>
FUT#11	M55×2	85.5	69.0	36	8.5	11	12	M12×1.75	φ12×200 (FUTA-12)	φ12×500 (FUTB-12)
FUT#12	M60×2	91.0	74.0							
FUT#13	M65×2	96.5	79.0	38	9.5	13	14	M14×2.0	φ14×250 (FUTA-14)	φ14×650 (FUTB-14)
FUT#14	M70×2	104.0	85.0	41						
FUT#15	M75×2	110.5	90.5	42	10.5	13	14	M14×2.0	φ14×250 (FUTA-14)	φ14×650 (FUTB-14)
FUT#16	M80×2	118.0	97.5	44						
FUT#17	M85×2	123.5	102.5	46	13.0	15	16	M16×2.0	φ16×300 (FUTA-16)	φ16×750 (FUTB-16)
FUT#18	M90×2	134.0	111.0	50						
FUT#19	M95×2	139.5	116.0	51	14.0	15	16	M16×2.0	φ16×300 (FUTA-16)	φ16×750 (FUTB-16)
FUT#20	M100×2	145.0	121.0	52						

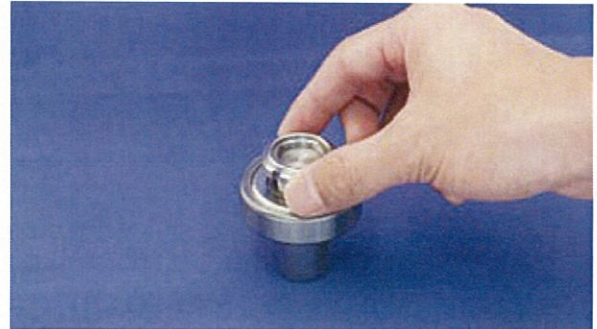
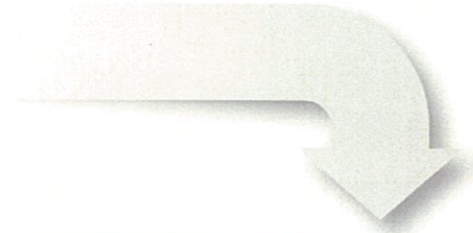
Specify Part No. when placing an order.

Unit: mm

# Installation Procedure

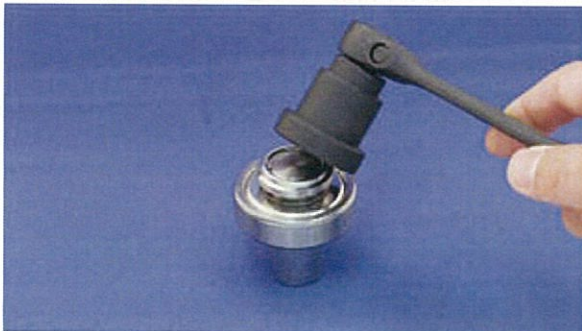


Insert a shaft to tightening member. Apply lubricant after checking that the tip of the thread portion of the shaft has a chamfer that is equivalent to the distance of 1 pitch. When the shaft has low hardness, use lubricant with especially high lubricating properties.



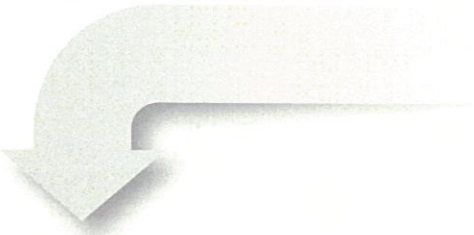
Manually screw the nut on until the friction ring touches the tip of the threaded port of the shaft.

※The nut cannot be used if the shaft thread is machined with a key way of other processing.



Use a tightening tool made especially for **FINE U-NUT**

※Using a hook wrench is also OK.  
※High-speed rotation impact wrenches cannot be used.



Press down on the axis portion of the ratchet handle and tighten by lightly turning the ratchet.



Check that bearing inner ring and **FINE U-NUT** bearing surface are closely adhered to each other and check that two full shaft threads protrude beyond the friction ring at the top of the nut.

When removing unscrew the nut with a tightening tool until the friction ring detaches the tip of the threaded portion of the bolt. After that, unscrew the nut manually.