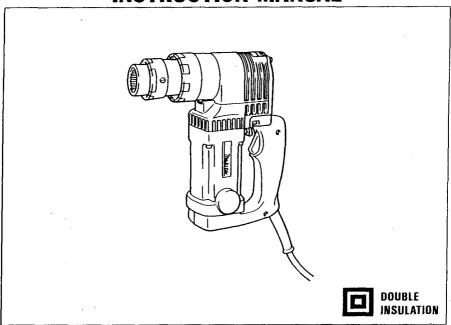




# **Shear Wrench**

MODEL 6920NB MODEL 6922NB

# INSTRUCTION MANUAL



#### **SPECIFICATIONS**

Model	Bolt size	Max. torque	No load speed (RPM)	Dimensions (L x W x H)	Net weight
6920NB	5/8", 3/4" (A490)	60 kg·m (434 lbs·ft)	26	241 mm x 84 mm x 246 mm (9-1/2" x 3-5/16" x 9-11/16")	4.3 kg (9.5 lbs)
6922NB	5/8", 3/4", 7/8" (A490)	82 kg·m (593 lbs·ft)	18	249 mm x 84 mm x 252 mm (9-13/16" x 3-5/16" x 9-15/16")	4.8 kg (10.6 lbs)

- · Manufacturer reserves the right to change specifications without notice.
- . Note: Specifications may differ from country to country.

WARNING: For your personal safety, READ and UNDERSTAND before using.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

# IMPORTANT SAFETY INSTRUCTIONS

(For All Tools)

WARNING: WHEN USING ELECTRIC TOOLS, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, AND PERSONAL INJURY, INCLUDING THE FOLLOWING:

# READ ALL INSTRUCTIONS.

- 1. KEEP WORK AREA CLEAN. Cluttered areas and benches invite injuries.
- CONSIDER WORK AREA ENVIRONMENT. Don't use power tools in damp or wet locations. Keep work area well lit. Don't expose power tools to rain. Don't use tool in presence of flammable liquids or gases.
- KEEP CHILDREN AWAY. All visitors should be kept away from work area.
   Don't let visitors contact tool or extension cord.
- 4. STORE IDLE TOOLS. When not in use, tools should be stored in dry, and high or locked-up place out of reach of children.
- DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was intended.
- USE RIGHT TOOL. Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended.
- 7. DRESS PROPERLY. Don't wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
- 8. USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty.
- DON'T ABUSE CORD. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- SECURE WORK. Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
- 11. DON'T OVERREACH. Keep proper footing and balance at all times.
- 12. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
- DISCONNECT TOOLS. When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.

- 14. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- 15. AVOID UNINTENTIONAL STARTING. Don't carry tool with finger on switch. Be sure switch is OFF when plugging in.
- 16. EXTENSION CORDS. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

TABLE 1 MINIMUM GAGE FOR CORD SETS

			Total Length of Cord in Feet				
		Ī	0 - 25	26 - 50	51 - 100	101 - 150	
Ampere Rating More Not More Than Than		A W G					
0	_	6	18	16	16	14	
6	_	10	18	16	14	12	
10	_	12	16	16	14	12	
12	_	16	14	12	Not Recommended		

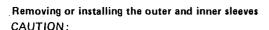
- 17. OUTDOOR USE EXTENSION CORDS. When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
- 18. STAY ALERT. Watch what you are doing, use common sense. Don't operate tool when you are tired.
- 19. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Don't use tool if switch does not turn it on and off.
- 20. GUARD AGAINST ELECTRIC SHOCK. Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
- 21. REPLACEMENT PARTS. When servicing, use only identical replacement parts.
- 22. POLARIZED PLUGS. To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

VOLTAGE WARNING: Before connecting the tool to a power source (receptacle, outlet, etc.) be sure the voltage supplied is the same as that specified on the nameplate of the tool. A power source with voltage greater than that specified for the tool can result in SERIOUS INJURY to the user — as well as damage to the tool. If in doubt, DO NOT PLUG IN THE TOOL. Using a power source with voltage less than the nameplate rating is harmful to the motor.

### **ADDITIONAL SAFETY RULES**

- Always be sure you maintain good balance and firm footing.
   Be sure no one is below when using the tool in high or elevated locations.
- 2. Use care and common sense when disposing of sheared bolt tips. Falling tips from high locations or scattered tips can cause severe injury.

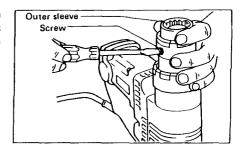
SAVE THESE INSTRUCTIONS.



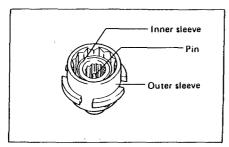
- Always be sure that the tool is switched off and unplugged before removing or installing the outer and inner sleeves.
- Be careful not to allow foreign matter to enter the insides of the tool when removing or installing the outer and inner sleeves.

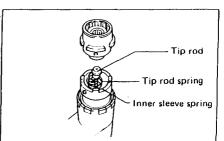
The outer sleeve M20 and inner sleeve 3/4" are factory installed. If you need other sizes for your work, replace the sleeves as follows.

Loosen the two screws while holding the outer sleeve. The outer and inner sleeves will be pushed up by the springs built into the tool.

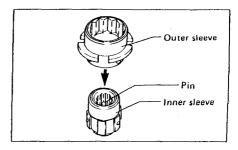


Press the pin down to remove the inner sleeve from the outer sleeve. Be careful not to drop the inner sleeve when removing it. Do not remove the inner sleeve spring, tip rod and tip rod spring from the tool.

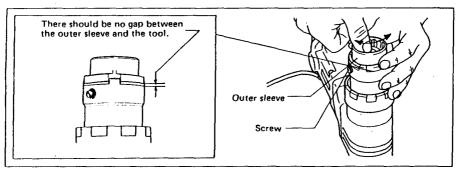




Hold the inner sleeve with the pin facing upward. Place the outer sleeve over the inner sleeve. Press the pin to secure the inner sleeve.



Insert the outer and inner sleeves into the tool while rotating the inner sleeve alternately clockwise and counterclockwise until there is no gap between the outer sleeve and the tool. See the figure below. Then tighten the two screws securely.



#### Switch action

To start the tool, simply pull the trigger. Release the trigger to stop.

#### CAUTION:

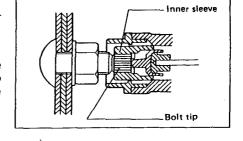
Before plugging in the tool, always check to see that the trigger switch actuates properly and returns to the "OFF" position when released.

#### **Bolt installation**

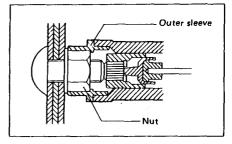
Slip the tool onto the bolt so that the inner sleeve completely covers the bolt tip.

#### CAUTION:

Be careful when fitting the sleeve onto the bolt tip. Striking the tip can damage it so that it will no longer fit inside the sleeve properly.

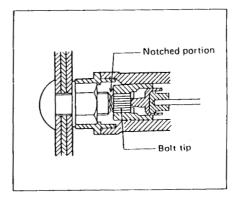


Keep forward pressure on the tool while sliding it further forward until the outer sleeve fits completely over the nut. If the tool fails to fit completely over the nut, twist the tool slightly right and left while pushing forward.

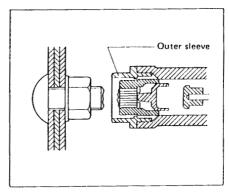


Pull the trigger switch. The outer sleeve turns to begin tightening the nut.

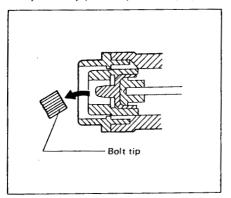
When the specified torque is attained, the bolt tip will be sheared at its notched portion. The bolt tip will remain inside the inner sleeve.

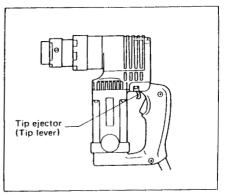


Release the trigger and withdraw the tool in a straight line.



Press the tip ejector (tip lever) to eject the bolt tip from the tool. Catch the sheared bolt tips to prevent them from falling dangerously below. Keep the tips off of the ground, floor, walkways, etc. to prevent injury from tripping or falling.





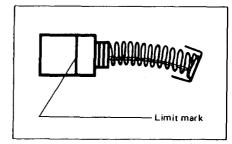
#### MAINTENANCE

#### CAUTION:

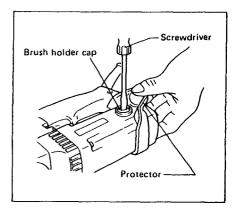
Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

#### Replacing carbon brushes

Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes

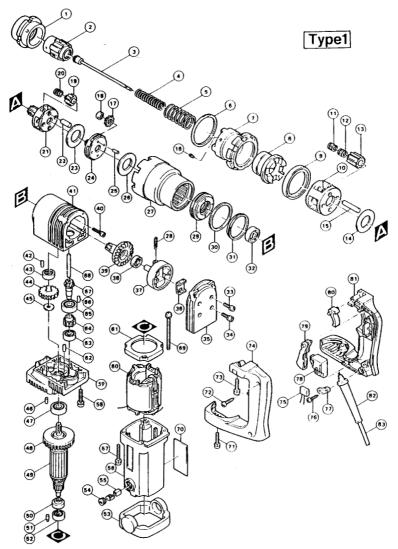


Open the protector. Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.



To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

# SHEAR WRENCH Model 6920NB Model 6922NB



Note: The switch, noise suppressor and other part configurations may differ from country to country.

#### MODEL 6920NB, 6922NB

NO.	NO. USED	DESCRIPTION	ITEM NO.	NO. USED	DESCRIPTION
MAC	MACHINE		MACHINE		
1	j 1	Outer Sleeve 20 37	38	[ 1	Ball Bearing 699
2	) 1	Inner Sleeve 3/4 38 Complete	39	1	Gear
3	١ ١	Chip Rod	1	ł	14-37 For 6920NB
4	1	Compression Spring 13		1	14-41 For 6922NB
5	١ ١	Compression Spring 25	40	4	Hex. Socket Head Bolt M4x14 (With Washer)
6	1	Spiro Lock Washer	41	j 1	Gear Case Complete
	ļ	60 For 6920NB	42	1	Rubber Pin 4
		72 For 6922NB	43	1	Ball Bearing 608LB
7	1	Outer Support	44	1 1	Spur Gear 34
В	1	Inner Support Complete	45	1	Washer 617
9	1	Ball Bearing	46	1	Rubber Pin 4
		6809 For 6920NB	47	١ ١	Ball Bearing 6000LLB
		6811 For 6922NB	48	1	Fan 55
10	1	Carrier	49	1	ARMATURE ASSEMBLY
11	4	Needle Cage	ł	1 1	(With Item 47, 48, 50 & 52)
		811 For 6920NB	50	١ ١	Insulation Washer
		1010 For 6922NB	51	1	Rubber Pin 4
12	4	Needle Cage	62	1	Ball Bearing 627LB
		B11 For 6920NB	53	1	Protector
		1010 For 6922NB	54	2	Brush Holder Cap
13	4	Spur Gear	55	1	Carbon Brush
- 1		16 For 6920NB	56	1	Motor Housing Complete
}		20 For 6922N8	57	4	Hex. Socket Head Bolt M4x35 (With Washer)
14	1	Washer 2542	58	4	Hex. Socket Head Bolt M4x25 (With Washer)
15	4	Pin	59	1 1	Gear Housing Complete
		8 For 6920NB	60	1	FIELD ASSEMBLY
		10 For 6922NB	61	1	Balile Plate
16	2	Screw M8x8	62	1 1	Rubber Pin 4
17	4	Spur Gear 25	63	1 1	Ball Bearing 608LB
18	4	Ball Bearing 694	64	1 1	Sour Gear 18
19	4	Spur Gear 25	65		Bell Bearing 6000LLB
20	4	Needle Cage 811	66	1	Rubber Pin 4
21	, i	Sour Gear 11	67	1	Spiral Bevel Gear
22	4	Pin 8	1 .		13 For 6920NB
23	,	Washer 2642	1		12 For 6922NB
24	i I	Spur Gear 14	68	,	Pin 4
25	4	Pin 4	69	2	Pan Head Screw M4x70 (With Washer)
26	, i	Washer 2542	70	ī	Name Plate
27	- i	Internal Gear	71	2	Hex. Socket Head Bolt M4x25 (With Washer)
1	` 1	45-66 For 6920NB	72	2	Tapping Screw 8T4x20
	i	63-66 For 6922NB	73	2	Hex. Socket Head Bolt M4x25 (With Washer)
28		Compression Spring 4	74	1	Handle Set (With Item 81)
29	- ;	Bracker	76	2	Tapping Screw 4x18
30	- ; ]	Spiro Lock Washer 52	177	i i	Strain Relief
30	- ;	Ring 44	78	i i I	Switch
32	- ;	Ball Bearing 6902	79	i 1	Switch Lever
33	2	Pan Head Screw M4×12 (With Washer)	80	;	Chip Lever
34	4	Hex. Sncket Head Bolt M4x14 (With Washer)	81		Handle Set (With Item 74)
35	1	Rear Cover	82	i 1	Cord Guard
36	- ; 1	Stopper Plate	83	- ;	Cord
37	- ;	Rod Supporter	""	' !	- <del></del>
3/ [	, ,	nou aupponer			

Note: The switch and other part specifications may differ from country to country.



# **WARNING**

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- · Lead from lead-based paints,
- · Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

#### MAKITA LIMITED ONE YEAR WARRANTY

#### Warranty Policy

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one-year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:

- · repairs have been made or attempted by others:
- repairs are required because of normal wear and tear:
- The tool has been abused, misused or improperly maintained;

alterations have been made to the tool.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE-YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

# Makita Corporation

3-11-8, Sumiyoshi-cho, Anjo, Aichi 446 Japan