

SPECIFICATIONS	GT-MG55S
FREE SPEED	55,000 r.p.m.
OVERALL LENGTH	165 mm
WEIGHT	180 g
FRAME DIAMETER	φ 17.5mm
AIR CONSUMPTION	0.160m <sup>3</sup> /min
RECOMMENDED AIR PRESSURE	0.6 MPa
HOSE CONNECTOR	PT 1/4
HOSE INNER DIAMETER	6.35 mm
ACCESSORIES	SPANNER (A/F9mm) 1pc. DRIVE PIN, LOCK 1pc.

### CERTIFICATE OF INSPECTION

SERIAL NO. \_\_\_\_\_

We hereby certify that before shipment, above tool has been carefully inspected according to our factory engineering standard and the result has come out in satisfactory data. In order to maintain the best conditions of this tool, please be sure to take a few minutes to read through the enclosed instruction manuals and operate as recommended.

DATE: \_\_\_\_\_

CHIEF INSPECTOR: \_\_\_\_\_

MANUFACTURED BY **VESSEL CO., INC.** OSAKA JAPAN

### SAFETY INSTRUCTION AND WARNING

FOR YOUR SAFETY, PLEASE FOLLOW INSTRUCTIONS BELOW AND OPERATION WITHOUT YOUR LOCAL SAFETY REGULATIONS MAY RESULT IN SERIOUS INJURY.

1. Before mounting grinding wheels and whenever the tool is issued for servicing, please DISCONNECT the tool from air supply and make sure throttle returned to OFF position.
2. If any vibration or unusual sound were created, disconnect the air supply IMMEDIATELY for repairing.
3. R.P.M. of the grinding wheels must be equal or above to the free speed of our grinder. Please refer to your wheels catalogue for details.
4. Check the grinding wheel diameter, shape and permissible overhang. (LESS THAN 13mm)
5. Always wear GOGGLES, FACE SHIELD and other protective clothing.

### LUBRICATION

1. Lubrication is indispensable to air tools, especially air micro grinders which are rotating higher R.P.M. The most ideal maintenance is to install one LUBRICATOR to a tool for automatic oil feed, but if it is not available, manual lubrication EVERY 1-2 HOURS is recommendable for long life. And this lubrication lasts the life of tool and to keep the most efficient function of mechanism and lack of lubrication causes the troubles of machine.
2. To lubricate, add SPINDLE OIL (VG-10) into the air feed intake.

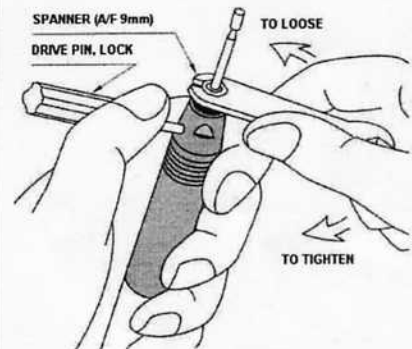
### AIR SUPPLY

1. Air tools adversely affected by MOISTURE. Since air from compressor contains much moisture and dust, it is desirable to provide a FILTER and lubricator in the pipeline to remove such undesirable elements. Also take the DRAIN out from air tank every day.
2. When using brand new tool or air hose, blow and clean the inside of air hose or pipe before installation. Air drop maybe cause by the lots of drain and dust accumulated and possibly makes the inside diameter smaller in the long use. Regular check-up is the secret of long of the tool.
3. Recommend to use at air pressure 0.55Mpa ~0.60Mpa at the tool. Excessive, higher air pressure leads to cut the tool life and even dangerous to the operator and lower air pressure will not give enough power which cause of trouble shootings. Use air regulator to adjust air to the correct pressure.

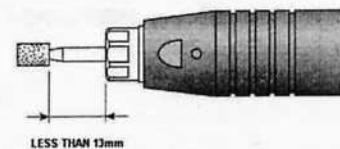
### HOW TO INSTALL THE GRINDING WHEELS

Grinding wheels being sold in the market (with a shaft diameter of 3mm) could be acceptable with this tool. 2.35mm and 1/8" are available as options. For your safety, use grinding wheels operable at 55,000rpm or more and with a maximum grinding wheel diameter 6mm or below. Beware of inferior quality grinding wheels being sold in the market with uneven shaft diameter, or which are off-centered, the usage of which may shorten tool life or serious damage of the tool.

1. Insert the Drive Pin, Lock goes through the hole at the end of the tool with the hole in the collet shaft and hold the collet. Then loosen the Collet Nut with spanner (A/F9mm).



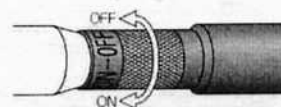
2. Next, insert the grinding wheel and adjust overhang will be less than 13mm.



3. Hold the Collet Shaft again with the Drive Pin, Lock and firmly tighten the Collet Nut by spanner (A/F9mm).

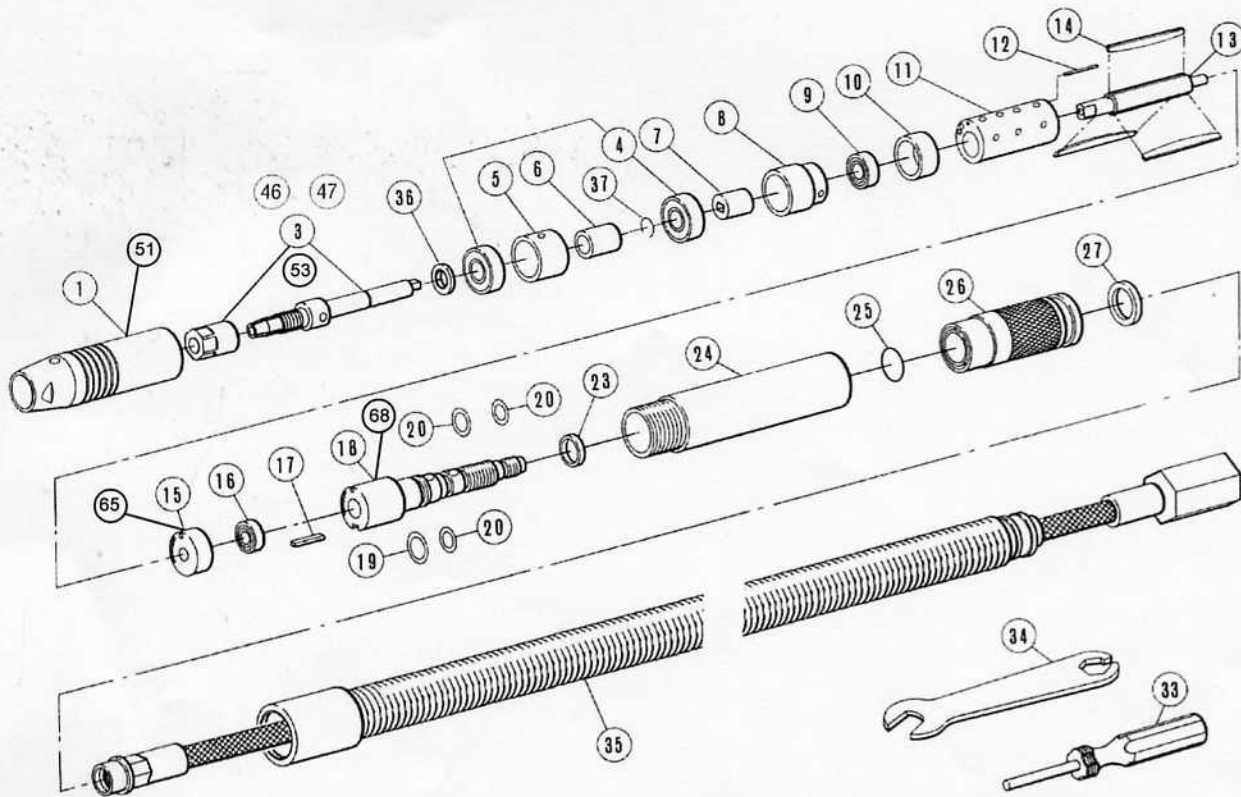
### OPERATION

1. After lubrication, oil will be discharged in the exhaust upon operation. Flush out air motor for a few seconds.
2. The motor starts rotating at high speed when the throttle is turned to ON direction. Use the tool by pressing lightly against work to be ground. To stop, turn the throttle to OFF direction.



3. Precise adjustments have been made around the throttle and rotating section. Do not disassemble under any circumstances. As this tool contains precision parts, avoid striking with other objects, fall or gripping external body by vise or clamp. Improper rotation may result shortening life of the tool.

# GT-MG55S/ MG55SB – Exploded diagram drawing & Parts list



Index No.	EDP No.	Description	Number Required	Index No.	EDP No.	Description	Number Required
1	810101	Cap, Front End (MG55S)	1	25	810125	O-Ring S0-006-18	1
3	810103	Shaft & Nut 3mm, Collet (MG55S)	1	26	810126	Throttle	1
4	810104	Bearing 696T2ZZA, Ball	2	27	810127	Filter	1
5	810105	Front Collar, Bearing	1	33	810133	Drive Pin, Lock	1
6	810106	Sleeve, Collet Shaft	1	34	810134	Spanner A/F 9mm	1
7	810107	Clutch	1	35	810135	Hose Set (Air Inlet 1.5m, Air Outlet 0.6m)	1
8	810108	Rear Collar, Bearing	1	36	810136	Washer, Collet	1
<9>	810109	Bearing 685ZZ, Ball (Installed No.10)	1	37	810137	C-Pin, Sleeve Retainer	1
10	810110	Endplate w/ Bearing, Front	1	51	810151	Cap, Front End (MG55SB)	1
11	810111	Cylinder w/ Dowel	1	53	810153	Shaft & Nut 3mm, Collet (MG55SB)	1
<12>	810112	Dowel SP1. 2 x 12, Cylinder (Installed No.11)	1	65	810165	Endplate w/ Bearing, Rear (MG55SB)	1
13	810113	Rotor	1	68	810168	Valve, Adjustment for Left Turn (MG55SB)	1
14	810114	Blade, Rotor	3	<b>OPTIONS</b>			
15	810115	Endplate w/ Bearing, Rear (MG55S)	1	46	810146	Shaft & Nut 2.35mm, Collet	1
<16>	810116	Bearing R2ZZ, Ball (Installed No.15)	1	47	810147	Shaft & Nut 1/8", Collet	1
17	810117	Key	1				
18	810118	Valve, Adjustment (MG55S)	1				
19	810119	O-Ring S7HS90	1				
20	810120	O-Ring S5HS90	3				
23	810123	Cover, O-Ring	1				
24	810124	Housing, Main	1				

Parts with < > marked shall not be supplied individually even if ordered since it is an integrate component.

Shape of part No. 51, 53, 65 and 68 are slightly different from illustration.

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