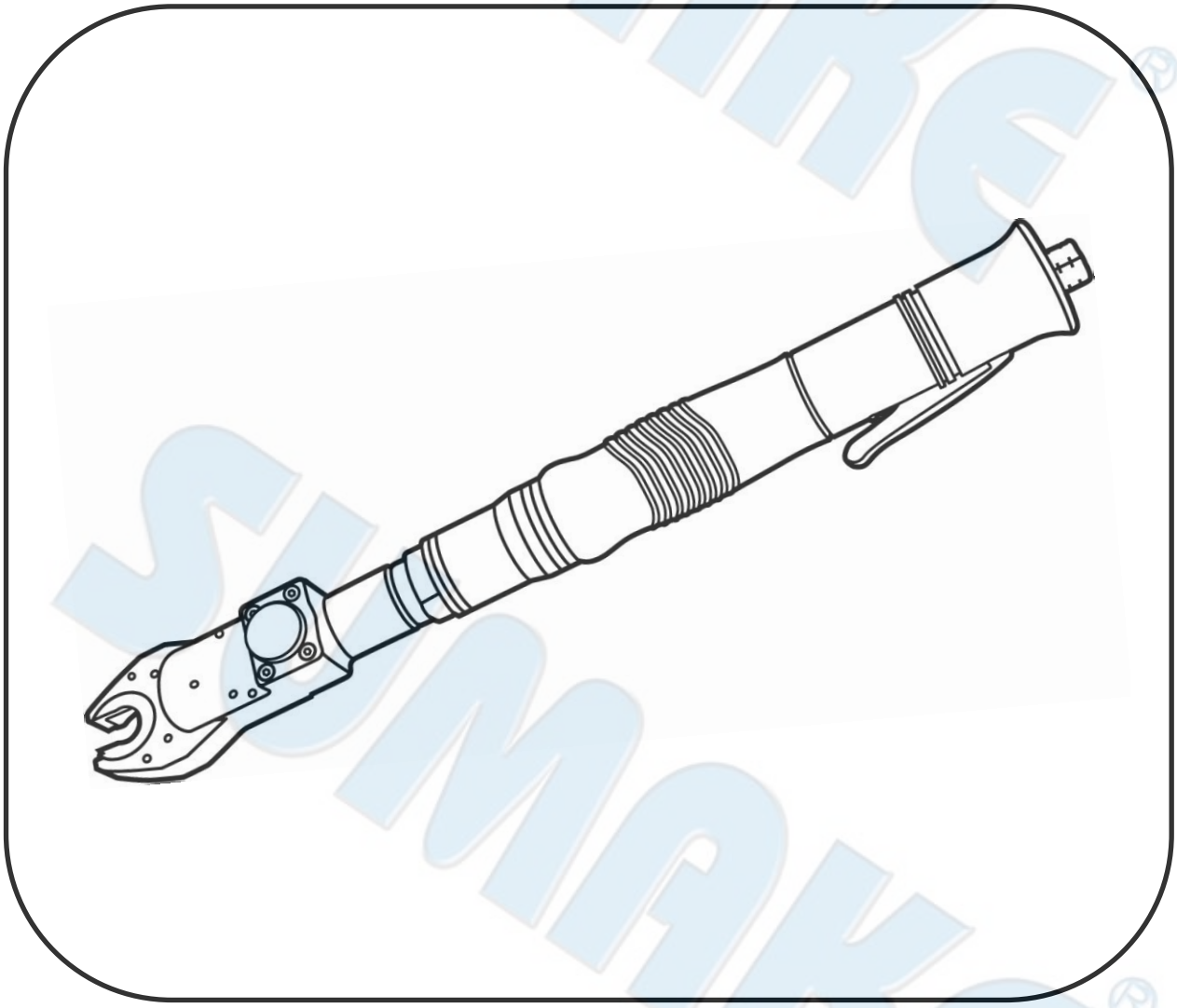
SUMAKE®

Professional & Industrial

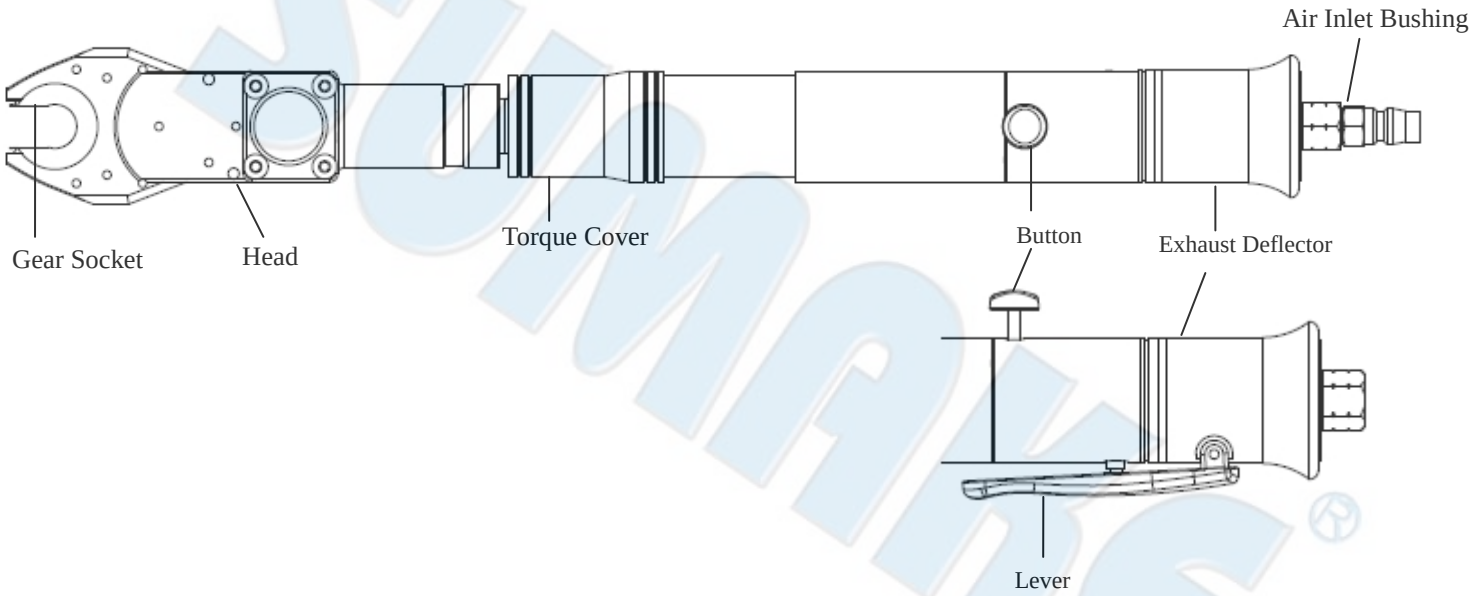
INSTRUCTION MANUAL

ITEM NO.: HOW(R)08(17)(24) series

AIR INDUSTRIAL OPEN-END WRENCH



For safety use, Please Follow the instructions.
The operation without your local regulations may cause serious injury.
Read thoroughly and understand this instruction manual and keep this within reach for future reference.

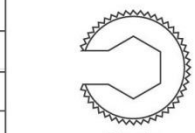
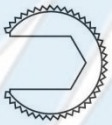


Specification:

Working Air Pressure: 90 psi

Model No.	Torque Range (Nm)	Free Speed (r.p.m)	Hex Size of Gear Socket (mm)	Head Sizes[W] (mm)	Dia. (mm)	Min. air hose bore (mm)
HOW(R)08-06	3.0~8.0	230	6	42	39	8.0
HOW(R)08-08	3.0~8.0	230	8	42	39	8.0
HOW(R)08-09	3.0~8.0	230	9	42	39	8.0
HOW(R)08-10	3.0~8.0	230	10	42	39	8.0
HOW(R)08-11	3.0~8.0	230	11	42	39	8.0
HOW(R)08-12	3.0~8.0	230	12	42	39	8.0
HOW(R)17-06	5.0~17	230	6	42	39	8.0
HOW(R)17-08	5.0~17	230	8	42	39	8.0
HOW(R)17-09	5.0~17	230	9	42	39	8.0
HOW(R)17-10	5.0~17	230	10	42	39	8.0
HOW(R)17-11	5.0~17	230	11	42	39	8.0
HOW(R)17-12	5.0~17	230	12	42	39	8.0
HOW(R)17-13	5.0~17	230	13	56	39	8.0
HOW(R)17-14	5.0~17	230	14	56	39	8.0
HOW(R)17-16	5.0~17	230	16	56	39	8.0
HOW(R)17-17	5.0~17	230	17	56	39	8.0
HOW(R)24-12	7.0~24	170	12	56	39	8.0
HOW(R)24-15	7.0~24	170	15	56	39	8.0
HOW(R)24-16	7.0~24	170	16	56	39	8.0
HOW(R)24-17	7.0~24	170	17	56	39	8.0
HOW(R)24-19	7.0~24	170	19	56	39	8.0
HOW(R)24-21	7.0~24	170	21	56	39	8.0
HOW(R)24-22	7.0~24	170	22	56	39	8.0
HOW(R)24-24	7.0~24	170	24	56	39	8.0

Optional Gear Socket Sizes:

Blind Gear		Open Gear		Hex Size of Gear Socket (mm)	Head Size [W] (mm)
Model No.	Gear type	Model No.	Gear type		
WH06	 Front  Back	WHR06	 Front  Back	6	42
WH08		WHR08		8	
WH09		WHR09		9	
WH10		WHR10		10	
WH11		WHR11		11	
WH12		WHR12		12	
WH13		WHR13		13	56
WH14		WHR14		14	
WH15		WHR15		15	
WH16		WHR16		16	
WH17		WHR17		17	
WH19		WHR19		19	
WH21		WHR21		21	
WH22		WHR22		22	
WH24		WHR24		24	

FUNCTION INSTRUCTION

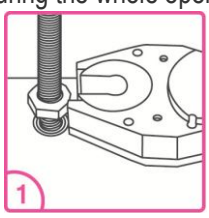
1. **Button & Lever design**
   Operator can push lever for releasing the gear socket back to the open position. Full down the button and lever for operation.

2. **Outside adjust the torque rapidly & Torque Cover**
   To prevent improper torque adjustment by operator, this up-to-the-date design fixes torque at same standard. Further, for this special structure design, the torque cover is necessary for tool during operation. Due to the safety consideration and to prevent the tool be broken by any impacting, please operate tool as per this instruction manual and note it is prohibitive to operate tool without torque cover.

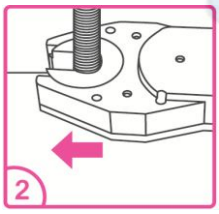
3. **Easy for change the Gear Socket [Forward only] and [Reverse / Forward]**
   Operator can change the gear socket easily and two model types can choose. [Forward only] is for Right rotation only and this model type can accurate tube nut tightening. [Reverse / Forward] is for Left& Right rotation and this model type can use for tiny area as well.

TOOL OPERATION

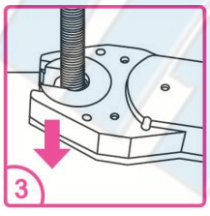
1 Confirm if the air hose or air pipe is clean and dry.
2 Make sure the air hose or air pipe is well connected with air open-end wrench.
3 Make sure the torque cover is well fixed on tool before operating.
4 Push lever for releasing the gear socket back to the open position. Due to the safety consideration, please hold carefully the tool during the whole operating duration.



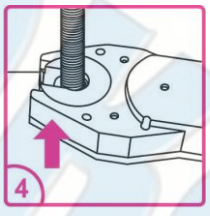
Push lever for releasing, back to the open position.



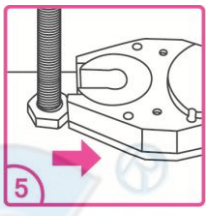
Slide on the fastener.



Full down the button and lever for operation.



Slide off the tightened fastener to free the tool.



Operate the lever to release, back to the open position.

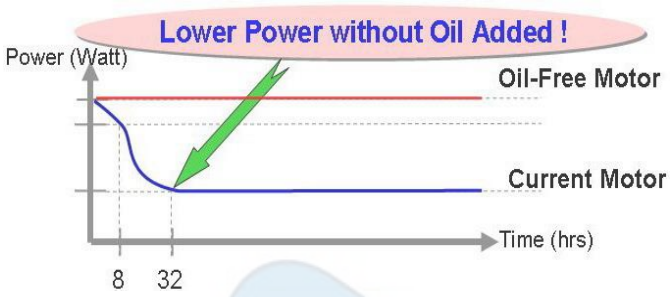
5 Air motor will automatically stop when the load reaches at the pre-set torque.
6 The Torque Calibration is only for reference and it is not real torque or equal torque.
Caution: Improper operation may damage the tool.

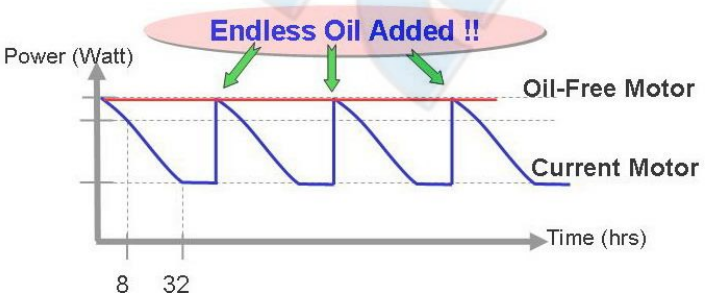
AIR SUPPLY

1 Air tools are adversely affected by moisture. Since air from compressor contains much moisture and dust, it is desirable to provide a filter in the pipeline to remove such undesirable elements. Also take the drain out from air tank every day.
2 When using brand-new air hose or air pipe, blow and clean the air hose or pipe inside before installation.
3 Keep air hose or air pipe inside clean to prevent airdrop problem caused by lots of drain and dust accumulated, either to avoid possibly inside diameter smaller problem after long term usage.
4 When disconnect air hose from air tool during operation, do not drop air hose end to the floor as dust or other element may get into air hose.
5 Use air regulator to keep stable air pressure at 6.0kgf-cm² (80~90psi) at the toll. It is important to get proper air pressure at the toll.
6 With high quality Oil-free motor, any moisture or lubrication injection may damage the air screwdriver, please keep tool dry and avoid oil based substances exposing to the products. For avoiding moisture affection, using Air Dryer is necessary in wet area or under moist weather.

TOOL ADVANTAGE

1 **High quality Oil-free Motor**
High quality Oil-free Motor is our new design used on high technologic tool. At the beginning operation, the power of Oil-free motor keeps stable at it's top capability without any oil injection, but the power of Current motor decreases till it's lowest capability after 32 hours operating unless oil adding. The high technologic Oil-free motor increases 60% torque and keeps noise as standard 74/78dB which prevents operator and environment from noise damaging and accords with industrial classified tool standard. (Please refer to the below table about Oil-free and current motor.)



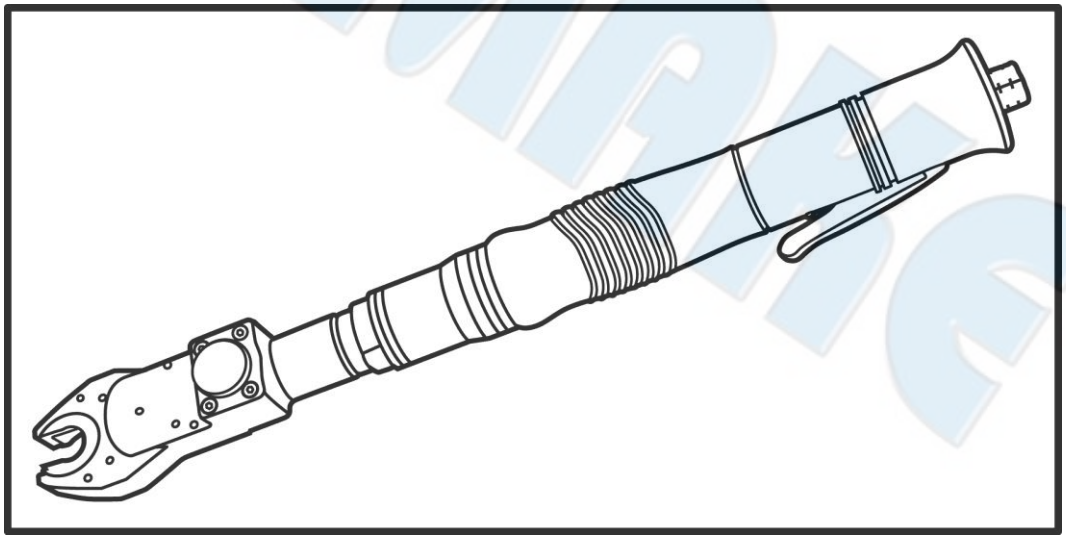


2 **All new patented mechanical design and comfort grip material**
This new patented mechanical design is 20% lighter than other brand. With the unity sharping composite grip and best balance design made by thermoplastic elastomer, the tool possess better lasting, wearing-resisting, comfortable grasp and anti-glossy features.
3 **Speediness**
Operator can change the gear socket easily between [Forward only] and [Reverse / Forward] type.

USING CAUTION

1 Please note improper operating may damage the tool.
2 Due to the safety consideration, please make sure tool is completely under control before and during operation.
3 Changing the rotation direction at will without stopping first the operation may damage the motor or reduce the usage term. Please note it is prohibited to change the rotation direction during operation, the proper operating method is stop first the operation, then change the rotation direction by pushing the Valve reverse switch.
4 The air screwdriver can be damaged by accidental falls or impacts. Due to the safety consideration, please hold the tool carefully or use the hook to prevent the tool dropping down.
5 Any moisture or lubrication injection may damage the air screwdriver, please keep tool dry and avoid oil based substances exposing to the products. For avoiding moisture affection, using Air Dryer is necessary in wet area or under moist weather.

SUMAKE *PNEUMATIC TOOLS*



Air Industrial
Open-End Wrench
HOW(R)17-6(8)(9)(10)(11)(12)(13)(14)(16)(17)

Specification:

Free Speed	230 r/min
Torque Range	5.0 ~ 17 N-m
Hex. Size of Gear Socket	6mm, 8mm, 9mm, 10mm, 11mm, 12mm, 13mm, 14mm 16mm, 17mm
Dia.	39mm
Overall Length	18.5” (470 mm)
Air Inlet (PT)	1/4” (6.35 mm)
Min. Air Hose	8 mm
Air Pressure	90 psi (6.3 bar)

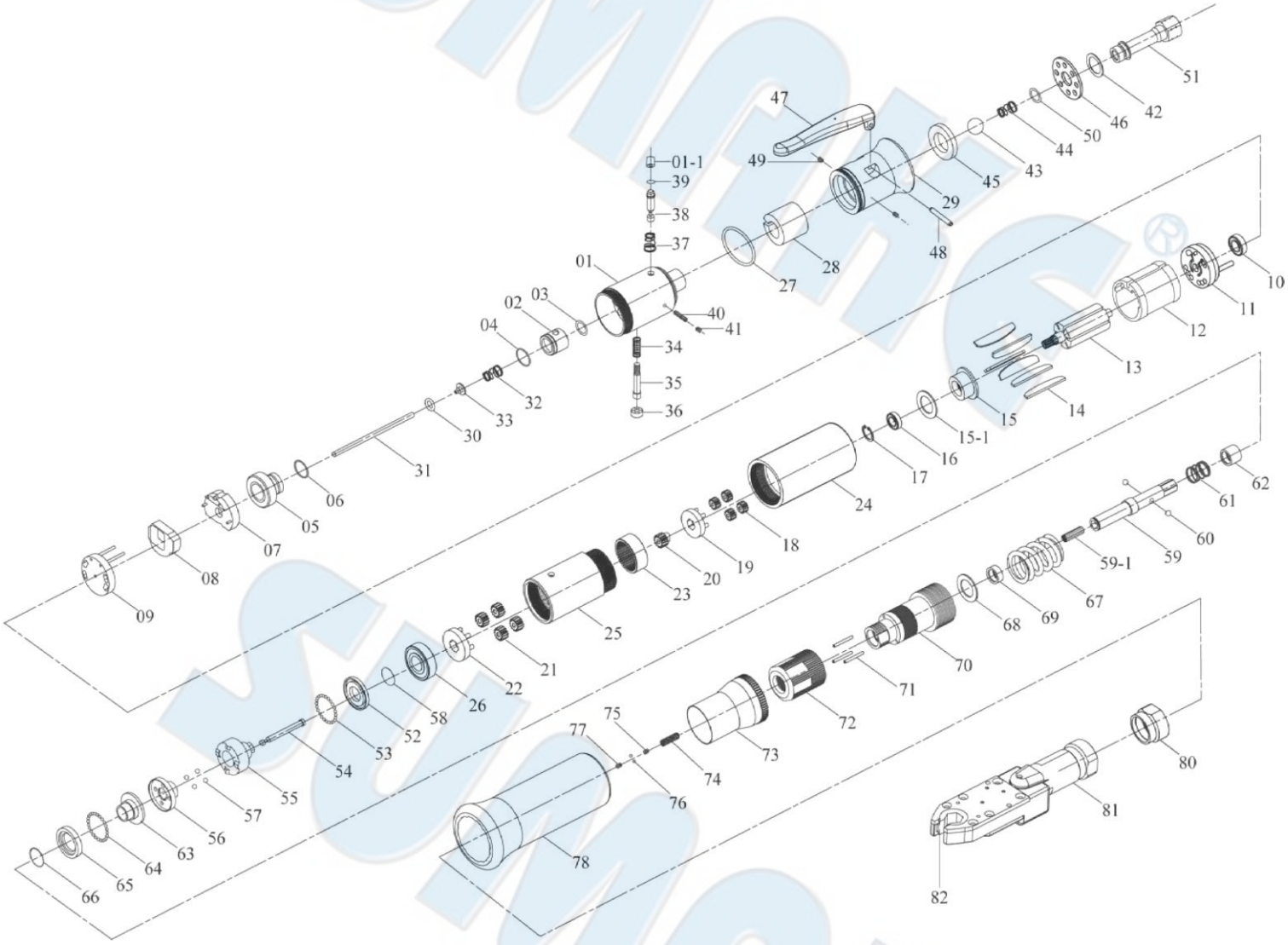
Noise and Vibration:

Vibration EN ISO 28927-2	**Noise** EN ISO 15744	**Remark**
Load: 0.9 m/s²	Sound Pressure Level load: 85 dB(A)	Please always wear ear protector at environment noise level > 80 dB(A) due to risk of impaired hearing!
	Sound power level load: 96 dB(A)	
Uncertainty K= 1.5 m/s²	Uncertainty K= 3dB	

SUMAKE INDUSTRIAL CO., LTD

4F,NO.351,Yangguang St.,Neihu District TAIPEI, TAIWAN, ZIP:114-91

HOW(R)17-13
AIR INDUSTRIAL OPEN-END WRENCH



HOW(R)17-13
AIR INDUSTRIAL OPEN-END WRENCH

PARTS LIST

No.	Parts No.	Description	Q'ty
1	1K2406	End Housing	1
1-1	2S6014	Outer Bushing	1
2	2S6013	Valve Pin Sleeve	1
3	2Q5001	O Ring	1
4	7Q6116	O Ring	1
5	1K2405	Valve Pin Cap	1
6	7Q6116	O Ring	1
7	1K2412	1st Valve Pin	1
8	1K2413	2st Valve Pin	1
9	1K2414	3st Valve Pin	1
10	7S5001	Ball Bearing	1
11	1S6001-B	End Plate	1
12	1P6003	Cylinder	1
13	1S6044	Rotor	1
14	1P6051	Blade	6
15	1P6063	Front Plate	1
15-1	4W6023	Washer	1
16	7S2002	Ball Bearing	1
17	6N2020	C Ring	1
18	1P2101	15T Plant Gear	4
19	1P3280	Fifth Gear Cage	1
20	1P2096	14T Main Gear	1
21	1P2132-T	14T Plant Gear	4
22	1P3284	Fourth Gear Cage	1
23	1S2073	Internal Gear	1
24	5A6069	Center Housing	1
25	4V1025	Front Housing	1
26	7S6003	Ball Bearing	1
27	7Q6105	O Ring	1
28	2P3040	Silencer	1
29	2A6013	Exhaust Deflector	1
30	7Q2006	O Ring	1
31	6S6007	Operating Rod	1
32	6N2145	Cone Spring	1
33	6S2021	Valve Plate	1
34	6N5112	Spring	1
35	1K2418	Valve Pin	1
36	5L2704	Botton	1
37	6N5113	Spring	1
38	2S5019	Valve Pin	1
39	7Q6112	Valve O Ring	1
40	6S2030-1	Screw	1
41	7S2113	Screw	1
42	7L0002	Washer	1

No.	Parts No.	Description	Q'ty
43	7S2103	Ball	1
44	6N2105	Cone Spring	1
45	2P3023	Silencer	1
46	2S5234	Washer	1
47	5L3106	Lever	1
48	7S2202	Roll pin	1
49	7S2113	Screw	2
50	2Q5001	O Ring	1
51	2S6007	Air Inlet Bushing [PT]	1
	2S6052	Air Inlet Bushing [PS]	1
	2S6051	Air Inlet Bushing [NPT]	1
52	2S6106	Retainer	1
53	7S2102	Ball	32
54	3S5001	Pilot Pin	1
55	3S5203	Rear Clutch	1
56	3S5219	Center Clutch	1
57	7S2112	Ball	4
58	6N2006	C Ring	1
59	3S7057	Anvil	1
59-1	7Q2002	Regulate Screw	1
60	7S2105	Ball	2
61	6N5110	Spring	1
62	3S2227	Slide Base	1
63	3S5221	End Clutch	1
64	7S2102	Ball	25
65	3S5231	Ball Race	1
66	6N2006	C Ring	1
67	6N3022	Torque Spring	1
68	7S5121	Washer	1
69	3S2165	Bushing	1
70	3S6132	Angle Clutch Housing	1
71	6S2010	Needle Pin	3
72	3A6007	Torque Ring	1
73	5A6517	Torque Cover (Black)	1
74	6N6001	Spring	1
75	7S2111	Screw	1
76	7S2102	Ball	2
77	7S2111	Screw	1
78	5L6010	Soft Cover	1
80	6S2102	Angle Lock Nut	1
81	6C2000	Wrench Gear Set (W/O Gear)	1
82	WH13	Gear (13mm) [HOW17-13]	1
	WHR13	Gear (13mm) [HOWR17-13]	1

EC DECLARATION OF CONFORMITY

We: **SUMAKE INDUSTRIAL CO., LTD.**
4F, No. 351, Yangguang St., Neihu District, Taipei City, Taiwan

declare in sole responsibility that the equipment
Equipment：AIR INDUSTRIAL OPEN-END WRENCH
Model/ Serial No.： HOW(R)17-6(8)(9)(10)(11)(12)(13)(14)(16)(17)

to which this declaration applies, complies with these normative documents:

- **Machinery Directive: 2006/42/EC**

and conforms to the following EN standard,

- **EN ISO 12100: 2010**
- **EN ISO 11148-6:2012**

Name and Signature/Position

Mike Su – Managing Director

Date and Place

2021/1/25

Taipei, Taiwan