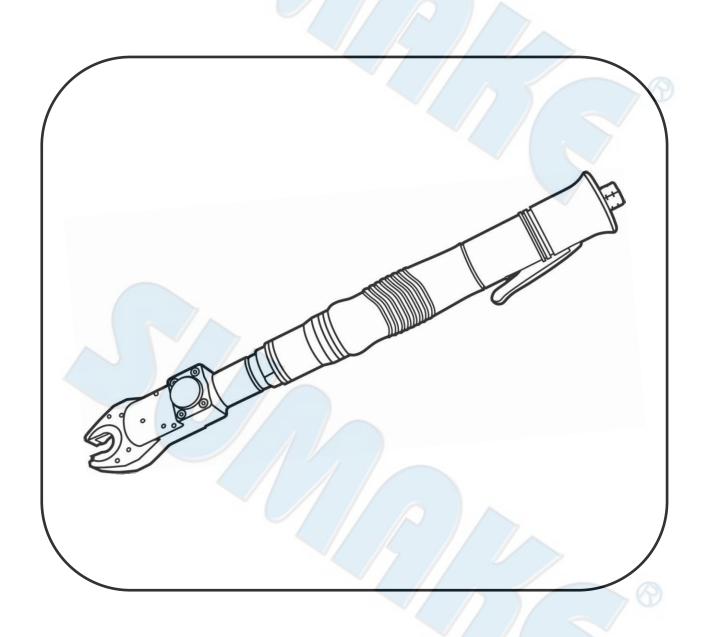




## **INSTRUCTION MANUAL**

ITEM NO.: HOW(R)08(17)(24) series
AIR INDUSTRIAL OPEN-END WRENCH









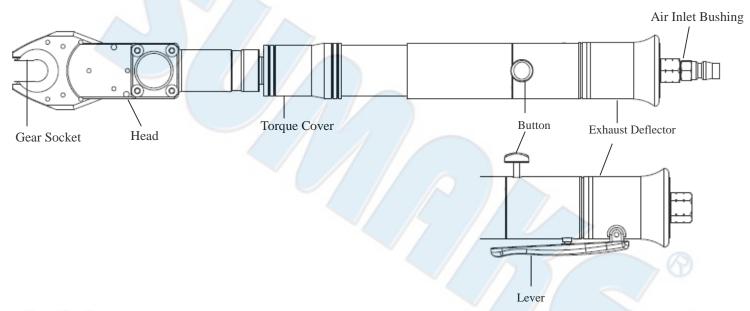




For safety use, Please Follow the instructions.

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 nsi

Specification:	<u> </u>				Working A	ir Pressure: 90 p
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			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	Head Size	
Model No.	Gear type	Model No.	Gear type	Gear Socket (mm)	[W] (mm)	
WH06	- 1	WHR06		○ 6		
WH08		WHR08		○ 8		
WH09	The same of the sa	WHR09	· ····································	○ 9		
WH10	A STATE OF THE STA	WHR10	The state of the s	○10	42	
WH11		WHR11		◯11		
WH12	The state of the s	WHR12	The state of the s	◯ 12		
WH13	Front	WHR13	Front	◯ 13		
WH14		WHR14		◯ 14		
WH15	The same of the sa	WHR15	- Transmitte	◯ 15		
WH16		WHR16	A A	○ 16		
WH17		WHR17		○ 17	56	
WH19	Back	WHR19	Back	◯ 19		
WH21	Duon	WHR21	Duck /	○ 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]

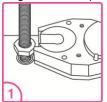
Operator can change the gear socket easily and two model types can choose. [Forward only] is for Right rotation only and this model type can accurate tube nut tightening. [Reverse / Forward] is for Left& Right rotation and this model type can use for tiny area as well.

#### **TOOL OPERATION**

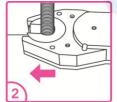
- 1 Confirm if the air hose or air pipe is clean and dry.
- 2 Make sure the air hose or air pipe is well connected with air open-end wrench.
- 3 Make sure the torque cover is well fixed on tool before operating.

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.



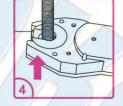
Push lever for releasing, back to the open position.



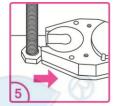
Slide on the fastener.

Full down the button

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

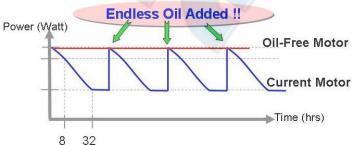
- Air tools are adversely affected by moisture. Since air from compressor contains much moisture and dust, it is desirable to provide a filter in the pipeline to remove such undesirable elements. Also take the drain out from air tank every day.
- When using brand-new air hose or air pipe, blow and clean 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.
- 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

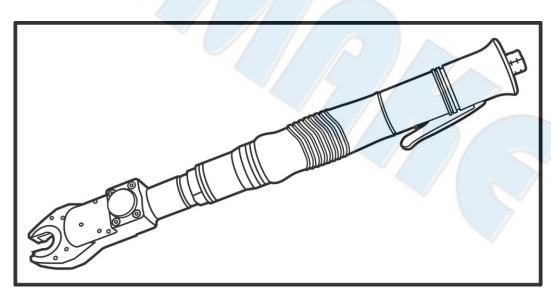
Operator can change the gear socket easily between [Forward only] and [Reverse / Forward] type.

#### **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.
- 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 HOW17S-16(17)

#### **Specification:**

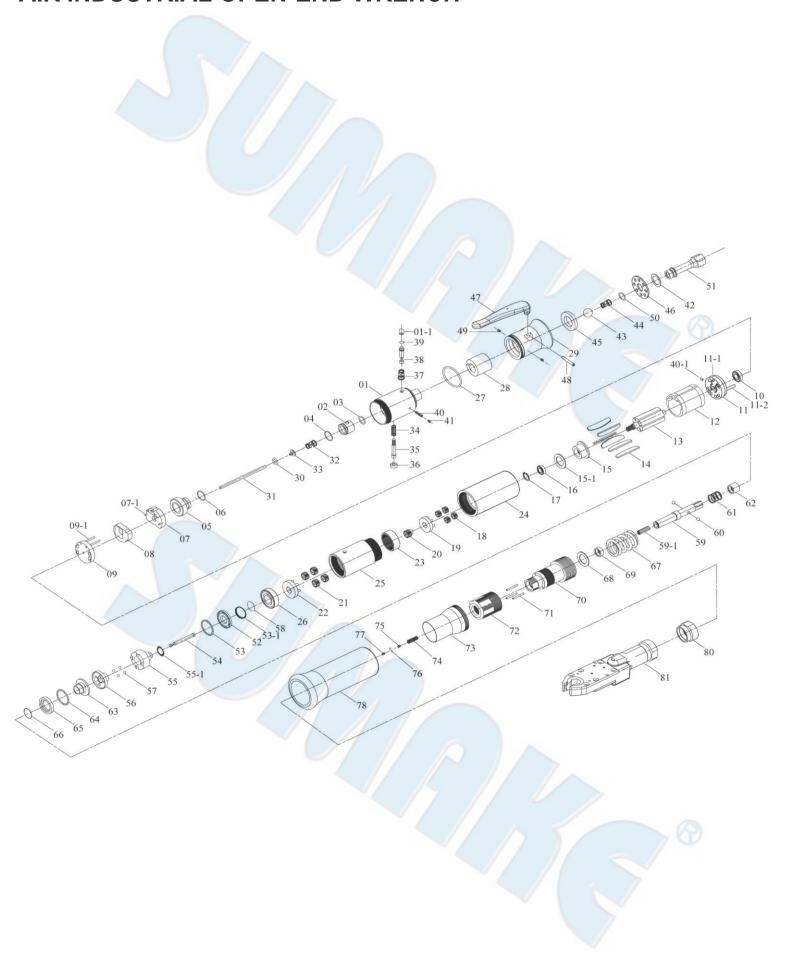
Free Speed	230 r/min			
Torque Range	5.0 ~ 17 N-m			
Hex. Size of Gear	16 17			
Socket	16mm, 17mm			
Dia.	39mm			
Overall Length	18.5" (470 mm)			
Air Inlet (PT)	1/4" (6.35 mm)			
Min. Air Hose	8 mm			
Air Pressure	90 psi (6.3 bar)			

#### **Noise and Vibration:**

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

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

# HOWS17-16 AIR INDUSTRIAL OPEN-END WRENCH



## HOWS17-16 AIR INDUSTRIAL OPEN-END WRENCH

PARTS LIST

No.	Parts No.	Description	Q'ty	No.	Parts No.	Description	Q'ty
1	1K2406	End Housing	1	41	7S2113	Screw	1
1-1	2S6019	Outer Bushing	1	42	7L0002	Washer	1
2	2S6013	Valve Pin Sleeve	_1	43	7S2103	Ball	1
3	2Q5001	O Ring	1	44	6N2105	Cone Spring	1
4	7Q6116	O Ring	1/	45	2P3023	Silencer	1
5	1K2405	Valve Pin Cap	1	46	2S5234	Washer	1
6	7Q6116	O Ring	1	47	5L3106	Lever	1
7	1K2412	1st Valve Pin	1	48	7S2202	Roll pin	1
7-1	7S5205	Pin	2	49	7S2113	Screw	2
8	1K2413	2st Valve Pin	/1	50	2Q5001	O Ring	1
9	1K2414	3st Valve Pin	1		2S6007	Air Inlet Bushing [PT]	1
9-1	6S2011	Pin	2	51	2S6052	Air Inlet Bushing [PS]	1
10	7S5001	Ball Bearing	1	4/	2S6051	Air Inlet Bushing [NPT]	1
11	1S6001-B	End Plate	1	52	2S6106	Retainer	1
11-1	7S2205	Pin	1	53	7S2102	Ball	32
11-2	7S5211	Pin	1	53-1	7S5161	Washer	1 1
12	1P6011	Cylinder	1	54	3S5001	Pilot Pin	1 1
13	1S6044	Rotor	1	55	3S6638	Rear Clutch	1 1
14	1P6051	Blade	6	55-1	7S8107	Retainer	1 1
15	1P6063	Front Plate	1	56	3S6721	Center Clutch	1
15-1	4W6023	Washer	1	57	7S2112	Ball	4
16	7S2002	Ball Bearing	1	58	6N2006	C Ring	1 1
17	6N2020	C Ring	1	59	3S7057	Anvil	1 1
18	1P2101	15T Plant Gear	4	59-1	7Q2002	Regulate Screw	1 1
19	1P3280	Fifth Gear Cage	1	60	7S2105	Ball	2
20	1G6086	10T Main Gear	1	61	6N5110	Spring	1
21	1P6120	15T Plant Gear	4	62	3S2227	Slide Base	1 1
22	1P3283	Fifth Gear Cage	1	63	3S6911	End Clutch	1
23	1S2073	Internal Gear	1	64	7S2102	Ball	25
24	5A6069	Center Housing	1	65	3S5235	Ball Race	1
25	4V1025	Front Housing	1/1/	66	6N2006	C Ring	1
26	7S6503	Ball Bearing	1	67	6N3010	Torque Spring	1
27	7Q6105	O Ring	1/	68	2S5237	Washer	1
28	2P3040	Silencer	1	69	3S2165	Bushing	1 1
29	2A6013	Exhaust Deflector	1	70	3S6132	Angle Clutch Housing	1
30	7Q2006	O Ring	1/	71	6S2010	Needle Pin	3
31	6S6008	Operating Rod	1	72	3A6007	Torque Ring	1
32	6N2145	Cone Spring	1	73	5A6517	Torque Cover (Black)	1 1
33	6S6100	Valve Plate	1	74	6N6001		1
34	6N5112	Spring	1	75	7S2111	Spring Screw	1 1
35	1K2418	Valve Pin	1	76	7S2111	Ball	2
36	5L2704	Botton	1 1	77	7S2102 7S2111	Screw	1
37	6N5113		1	78	5L6010	Soft Cover	1 1
38		Spring Valve Bin	1	80			1 1
	2S5019	Valve O Ping	1 1	$\vdash$	6S2102	Angle Lock Nut	+ -
39	7Q6112	Valve O Ring	1 1	81	6C2000	Wrench Gear Set (W/O Gear)	1 1
40	6S2030-1	Screw	1 1	82	WH14	Gear (14mm) [HOW17-14]	1
40-1	6S2015	Pin			WHR14	Gear (14mm) [HOWR17-14] HOWS17-16-P-1	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.: HOW17S-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

ike Su - Managing Director

Date and Place

2017/7/11

Taipei, Taiwan