Product Safety Information

Intended Use:

These Air Impact Wrenches are designed to remove and install threaded fasteners.

For additional information refer to Product Safety Information Manual Form 04580916.

Manuals can be downloaded from ingersollrandproducts.com

Power Management System

For models that include a power management system, the system allows operator reduction of maximum output power in either the forward or the reverse direction.

For reduced power in the forward direction and full power in the reverse direction, push the reverse valve inward on the right side of the tool and rotate the reverse valve until the notch on the right side aligns with the desired number on the right side. This provides reduced power in forward but full power in reverse when the reverse valve is pushed in the opposite direction. (See TPD1248 on page 2.)

For reduced power in the reverse direction and full power in the forward direction, push the reverse valve inward on the left side of the tool and rotate the reverse valve until the notch on the left side aligns with the desired number on the left side. This provides full power in forward but reduced power in reverse when the reverse valve is pushed the opposite direction. (See TPD1249 on page 2.)

For full power in both directions, rotate the Reverse Valve until the notch on either end of the Reverse Valve aligns with 5 on each side of the housing.

The power level indicators (See TPD1248 and TPD 1249) are for reference and **DO NOT** indicate a specific power. The power output can be further reduced in forward or reverse by using the variable throttle.

Product Specifications

Model	Style	Drive		Impacts per min.	Recommended Torque Range ft-lb (Nm)	
		Type	**Size**		**Forward**	**Reverse**
231C	Pistol	Square	1/2"	1,200	25-300 (34-407)	25-350 (34-475)
231C-AP	Pistol	Square	1/2"	1,200	25-300 (34-407)	25-350 (34-475)
231HA	Pistol	Square	1/2"	1,150	25-300 (34-407)	25-350 (34-475)
231HA-2	Pistol	Square 2" extended	1/2"	1,150	25-300 (34-407)	25-350 (34-475)
244A	Pistol	Square	1/2"	1,300	40-350 (54-475)	40-350 (54-475)
244A-2	Pistol	Square 2" extended	1/2"	1,300	40-350 (54-475)	40-350 (54-475)

Model	Sound Level dB(A) (ISO15744)		Vibration (m/s²) (ISO28927)	
	† Pressure (L_p)	‡ Power (L_w)	Level	*K
231C	99	110	6.5	0.8
231C-AP	99	110	6.5	0.8
231HA	94	105	6.5	0.8
231HA-2	94	105	6.5	0.8
244A	93	104	8.7	0.8
244A-2	93	104	8.6	1.1

† K_{pA} = 3dB measurement uncertainty
‡ K_{wA} = 3dB measurement uncertainty
* K = Vibration measurement uncertainty

⚠ WARNING

Sound and vibration values were measured in compliance with internationally recognized test standards. The exposure to the user in a specific tool application may vary from these results. Therefore, on site measurements should be used to determine the hazard level in that specific application.

Installation and Lubrication

Size air supply line to ensure tool's maximum operating pressure (PMAX) at tool inlet. Drain condensate from valve(s) at low point(s) of piping, air filter and compressor tank daily. Install a properly sized Safety Air Fuse upstream of hose and use an anti-whip device across any hose coupling without internal shut-off, to prevent hose whipping if a hose fails or coupling disconnects. See drawing 47132600 and table on page 2. Maintenance frequency is shown in a circular arrow and defined as h=hours, d=days, and m=months of actual use. Items identified as:

1. Air filter
2. Regulator
3. Lubricator
4. Emergency shut-off valve
5. Hose diameter
6. Thread size
7. Coupling
8. Safety Air Fuse
9. Oil
10. Grease - during assembly
11. Grease - through fitting

Parts and Maintenance

When the life of the tool has expired, it is recommended that the tool be disassembled, degreased and parts be separated by material so that they can be recycled.

Original instructions are in English. Other languages are a translation of the original instructions.

Tool repair and maintenance should only be carried out by an authorized Service Center.

Refer all communications to the nearest **Ingersoll Rand** Office or Distributor.