NOV. 2017

Blue-Point®

Operator Instructions

Includes – Foreseen Use, Work Stations, Putting Into Service, Operating, Dismantling, Assembly and Safety Rules.

Important

Read these instructions carefully before installing, operating, servicing or repairing this tool. Keep these instructions in a safe accessible place.

Manufacturer/Supplier

Snap-on Tools Company
2801 80th Street
Kenosha
WI 53141-1410
U.S.A.

Product Type
1" Impact Wrench

RPM
5,000
Cycles Per Min.

CE

Model No/Nos

AT1300B Standard Anvil
AT1300BL 6" Extended Anvil

Serial No.

Product Net Weight	Recommended Use Of Balancer Or Support	Recommended Hose Bore Size – Minimum	Recommended Max. Hose Length
AT1300B 23.18 lbs 10.50 Kg	**NO**	**1/2** ins **13** mm	**30** Ft **10** M
AT1300BL 26.90 lbs 12.20 Kg			

Air Pressure

Recommended Working	**6.2**	bar	**90**	PSI
Maximum	**6.2**	bar	**90**	PSI

Noise Level: **Sound Pressure Level 108.9 dB(A),**
Uncertainty, K 3.0 dB(A)
Sound Power Level 119.9 dB(A)
Uncertainty, K 3.0 dB(A)
Test Method: **Tested in accordance with ISO Standard 15744:2008**

SAFETY MESSAGES

Personal Safety Equipment

Use – Safety Glasses	YES
Use – Safety Gloves	
Use – Safety Boots	
Use – Breathing Masks	
Use – Ear Protectors	YES

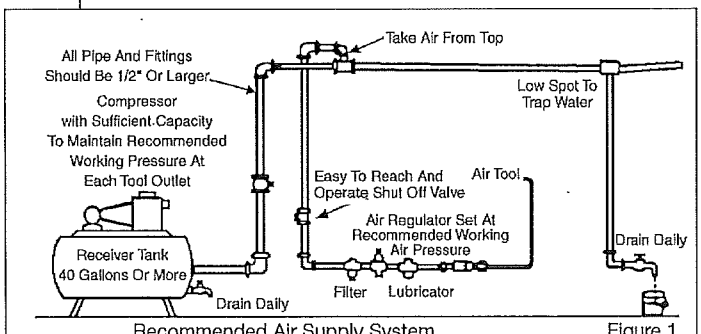
WARNING

- Always Read Instructions Before Using Power Tools
- Always Wear Safety Goggles
- Wear Hearing Protection
- Avoid Prolonged Exposure To Vibration

Vibration Level **12.01** Meters / Sec² (AT1300B)
10.66 Meters / Sec² (AT1300BL)
Uncertainty, K **1.68** Meters / Sec² (AT1300B)
1.55 Meters / Sec² (AT1300BL)
Test Method: **Tested in accordance with ISO standard 28927-2:2009**

Safety rules when using Impact Wrench

- Use only impact sockets and extensions, universal joints, etc. rated as being suitable for use with impact wrenches.
- Prolonged exposure to vibration may cause injury.
- Read all instructions before using this tool. All operators must be fully trained in its use and aware of these safety rules.
- Do not exceed the maximum working air pressure.
- Use personal protection equipment as recommended.
- Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects and other reproductive harm.
- Use only compressed air at the recommended conditions.
- If the tool appears to malfunction, remove from use immediately and arrange for service and repair. If it is not practical to remove tool from service, then shut off the air supply to the tool and write or have written a warning note and attach it to the tool.
- If tool is to be used with a balancer or other suspension device, ensure that the tool is firmly attached to the suspension/support device.
- When operating the tool, always keep the body and particularly the hands away from the working attachment fixed to the tool.
- The tool is not electrically insulated. Never use the tool if there is any chance of coming into contact with live electricity.
- Always when using the tool, adopt a firm footing and/or position and grip the tool sufficiently only to overcome any reaction forces that may result from the tool doing work. Do not overgrip.
- Use only correct spare parts for maintenance and repair. Do not improvise or make temporary repairs. Major servicing and repairs should only be carried out by persons trained to do so.
- Do not lock, tape, wire, etc. the 'On/Off' valve in 'On'vposition. The throttle/ lever, etc. must always be free to return to the 'Off' position when released.
- Always shut off the air supply to the tool and press the 'On/Off' valve to exhaust the air from the feed hose before fitting, removing or adjusting the working attachment fitted to the tool.
- Before using the tool, make sure that a shut off device has been fitted to the air supply line and the position is known and easily accessible so that the air supply to the tool can be shut off in an emergency.
- Check hose and fittings regularly for wear.
- Take care against entanglement of the moving parts o the tool with clothing, hair, ties, cleaning rags, rings, jewelry, watches, bracelets, etc. This could cause the body or parts of the body to be drawn towards and in contact with the moving parts of the tool and could be very dangerous.
- It is expected that users will adopt safe working practices and observe all local, regional and country legal requirements when installing, using or maintaining the tool.



Recommended Air Supply System Figure 1

- Take care that the exhaust air does not point towards any other person or material or substance that couldbe contaminated by oil droplets. When first lubricating a tool or if the tool exhaust has a high oil content, donot allow the exhaust air to come near very hot surfaces or flames.
- Never lay the tool down until the working attachment has stopped moving.
- When the tool is not in use, shut off the air supply and press trigger/lever to drain the supply line. If the tool is not to be used for a period of time, first lubricate,disconnect from air supply and store in a dry averageroom temperature environment.
- If the tool is passed from one user to a new or inexperienced user, make sure these instructions are passed with the tool.
- Do not remove any manufacturer fitted safety deviceswhere fitted, i.e., wheel guards, safety trigger, speed governors, etc.
- Wherever possible, secure workpiece with clamps, a vise, etc. to make it rigid so it does not move during the work operation. Keep good balance at all times. Do not stretch or overreach.
- Try to match the tool to the work operation. Do not use a tool that is too light or heavy for the work operation. If in doubt, seek advice.
- In general terms, this tool is not suitable for underwater use or use in explosive environments — seek advice from manufacturer.
- Try to make sure that the work area is clear to enable the work task to be performed safely. If practical and possible, try to clear unnecessary obstructions before starting work.
- Always use air hose and couplings with minimum working pressure ratings at least 1 1/2 times the maximum working pressure rating of the tool.

Foreseen Use Of The Tool

The impact wrench is designed for the tightening and loosening of threaded fasteners within the range as specified by the manufacturer. It should only be used in conjunction with suitable impact type 1" square female drive nut running sockets. Only use sockets which are of the impact type. It is allowed to use suitable extension bars, universal joints and socket adaptors between the square output drive of the impact wrench and the square female drive of the socket. Do not use the tool for any other purpose than that specified without consulting the manufacturer or the manufacturer's authorized supplier. To do so may be dangerous. Never use an impact wrench as a hammer to dislodge or straighten cross threaded fasteners. Never attempt to modify the tool for other uses and never modify the tool for even its recommended use as a nutrunner.

Work Stations

The tool should only be used as a handheld, hand operated tool. It is always recommended that the tool is used when standing on the solid floor. It can be used in other positions, but before any such use, the operator must be in a secure position having a firm grip and footing and be aware that when loosening fasteners the tool can move quickly away from the fastener being undone. An allowance must always be made for this rearward movement so as to avoid the possibility of hand/arm/body entrapment.

Putting Into Service

Air Supply

Use a clean lubricated air supply that will give a measured air pressure at the tool of 90 p.s.i./6.2 bar when the tool is running with the trigger fully depressed and the air regulator in its maximum opening flow position. Use recommended hose size and length. It is recommended that the tool is connected to the air supply as shown in figure 1. Do not connect a quick connect coupling directly to the tool, but use a whip or leader hose of approximately 12 inches length. Do not connect the tool to the air line system without incorporating an easy to reach and operate air shut off valve. The air supply should be lubricated. It is strongly recommended that an air filter, regulator, lubricator (FRL) is used, as shown in Figure 1, as this will supply clean, lubricated air at the correct pressure to the tool. Details of such equipment can be obtained from your supplier. If such equipment is not used, then the tool should be lubricated by shutting off the air supply to the tool, depressurizing the line by pressing the throttle lever on the tool. Disconnect the air line and pour into the air inlet (41) a teaspoonful (5ml) of a suitable pneumatic motor lubricating oil preferably incorporating a rust inhibitor. Reconnect tool to air supply and run tool slowly for a few seconds to allow air to circulate the oil. If tool is used frequently, lubricate on daily basis and if tool starts to slow or lose power. When lubricating, also ensure that the air inlet (41) is clean. It is recommended that joint tightness of the threaded fastener assembly be checked with suitable measuring equipment. It is recommended that the air pressure at the tool while the tool is running is 90 p.s.i./6.2 bar.

Operating

The output of the impact wrench in prime working condition is governed by mainly three factors:

a) the input air pressure;
b) the time the impact wrench is operated on the joint. Normal time for joints of average tension requirement 3 to 5 seconds;
c) the setting of the air regulator for a given joint at a given pressure operated for a given time.

The air regulator (23 Reverse Valve Set) can be used to regulate the output of the impact wrench if no other means of control is available. It is strongly recommended that an external pressure regulator, ideally as part of a filter/regulator/lubricator (FRL), is used to control air inlet pressure so that the pressure can be set to help control the tension required to be applied to the threaded fastener joint. There is no consistent, reliable torque adjustment on an impact wrench of this type. However, the air regulator can be used to adjust torque to the approximate tightness of a known threaded joint. To set the tool to the desired torque, select a nut or screw of known tightness of the same size, thread pitch and thread condition as those on the job. Turn air regulator to low position, apply wrench to nut and gradually increase power (turn regulator to admit more air) until nut moves slightly in the direction it was originally set. The tool is now set to duplicate that tightness, note regulator setting for future use. When tightening nuts not requiring critical torque values, run nut up flush and then tighten an additional one-quarter to one-half turn (slight additional turning is necessary if gaskets are being clamped). For additional power needed on disassembly work, turn regulator to its fully open position. This impact wrench is rated a 1" bolt size. Rating must be downgraded for spring U bolts, tie bolts, long cap screws, double depth nuts, badly rusted conditions and spring fasteners as they absorb much of the impact power. When possible, clamp or wedge the bolt to prevent springback. Soak rusted nuts in penetrating oil and break rust seal before removing with impact wrench. If nut does not start to move in three to five seconds use a larger size impact wrench. Do not use impact wrench beyond rated capacity as this will drastically reduce tool life. NOTE: Actual torque on a fastener is directly related to joint hardness, tool speed, condition of socket and the time the tool is allowed to impact. Use the simplest possible tool-to-socket hook up. Every connection absorbs energy and reduces power.

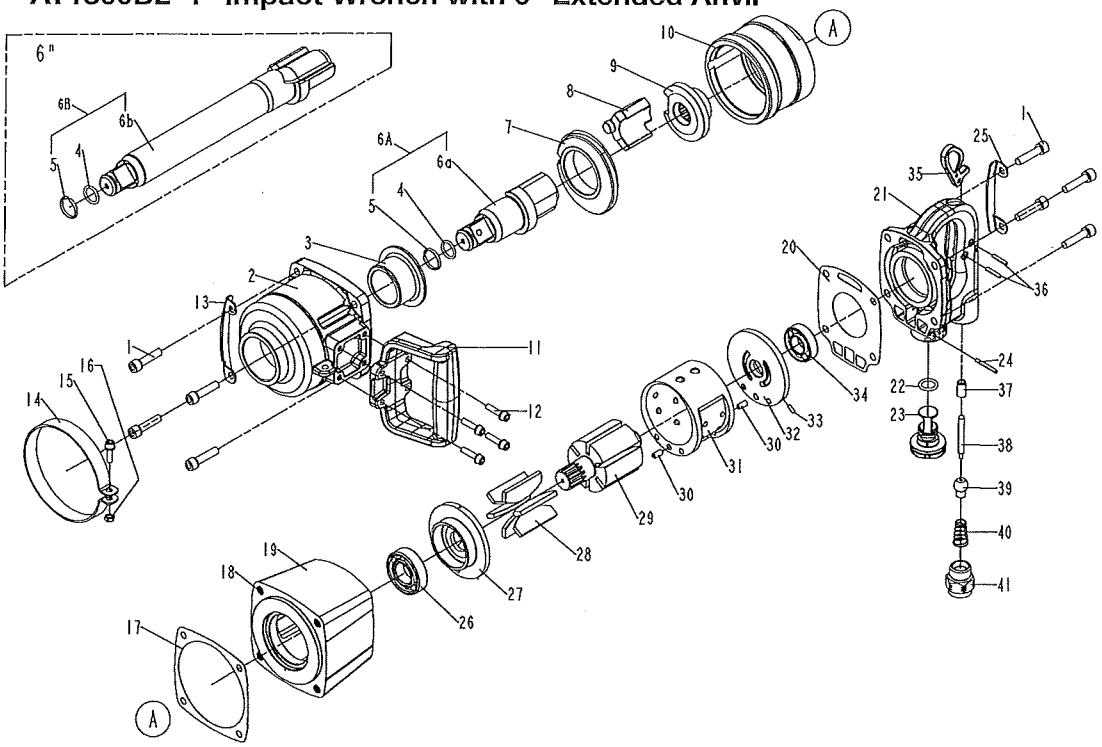
Auxiliary Handle (11). The auxiliary handle is attached with 4 screws to suit the comfort of the operator. Make sure the handle is fixed securely. The trigger/reverse valve set regulates the power of the impact blows and the frequency. It has three positions, the smallest circle is the lowest power setting and the largest circle is the most powerful setting. Always check that the reverse lever is in the appropriate position to suit the direction of rotation required before using the tool. The position 'F' is for tightening a right hand threaded join and 'R' for loosening .

For best results:

1) Always use the correct size impact type socket.
2) Use extra deep sockets in place of extension bars where possible.
3) Do not use oversized, worn or cracked sockets.
4) Hold the wrench so the socket fits squarely on the fastener. Hold the wrench firmly, but not too tightly, pressing forward slightly.

Blue-Point®

AT1300B 1" Impact Wrench
AT1300BL 1" Impact Wrench with 6" Extended Anvil



Ref. No.	Part Number	Description
1	AT1300B-1	Bolt Assy (8)
2	AT1300B-2	Hammer Case
3	AT1300B-3	Hammer Case Bushing
4	AT1300B-4	O-Ring
5	AT1300B-5	Socket Retainer
6a	AT1300B-6	Anvil
6A	AT1300B-6AS	Anvil Assy (Incl. 4 & 5)
6b	AT1300BL-1	6" Anvil
6B	AT1300BL-1AS	6" Extended Anvil Assy (Incl. 4 & 5)
7	AT1300B-7	Washer
8	AT1300B-8	Hammer
9	AT1300B-9	Hammer Cam
10	AT1300B-10	Hammer Frame
11	AT1300B-11	Handle
12	AT1300B-12	Bolt Assy (4)
13	AT1300B-13	Protector
14	AT1300B-14	Protector
15	AT1300B-15	Bolt Assy
16	AT1300B-16	Lock Nut
17	AT1300B-17	Packing-Hammer Case
18	AT1300B-18	Thread Insert (4)
19	AT1300B-19	Housing
20	AT1300B-20	Packing-Hammer Case

Ref. No.	Part Number	Description
21	AT1300B-21	Rear Cover
22	AT1300B-22	O-Ring
23	AT1300B-23	Reverse Valve Set
24	AT1300B-24	Spring Pin
25	AT1300B-25	Protector
26	AT1300B-26	Bearing
27	AT1300B-27	Front End Plate
28	AT1300B-28	Blade (6)
29	AT1300B-29	Rotor
30	AT1300B-30	Spring Pin (2)
31	AT1300B-31	Cylinder
32	AT1300B-32	Rear Bearing Plate
33	AT1300B-33	Spring Pin
34	AT1300B-34	Bearing
35	AT1300B-35	Trigger
36	AT1300B-36	Spring Pin (2)
37	AT1300B-37	Bushing
38	AT1300B-38	Pin
39	AT1300B-39	Seal Ball
40	AT1300B-40	Spring
41	AT1300B-41	Air Inlet
NS	AT1300B-42	Label Set (Nameplate Label + Warning Label) For AT1300B
NS	AT1300BL-2	Label Set (Nameplate Label + Warning Label) For AT1300BL

Dismantling & Assembly Instructions

Disconnect tool from air supply.

Use a rod and a hammer to knock spring pin (36) out and remove trigger (35). Use a socket and impact wrench to loosen air inlet (41) then remove spring (40), seal ball (39), pin (38) and bushing (37). Use a rod and a hammer to knock out spring pin (24) and then remove reverse valve set (23) and o-ring (22). Use a wrench to loosen bolt assy. (1) on hammer case (2), and then take apart packing (17), hammer frame (10), hammer cam (9), hammer (8), washer (7) and anvil (6) from hammer case. Remove o-ring (4) and socket retainer ring (5) from anvil (6). Use a wrench to loosen bolt assy. (1) on rear cover (21) and remove packing (20). Heat housing (19) to 350° and take out motor assembly from housing. Take apart rear bearing plate (32), front end plate (27), rotor (29) and blades (28). Remove bearings (26 and 34) if replacements are required.

Reassembly

Clean all components and examine for wear, cracks, etc. before reassembling. Look in particular for wear and cuts on o-rings, wear on rotor blades (28), and wear and cracks on anvil (6), hammer (8) and hammer cam (9). Check in particular the area of the square drive on anvil (6) and make sure that socket retainer (5) and o-ring (4) on anvil (6) still provide adequate socket retention. Make sure that the faces of bearing plate (32) and (27) that abut cylinder (31) are flat and free from surface markings and burrs. If necessary, lap faces with a very fine grade of abrasive paper. Use only manufacturer or authorized distributor replacement parts. Coat all parts with suitable pneumatic motor lubricating oil and assemble in the reverse order. See notes below.

When reassembling the motor assembly, first build up motor assembly locating pins in rear and front plate in holes in cylinder. Put rotor (29), blade (28) in the cylinder and put bearing plate (32 and 27) and bearing (26 and 34) on cylinder as a motor assembly. Heat housing (19) to 350°C (or 662°F) and put the motor assembly in housing.

On completing assembly, ensure that all parts are locked tight, the anvil will rotate, and the trigger and reverse valve set all operate freely. Pour in 2 to 3 drops of spindle oil into the air inlet (41). Connect tool to a suitable air supply and run the tool slowly for 2 to 3 seconds to allow the oil to circulate. Reset for required operation. Refer to section Operating.

Operation Specification		
	AT1300B	AT1300BL
Air Consumption	10.8 cfm	
Operating Torque	0-1600ft/lbs (0-2169Nm)	
Maximum Torque	2000 ft/lbs (2712 Nm)	
Air Inlet Thread	1/2" - 14 NPT	
Overall Length	13.59 ins. (345 mm)	19.53 ins. (496 mm)
Air Pressure	90 PSIG/6.2 Bar	

Trademark Acknowledgements
Snap-on® is a registered trademark of Snap-on Incorported.

DECLARATION OF CONFORMITY

Manufacturer:
Snap-on Tools Company
2801 80th Street,
Kenosha, WI 53141-1410, U.S.A.

Product: 1" Impact Wrench
Model No.: AT1300B / AT1300BL
Production date: 1711xxxx-xxxxxxxx

The undersigned hereby declares, on behalf of the above referenced manufacturer and product(s), to which this declaration relates, is in conformity with the provisions of:
Machinery Directive: 2006/42/EC
Safety: **EN792-6+A1:2008**
Vibration: **ISO 28927-2**
Noise: **ISO 15744:2008**
Safety: **EN ISO 12100:2010**

The Technical Construction File is maintained at:
Snap-on Tools Company
2801 80th Street
Kenosha, WI 53141-1410, U.S.A.

The authorized representative located whithin the Community is;
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