



3/8" BLACK NICKEL

BUTTERFLY IMPACT WRENCH

OWNER'S MANUAL



WARNING:

Read carefully and understand all INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item # 120210

Thank you very much for choosing a NORTHERN TOOL + EQUIPMENT CO., INC. Product! For future reference, please complete the owner's record below:

Model: _____ Purchase Date: _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This machine is designed for certain applications only. Northern Tool + Equipment cannot be responsible for issues arising from modification. We strongly recommend this machine is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted Northern Tool + Equipment to determine if it can or should be performed on the product.

For technical questions please call **1-800-222-5381**.

Technical Specifications

Item	Description
Square Drive	3/8"
Free Speed	10,000 RPM
Max. Torque	75 ft.-lbs.
Air Consumption	6 CFM
Air Inlet Diameter	1/4"- 18NPT
Min. Hose Size	3/8"
Max. Air Pressure	90 PSI

GENERAL SAFETY RULES



WARNING: Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your pneumatic tool.



WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.



WARNING: The brass components of this product contain lead, a chemical known to the State of California to cause birth defects (or other reproductive harm). (California Health & Safety code 25249.5, et seq.)

SAVE THESE INSTRUCTIONS

WORK AREA

- **Keep work area clean**, free of clutter and well lit. Cluttered and dark work areas can cause accidents.
- **Do not use your tool where there is a risk of causing a fire or an explosion;** e.g. in the presence of flammable liquids, gasses, or dust. Power tools create sparks, which may ignite the dust or fumes. Do not expose air tools to rain or wet conditions.

- ▣ **Keep children and bystanders** away while operating a power tool. Distractions can cause you to lose control, so visitors should remain at a safe distance from the work area.
- ▣ **Be aware of all power lines, electrical circuits,** water pipes and other mechanical hazards in your work area, particularly those hazards below the work surface hidden from the operator's view that may be unintentionally contacted and may cause personal harm or property damage.
- ▣ **Be alert of your surroundings.** Using power tools in confined work areas may put you dangerously close to cutting tools and rotating parts.

PERSONAL SAFETY

- ▣ **Stay alert,** watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- ▣ **Dress properly.** Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts. Air vents often cover moving parts and should be avoided.
- ▣ **Use safety apparel and equipment.** Use safety goggles or safety glasses with side shields which comply with current national standards, or when needed, a face shield. Use as dust mask in dusty work conditions. This applies to all persons in the work area. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate.
- ▣ **Avoid accidental starting.** Do not carry the power tool with your finger on the switch. Ensure the switch is in the off position before plugging tool into power outlet. In the event of a power failure, while a tool is being used, turn the switch off to prevent surprise starting when power is restored.
- ▣ **Do not overreach.** Keep proper footing and balance at all times.
- ▣ **Remove adjusting keys or wrenches** before connecting to the power supply or turning on the tool. A wrench or key that is left attached to a rotating part of the tool may result in personal injury.

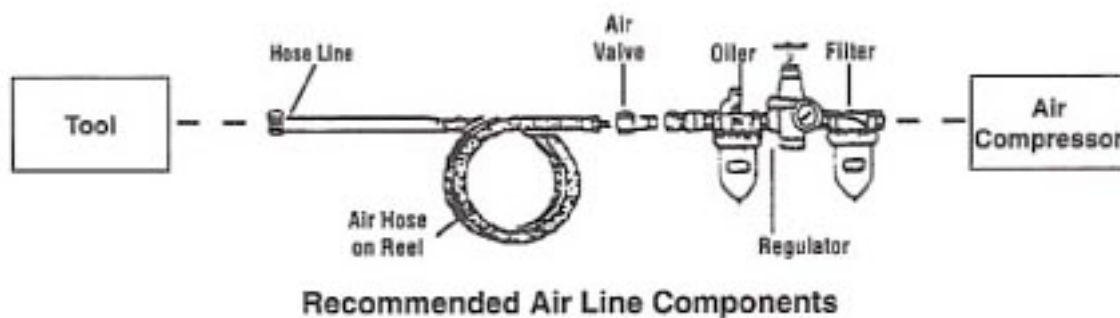
PNEUMATIC TOOL USE

- ▣ **Do not force the tool.** Tools do a better and safer job when used in the manner for which they are designed. Plan your work, and use the correct tool for the job.
- ▣ **Never use a tool** with a malfunctioning switch. Any power tool that cannot be controlled with the switch is dangerous and must be repaired by an authorized service representative before using.
- ▣ **Check for misalignment** or binding of moving parts, breakages of parts, damaged air hose (not included), and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- ▣ **Disconnect air supply** from tool and place the switch in the locked or off position before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- ▣ **Secure work** with clamps or a vise instead of your hand to hold work when practical. This safety precaution allows for proper tool operation using both hands.
- ▣ **Store idle tools.** When tools are not in use, store them in a dry, secure place out of the reach of children. Inspect tools for good working condition prior to storage and before re-use.
- ▣ **Use only accessories that are recommended** by the manufacturer for your model. Accessories that may be suitable for one tool may create a risk of injury when used on another tool.
- ▣ **Keep guards in place** and in working order.

- ▣ **Never leave tool** running unattended.
 - ▣ **Compressed air only.** Only use clean, dry and regulated compressed air at no more than 90 PSI to power this tool. Never use oxygen, carbon dioxide or any other bottled gas as a power source for this tool.
 - ▣ **Use proper size and type** air pressure line and fittings. The recommended air line for this tool is 3/8" delivering no more than 90 PSI. Recommended air inlet size is 1/4" - 18 NPT.
 - ▣ **Use air hoses rated** for safe operation of the tool. Air hoses rated for a maximum of 150 PSI or greater must be used with this tool.
 - ▣ **Make sure the hose** is free of obstructions or snags. Entangled hoses can cause loss of balance or footing.
1. **Maintain tools with care.** Keep tools clean and in good condition for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool fittings and hoses periodically and, if damaged, have them repaired by an authorized technician. The handles must be kept clean, dry, and free from oil and grease at all times.

ASSEMBLY

Figure 1. Optimal pneumatic set-up.



NOTE: For best performance, it is recommended to incorporate an inline filter, regulator, and oiler similar to the set-up seen in Figure 1. Everything needed for the perfect set-up can be found at Northern Tool + Equipment.

1. You will need to attach a standard 1/4" air coupler (not included) to the air inlet of the tool. First wrap the threaded portion of the 1/4" air coupler with pipe thread tape. Then thread the air coupler into the air inlet, and tighten securely.
2. Turn on the air compressor, set the air pressure regulator of the compressor to 90 PSI, and connect the air compressor hose to the air coupler on the impact wrench.



WARNING: Do not connect pneumatic tool to compressed air in which the pressure exceeds 90 PSI. Damage to your tool and possible personal injury may result.

NOTE: If you are not using an automatic oiler system, before operation, add a few drops of pneumatic tool oil to the airline connection. Add a few more drops after each hour of continual use.

3. Check the air line and its connections for air leaks, and repair them before using this tool.
4. Turn off the compressor and disconnect the air source hose in preparation to load the socket

onto the butterfly wrench.

OPERATING INSTRUCTION



WARNING: Always disconnect from the air source before examining or changing sockets.



WARNING: This tool generates considerable torque when in use. Always hold the tool with both hands when using, and brace yourself to resist the torque which will be delivered to the workpiece.

1. Select the appropriate size 3/8" square drive impact socket (not included) for your needs. Push and snap the socket onto the anvil. **Note:** Impact Sockets must be rated for 10,000 RPM or greater.
2. Rotating the throttle lever "butterfly" (#3) to the right causes the direction of the air impact wrench to turn FORWARD (clockwise).
3. You may control the amount of torque to be applied by rotating the regulator (#33). There are settings from 1 through 8, indicating increasing torque.

NOTE: The actual torque delivered at each of the eight settings will depend on the air pressure supplied to the tool. We suggest that you test the actual torque by tightening a nut or bolt at each setting, then observing the resultant torque by using a mechanical torque wrench (not supplied).

4. If installing a nut or bolt, set it as tight as possible by hand before tightening with the air impact wrench.
5. Connect the air hose to the air inlet, turn on the air compressor and make sure the air regulator is set at 90 PSI.
6. Place the socket (not included) over the fastener.
7. Grip the air impact wrench tightly with both hands, and rock the throttle lever "Butterfly" (#3) to the right. The tool will operate and tighten the fastener.
8. When the fastener is tightened, release the throttle lever "Butterfly" and remove the tool from the fastener.
9. If possible, check the actual torque applied to the fastener with a mechanical torque wrench (not supplied).
10. If removing a fastener, grip the air impact wrench tightly with both hands and rock the throttle lever "Butterfly" to the left. The tool will operate and loosen the fastener (assuming that the fastener is a standard right-hand thread).

NOTE: Always check to be sure of the thread direction of any fastener before attempting to install or remove it. If the fastener is a left-hand thread, rock the Throttle Lever "Butterfly" to the right for removal.



WARNING: If the fastener will not come off, first check the direction of the thread. If you have the thread direction correct and the fastener will still not come off, DO NOT INCREASE THE AIR PRESSURE to the tool beyond 90 PSI. This can damage the tool.

11. When you are finished using this tool, turn off the air compressor, bleed the remaining air from the tools, and disconnect the air hose. Put the air impact wrench away in its proper storage place.

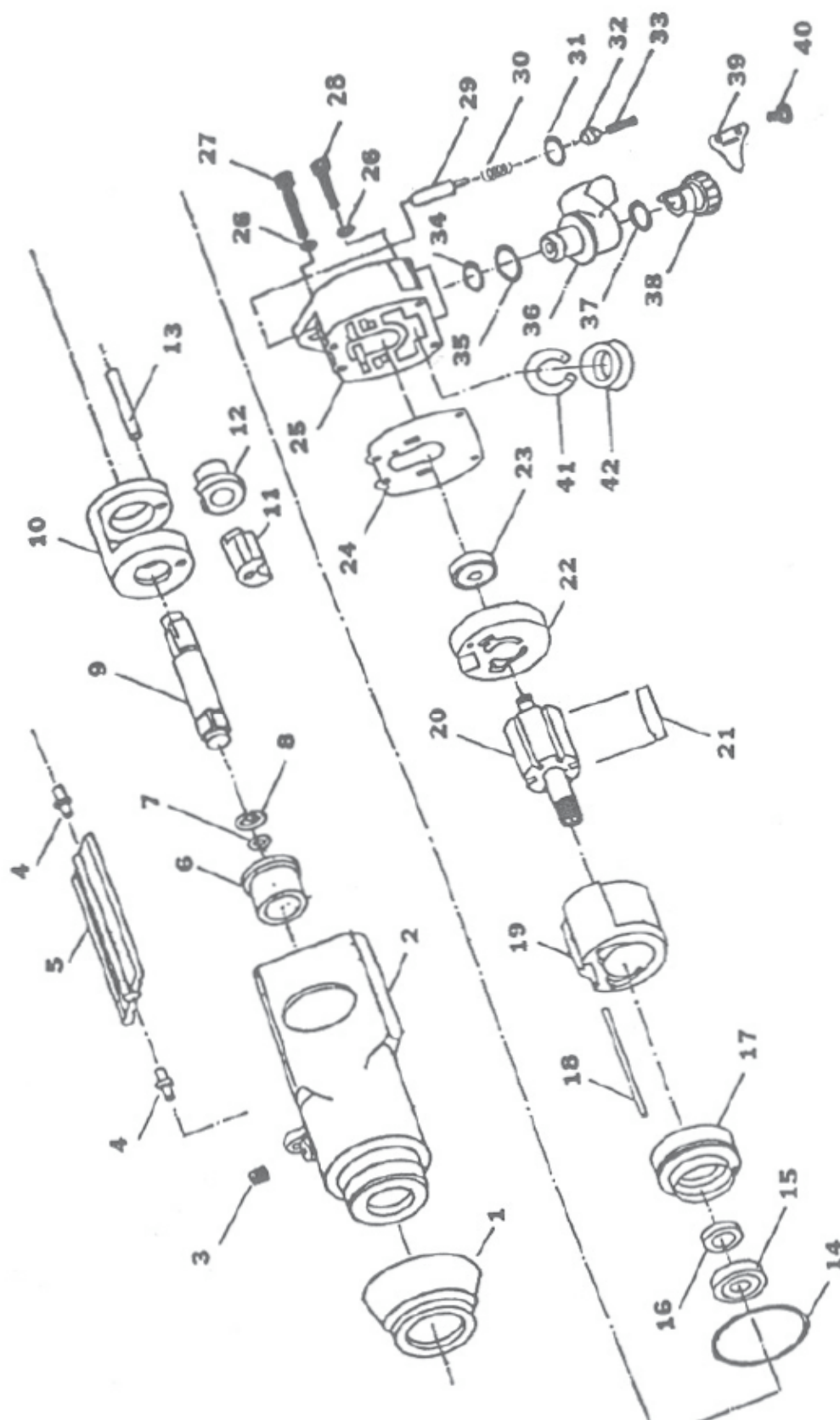
MAINTENANCE



WARNING: Make sure this tool is disconnected from its air source and squeeze the trigger to release all compressed air in the tool before attempting any maintenance, cleaning, or inspection.

- **Maintain your tools.** It is recommended that the general condition of any tool be examined before it is used. Keep your tools in good repair by adopting a program of conscientious repair and maintenance in accordance with the recommended procedures found in this manual. If any abnormal vibrations or noise occurs, turn the tool off immediately and have the problem corrected before further use. Have necessary repairs made by qualified service personnel.
- **Cleaning.** Use only soap and a damp cloth to clean your tools. Many household cleaners are harmful to plastics and other insulation. Never let liquid get inside a tool.
- Your Air Impact Wrench should be kept clean and dry in a suitable place where it will not be exposed to water or corrosive materials.
- If your tool loses power, or you notice air leaks, take it to a certified technician for service.

EXPLODED DIAGRAM



PARTS LIST

Part No.	Description	Qty.	Part No.	Description	Qty.
1	Housing	1	22	Back Cap	1
2	Oiler Screw	1	23	Spring	2
3	Throttle Lever	1	24	Valve Seat	2
4	Anvil Bushing	1	25	O-ring	2
5	Socket Retaining Ring	1	26	Spring	2
6	O-ring	1	27	Plunger	2
7	Anvil	1	28	O-ring	2
8	Hammer Pin	1	29	O-ring	1
9	Hammer Cage	1	30	Air Inlet Block	1
10	Hammer Dog	1	31	Spring	1
11	Cam	1	32	Steel Ball	1
12	Oil Seal	1	33	Regulator	1
13	Ball Bearing	2	34	Throttle Pin	2
14	Front End Plate	1	35	Washer	1
15	Rotor Blade	6	36	Retainer Ring	1
16	Rotor	1	37	Spring Washer	4
17	Cylinder	1	38	Cap Screw	4
18	Rear End Plate	1	39	Rubber Nose Guard	1
19	Spring Pin	1	40	Retainer Plate	1
20	Ball Bearing	1	41	Screw	2
21	Back Cap Gasket	1			



WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.



Northern Tool + Equipment Co.
2800 Southcross Drive West
P.O. Box 1499 Burnsville, MN 55337-0499
Made in China