



Assembly & Instruction Manual **ITEM 1324**



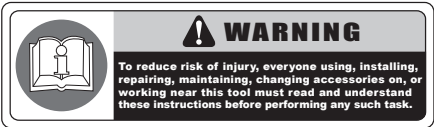
16PC AIR IMPACT TOOL KIT

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Mc i 'WUb'd i fW\UgY'UXX]h]cbU'']hY a g'Uh
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SAVE THIS MANUAL FOR FUTURE REFERENCE



Customer Service Postal Address:
1290 35 Road
Minden, NE 68959
Voice: 1-(308) 832-2070
Fax: 1-(308) 832-2069



Your new 16PC AIR IMPACT TOOL KIT has been engineered and manufactured to Cummins Industrial Tools high standards for dependability, ease of operation, and operator safety. Pay close attention to the Rules for Safe Operation, Warnings, and Cautions. If you use your machine properly and only for what it is intended, you will enjoy years of safe, reliable service.

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INTRODUCTION

- THIS PRODUCT has many features for making the use of this product more pleasant and enjoyable. Safety, performance, and dependability have been given top priority in the design of this product making it easy to maintain and operate.

▲ K5FB-B ; . Do not attempt to use this product until you thoroughly read and completely understand the operator's manual. Pay close attention to the safety rules, including Dangers, Warnings, and Cautions. If you use your product properly and only as intended, you will enjoy years of safe, reliable service.

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▲ K5FB-B ; . The operation of any tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always wear eye protection which is marked to comply with ANSI Z87.1.

GENERAL SAFETY RULES

▲ K5FB-B ; . When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment. Read all instructions before using the tool!

- **Work area conditions.** Cluttered areas invite injuries.
- **Additional work area conditions.** Do not use machines or power tools in damp or wet locations. Do not expose to rain. Keep work area well lighted.
- **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools or extension cords.
- **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
- **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
- **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
- **Use eye protection.** Always wear ANSI approved impact safety glasses underneath a full face shield during use. Also, wear heavy duty work gloves.
- **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
- **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. The handles must be kept clean, dry, and free from oil and grease at all times.
- **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before starting work.
- **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
- **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Any part that is damaged should be replaced.
- **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Cummins Industrial Tools.
- **Do not operate tools if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.

▲ K5FB-B ; . The warnings, cautions, and instructions discussed in this instruction manual can not cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which can not be built into this product, but must be supplied by the operator.

SPECIFIC SAFETY RULES

- **8C'BCH' : CF79'H<9'HCC@'** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool's capacities.
- **8C'BCH' 56 IG9'H<9'DCK9F'7CF8''** Do not yank compressor's cord to disconnect it from the receptacle. Do not carry tools by the cord.
- **5JC=8' IB-BH9BH=CB5@' GH5FH=B ; "** Do not carry any tool with your finger on the trigger, whether it is connected to the compressor or not.
- **8F5=B'7CADF9GGCF'9J9FM'85M'** Do not allow moisture to build up inside the compressor. Do not allow compressor to sit pressurized for longer than one hour.
- **A5?9'GIF9'5@@'9E I=DA9BH'=G'F5H98'HC'H<9'5DDFCDF=5H9'75D57=HM'** Make sure that the regulator is set at least 10 PSI lower than lowest rated piece of equipment you are using.
- **8C'BCH' IG9'CLM ; 9Bz'7CA6 IGH=6@9' ; 5G9Gz'CF'6CHH@98' ; 5G9G'5G'5'DCK9F'GCIF79''** The tool may explode, possibly causing injury.
- **8C'BCH'9L7998** the recommended air pressure of 90 PSI.
- **HCC@'AIGH'BCH'<C@8'DF9GGIF9'K<9B'5=F'GIDD@M'=G'8=G7CBB97H98''** If a wrong fitting is used the tool can remain charged with air after disconnecting and thus will be able to cycle after the air line is disconnected possibly causing injury.
- **5@K5MG'8=G7CBB97H'5=F'GIDD@M''** Before making adjustments, when servicing the tool, when clearing a jam, when tool is not in use, or when moving to a different work area, as accidental actuation may occur, possible causing injury.
- **8=G7CBB97H'DCK9F''** Unplug compressor when not in use.
- **CIH8CCF'9LH9BG=CBG'7CF8G''** When the equipment is operated outdoors, use only extension cords intended for outside use. See chart under "Extension Cords" for the proper AWG rating depending on the length of the cord(s) being used.
- **; I5F8'5 ; 5=BGH'9@97HF=7'G<C7?''** Prevent body contact with grounded surfaces such as pipes, radiators, rangers, and refrigerator enclosures.

PRODUCT SPECIFICATIONS

- This versatile kit is a must have for the garage or home
- 1/2" drive air impact wrench
 - Free speed: 8000 RPM
 - Maximum torque: 250 ft/lbs.
 - Air pressure: 90 PSI @ 5 CFM
 - Air inlet: 1/4" NPT
- 3/8" drive air ratchet
 - Free speed: 160 RPM
 - Torque: 50 ft/lbs.
 - Air pressure: 90 PSI @ 4 CFM
 - Air Inlet: 1/4" NPT

PRODUCT SPECIFICATIONS

- 10 pc. Chrome Vanadium steel air impact sockets
SAE: 1/2", 9/16", 5/8", 11/16", 3/4"
Metric: 11mm, 12mm, 13mm, 14mm, 17mm
- 1/2" - 3/8" impact socket adapter
- 2 brass air nipples
- Storage case

UNPACKING

INSTRUCTIONS

When unpacking the tool:

- Carefully remove the tool and accessories from the box.
- Make sure that all items listed in the packing list are included.
- Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.

⚠ K5FB-B ; If any part are missing do not operate the tool until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

PACKING LIST

- When unpacking, check to make sure the following parts are included. All sizes listed below are approximate. If any parts are missing or broken, please contact Cummins Industrial Tools at the number on the cover of this manual.
- 3/8" Ratchet Wrench
- 1/2" Impact Wrench
- 3/8" to 1/2" Adapter
- 4 mm Hex Wrench
- Impact Socket (7/16" – 1")
- Oil Pot
- Air Coupler

ASSEMBLY

Mc i f ' 5]f' FUhW\Yh`Wc a Yg`Wc a d`YhY`m`UggY a V`YX

Air Connection for Ratchet

%! Remove the plastic cap from the rear of the Connection Head (#2).

&! Wrap the threads of the Air Coupler with pipe thread seal tape (not included). Attach the Air Coupler to the Connection Head. Tighten the fitting.

'! Your Air Ratchet is ready for use.

Impact Wrench

■ This impact wrench develops a maximum of 230 ft./lb. of torque. The amount of torque can be increased or decreased using the Air Regulator (#11). When the Air Regulator is completely screwed in it is at its lowest setting. Air pressure increases as you loosen the Air Regulator.

OPERATION

Grounding Instructions

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%! This machine has a three-prong plug. The third prong (round) is the ground. Plug the machine's cord only into three-prong receptacles. Never cut off the round prong. Cutting off the ground will result in a safety hazard and void the warranty.

&! If a three-prong receptacle is not available, you may use an adapter. Extending from the male end of the adapter, you will find a ring connector or wire lead with a ring connector where the ground (round prong) would be. Remove the center screw of the outlet cover and put the screw through the ring connector and back into the hole of the outlet cover. Do not over-tighten or you will crack the outlet cover.

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%! This machine has a polarized plug. One prong is wider than the other prong. This plug will fit in polarized outlet only one way. If the plug does not fit fully in the outlet reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. DO not attempt to modify the plug in any way. Modifying the plug will result in a safety hazard and void the warranty.

Setup

■ Frequent, but not excessive, lubrication is required for best performance. Oil added through the airline connection will lubricate internal parts. An automatic airline oiler is recommended but oil may be added manually before every operation or after about 1 hour of continuous use. Only a few drops of oil at a time are necessary. Too much oil will collect inside the tool and be blown out during the exhaust cycle. Only use pneumatic tool oil. Do not use detergent oiler additives as these lubricants will cause accelerated wear to the seals in the tool.

■ Dirt and water in the air supply are major causes of pneumatic tool wear. Use a filter/oiler for better performance and longer life. The filter must have adequate flow capacity for the specific application. Consult the manufacturer's instructions for proper maintenance of your filter.

OPERATION

- The connector on the tool must not hold pressure when the air supply is disconnected. If the wrong fitting is used, the tool can remain charged with air after being disconnected and still be able to drive a fastener. See Figure 1 for the recommended accessories and connection order.

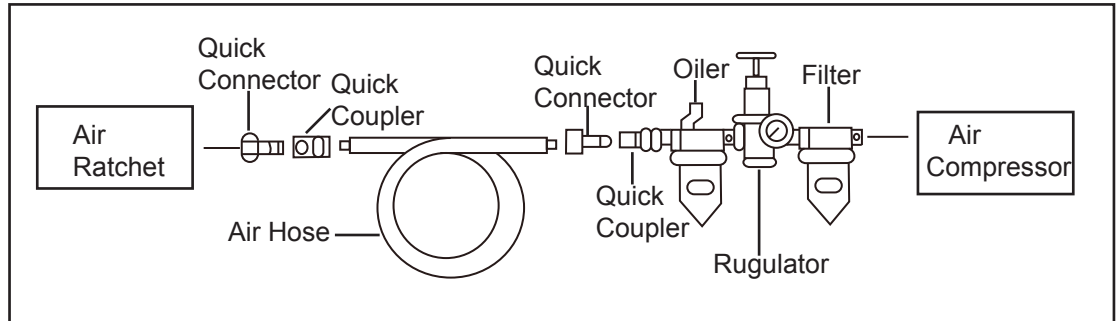


Figure 1- Airline Oiler Assembly

Air Ratchet Operation

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%! Select the appropriate socket for your needs.

&! Attach the socket to the Ratchet Anvil (#18) as shown in Figure 2.

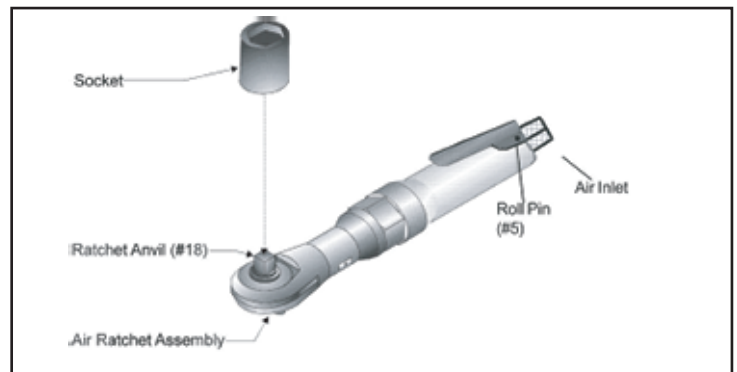


Figure 2- Attaching the Socket

'! Set the compressor's pressure regulator to 90 PSI. Do not set the compressor's outlet regulator over 90 PSI.

(! Connect the Air Ratchet to the air compressor's hose. If leaking is detected, disconnect the air hose and repair before use.

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%! Check the direction of the drive by pressing the Trigger (#4) as shown in Figure 3.

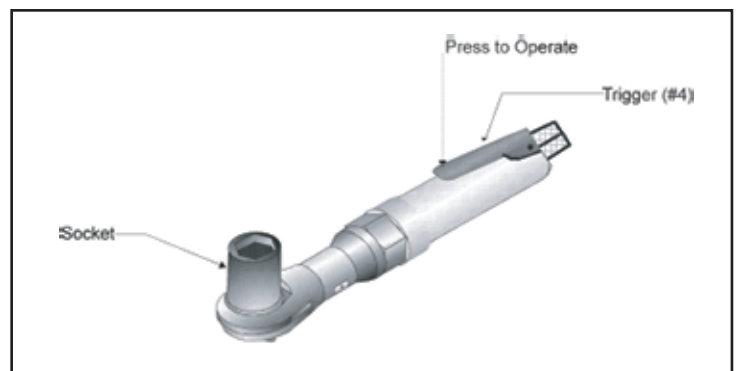


Figure 3- Operating the Air Ratchet

OPERATION

&! If the Air Ratchet is going counterclockwise (the correct direction to loosen), then proceed to step 4.

'! To change the direction of the drive to loosen, turn the dial marked "R-F" clockwise as shown in Figure 4.

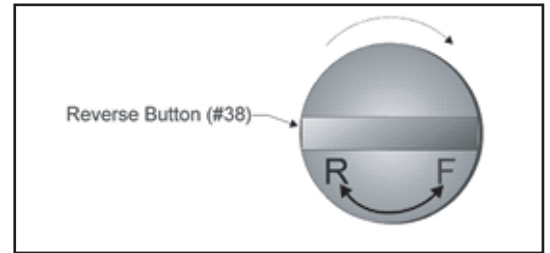


Figure 4- Changing Direction of the Drive

(! Place the socket over the nut to loosen.

)! Grip the Air Ratchet firmly. Press the trigger to begin loosening.

*! If the Air Ratchet cannot loosen the nut, DO NOT raise the outlet pressure of the air compressor. Do not continue attempts to loosen with the Air Ratchet. Use appropriate tools and methods to loosen the nut.

+! When the nut is removed, stop the Air Ratchet by releasing the trigger and remove the Air Ratchet. Remove the nut from the socket if needed.

H] [\hYb]b [

%! Check the direction of the drive by pressing the Trigger (#4) as shown in Figure 3.

&! If the Air Ratchet is going clockwise (the correct direction to tighten), then proceed to step 4.

'! To change the direction of the drive in order to tighten, turn the dial marked "R-F" counterclockwise as shown in Figure 5.

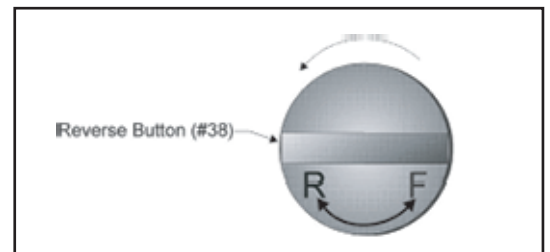


Figure 5 - Changing the Direction of the Drive

(! Thread the nut on as far as you can by hand.

)! Place the socket on the nut. To begin tightening the nut, press the trigger.

*! If the Air Ratchet stalls while tightening, do not continue attempts to tighten the nut with the Air Ratchet. DO NOT raise the outlet pressure of the air compressor. Use the appropriate tools and methods to tighten the nut.

+! When the nut has been tightened, remove the Air Ratchet and socket.

,! If available, check the recommended torque specifications for the nut. You should use a torque wrench to torque the nut after using the Air Ratchet.

OPERATION

Impact Wrench Operation

- %! Set the compressor's pressure regulator to a maximum of 90 PSI. 90 PSI is satisfactory without harming this tool.
- &! Remove the plastic cap from the rear of the Hose Adapter (#10).
- *! Wrap the threads of the Air Coupler with pipe thread seal tape (not included). Attach the Air Coupler to the Hose Adapter. Tighten the fitting.
- (! Determine the socket size necessary for the job you need to do. Attach the appropriate 1/2" drive socket to the Impact Wrench as shown in Figure 7.

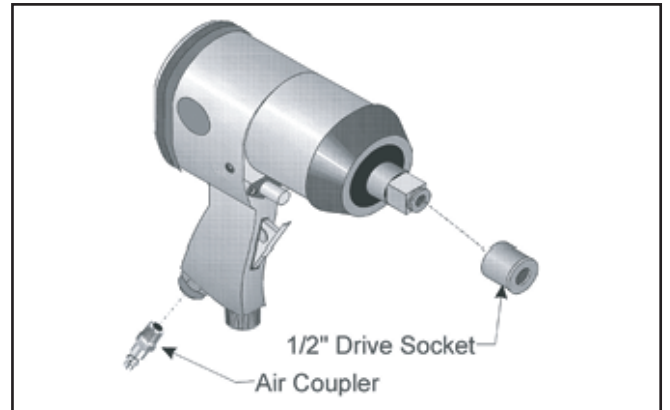


Figure 7- Attaching the Air Coupler and Socket

-)! Connect the Impact Wrench to the air compressor's hose. If leaking is detected, disconnect the air hose and repair before use.
- *! Select the power setting for Loosening by pushing in and turning the Air Regulator (#11) located on the bottom of the Impact Wrench as shown in Figure 8. When the Air Regulator is completely screwed in it is at its lowest setting. Air pressure increases as you push in and turn the Air Regulator.

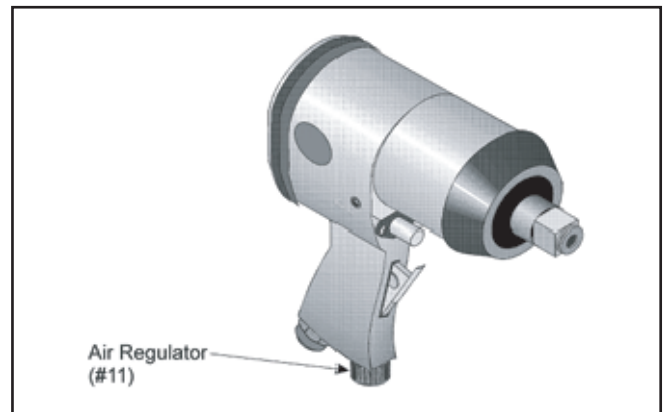


Figure 8- Adjusting the Reverse Power Setting

⚠ 75 IH=CB. Use the setting that is appropriate for the job. Do not set the power setting higher than needed. Damage to parts could result.

OPERATION

- +! Select the direction of the Wrench (forward or reverse) by pushing the Reverse Valve (#3) located on the handle of the Impact Wrench as shown in Figure 9.

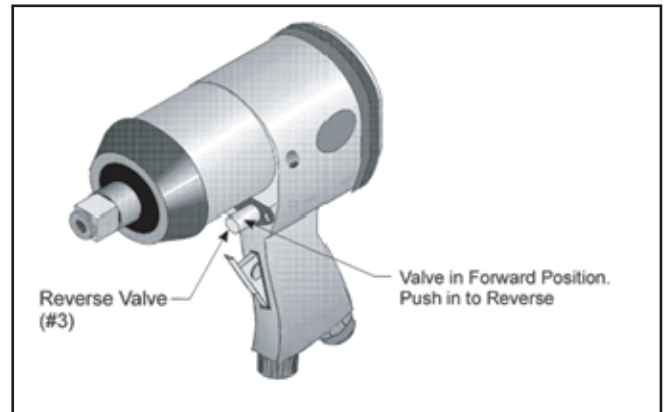


Figure 9- Selecting Reverse Direction

- ,! Press the Trigger (#4) to test the Impact Wrench. The Impact Wrench should spin freely as shown in Figure 10.

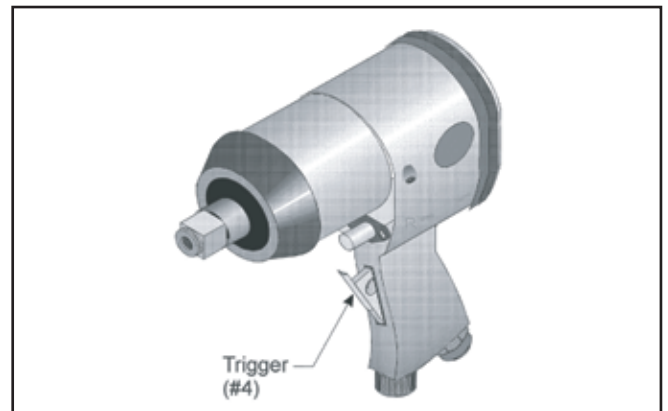


Figure 10- Pressing Trigger

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- %! Verify that the power level is correct for your needs and that the Reverse Valve (#3) has been shifted (pressed) completely to the right. If not, refer to steps 6 through 7 under Impact Wrench Operation before processing.
- &! Place your work in as clear a location as possible. Make sure the air hose will reach as far as needed without stressing any connections.
- '! With the correct socket attached to the Impact Wrench, slide the socket over the nut or bolt.
- (! Grip the Impact Wrench with both hands, especially with higher power settings. Make sure you are in a stable position and spread your feet shoulder-width apart.
-)! Press the Trigger (#4) to loosen the bolt.

⚠ K5FB-B ; . The Impact Wrench may kick back during operation. If this happens, release the trigger IMMEDIATELY!

OPERATION

- *! If the bolt will not loosen, and you are on a low power setting for loosening, try to increase the power setting and attempt again.
- +! If the bolt will not loosen with the Impact Wrench on a higher power setting, do not repeat attempts to loosen. You may snap the bolt or strip the threads of the stud or nut. Try another method to loosen the bolt or nut.

H] [\hYb]b [

- %! Verify that the power level is correct for your needs and that the Reverse Valve (#3) has been shifted (pressed) completely to the left. If not, refer to steps 6 through 7 under Impact Wrench Operation before processing.
- &! Place your work in as clear a location as possible. Make sure the air hose will reach as far as needed without stressing any connections.
- '! Thread the nut or bolt on as far as possible by hand. This is to prevent cross-threading.
- (! If you have torque specifications for the nut or bolt you are working on, refer to them. If a low torque setting is given, it is recommended that you use a socket wrench or a manual torque wrench to tighten as the Impact Wrench may provide too much torque, even in the lowest power setting.
-)! Place the socket onto the nut or bolt.
- *! Grip the Impact Wrench with both hands, especially with higher power settings. Make sure you are in a stable position and spread your feet shoulder-width apart.
- +! Press the trigger to tighten the bolt.
- ,! When the bolt is tight, release the trigger. Do not over-tighten!

MAINTENANCE

5]f' FUhW\ Yh' AUJbhYbUbWY

- Your Air Ratchet is best operated with an Airline Oiler. If you are using the Air Tool without an Airline Oiler, follow the steps below.
- %! Disconnect the Air Ratchet from the air hose.
- &! Apply a few drops of pneumatic tool oil through the air inlet before each use, or every hour if used continuously.

⚠ 75 IH-CB. Do not use detergent oil or additives as these lubricants will cause accelerated wear to the seals in the tool.

- '! Apply a few drops of oil to the Valve (#6), location shown in Figure 6. Work the trigger a few times to lubricate.

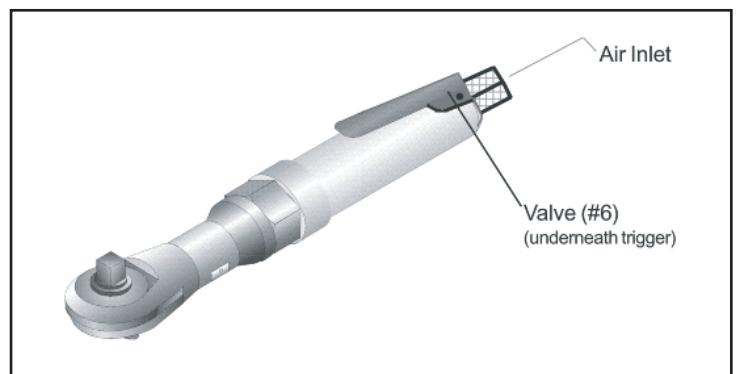


Figure 6- Lubrication Points

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- Your Impact Wrench is best operated with an Airline Oiler. If you are using the Air Tool without an Airline Oiler, follow the steps below.
- %! Disconnect the Impact Wrench from the air hose.
- &! Apply a few drops of pneumatic tool oil through the air inlet before each use, or every hour if used continuously.

⚠ 75 IH-CB. Do not use detergent oil or additives as these lubricants will cause accelerated wear to the seals in the tool.

- There are no user-serviceable parts in your Impact Wrench. Attempts to repair or make adjustments on your tool are prohibited and will VOID your warranty.
- Wipe down your tool after every use and store it in a drawer or other safe place.

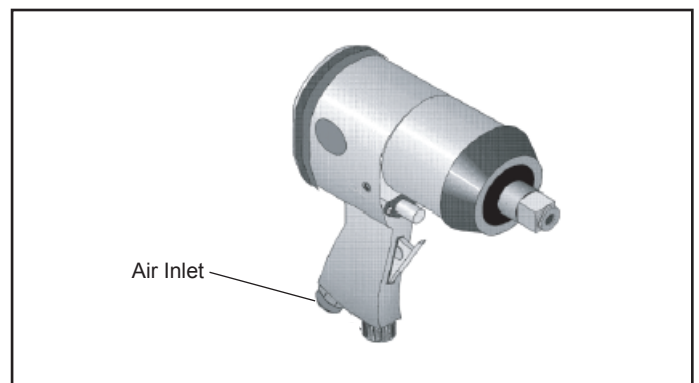
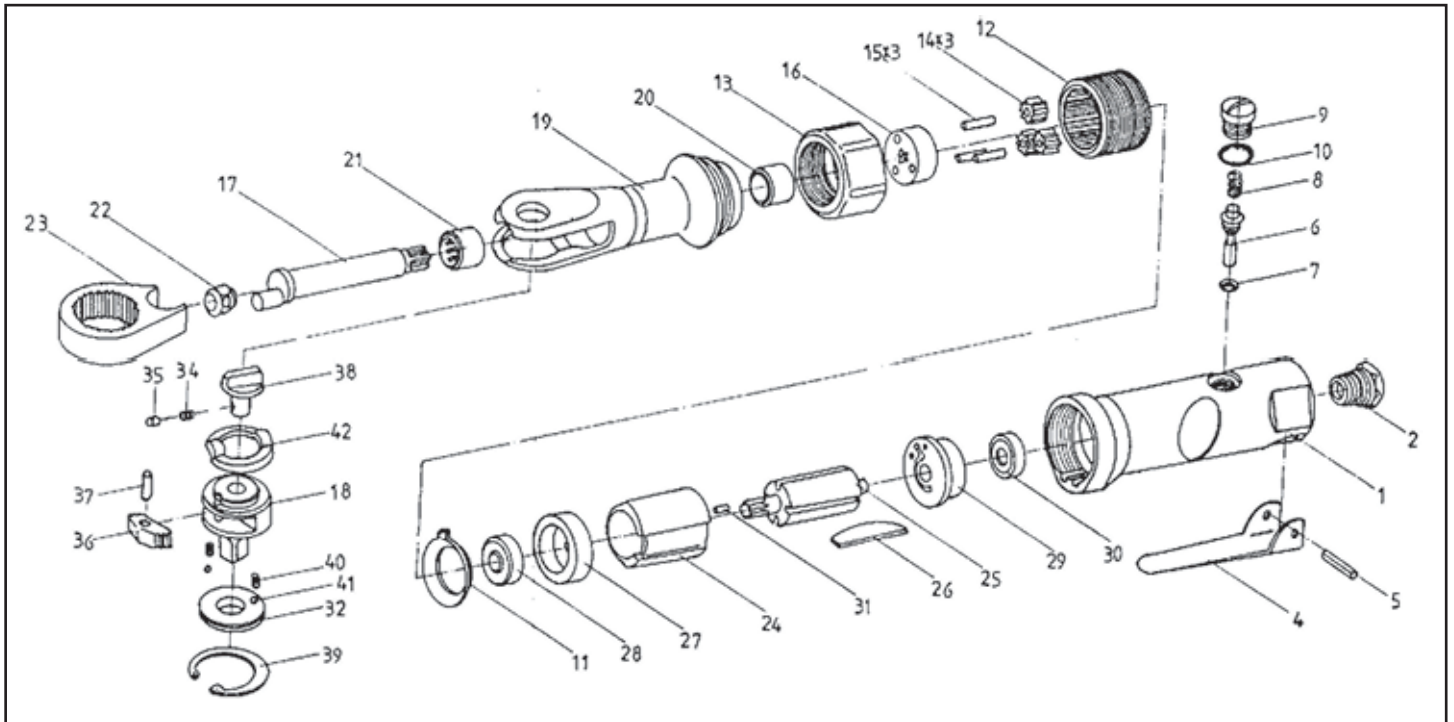


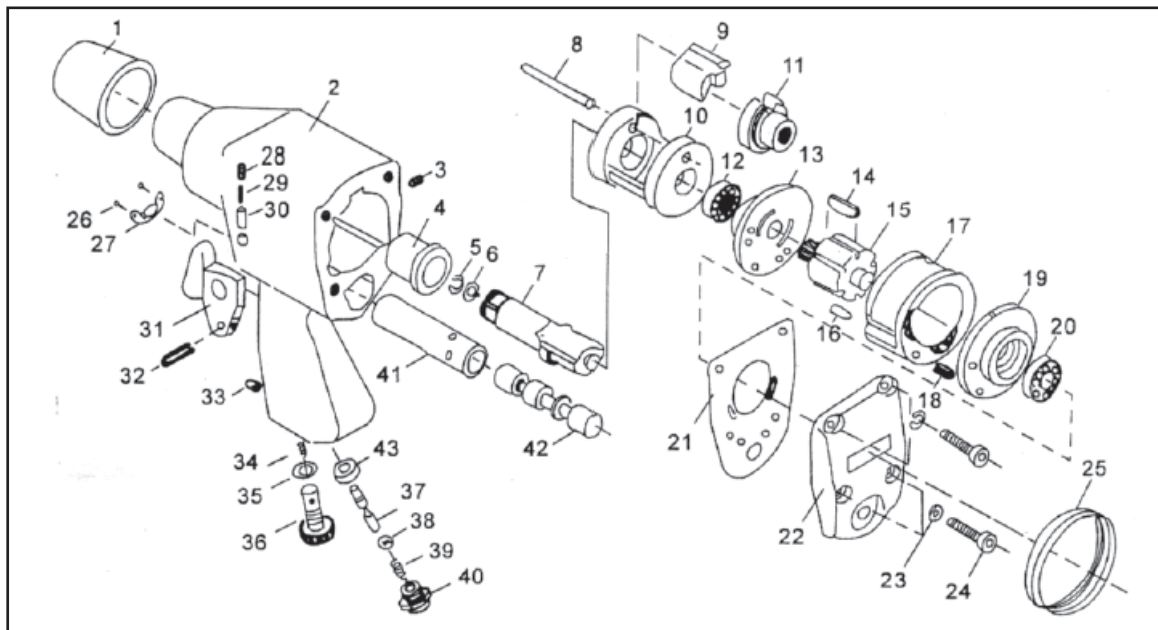
Figure 7- Lubrication Points

EXPLODED DIAGRAM & PARTS LIST



Bc'	DUfhg' .	8YgWf]dh]cb'	Bc'	DUfhg' .	8YgWf]dh]cb'
1	HY150-01	Housing	23	HY150-23	Ratchet Yoke
2	HY150-02	Connection Head	24	HY150-24	Cylinder
4	HY150-04	Trigger	25	HY150-25	Rotor
5	HY150-05	Roll Pin	26	HY150-26	Rotor Blade
6	HY150-06	Valve	27	HY150-27	Front Plate
7	HY130-18	O-Ring	28	HY150-28	Front Bearing
8	HY150-08	Spring	29	HY150-29	Rear Plate
9	HY150-09	Valve Plug	30	HY150-30	Rear Bearing
10	HY160-12	O-Ring	31	HY150-31	Cylinder Pin
11	HY150-11	Washer	32	HY150-32	Thrust Washer (3/8")
12	HY150-12	Thread Ring Gear	33	HY150-33	Thrust Washer (1/2")
13	HY150-13	Clamp Nut	34	HY150-34	Spring
14	HY150-14	Idler Gear	35	HY150-35	Lock Pin
15	HY150-15	Idler Gear Pin	36	HY150-36	Ratchet Pin
16	HY150-16	Idler Gear Plate	37	HY150-37	Pin
17	HY150-17	Crack Shaft	38	HY150-38	Reverse Button
18	HY150-18	Ratchet Anvil	39	HY150-39	Retainer Ring
19	HY150-19	Ratchet Housing	40	HY150-40	Spring
20	HY150-20	Spacer	41	HY150-41	Steel Ball
21	HY150-21	Needle Bearing	42	HY150-42	Washer
22	HY150-22	Drive Bushing			

EXPLODED DIAGRAM & PARTS LIST



'BC'	89G7F-DH-CB	EHM'	'BC'	89G7F-DH-CB	EHM'
1	Protecting Rubber	1	23	Washer	4
2	Housing	1	24	Screw	4
3	Screw	1	25	Rubber	1
4	Anvil Bushing	1	26	Screw	2
5	Anvil Collar And Seal	1	27	Exhaust Deflector	1
6	"O" Ring	1	28	Screw	1
7	Anvil(1/2" SQ)	1	29	Spring	1
8	Hammer Pin	1	30	Pin	1
9	Hammer Dog	1	31	Trigger	1
10	Hammer Cage	1	32	Pin	1
11	Drive Cam	1	33	Screw	1
12	Ball Bearing	1	34	Spring	1
13	Front end Plate	1	35	"O" Ring	1
14	Rotor Blade	6	36	Air Regulator	1
15	Rotor	1	37	Valve Stem	1
16	Pin	1	38	Steel Ball	1
17	Cylinder	1	39	Spring	1
18	Pin cylinder	1	40	Hose Adapter	1
19	Rear end Plate	1	41	Valve Sleeve	1
20	Ball Bearing	1	42	Reverse Valve	1
21	Rear Gasket	1	43	Bushing	1
22	Rear Cover	1	44		1