

Installation Instructions for 81035

Air Shear with Pistol Grip

Tool Specifications

Metal Capacity	18 gauge (0.048 in.)
Cutting Head Swivel	360 degree
Free Speed	2800 RPM
Average Air Consumption	4 CFM
Air Inlet	1/4 in. NPT
Air Hose Inside Diameter	3/8 in.
Required Air Pressure	90 psi (621 kPa)
Vibration Value	4.2 m/s ²
Noise Level*	82 dB(A)
Power Setting	Variable Speed Trigger
Grip	Pistol Style
Overall Length	9 1/16 in. (4.11 mm)
Housing Material	Aluminum
Net Weight	2.73 lb. (1.24 kg)

**The specified values are emission levels and are not necessarily to be seen as safe operating levels. As workplace conditions vary, this information is intended to allow the user to make a better estimation of the hazards and risks involved only.*

Safety Warnings

General Air Tool Warnings

1. Read and understand this entire manual before attempting assembly or operation.
2. Read and understand all warnings posted on the tool and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace warning labels if they become obscured or removed.
4. Do not use this tool for other than its intended use. If used for other purposes, JEGS disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
5. Always wear approved safety glasses or face shield while using this tool. (Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.)
6. Wear ear protectors (plugs or muffs) if the noise exceeds safe levels.
7. Wear gloves and protective clothing if operation produces sparks or flying particles. Gloves should be tight-fitting, without frayed fingers or hanging threads. Keep hands and body away from the working area of tool.
8. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead based paint
 - Crystalline silica from bricks, cement and other masonry products
 - Arsenic and chromium from chemically treated lumberYour risk of exposure 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 face or dust masks that are specifically designed to filter out microscopic particles.
9. Do not operate an air tool continually at full throttle without a work load on the tool.
10. The air tool must be properly lubricated before operating.
11. Never start a percussion type air tool (chipper, breaker, buster, etc.) without securing the tooling in the retainer and placing the tip against the work surface.
12. Do not operate air tool without its guards in place. Do not modify the tool.
13. Do not operate this tool while tired or under the influence of drugs, alcohol, or any medication.
14. Adopt a comfortable posture with proper balance, and maintain secure footing at all times. Non-slip footwear or anti-skid floor strips are recommended.
15. Do not wear loose clothing or jewelry. Confine long hair.
16. Excessive air pressure and too much free rotation may decrease life of the tool and may cause a hazardous situation.



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17. Check air hoses for wear, and keep them away from heat and sharp edges. Repair or replace damaged air hose immediately. Do not carry tool by the air hose.
18. Air hose may cause tripping hazards; keep hose away from traffic areas.
19. Do not use this tool near flammable objects or in potentially explosive environments. Do not use near live electrical wires.
20. Do not use power tools in damp or wet location, or expose them to rain. Keep work area well lit.
21. Do not leave a connected tool unattended. When not in use, disconnect tool from air source.
22. Shut off air supply and discharge any residual pressure from tool before removing hose, making adjustments, changing accessories, or storing tool.
23. Make sure tool is switched off and your finger off the trigger, before connecting to air supply.
24. Remove adjusting keys and wrenches before turning on tool.
25. Keep visitors a safe distance from the work area. Keep children away.
26. Give your work undivided attention. Looking around, carrying on a conversation and "horse-play" are careless acts that can result in serious injury.
27. Do not force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and more safely.
28. Repetitive motions and/or exposure to constant vibration can be harmful to hands and arms. Take frequent breaks and relax hands during extended operation. Change posture to avoid discomfort or fatigue.
29. Compressed air can be harmful if directed toward sensitive areas of the body, and may propel small particles caught in the air stream. Exercise proper caution.
30. Use only recommended accessories; improper accessories may be hazardous.
31. Maintain tools with care. Keep air tool clean and oiled for best and safest performance.
32. Do not use combustible gases, carbon dioxide, oxygen or any bottled gas as an air source for the tool. These can present risk of explosion and serious injury.
33. Do not lubricate the tool with combustible liquids, such as kerosene, diesel or jet fuel.
34. Do not dispose of this tool with normal household waste. Never dispose of the air tool into fire.

Specific Warnings for Metal Shear

35. This shear is designed for cutting sheet material, such as steel and plastics. If you are not familiar with the proper and safe operation of a pneumatic shear, do not use until proper training and knowledge have been obtained.
36. Secure workpiece with clamps or vise. Keep both hands on tool to prevent loss of control.
37. Keep hands away from reciprocating blades.
38. Replace blades if they become damaged or dull.

Familiarize yourself with the following safety notices used in this manual:



This means that if precautions are not heeded, it may result in serious, or even fatal, injury.



This means that if precautions are not heeded, it may result in minor injury and/or possible tool damage.

This manual is provided by JEGS, covering the safe operation and maintenance procedures for JEGS Air Shear. This manual contains instructions on safety precautions, general operating procedures, maintenance procedures and parts breakdown. Your tool has been designed and constructed to provide consistent, long-term operation if used in accordance with the instructions set forth in this document.

The instructions and warnings in this manual may not encompass all possible workplace environments. The operator is expected to take appropriate precautions and exercise common sense. As with any tool operation, safety of operator and bystanders should be first priority.

If there are questions or comments, please contact JEGS.

Record the serial number and purchase information of your tool.

Retain this manual for future reference. If the tool transfers ownership, the manual should accompany it.



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Setup & Assembly

Any missing parts or damage should be reported immediately to JEGS. Do not use a damaged tool. Read this instruction manual thoroughly for operation, maintenance and safety instructions.

Lubrication

The shear should be lubricated **daily** (or before each use) with air tool oil through the air inlet. During continual operation, it should be re-oiled every 1 to 2 hours. This can be done with an inline oiler, or manually. If done manually, proceed as follows:

1. Disconnect air hose from tool.
2. Place 4 or 5 drops of air tool oil into air inlet. **NOTE:** Air tool oil not provided; it is available at most major hardware and tool stores. SAE #10 oil or sewing machine oil may be used as a substitute. Do not use detergent oil.
3. Re-connect air. Run shear at low throttle without load for a few seconds to distribute the oil throughout tool.
4. When finished operating shear, disconnect air hose. Wipe off housing with a dry cloth. Place 4 or 5 drops of air tool oil into air inlet; re-connect air and run tool for a few seconds to distribute the oil. Disconnect air.

Operation



The pneumatic shear must be properly lubricated before operation. See "Lubrication" section.

1. Remove protective cap from air inlet. If an in-line oiler is not being used, add 4 or 5 drops of air tool oil (not included) into the air inlet.
2. Blow out airline to remove any dirt or moisture, then connect air supply hose to tool. Set air pressure to 90 psi.

IMPORTANT: Connecting a quick-change coupling directly to the tool is not recommended, as vibration may cause the connection to fail. Instead, add a leader hose and install any quick-change couplings farther down the line.

3. Place cutting blades against workpiece and both hands on tool.
4. Press trigger to operate. Speed is regulated by pressure applied to trigger.
5. Use moderate pressure against workpiece; do not force tool.
6. Release trigger to stop tool.

Adjustment



Disconnect shear from air supply before making any adjustments.

Head Position

1. To swivel head, loosen (do not remove) the three socket head screws with a hex wrench, just enough to allow head to swivel.
2. Rotate head to desired angle, and retighten the three screws.



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Air System Requirements

1. Use proper air hose size (refer to tool specifications). The hose should be just long enough to serve the working area. Excessive hose length will cause pressure drop.
2. Make sure air compressor supplies clean, dry air at correct CFM for the tool.
3. Set air pressure to 90 psi.



Excess air pressure and/or unclean air will shorten the tool's life and may create a hazardous situation.

4. Drain water from air compressor tank daily, as well as any condensation from air lines. Water in the air line may enter the tool and cause damage.
5. Change filters on the air system on a regular basis.
6. Airline pressure may be increased accordingly to compensate for extra-long air hoses (usually over 25 feet). Inside diameter of hose should be minimum 3/8 in.

Storage

Avoid storing the shear in very humid locations which promotes rusting of internal mechanisms. Always oil the tool and disconnect air hose before storage.

General Air Tool Information

If the air tool is not performing according to specifications, the following are among the most common causes. (See also "Troubleshooting" section.)

- Contaminated air such as a dirty air system or water in the system
- Using wrong size tool for the job
- Poor maintenance practices, such as using excessive air pressure or air volume
- Improper or no lubrication

Rule of Thumb

If it takes more than 8 seconds to tighten or loosen a bolt or nut with an air impact wrench at maximum setting, the air wrench is too small or the air compressor CFM is not powerful enough for the job. Continued use in either capacity will cause damage to the tool.

Tool Pressure

Operate on 70 to 100 psi (pounds per square inch) air pressure measured at the tool when the tool is operating. Set tool to 90 psi unless indicated otherwise. Pressure in excess of 100 psi will shorten the life of the tool.

Air System Recommendations

Equip the air compressor intake with a replaceable air filter that can be easily cleaned. Use safety shut-off valves so air flow can be stopped quickly in case of a line break. When using multiple hoses, air hoses should be larger than leader hose. Join multiple hoses directly, rather than with quick connect fittings which may cause pressure drops and tool power reduction. Use anti-whip devices across hose couplings to prevent hose from whipping in the event of a hose failure or coupling disconnect. Always use moisture traps at the compressor for the main distribution line. Use moisture traps and in-line oilers on each downline that is to be used for air tools. (See Figure 1). Place oiler as close to air tool as possible for best lubrication.

Maintenance

Use a light oil containing rust inhibitors, such as SAE #10. Many air tools have integral oil reservoirs, which should be kept filled when in-line oilers are not used. If greasing is required, use a grease that is highly water resistant for front case components on air impact wrenches, grinders and sanders.

Recycling

Protect the environment. Your tool contains materials which can be recovered or recycled. When its useful life has expired, please leave tool at a specialized facility.



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Recommended Arrangement of Air Piping & Airline System

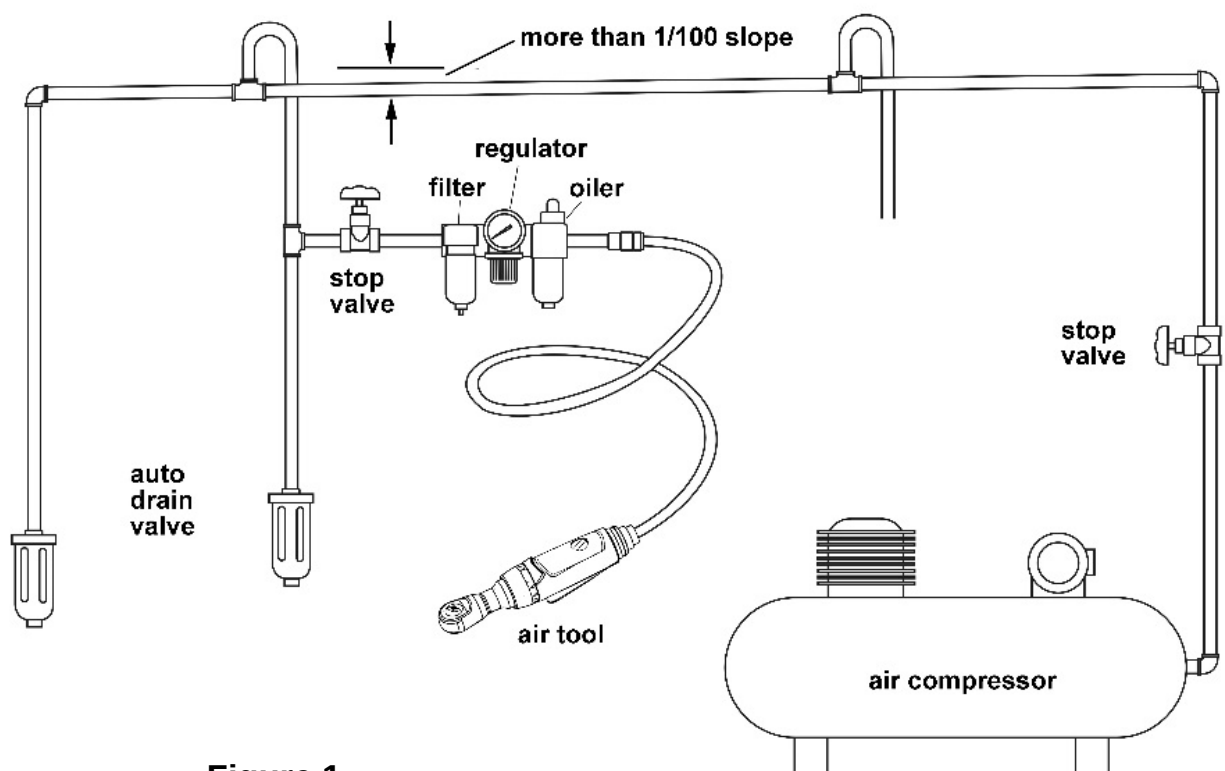
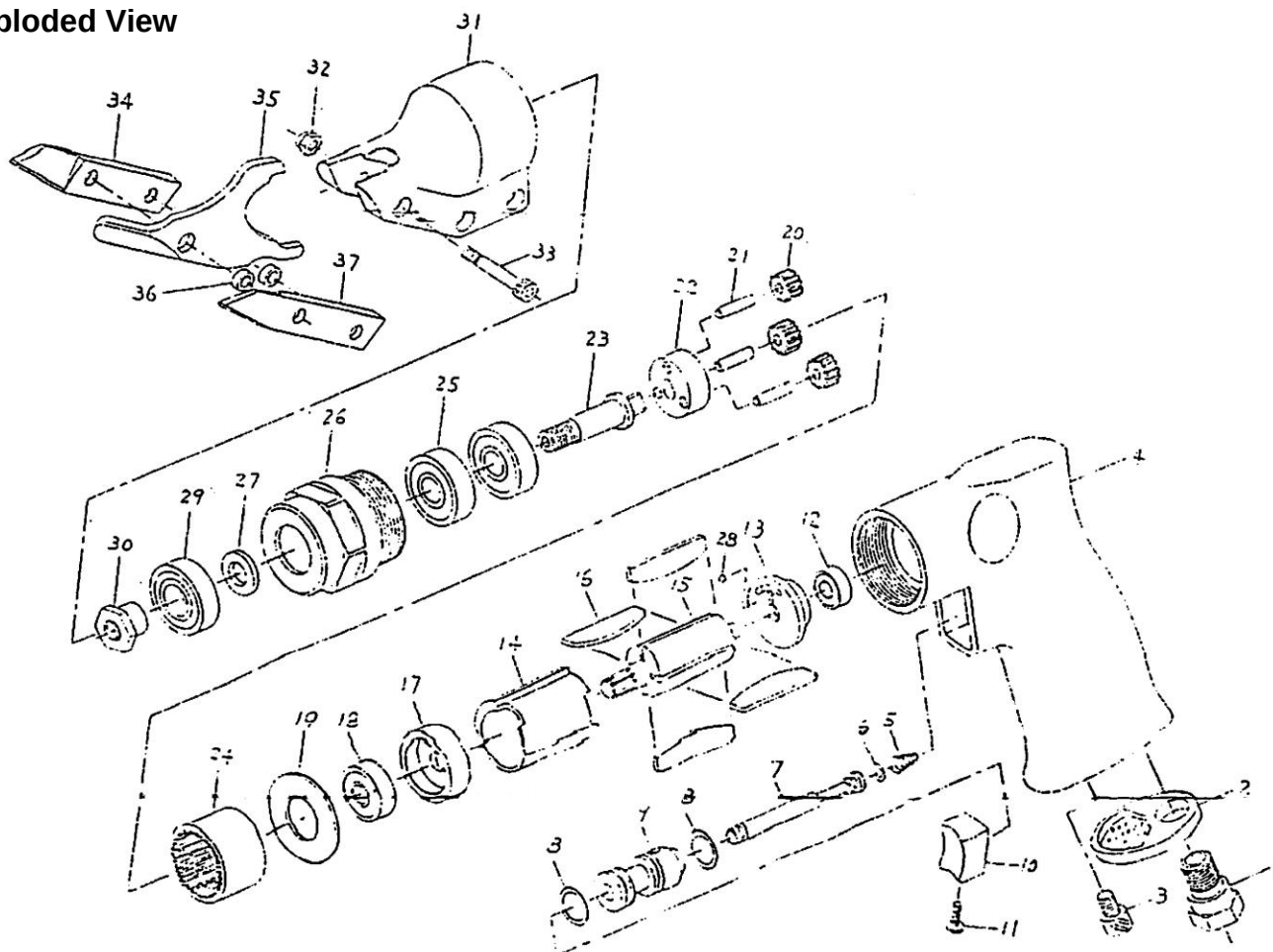


Figure 1

Troubleshooting

Problem	Possible cause	Remedy
Tool will not start	Air valve closed or obstructed	Open valve; clear any obstructions
	Dirt or gum deposits on components	Flush tool with gum solvent If problem persists, disassemble, clean and lubricate internal parts
	Rotor vanes or other components are worn	Replace worn components (Replace vanes as an entire set)
	Trigger inoperable	Clean trigger mechanism to ensure free movement. Replace mechanism if needed.
	Bearing(s) worn	Disassemble and inspect bearing Grease or replace as needed
Starts immediately when air is connected without trigger being pressed	Trigger malfunction	Clean trigger mechanism to ensure free movement. Replace mechanism if needed.
Excessive or abnormal vibration	Bearings worn	Disassemble and inspect bearing Grease or replace as needed
Loss of power; erratic action	Low air pressure	Verify compressor has proper CFM rating for tool Check compressor regulator setting; set air pressure to 90 psi. Set regulator dial on tool to maximum setting Check for loose connections
	Moisture or obstruction in air hose	Air supply must be clean and dry Clean out air hose(s) and remove any kinks or bends
	Improper size of air transmission lines, hoses, fittings, or couplings	Use appropriate-sized air lines/hoses Verify proper fittings/couplings
	Dirt or gum deposits on components	Flush tool with gum solvent. Check and clean air filter on compressor Clean external areas of tool. If problem persists, disassemble, clean and lubricate internal parts
	Rotor vanes are worn	Replace vanes (entire set)
Excessive heat develops in tool	Insufficient lubrication	Lubricate with air tool oil
	Worn components	Replace components as needed
Severe air leakage (Note: Minimal escape of air is often normal for air tools)	Air valve obstructed or damaged	Clean or replace
	Housing loose or damaged	Tighten or replace as needed

Exploded View



Parts No.	Description	Q TY
DL702-01	Air inlet	1
DL702-02	Exhaust sleeve	1
DL702-03	Valve body set screw	1
DL702-04	Housing	1
DL702-05	Spring	1
DL702-06	O-ring	1
DL702-07	Valve stem	1
DL702-08	O-ring	3
DL702-09	Valve body	1
DL702-10	Trigger	1
DL702-11	Screw	1
DL702-12	Bearing	1
DL702-13	Rear plate	1
DL702-14	Cylinder	1
DL702-15	Rotor	1
DL702-16	Rotor blade	4
DL702-17	Front plate	1
DL702-18	Bearing	1
DL702-19	Washer	1

Parts No.	Description	Q TY
DL702-20	Gear	3
DL702-21	Pin	3
DL702-22	Gear plate	1
DL702-23	Shaft	1
DL702-24	Gear link	1
DL702-25	Bearing	2
DL702-26	Clamp nut	1
DL702-27	Washer	1
DL702-28	Steel ball	1
DL702-29	Bearing	1
DL702-30	Excentric nut	1
DL702-31	Cutter housing	1
DL702-32	Lock nut	3
DL702-33	Lock screw	3
DL702-34	Left blade	1
DL702-35	Center blade	1
DL702-36	Spacer	2
DL702-37	Right blade	1