



Model:

**DS2000**

Product Type:

**PNEUMATIC DOOR SKIN REMOVER TOOL**

### Foreseen Use of the Tool

Do not use the tool outside of the design intent.  
Never modify the tool for any other purpose, or for its use.

## Safety Precaution

**Caution: To help prevent personal injury**

- Use of this product can expose you to chemicals such as phthalates which are known to the State of California to cause cancer, and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov/product](http://www.P65Warnings.ca.gov/product). Always wear ANSI approved safety equipment, safety glasses and clothing when using this product. Study, understand, and follow all instructions provided with this product. Failure to read and follow all warnings and operating instructions may result in damages and serious injury or death.
- Always wear ANSI approved goggles when using this product.
- Always select the correct accessories of the correct size and design for the job that you are attempting to perform.
- Always work in a clean, safe, well-lit, organized and adequately equipped area.
- Do not begin repairs without assurance that vehicle is in secure position, and will not move during repair.

### Product Information:

- Save significant time and cost in the removal of damaged door skins
- Forged and hardened steel de-crimping head
- Designed to unfold the steel flanges of a damaged door skin with a minimum of physical effort
- De-crimping head can be repositioned at various angles based on operator preference
- Secondary handle can be installed in either vertical or horizontal position and adds stability to help keep the tool oriented
- Patent Pending

### Unpacking

When unpacking, check the parts diagram and part number listing on page 5 to make sure all parts are included. If any parts are missing or damage, please call your distributor

### Important

Read these instructions carefully before operating this tool.  
Keep these instructions in a safe accessible place.



**Astro Pneumatic  
Tool Company**

[www.astrotools.com](http://www.astrotools.com)

### 1 YEAR LIMITED WARRANTY

•Astro Pneumatic Tool Co. warrants our products to the original user against defective material or workmanship for a period of 1 year (except where noted on our price schedule) from the date of 1st use. Astro reserves the right to determine whether the product failed because of defective material, workmanship or other causes and to charge back for missing parts. Astro Pneumatic Tool Co., at its discretion, will repair products covered under this warranty free of charge. The distributor should direct the original user to return the product (with the exceptions listed below) with the distributor's name, address, adequate proof of date of purchase or a copy of warranty card, and a short note explaining the problem. **Failures caused by accident, alteration, or misuse are not covered by this warranty.**

•Astro Pneumatic Tool Co. or its authorized service representatives must perform all warranty repairs. Any repair to the product by unauthorized service representatives voids this warranty. The rights under this warranty are limited to the original user and may not be transferred to subsequent owners.

•This warranty is in lieu of all other warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose. Some states do not allow the exclusion of limitations of incidental or consequential damages so the above limitations may not apply to you. All claims must be sent to:

**Astro Pneumatic Tool Company**  
372 Old US Highway 52 South  
Mt. Airy, NC 27030



**PLEASE CALL 1-800-221-9705  
FOR REPAIR AND RETURN INSTRUCTIONS**



### PNEUMATIC DOOR SKIN REMOVER TOOL



## **DS2000 PNEUMATIC DOOR SKIN REMOVER TOOL: BACKGROUND, FEATURES & BENEFITS**

### **Industry Background:**

- Removing door skins has always been a very tedious and labor-intensive job typically done using a grinder or carbide burr to remove the edge of the folded door skin flange, and then using heat to soften the adhesive and finally prying off the damaged door skin and the remaining flange.
- Other tools have been designed over the years to simplify this job, but none offered a significant improvement or are just another variation to the typical method.
- A very deliberate sustained effort, to develop a better way of removing a door skin, resulted in the development of a new way to un-crimp, or un-fold the crimped flange of a damaged door skin resulting in the DS2000 pneumatic power tool.

### **Features of the DS2000:**

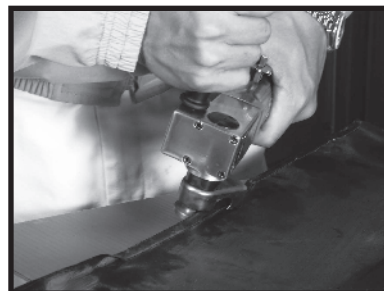
- Precision machined aluminum body components, hardened shafts, and ball bearing construction throughout, for long life and maximum durability to provide many years of trouble free service for real world professional use.
- Forged and hardened steel de-crimping head is specially designed to un-fold the steel flanges of a damaged door skin with a minimum of physical effort.
- The DS2000 is manufactured to be very versatile with provisions to reposition the un-crimping head to various angles based on operator preference.
- A secondary handle which can be installed in either the vertical or horizontal position adds stability to help keep the tool oriented in the proper position.
- Powerful pneumatic drive motor with planetary gear reduction reduces the speed and allows for maximum range of motion of the un-crimping head.
- Design allows tool to maneuver around inner and outer curves as well as most body design features.
- Close tolerance design and manufacturing, results in a tool that is incredibly smooth, and easy to use.

### **Benefits to technicians:**

- Drastic reduction in the time required to remove a door skin. As much as an hour can be expected improving your bottom line in a commission or rate environment.
- Significant reduction in operator fatigue, leads to fewer cases of carpal tunnel syndrome and other repetitive motion ailments.
- Light weight and maneuverable yet very powerful.

### **Benefits to management:**

- The drastic reduction in the time required to remove a door skin significantly reduces labor costs.
- Significant reduction in operator fatigue, leads to fewer cases of carpal tunnel syndrome and other repetitive motion ailments which reduces potential workman's comp claims and costs.
- Elimination of damage to the frame of the door skin eliminates additional labor to repair the damage.
- The reduction in labor, results in a very short payback period on your investment. In many cases the "DS2000" tool pays for itself within weeks.



## DS2000 OPERATING INSTRUCTIONS

*Thank you for purchasing a DS2000 Pneumatic Door Skin Remover Tool from Astro Pneumatic tool Company. We are confident that you will be very pleased with this tool. The DS2000 Door Skinner Tool is very straight forward and simple to operate, however, spending a few minutes to read through these instructions and tips could make you proficient in the use of the DS2000 much more quickly.*

*The DS2000 makes short work of opening the crimp of a factory door skin on either straight or smoothly contoured door edges. It can be used successfully in areas as short as 3 inches or infinitely longer. The DS2000 employs a new technique in removing door skins or other auto body panels. Rather than grinding all around the edge of a damaged skin, the DS2000 simply de-crimps, or folds the crimp of the skin open. Secondly, applying a prying force upon the unfolded flange with pliers typically breaks the adhesive (if any) and facilitates easy removal of the damaged skin, in a very short period of time without damage to the door frame.*

### **Preparation:**

There are a few that must be done to make your job successful.

First, consider your personal safety. Jagged edges of steel are very common in the auto body industry, and your operating hand will be in close proximity to an edge. Use common sense and Always wear approved safety equipment and clothing when using this product. Wear an appropriate pair of mechanics gloves while operating the DS2000 tool, to help prevent personal injury.

### **Operation:**

Now you are ready to un-crimp with the DS2000.

- 1) We manufacture an accessory hand tool that is made specifically to assist in starting to unfold a small section of the crimp, and can also be used in tight body lines where the DS2000 cannot be maneuvered. Alternately, conventional hand tools like a hammer and sharp chisel can be used to accomplish this task.
- 2) Once a small section of the flange has been started, hook the tip of the DS2000 un-crimping head on the started flange, and apply power to the tool. The reciprocal motion of the head quickly and easily unfolds the flange as you move the tool along the edge of the damaged door skin.

It is important to note that the crimp must be un-folded in one pass.

The un-crimping head of the DS2000 tool is installed at a 20 degree angle to the body of the tool. The inside edge of the un-crimping head must be kept parallel to the edge of the door. In other words, the body of the DS2000 must be kept at a 20 degree angle to the door edge. This angle of operation will keep your hand free of the ragged steel edge as you move the tool. The head can be removed and re-installed at different angles in 30 degree increments relative to the body of the tool, should you find it necessary.

A secondary handle is also included with your DS2000 to assist in keeping the tool in the proper position. This handle can be installed in either of two positions vertical or horizontal based on your preference.

- 3) Make sure you have the DS2000 connected to good clean shop air at 90 to 120 PSI.

The DS2000 is designed to be very maneuverable. It is capable of negotiating inside curves, outside curves, concave and convex door edges, and many style lines.

*With a little practice, you will experience outstanding results both on the exterior surfaces of the door and the inside flange, and save LOTS of time as well.*

**Maintenance instruction:**

- 1) Lubrication:  
After 3 to 4 hours of operation, oiling may be necessary again.
- 2) Tightness of parts:  
Regularly check whether all connecting parts are fastened securely. Follow this procedure daily before beginning work.
- 3) Cleanliness:  
Dust may accumulate around spindle inside shield. It is recommended to remove the dust on daily basis.
- 4) Storage:  
Avoid storing the tool in a location subject to high humidity. If the tool is left unused, the residual moisture inside the tool can cause rust. Before storing and after operation, oil the tool at the air inlet with spindle oil and run it for a short period.
- 5) Disposal:  
Follow national legislation of Waste disposal. Never drop into fire.
- 6) Ordering service part:  
For further operational and handling information or for replacement of parts and components, contact the sales agent from where you purchased the tool, or the service division of our company.  
\*In ordering parts and components, give each part number, name and quantities.

**⚠ WARNING ⚠**



1) The tool shall not be used in potentially explosive atmospheres.



2) Disconnect the air hose before changing or adjusting any inserted tools.

3) Before using tool, please confirm all couplings and plugs are fixed securely. Air hose that is under pressure may lash out when disconnected and could lead to serious injuries.

4) Prevent loose clothes, long hair or any other personal accessories from coming close to moving parts to reduce the risk of being caught, trapped or drawn into the rotating spindle.

5) Excessive high air pressure, that exceeds the maximum pressure, may cause injuries to user.



6) Exposure to strong vibration for extended time may cause harm to operator.

7) Make sure of the rotation direction before starting the tool to reduce hazardous situations due to unexpected rotation direction.



8) Slip/Trip/Fall is a major reason of serious injury or death. Beware of excess hose left on the walking or work surface.



9) Wearing eye/face protector could reduce the danger to person from high speed splinters being emitted from the tool or work surface.



10) Wearing correct breathing protection will help avoid inhaling dust or handling debris from work process that can be harmful to your health.

12) High sound level can cause permanent hearing loss. Use hearing protection while operating tool.

13) Due to the material being processed, there may be a risk of explosion or fire. Be aware of work surface dangers prior to beginning work.

14) There is a risk of being cut due to high speed rotation. Do not touch high speed rotating parts.

15) This power tool is not insulated. If contact is made with an electric current injury may occur.



16) Dust created by sanding, sawing, grinding, drilling and other related activities may expose the user to dust and/or microscopic particles that may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Users of this tool should review the chemical composition of the work surface and any products used in conjunction with the operation of this tool for any such chemicals prior to engaging in any activity that creates dust and/or microscopic particles.

Users should obtain the Material Safety Data Sheets for all identified chemicals, either from the manufacturer or their employer, and proceed to study, understand, and follow all instructions and warnings for exposure to such chemicals.

Some examples of these chemicals are: lead from lead-based paints; crystalline silica from bricks, cement and other masonry products; and arsenic and chromium from chemically treated lumber. A listing of the chemicals can be obtained from [www.oehha.ca.gov](http://www.oehha.ca.gov) under Proposition 65.

In order to reduce their exposure to such chemicals, users should always:

\*work in well-ventilated areas.

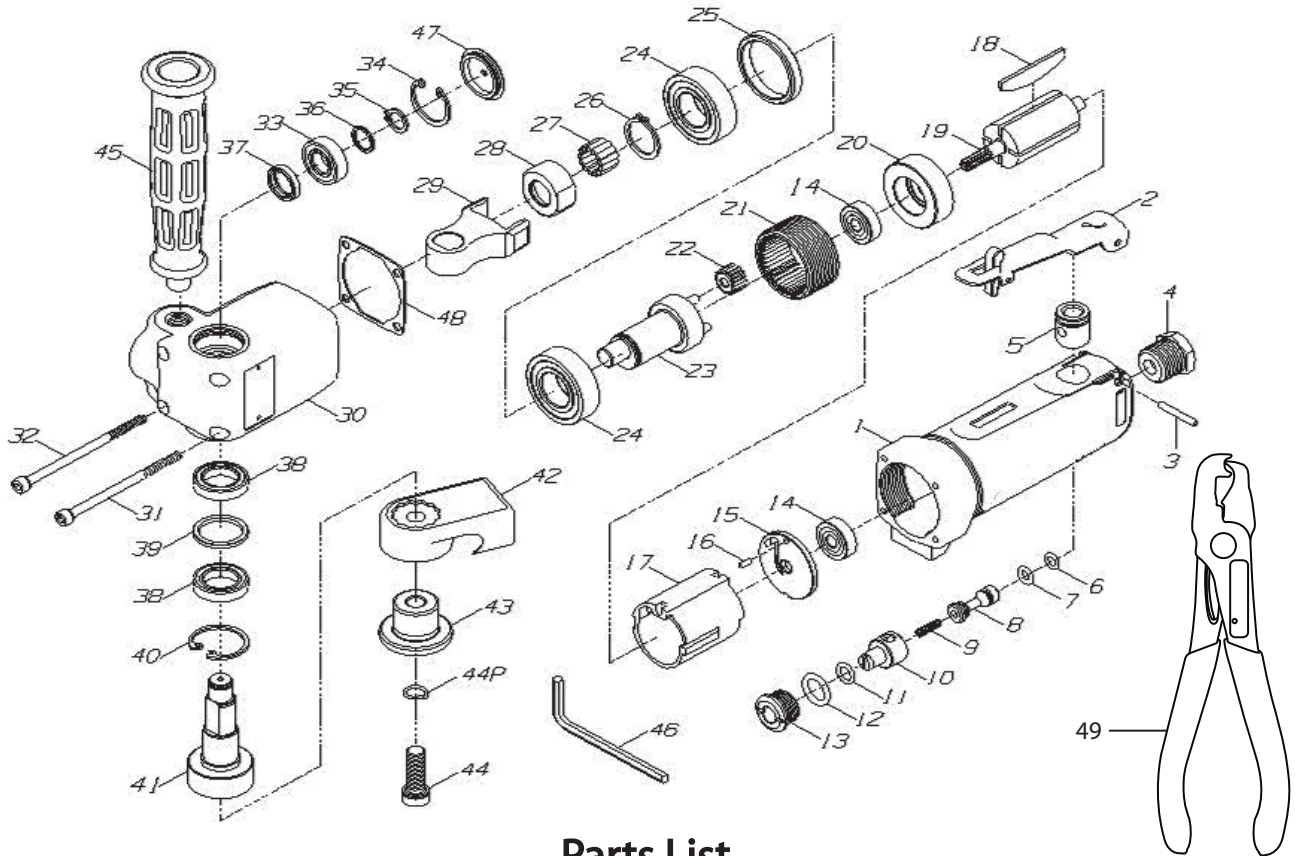
\*wear appropriate safety equipment and clothing that are specifically designed to filter out microscopic particles.

**Cautions for Use**

- 1) Always wear ear protection and safety glasses when using this tool. Gloves and protective clothing are recommended.
- 2) Personal protection and dust collection devices shall be chosen according to the material being worked upon. Please consult provider of such devices.
- 3) Basic safety instructions and warnings must always be followed. In addition, safety instructions & warnings identified in ANSI B186.1 Safety Code for Portable Air Tools must be followed. For further ANSI information see [www.ansi.org](http://www.ansi.org) or call (212) 642-4900

**PARTS BREAKDOWN**

Call 1.800.221.9705 for questions concerning performance of the product or other inquiries.



**Parts List**

Index No.	Part No.	Description	Qty
1	DS2000-01	Motor Housing	1
2	DS2000-02	Lever	1
3	DS2000-03	Pin	1
4	DS2000-04	Inlet	1
5	DS2000-05	Valve Bushing	1
6	DS2000-06	O-Ring	1
7	DS2000-07	O-Ring	1
8	DS2000-08	Valve Stem	1
9	DS2000-09	Valve Spring	1
10	DS2000-10	Air Regulator	1
11	DS2000-11	O-Ring	1
12	DS2000-12	O-Ring	1
13	DS2000-13	Valve Plug	1
14	DS2000-14	Ball Bearing	2
15	DS2000-15	Rear End Plate	1
16	DS2000-16	Pin	1
17	DS2000-17	Cylinder	1
18	DS2000-18	Rotor Blade	4
19	DS2000-19	Rotor	1
20	DS2000-20	Front End Plate	1
21	DS2000-21	Internal Gear	1
22	DS2000-22	Planet Gear	3
23	DS2000-23	Planet Carrier	1
24	DS2000-24	Baller Bearing	2
25	DS2000-25	Spacer	1

Index No.	Part No.	Description	Qty
26	DS2000-26	Retainer Ring	1
27	DS2000-27	Needle	13
28	DS2000-28	Needle Plate	1
29	DS2000-29	Drive Spindle	1
30	DS2000-30	Angle Head	1
31	DS2000-31	Screw	2
32	DS2000-32	Screw	2
33	DS2000-33	Ball Bearing	1
34	DS2000-34	Retainer Ring	1
35	DS2000-35	Retainer Ring	1
36	DS2000-36	Spacer	1
37	DS2000-37	Spacer	1
38	DS2000-38	Ball Bearing	2
39	DS2000-39	Spacer	1
40	DS2000-40	Retainer Ring	1
41	DS2000-41	Spindle	1
42	DS2000-42	Blade	1
43	DS2000-43	Plate	1
44	DS2000-44	Screw	1
44P	DS2000-44P	Spring Washer	1
45	DS2000-45	Handle	1
46	DS2000-46	Hex Wrench	1
47	DS2000-47	Cover	1
48	DS2000-48	Gasket	1
49	DS2000-49	Door Skin Starter Pliers	1



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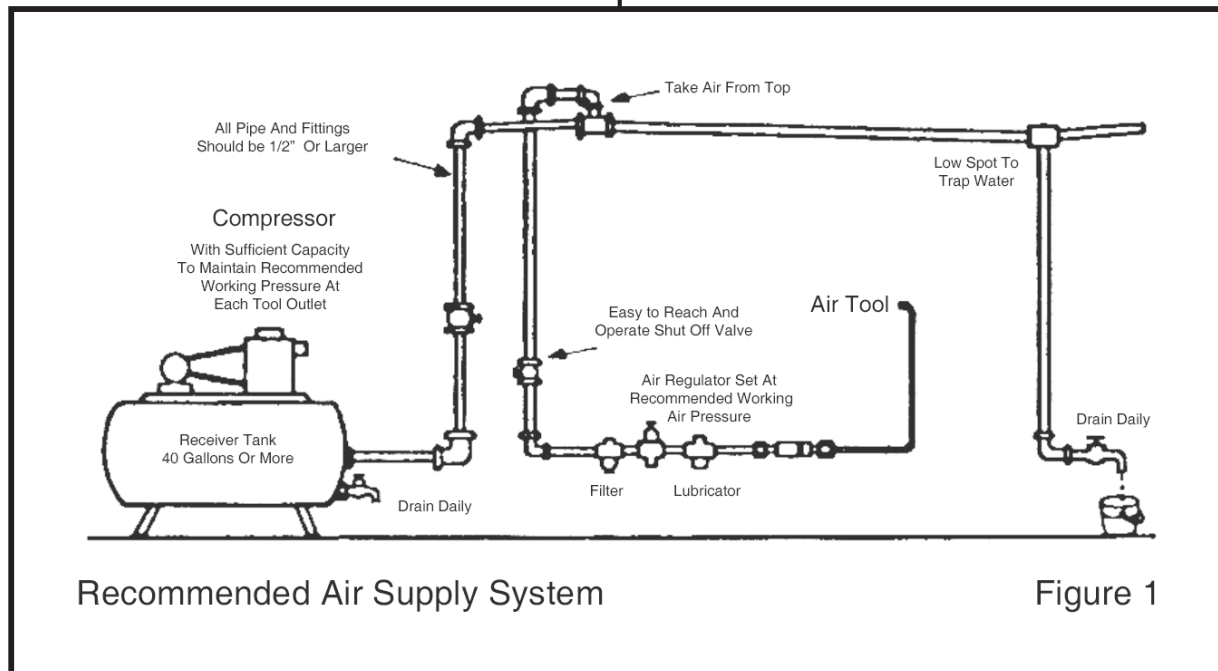
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### ASTRO PRODUCTS AVAILABLE FOR AIR FILTRATION:

**2618** - AIR CONTROL UNIT - 120CFM CAPACITY

**2616** - 3/8" FILTER, REGULATOR & LUBRICATOR WITH GAUGE



**INSTRUCTIONAL VIDEO**