

CENTRAL PNEUMATIC®

BRAKE CALIPER WIND BACK TOOL SET

Model 97456

SET UP AND OPERATING INSTRUCTIONS



Diagrams within this manual may not be drawn proportionally.

Due to continuing improvements, actual product may differ slightly from the product described herein.

Distributed exclusively by Harbor Freight Tools®.

3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our website at: <http://www.harborfreight.com>



**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

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For technical questions or replacement parts, please call 1-800-444-3353.

SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

IMPORTANT SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

CAUTION

CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.

General Safety Rules



WARNING! Read all instructions. Failure to follow all instructions listed below may result in serious injury. The term "pneumatic tool" in all of the warnings listed below refers to your Caliper Wind Brake Tool Set.

SAVE THESE INSTRUCTIONS

1. **Work area safety**
 - a. Keep work area clean and well lit. *Cluttered or dark areas invite accidents.*
 - b. Do not operate pneumatic tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. *Pneumatic tools create sparks which may ignite the dust or fumes.*
 - c. Keep children and bystanders away while operating a pneumatic tool. *Distractions can cause you to lose control.*
3. **Personal safety**
 - a. Stay alert, watch what you are doing and use common sense when operating a pneumatic tool. Do not use a pneumatic tool while you are tired or under the influence of drugs, alcohol or medication. *A moment of inatten-*

tion while operating pneumatic tools may result in serious personal injury.

- b. Use safety equipment. Always wear ANSI-approved safety impact goggles and NIOSH-approved dust mask/respirator. *Safety equipment such as non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
 - c. Avoid accidental starting. Ensure the Trigger (6A) is in the off-position before connecting to an air supply. *Carrying pneumatic tools with your finger on the Trigger or connecting pneumatic tools that have the Trigger on invites accidents.*
 - d. Remove any adjusting key or wrench before turning the pneumatic tool on. *A wrench or a key left attached to a rotating part of the pneumatic tool may result in personal injury.*
 - e. Do not overreach. Keep proper footing and balance at all times. *This enables better control of the pneumatic tool in unexpected situations.*
 - f. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. *Loose clothes, jewelry or long hair can be caught in moving parts.*
- 4. Pneumatic tool use and care**
- a. Do not force the pneumatic tool. Use the correct pneumatic tool for your application. *The correct pneumatic tool will do the job better and safer at the rate for which it was designed.*
 - b. Do not use the pneumatic tool if the Trigger (6A) does not turn it on and off. *Any pneumatic tool that cannot*

be controlled with the Trigger is dangerous and must be repaired.

- c. Disconnect the air hose from the pneumatic tool and release any remaining air pressure before making any adjustments, changing accessories, or storing pneumatic tools. *Such preventive safety measures reduce the risk of starting the pneumatic tool accidentally.*
 - d. Store idle pneumatic tools out of the reach of children and do not allow people unfamiliar with the pneumatic tool or these instructions to operate the pneumatic tool. *Pneumatic tools are dangerous in the hands of untrained users.*
 - e. Maintain pneumatic tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the pneumatic tool's operation. If damaged, have the pneumatic tool repaired before use. *Many accidents are caused by poorly maintained pneumatic tools.*
 - f. Use the pneumatic tool and its accessories in accordance with these instructions and in the manner intended for the particular type of pneumatic tool, taking into account the working conditions and the work to be performed. *Use of the pneumatic tool for operations different from those intended could result in a hazardous situation.*
- 5. Service**
- a. Have your pneumatic tool serviced by a qualified repair person using only identical replacement parts. *This will ensure that the safety of the pneumatic tool is maintained.*

Vibration Hazard

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any medical or physical symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
3. Wear suitable gloves to reduce the vibration effects on the user.
4. Use tools with the lowest vibration when there is a choice between different processes.
5. Include vibration-free periods each day of work.
6. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
7. To reduce vibration, maintain the tool as explained in this manual. If any

abnormal vibration occurs, stop use immediately.

Specific Safety Rules

1. Maintain labels and nameplates on the Caliper Wind Brake Tool Set. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
2. Use compressed air only. Use clean, dry, regulated, compressed air at **110 PSI. Do not exceed 110 PSI.**
3. Avoid unintentional starting. Prepare to begin work before turning on the tool.
4. Do not lay the tool down until it has come to a complete stop. Moving parts can grab the surface and pull the tool out of your control.
5. Do not leave the tool unattended when it is connected to a compressed air supply. Turn off the tool, and disconnect it from its compressed air supply before leaving.
6. This product is not a toy. Keep it out of reach of children.
7. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may 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.



**SAVE THESE
INSTRUCTIONS.**

SPECIFICATIONS

| | |
|------------------------|--|
| Product Application | Universal fit. Works with most European, Asian, and United States made vehicles. |
| Operating Air Pressure | 72 PSI to 110 PSI |
| Air Inlet Size | 1/4" - 18 NPT |
| Fabrication | Forged steel Disc Adapters. Die Cast Aluminum Gun with stamped steel and machined steel. |
| Additional Features | Rotates left or right to wind back pistons. Magnetic pad base. Trigger pressure speed control. 15 Pads. |

UNPACKING

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

OPERATING INSTRUCTIONS

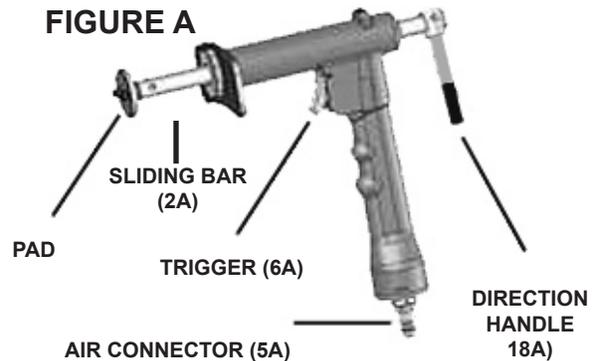


Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

WARNING TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Disconnect the Caliper Wind Brake Tool from its compressed air supply source, and release any compressed air from the tool before performing any set up and operating procedures.

Product Features



Product Applications

1. The following indicates which specific Pad must be used for each vehicle make and model.

(See Figure B, next page.)

Pad 2: Citroen/XM®, Xantia® (F/R)

Pad 3: Audi®(F), FIAT/Alpha Romeo®,

Ford Fiesta® (F), ISUZU® (F),

HONDA® Concesto (F),

Jaguar® XJ6, XJ40 (F/R),

BMW® 318is, 320i, 325TD,

518i, 525i, 1x, 740i, 850ci,
M5 (F), Mercedes Benz® 190,
200, 300, 420, 560 (F),
Mitsubishi® Colt (F), Nissan®
Mlera, Stanza, Sunny (F),
Range Rover® Austin, Metro,
200 & 400 Series, Maestra,
Montego (F), Toyota® Camry
(F), Volvo® (F), VW® Passat,
Golf, GTI (F).

Pad 4: Ford® AU & NZ, Telstar, Laser
(R),
Mazda® (R), Saab® 9000 (R),
Fiat/Alpha Romeo® 1642 (R),
Honda® Prelude, CRS, 16i,
GM® Saturn, Grand Prix,
Lumina (R).

3/8" Drive Adapter 5: Used with ex-
tension bar and ratchet (not
included) when applying
more strength to the piston.

Pad 6: Nissan® Primera, VW® Golf IV

Pad 7: Audi® 80, 90, V8 100, Coupe
E (R), Range Rover® 800
ABS, Subaru® L, Z (R), Ford®
Sierra, Granada, Scorpio (R),
Nissan® Bluebird, Silvia
Turbo, Primera,
Peugeot® 405,
1.9Gi, Gri, Sri, Gtxi, MI, 2.0

Sri (R), Toyota® Celica, Co-
rolla, GT, MR2 (R), VW
Golf Gti, Jetta, Synchro,
Jetta Gti, Passat CL, GL,
GT, Corrado, Scirocca, GTX.

Pad 8: General Motors® most 1-7/8"
diameter pistons.

Pad 9: General Motors® most 2-1/8"
diameter pistons.

Pad O: General Motors® most 2-1/2"
diameter pistons, Cadillac,
Seville, & El Dorado 79.

Pad Z: Renault® R21, Laguna (R).

Pad M: Ford®, MINI/Cooper.

Pad N: SAAB®, Honda®.

Pad E: Nissan® Maxima.

Pad G: Opel® (R).

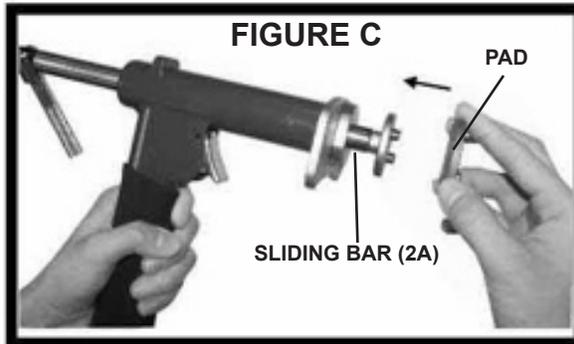
Pad K: Citroen®.



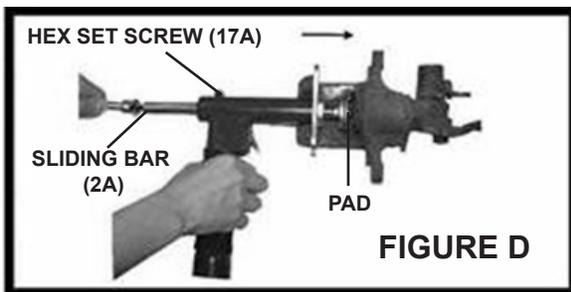
FIGURE B

General Operating Instructions

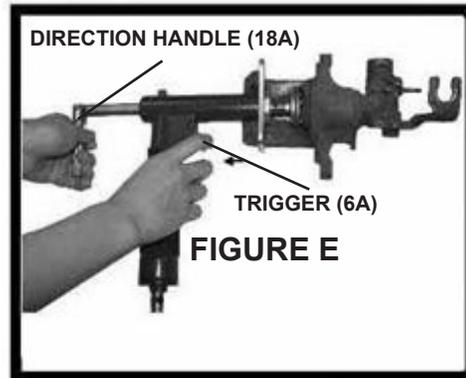
1. Place the proper Pad on the Sliding Bar (2A) of the tool. **(See Figure C.)**



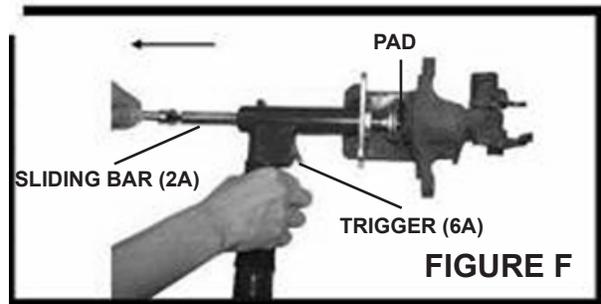
2. Connect an air hose to the Air Connector (5A) of the tool. Turn on the air compressor, and set its regulator between 72 and 110 PSI. **Do not exceed 110 PSI. (See Assy. Diagram.)**
3. Insert Adapter (14A) onto the caliper of the vehicle. Push Sliding Bar (2A) forward, rotating the Direction Handle (18A) to left or right in order to engage the pin/pins on the face of the Pad with the holes on fillister of the Caliper. **(See Figure D.)**



4. Squeezing the Trigger (6A) will force Sliding Bar (2A) forward to expand the Caliper. **(See Figure E.)**



5. When finished, release pressure on the Trigger (6A). Then pull out on the Sliding Bar (2A) to remove the Pad from the caliper. **(See Figure F.)**
6. Turn off the air compressor. Disconnect the air hose from the tool. Squeeze the tool's Trigger (6A) to release any remaining compressed air in the tool. Then store the tool in a clean, dry, safe location out of reach of children and other unauthorized people.



MAINTENANCE AND SERVICING



Procedures not specifically explained in this manual must be performed only by a qualified technician.

▲WARNING TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Disconnect the tool from its compressed air supply source before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:

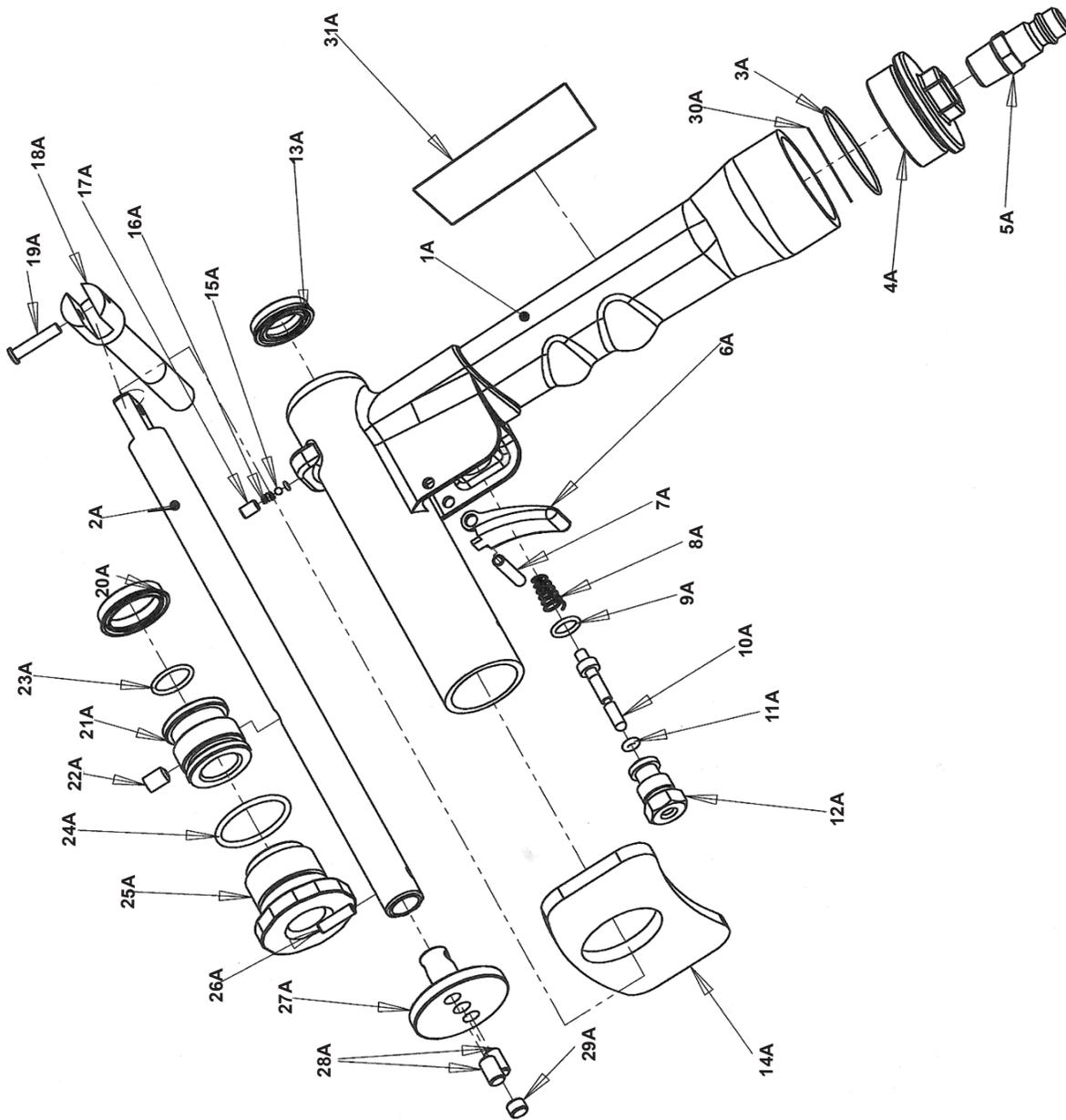
Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

1. **BEFORE EACH USE**, inspect the general condition of the tool. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, and any other condition that may affect its safe operation.
2. **AFTER USE**, clean external surfaces of the tool with clean, moist cloth. Then dry. Do not use solvents. Do not immerse in liquid.
3. **WHEN STORING**, Keep the tool and its accessories in its Carrying Case. Store the Carrying Case in a clean, dry, safe location out of reach of children and other unauthorized people.

PARTS LIST & ASSEMBLY DIAGRAM

| Part # | Description |
|--------|------------------|
| 1A | Body |
| 2A | Sliding Bar |
| 3A | O-Ring |
| 4A | Bottom Cap |
| 5A | Air Connector |
| 6A | Trigger |
| 7A | Hollow Pin |
| 8A | Spring |
| 9A | O-Ring |
| 10A | Air Control Pin |
| 11A | O-Ring |
| 12A | Base Nut |
| 13A | O-Ring |
| 14A | Adapter |
| 15A | Steel Ball |
| 16A | Spring |
| 17A | Hex Set Screw |
| 18A | Direction Handle |
| 19A | Rivet |
| 20A | Piston O-Ring |
| 21A | Piston |
| 22A | Bolt |
| 23A | O-Ring |
| 24A | O-Ring |
| 25A | Top Base Bolt |
| 26A | Hollow Pin |
| 27A | Bottom Base |
| 28A | Pin |
| 29A | Magnet |
| 30A | Mesh Screen |
| 31A | Foam |



LIMITED 1 YEAR WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of one year from the date of purchase (90 days if used by a professional contractor or if used as rental equipment). This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.