

Operating Instructions



IMPORTANT:

Read all instructions and warnings found in this manual and on power load packaging before operating your powder actuated tool. This manual should always accompany the tool and be transferred with it upon change of ownership.

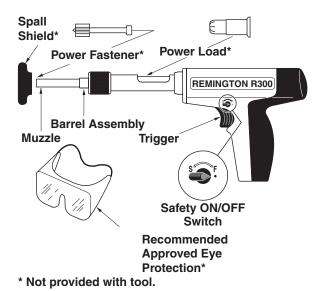
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REMINGTON® Model R300

The Remington® Model R300 is designed for use with Remington® .22 caliber, Type A, neck-down crimped power loads and Remington® Power Fasteners. Remington® Power Fasteners are manufactured from special steel and heat treated to produce a very hard, yet ductile, fastener.

The Remington® Model R300 is equipped with two safety devices; a safety ON/OFF switch next to the trigger and a spring-compression muzzle that must be fully depressed for the tool to fire.





A Warning: Safety **Precautions**

The following pages contain detailed warnings, cautions, and rules of safe operation. Read carefully and become familiar before operating to avoid serious injury. We expressly disclaim any liability for any injury to persons or damage to property which result from your failure to take the precautions contained in this manual.

WARNING: This tool is designed only for use by qualified operators. Qualification is obtained through a thorough understanding of the Safety Precautions and operating instructions as defined in this operating manual. NOTE: The labor regulations of many states require that the operator of this tool on a job site be thoroughly trained and certified for competence prior to operating this tool. For certification procedures, call: DESA Power Tools™ Technical Services Department, 1-800-858-8501 (English only) or visit www.desatech.com.

BEFORE USING

ALWAYS handle the tool as if it were loaded. Before starting work, check that the tool is unloaded and the muzzle is clear. NEVER load a tool unless it is going to be used.







2. **ALWAYS** inspect to make sure the tool is working properly. If the tool does not work properly, remove from service and tag DEFECTIVE. DO NOT use the tool again until it has been properly repaired.





Operators and bystanders must ALWAYS wear goggles 3. and ear protection which meet or exceed the accepted standards for adequate protection in your country. In the USA, refer to ANSI standards. In Canada, refer to CSA standards.

3





ALWAYS clear the work area on all sides and post appropriate warning signs on job sites.





ALWAYS make sure the work area is clean from loose material and debris.

HANDLING THE TOOL



 NEVER place your hand over the muzzle. Accidental discharge can cause serious injury.







NEVER place your finger on the trigger until the muzzle of the tool is against the work surface.





ALWAYS store UNLOADED powder actuated tool and power loads in a locked container. Keep power loads of different power levels in separate containers.



NEVER carry or pass a loaded powder actuated tool.
 NEVER point a powder actuated tool at anyone.







If the tool is dropped, inspect for damage and repair it before continuing to work. NEVER use a damaged tool.



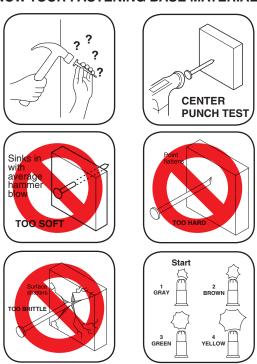


ALWAYS take precautions to maintain your balance while operating a powder actuated tool.

7. An operator taking medication should take extra precautions while handling the tool. NEVER drink alcoholic beverages or take medications which impair your vision, balance, or judgement before using a powder actuated tool.



KNOW YOUR FASTENING BASE MATERIAL



ALWAYS know the thickness and type of base material into which you are fastening. NEVER GUESS. Test the base material by using the Center Punch Test. The Center Punch Test is performed by using a hammer to test drive the particular power fastener to be used into the material. If the point penetrates easily, the material is too soft. If the point becomes blunt, the material is too hard. If the material fractures, cracks or shatters, the material is too brittle. Test fastenings can be made if the material shows a clear power fastener impression and the power fastener point is not blunted. ALWAYS start with the lowest power load (Gray-Level 1) and proceeding with the order shown in the lower right-hand figure above. Operators and bystanders must **ALWAYS** wear goggles and ear protection which meet or exceed the accepted standards for adequate protection in your country. In the USA, refer to ANSI standards. In Canada, refer to CSA standards.





 NEVER attempt to drive power fasteners into very hard or brittle materials including, but not limited to cast iron, glass, tile, stone, brick, or hardened steel. Materials of this type tend to shatter and create hazard from flying particles.



3. NEVER make fastenings in spalled or cracked areas.

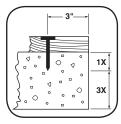


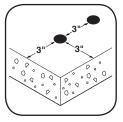
4. NEVER drive power fasteners into thin or easily penetrated material unless it is backed by concrete or steel. When in doubt, such as when base material is concealed, conduct a Center Punch Test (See page 6). Check continually to avoid fastening into unsuitable material, especially in older buildings.





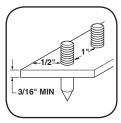
DO NOT fasten through or within 1/2" of predrilled or prepunched holes.





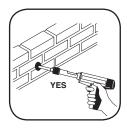
6. DO NOT drive power fasteners into concrete less than three times as thick as the intended power fastener penetration, within 3" of the edge, within 3" of another power fastener, or within 3" of a failed power fastener.





7. DO NOT drive power fasteners into steel base material less then 3/16" thick, within 2" of a weld, within 1/2" of the edge, or within 1" of another power fastener.



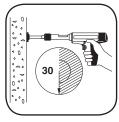


 When fastening into masonry walls, always drive into horizontal mortar joints, NEVER into vertical mortar joints. BE CAREFUL, a poorly laid joint may permit too much penetration and/or unsatisfactory holding power.

OPERATING THE TOOL



1. ALWAYS hold tool perpendicular to work surface.





2. Should the tool fail to fire, hold the muzzle firmly against the work surface for 30 seconds. Release the trigger and remove pressure on the tool while holding the muzzle against the work surface. Again press the tool firmly against the work surface and pull the trigger. If the tool still fails to fire, hold the tool firmly against the work surface for another 30 seconds before unloading and carefully discarding the misfired power load into water or oil.





ALWAYS use the spall shield when driving directly into concrete or steel. ALWAYS wear eye protection.





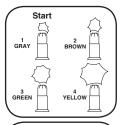
 NEVER use a powder actuated tool in an explosive or flammable atmosphere or when non-sparking tools are required.

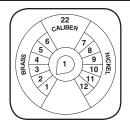
POWER LOADS AND POWER FASTENERS





1. NEVER leave unfired power loads on floors or work surfaces.





NOTE:

Failure to start with the lowest power level can result in overdrive condition and will result in damage to tool (see page 13).

 Remington® Power Loads are available in four power levels with gray (1) being the lowest power level and yellow (4) being the highest power level. start with the lowest power level (gray-level 1) and increase until a proper fastening is made (see page 13, Selecting Power Fasteners and Power Loads).





3. NEVER use power loads in firearms.



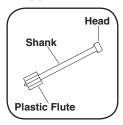
 NEVER carry power fasteners or other hard objects in the same pocket or container with power loads.



A color blind person must take extra precautions to prevent the chance of mixing the power loads of various levels.



Power fasteners are a permanently installed fixture. An act of demolition is required for their removal. Appropriate safety precautions must be taken.



NEVER use common nails or other materials as fasteners. Remington® Power Fasteners are manufactured from special steel and heat treated to produce a very hard, yet ductile, fastener.



NEVER pry a power load out of the chamber. Prying can discharge the load causing serious injury (see *Trouble-shooting Guide* on pages 19 and 20).





 ALWAYS insert the power fastener first, then the power load. If work is interrupted for any reason, ALWAYS remove the power load before removing the power fastener (see page 15, item 8).

Why a Power Fastener Holds

WHY A POWER FASTENER HOLDS IN CONCRETE

The compression bond of the concrete to the power fastener accounts for the majority of the holding power. The power fastener displaces the concrete which tries to return to its original form causing a squeezing effect.

Maximum holding power is achieved when the depth of penetration produces a bond on the power fastener equal to the strength of the concrete.



As a general rule, penetration should be approximately 1" to 1 1/4" into the base concrete. Make sure the concrete is at least three times as thick as the intended power fastener penetration. **NEVER** have the power fastener point protrude thru the concrete.

NOTE: Concrete needs to cure for 28 days before maximum fastening holding power will be achieved.

WHY A POWER FASTENER HOLDS IN STEEL

Holding power in steel depends on the elasticity of the steel. The steel pushes back on the shank of the power fastener.

Drop a marble into water; the water parts, the marble continues down, the water closes back. This is similar to the reaction when a power fastener penetrates steel.



In steel, the point of the power fastener must penetrate completely through for highest holding power. If the power fastener does not penetrate, the spring action of the steel pushes back on the point and tends to force the power fastener out.

Recommended applications are between 3/16-3/8" steel.

NOTE: When fastening in steel be sure the point goes thru the steel.

Selecting Power Fasteners and Power Loads

FASTENING INTO CONCRETE

The proper power fastener length can be determined by adding the thickness of the material to be fastened and the amount of power fastener that will actually penetrate the concrete. The concrete must be three times as thick as the intended power fastener penetration. In most cases, penetration should be approximately 1" to 1 1/4" into the base concrete material.



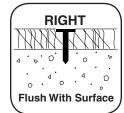
FASTENING INTO STEEL

The proper power fastener length can be determined by adding the thickness of the material to be fastened and the thickness of the steel. The point of the power fastener must go completely through the steel.



POWER LOADS

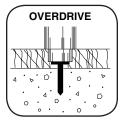
Always start with the lowest power level (gray-level 1). If the first test power fastener does not penetrate to the desired depth, move to the next highest power level (brown-level 2). Increase until a proper fastening is made. **IMPORTANT:** Damage to the tool will result if the above instructions are not followed (see illustrations to right and lower right).



OVERDRIVEN POWER FASTENERS AND PISTON

An overdriven power fastener results when too strong of a power load is used causing the piston to extend past the muzzle. Move to the next lightest power load. Repeated overdrive will damage your tool. By avoiding overdrive, you can extend the life of your tool considerably.

NOTE: NEVER fire the tool without a power fastener. This can damage the tool and/or cause possible injury to the operator.



Piston Extended Out of Muzzle

Operation



 ALWAYS place safety ON/OFF switch in the SAFETY ON position before inserting power fastener and power load.



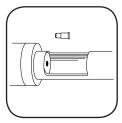


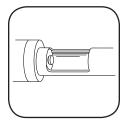
Grasp muzzle and slide barrel forward rapidly until it stops. This sets piston into firing position and opens the chamber.





Insert power fastener into muzzle of tool, head end first. Push the power fastener until point is even with end of tool. ALWAYS load the power fastener first, then the power load.





4. Select the proper Remington® Power Load (see Application Chart on pages 20 and 21) and insert into the chamber until it stops. NOTE: Failure to start with the lowest power level can result in overdrive condition and will result in damage to the tool (see page 13).

Operation



5. Push barrel into housing to the closed position.





Place the muzzle of tool perpendicular to work surface without tilting the tool. Push tool against work surface until sliding action of barrel stops.





Before squeezing trigger, rotate safety ON/OFF switch to the SAFETY OFF position. Squeeze trigger to set power fastener. Be sure to keep pressure on tool during this operation.

IMPORTANT: When tool is not in use, **ALWAYS** rotate safety ON/OFF switch to the SAFETY ON position.



After fastening is made, slide barrel forward rapidly. This
motion ejects the spent power load and resets the piston
for the next fastening. Make sure spent load has ejected
from tool.

Operation



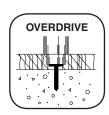


9. Should the tool fail to fire, hold the muzzle firmly against the work surface for 30 seconds. Release the trigger and remove pressure on the tool while holding the muzzle against the work surface. Again press the tool firmly against the work surface and pull the trigger. If the tool still fails to fire, hold the tool firmly against the work surface for another 30 seconds before unloading and carefully discarding the misfired power load into water or oil.

PISTON OVERDRIVE

If the tool does not open after firing and the piston is 1/2 inch or more out of the muzzle:

- Strike muzzle end of R300 against hard surface to force piston back into muzzle.
- 2. Eject the power load (See step 8 of Operation).

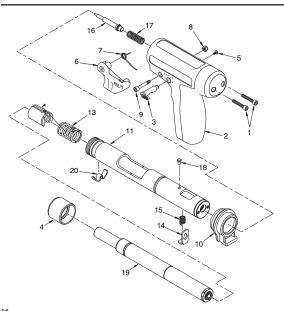


CARE OF YOUR R300

Clean your R300 after each day's use. Clean chamber with accessory wire brush, part number 056485 (Not included with tool). Apply good quality penetrating lubricant spray (such as WD-40) sparingly and wipe dry.

NOTE: The labor regulations of many states require that the operator of this tool on a job site be thoroughly trained and certified for competence prior to operating this tool. For certification procedures, call: Technical Services Department, 1-800-858-8501 (English only) or visit **www.desatech.com**.

Parts List



Key			
No.	Part No.	Description	Qty.
1	300001	Handle Screw	2
2	300110	Handle	1
3	300101	Safety Switch	1
4	300010	Tang Cap Screw	1
5	300104	Safety Switch Screw	1
6	300105	Trigger	1
7	300106	Trigger Spring	1
8	300107	Trigger Lock Nut	1
9	300108	Trigger Screw	1
10	300201	Receiver Stop	1
11	300210	Receiver	1
12	479601	Breech	1
13	479602	Breech Spring	1
14	479603	Sear	1
15	250604	Sear Spring	1
16	479605	Firing Pin	1
17	479606	Firing Pin Spring	1
18	479607	Pin Stip	1
19	479300	Barrel Assembly	1
20	479205	Tang	1

ACCESSORIES

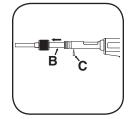
Part No.	Description
101320-01	Spall Sheild
056415	Goggles
056485	Brush, 1/4"
056486	Brush, 5/8"
501801	Hex Wrench, 3mm

IMPORTANT: Do not use key numbers when ordering service parts. Always order components by part number and description. Include Model and Serial numbers.

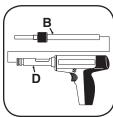
Barrel Replacement

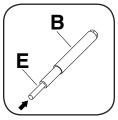
WARNING: NEVER disassemble, replace barrel, clean, or assemble a powder actuated tool while it is loaded.





Unscrew knurled tang nut
 (A). Slide barrel assembly
 (B) out and remove tang (C),
 then remove barrel assembly (B) from receiver (D).

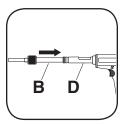




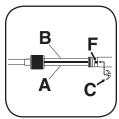


2. If tool has been overdriven, tap piston (E) on a hard surface until the piston is pushed back into the muzzle. Inspect the barrel assembly (B) and replace if damaged.





3. To assemble, push piston
(E) all the way into barrel
(B) using a screwdriver (G).
Slide the barrel assembly
(B) into the receiver (D).
Turn barrel (B) to line up
tang slot (F) with tang (C).
Insert tang (C) into tang slot
(F). Firmly tighten knurled
tang nut (A).



Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	REMEDY
Piston hangs out of muzzle.	Tool overdriven.	Tap piston on a hard surface until piston is pushed back into the muzzle (see <i>Overdriven Fastener</i> , below).
	Piston not properly assembled in relation to barrel screw.	Remove barrel assembly. Follow instructions for barrel replacement (see page 18). Replace all damaged or missing parts.
	Broken piston.	Replace barrel assembly or take tool to your distributor.
Overdriven fastener.	Excessive power.	Change either to next lowerpowderload or next longer length fastener.
Piston jammed.	Overdriving of fastener (see above).	Remove barrel assembly. Follow instructions for barrel replacement (see page 18). Replace other parts if damaged.
Expended load will not extract.	Dirty or damaged chamber.	Clean chamber. If loads will not chamber with slip-fit or extraction difficulties continue, take tool to your distributor.
	Broken ejector.	Replace barrel assembly or take tool to your distributor.
Reduction or loss of power	Piston not returning to full rear position.	Barrel must be snapped to the full extended position to properly position piston against breech.
	Worn piston ring or broken piston.	Replace barrel assembly or take tool to your distributor.
		Remove breech and check all parts for correct fit assembly.
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Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	REMEDY
Tool does not fire.	Failure of tool to depress completely.	See data listed under Tool does not completely depress, above.
	Dirt build-up on breech not allow- ing proper pen- etration of firing pin.	Check firing pin indenta- tion on cartridge. Clean breech, breech face, sear and firing pin. Replace worn or damaged parts.
	Safety Switch is in ON position	Rotate Safety Switch to OFF position.
Opening and closing of bar- rel or pushing down on the tool, etc. is not smooth but is rough or binds.	Lack of proper cleaning.	Inspect and clean complete tool. Replace worn or damaged parts.

Application Chart

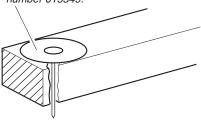
Power load and power fastener application information.				
For fastening this:	to this:	Power fastener length	Po	wer load color
Two by fours	Concrete Cement block Steel (3/16" to 3/8" thick)		A	Green Green Yellow
Furring strips	Concrete Cinder block Cement block Steel (3/16" to 3/8" thick)	1 1/2" 1 1/2" 1 1/2" 2"	A	Green Gray Brown Yellow
Electrical Junction boxes	Concrete Cement block Steel	1" 1" 3/4"	7	Green Brown Green
Conduit clips	Concrete Cement block Cinder block Steel	1" 1" 1" 1" 3/4"	Ŧ	Green Brown Gray Green
Shelf brackets	Concrete Cement block Cinder block	1" 1" 1"	A	Green Brown Gray
1/4" Plywood or pegboard	Concrete Cement block Steel	1 1/4" 1 1/4" 1"	Ð	Green Green Yellow

Application Chart

Power load listings are recommendations only. If you are in doubt, try a test fastening using the next lightest power load. Power fasteners and power loads are available in blister packs of 25 and cartons of 100.

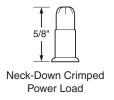
IMPORTANT

- Recommended for use with Remington® power loads and power fasteners.
- If power fastener goes below the top surface of the board, use penetrating control disc (see illustration below) or washered SPW-type power fasteners.
- Operators and bystanders must ALWAYS wear goggles and ear protection which meet or exceed the accepted standards for adequate protection in your country. In the USA, refer to ANSI standards. In Canada, refer to CSA standards.
 - * Use power fastener with penetration control disc, part number 015549.



IMPORTANT

This tool is designed to use .22 caliber neck-down crimped loads, power levels 1 (gray) through 4 (yellow).





CAUTION: Do not use any load other than the .22 caliber neck-down crimped load. Other types of loads will cause load-ejection problems.

.22 CALIBER Type A, neck-down crimp loads for powder actuated tools

Stock	Load Level	Load	Color Case	r Code
Number		Strength	Body	Head
A22C1	1	light	brass	Gray
A22C2	2	medium	brass	Brown
A22C3	3	heavy	brass	Green
A22C4	4	extra heavy	brass	Yellow

Replacement Parts And Accessories



WARNING: Use only replacement parts and accessories described in this manual. Use of other parts or accessories could damage tool or injure operator.

For original replacement parts and accessories, contact your nearest Authorized Dealer or Authorized Service Center for this product. If they can not supply the part or accessory, contact your nearest Parts Central listed on page 23. Each Authorized Dealer, Authorized Service Center, and Parts Central is independently owned and operated.

See page 17 for an Illustrated Parts List.

If you need additional referral information, contact our Technical Service Department (see *Technical Service*).

In Canada call 1-800-561-3372 for parts information.

Technical Service

You may have further questions about assembling, operating, or maintaining this product. If so, you can visit our Technical Service web site at **www.desatech.com** or contact our Technical Service Department at 1-800-858-8501 (English Only). You may also write to:

DESA Power Tools™

P.O. Box 90004

Bowling Green, KY 42102-9004

ATTN: Technical Service Power Tools

When contacting DESA Power Tools™, have ready

- · Your Name
- Your Address
- · Your Phone Number
- Model Number of Product
- Date of Purchase (Include copy of receipt for written requests).

Repair Service

Note: Only use original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

Each Authorized Service Center is independently owned and operated.

WARRANTY SERVICE

If product requires warranty service, return it to nearest Authorized Service Center. You must show proof of purchase. If faulty materials or workmanship caused damage, we will repair or replace product without charge. *Note:* Normal wear, misuse, abuse, neglect, or accidental damage is not covered under warranty.

NON-WARRANTY SERVICE

If product requires service, return it to nearest Authorized Service Center. Repairs will be billed to you at regular repair list prices.

For additional Service Center or warranty information, call 1-800-858-8501 (English only) or visit our Technical Service web site at www.desatech.com.

Parts Centrals

Ray's Portable Heater Service

3191 Myers Road Camino, CA 95709-9550 530-644-7716

Tool & Equipment Service Solutions, LLC

5 Manila Drive Hamden, CT 06514-0322 203-248-7553

1-800-397-7553

Grainger Parts Operations

1657 Shermer Road Northbrook, IL 60062-5362 708-498-5900 1-800-323-0620 www.grainger.com

Portable Heater Parts

342 North County Road 400 East Valparaiso, IN 46383-9704 219-462-7441 1-800-362-6951 www.portableheaterparts.com sales@portableheaterparts.com

techservice@portableheaterparts.com

1349 Adams Street Bowling Green, KY 42103-3414 270-846-1199 1-800-654-8534 franktalk@aol.com

Lvons & Lvons Sales Co. Inc.

Glen Arm Road Glen Arm, MD 21057-9454 410-665-6500 1-800-333-5966 lyonsco@erols.com

Master Part Distributors 1251 Mound Avenue NW Grand Rapids, MI 49504-2672 616-791-0505 1-800-446-1446 www.masterparts.net Hance Distributors, Inc.

12795 16th Avenue North Plymouth, MN 55441-4556 763-559-2299 www.hanceco.com

Automotive Equipment Service

1651 E. Kansas City Road Olathe, MO 66061 816-531-9144 1-800-843-3546 www.aes-lawnparts.com

Bowden Electric Motor Service

1681 S. Wesleyan Blvd. Rocky Mount, NC 27803 252-446-4203

East Coast Energy

10 East Route 36 West Long Branch, NJ 07764-1501 1-800-755-8809

Forrest Lytle and Sons, Inc.

740 West Galbraith Road Cincinnati, OH 45231-6002 513-521-1464 Bortz Chain Saw Shop

Road #2, Box 64A Oley, PA 19547-9412 610-987-6452

21st Century

2950 Fretz Valley Road Perkasie, PA 18944-4034 215-795-0400 1-800-325-4828

La Ports

2444 N 5th Street Hartsville, SC 29550-7704 843-332-0191

MTA Distributors

555 Hickory Hills Blvd. Nashville, TN 37189-9244 615-299-8777

1-800-264-0225

Webbs Appliance Center

1519 Church Street Nashville, TN 37203-3004 615-329-4079 1-800-899-4079

Industrial Hardware

4109 Bainbridge Blvd. Chesapeake, VA 23324-1403 804-543-2232 1-800-788-0008 catatem@erols.com

Mills Lawn and Garden

928 Commonwealth Place Virginia Beach, VA 23464 757-361-9293 www.mills-parts.com

Tuco Industrial Products 5223 180th Street SW

Suite 4A-1 Lynnwood, WA 98037-4506 425-743-9533 1-800-735-1268 www.tucoheat.com

Limited Warranty

DESA Power Tools™ warrants the Remington® Model R300 against defects in materials and workmanship for a period of one (1) year (90 days for reconditioned unit) from the date of purchase. The bill of sales or proof of purchase must be presented at the time a claim is made under this warranty.

If within one (1) year from the purchase date this Powder Actuated Tool fails due to a defect in material or workmanship, DESA Power Tools™ will repair or replace the tool at DESA Power Tools™ option. To obtain service under this warranty, contact DESA Power Tools™ at the number/address listed below. You must have the Serial Number, Model Number, date of purchase and indicate the type of problem being experienced. DESA Power Tools™ will send replacement part(s), repair, or replace the tool at DESA Power Tools™ option. However, this warranty does not cover failures caused by misusing or abusing the product (for proper use of this product, read and understand the operating instructions in this owners manual). Repairs made because of misuse, abuse, negligence, or accident will be charged for at regular repair prices. Power loads and power fasteners are not covered.

This express and limited warranty is the only warranty on this product, and to the full extent permitted by law there are no other warranties, express or implied, including warranties of merchantability and/or fitness for a particular purpose which extend beyond the terms of this express and limited warranty. To the full extent permitted by law, the liability of DESA Power Tools™ for personal injury, property damage, or any other damage whatsoever, including consequential and incidental damages, arising from the sale or use of this product shall not exceed the purchase price of this product.

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

In U.S.A., contact:



P.O. Box 90004 Bowling Green, KY 42102-9004 www.desatech.com In Canada, contact:



82 Akron Road Toronto, Ontario M8W 1T2 1-800-561-3372 Fax: 1-800-561-8003

U.S.A. ONLY

For Technical Assistance on Your Remington® Powder Actuated Tool Or For Certification Procedures, Call Technical Services Department 1-800-858-8501 (English only) Or Visit www.desatech.com.