

**1/4" AND 3/8" CHUCK GUARD KITS  
FOR SERIES RG AND RL DRILLS****NOTICE**

Series RG and RL Angle Drills and Chuck Guard Kits are designed for drilling operations in the aerospace, automotive, appliance, electronic machining and furniture industries. ARO is not responsible for customer modification of tools or accessory kits for applications on which ARO was not consulted.

**⚠ WARNING**

**IMPORTANT SAFETY INFORMATION ENCLOSED.  
READ THIS MANUAL BEFORE OPERATING TOOL.  
IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PLACE THE  
INFORMATION IN THIS MANUAL INTO THE HANDS OF THE OPERATOR.  
FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.**

**PLACING TOOL IN SERVICE**

- Always operate, inspect and maintain this tool in accordance with all regulations (local, state, federal and country) that may apply to hand held/hand operated pneumatic tools.
- For safety, top performance, and maximum durability of parts, operate this tool at 90 psig (6.2 bar/620 kPa) maximum air pressure at the inlet.
- Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool.
- Do not use damaged, frayed or deteriorated air hoses and fittings.
- Always use clean, dry air at 90 psig (6.2 bar/620 kPa) maximum air pressure. Dust, corrosive fumes and/or excessive moisture can ruin the motor of an air tool.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Do not remove any labels. Replace any damaged label.

**USING THE TOOL**

- Always wear eye protection when operating or performing maintenance on this tool.
- Always wear hearing protection when operating this tool.
- Keep hands, loose clothing, long hair and jewelry away from working end of tool.
- Note the position of the reversing mechanism before operating the tool so as to be aware of the direction of rotation when operating the throttle.
- Keep body stance balanced and firm. Do not overreach when operating this tool. Anticipate and be alert for sudden changes in motion, reaction torques, or forces during start up and operation.
- Tool accessory may continue to rotate briefly after throttle is released.
- Air powered tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions may be harmful to your hands and arms. Stop using any tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.
- Use accessories recommended by ARO.
- This tool is not insulated against electric shock.
- This tool is not designed for working in explosive atmospheres.
- Do not carry or drag the tool by the cord or cable.
- Prevent exposure and breathing of harmful dust and particles created by power tool use.  
Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects, and other reproductive harm. Some examples of these chemicals are:
  - lead from lead based paints,
  - crystalline silica from bricks and cement and other masonry products, and
  - arsenic and chromium from chemically treated lumber.Your risk from these exposures 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 dust masks that are specially designed to filter out microscopic particles.

**NOTICE**

The use of other than genuine ARO replacement parts may result in safety hazards, decreased tool performance, and increased maintenance, and may invalidate all warranties.

Repairs should be made only by authorized trained personnel. Consult your nearest ARO Authorized Servicenter.

For parts and service information, contact your local ARO distributor, or the Customer Service Dept. of the Ingersoll-Rand Distribution Center, White House, TN at PH: (615) 672-0321, FAX: (615) 672-0801.  
ARO Tool Products

Ingersoll-Rand Company

1725 U.S. No. 1 North • P.O. Box 8000 • Southern Pines, NC 28388-8000

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## WARNING SYMBOL IDENTIFICATION



## INSTALLATION OF THE 1/4" CHUCK GUARD

For Series RG:

1. Installing Retaining Ring (4):
  - a.) For tool with short Gear Case, protruding 1" (25.4 mm) from Pistol Housing, no Retaining Ring (4) is used.
  - b.) For tool with long Gear Case, protruding 1.5" (38.1 mm) from Pistol Housing, install Retaining Ring (4) in groove on Gear Case.
2. Slide Short Sleeve (1), flanged-end first, over Drill Chuck and Gear Case until flange is against Pistol Housing for a short Gear Case tool or Retaining Ring for a long Gear Case tool.
3. Slide O-ring (2) over Drill Chuck into groove on the Gear Case.
4. Slide Small Chuck Guard (3) over Drill Chuck onto O-ring (2), and up against Short Sleeve (1) flange. The friction fit between the Guard and the O-ring will hold the Guard in place.

For Series RL:

1. Slide Short Sleeve (1), flanged-end first, over Drill Chuck and Gear Case until flange is against Retaining Ring (4) and Pistol Housing.
2. Slide O-ring (2) over Drill Chuck into groove on the Gear Case.
3. Slide Small Chuck Guard (3) over Drill Chuck onto O-ring (2), and up against Short Sleeve (1) flange. The friction fit between the Guard and the O-ring will hold the Guard in place.

## INSTALLATION OF THE 3/8" CHUCK GUARD

For Series RG:

1. Remove the Chuck using the following technique:

### NOTICE

**The thread in the following step is a left-hand thread. Rotate the screwdriver clockwise to remove the screw.**

- a.) For reversible models, open the Chuck and using a Pozi-Drive Screwdriver, unscrew and remove the Chuck Retaining Screw.
  - b.) Insert the short leg of a 1/4" hex wrench into the Jaws of the Chuck and tighten the Chuck.
  - c.) Using a brass hammer, sharply rap the long leg of the wrench in a counterclockwise direction to loosen the Chuck.
  - d.) Unscrew and remove the Chuck from the spindle.
2. Installing Retaining Ring (5):
    - a.) For tool with short Gear Case, protruding 1" (25.4 mm) from Pistol Housing, no Retaining Ring (5) is used.
    - b.) For tool with long Gear Case, protruding 1.5" (38.1 mm) from Pistol Housing, install Retaining Ring (5) in groove on Gear Case.
  3. Installing Short Sleeve (1) or Long Sleeve (2):
    - a.) For tool with short Gear Case, protruding 1" (25.4 mm) from Pistol Housing, slide Long Sleeve (2) over Drill Chuck and Gear Case until Sleeve is against Pistol Housing.
    - b.) For tool with long Gear Case, protruding 1.5" (38.1 mm) from Pistol Housing, slide Short Sleeve (1), flanged-end first, over Drill Chuck and Gear Case, until Sleeve is against Retaining Ring (5).
  4. Slide O-ring (3) over Drill Chuck into groove on the Gear Case.
  5. Slide Large Chuck Guard (4) over Drill Chuck onto O-ring (3), and up against flange of Short Sleeve (1) for the long Gear Case, and Long Sleeve (2) for the short Gear Case. The friction fit between the Guard and the O-ring will hold the Guard in place.
  6. Thread the Chuck back onto the spindle.

For Series RL:

1. Remove the Chuck using the following technique:

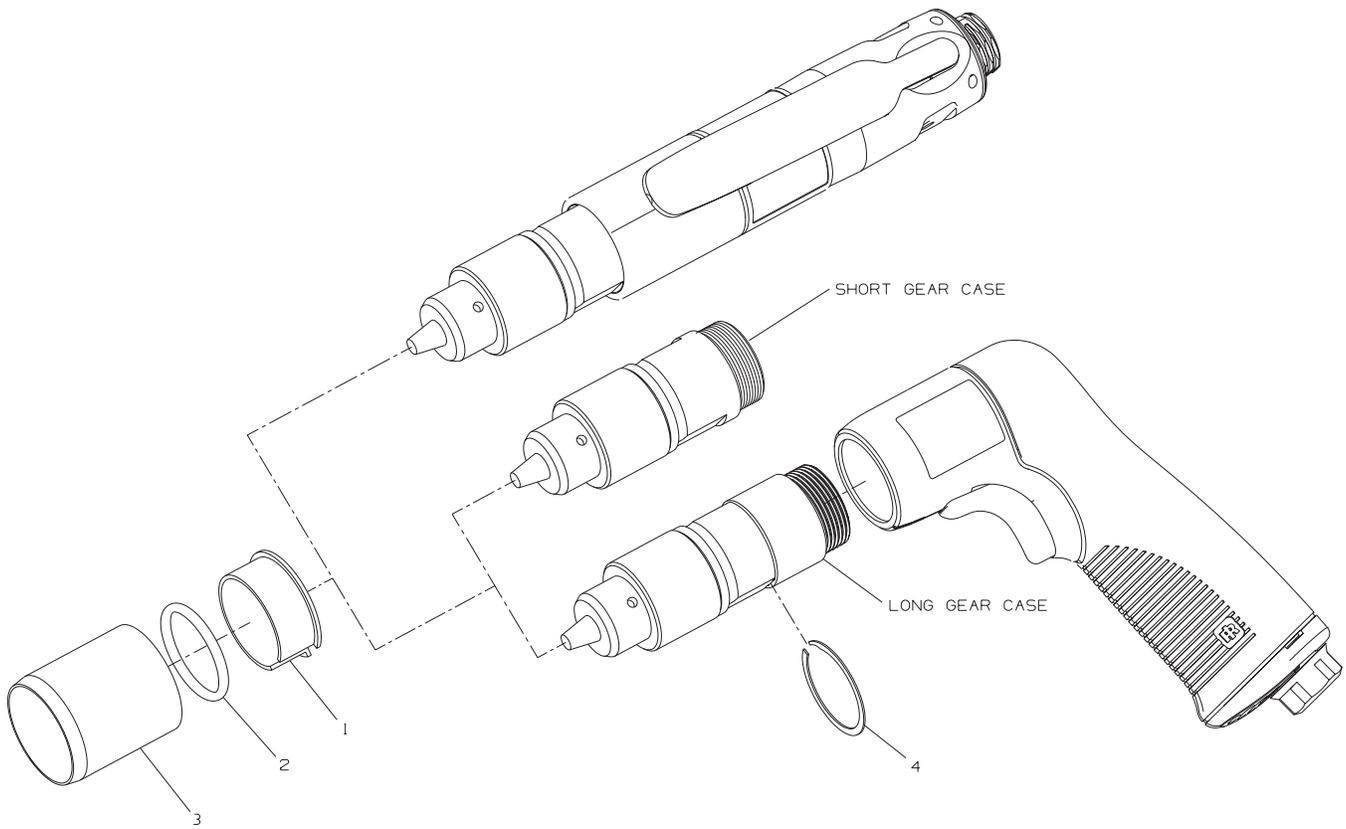
### NOTICE

**The thread in the following step is a left-hand thread. Rotate the screw driver clockwise to remove the screw.**

- a.) For reversible models, open the Chuck and using a Pozi-Drive Screwdriver, unscrew and remove the Chuck Retaining Screw.
  - b.) Insert the short leg of a 1/4" hex wrench into the Jaws of the Chuck and tighten the Chuck.
  - c.) Using a brass hammer, sharply rap the long leg of the wrench in a counterclockwise direction to loosen the Chuck.
  - d.) Unscrew and remove the Chuck from the spindle.
2. Remove the Chuck using the following technique:
    - a.) Insert the short leg of a 1/4" hex wrench into the Jaws of the Chuck and tighten the Chuck.
    - b.) Using a brass hammer, sharply rap the long leg of the wrench in a counterclockwise direction to loosen the Chuck.
    - c.) Unscrew and remove the Chuck from the spindle.
  3. Slide Short Sleeve (1), flanged-end first, over Drill Chuck and Gear Case until flange is against Retaining Ring (5) and Pistol Housing.
  4. Slide O-ring (3) over Drill Chuck into groove on the Gear Case.
  5. Slide Large Chuck Guard (4) over Drill Chuck onto O-ring (3), and up against Short Sleeve (1) flange. The friction fit between the Guard and the O-ring will hold the Guard in place.
  6. Thread the Chuck back onto the spindle.

For additional assembly instructions, refer to the Operation and Maintenance Manual for the specific tool you are repairing.

# 1/4" CHUCK GUARD KIT



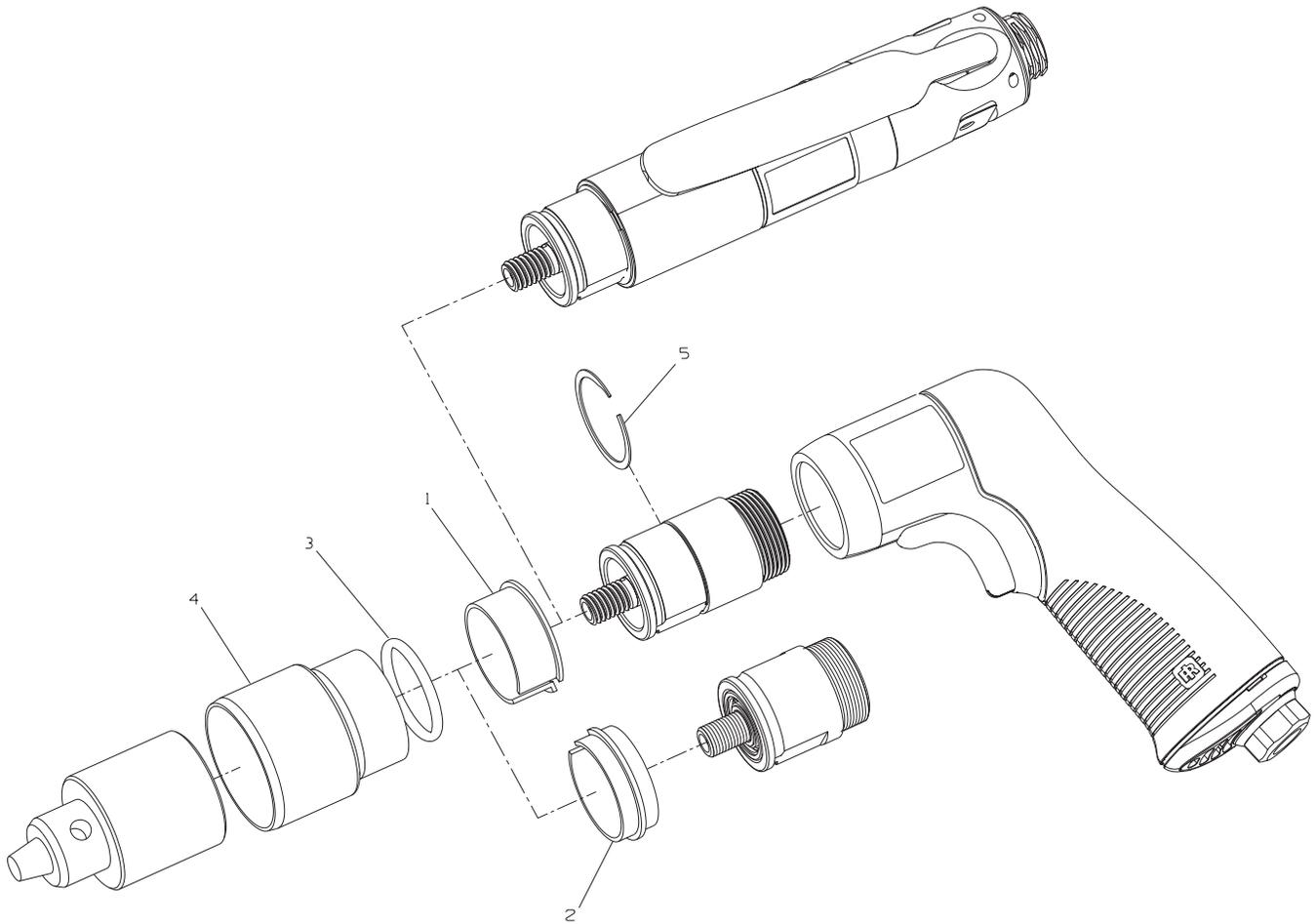
(Dwg. TPA 1837-00)

## PART NUMBER FOR ORDERING



	Chuck Guard Kit, 1/4" . . . . .	TRD-A961-S
1	Short Sleeve . . . . .	TRD-931
2	O-ring . . . . .	BU-948
3	Small Chuck Guard . . . . .	TRD-961-S
4	Retaining Ring . . . . .	TRH-197

### 3/8" CHUCK GUARD KIT



(Dwg. TPA 1838-00)

#### PART NUMBER FOR ORDERING



	Chuck Guard Kit, 3/8" .....	TRD-A961
1	Short Sleeve .....	TRD-931
2	Long Sleeve .....	TRD-931-L
3	O-ring .....	BU-948
4	Large Chuck Guard .....	TRD-961
5	Retaining Ring .....	TRH-197





