

**CPTIW12AL**

**1/2IN  
IMPACT  
WRENCH**

**CLÉ À  
CHOCS  
1/2 PO**

**LLAVE DE  
IMPACTO DE  
1/2 PULG**

## **WARNING**

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 paints,
- crystalline silica from bricks, cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

The risk of exposure to these types of chemicals varies depending on how frequently you work with certain chemicals. 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 specifically designed to filter out microscopic particles.

## **AVERTISSEMENT**

Les travaux de construction effectués à l'aide d'un outil électrique, comme le sablage, le sciage, le meulage et le perçage, produisent de la poussière qui contient des produits chimiques. De tels produits sont reconnus comme cancérogènes. Ils peuvent aussi causer des anomalies congénitales ou nuire d'une autre manière à la reproduction.

Voici quelques exemples de ces produits chimiques :

- le plomb contenu dans les peintures à base de plomb;
- la silice cristallisée contenue dans les briques, le ciment et d'autres produits de maçonnerie;
- l'arsenic et le chrome contenus dans le bois de sciage traité avec des produits chimiques.

Les risques d'exposition à ces produits chimiques varient selon la fréquence d'utilisation de certains matériaux. Pour réduire l'exposition, il est recommandé de travailler dans un endroit bien aéré et de porter de l'équipement de protection approuvé tel qu'un masque antipoussière spécialement conçu pour filtrer les particules microscopiques.

## **ADVERTENCIA**

El polvo ocasionado por del lijado neumático, el aserrado, la rectificación, la perforación y otras actividades de construcción puede contener sustancias químicas conocidas como agentes causantes del cáncer, defectos de nacimiento y otros daños reproductivos. Algunos ejemplos de dichas sustancias químicas son:

- plomo de pintura a base de plomo,
- la sílica cristalina proveniente del ladrillo, cemento y otros productos de mampostería, y
- el arsénico y el cromo proveniente de maderos tratados con sustancias químicas

El riesgo de ser expuesto a estos tipos de sustancias químicas varía según la frecuencia con la cual usted trabaja con ciertas sustancias químicas. Para disminuir la posibilidad de exposición a dichas sustancias químicas, usted debe trabajar en un área bien ventilada y con equipo aprobado de seguridad, tal como las mascarillas de polvo las cuales son diseñadas específicamente para filtrar las partículas microscópicas.

# CARLYLE®

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## SPECIFICATIONS

Max. Free Speed ..... 8,000RPM  
Max. Torque..... 650ft lb  
Breakaway Torque ..... 1,000ft lb  
Air Inlet ..... 1/4in NPT  
Recommended Hose Size ..... 3/8in I.D.  
Avg. Air Cons. .... 6.9CFM

Max. Air Pressure..... 90 psig (6.2 bar)  
Weight..... 5.8lb  
Length ..... 8in  
Width ..... 2.75in  
Height ..... 8.25in

# OPERATING MANUAL FOR CPTIW12AL



## WARNING INFORMATION



### SAVE THIS MANUAL FOR FUTURE REFERENCE.



**THIS INSTRUCTION MANUAL CONTAINS IMPORTANT SAFETY INFORMATION. READ THIS INSTRUCTION MANUAL CAREFULLY AND UNDERSTAND ALL INFORMATION BEFORE OPERATING THIS TOOL.**

It is the responsibility of the owner to make sure all personnel read this manual prior to using the device. It is also the responsibility of the device owner to keep this manual intact and in a convenient location for all to see and read. If the manual or product labels are lost or not legible, contact Carlyle for replacements. If the operator is not fluent in English, the product and safety instructions shall be read and discussed with the operator in the operator's native language by the purchaser/owner or his designee, making sure that the operator comprehends its contents.

Always operate, inspect and maintain this tool in accordance with American National Standards Institute Safety Code of Portable Air Tools (ANSI B186.1) and any other applicable safety codes and regulations.



For safety, top performance and maximum durability of parts, operate this tool at 90psig; 6.2 bar max air pressure with 3/8in diameter air supply hose.



Always wear impact-resistant eye and ear protection when operating or performing maintenance on this tool (users and bystanders). High sound levels can cause permanent hearing loss. Use hearing protection as recommended by your employer or OSHA regulation.



Operators and maintenance personnel must be physically able to handle the bulk, weight and power of this tool.

Keep tool out of reach of children.



Air powered tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions over extended periods of time may be harmful to your hands and arms. Discontinue use of tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.



Air under pressure can cause severe injury. Never direct air at yourself or others. Always turn off the air supply, drain hose of air pressure and detach tool from air supply before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool. Failure to do so could result in injury.



Whip hoses can cause serious injury. Always check for damaged, frayed or loose hoses and fittings, and replace immediately. Do not use quick detach couplings at tool. See instructions for correct set-up.



Do not operate a damaged or worn tool. Do not use quick-detach couplings at tool. See instructions for correct set-up.



Do not point or indulge in any horseplay with this tool.



Slipping, tripping and/or falling while operating air tools can be a major cause of serious injury or death. Be aware of excess hose left on the walking or work surface.

Keep body working stance balanced and firm. Do not overreach when operating the tool.

Anticipate and be alert for sudden changes in motion during start up and operation of any power tool.

Note direction of rotation BEFORE operating this tool.



Tool shaft may continue to rotate briefly after throttle is released. Avoid direct contact with accessories during and after use. Gloves will reduce the risk of cuts or burns.

Keep the tool in efficient operating condition.

**Impact wrenches are not torque control devices. Fasteners with specific torque requirements must be checked with suitable torque measuring devices after installation with an impact wrench.**

**Use only impact sockets or accessories. Do not use hand sockets or accessories.**

**Use only impact sockets and accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may create a risk of injury when used on another tool.**

Do not force tool beyond its rated capacity.



Do not carry tool by the hose. Protect the hose from sharp objects and heat.



Keep away from rotating end of tool. Do not wear jewelry or loose clothing. Secure long hair. Scalping can occur if hair is not kept away from tool and accessories. Choking can occur if neckwear is not kept away from tool and accessories.



This tool is not insulated against electric shock.



This tool must not be used in explosive atmospheres.



Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.

Use replacement parts and accessories recommended by Carlyle Tools.

Servicing and repairs should only be made by an authorized service center.

Do not use (or modify) the tool for any other purpose than that for which it was designed without consulting the manufacturer's authorized representative.

Do not remove any labels. Replace damaged labels.

Failure to heed these warnings may result in personal injury and/or property damage.



**WARNING:** This product can expose you to chemicals including nickel, which is 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](http://www.P65Warnings.ca.gov).

# OPERATING MANUAL FOR CPTIW12AL

## // AIR SUPPLY

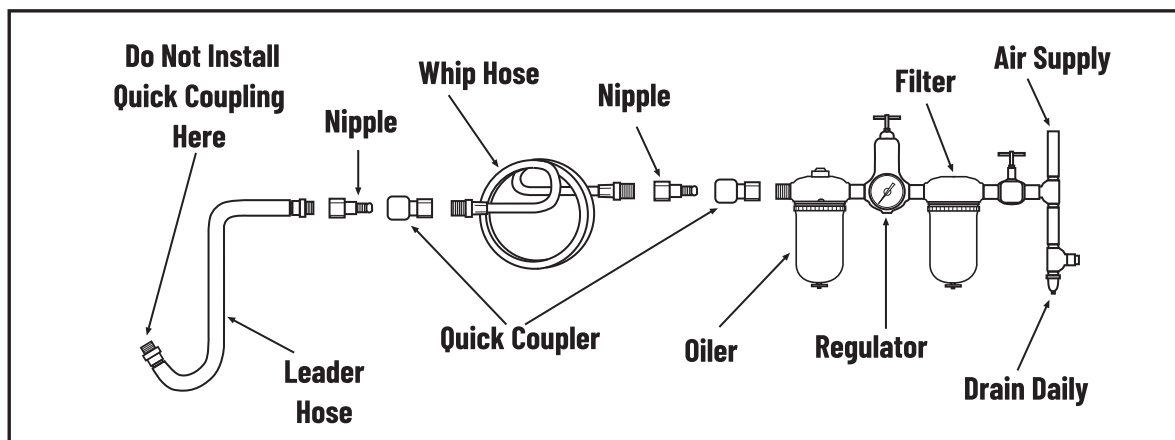
Tools operate on a wide range of air pressures. It is recommended that air pressure measures 90 PSI at the tool with the trigger fully depressed and no load applied to the tool. Low pressure (under 90 psig; 6.2 bar) reduces the speed of all air tools. Low air pressure not only wastes time, but also costs money. Higher pressure (over 90 psig; 6.2 bar) raises performance beyond the rated capacity of the tool, which will shorten tool life and could cause injury.

The recommended hookup procedure can be viewed in the above figure.

Always use clean, dry air. Dust, corrosive fumes, and/or water in the air line will cause damage to the tool. Drain the air tank daily. Clean the air inlet filter screen at least once per week.

The air inlet used for connecting the air supply has standard 1/4" NPT American Thread. Line pressure should be increased to compensate for unusually long air hoses (over 25 feet). Minimum hose diameter should be 3/8" I.D. Fittings should have the same inside dimensions and should be tightly secured.

Ensure an accessible emergency shut off valve has been installed in the air supply line and make others aware of its location.



## // LUBRICATION

Lubricate the air motor daily with Carlyle air tool oil. If no air line oiler is used, run 1/2 oz. of oil through the tool. The oil can be squirted into the tool air inlet or into the hose at the nearest connection to the air supply, then run the tool.

**WARNING:** After an air tool has been lubricated, oil will discharge through the exhaust port during the first few seconds of operation. The exhaust port must be covered with a towel before applying air pressure to prevent serious injury.

## // OPERATION

The air regulator knob can be used as an air throttle, if there are no other means of regulating air. Turn the air regulator knob all the way to highest position for maximum power.

The air regulator can be used to adjust torque to the approximate tightness of a known fastener. When tightening nuts not requiring critical torque values, run nut up flush and then tighten an additional one-quarter to one-half turn (slight additional turning is necessary if gaskets are being clamped). For additional power needed on disassembly work, turn regulator to its fully open position.

This impact wrench is rated at 1/2" USS bolt size. Rating must be down graded for spring U bolts, tie bolts, long cap screws, double depth nuts, badly rusted conditions and spring fasteners, as they absorb much of the impact power. When possible, clamp or wedge the bolt to prevent springback.

Soak rusted nuts in penetrating oil and break rust seal before removing with impact wrench. If nut does not start to move in three to five seconds, use a larger size impact wrench. Do not use impact wrench beyond rated capacity, as this will drastically reduce tool life.

The forward/reverse lever is used to change the direction of the tool. When the lever is moved to the right, the tool is in a forward or right hand direction. When the lever is moved to the left, the direction is reverse or left hand.

**NOTE: Actual torque on a fastener is directly related to joint hardness, tool speed, condition of socket and the time the tool is allowed to impact.**

Use the simplest possible tool-to-socket hook up. Every connection absorbs energy and reduces power

# OPERATING MANUAL FOR CPTIW12AL



## TROUBLESHOOTING

### IMPACT WRENCHES

**TOOL DOES NOT RUN OR RUNS SLOWLY, AND/OR AIR FLOWS ONLY SLIGHTLY FROM EXHAUST** — This condition is probably caused by insufficient air pressure, contaminants blocking the airflow or operation of motor parts, or a power regulator which has vibrated to a closed position.

**YOU SHOULD:** Check the air supply for sufficient pressure. Check the air inlet strainer for blockage. Pour a generous amount of air tool oil into air inlet. Operate tool in short bursts, in both forward and reverse directions. Repeat if necessary. If tool performance does not improve, the tool should be serviced by an authorized service center.

**TOOL WILL NOT RUN, EXHAUST AIR FLOWS FREELY.** This condition is probably caused by one or more rotor vanes stuck on accumulated sludge or varnish; motor rusted.

**YOU SHOULD:** Pour a generous amount of air tool oil into air inlet. Operate tool in short bursts in both forward and reverse directions. Lightly tap the motor housing with a plastic mallet. Detach the air supply. Try to free the motor by turning the drive shaft manually, if possible. If the tool remains jammed, it should be serviced by an authorized service center.

**SOCKETS WILL NOT STAY ON.** This condition is probably caused by a worn socket retainer ring or a soft backup o-ring

**YOU SHOULD:** Wear safety goggles. Detach the air supply. Using external retaining ring pliers, remove the old retaining ring. While holding the square drive with an appropriate wrench, use a small screwdriver to pry old retainer ring out of its groove. Always pry the ring away from your body, because it can be propelled outward at high velocity. Replace the backup o-ring and retainer ring with correct new parts (see breakdown). Place the retaining ring on a table and press the tool anvil into the ring with a rocking motion. Snap the ring into the groove by hand.

**PREMATURE ANVIL WEAR.** This is probably caused by using chromed sockets, which are not designed for use with impact tools, or worn sockets

**YOU SHOULD:** Stop using chrome sockets. Chrome sockets have a hard exterior surface and a soft core, which leads to a warped but very hard drive hole when used with impact tools. Chrome sockets will wear wrench anvils quickly and present a danger of splitting or breakage which can lead to injury or death.

**TOOL SLOWLY LOSES POWER BUT RUNS AT FULL SPEED WHEN NOT UNDER LOAD.** This condition is probably caused by worn clutch parts, inadequate lubrication, or worn engaging cam.

**YOU SHOULD:** FOR OIL LUBED WRENCHES: Check for presence of clutch oil (where oil is specified for the clutch) and remove oil fill plug. Tilt to drain all of the oil from the clutch case. Refill the case with Carlyle air tool oil or that recommended by the manufacturer in the specified amount. Also check for excess clutch oil. Clutch cases only need to be filled 50%, and overfilling can cause drag on high speed clutch parts. A typical 1/2" Drive oil lubed wrench only requires 1/2 ounce of clutch oil. FOR GREASE LUBED WRENCHES: Check for excess grease by rotating drive shaft by hand. It should rotate freely, and excess grease is usually expelled automatically.

**TOOL WILL NOT SHUT OFF.** This condition is probably caused by a broken or misaligned throttle valve O-ring, or a bent or jammed throttle valve stem.

**YOU SHOULD:** Remove the throttle assembly and install a new o-ring. Lubricate the assembly with air tool oil and operate the trigger briskly. If operation cannot be restored, the tool should be serviced at an authorized service center.

### AIR RATCHETS

**MOTOR RUNS. SPINDLE DOESN'T TURN, OR TURNS ERRATICALLY** — This condition is probably caused by worn teeth on the ratchet or pawl, a broken or weak pawl pressure spring, or weak drag springs which fail to hold the spindle while the pawl advances.

**YOU SHOULD:** Have replacement parts installed by an authorized service center.

**TOOL DOESN'T RUN, RATCHET HEAD INDEXES CRISPLY BY HAND** — This condition is probably caused by the accumulation of dirt or sludge in motor parts

**YOU SHOULD:** Pour a generous amount of air tool oil into the air inlet. Operate the throttle in short bursts. With the tool engaged on a bolt, alternately tighten and loosen the bolt by hand. If the tool remains jammed, it should be serviced at an authorized service center

### AIR DRILLS

**TOOL WILL NOT RUN, RUNS SLOWLY, AIR FLOWS SLIGHTLY FROM EXHAUST, SPINDLE TURNS FREELY** — This condition is probably caused by a blocked air passage or jammed motor parts.

**YOU SHOULD:** Check the air inlet for blockages. Pour a generous amount of air tool oil into air inlet. Operate the trigger in short bursts. Detach the air supply. Turn the empty and closed drill chuck by hand. Reconnect air supply. If the tool's performance does not improve, it should be serviced by an authorized service center.

**TOOL WILL NOT RUN. AIR FLOWS FREELY FROM EXHAUST. SPINDLE TURNS FREELY.** This condition is probably caused by a broken rotor vane or jammed or broken gears.

**YOU SHOULD:** Pour a generous amount of air tool oil into air inlet. Operate the trigger in short bursts. Detach the air supply. Turn the empty and closed drill chuck by hand. Reconnect air supply. If the tool's performance does not improve, it should be serviced by an authorized service center.

### TOOL SEIZED. SPINDLE WILL NOT

**TURN** — This condition is probably caused by a broken rotor vane or jammed or broken gears. **YOU SHOULD:** Have the tool serviced by an authorized service center.

# OPERATING MANUAL FOR CPTIW12AL



## TROUBLESHOOTING

**TOOL WILL NOT SHUT OFF** — The throttle valve o-ring has probably come unseated.

YOU SHOULD: Replace the o-ring (see breakdown) or have tool serviced by an authorized service center.

### AIR HAMMERS

**TOOL WILL NOT RUN** — This condition is probably caused by a clogged cycling valve or throttle valve.

YOU SHOULD: Check the air inlet for blockages. Pour a generous amount of

air tool oil into air inlet. Operate the trigger in short bursts with the chisel in place and against a solid surface. Detach the air supply. Tap the nose or barrel lightly with a plastic mallet, reconnect the air supply, and repeat above steps. If the tool is still seized, insert a 6" piece of 1/8" diameter rod in the nozzle and lightly tap to loosen the piston in the rear direction. Reconnect air supply and repeat above steps.

**CHISEL STUCK IN NOZZLE**— This condition is probably caused by a deformed shank.

YOU SHOULD: Have tool serviced by an authorized service center.

NOTE: DISASSEMBLY OF THIS TOOL BY ANY OTHER THAN AN AUTHORIZED SERVICE CENTER WILL VOID THE WARRANTY ON THIS TOOL.

### SANDERS/GRINDERS

**TOOL HAS NO POWER OR RUNS SLOWLY.** This condition is probably caused by insufficient air pressure, contaminants blocking the air flow, or speed regulator that has vibrated to a closed or off position.

YOU SHOULD: Check the air supply at the compressor and air lines to the tool for sufficient air pressure. Check the air inlet strainer for blockage and make sure speed regulator is in the open or on position. If power is not restored the tool should be serviced by an authorized service center.

**TOOL SEIZED. PAD/SPINDLE WILL NOT TURN.** This condition is probably caused by a broken rotor vane, jammed or broken gears, or seized bearing.

YOU SHOULD: Have the tool repaired by an authorized service center.

**TOOL WILL NOT SHUT OFF/RUNS CONTINUOUSLY.** The throttle valve seat has become loose or damaged.

YOU SHOULD: Replace o-ring or valve seat (see breakdown for proper parts) or have tool serviced by an authorized service center.

**SANDS/GRINDS UNEVENLY.** This condition is usually caused by loose pad/disc connection or worn or damaged pad/disc.

YOU SHOULD: Check pad/disc connection, ensure that connection is secure and tight. Replace worn or damaged pad/disc.



## WARRANTY

**Important: DO NOT RETURN PRODUCT TO PLACE OF PURCHASE.**

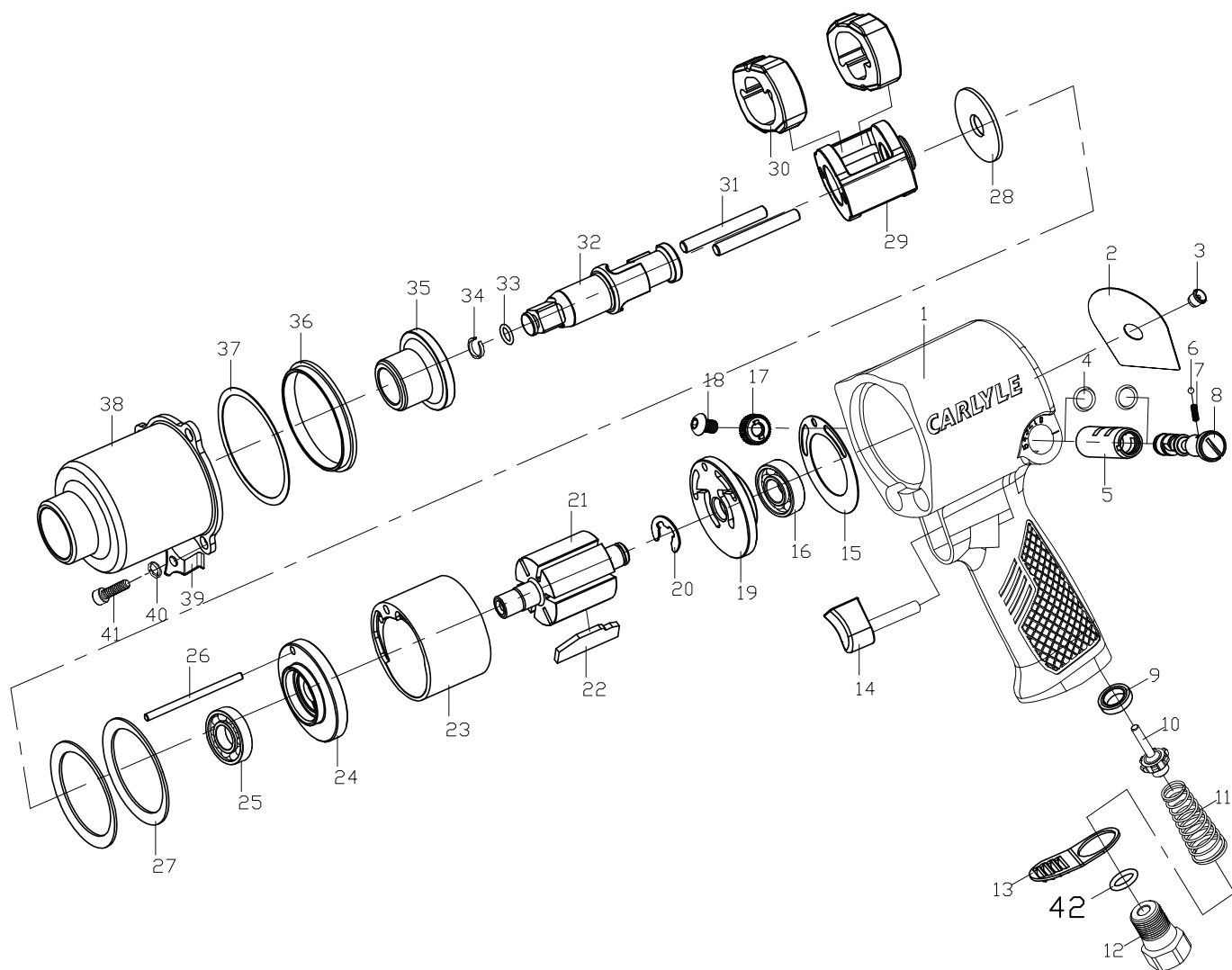
**WARRANTY POLICY:** This Carlyle Air Tool is warranted against defects in material and workmanship for a period of One (1) Year from the date of original purchase. We will replace, at our option, any part which proves to be defective in material or workmanship. Repairs or replacements are warranted as described above for the duration of the original warranty period. In the unlikely event a replacement unit is required during this One (1) year period, return the unit to your local Carlyle Auto Parts Store for a replacement. This warranty does not apply to products which have been subjected to abuse, misuse, modification, neglect, lack of maintenance, use in a production-related service, or repaired by anyone other than an Authorized Carlyle Air Tool Service Center.

For complete listing of Authorized Master Repair Centers, see enclosed Customer Warranty Repair Form, or visit [www.toolwarrantyrepair.com](http://www.toolwarrantyrepair.com)

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### EXPLODED TOOL PARTS DIAGRAM



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### TOOL PARTS LIST

| REF# | PART#          | DESCRIPTION                        | QTY |
|------|----------------|------------------------------------|-----|
| 1    | RS12AL01       | Housing Assy. (incl #2,3,5)        | 1   |
| 2    | RS23102C       | Name Plate (incl w/ #1)            | 1   |
| 3    | RS708A03       | Grease Fitting (incl w/ #1)        | 1   |
| 4    | RS708A04       | O-Ring                             | 2   |
| 5    | RS708A05       | Reverse Valve Sleeve (incl w/ #1)  | 1   |
| 6    | RS708A06       | Detent Ball (1/8")                 | 1   |
| 7    | RS708A07       | Detent Spring                      | 1   |
| 8    | RS708A08       | Reverse Valve                      | 1   |
| 9    | RS708A46       | Valve Seat                         | 1   |
| 10   | RS708A47       | Throttle Valve                     | 1   |
| 11   | RS708A48       | Spring-Valve                       | 1   |
| 12   | RS708A49       | Inlet Bushing                      | 1   |
| 13   | RS708A50       | Exhaust Deflector                  | 1   |
| 14   | RS708A51       | Trigger                            | 1   |
| 15   | RS708A18       | Rear Gasket                        | 1   |
| 16   | RS708A19       | Rear Bearing (6001Z)               | 1   |
| 17   | RS708A20       | Knob for Reverse Valve             | 1   |
| 18   | RS708A21       | Screw                              | 1   |
| 19   | RS708A22       | Rear End Plate                     | 1   |
| 20   | RS708A23       | E-Ring                             | 1   |
| 21   | RS708A24       | Rotor                              | 1   |
| 22   | RS708A25       | Rotor Blade (Pack of 6)            | 1   |
| 23   | RS708A26       | Cylinder                           | 1   |
| 24   | RS708A27       | Front End Plate                    | 1   |
| 25   | RS708A28       | Front Bearing (6002Z)              | 1   |
| 26   | RS708A29       | Cylinder Dowel Pin                 | 1   |
| 27   | RS708A30       | Motor Clamp Washer                 | 2   |
| 28   | RS708A31       | Washer                             | 1   |
| 29   | RS708A32       | Hammer Frame                       | 1   |
| 30   | RS708A33       | Hammer                             | 2   |
| 31   | RS708A34       | Hammer Pin                         | 2   |
| 32   | RS708A35       | Standard Anvil Assy (incl. #33,34) | 1   |
| 33   | RS708A12       | O-Ring (incl w/ #32)               | 1   |
| 34   | RS708A36       | Socket Retaining Ring (incl / #32) | 1   |
| 35   | RS708A37       | Anvil Bushing (incl w/ #38)        | 1   |
| 36   | RS708A38       | Protection Ring                    | 1   |
| 37   | RS708A39       | Front Gasket                       | 1   |
| 38   | RS708A40       | Hammer Case Assy. (incl. #35)      | 1   |
| 39   | RS708A53       | Trigger Retainer                   | 1   |
| 40   | RS708A41       | Spring Washer                      | 3   |
| 41   | RS708A42       | Cap Screw                          | 3   |
| 42   | RS708A54       | O-Ring                             | 1   |
| n/a  | RSCPTIW12ALPWL | Warning Label                      | 1   |

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# CARLYLE®

BUILT DIFFERENT

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