



## B-RAD USER MANUAL



LEADING MANUFACTURER OF ADVANCED TORQUE SYSTEMS



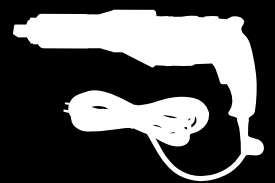
PNEUMATIC



BATTERY



ELECTRONIC



ELECTRIC

# THE INDUSTRY STANDARD...BELIEVE IT!

## ELECTRIC SERIES (V-RAD)



Torque Range  
100-2300 ft. lbs.

- ✓ **Quick adjust torque settings**  
Fast and accurate “dial a torque” for maximum versatility and efficiency
- ✓ **Soft-start vary speed trigger**  
Allows operator to safely and quickly set reaction arm before full torque is applied
- ✓ **Equal power in forward and reverse**  
Convenience and cost effective use of same tool for break away and final torque
- ✓ **Advanced ultra-durable electric motor design**  
Extreme duty designed to reduce maintenance cost and increase reliability
- ✓ **Advanced gearbox design**  
PATENTED planetary gear reduction drive system delivering one of the highest power-to-weight ratios of any controlled bolting system

## ELECTRIC SERIES (E-RAD)



Torque Range  
200-4000 ft. lbs.

- ✓ **Push-button select torque**  
Fast and convenient error-free digital single increment torque settings
- ✓ **Digital torque console display**  
Maximum accuracy by seeing the set torque value and the actual delivered torque value
- ✓ **Lightweight and Ergonomic pistol grip design**  
Advanced low-profile handle to reduce operator fatigue and increase productivity
- ✓ **Extremely low noise level only 75db**  
World’s quietest extreme torque gun, ideal for sensitive environments and standards
- ✓ **LED Green (Pass) or Red (Fail) indicator lights**  
Unmistakable visual signal indicates status of torque procedure for maximum accuracy and speed

## BATTERY SERIES



Torque Range  
100-1300 ft. lbs.

- ✓ **Quick adjust torque settings**  
Fast and accurate “dial a torque” for maximum versatility and efficiency
- ✓ **Soft-start vary speed trigger**  
Allows operator to safely and quickly set reaction arm before full torque is applied
- ✓ **Equal power in forward and reverse**  
Convenience and cost effective use of same tool for break away and final torque
- ✓ **Imagine the freedom – no air lines, no power cords!**  
The lightweight design of the B-SERIES makes them ideal for any application, especially where compressed air and electricity are not readily available.
- ✓ **Advanced gearbox design**  
PATENTED planetary gear reduction drive system delivering one of the highest power-to-weight ratios of any controlled bolting system

## PNEUMATIC SERIES



Torque Range  
50-8500 ft. lbs.

- ✓ **PATENTED planetary gear reduction**  
Delivers one of the highest power-to-weight ratios of any pneumatic controlled bolting system
- ✓ **Smooth continuous flow of controlled torque**  
Eliminates destructive hammering
- ✓ **Lightweight ergonomic pistol grip design**  
Reduces operator strain and injury; resulting in increased productivity
- ✓ **Unmatched reliability and quality**  
Delivered by one of the most advanced engineered gear boxes on the market



# Operating Instructions

## OPERATING INSTRUCTIONS

Dear Customer,

Many thanks for the confidence you have shown in us with the purchase of your new B-RAD power tool. Every RAD power tool is carefully tested and is subject to the strict quality controls of the RAD Quality Assurance section. However, the service life of any power tool is to a great degree dependent on yourself as the user. Please take account of the information contained in these operating instructions and the accompanying documents. The more care you exercise in handling your B-RAD power tool, the longer will it will provide reliable service to you.

## TABLE OF CONTENTS

1. Proper Use
2. General Safety Instructions
3. Special Safety Instructions
4. Operation
  - 4.1 Removing and replacing the battery-pack
  - 4.2 Setting the direction of rotation engaging the transporting safety device (switch-on lock)
  - 4.3 Installing the Reaction Arm and Setting the torque
5. Accessories
6. Repairs

### 1. PROPER USE

#### **Caution**

This cordless power tool is designed for tightening and loosening fasteners and other similar applications.

The operator bears sole responsibility for any damage caused by inappropriate use.

The generally recognized accident prevention regulations and the accompanying safety instructions must be observed.

### 2. GENERAL SAFETY INSTRUCTIONS

#### **Caution**

Before using the power tool, read the accompanying Safety Instructions and these Operating Instructions carefully and thoroughly.

Keep all of the documents supplied with the tool in a safe place and pass them on to the new owner if you part with the tool.

## Operating Instructions

### 3. SPECIAL SAFETY INSTRUCTIONS

#### Caution

Keep battery packs dry.

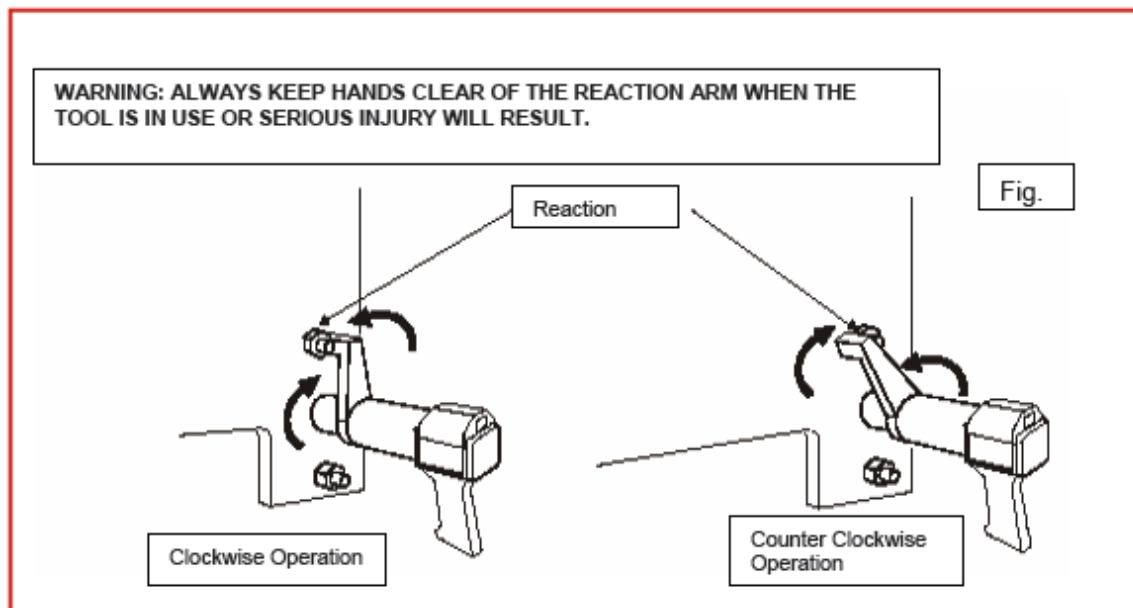
Do not use any damaged or deformed battery pack.

Do not expose the battery packs to fire.

Do not break into battery packs.

Do not touch battery pack contact terminals or short-circuit them.

If battery fluid leaks out and comes into contact with your skin, rinse immediately with plenty of water. If battery fluid gets into your eyes, wash it out with clean water and seek medical attention immediately.



### 4. OPERATION

Charge the battery pack before using.

Only once it has been charged and discharged five times (charging cycles) does the battery pack reach its full charging capacity.

The temperature range for charging is 0 – 50 degrees Celsius.

The number of possible charging cycles varies depending on the particular charger in use.

CS 10: max. 3000

C 45: max. 2000

However, the specified number of charge cycles is only reached if an exhaustive discharge of the battery pack is avoided. If performance diminishes, recharge the battery pack. The battery packs have no memory effect.

Store charged NiMH battery packs and recharge them after an interval of no more than six months.

## Operating Instructions

### 4.1 Removing and replacing the battery-pack

#### REMOVING

Press in the release button and remove the battery pack.

#### REPLACING

Push the battery pack fully into its housing until it locks into position.

### 4.2 Setting direction of rotation, engaging the transporting safety device (switch-on lock)

**Only operate the rotational direction switch / transporting safety device when the motor is at standstill.**

Operate the rotational direction switch / transporting safety device.

R = right-hand rotation selected

L = left-hand (reverse) rotation selected

0 = central setting: transportation position (switch-on lock engaged)

### 4.3 Installing the Reaction Arm and Setting the torque

**Ensure the reaction arm and snap ring are installed securely to hold the reaction arm in place.**

**Make sure the reaction arm is in contact with a solid contact point before you operate the tool.**

**Keep your body parts clear of the reaction arm when the tool is in operation.**

Your B-RAD tool comes completely calibrated with a quick reference torque chart. This allows you to set the B-RAD tool to the desired torque. Simply rotate the Quick Grip torque to the desired torque setting reference number which can be seen through the Easy View Guide. Once this is done, select forward or reverse and you are ready to torque when you depress the trigger. *When the tool reaches the desired torque the clutch mechanism will slip. When this happens, release the trigger immediately! Damage will result to the tool if the clutch is allowed to slip for extended periods of time!*



1) SELECT THE TORQUE RANGE REQUIRED BASED ON THE AMOUNT OF FT./LBS. NEEDED.

2) ROTATE THE QUICK GRIP DIAL CLOCKWISE OR ANTI-CLOCKWISE TO THE APPROPRIATE TORQUE SETTING.



3) VERIFY THE TOOL IS AT THE CORRECT TORQUE SETTING.

4) THE TORQUE IS NOW SET.



## Operating Instructions



5) MAKE SURE  
THE SWITCH AT  
THE REAR OF THE  
TOOL IS SET TO 0.

6) MAKE SURE  
THE SWITCH ON  
THE TOP OF THE  
TOOL IS SET TO 2.



### 5. ACCESSORIES

Use original RAD accessories only.

To assist in selecting the correct accessories, make sure that you take a note of the exact model of your tool and contact your RAD dealer.

Some items available are:

**PN-11283 ICS 10 Superfast Charger**

**PN-11282 C 45 Chargers**

**PN-11281 Battery packs**

**Many reaction arms-please contact us.**

### 6. REPAIRS

Repairs to power tools must be carried out by a qualified electrician only.

Any RAD power tool in need of repair can be sent to the address below. Please attach a description of the fault to the tool.

### CONTACT INFORMATION

NEW WORLD TECHNOLOGIES

30580 Progressive Way

Abbotsford, BC V2T 6Z2

Canada

Tel: 800-983-0044

Fax: 604-852-0269

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

E-mail: [info@radtorque.com](mailto:info@radtorque.com)

## Battery Charger Instructions

### **RAD BATTERY CHARGER**

#### **IMPORTANT SAFETY INSTRUCTIONS**

**Save these instructions** – This manual contains important safety and operating instructions for battery charger models PN-11282 (C 45) and PN-11283 (ICS 10).

Before using battery charger, read all instructions and cautionary markings on battery charger, battery, and product using battery.

#### **CAUTION**



To reduce risk of injury, charge only rechargeable OEM batteries. Other types of batteries may burst causing personal injury and damage.

Correct use: Universal fast chargers PN-11282 (C 45) and PN-11283 (ICS 10) are to be used exclusively for charging RAD 18 V battery packs with the max. capacity of 4 Ah. The user bears sole responsibility for any damage caused by inappropriate use. The generally recognized accident prevention regulations and the safety instructions which accompany them must be adhered to.

Repairs to electrical tools must be carried out by a qualified electrician **ONLY**. Any RAD electrical power tools in need of repair can be sent to one of the addresses listed on the last page or a RAD Authorized Repair Center. Please accompany the tool for repair with a description of the fault. We reserve the right to make alterations in line with advances in technology.

#### **WARNING**



Unplug immediately if the cable is damaged!

Unplug immediately if any sign of smoke or flames!

Do not submit the casing to impact!

Do not drill into the casing!

Keep away from children!

Keep away from moisture!

Chargers should only be operated between 32 degrees F and 103 degrees F (0-49 degrees C).

Batteries should only be charged when battery temp is between 32 degrees F and 120 degrees F (0-49 degrees C).

Do not throw battery packs in a fire or immerse in water!

## Battery Charger Instructions

Return faulty or used RAD battery packs to your dealer!

Do not dispose of battery packs along with domestic refuse. Please recycle!

The charger is not suitable for charging non-rechargeable batteries.

Use indoors only.

Do not expose to rain.

All ventilation slots must be kept free at all times!

### OPERATING INSTRUCTIONS

#### INITIAL USE

##### Caution



##### Caution

Before initial use, check that the voltage and frequency stated on the rating plate match the figures for your own electrical supply.

Before using the charger for the first time, check that the ventilation slits are clear. Minimum clearance from other objects: 2”.

These battery chargers are not suitable for charging non-rechargeable batteries.

The user bears sole responsibility for any damage caused by inappropriate use. The generally recognized accident prevention regulations and the accompanying safety instructions must be observed.

##### Wall Mounting

There are two holes in the underside of the charger to allow it to be wall-mounted.

CAUTION: Only if the battery charger is used in an upright position can it be guarded that large battery-packs will not fall out of the charging shaft socket if exposed to vibration.

#### PN-11282 (C 45) Charger

##### Self – Test

Connect to electrical supply – the red and green indicator lights up for approx. 1 second.

##### Standby Mode

Once the self-test has been completed, the indicator lights are off.

##### Battery-pack Charging

Insert the battery-pack into the charging shaft socket, pushing it fully home, into position.



## Battery Charger Instructions

The operating indicator lights continuously. A new battery-pack or one which has not been used for some time will only reach full capacity once it has been charged and discharged a number of times.

### **Trickle Charging**

After fast charging is completed, the unit automatically switches over to trickle charging. The operating indicator light flashes at longer intervals. The battery-pack can be left in the charger indefinitely so that it is always ready for use.

### **FAULTS**

#### **Warning indicator stays on**

The battery-pack is not being charged. The temperature is too high/too low. If the temperature of the battery-pack is between 32 degrees F and 120 degrees F (0 degrees C and 49 degrees C) the charging process begins automatically.

#### **Warning indicator flashes**

The battery-pack is defective. Remove from charger immediately.

Short-circuit between the charging contacts. Check charging shaft socket for foreign bodies.

The battery fails to charge = contacts may be dirty.

Remove the battery pack, clean the contacts and replace in charger.

**NOTE:** In the case of prolonged activity of electromagnetic disturbances, the battery charger ends the charging process prematurely for safety reasons. Remove the plug and plug in again after 2 seconds.

### **PN-11283 (ICS 10) Chargers**

#### **Self – test**

Connect to electrical supply – the red warning indicator lights up for approx. 1 second.

#### **Standby Mode**

Once the self-test has been completed, the operating indicator lights up.

#### **Battery-pack Charging**

Insert the battery-pack into the charging shaft socket, pushing it fully home, into position. Use the battery-pack adapter, if required. (Yellow: NiCd battery-pack)

The operating indicator light flashes in time with the superfast pulsed-current charging process. A new battery-pack or one which has not been used for some time will only reach full capacity once it has been charged and discharged a number of times.

## Battery Charger Instructions

### **Trickle Charging**

After super fast pulsed-current charging is complete, the unit automatically switches over to trickle charging. The operating indicator light flashes at longer intervals. The battery-pack can be left in the charger indefinitely so that it is always ready for use.

### **FAULTS**

#### **Warning indicator stays on**

The battery-pack is not being charged. The temperature is too high/too low. If the temperature of the battery-pack is between 32 degrees F and 120 degrees F (0 degrees C and 49 degrees C) the charging process begins automatically.

#### **Warning indicator flashes**

The battery-pack is defective. Remove from charger immediately.

Short-circuit between the charging contacts. Check charging shaft socket for foreign bodies.

### **REPAIRS**

Repairs to RAD battery chargers must be carried out by a qualified electrician only.

Any RAD battery chargers in need of repair can be sent to RAD or an authorized RAD repair facility. Please send the unit for repair with a brief description of the fault identified.

### **CONTACT INFORMATION**

NEW WORLD TECHNOLOGIES  
30580 Progressive Way  
Abbotsford, BC V2T 6Z2  
Canada  
Tel: 800-983-0044  
Fax: 604-852-0269  
E-mail: [info@radtorque.com](mailto:info@radtorque.com)

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

## **B-RAD Limited Warranty**

### **New Tool Warranty**

Any new tool branded with the RAD name and purchased from New World Technologies Inc., or through one of its authorized distributors or agents, is warranted to the original purchaser against defects in materials and workmanship for a period of one (1) year from the date of original calibration. Electric drive components such as electric motors, switches, and batteries etc., are covered for a period of three (3) months from the date of original calibration. Under the terms of this warranty, New World Technologies Inc., at its option and F.O.B. either its factory or an authorized service center, will replace or repair for the original purchaser, free of charge, any part or parts, found upon examination by New World Technologies Inc., to be defective in material or workmanship or both. If any product or part is replaced or repaired under the terms of this warranty, that product or part will carry the remainder of the warranty from the date of original calibration.

### **Repaired Tool Warranty**

Once a tool is beyond its new tool warranty, New World Technologies Inc., for a period of three (3) months from the date of repair, will replace or repair for the original purchaser, free of charge, any part or parts, found upon examination by New World Technologies Inc., to be defective in material or workmanship or both. If any product or part is replaced or repaired under the terms and conditions of this warranty, that product or part will carry the remainder of the warranty from the date of original repair.

To qualify for the above mentioned warranties, written notice to New World Technologies Inc. must be given immediately upon discovery of such defect, at which time New World Technologies Inc. will issue an authorization to return the tool. The defective item must promptly be returned to New World Technologies Inc. all freight charges prepaid. When returning a tool, the reaction arm/s being used with the tool must also be returned.

**New World Technologies Inc.:** Telephone: 1 800 983 0044 Email: [info@radtorque.com](mailto:info@radtorque.com)

### **Exclusions from Warranty**

At New World Technologies Inc.'s sole judgment tools or accessories that have been altered, damaged, misused, abused, badly worn due to excessive utilization, lost, or improperly maintained will NOT be covered under the terms of this warranty.

Tools returned without the reaction arm/s will not be covered under the terms of this warranty.

Consumable parts and accessories (such as extensions, reaction blanks/arms) are not covered under this warranty.

Tools that have been relabeled without prior written consent of New World Technologies Inc. will not be covered under this warranty.

Equipment and accessories not manufactured by New World Technologies Inc. (measuring equipment, etc.) are warranted only to the extent of the original manufacturer's warranty.

*\*There is no other express warranty. Implied warranties, including those of merchantability and fitness for a particular purpose are limited to one year from date of calibration and to the extent permitted by law. Liability for consequential damages under any and all warranties are excluded to the extent exclusion is permitted by law.*

