

# POWERGUN™ (PG450)

## Lithium-ion Battery Operated Grease Gun

### INSTRUCTION MANUAL



#### Introduction

The Macnaught Lithium-ion PG450 Battery operated grease gun is a portable high pressure, high volume grease gun, supplied complete with 2 x Lithium-ion batteries, battery charger, 1m long flexible extension and carry case.

#### Important Information

Visually inspect grease gun, charger and battery prior to use for any signs of damage, loose or missing parts. If equipment is worn or damaged, remove it from service. Contact an authorized service centre or distributor



#### WARNING

##### IMPORTANT INFORMATION

Please read this information carefully before use.

'Cautions' are listed throughout this manual to advise of actions to which may cause damage to your equipment.

Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed refers to your battery operated (cordless) power tool.

Make sure all operators have adequate access to the following instructions.

#### GENERAL SAFETY

Keep work area clean and well lit.

**DO NOT** operate power tools in explosive areas, e.g; close to flammable liquids, gases or dust.

##### ELECTRICAL SAFETY

Never modify electrical connections.

**DO NOT** expose power tool to rain or wet conditions.

Keep cord away from heat, oil, sharp edges or moving parts.

##### PERSONAL SAFETY

**DO NOT** use a power tool while you are tired or under the influence of drugs, alcohol or medication.



#### POWER TOOL USE AND CARE

**DO NOT** force the power tool.

**DO NOT** use power tool if the power tool is damaged or the switch does not turn the gun on and off.

Only use this power tool in accordance with the instructions provided.

#### Battery and Charger Safety Information



#### WARNING

If battery-pack case is damaged **DO NOT** charge. Danger of electric shock or electrocution

**DO NOT** probe the unit - Danger of electric shock or electrocution.

The battery charger **MUST NOT** be used for any other use than for charging the rechargeable batteries supplied with the PG450

**DO NOT** operate charger with a damaged power cord or plug, replace immediately.

**DO NOT** operate charger if it has received a sharp blow, or has been dropped. Take it to an authorized service centre.

**DO NOT** disassemble charger.

**DO NOT** store or use the tool and battery pack in locations where the temperature may reach or exceed 40°C/104°F.

**DO NOT** use charger on any other voltage than designated on the charger. 120/230/240 volts present at charging terminal

**DO NOT** attempt to open the battery pack.

**ONLY** charge the battery with the charger provided.

## Battery Disposal

**NOTE:** Dispose of depleted batteries Properly. The battery contains rechargeable Lithium-ion and must be recycled or disposed of properly. Please refer to the local authorities for the correct method of battery disposal.



**DO NOT** incinerate the battery pack. The battery can explode in a fire

**DO NOT** attempt to disassemble any battery.

## Charge Battery

**NOTE:** Charger is a fast recharge type charger.

Insert the small plug on the end of the charger lead into the pug hole on back of the battery. A red light indicates the battery is charging. When the battery is fully charged the red light turns yellow.

The battery can be charged:

- Attached to the grease gun
- Removed from the grease gun.



To remove battery from the grease gun, press the blue button on back of battery and slide battery out of the rear of the gun.

**DO NOT** force battery if fitting or removing from gun.

Replace battery into grease gun, by carefully aligning the battery to the cavity on the gun, slide battery in, until the battery locks into place.

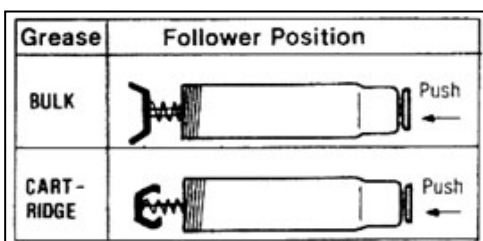
## Grease Gun Operation



### WARNING

Visually inspect the Grease Gun prior to use for damaged, loose, or missing parts. If equipment is worn or damaged, contact an authorized service center for damage assessment and repair.

### How to Select Follower Position



(Fig 1)

## Installing Grease Cartridge

**Note:** When replacing cartridge or bulk filling, ensure the high pressure/high volume switch is positioned on "H"

- 1) Unscrew and remove barrel from grease gun head



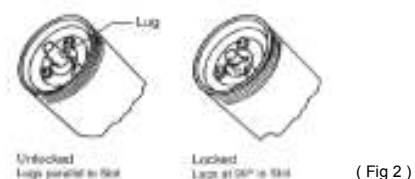
**Note:** Rotate the barrel counter clockwise to remove. Turn clockwise to tighten.

- 2) Pull the follower rod back until the rod groove can be pulled into the barrel slot.
- 3) Remove the large end cap from the cartridge.
- 4) Slide the large open end first into the barrel.



- 5) Remove the small end cap from the cartridge.
- 6) Screw the barrel onto the gun body assembly.
- 7) Unlock the follower rod from the barrel.
- 8) Lock follower rod (Fig 2), and apply light pressure on the pull handle (Fig 3), at the same time press the top of the bleeder valve.

How to lock Follower



(Fig 2)

- 9) Pull the trigger. If grease does not appear at the coupler repeat step 8.

## HOW TO BULK FILL BY SUCTION

**Note:** Select the correct follower position (see Fig 1)

- 1) Lock follower (Fig 2)
- 2) Unscrew the barrel from the gun body 2 to 3 turns.
- 3) Pull the rod back and retain in barrel slot (Fig.4)
- 4) Unscrew the barrel from the gun body.
- 5) Release the follower rod from the barrel slot.
- 6) Insert the open end of the barrel into the grease, pull the rod back slowly, and at same time push the barrel into the grease, until the groove in the rod appears then push the rod into the barrel.

7) Wipe clean and screw the barrel to the gun body assembly.

8) Repeat steps (7), (8), (9) "How to install a cartridge"



## Priming the Gun

1) Press the air bleed valve to expel the air.

2) Press the trigger on the gun in short bursts until grease starts to flow from the grease coupler.



**Note: If there is still air in the system or gun does not deliver grease,**

- Remove the flexible extension.
- Press the trigger on the gun until grease flows from the gun outlet.
- Refit the hose assembly to gun.

## High Pressure / High Volume Switch

**Important:** The gun is designed such that the switch always be positioned at "H" for normal greasing.

The only time the "L" position is used, is when higher greasing pressures are required. The pressure relief valve will require manual adjustment.

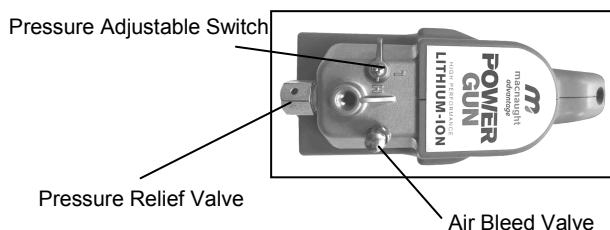
- Switch positioned at "H" (High volume),  
(Flowrate up to 120g/min / Pressure to 6,000psi)
- Switch positioned at "L" (Low volume),  
(Flowrate up to 35g/min / Pressure to 9,000psi)

Note: manual adjustment of the pressure relief valve required for pressures above 6,000psi

## Pressure Relief Valve

Note: The pressure relief valve located at the front of the gun and is factory set.

If higher grease pressures are required, the pressure valve can be adjusted with the adjusting screw located on the front of the pressure relief valve.



## Overload Protection

The PG450 is fitted with overload protection

If the motor exceeds the maximum current, the motor will stop. The motor to resume when safe to do so. .

## Gun Operation

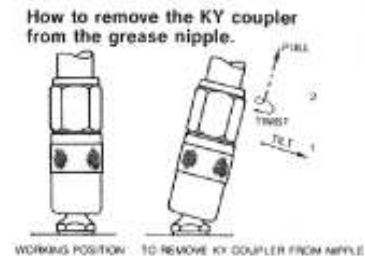
- Charge battery ( ref Charge Battery)
- Insert battery into grease gun
- Install grease cartridge as described ( ref Installing Grease Cartridge)
- Prime gun (ref Priming the gun)

5) Insert coupler onto the grease nipple as shown.



6) Press the trigger on the gun to dispense grease as required.

7) When finished greasing, remove coupler as pictured below



## TROUBLE SHOOTING GUIDE

TROUBLE	CAUSE	REMEDY
Gun fails to deliver grease.	a) Dirt under check valve ball b) Air lock	a) Clean dirt from check valve b) Bleed air from system
Motor does not run when trigger is pressed	a) Battery under charged b) Electrical fault	a) Fully charge batteries b) Take gun to closest service centre
Continual loss of prime	a) Air pockets in the grease b) Follower sticking in cartridge c) Faulty outlet check valve	a) Bleed air from system (ref priming gun) b) Check follower for damage (replace if required) c) Clean check valve (replace if required)
Grease leaking from pressure relief valve during operation	Faulty or incorrectly adjusted pressure valve	Adjust pressure relief valve. (Replace if found to be faulty)

## Specifications

Voltage DC	18 Volt
High Volume / Low Pressure	6.000 PSI (413 Bar), 150 g/min
Low Volume / High Pressure	9.000 PSI (620 Bar), 35 g/min
Grease Reservoir Capacity,	450g
Lubricant (Grease)	Up to NLGI#2
Working Temperature,	32°F~104°F(0°C~40°C)
Battery Capacity,	1.500 mAh
Quick Charge,	1 Hour
Input Voltage,	220 Volt~240 Volt (50 Hz)
Oil Hose Length,	30 in. (76 cm)



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