

OPERATING MANUAL — Cordless Framing Nailer

Paslode®
Impulse

Nail Gun Impulse e Framing. 0671006.

SCANNED

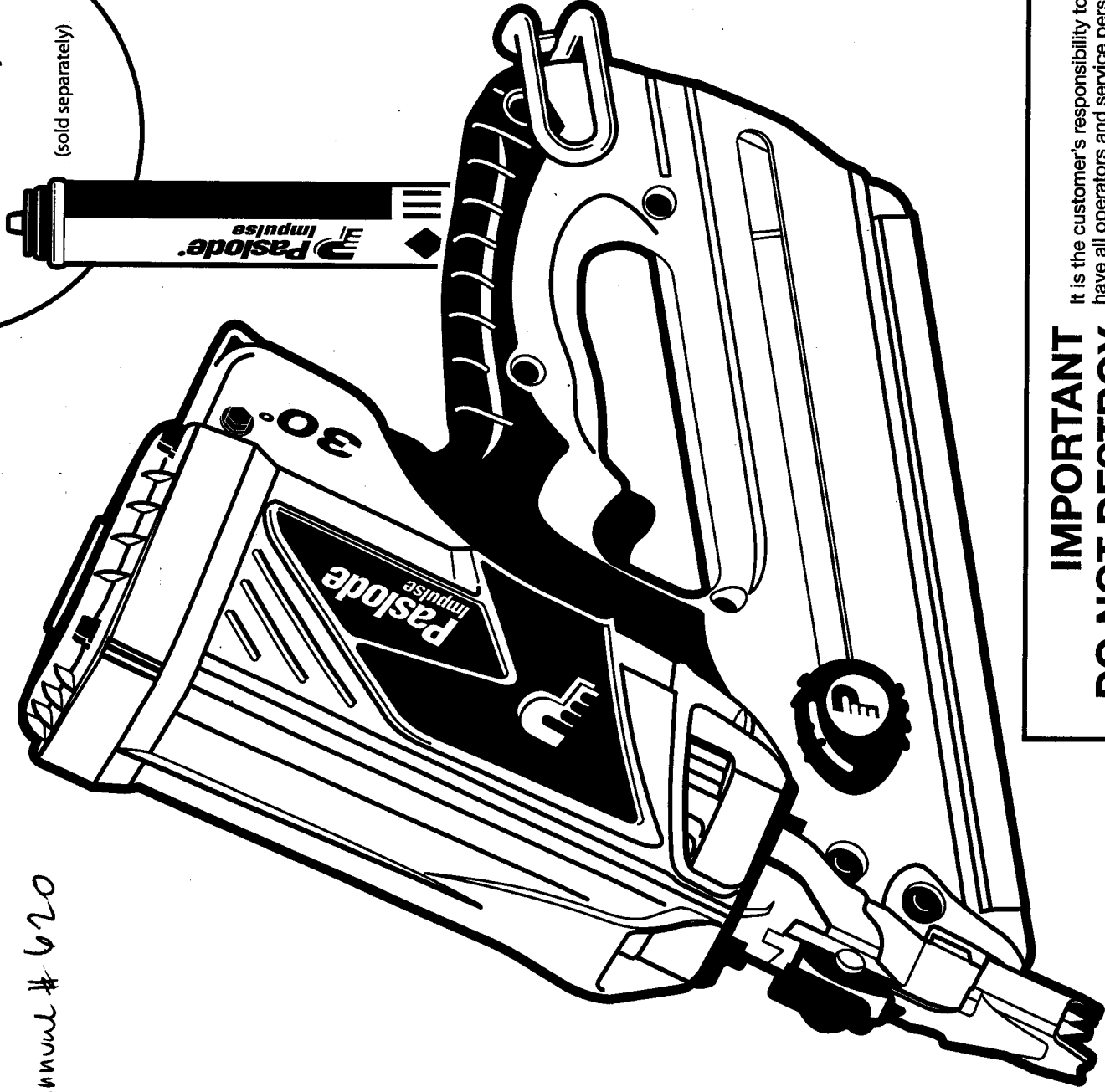
12/10
FrameMaster

Product Code B20540

Manual # 620

For use
with Paslode
fuel cell with
internal metering
valve only!

(sold separately)



IMPORTANT
DO NOT DESTROY

It is the customer's responsibility to have all operators and service personnel read and understand this manual.

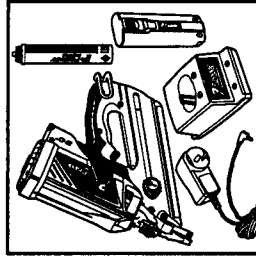
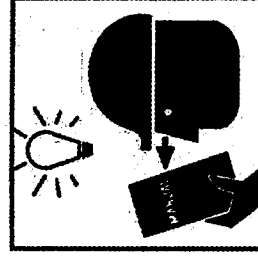
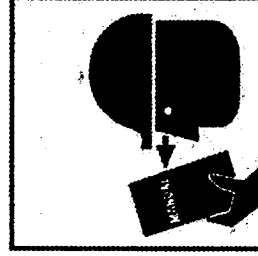
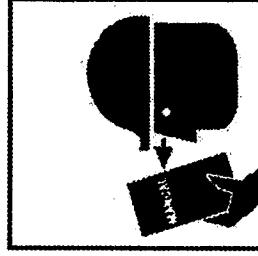
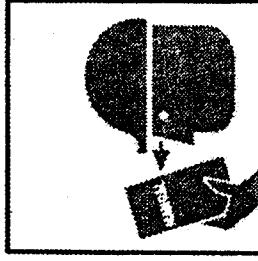
Printed in U.S.A. ©2010 Illinois Tool Works, Inc.

Paslode® Impulse

Impulse Tool System Operation

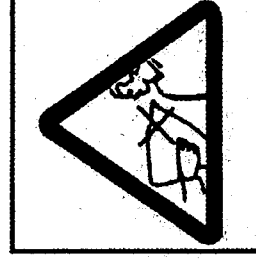
General safety instructions for internal combustion fastener driving tools

Congratulations on having chosen a Paslode product. Your tool will operate to your full satisfaction for a long time if handled correctly. Use Paslode specified fasteners, fuel cell, rechargeable battery, and spare parts only.



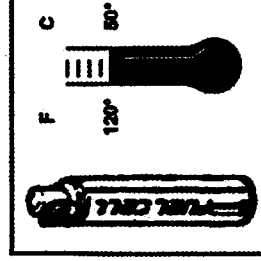
IMPULSE SYSTEM

The IMPULSE SYSTEM consists of tool, fasteners, fuel cell, battery, and battery charger. Only Paslode-specified fasteners, fuel cell, battery and battery charger may be used. The specified units must be seen as a single system in terms of technical safety.



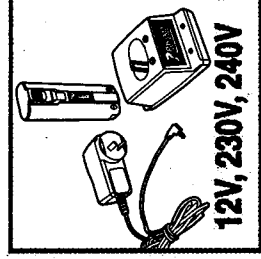
FASTENER TOOLS

Never carry tool with trigger depressed. Do not point the work contacting element at your own body or at somebody else. After having work completed, take fuel cell and battery out of tool. Keep tool and parts away from children and unauthorized persons. Store tool, battery, and fuel cell in tool case when not using it for some time.



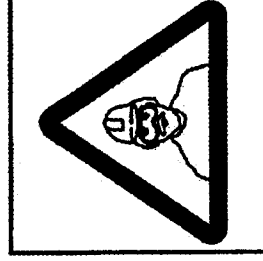
IMPULSE FUEL CELL

The fuel cell is an Aerosol product, the contents are flammable. The container is under pressure. Protect from exposure to temperatures above 50°C (120°F) (i.e. sunlight)! Do not spray against open flames or hot surfaces. Use outside or in well-ventilated areas. Do not burn, attempt to open, or puncture after use. Dispose of according to local regulations for Aerosol products.



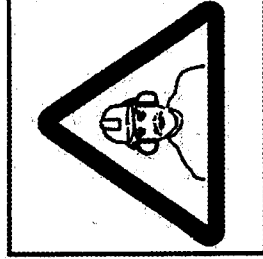
IMPULSE BATTERY-BATTERY CHARGER

Use only Paslode IMPULSE 6V battery and IMPULSE battery charger. Check for correct electric voltage. Observe data on battery charger. Store indoors at temperatures below 50°C or above 40°C. Do not open battery and do not throw into fire. Do not dispose of with garbage. Observe local regulations for disposal.



EYE PROTECTION

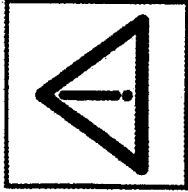
When operating the tool always wear approved eye protection. Small fragments might be shot from work piece. Eye protection is also recommended for persons close to work place.



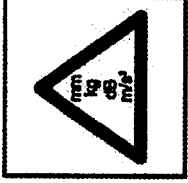
HEARING PROTECTION

Wear hearing protection when operating the tool. This reduces the sound level at your ear considerably. Hearing protection is also recommended for persons close to the work place.

Safety Instructions/Information



Observe all safety instructions! To avoid injuries to yourself or another person observe also the specific operating manual and service instructions for your tool.



For technical data, sound- and vibration values, information about fuel cell, battery and recharger, specified consumables please see your operating manual and ITW Paslode technical data sheet.



Only use fasteners, battery, fuel cell, battery charger and spare parts as specified in the tool data sheet. Paslode shall in no event be liable by non observation if the instructions. Fasteners are to be used only with timber-to-timber fixing or materials of similar or lesser density if not otherwise specified.



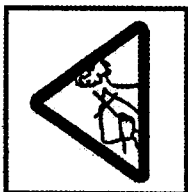
Do not operate close to flammable materials. Exhaust fumes may get heated up depending on work speed. Observe data about speed of work in tool data sheet.



This tool must be operated only in well ventilated environment. Operation of tool causes exhaust fumes of carbon monoxide which are a danger to health when inhaled.



Observe local regulations about storage, handling, and transportation of aerosol products (12 bar/50°C). Storage according to TRG300 (D). International transport regulations are established according to ADR/RID; IATA-DGR; IMDG-Code. No mailing!



This tool is not a toy. Never assume the tool is empty. Never point the tool at anyone or yourself. Never carry the tool with your finger on the trigger.



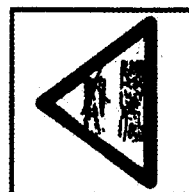
Use tool only for the intended application. When tool is ready for operation keep hands away from nosepiece area. Never point nosepiece at yourself or anyone else.



Do not damage housing of tool. No modifications of tool, fuel cell or battery charger are allowed. Do not place tool on oven or radiator, fuel cell in tool might burst. Observe temperature limit of max. 50°C of fuel cell.



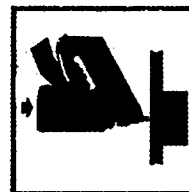
Hold the tool in a way to avoid a recoil injuring your head or your body. Beware! When working on stairs, ladders, roofs, or when nailing crates always take a favourable position to the work piece.



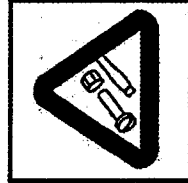
Watch your work piece! Fasteners may fire through the work piece and slide sideways through the work piece thus endangering people. Only operate when holding the tool on the work piece.



Tools being marked with an upside down equilateral triangle must be used only with a lower probe (work contacting element).



The Impulse nailer should be operated only when it is in contact with the work surface. When fastening thin materials such as plywood, be sure to position the tool so that the fastener is driven into the underlying piece.

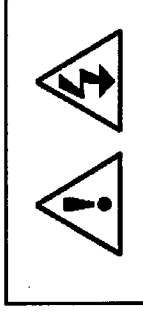


Periodically, check tension of all nuts and bolts on the tools.

Maintenance should only be carried out by competent persons.



Don't smoke when handling fuel cell. Do not inhale its contents. Keep fuel cell valve stem away from face eyes or skin.



Safety Instructions for Impulse Battery and Charging System

IMPORTANT SAFETY INSTRUCTIONS

- 1) Before using battery charging system, read all instructions and cautionary markings on AC-DC Adapter, Charger Base, and Battery.
- 2) Charging system is designed for indoor use only. Do not expose charging system to rain or excessive moisture.
- 3) Make sure cord is located so it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- 4) Do not operate charging system with damaged cord or plug - replace adapter immediately.
- 5) To reduce the risk of personal injury unplug the the charging system from the outlet before cleaning the contacts. Clean contacts with a dry brush or equivalent only.
- 6) The charging system and battery are specifically designed to work together. Do not attempt to charge any other cordless tool or battery with this charger.
- 7) Do not attempt to charge Impulse battery with any other charging system, other than the Impulse charging system.
- 8) Do not short a battery. A shorted battery can produce high current which can lead to overheating and burns.
- 9) Do not recharge batteries at a temperature below 40°F (5°C) or above 104°F (40°C).
- 10) Do not allow metal objects to come into contact with battery terminals.
- 11) Do not puncture or attempt to open battery case or cells.
- 12) Do not store battery where it will be subject to temperatures above 120°F (50°C).
- 13) Do not incinerate battery.
- 14) Do not use a defective battery charger, one that overheats and/or smokes when plugged in.
- 15) Battery must be recycled or disposed of properly. Battery contains nickel-cadmium cells.

Declaration of Conformity

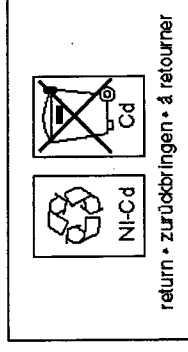


Paslode declares that this Charger System has been designed in compliance with the Regulations and Standards of 73/23/EEC and 89/336/EEC.

Rudolf Golsch

Rudolf Golsch

Paslode International



IMPULSE- Fuel Cell: Transportation /Storage Transportation



Labels Required:

Flammable Gas Hazchem: 2WE

UNDG:

Dangerous Goods Class: 2.1

UN Number: 3478

Shipping Name: Fuel Cell Cartridges

Storage Requirements:

- Keep out of reach of children.
- Store in original containers in approved flame-proof area.
- DO NOT store in pits, depressions, basements, or areas where vapours may be trapped.
- No smoking, naked lights, heat, or ignition sources.
- Keep containers securely sealed.
- Store away from incompatible materials.
- Store in a cool, dry, well ventilated area in an upright position.
- Avoid storage at temperatures higher than 40°C.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

Impulse Tool System Operation

Impulse - Battery/Battery Charger:


The Impulse tool comes with a rechargeable battery and its own charging system. This battery and charging system combination is the only one that will work with Impulse tools.

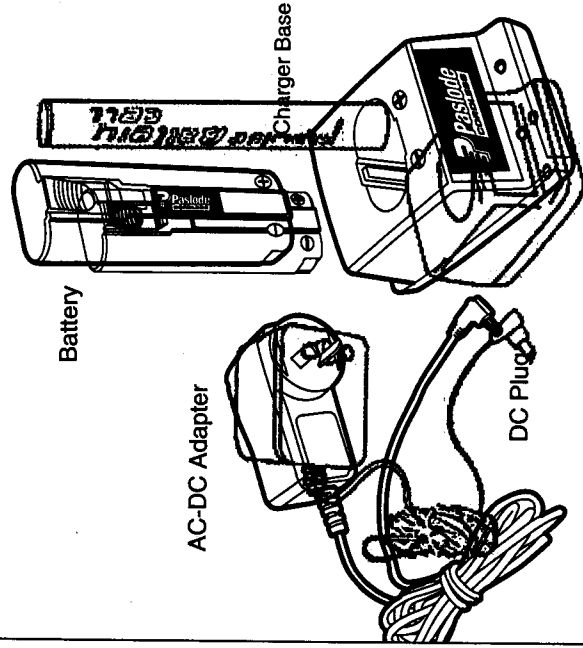
CHARGING PROCEDURE:

The battery must be charged before using a new Impulse Tool. New batteries are shipped discharged and must be charged before use. Each charging of the battery will take 5 minutes to 2 hours, depending on amount of discharge.

NOTE: OPERATING MANUAL FOR 2 HOUR CHARGING SYSTEM (ORANGE)!

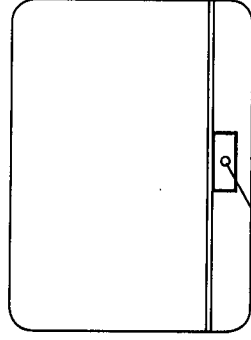
IMPORTANT CHARGING NOTES

	<p>ATTENTION!</p> <p>CHEMICAL/EXPLOSION HAZARD</p> <p>Read all instructions before charging or using battery. Disregard of instructions may result in fire, burns</p>
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IMPULSE BATTERY CHARGING SYSTEM

REAR VIEW OF CHARGER BASE




Plug Receptacle

TECHNICAL DATA

Impulse Adapter(AC-DC)
Australia/New Zealand

Impulse Charger Base
Impulse Battery
6VDC, 1300mAh, Nickel-cadmium

Input	Output	Polarity
240V, 50HZ	12VDC, 800mA	
12VDC, 9.6VA	6VDC, 4.5VA	

CHARGING INSTRUCTIONS:

1. Place the round DC plug of the adapter into the plug receptacle on the back of the orange charger base. Insert the adapter into the electric current outlet as specified in table below. A green light indicates power is on and charger is ready to use.
2. Insert battery with terminals down into charger base. Charge one battery only at a time.
Red light indicates that battery is charging.
The green light will turn off.

Please Note!

If battery is completely discharged, the red and green lights may flash back and forth for up to 20 minutes. This safety feature slowly recharges the battery until it is ready to accept the full charging current. If the lights continue to flash after 20 minutes, replace the battery.

3. **After charging, the red light will turn off and the green light will come on, indicating that the battery is fully charged.**
The battery is ready for use!
4. After charging is completed unplug DC plug adapter.

CHARGING TIMES FOR BATTERY:

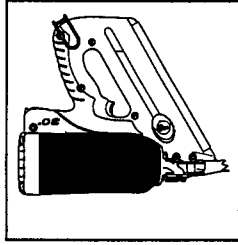
- First Charge 2 Hours
- Partially Charged Battery - 5 Min. to 2 Hours
- Completely Discharged Battery 2 Hours

Impulse Tool System Operation

The tool consists of three main assemblies:

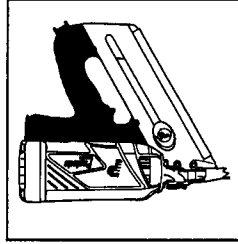
Housing with:

Combustion Chamber, Nosepiece, Work Contacting Element, Piston and Driver.



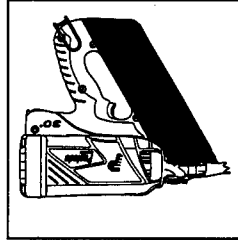
Handle with:

Tool Electronics, Motor, Spark Plug, Trigger and Compartment for fuel cell.



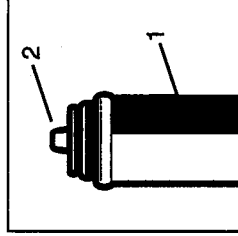
Magazine for:

Consumables with follower and compartment for Battery.



Fuel Cell:

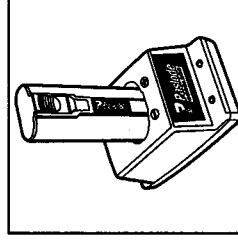
Consisting of container for fuel (1), FrameMaster Adaptor (2)



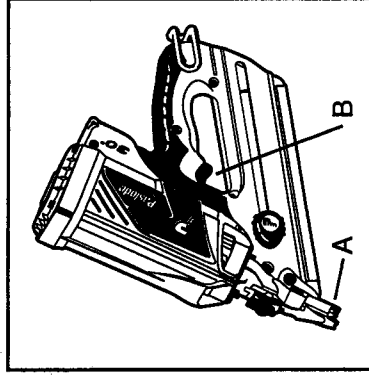
Battery/Battery

Charger:

The battery supplies power to the tool electronics, fan, and spark plug.



Impulse - Tool: Operation



Impulse tools work according to the principles of a linear combustion engine.

Press work contacting element of the tool (A) against work piece.

Combustion chamber is closed and fuel injected.

Fan mixes air and fuel.

Fuel/air mixture ignites by pulling trigger (B).

Combustion drives piston with driver.

Piston and driver return to initial position.

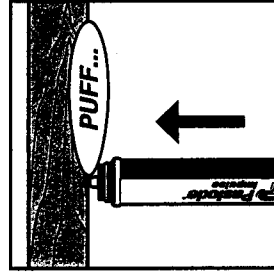
Lift tool from work piece and release trigger (B).

Combustion chamber opens and releases exhaust fumes.

Fan cools tool.

Impulse tool is ready for next single cycle.

Impulse - Fuel Cell: How to Determine if Fuel Cell Still Has Fuel



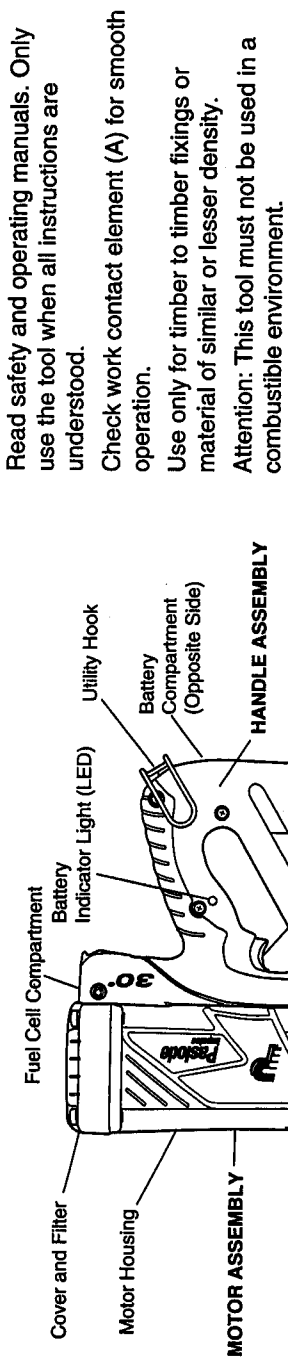
Holding fuel cell with tip pointing **UP** depress tip **straight** (to avoid damage to fuel cell stem) inward to see if fuel is dispensed (smell of fuel should be noticed). If gas is not dispensed, fuel cell is empty - replace it.

Observe Safety Regulations.

Safety Regulations: The propellant will remain in the fuel cell. Fuel cell is always under pressure. Propellant and fuel are flammable. Expanding gases cause low temperatures. Caution, fluid gases might cause injuries when getting in touch with skin or eyes. The fuel cell is to be used as stated in the "Fuel Cell" section. Refill forbidden!

Impulse Tool System Operation

1. Before using the tool

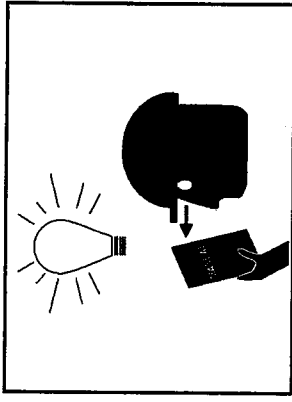


Read safety and operating manuals. Only use the tool when all instructions are understood.

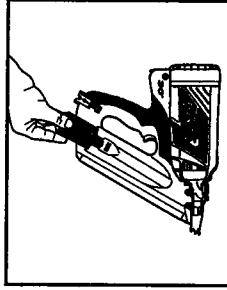
Check work contact element (A) for smooth operation.

Use only for timber to timber fixings or material of similar or lesser density.

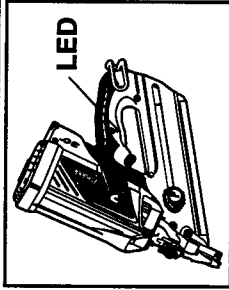
Attention: This tool must not be used in a combustible environment.



2. Battery Loading



Load impulse battery cell with contacts facing downwards into the battery compartment. Press firmly until battery locking clip is engaged. To remove battery, press the locking clip on the battery and slide battery out of its compartment.



Check LED in Handle of Tool:

LED strobe **light green** > Battery in tool. (Does not indicate state of charge)

LED strobe **light red** > Battery is empty, recharge battery!

When work contact element (A) is depressed against workpiece:

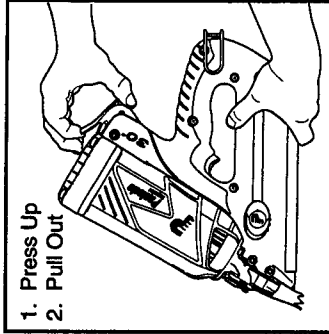
LED **solid green** > Battery charge ready for use.

LED **solid red** > Battery empty. Recharge!

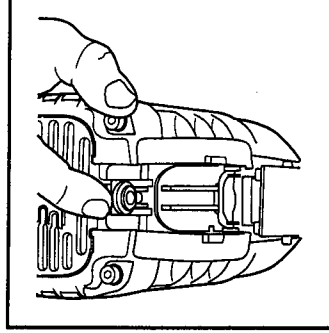
To recharge battery read charging instructions.

Battery contacts must be clean and free from corrosion; if necessary clean with fine emery cloth.

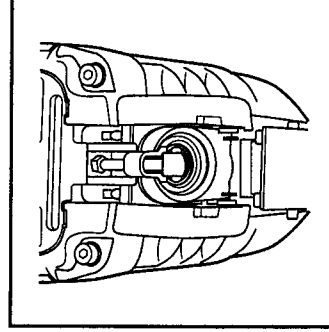
3. Loading Fuel Cartridge



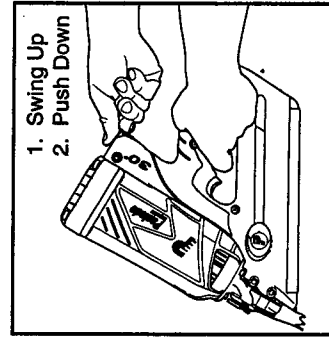
A. Press up at the bottom of the fuel door and pivot outward to open. The door will swing out of the way.



B. Lift the fuel cartridge adaptor and insert the fuel cartridge into the tool.



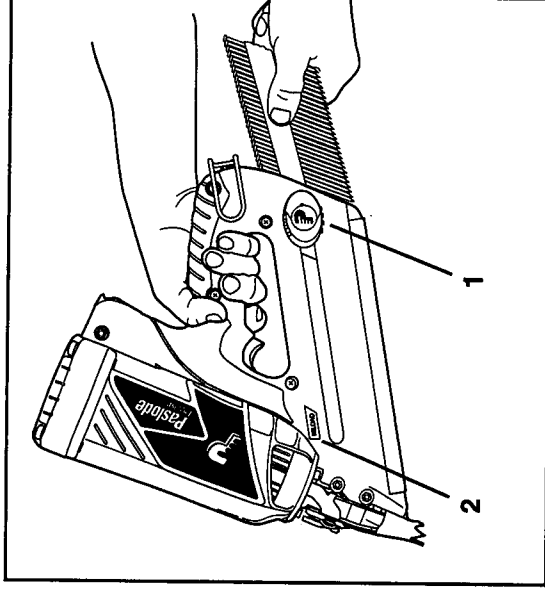
C. Release the adaptor so it is centered on the fuel cartridge.



D. Close the fuel door by swinging it up and over the fuel cartridge, and pushing down until the fuel door snaps into position.

Impulse Tool System Operation

4. Fastener Loading, Reloading and Removal



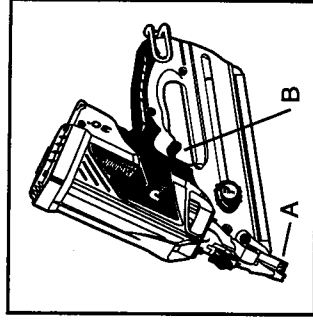
To load Fasteners:

1. Pull back the follower (1) until it reaches the locked position at the end of the magazine.
 2. Insert Paslode fasteners selected from technical specification sheet into the slot at the rear of the magazine. The fasteners will slide freely into the tool.
 3. Release the follower lock by depressing centre button on the follower and gently allow the follower to push the fastener strip forward to the correct firing position. Do not allow the follower to spring forward against the fastener strip otherwise collation may be damaged.
 4. Reload tool when centre button has reached "reload" arrow (2) or lock-out mechanism is activated.
 5. To unload fasteners again pull back follower to the locked position and simply slide out fasteners.
- Note: 1) Do not depress trigger when loading or unloading fasteners.
2) The lockout mechanism is activated when approx. 5 nails remain in magazine.

To remove these refer to point 5 above.

With fasteners, Battery and Fuel Cells loaded the Tool is now ready for use.

5. Trigger System



The Impulse nailer is equipped with a full sequential actuation (trigger) system for safety. For each operation the work contacting element (A) and trigger (B) must be actuated. For operation press work contacting element (A) on workpiece and squeeze trigger (B) for release of nail. Thereafter any further driving operations can only be actuated if the trigger (B) and work contacting element (A) have been returned to the starting position.

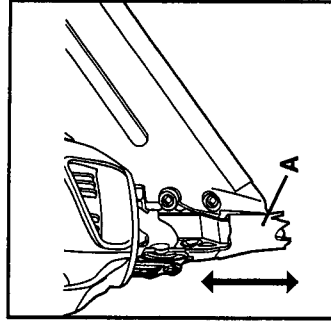
6. Cycle Rate

Intermittent Operation - 2 to 3 nails per second

Continuous Operation - 1000 nails per hour

NOTE: Exceeding these rates could cause tool to overheat, resulting in loss of performance or damage to tool components. By using the Impulse FrameMaster Nailer at its recommended cycle rate, you will be able to drive several thousand nails in a typical workday.

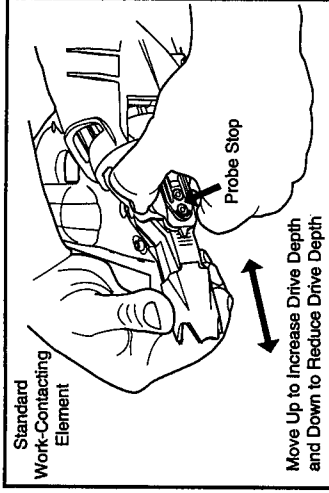
7. Tool Operation



1. Taking a firm grip of the tool handle fully depress the work contact element (A) against the work surface. This will close the combustion chamber, inject fuel and the fan will mix air and fuel.
2. Squeeze the trigger (B). The injected fuel in the combustion chamber is ignited and the combustion drives the piston assembly which in turn drives the fastener.
3. Release trigger and lift tool. Combustion chamber opens, fan cools tool internals. N.B. Fan will run for approximately 10 seconds after nailing is completed.
4. Tool is ready for the next cycle. NOTE: the tool is equipped with a lock-out mechanism operating when only 4-5 nails are left in magazine.

Impulse Tool System Operation

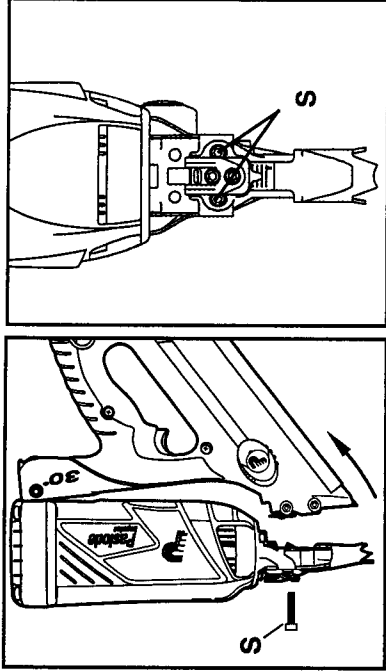
8. Depth of Drive Adjustment



The driven depth of a fastener may be adjusted by lengthening or shortening the overall length of the work contact element. To adjust work contact element:

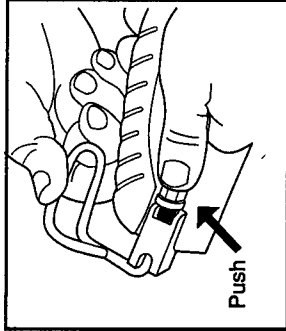
1. Remove fuel and battery cells.
2. Pulling the probe stop outward away from the tool will allow the work contacting element to be moved up or down. If the tool is over-driving (the nail head is driven below the surface of the wood), the work contacting element should be moved down slightly. If the nails stand up (the head is above the wood surface), the work contacting element should be moved up slightly. The indicator marks are set at 3mm increments.

9. Clearing a Nail Jam



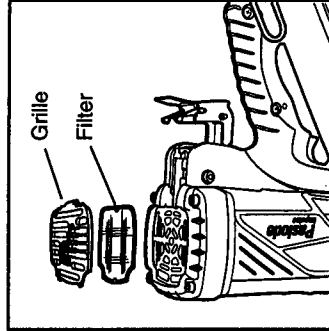
- Should a fastener jam in the nose of the tool proceed as follows:
1. Remove fuel and battery cells.
 2. Pull follower back to locked position and remove fasteners.
 3. Undo and remove the two magazine mounting screws (S).
 4. Ease the magazine away and remove jammed fastener.
 5. Re-align magazine and refit mounting screws (S).
 6. Reload fuel and battery cells.
 7. Reload fasteners and release follower.

10. Adjusting the Utility Hook



The adjustable utility hook can be used as a belt or rafter hook. To adjust the utility hook, push the black button in the direction of the arrow and rotate the hook to the desired position.

11. Cleaning the Air Filter



Open the grille by pressing slightly above the adapter, and pivoting the cover open. The air filter simply lifts out. Tap the filter GENTLY to remove any dust. Check and clean the air filter every two days. Soap and water restores the air filter to "like new" condition.

12. Cleaning your Tool

Periodic cleaning and oiling are necessary to keep the Paslode Impulse FrameMaster Nailer operating properly. See the Cleaning Procedure document that was included with your tool for complete instructions.