

CAPTIVE BOLT GUNS & ELECTRICAL STUNNERS

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Overview

There are several manufacturers of captive bolt tools – this presentation is intended to provide guidance in regards to safety, cleaning, maintenance and testing procedures for all types of stunners. It is recommended that all users of captive bolt tools read and understand the specific manufacturers operator manual for their specific stunner equipment.

CAPTIVE BOLT GUN STYLES

▶ IN LINE

- PENETRATING BOLT
- NON PENETRATING (CONCUSSION)

▶ PISTOL STYLE

- PENETRATING BOLT
- NON PENETRATING (CONCUSSION)

▶ LONG HANDLE

- CONTACT FIRE
- PENETRATING BOLT

IN LINE

▶ PRODUCT CHARACTERISTICS

- AUTO BOLT RESET
- MANUAL BOLT RESET
- 2 PIECE CONSTRUCTION
- EXTERNAL SAFETY
- REGULAR LENGTH AND LONG BARREL

◦ PRIMARY USE

- SLAUGHTER FACILITIES – PRIMARY & SECONDARY
- SOME ON FARM



MADE IN THE USA



SAFE HANDLING – IN LINE

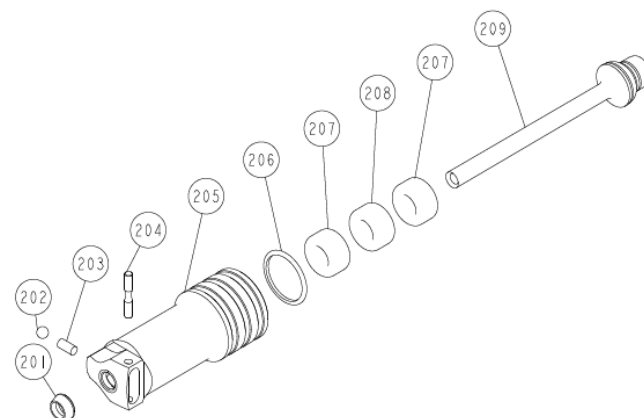
- ▶ READ THE OPERATORS MANUAL
- ▶ HAND OFF IN TWO PIECES
- ▶ STORE IT BROKEN DOWN
- ▶ USE MANUAL SAFETY IF AVAILABLE
- ▶ HANDS AWAY FROM END OF BARREL
- ▶ NEVER LEAVE IT LOADED
- ▶ USE PROPER POWER LOADS FOR APPLICATION



MAINTENANCE – IN LINE

If you shoot it clean it!

- ▶ Gun cleaning solvent (no WD 40)
- ▶ Oil usage
- ▶ Cleaning brushes
- ▶ Proper tools
- ▶ Barrel and breech
- ▶ Bolt retention system
- ▶ Bolt & buffers
- ▶ Breech cap
- ▶ Record keeping



PISTOL STYLE

- .25 and .22 Caliber
 - Automatic bolt retraction
- Primary use
- Slaughter facilities
 - On farm

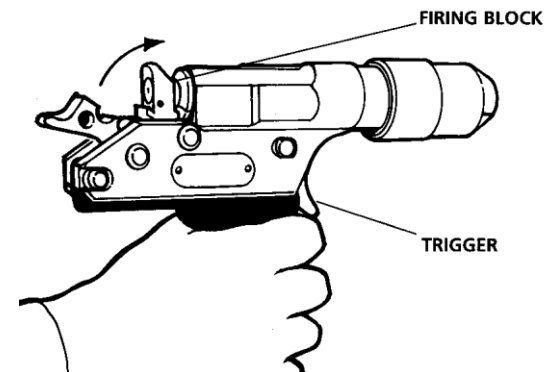


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SAFE HANDLING – PISTOL STYLE

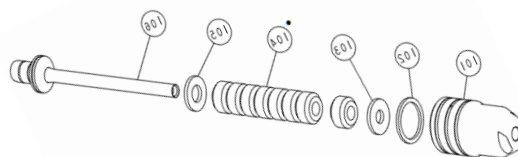
- ▶ Read the operators manual
- ▶ Hands away from barrel
- ▶ Never leave it loaded
- ▶ Remington rolling block safety
- ▶ One hand operation
- ▶ Use proper power loads for application



MAINTENANCE – PISTOL STYLE

If you shoot it clean it!

- ▶ Gun cleaning solvent (no WD40)
- ▶ Oil Usage
- ▶ Cleaning brushes
- ▶ Muzzle
- ▶ Barrel
 - Undercut cleaner
 - Breech cleaner
- ▶ Bolt & recuperator sleeves
- ▶ Record Keeping



LONG HANDLE

Contact Fire Stunners

- .25 Caliber
- Automatic Bolt Retraction
- Penetrating Bolt Only
- Contact Fire
- Two Piece Construction

▶ Primary Uses

- Large Plant
- Small Plant





SAFE HANDLING – LONG HANDLE

- ▶ Read the operators manual
- ▶ Hands away from barrel
- ▶ Never leave it loaded
- ▶ Rotate to fire only when ready to use
- ▶ Store broken down
- ▶ Uses proper power loads for application



MAINTENANCE – LONG HANDLE

If you shoot it clean it!

- ▶ Gun cleaning solvent (no WD40)
- ▶ Cleaning brushes
- ▶ Muzzle
- ▶ Barrel
 - Undercut cleaner
 - Breech cleaner
- ▶ Bolt & recuperator sleeves/buffers
- ▶ Record Keeping

POWER LOADS

- ▶ Use Proper power loads for application
- ▶ Storage
 - Long Term
 - Clean
 - Dry
 - Climate Controlled
 - First in First out
 - Lot number recorded
 - Don't carry in pockets
 - Daily use
 - Keep dry
 - Small quantities
 - Container



MAINTENANCE AREA

ALL CAPTIVE BOLT TOOLS

▶ Tools

- Wrench's
- Hammer
- Punches (properly sized)
- Pick
- Specific stunner tools (undercut & breech cleaner)



▶ Spare parts inventory

▶ Bench Vise

▶ Cleaning supplies

- Stunner cleaning solvent
- Shop towels
- Green scratch pads

STUNNER PERFORMANCE TESTER

ALL CAPTIVE BOLT TOOLS

► Suggested information

- Date & Time of test
- Tool number
- Serial #
- Power load used
- Service Technician ID
- Bolt Speed
- Download to any spreadsheet

EXAMPLE: Exportable data log for stun test tracking

Stun Test Data Records					
Date/Time	Stunner #	Serial #	Power Load Code	Operator ID	SPEED
5/4/2016 8:19	16	110016	7	1234	191
5/4/2016 8:24	16	110016	7	1234	179
5/4/2016 8:38	16	110016	9	1234	196
5/4/2016 9:04	17	110017	7	1235	184



OPERATOR SAFETY EQUIPMENT

- Knocker Vest
 - Chest Protection
 - Groin Protection

- Ear Protection



- Eye Protection



ELECTRIC HOG STUNNERS



ELECTRIC STUNNING Control Box

- ▶ Installed in clean & dry environment
- ▶ Easily accessible
 - Maintenance
 - Setting changes
- ▶ Installed on dedicated electrical circuit
- ▶ Back up system



CHECK LIST

- ▶ Verification of system performance
 - Verify voltage
 - Verify amperage
 - Stunner settings confirmed
 - Amperage – voltage – frequencies – stun time
 - Verify infeed line voltage to Control Box
 - Idle
 - Operating
- ▶ Inspect all connections
 - Is there water in the outlet or plug?
 - Loose or frayed wires?

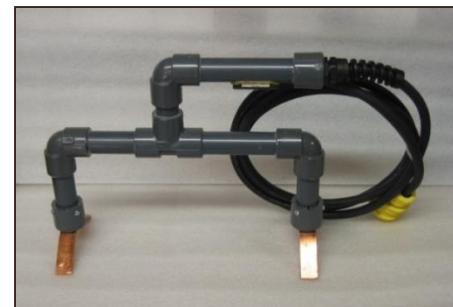
SPARE PARTS

- ▶ Maintain a critical parts inventory
 - Control Cards
 - Display Cards
 - Transformers
 - Fuses

- ▶ Regular PM schedule
 - Replace Contactors – at least once per year
 - Replace male/female plugs – Weekly? Monthly?
 - Wiring from panel to restrainer/stunning area

STUNNER WANDS

- ▶ Use properly designed wand
 - Hog restraint required?
 - Wand extensions needed?
- ▶ Clean and maintain daily
 - Clean wand tips – volume dictates how often
 - Check wiring
 - Verify switch operation – replace if necessary
- ▶ Storage
 - Warm – dry environment
 - Drying cabinet is ideal





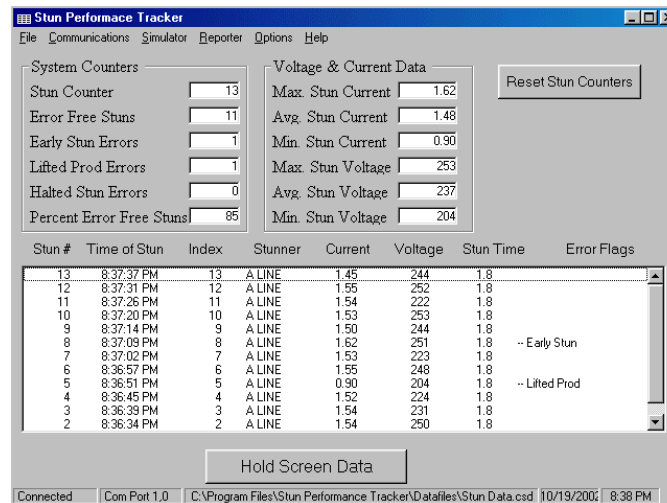
OPERATOR SAFETY

- ▶ Personal Protection
 - Gloves
 - Boots
 - Safety chaps or Apron

- ▶ Stunning area
 - Cover all metal
 - Animal restraint
 - Rubber mat on floor
 - Emergency shut off?

DOCUMENTATION

- ▶ Create daily maintenance log sheet
 - Include control unit and wands
- ▶ Make sure Stun Tracker software is operational (if available)
 - Print daily stunner log for file



QUESTIONS?



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Thank you!

