

83 Vermont Ave., Unit 6, Warwick, RI 02888 Tel: (401) 732-6333 Fax: (401) 732-6336 cutlass-studwelding.com

## Stud Welding...

- Fasteners
- Equipment
- Service

# **BANTAM CD WELD GUN MANUAL - PINTO**

MODEL: BANTAM C8

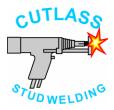
PART NO. : 602-325P

**SERIAL NO.:** 



PLEASE READ THIS OPERATION AND MAINTENANCE MANUAL CAREFULLY BEFORE USING YOUR NEW CUTLASS STUD WELDER.

COPYRIGHT CFI 2009 email: sales@cutlass-studwelding.com PAGE - 1 -



83 Vermont Ave., Unit 6, Warwick, RI 02888 Tel: (401) 732-6333 Fax: (401) 732-6336 cutlass-studwelding.com

#### Stud Welding...

- Fasteners
- Equipment
- Service

# **BANTAM CD WELD GUN MANUAL - PINTO**

# **WARRANTY**

The electrical and mechanical components of the Cutlass Stud Welders are thoroughly performance inspected prior to assembly in the Welder. The assembled Welder is completely performance checked. The Welder is delivered to you in perfect electro-mechanical condition. All parts used in the assembly of the Welder are fully warranted for a period of three (3) months from the date of delivery.

Under this warranty, the manufacturer reserves the right to repair or replace, at its option, defective parts which fail during the warranty period. Notice of any claim for warranty repair or replacement must be furnished to the manufacturer, by the purchaser, within five (5) days after the defect is first discovered. The manufacturer does not assume any liability for paying shipping costs, or for any labor or material furnished where such costs are not expressly authorized in writing.

We do not warrant the Cutlass Stud Welders, parts or accessories against failures resulting from misuse, abuse, improper installation, normal wear and tear, maladjustment or use not in accordance with the operating instructions furnished by the manufacturer. Cutlass shall never be liable for any consequential damages.



83 Vermont Ave., Unit 6, Warwick, RI 02888 Tel: (401) 732-6333 Fax: (401) 732-6336 cutlass-studwelding.com

#### Stud Welding...

- Fasteners
- Equipment
- Service

# **BANTAM CD WELD GUN MANUAL - PINTO**

# SUGGESTED SAFETY PRECAUTIONS

In any welding operation, it is the responsibility of the welder to observe certain safety rules to insure his personal safety and to protect those working near him.

Reference is directed without endorsement or recommendation, to ANSI Z49.1, Safety in Welding and Cutting, and to AWG Publication A6, 1-66 Recommended Safe Practices for Gas-Shielded Arc Welding.

- 1. Always treat electricity with respect. Under open circuit conditions, the welding machine output may be dangerous.
- 2. Do not work on live circuits and conductors. Disconnect the main power line before checking the machine or performing any maintenance operations.
- 3. Ensure the welding machine cabinet is properly grounded to a good electrical ground.
- 4. Do not stand in water or on damp floors while welding or weld in the rain. Avoid wearing wet or sweaty clothes when welding.
- Do not operate with worn or poorly connected cables, and do not operate weld gun with loose cable
  connections. Inspect all cables frequently for insulation failures, exposed wires, loose connections and repair
  as needed.
- 6. Do not overload weld cables or continue to operate with hot cables.
- Do not weld near flammable materials or liquids, in or near atmospheres, or on ducts carrying explosive gases.
- 8. Do not weld on containers which have held combustible or flammable materials, or on materials which give off flammable or toxic vapors when heated, without proper cleaning, purging, or inerting.
- 9. Ensure adequate ventilation is provided when welding in confined spaces.
- 10. Never look at the electrical arc without wearing eye shields.
- 11. Always use proper protective clothing, gloves etc. Never weld close to a bystander who is unaware of the possible dangers of ultraviolet light and weld splatter on their eyes.
- 12. Installation, servicing and trouble shooting should only be done by qualified personnel, familiar with this type of equipment.

COPYRIGHT CFI 2009 email: sales@cutlass-studwelding.com PAGE - 3 -



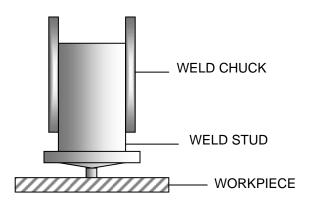
83 Vermont Ave., Unit 6, Warwick, RI 02888 Tel: (401) 732-6333 Fax: (401) 732-6336 cutlass-studwelding.com

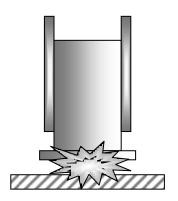
#### Stud Welding...

- Fasteners
- Equipment
- Service

# **BANTAM CD WELD GUN MANUAL - PINTO**

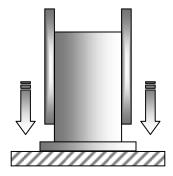
# THE CAPACITOR DISCHARGE STUD WELDING PROCESS HOW THE STUD WELD IS MADE:



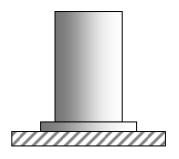


1. The stud is located on the spot to which it is to be welded.

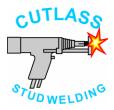
2. Stored energy is discharged through the precisely engineered weld tip at the base of the fastener.



 The stud is plunged into the molten weld pool, and fusion is achieved across the complete section of the weld.



4. The weld gun is withdrawn leaving the fastener permanently welded to the workpiece.



83 Vermont Ave., Unit 6, Warwick, RI 02888 Tel: (401) 732-6333 Fax: (401) 732-6336 cutlass-studwelding.com

#### Stud Welding...

- Fasteners
- Equipment
- Service

# **BANTAM CD WELD GUN MANUAL - PINTO**

## **CAUSES OF POOR OR ERRATIC WELDS**

- 1. Loose weld chuck does not grip stud tightly.
- 2. Faulty or loose ground connections.
- 3. Dirty base material (oil, grease, rust etc).
- 4. Voltage too high or too low.
- 5. Broken or loose cables.
- 6. Gun binding dirt in weld gun preventing free movement.
- 7. Leg and/or footpiece incorrectly set.
- 8. Use of center punch.
- 9. Weld cables coiled.

NOTE: The weld cables and ground cables should be laid out in a straight line or large loops. Poor weld quality may result if welding cables are closely coiled.

## **WELDER MAINTENANCE**

Your Cutlass welder is designed for long service with minimum care. Ordinary common sense maintenance will keep it operating efficiently. Following are some tips on preventative maintenance:

- 1. Treat the welding and control cables with respect. Avoid sharp bends and kinks which may break the cables. Do not use the cables as a "tow-line" to move controller. Avoid damaging or straining the cables where they enter the gun or connectors.
- 2. Ensure unit vents are not obstructed, and that the unit is not covered while in use. Avoid overheating.
- 3. Keep the welding gun free of dust and dirt. Periodically clean weld splatter from front of gun.
- 4. The welder should not be placed in close proximity to any MIG or TIG welders, nor should the Clipper share a common power supply with MIG or TIG equipment. Similarly the main ground connection from the Clipper to the workpiece should not be linked in any way to MIG or TIG grounds.

FAILURE TO COMPLY COULD INVALIDATE YOUR WARRANTY

COPYRIGHT CFI 2009 email: sales@cutlass-studwelding.com PAGE - 5 -



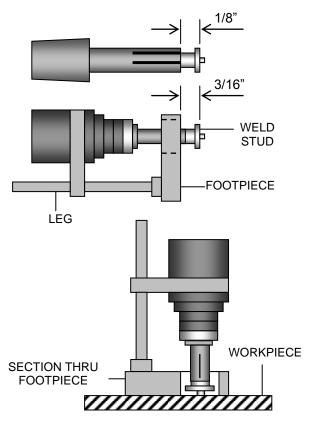
83 Vermont Ave., Unit 6, Warwick, RI 02888 Tel: (401) 732-6333 Fax: (401) 732-6336 cutlass-studwelding.com

## Stud Welding...

- Fasteners
- Equipment
- Service

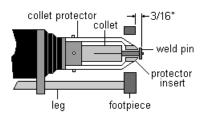
# **BANTAM CD WELD GUN MANUAL - PINTO**

## WELD GUN SETUP - standard weld studs



- The weld chuck should be adjusted as shown. For longer studs, as much of the stud should be held as possible. This may require complete removal of the adjusting screw.
- 2. Seat weld chuck firmly in the front of weld gun and attach leg and footpiece assembly. Set leg depth so approximately 3/16" of stud/chuck protrudes beyond the footpiece.
- Place the weld gun perpendicular to the workpiece as shown. Apply pressure to the gun so the footpiece lies firmly on the workpiece.
- Hold gun steady and pull trigger when stud is in required position. After weld cycle withdraw gun from stud. Pull gun straight back so weld chuck is not damaged.
- 5. Inspect weld and adjust setting as required.

## **WELD GUN SETUP - insulation pins**



For standard weld pins up to 6" long

Assemble all accessories to gun as shown. Ensure front end of gun is centered through hole in footpiece and there is no binding of parts. Set protrusion of stud to approx. 3/16" so spring pressure will force stud into molten weld pool.

COPYRIGHT CFI 2009 email: sales@cutlass-studwelding.com PAGE - 6 -

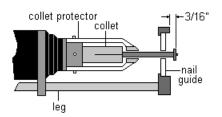


83 Vermont Ave., Unit 6, Warwick, RI 02888 Tel: (401) 732-6333 Fax: (401) 732-6336 cutlass-studwelding.com

## Stud Welding...

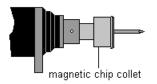
- Fasteners
- Equipment
- Service

# **BANTAM CD WELD GUN MANUAL - PINTO**



For all standard insulation pins over 6.1/2" long

Set up is as above except nail guide should be fitted to footpiece. Nail guide prevents long pins from bending or skidding during the weld. Again ensure pin is centered through nail guide and footpiece to prevent binding.



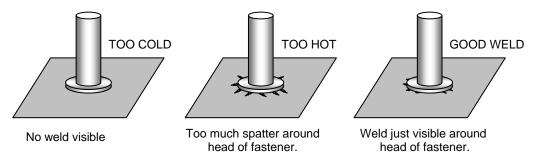
For cupped head and mini-cupped head insulation pins

Remove leg(s), footpiece, collet protector and collet from gun and store. Fit magnetic CHIP collet into spindle and tighten the two 10-32 holding screws in the gun spindle. Place cupped head pin onto magnetic collet ensuring pin is centered and well seated.

Set Pinto controller on power setting 5 or 6, push pin through insulation until contact is made with base material. Apply firm even pressure to gun (compress spring approx. 3/16"-1/4"). Hold gun steady and pull trigger. The spring in gun will force pin forward as the weld takes place.

#### **TEST WELDING**

Before making your first weld, check the ground clamp. It is essential that no power be lost through a poor connection. The surface under the ground should be free from oil, scale, grease and rust. The test should be on a piece of scrap material similar to the material to be used during actual production.



**NOTE:** IF WELD APPEARS COLD, DO NOT PLACE GUN ON WELDED STUD AND TRIGGER AGAIN.

DAMAGE TO WELD CHUCK OR CONTROLLER WILL OCCUR.

COPYRIGHT CFI 2009 email: sales@cutlass-studwelding.com PAGE - 7 -



83 Vermont Ave., Unit 6, Warwick, RI 02888 Tel: (401) 732-6333 Fax: (401) 732-6336 cutlass-studwelding.com

#### Stud Welding...

- Fasteners
- Equipment
- Service

# **BANTAM CD WELD GUN MANUAL - PINTO**

## CAUSES OF POOR OR ERRATIC WELDS

- 10. Loose weld chuck does not grip stud tightly.
- 11. Faulty or loose ground connections.
- 12. Dirty base material (oil, grease, rust etc).
- 13. Voltage too high or too low.
- 14. Broken or loose cables.
- 15. Gun binding dirt in weld gun preventing free movement.
- 16. Leg and/or footpiece incorrectly set.
- 17. Use of center punch.
- 18. Weld cables coiled.

NOTE: The weld cables and ground cables should be laid out in a straight line or large loops. Poor weld quality may result if welding cables are closely coiled.

## WELDER MAINTENANCE

Your Cutlass welder is designed for long service with minimum care. Ordinary common sense maintenance will keep it operating efficiently. Following are some tips on preventative maintenance:

- 5. Treat the welding and control cables with respect. Avoid sharp bends and kinks which may break the cables. Do not use the cables as a "tow-line" to move controller. Avoid damaging or straining the cables where they enter the gun or connectors.
- Ensure unit vents are not obstructed, and that the unit is not covered while in use. Avoid overheating.
- 7. Keep the welding gun free of dust and dirt. Periodically clean weld splatter from front of gun.
- 8. The welder should not be placed in close proximity to any MIG or TIG welders, nor should the CD power source share a common power supply with MIG or TIG equipment. Similarly the main ground connection from the CD welder to the workpiece should not be linked in any way to MIG or TIG grounds.

FAILURE TO COMPLY COULD INVALIDATE YOUR WARRANTY

COPYRIGHT CFI 2009 email: sales@cutlass-studwelding.com PAGE - 8 -



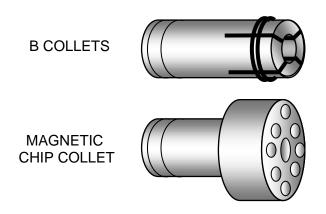
83 Vermont Ave., Unit 6, Warwick, RI 02888 Tel: (401) 732-6333 Fax: (401) 732-6336 cutlass-studwelding.com

## Stud Welding...

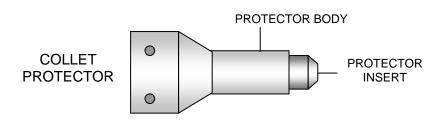
- Fasteners
- Equipment
- Service

# **BANTAM CD WELD GUN MANUAL - PINTO**

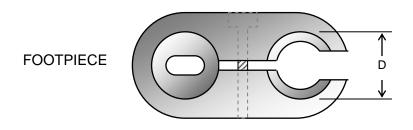
## STANDARD ACCESSORIES



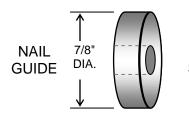
COLLET SIZE	PART NUMBER	
14GA	669-232	
12GA, #4	669-219	
10GA, #6	669-220	
3/16, #10	669-216	
CUPPED HEAD	O 669-215A	

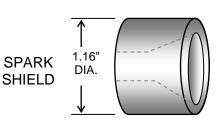


DESCRIPTION	PART NUMBER	
BODY ONLY	028-836	
12GA INSERT	028-834	
10GA INSERT	028-835	



DESCRIPTION	PART NUMBER	
FOOTPIECE S/L SMALL D=7/8"	023-252	
FOOTPIECE S/L MEDIUM D=1.16"	023-252M	

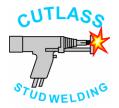




DESCRIPTION	PART NUMBER	
NAIL GUIDE	601-350	
SPARK SHIELD	999-013	

**COPYRIGHT CFI 2009** 

email: sales@cutlass-studwelding.com



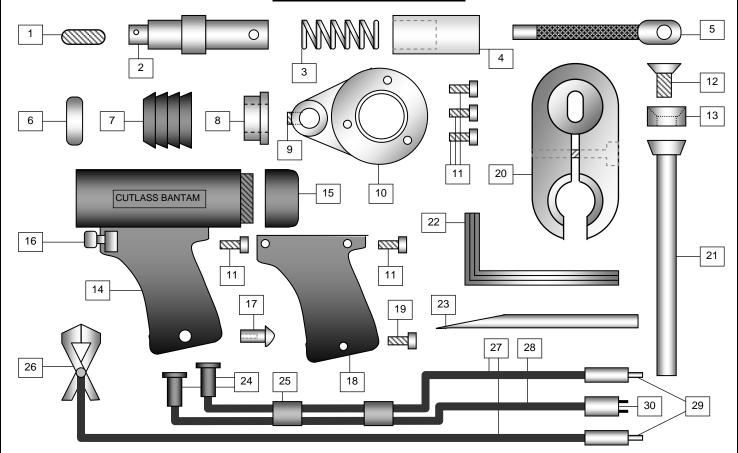
83 Vermont Ave., Unit 6, Warwick, RI 02888 Tel: (401) 732-6333 Fax: (401) 732-6336 cutlass-studwelding.com

## Stud Welding...

- Fasteners
  - Equipment
- Service

# **BANTAM CD WELD GUN MANUAL - PINTO**

## **BANTAM C8 GUN PARTS**



ITEM	DESCRIPTION	PART NO.
1	SPINDLE SCREW	016-405P
2	SPINDLE - PINTO	602-1905
3	HEAVY SPRING (SILVER)	001-800
4	REAR BEARING	022-357
5	INTERNAL WELD CABLE	602-056
6	BELLOWS RETAINER	001-816
7	BELLOWS	003-499
8	FACEPLATE BUSH S/L	602-054
9	FACEPLATE SCREW	010-410
10	FACEPLATE S/L	602-053
11	10-24 X 1/2 SCREW	009-914
12	LEG SCREW	017-775
13	LEG WASHER	017-332
14	GUN BODY	016-383
15	BACK CAP	015-803
16	TRIGGER SWITCH	650-640

ITEM	DESCRIPTION	PART NO.
17	LOWER HANDLE NUT	002-906
18	GUN HANDLE	016-384
19	10-24 X 3/4 SCREW	000-916
20	FOOTPIECE S/L	023-252
21	7" LEG ASSEMBLY	000-355
22	5/32 HEX KEY	000-373
23	CHUCK DRIFT	000-374
24	CABLE SLEEVE	001-181
25	1" RUBBER SLEEVE	600-627
26	GROUND CLAMP	650-625S
27	#4 WELD CABLE	600-768
28	CONTROL CABLE	600-717
29	WELD PLUG C/M	000-573
30	CONTROL PLUG C/M	000-594P
3A	EX. HEAVY SPRING	001-801

COPYRIGHT CFI 2009 email: sales@cutlass-studwelding.com PAGE - 10 -