Professional bore welders, boring bars and accessories

Value - Experience - Service - Support
www.borerepair.com - 603-835-2409 int'l - 800-650-1005 USA/CAN
Introducing our elegantly simple, ultra reliable bore welders and boring bars for top quality bore repairs on all types of machinery.

- The BOA-408i Bore welder

Bore welder and boring bar are integrated with our center mount system. This gives unparalleled ease of setup and use on all makes, models and types of equipment.

- The BOA-M1 Bore welder

- The EV Boring bar

The professional's choice...worldwide.

Value - Experience - Service - Support

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Bore Repair Systems, Inc. equipment is designed by users, for users. This is why our systems are the only portable bore repair systems that are built with the TOP 10 most valuable features in the industry.

TOP 10 LIST OF MOST VALUABLE FEATURES FOR EASY BORE REPAIR

#1 - Pass-thru drive design on both bore welder and boring bar - you will not have to re-mount the boring bar or welder drive when working on widely spaced bores on heavy equipment

#2 - Telescoping and reversible welding gun - no clumsy welding gun extensions are required when welding multiple inline bores

#3 - Center-mount bore welder to boring bar interface - simply attach your bore welder directly on centerline of boring bar with no centering or realignment needed

#4 - Mechanical axial feed can never get out of calibration - no chance of weld penetration problems with a BOA

#5 - Unique standard adjustable welding gun has the largest diameter range range in the industry - no need for multiple welding guns

#6 - Welding gun nozzles are electrically isolated and will not "arc out" when making contact with bore wall

#7 - Standard welding guns utilize inexpensive and easy to change thread-on welding tips and nozzles

#8 - Dual tool ports on boring bars - enables easy, accurate bore diameter measurements and tool adjustments, without having to remove bar or cutter

#9 - Mechanical feed system on all boring bar drives - fixed or variable feed rates run in direct conjunction with bar rotation providing smoothest possible surface finishes

#10 - Infinitely adjustable rotation speeds on boring bar drives enable use of wide variety of cutters including carbide, high speed steel and snap-ring cutters

CUSTOMER COMMENTS:

> Rick from Smitty’s writes:
"We absolutely love our Bore Repair System. We’ve been doing lots of ID’s and OD’s and it just works great!"

>MJ McCarroll writes:
"I would not trade my BOA bore welder for anything. It is that good."

>Turner Diesel writes:
"I am amazed at how great our BOA bore welder works. It’s been a real asset to our business."

>Gary from Clark’s Repair writes:
"Man I love my Bore Repair System, it just works great."

> Dan A. writes:
(After 5 years of ownership) "I use my BOA bore welder all the time and am considering adding a second machine soon... It has been an excellent addition to my business and always works for me and does a great job."

> Joe L. writes:
"I purchased one of your BRSS welding/boring systems from you and just wanted to let you know that it is everything you said it was, I am very pleased with it, and thank you."

>Peter M. writes:
"The BRSS boring and welding system I purchased from you works great. You have a very good product."

All of us at Bore Repair Systems, Inc. look forward to working with you and helping you with all your bore repair needs.

The professional’s choice... worldwide.

Value  —  Experience  —  Service  —  Support

www.borerepair.com  -  603-835-2409 Intl  -  800-650-1005 USA/CAN
#1. Center boring bar using centering kit & attach supports

#2. Insert boring bar drive and motor

#3. Machine the bore to clean and prepare for welding

#4. Insert BOA bore welder into support using interface kit

#5. Attach BOA bore welder to your MIG feeder and apply weld

#6. Slide boring bar back through supports and machine bore to size

Time is money and our integrated BRS systems saves you both. Cut welding time by 80% and machining time by 50% by using reliable, affordable Bore Repair Systems’ integrated bore welder and boring bar systems.

The professional’s choice...worldwide.

Value - Experience - Service - Support

www.borerepair.com - 603-835-2409 Intl - 800-650-1005 USA/CAN
Standard Boring Bar Setup

- **Drive Motor**: 115 or 240 volt
- **Dual-port chrome plated Boring Bar**
- **Drive Gearbox**
- **(2) Universal Support #K94.30 (standard)**
- **(2) Adjustable Sub-Plate #K94.21 (optional)**
- **Spider Support #K94.51 (standard)**
**Inverted Boring Bar Setup**

1. **Drive Motor**
   - 115 or 240 volt

2. **Universal Support**
   - #K94.30 (inverted)
   - "Inverting support moves it closer to bore to be machined providing more rigid support and better machining"

3. **Adjustable Sub-Plate**
   - #K94.21 (optional)

4. **Clamp Bar**
   - Clamping Screw with Captive Nut; reversible for best access to socket head

5. **Dual-port chrome plated Boring Bar**

6. **Drive Gearbox**

7. **Side Adjustment Screw**
   - (3)

8. **Leveling Screw**
   - (4)
Bore Welder Center Support

Universal Support

Center Support Extender (long shown); Use short (not shown) to reach remote bores

Bore being welded

Boring Bar bearings remain in during welding

Telescoping Tube - retract to weld Bore #2

Quick Connect Welding Gun

Plug-in Center Support w/ calibrated dial fine tuning

BOA-408i BoreWelder

Typical Repair Sequence
1. Align Boring Bar using cones for centering
2. Attach Bearing Supports
3. "Skin cut" bores to clean and make round
4. Remove Boring Bar leaving Supports in-place
5. Plug-in BoreWelder to Universal Support
6. Build up bores using BoreWelder
7. Remove BoreWelder
8. Reinstall Boring Bar
9. Machine bores to desired size

Universal Support

Tool-less, knurled Clamp Nut for telescoping Welding Gun

Spider Support
BarDrill Setup

Drive Motor 115 or 240 volt

Pilot Hole Drill w/#3 Morse Taper

Drive Gearbox

Manual Feed Wheel

Automatic Feed Rate Control

Dual-port chrome plated Boring Bar w/ number 3 Morse Taper for inserting Drills or Drill Chucks

Dual Support #K94.32; Typical uses: BarDrill as shown - Blind holes - Extra bar support

Adjustable Sub-Plate #K94.21
Universal Support Kits K94.30 & K94.32
Mount Configurations

**K94.30 Standard Support Setup**
- Outer Mounting Surface
- Universal Offset Body
- Captive Clamp Nut
- Hold-Down Stud
- (4) Leveling Screw
- Reversible Clamp Bolt

**K94.30 Inverted Support Setup**
- Hold Down Stud
- Clamping Surface
- Inner Mounting Surface
- Universal Offset Body

**K94.32 Dual Support Setup**
- (3) Captive Joining Nut
- (3) Joining Bolt
- Spherical Bearing

**Typical Uses/Features**

- **Standard Single Support**
  - Most outboard locations where bore is near mounting surface
  - Mount drive on either Outer or Inner Mounting Surface
  - Supports Spherical Bearing

- **Inverted Single Support**
  - Use when bore is inboard from mounting surface
  - Mount drive on either Outer or Inner Mounting Surface
  - Supports Spherical Bearing

- **Double Support**
  - Use when extra bar stiffness is needed, such as blind holes or bores located far from support
  - Can be used as a drill press with special Morse Taper Bar
  - Mount drive or bearing at either clamping location

- **Reversible Clamp and Joining Bolts**
  - Allows access to bolt head from either side
  - Clamp Nut captive on either side so second wrench not needed

Anchor Point (normally weld or use #K94.21 adjustable support)
The Bore Repair Systems, Inc. BOA-C45 portable line boring systems are simple to use in the field and shop, rugged and extremely accurate. From the C45 precision hardened and chromed boring bars with staggered dual tool ports and morse taper end to the unique external ratcheting, variable rate cam feed, tuneable ID bar support bearings and standard cone tightening system, the BOA-C45 line boring system will provide you with the features needed to quickly and accurately repair worn bores from under 1” to over 10” diameter on all types of equipment in a variety of industries. And while the BOA-C45 series line boring system features a powerful 3.3hp reversible, variable speed motor, the standard bar drive is a compact 15” wide* including the feed screw. The C45 system also features the popular pass-through drive design allowing placement between bores, in tight-access spots, or to be used on tricky “blind bore” jobs or jobs where there are multiple bores in a line. The unique, dis-engagable feed arm allows simple tool repositioning without removing the tool from the bar…a feature not possible with old-fashioned traditional end-drive boring systems. Add one of Bore Repair’s automatic bore welding systems for maximum efficiency and productivity on all your bore repair jobs.

BOA-C45 boring system includes the following standard equipment:

- 3.3Hp reversible, adjustable drive motor (120v or 240v)
- 1.75” x 72”long chrome, dual-tool ported boring bar
- (2) one-arm adjustable boring bar / boring bar gearbox / bore welder drive supports including (2) bearing inserts
- Sharpened cobalt/HSS cutting bit (1/2”) for ID and faces
- Quick-change feed screw
- Mounting plate kit for use with one-arm supports
- Star-drive motor to gearbox interface
- Pass-through, reversible, variable axial feed boring bar drive gearbox
- Centering cone package with tightener kit
- Extended range boring head
- Diamond plate carry/storage case
- Tool kit including allen wrench set and nut driver
- Protective sleeve with thread-off ends for boring bar
- Metric/Imperial scale
- Setup manual with step-by-step photos
- One-year warranty
- Upgrade from electric to hydraulic drive any time
- Free training

BOA-C45 Line Bore Kit
For machining bore diameters up to 14” (356mm)

BOA-C45 boring system optional accessories:

- BOA-406i and BOA-M1 integrated bore welding kit
- Large range bore head (for cutting to 356mm (14”) bores
- Small bore kit (for cutting down to 35mm (1.4”) bores
- Micro bore kit (for cutting down to 25mm (1”) bores
- Internal automatic snap-ring groove cutting system
- Automatic, low-profile face-machining kit
- Manual compact “plunge” face-machining kit
- Internal through-bar bore measuring gage kit
- Precision bar-mounted tool bit adjusting kit
- Bar coupler kit for joining two bars for long-span work
- Various length feed screws with quick change feature allowing un-interrupted long-span cutting and easy setup in tight spaces
- Compact and Vari-mount support options

See more at: www.borerepair.com
The Bore Repair Systems, Inc. model BB6 portable line boring system is simple to use, rugged and extremely accurate. From its precision hardened and chromed boring bars with dual tool ports to the adjustable, remote-mountable mechanical feed gearbox, tunable ID bar support bearings and standard cone tightening system, the BB6 line boring system will provide you with the tools needed to repair worn bores from under 1.4” to over 24” diameter on all types of equipment with ease and precision. And while the BB series line boring system features a powerful 3.3hp reversible, variable speed motor, the bar drive is a compact 12” wide. The BB6 system also features the popular pass-through drive design allowing placement between bores, or to be used on tricky “blind bore” jobs or on jobs where there are multiple bores in a line, the feed arm allows simple tool repositioning without removing the tool from the bar….a feature not possible with traditional end-drive boring systems. Add one of Bore Repair’s automatic bore welding systems for maximum efficiency and productivity on all your bore repair jobs.

**Model: BB6**

Bore machining package—for machining bores from 1.4” to 24” in diameter. (36mm to 610mm)
(Order #K09.15) Package (shown in photo above) includes:

- 3.3Hp reversible, adjustable drive motor (120v or 240v)
- Pass-through, remote mount adjustable feed gearbox
- (3) boring bar / boring bar drive supports
- Setup sleeve for support alignment
- Sharpened cobalt/HSS cutting bits (1/2” and 3/8”)
- (2) bar kit, 6’ x 2.25” and 1.25” diameter with reducers
- Pass-through, reversible boring bar drive gearbox
- Centering cone package with tightener clamp
- (6) Extended range boring heads
- Necessary wrenches
- Diamond plate carry/storage cases
- Adjustable feed travel stop arm

**TIP:** Don’t need to machine any bores smaller than 2.5”? Bore Repair Systems, Inc. also offers the BB6 Boring system is also available without the small (1.25”) bar package.

Popular accessories to further enhance your BB6 line boring system include: #K96.18 snap-ring machining kit, #9260 face machining head, #K94.21 adjustable base plate kit, #K92.10 ID bore measure kit and #K93.26 digital tool bit adjuster kit and bore welding package. Hydraulic drive option is also available.
The BOA-408i automatic bore welding system is designed for users who demand durability, ease of setup and precision without unnecessary complication.

Coupled with one of Bore Repair Systems’ boring bars and new Center Support System, it will provide you with a means of repairing worn bores on all types of equipment in the fastest, most efficient way possible. Awarded numerous design patents, owners of our BOA systems quickly realize they made the right decision when choosing Bore Repair Systems’ products. The BOA systems are the simplest to set up, the simplest to use and offer the highest levels of precision all at very reasonable prices.

The BOA-408i is conveniently offered in 5 packages, ranging from the basic BOA-408i S1 for internal bore buildup to the fully loaded BOA-408i S5 which features all the upgrades available including long stroke, auto-skip, face welding, outside diameter welding and even a BOA-M1 compact bore weld drive head and gun assembly.

The BOA-408i bore welder system is also offered in complete, turnkey kit form with integrated boring bar system. See our BRS2-BRS7 integrated bore welding and machining systems.

Already own a boring bar system but need to automate your bore welding process? The BOA-408i is for you too. Any BOA-408i system is available with boring bar interface kits to fit any brand boring bar system that you may now own.

Bore Repair Systems, Inc. offers many convenient purchase plans including rent-to-own and lease finance options. Contact us today at 603-835-2409 or visit our website at www.borerepair.com.
The BOA-M1 basic bore welding system is Bore Repair Systems’ most compact and affordable bore welder. The welder drive and spindle assembly will fit nearly anywhere at just under 280mm (11.0") long.

The BOA-M1 basic package is extremely versatile. With standard components, it can reach bores nearly 610mm (24") away from its’ mount location, or bores over 1.2m (48") apart from one another when mounted between bores.

The BOA-M1 design is elegantly simple and extremely durable, very easy to set up and operate. It utilizes the same gun and conduit system as the BOA-408i so parts are interchangeable.

While the BOA-M1 bore welding system is a popular choice with our existing BOA-408i and BOA-550HD customers who are interested in a second bore welder that can fit in tight, restricted access bore repair jobs, it is also very popular with our new customers who are just starting out who need a bore welder that will give top quality professional results at the lowest possible entry price.

The BOA-M1 comes complete with a hand feed wheel and rotation speed timer with chart. This ensures smooth, even weld bead application every time. The BOA-M1 can also be easily driven automatically with a basic hand drill or for maximum versatility you can add our automatic stepper drive kit.

Please call us today at 603-835-2409 or visit our website at www.borerepair.com Several purchase and leasing options are available.
The Bore Repair Systems, Inc. BRS2c, BRS3c and BRS4c integrated line boring bar and bore welding machines are our most popular selling packages. The bore welder and boring bar feature the popular, mount anywhere pass-through drive systems. On bores where there may be restricted access, or bores that are spaced far apart, the pass-through drive design gives you the flexibility to mount where it makes the most sense, such as between the bores. On jobs such as payloader lift arm bores, the BOA-408i can be center-mounted and can weld out either end of the machine with one simple operation, without ever losing system center...this is unique to the BOA-408i design. On blind bores, our systems do not require special cumbersome remote mounting kits or various length bars because with our pass-through design the excess bar simply comes out of the back end of the machine. The BRS packages share one mount for boring and welding which allows fast setup and rapid transitions from boring to the welding process.

**MODEL: BRS2c**

Bore welding & machining package— for 1.8” to 10.0” dia repairs  
**#K05.109902 Package (shown above) Includes:**

- Bore welding head, 110v or 220v drive with variable feed direction, rate and RPM—premium pass-through design
- Extendable, reversible welding shaft with 90” total extended reach from bore to bore (expandable)
- 10’ 150amp welding conduit with universal end (hi-amp upgrades are available)
- Aluminum diamond-plate custom storage cases
- Spare welding nozzle, tip and diffuser assortment
- Arc-resistant heatsink style adjustable welding head with quick-connect
- Welding gun extender assembly with quick-connect
- Setup manual with exploded views and graphics
- Remote weld trigger for partial bore welding or skipping over no-weld areas
- Fully 360 degree adjustable mounting system enabling control placement where it is most convenient
- Boring bar drive, 3.3HP 110v or 220v drive with variable feed direction and RPM—premium pass-through design
- 72” long x 1.75” dia. Bar with dual 1/2” tool ports—enabling easy bore measurements w/out tool removal
- Centering kit (solid steel cones) with unique one-person centering cone spanner tightening system (for 1.8”-10.0”)
- Two auxiliary spherical self-aligning bar support bearings and one primary bar/machine support (adjustable)
- Sharpened 1/2” square high-speed tool (carbide optional)
- Bore welder to boring bar interface package enables bore welder to mount directly to boring bar bearings or support
- Setup sleeve for easy machine support setup plus (3) machine and bar supports included
- Quick change feed screw system with over-travel safety
- Boring bar tool extender for sturdy tool holding when machining larger bores
- Corrosion-resistant materials used throughout both boring and welding system for years of shop and field reliability

**MODEL: BRS3c**

Bore welding & machining package—for 1.4” to 10.0” dia repairs  
**#K05.109903 Package includes all items above plus:**

- 72” long x 1.25” dia bar with dual 3/8” tool ports + tooling
- Centering cone & bushing kit for 1.75” to 1.25” conversion

**MODEL: BRS4c**

Bore welding & machining package—for 1.0” to 10.0” dia repairs  
**#K05.109904 Package includes all items above plus:**

- 48” long x .875” dia bar with 1/4” tool ports + tooling
- Centering cone & bushing kit for 1.75” to .875” conversion

ADD at any time: Large bore welding heads, extended range centering rings, high-amp consumables, outside diameter & face welding & machining.
The Bore Repair Systems, Inc. BRS6 bore repair packages are selected by customers who have large diameters to repair, generally from 2.5” up to as large as 24”. The bore welder and boring bar feature the popular, mount anywhere pass-through drive systems. On bores where there may be restricted access, or bores that are spaced far apart, the pass-through drive design gives you the flexibility to mount where it makes the most sense, such as between the bores. On jobs such as payloader lift arm bores, the BOA-408i can be center-mounted and can weld out either end of the machine with one simple operation, without ever losing system center...this is unique to the BOA-408i design. On blind bores, our systems do not require special cumbersome remote mounting kits or various length bars because with our pass-through design the excess bar simply comes out of the back end of the machine. The BRS packages share one mount for boring and welding which allows fast setup and rapid transitions from boring to the welding process.

MODEL: BRS6  Bore welding / machining package— for 1.5” to 24.0” dia repairs

#K05.110915 Package (shown above) Includes:

- Bore welding head, 110v or 220v drive with variable feed direction and RPM
- Extendable, reversible welding shaft with 90” total extended reach from bore to bore (expandable)
- 10’ 150amp welding conduit with universal end (hi-amp upgrades are available)
- Aluminum diamond-plate custom storage cases
- Spare nozzle, tip and diffuser assortment
- Arc-resistant heatsink style adjustable welding heads & extensions with quick-connect
- Tool kit for both bore welding system and boring bar
- Setup manuals & dvd
- Remote weld trigger for partial bore welding or skipping over no-weld areas
- Fully 360 degree adjustable mounting system enabling control placement where it is most convenient
- Boring bar drive, 110v or 220v drive with variable feed direction RPM and variable feed rate (hydraulic or air power options also available)
- 72” long x 2.25” dia. Bar with dual 1/2” tool ports—enabling easy bore measurements w/out tool removal
- Centering kit with unique aluminum split finned feature enabling installation and removal in tight spaces
- Two auxiliary spherical self-aligning bar support bearings each of which can also support the feed unit
- Sharpened 1/2” square high-speed tool (carbide optional)
- Bore welder to boring bar interface package enables bore welder to mount directly to boring bar bearings or support
- Modular axial feed box can be mounted independently of the rotational head if desired or required.
- 72” long x 1.25” dia bar with drive reducers & small cones
- Boring bar tool extender kit for sturdy tool holding when machining larger bores
- Corrosion-resistant materials used throughout both boring and welding system for years of shop and field reliability

TIP: As your system capabilities needs increase, add large bore welding heads, high-amp consumables, outside diameter & face welding & machining longer or shorter bars or the snap ring groove cutting option. Other configurations of the BB6 and bore welding system combination package are available. Contact Bore Repair Systems, Inc. or your local distributor for more details or a custom quote.
STANDARD GUN (for 308i) - A113
STANDARD GUN (for 408i & M1) - A313
SHORT GUN (for 408i & M1) - A328

Standard Guns Diameter range: 1.25 to 8" (32 to 203mm)
Short Gun Diameter Range: 1.25 to 4" (32 to 101mm)
Short Gun 3" (76mm) shorter than standard for use in tight locations.

FEATURES OF ALL OF OUR GUNS:
- Quick install on BOA-308i, 408i, 450HD, M1 & L34 Bore Welders
- High electrical & thermal conductivity to help maintain an efficient and safe operating temperature
- Lightweight aluminum construction
- Weld in any position
- Covered by several USA Patents
- Electrical isolation of nozzles and use of standard tips for all bores larger than 1.2" (30mm)

OD GUN (for 308i)
A114
OD GUN (for 408i & M1)
A317
Diameter range: 1 to 12" (25 to 305mm)
Custom sizes available

MICRO GUN (for 308i) - A138
MICRO GUN (for 408i & M1) - A336
Diameter range: .8 to 2" (20 to 51mm)

HI-AMP GUN (for 308i)
A135
HI-AMP GUN (for 408i, M1 & L34)
A344
Minimum Diameter - 4" (101mm)

HAND-HELD GUN
(for 408i & M1)
A333
Easily connects to Bore Welder conduit, eliminating the need to carry an extra gun and conduit.

LARGE DIAMETER GUN (for 308i)
A115
LARGE DIAMETER GUN (for 408i & M1)
A310
Diameter range: 8 to 15" (200 to 380mm)
Diameter range with extenders: to 48" (1220mm)

BORE REPAIR SYSTEMS, INC.
web: borerepair.com

(800)650-1005 & (603)835-2409
**FACE GUN - K13.10**

**FEATURES:**
- Lightweight
- Adjusts easily to the desired welding position
- Weld either inward or outward
- Weld faces up to 24" diameter
- Quick install on 308i, 408i & M1
- High electrical and thermal conductivity to maintain a low operating temperature
- Covered by USA Patent No. 6,486,438 et al

**GUN DIAMETER EXTENSIONS**
**K13.12**

**FEATURES:**
- Comes with 2 extensions
- Each extension adds 5" (127mm) to the maximum diameter capability of the gun
- Gun liner removal not required
- Use with Large Diameter Gun

**BEAM GUN - K13.11**

**FEATURES:**
- Aluminum tube construction makes the torch extremely rigid and durable yet lightweight
- Can weld both ID's and OD's (48" maximum)
- Quick install on 308i, 408i & M1
- High electrical and thermal conductivity to maintain a low operating temperature

**GUN REACH EXTENSIONS**
**A309 [6" (152mm)]**
**A335 [10" (254mm)]**

**FEATURES:**
- Liners contained in extensions
- Can be used with all guns on 408i and M1 machines
- Quick connection and angular orientation with captive nuts
- Constructed with light, highly conductive aluminum with brass fittings
BORE WELDER SUPPORT OPTIONS

FULLY ADJUSTABLE BASES
"T" BASE (for 408i) - K11.11
"A" BASE (for M1) - K31.21
Allows full adjustment to bore:
- Leveling
- Centering
Also repeatable angular positioning

UNIVERSAL HEX MOUNT
for BOA-M1 - K31.10
- Compact and easy to use
- Can be aligned directly from boring bars

QUICK CONNECT CENTER SUPPORT KIT
for BOA-408I - K11.21 | for BOA-M1 - K31.11
- Set-up quickly with no guesswork
- Centers directly from boring bar bearing mounts
- Adjustments made directly using off-set dial

BORE REPAIR SYSTEMS, INC.
web: borerepair.com
(800)650-1005 & (603)835-2409
BORE MEASURING KIT
K92.10

FEATURES:
- Kit Diameter Range - 1.7 to 14 inches (42 to 355mm)
- Additional spacers available for larger diameters
- Works in 3/8 and 1/2 inch, and 10, 12, 16mm tool holes
- Durable large diameter plungers
- Stainless steel construction
- No tools needed for most bores
- Comes in durable case with special nesting and adapters for two tooling sizes

Easy to Use:
1. Insert measuring tool through a tool hole in the boring bar
2. Extend the tool into the bore
3. Snap open the measuring tool
4. Retract the bar
5. Measure the tool length

TIGHT BORE MEASURING KIT
K92.20

FEATURES:
- Measure bore diameters equal to bar size, to bar size plus .5 inches (.12mm)
- Durable large diameter plungers
- No tools needed
- Kits for all bar and tool sizes available
- Patent Pending

CARBIDE TOOLING KIT

FEATURES:
- Special low-profile design works with Bore Repair K93 tool adjuster
- Available in 3/8" and 1/2" square
- A variety of carbide grades are available allowing various materials to be machined

3/8" Tool - K91.10 | 1/2" Tool - K91.11
(Kit includes 2 Bits, Holder and Tool)

PRE-SHARPENED HIGH-SPEED STEEL BITS

FEATURES:
- Wide cutting edge allows both ID and spot facing for easy face touch-up
- Design of the grind offers easy sharpening using a standard bench grinder
- Special grind for longer edge life and cleaner cut

3/8" Square Bit - #9088 | 1/2" Square Bit - #9087

MULTI-FUNCTION TOOL ADJUSTER

Available for the following Tooling Sizes:
1. 1/4" square > K93.10 (Body Only #A903)
2. 3/8" square > K93.11 (Body Only #A904)
3. 1/2" square > K93.12 (Body Only #A905)
4. 10mm square > K93.13 (Body Only #A906)
5. 12mm square > K93.14 (Body Only #A907)
6. 16mm round > K93.15 (Body Only #A908)
7. 3/8" & 1/2" sq > K93.16

All kits include a Tool Adjuster Body, a Barrel Micrometer, a Multi-Function Tool Adjuster Support, and a Carrying Case and Tools.

BORE REPAIR SYSTEMS, INC.
www.borerepair.com
(800)650-1005
(603)835-2409
BORING BAR SUPPORT KIT
(K94.20)*

KIT INCLUDES:
(2) A910 Drive Support & Spherical Support
Adjuster Plate Assemblies
(1) 9194 Alignment Sleeve

Set-Up Steps:
1. Tack weld or clamp the Adjuster Plate Assemblies adjacent to the bores to be repaired. (The plates should be approximately perpendicular to the bore axis, and with the clamping bolt 5° from the bore centerline.
2. Attach the Drive Support as shown, and the Spherical Support (not shown) to the Adjuster Plate.
3. Adjust as necessary using the "jack" bolts to achieve the desired bore alignment.
4. Insert the Alignment Sleeve into the Drive Support as shown.
5. Slide the Boring Bar through the Alignment Sleeve and the Spherical Support.
6. Tighten the Strap Clamp.

Kit Assembled on Drive-End

BORING BAR ALIGNMENT KIT

Set-Up Step #1:
1. Assemble 2 sets of Rings, Standoffs, and Screws as shown.
2. With the Rings on the Boring Bar, tack weld Standoffs to the Bore Faces so that the Rings are approximately centered.

FEATURES
- Low Profile
- Easy Alignment to Other Bores
- Allows Precision Alignment
- Great for Alignment to Out-of-Round Bores

Set-Up Step #2:
1. Retract the Adjuster Screws from the Threaded Holes in the Adapter Ring and rotate the Adapter Ring until the Adjuster Screws are no longer aligned with the Threaded Holes.
2. Align the Boring Bar as required using the Adjuster Screws. (If the Bore is round, it is sometimes helpful to insert a Cutting Tool and measure the distance from the Cutting Tool to the Bore in order to assure proper alignment.)

FOR THE FOLLOWING SIZE BARS
1 1/4" Bars 1 3/8" to 5 1/2" Bore Bars K94.10
1 3/4" Bars 1 7/8" to 10" Bore Bars K94.11
1 1/4" & 1 3/4" 1" to 10" Bore Bars K94.12
2.0" Bars 2 1/8" to 10" Bore Bars K94.13
2 1/4" Bars 2 3/8" to 10" Bore Bars K94.14

ID GROOVE CUTTER

FEATURES
- Cutter fits in 1/2" tool holes in boring bars
- High speed steel cutting bits
- Cuts grooves in bores from 2.5" to 6" (64 to 152mm)
- Very compact - can be used in confined spaces

FOR THE FOLLOWING BAR SIZES
1 1/2" Bars K96.10
1 3/4" Bars K96.11
2" Bars K96.12
2 1/4" Bars K96.13

BORRE REPAIR SYSTEMS, INC. (800)650-1005 & (603)835-2409
web: borerrepair.com
# Consumable parts (welding)

## Welding Tips

<table>
<thead>
<tr>
<th>Tip Type</th>
<th>Diameter</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stub tip, .8mm (.030&quot;)</td>
<td>#1058</td>
<td></td>
</tr>
<tr>
<td>Stub tip, .9mm (.035&quot;)</td>
<td>#1059</td>
<td></td>
</tr>
<tr>
<td>Stub tip, 1.2mm (.045&quot;)</td>
<td>#1060</td>
<td></td>
</tr>
<tr>
<td>Standard tip, .8mm (.030&quot;)</td>
<td>#1061</td>
<td></td>
</tr>
<tr>
<td>Standard tip, .9mm (.035&quot;)</td>
<td>#1062</td>
<td></td>
</tr>
<tr>
<td>Standard tip, 1.2mm (.045&quot;)</td>
<td>#1063</td>
<td></td>
</tr>
<tr>
<td>Hi-amp tip, .9mm (.035&quot;)</td>
<td>#2040</td>
<td></td>
</tr>
<tr>
<td>Hi-amp tip, 1.2mm (.045&quot;)</td>
<td>#2041</td>
<td></td>
</tr>
<tr>
<td>Hi-amp tip, 1.3mm (.052&quot;)</td>
<td>#2042</td>
<td></td>
</tr>
<tr>
<td>Micro-gun tip, .8mm (.030&quot;)</td>
<td>#1255</td>
<td></td>
</tr>
</tbody>
</table>

## Welding Nozzles

<table>
<thead>
<tr>
<th>Nozzle Type</th>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini nozzle</td>
<td>Insulated ceramic 32-50mm (1.25-2.00&quot;)</td>
<td>#1092C</td>
</tr>
<tr>
<td>Mini nozzle</td>
<td>Brass 32-50mm (1.25-2.00&quot;)</td>
<td>#1092B</td>
</tr>
<tr>
<td>Stub nozzle</td>
<td>(use for dia. to 50mm (2.00&quot;))</td>
<td>#1066</td>
</tr>
<tr>
<td>Standard nozzle</td>
<td>(use for dia. Over 127mm (5.0&quot;))</td>
<td>#1067</td>
</tr>
<tr>
<td>Hi-amp nozzle</td>
<td>(for use on beam &amp; hi-amp gun)</td>
<td>#2067</td>
</tr>
<tr>
<td>Hi-amp stub nozzle</td>
<td>(use on beam &amp; hi-amp gun)</td>
<td>#2074</td>
</tr>
<tr>
<td>Micro-gun nozzle</td>
<td>Body</td>
<td>#1258</td>
</tr>
<tr>
<td>Hand-held gun nozzle</td>
<td></td>
<td>#1308</td>
</tr>
</tbody>
</table>

## Welding Diffusers

<table>
<thead>
<tr>
<th>Diffuser Type</th>
<th>Diameter</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini diffuser</td>
<td>9mm</td>
<td>#1093</td>
</tr>
<tr>
<td>Standard diffuser</td>
<td>9mm</td>
<td>#1057</td>
</tr>
<tr>
<td>Hi-amp diffuser</td>
<td>12mm</td>
<td>#2068</td>
</tr>
<tr>
<td>Hi-amp stub diffuser</td>
<td>12mm</td>
<td>#2075</td>
</tr>
<tr>
<td>Hi-amp diffuser to gun adapter, 9-12mm</td>
<td>#1251</td>
<td></td>
</tr>
<tr>
<td>Hi-amp diffuser to gun adapter</td>
<td>#2080</td>
<td></td>
</tr>
</tbody>
</table>

## Liner & Conduits

<table>
<thead>
<tr>
<th>Liner Type</th>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liner, conduit replacement</td>
<td></td>
<td>#1038</td>
</tr>
<tr>
<td>Liner (1.5m (5') section, trim to fit)</td>
<td></td>
<td>#1039</td>
</tr>
<tr>
<td>Conduit assembly, standard duty QC</td>
<td></td>
<td>#A315</td>
</tr>
<tr>
<td>Conduit assembly, heavy duty QC</td>
<td></td>
<td>#A337</td>
</tr>
<tr>
<td>Conduit assembly, extra heavy duty QC</td>
<td></td>
<td>#A338</td>
</tr>
</tbody>
</table>

## Welding wire

<table>
<thead>
<tr>
<th>Wire Type</th>
<th>Diameter</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large cast bore welder wire, .8mm (.030&quot;)</td>
<td>#1103</td>
<td></td>
</tr>
<tr>
<td>Large cast bore welder wire, .9mm (.035&quot;)</td>
<td>#1202</td>
<td></td>
</tr>
</tbody>
</table>

(superior weld bead tracking with this wire)
## Borewelder parts & acc.

### Welding Guns

<table>
<thead>
<tr>
<th>Gun Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gun, short QC</td>
<td>#A328</td>
</tr>
<tr>
<td>Gun, standard QC</td>
<td>#A313</td>
</tr>
<tr>
<td>Gun, micro QC for ID’s 20-50mm (.8”-2.0”)</td>
<td>#A336</td>
</tr>
<tr>
<td>Gun, large dia. for ID’s 200-380mm (8”-15”) QC</td>
<td>#A310</td>
</tr>
<tr>
<td>Gun, outside dia. for 25mm-305mm (1”-12”) QC</td>
<td>#A317</td>
</tr>
<tr>
<td>Hi-amp gun</td>
<td>#A209</td>
</tr>
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</table>

### Specialty Guns

<table>
<thead>
<tr>
<th>Gun Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra heavy duty gun, ultra hi-amp</td>
<td>#A404</td>
</tr>
<tr>
<td>Heavy duty gun extender</td>
<td>#K23.10</td>
</tr>
<tr>
<td>Face welding gun kit</td>
<td>#K13.10</td>
</tr>
<tr>
<td>Beam gun kit (adjustable ID and OD welding)</td>
<td>#K13.11</td>
</tr>
<tr>
<td>Hand held gun assembly QC</td>
<td>#A333</td>
</tr>
</tbody>
</table>

### Gun Extenders

<table>
<thead>
<tr>
<th>Gun Extender</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gun extension assembly 150mm (6”)</td>
<td>#A309</td>
</tr>
<tr>
<td>Gun extension assembly 250mm (10”)</td>
<td>#A335</td>
</tr>
<tr>
<td>Gun diameter extension kit (125mm (5”) x2</td>
<td>#K13.12</td>
</tr>
<tr>
<td>(note: #K13.12 only for use with #A310 welding gun)</td>
<td></td>
</tr>
</tbody>
</table>

### Welder Supports

<table>
<thead>
<tr>
<th>Support Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>“T” Base with tack plate</td>
<td>#K11.11</td>
</tr>
<tr>
<td>Universal Hex mount (use with BOA-M1 only)</td>
<td>#A329</td>
</tr>
<tr>
<td>Radial support, BOA-M1</td>
<td>#A308</td>
</tr>
<tr>
<td>Support tube (BOA-M1)</td>
<td>#3099</td>
</tr>
<tr>
<td>Center support kit (BOA-M1)</td>
<td>#K31.11</td>
</tr>
<tr>
<td>Center support kit (BOA-408i)</td>
<td>#K11.21</td>
</tr>
<tr>
<td>Radial support extension 102mm (4”)</td>
<td>#A118</td>
</tr>
<tr>
<td>Radial support extension 204mm (8”)</td>
<td>#A119</td>
</tr>
<tr>
<td>Centering cone 45-160mm (1.8-6.4”)</td>
<td>#1317</td>
</tr>
<tr>
<td>Centering tube &amp; cone kit 45-160mm (1.8-6.4”)</td>
<td>#K11.12</td>
</tr>
</tbody>
</table>

### Drive Spindles

<table>
<thead>
<tr>
<th>Spindle Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spindle assembly, 250mm (10”) (BOA-M1 only)</td>
<td>#A320</td>
</tr>
<tr>
<td>Spindle assembly, 356mm (14”)</td>
<td>#A325</td>
</tr>
<tr>
<td>Spindle assembly, 457mm (18”)</td>
<td>#A319</td>
</tr>
<tr>
<td>Spindle assembly, 610mm (24”)</td>
<td>#A326</td>
</tr>
<tr>
<td>Spindle assembly, 762mm (30”)</td>
<td>#A351</td>
</tr>
</tbody>
</table>

### Telescoping weld gun

<table>
<thead>
<tr>
<th>Extension Assemblies</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telescoping tube assembly, 305mm (12”)</td>
<td>#A339</td>
</tr>
<tr>
<td>Telescoping tube assembly, 483mm (19”)</td>
<td>#A316</td>
</tr>
<tr>
<td>Telescoping tube assembly, 610mm (24”)</td>
<td>#A340</td>
</tr>
<tr>
<td>Telescoping tube assembly, 915mm (36”)</td>
<td>#A341</td>
</tr>
</tbody>
</table>
### Misc. bore repair parts

**BOA 408i upgrades**

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-speed gearset kit</td>
<td>#K12.14</td>
</tr>
<tr>
<td>Standard-speed gearset kit</td>
<td>#K12.13</td>
</tr>
<tr>
<td>Std/Low-speed gearset kit</td>
<td>#K12.12</td>
</tr>
<tr>
<td>Auto-skip upgrade</td>
<td>#A129</td>
</tr>
</tbody>
</table>

**Boring bar supports, centering, etc.**

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boring bar base-plate support kit, adjustable</td>
<td>#K94.21</td>
</tr>
<tr>
<td>Support, dogleg adjustable one-arm boring bar</td>
<td>#K94.30</td>
</tr>
<tr>
<td>Support kit, 2x one-arm w/ coupling hardware</td>
<td>#K94.32</td>
</tr>
<tr>
<td>Support, Multi-Mount w/hardware &amp; tack plates</td>
<td>#K94.49</td>
</tr>
<tr>
<td>Support, universal compact adjustable circular</td>
<td>#K94.50</td>
</tr>
<tr>
<td>Bearing, spherical insert assembly for 1.75” bar</td>
<td>#A922</td>
</tr>
<tr>
<td>Bearing, spherical insert for 2.25” bar</td>
<td>#9233</td>
</tr>
<tr>
<td>Boring bar align kit (low-profile) for 1.25” dia bars</td>
<td>#K94.10</td>
</tr>
<tr>
<td>Boring bar align kit (low profile) for 1.75” dia bars</td>
<td>#K94.11</td>
</tr>
<tr>
<td>Boring bar align kit (low profile) for 2.25” dia bars</td>
<td>#K94.14</td>
</tr>
<tr>
<td>Tool extender arm, 3” - for 6”-10” dia. boring</td>
<td>#K91.20</td>
</tr>
<tr>
<td>Tool extender arm, 5” - for 10” - 14” dia boring</td>
<td>#K91.21</td>
</tr>
<tr>
<td>ID bore measure gage, standard model</td>
<td>#K92.10</td>
</tr>
<tr>
<td>ID bore measure gage, tight bore model</td>
<td>#K92.20</td>
</tr>
</tbody>
</table>

**Boring bar related accessories**

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-function tool bit adjuster kit for 1/2” sq.</td>
<td>#K93.12</td>
</tr>
<tr>
<td>Multi-function tool bit adj. kit for 1/2 &amp; 3/8” sq.</td>
<td>#K93.16</td>
</tr>
<tr>
<td>Multi-function tool adj. kit for 1/2, 3/8 and 1/4 sq.</td>
<td>#K93.17</td>
</tr>
<tr>
<td>Tool adjuster body, for 1/4” sq. bits</td>
<td>#A903</td>
</tr>
<tr>
<td>Tool adjuster body, for 3/8” sq. bits</td>
<td>#A904</td>
</tr>
<tr>
<td>Multi-function tool bit adjuster kit for 10mm sq. bit</td>
<td>#K93.13</td>
</tr>
<tr>
<td>Multi-function tool bit adjuster kit for 12mm sq. bit</td>
<td>#K93.14</td>
</tr>
<tr>
<td>Multi-function tool bit adj. kit for 1/2 &amp; 3/8” sq. digital</td>
<td>#K93.26</td>
</tr>
<tr>
<td>Cutting bit, HSS w/5% cobalt, pre-sharp 1/4” sq.</td>
<td>#9085</td>
</tr>
<tr>
<td>Cutting bit, HSS w/5% cobalt, pre-sharp 3/8” sq.</td>
<td>#9088</td>
</tr>
<tr>
<td>Cutting bit, HSS w/5% cobalt, pre-sharp 1/2” sq.</td>
<td>#9087</td>
</tr>
<tr>
<td>Cutting bit kit, carbide 3/8” sq. lo-pro (#9130 insert)</td>
<td>#K91.10</td>
</tr>
<tr>
<td>Cutting bit kit, carbide 1/2” sq. lo-pro (#9130 insert)</td>
<td>#K91.11</td>
</tr>
<tr>
<td>Ultra-carbide bit, 1/2” HD Multi (#9475 insert)</td>
<td>#K91.14</td>
</tr>
<tr>
<td>Replacement ultra-carbide insert</td>
<td>#9475</td>
</tr>
<tr>
<td>Groove cutting kit for 1.75” dia bars, ex model</td>
<td>#K96.16</td>
</tr>
<tr>
<td>Groove cutting kit for 2.0” dia bars, ex model</td>
<td>#K96.17</td>
</tr>
<tr>
<td>Groove cutting kit for 2.25” dia bars, ex model</td>
<td>#K96.18</td>
</tr>
<tr>
<td>Face cutting kit, plunge-style for 1.75” dia bars</td>
<td>#K96.25</td>
</tr>
<tr>
<td>Face cutting kit, automatic spiral for 1.75” dia bars</td>
<td>#K96.26</td>
</tr>
<tr>
<td>Face cutting kit, automatic spiral for 2.25” dia bars</td>
<td>#9260</td>
</tr>
</tbody>
</table>

*Note: Also available for your boring bar systems are various length bars, hydraulic upgrade, face cutter kits for larger bars, two-arm mounting kits, morse-tapered bars (allowing end-of-bar drilling operations and easy coupling) and more. Call us for any of your special applications and requirements.*

Covered under Pat. Nos 6,137,076; 6,448,531; 6,737,608; 6,284,995; 6,486,438

Bore Repair Systems, Inc.
97 Lower Cemetery Road
Langdon, NH 03602 USA
Borerepair.com - 603-855-2409
One-arm multi-mount support
Offers a variety of mounting options
plus handy time saving built-in X-Y and leveling adjustability

Order kit # K94.49

This kit includes necessary hardware, (2) mounting blocks, tack plate, center ring and clamping block.

Bearing inserts are sold separately.

Bearing insert part numbers are #A922 for the 1.75” diameter bar and #9233 for the 2.25” diameter bar

Mount the supports with the tack-bars for large diameter work, or when extra clearance is required for face cutting or groove cutting. The tack-bars may be mounted horizontally or vertically depending on individual job requirements. Standard height bars shown. Optional tall bars are also available. All bars now allow fine tuning with included level screws.

Tack-bars installed

Mount the supports with the tack-plate for smaller diameter jobs or when extra clearance is not needed. The same tack-plate may be used for the standard one-arm supports as well.

Tack-plate installed
One-Arm long offset support mounted to excavator boom

Face welding gun #K13.10 with compact arm option shown being used with one-arm long offset support.

Face machining head #K96.26 shown being used with one-arm long offset support.

www.borerepair.com—603-835-2409
Compact circular support

Offers many mounting options. Great for tight spaces or for adding additional boring bar, bore welder or boring bar drive support when desired.

Offers X-Y and leveling adjustment after being mounted to workpiece.

Order Kit #K94.50

This kit includes the necessary hardware, (3) extension arms and center ring assembly. Bearing inserts are sold separately.

Bearing insert part numbers are #A922 for the 1.75” diameter bar and #9233 for the 2.25” diameter bar

Shown supporting the BOA-C45 (left) and with #A922 bar support bearing (right)

For added bar rigidity and support, add the #K94.50 compact circular support with bearing insert to the #K94.49 one-arm support as shown
Ultra-Carbide Indexable

Order kit # K91.14

Line-boring cutter kit for 1/2” tool ports

The Bore Repair Systems, Inc. Ultra-Carbide indexable line bore cutter kit is our newest design in cutting bit kits.

**Features:**
- Low-profile tool pocket—enables the cutter to slide entirely through the bar
  - Enables faster rotation speeds than standard high speed steel bit
  - Can be used for entire job, not just finishing. The Ultra-Carbide bit withstands rough cuts, interrupted cuts and harder material
  - Stays sharp up to 10x longer than high speed steel bits, and is tougher than cemented carbides and traditional carbide inserts
  - 3 cutting edges, helping to keep you on the job not sharpening the tool
  - Holder may be heat hardened if desired

*Kit includes 1 each: #9476 insert holder, #9475 insert, #9477 torx screw and #9478 flag wrench*
# Bore welder packages

## BOA-408i S5 System

**Standard Capabilities:**
- I.D. Weld range: 20mm-1.2m (.8-48")
- O.D. Weld range: 20mm-1.02m (.8-40")
- Face Welding: 20-610mm (.8-24")
- Stroke: 318mm (12.5")
- Pass-thru & telescopic long-duration welding at high amperage
- Auto-weld skip for partial bore welding
- Can weld in compact spaces (use BOA-M1 drive)
- Can weld two bores at once (2 feeders needed)

## BOA-408i S4 System

**Standard Capabilities:**
- I.D. Weld range: 20mm-914mm (.8-36")
- O.D. Weld range: 20mm-914mm (.8-36")
- Face Welding: 20-610mm (.8-24")
- Stroke: 318mm (12.5")
- Long-duration welding
- High amperage operation
- Pass-through gun drive with tool-less telescoping feature and full, tool-less reversibility

## BOA-408i S3 System

**Standard Capabilities:**
- I.D. Weld range: 20mm-914mm (.8-31")
- O.D. Weld range: 20mm-305mm (.8-12")
- Face Welding: 20-610mm (.8-24")
- Stroke: 318mm (12.5")
- Long-duration welding
- High amperage operation
- Pass-through gun drive with tool-less telescoping feature and full, tool-less reversibility

## Standard equipment:

<table>
<thead>
<tr>
<th>BOA-408i S5 System</th>
<th>BOA-408i S4 System</th>
<th>BOA-408i S3 System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welding gun drive 120v/240v AC automatic</td>
<td>Welding gun drive 120v/240v AC automatic</td>
<td>Welding gun drive 120v/240v AC automatic</td>
</tr>
<tr>
<td>Long stroke telescopic ball spindle</td>
<td>Long stroke telescopic ball spindle</td>
<td>Long stroke telescopic ball spindle</td>
</tr>
<tr>
<td>Standard weld gun assembly</td>
<td>Standard weld gun assembly</td>
<td>Standard weld gun assembly</td>
</tr>
<tr>
<td>Heavy duty conduit with remote weld switch</td>
<td>Heavy duty conduit with remote weld switch</td>
<td>Standard conduit with remote weld switch</td>
</tr>
<tr>
<td>Standard gun extension tube assembly</td>
<td>Standard gun extension tube assembly</td>
<td>Standard gun extension tube assembly</td>
</tr>
<tr>
<td>Micro weld gun assembly</td>
<td>Micro weld gun assembly</td>
<td>Micro weld gun assembly</td>
</tr>
<tr>
<td>Weld gun extensions, 152 &amp; 254mm (6 &amp; 10&quot;)</td>
<td>Weld gun extensions, 152 &amp; 254mm (6 &amp; 10&quot;)</td>
<td>Weld gun extensions, 152 &amp; 254mm (6 &amp; 10&quot;)</td>
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<tr>
<td>Bore welder support tube</td>
<td>Bore welder support tube</td>
<td>Bore welder support tube</td>
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<tr>
<td>Radial support arm</td>
<td>Radial support arm</td>
<td>Radial support arm</td>
</tr>
<tr>
<td>Necessary tools</td>
<td>Necessary tools</td>
<td>Necessary tools</td>
</tr>
<tr>
<td>Deluxe consumables kit</td>
<td>Deluxe consumables kit</td>
<td>Standard consumables kit</td>
</tr>
<tr>
<td>Diamond plate carry case</td>
<td>Diamond plate carry case</td>
<td>Diamond plate carry case</td>
</tr>
<tr>
<td>Users and setup manual</td>
<td>Users and setup manual</td>
<td>Users and setup manual</td>
</tr>
<tr>
<td>Outside diameter welding gun</td>
<td>Outside diameter welding gun</td>
<td>Outside diameter welding gun</td>
</tr>
<tr>
<td>Adjustable &quot;T&quot; base and tack plate kit</td>
<td>Adjustable &quot;T&quot; base and tack plate kit</td>
<td>Adjustable &quot;T&quot; base and tack plate kit</td>
</tr>
<tr>
<td>Large diameter welding gun</td>
<td>Large diameter welding gun</td>
<td>Large diameter welding gun</td>
</tr>
<tr>
<td>Large diameter welding gun extenders (2)</td>
<td>Large diameter welding gun extenders (2)</td>
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</tr>
<tr>
<td>Radial extenders for large diameter reach (3)</td>
<td>Radial extenders for large diameter reach (2)</td>
<td>Radial extenders for large diameter reach (2)</td>
</tr>
<tr>
<td>Face welding gun kit</td>
<td>Face welding gun kit</td>
<td>Face welding gun kit</td>
</tr>
<tr>
<td>Handheld welding gun with quick connect</td>
<td>Handheld welding gun with quick connect</td>
<td>Handheld welding gun with quick connect</td>
</tr>
<tr>
<td>Beam gun kit for large ID and OD welding</td>
<td>Beam gun kit for large ID and OD welding</td>
<td>Beam gun kit for large ID and OD welding</td>
</tr>
<tr>
<td>Low-speed kit for precision control in large bores</td>
<td>Low-speed kit for precision control in large bores</td>
<td>Low-speed kit for precision control in large bores</td>
</tr>
<tr>
<td>BOA-M1 compact bore welder</td>
<td>Hex BOA-M1 borerwelder support kit</td>
<td>Compact gun extension tube assembly</td>
</tr>
<tr>
<td>Compact conduit assembly</td>
<td>Standard conduit assembly</td>
<td>Short telescopic ball spindle</td>
</tr>
<tr>
<td>Short telescopic ball spindle</td>
<td>Stub weld gun assembly</td>
<td>Auto-Skip feature installed for partial bore weld</td>
</tr>
</tbody>
</table>

### Order numbers:

- BOA-408i S5 System: Order #K01.50
- BOA-408i S4 System: Order #K01.40
- BOA-408i S3 System: Order #K01.30

**NOTE:**

All BOA-408i bore welder systems feature the pass-through drive system design. This enables simple bore-to-bore transitions by simply telescoping or retracting the bore welder gun extension assembly. The BOA-408i may also be mounted between a set of bores, and can weld our either end of the bore welder. This is a very handy feature for working on bores such as those found on the front of a pay loader because by center mounting the BOA-408i drive, only one setup is required to weld both left and right side bores. Diameter adjustment is a snap with the BOA torch pivot mechanism, also included with all BOA-408i bore welder systems.

All BOA-408i bore welder systems may be equipped with the bore welder to boring bar interface for true plug and play simplicity. Once the Bore Repair Systems, Inc. boring bar is set up, the bore welder simply plugs in to the boring bar support.

All BOA-408i bore welder systems feature self-lubricating, maintenance-free, self lubricating spindle bearings, clutchless chain drive and simple, durable on-board control eliminating the need for control cables or control box.
## Bore Welder Packages

**BOA-408i S2 Borewelder**

- **Standard Capabilities:**
  - I.D. Weld range: 20mm-533mm (.8-21")
  - Stroke: 178mm (7”)
  - Standard-duration welding
  - Standard amperage welding
  - Adjustable mounting feature enabling stand-alone operation or use with any boring bar
  - Pass-through gun drive with tool-less telescoping feature and full, tool-less reversibility

**Standard Equipment:**
- Welding gun positioner 120v/240v A/C, automatic
- Standard stroke telescopic ball spindle
- Standard weld gun assembly
- Standard conduit with remote weld switch
- Standard gun extension tube assembly
- Micro weld gun assembly
- Weld gun extension 254mm (10’)
- Bore welder support tube
- Radial support arm
- Necessary tools
- Standard consumables kit
- Users and setup manual
- Adjustable “T” base and tack plate kit
- Large diameter welding gun
- 8” Radial extender for large diameter reach
- Handheld welding gun with quick connect

**Order #K01.20**

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**BOA-408i S1 Borewelder**

- **Standard Capabilities:**
  - I.D. Weld range: 20mm-356mm (.8-14")
  - Stroke: 178mm (7”)
  - Standard-duration welding
  - Standard amperage welding
  - Stationary mounting (system usually purchased with optional boring bar and boring bar adapter)
  - Pass-through gun drive with tool-less telescoping feature and full, tool-less reversibility

**Standard Equipment:**
- Welding gun positioner 120v/240v A/C, automatic
- Standard stroke telescopic ball spindle
- Standard weld gun assembly
- Standard conduit with remote weld switch
- Standard gun extension tube assembly
- Micro weld gun assembly
- Weld gun extension, 152mm (6”)
- Bore welder support tube
- Radial support arm
- Necessary tools
- Standard consumables kit
- Users and setup manual

**Order #K01.10**

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**BOA-M1 Borewelder**

- **Standard Capabilities:**
  - I.D. weld range: 32mm-203mm (1.8—8.0”)
  - Stroke: 260mm (10.25”)
  - Standard amperage operation
  - Ability to weld in compact spaces
  - Ability to weld from either end or side of gun drive
  - Reach: 965mm (38”) (from one end) (1.9m (76”) total reach if gun extender is reversed)

**Standard Equipment:**
- Welding gun positioner, semi-automatic
- Standard stroke ball spindle
- Standard weld gun assembly
- Standard gun extension tube assembly
- Gun rotation handwheel
- Necessary tools
- Carry case with custom nesting
- Standard consumables kit

**Order #K03.10**

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**NOTE:**

All BOA-408i bore welder systems feature the pass-through drive system design. This enables simple bore-to-bore transitions by simply telescoping or retracting the bore welder gun extension assembly. The BOA-408i may also be mounted between a set of bores, and can weld our either end of the bore welder. This is a very handy feature for working on bores such as those found on the front of a pay loader because by center mounting the BOA-408i drive, only one setup is required to weld both left and right side bores. Diameter adjustment is a snap with the BOA torch pivot mechanism, also included with all BOA-408i bore welder systems.

All BOA-408i bore welder systems may be equipped with the bore welder to boring bar interface for true plug and play simplicity. Once the Bore Repair Systems, Inc. boring bar is set up, the bore welder simply plugs in to the boring bar support.

All BOA-408i bore welder systems feature self-lubricating, maintenance-free, self lubricating spindle bearings, clutched chain drive and simple, durable on-board control eliminating the need for control cables or control box.

Covered under Pat. Nos 6,137,076; 6,448,531; 6,737,608; 6,284,995; 6,486,438

Bore Repair Systems, Inc.
97 Lower Cemetery Road
Langdon, NH 03602 USA
Borerrepair.com - 603-835-2409
Fax: 603-835-2609
Model BOA-C45 Linebore Package

Core Package Diameter range is 1.9” -10” (48 to 254mm) Includes:

- 3.3 HP variable speed motor w/4 speed transmission
- 72” (1.8 m) x 1.75” chromed internally couplable bar with dual tool ports
- Pass-through bar drive w/ quick connect feed screw
- Set-up cylinder for locating and aligning multi-mount
- (2) Mount plates for anchoring dogleg support
- Disengagable bar feed mechanism for quick feed adjustment
- Automatic in-feed crash protection
- Trouble-free spline connection between motor and gearbox
- (2) HSS, 5% cobalt cutters
- Speed range of 15 to 270 RPM and reversible feed

- Variable rate axial feed
- (2) One-arm dogleg bar/drive / bore welder support
- (1) Bar support bearing insert (precision tuneable)
- Tool extension, for bores 6”-10” (152-254mm)
- Removable axial feed screw
- Rugged carrying case
- Allen wrench set with tool pouch
- Centering kit including tensioning system for centering system in bores 1.9” to 10” (48 to 254mm)
- Graphical set-up manual with full parts list

(Optional accessories for the BOA-C45 line bore system include several face machining options, snap-ring groove cutting kit, ultra-carbide indexable cutting system, thru-bar bore measure kit, digital and non-digital precision tool adjusters, small and micro bar kit (enabling boring in diameters down to 1” (25mm), extended range boring head for bores up to 14” (356mm), hydraulic drive option, automatic or semi-automatic bore welding options and more. See accessories list for full range of available options. All bars are available in 4 ft., 6ft. & 8ft. Lengths.)

Model BB-6 Linebore Package

Core Package Diameter range is 1.4” -24” (36 to 610mm) Includes:

- 3.3 HP variable speed motor w/4 speed transmission
- 72” (1.8 m) x 2.25” bar with dual tool ports
- (2) HSS, 5% cobalt cutters
- (2) Set-up blocks for adjustable supports
- Large diameter tool extender – to 24” (619 mm)
- Dis-engagable bar feed gearbox with remote mount capability
- Automatic in-feed crash protection
- Trouble-free keyed connection between motor and gearbox
- Aluminum diamond plate storage case

- Speed range of 10 to 170 RPM and reversible feed
- 72” (1.8 m x 1.25”) chromed bar with dual tool ports
- (2) Adjustable one arm offset bar and welder supports
- Adjustable compact bar and welder support
- Centering cone set – 1.4 to 14” (35 to 356 mm)
- Easily removable feed screws – available in several lengths
- Infinitely variable feed rate
- Instructional set-up manual with photos
- Tool set with tool box

(Optional accessories for the BB-6 line bore system include several face machining options, snap-ring groove cutting kit, ultra-carbide indexable cutting system, thru-bar bore measure kit, digital and non-digital precision tool adjusters, automatic or semi-automatic bore welding options and more. See accessories list for full range of available options. Hydraulic drive option is also available. All bars are available in 4 ft., 6ft. & 8ft. Lengths.)
**Combo Boring & Welding Packages**

- Welding / Boring systems below share the same mount for easy one-step setup and boring to welding transitions.
- Systems below all feature dual tool / accessory ports on bar. This feature, when used with snap gage and digital tool adjuster gives you the easiest and most accurate means of measuring the bore with the tool bit and bar still in place, and the most accurate way to adjust your tool bit for precise final cuts with .0001" precision.
- Many systems below feature the centering cone tightener kit. This unique kit makes the job of centering your bar and keeping the cones tight by yourself a breeze. Kit includes its own spanner wrench.
- All systems below feature the unique pass-through drive design. This design, unlike the old fashioned end-mounted designs of other brands offers users far superior setup versatility. The pass-through design is excellent for bores that are spaced far apart and for parts that have blind bores. These bores are commonly found on construction machinery.
- All packages below may be customized as you need. Packages below may swap the BOA-408i for the BOA-M1 for $2875. pkg. discount
- All systems below feature adjustable bar support bearings—ensures bars slide through supports bearings with ease

### Model Combination Bore Welding & Machining Kit Descriptions

#### BRS2c

<table>
<thead>
<tr>
<th>MODEL</th>
<th>COMBINATION BORE WELDING &amp; MACHINING KIT DESCRIPTIONS</th>
<th>PACKAGE DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRS2c (Electric drive)</td>
<td>BORING SYSTEM MODEL: BOA-C45 Pass-Thru Drive Electric- FOR BORES 47-254mm (1.8-10&quot;) DIA KIT DESCRIPTION: Bar included: (1) Chromed 1 3/4&quot;Ø x 72&quot; long w/ dual tool holes, 115v or 220v, Hi Torque 3.3 hp. Reversing Var. Elec. Drive (15-270 RPM) with reversing feed mechanism, centering cone set w/tightener kit, 2 spherical bar support bearings, 3 machine supports, aluminum custom case, tool bit, BOA-408i bore welder package w/center support kit. (upgradable drive can run 7/8&quot; and 1.25&quot; dia bars) OPTIONS AVAILABLE: Thru-bar measuring tool, carbide insert tool package, small bar options (for boring down to 1&quot; or 1 3/8&quot; Ø (depends on kit selected), facing tool, digital tool adjuster kit, snap-ring groove cutter, extended diameter range cutting heads, tapered bars for blind end-drilling/milling operations.</td>
<td>(Comes with BOA-408i bore welder and direct mount interface) Order # K05.109902</td>
</tr>
</tbody>
</table>

#### BRS3c

<table>
<thead>
<tr>
<th>MODEL</th>
<th>COMBINATION BORE WELDING &amp; MACHINING KIT DESCRIPTIONS</th>
<th>PACKAGE DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRS3c (Electric drive)</td>
<td>BORING SYSTEM MODEL: BOA-C45 Pass-Thru Drive Elec.- FOR BORES 35-254mm (1.4-10&quot;) DIA KIT DESCRIPTION: 2 Bar set: (1ea.) 1 3/4&quot; &amp; 1 1/4&quot;Ø Chrome Bars x 72&quot; long w/ dual tool ports, 115v or 220v, Hi Torque 3.3 hp. Reversing Var. Elec. Drive (15-270 RPM) with reversing feed mechanism, centering cone set w/tightener kit, 2 spherical bar support bearings, 3 machine supports, aluminum custom case, machine mount, 2 tool bits, BOA-408i bore welder package w/center support kit. (upgradable drive can run 7/8&quot; dia bar kit for small diameter boring) OPTIONS AVAILABLE: Thru-bar measuring tool, carbide insert tool package, small bar options (for boring down to 15/16&quot;) facing tool, custom length bars &amp; tool ports, digital tool bit adjuster, snap-ring groove cutter, extended diameter range cutting heads, tapered bars for blind end-drilling/milling operations.</td>
<td>(Comes with BOA-408i bore welder and direct mount interface) Order # K05.109903</td>
</tr>
</tbody>
</table>

#### BRS4c

<table>
<thead>
<tr>
<th>MODEL</th>
<th>COMBINATION BORE WELDING &amp; MACHINING KIT DESCRIPTIONS</th>
<th>PACKAGE DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRS4c (Electric drive)</td>
<td>BORING SYSTEM MODEL: BOA-C45 Pass-Thru Drive Elec.- FOR BORES 24-254mm (1-10&quot;) DIA KIT DESCRIPTION: 3 Bar set: (1ea.) 1 3/4&quot; &amp; 1 1/4&quot;Ø Chrome Bars x 72&quot; long w/ dual tool ports, 1 7/8&quot;Ø Chrome Bar x48&quot;, 115v or 220v, Hi Torque 3.3hp. Reversing Var. Elec. Drive (15-270 RPM) with reversing feed mechanism, centering cone set w/tightener kit, 2 spherical bar support bearings, 2 machine supports, aluminum custom case, adj. machine mount, reducer kits for 1.25&quot; and 7/8&quot; bars, centering cones for all bar sizes w/tightener kit plus 3 tool bits. BOA-408i bore welder package w/center support kit. OPTIONS AVAILABLE: Thru-bar measuring tool, carbide insert tool package, facing tool, digital tool adjustment kit, snap-ring groove cutter, extended diameter range cutting heads, custom length bars &amp; tool ports, morse tapered bars for blind end-drilling/milling operations.</td>
<td>(Comes with BOA-408i bore welder and direct mount interface) Order # K05.109904</td>
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#### BRS5c

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<tr>
<th>MODEL</th>
<th>COMBINATION BORE WELDING &amp; MACHINING KIT DESCRIPTIONS</th>
<th>PACKAGE DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRS5c (Hydraulic drive)</td>
<td>BORING SYSTEM MODEL: BOA-C45HY Pass-Thru Drive Hydraulic- FOR BORES 45-356mm (1.8&quot;-14&quot;) DIA. KIT DESCRIPTION: Bar included: 1 1/2&quot;Ø x72&quot; long, 115v or 220v, 2.5hp vari-speed hydraulic drive, centering cones w/tightener kit, 2 spherical bar support bearings, 3 universal machine supports, tool bit, custom storage case. BOA-408i automatic bore welder package w/center support kit. OPTIONS AVAILABLE: Electric drive, small and/or micro bar kits for small boring applications, facing head, ID bore measuring tools, snap-ring groove cutter, custom length bars, digital tool adjustment kit, morse tapered bars for blind end-drilling/milling operations.</td>
<td>(Comes with BOA-408i bore welder and direct mount interface) Order # K05.109905</td>
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#### BRS6

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<tr>
<th>MODEL</th>
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<th>PACKAGE DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRS6 (Electric drive)</td>
<td>BORING SYSTEM MODEL: BB 6 Pass-Thru Drive Electric FOR BORES 36-610mm (1.4-18&quot;) DIAM. KIT DESCRIPTION: Bar included: 2 2¼&quot;Ø Bar x 72&quot; long, 1.25&quot;Ø Bar x 72&quot; long w/dual tool ports, 2.5hp hydraulic drive option, alignment cones, tooling, tool extensions, 3 adjustable bar/machine supports, tool kit &amp; custom storage case. BOA-408i bore welder package w/bore welder adapter kit. OPTIONS AVAILABLE: Lg. bore kit (up to 24&quot;Ø), facing head, carbide tooling kit, pneumatic drive, 2.5hp hydraulic drive, custom length bars, digital tool adjustment gauge, ID bore measuring gage kit, snap ring groove cutting kit. (also available without 1.25&quot; dia bar package—call for price)</td>
<td>(Comes with BOA-408i bore welder and direct mount interface) Order # K05.109915</td>
</tr>
</tbody>
</table>