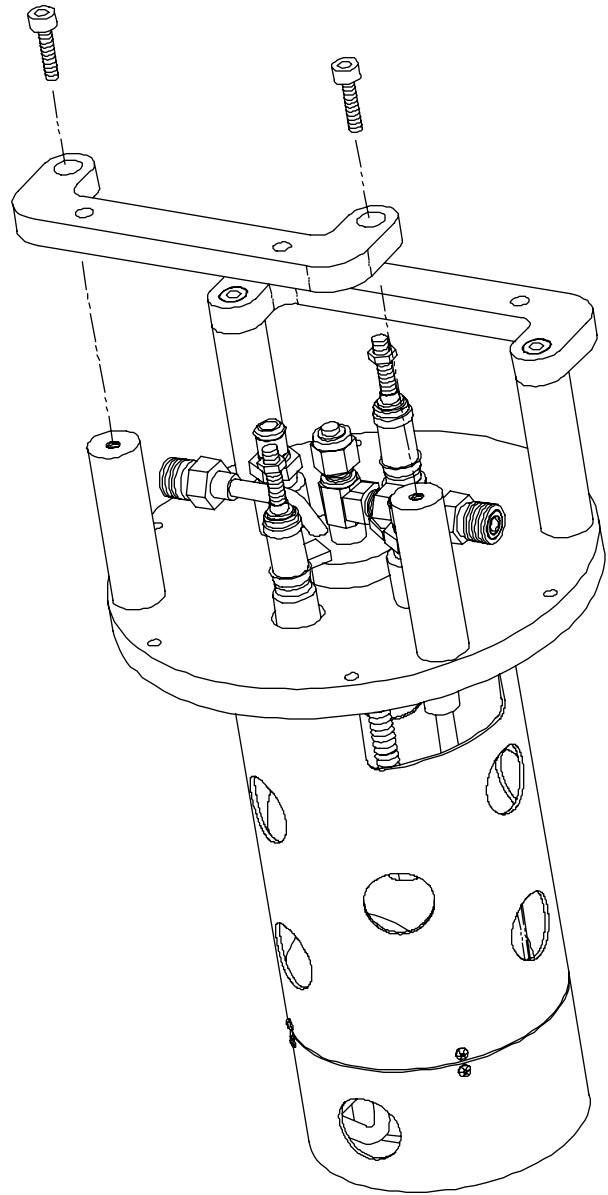
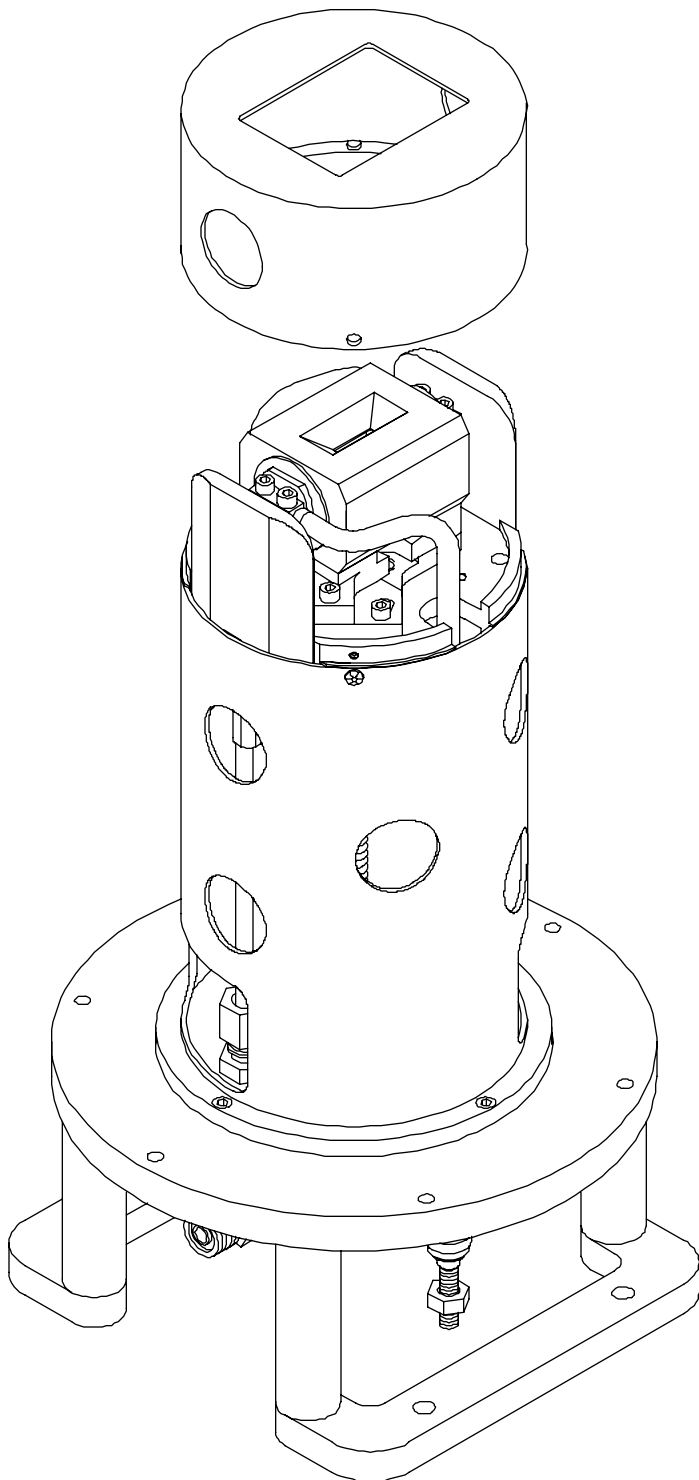
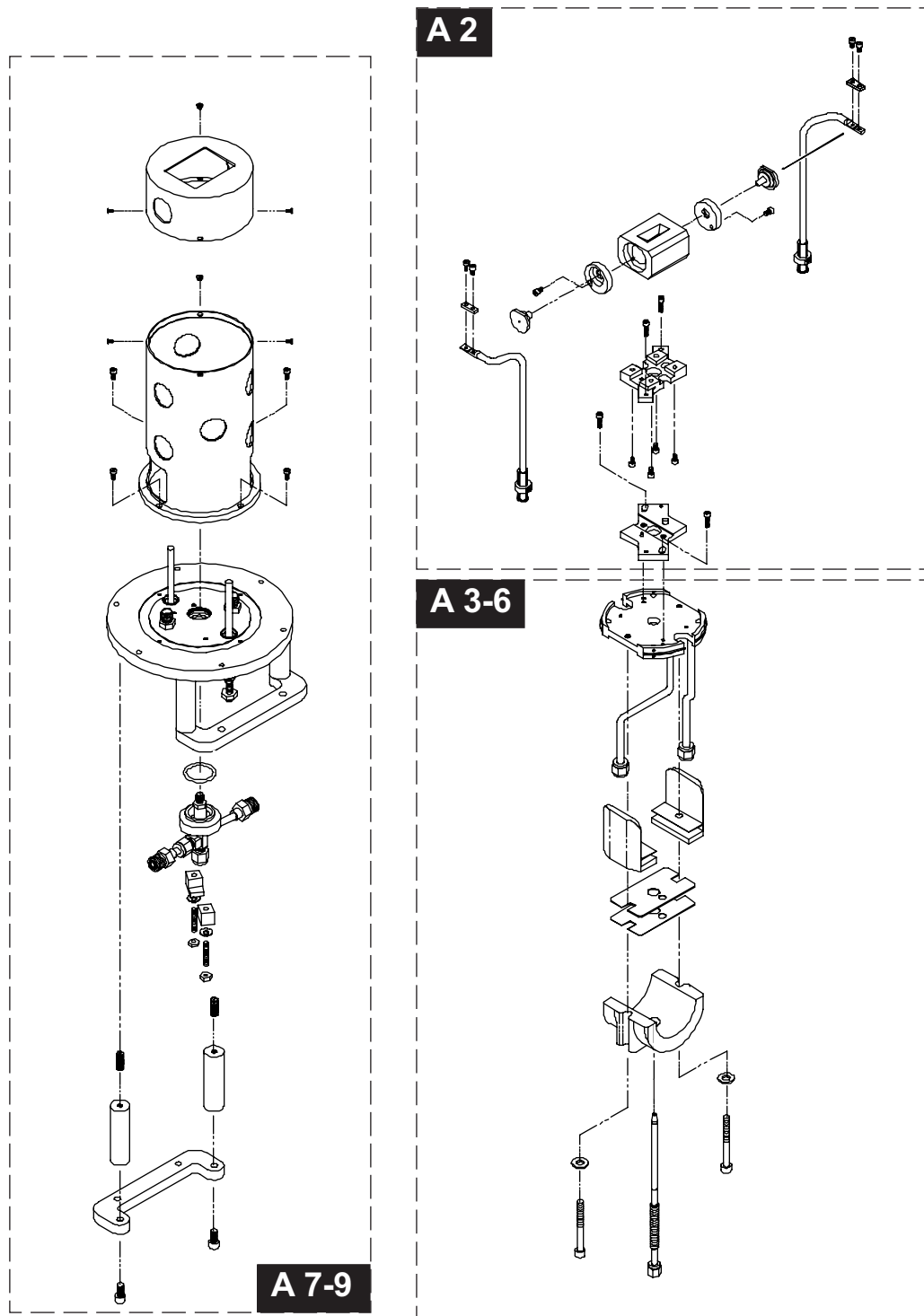


Section A

P/N: 10200 Source for
3204, 3206, 6200,
and Kasper MC200 Implanters
No Vaporizer



Note: For **SKM** version of the Source
for 3204, 3206, 6200,
and Kasper MC200 Implanters
P/N 10250
Reference A-2.1 and A-2.2.



Key to Following Sections

- A-2.0** Section labeled with part numbers, referencing appropriate pages.
- A-2.1** Offers component choices for standard version source, showing mounting stage/arc chamber combinations and exploded views of arc chambers.
- A-2.2** Section labeled with part numbers for the SKM version of the 3204, 3206, 6200, and Kasper MC200 Source.
- A-2.3** Offers component choices for SKM version source, showing mounting stage/arc chamber combinations and exploded views of arc chambers.
- A-2.4** Explanation of different endcap, insulator choices, and filament buss choices.
- A-3** Section labeled with part numbers, referencing appropriate pages, offering alternative gas feed tube choices.
- A-4** Explanation of different gas feed tube manifolds, detail of magnet shunt set, and gauss measurement system.
- A-5** Explanation of arc chamber mounting stage system, with alternatives for use with various arc chambers.
- A-6** Cooling plate choices and source plate choices.
- A-7** Section labeled with part numbers, referencing appropriate pages.
- A-8** Source plate choices for 3204, 3206, 6200, and Kasper MC200 Source.
- A-9** Explanation of improved cable system for 3204, 3206, 6200, and Kasper MC200 Source.

Standard Version of 3204, 3206, 6200, and Kasper MC200 Source

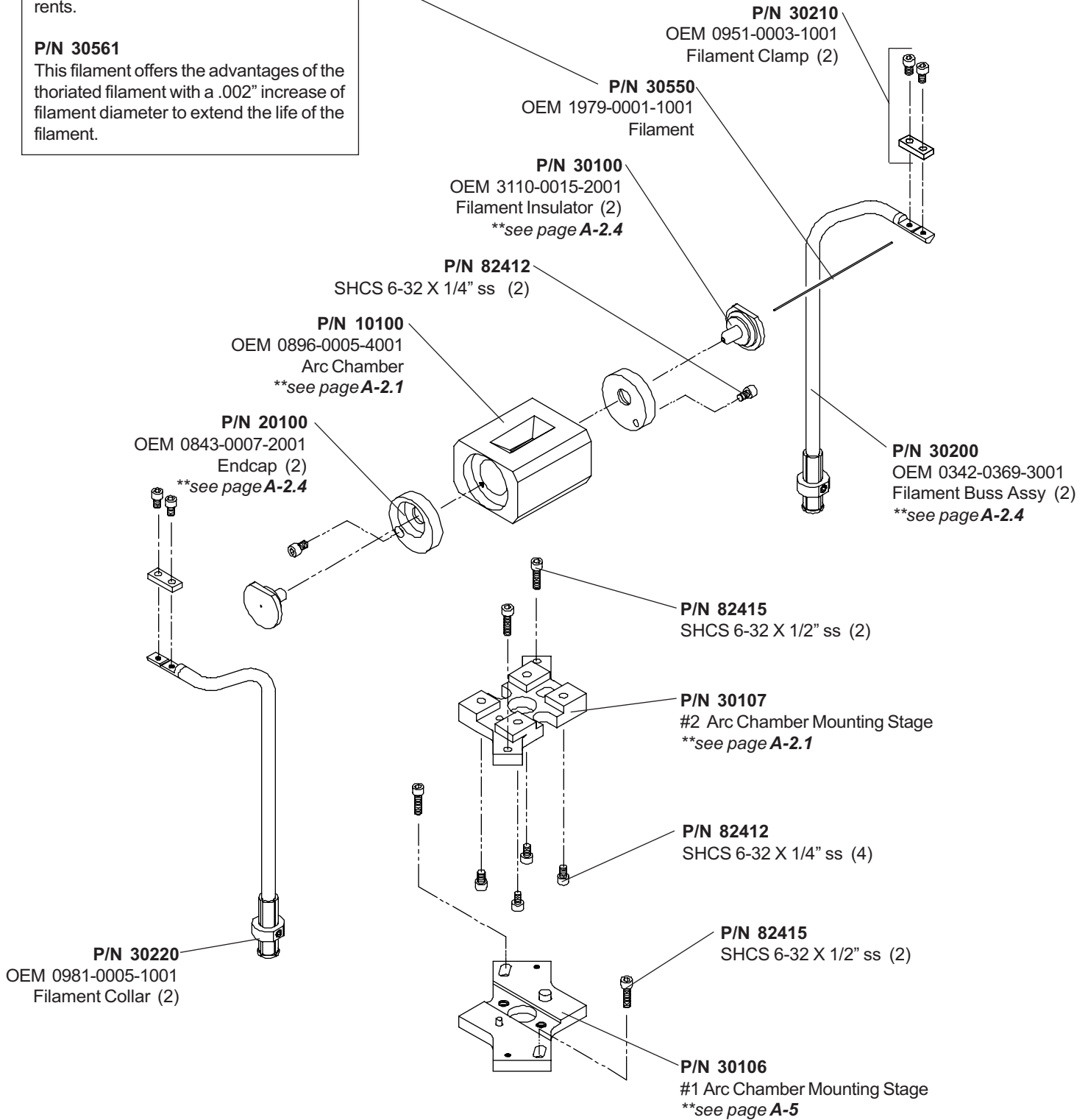
P/N 30550 is interchangeable with:

P/N 30560

Thoriated tungsten is reported to give increased emissivity at lower filament currents.

P/N 30561

This filament offers the advantages of the thoriated filament with a .002" increase of filament diameter to extend the life of the filament.



****Reference A-2.1 for interchangeable components for the items shown here.**

The Arc Chamber Mounting Stages

In this two piece system, the #1 mounting stage attaches to the cooling plate and the #2 mounting stage to the arc chamber, allowing the removal and replacement of the arc chamber without a lengthy realignment procedure. P/N 30107 is for use with arc chambers: P/Ns 10100, 10110, 10500, 10512, and 10600. P/N 30108 is for use with arc chambers: P/Ns 10550 and 10650.

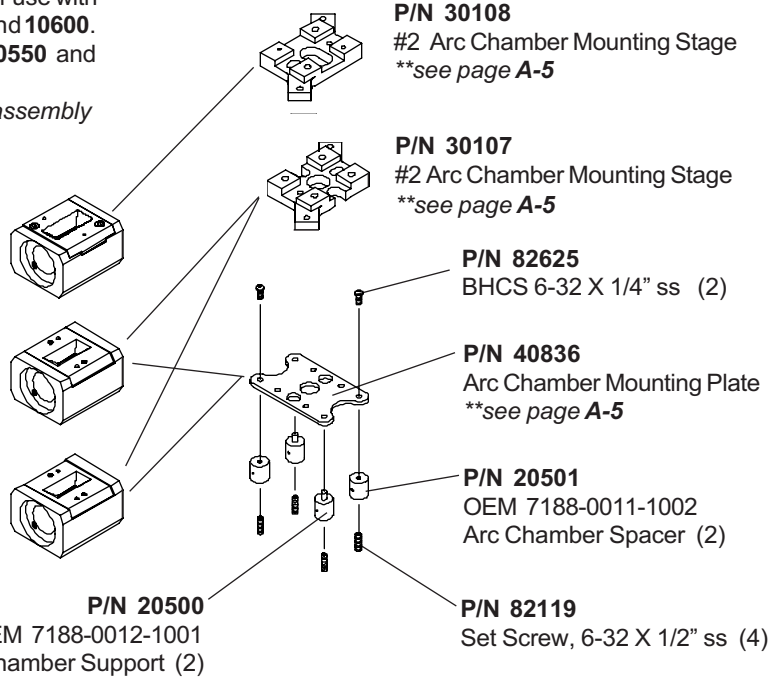
**refer to page A-5 for a graphical representation of assembly

For more information on Arc Chambers components for P/N 10200, see page A-2.4

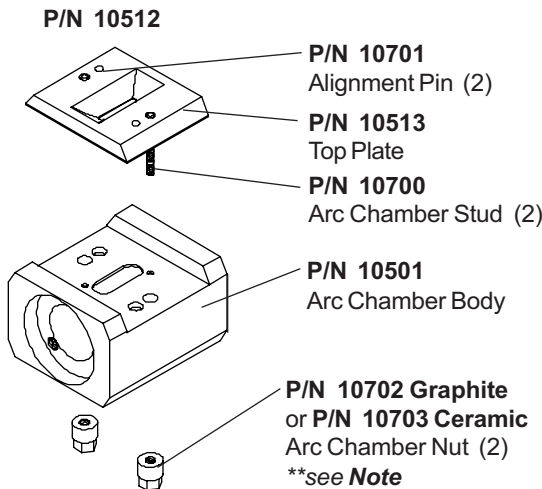
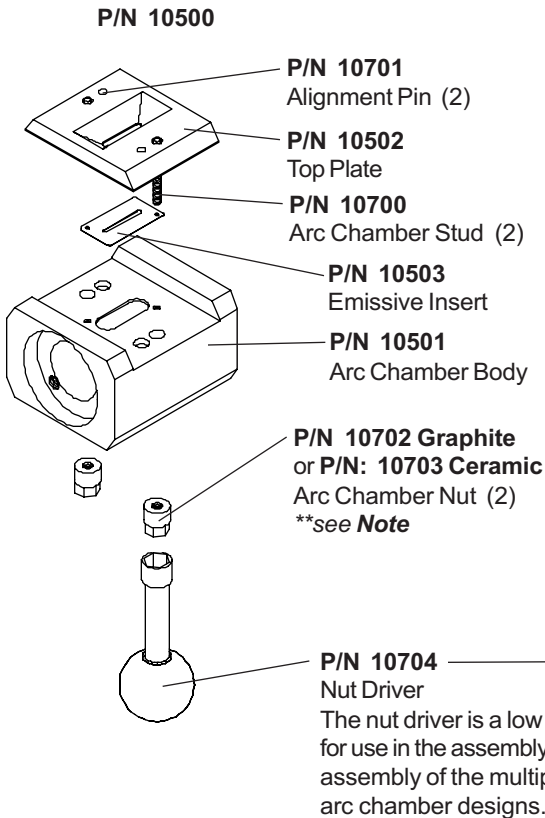
P/N 10550
OEM 0897-0034-0001
Eaton Design
3 Pc Arc Chamber
**see below

P/N 10512
2 Pc Arc Chamber
**see below

P/N 10500
3 Pc Arc Chamber
**see below

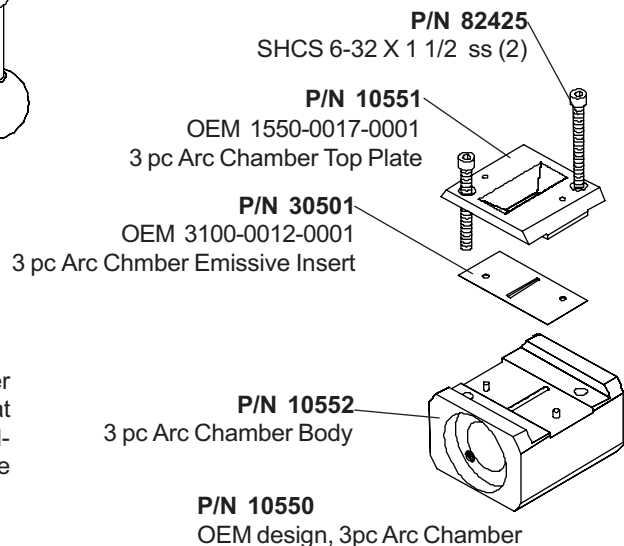


These Arc Chambers are interchangeable with P/N 10100 when used with appropriate Mounting Stage.



The Standard Three Piece Arc Chamber

Our three piece arc chambers are designed utilizing molybdenum studs, (P/N 10700), to ensure that the assembly remains sealed in operation. Stainless steel fasteners have a much higher coefficient of thermal expansion causing them to effectively loosen at operating temperatures. Additionally, neither our graphite, (P/N 10702), nor ceramic, (P/N 10703), nuts will seize in operation, ensuring that the Glemco, Inc. arc chamber will always be easily serviced.



**Note:

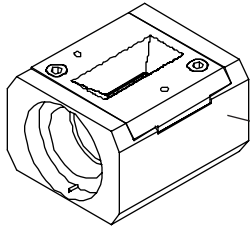
Graphite nuts are used with our 3 piece arc chamber designs to eliminate disassembly problems due to heat affected fasteners. Ceramic nuts offer the same advantages as the graphite nut, and are available for those applications sensitive to the presence of graphite.

SKM Version of 3204, 3206, 6200, and Kasper MC200 Source

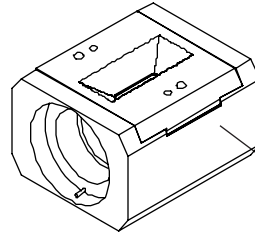
The Arc Chamber Mounting Stages

In this two piece system, the #1 mounting stage attaches to the cooling plate and the #2 mounting stage to the arc chamber, allowing the removal and replacement of the arc chamber without a lengthy realignment procedure.

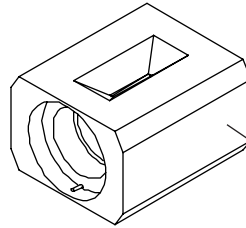
P/N 30108 is for use with arc chamber **P/N 10650**, and **P/N 30107** is for use with **P/N 10110** and **P/N 10600**.



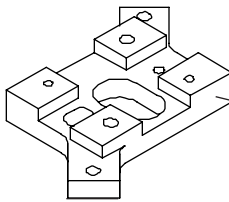
P/N 10650
OEM 0897-0033-0001
OEM design:
3 Pc Arc Chamber, Complete



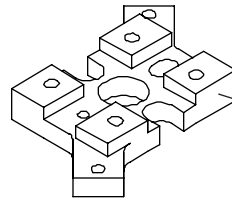
P/N 10600
3 Pc Arc Chamber Design, Complete



P/N 10110
OEM 0896-0030-0001
SKM Arc Chamber



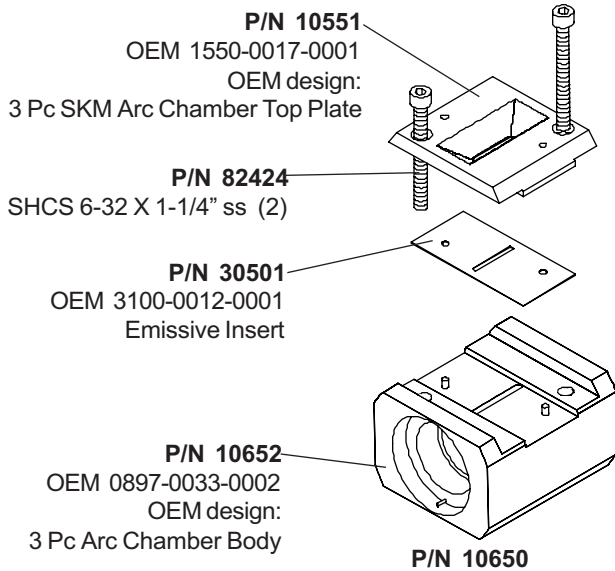
P/N 30108
#2 Arc Chamber Mounting Stage
**see page A-5



P/N 30107
#2 Arc Chamber Mounting Stage
**see page A-5

The SKM version of the Three Piece Arc Chamber

Our three piece arc chambers are designed utilizing molybdenum studs, (**P/N 10700**), to ensure that the assembly remains sealed in operation. Stainless steel fasteners have a much higher co-efficient of thermal expansion causing them to effectively loosen at operating temperatures. Additionally, neither our graphite, (**P/N 10702**), nor ceramic, (**P/N 10703**), nuts will seize in operation, ensuring that the Glemco, Inc. arc chamber will always be easily serviced.



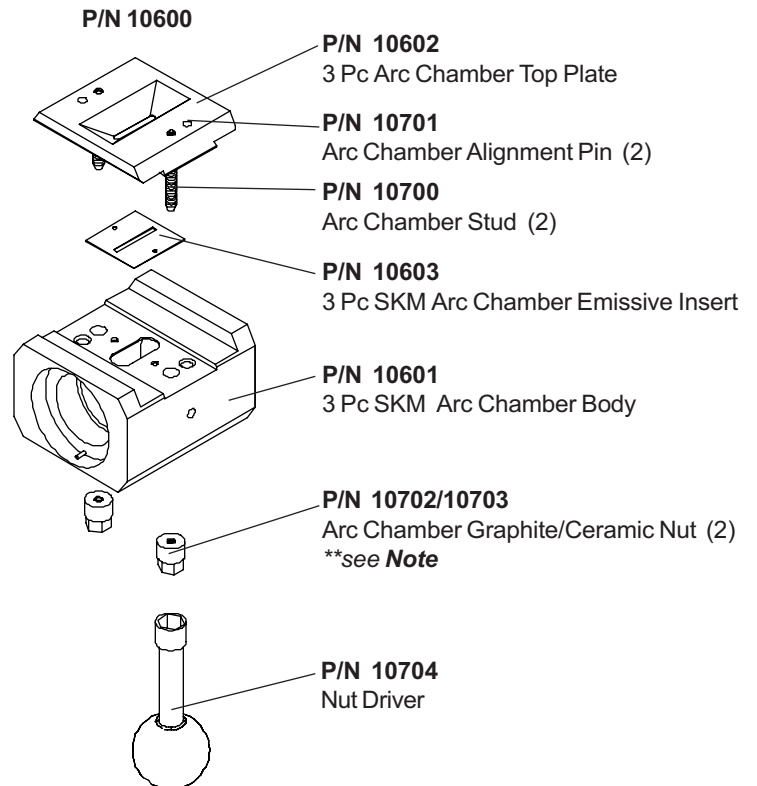
P/N 10551
OEM 1550-0017-0001
OEM design:
3 Pc SKM Arc Chamber Top Plate

P/N 82424
SHCS 6-32 X 1-1/4" ss (2)

P/N 30501
OEM 3100-0012-0001
Emissive Insert

P/N 10652
OEM 0897-0033-0002
OEM design:
3 Pc Arc Chamber Body

P/N 10650



P/N 10600

P/N 10602
3 Pc Arc Chamber Top Plate

P/N 10701
Arc Chamber Alignment Pin (2)

P/N 10700
Arc Chamber Stud (2)

P/N 10603
3 Pc SKM Arc Chamber Emissive Insert

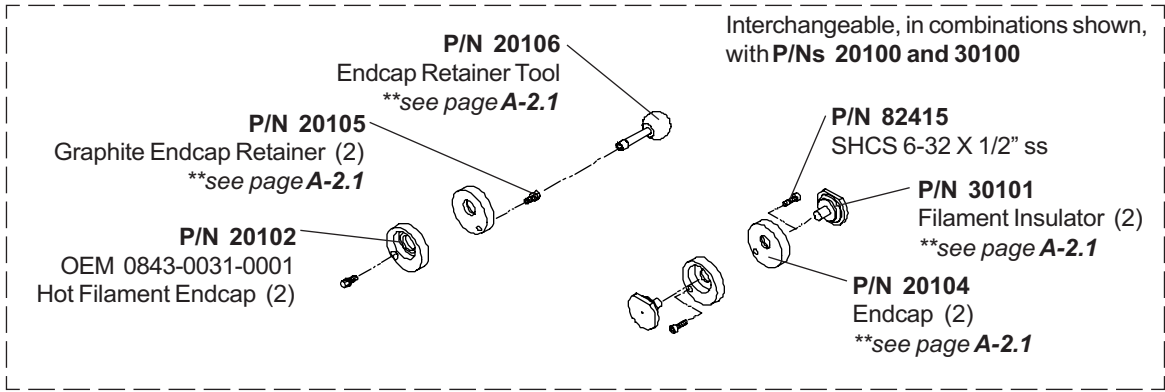
P/N 10601
3 Pc SKM Arc Chamber Body

P/N 10702/10703
Arc Chamber Graphite/Ceramic Nut (2)
**see Note

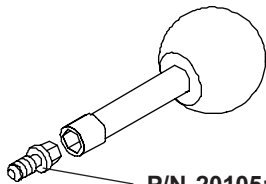
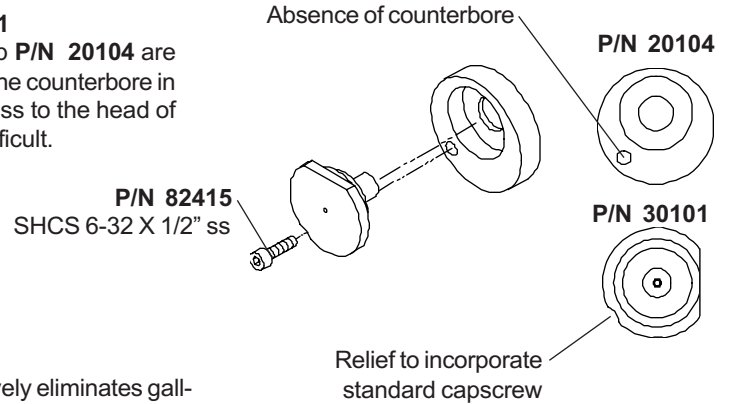
P/N 10704
Nut Driver

**Note:

Graphite nuts are used with our 3 piece arc chamber designs to eliminate disassembly problems due to heat affected fasteners. Ceramic nuts offer the same advantages as the graphite nut, and are available for those applications sensitive to the presence of graphite.

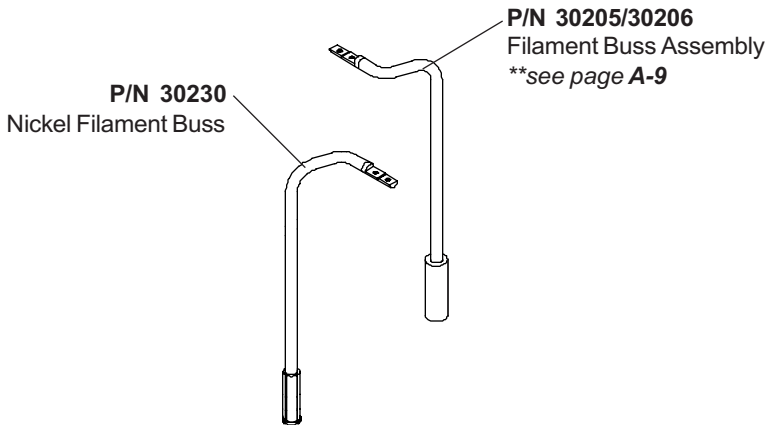


P/N 20104 and P/N 30101
Filament Insulator **P/N 30101** and endcap **P/N 20104** are used by customers who prefer to eliminate the counterbore in the OEM endcap design. This allows access to the head of the capscrew should disassembly prove difficult.



P/N 20105 and 20106
P/N 20105: Graphite Endcap Retainer positively eliminates galling seen with the commonly used stainless steel capscrew. The retainer is also easily removed if broken.
P/N 20106: Endcap Retainer Tool is designed specifically for use with the graphite endcap retainer, allowing efficient use of the fastener.

Alternatives to P/N 30200



P/N 30230: Nickel Filament Buss Assembly

The nickel filament buss is used to replace the standard OEM copper unit and is especially indicated in applications implanting phosphorus. Phosphorus aggressively attacks copper oxide, severely shortening the useful life of the standard buss. Nickel has been proven to outlast the copper by at least a tenfold factor in some applications.

P/N 30205: Nickel Filament Buss Assembly

This filament buss incorporates a special high current, low insertion force connector to replace the OEM's difficult collet and collar connector that can cause mechanical strain on the filament. This unit is used with **P/N 10632: Source Plate with Feed-thru** and **P/N 10631, Cable Assembly**.

P/N 30206: Filament Buss Assembly

Mechanically the same as **P/N 30205** above, except manufactured from copper for a lower cost alternative for those customers whose processes don't require nickel's corrosion resistance.

***see page A-9 for more details.*

P/N 10610
 OEM 0342-0565-3001
 Cooling Plate
 **see page A-6

P/N 10306
 OEM 7058-0001-1001
 Copper Thermal Seal (2)

P/N 10305
 OEM 5936-0001-2001
 Magnet Pole (2)

Alternative to **P/N 40105** and **P/N 40115**.
 see also page A-4

P/N 40100
 OEM 0342-0519-2001
 Vapor Source Crucible

P/N 10304
 OEM 7120-0001-2001
 Magnet Shunt, Set
 see page A-4

P/N 40810
 OEM 1066-0007-1001
 Closed Crucible Coupling

P/N 10307
 OEM 4630-0002-2001
 Source Magnet

P/N 40800
 OEM 1066-0006-1001
 Open Crucible Coupling

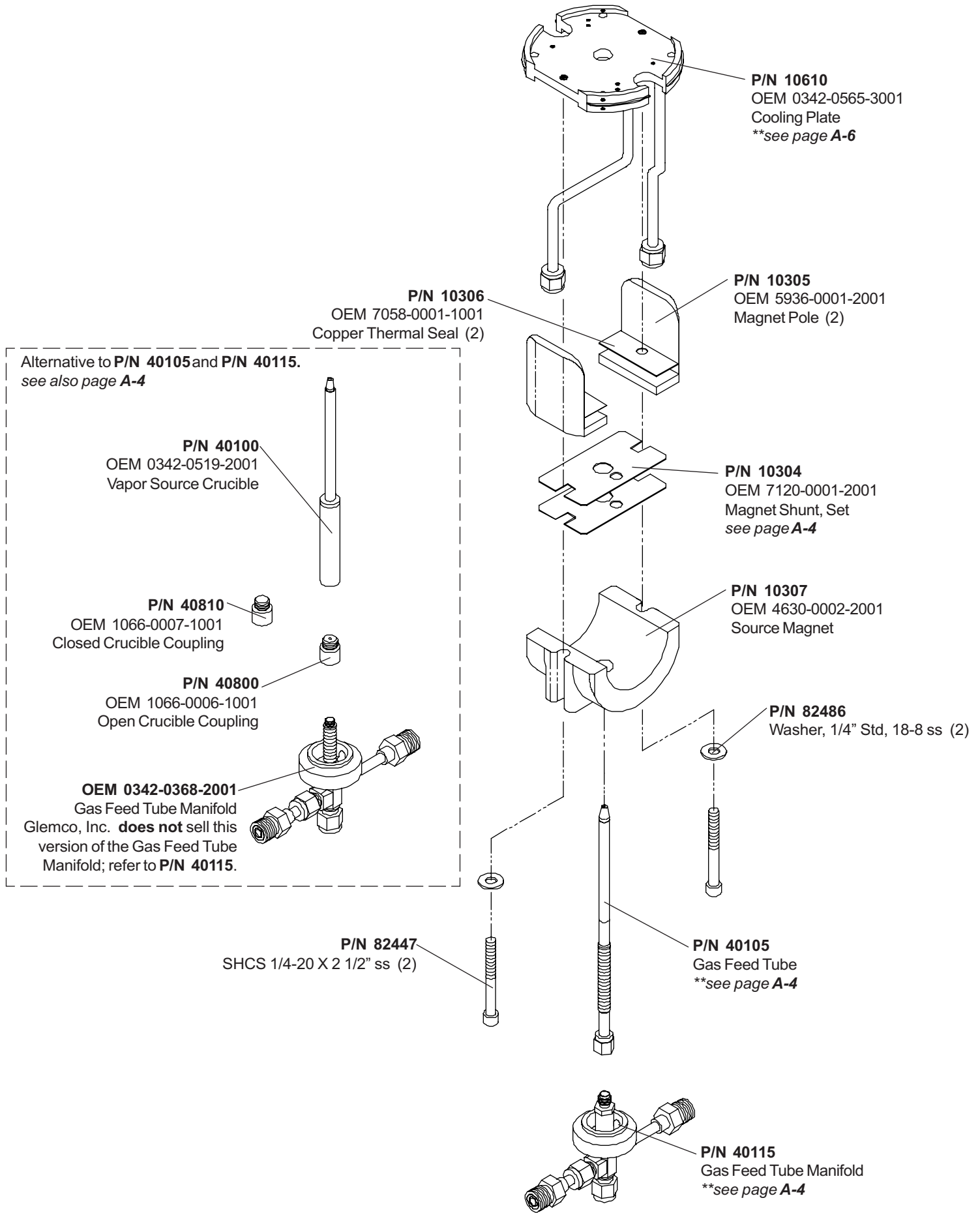
P/N 82486
 Washer, 1/4" Std, 18-8 ss (2)

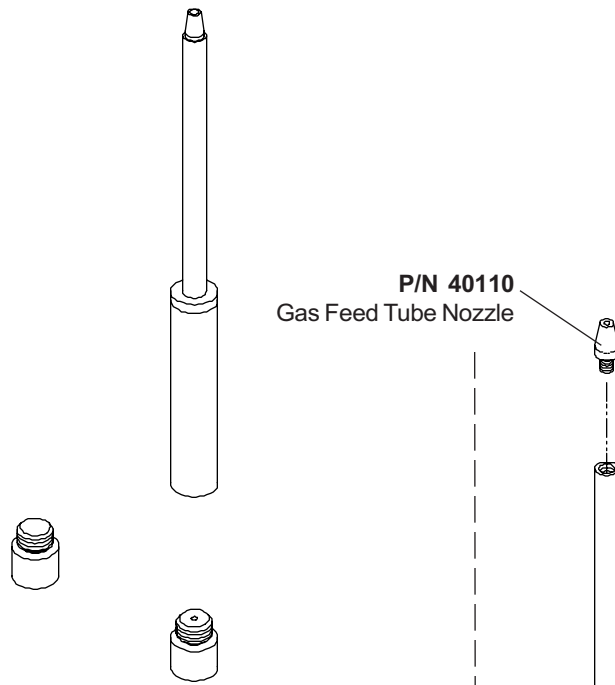
OEM 0342-0368-2001
 Gas Feed Tube Manifold
 Glemco, Inc. **does not** sell this
 version of the Gas Feed Tube
 Manifold; refer to **P/N 40115**.

P/N 82447
 SHCS 1/4-20 X 2 1/2" ss (2)

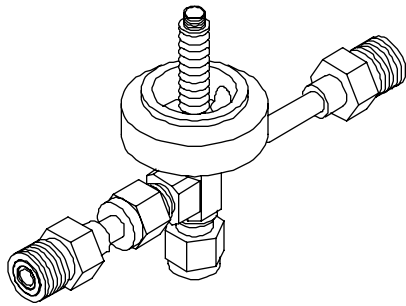
P/N 40105
 Gas Feed Tube
 **see page A-4

P/N 40115
 Gas Feed Tube Manifold
 **see page A-4



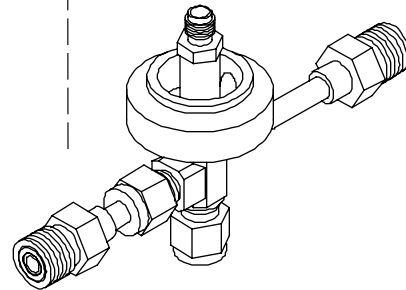


P/N 40110
Gas Feed Tube Nozzle



OEM 0342-0368-2001
Not sold by Glemco, Inc.

OEM design

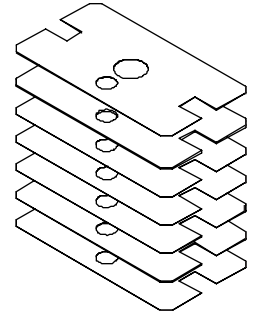


Glemco, Inc's Assembly design

P/N 10304; Magnet Shunt, Set

The thicknesses provided in this set will enable you to stack up, in .001" increments, any thickness up to .062". A set consists of:

- 2ea. .001"
- 1ea. .002"
- 1ea. .004"
- 1ea. .008"
- 1ea. .015"
- 1ea. .031"



P/N 40105, Gas Feed Tube with Replaceable Nozzle

This Gas Feed Tube is designed with a replaceable nozzle, (P/N 40110), manufactured from molybdenum, extending the useful life of the part by allowing replacement of the high wear portion of the unit. Both the Gas Feed Tube and the Gas Feed Tube Manifold, (P/N 40115), are manufactured with fittings that eliminate the use of the Vapor Source Crucible, (P/N 40100), and Crucible Couplings, (P/N 40800 and P/N 40810). The flexible tube is incorporated into the manifold in the OEM version of the Gas Feed Tube Manifold. The Glemco version is more practical, locating the flexible tube and the replaceable nozzle together in the low cost replaceable gas feed tube.

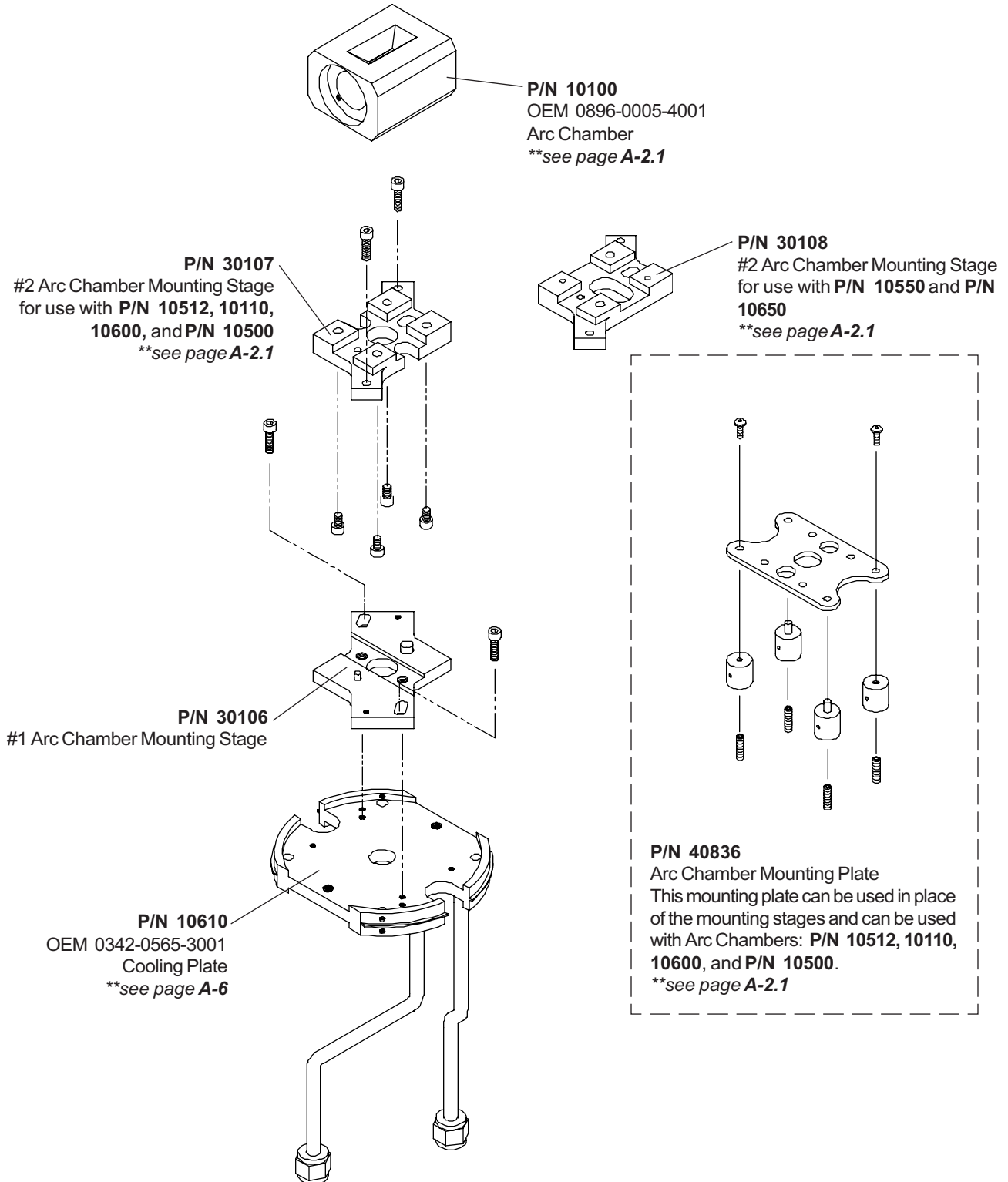


P/N 10152

We offer this package, which consists of a gauss meter and a gauss block, (a special fixture that allows simple and accurate measurement of the medium current field strength). The gauss block, P/N 10150 and gauss meter P/N 10151 are also sold separately.

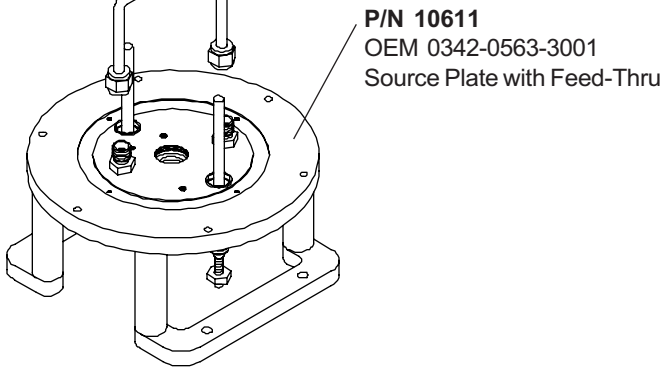
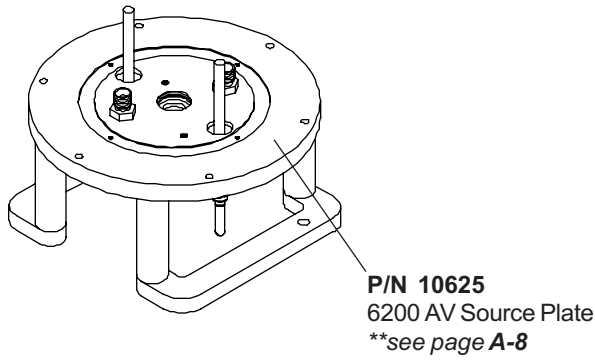
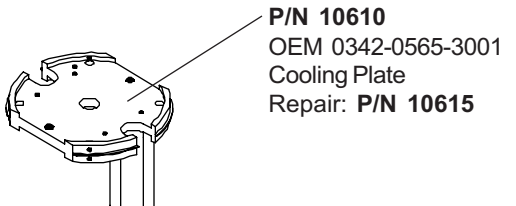
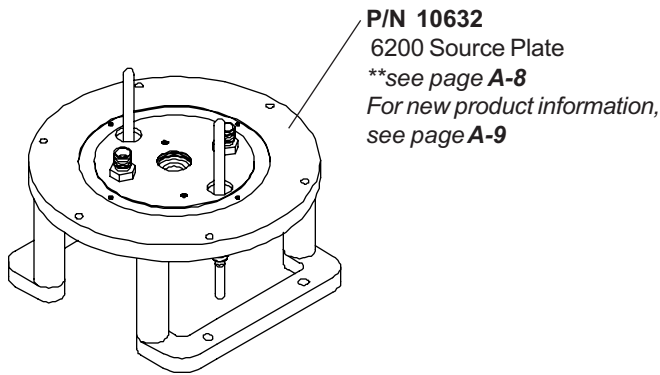
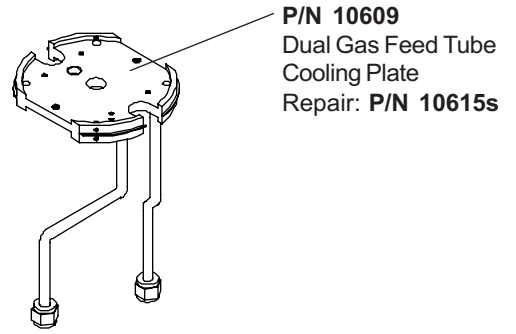
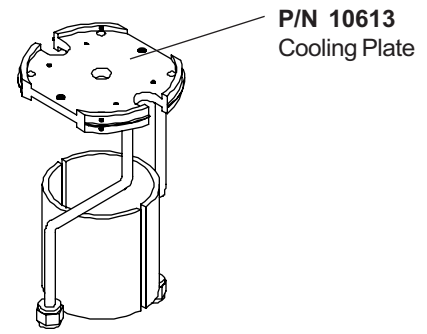
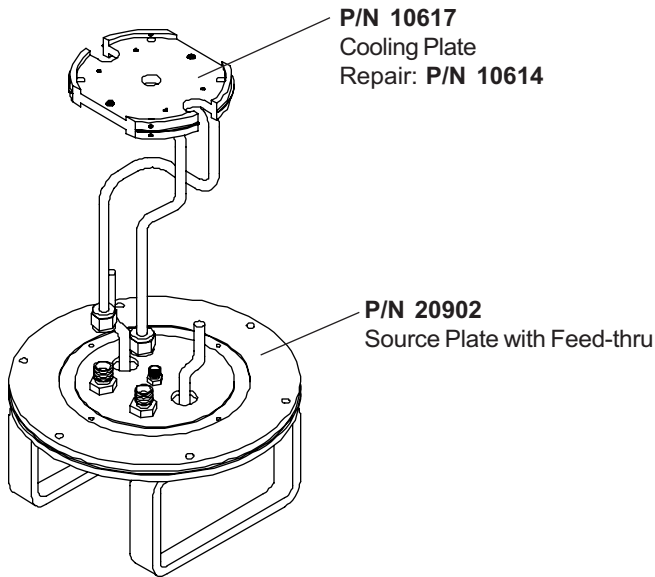
The Arc Chamber Mounting Stages

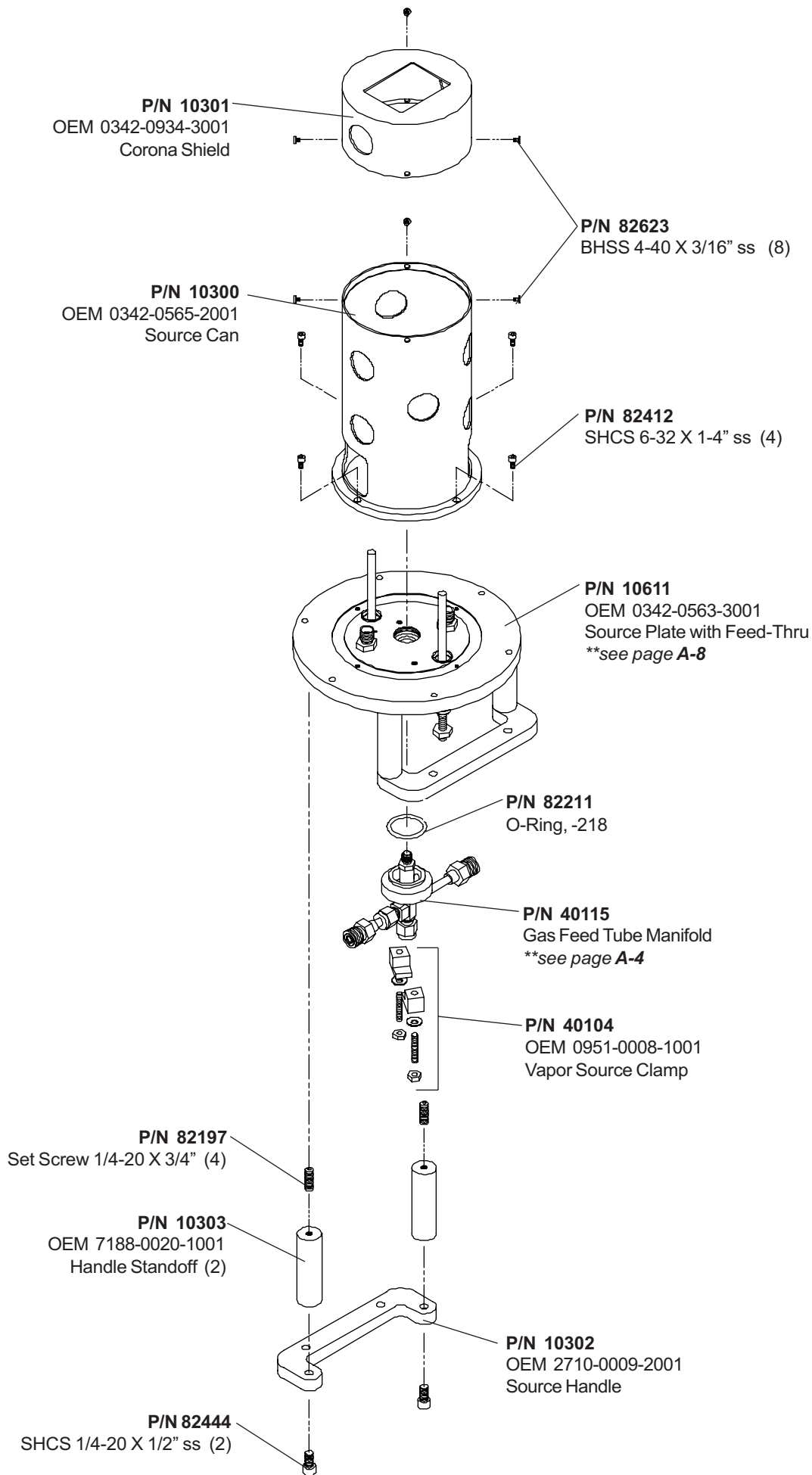
In this two-piece system, the #1 mounting stage attaches to the cooling plate and the #2 mounting stage to the arc chamber, allowing the removal and replacement of the arc chamber without a lengthy realignment procedure.



Source Plates and Cooling Plates for 3204, 3206, 6200, and Kasper MC200 Source

All Cooling Plates manufactured by Glemco, Inc. are compatible with all Source Plates shown here with the exception of the Cooling plate and Source plate, (P/N 10617 and P/N 20902), for the Kasper MC200 Implanter. P/N 10632 utilizes the new high current, low insertion force connectors on P/N 30205, (see page A-2.4 and A-9), and P/N 10631, (see page A-9).

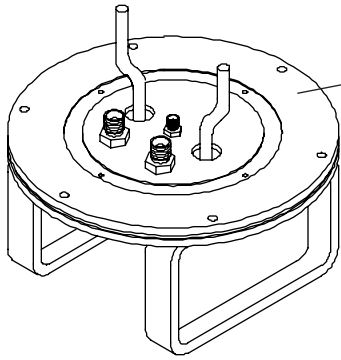




Source Plates for 3204, 3206, 6200, and Kasper MC200 Source

** Interchangeable in 3204, 3206, 6200, and Kasper MC200 Source with appropriate accessories.

Cooling plate information on page A-6

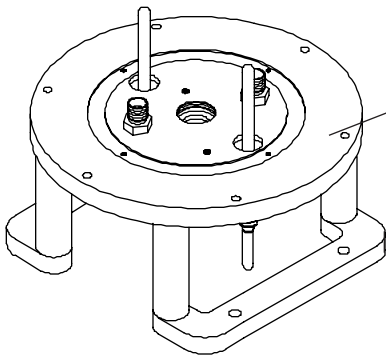


P/N 20902

Source Plate with feed-thru
Kasper MC200 Source

To order repair for this source plate, use

P/N 10621 *



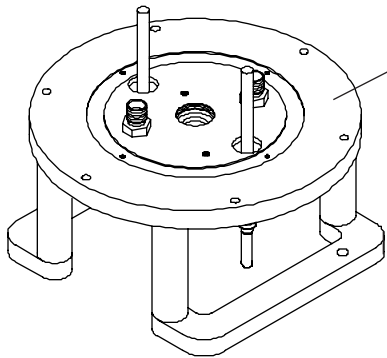
P/N 10632

Source Plate with feed-thru

**see page A-9

To order repair for this source plate, use

P/N 10635 *



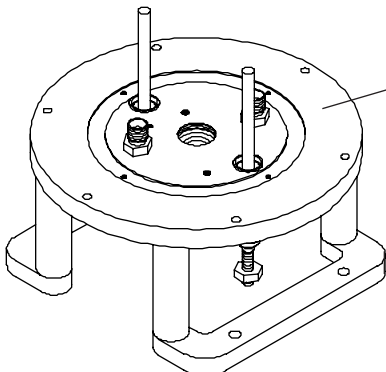
P/N 10625

AV Source Plate with feed-thru

**see page A-9

To order repair for this source plate, use

P/N 10630 *



P/N 10611

OEM 0342-0563-3001

Source Plate with feed-thru

To order repair for this source plate, use

P/N 10620 *

*For requesting repairs to the various source plates, be sure to refer to the appropriate source plate repair number. Repairs may include, but are not limited to, replacing feed-thrus, cooling fittings, repairing damage to o-ring surfaces, etc. Price listed for the repair is for feed-thru replacement only. Additional requirements will be quoted separately.

Note: Glemco sources do not accommodate vaporizers.

New Product Improvement:

P/N 10632: This Glemco design utilizes our special high current, low insertion force connector in both the cable assembly and the filament buss. The troublesome collar and set screw are eliminated, easing service and minimizing mechanical strain to the filament.

P/N 10625 This OEM design accomodates the standard filament buss design that relies on a split collet and clamp and can be used with the cable assembly, **P/N 10631**.

