

***MODEL 9-750***  
***WATER COOLED WELD HEAD***

***ILLUSTRATED PARTS BREAKDOWN MANUAL***

**MODEL 9-750**  
**IPB Notice and Revision History**


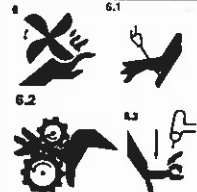

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**WARNING**



The nature of the GTAW process creates some POTENTIAL HAZARDS. In accordance with international safety regulations the EXCLAMATION SYMBOL indicates that this equipment is considered HAZARDOUS. The LIGHTNING FLASH SYMBOL indicates that there are potential electrical hazards. The display of these symbols makes it the OPERATOR'S RESPONSIBILITY TO ENSURE THAT THEY HAVE BEEN MADE AWARE OF and shall observe the hazardous conditions.

|   |  |
|---|--|
|    | <b>WARNING:</b> AMI factory training is essential for all Maintenance Technicians who operate AMI equipment. Do not operate or service this equipment without proper AMI approved training.  |
|   | <b>WARNING:</b> Keep hands and fingers clear from moving parts such as fans, gears, rotors, Wire Feed, Weld Head Travel, i.e. Oscillation (OSC) and Arc Voltage Control (AVC) mechanisms<br><br>Weld Head AVC and Oscillator Slide Assemblies develop high forces and it is possible, by their nature of operation, to harm any object or body part that may get into these areas. <b>USE EXTREME CAUTION!</b> |
|  | <b>Electrical Shock Hazard:</b> Always disconnect weld heads when servicing internal components or opening housing covers for access.  |

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| REV | ECO # | CHANGE DESCRIPTION   | DATE     | APR   |
|-----|-------|--|----------|-------|
| -   | N/A   |  | 12/18/06 | LEC   |
| A   | 5183  | IPB 0905234, ITEM 3 CHANGED TO PR07-0,25NP FROM SPSO.0781x0.25 | 10/31/08 | BF    |
| B   | 5579  | Added rev F of 750015 and Wiring Diagram                       | 1/18/10  | DC    |
| C   | 5753  | Updated IPB 090800 and Table of Contents                       | 10/6/10  | GB/DC |
|     |       |  |          |       |
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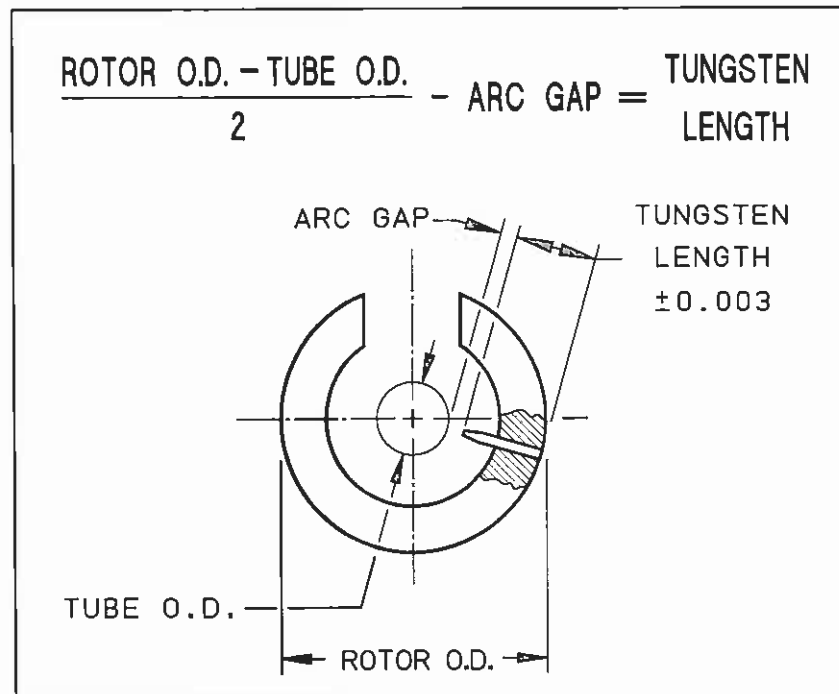
DATE EFFECTIVE: 24 January 2005

PRODUCT MODEL: 9-750  
MANUAL NUMBER: 730118

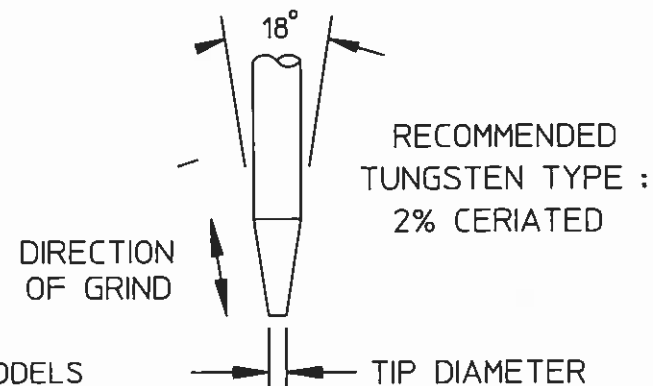
| <b>IPB NUMBER</b> | <b>DESCRIPTION</b>                                      |
|-------------------|---|
| 750015            | MODEL 9 ELECTRODE DIMENSIONS                            |
| 0901133           | WELD HEAD ASSEMBLY                                      |
| 090787            | ROTOR ASSEMBLY  |
| 0905232           | COVER FLIP TOP ASSEMBLY                                 |
| 0905234           | CLAMP ASSY HOUSING HSG SIDE                             |
| 0905235           | CLAMP ASSY COVER SIDE                                   |
| 090800            | CABLE ASSEMBLY M9                                       |
| 0905119           | LOCATING ARM KIT / INSTALLATION (OPTION)                |
| 0901103           | MODEL 9M-750 WELD HEAD ASSEMBLY                         |
| 0905185           | KIT CONVERSION M9-750 TO M9M-750 (OPTION)               |
| 0907102           | HOLDER ELECTRODE EXTENDER ASSEMBLY                      |
| DWG #750028       | KIT CONVERSION M9-750 TO M9CT-750 INSTRUCTIONS (OPTION) |
| 175144-06         | MODEL 9-750 WELD HEAD WIRING DIAGRAM                    |

## ELECTRODE DIMENSIONS

| ROTOR DIAMETER  |            |
|---|------------|
| MODEL NO.   | ROTOR O.D. |
| 9-250   | 0.802      |
| 9-500/4-500   | 1.388      |
| 9-675   | 1.715      |
| 9M-750  | 1.312      |
| 9-750   | 2.000      |
|   |            |
| 9-1500  | 3.187      |
| 9AF-1500  | 2.252      |
| 9E-1500   | 2.687      |
| 8-2000  | 3.450      |
| 9-2500  | 4.380      |
| 9AF-2500  | 3.156      |
| 9E-2500   | 4.280      |
|   |            |
| * 9-3500  | 5.380      |
| 9E-3500   | 5.310      |
| 8-4000  | 5.310      |
| * 9-4500  | 6.875      |
| 9ER-4500  | 5.776      |
| 8-6625  | 8.094      |
| * 9-7500  | 10.440     |
| 9E-7500   | 9.375      |
| * FOR HEADS USING OPTIONAL TUNGSTEN EXTENDER, SEE PAGE 2. |            |

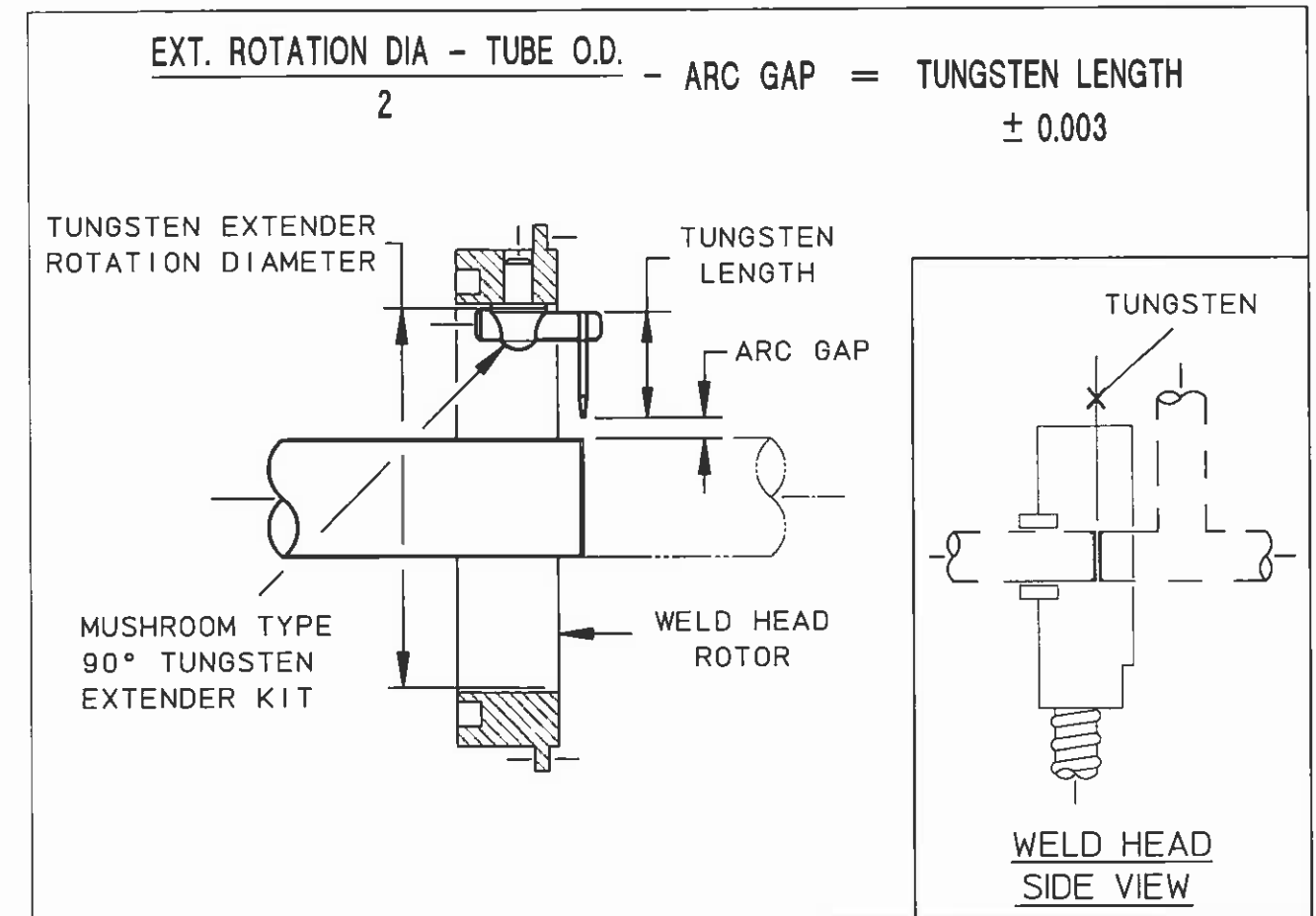


| TUBE/PIPE WALL THICKNESS | RECOMMENDED ARC GAP | RECOMMENDED TIP DIA. |
|--------------------------|---------------------|----------------------|
| 0.020/0.035              | 0.030               | 0.020                |
| 0.049/0.085              | 0.050               | 0.030                |
| 0.091/0.154              | 0.070               | 0.040                |



- NOTES:
1. RECOMMENDED ARC GAP FOR MODELS 4-500, 9-250 & 9-500 IS 0.045 MAXIMUM.
  2. IN INSTANCES WHERE OUT-OF-ROUNDNESS ON THIN-WALLED TUBING OCCURS (NORMALLY 2.500 O.D. OR LARGER), A 0.070 ARC GAP IS RECOMMENDED.
  3. DIMENSIONS ARE IN INCHES.

## TUNGSTEN LENGTH CALCULATION FOR TUNGSTEN EXTENDERS

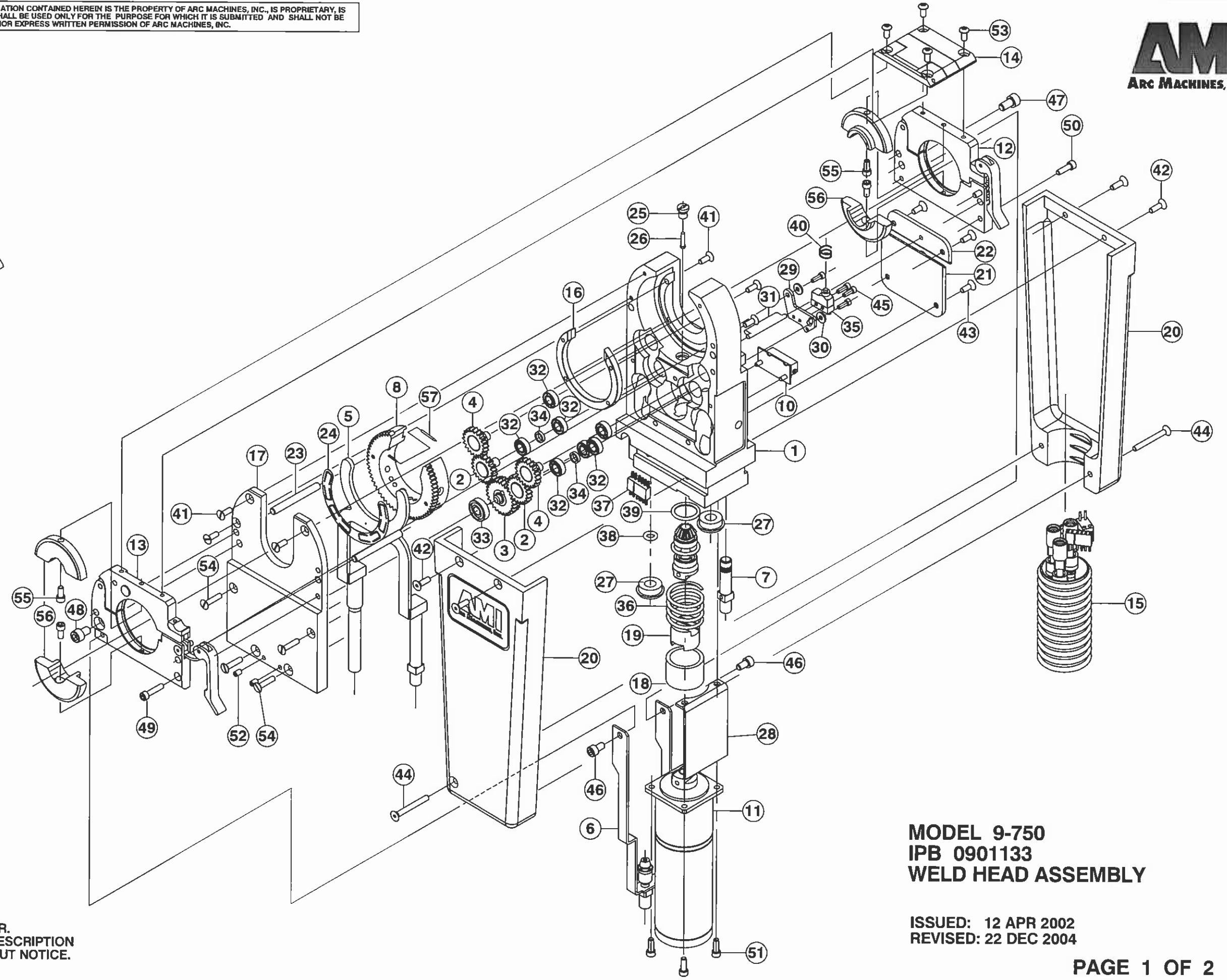
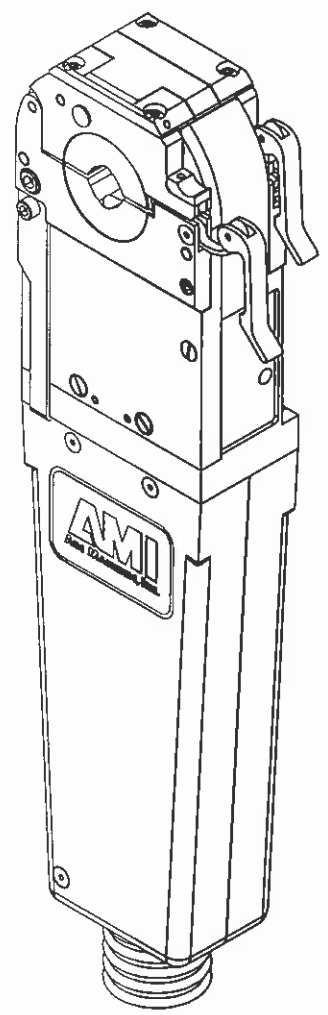


| WELD HEAD MODEL NO. | KIT WITH 1/16 TUNGSTEN HOLDER PART NO. | KIT WITH 3/32 TUNGSTEN HOLDER PART NO. | TUNGSTEN EXTENDER ROTATION DIA. |
|---------------------|--|--|---------------------------------|
| 9-1500              | 13090796-01                            | 13090796-02                            | 2.031                           |
| 9-2500              | 13090796-05                            | 13090796-06                            | 3.156                           |
| 9-3500              | 13090796-05                            | 13090796-06                            | 4.031                           |
| 9-4500              | 13090796-03                            | 13090796-04                            | 4.920                           |
| 9-7500              | 13090796-05                            | 13090796-06                            | 8.280                           |

### NOTES:

1. PART NUMBERS SHOWN ARE FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE.
2. CONTACT AMI SALES OR SERVICES FOR SPECIFIC PART NUMBER.

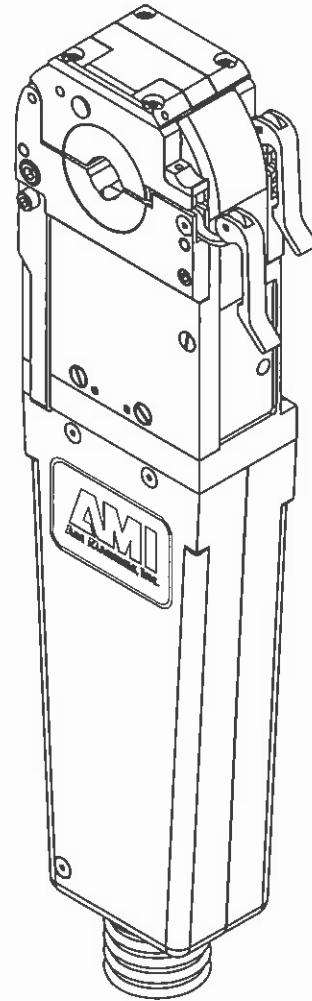
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TO ORDER USE PART NUMBER.  
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**MODEL 9-750**  
**IPB 0901133**  
**WELD HEAD ASSEMBLY**

ISSUED: 12 APR 2002  
REVISED: 22 DEC 2004

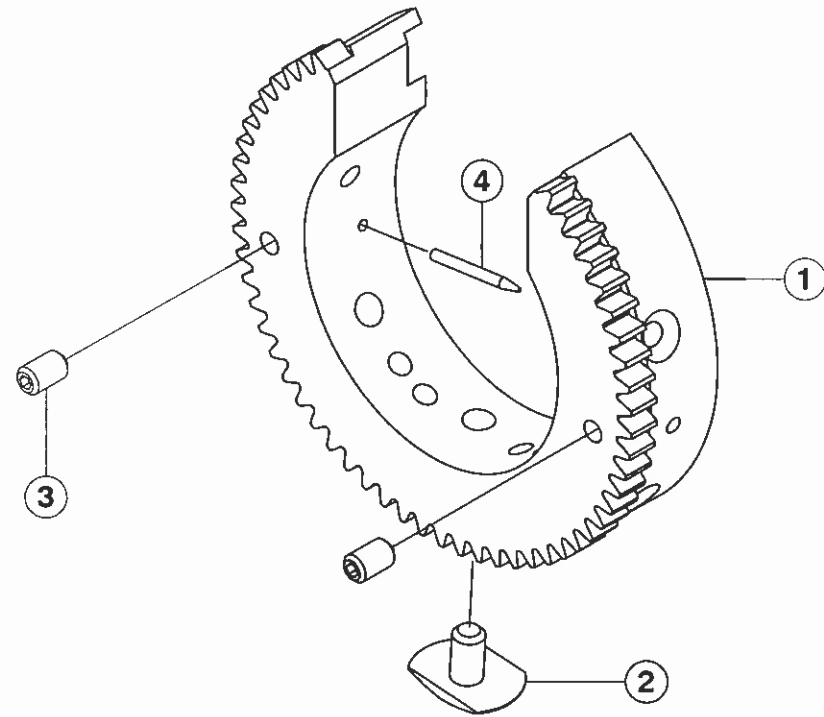


| ITEM NO. | QTY. | PART NO.             | DESCRIPTION                    | ITEM NO. | QTY. | PART NO.            | DESCRIPTION                    |
|----------|------|----------------------|--------------------------------|----------|------|---------------------|--------------------------------|
| 1        | 1    | 42090185-01          | HOUSING MAIN                   | 37       | 1    | 7051                | CONN 5 PIN MALE                |
| 2        | 2    | 13090618-01          | GEAR IDLER ASSY                | 38       | 1    | 2-010-S604-70       | O RING .238 ID .070 W SIL      |
| 3        | 1    | 13090618-02          | GEAR DRIVE ASSY                | 39       | 1    | 2-014-S604-70       | O RING .489 ID .070 W VITON    |
| 4        | 2    | 13090618-03          | GEAR IDLER ASSY                | 40       | 1    | MM-9                | SPRING CPRSN .25D .31L .020W   |
| 5        | 1    | 130907123-01         | CONDUCTOR SHOE BRAZED ASSY     | 41       | 7    | SFL04-40-0,31NY     | SCREW FLH SLT 4-40 5/16 L NYL  |
| 6        | 1    | 13090750-01          | GROUND STRAP                   | 42       | 4    | SFS04-40-0,37NP     | SCREW FLH SKT 4-40 3/8 L       |
| 7        | 1    | 13090803-01          | TUBE FTG GAS                   | 43       | 4    | SFS04-40-0,31NP     | SCREW FLH SKT 4-40 5/16 L      |
| 8        | 1    | 13090787-01          | ROTOR ASSY                     | 44       | 2    | SFS04-40-1.00NP     | SCREW FLH SKT 4-40 1.00 L      |
| 9        | 1    | 13090602-07          | GEAR PINION DRIVE ASSY         | 45       | 4    | SCS02-56-0,31NP     | SCREW CAP SKT 2-56 5/16 L      |
| 10       | 1    | 130901132-01         | RETAINER TRIM POT ASSY         | 46       | 2    | SCS06-32-0,25SP     | SCREW CAP SKT 6-32 1/4 SIL PL  |
| 11       | 1    | 13090602-01          | MOTOR DRIVE ASSY               | 47       | 1    | SCS08-32-0,31NP     | SCREW CAP SKT 8-32 5/16 L      |
| 12       | 1    | 130905234-01         | CLAMP HOUSING HOUSING SIDE     | 48       | 1    | SCS08-32-0.25NP     | SCREW CAP SKT 8-32 1/4 L       |
| 13       | 1    | 130905235-01         | CLAMP ASSY COVER SIDE          | 49       | 1    | SCS04-40-0.50NP     | SCREW CAP SKT 4-40 1/2L        |
| 14       | 1    | 130905232-01         | COVER FLIP TOP ASSY            | 50       | 1    | SCS04-40-0.37NP     | SCREW CAP SKT 4-40 3/8 L       |
| 15       | 1    | 13090800-01          | CABLE M9 10 FT                 | 51       | 4    | SCS04-40-0.31NP     | SCREW CAP SKT 4-40 5/16 L      |
| 16       | 1    | 420907123-01         | GUIDE RING                     | 52       | 2    | SSS04-40-18NPCU     | SCREW SET SKT 6-32 3/16L NY PT |
| 17       | 1    | 42090183-01          | COVER HOUSING                  | 53       | 4    | SBS04-40-0,25NP     | SCREW BTH SKT 4-40 1/4 L       |
| 18       | 1    | 42090602-04          | SPACER SPRING                  | 54       | 4    | SFLO4-40-0,50NY     | SCREW FLH SLT 4-40 1/2 L NYL   |
| 19       | 1    | 42090602-03          | COUPLING INSULATING            | 55       | 4    | SCS04-40-0.25NP     | SCREW CAP SKT 4-40 1/4 L       |
| 20       | 2    | 42090104-01          | HANDLE ONE-HALF                | 56       | 4    | 420905214-00 (REF.) | CLAMP INSERT (ORDER BY SIZE)   |
| 21       | 1    | 42091106-01          | COVER LIMIT SWITCH LARGE CLEAR | 57       | 1    | ELECTRODE           | (REF.)                         |
| 22       | 1    | 42091106-02          | COVER LIMIT SWITCH SMALL CLEAR |          |      |                     |                                |
| 23       | 2    | 42090164-08          | PIN .156D 1.4L 9-750           |          |      |                     |                                |
| 24       | 1    | 420907216-01         | PLATE BACKING                  |          |      |                     |                                |
| 25       | 1    | 42090716-02          | BUSHING PUSH ROD               |          |      |                     |                                |
| 26       | 1    | 42090716-01          | PUSH ROD LIMIT SW              |          |      |                     |                                |
| 27       | 2    | 420901126-02         | GROMMET                        |          |      |                     |                                |
| 28       | 1    | 42091102-04          | INSULATOR SKIRT                |          |      |                     |                                |
| 29       | 1    | 42091103-01          | PLATE MTG LIMIT SWITCH         |          |      |                     |                                |
| 30       | 2    | W02ZP-FL             | WASHER FL # 2                  |          |      |                     |                                |
| 31       | 1    | 42091107-01          | LEVER LIMIT SWITCH             |          |      |                     |                                |
| 32       | 7    | SSRI-6632LLRA3P25LY[ | BEARING BALL .18 .37 [15]      |          |      |                     |                                |
| 33       | 1    | SSR-3LLRA3P25LY13    | BEARING BALL .18 .50           |          |      |                     |                                |
| 34       | 2    | DB6D9                | SPACER SHAFT .18ID .25D .062T  |          |      |                     |                                |
| 35       | 1    | MMGGD1D0C            | SWITCH LIMIT PLUNGER           |          |      |                     |                                |
| 36       | 1    | S-939                | SPRING CPRSN .81D .70L .072W   |          |      |                     |                                |

**MODEL 9-750  
IPB 0901133  
WELD HEAD ASSEMBLY**

ISSUED: 12 APR 2002  
REVISED: 22 DEC 2004

TO ORDER USE PART NUMBER.  
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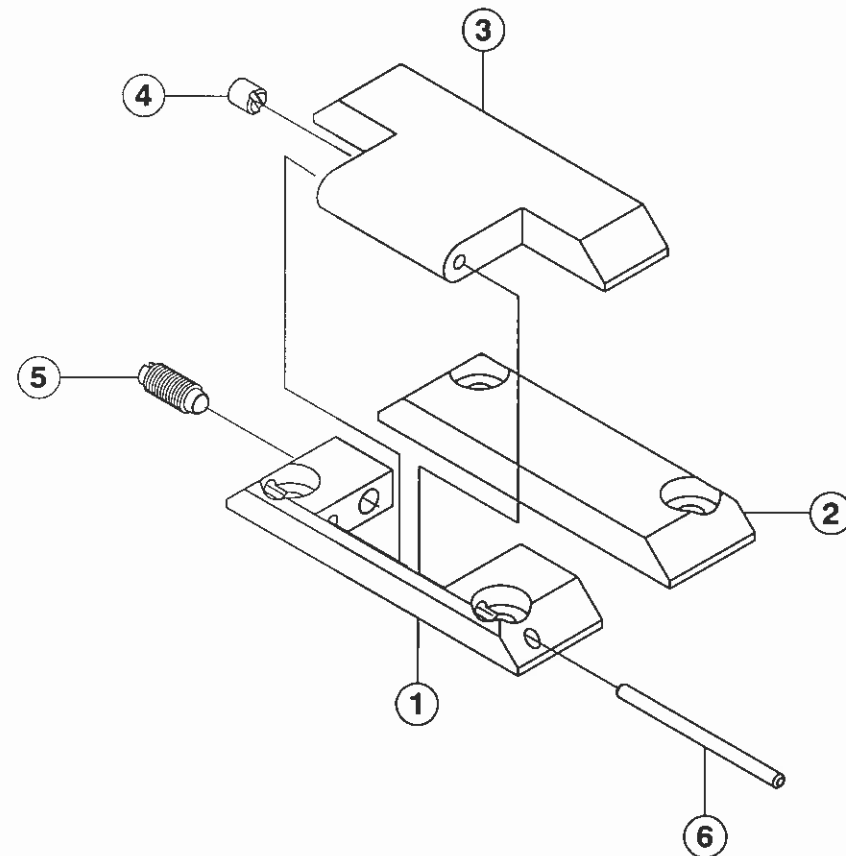


| ITEM NO. | QTY. | PART NO.        | DESCRIPTION                    |
|----------|------|-----------------|--------------------------------|
| 1        | 1    | 420907164-01    | ROTOR M9-750                   |
| 2        | 1    | 420907156-02    | CAM LIMIT SWITCH (MODIFIED)    |
| 3        | 2    | SSS04-40-18NPCU | SCREW SET SKT 4-40 3/16 L CUPT |
| 4        | 1    | ELECTRODE       | (REF.)                         |

**MODEL 9-750**  
**IPB 090787**  
**ROTOR ASSEMBLY**

ISSUED: 4 JAN 2005  
REVISED:

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| ITEM NO. | QTY. | PART NO.     | DESCRIPTION                      |
|----------|------|--------------|----------------------------------|
| 1        | 1    | 420905361-01 | COVER FRAME FLIP TOP             |
| 2        | 1    | 420905361-02 | COVER FIXED FLIP TOP             |
| 3        | 1    | 420905361-03 | COVER HINGED FLIP TOP            |
| 4        | 1    | CL-2-BD      | BALL DETENT                      |
| 5        | 1    | CL-15-SBP-1  | PLUNGER BALL SS 6-40 X 5/16 LONG |
| 6        | 1    | PD06-1,00SS  | PIN DOWEL 1/16D 1.0L SST         |

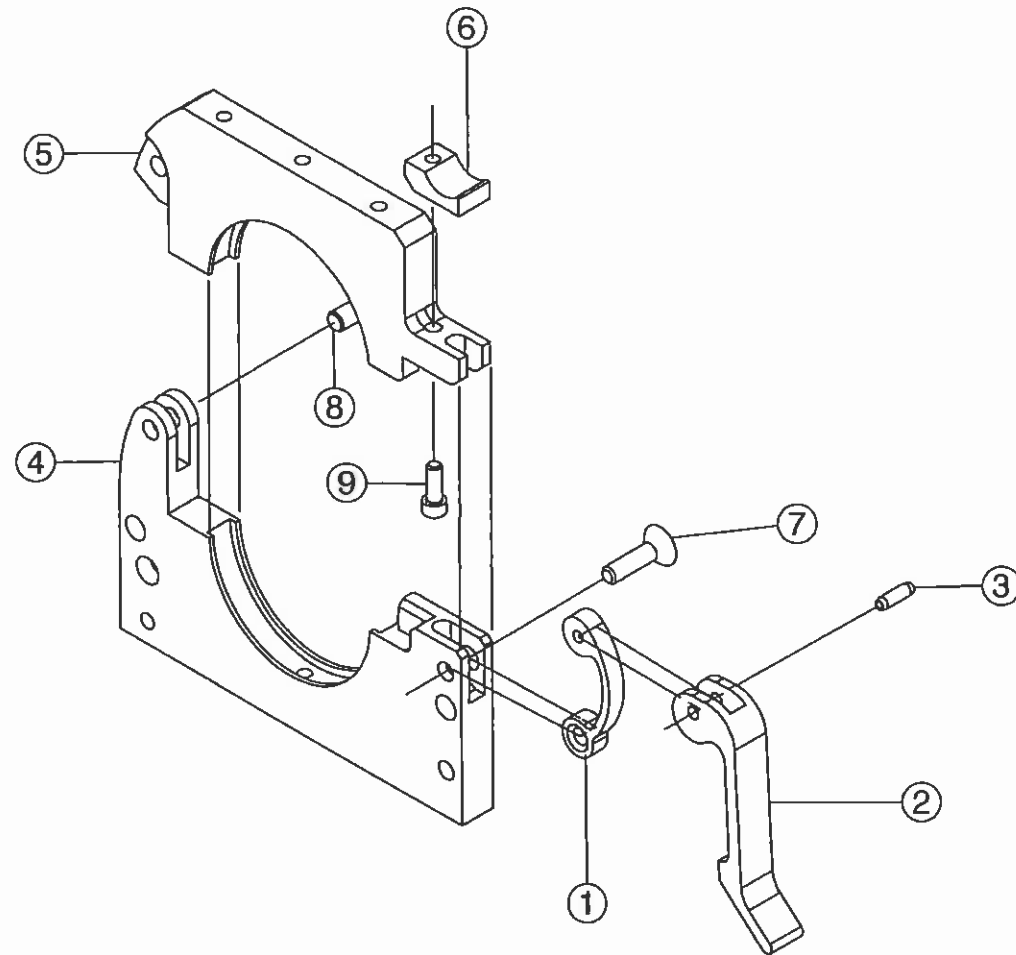
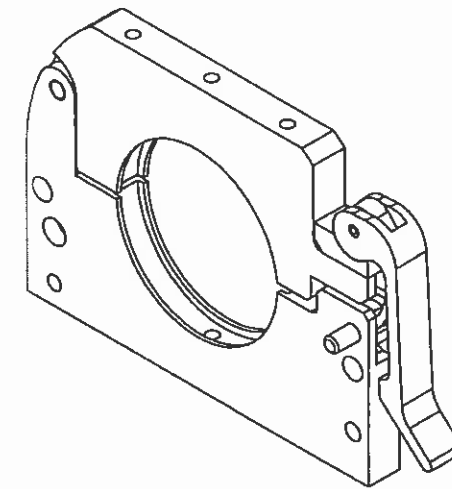
**MODEL 9-750**  
**IPB 0905232**  
**COVER FLIP TOP ASSEMBLY**

ISSUED: 4 JAN 2005  
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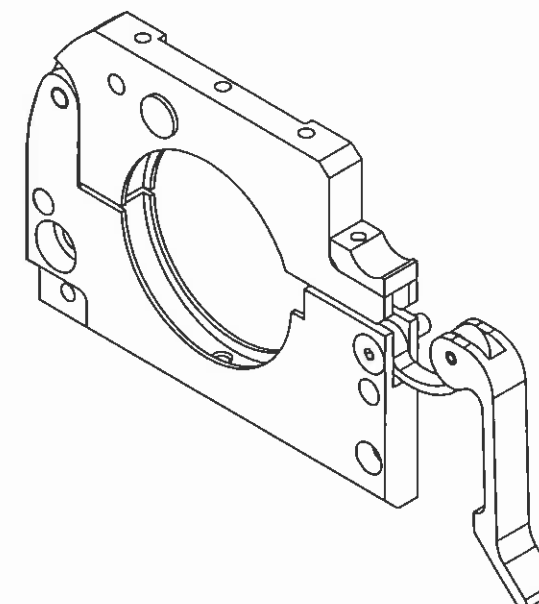
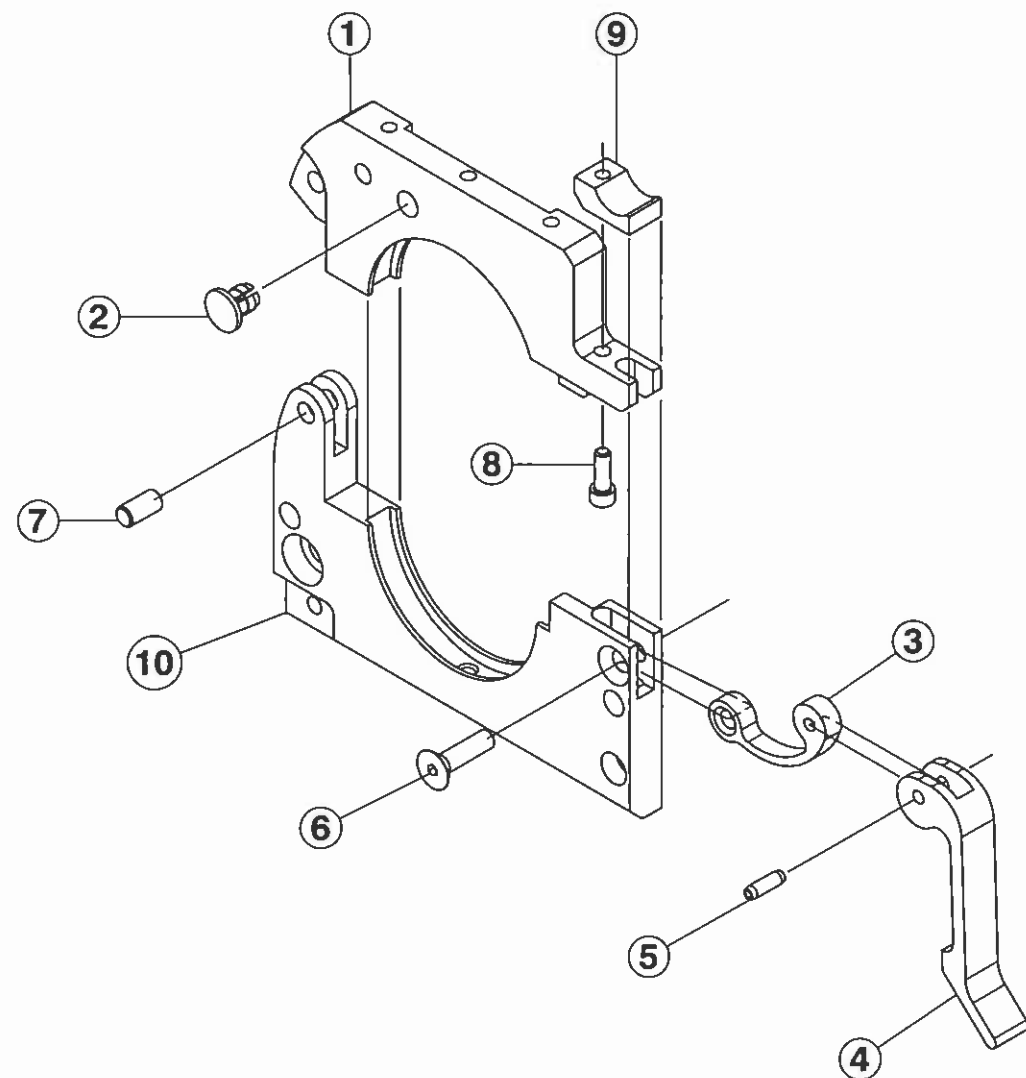


| ITEM NO. | QTY. | PART NO.           | DESCRIPTION                     |
|----------|------|--------------------|---------------------------------|
| 1        | 1    | 420905368-01closed | LATCH SPRING                    |
| 2        | 1    | 420905368-02       | LATCH                           |
| 3        | 1    | PR07-0, 25NP       | PIN ROLL 5/64D 1/4L             |
| 4        | 1    | 420905237-01       | HOUSING CLAMP LWR REAR HSG SIDE |
| 5        | 1    | 420905366-01       | CLAMP HOUSING UPPER             |
| 6        | 1    | 220905407-01       | INSERT OVERCENTER               |
| 7        | 1    | SFS04-40-0,43NP    | SCREW FLH SKT 4-40 7/16 L       |
| 8        | 1    | D14-6              | PIN DOWEL 1/8D 1/4L             |
| 9        | 1    | SCS02-56-0,31NP    | SCREW CAP SKT 2-56 5/16 L       |

**MODEL 9-750**  
**IPB 0905234**  
**CLAMP ASSY HOUSING HSG SIDE**

ISSUED: 12 DEC 2006  
 REVISED: 31 OCT 2008

TO ORDER USE PART NUMBER,  
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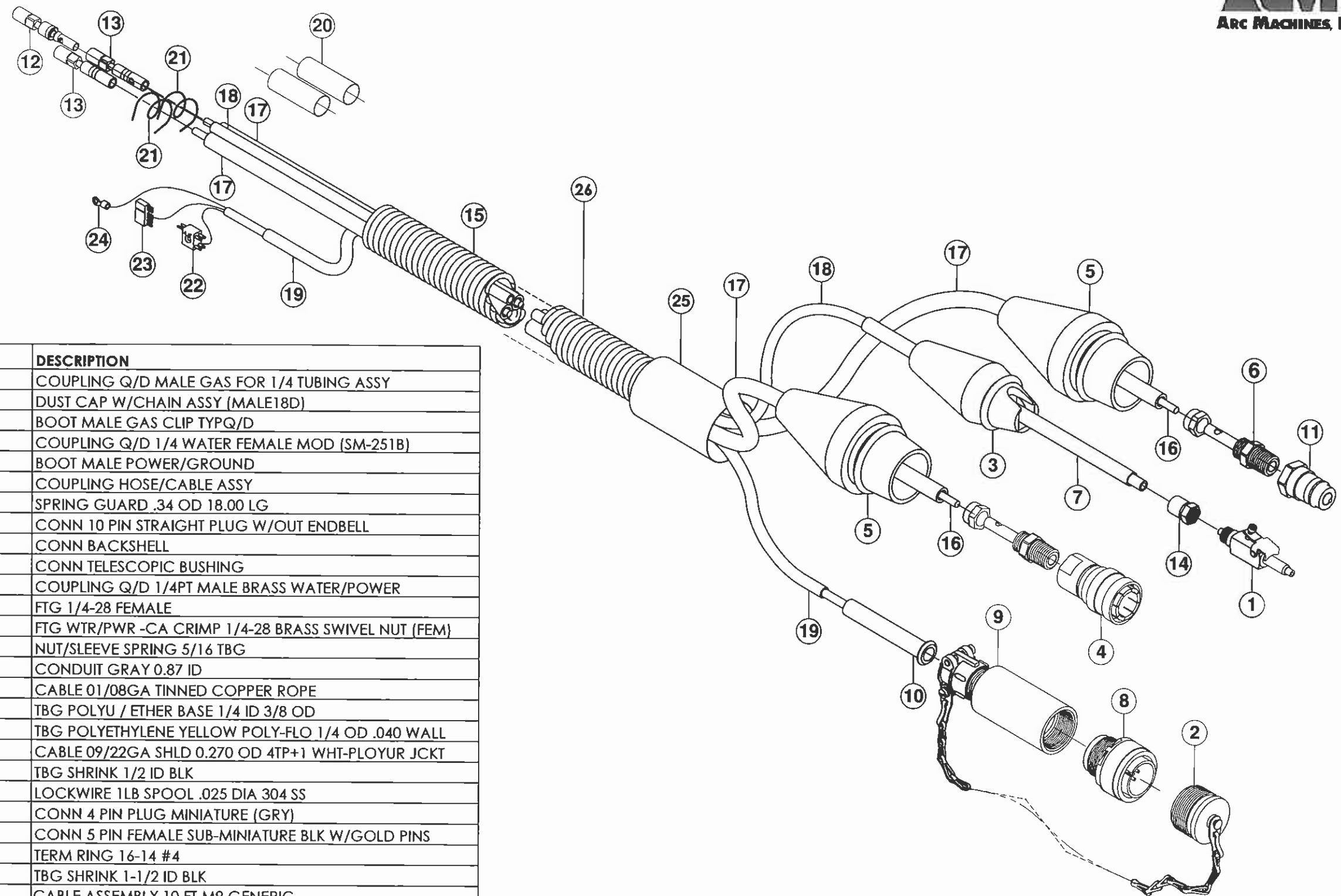


| ITEM NO. | QTY. | PART NO.        | DESCRIPTION              |
|----------|------|-----------------|--------------------------|
| 1        | 1    | 420905367-01    | CLAMP UPPER COVER        |
| 2        | 1    | 420905221-04    | PLUG                     |
| 3        | 1    | 420905368-01    | LATCH SPRING             |
| 4        | 1    | 420905368-02    | LATCH                    |
| 5        | 1    | SPS 0.0781x0.25 | PIN ROLL 5/64D 1/4L      |
| 6        | 1    | SFS04-40-0,43NP | SCREW FLH SKT 4-40 7/16L |
| 7        | 1    | D14-6           | PIN DOWEL 1/8D 1/4L      |
| 8        | 1    | SCS02-56-0.25NP | SCREW CAP SKT 2-56 1/4L  |
| 9        | 1    | 220905407-01    | INSERT OVERCENTER        |
| 10       | 1    | 420905236-01    | CLAMP HOUSING LOWER      |

**MODEL 9-750**  
**IPB 0905235**  
**CLAMP ASSY COVER SIDE**

ISSUED: 12 DEC 2006  
REVISED: -

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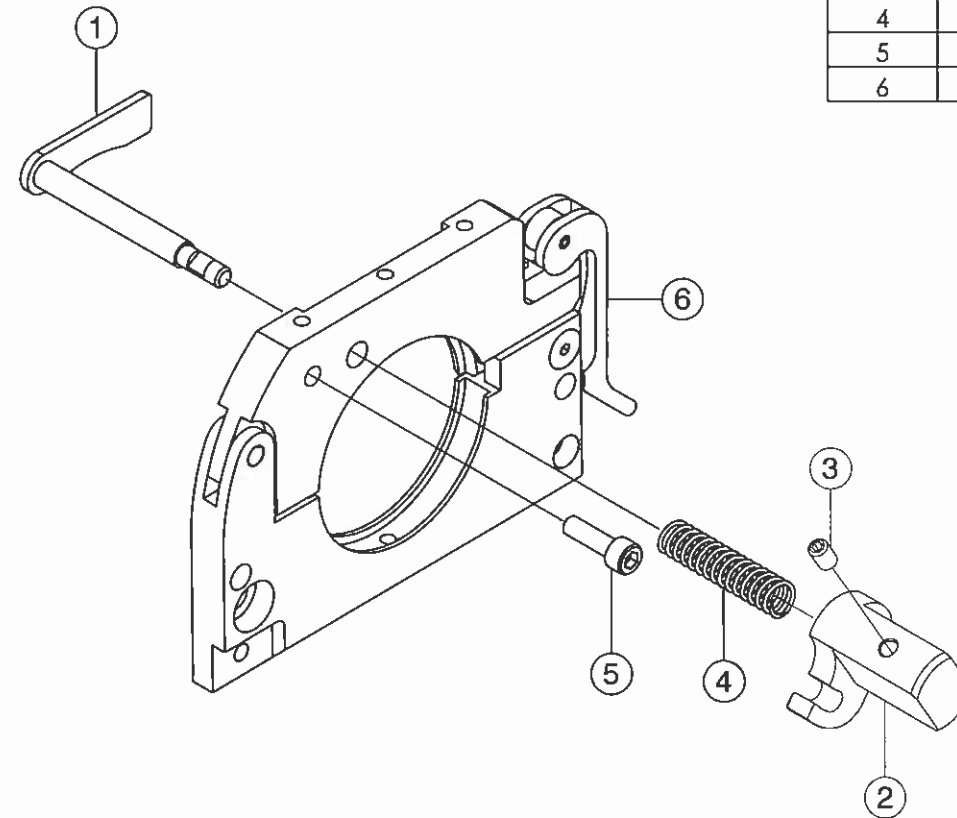
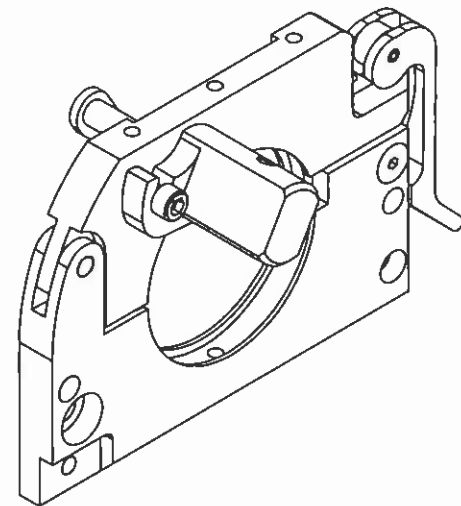
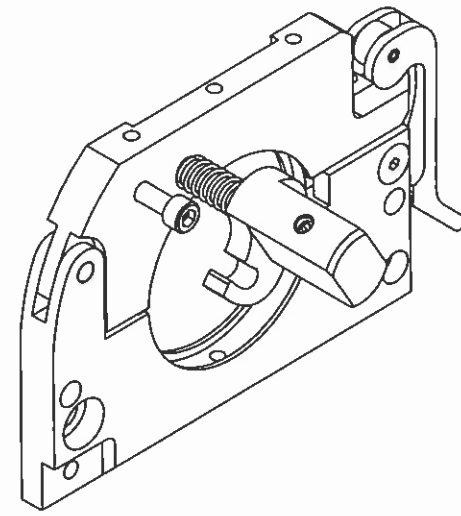
| ITEM NO. | QTY. | PART NO.        | DESCRIPTION   |
|----------|------|-----------------|---|
| 1        | 1    | 1351109-01      | COUPLING Q/D MALE GAS FOR 1/4 TUBING ASSY           |
| 2        | 1    | 1350110-04      | DUST CAP W/CHAIN ASSY (MALE18D)                     |
| 3        | 1    | 42060805-04     | BOOT MALE GAS CLIP TYPQ/D                           |
| 4        | 1    | 42060800-02     | COUPLING Q/D 1/4 WATER FEMALE MOD (SM-251B)         |
| 5        | 2    | 42060804-01     | BOOT MALE POWER/GROUND                              |
| 6        | 2    | 42060800-07     | COUPLING HOSE/CABLE ASSY                            |
| 7        | 1    | AS200718        | SPRING GUARD .34 OD 18.00 LG                        |
| 8        | 1    | MS3106E18-1PF42 | CONN 10 PIN STRAIGHT PLUG W/OUT ENDBELL             |
| 9        | 1    | G1501N186A3A    | CONN BACKSHELL                                      |
| 10       | 1    | MS39056-3       | CONN TELESCOPIC BUSHING                             |
| 11       | 1    | SM-252B         | COUPLING Q/D 1/4PT MALE BRASS WATER/POWER           |
| 12       | 1    | 2PFI            | FTG 1/4-28 FEMALE                                   |
| 13       | 2    | ARC-1881        | FTG WTR/PWR -CA CRIMP 1/4-28 BRASS SWIVEL NUT (FEM) |
| 14       | 1    | 261-PG-04       | NUT/SLEEVE SPRING 5/16 TBG                          |
| 15       | 1    | DUCT-0,87-50-G  | CONDUIT GRAY 0.87 ID                                |
| 16       | 2    | NER7-95-36T     | CABLE 01/08GA TINNED COPPER ROPE                    |
| 17       | 2    | 42090806-01     | TBG POLYU / ETHER BASE 1/4 ID 3/8 OD                |
| 18       | 1    | 44-P-YELLOW     | TBG POLYETHYLENE YELLOW POLY-FLO 1/4 OD .040 WALL   |
| 19       | 1    | CWT11943        | CABLE 09/22GA SHLD 0.270 OD 4TP+1 WHT-PLOYUR JCKT   |
| 20       | 2    | M23053/5-108-0  | TBG SHRINK 1/2 ID BLK                               |
| 21       | 2    | MS20995C25      | LOCKWIRE 1LB SPOOL .025 DIA 304 SS                  |
| 22       | 1    | JF2P2SCD        | CONN 4 PIN PLUG MINIATURE (GRY)                     |
| 23       | 1    | 7052            | CONN 5 PIN FEMALE SUB-MINIATURE BLK W/GOLD PINS     |
| 24       | 1    | 34119           | TERM RING 16-14 #4                                  |
| 25       | 1    | M23053/5-111-0  | TBG SHRINK 1-1/2 ID BLK                             |
| 26       | -    | 13090800-01     | CABLE ASSEMBLY 10 FT M9 GENERIC                     |

**MODEL 9  
IPB 090800  
CABLE ASSEMBLY**

ISSUED: 3 JAN 2005  
REVISED: 5 OCT 2010

TO ORDER USE PART NUMBER.  
PRICE, PART NUMBER AND DESCRIPTION  
SUBJECT TO CHANGE WITHOUT NOTICE.

**THIS IPB SUPERSEDES ALL OTHER IPB'S  
REFERENCING 13090800-01 CABLE ASSEMBLY**



| ITEM NO. | QTY. | PART NO.                 | DESCRIPTION                    |
|----------|------|--------------------------|--------------------------------|
| 1        | 1    | 130905117-01             | ARM LOCATING BRAZED            |
| 2        | 1    | 420905284-01             | KNOB                           |
| 3        | 1    | SSS04-40-18NPCU          | SCREW SET SKT 4-40 3/16 L CUPT |
| 4        | 1    | C0210-022-1250S          | SPRING CPRSN .21D 1.25L .022W  |
| 5        | 1    | SCS04-40-0,37NP          | SCREW CAP SKT 4-40 3/8 L       |
| 6        | 1    | CLAMP HOUSING COVER SIDE | ( REF. )                       |

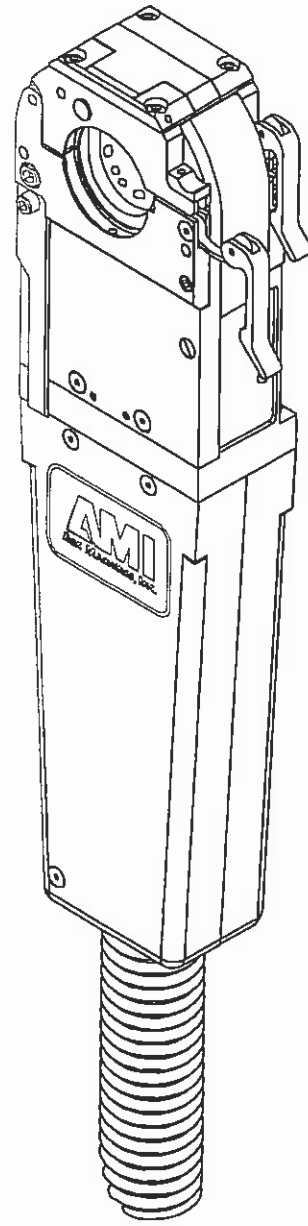
**MODEL 9-750**  
**IPB 0905119**  
**LOCATING ARM KIT / INSTALLATION**

ISSUED: 5 JAN 2005  
REVISED:

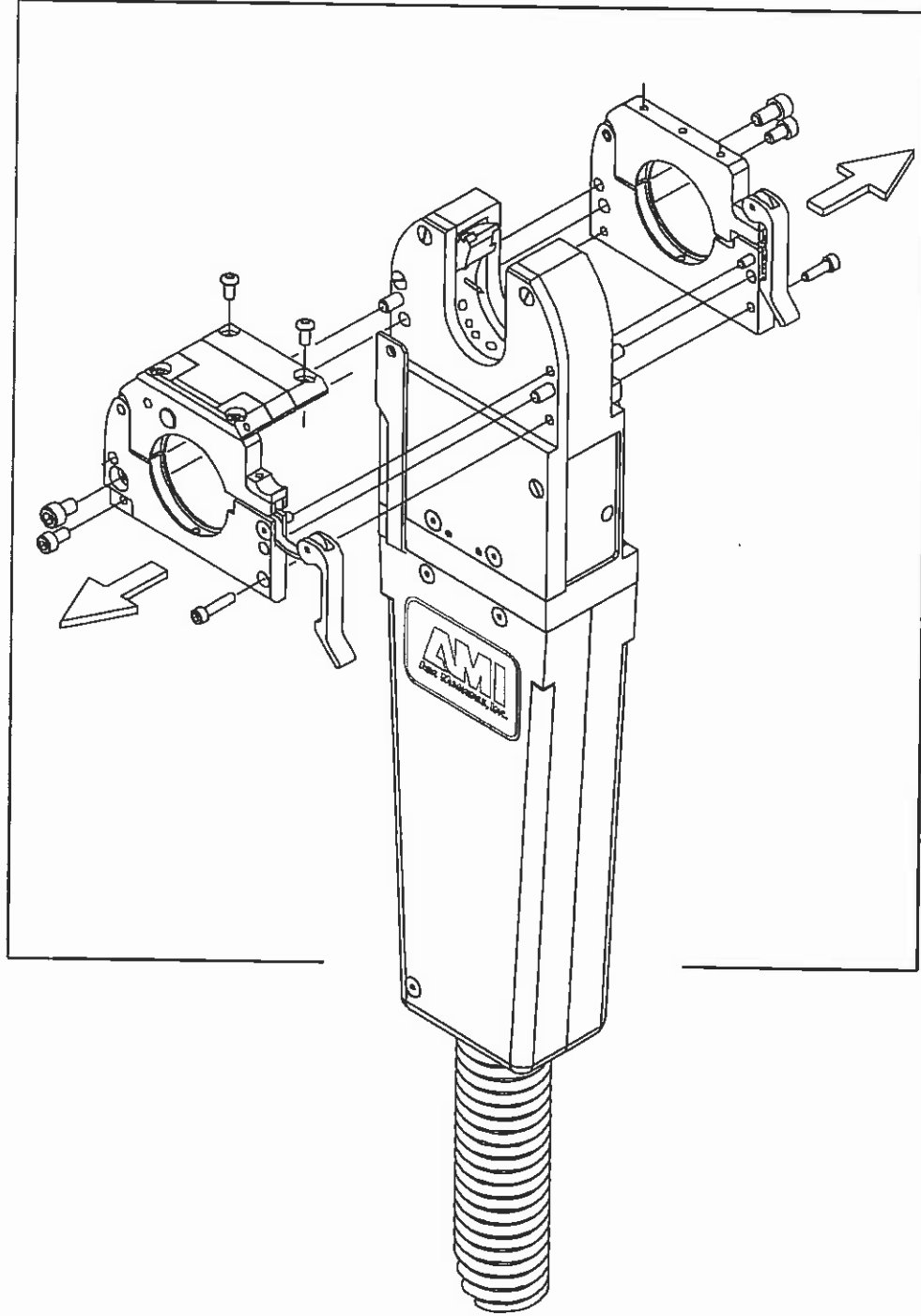
TO ORDER USE PART NUMBER.  
PRICE, PART NUMBER AND DESCRIPTION  
SUBJECT TO CHANGE WITHOUT NOTICE.

# MODEL 9-750 CONVERSION TO MODEL 9CT-750 INSTRUCTIONS

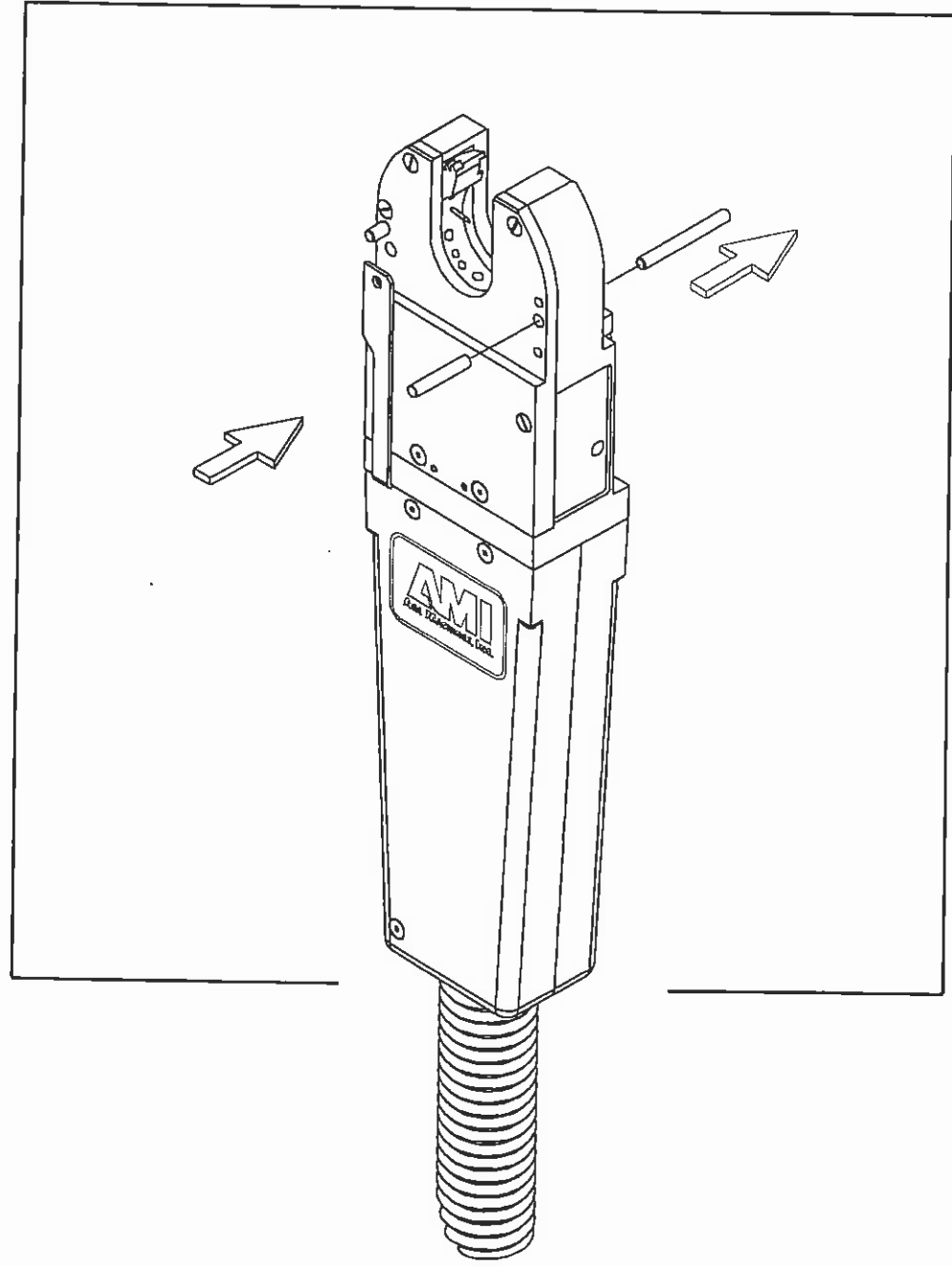
1. REMOVE BOTH STANDARD CLAMP HOUSING ASSEMBLIES AND COVER FLIP TOP ASSEMBLY FROM WELD HEAD.



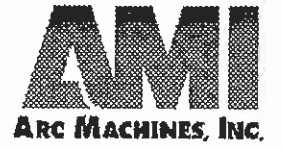
MODEL 9-750



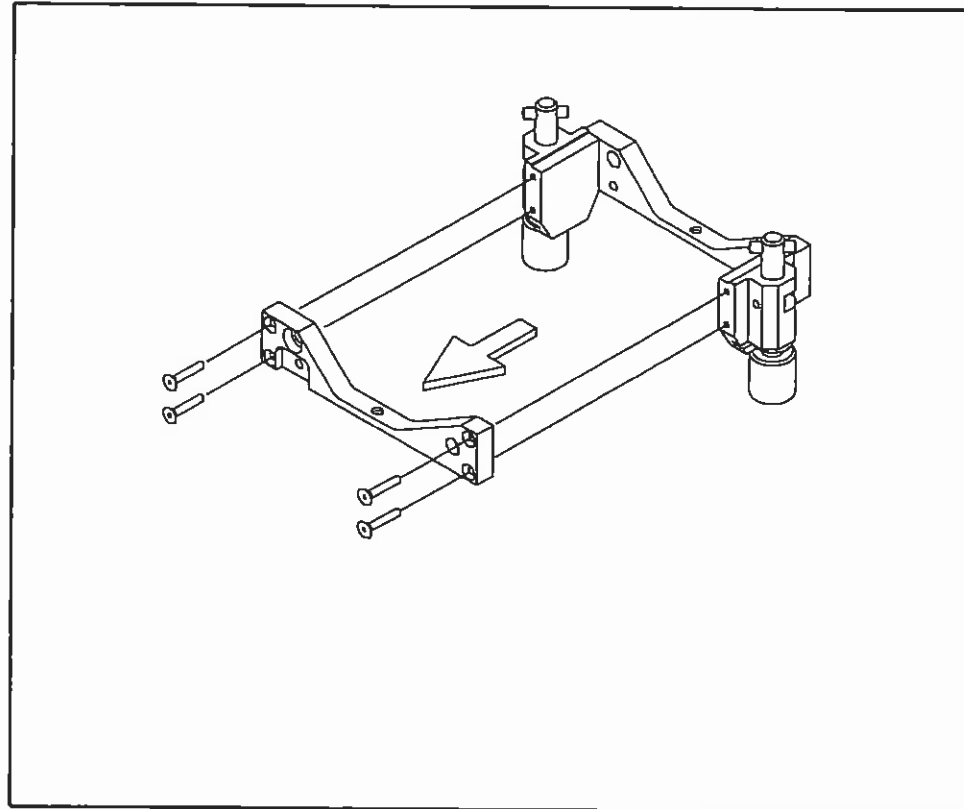
2. REMOVE ONE G-10 PIN AND REPLACE WITH PIN FROM KIT, AS SHOWN.



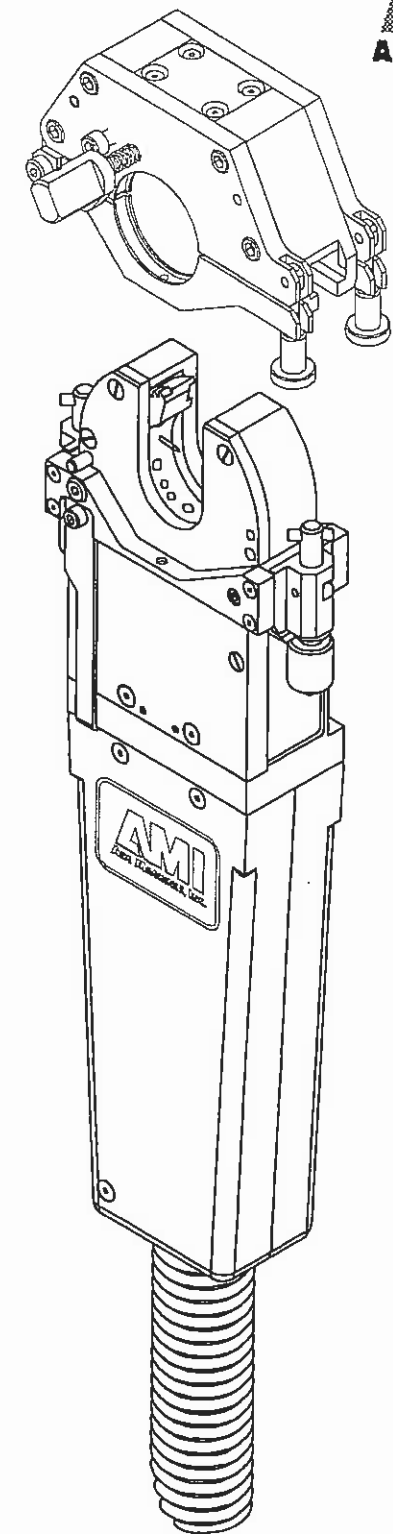
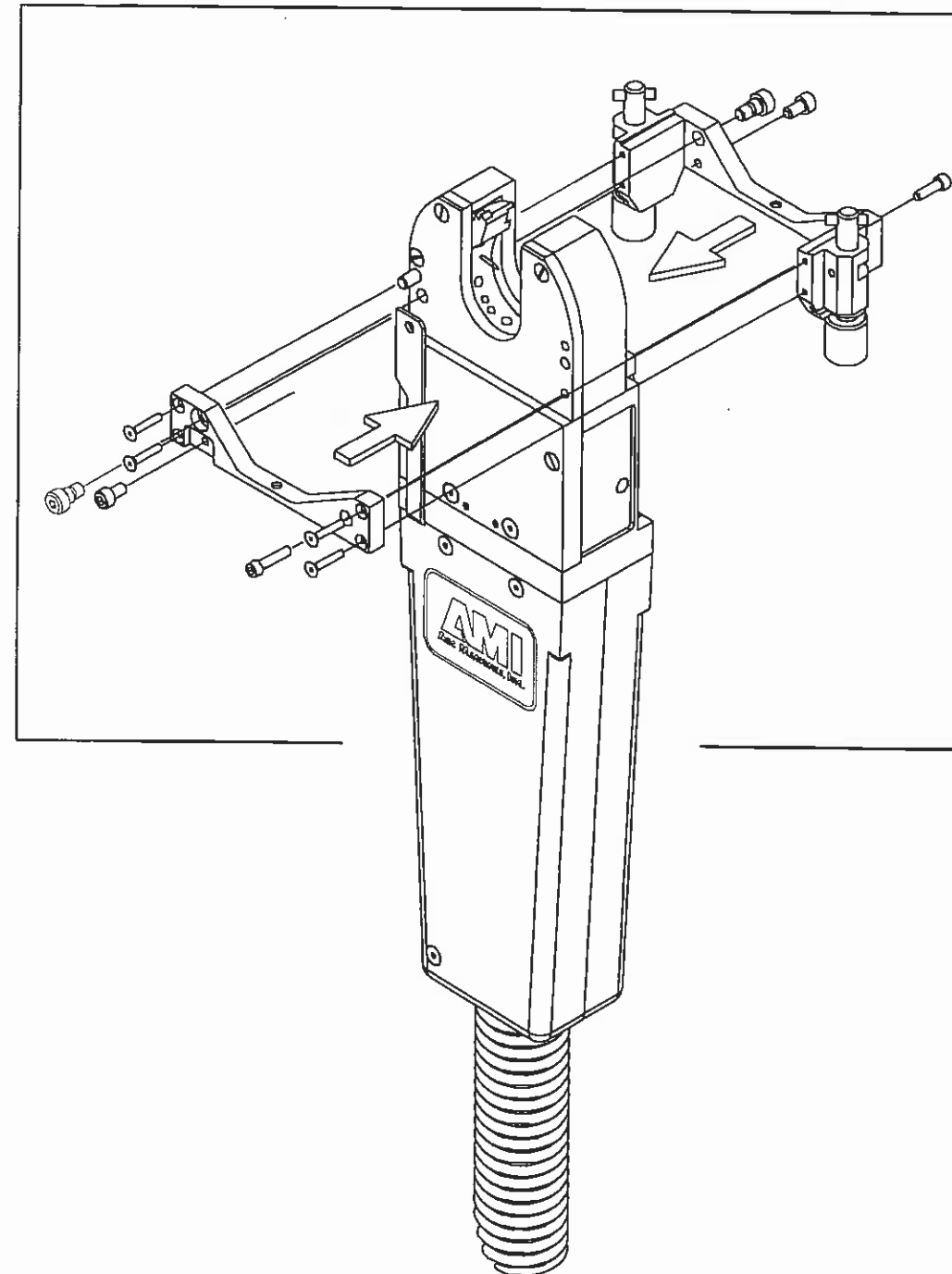
# MODEL 9-750 CONVERSION TO MODEL 9CT-750 INSTRUCTIONS



3. SPLIT ADAPTER HOUSING INTO TWO SECTIONS AS SHOWN.



4. MOUNT THE TWO PIECES OF THE ADAPTER HOUSING TO THE WELD HEAD USING THE SHOULDER SCREWS (2 PLACES) FROM THE KIT AND THE REMAINING ORIGINAL SCREWS.

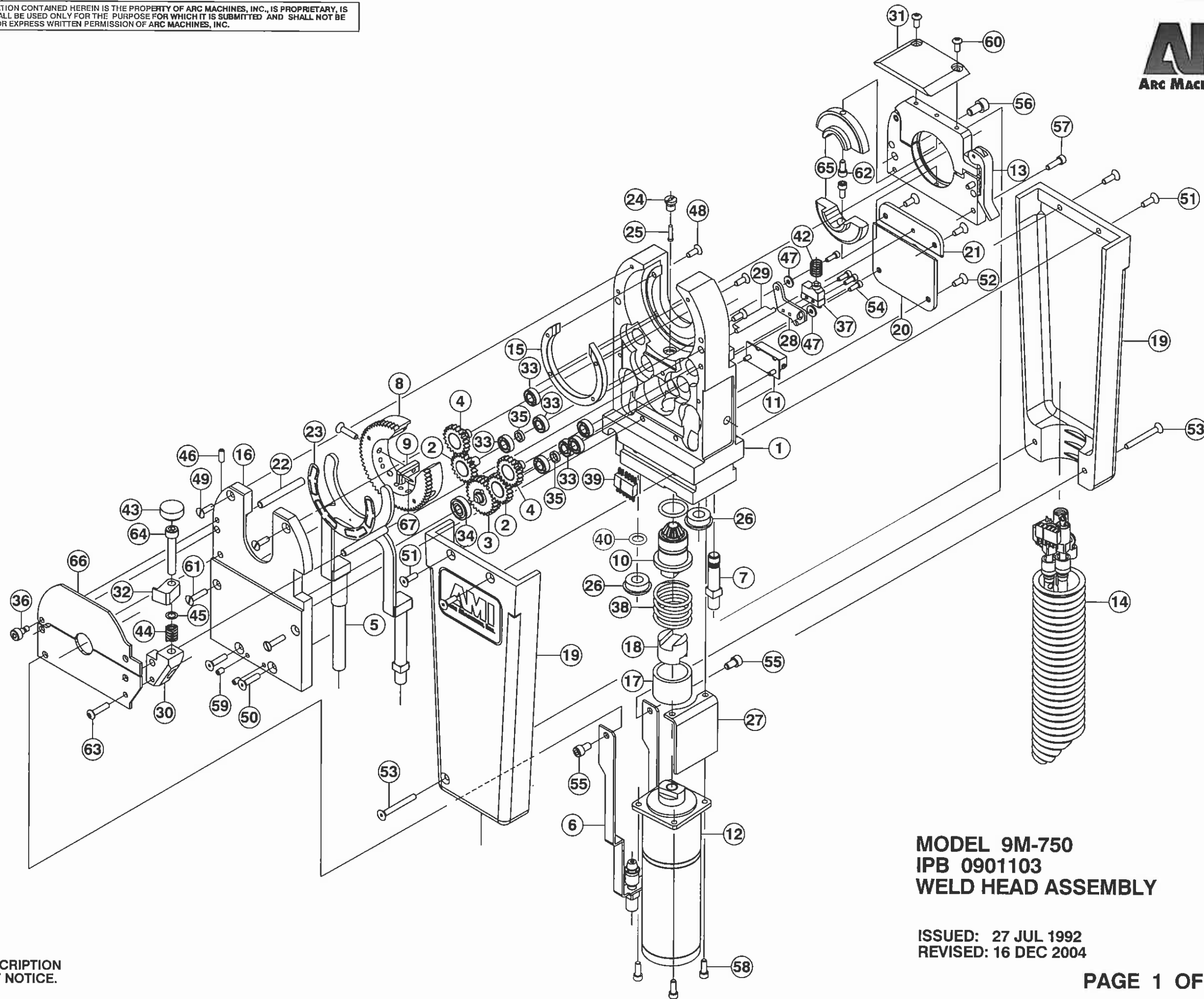
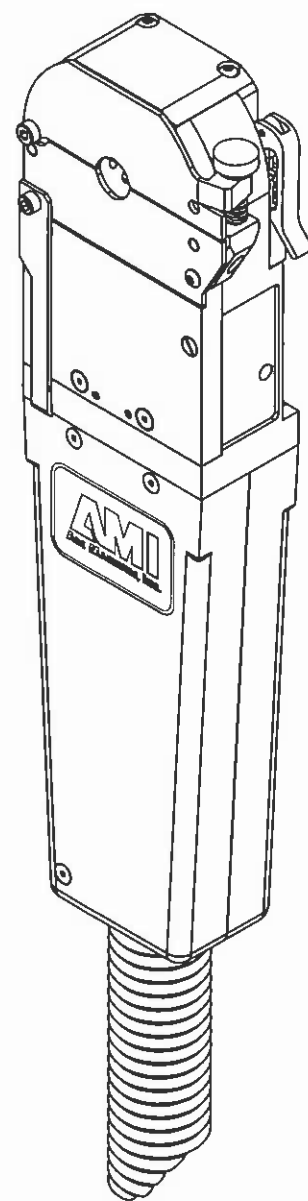


MODEL 9CT-750

DWG# 750028

ISSUED: 8 MAY 1990  
REVISED: 10 JAN 2005 PAGE 2 OF 2

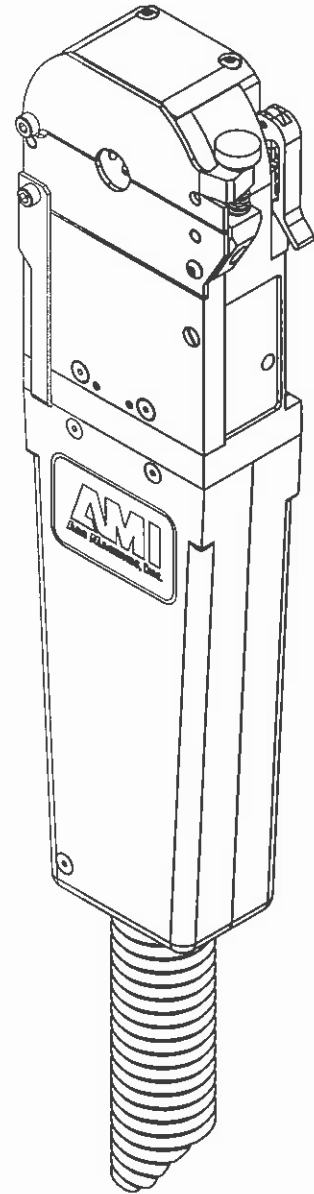
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**MODEL 9M-750  
IPB 0901103  
WELD HEAD ASSEMBLY**

ISSUED: 27 JUL 1992  
REVISED: 16 DEC 2004

TO ORDER USE PART NUMBER.  
PRICE, PART NUMBER AND DESCRIPTION  
SUBJECT TO CHANGE WITHOUT NOTICE.



| ITEM NO. | QTY. | PART NO.             | DESCRIPTION                    | ITEM NO. | QTY. | PART NO.            | DESCRIPTION                     |
|----------|------|----------------------|--------------------------------|----------|------|---------------------|---------------------------------|
| 1        | 1    | 42090185-01          | HOUSING MAIN                   | 42       | 1    | MM-9                | SPRING CPRSN .25D .31L .020W    |
| 2        | 2    | 13090618-01          | GEAR IDLER ASSY                | 43       | 1    | 99-601-7            | KNOB KNURL #8 SCREW PLASTIC BLK |
| 3        | 1    | 13090618-02          | GEAR DRIVE ASSY                | 44       | 1    | S-1112              | SPRING CPRSN .26D .37L .032W    |
| 4        | 2    | 13090618-03          | GEAR IDLER ASSY                | 45       | 1    | DB3D49              | SPACER .167ID .25OD .020T SS    |
| 5        | 1    | 130907123-01         | CONDUCTOR SHOE BRAZED          | 46       | 1    | SSS04-40-31NPCU     | SCREW SET SKT 4-40 5/16 L CUPT  |
| 6        | 1    | 13090750-01          | GROUND STRAP                   | 47       | 2    | W02ZP-FL            | WASHER FL # 2                   |
| 7        | 1    | 13090803-01          | TUBE FTG GAS                   | 48       | 4    | SFL04-40-0,31NY     | SCREW FLH SLT 4-40 5/16 L NYL   |
| 8        | 1    | 13090787-01          | ROTOR ASSY                     | 49       | 2    | SFL04-40-0,37NY     | SCREW FLH SLT 4-40 3/8 L NYL    |
| 9        | 1    | 130907102-01         | HOLDER TUNGSTEN EXTENDER       | 50       | 3    | SFS04-40-0,50NP     | SCREW FLH SKT 4-40 1/2 L        |
| 10       | 1    | 13090602-07          | GEAR PINION DRIVE ASSY         | 51       | 4    | SFS04-40-0,37NP     | SCREW FLH SKT 4-40 3/8 L        |
| 11       | 1    | 130901132-01         | RETAINER TRIM POT ASSY         | 52       | 4    | SFS04-40-0,31NP     | SCREW FLH SKT 4-40 5/16 L       |
| 12       | 1    | 13090602-01          | MOTOR DRIVE ASSY               | 53       | 2    | SFS04-40-1,00NP     | SCREW FLH SKT 4-40 1.00 L       |
| 13       | 1    | 130905234-01         | CLAMP HOUSING HOUSING SIDE     | 54       | 4    | SCS02-56-0.25NP     | SCREW CAP SKT 2-56 1/4 L        |
| 14       | 1    | 13090800-01          | CABLE M9 10 FT                 | 55       | 2    | SCS06-32-0.25SP     | SCREW CAP SKT 6-32 1/4 L        |
| 15       | 1    | 420907123-01         | GUIDE RING                     | 56       | 1    | SCS06-32-0.25SP     | SCREW CAP CKT 6-32 1/4 L        |
| 16       | 1    | 420901117-01         | COVER HOUSING                  | 57       | 1    | SCS04-40-0.37NP     | SCREW CAP SKT 4-40 3/8 L        |
| 17       | 1    | 42090602-04          | SPACER SPRING                  | 58       | 4    | SCS04-40-0,31NP     | SCREW CAP SKT 4-40 5/16 L       |
| 18       | 1    | 42090602-03          | COUPLING INSULATING DERLIN     | 59       | 2    | SSS04-40-18NPCU     | SCREW SET SKT 4-40 3/16 L CUPT  |
| 19       | 2    | 42090104-01          | HANDLE ONE-HALF                | 60       | 2    | SBS04-40-0,25NP     | SCREW BTH SKT 4-40 1/4 L        |
| 20       | 1    | 42091106-01          | COVER LIMIT SWITCH LARGE CLEAR | 61       | 2    | SFL04-40-0,50NY     | SCREW FLH SLT 4-40 1/2 L NYL    |
| 21       | 1    | 42091106-02          | COVER LIMIT SWITCH SMALL CLEAR | 62       | 2    | SCS04-40-0.25NP     | SCREW CAP SKT 4-40 5/16 L       |
| 22       | 2    | 42090164-13          | PIN G-10 0.156 x 1.290         | 63       | 1    | SBS04-40-0,50NP     | SCREW BTH SKT 4-40 1/2 L        |
| 23       | 1    | 420907216-01         | PLATE BACKING                  | 64       | 1    | SCS08-32-1.00NP     | SCREW CAP SKT 8-32 1.00 L       |
| 24       | 1    | 42090716-02          | BUSHING PUSH ROD               | 65       | 2    | 420905214-00 (REF.) | CLAMP INSERT (ORDER BY SIZE)    |
| 25       | 1    | 42090716-01          | PUSH ROD LIMIT SW              | 66       | 1    | 130905183-03 (REF.) | CLAMP PLATE (ORDER BY SIZE)     |
| 26       | 2    | 420901126-02         | GROMMET                        | 67       | 1    | ELECTRODE           | (REF.)                          |
| 27       | 1    | 42091102-04          | INSULATOR SKIRT                |          |      |                     |                                 |
| 28       | 1    | 42091103-01          | PLATE MTG LIMIT SWITCH         |          |      |                     |                                 |
| 29       | 1    | 42091107-01          | LEVER LIMIT SWITCH             |          |      |                     |                                 |
| 30       | 1    | 420905308-01         | BRACKET CLAMP CLOSURE          |          |      |                     |                                 |
| 31       | 1    | 420905312-01         | COVER VIEWPORT CLEAR           |          |      |                     |                                 |
| 32       | 1    | 420905308-02         | LATCH CLAMP                    |          |      |                     |                                 |
| 33       | 7    | SSRI-6632LLRA3P25LY[ | BEARING BALL .18 .37 [15]      |          |      |                     |                                 |
| 34       | 1    | SSR-3LLRA3P25LY13    | BEARING BALL .18 .50           |          |      |                     |                                 |
| 35       | 2    | DB6D9                | SPACER SHAFT .18ID .25D .062T  |          |      |                     |                                 |
| 36       | 1    | 44D10                | SCREW SHLDR SKT 4-40 1/8D 1/8  |          |      |                     |                                 |
| 37       | 1    | MMGGD1D0C            | SWITCH LIMIT PLUNGER           |          |      |                     |                                 |
| 38       | 1    | S-939                | SPRING CPRSN .81D .70L .072W   |          |      |                     |                                 |
| 39       | 1    | 7051                 | CONN 5 PIN MALE                |          |      |                     |                                 |
| 40       | 1    | 2-010-S604-70        | O RING .238 ID .070 W SILICONE |          |      |                     |                                 |
| 41       | 1    | 2-014-S604-70        | O RING .489 ID .070 W VITON    |          |      |                     |                                 |

**MODEL 9M-750  
IPB 0901103  
WELD HEAD ASSEMBLY**

ISSUED: 27 JUL 1992  
REVISED: 16 DEC 2004

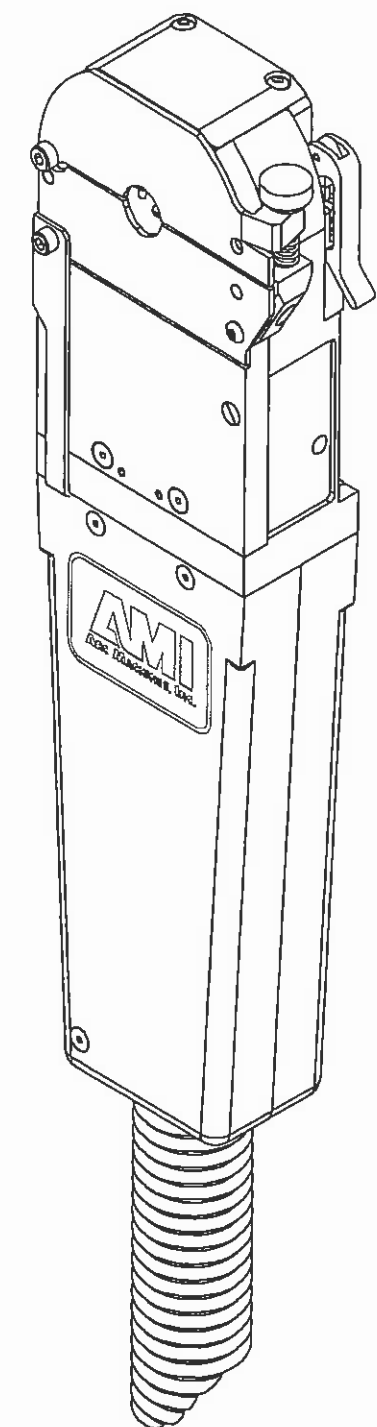
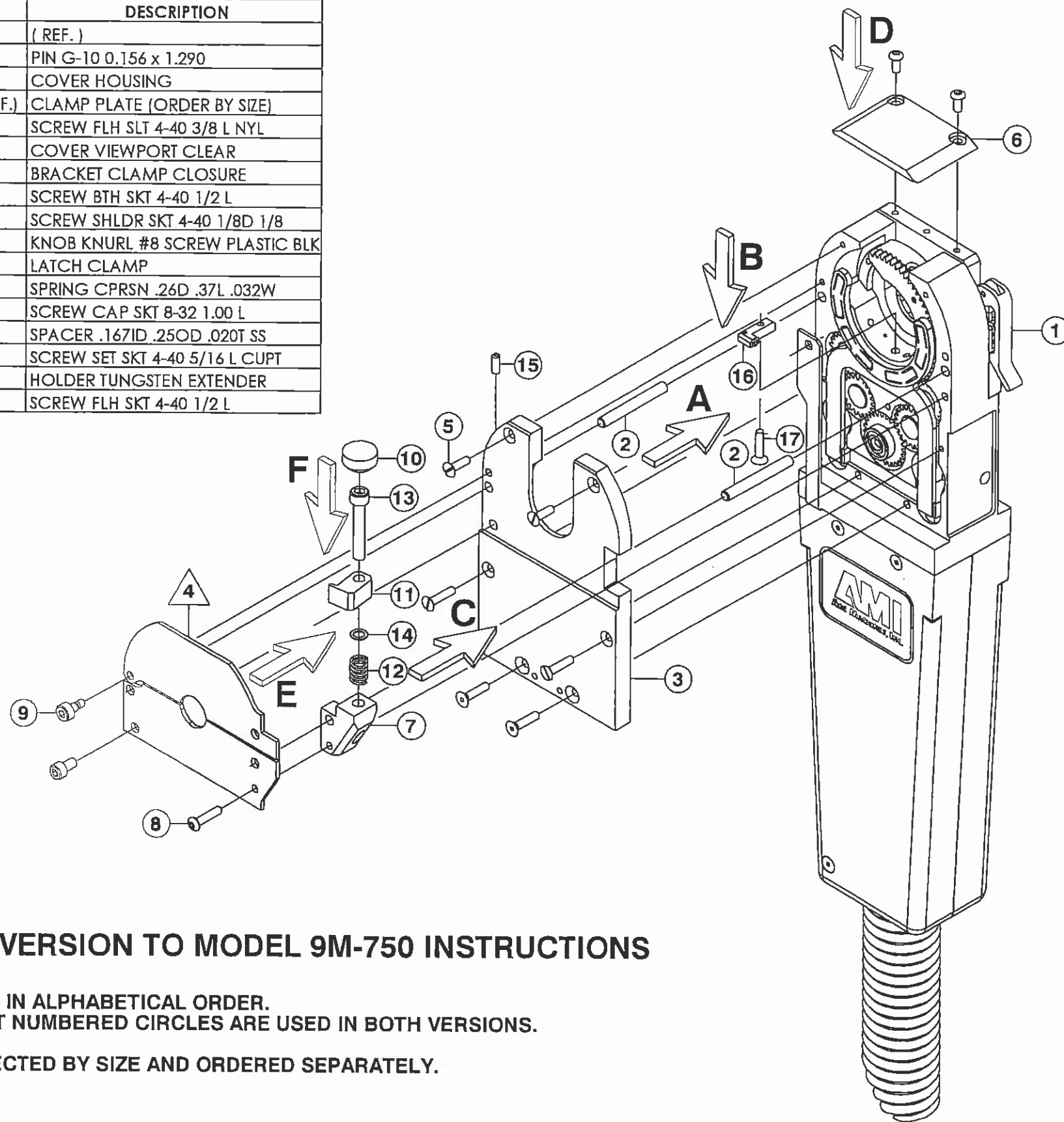
TO ORDER USE PART NUMBER.  
PRICE, PART NUMBER AND DESCRIPTION  
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| ITEM NO. | QTY. | PART NO.            | DESCRIPTION                     |
|----------|------|---------------------|---------------------------------|
| 1        | 1    | WELD HEAD           | ( REF. )                        |
| 2        | 2    | 42090164-13         | PIN G-10 0.156 x 1.290          |
| 3        | 1    | 420901117-01        | COVER HOUSING                   |
| 4        | 1    | 130905183-03 (REF.) | CLAMP PLATE (ORDER BY SIZE)     |
| 5        | 2    | SFL04-40-0,37NY     | SCREW FLH SLT 4-40 3/8 L NYL    |
| 6        | 1    | 420905312-01        | COVER VIEWPORT CLEAR            |
| 7        | 1    | 420905308-01        | BRACKET CLAMP CLOSURE           |
| 8        | 1    | SBS04-40-0,50NP     | SCREW BTH SKT 4-40 1/2 L        |
| 9        | 1    | 44D10               | SCREW SHLDR SKT 4-40 1/8D 1/8   |
| 10       | 1    | 99-601-7            | KNOB KNURL #8 SCREW PLASTIC BLK |
| 11       | 1    | 420905308-02        | LATCH CLAMP                     |
| 12       | 1    | S-1112              | SPRING CPRSN .26D .37L .032W    |
| 13       | 1    | SCS08-32-1.00NP     | SCREW CAP SKT 8-32 1.00 L       |
| 14       | 1    | DB3D49              | SPACER .167ID .25OD .020T SS    |
| 15       | 1    | SSS04-40-31NPCU     | SCREW SET SKT 4-40 5/16 L CUPT  |
| 16       | 1    | 130907102-01        | HOLDER TUNGSTEN EXTENDER        |
| 17       | 1    | SFS04-40-0,50NP     | SCREW FLH SKT 4-40 1/2 L        |



### MODEL 9-750 CONVERSION TO MODEL 9M-750 INSTRUCTIONS

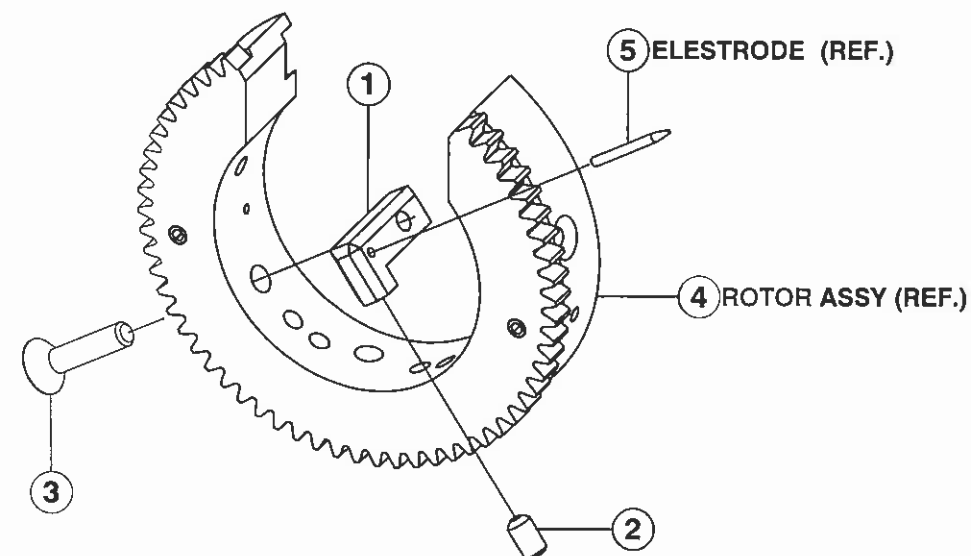
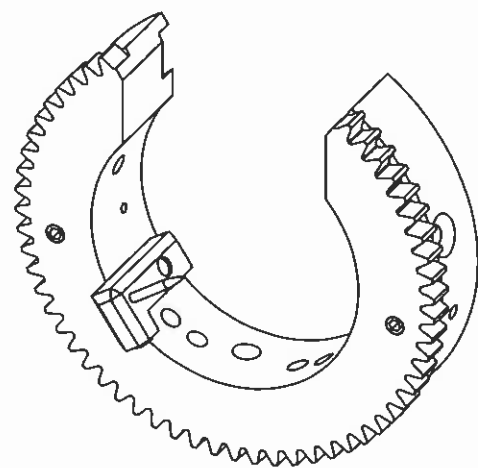
- 2. INSTALL PARTS IN ALPHABETICAL ORDER.
- 3. ITEMS WITHOUT NUMBERED CIRCLES ARE USED IN BOTH VERSIONS.
- △ 4. MUST BE SELECTED BY SIZE AND ORDERED SEPARATELY.

MODEL 9M-750

MODEL 9-750  
 IPB 0905185  
 KIT CONVERSION M9-750 TO M9M-750

TO ORDER USE PART NUMBER.  
 PRICE, PART NUMBER AND DESCRIPTION  
 SUBJECT TO CHANGE WITHOUT NOTICE.

ISSUED: 27 JUL 1992  
 REVISED: 12 JAN 2005



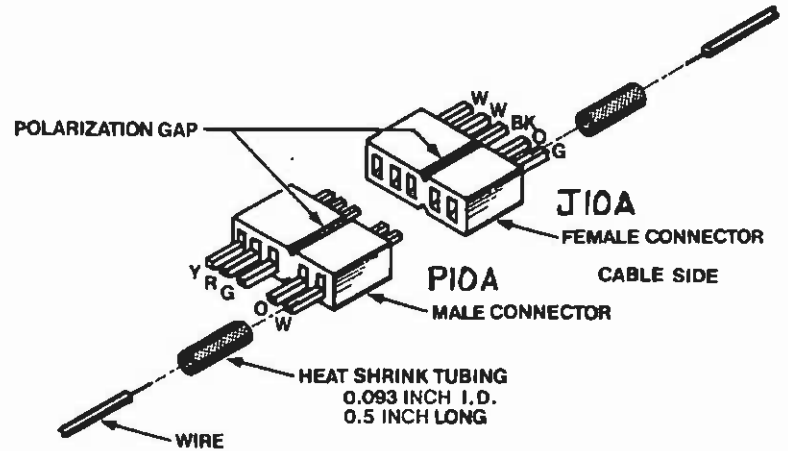
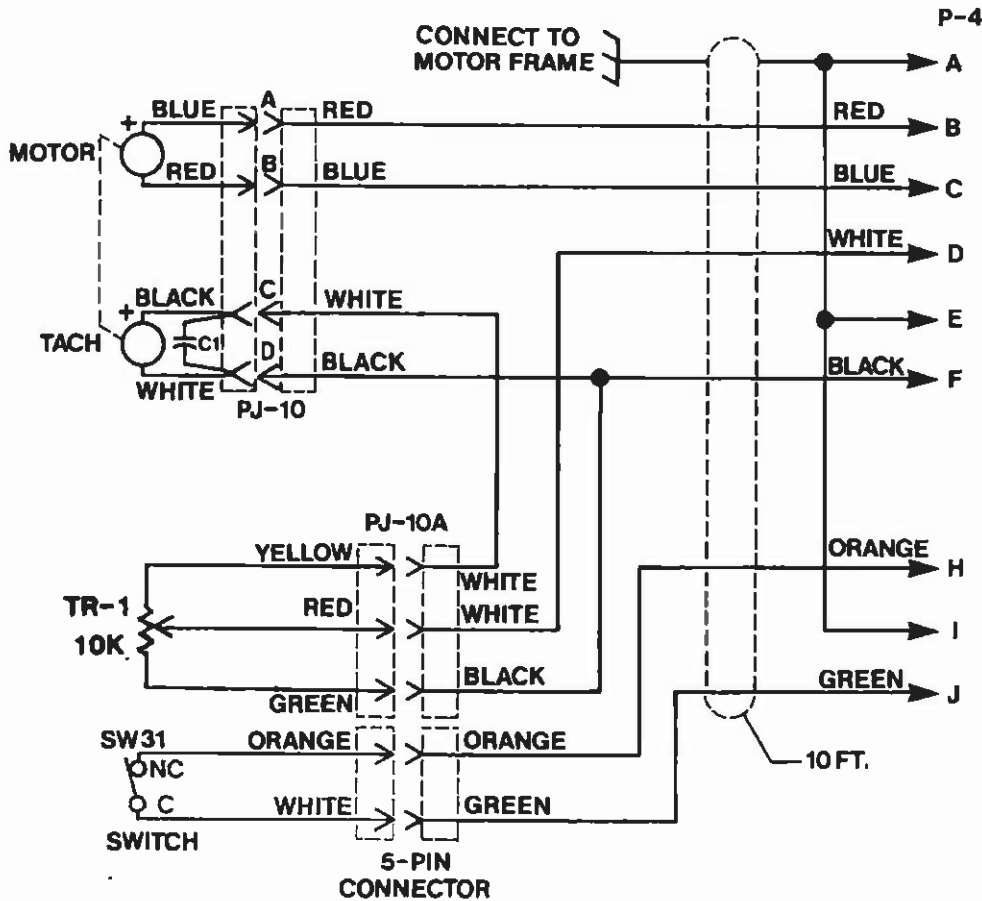
| ITEM NO. | QTY. | PART NO.        | DESCRIPTION                    |
|----------|------|-----------------|--------------------------------|
| 1        | 1    | 420907190-01    | HOLDER TUNGSTEN EXTENDER       |
| 2        | 1    | SSS04-40-18NPCU | SCREW SET SKT 4-40 3/16 L CUPT |
| 3        | 1    | SFS04-40-0,50NP | SCREW FLH SKT 4-40 1/2 L       |
| 4        | 1    | 13090787-01     | ROTOR ASSY                     |
| 5        | 1    | ELECTRODE       | (REF.)                         |

TO ORDER USE PART NUMBER.  
PRICE, PART NUMBER AND DESCRIPTION  
SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL 9M-750  
IPB 0907102  
HOLDER ELECTRODE EXTENDER  
ASSEMBLY

ISSUED: 17 JAN 2005  
REVISED:

| LTR | DCO  | REVISIONS  | DATE     | BY | APPR |
|-----|------|--|----------|----|------|
| A   | 1716 | C E D ON PJ-10 REVISED                             | 11-24-92 | MH | RV   |
| B   | 2447 | ADDED P10A & J10A. REMOVED PN'S FOR P10A, J10A, P4 | 12-4-97  | MC | BAC  |



| ITEM   | QTY. | IDENTIFYING NO.            | NOMENCLATURE OR DESCRIPTION | MFR.   | PART NO. |
|--|------|----------------------------|-----------------------------|--|----------|
| PARTS LIST   |      |                            |                             |  |          |
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| UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES. TOLERANCES ARE FRACTIONS DECIMALS ANGLES<br>± 1/16    ± .030    ±<br>± .005    ± .010    ± .005   |      | THIRD ANGLE PROJECTION<br> |                             | FOR INCH STANDARDS SEE DOD-STD-100   |          |
| APPROVALS<br>R. BILEK<br>(MR)  |      | DATE<br>10-16-85           |                             | <b>ARC MACHINES INC.</b><br>DESCRIPTION<br><b>MODEL 9 WELD HEAD WIRING DIAGRAM</b> |          |
| MATERIAL   |      | SIZE A                     |                             |  |          |
| NEXT ASSY. USED ON   |      | APPLICATION                |                             | SCALE DO NOT SCALE DRAWING SHEET 1 OF 1  |          |