

To be used for reference only
MODEL 96
ILLUSTRATED PARTS BREAKDOWN MANUAL


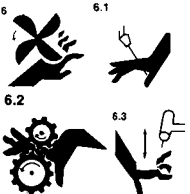

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MODEL 96 IPB Notice and Revision History

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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.

	<p>WARNING: 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.</p>
	<p>WARNING: 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</p> <p>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. USE EXTREME CAUTION!</p>
	<p>Electrical Shock Hazard: Always disconnect weld heads when servicing internal components or opening housing covers for access.</p>

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REV	DCO #	CHANGE DESCRIPTION	DATE	BY	APR
A	5031	On 960101: Change Item 70 P/N to 13960803-01, was 13960801-01. On 960800: Deleted Item 3.	10 JUL 2008	SO	BF
B	4794	On 960800: Change items 4, 6, 15, 17, 19, 27, 29 & 49 to reflect current production parts	22 DEC 2011	MH	DC

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TABLE OF CONTENTS

DATE EFFECTIVE: 13 SEP 1990

PRODUCT MODEL: 96
MANUAL NUMBER: 730060

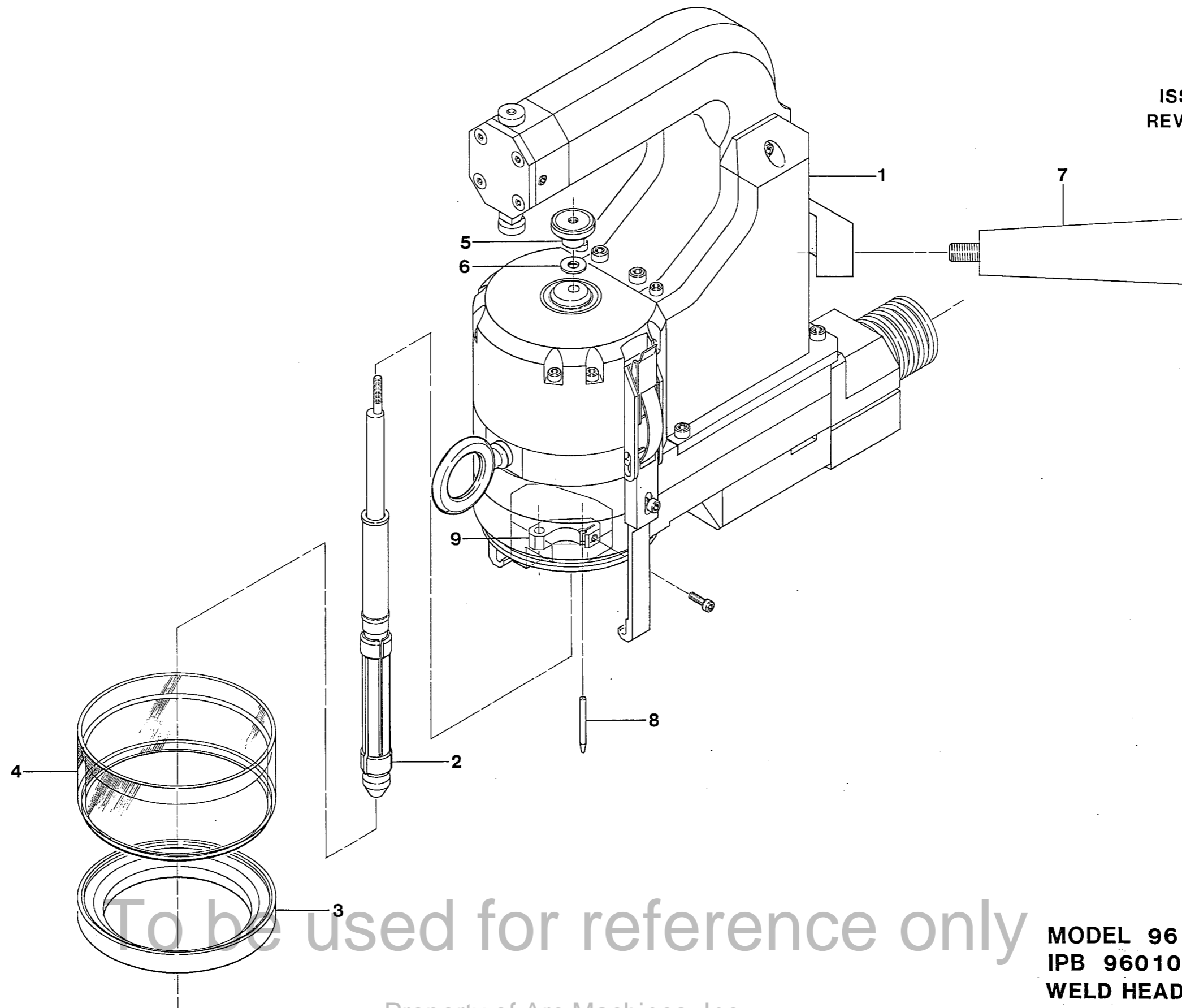
IPB NUMBER	DESCRIPTION
960100	WELD HEAD TOP ASSEMBLY
960101	WELD HEAD BASIC ASSEMBLY
960800	CABLE ASSEMBLY
961000	COLLET 1/2 INCH - 3/4 INCH O.D. TUBE ASSEMBLY
961001	COLLET 1 INCH - 2 INCH O.D. TUBE ASSEMBLY

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ISSUED: 6 APR 1990
REVISED:



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MODEL 96
IPB 960100
WELD HEAD TOP ASSEMBLY



IPB NUMBER: 960100
DATE EFFECTIVE: 6 Apr 1990
DATE REVISED: 14 Feb 1996

TO ORDER
USE PART NUMBER
DO NOT USE IPB
ITEM NUMBER

ARC MACHINES, INC.
PRODUCT MODEL: 96
DESCRIPTION: WELD HEAD TOP ASSEMBLY
MANUAL NUMBER: 730060
NOTES:

IPB ITEM NUMBER	QTY	U/M	PART NUMBER	DESCRIPTION
1	1	EA	13960101-01	WELD HEAD BASIC ASSY
2	1	EA	14961002-01	LIST SEL COLLETS M96-SN SLV
3	1	EA	42960900-01	RING NOSE
4	1	EA	42900703-01	CHAMBER CLEAR GAS SHIELD
4A	1	EA	42960702-01	CHAMBER OPAQUE AMI-UK VERSION
4B	1	EA	42900702-01	CHAMBER SHIELDED
5	1	EA	13960104-01	NUT THUMB
6	1	EA	5710-22-30	WASHER FL .14ID .43D .030T SST
7	1	EA	13900105-01	HANDLE
8	1	EA	84Z20	TUNG 2% TH .093 7.00
9	1	EA	42960700-03	HOLDER ELECTRODE 1/16 DIA
9A	1	EA	42960700-02	HOLDER ELECTRODE 3/32 DIA

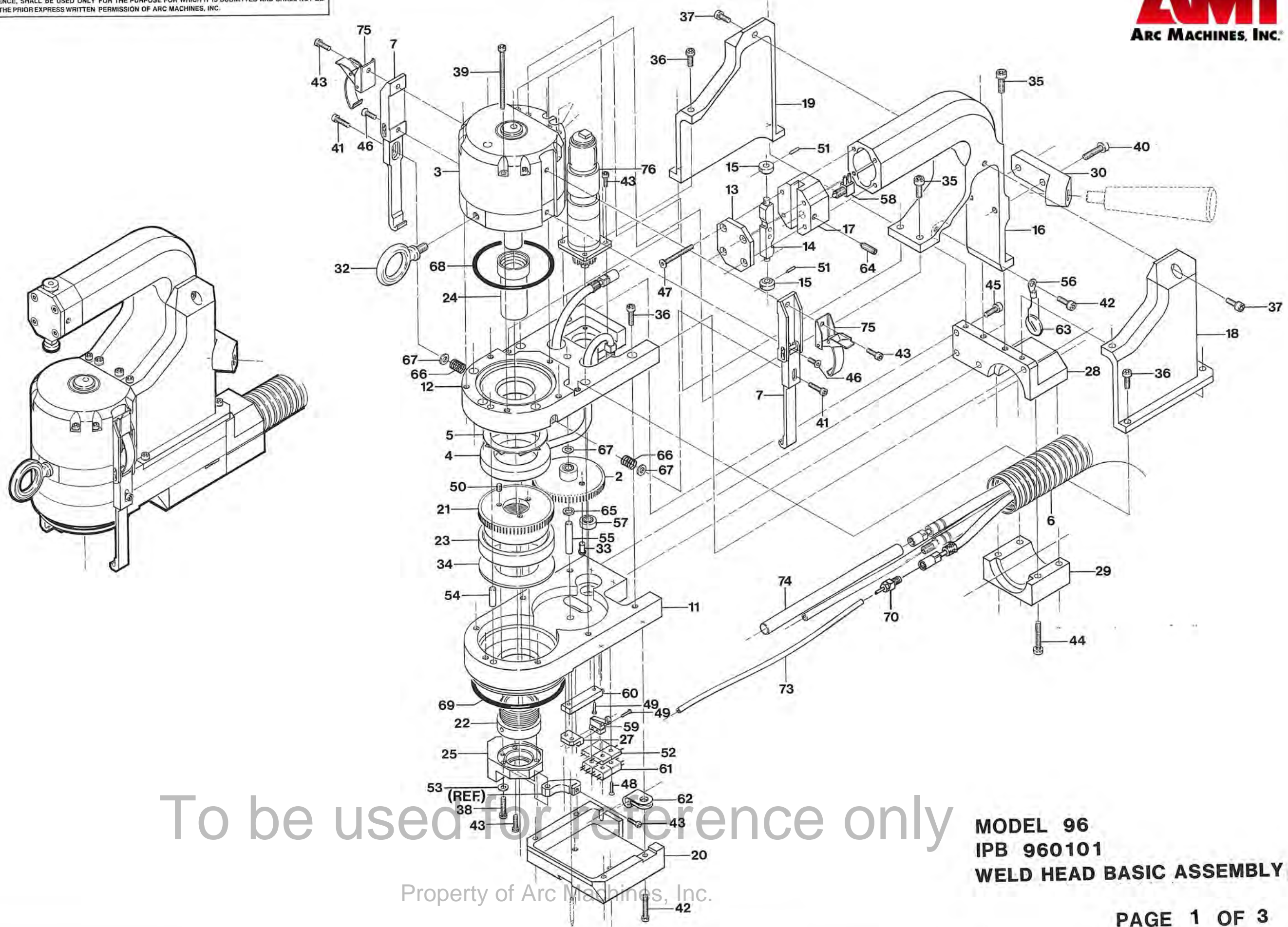
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PRICE, PART NUMBER AND
DESCRIPTION SUBJECT TO
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Page 2 of 2

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MODEL 96
IPB 960101
WELD HEAD BASIC ASSEMBLY

Property of Arc Machines, Inc.



IPB NUMBER: 960101

TO ORDER
USE PART NUMBER
DO NOT USE IPB
ITEM NUMBER

ARC MACHINES, INC.

PRODUCT MODEL: 96
DESCRIPTION: WELD HEAD BASIC ASSEMBLY
MANUAL NUMBER: 730060
NOTES:

IPB ITEM NUMBER	QTY	U/M	PART NUMBER	DESCRIPTION
1	0	-	-	-----
2	1	EA	42960600-03	GEAR IDLER
3	1	EA	13960102-01	CYLINDER AIR
4	1	EA	13900702-01	CONDUCTOR RING WELDHD BSC M90
5	1	EA	13900701-01	PRESSURE RING WELDED
6	1	EA	13960800-01	CABLE M96 CONTROL
7	2	EA	13960103-01	CLAMP NOSE
11	1	EA	42960100-01	HOUSING MAIN
12	1	EA	42960101-01	COVER MAIN HOUSING
13	1	EA	42960202-04	CAP END
14	1	EA	42960202-02	CAM VALVE
15	2	EA	42960202-03	BUTTON HANDLE MODEL 96
16	1	EA	42960200-01	HANDLE
17	1	EA	42960202-01	BRACKET AIR VALVE
18	1	EA	42960201-01	COVER SIDE LH
19	1	EA	42960201-02	COVER SIDE RH
20	1	EA	42961100-01	COVER LIMIT SWITCH
21	1	EA	42960600-01	ROTOR
22	1	EA	42960600-02	ROTOR STEM
23	1	EA	42960104-01	BEARING ROTOR MODEL 96
24	1	EA	42960104-02	INSULATOR
25	1	EA	42960700-01	PLATE MOUNTING
27	1	EA	42961100-02	BRACKET LIMIT SWITCH MOUNTING
28	1	EA	42960106-01	PLATE REAR
29	1	EA	42960106-02	CLAMP CABLE
30	1	EA	42900300-04	BRACKET WELD HD BASIC M90/M96
32	1	EA	42900104-04	EYE BOLT (8891T72)
33	1	EA	42900600-04	CAM
34	1	EA	42960104-03	WASHER THRUST (G18DU)
35	4	EA	SCS08-32-0.50NP	SCREW CAP SKT 8-32 1/2 L
36	13	EA	SCS06-32-0.50NP	SCREW CAP SKT 6-32 1/2 L
37	3	EA	SCS06-32-0.37NP	SCREW CAP SKT 6-32 3/8 L
38	1	EA	SCS06-32-0.62NP	SCREW CAP SKT 6-32 5/8 L
39	5	EA	SCS04-40-2.00NP	SCREW CAP SKT 4-40 2 L
40	2	EA	SCS10-32-0.50NP	SCREW CAP SKT 10-32 1/2 L
41	2	EA	SCS04-40-0.62NP	SCREW CAP SKT 4-40 5/8 L
42	1	EA	SCS06-32-0.75NP	SCREW CAP SKT 6-32 3/4 L

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PRICE, PART NUMBER AND
DESCRIPTION SUBJECT TO
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IPB NUMBER: 960101

TO ORDER
USE PART NUMBER
DO NOT USE IPB
ITEM NUMBER

ARC MACHINES, INC.

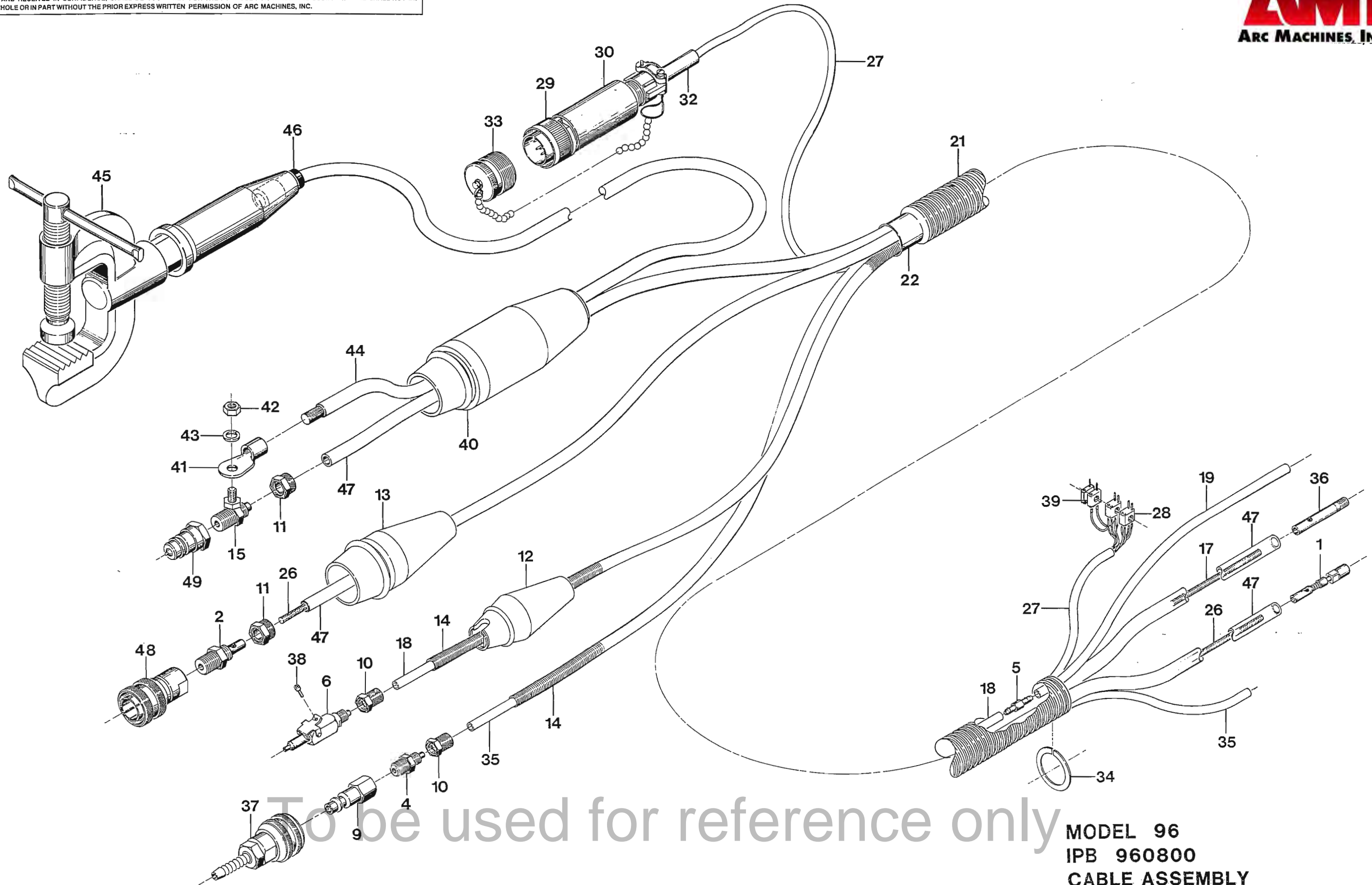
PRODUCT MODEL: 96
DESCRIPTION: WELD HEAD BASIC ASSEMBLY
MANUAL NUMBER: 730060
NOTES:

IPB ITEM NUMBER	QTY	U/M	PART NUMBER	DESCRIPTION
43	9	EA	SCS04-40-0.31NP	SCREW CAP SKT 4-40 5/16 L
44	4	EA	SCS08-32-0.87NP	SCREW CAP SKT 8-32 7/8 L
45	4	EA	SCS08-32-0.62NP	SCREW CAP SKT 8-32 5/8 L
46	2	EA	SFS04-40-0.31NP	SCREW FLH SKT 4-40 5/16 L
47	4	EA	SFS04-40-1.00NP	SCREW FLH SKT 4-40 1.00 L
48	4	EA	SFS02-56-0.37NP	SCREW FLH SKT 2-56 3/8 L
49	6	EA	SRL02-56-0.37NP	SCREW RDH SLT 2-56 3/8 L
50	3	EA	SSS04-40-18NPFL	SCREW SET SKT 4-40 3/16 FLPT
51	2	EA	PR06-0.43NP	PIN ROLL 1/16D 7/16L
52	2	EA	JF1S1PB	CONN MINTR 2 SKT RCPT
53	1	EA	5710-275-24	WASHER FLAT .14 ID .31 D .024T
54	2	EA	D19D500	PIN DOWEL HARD 3/16D 1/2L SST
55	1	EA	DA2D11	SHAFT PRCN INCR 3/16D 1-1/8 L
56	1	EA	B-3002	TERM RING #6, 22-16 AWG TONGUE
57	1	EA	SSRF-3LLRA3P25 [BEARING BALL .18 .50 [LY13]
58	1	EA	SMAV-3	VALVE 3 WAY
59	1	EA	MMGGD1W2C	SWITCH LIMIT LEAF ROLLER
60	1	EA	3057L-1-103	POT TRIM 10K OHM 1.25L
61	2	EA	JF2P2SCD	CONN 4 PIN PLUG MINIATURE
62	1	EA	8942	CLAMP CABLE 1/4 BLK NY
63	1	EA	V130LA10A	VARISTOR 130V 10 AMP
64	1	EA	SSM-54	PLUNGER SPRING 1/4-20 THD .50L
65	6	EA	DB3D50	SPACER SHIM .206ID .310D .020T
66	2	EA	PP-69	SPRING CPRSN .18D .21L .020W
67	3	EA	5710-267-24	WASHER FLAT .125 .281 .024 SST
68	1	EA	2-033-C873-70	O RING 1.989 ID .070 W NEO
69	1	EA	2-144-E515-80	O RING 2.487 ID .103W ETHYLENE
70	1	EA	13960803-01	FTNG AIR SHORT BRAZED
71	0	-	-	-----
72	0	-	-	-----
73	2	EA	3814-5	HOSE 1/8 OD 1/16 ID URETHANE
74	1	EA	726	TBG SIL 3/8 OD 1/16 W
75	2	EA	97-30-160-11	LATCH DRAW OVER CENTER
76	1	EA	13960600-01	MOTOR DRIVE ASSY

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MODEL 96
IPB 960800
CABLE ASSEMBLY
PAGE 1 OF 2



ARC MACHINES, Inc. ARC MACHINES, Inc.®

IPB NUMBER: 960800
DATE EFFECTIVE: 6-Apr-90
DATE REVISED: 22-Dec-11

TO ORDER
USE PART NUMBER
DO NOT USE IPB ITEM NUMBER

PRODUCT MODEL: 96
DESCRIPTION: CABLE ASSEMBLY
MANUAL NUMBER: 730060
NOTES:

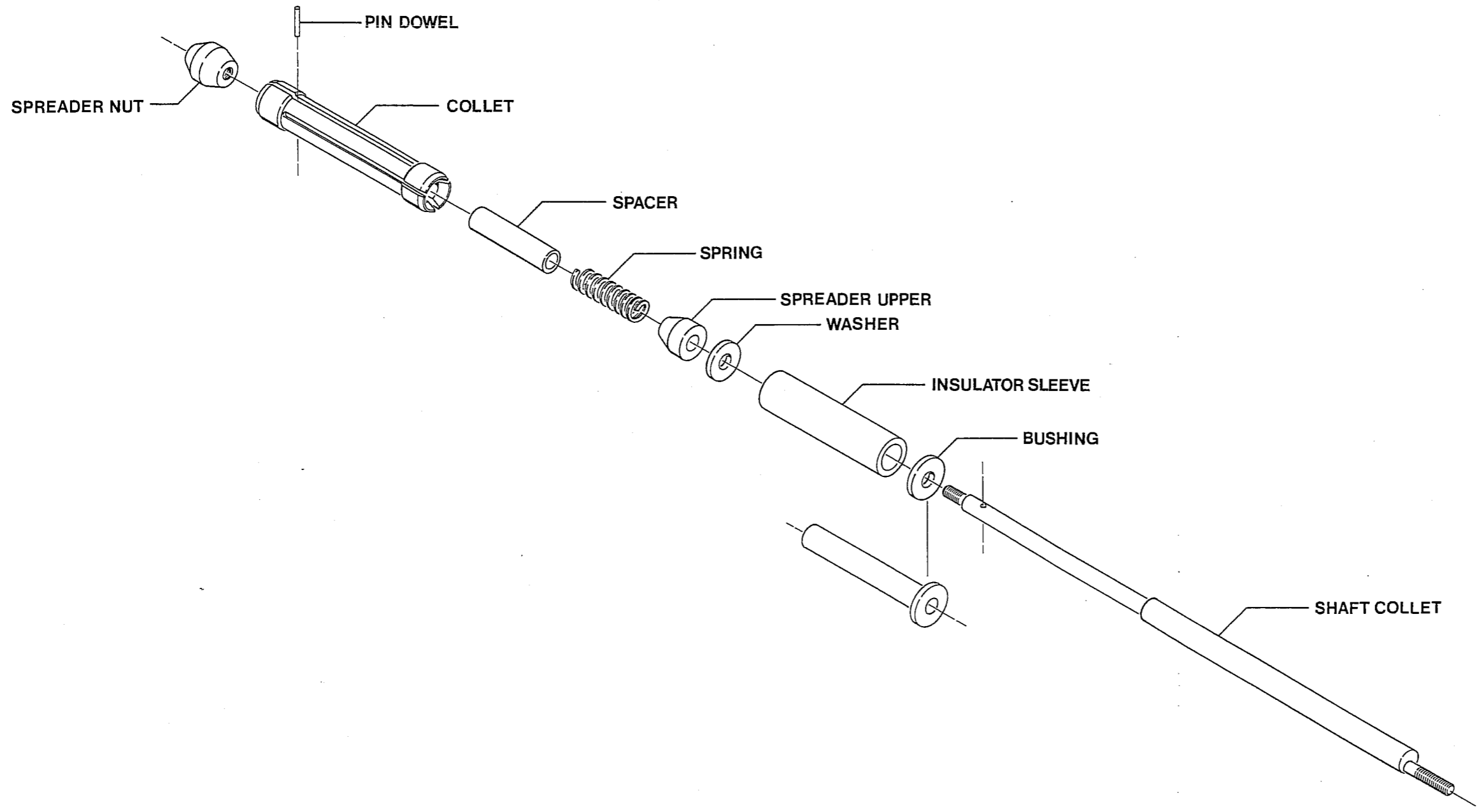
IPB ITEM NUMBER	QTY	UOM	PART NUMBER	DESCRIPTION
1	1	EA	ARC-1881	FTG WTR/PWR-CA CRIMP 1/4-28 BRASS SWIVEL NUT (FEMALE)
2	1	EA	42060800-07	COUPLING WTR/PWR (42060800-06) BRZD
4	1	EA	68P-4-2	FTG CONN 1/4 TUBE 1/8 MPT BR
5	1	EA	MHU-1-808-3	FTG NIPPLE TUBING SUPPORTED
6	1	EA	1351109-01	COUPLING Q/D ASSY MALE GAS FOR 1/4 TUBING
9	1	EA	13	COUPLING Q/D AIR PLUG 1/8 IN FPT SERIES 3000 STEEL
10	2	EA	261-PG-04	NUT/SLEEVE SPRING 1/4 TUBE
11	1	EA	261-PG-06	NUT/SLEEVE SPRING 3/8 TBG
12	1	EA	42060805-04	BOOT MALE GAS CLIP TYP Q/D
13	1	EA	42060804-01	BOOT P/G MALE POWER/GROUND
14	1	EA	AS200718	SPRING GUARD .34 OD 18.00 LG
15	1	EA	42150803-01	MANIFOLD
17	1	EA	SS3-26	SPRING EXT .18D .026W 20 IN SS
18	11	FT	44-P-YELLOW	TBG POLYETHYLENE YELLOW POLY-FLO 1/4 OD .040 WALL
19	1	EA	2800546	TBG SILICONE 1/8 ID 1/4 OD FUEL TYPE BLUE LINE
21	1	EA	DUCT-0,87-50-G	CONDUIT GRAY 0.87 ID
22	1	EA	M23053/5-111-0	TBG SHRINK 1-1/2 ID BLK
26	12	FT	NER7-95-36T	CABLE 01/08GA TINNED COPPER ROPE
27	1	EA	710023-01	CABLE, 09/22GA 0.270OD SHLD HYT WHT-POLYUR JKT 4TP+1
28	2	EA	JF2P2SCD	CONN 4 PIN PLUG MINIATURE (GRY) (A,B-SKTS C,D-PINS)
29	1	EA	MS3106E18-1PF42	CONN 10 PIN STRAIGHT PLUG W/OUT ENDBELL
30	1	EA	G1501N186A3A	CONN BACKSHELL
32	1	EA	MS39056-3	CONN TELESCOPING BUSHING 5/16 DIA CABLE
33	1	EA	1350110-04	DUST CAP ASSY W/CHAIN(MALE18D)
34	1	EA	42900104-03	RTNG RING
35	11	FT	44-P-GREEN	TBG POLYETHYLENE GREEN POLY-FLO 1/4 OD .040 WALL
36	1	EA	13900802-01	FTG WATER BRZD
37	1	EA	3600	COUPLING Q/D AIR HOSE BARB
38	1	EA	SCS04-40-0,31NP	SCREW CAP SKT 4-40 5/16 L
39	2	EA	JF1P1SB	CONN 2 PIN PLUG MINIATURE (GRY) (A-SKT B-PIN)
40	1	EA	13900801-01	COUPLING BOOT GROUND WATER M90
41	1	EA	B-3284	TERM RING 2 AWG 1/4
42	1	EA	N25-20ZP-HEX	NUT 1/4-20
43	1	EA	W25NP-LK-SP	WASHER
44	1	EA	WC2	CABLE, WELDING 2AWG 200A 600V .435 OD EPDM BLK
45	1	EA	MIG-600	CLAMP GROUND
46	1	EA	42900104-08	STRAIN RELIEF
47	1	EA	42090806-01	TBG, POLYU BRAIDED ETHER BASE (WATER USE) 1/4ID 3/8OD
48	1	EA	42060800-02	COUPLING Q/D 1/4 WATER FEMALE MOD (SM-251B)
49	1	EA	C000008	COUPLING Q/D 1/4PT MALE BRASS WATER/POWER

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ISSUED: 6 APR 1990
REVISED: 7 DEC 1990



NOTES: 1. TO ORDER ASSEMBLY SPECIFY I.D. SIZE.
2. TO ORDER REPLACEMENT PARTS SPECIFY NAME AND TUBE I.D.

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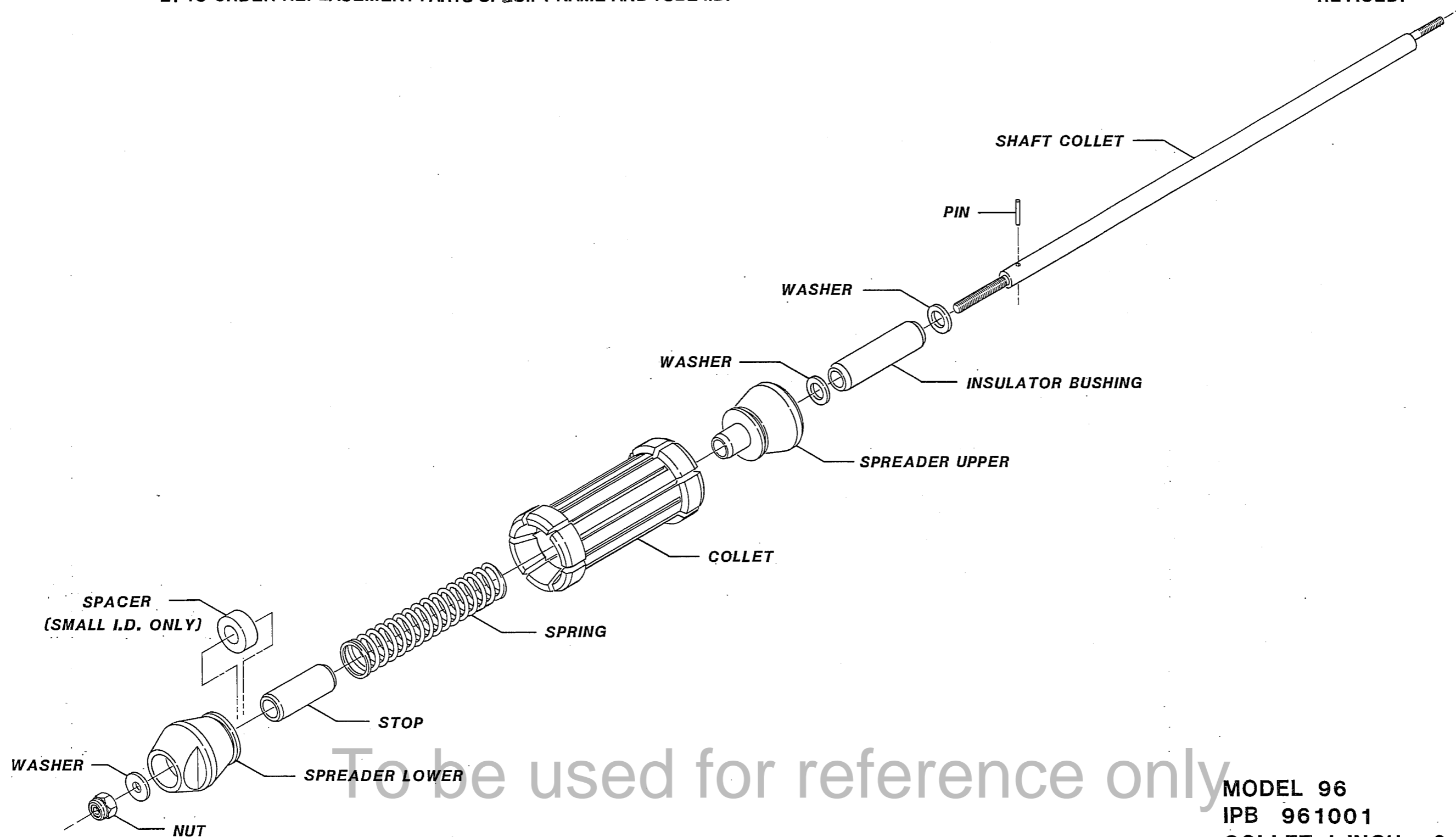
MODEL 96
IPB 961000
COLLET 1/2 INCH-3/4 INCH O.D.
TUBE ASSEMBLY

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- NOTES: 1. TO ORDER ASSEMBLY SPECIFY I.D. SIZE.
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ISSUED: 7 DEC 1990
REVISED:



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MODEL 96
IPB 961001
COLLET 1 INCH - 2 INCH O.D.
TUBE ASSEMBLY