

MAINTENANCE & REPLACEMENT PARTS

Bulbs (Lamps)



Please call regarding availability of bulbs not listed

ANSI codes and manufacturer's part numbers are cross-referenced (in *italics and parenthesis*) when available.

Tungsten Halogen & Incandescent

* Recommend Bulb Removal/Installation Tool shown after listing

2.5V/0.35A Bullet. 252 \$4.00 (634, 8000155)	6V/10W Halogen, G4, Osram. 64225 \$4.50 (<i>ESA/FHD, 76342, 050-550, 050-556, 700-065, 8-C403, 907-090, 624, 655C, 7387, 3369, 1000531</i>)
3.5V/0.72A Bullet, Boehm. 03100 \$10.60 (3287, 8000017)	6V/10W Halogen, G4, Philips. 5972 \$7.50 (38-61-08, 91-01-54, 64223, 1000857)
6V/0.2A Bullet (for teaching head). 328 \$1.50 (79098, 31-31-50, 8000168)	6V/10W Halogen, G4, Philips. 7387 \$5.20 (<i>ESA/FHD, 76342, 050-550, 050-556, 700-065, 8-C403, 907-090, 624, 655C, 7387, 3369, 1000531</i>)
6V/0.2A Bullet w/Lens (for multi-TH), Nikon. MXA20101 \$11.00 (79186)	6V/10W SC Bayonet, round. 5001 \$1.83 (3040-0260, 6814P)
6V/1.2A Horizontal Filament, Hosobuchi. OP2101 \$15.45 (MA560, 8000369)	6V/10W Screw, Hosobuchi. OP2103 \$9.75 (8-G102, 8000303)
6V/1.2A Vertical Filament, Hosobuchi. OP2101/U \$15.45 (MA561, 8000370)	6V/12W Halogen, G4. GE786 \$8.20 (8000252)
6V/2A SC Bayonet, Frosted, round, Ushio. 8-C201 \$7.10 (8000301)	6V/15W Bulb and Socket, Ushio. 8-C103 \$22.50
6V/3A (6V/18W) Frosted, ½ Silver, Swift. MA737 \$12.00 (8000350)	6V/15W DC Bayonet, Flanged, Oblong. 77903 \$10.00 (OP2130, 8000240)
6V/4.5A DC Prefocus*, Ushio. 1468 \$5.00 (581, 8000067)	6V/15W DC Bayonet, Flanged, Nikon. 77910 \$13.50 (8000242)
6.4V/2.63A DC Bayonet. S8.1130 \$2.30	6V/15W DC Bayonet, Oblong, Ushio. 8018 \$7.40 (3800-29-9020, 76906, 166-324, 500-012, 8000269)
6.5V/2.75A (6.5V/15W) DC Bayonet. 1493 \$2.75 (360, 700-034, 8-B102, MA402, 21138, 8000070)	6V/15W DC Flanged. 177Z \$9.25 (3800-18-1740, 38-01-77, OP2131, 8000172)
6.5V/2.75A DC Prefocus*, Ushio. 1460X \$5.50 (31-31-75, 31-31-76, 31-01-05, 8000066)	6V/15W (6V/3A) DC Bayonet, Round. OP2114 \$6.25 (76907, 8000233)
6.5V/2.75A DC Prefocus*. GE1630 \$9.30 (8000092)	6V/20W Halogen, G4. GE778 \$8.90 (31-31-81-01, 31-31-81-10, 569, 31-31-21, 8000239)
6.5V/2.75A DC Prefocus*. 1631X \$8.00 (31-31-85, 31-31-86, 31-31-79, 8000093)	6V/20W (6V/3.33A) Halogen, G4. GE788 \$7.90 (MA260/05, 1121)
6.5V/2.75A DC Prefocus*. GE1631X \$13.50 (31-31-85, 31-31-86, 31-31-79, 8000093)	6V/20W Halogen, G4, Osram. 64250 HLX \$4.40 (<i>ESB/FHE, 1120, 362-658, 3801-20-1740D, 11143, 500-245, 89500, 79099, 8-C405, MA780, 7388, MA420, MA07, 687.95, 3256, 12-561-BLB1, MA311, 1000532</i>)
6.5V/2.75A DC Prefocus*, Ushio. 1649 \$9.90 (31-31-42, 31-31-43, 8000100)	6V/20W Halogen with Lead, Narva. 55133 \$33.00
6V/5W Screw, Ushio. 8000302 \$10.00 (8-G101)	6V/20W MR11, Ushio. JCR/M6V20W \$18.40 (83314)
6V/9W MR11, Philips. 13529 \$21.50	6V/25W Flanged, G4. 39-01-53 \$19.00 (8000174)
6V/10W (6V/1.67A) Halogen, G4. GE787 \$7.50 (31-31-77-01, 31-31-77-10, MA570, 76342, 8000254)	6V/25W Halogen with Lead, Narva. 55147 \$33.00 (33-01-53)
6V/10W Halogen, G4, Osram. 64223 \$17.00 (38-61-08, 91-01-54, 5972, 1000857)	6V/30W (6V/5A) Bayonet, Oblong, Hosobuchi. OP2118 \$6.70 (MA738, 77904, 8-C101, 8000241)
	6V/30W Bulb and Socket, Ushio. 8-C102 \$22.50 (8000299)
	6V/30W (6V/5A) Candelabra, Osram. 8100 \$18.75 (500-011, 8000277)
	6V/30W DC Flanged, Ushio. 8000175 \$20.00 (39-01-58)
	6V/30W Halogen, G4, Philips. 5761 \$9.80 (84246, 8-C410, MA326, 3256-30W, LB-30WH, 64265 HLX, SE06.0215, MINJ-F-B2, 1000867)
	6V/30W Halogen with Lead, Narva. 55168 \$39.00
	6V/35W Halogen, G4, vertical filament, Osram. 64275 \$7.50
	8V/20W MR11, Osram. 64255 \$18.20 (Y99702)
	10V/70W Horizontal Filament, Nikon. 71256 \$16.00 (8000226)
	10.8V/30W MR16, Ushio. EKZ \$16.50 (1000315)

Continued

12V/10W DC Bayonet. GE1004	\$2.45
(800-411)	
12V/10W SC Bayonet, round, horizontal filament. S-5203Z	\$33.30
(800-421)	
12V/10W Halogen, G4. 64415	\$3.40
12V/10W Halogen, G4. 800-170	\$13.50
12V/10W Tubular. 800-400	\$13.00
12V/15W Halogen, G4. 800-422	\$19.00
12V/15W MR11C, faceted. JCR12V15W/G4	\$5.90
12V/20W Halogen, G4, 2000 hrs, Osram. 64425	\$2.85
(58661, 800-160, 3253, HT-59-1152, SE06.0098)	
12V/22W MR11. JCR12V22WA/3 , KLS	\$34.85
(8-S110)	
12V/25W SC Bayonet. 93	\$1.25
12V/30W Halogen, G6.35, Osram. 64261	\$14.50
(500-317, 115000317)	
12V/30W Halogen, PG22, Osram. 64260	\$17.60
12V/35W MR11C, Philips. 14626	\$13.25
(FTE-CG)	
12V/45W SC Bayonet, clear. BA15s	\$15.00
12V/50W Halogen, G6.35, Osram. 64610 HLX	\$4.50
(BRL, 76516, 8-C407, MA784, 500-182, 7027, M650, MA275/05, 1000071)	
12V/50W Halogen, Special Base, Dr Fischer. 384-643	\$59.00
(4643 HLX, 90-1300, M-01020)	
12V/60W DC Bayonet. 3800-18-2520	\$20.50
(38-02-16, 500-010, 8000173)	
12V/75W MR16, Ushio. EFN	\$14.00
(3800-79-9030, 64615 HLX, 6853, 1000270)	
12V/100W Halogen, High Intensity, Osram. 64625 HLX	\$4.75
(FCR, 76513, 500-974, 8-C401, 193-049, 3800-59-1660, MA782, 7023, 9-8600-15, M32-05-45, 2052, 1000490)	
12V/100W Halogen, Long Life, Osram. 64623 HLX	\$5.70
(EVA, 84125, 8-C406, 043-144, 7724, 3800-79-9540, 1000381)	
12V/100W Halogen, 2-pin prefocus, Osram. 64628	\$11.40
(FDT, 31-31-58, 5973, 1000504)	
12V/100W MR16, Osram. EFP	\$9.70
(64627, 098-145, 6834, 3800-79-9040, 1000271)	
13.8V/85W MR16, Osram. 64618	\$12.00
(DED, 13288, 13194)	
14.5V/90W MR16, Ushio. EPV	\$13.75
15V/150W Halogen, G6.35, EVB/BRJ	\$5.25
(64633 HLX, 6550, 100069)	
15V/150W MR16, Osram. 64635 HLX	\$42.00
15V/150W MR16, Ushio. EFR	\$15.50
(997-053, 8-S401, 31-01-98, 64634 HLX, 6423, 58102, 10001-111, Y99701, 1000272)	
20V/1A DC Prefocus*. 1634	\$9.00
(31-31-37, 050-540, 506-014, 8000095)	
20V/150W MR16, faceted, 500 hrs, Ushio. DDL	\$11.00
(A08130, 82931, 3378, 23500-014, 1000173)	
21V/150W MR16, 2-pin vented, Ushio. DNF	\$20.00
(61351, 001160, 243054, SY0023, 4000-0996-0019, 6000-150, 52118, 5212-11, 5212-51, 5212-81, 1000207)	
21V/150W MR16, 40 hrs, Ushio. EJA	\$11.50
(A08110, 76223, 8-C404, 902-063, N650013, N650012, 1000297, 02-015855-0000)	
21V/150W MR16, 40 hrs. EJV	\$13.20
(1000302, 02-015852-0000)	

21V/150W MR16, 200 Hrs, Ushio. EKE	\$11.00
(902-058, 31-31-52, A08120, FL180/70, FL150/70, FT150/70, FT190/70, 3378, 1000306, 02-015850-0000)	
21V/150W MR16, 1000 Hrs, Osram. EKE/X	\$13.80
(EKE/LL, 1003370)	
24V/150W Halogen, High Intensity, Osram. 64640 HLX	\$3.40
(FCS, 71826, 799-892, MA786, 7158, 037-717, 799-892, 58101, 501-109, 1000492)	
24V/150W Halogen, Long Life, Osram. 64642 HLX	\$8.00
(FDV)	
24V/250W Halogen, G6.35, Osram. 64657	\$5.30
(EVC/FGX, 6958)	
24V/250W MR16, Osram. 64653 HLX	\$12.50
(ELC, 13163, Y99704, 1000318)	
82V/250W MR16. EVW	\$12.75
82V/300W MR13, Eiko. FHS	\$12.25
120V/6W DC Bayonet. 6S6DC120V	\$2.50
(10407, 1005, 8000220)	
120V/15W Candelabra, Ushio. 15S11/13CL	\$5.20
(626, 8000079)	
120V/15W DC Bayonet. 15T7DC	\$3.00
(77906, 12610, 12603, 800-101, 8000083)	
120V/20W ½ Silver, DC Bayonet, Oblong. 77427	\$13.00
(MA361/10)	
120V/20W ½ Silver, DC Bayonet, Oblong, Ushio. 78595	\$11.80
(MA361/10, MXA20163, 8000385)	
120V/20W ½ Silver, DC Bayonet, Round. MA886	\$12.20
120V/20W DC Bayonet, Oblong. 800-102	\$13.50
120V/20W DC Bayonet, Round, Eiko. MA2201	\$7.00
(MA2251B, 8000344)	
120V/20W Frosted/Silver, Round. MA736	\$14.00
120V/30W DC Bayonet, Round. MA722A	\$7.00
120V/30W DC Bayonet, S11. BLC	\$4.80
(31-31-71-03, 31-31-71-05, 8-B152, 1000060)	
120V/30W Miniature Flood. MA263/05	\$20.00
120V/150W Medium Screw, Higuchi. 150P25/2SB	\$20.00
120V/150W MR16, faceted, 12 hrs, Ushio. ESD	\$26.55
(906117, 1000356)	
120V/250W MR16, faceted, Ushio. ENH	\$17.75
(54986, 1006926, 1000333)	
120V/300W GY9.5, Ushio. JCD120V300WC	\$14.50
(1000896)	
120V/300W MR16, stippled, oval 2-pin, Osram. ELH	\$11.75
(64660, 1000321)	
125V/300W MR16, Long Life, faceted, Eiko. ELH-5	\$17.00
(1003020)	
130V/50W Halogen, G8, Hiraki. JCD130V50W/G8	\$5.50
(25088A)	

LED

3.4V/0.06W LED, Wedge. 800-001	\$17.00
(MA2215)	
3.4V/3W LED Assembly. 800-500	\$49.00
12V/3W LED Module (6000 K). 1101000201982	\$176.00
LED Assembly. 800-425	\$35.10
LED Assembly. 800-426	\$36.90
LED Assembly. 800-427	\$45.00
LED Assembly. 800-428	\$13.50

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Metal Halide

60V/24W MR11, 300 hrs, Welch Allyn. **09500-U**\$270.00
(AL-1824, 8-61257)

Mercury Short Arc

50W Mercury Arc, 100 Hrs, Osram. **HBO50W/AC/L1**\$115.00
(78564, 78588, 8-B199, 38-16-19, 414140, 2055,
3040-0090, 500-137, SHL-50AC1, BA-001, 5000487)
50W Mercury Arc, 100 Hrs, Osram. **HBO50W/AC/L2**\$115.00
(31-31-65, SHL-50AC2, BA-002, 5000857)
50W Mercury Arc, 200 Hrs, Osram. **HBO50W/3**\$140.00
(BA-003)
100W Mercury Arc, 200 Hrs, Ushio. **USH-102D**\$109.00
(78589, 8-B192U, 500-138, 3800-18-4060/D,2087-001,
3040-0380, BA-005A, HBO100W/2, M/5000/133, 5000274)
100W Mercury Arc, 300 Hrs, Ushio. **USH-103D**\$135.00
(78590, 8-B1920, 380301-9350, USH-103OL, 5001329,
HBO103W/2)
200W Mercury Arc, 1000 hrs, Ushio. **USH-200DP**\$135.80
(HBO200W/2, 31-01-01, 649, 860014, 78580, 8-B190,
3800-18-4070, 38-16-15, 050-320, MA885,
91-00-50, 505-620, 78590, 5000276)

Xenon Short Arc

75W Xenon Arc, 400 hrs, Ushio. **UXL-75XE**\$195.00
(XBO75W/2, 8-B198, 910881-2013, 38-16-02, 500-139,
91-01-42, 3800-79-9190, 78682, 620-125, 903-050,
BA-013, 5000371)
150W Xenon Arc, Short Gap. **XBO150W/CROFR**\$260.00
(8-B195, BA-018, UXL-150S-0, 3801-22-2450,
500-008, 5000326)
180W Xenon Arc, Osram. **XBOR180W45COFR**\$450.00
(69183, 407.309)

Fluorescent

4W Fluorescent, Tubular, Eiko. **F4T5/D**\$7.00
(31-31-03, MA309/05, 3000108)
5W Fluorescent, G23, Sylvania. **CF5DS/841**\$11.70
(21278, 800-138, MA68, 48920-81, 20303)
9W Fluorescent, G23, Sylvania. **CF9DS/841**\$4.95
(20305)
22W Fluorescent, 8" OD Circle, Sylvania. **FC8T9/D/RS**\$19.00
(29980)
32W Fluorescent, 12" OD Circle, Sylvania. **FC12T9/D/RS**\$15.90
(20030)

Germicidal

4W Germicidal (UV-C), G5, Osram. **G4T5/OF**\$10.35
(23397)
15W Germicidal (UV-C), G13, Sylvania. **G15T8**\$17.00
(21612, 3000007)
25W Germicidal (UV-C), G13, Ushio. **G25T8**\$19.80
(3000008)
39W Germicidal, single-pin, Ushio. **G36T5L**\$35.80
(23443, 00206, 3000312)
65W Germicidal, single-pin, 155.4 cm, Higuichi. **G64T5L**\$83.00

Heat (Infrared)

250W, R40, shatter resistant, GE. **250BR40/HI/TC**\$14.00

* Recommend Bulb Removal/Installation Tool (shown below)



Remove and install prefocused/flanged bulbs safely with this simple tool. Push rubber-lined tube directly onto top of bulb and turn clockwise to install, or counterclockwise to remove.

Bulb Removal/Installation Tool. 3283.....\$16.00

Batteries

Batteries, button cell, 11.6 mm diameter
Silver Oxide, 1.55V, 5.4 mm high, Energizer. **357**\$4.00
(303, A76, AG13, EPX76, LR1154, LR44)
Alkaline, 1.5V, 3.05 mm high. **389**\$2.25
(LR1130, LR54, SR1130, AG10, 189)

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Fuses



Fuses

¼ x 1¼"

Fast-Acting, AGC

0.1A/250V. 312-100	\$2.00
0.2A/250V. 312-200	\$2.00
1A/250V. 312-001	\$2.00
2A/250V. 312-002	\$2.00
3A/250V. 312-003	\$2.00
4A/250V. 312-004	\$2.00

Time-Delay (Slow-Blow), MDL

0.7A/250V. 313-700	\$2.00
1A/250V. 313-001	\$2.00
2.5A/250V	\$2.00

5 x 20 mm

Fast-Acting, GMA

0.5A/250V. 235-500	\$2.00
1A/250V. 235-001	\$2.00
3A/250V. 235-003	\$2.00
5A/125V. 235-005	\$2.00

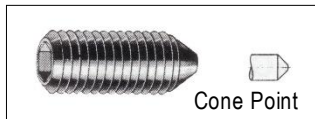
Time-Delay (Slow-Blow), Glass tube

0.5A/250V. 239-500	\$2.00
1A/250V. 239-001	\$2.00
2A/250V. 239-002	\$2.00
2.5A/250V.	\$2.00
3A/250V. 239-003	\$2.00
5A/250V. 239-005	\$2.00

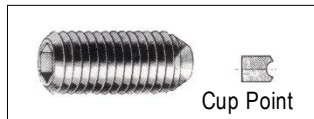
Time-Delay (Slow-Blow), Ceramic

1A/250V. 215-001	\$2.00
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Set Screws



Cone Point



Cup Point

Set Screws, steel

Cone Point, DIN 914

M4 x 0.7 x 5 mm length, 2 mm hex key size. 77702	\$0.50
M4 x 0.7 x 10 mm length, 2 mm hex key size. 77704	\$0.50
M4 x 0.7 x 12 mm length, 2.5 mm hex key size. 77706	\$0.50
M5 x 0.7 x 10 mm length, 2.5 mm hex key size. 77708	\$0.50

Cup Point, DIN 916

M3 x 0.5 x 3 mm length, 1.5 mm hex key size. 77722	\$0.50
M3 x 0.5 x 5 mm length, 1.5 mm hex key size. 77724	\$0.50

Tools



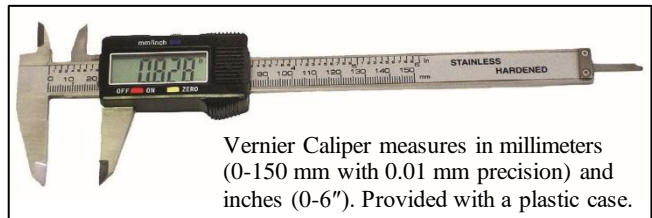
Cutter, diagonal, 5". PLR-766.00 \$10.95



Demagnetize or magnetize parts and tools.

Demagnetizer/Magnetizer, 1½ x 3" opening. DEM-345.00 \$49.95

Gauges



Vernier Caliper measures in millimeters (0-150 mm with 0.01 mm precision) and inches (0-6"). Provided with a plastic case.

Vernier Caliper, digital, 3-button. 600VCD001 \$36.50

Battery (replacement), Silver Oxide. **357** \$4.00



Reproducibility enhanced by rapid stop. Provided with padded, plastic case.

Micrometer, 0-25 mm in 0.01 mm div, Germany. 601A \$40.70

Hex L-Wrenches (Allen), metric

0.71 mm, short-arm, each. 78001	\$0.75
0.89 mm, short-arm, each. 78002	\$0.75
1.27 mm, short-arm, each. 78003	\$0.75
1.5 mm, short-arm, each. 78004	\$0.75
2 mm, short-arm or long-arm (<i>specify</i>), each. 78005	\$0.75
2.5 mm, short-arm, each. 78006	\$0.75
3 mm, short-arm or long-arm (<i>specify</i>), each. 78007	\$0.75

Hex L-Wrench Sets

7-Pc, short-arm. 78000	\$5.00
0.71, 0.89, 1.27, 1.5, 2, 2.5 and 3 mm. Includes case.	



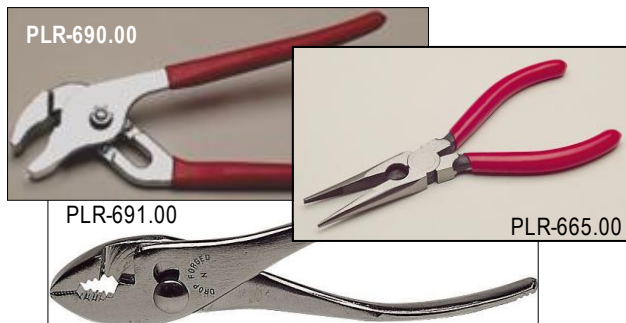
Ball end can be inserted up to 20° off-axis and not bind. Includes storage case.

13-Pc, ball end, long-arm, chrome vanadium

Metric. 96416	\$15.90
1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 8, and 10 mm	
SAE. 94680	\$15.90
0.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, and 3/8"	



Inspection Mirror, 9", stainless steel. M31 \$2.50



Pliers

Groove Joint, 7½". PLR-690.00	\$6.40
Multi-grooved handles adjust for various jobs.	
Long Nose with Side Cutter, 6½". PLR-665.00	\$5.80
Features serrated jaws and vinyl grip handles.	
Slip Joint with Wire Cutter, 6½". PLR-691.00	\$4.30
Made from drop-forged steel with a nickel plating.	
Plier Set, 4-pc, canvas pouch. 20006	\$32.45
Pouch holds three pliers outlined above plus one diagonal cutter (<i>PLR-766.00</i>).	



Miniature



Japanese Style Phillips

Screwdrivers

Miniature Combo, 6-pc, swivel head. SCR-905.00	\$2.95
Slotted tips: 1.0, 1.2, 1.8, 2.4 mm; Phillips tips: #0, #1.	
Japanese-Style Phillips (JIS)	
#1, 3" long blade, 7¼" overall length. 53325A32	\$13.70
#2, 4" long blade, 8¼" overall length. 53325A33	\$16.50



Straight Blade ¼" Offset Pencil Point

Includes handle plus all 3 pairs of tips.

Spanner Wrench Kit. T-132-346	\$94.00
Tips (replacement), each Pair	\$24.00



Wrenches

9-Way. SOL-289.00	\$12.80
Sizes: 7/16, 1/2, 9/16, 5/8, 11/16, 7/8, 1, and 1 1/8".	
Useful for lab equipment and gas cylinders. Length: 8½".	