



BARCO Projection Systems

SECTION I

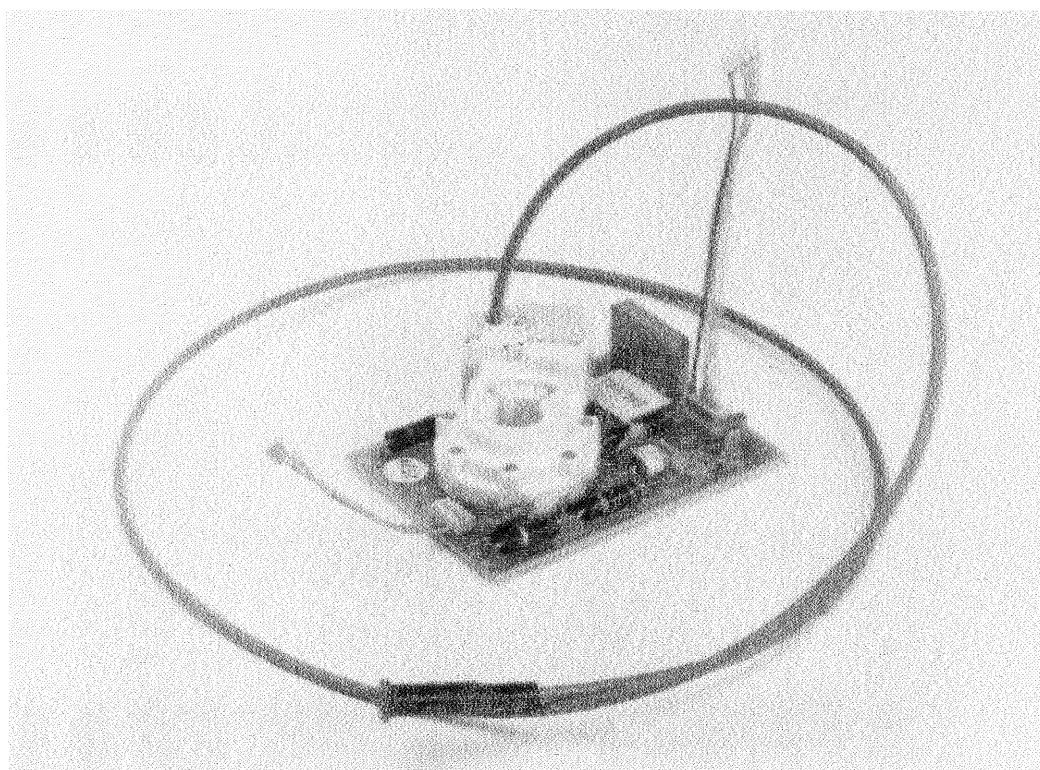
service sheet

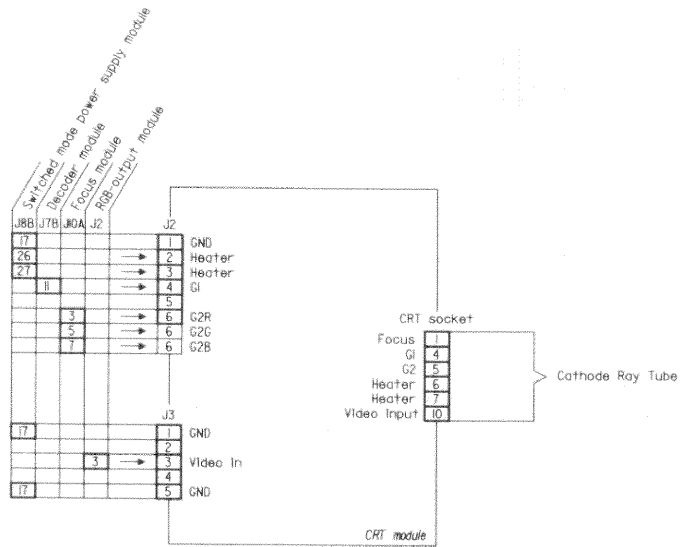
CRT SOCKET

RED 76 17592

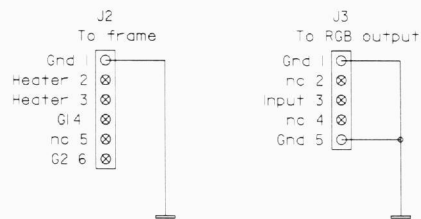
GREEN 76 17595

BLUE 76 17596



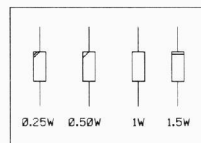
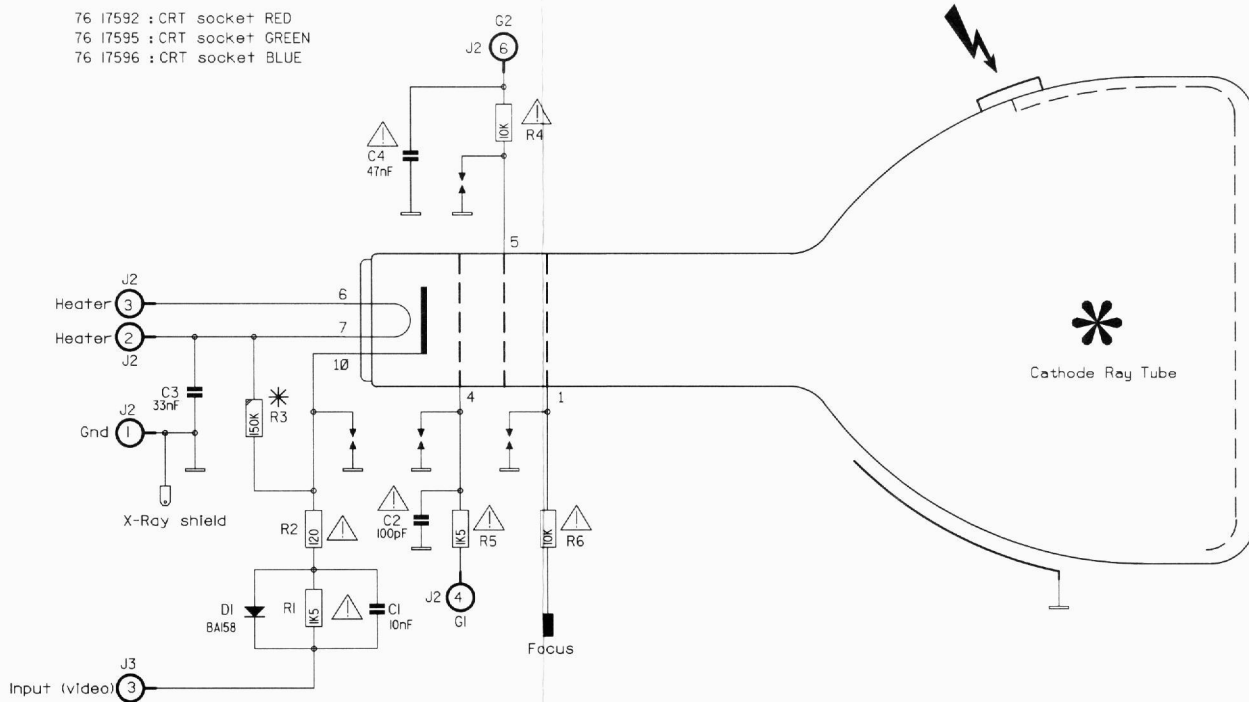


| | | |
|--------------------|-------------|------------------------|
| Name CRT module | | Article nr. 761759- |
| Date 15/09/1990 | Drawn PG | Checked CS |



* Only mounted on the GREEN CRT socket.

- 76 17592 : CRT socket RED
- 76 17595 : CRT socket GREEN
- 76 17596 : CRT socket BLUE



PRODUCT SAFETY NOTICE

COMPONENTS MARKED WITH * OR HAVE SPECIAL CHARACTERISTICS IMPORTANT TO SAFETY BEFORE REPLACING ANY OF THESE COMPONENTS. READ CAREFULLY THE SERVICE SAFETY PRECAUTIONS.
DO NOT DEGRADE THE SAFETY OF THIS SET THROUGH IMPROPER SERVICING

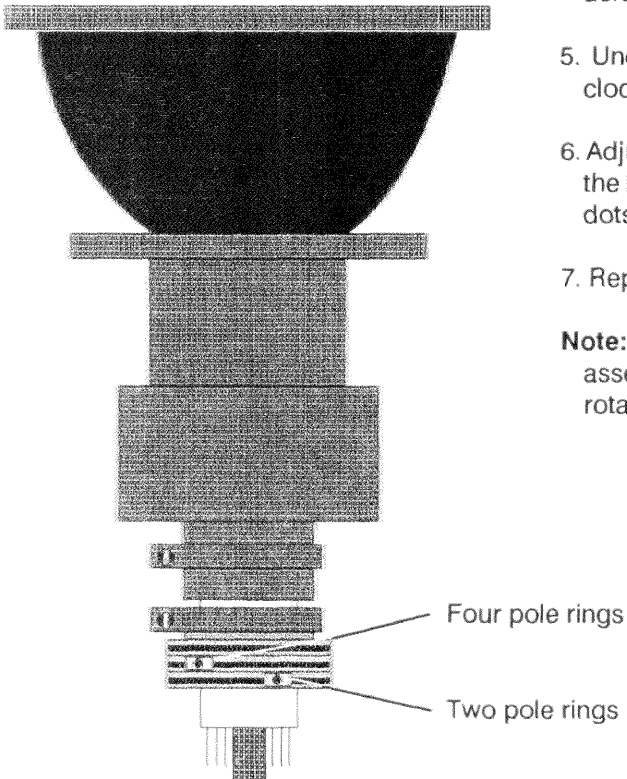
| | | | |
|------|------------|-------------|------------|
| Name | CRT module | Article nr. | 761759- 00 |
| Date | 15/04/1991 | Drawn | PGOE |
| | | Checked | CS |

BARCO PROJECTION SYSTEMS

Adjusting beam spot size

1. Select a source that will generate a field of small dots.
2. Lower brightness and increase the contrast until the dots begin to bloom.
3. Overdrive the electronic focus by turning the control clockwise for the respective CRT.
4. Adjust the four pole rings (the rings closest to the yoke) until the defocused dots are circular.
5. Underdrive the electronic focus by turning the control counter clockwise for the respective CRT.
6. Adjust the two pole rings (the rings closest to the CRT socket) until the brightest portion of the defocused dots are in the center of the dots.
7. Repeat the procedure for each CRT.

Note: While adjusting the pole magnets you may rotate the entire pole assembly by (carefully) using the knob as a handle. You may also rotate the pole elements by turning the knob itself.



CRT SOCKET

RED 76 17592
GREEN 76 17595
BLUE 76 17596

CRT SOCKET RED 76 17592

| ITEM NO. | SIT. | DESCRIPTION |
|----------|------|---------------------------|
| 13 1262 | B..1 | TUBE SURGE PROTECTION 1KV |
| 11 4120 | C..1 | CAP POMEFF 10K K 250 |
| 11 20902 | C..2 | CAP CE DI 100P K 2000 |
| 11 4126 | C..3 | CAP POMEFF 33K K 250 |
| 11 1773 | C..4 | CAP PPEPO 4K7 J 1500 |
| 13 1637 | D..1 | DIODE BA158 SWITCH |
| 31 1036 | J1.. | TUBE SOCKET SD130 |
| 31 3454 | J4.. | CONN TAB MBT T0,5 4,8 |
| 78 0028 | PC.. | PC PJ 49 CRT 7617592 |
| 10 2138 | R..1 | RES CC 1K5 K 1W |
| 10 2125 | R..2 | RES CC 120E F 1W |
| 10 2148 | R..4 | RES CC 10K K 1W |
| 10 2138 | R..5 | RES CC 1K5 K 1W |
| 10 2148 | R..6 | RES CC 10K K 1W |

CRT SOCKET GREEN 76 17595

| ITEM NO. | SIT. | DESCRIPTION |
|----------|------|---------------------------|
| 13 1262 | B..1 | TUBE SURGE PROTECTION 1KV |
| 11 4120 | C..1 | CAP POMEFF 10K K 250 |
| 11 20902 | C..2 | CAP CE DI 100P K 2000 |
| 11 4126 | C..3 | CAP POMEFF 33K K 250 |
| 11 1773 | C..4 | CAP PPEPO 4K7 J 1500 |
| 13 1637 | D..1 | DIODE BA158 SWITCH |
| 31 1036 | J1.. | TUBE SOCKET SD130 |
| 31 3454 | J4.. | CONN TAB MBT T0,5 4,8 |
| 78 0028 | PC.. | PC PJ 49 CRT 7617592 |
| 10 2138 | R..1 | RES CC 1K5 K 1W |
| 10 2125 | R..2 | RES CC 120E F 1W |
| 10 1162 | R..3 | RES CF 150K J 0W25 |
| 10 2148 | R..4 | RES CC 10K K 1W |
| 10 2138 | R..5 | RES CC 1K5 K 1W |
| 10 2148 | R..6 | RES CC 10K K 1W |

CRT SOCKET BLUE 76 17596

| ITEM NO. | SIT. | DESCRIPTION |
|----------|------|---------------------------|
| 13 1262 | B..1 | TUBE SURGE PROTECTION 1KV |
| 11 4120 | C..1 | CAP POMEFF 10K K 250 |
| 11 20902 | C..2 | CAP CE DI 100P K 2000 |
| 11 4126 | C..3 | CAP POMEFF 33K K 250 |
| 11 1773 | C..4 | CAP PPEPO 4K7 J 1500 |
| 13 1637 | D..1 | DIODE BA158 SWITCH |
| 31 1036 | J1.. | TUBE SOCKET SD130 |
| 31 3454 | J4.. | CONN TAB MBT T0,5 4,8 |
| 78 0028 | PC.. | PC PJ 49 CRT 7617592 |
| 10 2138 | R..1 | RES CC 1K5 K 1W |
| 10 2125 | R..2 | RES CC 120E F 1W |
| 10 2148 | R..4 | RES CC 10K K 1W |
| 10 2138 | R..5 | RES CC 1K5 K 1W |
| 10 2148 | R..6 | RES CC 10K K 1W |

CRT SOCKET

RED 76 17592

GREEN 76 17595

BLUE 76 17596

CRT SOCKET RED 76 17592

| ART.NO. | DESCRIPTION | QUANTITY |
|----------|---------------------------|----------|
| 11 1773 | CAP PPMPO 4K7 J 1500 | 1 |
| 11 20902 | CAP CE DI 100P K 2000 | 1 |
| 11 4120 | CAP POMEFF 10K K 250 | 1 |
| 11 4126 | CAP POMEFF 33K K 250 | 1 |
| 13 1262 | TUBE SURGE PROTECTION 1KV | 1 * |
| 13 1637 | DIODE BA158 SWITCH | 1 |
| 31 1036 | TUBE SOCKET SD130 | 1 * |
| 31 3454 | CONN TAB MBT T0,5 4,8 | 1 |
| 78 0028 | PC PJ 49 CRT 7617592 | 1 |

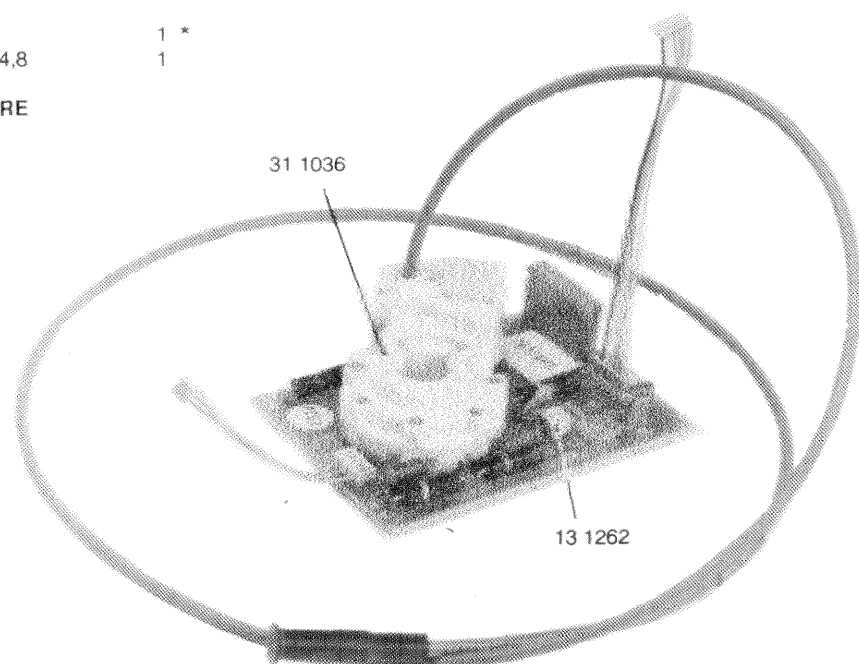
CRT SOCKET GREEN 76 17595

| ART.NO. | DESCRIPTION | QUANTITY |
|----------|---------------------------|----------|
| 11 1773 | CAP PPMPO 4K7 J 1500 | 1 |
| 11 20902 | CAP CE DI 100P K 2000 | 1 |
| 11 4120 | CAP POMEFF 10K K 250 | 1 |
| 11 4126 | CAP POMEFF 33K K 250 | 1 |
| 13 1262 | TUBE SURGE PROTECTION 1KV | 1 * |
| 13 1637 | DIODE BA158 SWITCH | 1 |
| 31 1036 | TUBE SOCKET SD130 | 1 * |
| 31 3454 | CONN TAB MBT T0,5 4,8 | 1 |
| 78 0028 | PC PJ 49 CRT 7617592 | 1 |

CRT SOCKET BLUE 76 17596

| ART.NO. | DESCRIPTION | QUANTITY |
|----------|---------------------------|----------|
| 11 1773 | CAP PPMPO 4K7 J 1500 | 1 |
| 11 20902 | CAP CE DI 100P K 2000 | 1 |
| 11 4120 | CAP POMEFF 10K K 250 | 1 |
| 11 4126 | CAP POMEFF 33K K 250 | 1 |
| 13 1262 | TUBE SURGE PROTECTION 1KV | 1 * |
| 13 1637 | DIODE BA158 SWITCH | 1 |
| 31 1036 | TUBE SOCKET SD130 | 1 * |
| 31 3454 | CONN TAB MBT T0,5 4,8 | 1 |

*NUMBERS REFERRING TO PICTURE



SPARE PARTS

Date : 28/08/90 76 1759X

CRT UNIT

RED 76 17802
GREEN 76 17805
BLUE 76 17806

CRT UNIT RED 76 17802

ITEM NO. SIT. DESCRIPTION

| | | | | | |
|----------|------|--------------------------------|----------|------|------------------------------|
| 76 17792 | 1000 | UN CRT PJ 49 07MP CORD GR800 R | 39 5196 | 3270 | GLUE LOCTITE 270 |
| 76 15128 | 2000 | UN DEF PJ 45 D1000 CPL | 80 2852 | 3300 | FRAME PJ 49 HD8 LEVER RED |
| 76 1818 | 2000 | UN DEF PJ 49 *800 CPL | 80 2860 | 3310 | FRAME PJ 49 HD8 AXLE LEVER |
| 30 6661 | 2010 | MAGNET 2/4POLE SHIFT/SPOT SIZE | 80 2854 | 3330 | FRAME PJ 49 HD8 GUIDING L/R |
| 80 2678 | 3000 | FRAME PJ 49 HD8 LENS RED | 80 2873 | 3340 | WASHER PJ 49 FRAME HD9 |
| 80 2988 | 3001 | WASHER DIA 5,5 X14,25 T0,5 *AL | 36 2221 | 3350 | SCREW DIN963 M 4 X 5 MC- |
| 80 2847 | 3120 | FRAME PJ 49 HD8 SCREW CTRL U/D | 36 1922 | 3360 | SCREW DIN965 M 4 X 6 MC+ |
| 80 2848 | 3130 | SPACER L 6,25 D13 D6,1 FE | 80 2861 | 3400 | FRAME PJ 49 HD8 PICTURE TUBE |
| 36 7355 | 3140 | WASHER DIN2093 12,5X6,2X0,7 | 80 2917 | 3401 | FRAME PJ 49 HD8 DUST RING GR |
| 80 2849 | 3150 | WASHER DIA 6,1 X13 T1 | 80 2853 | 3410 | FRAME PJ 49 HD8 GUIDING U/D |
| 36 6105 | 3160 | NUT DIN934 M 6 HEXAGON | 36 1922 | 3420 | SCREW DIN965 M 4 X 6 MC+ |
| 39 5196 | 3170 | GLUE LOCTITE 270 | 80 2672 | 3500 | FRAME PJ 49 HD8 BLOC SCREW |
| 80 2847 | 3220 | FRAME PJ 49 HD8 SCREW CTRL U/D | 80 2680 | 3510 | FRAME PJ 49 HD8 BLOC SPRING |
| 80 2848 | 3230 | SPACER L 6,25 D13 D6,1 FE | 80 2620 | 3600 | CASE PJ 49 CRT AKWADAG PLATE |
| 36 7355 | 3240 | WASHER DIN2093 12,5X6,2X0,7 | 36 23335 | 3610 | SCREW DIN933 M 5 X16 TWOLOK |
| 80 2849 | 3250 | WASHER DIA 6,1 X13 T1 | 76 1387D | 3620 | UN CRT S43 |
| 36 6105 | 3260 | NUT DIN934 M 6 HEXAGON | | | |

CRT UNIT GREEN 76 17805

ITEM NO. SIT. DESCRIPTION

| | | | | | |
|----------|------|--------------------------------|----------|------|-------------------------------|
| 76 17795 | 1000 | UN CRT PJ 49 07MP CORD GR800 G | 39 5196 | 3270 | GLUE LOCTITE 270 |
| 76 15128 | 2000 | UN DEF PJ 45 D1000 CPL | 80 2851 | 3300 | FRAME PJ 49 HD8 LEVER GRE/BLE |
| 76 1818 | 2000 | UN DEF PJ 49 *800 CPL | 80 2860 | 3310 | FRAME PJ 49 HD8 AXLE LEVER |
| 30 6661 | 2010 | MAGNET 2/4POLE SHIFT/SPOT SIZE | 80 2854 | 3330 | FRAME PJ 49 HD8 GUIDING L/R |
| 80 2671 | 3000 | FRAME PJ 49 HD8 LENS GREEN | 80 2873 | 3340 | WASHER PJ 49 FRAME HD9 |
| 80 2988 | 3001 | WASHER DIA 5,5 X14,25 T0,5 *AL | 36 2221 | 3350 | SCREW DIN963 M 4 X 5 MC- |
| 80 2847 | 3120 | FRAME PJ 49 HD8 SCREW CTRL U/D | 36 1922 | 3360 | SCREW DIN965 M 4 X 6 MC+ |
| 80 2848 | 3130 | SPACER L 6,25 D13 D6,1 FE | 80 2670 | 3400 | FRAME PJ 49 HD8 BLOC FIX AL |
| 36 7355 | 3140 | WASHER DIN2093 12,5X6,2X0,7 | 80 2917 | 3401 | FRAME PJ 49 HD8 DUST RING GR |
| 80 2849 | 3150 | WASHER DIA 6,1 X13 T1 | 80 2853 | 3410 | FRAME PJ 49 HD8 GUIDING U/D |
| 36 6105 | 3160 | NUT DIN934 M 6 HEXAGON | 36 1922 | 3420 | SCREW DIN965 M 4 X 6 MC+ |
| 39 5196 | 3170 | GLUE LOCTITE 270 | 80 2672 | 3500 | FRAME PJ 49 HD8 BLOC SCREW |
| 80 2847 | 3220 | FRAME PJ 49 HD8 SCREW CTRL U/D | 80 2680 | 3510 | FRAME PJ 49 HD8 BLOC SPRING |
| 80 2848 | 3230 | SPACER L 6,25 D13 D6,1 FE | 80 2620 | 3600 | CASE PJ 49 CRT AKWADAG PLATE |
| 36 7355 | 3240 | WASHER DIN2093 12,5X6,2X0,7 | 36 23335 | 3610 | SCREW DIN933 M 5 X16 TWOLOK |
| 80 2849 | 3250 | WASHER DIA 6,1 X13 T1 | 76 1387D | 3620 | UN CRT S43 |
| 36 6105 | 3260 | NUT DIN934 M 6 HEXAGON | | | |

CRT UNIT BLUE 76 17806

ITEM NO. SIT. DESCRIPTION

| | | | | | |
|----------|------|--------------------------------|----------|------|-------------------------------|
| 76 17796 | 1000 | UN CRT PJ 49 07MP CORD GR800 B | 39 5196 | 3270 | GLUE LOCTITE 270 |
| 76 15128 | 2000 | UN DEF PJ 45 D1000 CPL | 80 2851 | 3300 | FRAME PJ 49 HD8 LEVER GRE/BLE |
| 76 1818 | 2000 | UN DEF PJ 49 *800 CPL | 80 2860 | 3310 | FRAME PJ 49 HD8 AXLE LEVER |
| 30 6661 | 2010 | MAGNET 2/4POLE SHIFT/SPOT SIZE | 80 2854 | 3330 | FRAME PJ 49 HD8 GUIDING L/R |
| 80 2679 | 3000 | FRAME PJ 49 HD8 LENS BLUE | 80 2873 | 3340 | WASHER PJ 49 FRAME HD9 |
| 80 2988 | 3001 | WASHER DIA 5,5 X14,25 T0,5 *AL | 36 2221 | 3350 | SCREW DIN963 M 4 X 5 MC- |
| 80 2847 | 3120 | FRAME PJ 49 HD8 SCREW CTRL U/D | 36 1922 | 3360 | SCREW DIN965 M 4 X 6 MC+ |
| 80 2848 | 3130 | SPACER L 6,25 D13 D6,1 FE | 80 2670 | 3400 | FRAME PJ 49 HD8 BLOC FIX AL |
| 36 7355 | 3140 | WASHER DIN2093 12,5X6,2X0,7 | 80 2917 | 3401 | FRAME PJ 49 HD8 DUST RING GR |
| 80 2849 | 3150 | WASHER DIA 6,1 X13 T1 | 80 2853 | 3410 | FRAME PJ 49 HD8 GUIDING U/D |
| 36 6105 | 3160 | NUT DIN934 M 6 HEXAGON | 36 1922 | 3420 | SCREW DIN965 M 4 X 6 MC+ |
| 39 5196 | 3170 | GLUE LOCTITE 270 | 80 2672 | 3500 | FRAME PJ 49 HD8 BLOC SCREW |
| 80 2847 | 3220 | FRAME PJ 49 HD8 SCREW CTRL U/D | 80 2680 | 3510 | FRAME PJ 49 HD8 BLOC SPRING |
| 80 2848 | 3230 | SPACER L 6,25 D13 D6,1 FE | 80 2620 | 3600 | CASE PJ 49 CRT AKWADAG PLATE |
| 36 7355 | 3240 | WASHER DIN2093 12,5X6,2X0,7 | 36 23335 | 3610 | SCREW DIN933 M 5 X16 TWOLOK |
| 80 2849 | 3250 | WASHER DIA 6,1 X13 T1 | 76 1387D | 3620 | UN CRT S43 |
| 36 6105 | 3260 | NUT DIN934 M 6 HEXAGON | | | |

CRT UNIT

RED 76 17802

GREEN 76 17805

BLUE 76 17806

CRT UNIT RED 76 17802

| ART.NO. | DESCRIPTION | QUANTITY | | | |
|----------|--------------------------------|----------|---------|--------------------------------|---|
| 30 6661 | MAGNET 2/4POLE SHIFT/SPOT SIZE | 1 | 80 2680 | FRAME PJ 49 HD8 BLOC SPRING | 4 |
| | | | 80 2847 | FRAME PJ 49 HD8 SCREW CTRL U/D | 2 |
| 36 1922 | SCREW DIN965 M 4 X 6 MC+ | 3 | 80 2848 | SPACER L 6,25 D13 D6,1 FE | 2 |
| 36 2221 | SCREW DIN963 M 4 X 5 MC- | 1 | 80 2849 | WASHER DIA 6,1 X13 T1 | 4 |
| 36 23335 | SCREW DIN933 M 5 X16 TWOLOK | 4 | 80 2852 | FRAME PJ 49 HD8 LEVER RED | 1 |
| 36 6105 | NUT DIN934 M 6 HEXAGON | 2 | 80 2853 | FRAME PJ 49 HD8 GUIDING U/D | 1 |
| 36 7355 | WASHER DIN2093 12,5X6,2X0,7 | 10 | 80 2854 | FRAME PJ 49 HD8 GUIDING L/R | 1 |
| | | | 80 2860 | FRAME PJ 49 HD8 AXLE LEVER | 1 |
| 39 5196 | GLUE LOCTITE 270 | 2 | 80 2861 | FRAME PJ 49 HD8 PICTURE TUBE | 1 |
| | | | 80 2873 | WASHER PJ 49 FRAME HD9 | 1 |
| 80 2620 | CASE PJ 49 CRT AKWADAG PLATE | 1 | 80 2917 | FRAME PJ 49 HD8 DUST RING GR | 1 |
| 80 2672 | FRAME PJ 49 HD8 BLOC SCREW | 1 | 80 2988 | WASHER DIA 5,5 X14,25 T0,5 *AL | 4 |
| 80 2678 | FRAME PJ 49 HD8 LENS RED | 1 | | | |

CRT UNIT GREEN 76 17805

| ART.NO. | DESCRIPTION | QUANTITY | | | |
|----------|--------------------------------|----------|---------|--------------------------------|---|
| 30 6661 | MAGNET 2/4POLE SHIFT/SPOT SIZE | 1 | 80 2672 | FRAME PJ 49 HD8 BLOC SCREW | 1 |
| | | | 80 2680 | FRAME PJ 49 HD8 BLOC SPRING | 4 |
| 36 1922 | SCREW DIN965 M 4 X 6 MC+ | 3 | 80 2847 | FRAME PJ 49 HD8 SCREW CTRL U/D | 2 |
| 36 2221 | SCREW DIN963 M 4 X 5 MC- | 1 | 80 2848 | SPACER L 6,25 D13 D6,1 FE | 2 |
| 36 23335 | SCREW DIN933 M 5 X16 TWOLOK | 4 | 80 2849 | WASHER DIA 6,1 X13 T1 | 4 |
| 36 6105 | NUT DIN934 M 6 HEXAGON | 2 | 80 2851 | FRAME PJ 49 HD8 LEVER GRE/BLE | 1 |
| 36 7355 | WASHER DIN2093 12,5X6,2X0,7 | 10 | 80 2853 | FRAME PJ 49 HD8 GUIDING U/D | 1 |
| | | | 80 2854 | FRAME PJ 49 HD8 GUIDING L/R | 1 |
| 39 5196 | GLUE LOCTITE 270 | 2 | 80 2860 | FRAME PJ 49 HD8 AXLE LEVER | 1 |
| | | | 80 2873 | WASHER PJ 49 FRAME HD9 | 1 |
| 80 2620 | CASE PJ 49 CRT AKWADAG PLATE | 1 | 80 2917 | FRAME PJ 49 HD8 DUST RING GR | 1 |
| 80 2670 | FRAME PJ 49 HD8 BLOC FIX AL | 1 | 80 2988 | WASHER DIA 5,5 X14,25 T0,5 *AL | 4 |
| 80 2671 | FRAME PJ 49 HD8 LENS GREEN | 1 | | | |

CRT UNIT BLUE 76 17806

| ART.NO. | DESCRIPTION | QUANTITY | | | |
|----------|--------------------------------|----------|---------|--------------------------------|---|
| 30 6661 | MAGNET 2/4POLE SHIFT/SPOT SIZE | 1 | 80 2679 | FRAME PJ 49 HD8 LENS BLUE | 1 |
| | | | 80 2680 | FRAME PJ 49 HD8 BLOC SPRING | 4 |
| 36 1922 | SCREW DIN965 M 4 X 6 MC+ | 3 | 80 2847 | FRAME PJ 49 HD8 SCREW CTRL U/D | 2 |
| 36 2221 | SCREW DIN963 M 4 X 5 MC- | 1 | 80 2848 | SPACER L 6,25 D13 D6,1 FE | 2 |
| 36 23335 | SCREW DIN933 M 5 X16 TWOLOK | 4 | 80 2849 | WASHER DIA 6,1 X13 T1 | 4 |
| 36 6105 | NUT DIN934 M 6 HEXAGON | 2 | 80 2851 | FRAME PJ 49 HD8 LEVER GRE/BLE | 1 |
| 36 7355 | WASHER DIN2093 12,5X6,2X0,7 | 10 | 80 2853 | FRAME PJ 49 HD8 GUIDING U/D | 1 |
| | | | 80 2854 | FRAME PJ 49 HD8 GUIDING L/R | 1 |
| 39 5196 | GLUE LOCTITE 270 | 2 | 80 2860 | FRAME PJ 49 HD8 AXLE LEVER | 1 |
| | | | 80 2873 | WASHER PJ 49 FRAME HD9 | 1 |
| 80 2620 | CASE PJ 49 CRT AKWADAG PLATE | 1 | 80 2917 | FRAME PJ 49 HD8 DUST RING GR | 1 |
| 80 2670 | FRAME PJ 49 HD8 BLOC FIX AL | 1 | 80 2988 | WASHER DIA 5,5 X14,25 T0,5 *AL | 4 |
| 80 2672 | FRAME PJ 49 HD8 BLOC SCREW | 1 | | | |