

VIEW FROM 'X'

SECTION R-R
 ** TO BE MANUFACTURED FROM DW-110B-3100-42

- PHOSPHATING AND PAINTING TO BE DONE AS PER IS:3018 CLASS-B
 1. PHOSPHATING TO BE DONE AS PER IS:3018 CLASS-B
 2. PAINTING TO BE DONE AT WPE IN OR DURING ASSEMBLY
 3. PAINTING TO BE DONE AT WPE IN OR DURING ASSEMBLY
 4. PAINTING TO BE DONE AT WPE IN OR DURING ASSEMBLY
 5. M 8 .16 HOLES EQUISPACED TO BE DONE ON PCD 600
 ON TOP PLATE FOR LIFTING.



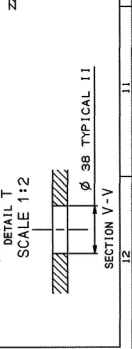
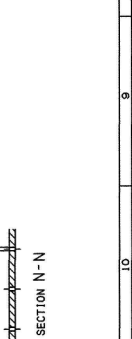
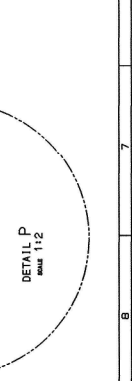
NO.	DESCRIPTION	PART NO.	MATERIAL	SYMBOL	DIMENSIONS	REMARKS
1	LAUNCHER MOUNTING FRAME					
GENERAL INFORMATION						
LINEAR DIMENSIONS						
UNIT	MM	IN	MM	IN	MM	IN
CONVERSION	1:1	25.4	1000	39.37	1000	39.37
ANGULAR DIMENSIONS						
UNIT	DEG	MIN	SEC	DEG	MIN	SEC
CONVERSION	1	60	3600	1	60	3600
SCALE						
SCALE	1:1	REVISION				
DRAWING DATA						
DRAWING NO. DW 110B-3100-11						
PROJECT NAME LAUNCHER MOUNTING FRAME						
PROJECT NO. 110B-3100-11						
PROJECT DESCRIPTION TRAINING GEAR ASSY						
PROJECT CODE 110B-3100-11						
PROJECT LOCATION KAVACH MOD-11						
PROJECT TYPE PROTOTYPE FACTORY						
PROJECT OFFICE DW 110B-3100-11						

NO.	DESCRIPTION	DATE	BY	CHKD
1	DESIGN			
2	DRAWING			
3	CHECKING			
4	APPROVAL			

MINIMUM SIZE & FIT DEVIATION

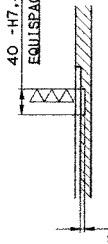
φ 6 -H7	0	0.012
φ 25 -H7	0	0.025
φ 30 -H7	0	0.025
φ 500 -H7	0	0.025

MINIMUM SIZE & FIT DEVIATION

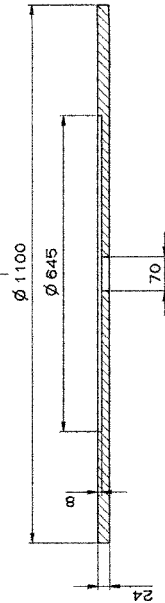
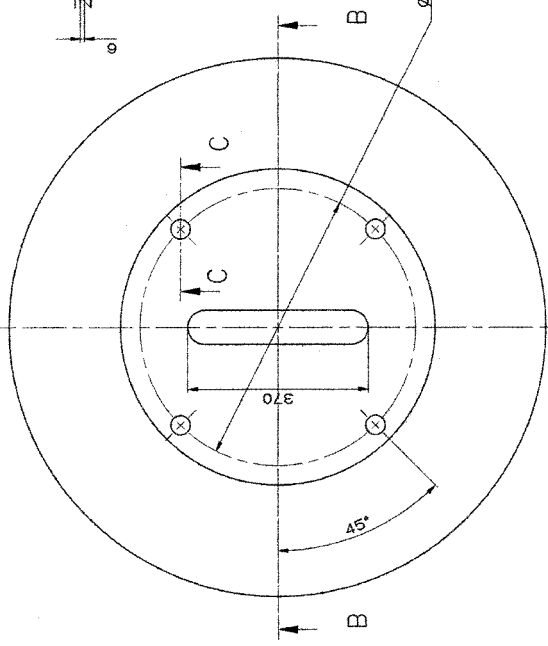


SCALE 1:12

40 -H7, 4 HOLES
EQUISPACED



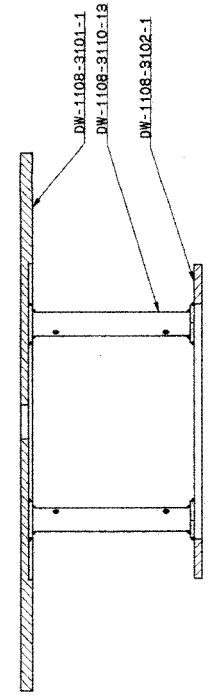
SECTION C-C



SECTION B-B

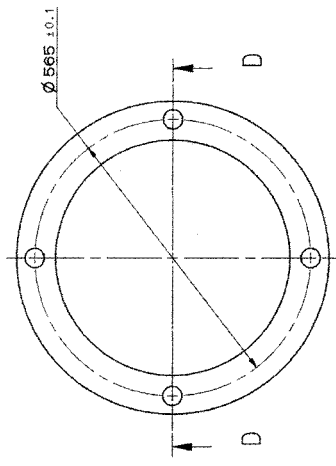
ALTERNATE MATERIAL :- EN-8 OR
080M40 BS:970 PART-I 1983

DW-1108-3101-1 TOP PLATE 40CB, IS:5517 1 1:5
DRAWING NO NOMENCLATURE MATERIAL NO. OFF.SCALE



E WELDED TOGETHER
STRESSES TO BE BELIEVED AFTER WELDING

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SECTION D-D

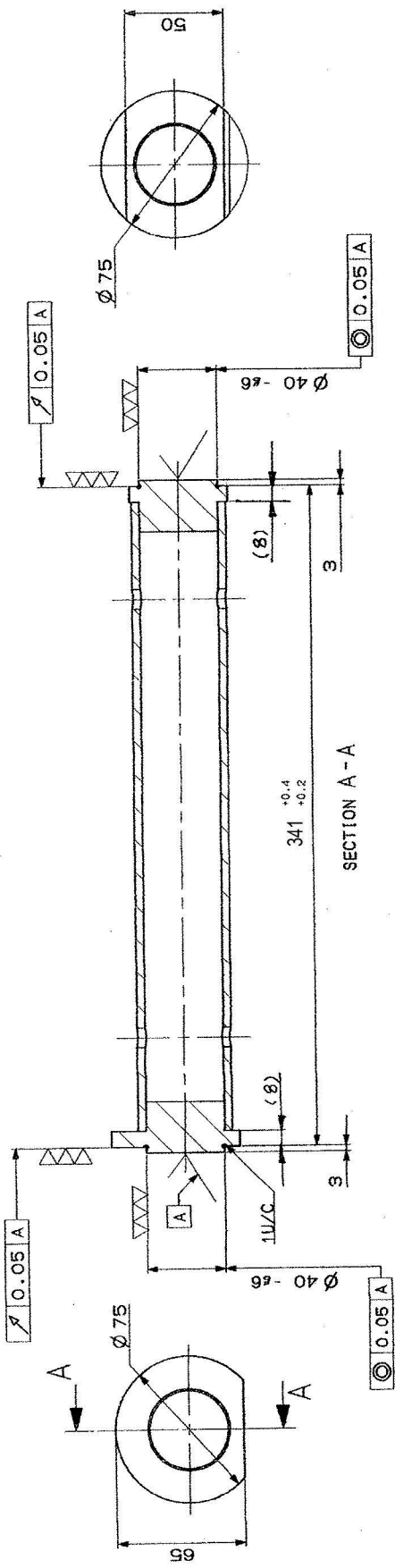
ALTERNATE MATERIAL :- EN-8 OR
080M40 BS:970 PART-I 1983

DW-1108-3102-1 BOTTOM PLATE 40CB, IS:5517 1 1:5
DRAWING NO NOMENCLATURE MATERIAL NO. OFF.SCALE

1 LAUNCHER MOUNTING FRAME (WELDING)		PART No.		MATERIAL		STANDARD		DIMENSIONS		REMARKS	
No. OFF	DESCRIPTION	No. OFF	INDEX	ALTERNATION	SCALE	DATE	NAME	DATE	NAME	DATE	NAME
1	LAUNCHER MOUNTING FRAME (WELDING)				1:1	10.10.83	MM				
GENERAL TOLERANCE LINEAR DIMENSIONS 0-30 0.1 30-100 0.15 100-300 0.2 300-500 0.3 500-1000 0.4 1000-2000 0.5 2000-5000 0.7 5000-10000 1.0 ANGULAR DIMENSION 0-15 0.1 15-30 0.2 30-45 0.3 45-90 0.5 90-180 0.7 VALUE IN "mm" 0.05 0.1 0.2 0.3 0.5 0.7 1.0 1.5 2.0 3.0 4.0 6.0 8.0 12.0 15.0 25.0 30.0 50.0 70.0 110.0 150.0 250.0 500.0 1000.0											
LAUNCHER MOUNTING FRAME (WELDING) TRAINING GEAR ASSY. LRMR LAUNCHER KAVACH MOD-II											
MACHINE TOOL PROTOTYPE FACTORY, BRIGHT AMBERNATH OFFICE DRAWING NO. DW-1108-3100-42											



10.10.83



* (Wavy symbol)

* TO BE MANUFACTURED FROM DW-1108-3110-43

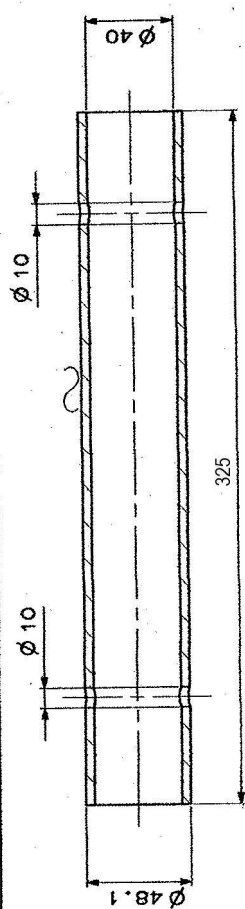
1		TUBE ASSY	*		REMARKS	
No. OFF	DESCRIPTION	PART No.	MATERIAL	STANDARD	DIMENSIONS	
GENERAL TOLERANCE						
LINEAR DIMENSIONS						
0-25	0.1					
25-50	0.15					
50-100	0.2					
100-200	0.3					
200-300	0.4					
300-500	0.5					
500-1000	0.8					
1000-2000	1.2					
ANGULAR DIMENSION						
1°-10°	±1'					
10°-60°	±30'					
60°-90°	±50'					
>100°	±1°					
VALUE IN "UM"						
0-25	3					
25-50	4					
50-100	5					
100-200	6					
200-500	8					
500-1000	12					
TUBE ASSY						
LAUNCHER MOUNTING FRAME						
TRAINING GEAR ASSY						
LR-MR LAUNCHER						
KAVACH MOD-II						
DRAWING No. DW-1108-3110-13						
OFFICE						
DATE						
SCALE						
1:1						
DRAWN						
CHECKED						
APPROVED						
REPLACED BY						
REPLACED FOR						

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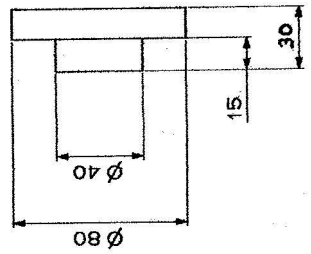
MINIMAL SIZE & FIT DEVIATION

UNCLASSIFIED

APPROVED



~ (~)



ALTERNATE MATERIAL :- EN-8 OR
080M40 BS:970 PART-I 1983

~ (~)

DW-1108-3111-1 PIPE IS:1161 1 1:2
DRAWING NO. NOMENCLATURE MATERIAL NO. OFF SCALE

DW-1108-3112-1 BOSS 40C8, IS:5517 2 1:2
DRAWING NO. NOMENCLATURE MATERIAL NO. OFF SCALE

No. OFF	DESCRIPTION	PART No.	MATERIAL	STANDARD	DIMENSIONS	REMARKS
1	TUBE ASSY					

GENERAL TOLERANCE	LINEAR DIMENSIONS	ANGULAR DIMENSION	No. OFF	DRG. No. OF ASSOCIATED PART	INDEX	ALTERNATION	DATE	NAME
0-9	10.1	1°						
10-19	10.2	1.5°						
20-29	10.3	2°						
30-39	10.4	2.5°						
40-49	10.5	3°	4	DW-1108-0000-11(SR)				
50-59	10.6	3.5°	4	DW-1108-0000-11(LR-WR)				
60-69	10.7	4°						
70-79	10.8	4.5°						
80-89	10.9	5°						
90-99	11.0	5.5°						
100-109	11.1	6°						
110-119	11.2	6.5°						

TUBE ASSY(WELDING)
LAUNCHER MOUNTING FRAME
TRAINING GEAR ASSY
LR-MR LAUNCHER
KAVACH MOD-11

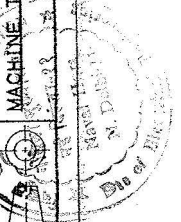
STRESSES TO BE RELIEVED AFTER
E-WELDED

SCALE	DRAWN	CHECKED	APPROVED	REPLACED BY	REPLACED FOR	DRAWING No.
1:1	15.10.06					DW-1108-3110-43

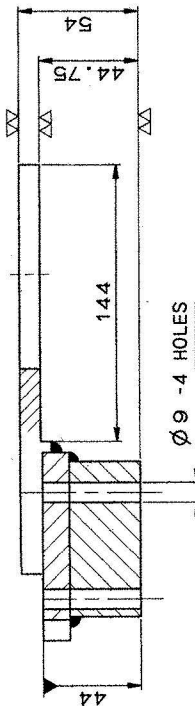
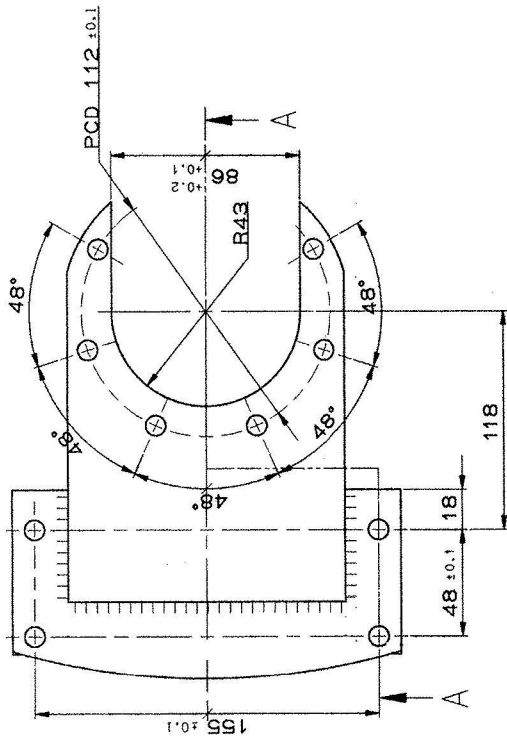
NOMINAL SIZE & FIT
DEVIATION

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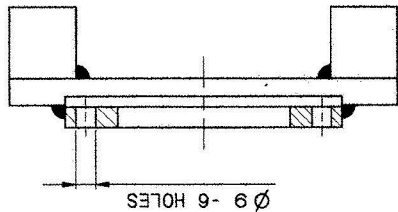
SECTION F-F



REVISION - I



SECTION A-A



** PHOSPHATING AND PAINTING

1. PHOSPHATING TO BE DONE AS PER IS:3618 CLASS B
2. PRIMER RED OXIDE TO STANDARD IS:12744 TO BE APPLIED BY FIRM WHO IS SUPPLYING STORE TO MPFAS PER DW-1134
3. PAINTING TO BE DONE AT MPF IN OR DURING ASSEMBLY AS PER DW-1134

* NOTE TO BE MANUFACTURED FROM DW-1108-4400-42



No. OFF	DESCRIPTION	PART No.	MATERIAL	STANDARD	DIMENSIONS	REMARKS
1	SUPPORT BRACKET-III					**
GENERAL TOLERANCE						
LINEAR DIMENSIONS						
0-3	±0.1					
3-30	±0.2					
30-120	±0.3					
120-315	±0.5					
315-1000	±0.8					
1000-2000	±1.2					
ANGULAR DIMENSION						
1-10	±1'					
10-50	±30'					
50-100	±20'					
100	±10'					
VALUE IN "Um"						
0.05	0.02					
0.02	0.01					
0.01	0.005					
0.005	0.002					
No. OFF						
1	DW-1109-0000-11					
1	DW-1108-0000-11					
No. OFF						
2006						
DATE						
21.10.2006						
SCALE						
1:2						
DRAWN BY						
CHECKED BY						
APPROVED BY						
REPLACED BY						
REPLACED FOR						
DRAWING No.						
DW-1108-4400-13						
DESIGN OFFICE						
MACHINE TOOL PROTOTYPE FACTORY, AMBARNATH						
KAVACH MOD-II						
LR-MR LAUNCHER						
ELEVATING HAND DRIVE ASSY						
SUPPORT BRACKET-III						
INDEX ALIENATION						
No. OFF						
1						
No. OF ASSOCIATED PART						
1						
REVISION						
DW 1108 SELECTED DW 1108 ACED DW 14 DW 15 DW 16 DW 17 DW 18 DW 19 DW 20 DW 21 DW 22 DW 23 DW 24 DW 25 DW 26 DW 27 DW 28 DW 29 DW 30 DW 31 DW 32 DW 33 DW 34 DW 35 DW 36 DW 37 DW 38 DW 39 DW 40 DW 41 DW 42 DW 43 DW 44 DW 45 DW 46 DW 47 DW 48 DW 49 DW 50 DW 51 DW 52 DW 53 DW 54 DW 55 DW 56 DW 57 DW 58 DW 59 DW 60 DW 61 DW 62 DW 63 DW 64 DW 65 DW 66 DW 67 DW 68 DW 69 DW 70 DW 71 DW 72 DW 73 DW 74 DW 75 DW 76 DW 77 DW 78 DW 79 DW 80 DW 81 DW 82 DW 83 DW 84 DW 85 DW 86 DW 87 DW 88 DW 89 DW 90 DW 91 DW 92 DW 93 DW 94 DW 95 DW 96 DW 97 DW 98 DW 99 DW 100 DW 101 DW 102 DW 103 DW 104 DW 105 DW 106 DW 107 DW 108 DW 109 DW 110 DW 111 DW 112 DW 113 DW 114 DW 115 DW 116 DW 117 DW 118 DW 119 DW 120 DW 121 DW 122 DW 123 DW 124 DW 125 DW 126 DW 127 DW 128 DW 129 DW 130 DW 131 DW 132 DW 133 DW 134 DW 135 DW 136 DW 137 DW 138 DW 139 DW 140 DW 141 DW 142 DW 143 DW 144 DW 145 DW 146 DW 147 DW 148 DW 149 DW 150 DW 151 DW 152 DW 153 DW 154 DW 155 DW 156 DW 157 DW 158 DW 159 DW 160 DW 161 DW 162 DW 163 DW 164 DW 165 DW 166 DW 167 DW 168 DW 169 DW 170 DW 171 DW 172 DW 173 DW 174 DW 175 DW 176 DW 177 DW 178 DW 179 DW 180 DW 181 DW 182 DW 183 DW 184 DW 185 DW 186 DW 187 DW 188 DW 189 DW 190 DW 191 DW 192 DW 193 DW 194 DW 195 DW 196 DW 197 DW 198 DW 199 DW 200 DW 201 DW 202 DW 203 DW 204 DW 205 DW 206 DW 207 DW 208 DW 209 DW 210 DW 211 DW 212 DW 213 DW 214 DW 215 DW 216 DW 217 DW 218 DW 219 DW 220 DW 221 DW 222 DW 223 DW 224 DW 225 DW 226 DW 227 DW 228 DW 229 DW 230 DW 231 DW 232 DW 233 DW 234 DW 235 DW 236 DW 237 DW 238 DW 239 DW 240 DW 241 DW 242 DW 243 DW 244 DW 245 DW 246 DW 247 DW 248 DW 249 DW 250 DW 251 DW 252 DW 253 DW 254 DW 255 DW 256 DW 257 DW 258 DW 259 DW 260 DW 261 DW 262 DW 263 DW 264 DW 265 DW 266 DW 267 DW 268 DW 269 DW 270 DW 271 DW 272 DW 273 DW 274 DW 275 DW 276 DW 277 DW 278 DW 279 DW 280 DW 281 DW 282 DW 283 DW 284 DW 285 DW 286 DW 287 DW 288 DW 289 DW 290 DW 291 DW 292 DW 293 DW 294 DW 295 DW 296 DW 297 DW 298 DW 299 DW 300 DW 301 DW 302 DW 303 DW 304 DW 305 DW 306 DW 307 DW 308 DW 309 DW 310 DW 311 DW 312 DW 313 DW 314 DW 315 DW 316 DW 317 DW 318 DW 319 DW 320 DW 321 DW 322 DW 323 DW 324 DW 325 DW 326 DW 327 DW 328 DW 329 DW 330 DW 331 DW 332 DW 333 DW 334 DW 335 DW 336 DW 337 DW 338 DW 339 DW 340 DW 341 DW 342 DW 343 DW 344 DW 345 DW 346 DW 347 DW 348 DW 349 DW 350 DW 351 DW 352 DW 353 DW 354 DW 355 DW 356 DW 357 DW 358 DW 359 DW 360 DW 361 DW 362 DW 363 DW 364 DW 365 DW 366 DW 367 DW 368 DW 369 DW 370 DW 371 DW 372 DW 373 DW 374 DW 375 DW 376 DW 377 DW 378 DW 379 DW 380 DW 381 DW 382 DW 383 DW 384 DW 385 DW 386 DW 387 DW 388 DW 389 DW 390 DW 391 DW 392 DW 393 DW 394 DW 395 DW 396 DW 397 DW 398 DW 399 DW 400 DW 401 DW 402 DW 403 DW 404 DW 405 DW 406 DW 407 DW 408 DW 409 DW 410 DW 411 DW 412 DW 413 DW 414 DW 415 DW 416 DW 417 DW 418 DW 419 DW 420 DW 421 DW 422 DW 423 DW 424 DW 425 DW 426 DW 427 DW 428 DW 429 DW 430 DW 431 DW 432 DW 433 DW 434 DW 435 DW 436 DW 437 DW 438 DW 439 DW 440 DW 441 DW 442 DW 443 DW 444 DW 445 DW 446 DW 447 DW 448 DW 449 DW 450 DW 451 DW 452 DW 453 DW 454 DW 455 DW 456 DW 457 DW 458 DW 459 DW 460 DW 461 DW 462 DW 463 DW 464 DW 465 DW 466 DW 467 DW 468 DW 469 DW 470 DW 471 DW 472 DW 473 DW 474 DW 475 DW 476 DW 477 DW 478 DW 479 DW 480 DW 481 DW 482 DW 483 DW 484 DW 485 DW 486 DW 487 DW 488 DW 489 DW 490 DW 491 DW 492 DW 493 DW 494 DW 495 DW 496 DW 497 DW 498 DW 499 DW 500 DW 501 DW 502 DW 503 DW 504 DW 505 DW 506 DW 507 DW 508 DW 509 DW 510 DW 511 DW 512 DW 513 DW 514 DW 515 DW 516 DW 517 DW 518 DW 519 DW 520 DW 521 DW 522 DW 523 DW 524 DW 525 DW 526 DW 527 DW 528 DW 529 DW 530 DW 531 DW 532 DW 533 DW 534 DW 535 DW 536 DW 537 DW 538 DW 539 DW 540 DW 541 DW 542 DW 543 DW 544 DW 545 DW 546 DW 547 DW 548 DW 549 DW 550 DW 551 DW 552 DW 553 DW 554 DW 555 DW 556 DW 557 DW 558 DW 559 DW 560 DW 561 DW 562 DW 563 DW 564 DW 565 DW 566 DW 567 DW 568 DW 569 DW 570 DW 571 DW 572 DW 573 DW 574 DW 575 DW 576 DW 577 DW 578 DW 579 DW 580 DW 581 DW 582 DW 583 DW 584 DW 585 DW 586 DW 587 DW 588 DW 589 DW 590 DW 591 DW 592 DW 593 DW 594 DW 595 DW 596 DW 597 DW 598 DW 599 DW 600 DW 601 DW 602 DW 603 DW 604 DW 605 DW 606 DW 607 DW 608 DW 609 DW 610 DW 611 DW 612 DW 613 DW 614 DW 615 DW 616 DW 617 DW 618 DW 619 DW 620 DW 621 DW 622 DW 623 DW 624 DW 625 DW 626 DW 627 DW 628 DW 629 DW 630 DW 631 DW 632 DW 633 DW 634 DW 635 DW 636 DW 637 DW 638 DW 639 DW 640 DW 641 DW 642 DW 643 DW 644 DW 645 DW 646 DW 647 DW 648 DW 649 DW 650 DW 651 DW 652 DW 653 DW 654 DW 655 DW 656 DW 657 DW 658 DW 659 DW 660 DW 661 DW 662 DW 663 DW 664 DW 665 DW 666 DW 667 DW 668 DW 669 DW 670 DW 671 DW 672 DW 673 DW 674 DW 675 DW 676 DW 677 DW 678 DW 679 DW 680 DW 681 DW 682 DW 683 DW 684 DW 685 DW 686 DW 687 DW 688 DW 689 DW 690 DW 691 DW 692 DW 693 DW 694 DW 695 DW 696 DW 697 DW 698 DW 699 DW 700 DW 701 DW 702 DW 703 DW 704 DW 705 DW 706 DW 707 DW 708 DW 709 DW 710 DW 711 DW 712 DW 713 DW 714 DW 715 DW 716 DW 717 DW 718 DW 719 DW 720 DW 721 DW 722 DW 723 DW 724 DW 725 DW 726 DW 727 DW 728 DW 729 DW 730 DW 731 DW 732 DW 733 DW 734 DW 735 DW 736 DW 737 DW 738 DW 739 DW 740 DW 741 DW 742 DW 743 DW 744 DW 745 DW 746 DW 747 DW 748 DW 749 DW 750 DW 751 DW 752 DW 753 DW 754 DW 755 DW 756 DW 757 DW 758 DW 759 DW 760 DW 761 DW 762 DW 763 DW 764 DW 765 DW 766 DW 767 DW 768 DW 769 DW 770 DW 771 DW 772 DW 773 DW 774 DW 775 DW 776 DW 777 DW 778 DW 779 DW 780 DW 781 DW 782 DW 783 DW 784 DW 785 DW 786 DW 787 DW 788 DW 789 DW 790 DW 791 DW 792 DW 793 DW 794 DW 795 DW 796 DW 797 DW 798 DW 799 DW 800 DW 801 DW 802 DW 803 DW 804 DW 805 DW 806 DW 807 DW 808 DW 809 DW 810 DW 811 DW 812 DW 813 DW 814 DW 815 DW 816 DW 817 DW 818 DW 819 DW 820 DW 821 DW 822 DW 823 DW 824 DW 825 DW 826 DW 827 DW 828 DW 829 DW 830 DW 831 DW 832 DW 833 DW 834 DW 835 DW 836 DW 837 DW 838 DW 839 DW 840 DW 841 DW 842 DW 843 DW 844 DW 845 DW 846 DW 847 DW 848 DW 849 DW 850 DW 851 DW 852 DW 853 DW 854 DW 855 DW 856 DW 857 DW 858 DW 859 DW 860 DW 861 DW 862 DW 863 DW 864 DW 865 DW 866 DW 867 DW 868 DW 869 DW 870 DW 871 DW 872 DW 873 DW 874 DW 875 DW 876 DW 877 DW 878 DW 879 DW 880 DW 881 DW 882 DW 883 DW 884 DW 885 DW 886 DW 887 DW 888 DW 889 DW 890 DW 891 DW 892 DW 893 DW 894 DW 895 DW 896 DW 897 DW 898 DW 899 DW 900 DW 901 DW 902 DW 903 DW 904 DW 905 DW 906 DW 907 DW 908 DW 909 DW 910 DW 911 DW 912 DW 913 DW 914 DW 915 DW 916 DW 917 DW 918 DW 919 DW 920 DW 921 DW 922 DW 923 DW 924 DW 925 DW 926 DW 927 DW 928 DW 929 DW 930 DW 931 DW 932 DW 933 DW 934 DW 935 DW 936 DW 937 DW 938 DW 939 DW 940 DW 941 DW 942 DW 943 DW 944 DW 945 DW 946 DW 947 DW 948 DW 949 DW 950 DW 951 DW 952 DW 953 DW 954 DW 955 DW 956 DW 957 DW 958 DW 959 DW 960 DW 961 DW 962 DW 963 DW 964 DW 965 DW 966 DW 967 DW 968 DW 969 DW 970 DW 971 DW 972 DW 973 DW 974 DW 975 DW 976 DW 977 DW 978 DW 979 DW 980 DW 981 DW 982 DW 983 DW 984 DW 985 DW 986 DW 987 DW 988 DW 989 DW 990 DW 991 DW 992 DW 993 DW 994 DW 995 DW 996 DW 997 DW 998 DW 999 DW 1000						

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