

Catalogue with specifications of all Philips and Norelco type numbers in the BP-database.
Chronological sequence of design-groups within each main category.

All products in this catalogue are divided in the following main categories:

1. Rotary Action products, sales, study projects and promotional items in the years 1939-2019:

10 = Rotary shavers, both for men and women.

15 = Shaving heads, both for replacement sales and study projects.

16 = Accessories, in general only products for sale.

2. Philips and Norelco Ladyshave (non-rotary) and epilation products for women from 1960 - 1998.

3. Philips and Norelco beard trimmers and hair clippers from 1965 - 2001.

4. Philips vibrafoil shavers. Limited to the period 1959 - 1980

This survey reflects Philips development and marketing related to shaving and grooming.

One record is made for each typenumber and a few separate versions containing relevant product information.

The list of type numbers seems complete for Rotary Action products from 1939 up to 2019.

The type number groups are arranged in a chronological sequence:

1939 = numbers without prefix, mainly 7000 group, shavers being part of the Radio Division, Used till approx. 1951.

1951 = KL and P typenumbers.

KL = Personal care products. Temporarily used for shavers from 1951 - 1953.

P = type numbers for other groups, used incidentally for shavers.

SA 7743 used for local wallholder activity in France. No other SA types known by the author.

1953 = SC group from 1953 - 1966. Reserved for shavers only.

1960 = various typenumbers used incidentally for shavers in the period 1960 - 1970.

IH, KB = Local activities, other product groups and sub brands.

XTR = Vibrafoil production Carinthia (Philips) Klagenfurt 1960 - 1970 for non-Philips brands.

From 1970 XTR is used as commercial identification for Philips vibrafoil.

ACA = Typenumber group only used temporarily approx. 1970 for new products under development.

Recoded to HP system before sales.

1967 = HP group from 1966 - 1986. After 1986 continuation for Rotary accessories and Ladycare products.

Separate section for a few Norelco typenumbers related to local activities in USA. Period 1970-1990.

1986 = HS 1986 - 1995. For Norelco 2 and 3 digits followed by 1, 2 or 3 characters related to power source.

1995 = HQ group from 1995. For Norelco 3 and 4 digits followed by 1 or 2 characters.

HQ-C, HQ-T en HQ-G = beard trimmers and hairclippers.

2007 = HS and RQ typenumbers. 2010 = AT and PT = Aqua touch and Power Touch

2012 - 2019 = JC + FT + PQ + RQ + S + SH + SW + YS + YQ + XA + XZ

Explanation of the various data in the records:

Typecode / Design group is a supporting chronological system to arrange and combine typenumbers:

Typenumbers of products are combined in relation to their basic design or characteristic.

Each designgroup is arranged in accordance to the first year of introduction or study of this particular design.

The year of the Design group title is usually not the year of introduction of the specific type number version.

The typenumber introduction/study year is mentioned separately:

spec = year of specification. s = year of study. m = marketing start, p = production start.

The selection of design groups and the titles are a subjective choice of the author.

Typenumber: Philips typenumbers with official version numbers after the / 'slash'.

Additions like study, proto, etc. are made by the author of the catalogue.

Shaving system: number of shaving heads + typenumber of head or product code.

Brands (see specification text) = usually Philips, Philishave and/or Norelco.

Use of the Philishave brand is terminated in 2006.

Energy source: RC = rechargeable, AC = mains operation, DC = direct current. Sometimes combinations.

Category: 10 = Rotary menshavers. 10a = Rotary Ladyshave. 15 = Shaving heads. 16 = Accessories.

2 = Ladycare products. 3 = Beard trimmers + hair clippers. 4 = Vibrafoil shavers, only Philips brand.

Rotary Action products

1936 Philite razor blade & study rotary system

1936 vario

various items

1936+ study Rota

Philite (Globe) razor blade holder 1935 » study market/systems 1936 » proto 1938

1935 production of holder for razor blade by Philips Philite factory for plastics in Eindhoven.

Philite = Bakelite (thermosetting plastic) holder for razor blades produced by Philips Philite factory in Eindhoven.

Black version in Philite box marketed 1935. Versions with and without Philite brandname on holder and box.

Given free by company Globe in the Netherlands (Utrecht?) with purchase of razor blades at price of Dgld. 1,-.

Carton box with Globe symbol. Bordeaux red (maroon) version in the early forties.

1936 first consideration 'make or buy' of electric shavers at Philips to fill 'low season factory gap'.

1937 and early 1938 collection of shaver samples from USA to Philips 'Kleine Apparaten' in Eindhoven.

Most shavers of oscillating clipper type, but two shavers with rotary system: Rotashave with rotary foil system and Zephyr with long spiral rotary cutter. Price US \$ 15,00 = 1937. Promoted by Zephyr Shaver Corp. New York as:

» 'Rotary shaver' is not a clipper-type shaver. Its cutting action is utterly new in electric shaving.

Four rotary blades whirl at 266-times-a-second, "glancing" each whisker off.

Once is enough, you get a clean shave the first time.

1937 Autumn: body of Zephyr shaver used by Ir. Alexandre Horowitz (born 1904 Antwerpen) for prototype rotary head.

1938/05 = cost price estimate by Horowitz/Thomann 4,50. Target sales price 17,50. Investment first models Dgld. 2.000,-.

1938/12 = Estimated cost price varies from 3,50 to 4,50 including packaging. Sales expectations 10 - 50.000/year.

Working models design 7730 in 1938 used by 10 persons. Production start Summer 1939 in Eindhoven.

Initially (in period before introduction) shaving heads had no centring hole in guard.

Presented at Spring Fair - Utrecht March 14, 1939 with 12 working models. Orders 8.000 shavers.

282

Zaaken van State.

Bjaagt nemant die dit speeltjen ziet /
 Waarom dit heben zo geschiet ?
 De Leeuw is nu geheel veracht /
 Want hy is door en zonder kracht

Yder houdtet meer met de Ryzende
 mart al met de afgaande.
 Klein is de rouw om een oude
 Koe.

Een levende hond is beter als een
 doode leeuw. Salomon.
 Ook hazen trekken den leeuw by
 den baart als hy out is.

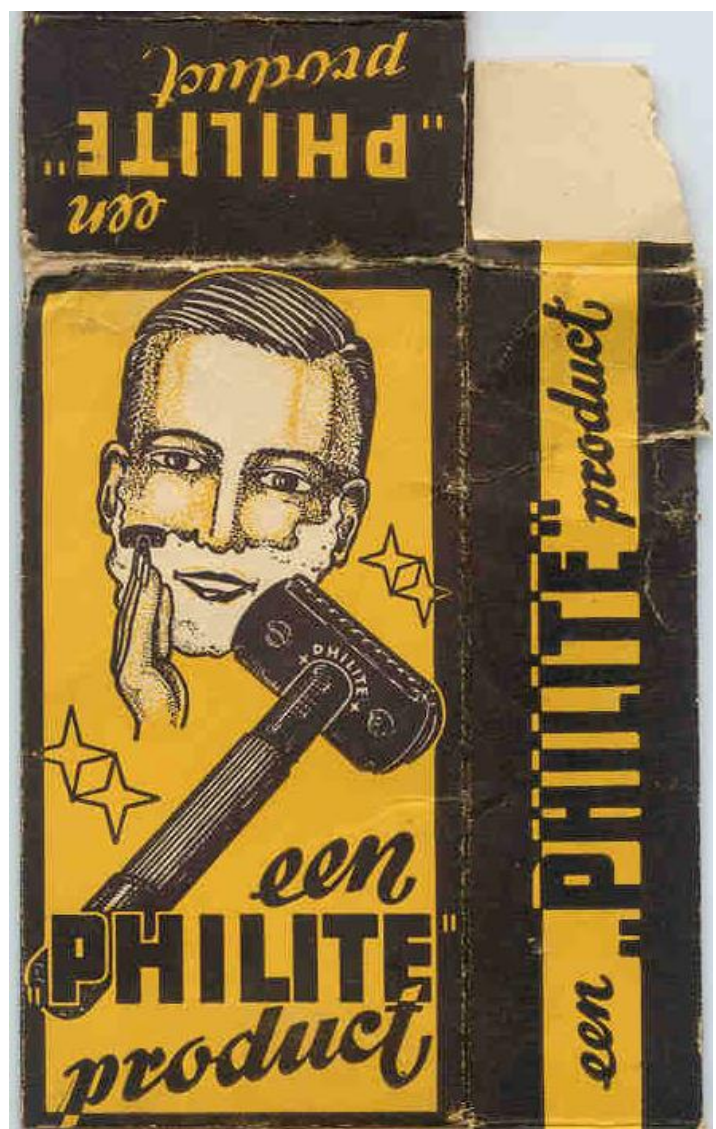
A barbe de fol apprens à raire.



Wilt gy wel scheeren na den aart ?
 Zo scheert dooz eerst een Gek zyn baart.

Het is een oude spreek ; Wie net wil leeren scheeren /
 Die moet dooz eerst een Gek tot zyn halant begeren.
 Bjaagt nemant waarom dat ? wel hooft de reden aan /
 Wie malle hoppen scheert / heeft zelden haast gedaan ;
 Dynaast op pder hooft dient raat te zyn genomen /
 En schiet op pder knip zo moet de spiegel komen ;

Dan.



1936+ adapters for mains shavers

1939-	Edison adapter	7942
AC	Philishave	

Edison screw adapter 'A' type, black & medical white » set 4 in box

Adapters for mains outlet sockets. Initially round adapters for Audio equipment. In 1940 new design.

Edison screw-connector. = A-plug adapter. 12 NC code in 1964 = 8841 942.

7942/00 = version in black colour as sold in 1939 and following years.

7942/01A = white colour to replace black version, recoded to 7942 A.

Complete set of 4 different adapters: Price Holland in 1949 = / 4,50 and in Germany price 1956 = DM 4,80. NL » 1,25 = 1959

7943 = Swan adapter 'B' type

7944 = UK [& EU] adapter 'C' type

7945 = USA adapter 'D' type

1939-	Swan adapter	7943
AC	Philishave	

Swan 'B' bayonet type black & medical white » set 4 in box & local UK versions

Adapters for mains outlet sockets. Initially round adapters for Audio equipment. In 1940 new design.

Swan bayonet-connector. = B-plug adapter. 12 NC code in 1964 = 8841 943.

7943/00 = version in black colour as sold in 1939 and following years.

7943/01B = white colour to replace black version, recoded to 7943 B

Complete set of 4 different adapters: Price Holland in 1949 = / 4,50 and in Germany price 1956 = DM 4,80. NL » 1,25 = 1959

Set with 4 adapters in brown colour are original version for Audio equipment.

Local version Gt. Britain > Swan adapter Made in England supplied with 7735 shaver. Closed and economy open versions.

1939-	UK plug adapter	7944
AC	Philishave	

UK & Eu round pin adapter 'C' type, black & medical white » set 4 in box

Adapters for mains outlet sockets. Initially round adapters for Audio equipment. In 1940 new design.

UK round pin-connector. = C-plug adapter. Fits European sockets as well. 12 NC code in 1964 = 8841 944.

7944/00 = version in black colour as sold in 1939 and following years.

7944/01C = white version, recoded to 7944 C

7944C/01 = inscription Made in Holland.

Initially promoted to fit British sockets, this 'C' adapter is applied to convert American plugs to European sockets!

Adapters in brown colour are original version for Audio equipment.

Complete set of 4 different adapters: Price Holland in 1949 = / 4,50 and in Germany price 1956 = DM 4,80. NL » 1,25 = 1959

1939-	USA plug adapter	7945
AC	Philishave	

USA connector flat pins 'D' type, black & medical white » set 4 in box

Adapters for mains outlet sockets. Initially round adapters for Audio equipment. In 1940 new design.

USA flat pin-connector. = D-plug adapter. 12 NC code in 1964 = 8841 945

7945/00 = version in black colour as sold in 1939 and following years.

7945/01D = white colour to replace black version, recoded to 7945 D

Complete set of 4 different adapters: Price Holland in 1949 = / 4,50 and in Germany price 1956 = DM 4,80. NL » 1,25 = 1959

adapters in brown colour are original version for Audio equipment.



1939 'cigar' 7730 +/- skin stretcher, 3 blades

1939/03=m 1=7751/00 & /01=48x3**7730**

AC Philishave

7730 with & without skin stretching rim, cutter 3 bronze & steel » lady promotion
 1937 Autumn: body of Zephyr shaver used by Ir. Alexandre Horowitz (born 1904 Antwerpen) for prototype rotary head.
 1938/05 cost price estimate Horowitz/Thomann Dgld. 4,50. Target sales price 17,50. Investment first models Dgld. 2.000,-
 1938/12 = Estimated cost price varies from Dgld. 3,50 to 4,50 including packaging. Sales expectations 10 - 50.000/year.
 Working models design 7730 in 1938 used by 10 persons. Production start Summer 1939 in Eindhoven.
 Initially (in period before introduction) shaving heads had no centring hole in guard.
 Presented at Spring Fair - Utrecht March 14, 1939 with 12 working models. Orders 8.000 shavers.
 (Separate round transformer 220/110 V for demonstration?) Market_introduction 1939/09/20 Autumn Fair - Utrecht.
 Production estimate based upon personal calculation of Bram Porrey:
 production all versions with bronze cutters: approx. 30.000 shavers. Total production type 7730 approx. 90.000 shavers.

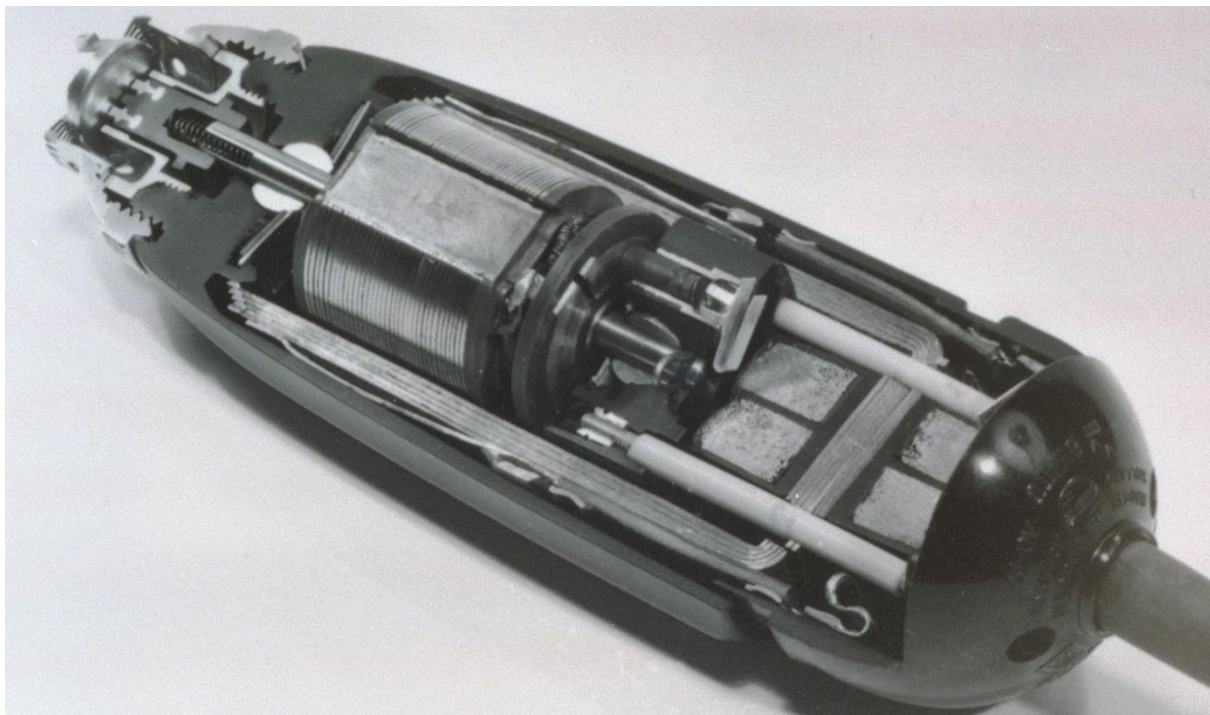
Inscriptions, type shaving head + packaging variable due to running changes. Inscriptions missing on initial versions:
 no Philips, Philishave or typenumber. Philips and Philishave, no typenumber. Philips and typenumber, no Philishave.
 Plug with 2 resistors + voltage selector. Voltage settings: 120 / 165 / 225. Solid black rubber flex.
 Guard with 12 holes mid-side for beard-dust removal, variations in size of holes.
 First bronze cutter, triangle-shaped with 3 blades from 1938 (prototype) till production end 1939.
 Replaced as running change by bronze disc shape with 3 blades, starting end 1939.
 Choice for bronze » low friction, manufacturing process relatively cheap and easy.
 Disadvantage brittle and not sufficiently selfsharpening.
 Advantage 3-blades » Optimal contact of cutter blades with guard.
 Light brown leather pouch with carton sleeve insert and one push-button with Philips stars.

Skin stretching rim to reduce skin irritation. Dutch patent 56734, application 96652 on 20-1-1940. Inventor Jan de Groot.
 Running change early 1940 approx. February with same typenumber 7730. Presented Spring Fair Utrecht 9-14 March, 1940.
 April 1940 recommendation to Philips employees owning 7730 to buy skin stretching replacement in Philips shop.
 Initially still with bronze disc cutter, promoted early 1940 in Germany. D » RM45,00 = 194x
 Replaced by steel cutter as running change spring 1940, round disc-shape with 3 blades.
 Reason > bronze blades were not sufficiently self-sharpening and many complaints about broken cutter blades.
 Guard with holes for dust removal. Running change holes from half height to lower position close to flange.

Estimated production of version with 3-blade steel cutter 60.000 shavers.
 End 1940/early 1941 change to 6-blade cutter, typenumber 7736 = Philishave "6". Introduction 7730 in France 1940.
 Samples 7736 with large 7733 shaving head in 1947. Prototypes.
 Recessed area between housing and cap serves the purpose of clipping shaver in metal wire-hook as wallholder.

LADY: Promotion for use as ladyshaver in documentation/instructions from 1939 onwards. Study manicure approx. 1941.

PATENTS: Philips 54862 priority 1938/06. > 53770 priority 1939/02. > 56734 filed 1940/01.
 Patent 212254 Switzerland by Alexandre Horowitz & Alexis van Dam (constructor), priority 1938/06/13 Deutsches Reich.
 UK patent 525,602 priority Germany 1938/06/13. UK patent 535,166 priority Germany Februari, 1939.
 Nederlands Octrooi huidspanning 56734, application 96652 on 20-1-1940. Inventor Jan de Groot.
 Patents Rotary » 295986 year 1911. > 361489 year 1921. > 48160 year 1926. > 1,941,583 Loyd Scruggs application 1932.
 » 2,099,334 Gormley filed 1936. > 2,119,021 Moskovics application 1938. > 2,119,284 Meyer filed 1938.



1939 shaving head 17 mm, 2-pin, 3 + 6 blades

1939/03- p RC=17/48x3 & 6 bl.

Philishave

7751

bronze triangle shape cutter 3-blades, 17 mm, 2-pin coupling, 80 - 100 microns

7751 = Guard diameter 17 mm, 12 holes mid-side for removal of beard dust. Cutter speed on 7730 shaver up to 10.000 rpm.

Lamellae thickness nominal 100 microns (specified 80 microns?). Radial slots 48 standard width 0,28 mm, length 2 mm.

Production start with cutter bronze triangle shape with 3 blades.

Only used on shavers, not for service, for a few months at production start of 7730 till approx. November 1939.

7751/00 = Bronze disc cutter, 3 blades. Produced for a very short period end 1939 till early 1940.

7751/01 = Steel disc cutter 3 blades.

Change to steel because bronze cutters were not sufficiently self-sharpening and complaints broken blades.

Replaced end 1940 by 6-blade disc cutter on 7736 as 7751/06. Used as service item for model 7730 as well. NL »6,00=1955

7751/06 = replacement shaving head, guard with/without dust holes, turned disc cutter with 6 blades. Start 1940/11- p.

Wrapped in silk paper, packed in single slide carton, black print of drawing cutter and comb. No type number on pack.

Guard initially with 12 holes mid-side for removal of beard dust.

After introduction of the skin stretching rim the position of holes changed to lower side of guard.

Position of holes varies between 5,0 and 1,5 mm above flange. Holes deleted approx. 1946.

Samples of guard with 12 holes lower side for beard dust removal. Produced in 1940 and 1942.

Sample 7736 special disc cutter: coupling holes not open, 2 extra open holes at larger distance. Dust holes mid-height.

Production of shavers with 7751 type shaving heads terminated probably around 1948.

Production 7751 heads for service till approx. 1955 ? Supply 7751/06 for service 7730 & 7736 continued till early sixties.

[SC] 7751 recoded in 1968 to 12 NC code 8840 908.

Shipments service 7751 > 1945 = 7.000, 1946 = 30.000, 1953 = 33.000. Total 1945 - 1953 = approx. 300.000 heads.

Studies dual and reversible cutter:

» 7751 dual = Cutter brass nickel plated with 3 dual blades. One set of 3 blades faces down, other set upward direction.

Design of blades is such that cutter can be used in 2 identical positions to double lifetime.

Study probably in 1940. Samples known from various sources.

» 7751 reversible. One side operates on outer side of thicker lamellae, other on inner side of slots with thinner lamellae.

Shaving head guard study > Lamellae at outside entry thicker than at centre of guard.

Preferably gradually reduced from 0,11 to 0,06 mm.

Variations: Size of slots or holes. Separate cutter for thinner inner circle.

Patent NL C.D. 672.715, application 96998 1940/02/20, priority 1939/02/21. Cutter centring on one side of running groove.

Dutch patent application 991579-10-1940 for version with 'dented' cutter blades, patent 55684 (PH 7297) issued 15-12-1943.

UK patent UK 550,903 1943/01/29, application 1941/12/18. Cutter centring on one side of running groove.

Patents: Patent 59158 (PH 7802), application 104325 of 13-01-1942 by A. v.d. LEE and W.L.L. Vivie.

Patent 60290 (PH 7904), application 105143 of 14-03-1942 relates to reinforcement construction of guard.

Patent 61165 (PH 8452), application 109558 of 02-02-1943 relates to central support of guard. UK patent 618,303.

Patent 61903 (PH 8454), application 109643 of 05-02-1943 central support of guard, additional to patent application 109558.

Applications R. Keblusek for reversible cutter + guard with separate slots/holes (choice for thick or sensitive skin:

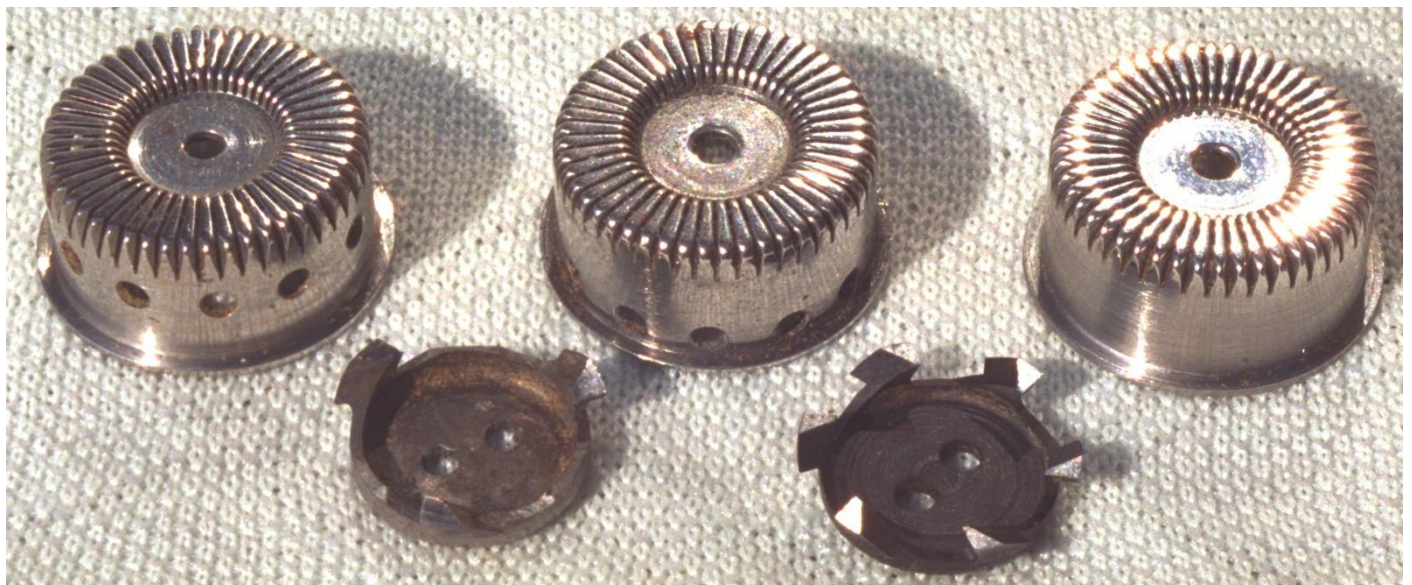
Appl. 108353 of 4-11-1942. Patent 64976 (PH 8211) and 108354 of 4-11-1942. UK 646,778 (as 64976). Patent 59721 (PH 8212).

Patent Germany 729711 1941/01, priority NL 1940/01. Reversible cutter with reserve blades.

Patent NL 61144, appl. 109809 16-02-1943 by Kronouer and Keblusek. Guard shaving head supported by ball-bearing.

Patent Germany 915902, erteilt 8-7-1949, issued 29-7-1954. Priority 16-02-1943 by Kronouer/Keblusek. UK patent 618,112.

Patent NL 64161 for shape of lamellae and production method, application 112331 of July 23, 1943. UK patent 626,367.



1941 'cigar' 6-blades & carshaver + lady study

1940/11-p 1=7751/06=47 x6

AC Philishave

7736 & lady study

black shaver, various pouches. Guard with & without dust holes » 7730 ladyshave promo 1939, study gilded manicure set. 7736 = 7730 with 6 blade-cutter to reduce problem of 'cutter jumping'. Dust cap chromium plated and black lacquered. Redbrown linen pouch, weaved sisal + paper 'string' pouch. Variations due to lack of material during and after War. In 1947 with black lacquered protection cap. Action in Holland with trial shavers, engraved "Bruikleen App. + company". Registered versions in German service documentation are 7736/00, 7736/02, 7736/19, 7736/22. 7736/10 = leather zipper pouch, wooden brush. This is the basic and the last version. Carton box red, shaving man and '6'. Start with 7730 marking on shaver and sculptured red label with '6' emblem glued on lid of carton box. Round red label. Sample found shavernumber 22183, head disc cutter 7320. Sold in France. Directions for use with 3-blade disc cutter. Sept. 9, 1941 = 100.000 shavers PHILISHAVE "6" produced in Eindhoven. Total production Philishave '6' estimated at more than 400.000. D»RM45,00 Production level 1941: 3000/week. Plan Oct. 1941 to increase level in 1942 to 8000/week (150 extra factory people needed). Production 1943/44 concentrated at location in Vught. Limited output, lack of material. Schedule 1943: 1500 - 2000/week. 1945/05 - 1946/04 production Eindhoven 107.000 shavers. Summer 1946 Eindhoven 3.400 shavers. Production stop 1946. Production of 500.000 shavers since 1939 celebrated November 13, 1946 with 'silver six' version 7736. Assembly 1946 in Sweden 12.500. Sales activities in Denmark 1941 - 1947. Production start 1941/02. Switzerland introduction 1942, sales 358 shavers. Sales in 1943 = 1641, in 1948 = 2233. Recessed area between housing and cap serves the purpose of clipping shaver in metal wire-wallholder.

**Milestone in 1941 to celebrate the production of 100 thousand shavers type 7736 (excluding type 7730): Glass saucer with upright 7736 shaver to celebrate 100.000 shavers 7736 with 6-blade cutters produced. Etched text >> Sept. 9, 1941 = 100.000 shavers PHILISHAVE "6" produced in Eindhoven << Most likely only one sample has been made, probably by Kristalunie in Maastricht or Koninklijke Glasfabriek Leerdam. Approx. 1972 discarded by Mr. C.M. v.d. Put and given to Bram Porrey, who kept it in his office till retirement in 1994. May 1994 with 7743 Groene Draeck on loan basis to Rijksmuseum Amsterdam by B. Porrey for future exhibition. Glass expert Rijksmuseum Drs. W. Ritsema van Eck showed much interest. Loan letter Prof. Dr. W.H. Vroom 'Directeur Afdeling Nederlandse Geschiedenis' NG 94.2473 - May 18th 1994 to B. Porrey. 2003-10-13 letter of extended storage till 2008 by Dr. J.P. Sigmond, directeur collecties, inventory nr. NG-1995-1-1 en -2.

Promotion: Glass wallplate Philishave 6 drawing + text silver on black. To be mounted on the wall in shops. with 4 screws. Back side marked with white paint: "Eigendom NV Philips Gloeilampenfabrieken". The first promotional movie for Philishave 7736 is made approx. 1943 by Joop Geesink Studio. Animation with dolls by studio Geesink Toonder, music Hugo de Groot. Titel 'Phi-garo in the Woods'. The 'hero' (7736) Phi-garo is a badly shaven gnome, laughed at by an elf. He visits a barber who shaves his beard. But the elf is still not satisfied. It takes a visit to a modern barber, using an electric Philishave, to achieve full satisfaction.

LADYSHAVE: Promo for use as ladyshaver in documentation and manuals of menshaver model 7730 from 1939 onwards. Lady study project: Shaving head 17 mm. 48 slots. Guard with 12 holes low position at flange for removal of beard dust. Shaving head holder with skin stretcher. Guard and shaving head holder are both gold plated. Miniature grinding stone unit for manicure. Single sample as proof of study, probably around 1940/41.

1944spec 1=7751/06=47 x6

DC study project

7741

= 7736 as carshaver for 6-12 Volt DC.

Specified November 1944 » no data on sales nor samples.



1942 study 2-head shaver > 7734

1941 proto 2=7756/30 or 7757

AC study project

7734 study

2-head prototype 1941, 1-slot coupling » 7 handmade samples

7734 is specified as 'Super Luxe model', no further specification available.

Most likely related to the pre-development of first 2-head Philipsave version.

In 1941 Mr. A. van der Lee, colleague of Lex van Dam, constructed a working sample of a 2-head shaver.

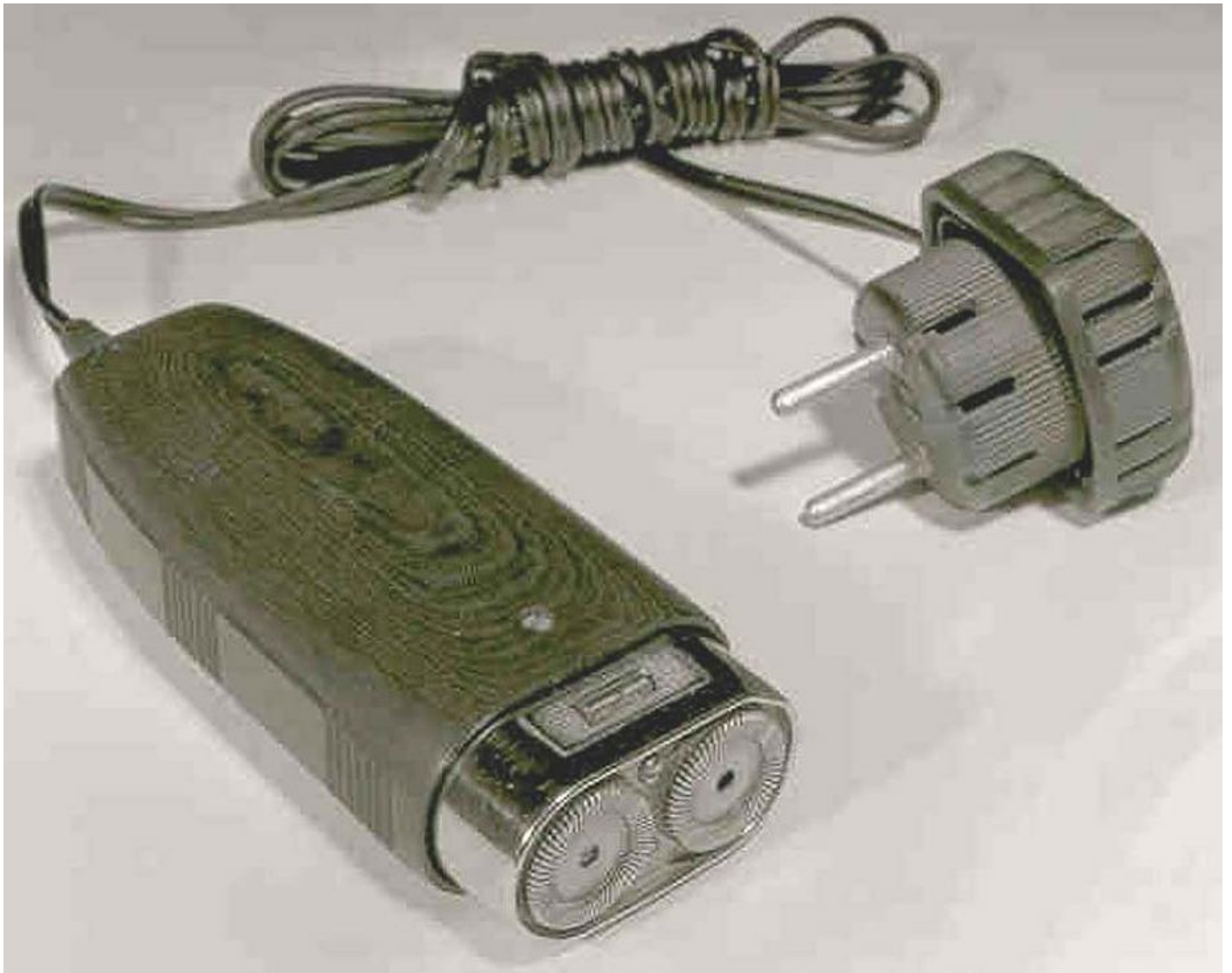
After presentation (illegal) permission was granted to produce 6 more samples as preparation for after-war activities.

Specification June 1943 = Transmission 1:2,3. Motor speed 8.000 rpm. and cutter speed 3.500 rpm.

Rotor rotates anti-clockwise [= left direction]. One sample checked = shaving heads with width of slots 0,28 mm.

Continuation 1945/46 with modified design, not produced. Sales preparations 2-head postponed till intro 'egg' design 7743.

Reasons for postponement a/o lack of capacity to produce sufficient quantity of shaving heads.



1945 planetarium + study 7756 + 7735 + mirror

1938 Planetarium patent = Principle to rotate or oscillate shaving guard or complete shaving unit.

First idea is rotating with low speed at 40 - 120 r.p.m. Basic invention filed for patent by Philips in November 1938.

Oscillating movement (100/500 cycles/minute) claimed as improvement February 1939.

Samples found of singleheader versions on body of 7733 and 7735.

7733 > Maroon housing. Handmade unit construction with shaving head 7757, produced 1948.

7735 > Ivory housing. Handmade unit construction with shaving head 7757, produced 1946. Ring with long static entry slots.

Unit construction and metal protection cap of both models basically identical. Samples probably made around 1948/49.

Dutch application rotary movement 95826 filed 9-11-1939, priority 10-11-1938 (Germany). Patent 53921 dated 16-01-1943.

Patentschrift Deutsches Reich Nr. 718390 patentiert vom 11 November 1938 an. UK patent 533,467 priority 11-11-1938.

Patentschrift Deutsches Reich Nr. 694507 (PH 6715) 24-02-1939, published 2-08-1940 = oscillating movement.

Dutch application oscillating movement 97027 filed 22-02-1940, priority 23-02-1939 (Germany). Patent 59579=16-01-1943.

Claimed to be an improvement over previous patent for rotating movement. UK patent 538,916 priority Februari 1939.

1945 or earlier » Study shaving head 19 mm on body 'cigar' design.

Samples found of 7730 and 7736 body with modified holder adapted to shaving heads with larger diameter:

7730 body, no typenumber, head holder of model 7735, code head 8 44 61, formed cutter 7756, 6 blades, 2-pin coupling.

7730 typenumber, shaving head holder of type 7733, code head 4 33 50, turned disc cutter, 6 blades and 2-pin coupling.



7736 type black nr. 2 32 7 6, cotton covered flex. Head 7756, code 8 . 5 1, disc cutter with 6 blades and 2-pin coupling.

Shaving head holder interior enlarged by turning off to hold 7756 head with brass spacer ring.

Study new stick design = prototype of handmade flat long body (Pertinax) with shaving unit similar to 7737 and 7735

Prototype in Philips museum Eindhoven. Probably produced around 1942.

Patent application 131505 of 9-04-1947 by K.R.Holland for 2 cutter assemblies with slots as blades. Patent 72284 (PH 9859).

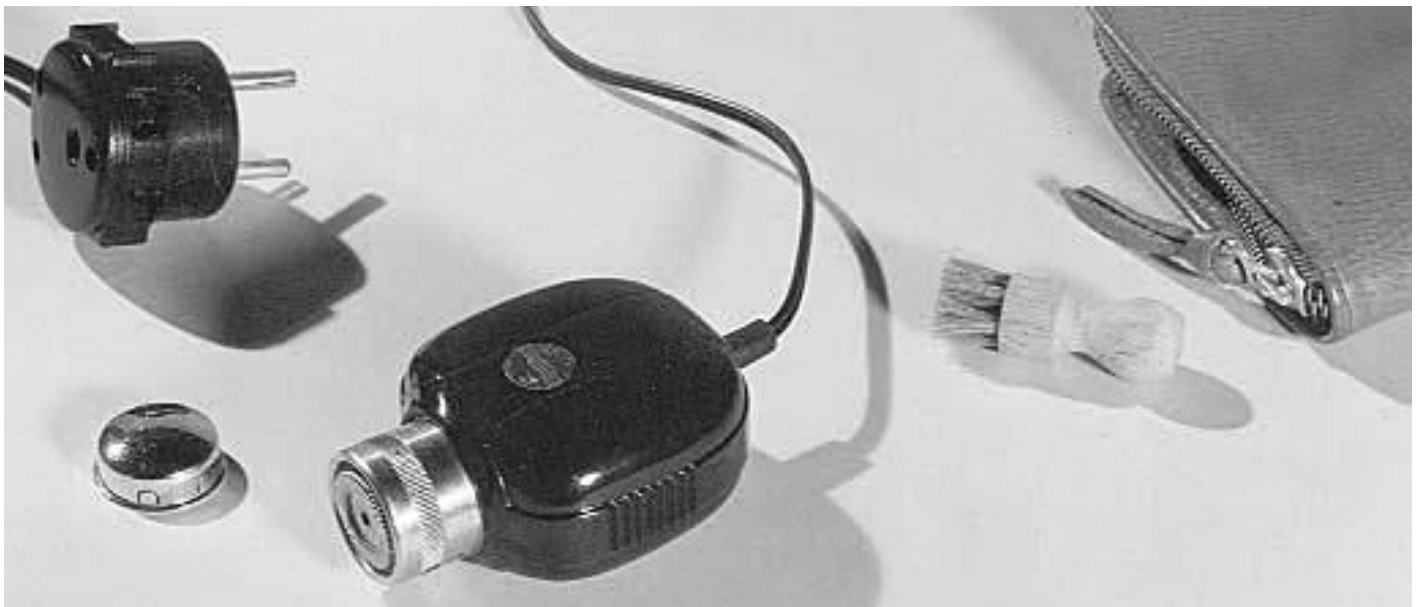
Study shaving mirror with light. Specification 1946/11. Working model 1947. Picture of a different design 1961/01

7735 proto = 7735 /00. A design to succeed the 'stick' model 7730. Study in 1945 or earlier.

Flat, square model with rounded corners and edges. Black Philite housing. New round resistor plug.

Working samples made in 1945 with housing pressed from moulds, but most likely no production nor sales.

Probably used as technical basis for round P 9500 and SC 7780 models.



1947/02 p 1=7756/03=60 x 6
AC Norelco white

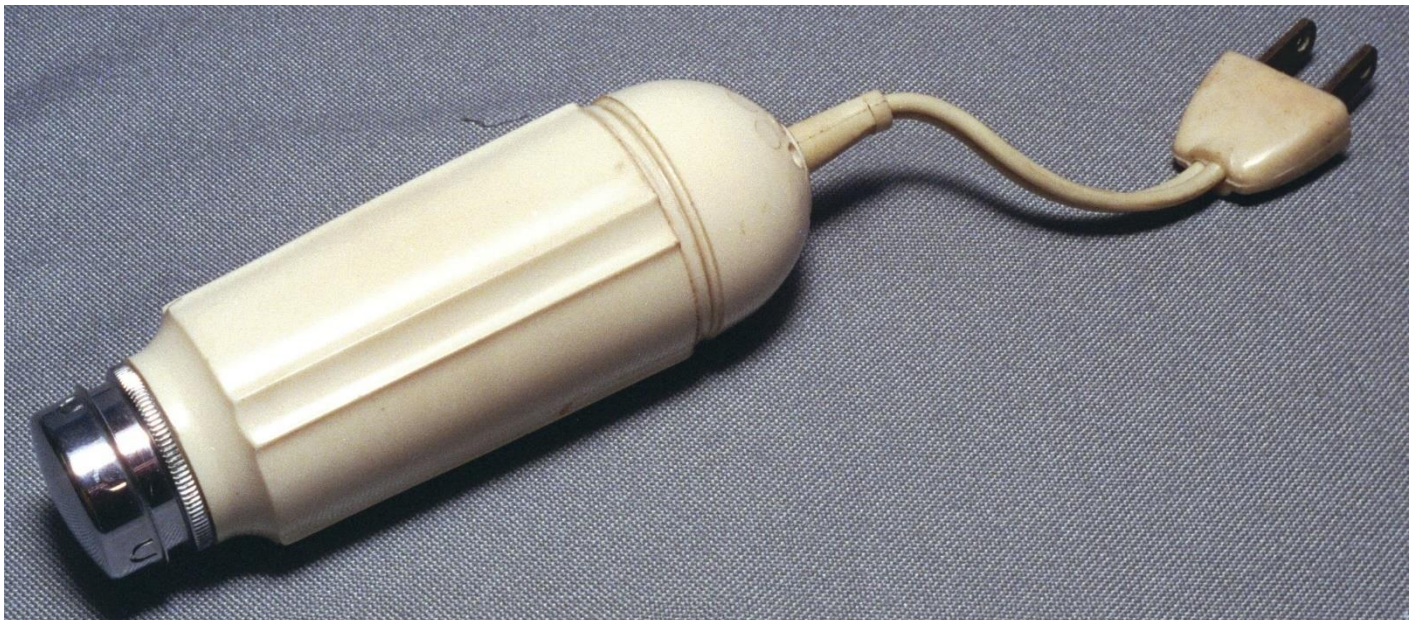
7733 Norelco & 7733K maroon

NORELCO = 7733 versions white for Norelco in USA. Sales price USA » 22,50? In 1949.
Limited introduction end 1947, sales campaign in 1948. Initial deliveries 1947/48 = 2 x 1.000 shavers.
Total USA market in 1948 = 1,65 million shavers, dominated by Schick, Sunbeam and Remington.
Sales Sept. - Dec. 1948 = 2.500 shavers.
Advertising investment 1949 = \$ 28.000,-. Sales 15.000 shavers through 25 leading retailers coast tot coast.

7733K = maroon with flat pin plug as used in USA, Canada and other overseas countries.
Specifications housing Bordeaux-red [maroon] colour, 110 volt - 60 cis, with USA plug:
7733/51 = 7733/01, but mono-voltage 110 V - 60 Hz, moulded plug for USA. Basic version without packaging.
7733/56 = 7733/51 in leather pouch.
7733 K/00 = 7733/01, but USA plug. 110 Volt 60 Hz. Specified 1949/09/16.

Specification housing white colour, 110 volt - 60 cis, with USA plug:
7733/52 = 7733/01 mono-voltage 110 V - 60 Hz, moulded plug for USA. White colour housing. Basic version, no packaging.
7733/57 = 7733/52 in leather pouch.
Note: Statistics of total Norelco sales menshavers USA > 1948 = 2.500, 1949 = 15.000, 1950 = 30.000 shavers.

No data yet whether sold in USA with Philishave or Norelco inscription on housing.



1947/02 p 1=7756/03=60 x6

AC

Philishave+Norelco

7733 & L & promo

various colours + packaging, 2-pin & 1-slot coupling, plug 7735 & 7736 & trade plug

7733 Stick model with larger shaving head, stronger motor as 'intermediate' successor of 7736. Factory cost 1948 = / 13,45. New 'egg' type already designed in 1945, but will take several years before production start possible.

Reason to introduce reluctantly larger stick design 7733 = strong competition USA and Switzerland reduced sales 7736.

Production start 1947-02-20 with available components = plug of 7736 and 2-pin coupling. New maroon colour.

Cutter spring pressure increased with 30% compared to 7736 = now 22,5 with minimum 17,5 g. Maroon and black housing.

Oil pad in dust cap, to be removed before use as oil + shaving dust (iron particles) will act as abrasive for shaving system.

Resistor plug of 7736 from -1946 till September 1948 (modified smooth rounded corners) = 170.000 shavers?

New oval plug as for 7735 model - 1948/09 (new serial numbering from zero). Mid 1951 = 10.000? New moulds with rim.

Versions in leather & linen pouch & carton display box.

Cutter with 2-pin and slot-coupling. Introduction ozon holes mid-1947. Samples 3x Siera shaver ready 1949/01.

Production in bicycle lighting factory, old textile mill in Roermond. Assembly 7733 similar to bicycle dynamo.

Motor components to be fitted in closed cylindrical housing. Introduction in 1947. Production 1947 + 1948 = 168.000.

7733/00 = first 'factory' version specified with Bordeaux-red housing, one-slot coupling and new resistor plug of 7735.

Initially specified for larger shaving head 7756/30, but not ready for introduction on 7733.

One-slot coupling introduced on type 7737A = 'mouse' design in 1947. Model 7733 follows shortly before production stop.

Sample found: Black 7733 with slot coupling, made in France, with French mono trade plug Fovet brand. Produced -1950.

Picture of first design in Philips archive = black shaver with oval shaped resistor plug and long narrow zipper pouch.

7733/01 = 7733/00 Bordeaux-red [maroon], specified with square plug of 7736 and 2-pin coupling. Without packaging.

7733/02 = specified as 7733/01 Bordeaux red with mono voltage trade plug. Basic version, no packaging specified.

7733/03 = 7733/01 black. Square resistor plug 7736, no packaging. Production Holland.

7733/05 = 7733/01 maroon in leather pouch. 7733/06 = 7733/01 maroon in linen pouch. 7733/07 = 7733/03, leather pouch.

7733/08 = 7733/03 black in redbrown linen pouch with pushbutton lock. Sold a/o in Austria 1950/51 (price 345,-).

7733/16 = Maroon shaver and plug, black plastic flex. Round resistor plug of type 7735.

Start Autumn 1948. Simultaneously individual numbering of shaver starts again from zero. Service documentation 1949.

Version for Holland with brush + dfu in special carton box. Without wallet. Introduction simultaneously with 7735 in 1948.

Both types packed in same carton display box without wallet. This version is active till end of 7733 sales

Argument Philips cheap version: Most buyers do not use the leather zipper wallet and the lower price will stimulate sales.

7733/17 = specified as 'oxblood housing', new plug 'egg' shaver type 7735, no pouch. Similar to 7733/01 = 2-pin coupling.

7733/50 = 7733/01 mono 220 V, standard trade-plug for South America. 7733/55 = 7733/50 packed in leather pouch.

Sample with black lacquered protection cap found. Sample with NDS, but without country of origin inscription.

GERMANY: Production starts 1949 = 40.000 shavers, sales 4.500.

Germany price in 1950 of shaver without packaging = 48,-. Price separate leather pouch DM 7,00.

Production Germany in 1949 = 40.000 shavers. In 1950 final production Germany = 34.000 shavers.

Germany price in 1950 of separate leather pouch DM 7,00.

Austria: Sales start 1948/49 = 6.500 shavers. UK = 1949/09,

Denmark: Assembly 1947 + 1948 = 16.000, sales 7.500 shavers (assy included in production Eindhoven). Sales till end 1949?

Carton boxes: Blue/red with 'Staalbaard Standaard' [Holland]. International version redbrown, neutral with trademarks.

Production Holland 1946/47 = -50.000, 1947 = 85.000, 1948 = -50.000, 1950 = 40.000 shavers.

Start Eindhoven > Zwolle > Roermond in 1948. Final production in 1951 = 6.000. Total 222.000.

Sales 7733 till end 1948 in Holland = 118.000 shavers. Norway = 18.000, rest Europe 23.000. Others 7.000 shavers.

Promotion: Airlines samples KLM and SWISS AIR found. Promotion Mr. Steelbeard. Hand designed to hold 7736 or 7733.

7733L /00 = Specified 1946/11 as maroon airline version with modified 28 Volt motor for KLM = Royal Dutch Airlines. Special promotional versions for passengers use on various airlines. Also used on marine vessels and in trains.

Emblem 'hand engraved' in housing. KLM = Royal Dutch Airlines emblem on shaver housing, approx. 1950.

In 1949 all long distance KLM planes are equipped with Philishave 7733 shavers. Mono plug, USA version?

7733 with cut-away part of housing as sample and as art impression in colour used as poster for shops.

» Mr. Steelbeard display doll = Smiling man with enlarged chin, clean shaven, black suit, shaver in hand.

Introduction of 7733 at Autumn Fair 1947 in Utrecht. In demo stand with 5 mirrors more than 4.000 visitors were shaven.

Philishave model, high 1,5 meters. Life-sized figure of popular PhiliShave mascot, called Mr. Beardmore. Publ. Waves 3.

Philips Announcer 1949 = Mr. Cutbeard. Plaster-cast figure, 50 cm high, black suit.

Large quantity produced. Used as symbol for private USA internet website in 1997/98..



1946+ shaving head 2-pin 19 mm head > 7756

1946- p **RC=19,5 mm=60 x6**
Philishave

7756

7756/00 turned disc cutter, /10 in plastic box. /30 = 1-slot coupling, study 0,3 mm slots

7756 = Guard chrome steel, diameter 19,5 mm. Rim at side of guard, 60 slots width 0,28 mm. Hole in centre top guard.

Cutter with 6 blades, 2-pin coupling. Used on steelbeard shaver type 7733.

Initially with turned disc cutter. Changed to turned cutter with 'open legs', produced in 1950.

Replaced by formed cutter for final replacement sales. NL »6,00=1955

Shipments replacement heads 7756 > 1947 = 90.000, 1955 = 22.000 (final). Total 1947 - 1955 = approx. 600.000 heads.

Versions with turned disc cutter specified:

7756/00 = head/cutter assembly with turned cutter type, without packaging. Production from approx. 1946 till 1949.

Initially with turned disc type cutter. In a/o 1950 production of turned cutter with 'open' cutter blades.

7756/10 = 7756/00 turned cutter in plastic box.

7756/03 = 7756/00, head/cutter assy with formed cutter, without packaging. Production start 1948.

7756/13 = 7756/03 packed in plastic snap-box, transparent plastic with curved **lock-lid**, oil pad, black print 7756.

Other versions specified:

7756/12 = Guard with 60 slots + 120 holes [waved slots]. Turned cutter, 6 blades. Packed in plastic snap-box.

Special version specified in 1946. (see 7757)

7756/30 = Guard with 60 slots. Width of the slots 0,3 mm (standard = 0,28 mm). Cutter specified with one-slot coupling.

Probably experiment for single head steelbeard version type 7733, or for double header development in 1942.

Wider slots with same thickness of lamellae can compensate for lower specific pressure on skin due to larger total surface of head(s), as one of the options to maintain optimal closeness/skin comfort balance.



1947 'mouse' synchronous motor > 7737

1947/08=p 1=7757/03=60 x6

AC Philishave+Norelco

7737A

ivory, leather zipper & lip-button wallet. Synchronous motor 50 & 60 Hz, starting lever.

7737A = Design related to 'egg' 7735. Ivory housing. Initially designed with shaving head 7756 = 2-pin coupling (not sold?).

Versions with smooth and ribbed shaving head holder ring. Synchronous motor 50 or 60 Hz with starting lever.

Initial Typename Steelbeard Ivory, changed to Philishave Ivory. Nickname 'mouse'. Pre-production Spring 1947.

Production start August 1947. Sales start Autumn 1947, except Holland and Belgium. (Plan to delay till Spring 1948).

Production Eindhoven in 1947 = 5.000, 1948 = 41.000, 1949 final 16.000 (including assy Norway). Total 62.000 shavers.

Norway: assembly 7.000 shavers in 1948.

Production Australia: 1949 + 1950 = 77.000 shavers. Stop in 1951 = 21.000 shavers.

7737A/00 = basic version 220 Volt 50 Hz without brush and packaging.

7737A/01, /31, 35, /36 = registered, but no specification available.

7737A/02 = /00 with brush.

7737A/03 = /02 without plug, destination Australia. Leather zipper wallet. Start 1948

7737A/05 = /00 with brush in zipper wallet.

7737A/06 = /00 with brush in wallet with metal slide-'lip-button' closure (dutch = 'liptas').

7737A/07 = /00 disassembled for local assy in Sweden.

7737A/08 = /07, but motor 120 Volt, in parts for local assy.

7737A/09 = /00 disassembled in Holland for assembly in Australia.

7737A/10 = basic version 120 Volt 50 Hz without packaging.

7737A/11 = /10 with brush.

7737A/15 = /10 with zipper pouch.

7737A/16 = 7737A/10, leather 'lip-button' wallet.

7737A/20 = version with resistor plug for 200 - 250 Volt 50 Hz and British plug for Gt. Britain.

7737A/30 = version 230-240 Volt.

7737A/40 = version 140 / 230 Volt with 'oval' resistor plug of new model 7735.

7737A/45 = /40 resistor plug (4200 Ohm resistor) voltage switch 110 - 160 / 165 - 225 V 50 Hz in leather zipper wallet.

7737A/51 = /50 with brush.

NORELCO:

7737A/50 = shaver 110 Volt 60 Hz. 2-pole, Ticonal magnet rotor 3000 r.p.m. Moulded USA plug.

7737A/51 = /50 with brush.

7737A/55 = 7737A/50 with brush in light brown leather zipper pouch with Norelco trademark..

7737A/56 = 7737A/50 with brush in leather 'lip-button' wallet.

Note: Problems with interrupted rotation movement, characteristic for synchronous motor.

Nickname amongst motor technicians in Nat. Lab. = "klootzak" with reference to problems (Prof. Willem v.d. Hoek).

In 1954 the Physical Lab. (Nat. Lab.) Eindhoven will be working on an improved design synchronous motor.

Commercial Dept. is not prepared to accept such development for shavers, due to extreme negative experience with 7737.



1947 = p. Guard 19,5 mm 60 slots, cutter 6 blades, 1-slot coupling. Shaving head 7757

service pack: /13 standard slots, /14 waved, /16 = Lady head » study

7757 = 19.5 mm guard with centring rim on side of guard to fit a/o 'egg' type shavers. Guard with 60 slots.

Production start 1947 with turned cutter, 6 blades, 1-slot coupling. (For flip-top head holders SC 2817 with flange is designed).

Replaced by formed cutter, production start end 1950. Production spring 1958 completely changed to waved slots.

Waved slots: 7757 versions 60 slots + 120 holes. Cutter with 6 blades. Production spring 1958 completely changed to waved slots.

Theory holes in slots = skin can protrude locally deeper in slots.

Holes however limit the increase of number of slots. More slots better than holes.

Study 3 holes per slot = 180 holes. Prototypes on 7735. Specified: 7735/18 = 7735/00 but shaving head with 180 holes.

Survey of all versions with description as specified in Philips file:

7757/00 = first version with turned cutter, wide 'blade-arms', standard slots, no pack. Production 1947 till approx. 1953.

7757/02 = 7757/00 turned cutter, but guard with 60 slots and 120 holes. Shaving head assy without packaging.

7757/03 = shaving head assy with standard slots, formed cutter, no packaging. Production 1949 till 1958.

7757/04 = 7757/03, but 60 slots and 120 holes, formed cutter, production start end 1950. Without packaging.

7757/05 = 7757/00 guard 150 holes = 5 per 2 slots, cutter track width 2,2 mm, 'outer centring', formed cutter. Specified 1948.

7757/10 = 7757/00 plastic transparent box, no lock. White text 'Philips Philishave spare cutter guard assembly' in 1950.

7757/12 = 7757/02 in plastic snapbox.

7757/13 = 7757/03 in transparent lock-boxes: high + Philips emblem and low curved with red print 7757.

7757/14 = 7757/04 in high transparent plastic sealed box.

7757/18 = Shaving head assy produced in Philips factory Spain.

Versions for Ladyshave a/o 'egg' type shavers:

7757/16 = 7757/13 formed cutter, with thicker lamellae, 180 microns. Packed in box with label 'Ladyshaver'.

7757/17 = Service shaving head for Ladyshaver, gold plated. Thicker lamellae, 180 micron.

7757/23 = 7757/03 formed cutter. With ornamental disc aluminum anodized gold-colour.

7757/24 = 7757/04 waved slots [120 holes], formed cutter, with ornamental disc aluminum anodized gold-colour.

7723/34 = 7757/24 in plastic box. Last active versions 7757/03, 7757/04 and 7757/18.

Shipments replacement heads 7757 > 1949 (start), 1951 = 40.000, 1952 = 125.000, 1957 = 2.500.

Total 1949 - 1957 = approx. 300.000 heads. Price in Holland 1955 = / 6,00. Service price in Germany 1952 = DM 8,00.

Note: Important feature of Philishave shaving system is the self-sharpening effect.

This is based on a difference in hardness between cutter and guard (cutter is harder and wears faster).

Over the years tests support the claim that after over 1000 shaves the performance in general is still equal to new.

In 1954 complaints from consumers about reduced shaving performance after relative short period of use.

Laboratory reveals that cutting edges get blunt. Research for cutter material with higher wearing factor is started.

Studies: 1947/11 study recessed running groove [loopgroef]. Samples with vertically inclined sawing of slots and entry.



1948/09 =p 'egg 1-head' AC > 7735 & K & G & 7746

ivory » /01 & /02 carton display box & /05 leather zipper wallet & local production

7735 = New design with nickname 'egg'. Designer Joop van Osnabrugge. Factory cost 1948 = / 13,25 (-same as 7733). New series motor 110 V and transmission. Cutter speed 2500 - 3400 rpm. New resistor plug, design approved 1946/11. Norelco 10 samples 1949/04. Release test 6- and 3-pole rotor 1951/11. Production code under dust removal ring. Initial version has dust removal ring with 'ridges' to lock ring in either open or closed position. Gives extra grip for turning. Some time after introduction construction modified into (cheaper and more durable) open ring with bent flanges. Samples with and without 'ozon-holes' in housing. In 1951 still illustrations with round disc cutter.

Versions with resistor plug in display carton without wallet: Version at introduction date.

7735/01 = Export carton. Ivory box with blue carton insert. Text: PhiliShave Ivory, Philips emblem, shaver in hand.

7735/02 = Special carton for Holland. Text: PhiliShave, Staalbaard Ivoor, drawing of Steelbeard man.

7735/03 = Version with special label for Belgium on lid of carton box.

7735/20 = shaver wrapped in 'silkpaper', packed in export carton with brush, dfu and guarantee card.

At introduction in 1948 shaver is packed in carton display box without wallet to reduce price in effort to stimulate sales.

Name in Holland: Staalbaard Ivoor. This name appears on carton box still end 1951. Promotional name in 1952 = ivoor-6.

According to Philips most buyers of 7733 did not use the leather zipper wallet.

Same carton at lower price in 1948 for 7733 Staalbaard Standaard. Production 7733 in 1949 only for Holland = 30.000.

Price shaver in carton box Holland 1949 = 47,00. Price zipper wallet A 1.336.52 in Holland 1949 = / 4,50. D » 65,00 = 1950

7735/05 = version in zipper wallet, packed in export carton. Price zipper wallet A 1.336.52 in Holland 1949 = / 4,50.

Production Eindhoven till 1948/04 = 33.000, 1949 = 110.000, 1950 = 290.000 incl. 55.000 for local assembly.

1951 = 430.000 incl. 100.000. 1952 = 270.000 incl. 206.000 for local assy, 1953 only 10.000 for local assy.

Total production till 1952/04 = 1.14 million shavers + 250.000 motors.

Various versions for local production:

Austria » 7735/08 = Assy in Austria, parts from Holland.

1949 - 1951/52 = 100.000 shavers > 1950 = 15.000, 1951 31.000, 1952 56.000 shavers.

Australia production preparation 1951/03. Special motor designed for 240 Volt. Large plug with 3 pins.

Local production/assembly 1951 = 18.000, 1952 = 66.000, 1953 = 30.000 shavers.

7735/13 = 7735/06 mono 220 V, but inscription 'Made in Australia'.

7735/14 = motor 200-250 V. Flex without plug. Local pack Australia.

7735/42 = mono 220 Volt, different plug and 'Made in Australia'.

Canada assembly in 1949 + 1950 = total 7.000 shavers.

7735/60 = head 7757/03. Production Drachten for Canada. 7735/61 = Assembly in Canada, parts from Drachten.

Denmark assy 1949 = 9.000, 1950 = 20.000, 1951 = 28.000, 1952 final = 86.000 shavers.

7735/09 = 7735/00, disassembly in Drachten for re-assembly in Denmark.

7735/36 = assy in Denmark 1949 - 1952 = 145.000 shavers. Sales Denmark start 1949.

Norway assy in 1950 = 17.000, 1951 = 35.000, 1952 = 35.000, 1953 final = 3.000 shavers.

7735/40 = 7735/00, disassembled for re-assembly in Norway.

7735/10 = /00 assembly in Norway 1949-1952 = 90.000 shavers. 7735/15 = /10 in leather wallet.

7735/41 = 7735/05 impregnated rotor according to SEMKO for Sweden. 7735/43 = /00, SEMKO, export carton without wallet.

7735A/00 = specified 1951/10 with cheaper motor.

7735/26 = version [25] with shaving head with 10% narrower slots (0,25 mm) in wallet. No data on production or sales.

No data on purpose of this head. Experimental version for sensitive skin to reduce skin irritation? Or for Ladyshave ?

7735/18 = 7735/00 but shaving head with 180 holes (= waved slots with 3 holes per slot).

Versions mono voltage: 7735/04 = standard trade plug, 90-120 V. 7735/51 = American plug. 7735/06 = 220 Volt.

7735/00 = shaver with flex, basic version without packaging. 7735/99 = version without shaving head.

Uruguay local assy in 1952 = 400 shavers.

7735 K/00 = ivory, KLM Royal Dutch Airlines inscription, 115 Volt, moulded USA plug,

Packed in special KLM pouch with additional replacement shaving head. Specified 1949/02.

7735G/12 = basic version with shaving head with 120 holes and turned/ground cutter [gedraaid en geslepen mes 7757/02.

7735G/51 = Version for Canada with shaving head with 120 holes = 'waved' slots. Leather zipper wallet.



1949/04=p 1=7757/03+7757/04

AC

Philishave+Norelco+Raselis

7735 F+D+UK+USA

G = waved » K = KLM » /17 France, /30 Gt. Britain, /45 Germany

FRANCE > 7735/04 = First version for France (reference service doc. 1950/09). Introduction 1950.

Local production/assy 1950 - 1953 = 650.000 shavers. In 1953 only production of version RA 5000 = 8000 shavers.

France production in 1950 = 13.000, 1951 = 250.000, 1952 = 350.000, 1953 final = 40.000 shavers.

7735/17 = 7735/00 interference suppression for France. Dust cap embossed. In bulk to France for local completion.

7735/19 = 7735/17 without plug. Version in red plastic zipper pouch found.

Sample found made in France without type number on shaver, with Philishave, Philips, N, D, S.

RASELIS = 7735 with trademark Raselis in modified design with 'grip-ornament' at both sides of shaver-housing.

Trademark CSCF on shaver and plug, Raselis and 7735 on shaver. Version with standard resistor plug. Leather wallet.

Sales in 'Coutelier' shops France.

GERMANY » Introduction on August 18th, 1950.

Production Wetzlar/Germany in 1951/52 = 160.000 shavers. > 1951 = 22.000, 1952 = 140.000 shavers.

7735/45 = /36 made in Germany (Wetzlar), VDE plug. 7735/44 = /45, plug without VDE approval.

7735/46 = /00 in German packaging. Carton box ivory/brown with text 'Das Geschenk für den Herrn'.

7735/47 = 7735/00 production Holland, but in fancy box with special label for Germany.

Price in 1949 = DM 65,00. In catalogue 1950 - 1952 shaver = DM 48,00. Leather pouch = DM 7,00.

Germany promotion = Mirror with drawing of one-head puppet. Text 'Philips Schermann Trockenrasierer'.

GREAT BRITAIN » Introduction October 1949.

Local production from early 1949 till summer 1952 = 200.000 shavers + 25.000 motors in 1951.

Gt. Britain production 1949 = 8.000, 1950 = 53.000, 1951 = 75.000, 1952 = 58.000, 1953 final = 4.000 shavers.

7735/30 = in carton box, no pouch. 7735/31 = 110-160 and 165-250, modifications in the text.

7735/32 = 7735/30 without 'Made in England'.

7735/34 = plastic wallet. 7735/35 = leather wallet.

7735/30 = version for Gt. Britain in plastic wallet specified < 1950/09. Resistor plug with thick, short round British pins.

NORELCO versions standard and waved slots. Norelco typenumber on carton box and directions for use = U 7735 S.

Initial sales with Philishave on shaver housing. Explanatory Notice in Norelco manuals. Succeeded 1954 by 7746G.

7735/07 = 7735/00 in leather zipper wallet of model 7737.

7735/50 = Norelco shaver with flex and moulded USA plug without packaging).

7735/55 = 7735/50 in zipper wallet. 7735/56 = 7735/50 in lip-button wallet

7735 G/07 = 7735/07 in leather zipper wallet of model 7737, shaving head with 120 holes in slots, formed cutter.

Specified 1950/11. Introduced -1951?

Shipment of first 5.000 shavers approx. June 1950. Total planning 1950 = 67.000 shavers.

Introduction price \$ 16,50 compared to previous \$ 22,50. USA » 16,95 = 1950. Price in 1952 = \$ 19,95.

Sales in USA with single header not successful. Breakthrough starts with doubleheader.

Sample found with Philishave shaver, USA plug and Norelco carton box + dfu. Leather wallet without Norelco brand.

1954 Norelco 'egg' 1-head waved slots 7757/04 type 7746G

7746G = 7735 ivory, waved slots, cordset USA plug, red Norelco name, leather wallet

7746G = 7735. Inscriptions Norelco [red], North American Philips Co. Inc. 110 V. 6 W. AC/DC. Type 7746. Made in Holland.

7746G /00 = specified as ivory shaver, shaving head with 120 holes. USA cordset.

7746G /01 = /00 without flex and plug. 7746G /02 = /00 in leather wallet and Norelco carton.

7746G /03 = /01 in leather wallet and Norelco carton. Production only in 1954/55 = 5.000 shavers.



1948 dynamo 1head study + bicycle dynamo

Hand-powered rotary shaver: Study single header in 1948.

Stick model single head shaver. Cutter powered by fly-wheel, activated by pushing handle. Principle hand dynamo-light.

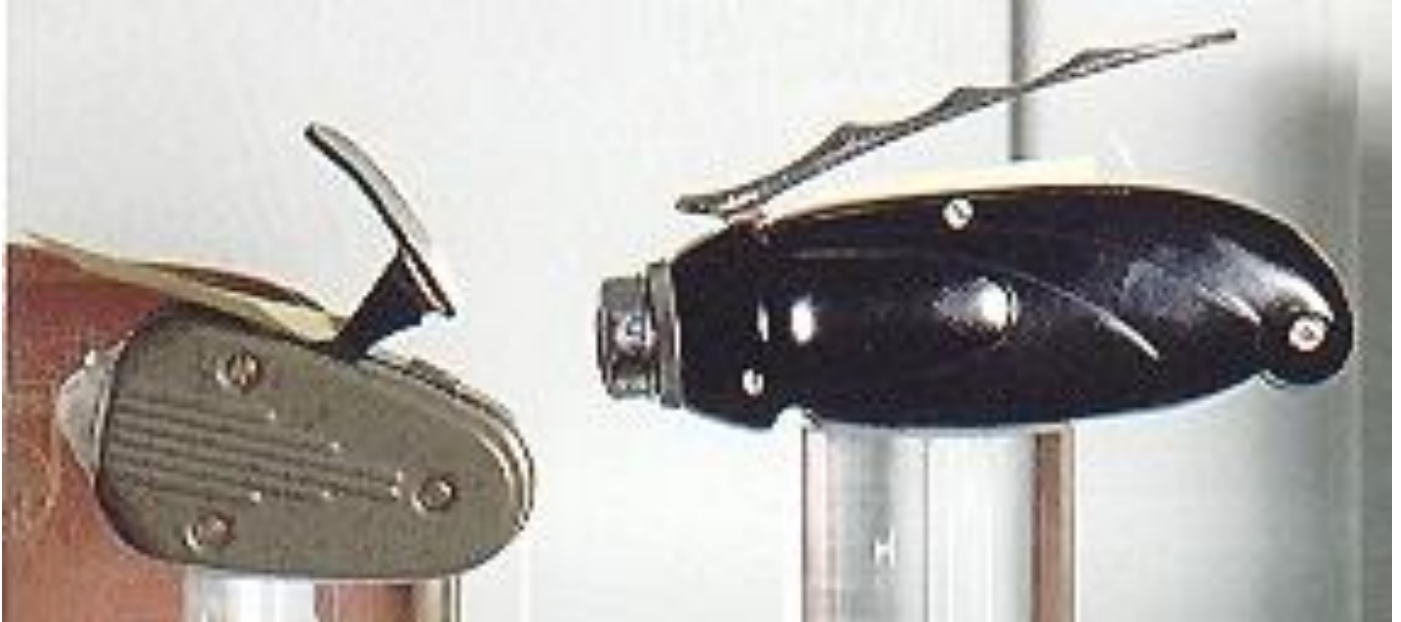
Moulded working product in file Philips - Drachten. "Knijpkat" principle. Samples likely limited to less than 10.

Working prototype made in Physical Lab. Eindhoven by mr. H. Heuts 20-29 January 1948. Memorandum 4-2-1948.

Interview with mr. Heuts 2005/03 did not reveal further information. Only less than 10 samples made?

Alternative design with pull cord presented as well. Patent application for this idea prepared. Patent granted?

Torch light 'knijpkat' idea originates from mr. A. Thomann in approx. 1937.



Related products:

7405 = bicycle dynamo. Trademark Philidyne. 6 Volt, 3 W, 0,5 A. Made in Holland - Importé de Hollande. 7405.

7435 = bicycle dynamo. Trademark Philidyne. 6 Volt, 3 W, 0,5 A. Made in Holland - Importé de Hollande.

Produced around 1947 in an old windmill at Roermond by 200 girls.

Shortage workforce Eindhoven after World War II made it necessary to find another location for the production of shavers.

Assembly method of Steelbeard has basic resemblance with bicycle dynamo (energy unit in a closed cylindrical housing).

This might have been one of the reasons to select Roermond as a temporarily production centre for shavers.

In 1951 shaver production moved to Drachten. 7435 sold in Holland 1952 price / 12,75, with other type 7422 price 10,75.



1948 study 1942-1960 concentric head 7760

1950-model 1=proto 150 slots

AC study project

7744 study

7744 = specified as universal shaver, cream/ivory colour, shaving head with 150 slots. Shaver type 7735, fixed cord. Diameter 20 mm. Slots in 2 circles, but 1 track, length 5 mm. Cutter diam. 18 mm, 6 blades width 4,5 mm, groove centre. Appearance similar to concentric heads, but basically different as this one track with single blades. Small quantity heads produced for tests [> 40 heads] on shaver 'egg' type 7735. No production for sales. First sample found with production code 1948. 7744/00 = Philishave. Norelco version = 7745/00. New code SC 7744 for motor of doublehead egg type.

1949- spec 1=proto 150 slots

AC study project

7745 study

Norelco 7745 = 7744 with cordset = 7735 with 90 + 60 slots, concentric 7760
7745 = specified as universal shaver, cream/ivory, shaving head with 150 slots. Shaver type 7735, but detachable cordset. Diameter 20 mm. Slots in 2 circles, length 5 mm. Cutter diameter 18 mm, 6 blades width 4,5 mm, groove in centre. Probably first test version of concentric head, typenumber 7760. Small quantity heads produced for tests [> 40 heads] on shaver 'egg' type 7735. No production for sales. 7745/00 = 7744/00 Philishave, but detachable cordset with American plug for Norelco. Cream/ivory colour.

1948- RCC=various

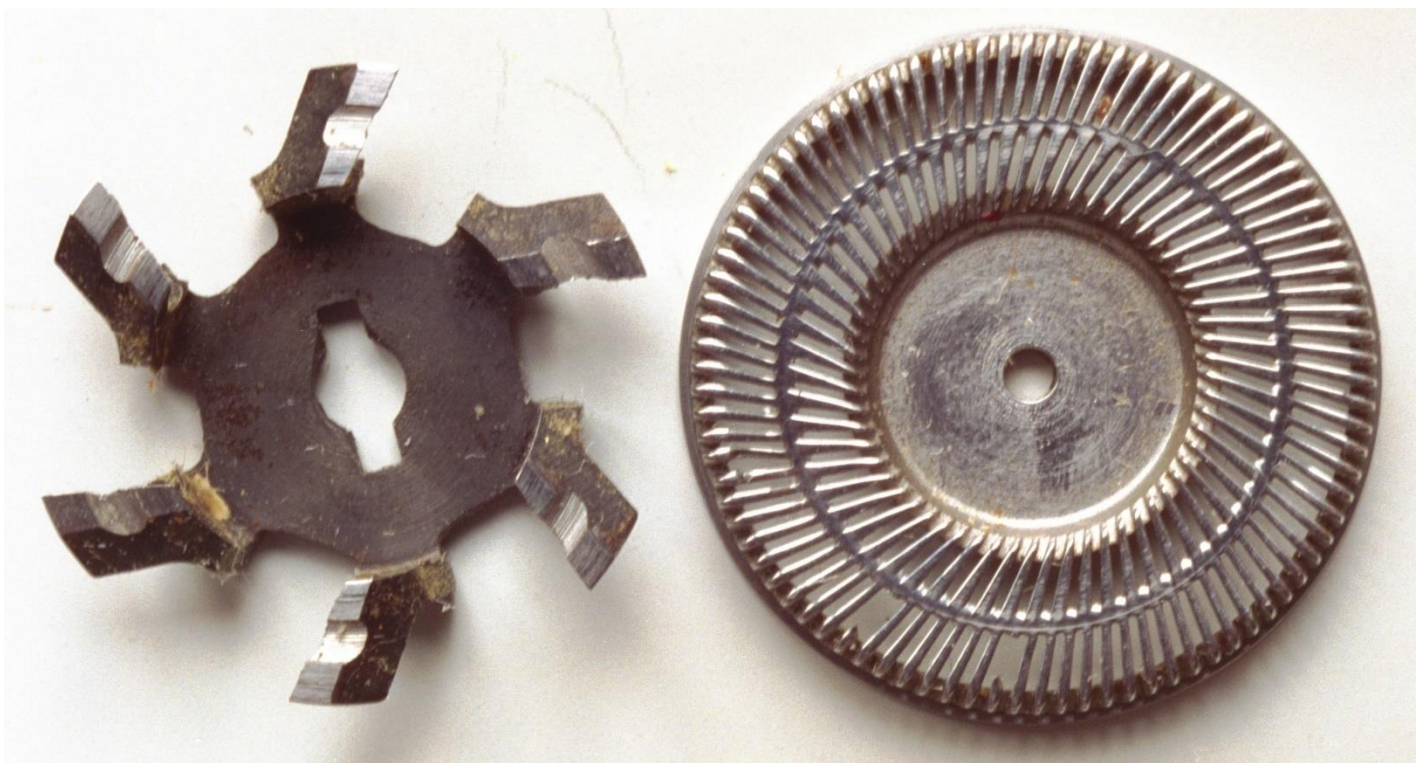
study project

7760 study-1

Typenumber 7760 = shaving head with 2 or more cutter tracks in concentric circles. Issued approx. 1948. Most probably related to shaver specification 7744 and 7747 approx. 1950 = 7735 with dual track head 90 + 60 slots. Laboratory research on concentric heads in 1954 very active. Study large concentric head approx. 1955. Similar to Vaan All, Japan. Shaving head holder to fit Philips Ladyshave 7738. Diameter 34 mm with 80 + 40 slots. 5 cutters x 2 solid blades. Diameter 28 mm with 90 + 45 anti-clockwise slots, no holes. Cutter 8 + 6 blades.

See for continuation separate record in 1960 = 7760 study.

Patent application 105181 filed 18-3-1942, published 15-5-1946. Patent 59161. Christiaan Jacobus Josephus Dankers. Extension of main patent No. 54862 dated June 16, 1943. Application UK May 31, 1946. Number 16554/46. Published Oct. 10, 1951. Patent number 658,736. Patent application concept for multiple slots/blades construction PH 14.412 of 01-05-1957 (Gk. 23180). Patent applied v.d. Driest concentric head 296894 of 20-08-1963. PH 18.568 (Gk. 31922-32163). Drawing dual blade 1 piece. US patent v.d. Driest 3,261,091 July 19, 1966. Filed July 23, 1964. Serial 384,613. Priority NL Aug. 20, 1963 No. 296,894. US 3,624,681 filed Aug. 22, 1969 by Frans Zuurveen and Eduard Willem Tietjens. Priority Aug. 31, 1968 Netherlands 6812446.



Subject shaving head with multiple rings, independently floating. Samples produced at Nat. Lab. Eindhoven.

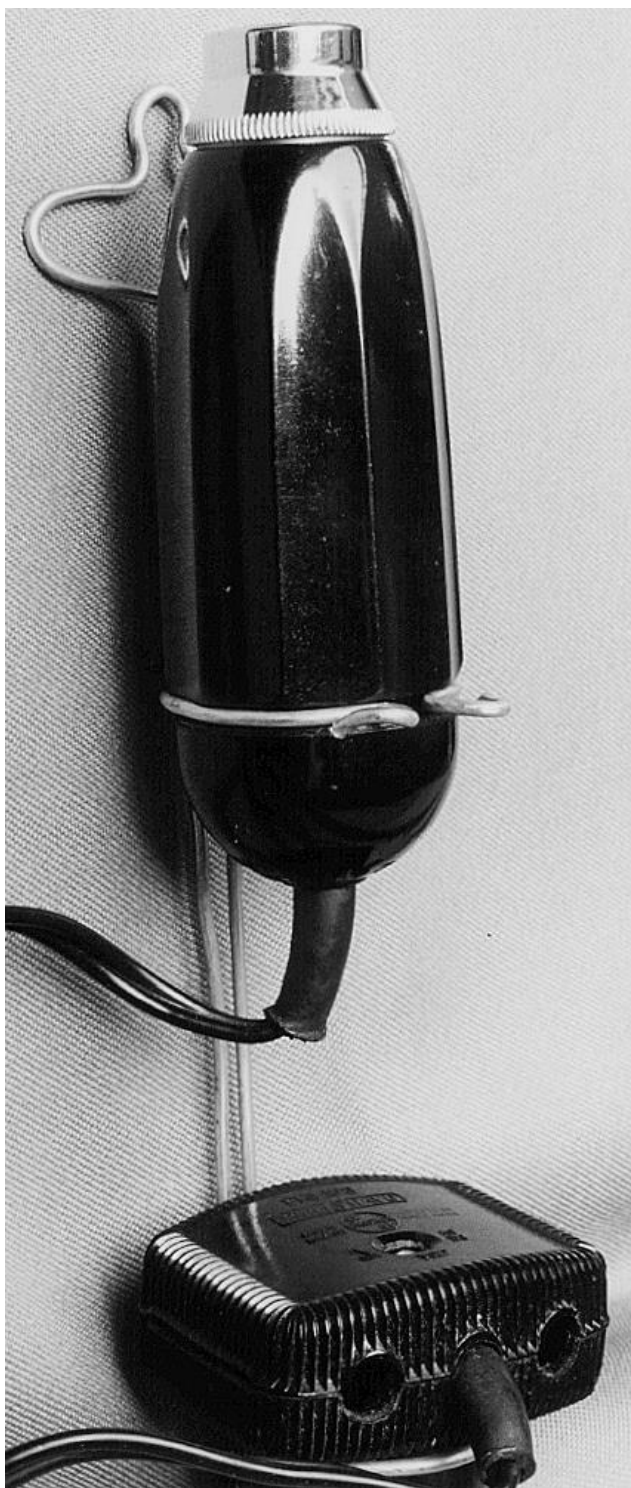
1939 wire wall holder for 7736. 1948 wall holder for 7733 type 7502

Approx. 1940 a wallholder fitting type 7730 and 7736 has been designed and produced. No typenumber known. Made of steel wire, formed to clip recessed groove in 7736 cap and housing, with lower circle to hold resistor plug

Typenumber **7502** = Holder for wall mounting with provision to hold shaverplug. White lacquered die-cast aluminum.

Two wallmounting screws. Fits shaver 7733 Steelbeard. NL»HFL 6,25 in 1949 + 1952.

Promotion in Holland 1949 to place a wallholder with instructions in hotelrooms.



1950 Philips+Norelco Ladyshave 'egg' 1-head type 7738

7738 ivory & white, chrome & gold & medical » study rotafoil & clipper unit -1954

7738 = First Philips Ladyshave model derived from 7735. Technically as 7735 except top housing and shaving unit.

Working sample ladyshaver 1946/11. Norelco 12 samples 1949/11. Introduction USA in 1950. Sales Norelco 1950 = 11.000
7738/13 and 7738/14 versions (with dual resistor plug?), ivory housing and chrome dustcap, imitation peau de suède wallet.

7738/00, /17, /19 = with chrome protection cap.

Production Eindhoven till 1950/04 = 9.130, 1950/05 - 1951/04 (final) = 20.000 shavers. Total 29.000 shavers

Demonstrations France 1950/51 in theatres/cabarets, Foire de Paris, swimming pools and at beaches (in a tent).

50% of women in France epilate.

Versions for France with motor for 90 Volt. Interference suppression with 2 ceramic capacitors + choke coil in plug:

7738/01 = Goldplated protection cap. 7738/04 = Goldplated dustcap. Red leather wallet. Nylon brush and DFU for France.

7738/18 = /04 with chrome protection cap. 7738/15 = /04 chrome protection cap, in bulkpack.

7738/05 = version for medical purposes with chrome protection cap in carton box.

France acts as pioneer in 1950/51 to find marketing tools for selling Ladyshave. Appointed a female demonstrator on duty in hospitals to support sales through medical channels, viz. orthopaedics, cutters and dealers in surgical instruments.

7738/02 = basic version with goldplated protection cap + special shaving head (not specified). In white leather wallet.

Study model 7738 with shaving unit of type 7735.

7738/10 = Lady Norelco Electric Razor standard version, goldplated protection cap, American plug, without packaging.

7738/11 = /10 but motor designed for 90 Volt, in red leather wallet.

7738/12 = /11 in white leather wallet.

Other version: 7738/16 = /06, chrome dust cap, American plug, motor 90 Volt, in luxury peau de suède wallet.

Norelco wallet with hinge lid and lip-button lock.

Off-white with green inside.

Version with chrome cap packed in satin lined, suède-like travelling case (= soft zipper pouch).

7758 = typenumber of service shaving head for 7738.

Probably version(s) with American plug are sold as Philips brand to other countries with USA wallsockets, e.g. Canada.

Ladyshave activities prior to the introduction of 7738 in 1950:

Promotion for use as ladyshaver in documentation and instructions of menshaver model 7730 from 1939 onwards.

Lady study project: Shaving head 17 mm. 48 slots.

Guard with 12 holes low position at flange for removal of beard dust.

Shaving head holder with skin stretcher.

Guard and shaving head holder are both gold plated.

Miniature grinding stone unit for manicure.

Single sample as proof of study, probably around 1940/41.

1954- = Study projects related to model 7738:

Study 7738 with Rotafoil Clipper head = Philishave slotted ring, diameter 25 mm + round foil with holes.

Working prototype on modified 7738 shaver with maroon bottom cap. Probably made around 1954.

Study 7738 with Rotary clipper unit for long hairs. Shaver body enlarged to hold stronger series motor. - 1954.

Sample of single maroon resistor plug, inscription 7738, with black flex. AV found at service dealer in Holland.



7758 Service shaving head for Ladyshave 7738 + SC 7761 Diameter guard 22 mm. 7758

7758/00 = version with turned cutter. 7758/03 = version with formed cutter.

Replacement shipments from 1951 - 1954 = 2.400 heads.

1953~ Norelco SC 7761

SC 7761/00 = Ivory colour ladyshaver derived from 7738 with special shaving head and fixed cord with moulded USA plug.

SC 7761/01 = SC 7761/00 in packaging.

1953 specification Norelco SC 7770

SC 7770/00 = 7738/00 with American plug, chrome protection cap.

SC 7770/01 = SC 7770/00 in luxury leather wallet, carton box.

1950 study Ladyshave 1-head ball-shape

1950 study 1=7757/03=60 x6

AC study project

7747 study

7747/00 specified as 'Ball-shape' ('kugel-vormig') design. Unit derived from 7735, modified transparent plastic dust cap.

Cream colour. Universal motor 110 Volt. Cordset with moulded USA plug to be purchased in USA.

Specification 10-06-1950. Estimated total series 100.000. Target cost price basis 1950=/ 8,00.

Development stopped 15-10-1951. Re-activated 5-1-1952. Project cancelled 29-09-1953.

7747/10=/00 but flex fixed to shaver. Resistor plug with space for interference suppression coil.

Symmetrical motor 110 Volt. Rotor mounted in housing independently from stator.

Same risky construction as first hairdryer in same period. Working model produced, ivory lacquered housing.

Similar dummy designs of lady version associated with perfume bottles. Shaving head 1957.

Picture of ivory sample Norelco Ladyshave with dustcap and cordset in Philips archives: C 32490 dated 11-08-1950.



1951 battery DC versions 'egg 1-head' **KL 2400 & KL 2401**

KL 2400 maroon » pouch or carton. KL 2400/12 = 3x D battery box + P 6530 Holland 1955

KL 2400 = First version for car battery or torch light connection. Motor designed for nominal 3,6 Volt, efficiency 20%. Ivory and Bordeaux-red. Cutter speed nom. 4.500 rpm on 6 Volt. Production Holland 1951/05 - 1952/04 = 18.500 shavers. Specification KI 2400 in 1952/01 = Ivory colour. Plug as Philips flashlight camera. 11 shaves average 7 minutes per day.

Versions specified in 1952/01: KL 2400/01 = product in bulkpack.

KL 2400/02 = product in carton box, without pouch, with brush and instructions for use.

KL 2400/03 = product in carton box, with leather pouch, brush and instructions for use.

Maroon version with battery box KL 2806 flat battery 4,5 Volt introduced summer 1952. Number of shaves claimed 30.

Germany "Schermann". Ivory version in 1953, price DM 48,00. Battery box DM 2,90.

Versions specified in 1949 as typenumber 7735. Recoded to KL 2400 in new typenumber system before production start.

KL group was allocated to all Personal Care products before decision made to give shavers a separate SC group.

Sample found with dual typenumber on housing = KL 2400 in circle + additionally 7735.

Samples prepared 1949/04: 5x for 6-12 Volt and 5x for 24 Volt.

7735/11 = 7735 version designed for 6 volt with separate resistor.

7735/21 = 7735/00 designed for 24 Volt, without resistor. Packed in export carton.

7735/22 = 7735/21, but without additional shaving head, no 'Made in Holland', in bulk pack.

7735/12 = KL 2400/12 = Maroon-6 + adapter P 6.530.020 for torch light in carton without pouch. Netherlands 1955 = 39,75.



KL 2401 = KL 2400 shaver + batterybox in ivory colour.

Quality control KL 2401 registered November 1951.



1951 'diabolo' Pope P9500 & Radiola RA 5000

1951 = p 1=7757/03=60 x6

AC Pope+Radiola

P9500

ivory smooth housing » luxury wallet, fixed flex, resistor plug. SC 7780 ladyshave
 P9500 = special single head design, flat cylinder type. Probably derived from square design 7735/00 prototype.
 Clear distinction from Philishave 'egg' design for sale under second [Philips] brands Pope and Radiola..
 Version with smooth housing. Radiola RA 5000 with 'ribbed' housing. Pope P9500 textured centre part of housing.
 Motor designed for 110 - 160 Volt. Resistor 1700 Ohm for 165 - 220 Volt connection. Embossed protection cap [France].

P 9500/01 = basic version in wallet. P 9500/02 = /01 without wallet. P 9500/03 = /01 without plug, 220 Volt.
 P 9500/04 = 230 Volt with bayonet plug, in plastic wallet. P 9500/05 = artificial leather wallet lined with blue silk.
 Production Holland in 1951 = 1.000, 1952 = 11.000 shavers. Total 12.000 shavers.
 For service supply the Philite gearwheel has been replaced by nylon in 1954.
 RA 5000 = P9500 design with ribbed housing, ivory colour. Motor for 90 Volts with interference suppression.
 Voltage switch 127 and 220 Volt. Radiola emblem. Only produced in France in 1954 = 7.700 shavers.

1954 = p 1=7757/03=60 x6

AC Radiola

RA 5000

As P9500 > ivory ribbed housing, Radiola version 127 / 220 V in 1954
 P9500 = special single head design, flat cylinder type. Probably derived from square design 7735/00 prototype.
 RA 5000 = P9500 design with ribbed housing, ivory colour. Motor for 90 Volts with interference suppression.
 Voltage switch 127 and 220 Volt. Radiola emblem. Only produced in France in 1954 = 7.700 shavers.

