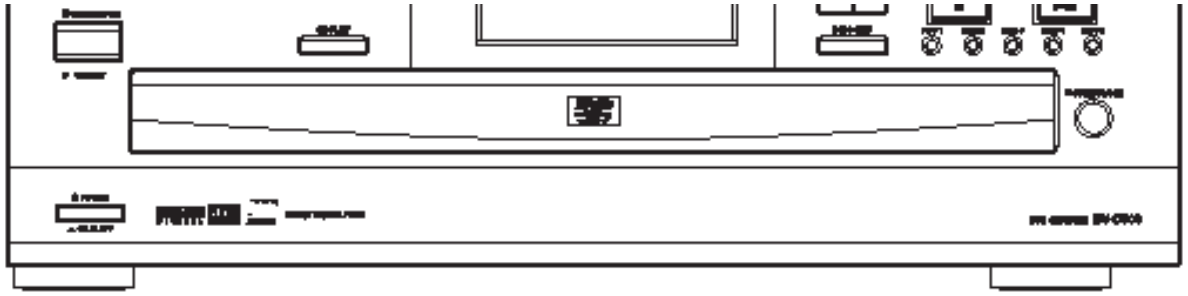
ONKYO®

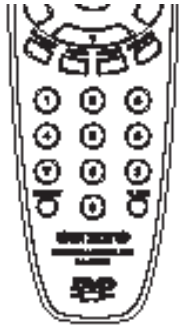
Parts Lookup and ordering guide

This material is intended for use by anyone who comes in contact with ONKYO' electronic parts. Service parts order, parts administration, warranty administration, inventory control, data base development, and technical departments may use this information for all appropriate purpose.

ONKYO PARTS LOOKUP
and TERMINOLOGY

D = is a marker for US version.





RC-469DV

The beginning of service manual often will indicate which part number within the list to pick when ever a replacement part order is needed. This is specially important whenever ordering PCB's and power supply components and Tuners.

Black model

BUDD	120V AC, 60Hz

Example:

REF. NO.	PART NO.	DESCRIPTION
U1	1A865589-2A	NAAF-6789-2A, Front channel power amplifier PC board ass'y <DD>
	1A865589-2B	NAAF-6789-2B, Front channel power amplifier PC board ass'y <PP,PA, GT>
	1A865589-2C	NAAF-6789-2C, Front channel power amplifier PC board ass'y <490>
	1A865589-2D	NAAF-6789-2D, Front channel power amplifier PC board ass'y <WT, WR>
U2	1A865590-2A	NAAF-6790-2A, Surround channel power amplifier PC board ass'y <DD>
	1A865590-2B	NAAF-6790-2B, Surround channel power amplifier PC board ass'y <PP,PA, GT>
	1A865590-2C	NAAF-6790-2C, Surround channel power amplifier PC board ass'y <490>

ONKYO PARTS LOOKUP
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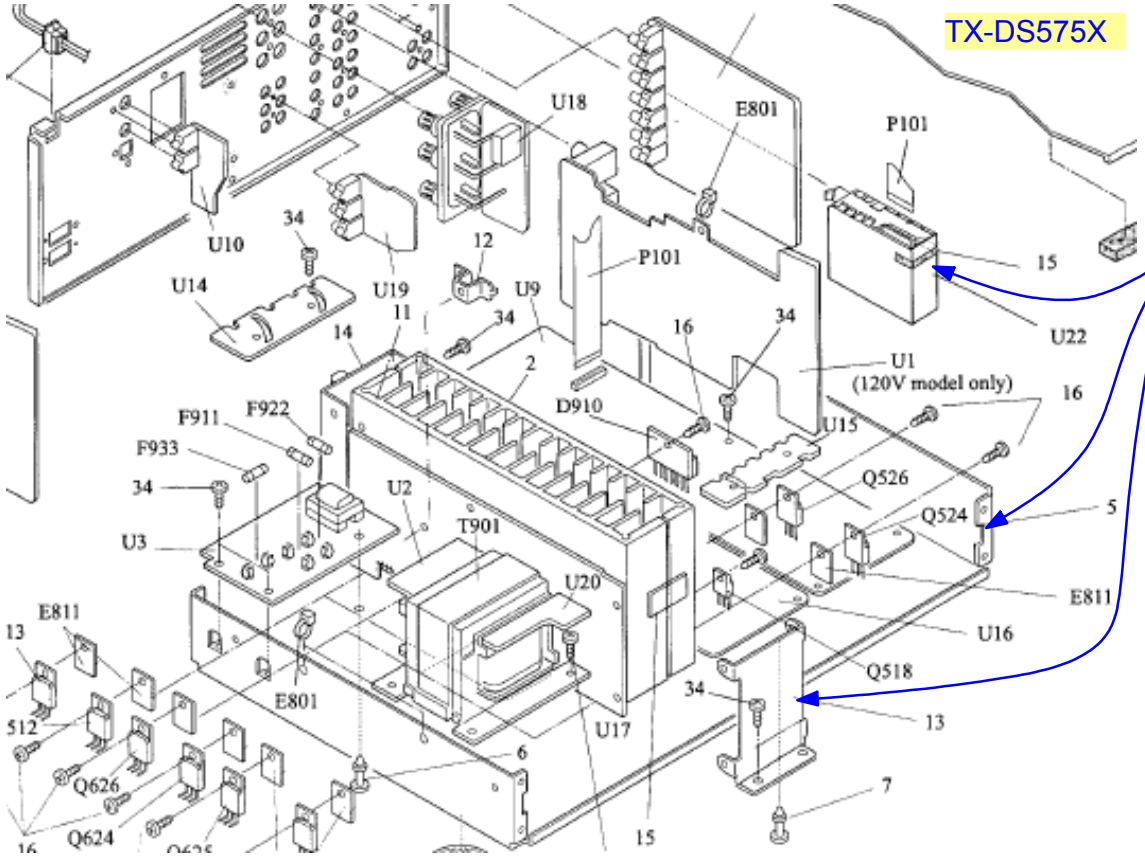
Onkyo uses few method to present part numbers of a verity components used in its production. Please use these as a guide line to help you look up parts and or identify parts quickly.

1. PCB's locations and part numbers are often times found along side structural hardware components referred to as "Exploded View of Mechanical". They may be labeled as U### while other structural assembly components may be given a numbers only.

Example: U18, U9, U2, U1, etc...



3. Mechanical parts are of those which help mount, hold, fasten and cover the above parts listed in boxes 1 and 2 and give the product a given operational, structural and cosmetics look.

Example: 15, 13, 5, 16 etc ...

2. Fuses, Transformers, Lead Connectors, Jacks, Tape, Insulators, and Large semiconductors may be given location ID within mechanical layout section. If you do not find these components within the schematic location, they may be found here.

Example: F933, F911, Q624, Q526, E811, P101, E801 T901 etc...

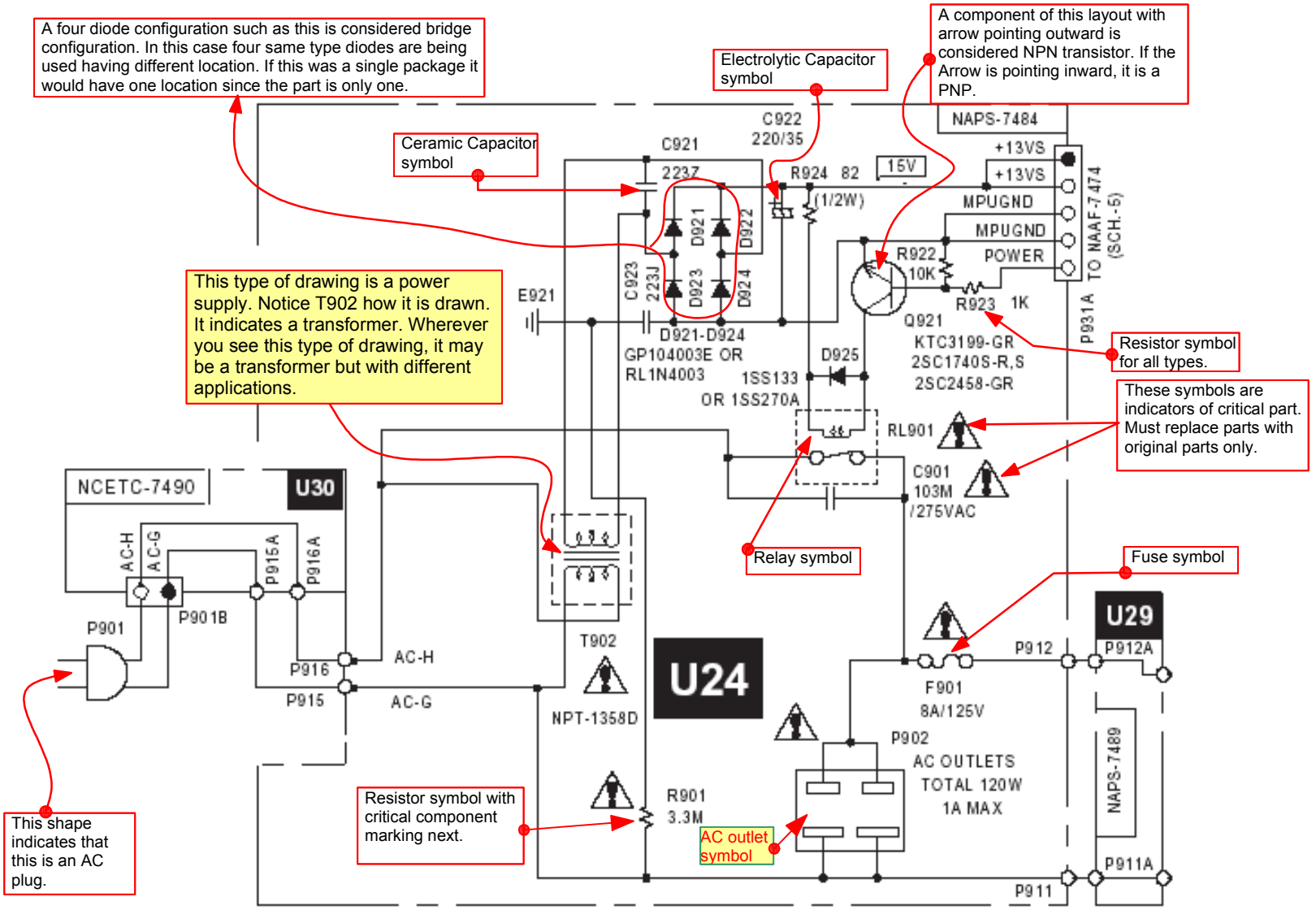
ONKYO PARTS LOOKUP and TERMINOLOGY

Mechanical parts list for items shown on page 1 may be found listed here. As you notice some semi conductors are also listed here which are often associated to being output transistors and ICs, Rectifier Bridge Diodes, Regulators, and fuses.

TX-DS575X

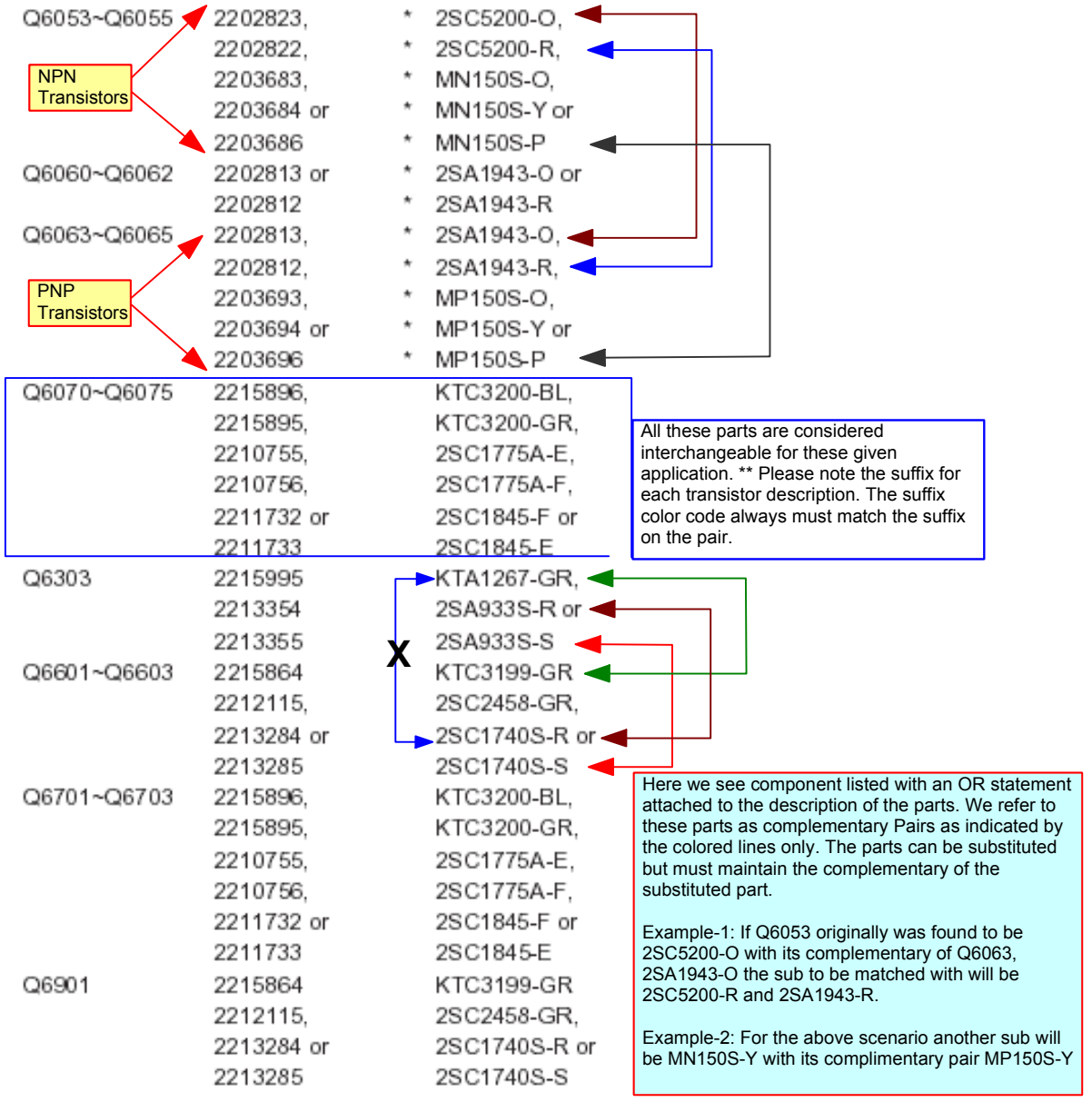
11	27160438	Heat sink L		22380274		RS603M, Diode
12	27141681	Retainer PWB	E801	260208		Wire tie
13	27141736	Retainer, front	E811	223024Y	⚠	AC238, Isolated sheet
14	27141737	Retainer, rear	E891	880048		P-3055B-8L,Plastic rivet <P/T/A/GT>
15	29110083	Tape, cloth	F911	252198Y	⚠	8A-UL, Primary fuse <D/W/R>
16	801433	3SMS8W.SW+14B(BC), Special screw	F922	252077 or	⚠	4A-SE-EAK or
17	28325497A	Knob, power <B>		252243	⚠	4A-SE-TL250V, Primary fuse <P/T/W/R/A/GT>
	28325499A	Knob, power <G>	F933	252075 or	⚠	2.5A-SE-EAK or
	28325547A	Knob, power <S>		252241	⚠	2.5A-SE-TL250V, AC Outlet fuse <P/T>
18	28191846	Clear plate <B> <P>	P101	2047152012	⚠	NCFC7-152012,Flexible flat cable
	28191847	Clear plate <S>	P7001	2047402512	⚠	NCFC7-402512, Flexible flat cable
	28191881	Clear plate <B> <D/T/W/R/A>	P7004	2047401512	⚠	NCFC7-401512,Flexible flat cable
	28191882	Clear plate <G>	P901	253193HIT or	⚠	AS-CEE, or
19	28184752	Top cover <B>		253195MAR	⚠	AS CEE, Power supply cord <P/GT/T>
	28184753	Top cover <G>		253197HIT	⚠	AS-SAA, Power supply cord <A>
	28184754	Top cover <S>		253233KAW	⚠	AS-CEE-2, Power supply cord <W>
20	28141272Y	t 10x60x20, Cushion		253285HIT or	⚠	AS-CCEE or
21	838430088	3TTB+8B(BC),Self-tapping screw <B>		253267KAW	⚠	AS-CCEE, power supply cord <R>
	838930088	3TTB+8B(UN),Self-tapping screw <G/S>		253279HIT or	⚠	AS-UC-2#18 or
22	27175319A	Leg		253280VOL	⚠	AS-UC-2#18, Power supply cord <D>
23	28141332	Cushion	Q1512	2203063,	*	2SC5198-O,
24	831430088	3TTW+8B(BC),Self-tapping screw	Q523	2202523,	*	2SC4468-O,
25	28325648	Knob, volume <D>	Q524	2202524,	*	2SC4468-Y,
	28325651	Knob, volume <B> <P/T/W/A/R>	Q623	2202526 or	*	2SC4468-P or
	28325653	Knob, volume <G>	Q624	2203062	*	2SC5198-R,Transistor
	28325652	Knob, volume <S>	Q1513	2203053,	*	2SA1941-O,
26	28325405	Knob, tone <B>	Q525	2202513,	*	2SA1695-O,
	28325407	Knob, tone <G>	Q526	2202514,	*	2SA1695-Y,

ONKYO PARTS LOOKUP and TERMINOLOGY



ONKYO PARTS LOOKUP and TERMINOLOGY

Majority of the times, parts list looks like this.



ONKYO PARTS LOOKUP
and TERMINOLOGY

Japan's Sensible Approach to Electronic Parts Naming Order.

Japanese transistor manufacturers use a unique but simple method to keep order to the device naming order.

Most transistor start with:

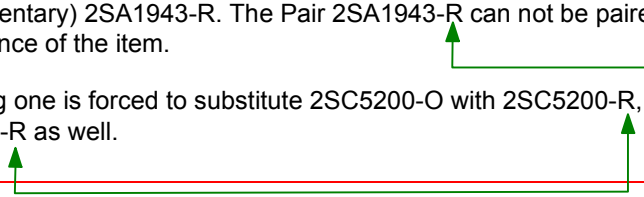
2SA### = 2= Means it is bipolar device, S= means Silicon, A= means it is PNP High frequency device.
2SB### = 2= Means it is bipolar device, S= means Silicon, A= means it is PNP Low frequency device.
2SC### = 2= Means it is bipolar device, S= means Silicon, A= means it is NPN High frequency device.
2SD### = 2= Means it is bipolar device, S= means Silicon, A= means it is NPN Low frequency device.
DTA### = D= means it is digital, T= means Transistor, A= means it is a PNP low frequency device.
DTC### = D= means it is digital, T= means Transistor, C= Means it is a NPN high frequency device.

Not all transistors have matched pairs: If they did, the match pairs are found within their perspective operating frequency group.
For a transistors labeled 2SA its matched pair can only be found within the transistor group of 2SC.
For a transistors labeled 2SB its matched pair can only be found within the transistor group of 2SD.
When forming a matched pair, one MUST maintain the group order.

Example of a critical application:

2SC5200-O NPN Transistor has a matched pair (complementary) of 2SA1943-O. The sub for 2SC5200-O Transistor may be 2SC5200-R which has a pair (complimentary) 2SA1943-R. The Pair 2SA1943-R can not be paired with 2SC5200-O in a proper service environment as it will jeopardize the specific performance of the item.

Assuming one is forced to substitute 2SC5200-O with 2SC5200-R, it would mean also replacing its matched pair (complementary) from 2SA1943-O to 2SA1943-R as well.



ONKYO PARTS LOOKUP
and TERMINOLOGY

Suffix to a device is to show its differing specification form same classification and ID part.

2SA### - O → Correct Match pair → 2SC### - O → Not acceptable Match Pair. → 2SC### - R

Not acceptable match pair

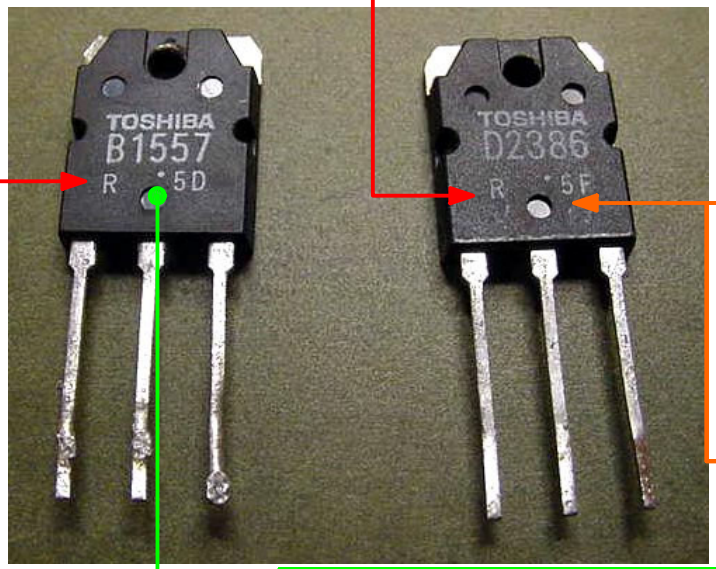
Not acceptable match pair

2SB### - R → Correct Match pair → 2SD### - R → Not acceptable Match Pair → 2SD### - O

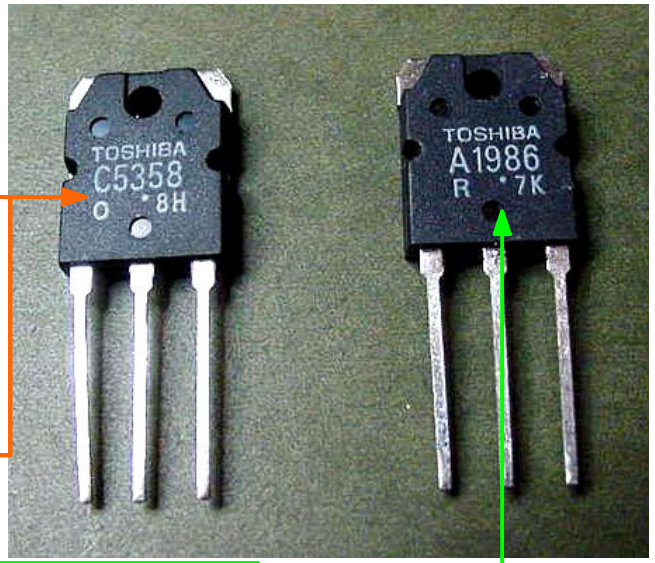
Not acceptable substitute

Not acceptable substitute

Not acceptable substitute



Both may be NPN but belong to different classification. Sub between C and D is not often recommended.



Even though both are PNP, the two belong to two different classification. Subbing B to A or A to B is not recommended without all the engineering facts addressed.

ONKYO PARTS LOOKUP
and TERMINOLOGY

Important Note:

If one of the Pair parts must be substituted, one also must replace the Pair following the given guideline.

The Sub for A may be found in A, for B in B, for C in C and for D in D unless specifically recommended by ONKYO. "See page 5"

The pair for A is C and the pair for B is D. true only if the Suffixes of the transistors are the same. Two are considered only when the pairs suffixes correspond. A component having a Suffix (O) is only a match to a pair having same suffix (O). (See pages 5, 6, and 8).

If two components are made to operate as matched pairs such as in power amplifier drivers and output stages, consider maintaining the safety and integrity rules as provided.

It is also important to know some of these devises may be applied in critical safety noted circuitry such as switching power supply and regulators. Therefore, one must do all that is possible to keep the part replacement order as indicated in the manual.

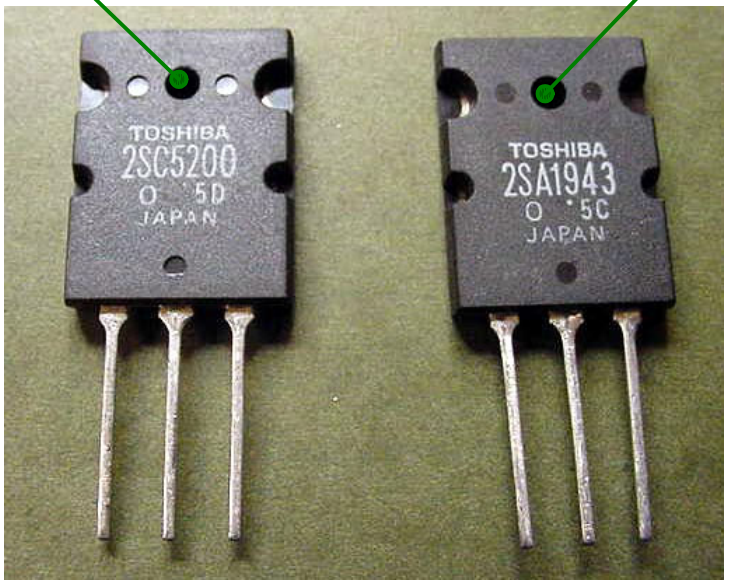
Should you find a part is not in a stock or back ordered, please make the appropriate parts lookup to obtain a substitute but matched pair.

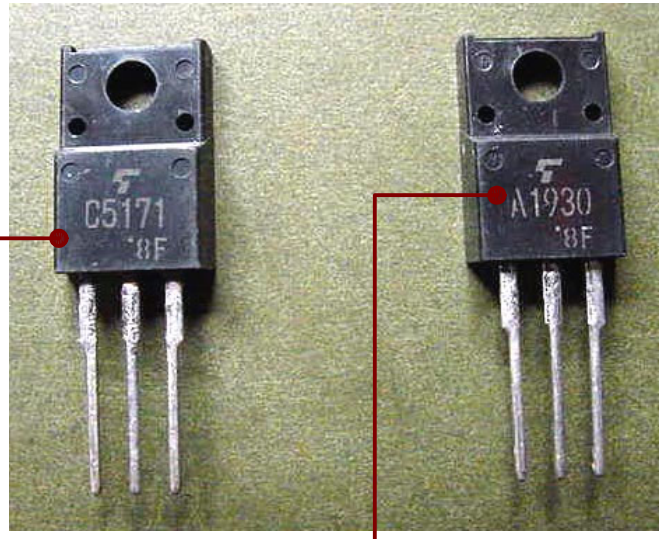
ONKYO PARTS LOOKUP
and TERMINOLOGY

Suffix to a device is to show its differing specification form same classification and ID part.

2SC### - O → Correct Match pair → 2SA### - O → Not acceptable Match Pair. → 2SC### - R

Not acceptable match pair





Suffix to a device is to show its differing specification form same classification and ID part.

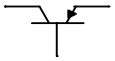
2SC### - 8F → Correct Match pair → 2SA### - 8F → Not acceptable Match Pair. → 2SC### - 7G

Not acceptable match pair

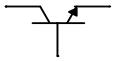
ONKYO PARTS LOOKUP and TERMINOLOGY

Basic Parts Symbol

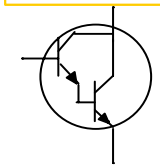
PNP Transistor



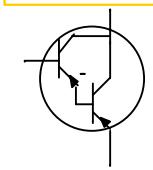
NPN Transistor



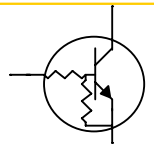
NPN Darling ton Transistor



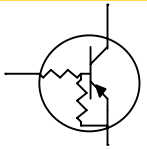
PNP Darling ton Transistor



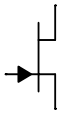
NPN Digital Transistor



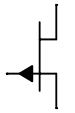
PNP Digital Transistor



N channel junction Field Effect Transistor



P channel junction Field Effect Transistor



Diode

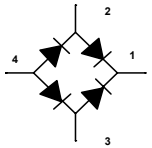
Zener Diode

Light Emitting Diode (LED))

Varactor

Silicon Controlled Rectifier (SCR)

Bridge Rectifier Diode

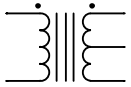


Resistor

Ceramic Capacitor

Electrolytic Capacitor

Transformer



If one of the Pair parts must be substituted, one also must replace the Pair following the given guideline.

The Sub for A may be found in A, for B in B, for C in C and for D in D. The pair for A is C and the pair for B is D. If two components are made to operate as matched pairs such as in power amplifier drivers, and output stages, consider maintaining the safety and integrity rules as provided.

It is also important to know some of these devises may be applied in critical safety noted circuitry such as switching power supply and regulators. Therefore, one must do all that is possible to keep the part replacement order as indicated in the manual.

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ONKYO PARTS LOOKUP
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Parts Description	2	S	C	1318	A
Elements	1	2	3	4	5

Element	1	=	Indicated number of active internal or external connections minus one
	2	=	Means Device is registered with EIAJ
	3	=	Polarity and Application
	4	=	Registration Serial Number with EIAJ
	5	=	Suffixes indicates Improvements and or Variation A= First improvement
			B= Second improvement
			An improved version may replace an unimproved version but not vise versa.

ONKYO PARTS LOOKUP
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Most Onkyo's PCB parts have PCB ID which can be seen printed on the PCB towards a corner edge. These IDs are **NOT** part numbers, rather a Production Descriptive Name ID.

The PCB below is a TX-DS989DSP (digital) Signal Processor) assembly. The PCB ID on this PCB is seen top left (See zoomed image).
NCDG-6830 is a descriptive ID prior to PCB being populated with components. Service manual refers to these as NADG-6830 indicating it is a populated PCB. The number below it 25136830B is not a part number. It's Suffix at the end of the digits indicates production series.

Second character in NADG-6830 (NCDG-6830) indicates it is a populated PCB.
The last character in 25136830B indicates revision made or production series. In this case this PCB is a second revision or production series. The suffix is significant ID at times referenced when ever service bulletin is being introduced.

Example: A bulletin may say a given modification may apply to A and B PCB production but not later versions such as C,D,E or F.