

Hammond Service

T E C H N I C A L A I D

↙ SMALL PARTS STORAGE

↙ MINIMUM PARTS LIST

↙ SEMICONDUCTOR CROSS REFERENCE

↙ SOLID STATE COMPONENT SPECS.

↙ VACUUM TUBE LISTING

Hammond Technician Suggested Minimum Parts List

ALL MODELS

How often does a part that sells for a \$1.00 or less cost you \$30.00 or more? If you do not have the part you need the time you waste to go get that part or in scheduling another service call after you obtain the part can easily be worth \$30.00 or more.

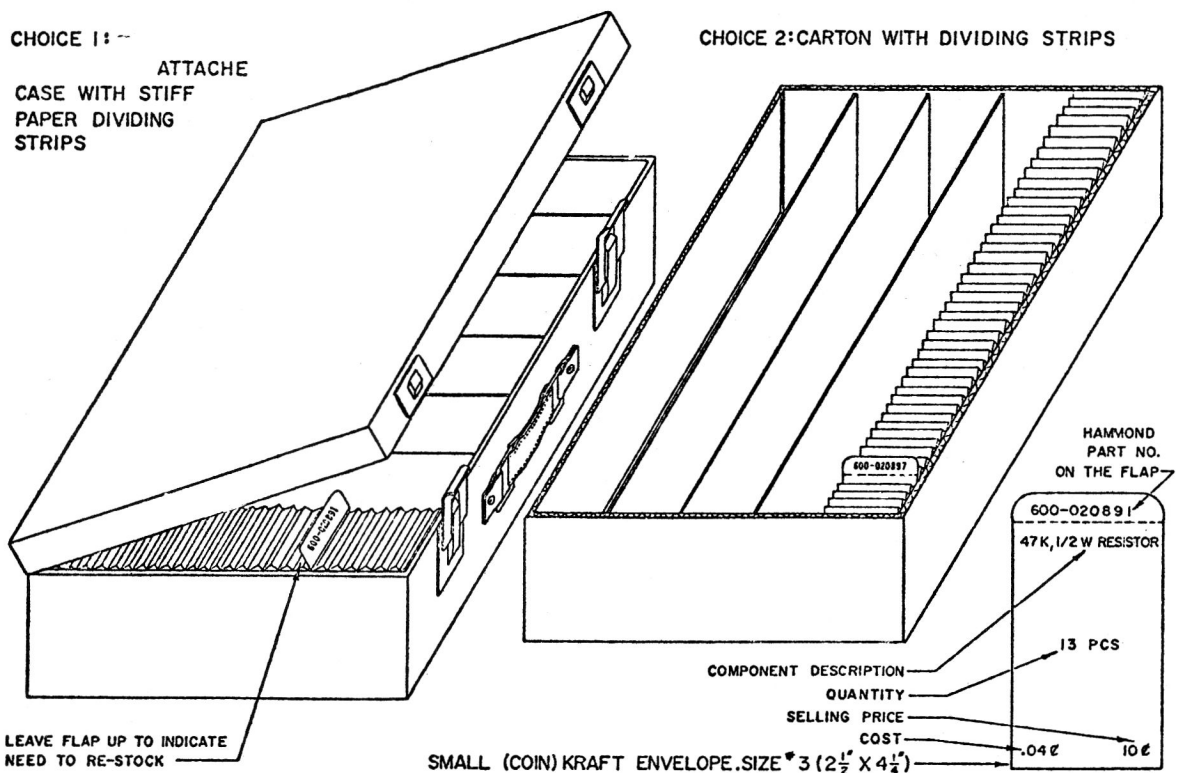
Does it make sense to replace an entire PWB when 99% of the time you could repair the PWB if you have the correct part? If you do not have the PWB, and you do not stock the parts to repair it, you have to order it and make another service call to install it.

Why maintain an inventory of PWB's costing thousands of dollars when you can repair most PWB's with an inventory of parts costing only a few hundred dollars? The parts inventory will never become obsolete while experience has shown that the PWB inventory will, after one or two years, just sit on a shelf and collect dust.

In most cases the time spent in obtaining one inexpensive part would buy a complete assortment of that part i.e. 5 each of all 85 10% 1/2 watt resistors can be obtained for app. \$15.00 at a cost of less than 3¢ each.

The attached sheets are the first in a series to designate the minimum parts inventory that experience has shown is necessary to properly and efficiently service Hammond Organs, and most other makes as well.

A convenient and inexpensive method of inventorying and storing small parts is with a coin envelope index as shown.



INDEX PAGE

Minimum parts list

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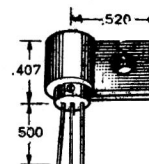
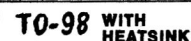
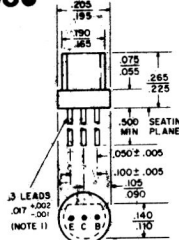
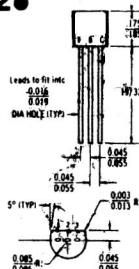
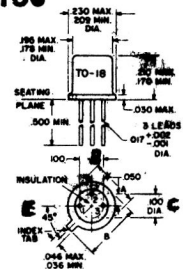
Please send corrections, additions, and/or comments to the service dept. at Franklin Park, Ill.

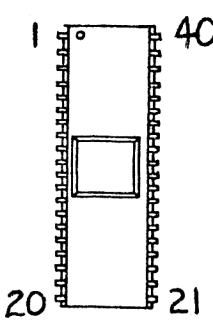
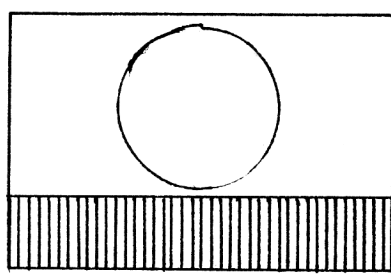
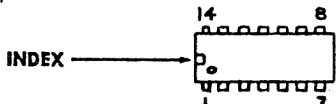
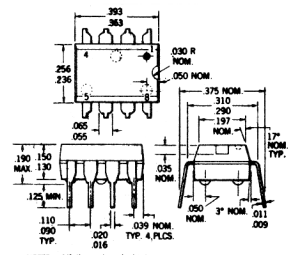
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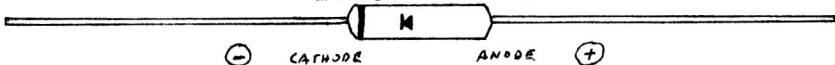
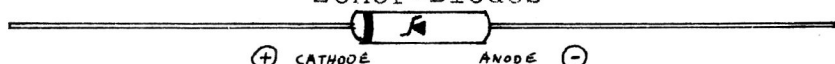
MANY OF THE COMPONENTS SHOWN ON THE FOLLOWING PAGES ARE STANDARD TO THE ELECTRONIC INDUSTRY AND CAN BE OBTAINED FROM LOCAL ELECTRONIC DISTRIBUTORS.

if # is 0, part above it can be substituted

T0-18.

[illegible]

40P		40P		
				
DUAL IN LINE LEADS		FLAT PAC LEADS		
14 P		8 P		8P
				
DUAL IN LINE LEADS		DUAL IN LINE LEADS		OCTAL LEADS
Part No.	Type	Case	Comments	#
075-000380	MOS	40p dil	Divider Keyer	1
075-000424	MOS	40p dil	Divider keyer	1
075-000426	MOS	40p dil	Divider Keyer	1
075-000427	MOS	40p dil	Divider Keyer	1
075-000428	MOS	40p flat	Divider Keyer Piper	1
075-000428-001DS		40p dil	Divider Keyer Piper	1
075-000429	MOS	40p dil	Divider Keyer	1
075-00430	MOS	40p dil	RHYTHM	1
075-000090	MOS	8p dil	741 OP AMP case can be T0-5, 8 leads	2
075-042148		14p dil	6 stage divider PD 455	2
075-043341		14p dil	7 stage divider PL4-C07C	2
075-045037		14p dil	duel stage J-K divider MC-7479P	2
075-046270		14p dil	single J-K divider MC-7472P	2
075-046287		14p dil	4 united fet Nat. MM-552A	2
075-047242	MOS	14p dil	MDD divider C85,G92-C97	2
075-047243	MOS	14p dil	MDD divider C#86-F#91	2
075-047298	MOS	14p dil	7 stage divider	2
075-047720	MOS	14p dil	buffer Nat. 7413	2

Diode - Rectifier						
						
Part No.	Piv	A	W	Type	Comments	#
001-015010	75	50ma		G-signal	1N34A	10
001-015011				G-signal	1N34A	0
001-026080			250mw	S-signal	Lo-Cap. Lo- Leak 1N4148	30
001-026060			250mw	S-signal	Lo-Cap. Lo- Leak 1N4148	0
001-026032			250mw	S-signal	1N461A	0
001-026110			250mw	S-signal		0
001-026010			250mw	S-signal		0
001-024052	200	1A		S-rect.	1N3189	10
001-024051	100	1A		S-rect.	1N4002	0
001-024050	50	1A		S-rect.		0
001-024030	100	300ma		S-rect.	1N440	0
001-024010	100	300ma		S-rect.	1N537	0
001-024030	600	600ma		S-rect.	1N1096	4
001-024061	100	3A		S-rect.	1N4720	10
001-024060	100	3A		S-rect.	1N4720	0
001-024070	50	10A		S-rect.	1N1191	2
001-024080					10-40 mv RMS noise HEP 724 1N2712	2
Zener-Diodes						
						
Part No.	V	A	W	%	Comments	#
001-023027	28	34ma	1	5	1N4750	4
001-023031	22	45ma	1		1N3028	2
001-023032	20	50ma	1		1N4747	2
001-023025	18	50ma	1		1N4746	2
001-023038	16	62ma	1	5	1N4745	2
001-023028	15	66ma	1	5	1N4744	2
001-023034	15	66ma	1	10	1N4744	0
001-023026	14	68ma	1	5	1N4744	4
001-023037	12		1		1N4742	2
001-023039	10	86ma	1	5	1N4740	2
001-023035	10	86ma	1		1N4740	0
001-023029	10	83ma	1		1N4740	0
001-023033	6	160ma	1		1N1766	2
001-024061	5	160ma	1	5	1N4733	2
001-023030	5	162ma	1	10	1N4733	0
001-023036	4	180ma	1		1N4730	2
001-023046	28		3	5	1N5363	2
001-023040	28	100ma	3	10	1N5363	0
001-023045	18	165ma	3		1N5355A	2
001-023041	15	200ma	3		1N5352	2
001-023047	14		3			2
001-023044	13.5	215ma	3	5	1N5350A	2
001-023042	7	400ma	3		1N5343	2
001-023043	6	215ma	3	10	1N5340A	2
001-023010	3.9	850ma	3.5		could use 023036 1N5335	2
001-023020	7.5	1.35A	10		1N297B	2
001-023021	24	350ma	10		1N2986B	2

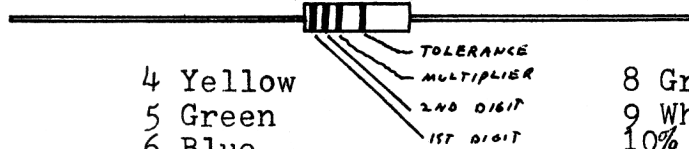
VACUMN TUBES

Part No.	Type	Description-cross reference, etc.	#
none	0A2	Voltage Regulator 150V 5-30 ma. 6073	1
	0C2	Voltage Regulator 75V 5-30 ma.	1
	0C3	Voltage Regulator 105V 5-40 ma. VR-105	1
	0D3	Voltage Regulator 150V 5-40 ma. VR-150	1
none	2A3	Triode	4
002-005200	5AR4	Full Wave Rectifier GZ-34	2
	5BC3A	Full Wave Rectifier	2
	5R4GYB/5RGYA	Full Wave Rectifier	2
002-005201	5U4GB	Full Wave Rectifier GZ-34	4
	5V4	Full Wave Rectifier	2
002-005202	5Y3GT/5V3A/5AU4	Full Wave Rectifier	2
002-006400	6AK6	Power Amp. Pentode	2
	6AL5	Dual Diode	2
	6AN8A	Med.-Mu-Triode, Sharp Cutoff Pentode	2
	6AQ5A	Beam Power Pentode	2
002-006500	6AU4CTA	Half Wave Rectifier	2
	6AU6A	Sharp Cut-off Pentode	2
	6AV6	Dual Diode, High Mu Triode	2
	6BA6	Remote cut-off Pentode EF-93	2
002-006100	6BJ7	Triple Diode	2
002-006700	6BQ5	Power Amp. Pentode EL-84	4
	6BR8A/6FV8	Med-Mu Triode, Sharp cut-off Pentode	2
002-006300	6C4	Med-Mu Triode	2
	6C5	Med-Mu Triode	2
002-006200	6CA4	Full Wave Rectifier EZ-81	2
002-006701	6CA7	Power Amp. Pentode EL-34	2
	6DR7	Dissimilar Dual Triode	2
	6EU7	Twin Triode	2
	6F5	High Mu Triode	2
	6F8	Med-Mu Twin Triode	2
	6FA7	Diode Sharp Cutt-off, Twin Plate Tetrode	4
	6FH8	Med.-Mu Triode, Three Plate Tetrode	4
002-006303	6FQ8/6CG7	Med-Mu Dual Triode	2
002-006401	6GW8	High Mu Triode, Sharp Cut -off Pentode ECL-86	2
002-006304	6J5	Medium Mu Triode	2
	6J7	Sharp Cut-off Pentode	2
	6K6GT	Power Amp. Pentode	2
	6K11/6Q11	Twin high Mu Triode, Med-Mu Triode	2
	6KM8	Diode, Three Plate Tetrode	2
	6L6GC	Beam Power Amp.	8
	6S4A	Med-Mu Triode	2
002-006305	6SC7	Hi-Mu Twin Triode	2
002-006502	6SJ7	Sharp Cut-off Pentode	2
	6SK7	Remote Cut-off Pentode	2
	6SL7GT	Hi-Mu Twin Triode	2
002-006306	6SN7GTB	Med-Mu Twin Triode	8
	6SQ7	Twin Diode, Hi-Mu triode	2
002-006703	6U8A/6KD8	Med-Mu Triode, Sharp Cut-off Pentode ECF-82	2
	6V4	Full Wave Hi-Vac Rectifier EL-80	2
	6V6GTA	Beam Power Amp.	6
	6W4GT	Half Wave Hi-Vac Rectifier	2
002-006201	6X4	Full Wave Hi-Vac Rectifier	2
	6X5GT	Full Wave Hi-Vac Rectifier	2
	6X8A	Triode, Pentode Converter	2

Part No.	Type	Description-cross reference, etc.	#
	7A4	Remote Cut-off R F Pentode	2
	7A8	Octode Converter	2
	7B5	Power Amp. Pentode	2
	7B6	Duplex Diode, Hi-Mu Triode	2
	7B7	Remote Cut-off R F Pentode	2
	7F8	Hi-Freq. Twin Triode	2
	12AT7	Twin Triode ECC-81	2
	12AU6	Sharp Cut-off R F Pentode	2
002-012300	12AU7A	Med-Mu Twin Triode ECC-82	8
	12AV6	Duplex Diode, Hi-Mu Triode	2
	12AV7	Twin Triode	2
002-012301	12AX7A	Hi-Mu Twin Triode 7025 ECC-83	4
002-000001	12AX7	Matched Pair Green Label for H Perc.	0
	12AY7	Twin Triode	2
	12AZ7A	Twin Triode	2
002-012302	12BH7A	Med-Mu Twin Triode	2
	12DT8	Hi-Mu Dual Triode	2
	12FQ8	Twin Double Plate Triode	8
	12V6GT	Beam Power Amp.	2
none	56	Med-Mu Triode	2
none	57	Sharp Cut-off Pentode	2
	5881	Beam Power Amp. (special 6L6-G)	4
002-006503	6267	EF-86	2
	6550	Power Pentode	4
	6973	Power Pentode	4
	7025	Hi-Mu TwinTriode (special 12AX7A)	2
	7027A	Beam Power Amp.	4
	7043		2
	7189	Power Pentode	4
002-006402	7199	Med-Mu Triode, Sharp Cut-off Pentode	2
002-006307	7247	Dual Triode	2
002-006704	7591A	Power Pentode	4
	7868	Power Pentode	4
002-006705	KT-88		2

Tubes used in Hammond Organs and/or Tone Cabinets etc. have a Hammond part number or the notation (none).

Resistors 1/2W 10%



0 Black
1 Brown
2 Red
3 Orange

4 Yellow
5 Green
6 Blue
7 Violet

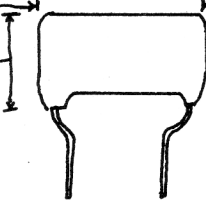
8 Grey
9 White
10% Silver
5% Gold

OHMS	#	OHMS	#	OHMS	#	OHMS	#	OHMS	#	OHMS	#	OHMS	#	OHMS	#
		10	5	100	5	1.0K	5	10K	5	100K	5	1.0M	5	10M	5
		12	5	120	5	1.2K	5	12K	5	120K	5	1.2M	5	12M	5
		15	5	150	5	1.5K	5	15K	5	150K	5	1.5M	5	15M	5
		18	5	180	5	1.8K	5	18K	5	180K	5	1.8M	5	18M	5
2.2	5	22	5	220	5	2.2K	5	22K	5	220K	5	2.2M	5	22M	5
2.7	5	27	5	270	5	2.7K	5	27K	5	270K	5	2.7M	5		
3.3	5	33	5	330	5	3.3K	5	33K	5	330K	5	3.3M	5		
3.9	5	39	5	390	5	3.9K	5	39K	5	390K	5	3.9M	5		
4.7	5	47	5	470	5	4.7K	5	47K	5	470K	5	4.7M	5		
5.6	5	56	5	560	5	5.6K	5	56K	5	560K	5	5.6M	5		
6.8	5	68	5	680	5	6.8K	5	68K	5	680K	5	6.8M	5		
8.2	5	82	5	820	5	8.2K	5	82K	5	820K	5	8.2M	5		

Capacitor 100V PWB-(orange drop)

.007 - 1.250

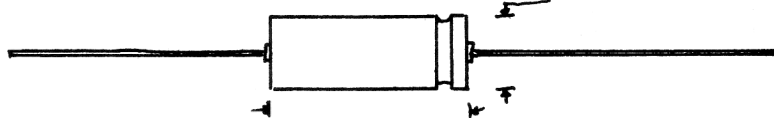
5/16 - 63/64



13/64 - 47/64



uF	#	uF	#	uF	#
.001	2	.01	2	.1	2
.0012	2	.012	2	.12	2
.0015	2	.015	2	.15	2
.0022	2	.022	2	.22	2
.0027	2	.027	2	.27	2
.0033	2	.033	2	.33	2
.0039	2	.039	2	.39	2
.0047	2	.047	2	.47	2
.0056	2	.056	2	.56	2
.0068	2	.068	2	.68	2
.0082	2	.082	2	.82	2
				1.0	2

Capacitor Electrolytic
Axial Leads

uF	WV	#	uF	WV	#	uF	WV	#
1	50	2	100	10	2	470	10	2
2.2	50	2	100	25	2	470	25	2
3.3	50	2	100	50	2	470	50	2
4.7	50	2	150	10	2	1000	10	2
10	25	2	150	25	2	1000	25	2
10	50	2	150	50	2	1500	10	2
22	25	2	220	10	2	1500	25	2
22	50	2	220	25	2	2200	10	2
33	25	2	220	50	2	2200	25	2
33	25	2	330	10	2	3000	25	2
47	25	2	330	25	2			
47	25	2	330	50	2			

Capacitor Disc-Ceramic

Part No.	Cap.	V	#	Part No.	Cap.	V	#	Part No.	Cap.	V	#
427-170095	.01	100	2	426-010352	270p		2	426-010703	.0068		2
	.02	100	2	426-010372	330p		2	426-010723	.0082		2
	.03	100	2	426-010392	390p		2	426-010743	.01		2
	.05	100	2	426-010412	470p		2	426-010763	.02		2
	.1	100	2	426-010442	560p		2	426-110652	.03		2
	5p	1000	2	426-010462	680p		2		.05		2
	10p	1000	2	426-010502	.001	1000	10				
426-010112	27p		2	426-010522	.0012		2	419-040052	.1	500	2
426-010172	47p		2	426-010542	.0015		2				
426-010212	68p		2	426-010583	.0012		2				
426-010252	100p		10		.0033	1000	2				
426-010292	150p		2	426-010643	.0039		2				
426-010322	200p		2	426-010663	.0047		2				
426-010332	220p		2		.0056	1000	2				

Capacitor Tantalum

Part No.	Cap.	V	#	Part No.	Cap.	V	#	Part No.	Cap.	V	#
435-474352	.047	35	2	414-020112	.82		2	414-040132	4.7	25	2
414-040032	.22	25	2	414-240092	1	25	2	414-050142	6.8	35	2
414-240042	.33	25	2	414-240102	1.5	25	2	414-020112	22	10	2
414-240052	.47	35	2	414-250112	2.2	35	2				
414-240062	.56		2	414-240122	3.3	25	2				
414-250072	.68	25	2	414-220262	3.9	15	2				

Capacitor Polystyrene

Part No.	Cap.	#	Part No.	Cap.	#	Part No.	Cap.	#
410-010181	100p	2	410-010204	3,270p	2	411-050114	18,000p	2
409-020014	613p	2	410-010204	3,720p	2	411-050114	18,500p	2
409-020024	819p	2	410-010214	4,630p	2	411-050124	26,200p	2
409-020034	1,160p	2	411-050084	6,550p	2	411-050134	36,200p	2
409-020044	1,640p	2	411-050094	9,260p	2	411-050014	76,422p	2
410-010194	2,320p	2	411-050104	13,100p	2	411-050144	78,400p	2

Resistor PWB potentiometer

Part No.	Res.	#	Part No.	Res.	#	Part No.	Res.	#
676-000052	100	2	676-000014	10K	2	676-000077	250K	2
676-000053	220	2	676-000015	20K	2	676-000080	500K	2
676-000057	1K	2	676-000069	50K	2	676-000033	1M	2
676-000061	5K	2	676-000073	100K	2			

