

MOTOR UNIT (MU, LMU AND YMU)
PARTS

FIGURE	CONTENTS	PAGE
1	Motor Unit Application Chart	2
2	Synchronous Motor Cross-Reference Chart	3
3	Synchronous Motor Assemblies (Standard or Heavy Duty)	4
4	Relay and Capacitor Mounting (Synchronous)	5
5	Relay and Capacitor Mounting (Synchronous)	6
6	Relay and Capacitor Mounting	7
7	Relay and Capacitor Mounting (Synchronous)	8
8	Relay and Capacitor Mounting (Synchronous)	9
9	Synchronous Motor Assemblies (Miniature)	10
10	Relay and Capacitor Mounting (Synchronous)	11
11	Relay, Capacitor Mounting and Bracket (Synchronous)	12
12	Synchronous Motor Mounting with Centrifugal Switch Assembly	13
13	Relay and Capacitor Mounting (Synchronous)	14
14	Series Motor Cross-Reference Chart	15
15	Series Motor Assemblies	16
16	Brush Assemblies	17
17	150845 and 324116 Governor Assemblies	18
18	154628 Governor Assembly	19
19	Series Motor Mounting Parts	20
20	Series Motor Mounting Parts with RF Suppression	21
21	Series Motor Mounting Parts with RF Suppression	22
22	Series Motor Mounting Parts	23
23	Series Motor Mounting Parts with RF Suppression	24
24	Series Motor Mounting Parts with RF Suppression	25
25	174546 Modification Kit to Provide Motor Running Contacts	26
26	174551 (less cable) 175198 (with cable) Modification Kits to Provide Motor Running Contacts	26
27	Triac Switch	27
28	Motor Covers	27
	Modification Kits	28
	Modification Kits (Continued)	29
	Numerical Index	30

Units Covered	Operating Characteristics	General Usage	ASR Set	RT Set	High Speed Punch	High Speed Reader	Miniature Trans-Dist.	Miniature Reperf.	Miniature Rec. Selector	Compact Page Printer	Tape Printer (Ticker)	Multiple Mounted Units	Variable Speed	Stack Mounted	Wall Mounted	37 Type
Teletype Code																
LMU3	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600RPM	X														
LMU4	Series, 1/20 HP, 115V/60 Hertz/3600 RPM, RF Sup.	X														
LMU6	Series, 1/20 HP, 115V/60 Hertz/3600 RPM	X														
ⓐLMU10	Series, 1/20 HP, 115V/60 Hertz/3600 RPM, RF Sup.												X			
LMU11	AC Synchronous, 1/12 HP, 115V/60 Hertz/3600 RPM			X												
LMU12	AC Synchronous, 1/12 HP, 115V/60 Hertz/3600 RPM		X									X				
LMU13	Series, 1/15 HP, 115V/60 Hertz/3600 RPM			X												
LMU14	Series, 1/15 HP, 115V/60 Hertz/3600 RPM, RF Sup.		X									X				
LMU15	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM	X														
LMV19	AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM						X		X							
LMU20	AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM															
LMU21	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM													X		
LMU23	DC Series, 1/15 HP, 48V/3600 RPM			X												
LMU24	AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM							X								
LMU26	AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM							X	X							
LMU27	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM														X	
LMU28	Series, 1/20 HP, 115V/60 Hertz/3600 RPM													X		
LMU29	DC Series, 1/15 HP, 48V/3600 RPM	X														
LMU30	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM			X												
LMU31	AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM								X							
LMU32	Series, 1/15 HP, 115V/60 Hertz/3600 RPM, RF Sup.			X												
LMU33	AC Synchronous, 1/20 HP, 115V/50 Hertz/3000 RPM				X											
LMU35	AC Synchronous, 25 MPH, 115V/50 Hertz/3000 RPM					X										
LMU36	AC Synchronous, 1/20 HP, 115V/50 Hertz/3000 RPM			X												
LMU37	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM									X						
LMU38	AC Synchronous, 1/20 HP, 115V/50 Hertz/3000 RPM	X														
LMU39	Series, 1/15 HP, 115V/60 Hertz/3600 RPM, RF Sup.		X									X				
LMU41	Series, 1/20 HP, 115V/60 Hertz/3600 RPM, RF Sup.	X														
LMU42	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM										X					
MU43	AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM					X										
LMU45	AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM					X										
LMU46	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM				X											
ⓐLMU47	Series, 1/20 HP, 115V/60 Hertz/3600 RPM, RF Sup.												X			
LMU49	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM	X														
LMU50	AC Synchronous, 1/12 HP, 115V/50 Hertz/3000 RPM		X													
LMU51	AC Synchronous, 1/20 HP, 115V/50 Hertz/3000 RPM									X						
LMU52	AC Synchronous, 1/20 HP, 115V/50 Hertz/3000 RPM													X		
LMU55	AC Synchronous, 1/20 HP, 230V/50 Hertz/3000 RPM	X														
LMU56	AC Synchronous, 25 MPH, 115V/60 Hertz/3600 RPM							X								
LMU57	Series, 1/20 HP, 115 V/60 Hertz/3600 RPM	X														
LMU60	Series, 1/20 HP, 115V/60 Hertz/3600 RPM											X				
LMU61	Series, 1/15 HP, 115V/60 Hertz/3600 RPM			X												
LMU63	Series, 1/20 HP, 115V/60 Hertz/3600 RPM, RF Sup.	X														
LMU64	Series, 1/20 HP, 115V/60 Hertz/3600RPM, RF Sup.													X		
YMU2	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM															X
YMU3	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM															X
YMU4	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM															X
YMU5	Series, 1/15 HP, 115V/60 Hertz/3600 RPM															X

ⓐ Requires 173518 Modification Kit for special variable speed application.

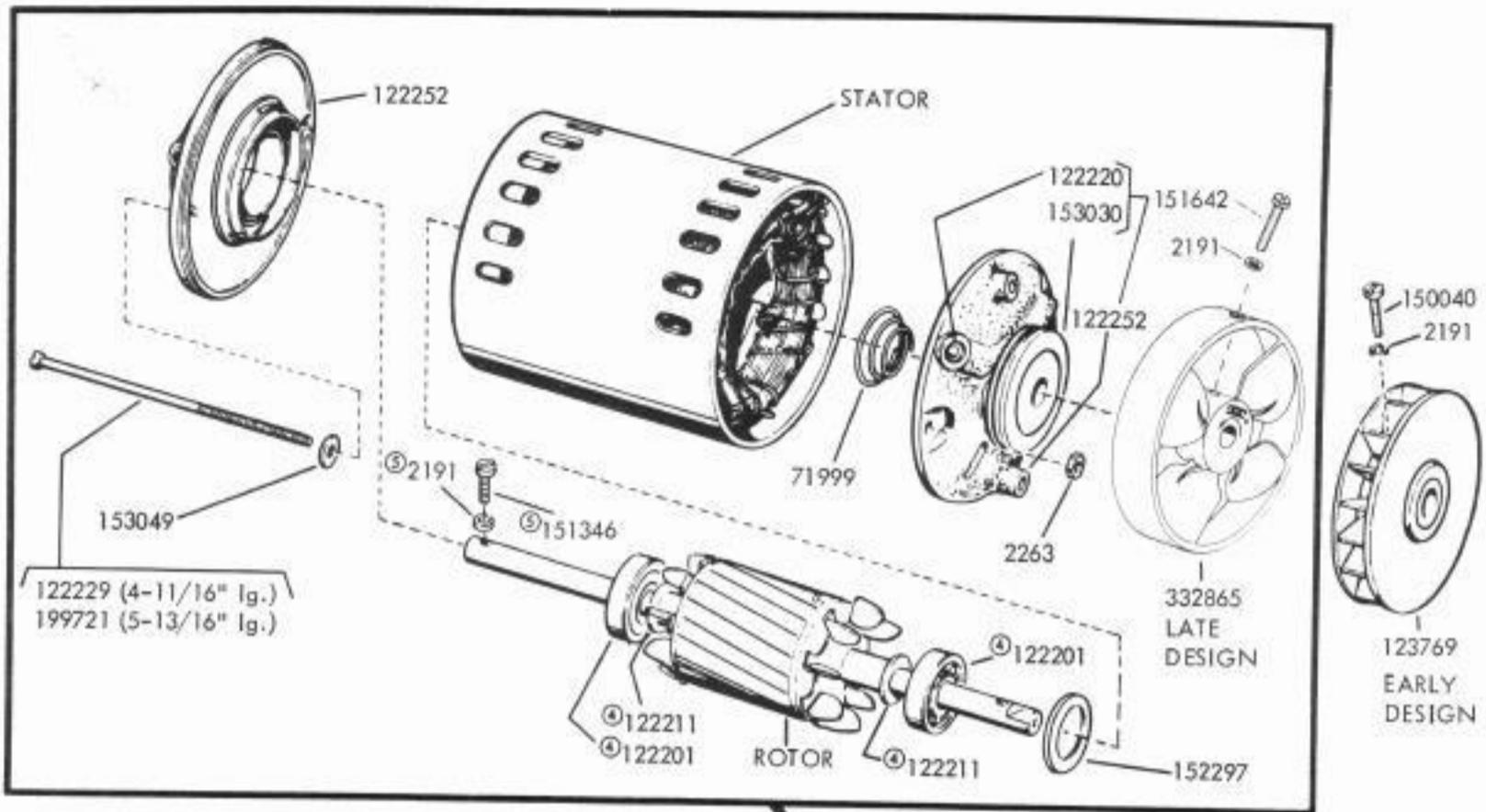
FIGURE 1. MOTOR UNIT APPLICATION CHART

SYNCHRONOUS MOTOR UNITS

Teletype Code	Motor Assembly	Motor Bracket	Mounting Plate	Thermostatic Switch	Fixed Capacitor	Spring or Clamp	Relay	Relay Insulator	Spring or Clamp	Cable Assembly	Jumper
LMU3	151795	305661	305660	122249	122245	305658	151923	305659	305658	151927	96264R (5" lg. Red)
LMU11	155595	305661	305660	160304	160299	305658	160303	305659	305658	151927	96264R (5" lg. Red)
LMU12	159739	305661	305660	160304	160299	305658	160303	305659	305658	151927	96264R (5" lg. Red)
LMU15	170764	305661	305660	122249	122245	305658	151923	305659	305658	151927	96264R (5" lg. Red)
LMU19	161984	142589		174471	162072	151922	173425	162196	151925	161099	96264R (5" lg. Red)
LMU20	161984	142589		174471	162072	151922	173425	162910	160302	162911	96264R (5" lg. Red)
LMU21	151795	164612		122249	122245	151922	151923	164603	151925	151927	96264R (5" lg. Red)
LMU24 and LMU56	310295	142589		fused	162072	151922	173425	162196	151925		176137 (9-1/4" lg. Black w/320410(Terminal)) 96264R (5" lg. Red)
LMU26	161984	142589		174471	162072	151922	173425	162910	160302	162911	96264R (5" lg. Red)
LMU27	178500	176948	176947	122249	122245	151922	151923	151924	151925		
LMU30	178500	305661	305660	122249	122245	305658	151923	305659	305658	151927	96264R (5" lg. Red)
LMU31	161984	142589		174471	162072	151922	173425	162196	151925	179016	96274R (10" lg Red)
LMU33	170764	305661	305660	①193781	122245	305658	151923	305659	305658	151927	96264R (5" lg. Red)
② LMU35	194924	171749		fused	①195172	171702	①195173	171704	171703	195178	
LMU36	178500	305661	305660	①193781	122245	305658	151923	305659	305658	151927	96264R (5" lg. Red)
LMU37	151795	194897		122249	122245	151922	151923	310341	151925	194899	96264R (5" lg. Red)
LMU38	151795	305661	305660	①193781	122245	305658	151923	305659	305658	151927	96264R (5" lg. Red)
LMU42	196830	196839		122249	122245	151922	151923	196794	151925	151927	96264R (5" lg. Red)
LMU43	161984	171749		174471	162072	171702	173425	171704	171703	171810	96264R (5" lg. Red)
LMU45	161984	171749		174471	162072	171702	173425	171704	171703	193181	
LMU46	151795	305661	305660	122249	122245	305658	151923	305659	305658	193236	96264R (5" lg. Red)
LMU49	170764	172795	151920	122249	122245	151922	151923	151924	151925	151927	96264R (5" lg. Red)
③ LMU50	199718	304538	151920	307281	304793	151922	304792		304537	151927	312573 (6" lg. Red w/320418(Terminal)) 312574 (6" lg. Black w/320418(Terminal))
LMU51	151795	194897		①193781	122245	151922	151923	310341	151925	194899	96264R (5" lg. Red)
LMU52	151795	164612		①193781	122245	151922	151923	164603	151925	151927	96264R (5" lg. Red)
LMU55	306063	305661	305660	320269	320270	305658	320271	305659	305658	151927	96264R (5" lg. Red)
YMU2	170764	312979		122249	122245	151922	151923	312977	151925	306320	96262R (4" lg. Red)
YMU3	170764	312979		334877	122245	151922	151923	312977	151925	306320	96262R (4" lg. Red)
YMU4	170764	305661	305660	122249	122245	305658	151923	305659	305658	306320	96274 (10" lg. Red)

FIGURE 2. SYNCHRONOUS MOTOR CROSS — REFERENCE CHART

① For use with motor unit operating on 50 Hertz current
 ② See page 10 for parts peculiar to LMU35
 ③ See page 6 for parts peculiar to LMU50



SYNCHRONOUS MOTOR ASSEMBLY - STANDARD OR HEAVY DUTY

SYNCHRONOUS MOTORS - Standard or Heavy Duty				
DUTY	MOTOR ASSEMBLY	STATOR	ROTOR	MOTOR DATA
Standard	151795	122251	128874	AC Synchronous, 1/20 HP, 115V: 50/60 Hertz, 3000/3600 RPM
Heavy	155595	②160306	160305	AC Synchronous, 1/12 HP, 115V: 60 Hertz, 3600 RPM
Heavy	159739	160306	160305	AC Synchronous, 1/12 HP, 115V: 60 Hertz, 3600 RPM
Standard	①170764	122251	⑥128874	AC Synchronous, 1/20 HP, 115V: 50/60 Hertz, 3000/3600 RPM
Standard	178500	③122251	⑥128874	AC Synchronous, 1/20 HP, 115V: 60 Hertz, 3600 RPM
Standard	②196830	196831	⑥128874	AC Synchronous, 1/20 HP, 115V: 60 Hertz, 3600 RPM
Heavy	199718	199720	199719	AC Synchronous, 1/12 HP, 115V: 50 Hertz, 3000 RPM
Standard	306063	320272	⑥128874	AC Synchronous, 1/20 HP, 230V: 50/60 Hertz, 3000/3600 RPM

- ① Without fan
- ② CW rotation (all others CCW rotation)
- ③ Arranged for inverted mounting
- ④ Common to all rotors
- ⑤ Not part of motor assemblies
- ⑥ New style has flat at end of rotor shaft

FIGURE 3. SYNCHRONOUS MOTOR ASSEMBLIES (STANDARD OR HEAVY DUTY)

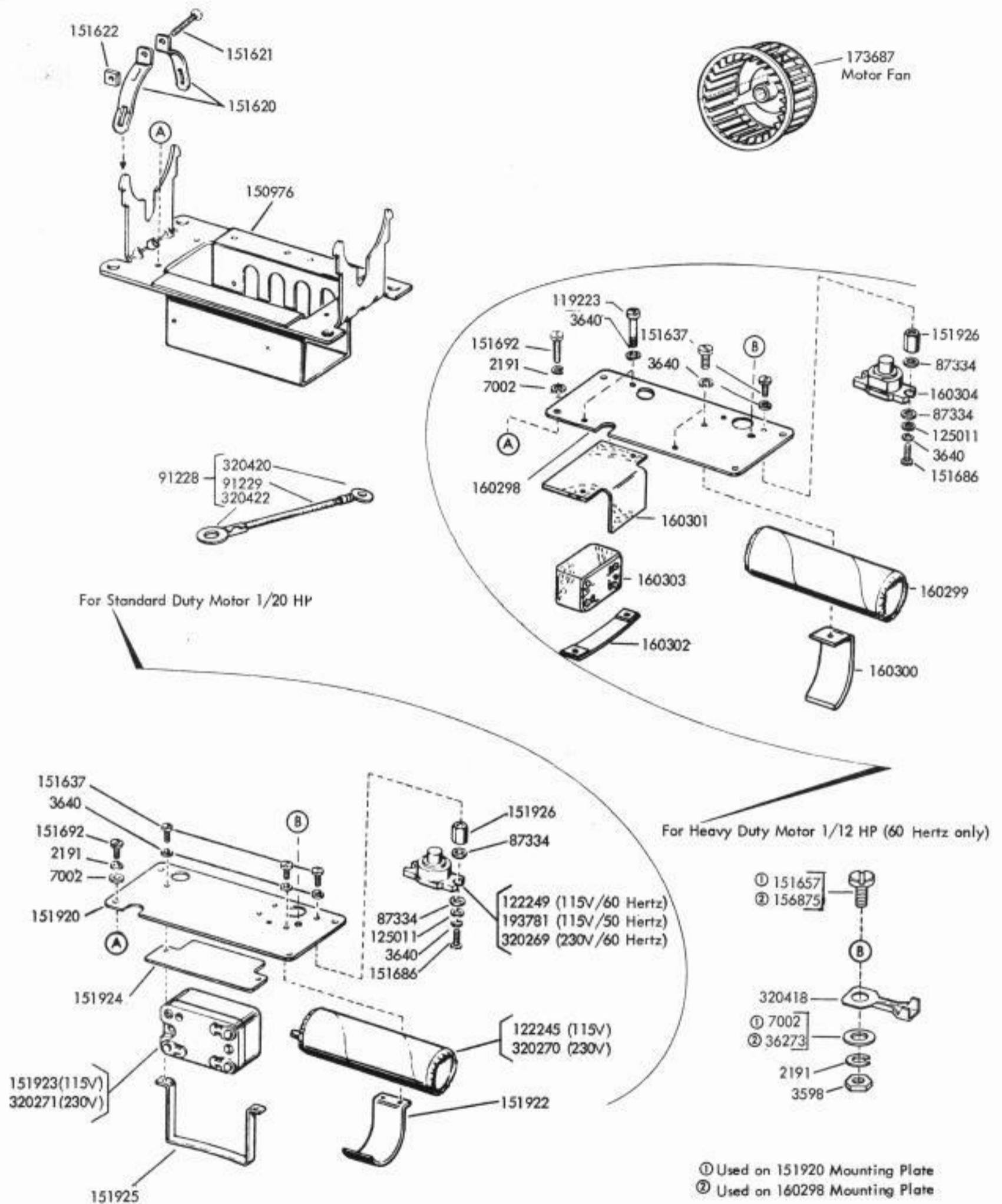


FIGURE 4. RELAY AND CAPACITOR MOUNTING (SYNCHRONOUS)

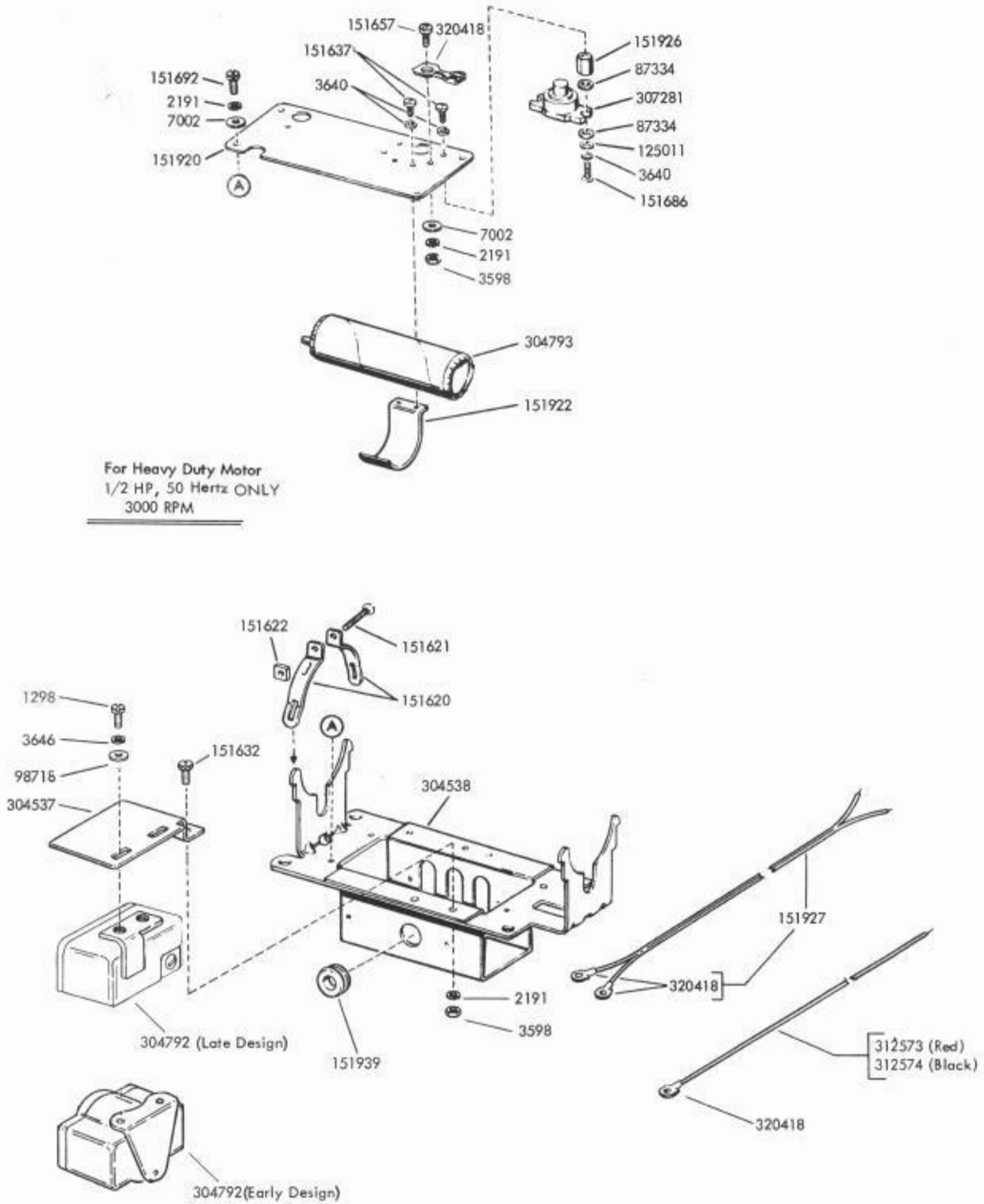


FIGURE 5. RELAY AND CAPACITOR MOUNTING (SYNCHRONOUS)

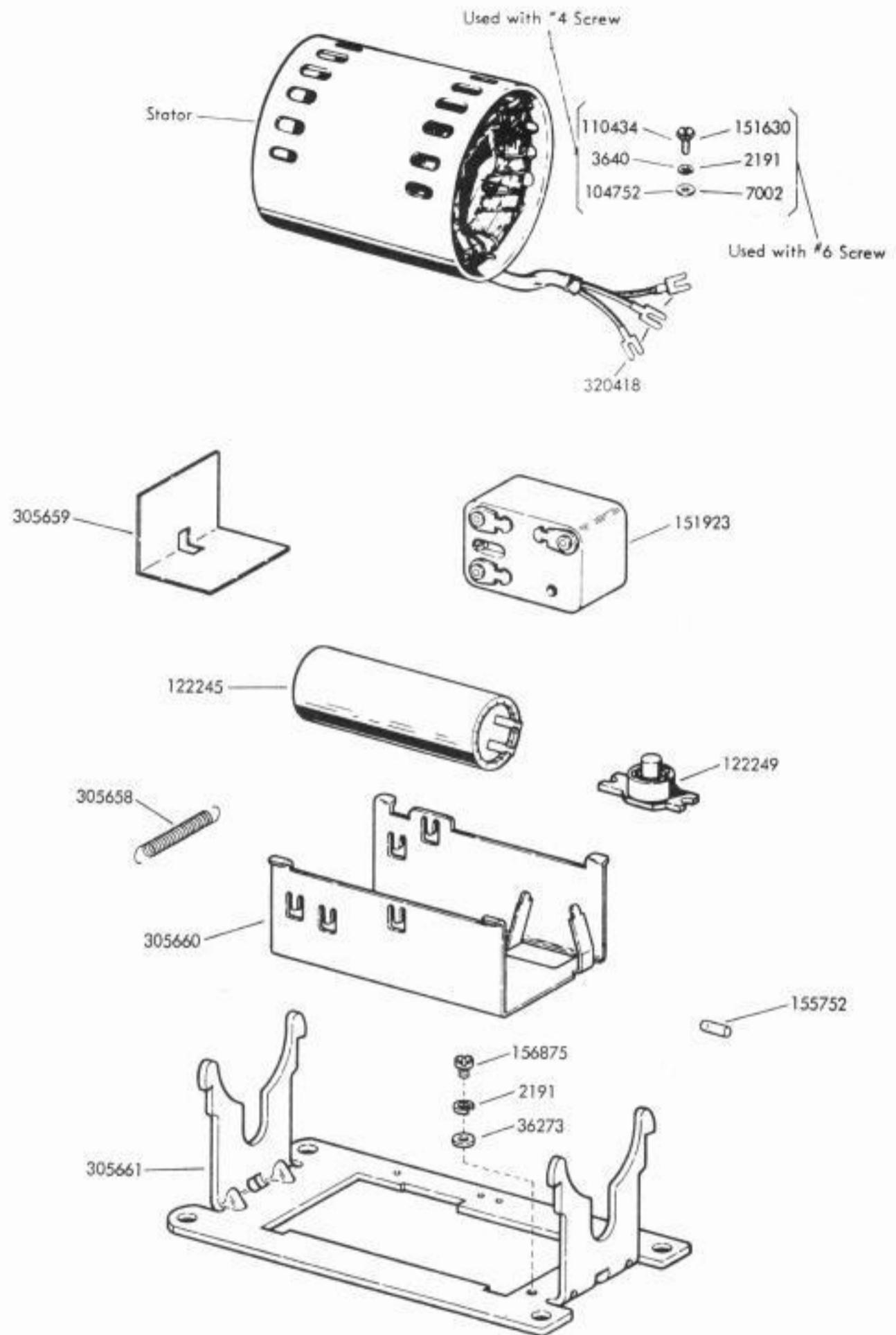


FIGURE 6. RELAY AND CAPACITOR MOUNTING

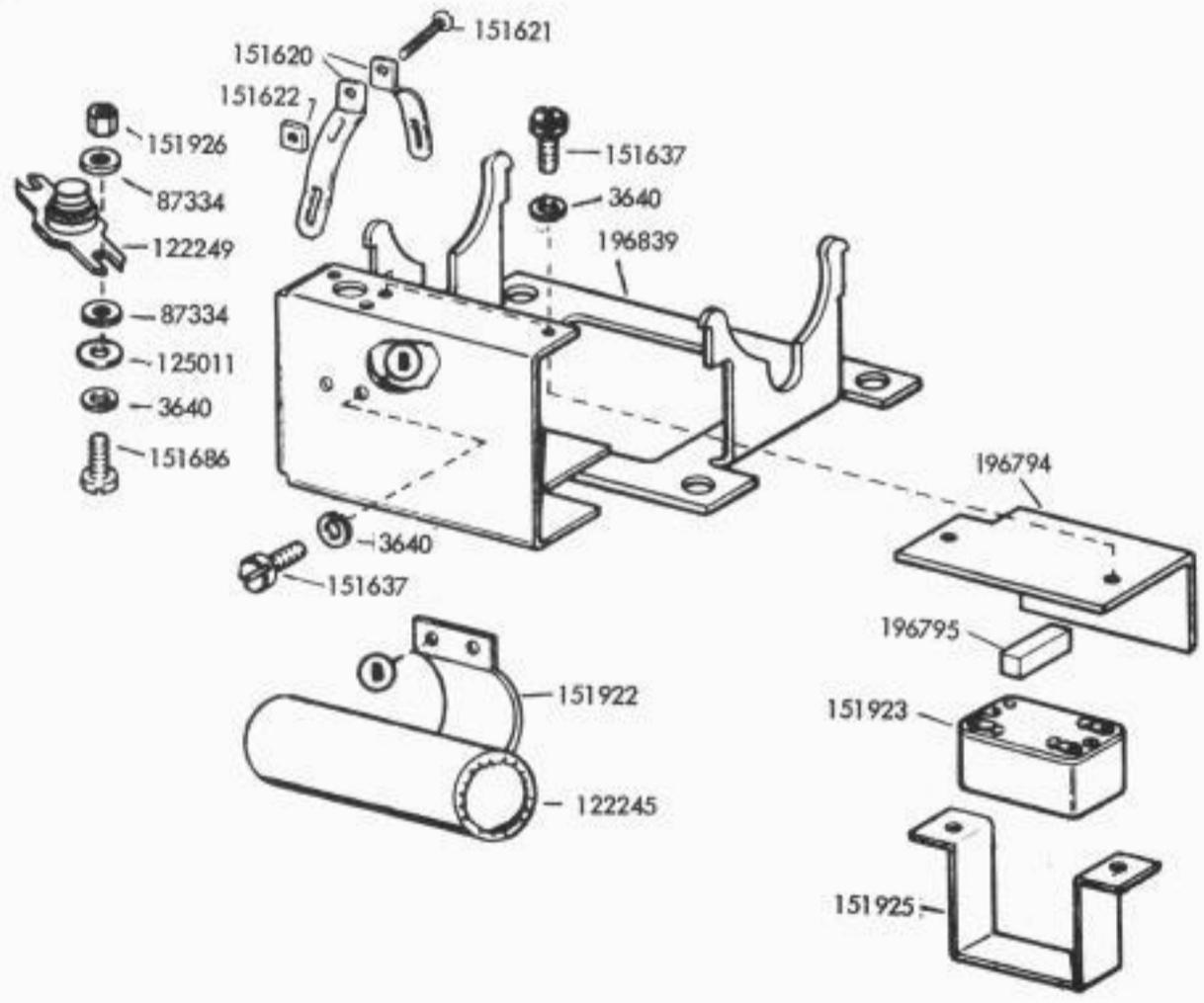
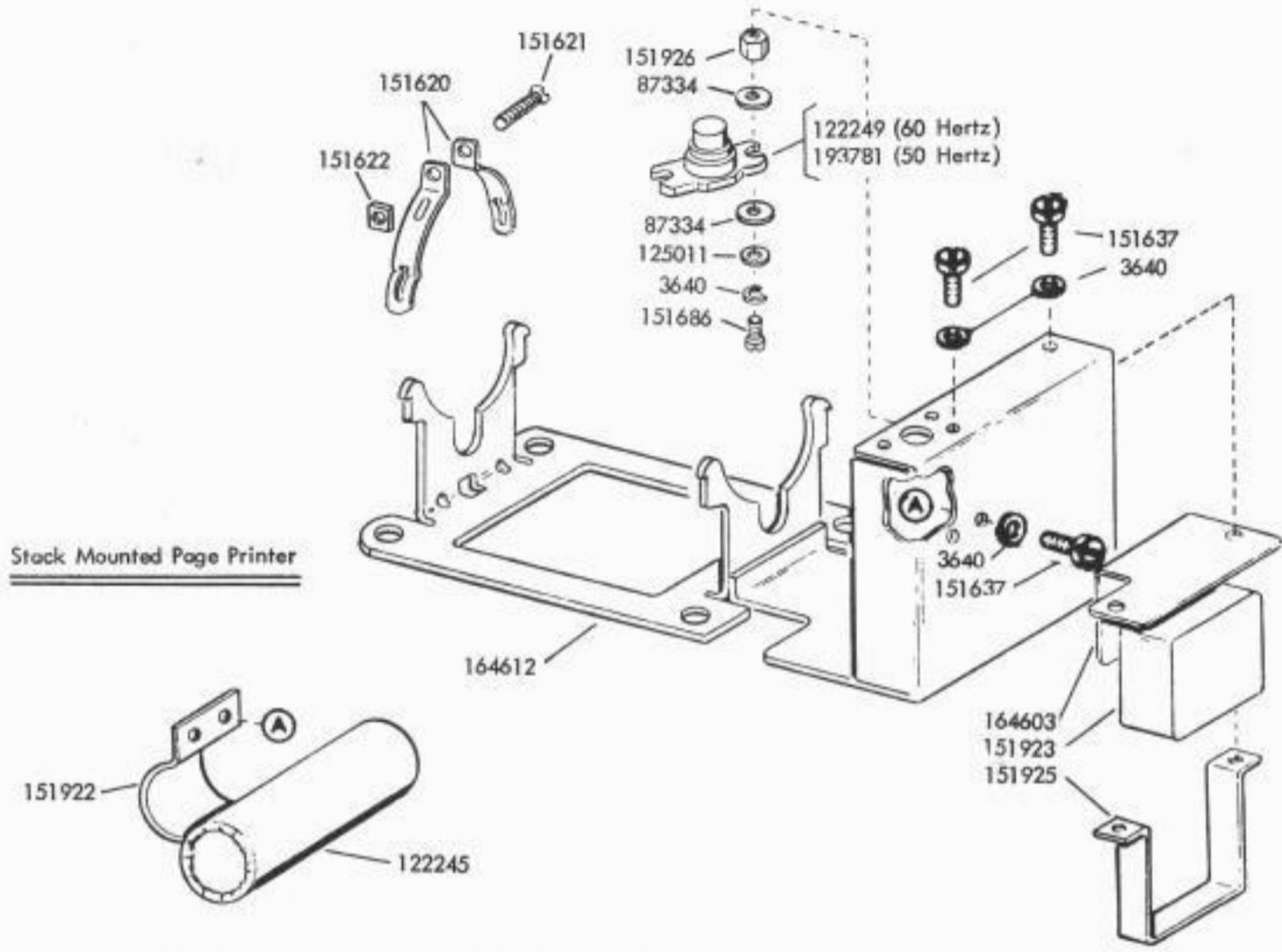
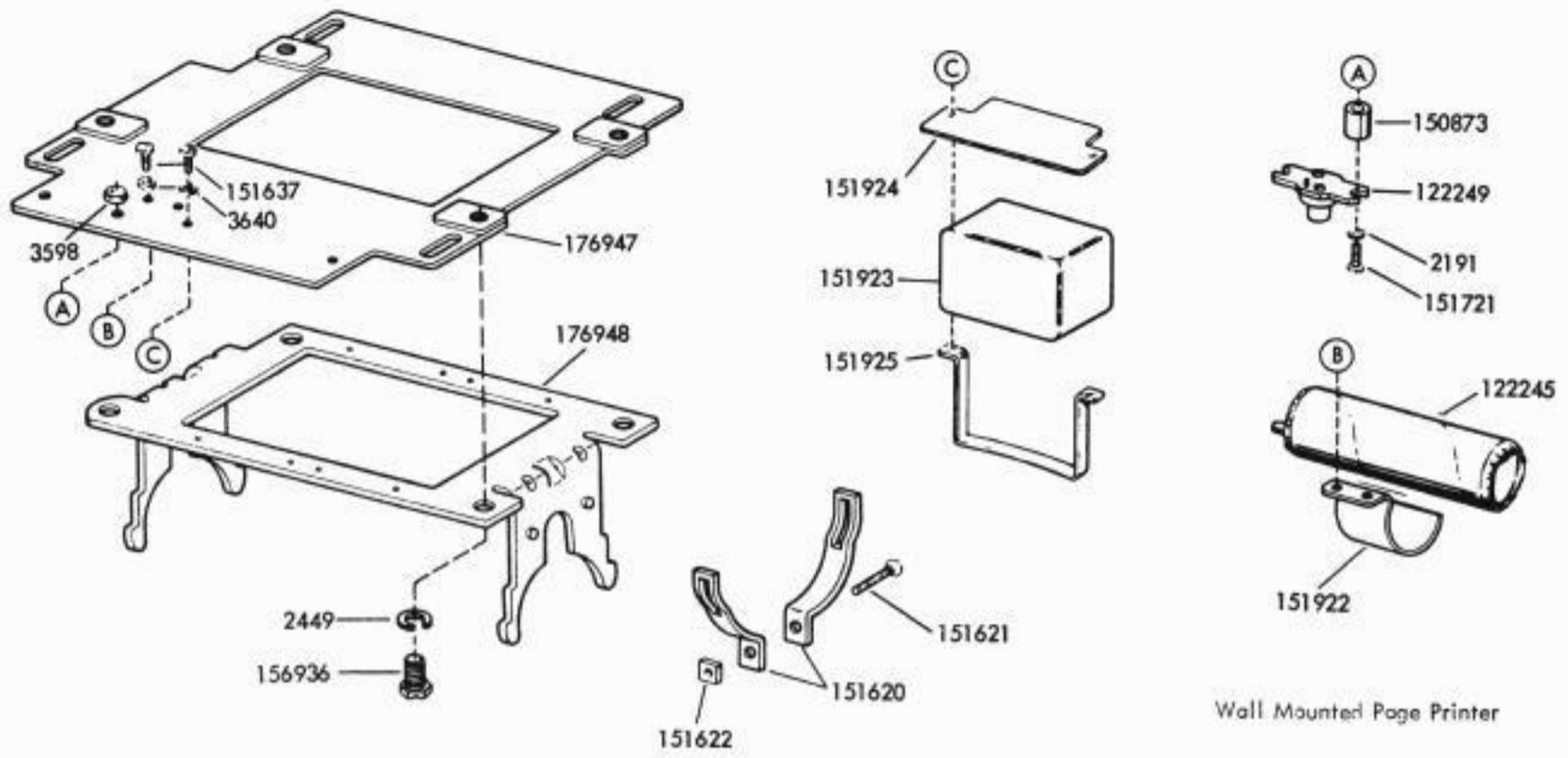
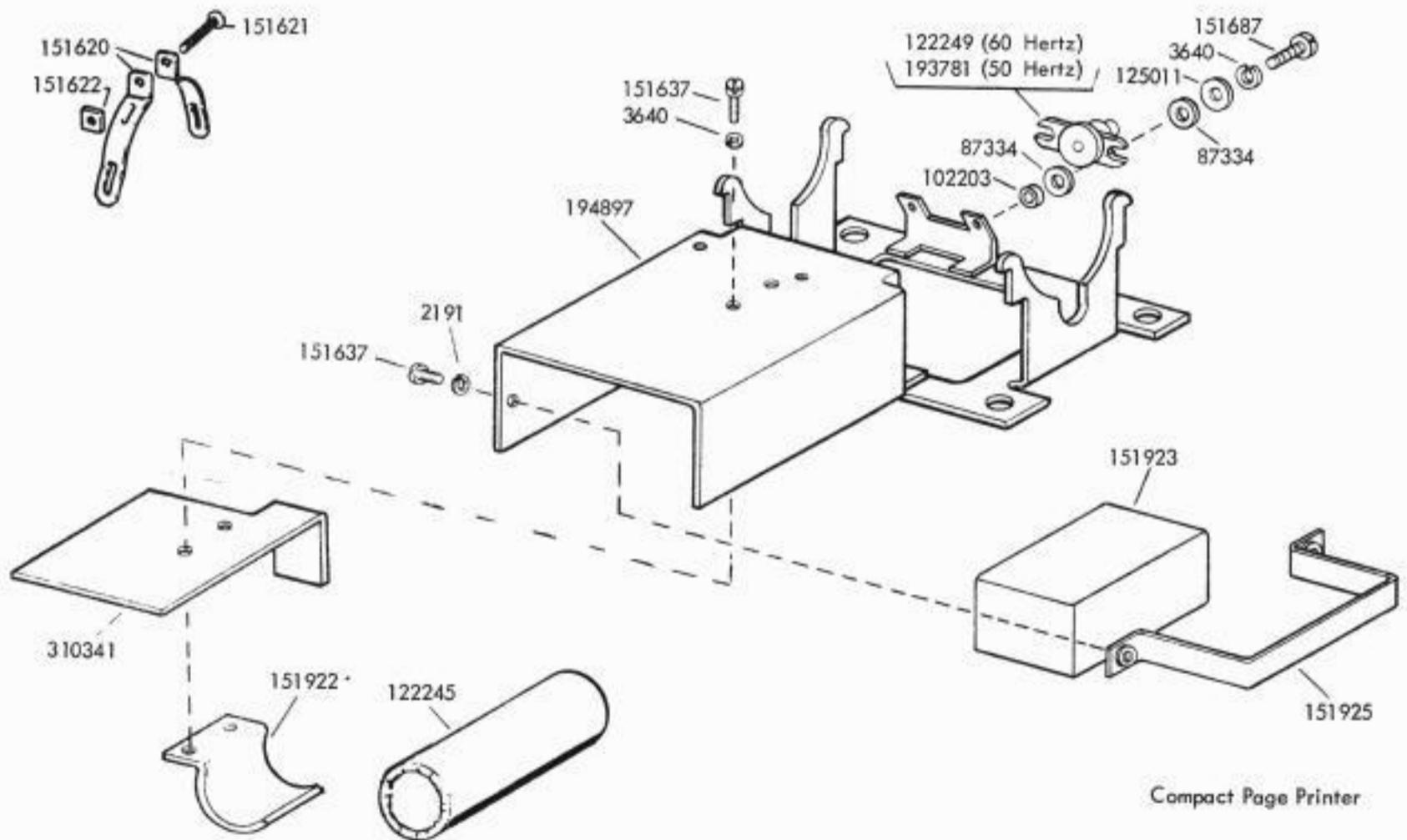


FIGURE 7. RELAY AND CAPACITOR MOUNTING (SYNCHRONOUS)

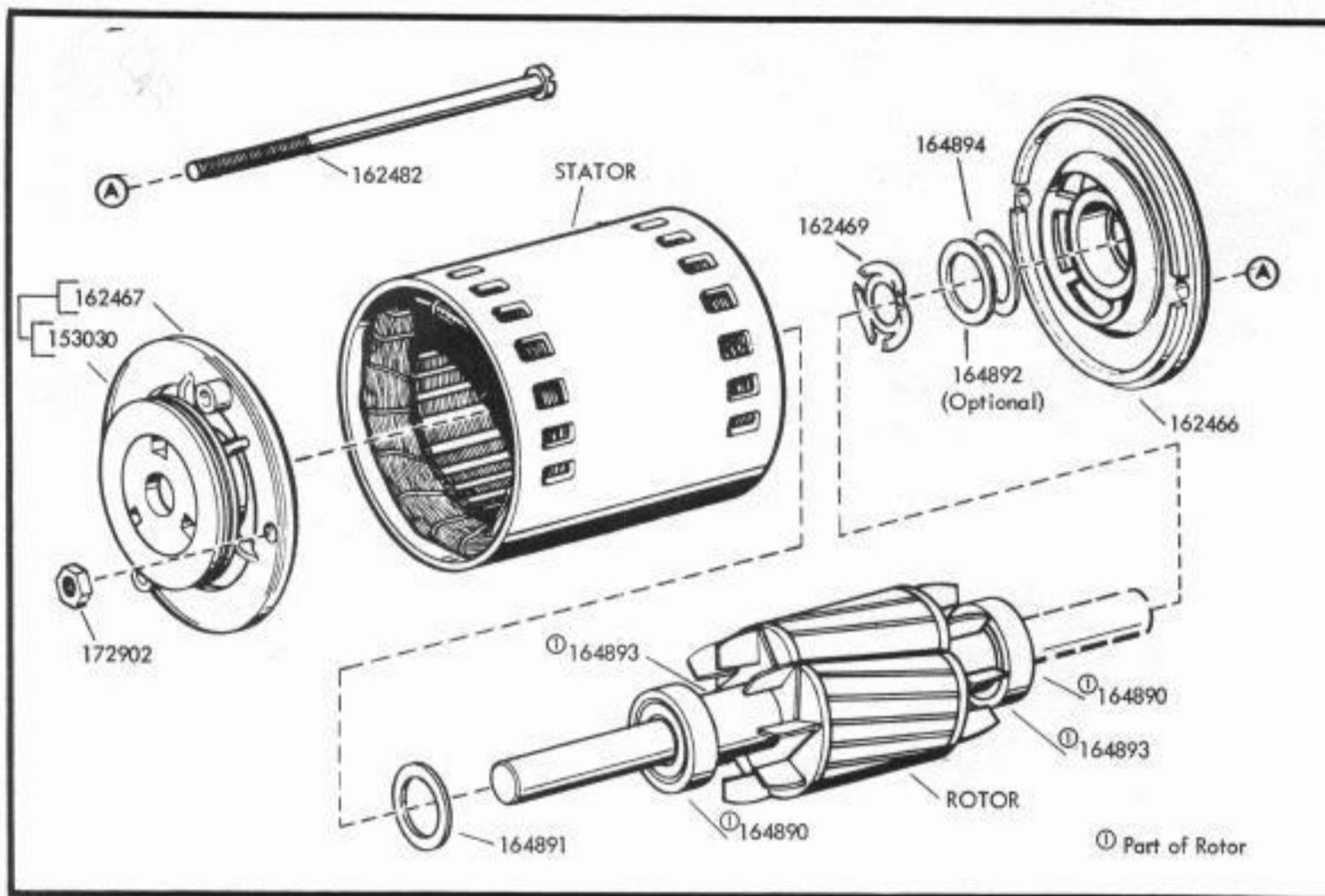


Wall Mounted Page Printer



Compact Page Printer

FIGURE 8. RELAY AND CAPACITOR MOUNTING (SYNCHRONOUS)



MINIATURE MOTOR ASSEMBLY

SYNCHRONOUS MOTORS - Miniature			
MOTOR ASSEMBLY	STATOR	ROTOR	MOTOR DATA
161984	162464	330564	AC Synchronous, 25 MHP, 115V: 60 Hertz, 3600 RPM
194924	195214	330564	AC Synchronous, 25 MHP, 115V: 50 Hertz, 3000 RPM
310295	162464	② 330565	AC Synchronous, 25 MHP, 115V: 60 Hertz, 3600 RPM

② Has double shaft extension

FIGURE 9. SYNCHRONOUS MOTOR ASSEMBLIES (MINIATURE)

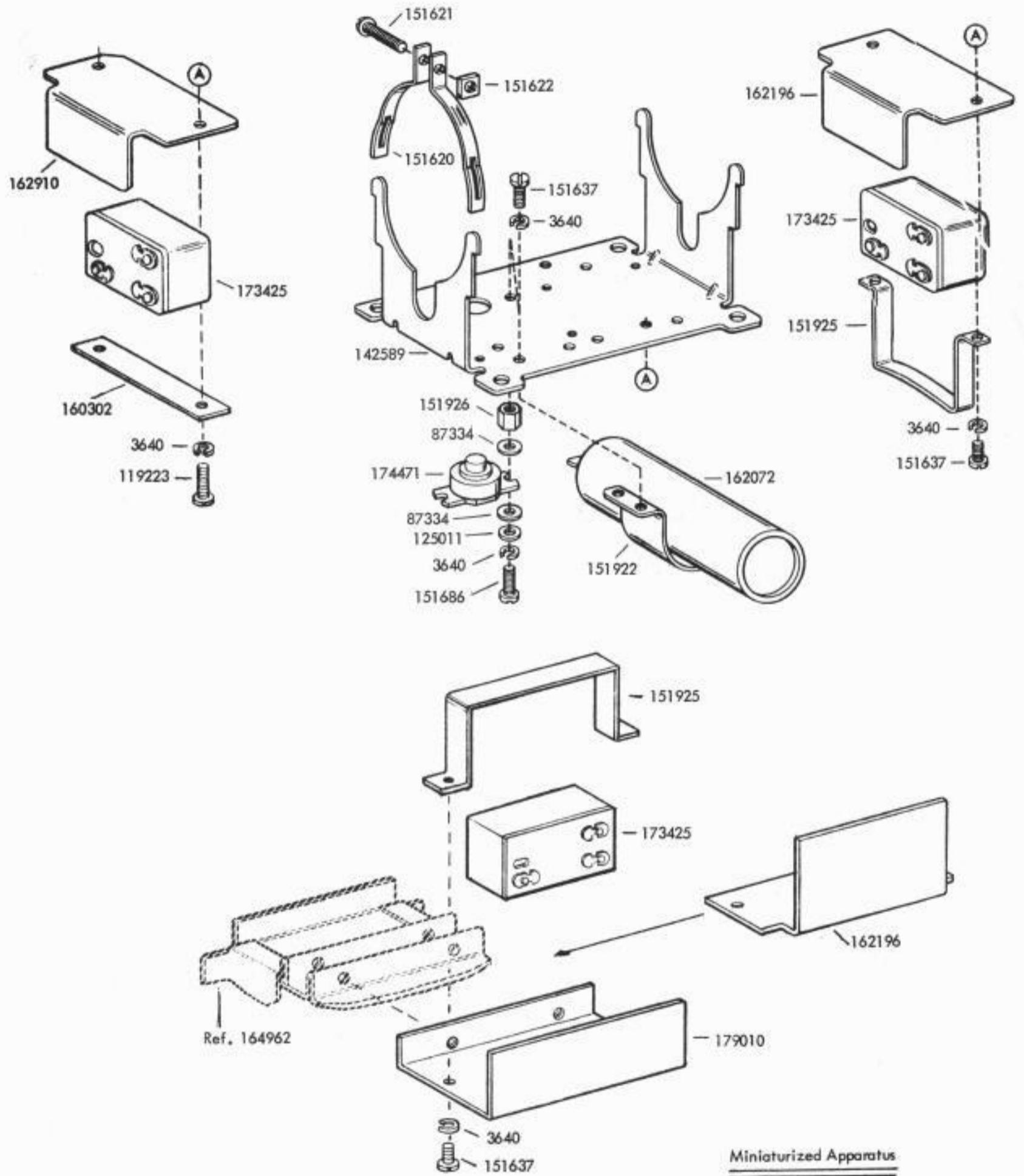


FIGURE 10. RELAY AND CAPACITOR MOUNTING (SYNCHRONOUS)

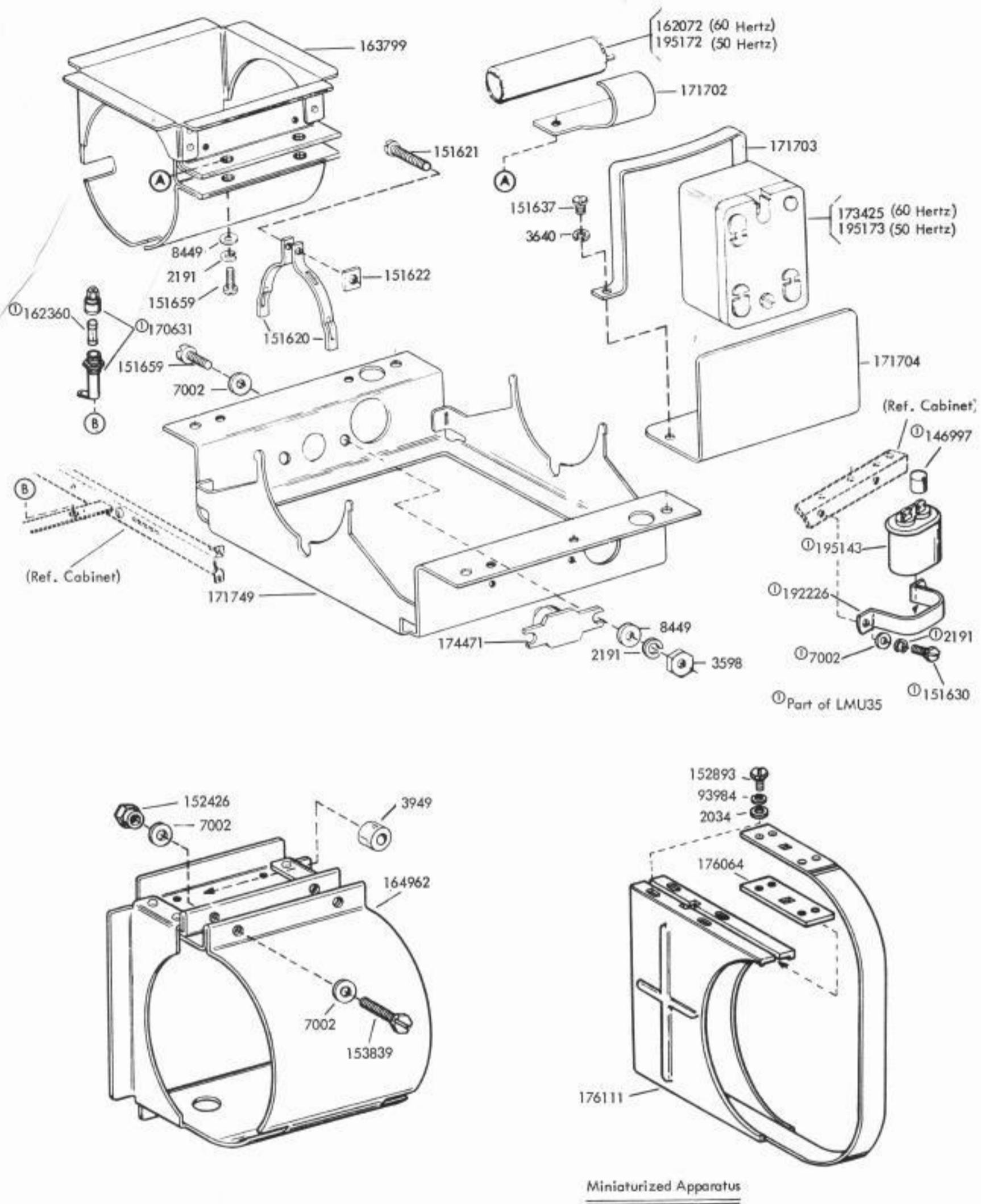


FIGURE 11. RELAY, CAPACITOR MOUNTING AND BRACKET (SYNCHRONOUS)

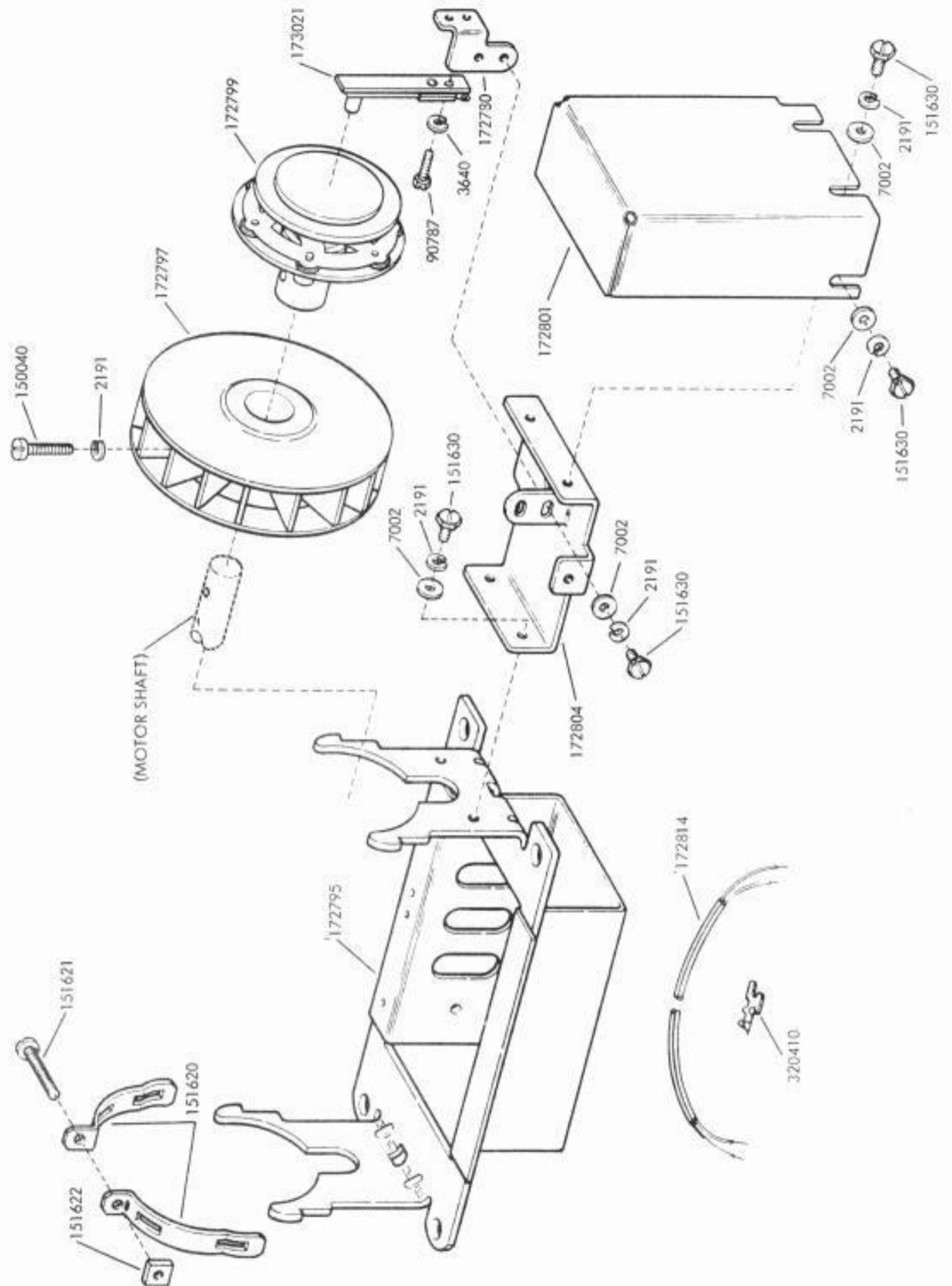


FIGURE 12. SYNCHRONOUS MOTOR MOUNTING WITH CENTRIFUGAL SWITCH ASSEMBLY

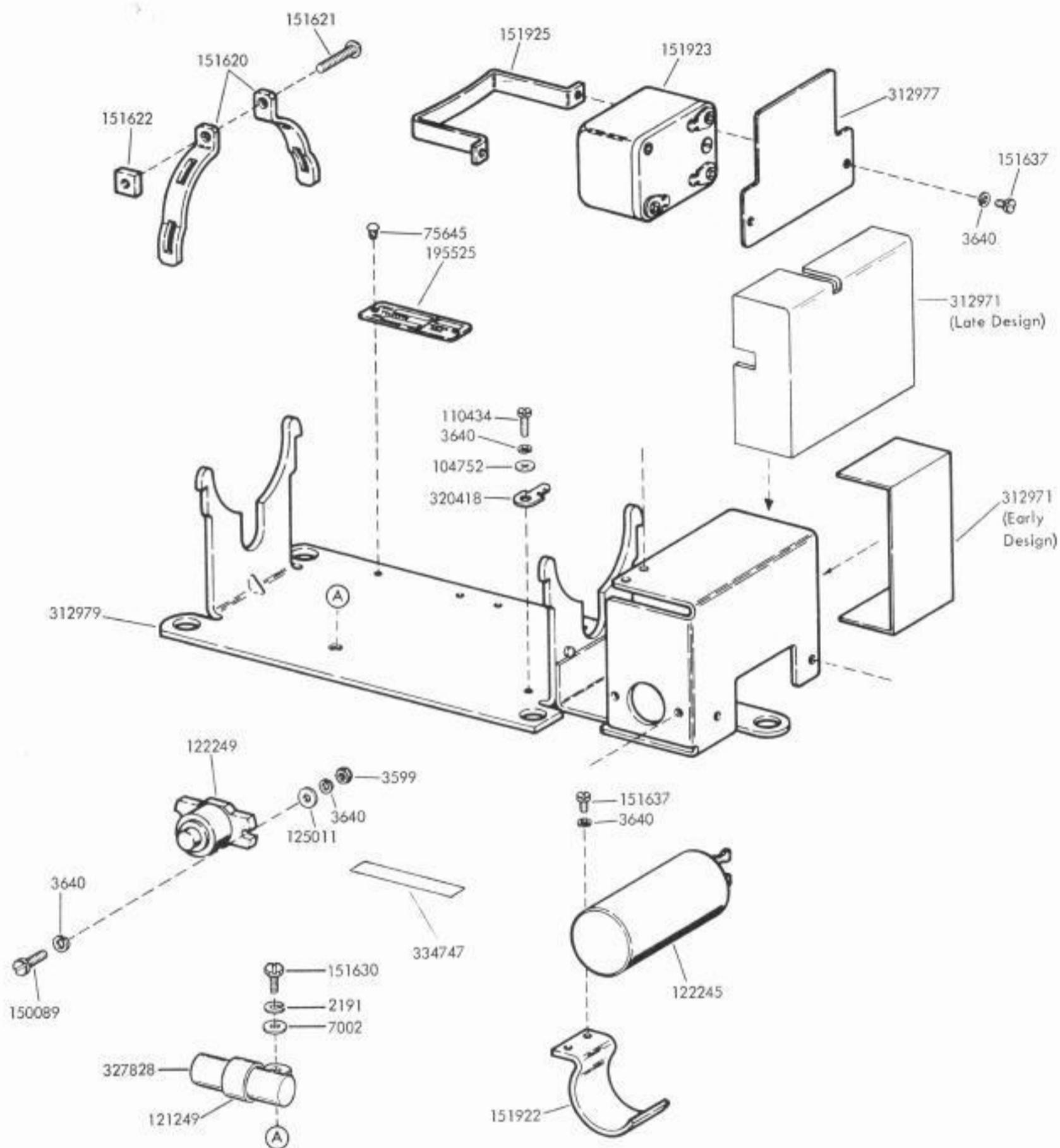
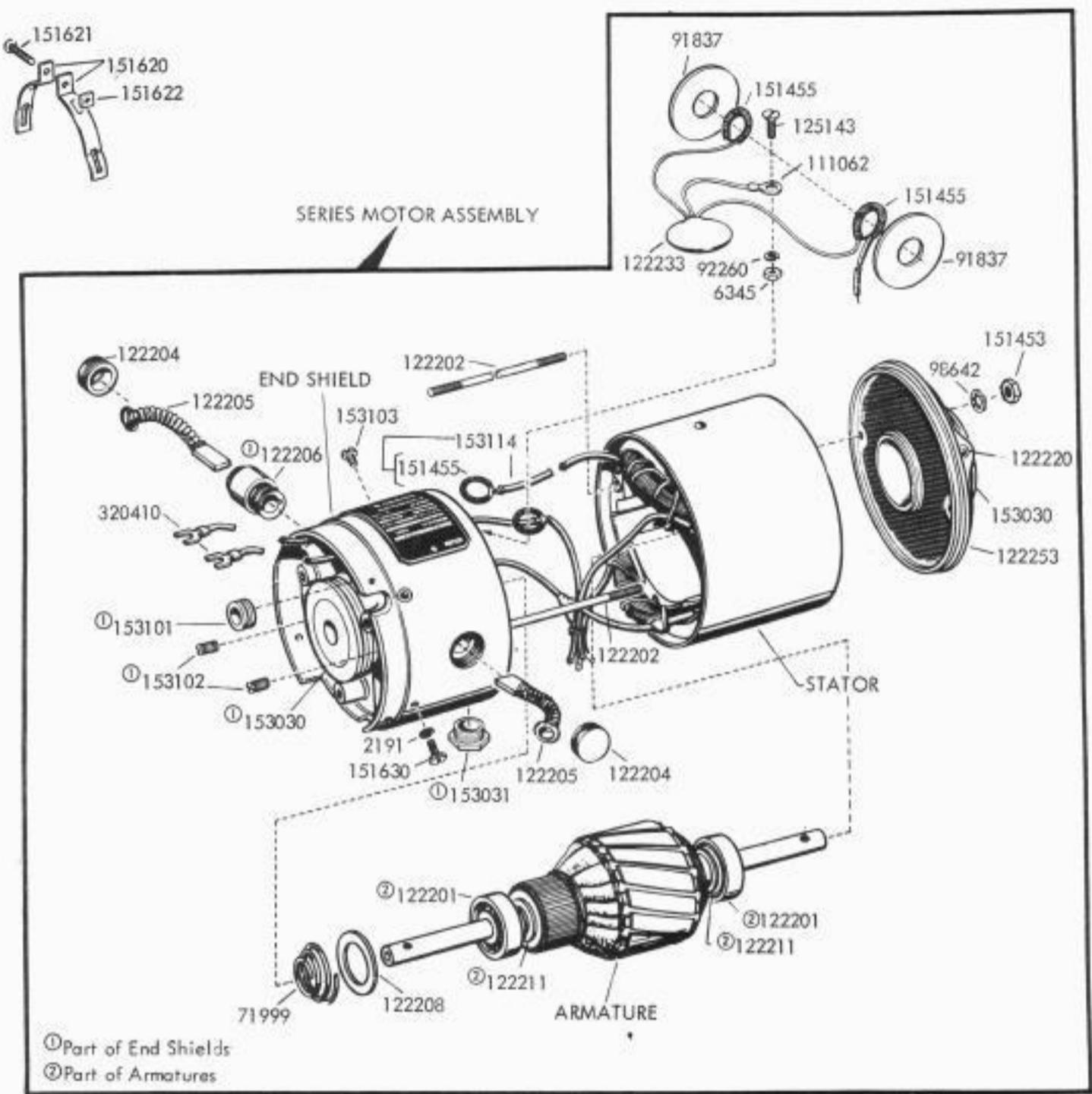


FIGURE 13. RELAY AND CAPACITOR MOUNTING (SYNCHRONOUS)

SERIES MOTOR UNITS

Teletype Code	Motor Assembly	Motor Bracket	Container	Lid	Nipple	Capacitor	Resistor	Electrical Noise Suppressor	Cable Assembly	Jumper
LMU4	150701	152046	152039	152040	152067	161579	161580	161578	152059	91228 (2-1/2"lg. w/320420 and 320422 Terminals) 162684 (2-3/4"lg. w/164479 Terminal) 162685 (4"lg. w/164479 Terminal)
LMU6	150701	150976				161579	161580			91228 (2-1/2"lg. w/320420 and 320422 Terminals) 162684 (2-3/4"lg. w/164479 Terminal) 163268 (6-1/2"lg. White w/164479 Terminal) 163269 2"lg. w/164479 Terminal)
LMU10	150701	152046	152039	152040	152067	161579	161580	161578	152059	91228 (2-1/2"lg.w/320420 and 320422 Terminals) 162684 (2-3/4" lg. w/164479 Terminal) 162685 (4" lg. w/164479 Terminal)
LMU13	163272	150976				161579	161580			91228 (2-1/2" lg. w 320420 and 320422 Terminals) 162684 (2-3/4" lg. w/164479 Terminal) 163268 (6-1/2" lg. White w/164479 Terminal) 163269 (2" lg. 2/164479 Terminal)
LMU14	161577	152046	152039	152040	152067	161579	161580	161578	152059	91228 (2-1/2" lg. w/320420 and 320422 Terminals) 162684 (2-3/4" lg. w/164479 Terminal) 162685 (4" lg. w/164479 Terminal)
LMU23	164758	173751				173003	173004			91228(2-1/2"lg. w/320420 and 320422 Terminals)
LMU28	179100	152046	179105	179106	179282	161579	179103	161578	179283	91228(2-1/2"lg. w/320420 and 320422 Terminals)
LMU29	179190	152046	179420	179424	152067	179421	173004	179422	152059	91228(2-1/2"lg. w/320420 and 320422 Terminals)
LMU32	194060	152046	194057	179424	194063	161579	179103	161578	152059	91228(2-1/2"lg. w/320420 and 320422 Terminals)
LMU39	161577	152046	179420	179424	152067	161579	179103	161578	152059	91228(2-1/2"lg. w/320420 and 320422 Terminals)
LMU41	150701	152046	179420	179424	152067	161579	179103	161578	152059	91228(2-1/2"lg. w/320420 and 320422 Terminals)
LMU47	150701	152046	179420	179424	152067	161579	179103		152059	91228(2-1/2"lg. w/320420 and 320422 Terminals)
LMU57	324111	152046								91228(2-1/2"lg.w/320420 and 320422 Terminals)
LMU60	324111	150976						161578	152059	91228(2-1/2"lg.w/320420 and 320422 Terminals)
LMU61	321580	150976						161578	152059	91228(2-1/2"lg.w/320420 and 320422 Terminals)
LMU63	324111	152046	179105	179106	179282			161578	179283	91228(2-1/2"lg.w/320420 and 320422 Terminals)
LMU64	324111	150976						161578	152059	91228(2-1/2"lg.w/320420 and 320422 Terminals)
YMU5	321580	152046								91228(2-1/2"lg.w/320420 and 320422 Terminals)

FIGURE 14. SERIES MOTOR CROSS-REFERENCE CHART



SERIES MOTORS STANDARD OR HEAVY DUTY					MOTOR DATA
	MOTOR ASSEMBLY	STATOR	ARM-ATURE	END SHIELD	
Standard	150701	122221	122210	122200	Series, 1/20 HP, 115V: 60 Hertz, 3600 RPM
Heavy	161577	161576	161575	122200	Series, 1/15 HP, 115V: 60 Hertz, 3600 RPM
Heavy	①163272	161576	161575	163273	Series, 1/15 HP, 115V: 60 Hertz, 3600 RPM
Heavy	①164758	164756	164757	163273	DC Series, 1/15 HP, 48V: 3600 RPM
Standard	179100	122221	122210	179101	Series, 1/20 HP, 115V: 60 Hertz, 3600 RPM
Heavy	179190	164756	164757	122200	DC Series, 1/15 HP, 48V: 3600 RPM
Heavy	②194060	161576	161575	194062	Series, 1/15 HP, 115V: 60 Hertz, 3600 RPM
Heavy	321580	312270	161575	312269	Series, 1/15 HP, 115V: 60 Hertz, 3600 RPM
Standard	324111	324112	1222210	324113	Series, 1/20HP, 115V: 50/60 Hertz, 3600RPM

② Arranged for Inverted Mounting

FIGURE 15. SERIES MOTOR ASSEMBLIES

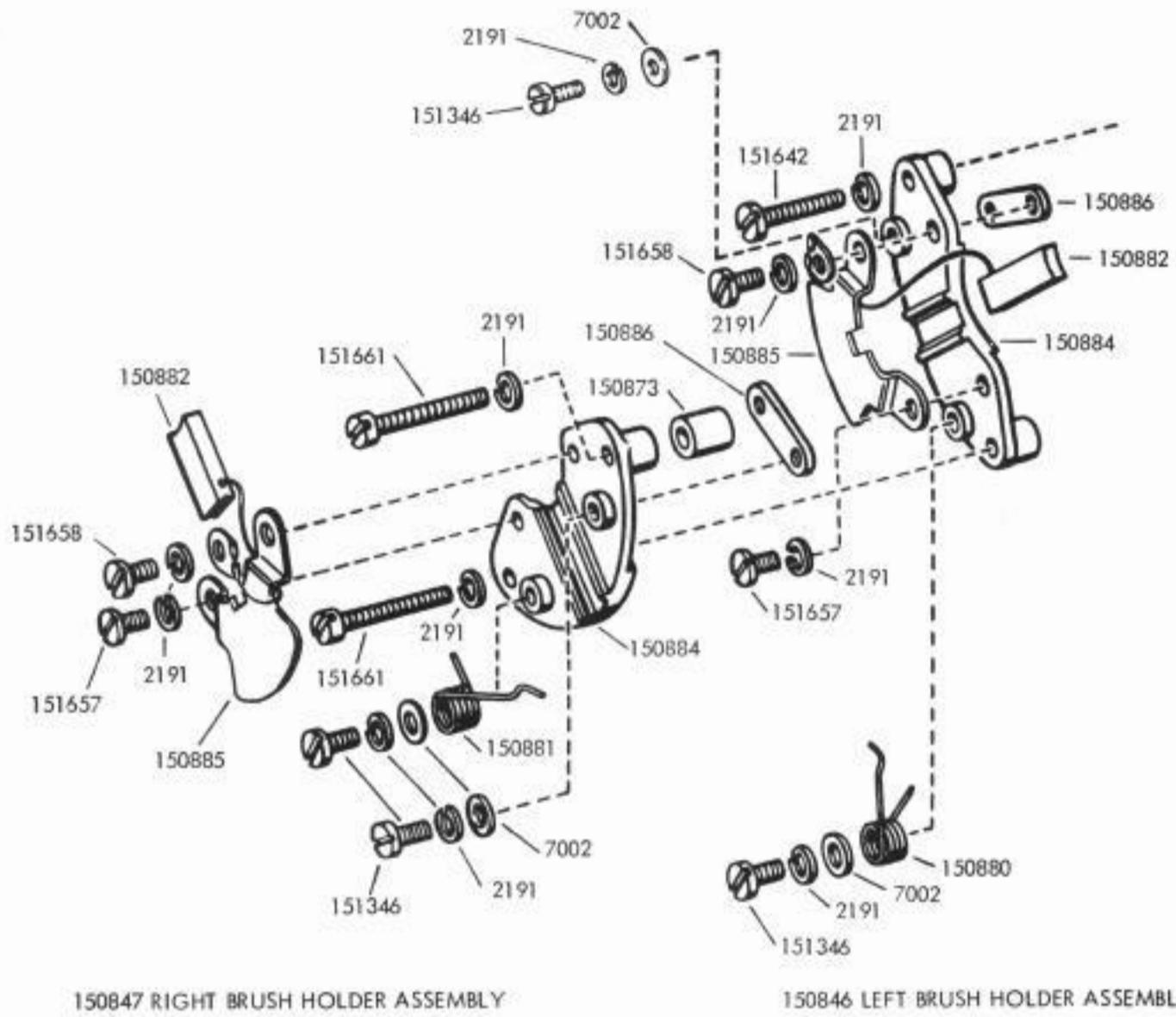
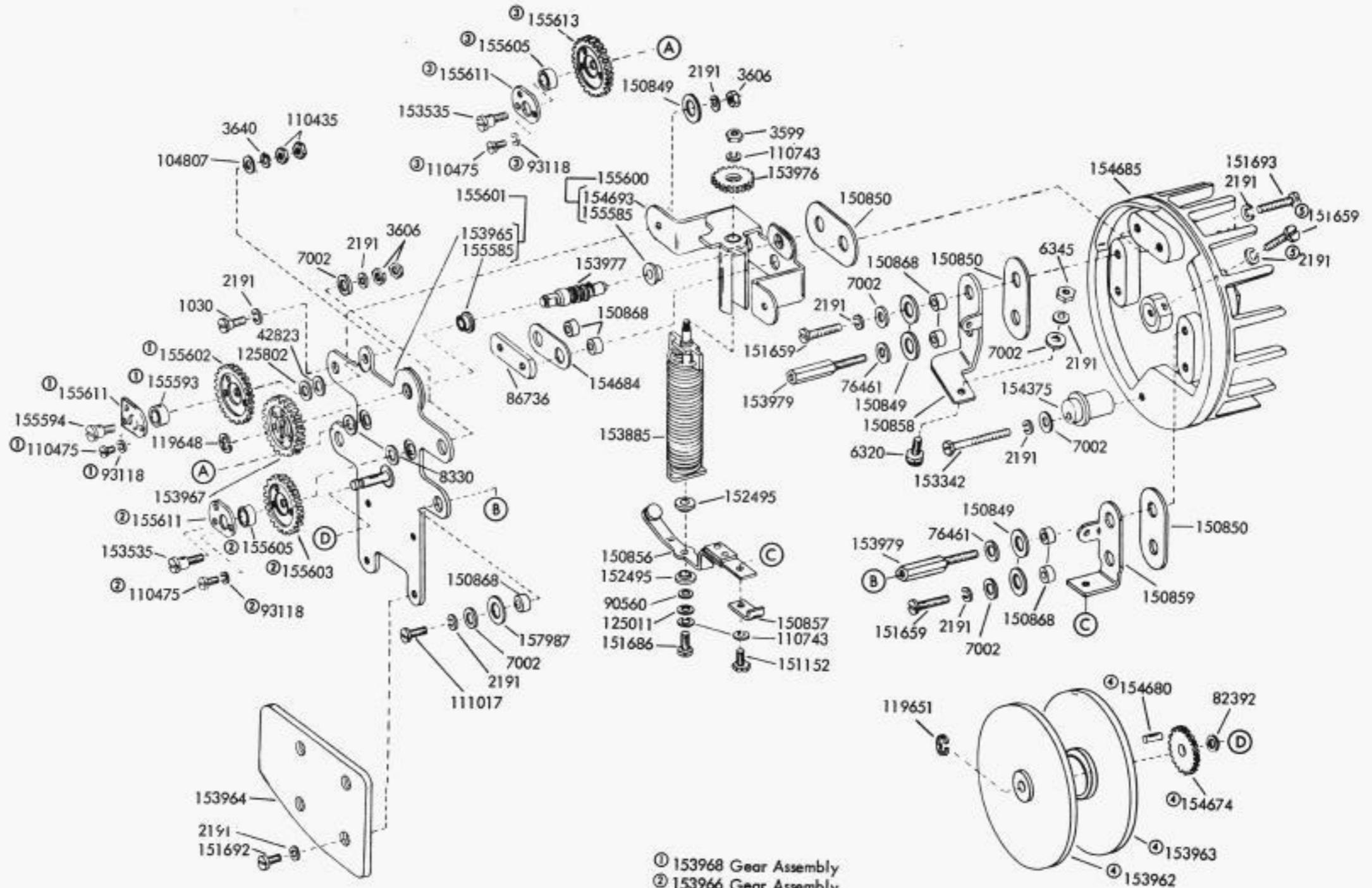


FIGURE 16. BRUSH ASSEMBLIES

FIGURE 18. 154628 GOVERNOR ASSEMBLY



- ① 153968 Gear Assembly
- ② 153966 Gear Assembly
- ③ 153536 Gear Assembly
- ④ 154676 Disc Assembly
- ⑤ Not Part of 154628 Governor Assembly

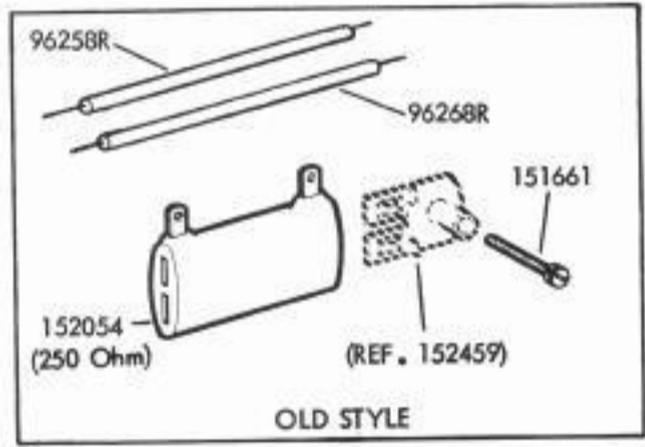
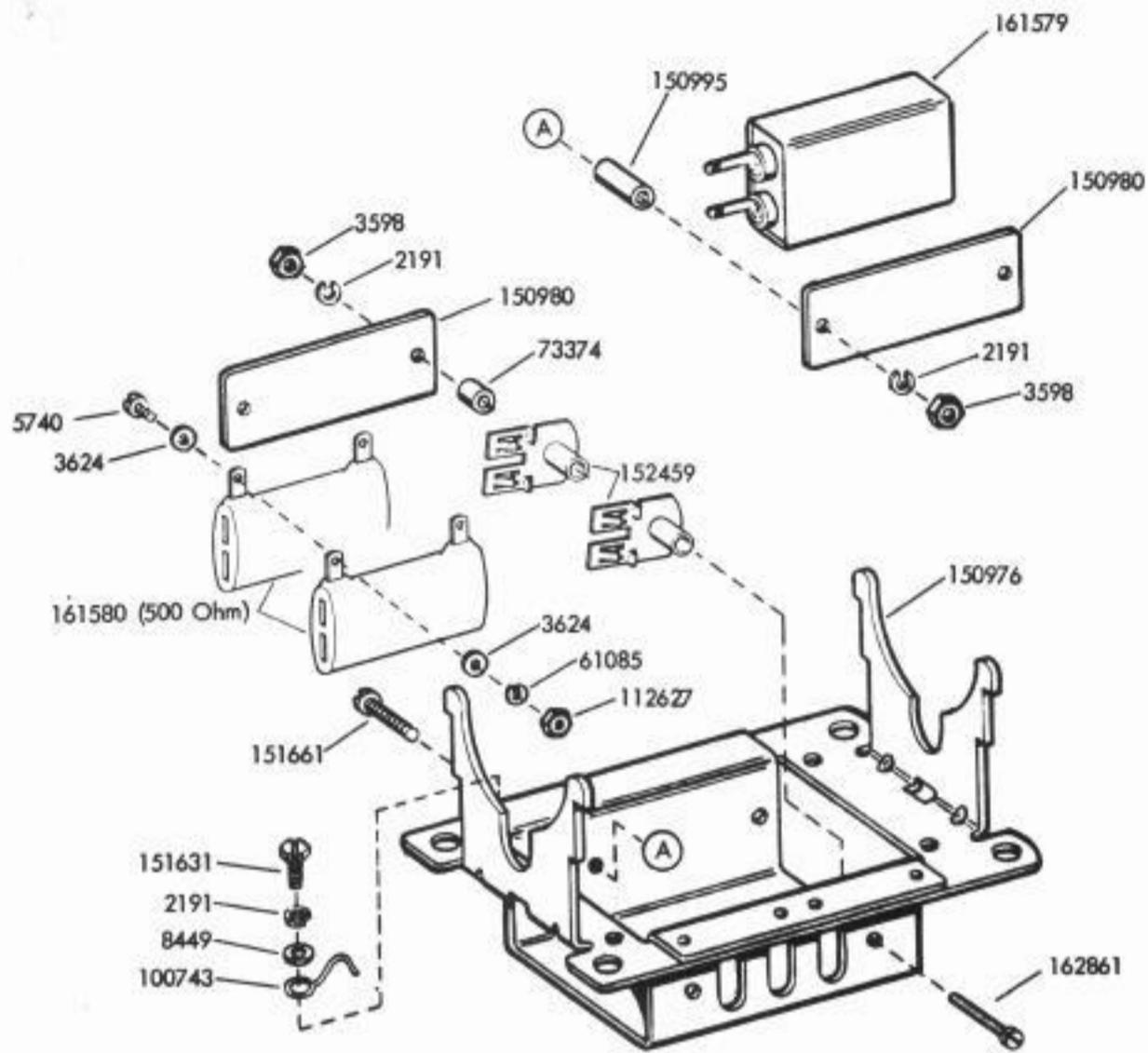
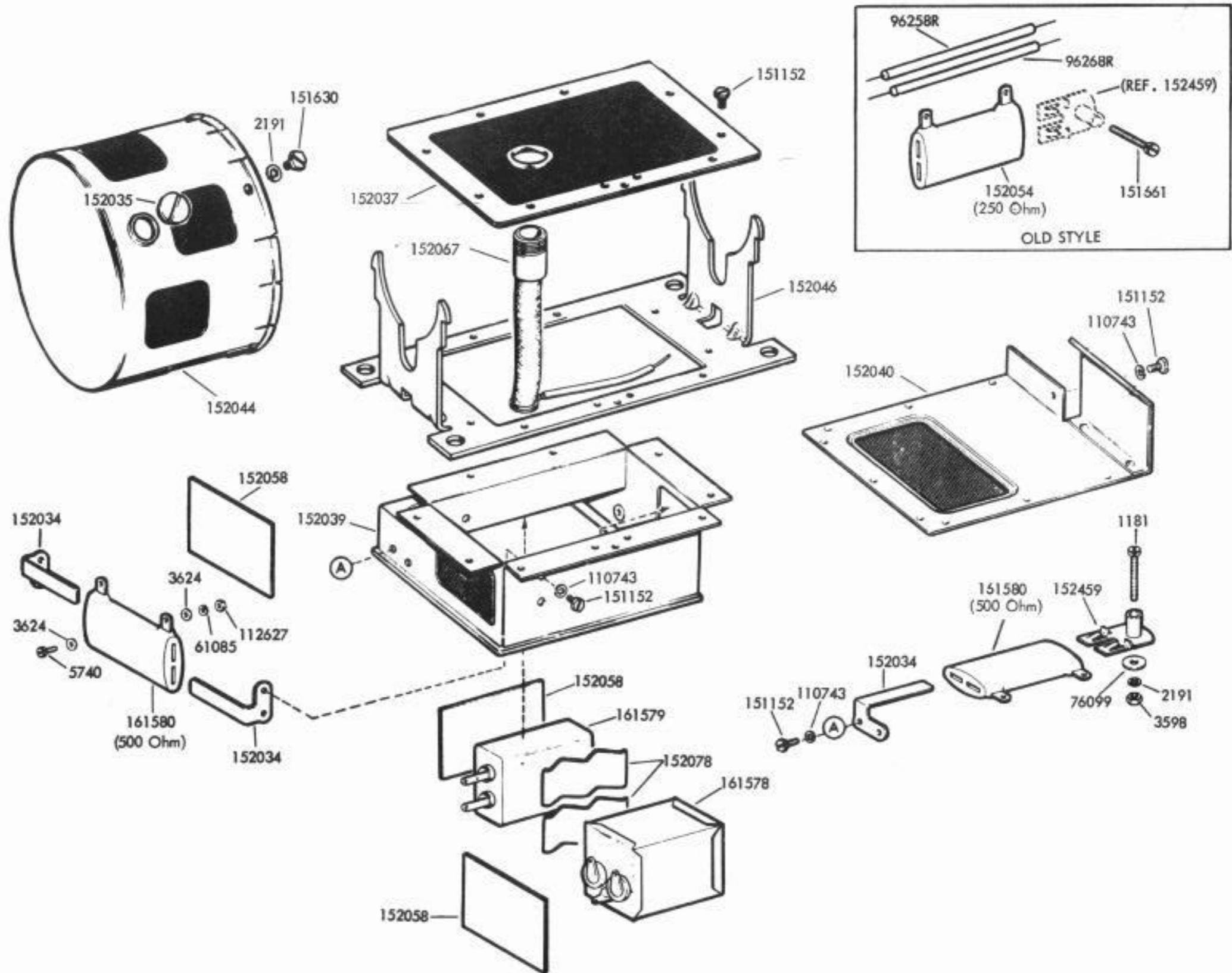


FIGURE 19. SERIES MOTOR MOUNTING PARTS

FIGURE 20. SERIES MOTOR MOUNTING PARTS WITH RF SUPPRESSION



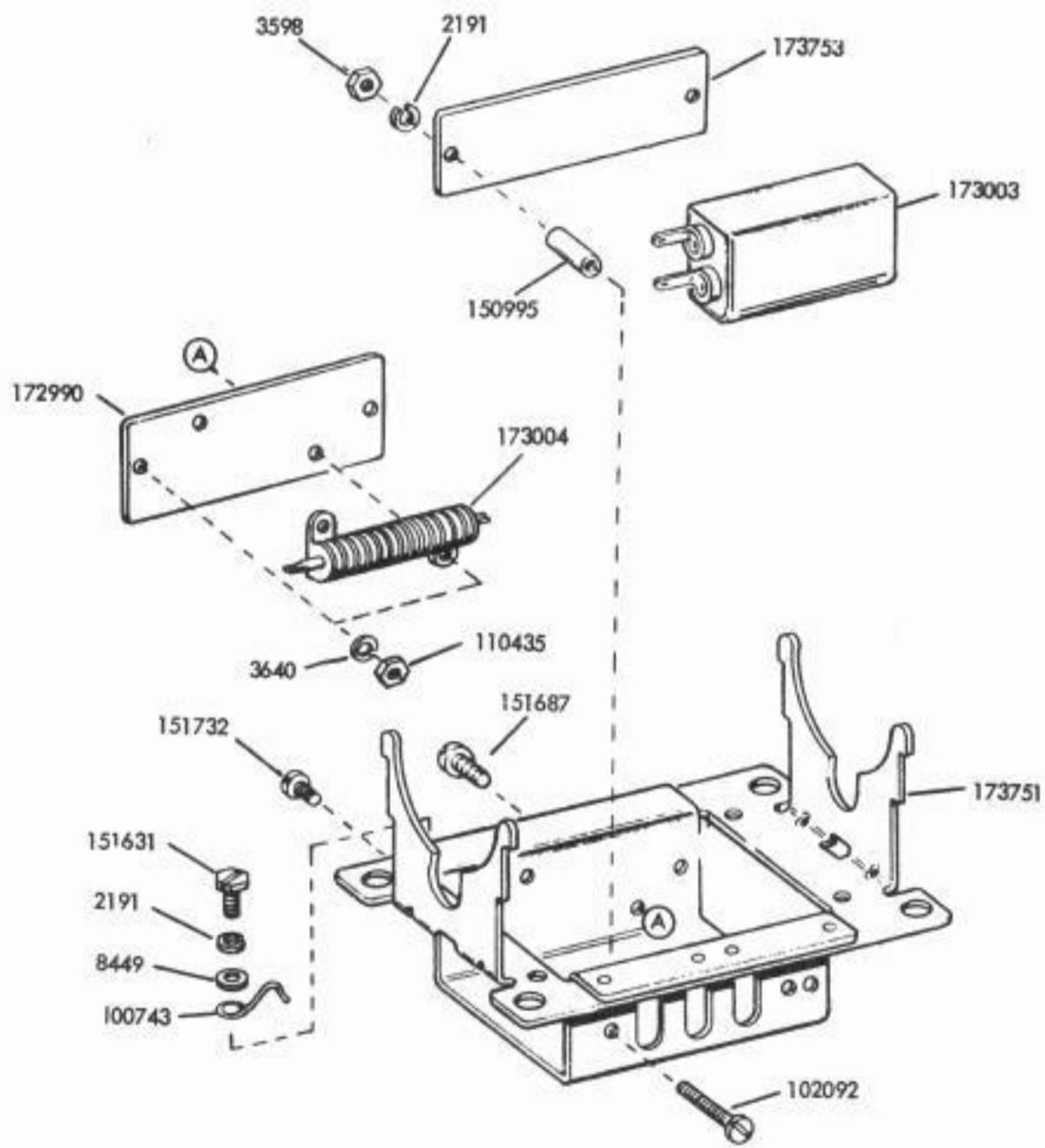


FIGURE 22. SERIES MOTOR MOUNTING PARTS

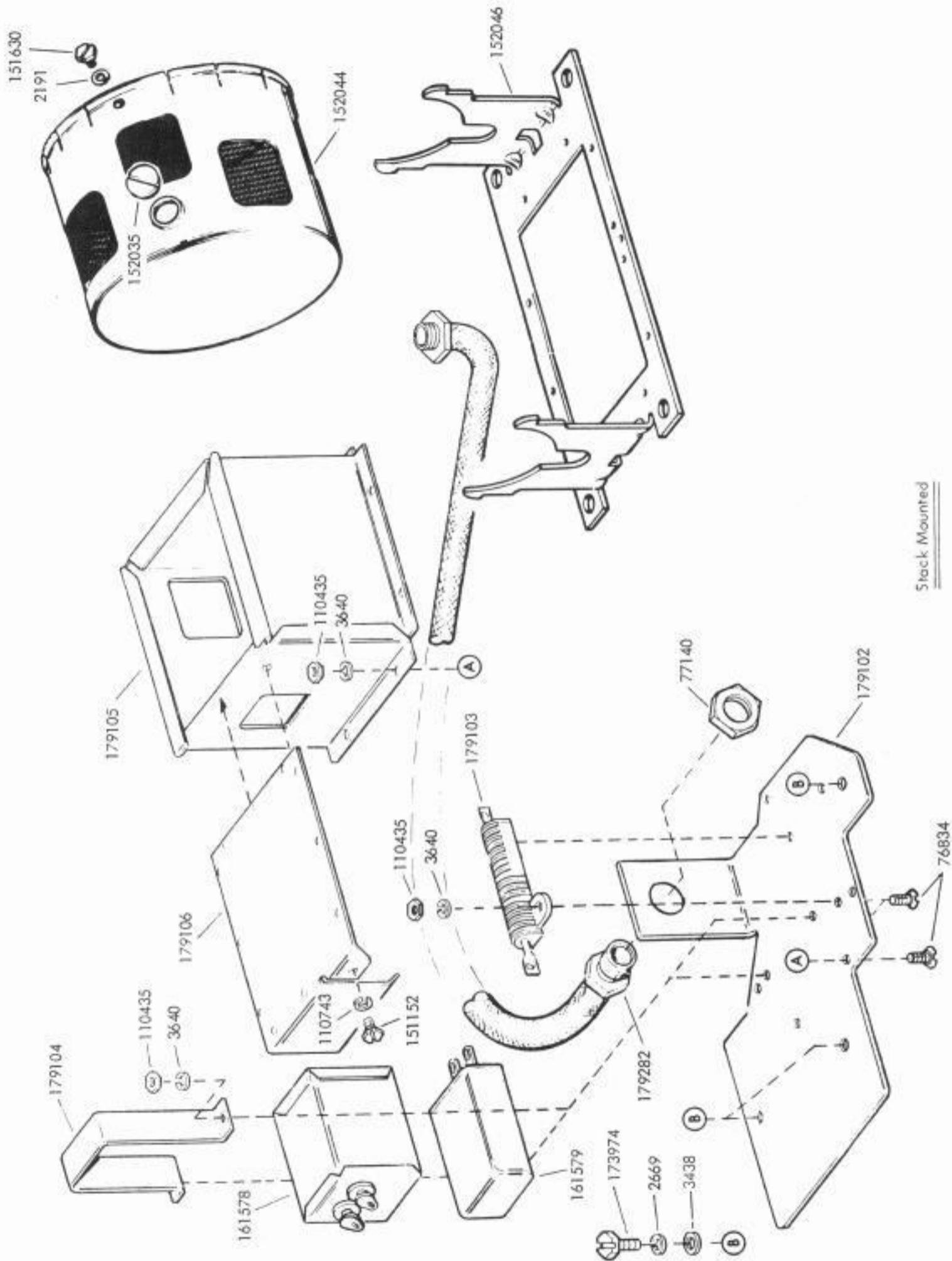


FIGURE 23. SERIES MOTOR MOUNTING PARTS WITH RF SUPPRESSION

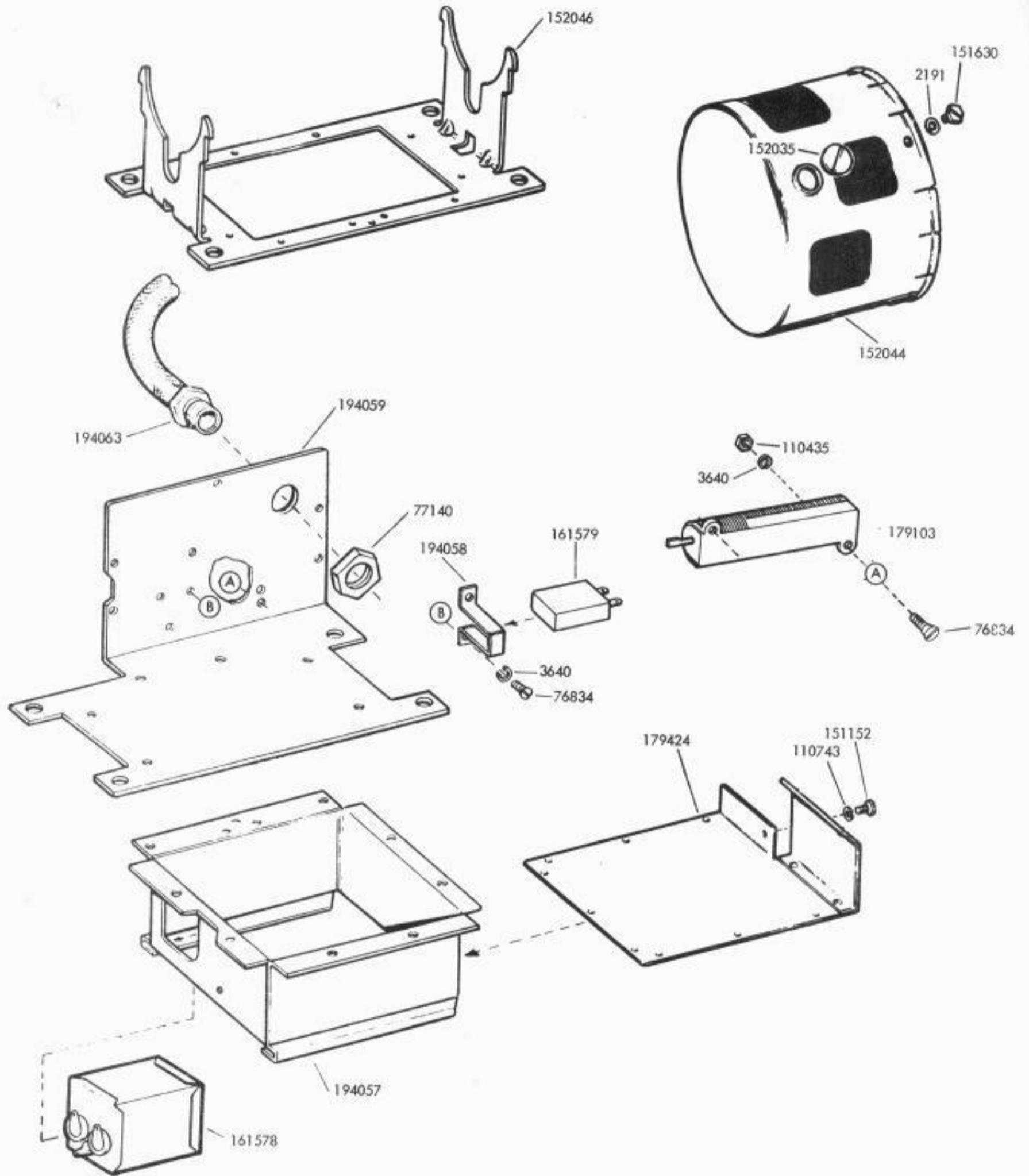


FIGURE 24. SERIES MOTOR MOUNTING PARTS WITH RF SUPPRESSION

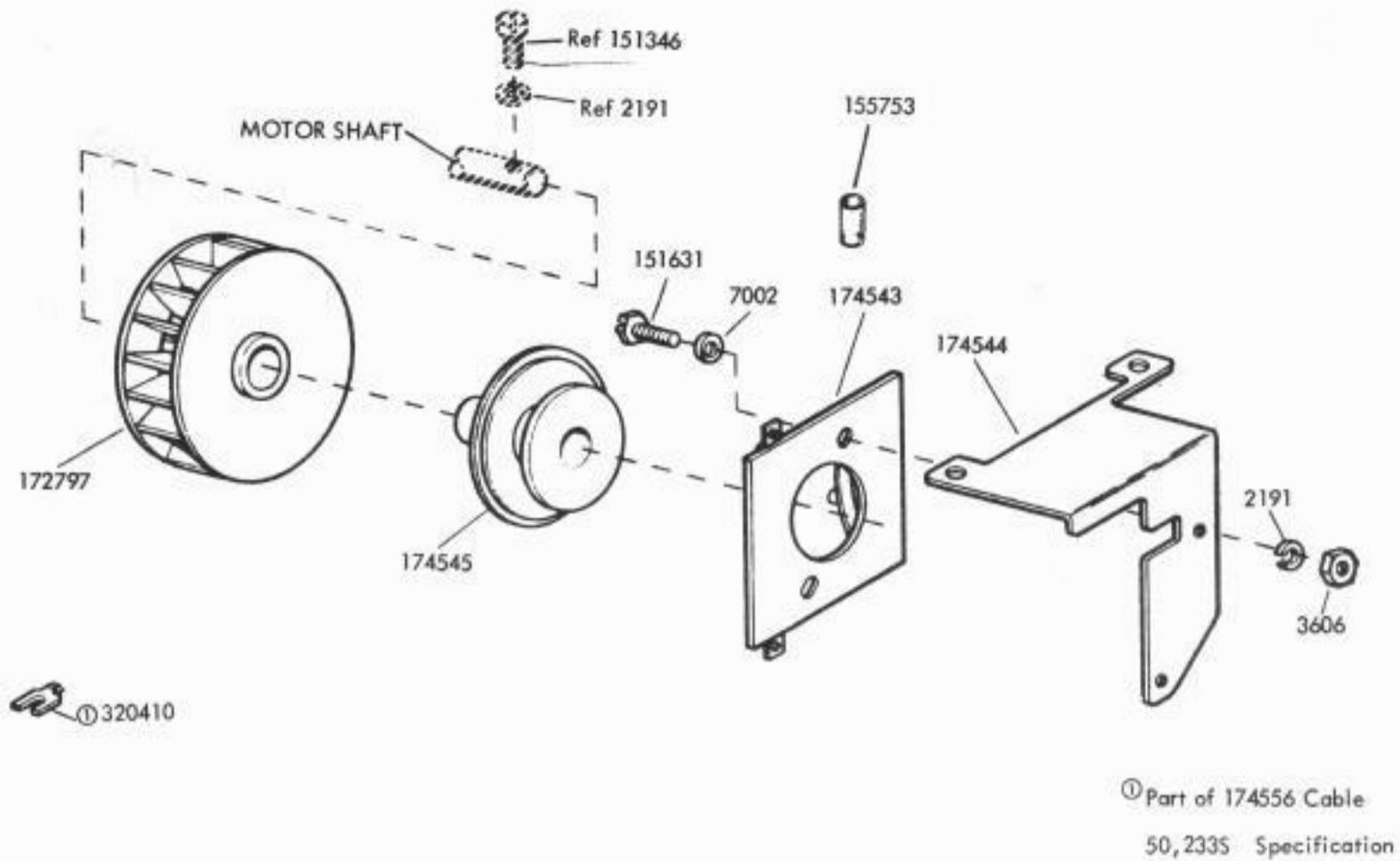


FIGURE 25. 174546 MODIFICATION KIT TO PROVIDE MOTOR RUNNING CONTACTS

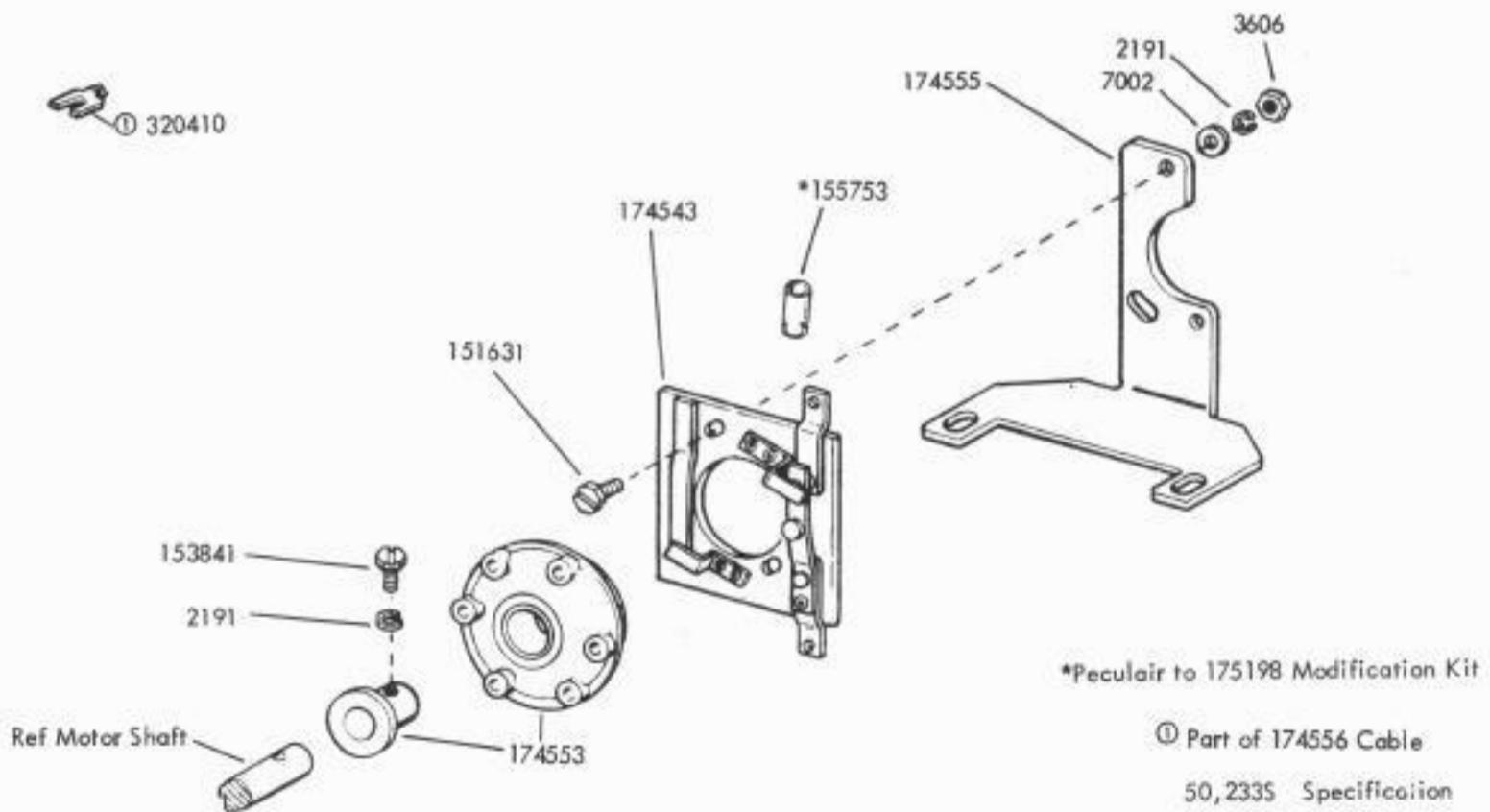
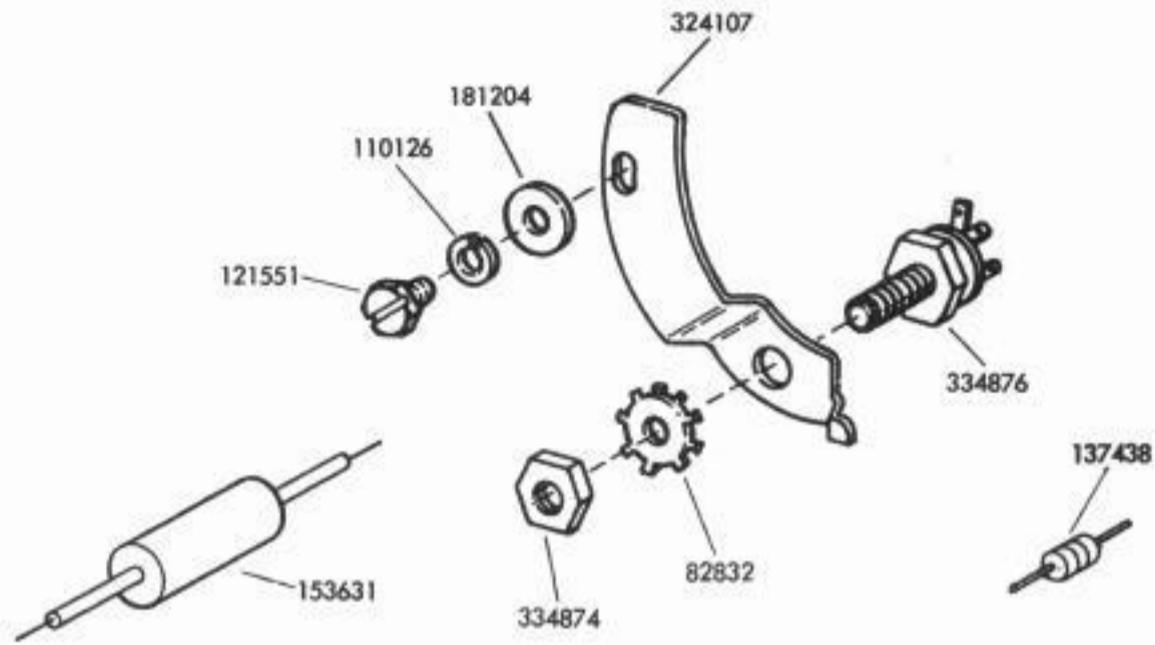


FIGURE 26. 174551 (LESS CABLE) 175198 (WITH CABLE) MODIFICATION KITS TO PROVIDE MOTOR RUNNING CONTACTS



Note: Part of 321580 and 324111
Motor Assemblies

FIGURE 27. TRIAC SWITCH

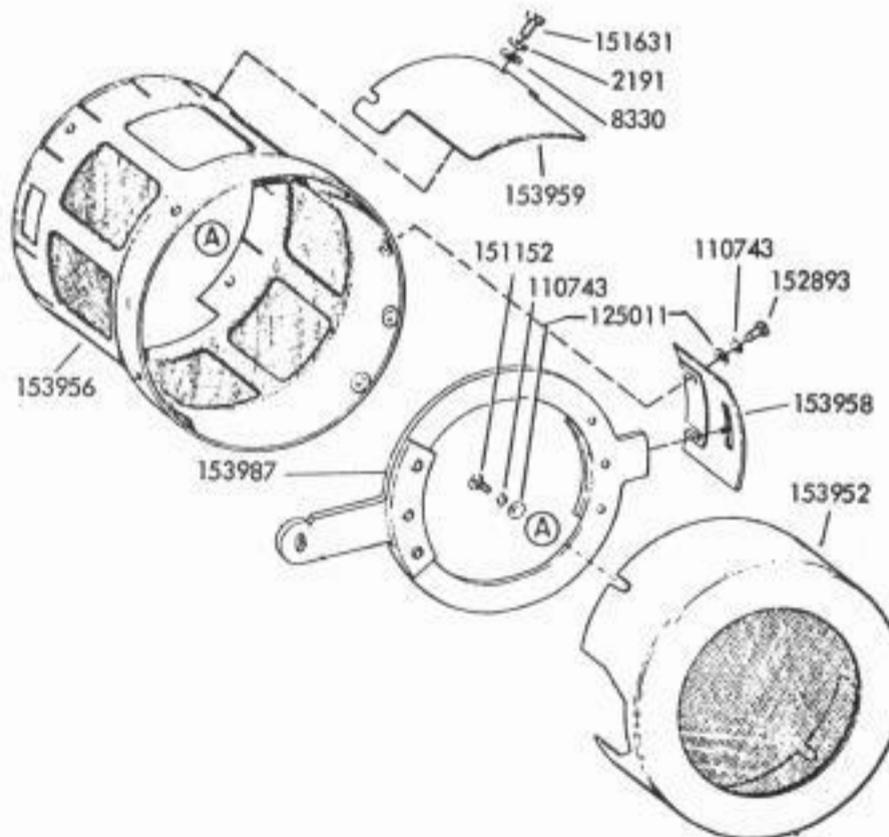


FIGURE 28. MOTOR COVERS

MODIFICATION KITS
(Parts are illustrated on the pages indicated)

Modification Kit-Number	Part Number	Description	Quantity	Figure Number	Specification Number
198693	Modification Kit to Convert and LMU14 to and LMU39.				50,376S
	3640	Lockwasher	7	19	
	75646	Screw, Drive	4		
	122233	Capacitor Assembly	1	13	
	139697	Screw, 4-40 x 9/32 Fil	7	19	
	320410	Terminal	1	13	
	152067	Nipple	1	19	
	161576	Stator, Motor	1	13	
	179424	Lid w/Insulator	1	19	
	198691	Plate w/Resistor Assembly	1	19	
	198692	Container Assembly	1	19	
	309431	Plate, Code (LMU39X)	1		
	312530	Washer, Textolite	1	19	
	312531	Washer, Fiber	1	19	
304739	Modification Kit to Convert an LMU46 to an LMU41.				50,376S
	2191	Lockwasher	4	19	
	3640	Lockwasher	8	19	
	75646	Screw, Drive	4		
	110743	Lockwasher	1	19	
	122221	Stator, Motor	1	13	
	122233	Capacitor Assembly	1	13	
	139697	Screw, 4-40 x 9/32 Fil	7	19	
	151152	Screw, 4-40 x 3/16 Hex	1	19	
	320410	Terminal	1	13	
	151630	Screw, 6-40 x 1/4 Hex	4	19	
	152035	Plug	1	19	
	152044	Cover	1	19	
	152046	Bracket w/Cradle, Motor	1	19	
	152067	Nipple	1	19	
	179424	Lid w/Insulator	1	19	
	198691	Plate w/Resistor Assembly	1	19	
	198692	Container Assembly	1	19	
	309432	Plate, Code (LMU41X)	1		
	312530	Washer, Textolite	1	19	
	312531	Washer, Fiber	1	19	
306708	Modification Kit to Conver an LMU10 to an LMU47.				50,376S
	3640	Lockwasher	7	19	
	75c46	Screw, Drive	4		
	122221	Stator, Motor	1	13	
	122233	Capacitor Assembly	1	13	
	139697	Screw, 4-40 x 9/32 Fil	7	19	
	320410	Terminal	1	13	
	152067	Nipple	1	19	
	179424	Lid w/Insulator	1	19	
	198691	Plate w/Resistor Assembly	1	19	
	198692	Container Assembly	1	19	
	309433	Plate, Code (LMU47X)	1		
	312530	Washer, Textolite	1	19	
	312531	Washer, Fiber	1	19	
306709	Modification Kit to Convert an LMU4 to an LMU41.				50,376S
	3640	Lockwasher	7	19	
	75646	Screw, Drive	4		
	122221	Stator, Motor	1	13	
	122233	Capacitor Assembly	1	13	
	139697	Screw, 4-40 x 9/32 Fil	7	19	
	320410	Terminal	1	13	
	152067	Nipple	1	19	
	179424	Lid w/Insulator	1	19	

MODIFICATION KITS (Continued)
(Parts are illustrated on the pages indicated)

Modification Kit-Number	Part Number	Description	Quantity	Figure Number	Specification Number
	198691	Plate w/Resistor Assembly	1	19	
	198692	Container Assembly	1	19	
	309432	Plate, Code (LMU41X)	1		
	312530	Washer, Textolite	1	19	
	312531	Washer, Fiber	1	19	

NUMERICAL INDEX

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
1030	Screw, Shoulder 6-40 19	90787	Screw, 4-40 x 3/8 Hex 13	122233	Capacitor Assembly 16,28
1181	Screw, 6-40 x 11/16 Fil 21	91228	Strap, 2-1/2" Braided 5,15	122245	Capacitor, 43 to 48 Mfd 3,5,7,8,9,14
1298	Screw, 8-32 x 1/4 Fil 6	91229	Strap, 2" Braided 5	122249	Switch, Thermosiotic 3,5,7,8,9,14
2034	Washer, Flat 12	91837	Washer, Insulating 16	122251	Stator, Motor 4
2191	Lockwasher 4,5,6,7,9,12,13,14,16 to 28	92260	Lockwasher 16	122252	Shield Assembly, End 4
2263	Nut, 8-32 Hex 4	93118	Lockwasher 19	122253	Shield Assembly, End 16
2449	Lockwasher 9	93984	Lockwasher 12	123769	Fan, Motor 4
2669	Lockwasher 24	96258R	Jumper, 3" Red 20,21	125011	Washer, Flat 5,6,8,9,11,14,18,19,27
3438	Washer, Flat 24	96262R	Jumper, 4" Red 3	125143	Screw, 6-32 x 3/8 Flat 16
3598	Nut, 6-40 Hex 5,6,9,12,20,21,23	96264R	Jumper, 5" Red 3	125802	Washer, Flat 19
3599	Nut, 4-40 Hex 14,19,22	96268R	Jumper, 7" Red 20,21	128874	Rotor, Motor 4
3606	Nut, 6-40 Hex 19,26	96274R	Jumper, 10" Red 3	137438	Resistor, 100 Ohm 27
3624	Washer, Flat 20,21	98642	Lockwasher 16	139697	Screw, 4-40 x 9/32 Fil 22,28
3640	Lockwasher 5,6,7,8,9,11,12,13,14,19,22,23,24,25,28	98712	Screw, 4-40 x 1/4 Flat 18	142589	Bracket w/Cradle, Motor 3,11
3646	Lockwasher 6	98718	Washer, Flat 6	146997	Cap, Bushing 12
3949	Spacer, .160" Thk 12	100743	Clamp, Cable 20,23	150040	Screw, 6-40 x 5/8 Fil 4,13
5740	Screw, 2-56 x 1/4 Fil 20,21	102092	Screw, 6-40 x 1-17/32 Rd 23	150089	Screw, 4-40 x 1/2 Fil 14
6320	Screw, 6-32 Contact 18,19	102203	Bushing 9	150701	Motor, 115V AC Series 15,16
6345	Nut, 6-32 Hex 16,18,19	104752	Washer, Flat 7,14	150845	Governor Assembly 1,18
7002	Washer, Flat 5,6,7,12,13,14,17,18,19,26	104807	Washer, Flat 19	150846	Holder Assembly, Left Brush 17
8330	Washer, Flat 19,27	110126	Lockwasher 27	150847	Holder Assembly, Right Brush 17
8449	Spacer, .094" Thk 12,20,23	110434	Screw, 4-40 x 3/16 Fil 7,14	150849	Washer, Insulating 18,19
36273	Washer, Flat 5,7	110435	Nut, 4-40 Hex 19,23,24,25	150850	Insulator, .031" Thk 18,19
42823	Washer, Flat 19	110475	Screw, 2-64 x 5/64 Rd 19	150856	Arm, Contact 18,19
61085	Lockwasher 20,21	110743	Lockwasher 18,19,21,22,24,25,27,28	150857	Clamp 18,19
71999	Spring, Motor Thrust 4,16	111017	Screw, 6-40 x 5/16 Fil 19	150858	Bracket, Contact 18,19
73374	Spacer, .250" 20	111062	Terminal 16	150859	Bracket, Mounting 18,19
75645	Screw, No. 0 x 1/8 Drive 14	112627	Nut, 2-56 Hex 20,21	150865	Screw, 4-40 Clamping 18
75646	Screw, No. 0 x 3/16 Drive 28	119223	Screw, 4-40 x 1-15/32 Fil 5,11	150866	Clamp 18
76099	Washer, Flat 21	119648	Ring, Retaining 19	150868	Bushing, Insulating 18,19
76461	Washer, Flat 19	119651	Ring, Retaining 19	150869	Spring 18
76834	Screw, 4-40 x 3/8 Flat 22,24,25	121249	Clamp, 5/8 ID Cable 14	150872	Stud 18
77140	Nut, Lock 9/16 - 32 Hex 24,25	121551	Screw, 8-32 x 1/4 Hex 27	150873	Collar 9,17
82392	Shim, .004" Thk 19	122200	Shield Assembly, End 16	150877	Bracket, Guide 18
82832	Lockwasher 27	122201	Rearing, Ball 4,16	150879	Cover, Governor 18
86736	Plate, Clamping 19	122202	Stud 16	150880	Spring, Governor Brush 17
87334	Washer, Insulating 5,6,8,9,11	122204	Cap, Brush 16	150881	Spring, Governor Brush 17
90560	Washer, Flat 19	122205	Brush w/Spring 16	150882	Brush, Contact 17
		122206	Holder, Brush 16	150884	Mounting, Brush 17
		122208	Washer, Flat 16	150885	Plate, Brush 17
		122210	Armature, Motor 16		
		122211	Washer, Pull 4,16		
		122220	Oiler, Ball 4,16		
		122221	Stator 16,28		
		122229	Bolt, 8-32 x 4-11/16 Fil 4		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
150886	Plate, Clamp 17	151924	Insulator, .031" Thk 3,5,9	153965	Bracket 19
150976	Bracket, w/Cradle, Motor 5,15,20	151925	Clamp 3,5,8,9,11,14	153966	Gear Assembly 19
150980	Plate, Clamping 20	151926	Nut, 4-40 Spl 5,6,8,11	153967	Gear, 28 T 19
150995	Bushing 20,23	151927	Cable w/Terminals 3,6	153968	Gear Assembly 19
150997	Fan, Governor 18	151939	Grommet, Rubber 6	153976	Gear, 32 T 19
151152	Screw, 4-40 x 3/16 Hex 18,19,21,22,24,25,27,28	152034	Bracket, Resistor 21	153977	Worm 19
151346	Screw, 6-40 x 3/8 Fil 4, 17,26	152035	Plug 21,22,24,25,28	153979	Post 19
151453	Nut, 10-32 Hex 16	152037	Cover 21	153987	Brake, Slide 27
151455	Spring, Helical Clip 16	152039	Container 15,21	154375	Backstop 18,19
151620	Strap, Motor Mounting 5,6,8,9,11,12,13,14,16	152040	Lid 15,21	154628	Governor Assembly 1,19
151621	Screw, 6-32 x 3/4 Rd 5,6, 8,9,11,12,13,14,16	152044	Cover 21,22,24,25,28	154674	Gear, 20 T 19
151622	Nut, 6-32 Sq 5,6,8,9,11, 12,13,14,16	152046	Bracket w/Cradle, Motor 15,21,22,24,25,28	154676	Disc Assembly 19
151630	Screw, 6-40 x 1/4 Hex 7, 12,13,14,16,21,22,24,25, 28	152054	Resistor, 250 Ohm 20,21	154680	Bearing, Roller 19
151631	Screw, 6-40 x 5/16 Hex 20,23,26,27	152058	Separato 21	154684	Insulator 19
151632	Screw, 6-40 x 3/8 Hex 6	152059	Cable w/Terminals 15	154685	Fan Assembly 18
151637	Screw, 4-40 x 1/4 Fil 5, 6,8,9,11,12,14,18	152067	Nipple 15,21,22,28	154693	Bracket 19
151642	Screw, 6-40 x 3/4 Fil 4,17	152078	Spring, Separator 21	155585	Bearing, Ball 19
151657	Screw, 6-40 x 1/4 Fil 5,6,17	152297	Washer, Bearing 4	155593	Bearing, Ball 19
151658	Screw, 6-40 x 5/16 Fil 17	152426	Nut, 6-40 Hex Self-Locking 12	155594	Screw, 4-40 Shoulder 19
151659	Screw, 6-40 x 1/2 Fil 12, 18,19	152459	Bracket, Mounting 20,21	155595	Motor, Synchronous 3,4
151661	Screw, 6-40 x 1" Fil 17, 18,20,21	152495	Bushing 18,19	155600	Bracket 19
151686	Screw, 4-40 x 3/8 Fil 5,6,8,11,19	152893	Screw, 4-40 x 1/4 Hex 12,27	155601	Plate, Gear Train 19
151687	Screw, 4-40 x 7/16 Fil 9,22,23	153030	Mount, Vibration 4,10,16	155602	Gear, 28 T 19
151692	Screw, 6-40 x 3/16 Fil 5,6,19	153031	Bushing, Lead 16	155603	Gear, 28 T 19
151693	Screw, 6-40 x 9/16 Fil 19	153049	Washer, Insulating 4	155605	Bearing, Ball 19
151721	Screw, 6-40 x 3/4 Hex 9	153101	Grommet, Rubber 16	155611	Ring, Bearing 19
151732	Screw, 4-40 x 11/32 Fil 23	153102	Screw, Set 8-32 16	155613	Gear, 28 T 19
151795	Motor, Synchronous 3,4	153103	Screw, 4-40 Self-Tapping 16	155752	Sleeve, 5/64 ID x 1/2 Lg Insulating 7
151920	Plate, Mounting 3,5,6	153114	Jumper, 8-1/2" Black 16	155753*	Sleeve, 1/8 ID x 1/2" Lg Insulating 26
151922	Clamp 3,5,6,8,9,11,14	153342	Screw, 6-40 x 15/16 Hex 19	156875	Screw, 6-40 x 5/32 Fil 5,7
151923	Relay, Motor Starting 3, 5,7,8,9,14	153535	Screw, 6-40 Shoulder 19	156936	Screw, 1/4-32 x 5/16 Hex 9
		153536	Gear Assembly 19	157987	Washer, Insulating 19
		153631	Network, Spark Suppression 27	159739	Motor, Synchronous 3,4
		153839	Screw, 6-40 x 5/8 Hex 12	160298	Plate, Mounting 5
		153841	Screw, 6-40 x 9/16 Hex 26	160299	Capacitor, 226 MFD 3,5
		153885	Spring Assembly 19	160300	Clamp 5
		153952	Cover, Motor 27	160301	Plate, Insulating 5
		153956	Cover 27	160302	Plate, Nut 3,5,11
		153958	Guide Plate 27	160303	Relay 3,5
		153959	Coverplate 27	160304	Switch, Thermostatic 3,5
		153962	Disk 19	160305-	Rotor, Motor 4
		153963	Disk 19	160306	Stator, Motor 4
		153964	Counterweight 19	161099	Cable w/Terminals 3
				161575	Armature, Motor 16
				161576	Stator, Motor 16,28
				161577	Motor, 115V AC Series 15,16

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
161578	Suppressor, Noise 15,21, 22,24,25	172780	Bracket, Contact Mounting 13	179104	Bracket, Clamp 24
161579	Capacitor, .5 MFD 15,20, 21,22,24,25	172795	Bracket w/Cradle, Motor 3,13	179105	Container 15,24
161580	Resistor, 500 Ohm 15,20,21	172797	Fan 13,26	179106	Lid w/Insulator 15,24
161984	Motor, AC Synchronous 3,10	172799	Switch, Centrifugal 13	179190	Motor, 48V DC Series 15, 16
162072	Capacitor, 88 to 108 MFD 3,11,12	172801	Cover, Switch 13	179282	Nipple 15,24
162196	Insulator 3,11	172804	Plate, Adapter 13	179283	Cable w/Terminals 15
162360	Fuse, SL-BL .8 Amp 12	172814	Cable w/Terminals 13	179420	Container 15,22
162464	Stator, Motor 10	172902	Nut, 6-32 Hex 10	179421	Capacitor, 1 MFD 15,22
162466	Shield, Rear End 10	172990	Plate 23	179422	Suppressor, Noise 15,22
162467	Shield, Front End 10	173003	Capacitor, 1 MFD 15,23	179423	Plate w/Bracket 22
162469	Washer, Spring 10	173004	Resistor, 100 Ohm 15,22, 23	179424	Lid w/Insulator 15,22,25, 28
162482	Bolt, 6-32 x 3-1/2 Fil 10	173021	Contact, Spring 13	181204	Washer, Flat 27
162684	Jumper, 2-3/4" White 15	173425	Relay, Motor Starting 3, 11,12	192226	Bracket, Capacitor Mounting 12
162685	Jumper, 4" White 15	173518	Modification Kit 2	193181	Cable w/Terminals 3
162861	Screw, 6-40 x 1-7/16 Fil 20	173687	Fan, Motor 5	193236	Cable w/Terminals 3
162910	Insulator 3,11	173751	Bracket w/Cradle, Motor 15,23	193781	Switch, Thermostatic 3,5,8,9
162911	Cable w/Terminals 3	173753	Plate 23	194057	Container 15,25
163268	Jumper, 6-1/2" White 15	173974	Screw, 10-32 x 5/16 Hex 24	194058	Clamp 25
163269	Jumper, 2" White 15	174471	Switch, Thermostatic 3, 11,12	194059	Bracket 25
163272	Motor, 115V AC Series 15,16	174543	Switch 26	194060	Motor, 115V AC Series 15, 16
163273	Shield Assembly, End 16	174544	Bracket 26	194062	Shield Assembly, End 16
163799	Bracket 12	174545	Rotor 26	194063	Nipple 15,25
164479	Terminal 15	174546	Modification Kit 1,26	194897	Bracket w/Cradle, Motor 3,9
164603	Insulator 3,8	174551	Modification Kit 1,26	194899	Cable w/Terminals 3
164612	Bracket w/Cradle, Motor 3,8	174553	Rotor 26	194924	Motor, 115V AC Synchronous 3,10
164756	Stator, Motor 16	174555	Bracket, Switch 26	195143	Capacitor, 7 MFD 12
164757	Armature, Motor 16	174556	Cable w/Terminals 26	195172	Capacitor, Motor Start 64 to 77 MFD 3,12
164758	Motor, 48V DC Series 15, 16	175198	Modification Kit 1,26	195173	Relay 3,12
164890	Bearing, Ball 10	176064	Plate, Nut 12	195178	Cable w/Terminals 3
164891	Shim, .032" Thk 10	176111	Duct 12	195214	Stator 10
164892	Shim, .018" Thk 10	176137	Jumper, 9-1/4" Black 3	195525	Plate, Identification 14
164893	Collar, Thrust 10	176947	Plate w/Pads 3,9	196794	Insulator 3,8
164894	Shim, .018" Thk 10	176948	Bracket w/Cradle, Motor 39	196795	Block, Mounting 8
164962	Bracket 11,12	178500	Motor, AC Synchronous 3,4	196830	Motor, Synchronous 3,4
170631	Holder, Fuse 12	179010	Bracket, Relay 11	196831	Stator, Motor 4
170764	Motor, AC Synchronous 3,4	179016	Cable w/Terminal 3	196839	Bracket w/Cradle, Motor 3,8
171702	Clamp 3,12	179100	Motor, 115V AC Series 15,16	198691	Plate w/Resistor Assembly 22,28,29
171703	Clamp 3,12	179101	Shield Assembly, End 16	198692	Container Assembly 22,28, 29
171704	Insulator 3,12	179102	Plate, Mounting 24	198693	Modification Kit 28
171749	Bracket, w/Cradle, Motor 3,12	179103	Resistor, 250 Ohm 15,22, 24,25		
171810	Cable w/Terminals 3				

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
199718	Motor, 115V AC 50 Hertz Synchronous 3,4	307281	Switch, Thermostatic 3,6	320410	Terminal, Spade Type 3, 13,16,26,28
199719	Rotor, Motor 4	309431	Plate, Code 28	320418	Terminal, Ring Type 3,5, 6,7,14
199720	Stator, Motor 4	309432	Plate, Code 28,29	320420	Terminal, Ring Type 5,15
199721	Bolt, 8-32 x 5-13/16 Fil 4	309433	Plate, Code 28	320422	Terminal, Ring Type 5,15
304537	Bracket 3,6	310295	Motor, Synchronous 3,10	321580	Motor Series 15,16,27
304538	Bracket 3,6	310341	Insulator 3,9	324107	Bracket 27
304739	Modification Kit 28	312269	Shield, End 16	324111	Motor Assembly 15,16,27
304792	Relay 3,6	312270	Stator 16	324112	Stator 16
304793	Capacitor, 161 to 193 MFD 3,6	312530	Washer, Textolite 22,28, 29	324113	Shield Assembly, End 16
305658	Spring 3,7	312531	Washer, Fiber 22,28,29	324115	Fan, Governor 18
305659	Insulator 3,7	312573	Jumper, 6" Red 3,6	324116	Governor Assembly 1,18
305660	Plate, Mounting 3,7	312574	Jumper, 6" Black 3,6	327828	Filter w/Network 14
305661	Bracket w/Cradle, Motor 3,7	312971	Shield 14	330564	Rotor 10
306063	Motor, 230V AC Synchronous 3,4	312977	Insulator 3,14	330565	Rotor 10
306320	Cable Assembly 3	312979	Bracket w/Cradle, Motor 3,14	330579	Screen w/Brackets 22
306708	Modification Kit 28	320269	Switch, Thermostatic 3,5	332865	Fan 4
306709	Modification Kit 28	320270	Capacitor, 15 to 18 MFD 3,5	334747	Label 14
		320271	Relay, Motor Starting 3,5	334874	Nut, 1/4-28 Hex 27
		320272	Stator 4	334876	Switch 27
				334877	Switch 3