

MOTOR UNIT (LMU)  
PARTS

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MOTOR UNIT APPLICATION CHART

| Units Covered |                  | Operating Characteristics                        | General Usage | ASR Set | RT Set | High Speed Punch | High Speed Reader | Miniature Reader | Miniature Trans-Dist | Miniature-Reperf. | Compact Rec. Selector | (Ticker) Tape Printer | Multiple Mounted Units | Variable Speed | Stack Mounted |
|---------------|------------------|--|---------------|---------|--------|------------------|-------------------|------------------|----------------------|-------------------|-----------------------|-----------------------|------------------------|----------------|---------------|
| Teletype Code | Bell System Code |  |               |         |        |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU3          | 28A              | AC Synchronous, 1/20 HP, 115V/60 cycle/3600 RPM  | X             |         |        |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU4          |                  | Series, 1/20 HP, 115V/60 cycle/3600 RPM, RF Sup. | X             |         |        |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU6          | 28B              | Series, 1/20 HP, 115V/60 cycle/3600 RPM          | X             |         |        |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| *LMU10        |                  | Series, 1/20 HP, 115V/60 cycle/3600 RPM, RF Sup. |               |         |        |                  |                   |                  |                      |                   |                       | X                     |                        |                |               |
| LMU11         |                  | AC Synchronous, 1/12 HP, 115V/60 cycle/3600 RPM  |               |         | X      |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU12         | 28C              | AC Synchronous, 1/12 HP, 115V/60 cycle/3600 RPM  |               | X       |        |                  |                   |                  |                      |                   |                       | X                     |                        |                |               |
| LMU13         |                  | Series, 1/15 HP, 115V/60 cycle/3600 RPM          |               |         | X      |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU14         | 28D              | Series, 1/15 HP, 115V/60 cycle/3600 RPM, RF Sup. |               | X       |        |                  |                   |                  |                      |                   |                       | X                     |                        |                |               |
| LMU15         | 35A              | AC Synchronous, 1/20 HP, 115V/60 cycle/3600 RPM  | X             |         |        |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU19         |                  | AC Synchronous, 25 MHP, 115V/60 cycle/3600 RPM   |               |         |        |                  | X                 |                  |                      |                   |                       |                       |                        |                |               |
| LMU20         |                  | AC Synchronous, 25 MHP, 115V/60 cycle/3600 RPM   |               |         |        |                  |                   | X                |                      |                   |                       |                       |                        |                |               |
| LMU21         | 28LA             | AC Synchronous, 1/20 HP, 115V/60 cycle/3600 RPM  |               |         |        |                  |                   |                  |                      |                   |                       |                       |                        | X              |               |
| LMU23         |                  | DC Series, 1/15 HP, 48V/3600 RPM                 |               |         | X      |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU24         |                  | AC Synchronous, 25 MHP, 115V/60 cycle/3600 RPM   |               |         |        |                  |                   | X                |                      |                   |                       |                       |                        |                |               |
| LMU26         |                  | AC Synchronous, 25 MHP, 115V/60 cycle/3600 RPM   |               |         |        |                  |                   | X                |                      |                   |                       |                       |                        |                |               |
| LMU28         |                  | Series, 1/20 HP, 115V/60 cycle/3600 RPM          |               |         |        |                  |                   |                  |                      |                   |                       |                       |                        | X              |               |
| LMU29         | 28E              | DC Series, 1/15 HP, 115V/3600 RPM                | X             |         |        |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU30         |                  | AC Synchronous, 1/20 HP, 115V/60 cycle/3600 RPM  |               |         | X      |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU31         |                  | AC Synchronous, 25 MHP, 115V/60 cycle/3600 RPM   |               |         |        |                  |                   |                  | X                    |                   |                       |                       |                        |                |               |
| LMU32         |                  | Series, 1/15 HP, 115V/60 cycle/3600 RPM, RF Sup. |               |         | X      |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU33         |                  | AC Synchronous, 1/20 HP, 115V/50 cycle/3000 RPM  |               |         |        | X                |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU35         |                  | AC Synchronous, 25 MPH, 115V/50 cycle/3000 RPM   |               |         |        |                  | X                 |                  |                      |                   |                       |                       |                        |                |               |
| LMU36         |                  | AC Synchronous, 1/20 HP, 115V/50 cycle/3000RPM   |               |         | X      |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU37         |                  | AC Synchronous, 1/20 HP, 115V/60 cycle/3600 RPM  |               |         |        |                  |                   |                  | X                    |                   |                       |                       |                        |                |               |
| LMU38         |                  | AC Synchronous, 1/20 HP, 115V/50 cycle/3000 RPM  | X             |         |        |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU39         |                  | Series, 1/15 HP, 115V/60 cycle/3600 RPM, RF Sup. |               | X       |        |                  |                   |                  |                      |                   |                       | X                     |                        |                |               |
| LMU41         |                  | Series, 1/20 HP, 115V/60 cycle/3600 RPM, RF Sup. | X             |         |        |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU42         |                  | AC Synchronous, 1/20 HP, 115V/60 cycle/3600 RPM  |               |         |        |                  |                   |                  |                      |                   | X                     |                       |                        |                |               |
| MU43          | 28F              | AC Synchronous, 25 MHP, 115V/60 cycle/3600 RPM   |               |         |        |                  |                   |                  |                      |                   |                       | X                     |                        |                |               |
| LMU45         |                  | AC Synchronous, 25 MHP, 115V/60 cycle/3600 RPM   |               |         |        |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU46         |                  | AC Synchronous, 1/20 HP, 115V/60 cycle/3600 RPM  |               |         |        | X                |                   |                  |                      |                   |                       |                       |                        |                |               |
| *LMU47        |                  | Series, 1/20 HP, 115V/60 cycle/3600 RPM, RF Sup. |               |         |        |                  |                   |                  |                      |                   |                       |                       | X                      |                |               |
| LMU49         |                  | AC Synchronous, 1/20 HP, 115V/60 cycle/3600 RPM  | X             |         |        |                  |                   |                  |                      |                   |                       |                       |                        |                |               |
| LMU51         |                  | AC Synchronous, 1/20 HP, 115V/50 cycle/3000 RPM  |               |         |        |                  |                   |                  | X                    |                   |                       |                       |                        |                |               |
| LMU52         |                  | AC Synchronous, 1/20 HP, 115V/50 cycle/3000 RPM  |               |         |        |                  |                   |                  |                      |                   |                       |                       |                        | X              |               |

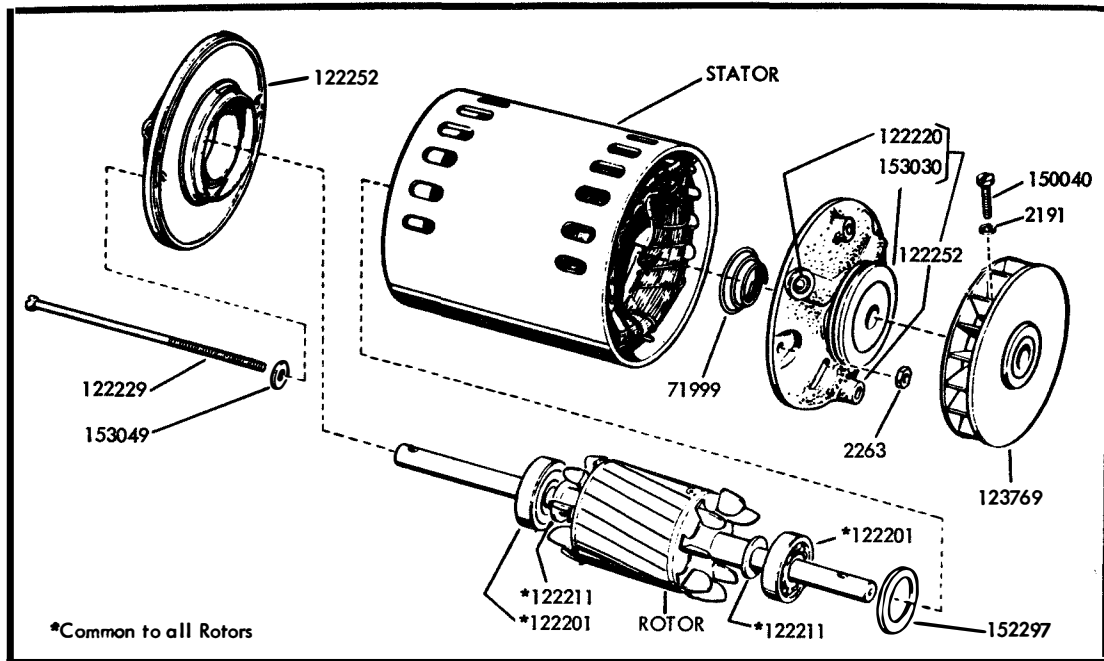
\*Requires 173518 Mod. Kit for special Variable speed application BSP Section 573-116-800/Parts Bulletin 1149B, Page 1-27

SYNCHRONOUS MOTOR UNITS

| Teletype Code | Motor Assembly | Cradle | Mounting Plate | Thermostatic Switch | Fixed Capacitor | Capacitor Clamp | Relay   | Relay Insulator | Relay Clamp | Cable Assembly | Wire  |
|---------------|----------------|--------|----------------|---------------------|-----------------|-----------------|---------|-----------------|-------------|----------------|---|
| LMU3          | 151795         | 150976 | 151920         | 122249              | 122245          | 151922          | 151923  | 151924          | 151925      | 151927         | 96264R (5" lg. Red)   |
| LMU11         | 155595         | 150976 | 160298         | 160304              | 160299          | 160300          | 160303  | 160301          | 160302      | 151927         | 96264R (5" lg. Red)   |
| LMU12         | 159739         | 150976 | 160298         | 160304              | 160299          | 160300          | 160303  | 160301          | 160302      | 151927         | 96264R (5" lg. Red)   |
| LMU15         | 170764         | 150976 | 151920         | 122249              | 122245          | 151922          | 151923  | 151924          | 151925      | 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         | 161984         | 142589 |                | fused               | 162072          | 151922          | 173425  | 162196          | 151925      |                | 176137 (9-1/4" lg. Black w/151626 Terminal)<br>151819 (3" lg. Black w/151626 Terminal)<br>96264R (5" lg. Red) |
| LMU26         | 161984         | 142589 |                | 174471              | 162072          | 151922          | 173425  | 162910          | 160302      | 162911         | 96264R (5" lg. Red)   |
| LMU30         | 178500         | 150976 | 151920         | 122249              | 122245          | 151922          | 151923  | 151924          | 151925      | 151927         | 96264R (5" lg. Red)   |
| LMU31         | 161984         | 142589 |                | 174471              | 162072          | 151922          | 173425  | 162196          | 151925      | 179016         | 156656 (2-3/4" lg. Black W/107398<br>and 82474 Terminals)   |
| LMU33         | 170764         | 150976 | 151920         | *193781             | 122245          | 151922          | 151923  | 151924          | 151925      | 151927         | 96264R (5" lg. Red)   |
| +LMU35        | 194924         | 171749 |                | fused               | *195172         | 171702          | *195173 | 171704          | 171703      | 195178         | 96264R (5" lg. Red)   |
| LMU36         | 178500         | 150976 | 151920         | *193781             | 122245          | 151922          | 151923  | 151924          | 171703      | 151927         | 96264R (5" lg. Red)   |
| LMU37         | 151795         | 194897 |                | 122249              | 122245          | 151922          | 151923  | 194898          | 151925      | 194899         | 96264R (5" lg. Red)   |
| LMU38         | 151795         | 150976 | 151920         | *193781             | 122245          | 151922          | 151923  | 151924          | 151925      | 151927         | 96264R (5" lg. Red)   |
| LMU42         | 196830         | 196839 |                | 122249              | 122245          | 151922          | 151923  | 164603          | 151925      | 151927         | 96264R (5" lg. Red)   |
| MU43          | 161984         | 171749 |                | 174471              | 162072          | 171702          | 173425  | 171704          | 171703      | 171810         | 96264R (5" lg. Red)   |
| LMU45         | 161984         | 171749 |                | 174471              | 162072          | 171702          | 173425  | 171704          | 171703      | 193181         | 96264R (5" lg. Red)   |
| LMU46         | 151795         | 150976 | 151920         | 122249              | 122245          | 151922          | 151923  | 151924          | 151925      | 193236         | 96264R (5" lg. Red)   |
| LMU49         | 170764         | 172795 | 151920         | 122249              | 122245          | 151922          | 151923  | 151924          | 151925      | 151927         | 96264R (5" lg. Red)   |
| LMU51         | 151795         | 194897 |                | *193781             | 122245          | 151922          | 151923  | 194898          | 151925      | 194899         | 96264R (5" lg. Red)   |
| LMU52         | 151795         | 164612 | 151920         | *193781             | 122245          | 151922          | 151923  | 164603          | 151925      | 151927         | 96264R (5" lg. Red)   |

\*For use with Motor Unit operating on 50 Cycle Current  
+See Page 10 for Parts peculiar to LMU35

FIGURE 1. SYNCHRONOUS MOTOR CROSS-REFERENCE CHART



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 Cycle, 3600RPM |
| Heavy                                       | 155595         | #160306 | 160305 | AC Synchronous, 1/12 HP, 115V: 60 Cycle, 3600 RPM   |
| Heavy                                       | 159739         | 160306  | 160305 | AC Synchronous, 1/12 HP, 115V: 60 Cycle, 3600 RPM   |
| Standard                                    | +170764        | 122251  | 128874 | AC Synchronous, 1/20 HP, 115V: 50/60 Cycle, 3600RPM |
| Standard                                    | 178500         | #122251 | 128874 | AC Synchronous, 1/20 HP, 115V: 60 Cycle, 3600 RPM   |
| Standard                                    | **196830       | 196837  | 128874 | AC Synchronous, 1/20 HP, 115V: 60 Cycle, 3600 RPM   |

+Without Fan  
 \*\*CW Rotation (All others CCW Rotation)  
 #Arranged for Inverted Mounting

FIGURE 2. SYNCHRONOUS MOTOR ASSEMBLIES (STANDARD OR HEAVY DUTY)

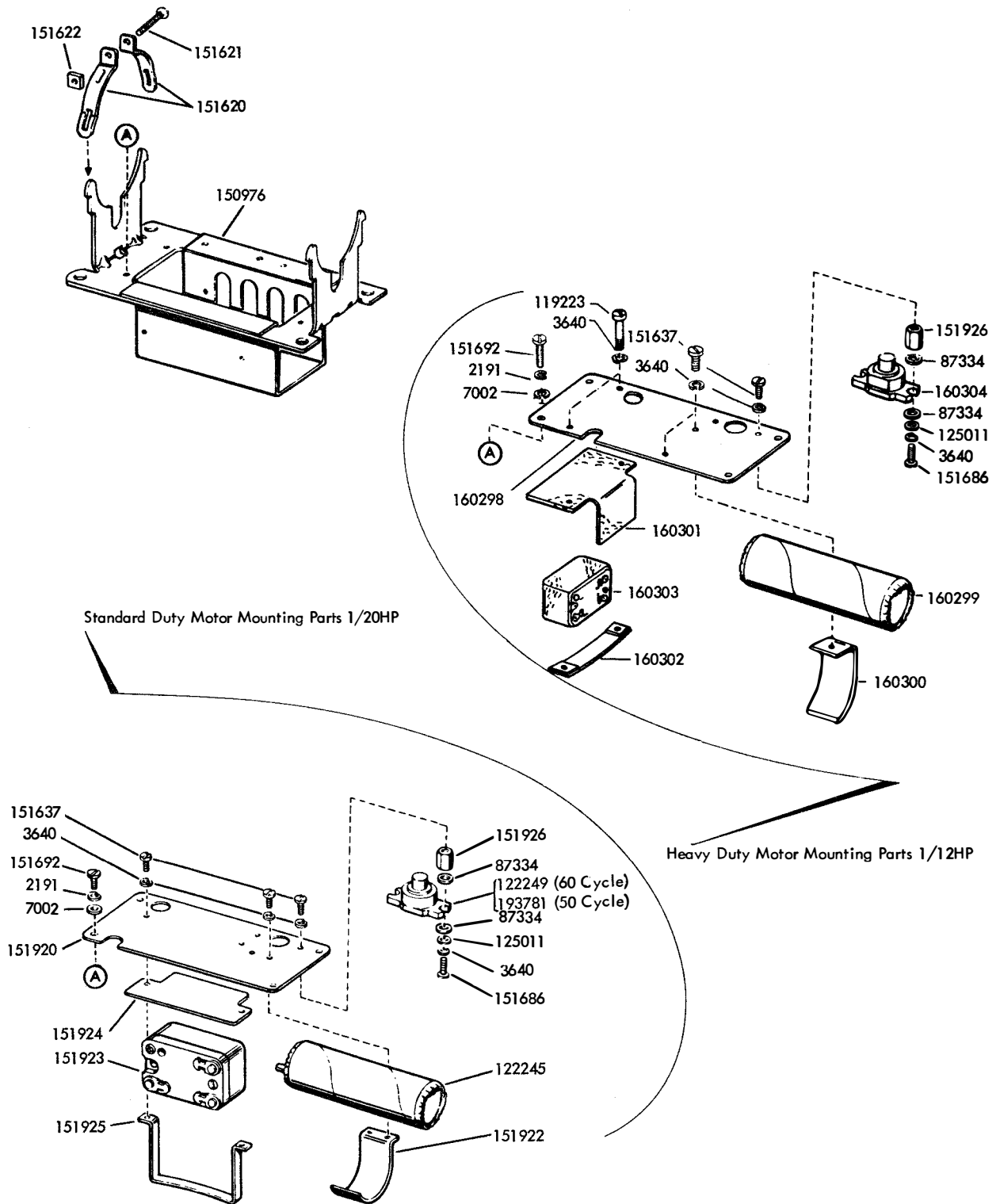


FIGURE 3. RELAY AND CAPACITOR MOUNTINGS (SYNCHRONOUS)

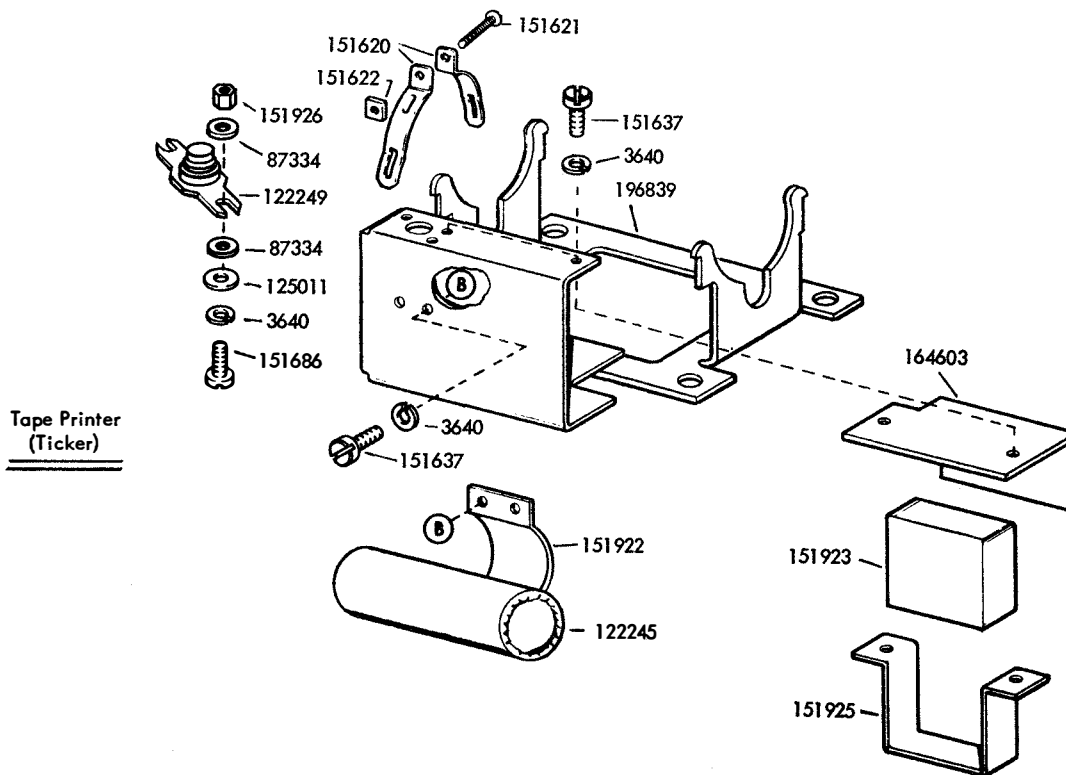
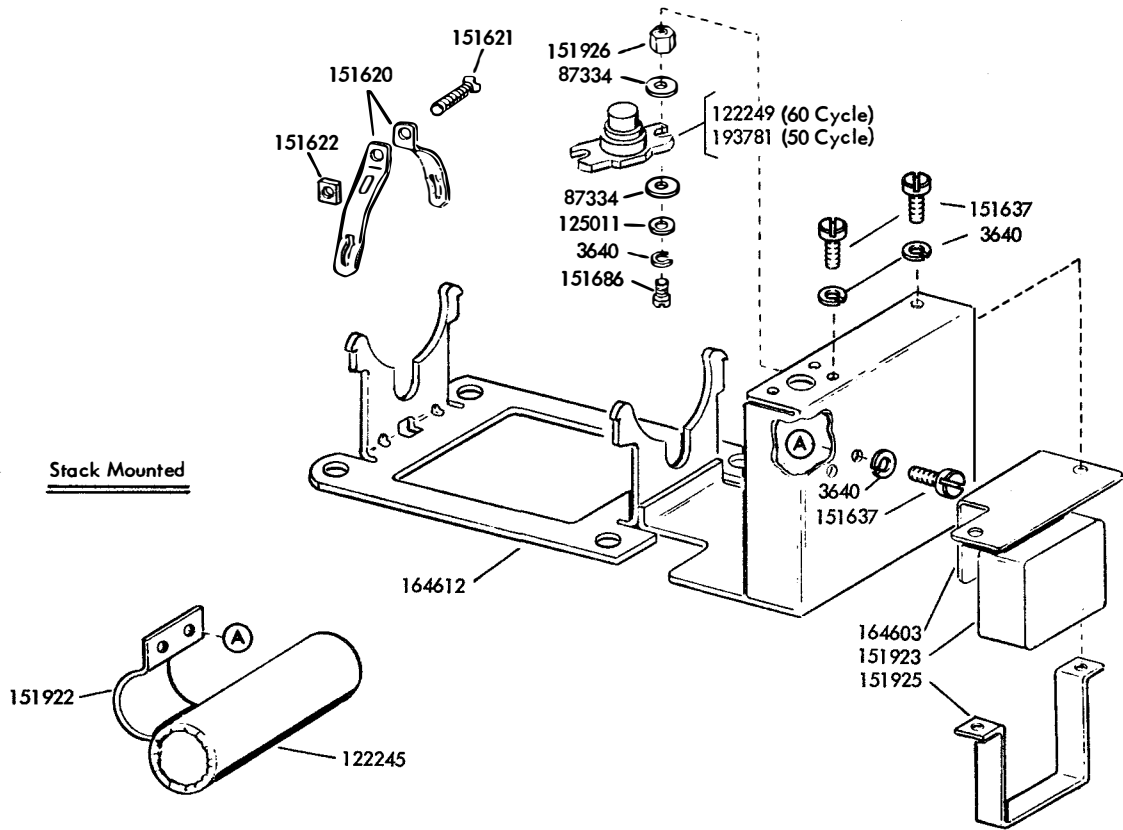
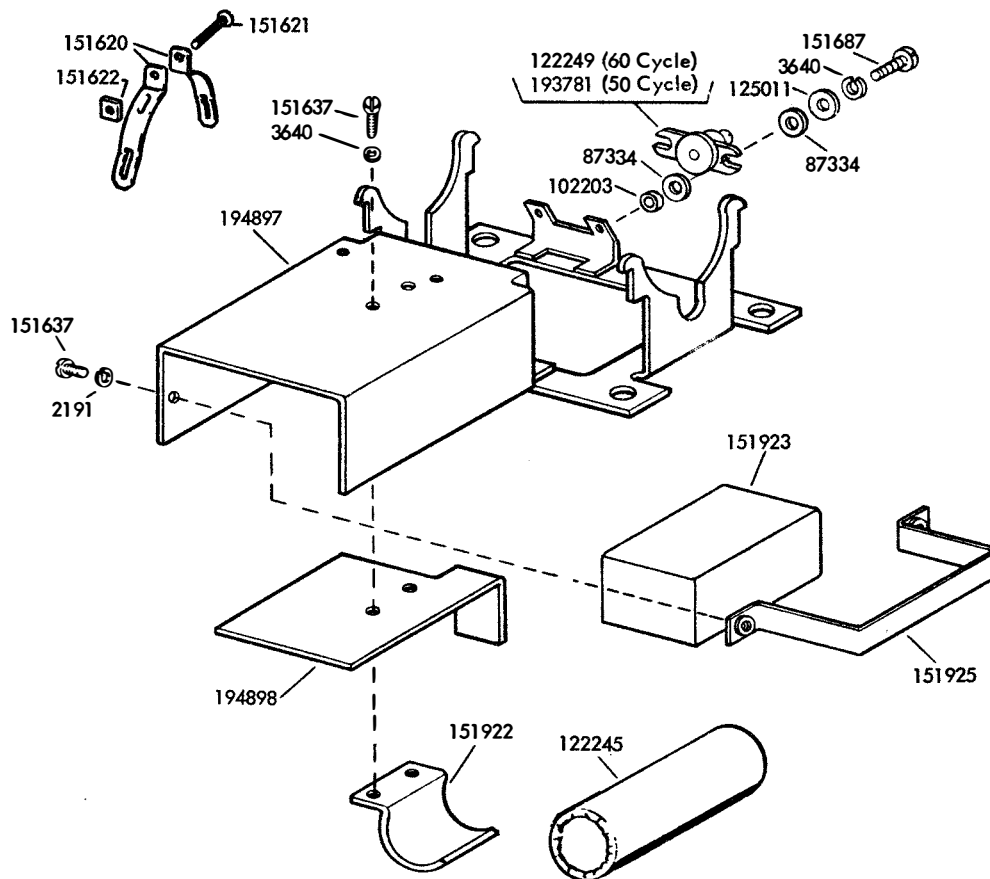
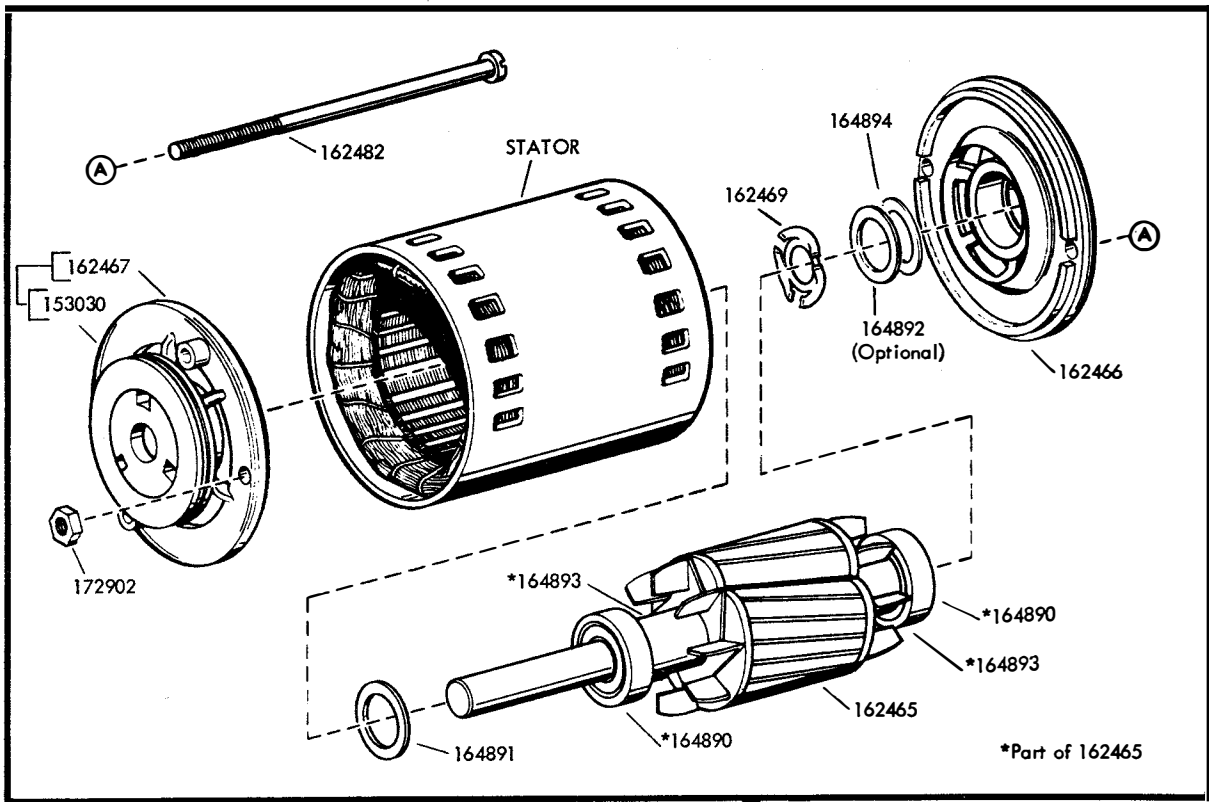


FIGURE 4. RELAY AND CAPACITOR MOUNTINGS (SYNCHRONOUS)



Compact Page Printer

FIGURE 5. RELAY AND CAPACITOR MOUNTINGS (SYNCHRONOUS)



MINIATURE MOTOR ASSEMBLY

| SYNCHRONOUS MOTORS - Miniature |        |  |
|--------------------------------|--------|--|
| MOTOR ASSEMBLY                 | STATOR | MOTOR DATA                                       |
| 161984                         | 162464 | AC Synchronous, 25 MHP, 115V: 60 Cycle, 3600 RPM |
| 194924                         | 195214 | AC Synchronous, 25 MHP, 115V: 50 Cycle, 3000 RPM |

FIGURE 6. SYNCHRONOUS MOTOR ASSEMBLIES (MINIATURE)



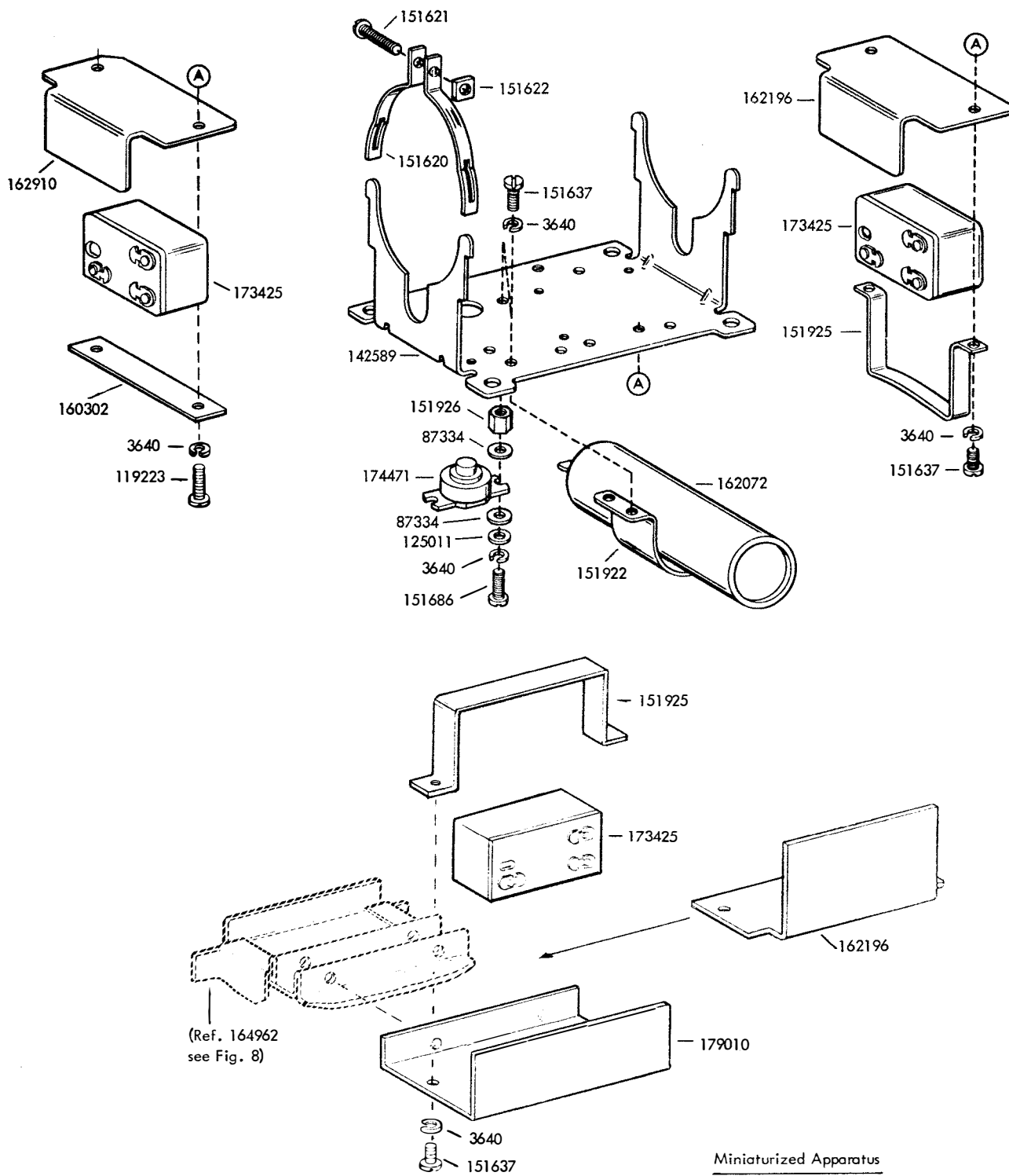


FIGURE 7. RELAY AND CAPACITOR MOUNTINGS (SYNCHRONOUS)

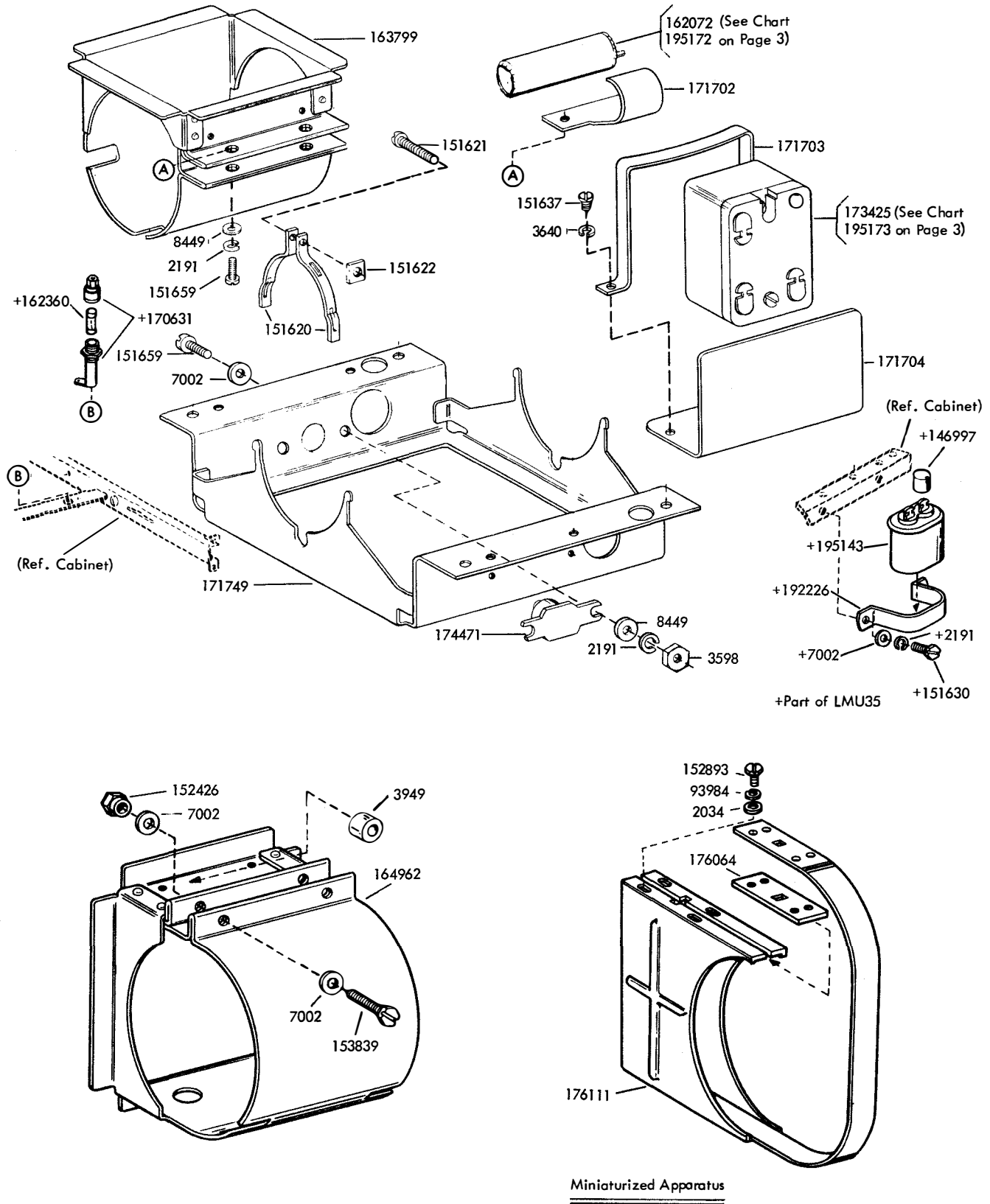
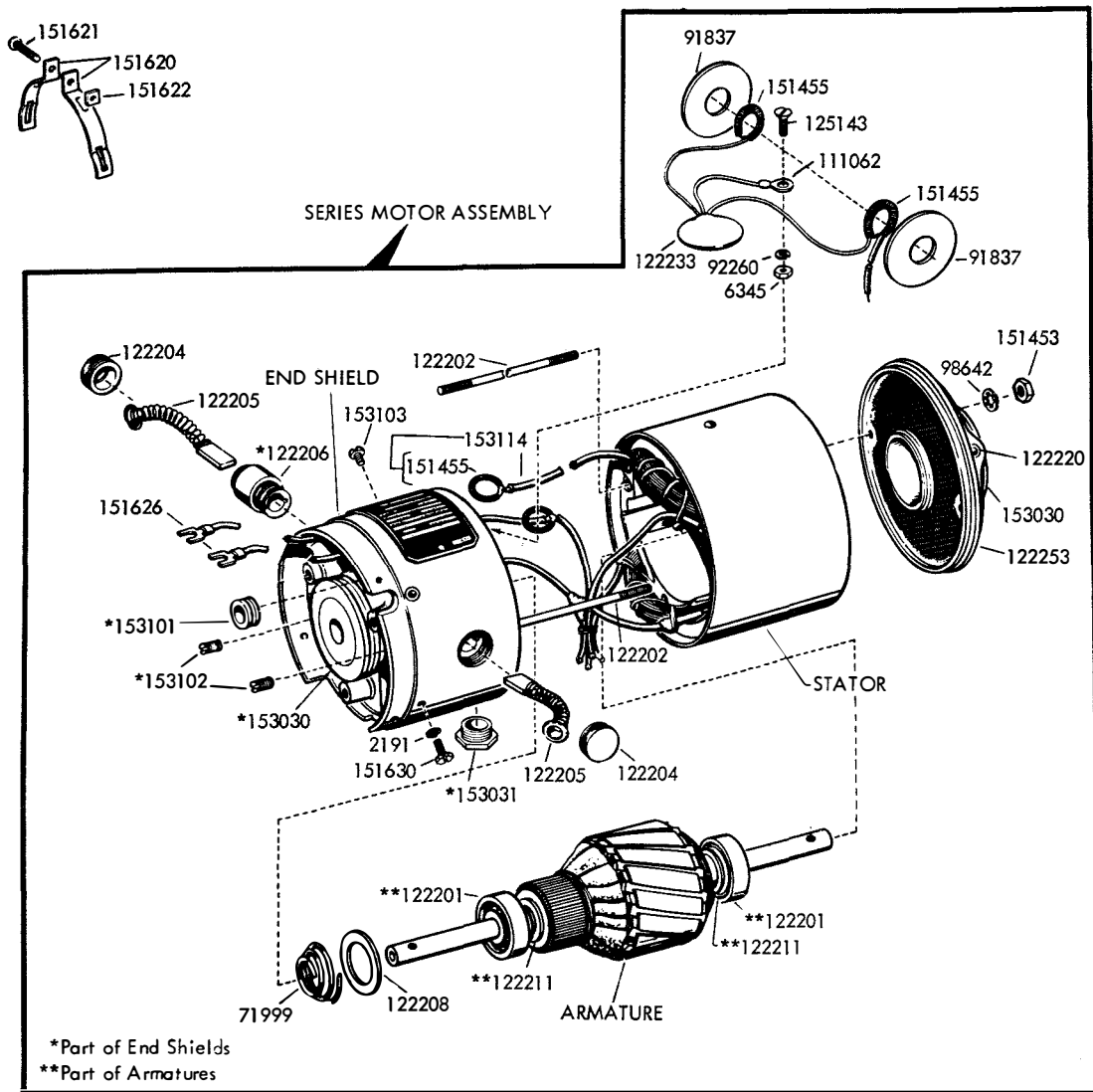


FIGURE 8. RELAY, CAPACITOR MOUNTING AND BRACKET (SYNCHRONOUS)

SERIES MOTOR UNITS

| Teletype Code | Motor Assembly | Motor Bracket | Container | Lid    | Nipple | Capacitor | Resistor | Electrical Noise Suppressor | Cable Assembly | Wire  |
|---------------|----------------|---------------|-----------|--------|--------|-----------|----------|-----------------------------|----------------|---|
| LMU4          | 150701         | 152046        | 152039    | 152040 | 152067 | 161579    | 161580   | 161578                      | 152059         | 91228 (2-1/2" lg. w/107398 and 125139 Terminals)<br>162684 (2-3/4" lg. w/164479 Terminal)<br>162685 (4" lg. w/164479 Terminal)  |
| LMU6          | 150701         | 150976        |           |        |        | 161579    | 161580   |                             |                | 91228 (2-1/2" lg. w/107398 and 125139 Terminals)<br>162684 (2-3/4" lg. w/164479 Terminal)<br>163268 (6-1/2" lg. White w/164479 Terminal)<br>163269 (2" lg. w/164479 Terminal) |
| LMU10         | 150701         | 152046        | 152039    | 152040 | 152067 | 161579    | 161580   | 161578                      | 152059         | 91228 (2-1/2" lg. w/107398 and 125139 Terminals)<br>162684 (2-3/4" lg. w/164479 Terminal)<br>162685 (4" lg. w/164479 Terminal)  |
| LMU13         | 163272         | 150976        |           |        |        | 161579    | 161580   |                             |                | 91228 (2-1/2" lg. w/107398 and 125139 Terminals)<br>162684 (2-3/4" lg. w/164479 Terminal)<br>163268 (6-1/2" lg. White w/164479 Terminal)<br>163269 (2" lg. w/164479 Terminal) |
| LMU14         | 161577         | 152046        | 152039    | 152040 | 152067 | 161579    | 161580   | 161578                      | 152059         | 91228 (2-1/2" lg. w/107398 and 125139 Terminals)<br>162684 (2-3/4" lg. w/164479 Terminal)<br>162685 (4" lg. w/164479 Terminal)  |
| LMU23         | 164758         | 173751        |           |        |        | 173003    | 173004   |                             |                | 91228 (2-1/2" lg. w/107398 and 125139 Terminals)  |
| LMU28         | 179100         | 152046        | 179105    | 179106 | 179282 | 161579    | 179103   | 161578                      | 179283         | 91228 (2-1/2" lg. w/107398 and 125139 Terminals)  |
| LMU29         | 179190         | 152046        | 179420    | 179424 | 152067 | 179421    | 173004   | 179422                      | 152059         | 91228 (2-1/2" lg. w/107398 and 125139 Terminals)  |
| LMU32         | 194060         | 152046        | 194057    | 179424 | 194063 | 161579    | 179103   | 161578                      | 152059         | 91228 (2-1/2" lg. w/107398 and 125139 Terminals)  |
| LMU39         | 161577         | 152046        | 179420    | 179424 | 152067 | 161579    | 179103   | 161578                      | 152059         | 91228 (2-1/2" lg. w/107398 and 125139 Terminals)  |
| LMU41         | 150701         | 152046        | 179420    | 179424 | 152067 | 161579    | 179103   | 161578                      | 152059         | 91228 (2-1/2" lg. w/107398 and 125139 Terminals)  |
| LMU47         | 150701         | 152046        | 179420    | 179424 | 152067 | 161579    | 179103   |                             | 152059         | 91228 (2-1/2" lg. w/107398 and 125139 Terminals)  |

FIGURE 9. SERIES MOTOR CROSS-REFERENCE CHART



| SERIES MOTORS STANDARD OR HEAVY DUTY |                |        |          |            | MOTOR DATA                                |
|--------------------------------------|----------------|--------|----------|------------|---|
|                                      | MOTOR ASSEMBLY | STATOR | ARMATURE | END SHIELD |   |
| Standard                             | 150701         | 122221 | 122210   | 122200     | Series, 1/20 HP, 115V: 60 Cycle, 3600 RPM |
| Heavy                                | 161577         | 161576 | 161575   | 122200     | Series, 1/15 HP, 115V: 60 Cycle, 3600 RPM |
| Heavy                                | +163272        | 161576 | 161575   | 163273     | Series, 1/15 HP, 115V: 60 Cycle, 3600 RPM |
| Heavy                                | +164758        | 164756 | 164757   | 163273     | DC Series, 1/15 HP, 48V: 3600 RPM         |
| Standard                             | 179100         | 122221 | 122210   | 179101     | Series, 1/20 HP, 115V: 60 Cycle, 3600 RPM |
| Heavy                                | 179190         | 164756 | 164757   | 122200     | DC Series, 1/15 HP, 48V: 3600 RPM         |
| Heavy                                | +194060        | 161576 | 161575   | 194062     | Series, 1/15 HP, 115V: 60 Cycle, 3600 RPM |

+Arranged for Inverted Mounting

FIGURE 10. SERIES MOTOR ASSEMBLIES

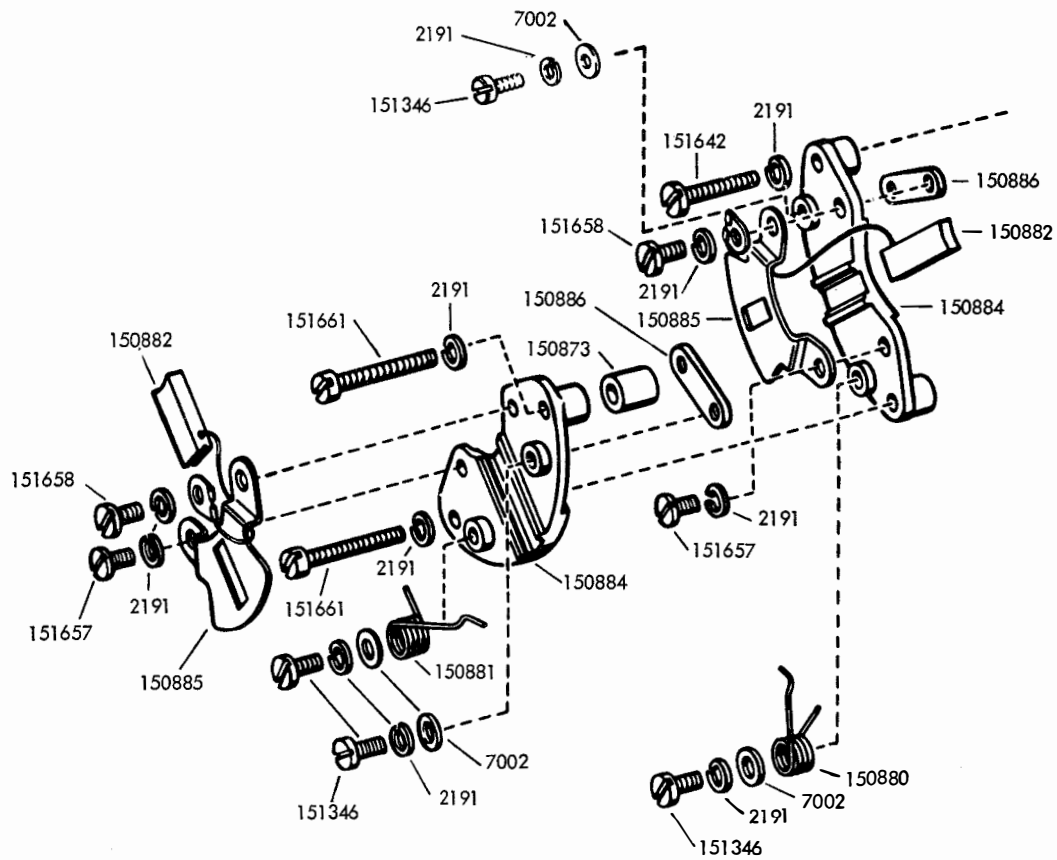


FIGURE 11. BRUSH ASSEMBLIES

FIGURE 12. 150845 GOVERNOR ASSEMBLY

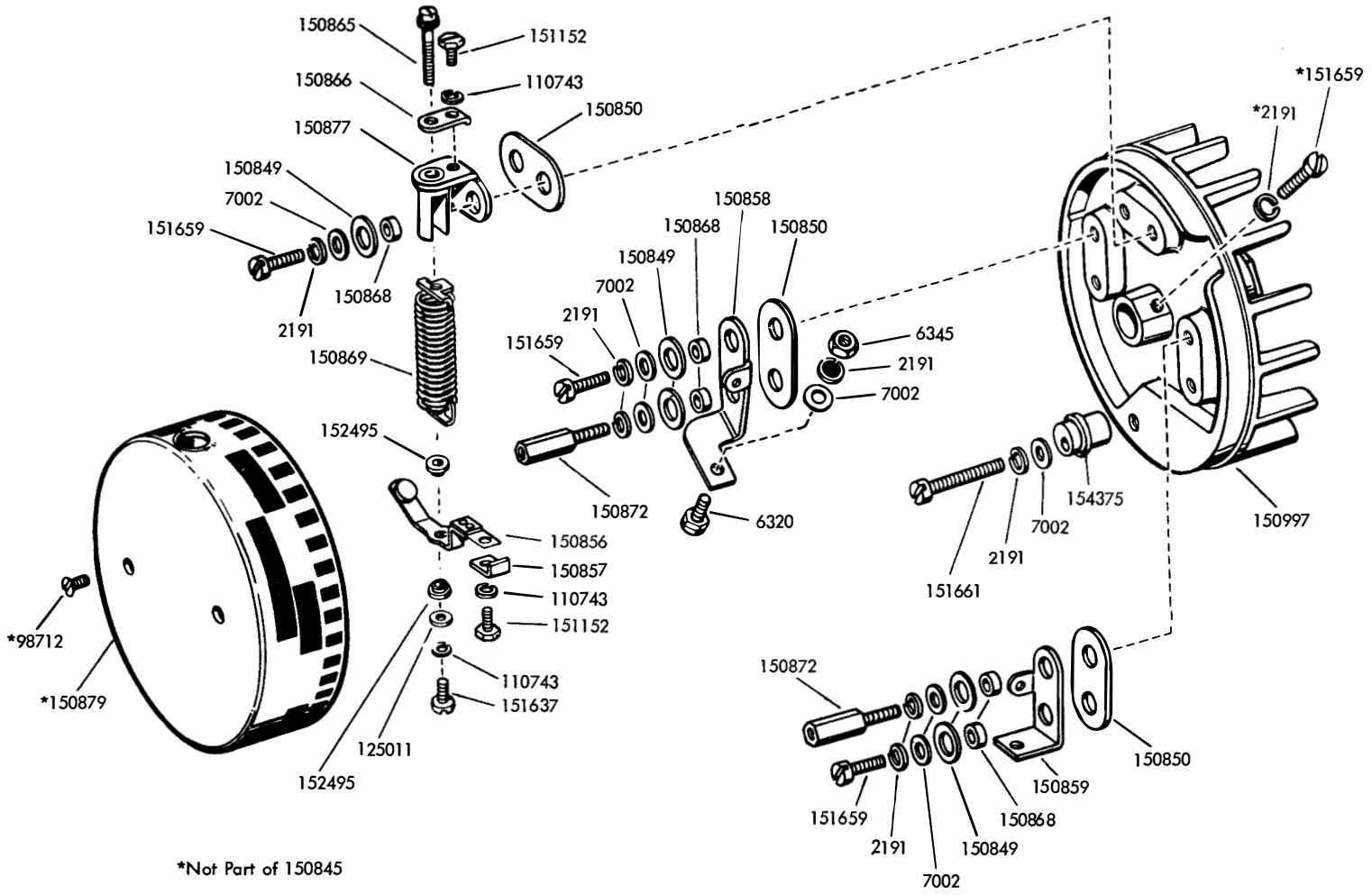
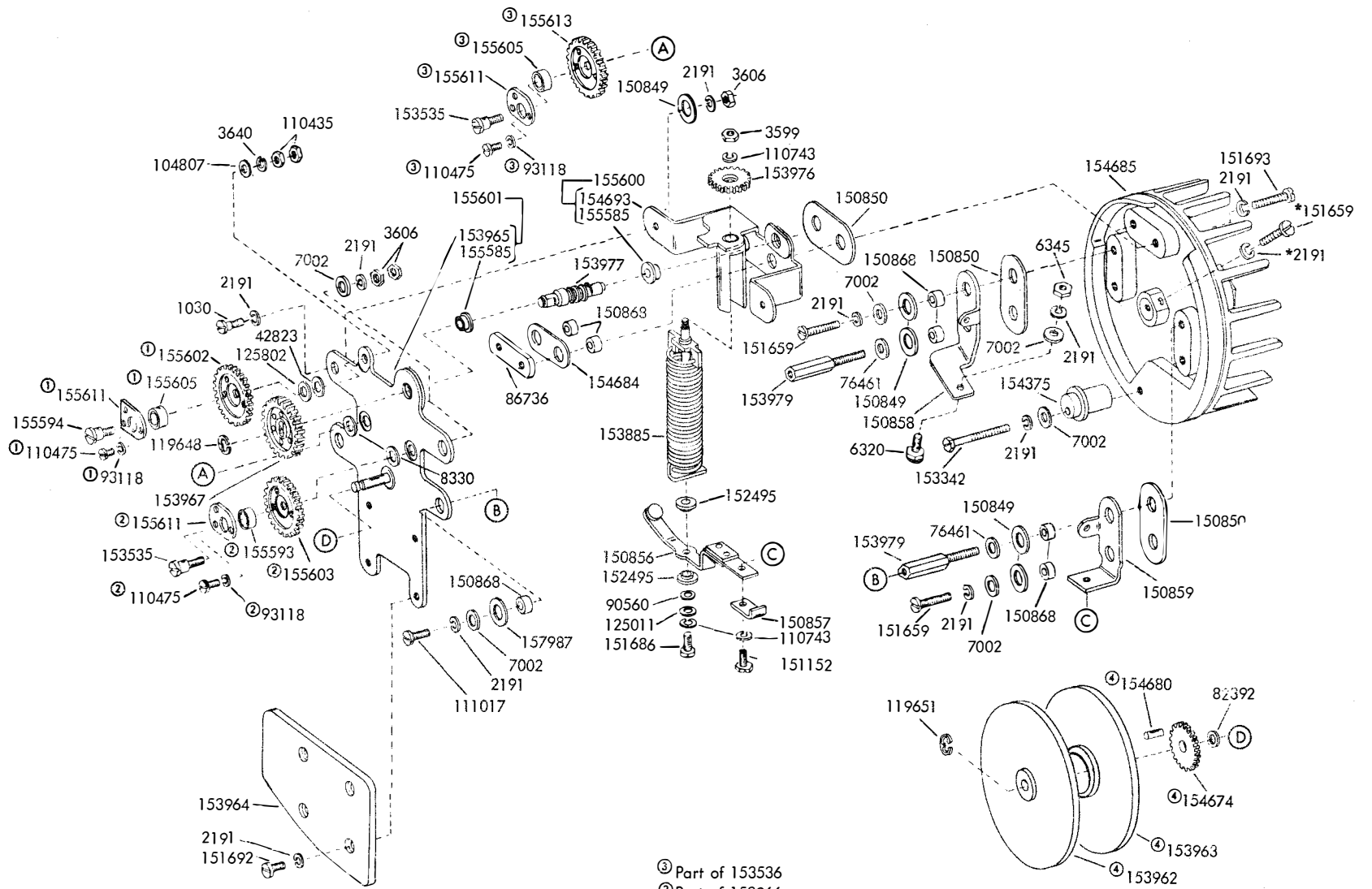


FIGURE 13. 154628 GOVERNOR ASSEMBLY



- (3) Part of 153536
- (2) Part of 153966
- (1) Part of 153968
- (4) Part of 154676
- \*Not part of 154628

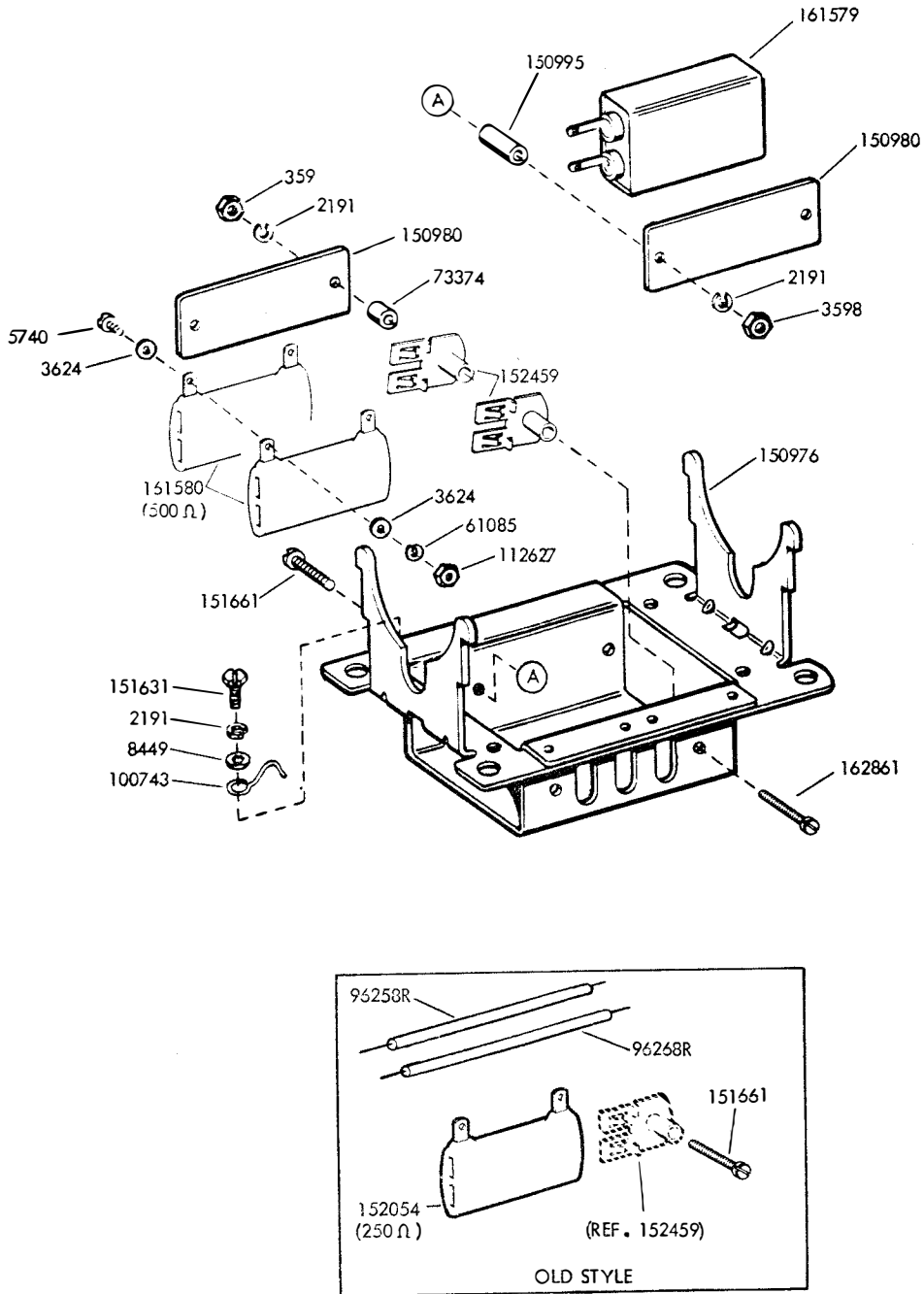
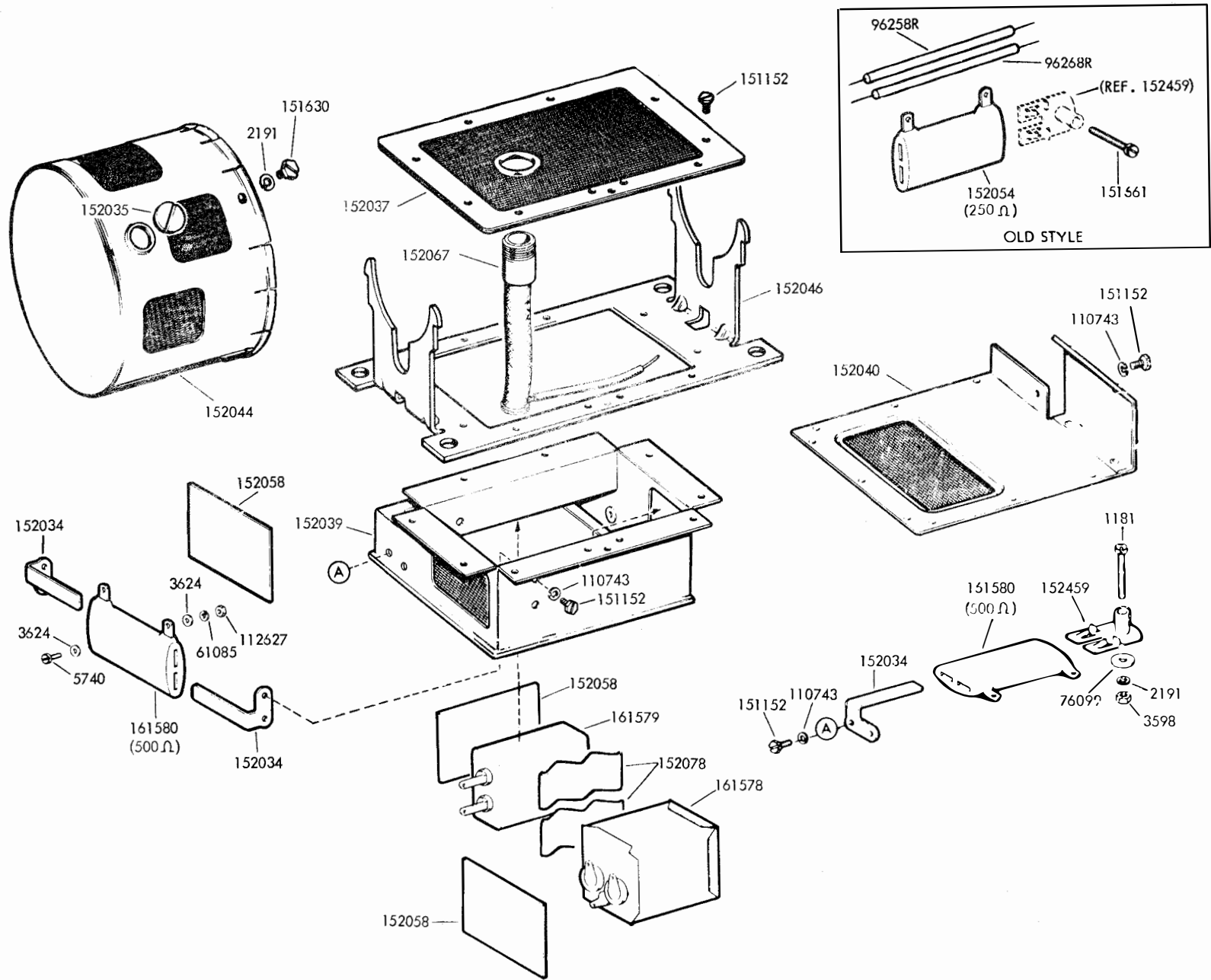


FIGURE 14. SERIES MOTOR MOUNTING PARTS



FIGURE 15. SERIES MOTOR MOUNTING PARTS WITH RF SUPPRESSION



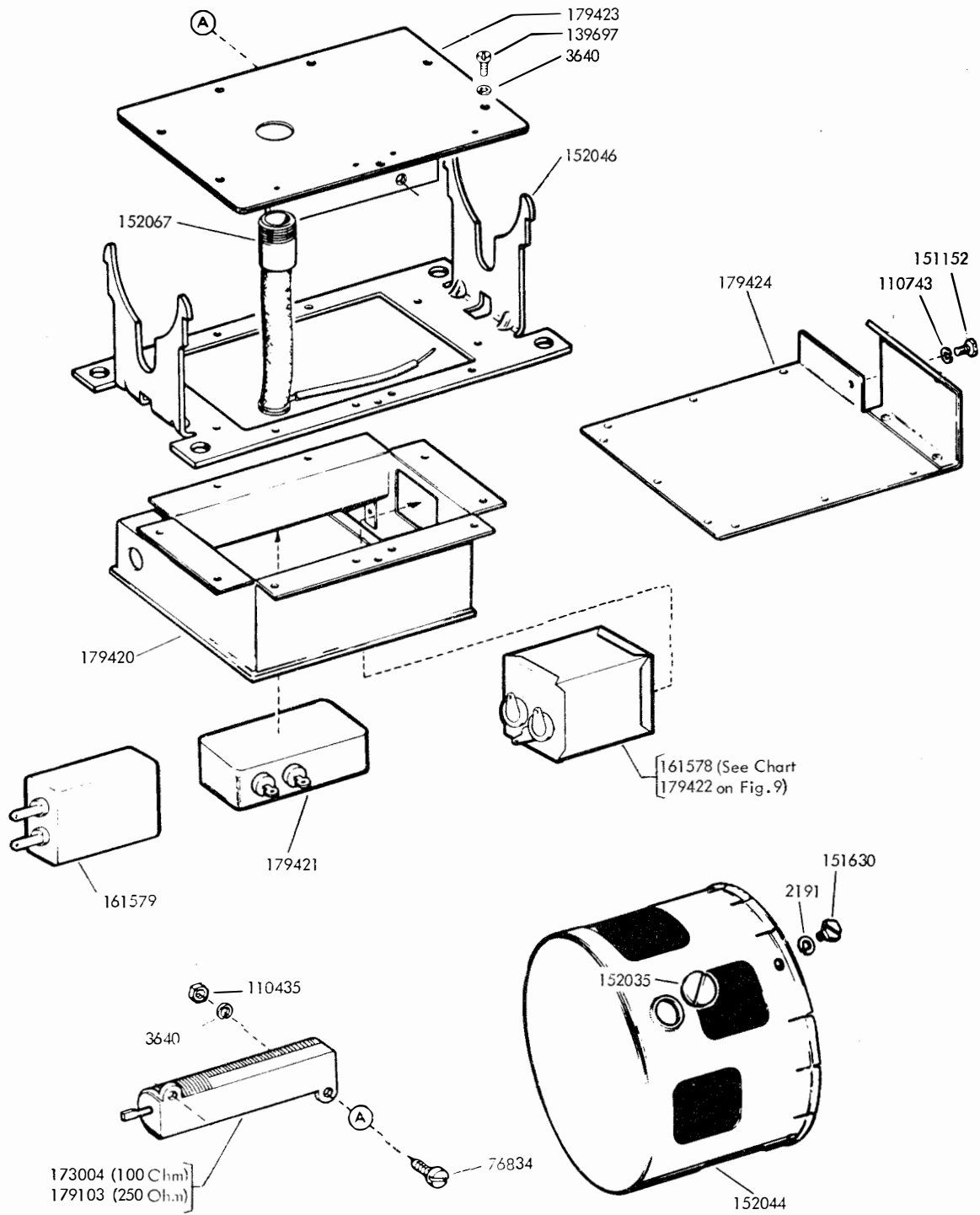


FIGURE 16. SERIES MOTOR MOUNTING PARTS WITH RF SUPPRESSION

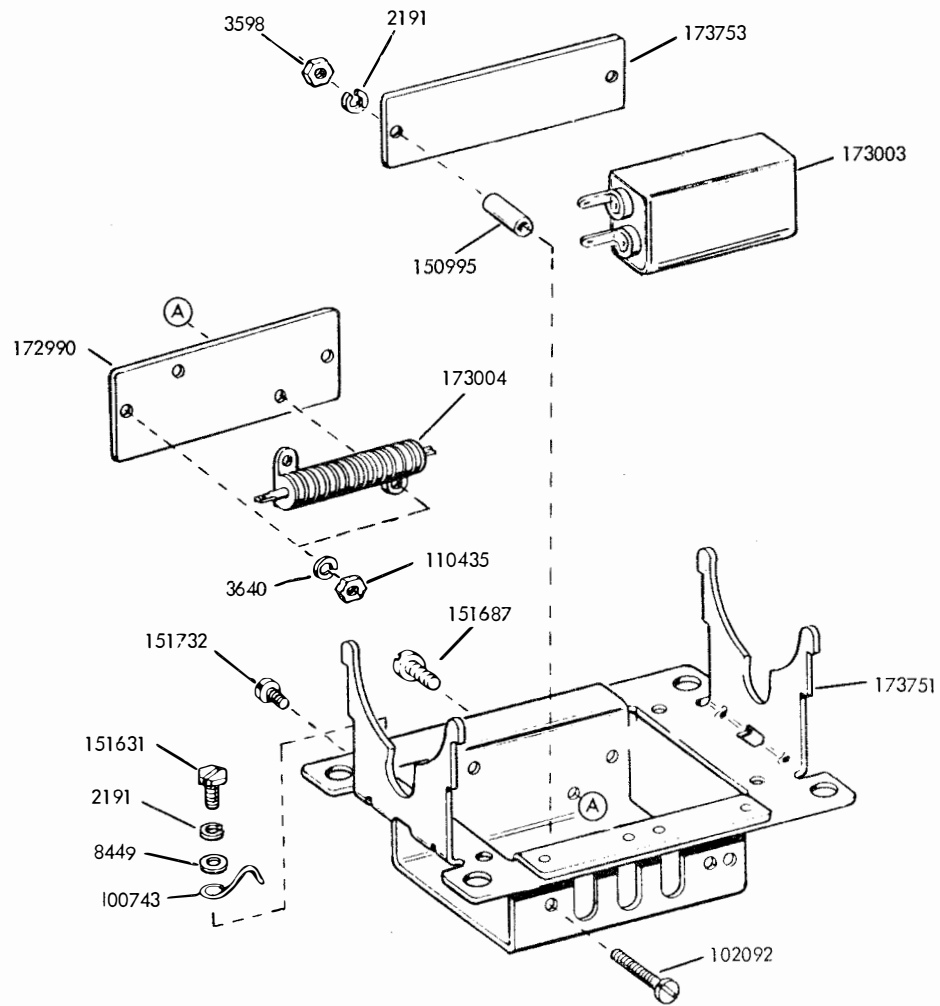
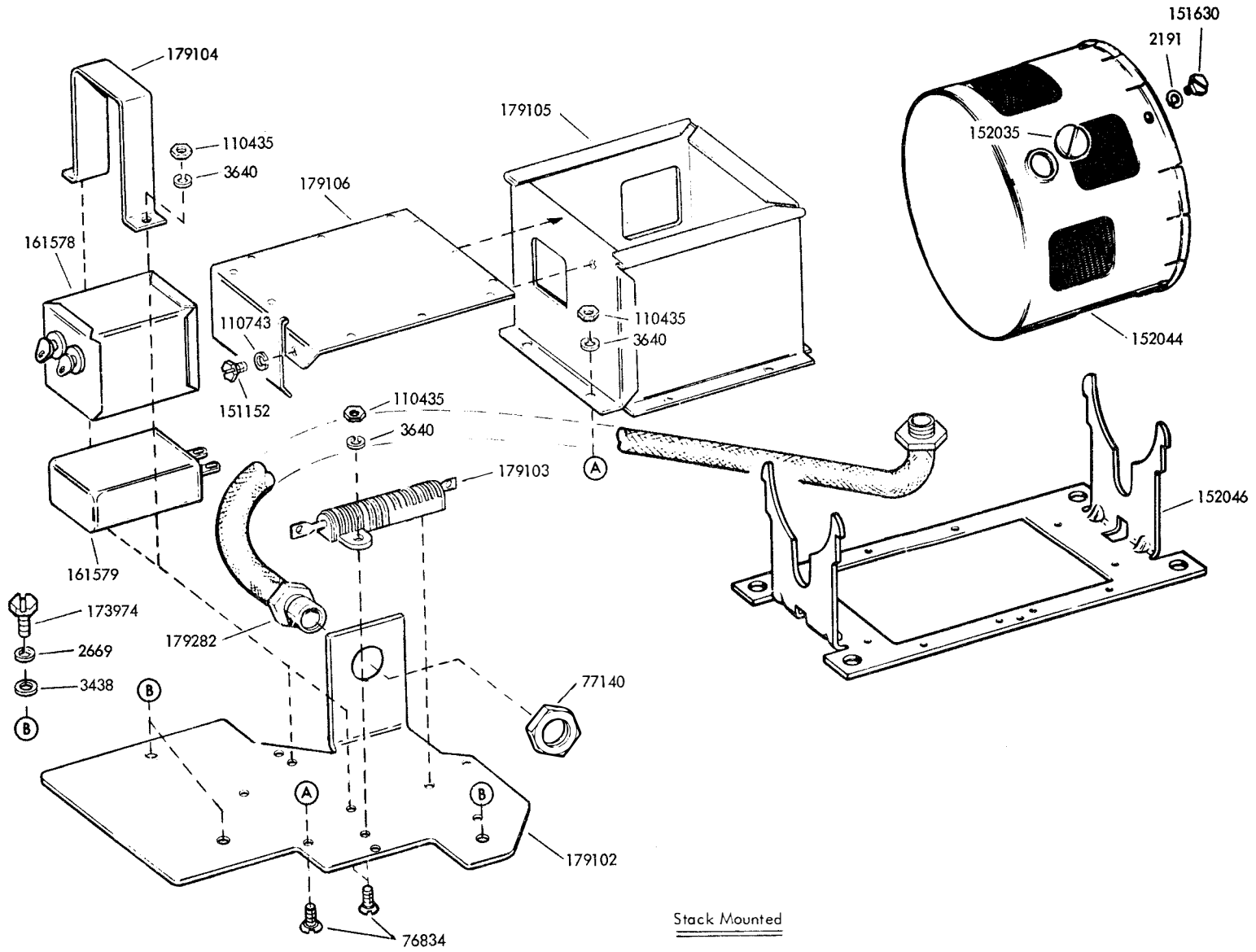


FIGURE 17. SERIES MOTOR MOUNTING PARTS

FIGURE 18. SERIES MOTOR MOUNTING PARTS WITH RF SUPPRESSION



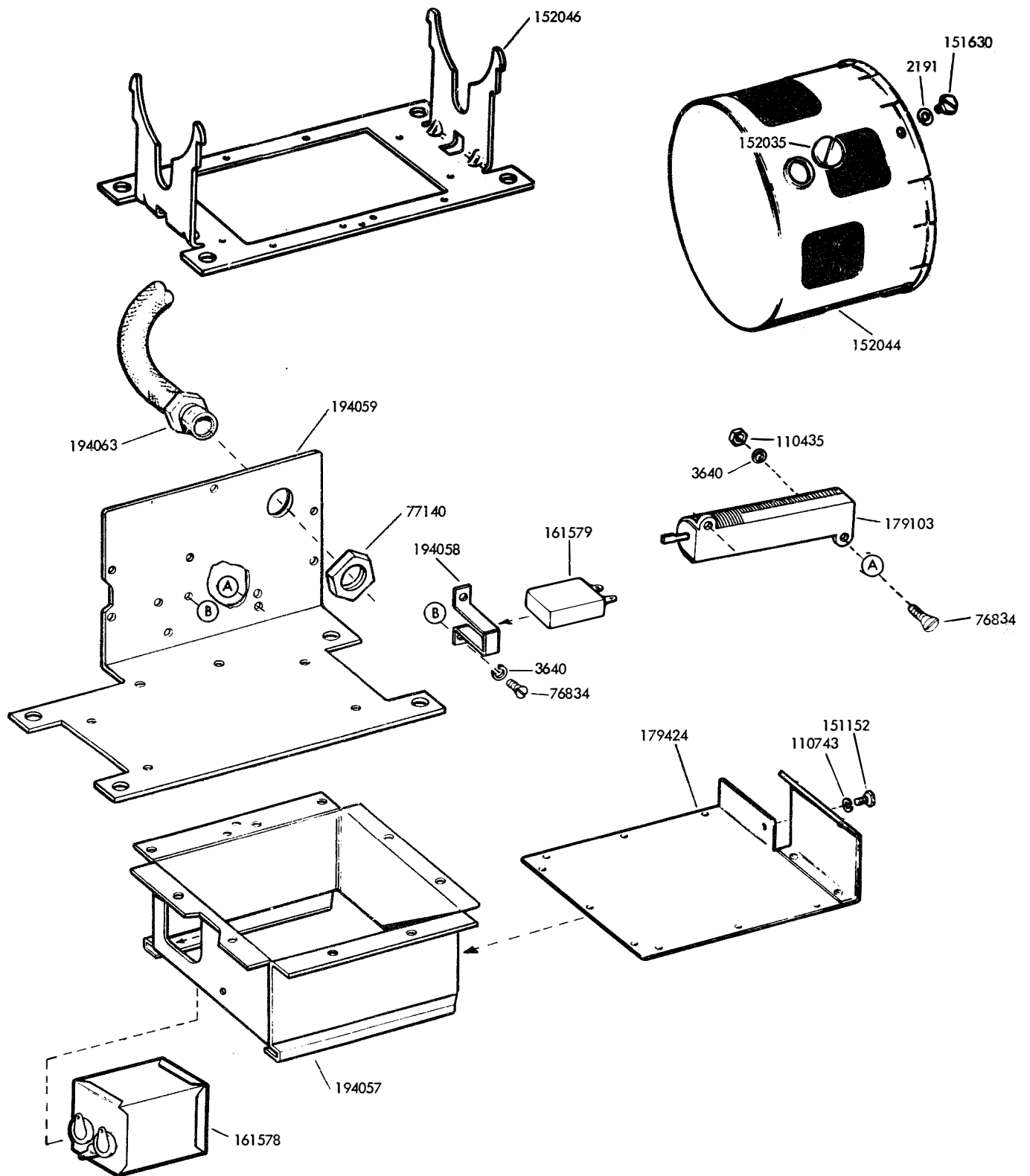
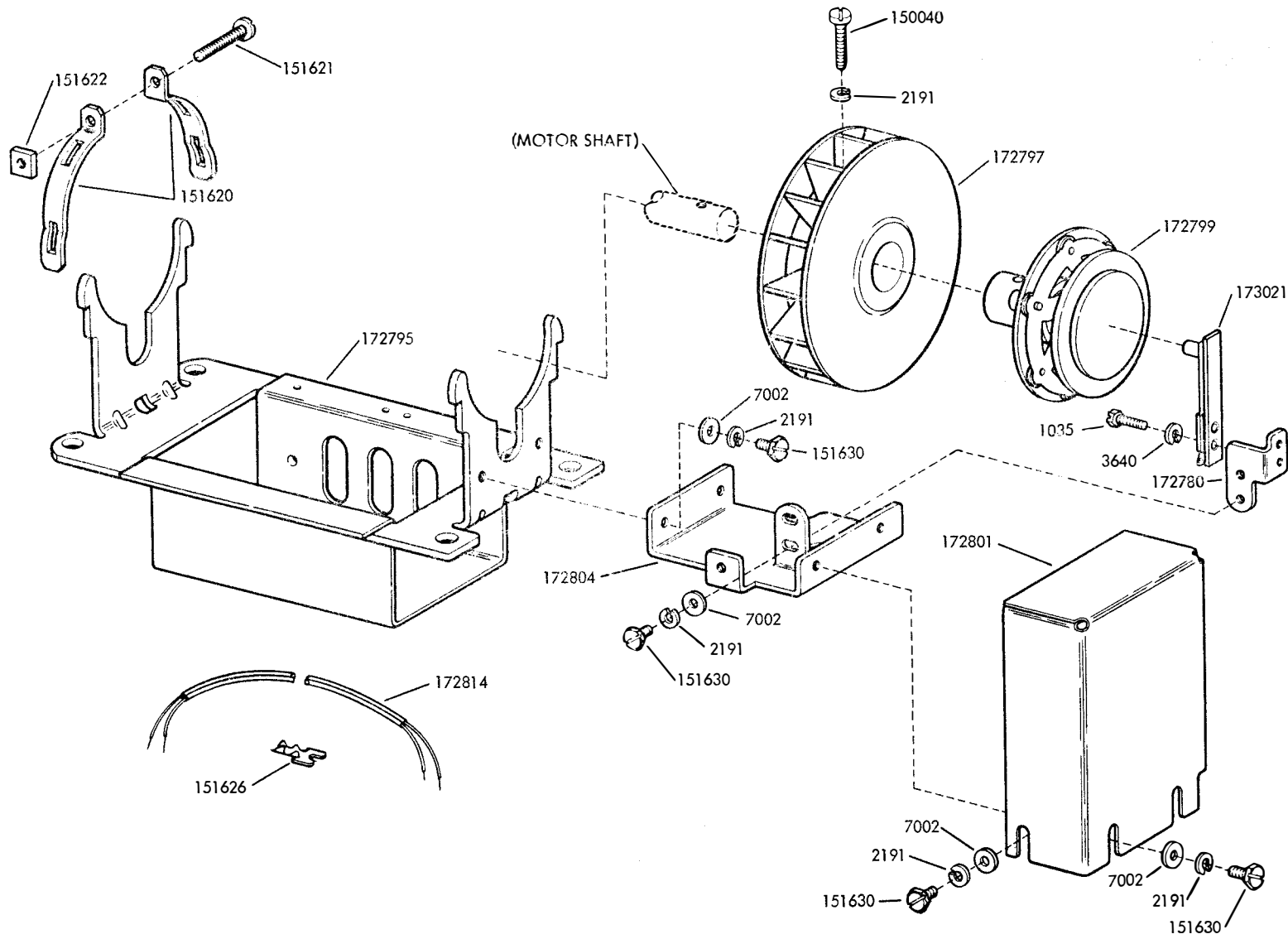


FIGURE 19. SERIES MOTOR MOUNTING PARTS WITH RF SUPPRESSION

FIGURE 20. SYNCHRONOUS MOTOR UNIT WITH CENTRIFUGAL SWITCH ASSEMBLY



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| 1035        | Screw (4-40 x 3/8 Hex) 22           | 122211      | Washer, Pull 4,12                           | 151659      | Screw (6-40 x 1/2 Fil) 10,14,15   |
| 1181        | Screw (6-40 x 11/16 Fil) 17         | 122220      | Oiler, Ball 4,12                            | 151661      | Screw (6-40 x 1" Fil) 13,14,16,17 |
| 2034        | Washer, Flat 10                     | 122221      | Stator 12                                   | 151686      | Screw (4-40 x 3/8 Fil) 5,6,9,15   |
| 2191        | Washer, Lock 4,5,7,10,12 to 22      | 122229      | Bolt (8-32 x 4 11/16 Fil) 4                 | 151687      | Screw (4-40 x 7/16 Fil) 7,19      |
| 2263        | Nut (8-32 Hex) 4                    | 122233      | Capacitor Assembly 12                       | 151692      | Screw (6-40 x 3/16 Fil) 5,15      |
| 2669        | Washer, Lock 20                     | 122245      | Capacitor (43 to 48 Mfd) 3,5,6,7            | 151693      | Screw (6-40 x 9/16 Fil) 15        |
| 3438        | Washer, Flat 20                     | 122249      | Switch, Thermostatic 3,5,6,7                | 151732      | Screw (4-40 x 11/32 Fil) 19       |
| 3598        | Nut (6-40 Hex) 10,16,17,19          | 122251      | Stator 4                                    | 151795      | Motor, Synchronous 3,4            |
| 3599        | Nut (4-40 Hex) 15                   | 122252      | Shield Assembly, End 4                      | 151819      | Jumper (3" Black) 3               |
| 3606        | Nut (6-40 Hex) 15                   | 122253      | Shield Assembly, End 12                     | 151920      | Plate, Mounting 3,5               |
| 3624        | Washer, Flat 16,17                  | 123769      | Fan, Motor 4                                | 151922      | Clamp 3,5,6,7,9                   |
| 3640        | Washer, Lock 5,6,7,9,10,15,18 To 22 | 125011      | Washer, Flat 5,6,7,9,14,15                  | 151923      | Relay, Motor 3,5,6,7              |
| 3949        | Spacer (.160") 10                   | 125139      | Screw (4-40 x 1/8 Fil) 11                   | 151924      | Insulator 3,5                     |
| 5740        | Screw (2-56 x 1/4 Fil) 16,17        | 125143      | Screw (6-32 x 3/8 Flat) 12                  | 151925      | Clamp 3,5,6,7,9                   |
| 6320        | Screw, Contact (6-32) 14,15         | 125802      | Washer, Flat 15                             | 151926      | Nut (4-40 Spl.) 5,6,9             |
| 6345        | Nut (6-32 Hex) 12, 14, 15           | 128874      | Rotor, Motor 4                              | 151927      | Cable w/Terminals 3               |
| 7002        | Washer, Flat 5,10,13,14,15,22       | 139697      | Screw (4-40 x 9/32 Fil) 18                  | 152034      | Bracket, Resistor 17              |
| 8330        | Washer, Flat 15                     | 142589      | Bracket, Motor 3,9                          | 152035      | Plug 17,18,20,21                  |
| 8449        | Spacer (.094") 10,16,19             | 146997      | Cap 10                                      | 152037      | Cover 17                          |
| 42823       | Washer, Flat 15                     | 150040      | Screw (6-40 x 5/8 Fil) 4,22                 | 152039      | Container 11,17                   |
| 61085       | Washer, Lock 16,17                  | 150701      | Motor 115V. A.C. Series 11,12               | 152040      | Lid 11, 17                        |
| 71999       | Spring 4,12                         | 150845      | Governor Assembly 14                        | 152044      | Cover 17,18,20,21                 |
| 73374       | Spacer (.250") 16                   | 150849      | Washer, Insulating 14,15                    | 152046      | Bracket, Motor 11,17,18,20,21     |
| 76099       | Washer, Flat 17                     | 150850      | Insulator (.031") 14,15                     | 152054      | Resistor (250 Ohm) 16,17          |
| 76461       | Washer, Flat 15                     | 150856      | Arm, Contact 14,15                          | 152058      | Separator 17                      |
| 76834       | Screw (4-40 x 3/8 Flat) 18,20,21    | 150857      | Clamp 14,15                                 | 152059      | Cable w/Terminals 11              |
| 77140       | Nut, Lock (9/16 - 32 Hex) 20,21     | 150858      | Bracket, Contact 14,15                      | 152067      | Nipple 11,17,18                   |
| 82392       | Shim (.004") 15                     | 150859      | Bracket, Mounting 14,15                     | 152078      | Spring 17                         |
| 82474       | Terminal 3                          | 150865      | Screw, Clamping (4-40) 14                   | 152297      | Washer, Flat 4                    |
| 86736       | Plate, Clamping 15                  | 150866      | Clamp 14                                    | 152426      | Nut, Self-Locking (6-40 Hex) 10   |
| 87334       | Washer, Insulating 5,6,7,9          | 150868      | Bushing, Insulating 14,15                   | 152459      | Bracket, Mounting 16,17           |
| 90560       | Washer, Flat 15                     | 150869      | Spring 14                                   | 152495      | Bushing 14,15                     |
| 91228       | Strap (2-1/2" Braided) 11           | 150872      | Stud 14                                     | 152893      | Screw (4-40 x 1/4 Hex) 10         |
| 91837       | Washer, Insulating 12               | 150873      | Collar 13                                   | 153030      | Mount, Vibration 4,8,12           |
| 92260       | Washer, Lock 12                     | 150877      | Bracket 14                                  | 153031      | Bushing, Lead 12                  |
| 93118       | Washer, Lock 15                     | 150879      | Cover, Governor 14                          | 153049      | Washer, Fiber 4                   |
| 93984       | Washer, Lock 10                     | 150880      | Spring, Governor Brush 13                   | 153101      | Grommet, Rubber 12                |
| 96258R      | Jumper (3" Red) 16,17               | 150881      | Spring, Governor Brush 13                   | 153102      | Screw, Set (8-32) 12              |
| 96264R      | Jumper (5" Red) 3                   | 150882      | Brush 13                                    | 153103      | Screw, Self-Tapping (4-40) 12     |
| 96268R      | Jumper (7" Red) 16,17               | 150884      | Mounting, Brush 13                          | 153114      | Jumper (8-1/2" Black) 12          |
| 98642       | Washer, Lock 12                     | 150885      | Plate, Brush 13                             | 153342      | Screw (6-40 x 15/16 Hex) 15       |
| 98712       | Screw (4-40 x 1/4 Flat) 14          | 150886      | Plate, Clamp 13                             | 153535      | Screw, Shoulder (6-40) 15         |
| 100743      | Clamp, Cable 16,19                  | 150976      | Bracket, Motor 3,5,11,16                    | 153536      | Gear Assembly 15                  |
| 102092      | Screw (6-40 x 1-17/32 Rd) 19        | 150980      | Plate, Clamping 16                          | 153839      | Screw (6-40 x 5/8 Hex) 10         |
| 102203      | Bushing 7                           | 150995      | Bushing 16,19                               | 153885      | Spring Assembly 15                |
| 104807      | Washer, Flat 15                     | 150997      | Fan, Governor 14                            | 153962      | Disk 15                           |
| 107398      | Terminal 3,11                       | 151152      | Screw (4-40 x 3/16 Hex) 14,15,17,18,20,21   | 153963      | Disk 15                           |
| 110435      | Nut (4-40 Hex) 15,18,19,20,21       | 151346      | Screw (6-40 x 3/8 Fil) 13                   | 153964      | Counterweight 15                  |
| 110475      | Screw (2-64 x 5/64 Rd) 15           | 151453      | Nut (10-32 Hex) 12                          | 153965      | Bracket 15                        |
| 110743      | Washer, Lock 14,15,17,18,20,21      | 151455      | Spring, Helical Clip 12                     | 153966      | Gear Assembly 15                  |
| 111017      | Screw (6-40 x 5/16 Fil) 15          | 151620      | Strap, Motor Mounting 5,6,7,9,10,12,22      | 153967      | Gear (28 T) 15                    |
| 111062      | Terminal 12                         | 151621      | Screw (6-32 x 3/4 Rd) 5,6,7,9,10,12,22      | 153968      | Gear Assembly 15                  |
| 112627      | Nut (2-56 Hex) 16,17                | 151622      | Nut (6-32 Sq.) 5,6,7,9,10,12,22             | 153976      | Gear (32 T) 15                    |
| 119223      | Screw (4-40 x 1-15/32 Fil) 5,9      | 151626      | Terminal 3,12,22                            | 153977      | Worm 15                           |
| 119648      | Ring, Retaining 15                  | 151630      | Screw (6-40 x 1/4 Hex) 10,12,17,18,20,21,22 | 153979      | Post 15                           |
| 119651      | Ring, Retaining 15                  | 151631      | Screw (6-40 x 5/16 Hex) 16,19               | 154375      | Backstop 14,15                    |
| 122200      | Shield Assembly, End 12             | 151637      | Screw (4-40 x 1/4 Fil) 5,6,7,9,10,14        | 154628      | Governor Assembly 15              |
| 122201      | Bearing, Ball 4,12                  | 151642      | Screw (6-40 x 3/4 Fil) 13                   | 154674      | Gear (20 T) 15                    |
| 122202      | Stud 12                             | 151657      | Screw (6-40 x 1/4 Fil) 13                   | 154676      | Disk Assembly 15                  |
| 122204      | Cap, Brush 12                       |             |   | 154680      | Bearing, Roller 15                |
| 122205      | Brush w/Spring 12                   |             |   | 154684      | Insulator 15                      |
| 122206      | Holder, Brush 12                    |             |   | 154685      | Fan, Assembly 15                  |
| 122208      | Washer, Flat 12                     |             |   | 154693      | Bracket 15                        |
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| 155594      | Screw, Shoulder (4-40) 15                     | 163799      | Bracket 10                    | 179103      | Resistor (250 Ohm) 11,18,20,21             |
| 155595      | Motor, Synchronous 3,4                        | 164479      | Terminal 11                   | 179104      | Bracket, Clamp 20                          |
| 155600      | Bracket 15                                    | 164603      | Insulator 3,6                 | 179105      | Container 11,20                            |
| 155601      | Plate 15                                      | 164612      | Bracket w/Cradle 3,6          | 179106      | Lid 11,20                                  |
| 155602      | Gear (28 T) 15                                | 164756      | Stator, Motor 12              | 179190      | Motor, 48V. D.C. Series 11,12              |
| 155603      | Gear (28 T) 15                                | 164757      | Armature, Motor 12            | 179282      | Nipple 11,20                               |
| 155605      | Bearing, Ball 15                              | 164758      | Motor, 48V.A.C. Series 11,12  | 179283      | Cable w/Terminals 11                       |
| 155611      | Ring, Bearing 15                              | 164890      | Bearing, Ball 8               | 179420      | Container 11,18                            |
| 155613      | Gear (28 T) 15                                | 164891      | Washer, Flat 8                | 197421      | Capacitor (1 MFD) 11,18                    |
| 156656      | Jumper (2-3/4" Black) 3                       | 164892      | Washer, Flat 8                | 179422      | Suppressor, Noise 11,18                    |
| 157987      | Washer, Insulating 15                         | 164893      | Collar, Thrust 8              | 179423      | Plate 18                                   |
| 159739      | Motor, Synchronous 3,4                        | 164894      | Washer, Flat 8                | 179424      | Lid 11,18,21                               |
| 160298      | Plate, Mounting 3,5                           | 164962      | Bracket 10                    | 192226      | Bracket, Capacitor Mounting 10             |
| 160299      | Capacitor (226 MFD) 3.5                       | 170631      | Holder, Fuse 10               | 193181      | Cable w/Terminals 3                        |
| 160300      | Clamp 3,5                                     | 170764      | Motor, Synchronous 3,4        | 193236      | Cable w/Terminals 3                        |
| 160301      | Plate, Insulating 3,5                         | 171702      | Clamp 3,10                    | 193781      | Switch, Thermostatic 3,5,6,7               |
| 160302      | Plate, Nut 3,5,9                              | 171703      | Clamp 3,10                    | 194057      | Container 11,21                            |
| 160303      | Relay 3,5                                     | 171704      | Insulator 3,10                | 194058      | Clamp 21                                   |
| 160304      | Switch, Thermostatic 3,5                      | 171749      | Bracket, Motor 3,10           | 194059      | Bracket 21                                 |
| 160305      | Rotor, Motor 4                                | 171810      | Cable w/Terminals 3           | 194060      | Motor, 115V.A.C. Series 11,12              |
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| 161099      | Cable Assembly 3                              | 172795      | Bracket, Motor 3,22           | 194063      | Nipple 11,21                               |
| 161575      | Armature, Motor 12                            | 172797      | Fan 22                        | 194897      | Bracket w/Cradle 3,7                       |
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| 161579      | Capacitor (.5 MFD) 11,16,17,18,20,21          | 172814      | Cable w/Terminals 22          | 195143      | Capacitor (7 MFD) 10                       |
| 161580      | Resistor (500 Ohm) 11,16,17                   | 172902      | Nut (6-32 Hex) 8              | 195172      | Capacitor, Motor Start (64 to 77 MFD) 3,10 |
| 161984      | Motor, A.C. Synchronous 3,8                   | 172990      | Plate 19                      | 195173      | Relay 3,10                                 |
| 162072      | Capacitor, Motor Start (83 to 103 MFD) 3,9,10 | 173003      | Capacitor (1 MFD) 11,19       | 195178      | Cable w/Terminals 3                        |
| 162196      | Insulator 3,9                                 | 173004      | Resistor (100 Ohm) 11,18,19   | 195214      | Stator 8                                   |
| 162360      | Fuse (.8 Amp) 10                              | 173021      | Contact, Spring 22            | 196830      | Motor, Synchronous 3,4                     |
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| 162467      | Shield, Front End 8                           | 173753      | Plate 19                      |             |  |
| 162469      | Washer, Spring 8                              | 173974      | Screw (10-32 x 5/16 Hex) 20   |             |  |
| 162482      | Bolt (6-32 x 3-1/2 Fil) 8                     | 174471      | Switch, Thermostatic 3,9,10   |             |  |
| 162684      | Jumper (2-3/4" White) 11                      | 176064      | Plate, Nut 10                 |             |  |
| 162685      | Jumper (4" White) 11                          | 176111      | Duct 10                       |             |  |
| 162861      | Screw (6-40 x 1-7/16 Fil) 16                  | 176137      | Jumper (9-1/4" Black) 3       |             |  |
| 162910      | Insulator 3,9                                 | 178500      | Motor, Synchronous 3,4        |             |  |
| 162911      | Cable w/Terminals 3                           | 179010      | Bracket, Relay 9              |             |  |
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| 163269      | Jumper (2" White) 11                          | 179100      | Motor, 115V.A.C. Series 11,12 |             |  |
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