

BULLETIN No. 1036
ISSUE 3
DECEMBER, 1931

TELETYPE

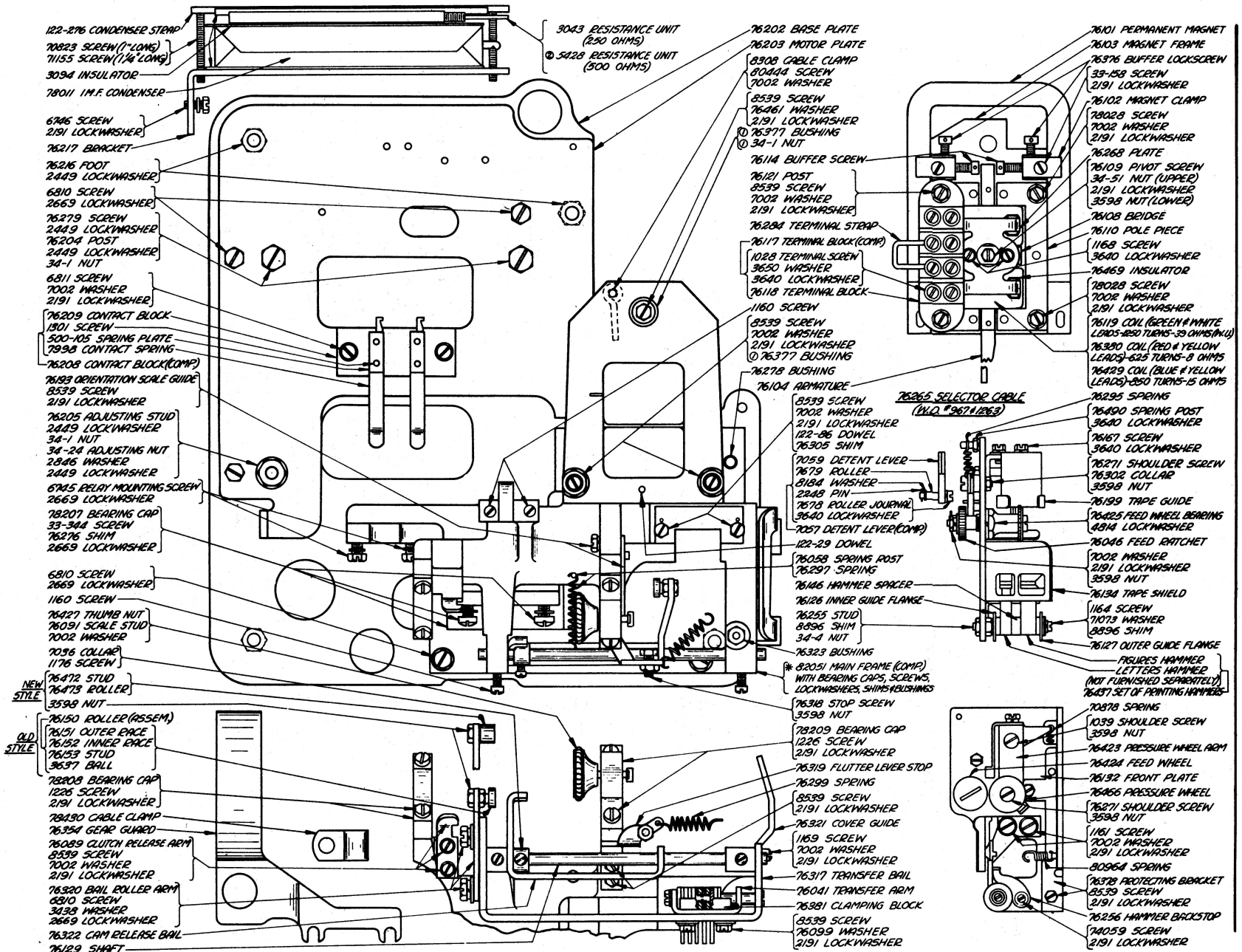
PRINTING TELEGRAPH SYSTEMS

M23

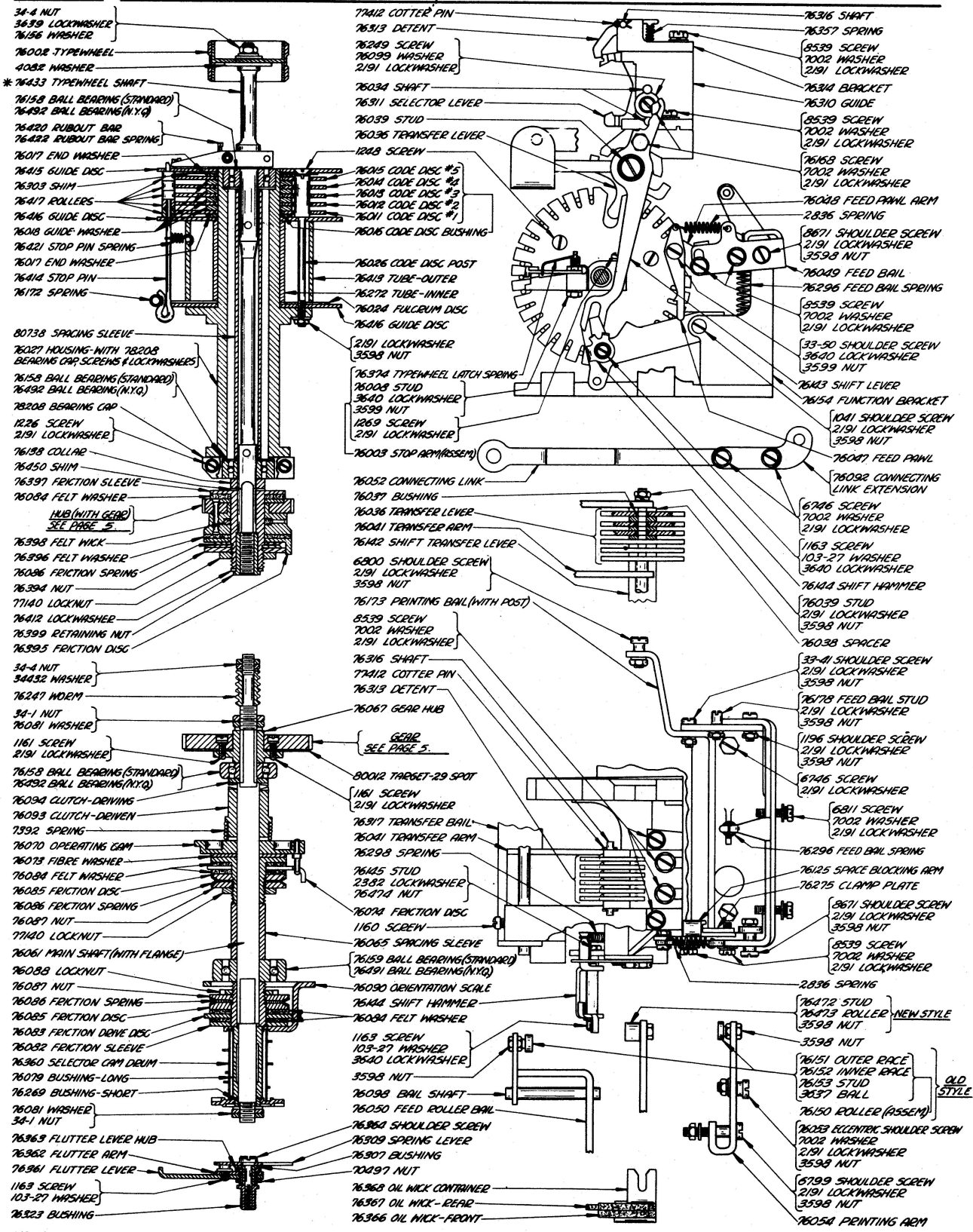
PARTS
TELETYPE TAPE PRINTER (TICKER)
(FOR TICKERS BEARING SERIAL NUMBERS ABOVE 1000)



CP-
 23
 MODEL 23



* ①, ② NOTE:- SEE PAGE # 7 FOR EXPLANATION.



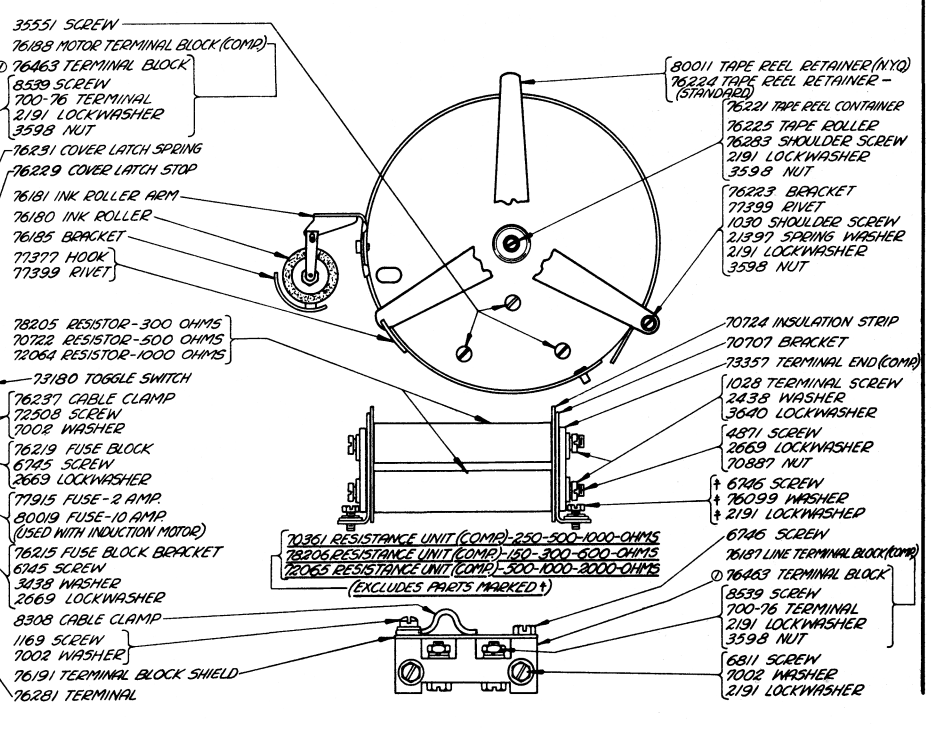
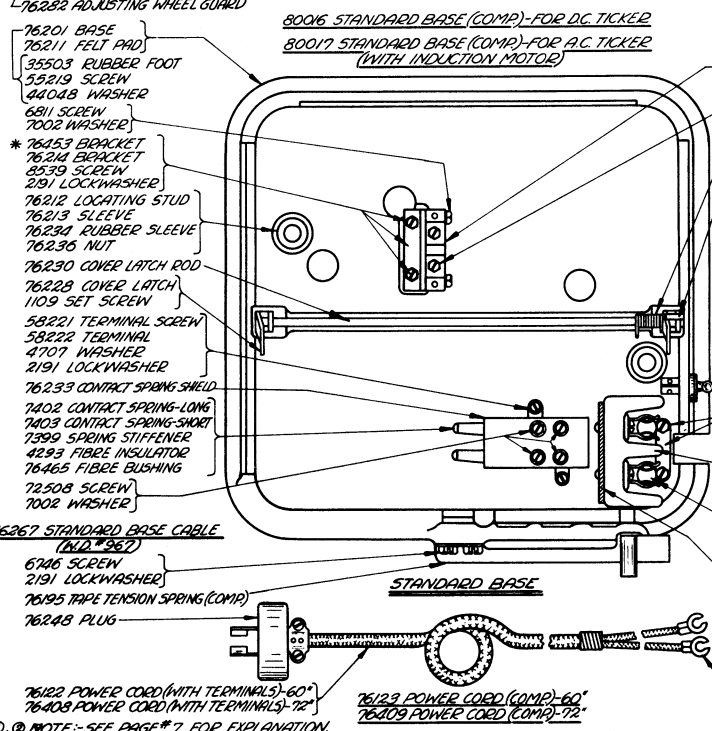
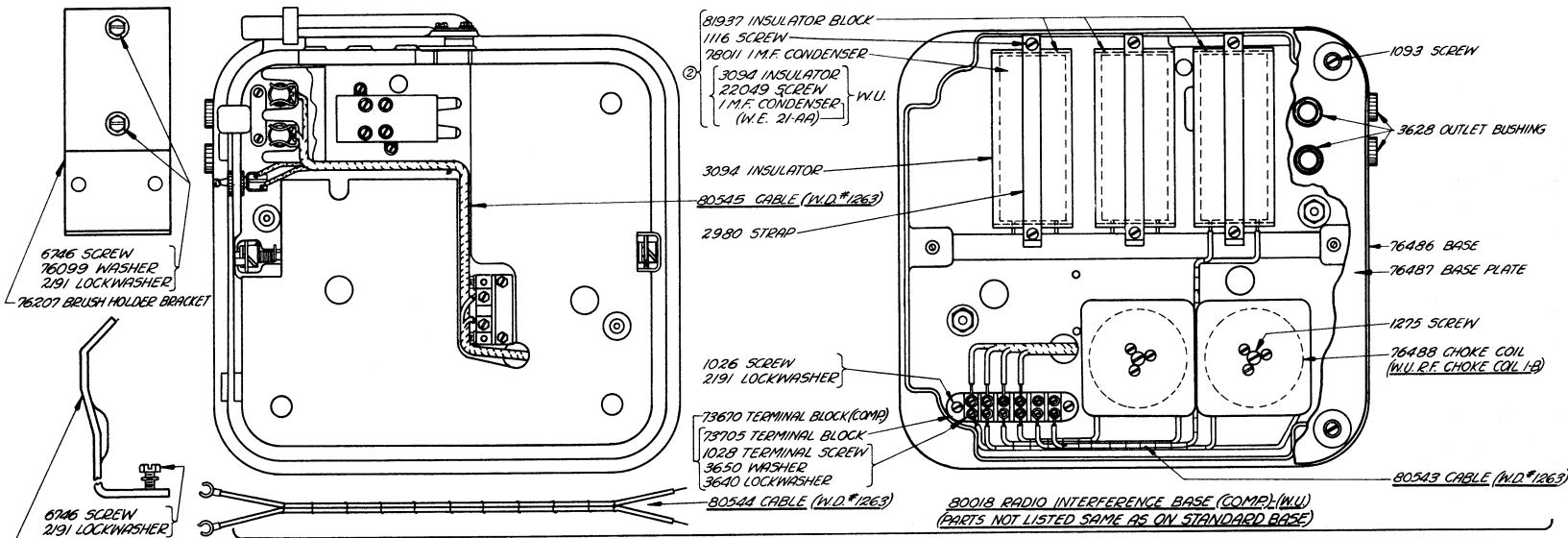
NOTE:-
* SEE PAGE #7 FOR EXPLANATION.

- 34-4 NUT
- 3639 LOCKWASHER
- 76156 WASHER
- 76002 TYPENWHEEL
- 4082 WASHER
- * 76433 TYPENWHEEL SHAFT
- 76158 BALL BEARING (STANDARD)
- 76492 BALL BEARING (N.Y.Q)
- 76420 RUBOUT BAR
- 76422 RUBOUT BAR SPRING
- 76017 END WASHER
- 76415 GUIDE DISC
- 76303 SHIM
- 76417 ROLLERS
- 76416 GUIDE WASHER
- 76018 GUIDE WASHER
- 76421 STOP PIN SPRING
- 76017 END WASHER
- 76414 STOP PIN
- 76172 SPRING
- 80738 SPACING SLEEVE
- 76027 HOUSING-WITH 78208 BEARING CAP SCREWS & LOCKWASHERS
- 76158 BALL BEARINGS (STANDARD)
- 76492 BALL BEARING (N.Y.Q)
- 78208 BEARING CAP
- 1226 SCREW
- 2191 LOCKWASHER
- 76198 COLLAR
- 76450 SHIM
- 76397 FRICTION SLEEVE
- 76084 FELT WASHER
- HUB (WITH GEAR SEE PAGE 5)
- 76398 FELT WICK
- 76396 FELT WASHER
- 76096 FRICTION SPRING
- 76394 NUT
- 77140 LOCKNUT
- 76412 LOCKWASHER
- 76399 RETAINING NUT
- 76395 FRICTION DISC
- 34-4 NUT
- 34432 WASHER
- 76247 WORM
- 34-1 NUT
- 76081 WASHER
- 1161 SCREW
- 2191 LOCKWASHER
- 76158 BALL BEARING (STANDARD)
- 76492 BALL BEARING (N.Y.Q)
- 76094 CLUTCH-DRIVING
- 76093 CLUTCH-DRIVEN
- 7392 SPRING
- 76070 OPERATING CAM
- 76073 FIBRE WASHER
- 76084 FELT WASHER
- 76085 FRICTION DISC
- 76086 FRICTION SPRING
- 76087 NUT
- 77140 LOCKNUT
- 76061 MAIN SHAFT (WITH FLANGE)
- 76088 LOCKNUT
- 76087 NUT
- 76086 FRICTION SPRING
- 76085 FRICTION DISC
- 76083 FRICTION DRIVE DISC
- 76082 FRICTION SLEEVE
- 76360 SELECTOR CAM DRUM
- 76079 BUSHING-LONG
- 76269 BUSHING-SHORT
- 76081 WASHER
- 34-1 NUT
- 76363 FLUTTER LEVER HUB
- 76362 FLUTTER ARM
- 76361 FLUTTER LEVER
- 1163 SCREW
- 103-27 WASHER
- 76323 BUSHING

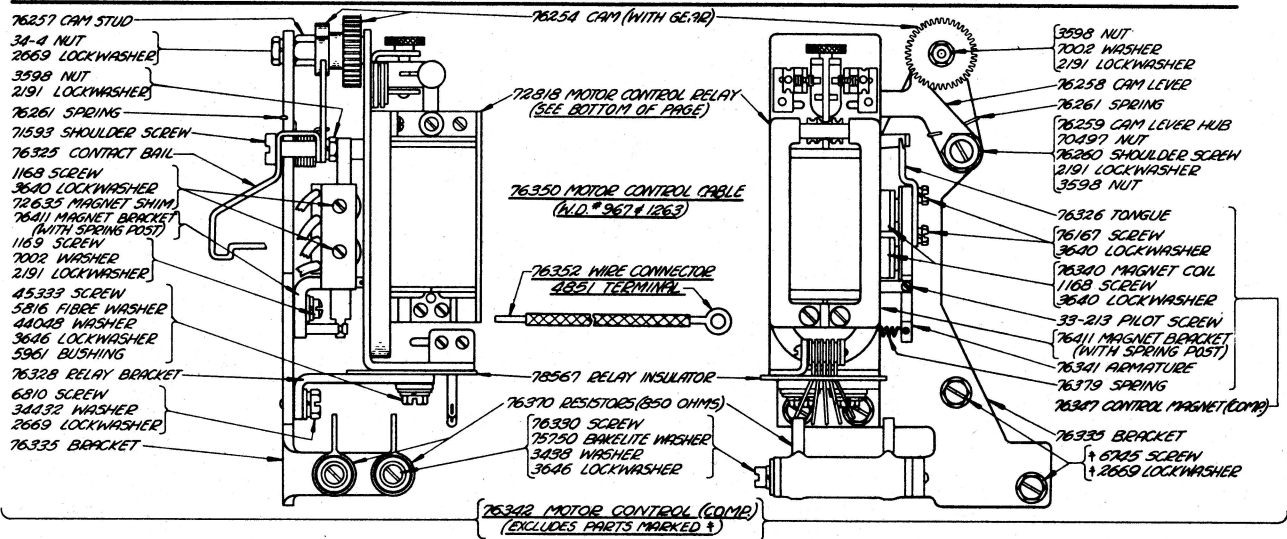
- 77412 COTTER PIN
- 76313 DETENT
- 76249 SCREW
- 76099 WASHER
- 2191 LOCKWASHER
- 76034 SHAFT
- 76311 SELECTOR LEVER
- 76039 STUD
- 76036 TRANSFER LEVER
- 1248 SCREW
- 76015 CODE DISC #5
- 76014 CODE DISC #4
- 76013 CODE DISC #3
- 76012 CODE DISC #2
- 76011 CODE DISC #1
- 76016 CODE DISC BUSHING
- 76026 CODE DISC POST
- 76413 TUBE-OUTER
- 76272 TUBE-INNER
- 76024 FULCRUM DISC
- 76416 GUIDE DISC
- 2191 LOCKWASHER
- 3598 NUT
- 76374 TYPENWHEEL LATCH SPRING
- 76008 STUD
- 3640 LOCKWASHER
- 3599 NUT
- 1269 SCREW
- 2191 LOCKWASHER
- 76003 STOP ARM (ASSEMB)
- 76052 CONNECTING LINK
- 76037 BUSHING
- 76036 TRANSFER LEVER
- 76041 TRANSFER ARM
- 76142 SHIFT TRANSFER LEVER
- 6800 SHOULDER SCREW
- 2191 LOCKWASHER
- 3598 NUT
- 76173 PRINTING BAIL (WITH POST)
- 8539 SCREW
- 7002 WASHER
- 2191 LOCKWASHER
- 76316 SHAFT
- 77412 COTTER PIN
- 76313 DETENT
- 76067 GEAR HUB
- SEE PAGE 5
- 80012 TARGET-29 SPOT
- 1161 SCREW
- 2191 LOCKWASHER
- 76317 TRANSFER BAIL
- 76041 TRANSFER ARM
- 76298 SPRING
- 76145 STUD
- 2382 LOCKWASHER
- 76474 NUT
- 76074 FRICTION DISC
- 1160 SCREW
- 76065 SPACING SLEEVE
- 76159 BALL BEARING (STANDARD)
- 76491 BALL BEARING (N.Y.Q)
- 76090 ORIENTATION SCALE
- 76404 SHIFT HAMMER
- 76094 FELT WASHER
- 1163 SCREW
- 103-27 WASHER
- 3640 LOCKWASHER
- 3598 NUT
- 76098 BAIL SHAFT
- 76050 FEED ROLLER BAIL
- 76360 SHOULDER SCREW
- 76309 SPRING LEVER
- 76307 BUSHING
- 70097 NUT
- 76368 OIL WICK CONTAINER
- 76367 OIL WICK-REAR
- 76366 OIL WICK-FRONT

- 76316 SHAFT
- 76357 SPRING
- 8539 SCREW
- 7002 WASHER
- 2191 LOCKWASHER
- 76341 BRACKET
- 76310 GUIDE
- 8539 SCREW
- 7002 WASHER
- 2191 LOCKWASHER
- 76163 SCREW
- 7002 WASHER
- 2191 LOCKWASHER
- 76028 FEED PAWL ARM
- 2836 SPRING
- 8671 SHOULDER SCREW
- 2191 LOCKWASHER
- 3598 NUT
- 76049 FEED BAIL
- 76296 FEED BAIL SPRING
- 8539 SCREW
- 7002 WASHER
- 2191 LOCKWASHER
- 33-50 SHOULDER SCREW
- 3640 LOCKWASHER
- 3599 NUT
- 76443 SHIFT LEVER
- 76154 FUNCTION BRACKET
- 1041 SHOULDER SCREW
- 2191 LOCKWASHER
- 3598 NUT
- 76047 FEED PAWL
- 78092 CONNECTING LINK EXTENSION
- 6746 SCREW
- 7002 WASHER
- 2191 LOCKWASHER
- 1163 SCREW
- 103-27 WASHER
- 3640 LOCKWASHER
- 76144 SHIFT HAMMER
- 76039 STUD
- 2191 LOCKWASHER
- 3598 NUT
- 76038 SPACER
- 33-41 SHOULDER SCREW
- 2191 LOCKWASHER
- 3598 NUT
- 76178 FEED BAIL STUD
- 2191 LOCKWASHER
- 3598 NUT
- 1196 SHOULDER SCREW
- 2191 LOCKWASHER
- 3598 NUT
- 6746 SCREW
- 2191 LOCKWASHER
- 6811 SCREW
- 7002 WASHER
- 2191 LOCKWASHER
- 76296 FEED BAIL SPRING
- 76125 SPACE BLOCKING ARM
- 76275 CLAMP PLATE
- 8671 SHOULDER SCREW
- 2191 LOCKWASHER
- 3598 NUT
- 8539 SCREW
- 7002 WASHER
- 2191 LOCKWASHER
- 2836 SPRING
- 76472 STUD
- 76473 ROLLER-NEW STYLE
- 3598 NUT
- 3598 NUT
- 76151 OUTER RACE
- 76152 INNER RACE
- 76153 STUD
- 3037 BALL
- 76150 ROLLER (ASSEMB)
- 76053 ECCENTRIC SHOULDER SCREW
- 7002 WASHER
- 2191 LOCKWASHER
- 3598 NUT
- 6799 SHOULDER SCREW
- 2191 LOCKWASHER
- 3598 NUT
- 76054 PRINTING ARM

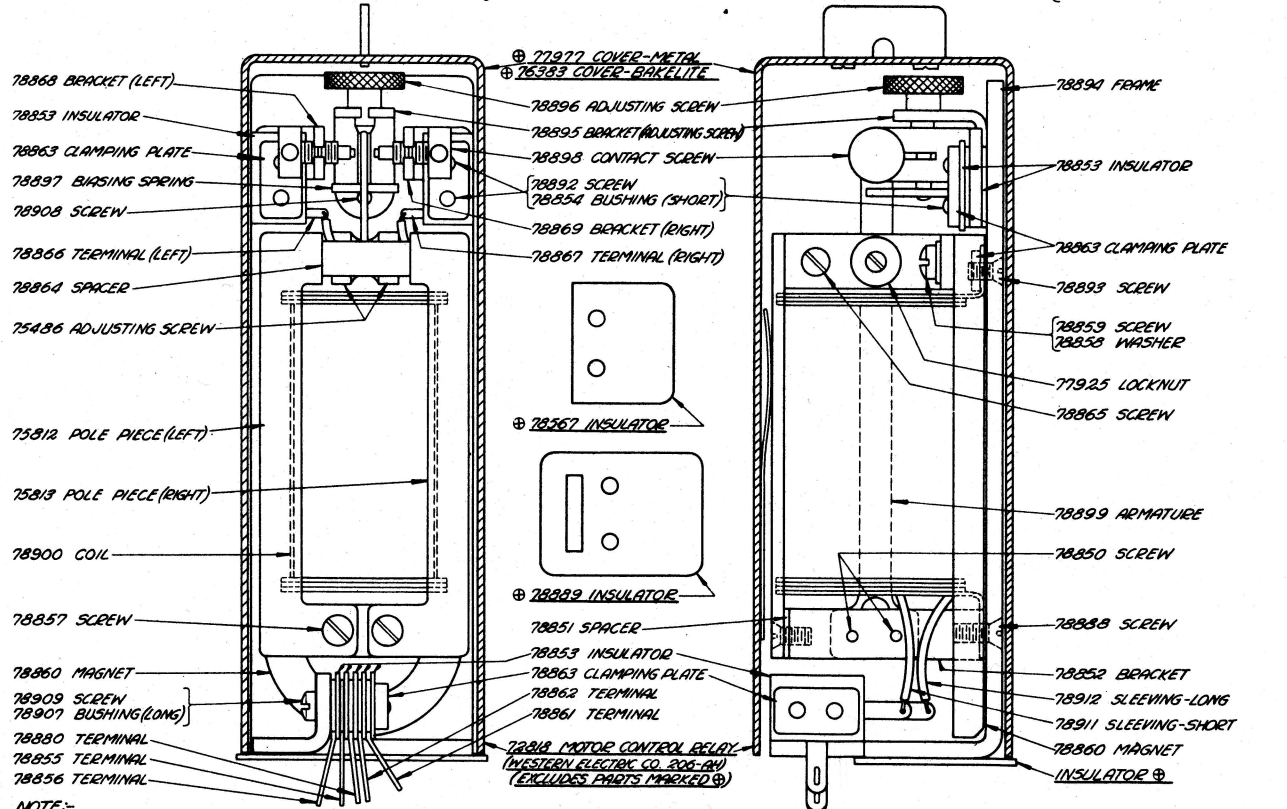
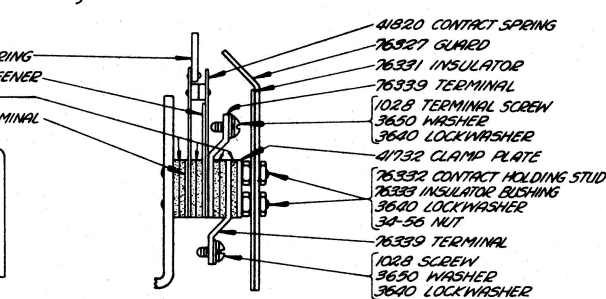
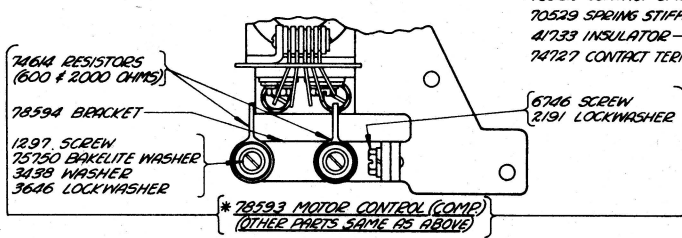
OLD STYLE



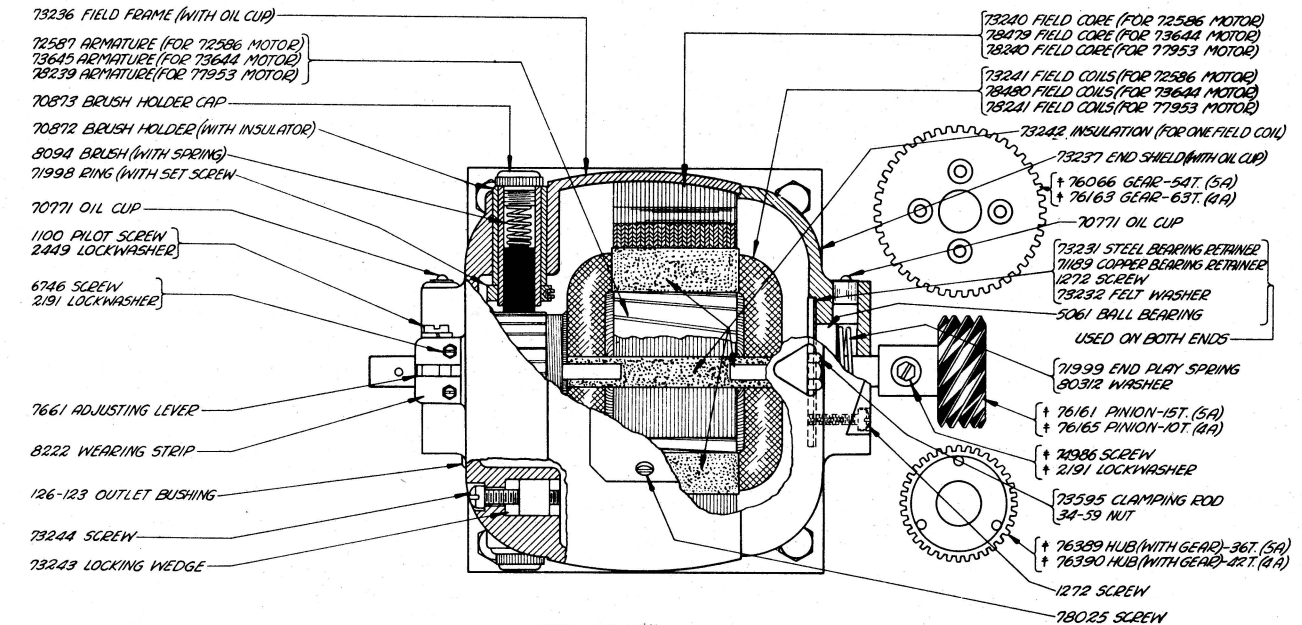
* ①, ② NOTE: - SEE PAGE # 7 FOR EXPLANATION



8308 CABLE CLAMP
74059 SCREW
7002 WASHER

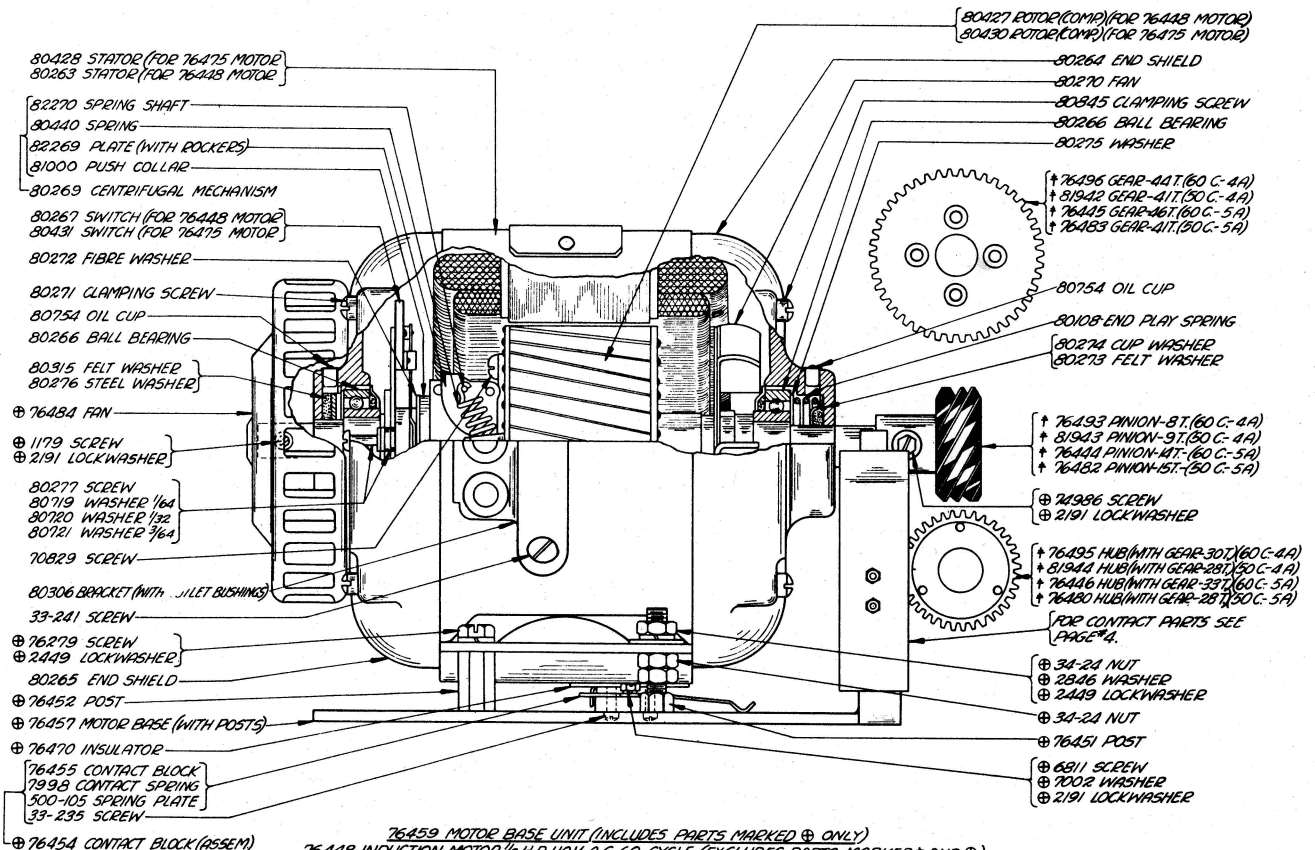


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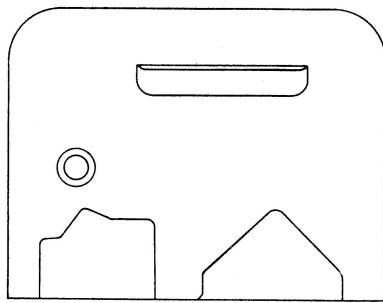


76266 MOTOR CABLE (A.C. SERIES MOTOR)
 76386 MOTOR CABLE (D.C. MOTOR)
 (W.D. #967 #1263)

72586 MOTOR 1/7 H.P. 110V. D.C.
 73644 MOTOR 1/7 H.P. 220V. D.C.
 77953 MOTOR 1/5 H.P. 110V. A.C. SERIES
 MOTORS EXCLUDE PARTS MARKED †



76459 MOTOR BASE UNIT (INCLUDES PARTS MARKED † ONLY)
 76448 INDUCTION MOTOR 1/4 H.P. 110V. A.C. 60 CYCLE (EXCLUDES PARTS MARKED † AND ‡)
 76475 INDUCTION MOTOR 1/4 H.P. 110V. A.C. 50 CYCLE (EXCLUDES PARTS MARKED † AND ‡)
 76477 INDUCTION MOTOR UNIT (ASSEM)-HIGH SPEED-60 CYCLE A.C. (INCLUDES 76459, 76448, 76445, 76444 & 76446)
 80441 INDUCTION MOTOR UNIT (ASSEM)-HIGH SPEED-50 CYCLE A.C. (INCLUDES 76459, 76475, 76483, 76482 & 76480)
 76476 INDUCTION MOTOR UNIT (ASSEM)-LOW SPEED-60 CYCLE A.C. (INCLUDES 76459, 76448, 76496, 76499 & 76495)
 81946 INDUCTION MOTOR UNIT (ASSEM)-LOW SPEED-50 CYCLE A.C. (INCLUDES 76459, 76475, 81942, 81943 & 81944)



- 2422 LOCKWASHER
- 73087 2-56 HEX. NUT
- 76210 COVER (WITHOUT PLATES)
- 76290 NAME PLATE (W.U.-5-A)
- 76385 NAME PLATE (W.U.-4-A)
- 76426 NAME PLATE (W.U. LARGE)
- 78474 2-56 X 1/4 SCREW

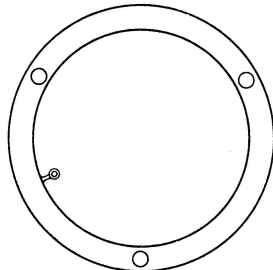
76300 COVER COMPLETE (W.U.)
76301 COVER COMPLETE (N.Y.Q.)

- 1064 SCREW (USED WITH METAL SPEED TARGET)
- 76274 SCREW (USED WITH BAKELITE SPEED TARGET)
- 6320 CONTACT SCREW (TUNGSTEN CONTACT)
- 2191 LOCKWASHER
- 6345 NUT
- 6329 SPRING
- 6319 BLOCK
- 6333 TERMINAL
- 6342 WIRE
- 8165 WASHER

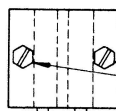
- 6344 CONTACT SPRING (WITH CONTACT POINT)
- 72335 CONTACT POINT
- 6318 CONTACT SPRING CLAMP
- 6344 SCREW
- 6347 SCREW
- 2191 LOCKWASHER
- 6319 BLOCK
- 6324 ADJUSTING WHEEL
- 6330 ADJUSTING WHEEL BEARING
- 6341 BUSHING
- 6311 BAKELITE RING

- SPEED TARGETS
- 76273 - 7 SPOTS - BAKELITE
 - 76353 - 8 SPOTS
 - 7704 - 8 SPOTS - METAL (N.Y.Q.)

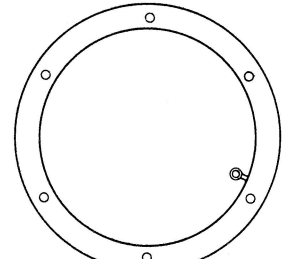
- 6346 SCREW
- 6347 SCREW
- 2191 LOCKWASHER
- 6979 HUB
- 6770 BAKELITE DISC
- 6348 SCREW
- 3640 LOCKWASHER



6339 INNER GOVERNOR RING (WITH TERMINAL)



- 6301 GOVERNOR COVER
- 6211 GOVERNOR MOUNTING SCREW
- 2191 LOCKWASHER
- 73514 BRUSH HOLDER
- 72088 SCREW
- 2191 LOCKWASHER
- 6354 BRUSH CAP
- 6357 BRUSH SPRING
- 6358 BRUSH
- 6305 GOVERNOR BRUSH (COMP.)



6340 OUTER GOVERNOR RING (WITH TERMINAL)

THE 6339 INNER GOVERNOR RING, 6340 OUTER GOVERNOR RING, 6311 BAKELITE RING & 6770 BAKELITE DISC ARE MADE OVERTSIZE AND CAN BE USED FOR RE-PLACEMENT ONLY AT POINTS WHERE FACILITIES ARE AVAILABLE FOR TURNING THEM DOWN AFTER RINGS HAVE BEEN ASSEMBLED IN THE GOVERNOR.

7485 GOVERNOR COMPLETE (FOR 3/8" MOTOR SHAFT)
(GOVERNOR COMPLETE DOES NOT INCLUDE BRUSH HOLDER & BRUSHES)

NOTES OF EXPLANATION

- Page 1.
* #82051 main frame (comp.) - new style, with molded inserts, is interchangeable with #76055 main frame (comp.) - old style.
1. #76377 bushing and #34-1 nut are used only with #76055 (old style) frame.
 2. #5428 resistance unit, 500 ohms, is used with 220 volt tickers.
- Page 2.
* #76433 typewheel shaft (new style) is interchangeable with #76028 typewheel shaft (old style).
- Page 3.
* #76453 bracket is used on induction motor tickers in place of #76214 bracket.
1. #76463 terminal block is interchangeable with #76186 terminal block.
 2. For Western Union replacements order 1 mfd Condenser W.E. 21-AA, #22049 (W.U.) Screws and #3094 Insulator in place of #78011 one mfd. Condenser, #1116 Screws and #81937 Insulator Block.
- Page 4.
* #78593 motor control (comp.) is used on 220 volt tickers.

NUMERICAL INDEX

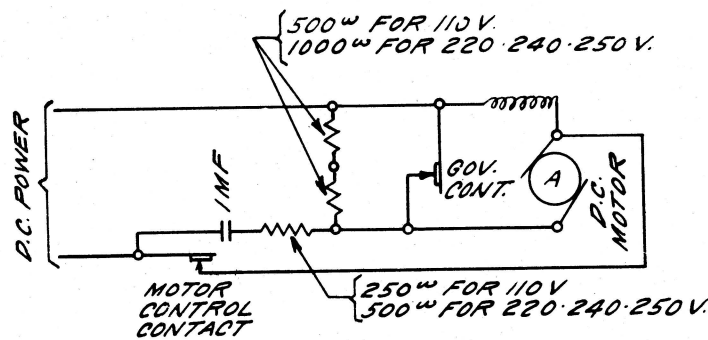
21-AA	W.E. 1 M.F. Condenser, 3	6320	Contact Screw (Tungsten Contact), 6	72065	Resistance Unit (Comp.), 500-1000-2000 Ohms, 3
33-41	6-40 Shoulder Screw, 2	6323	Spring, 6	72088	6-40 x 1-1/16 Screw, 6
33-50	4-40 Shoulder Screw, 2	6324	Adjusting Wheel, 6	72508	6-40 x 3/4 Screw, 3
33-158	6-40 x 1/2 Screw, 1	6330	Adjusting Wheel Bearing, 6	72586	Motor 1/17 H.P., 110 V., D.C., 5
33-213	3-56 Pilot Screw, 4	6333	Terminal, 6	72587	Armature (For 72586 Motor), 5
33-235	6-32 x 5/16 Screw, 5	6339	Inner Governor Ring (With Terminal), 6	72635	Magnet Shim, 4
33-241	10-32 x 1/4 Screw, 5	6340	Outer Governor Ring (With Terminal), 6	72818	Motor Control Relay, 4
33-344	10-32 x 3/4 Screw, 1	6341	Bushing, 6	72835	Contact Point, 6
34-1	1/4-32 Hex. Nut, 1, 2	6342	Wire, 6	73087	2-56 Hex. Nut, 6
34-4	10-32 Hex. Nut, 1, 2, 4	6344	6-32 x 11/32 Screw, 6	73180	Toggle Switch, 3
34-24	1/4-32 Hex. Nut, 1, 5	6345	6-32 Hex. Nut, 6	73231	Steel Bearing Retainer, 5
34-51	6-40 Hex. Nut, 1	6346	6-32 x 3/4 Screw, 6	73232	Felt Washer, 5
34-56	4-40 Hex. Nut, 4	6347	6-32 x 3/8 Screw, 6	73236	Field Frame (with oil cup), 5
34-59	10-32 Hex. Nut, 5	6348	4-36 x 3/4 Screw, 6	73237	End Shield (with oil cup), 5
103-27	Washer, 2	6354	Brush Cap, 6	73240	Field Core (For 72586 Motor), 5
122-29	Dowel, 1	6357	Brush Spring, 6	73241	Field Coils (For 72586 Motor), 5
122-86	Dowel, 1	6358	Brush, 6	73242	Insulation (for one field coil), 5
122-276	Condenser Strap, 1	6358	Brush, 6	73243	Locking Wedge, 5
126-123	Outlet Bushing, 5	6745	10-32 x 1/2 Screw, 1, 3, 4	73244	10-32 x 7/8 F.H. Screw, 5
500-105	Spring Plate, 1, 5	6746	6-40 x 5/16 Screw, 1, 2, 3, 4, 5	73357	Terminal End (Comp.), 3
700-76	Terminal, 3	6770	Bakelite Disc, 6	73514	Brush Holder, 6
1026	6-40 x 3/8 Screw, 3	6799	6-40 Shoulder Screw, 2	73595	Clamping Rod, 5
1028	4-40 Terminal Screw, 1, 3, 4	6800	6-40 Shoulder Screw, 2	73644	Motor 1/17 H.P., 220 V., D.C., 5
1030	6-40 Shoulder Screw, 3	6810	10-32 x 3/8 Screw, 1, 4	73645	Armature (For 73644 Motor), 5
1039	6-40 Shoulder Screw, 1	6811	6-40 x 5/8 Screw, 1, 2, 3, 5, 6	73670	Terminal Block (Comp.), 3
1041	6-40 Shoulder Screw, 2	6979	Hub, 6	73705	Terminal Block, 3
1064	6-32 x 1/4 Screw, 6	7002	Washer, 1, 2, 3, 4, 5	74059	6-40 x 7/32 Screw, 1, 4
1093	8-32 x 7/16 Screw, 3	7036	Collar, 1	74614	Resistors - 600 & 2000 Ohms, 4
1100	1/4-32 Pilot Screw, 5	7057	Detent Lever (Comp.), 1	74727	Contact Terminal, 4
1109	10-32 x 3/16 Screw, 3	7059	Detent Lever, 1	74986	6-40 x 13/32 Screw, 5
1116	10-32 x 1-11/32 Screw, 3	7392	Spring, 2	75486	Adjusting Screw, 4
1160	6-40 x 5/16 Screw, 1, 2	7392	Spring Stiffener, 3	75750	Bakelite Washer, 4
1161	6-40 x 1/4 Screw, 1, 2	7399	Contact Spring - Long, 3	75812	Pole Piece (Left), 4
1163	4-40 x .188 Screw, 2	7402	Contact Spring - Short, 3	75813	Pole Piece (Right), 4
1164	2-56 x 3/16 Screw, 1	7403	Governor Complete (For 3/8" Motor Shaft), 6	76002	Typewheel, 2
1168	4-40 x 5/16 Screw, 1, 4	7485	Adjusting Lever, 5	76003	Stop Arm (Assem.), 2
1169	6-40 x 7/16 Screw, 1, 3, 4	7661	Roller Journal, 1	76008	Stud, 2
1176	6-40 x 3/16 Screw, 1	7678	Roller, 1	76011	Code Disc #1, 2
1179	6-40 x 5/8 Screw, 5	7679	Target - 8 spots (Metal) (N.Y.Q.), 6	76012	Code Disc #2, 2
1196	6-40 Shoulder Screw, 2	7704	Contact Spring, 1, 5	76013	Code Disc #3, 2
1226	6-40 x 3/4 Screw, 1, 2	7998	Brush (With Spring), 5	76014	Code Disc #4, 2
1248	6-40 x 1/2 Screw, 2	8094	Washer, 6	76015	Code Disc #5, 2
1269	6-40 x 1/2 Screw, 2	8165	Washer, 1	76016	Code Disc Bushing, 2
1272	6-40 x 11/16 Screw, 5	8184	Wearing Strip, 5	76017	End Washer, 2
1275	10-32 x 1-1/2 Screw, 3	8222	Cable Clamp, 1, 3, 4	76018	Guide Washer, 2
1297	6-40 x 2-7/16 Screw, 4	8308	6-40 x 1/2 Screw, 1, 2, 3	76024	Fulcrum Disc, 2
1301	6-32 x 3/8 Screw, 1	8539	6-40 Shoulder Screw, 2	76026	Code Disc Post, 2
2191	Lockwasher, 1, 2, 3, 4, 5, 6	8671	Shim, 1	76027	Housing, 2
2248	Pin, 1	8896	Spring Washer, 3	76034	Shaft, 2
2382	Lockwasher, 2	21397	10-32 x 1-5/8 Screw (W.U.), 3	76036	Transfer Lever, 2
2422	Lockwasher, 6	22049	Washer, 2, 4	76037	Bushing, 2
2438	Washer, 3	34432	Rubber Foot, 3	76038	Spacer, 2
2449	Lockwasher, 1, 5	35503	10-32 x 3/8 Screw, 3	76039	Stud, 2
2669	Lockwasher, 1, 3, 4	35551	Clamp Plate, 4	76041	Transfer Arm, 1, 2
2836	Spring, 2	41732	Insulator, 4	76046	Feed Ratchet, 1
2846	Washer, 1, 5	41820	Contact Spring, 4	76047	Feed Pawl, 2
2980	Strap, 3	44048	Washer, 3, 4	76048	Feed Pawl Arm, 2
3043	Resistance Unit (250 Ohms), 1	45333	8-40 x 7/16 Screw, 4	76049	Feed Bail, 2
3094	Insulator, 1, 3	55219	8-32 x 3/8 Screw, 3	76050	Feed Roller Bail, 2
3438	Washer, 1, 3, 4	58221	6-32 Terminal Screw, 3	76052	Connecting Link, 2
3598	6-40 Hex. Nut, 1, 2, 3, 4	58222	Terminal, 3	76053	Eccentric Shoulder Screw, 2
3599	4-40 Hex. Nut, 2	70361	Resistance Unit (Comp.), 250-500-1000 Ohms, 3	76054	Printing Arm, 2
3628	Outlet Bushing, 3	70497	5/16-32 Nut, 2, 4	76055	Main Frame (Comp.) (Old Style), 7
3637	Ball, 1, 2	70529	Spring Stiffener, 4	76058	Spring Post, 1
3639	Lockwasher, 2	70707	Bracket, 3	76061	Main Shaft (With Flange), 2
3640	Lockwasher, 1, 2, 3, 4, 6	70722	Resistor - 500 Ohms, 3	76065	Spacing Sleeve, 2
3646	Lockwasher, 4	70724	Insulation Strip, 3	76066	Gear - 54 T, (5A), 5
3650	Washer, 1, 3, 4	70771	Oil Cup, 5	76067	Gear Hub, 2
4082	Washer, 2	70823	6-32 x 1 Screw, 1	76070	Operating Cam, 2
4293	Fibre Insulator, 3	70829	8-36 x 5/16 Screw, 5	76073	Fibre Washer, 2
4707	Washer, 3	70872	Brush Holder (With Insulator), 5	76074	Friction Disc, 2
4814	Lockwasher, 1	70873	Brush Holder Cap, 5	76079	Bushing - Long, 2
4851	Terminal, 4	70878	Spring, 1	76081	Washer, 2
4871	3/16-24 x 4 Screw, 3	70887	3/16-24 Hex. Nut, 3	76082	Friction Sleeve, 2
5061	Ball Bearing, 5	71073	Washer, 1	76083	Friction Drive Disc, 2
5428	Resistance Unit (500 Ohms), 1	71155	6-32 x 1-1/4 Screw, 1	76084	Felt Washer, 2
5816	Fibre Washer, 4	71189	Copper Bearing Retainer, 5	76085	Friction Disc, 2
5961	Bushing, 4	71593	6-40 Shoulder Screw, 4	76086	Friction Spring, 2
6301	Governor Cover, 6	71998	Ring (With Set Screw), 5		
6305	Governor Brush (Comp.), 6	71999	End Play Spring, 5		
6311	Bakelite Ring, 6	72064	Resistor - 1000 Ohms, 3		
6314	Contact Spring (with contact point), 6				
6318	Contact Spring Clamp, 6				
6319	Block, 6				

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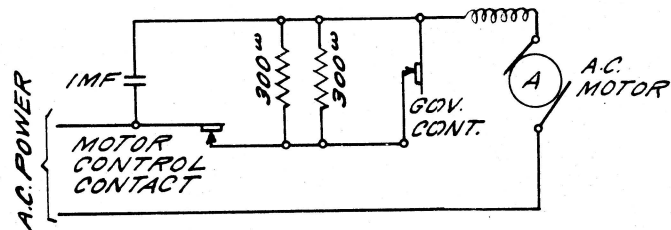
76087	Nut, 2	76230	Cover Latch Rod, 3	76376	Buffer Lockscrew, 1
76088	Locknut, 2 - -	76231	Cover Latch Spring, 3	76377	Bushing, 1
76089	Clutch Release Arm, 1	76233	Contact Spring Shield, 3	76378	Protecting Bracket, 1
76090	Orientation Scale, 2	76234	Rubber Sleeve, 3	76379	Spring, 4
76091	Scale Stud, 1	76236	5/16-18 Hex. Nut, 3	76380	Coil - 8 Ohms, 1
76092	Connecting Link Extension, 2	76237	Cable Clamp, 3	76381	Clamping Block, 1
76093	Clutch - Driven, 2	76247	Worm, 2	76382	Contact Spring, 4
76094	Clutch - Driving, 2	76248	Plug, 3	76383	Cover - Bakelite, 4
76098	Bail Shaft, 2	76249	6-40 x 1/8 Screw, 2	76385	Nameplate (W.U.4-A), 6
76099	Washer, 1, 2, 3	76254	Cam (With Gear), 4	76386	Motor Cable (D.C.Motor), 5
76101	Permanent Magnet, 1	76255	Stud, 1	76389	Hub (with gear) - 36 T (5A), 5
76102	Magnet Clamp, 1	76256	Hammer Backstop, 1	76390	Hub (with gear) - 42 T (4A), 5
76103	Magnet Frame, 1	76257	Cam Stud, 4	76394	Nut, 2
76104	Armature, 1	76258	Cam Lever, 4	76395	Friction Disc, 2
76108	Bridge, 1	76259	Cam Lever Hub, 4	76396	Felt Washer, 2
76109	Pivot Screw, 1	76260	6-40 Shoulder Screw, 4	76397	Friction Sleeve, 2
76110	Pole Piece, 1	76261	Spring, 4	76398	Felt Wick, 2
76114	Buffer Screw, 1	76265	Selector cable, 1	76399	Retaining Nut, 2
76117	Terminal Block (Comp.), 1	76266	Motor Cable (A.C.Series Motor), 5	76408	Power Cord (with terminals) 72", 3
76118	Terminal Block, 1	76267	Standard Base Cable, 3	76409	Power Cord (Comp.) - 72", 3
76119	Coil 39 Ohms (W. U.), 1	76268	Plate, 1	76411	Magnet Bracket (with spring post), 4
76121	Post, 1	76269	Bushing - Short, 2	76412	Lockwasher, 2
76122	Power Cord (With Terminals) - 60", 3	76271	6-40 Shoulder Screw, 1	76413	Tube - Outer, 2
76123	Power Cord (Comp.) - 60", 3	76272	Tube - Inner, 2	76414	Stop Pin, 2
76125	Space Blocking Arm, 2	76273	Target - 7 spots - Bakelite, 6	76415	Guide Disc, 2
76126	Inner Guide Flange, 1	76274	6-32 x 3/8 Screw, 6	76416	Guide Disc, 2
76127	Outer Guide Flange, 1	76275	Clamp Plate, 2	76417	Rollers, 2
76129	Shaft, 1	76276	Shim, 1	76420	Rubout Bar, 2
76132	Front Plate, 1	76278	Bushing, 1	76421	Stop Pin Spring, 2
76134	Tape Shield, 1	76279	1/4-32 x 5/8 Screw, 1, 5	76422	Rubout Bar Spring, 2
76138	Collar, 2	76281	Terminal, 3	76423	Pressure Wheel Arm, 1
76142	Shift Transfer Lever, 2	76282	Adjusting Wheel Guard, 3	76424	Feed Wheel, 1
76143	Shift Lever, 2	76283	6-40 Shoulder Screw, 3	76425	Feed Wheel Bearing, 1
76144	Shift Hammer, 2	76284	Terminal Strap, 1	76426	Nameplate (W.U.Large), 6
76145	Stud, 2	76290	Name Plate (W.U.5-A), 6	76427	Thumb Nut, 1
76146	Hammer Spacer, 1	76295	Spring, 1	76429	Coil - 15 Ohms, 1
76150	Roller (Assem.), 1, 2	76296	Feed Bail Spring, 2	76433	Typewheel Shaft, 2
76151	Outer Race, 1, 2	76297	Spring, 1	76437	Set of Printing Hammers, 1
76152	Inner Race, 1, 2	76298	Spring, 2	76444	Pinion - 14 T (60 C. Ind. - 5-A), 5
76153	Stud, 1, 2	76299	Spring, 1	76445	Gear - 46 T (60 C. Ind. - 5-A), 5
76154	Function Bracket, 2	76300	Cover Complete (W.U.), 6	76446	Hub (with gear) - 33 T. (50 C. Ind. - 5-A), 5
76156	Washer, 2	76301	Cover Complete (N.Y.Q.), 6	76448	Induction Motor 1/8 H.P., 110 V., A.C., 60 Cycle, 5
76158	Ball Bearing (Standard), 2	76302	Collar, 1	76450	Shim, 2
76159	Ball Bearing (Standard), 2	76303	Shim, 2	76451	Post, 5
76161	Pinion - 15 T (5A), 5	76305	Shim, 1	76452	Post, 5
76163	Gear - 63 T, (4A), 5	76307	Bushing, 2	76453	Bracket, 3
76165	Pinion - 10 T (4A), 5	76309	Spring Lever, 2	76454	Contact Block (Assem.), 5
76167	6-40 x 3/16 Screw, 1, 4	76310	Guide, 2	76455	Contact Block, 5
76168	6-40 x 3/16 Screw, 2	76311	Selector Lever, 2	76457	Motor Base (with posts), 5
76172	Spring, 2	76313	Detent, 2	76459	Motor Base Unit, 5
76173	Printing Bail (With Post), 2	76314	Bracket, 2	76461	Washer, 1
76178	Feed Bail Stud, 2	76316	Shaft, 2	76463	Terminal Block, 3
76180	Ink Roller, 3	76317	Transfer Bail, 1, 2	76465	Fibre Bushing, 3
76181	Ink Roller Arm, 3	76318	Stop Screw, 1	76466	Pressure Wheel, 1
76185	Bracket, 3	76319	Flutter Lever Stop, 1	76469	Insulator, 1
76187	Line Terminal Block (Comp.), 3	76320	Bail Roller Arm, 1	76470	Insulator, 5
76188	Motor Terminal Block (Comp.), 3	76321	Cover Guide, 1	76472	Stud, 1, 2
76191	Terminal Block Shield; 3	76322	Cam Release Bail, 1	76473	Roller, 1, 2
76193	Orientation Scale Guide, 1	76323	Bushing, 1, 2	76474	10-32 Hex. Nut, 2
76195	Tape Tension Spring (Comp.), 3	76325	Contact Bail, 4	76475	Induction Motor, 1/8 H.P., 110 V., A.C., 50 Cycle, 5
76199	Tape Guide, 1	76326	Tongue, 4	76476	Induction Motor Unit (Assem.), Low Speed 60 Cycle, A.C., 5
76201	Base, 3	76327	Guard, 4	76477	Induction Motor Unit (Assem.) High Speed - 60 Cycle, A.C., 5
76202	Base Plate, 1	76328	Relay Bracket, 4	76480	Hub (with gear) - 28 T., (50 C. Ind. - 5-A), 5
76203	Motor Plate, 1	76330	6-40 Screw, 4	76482	Pinion - 15 T, (50 C. Ind. - 5-A), 5
76204	Post, 1	76331	Insulator, 4	76483	Gear - 41 T (50 C. Ind. - 5-A), 5
76205	Adjusting Stud, 1	76332	Contact Holding Stud, 4	76484	Fan, 5
76207	Brush Holder Bracket, 3	76333	Insulator Bushing, 4	76486	Base, 3
76208	Contact Block (Comp.), 1	76335	Bracket, 4	76487	Base Plate, 3
76209	Contact Block, 1	76339	Terminal, 4	76488	Choke Coil (W.U.R.F. Choke Coil 1-B), 3
76210	Cover (Without Plates), 6	76340	Magnet Coil, 4	76490	Spring Post, 1
76211	Felt Pad, 3	76341	Armature, 4	76491	Ball Bearing (N.Y.Q.), 2
76212	Locating Stud, 3	76342	Motor Control (Comp.), 4	76492	Ball Bearing (N.Y.Q.), 2
76213	Sleeve, 3	76347	Control Magnet (Comp.), 4	76493	Pinion - 8 T (60 C. Ind. - 4-A), 5
76214	Bracket, 3	76350	Motor Control Cable, 4		
76215	Fuse Block Bracket, 3	76352	Wire Connector, 4		
76216	Foot, 1	76353	Target - 8 spots - Bakelite, 6		
76217	Bracket, 1	76354	Gear Guard, 1		
76219	Fuse Block, 3	76357	Spring, 2		
76221	Tape Reel Container, 3	76360	Selector Cam Drum, 2		
76223	Bracket, 3	76361	Flutter Lever, 2		
76224	Tape Reel Retainer (Standard), 3	76362	Flutter Arm, 2		
76225	Tape Roller, 3	76363	Flutter Lever Hub, 2		
76228	Cover Latch, 3	76364	6-40 Shoulder Screw, 2		
76229	Cover Latch Stop, 3	76366	Oil Wick - Front, 2		
		76367	Oil Wick - Rear, 2		
		76368	Oil Wick Container, 2		
		76370	Resistors (850 Ohms), 4		
		76374	Typewheel Latch Spring, 2		

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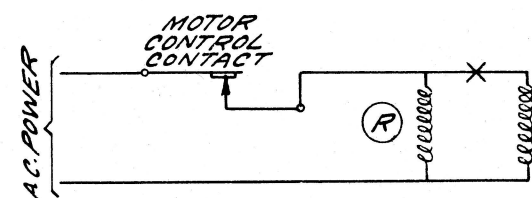
76495	Hub (with gear) - 30 T. (60 C. Ind. - 4-A), 5	80108	End Play Spring, 5
76496	Gear - 44 T., (60 C. Ind. - 4-A), 5	80263	Stator (For 76448 Motor), 5
77140	Locknut, 2	80264	End Shield, 5
77377	Hook, 3	80265	End Shield, 5
77399	Rivet, 3	80266	Ball Bearing, 5
77412	Cotter Pin, 2	80267	Switch (For 76448 Motor), 5
77915	Fuse - 2 Amp., 3	80269	Centrifugal Mechanism, 5
77925	Locknut, 4	80270	Fan, 5
77953	Motor 1/25 H.P., 110 V., A.C. (Series), 5	80271	Clamping Screw, 5
77977	Cover - Metal, 4	80272	Fibre Washer, 5
78011	1 M.F. Condenser, 1, 3	80273	Felt Washer, 5
78025	4-48 x 3/16 Screw, 5	80274	Cup Washer, 5
78028	6-40 x 15/16 Screw, 1	80275	Washer, 5
78205	Resistor - 300 Ohms, 3	80276	Steel Washer, 5
78206	Resistance Unit (Comp.) 150-300-600 Ohms, 3	80277	6-40 x 9/16 Screw, 5
78207	Bearing Cap, 1	80306	Bracket (With outlet bushings), 5
78208	Bearing Cap, 1, 2	80312	Washer, 5
78209	Bearing Cap, 1	80315	Felt Washer, 5
78239	Armature (For 77953 Motor), 5	80427	Rotor (Comp.) (For #76448 Motor), 5
78240	Field Core (For 77953 Motor), 5	80428	Stator (For #76475 Motor), 5
78241	Field Coils (For 77953 Motor), 5	80430	Rotor (Comp.) (For #76475 Motor), 5
78430	Cable Clamp, 1	80431	Switch (For #76475 Motor), 5
78474	2-56 x 1/4 Screw, 6	80440	Spring, 5
78479	Field Core (For 73644 Motor), 5	80441	Induction Motor Unit (Assem.) High Speed - 50 Cycle A.C., 5
78480	Field Coils (For 73644 Motor), 5	80444	6-40 x 1/4 Screw, 1
78567	Relay Insulator, 4	80543	Cable, 3
78593	Motor Control (Comp. 220 V.), 4	80544	Cable, 3
78594	Bracket, 4	80545	Cable, 3
78850	4-36 x 5/16 Screw, 4	80719	Washer 1/64, 5
78851	Spacer, 4	80720	Washer 1/32, 5
78852	Bracket, 4	80721	Washer 3/64, 5
78853	Insulator, 4	80738	Spacing Sleeve, 2
78854	Bushing (Short), 4	80754	Oil Cup, 5
78855	Terminal, 4	80845	Clamping Screw, 5
78856	Terminal, 4	80964	Spring, 1
78857	4-36 x 1/4 F.H. Screw, 4	81000	Push Collar, 5
78858	Washer, 4	81937	Insulator Block, 3
78859	4-48 x 7/16 Screw, 4	81942	Gear - 41 T. (50 C. Ind. - 4-A), 5
78860	Magnet, 4	81943	Pinion - 9 T. (50 C. Ind. - 4-A), 5
78861	Terminal, 4	81944	Hub (with gear), 28 T. (50 C. Ind. - 4-A), 5
78862	Terminal, 4	81946	Induction Motor Unit (Assem.) - Low Speed - 50 Cycle A.C., 5
78863	Clamping Plate, 4	82051	Main Frame, (Comp.), 1
78864	Spacer, 4	82269	Plate (with rockers), 5
78865	4-36 x 1/4 Screw, 4	82270	Spring Shaft, 5
78866	Terminal (Left), 4		
78867	Terminal (Right), 4		
78868	Bracket (Left), 4		
78869	Bracket (Right), 4		
78880	Terminal, 4		
78888	4-36 x 5/16 F.H. Screw, 4		
78889	Insulator, 4		
78892	4-48 x 3/4 F.H. Screw, 4		
78893	4-48 x 7/32 F.H. Screw, 4		
78894	Frame, 4		
78895	Bracket (Adjusting Screw), 4		
78896	Adjusting Screw, 4		
78897	Biasing Spring, 4		
78898	Contact Screw, 4		
78899	Armature, 4		
78900	Coil (5 Ohms), 4		
78907	Bushing (Long), 4		
78908	4-48 x 3/16 F.H. Screw, 4		
78909	4-48 x 1/2 Screw, 4		
78911	Sleeving - Short, 4		
78912	Sleeving - Long, 4		
80011	Tape Reel Retainer (N. Y. Q.), 3		
80012	Target - 29 Spot, 2		
80016	Standard Base (Comp.) For D.C. Ticker, 3		
80017	Standard Base (Comp.) - For A.C. Ticker (With Induction Motor), 3		
80018	Radio Interference Base (Comp.) (W.U.), 3		
80019	Fuse - 10 Amp., 3		



SCHEMATIC DIAGRAM OF D.C. MOTOR CIRCUIT.



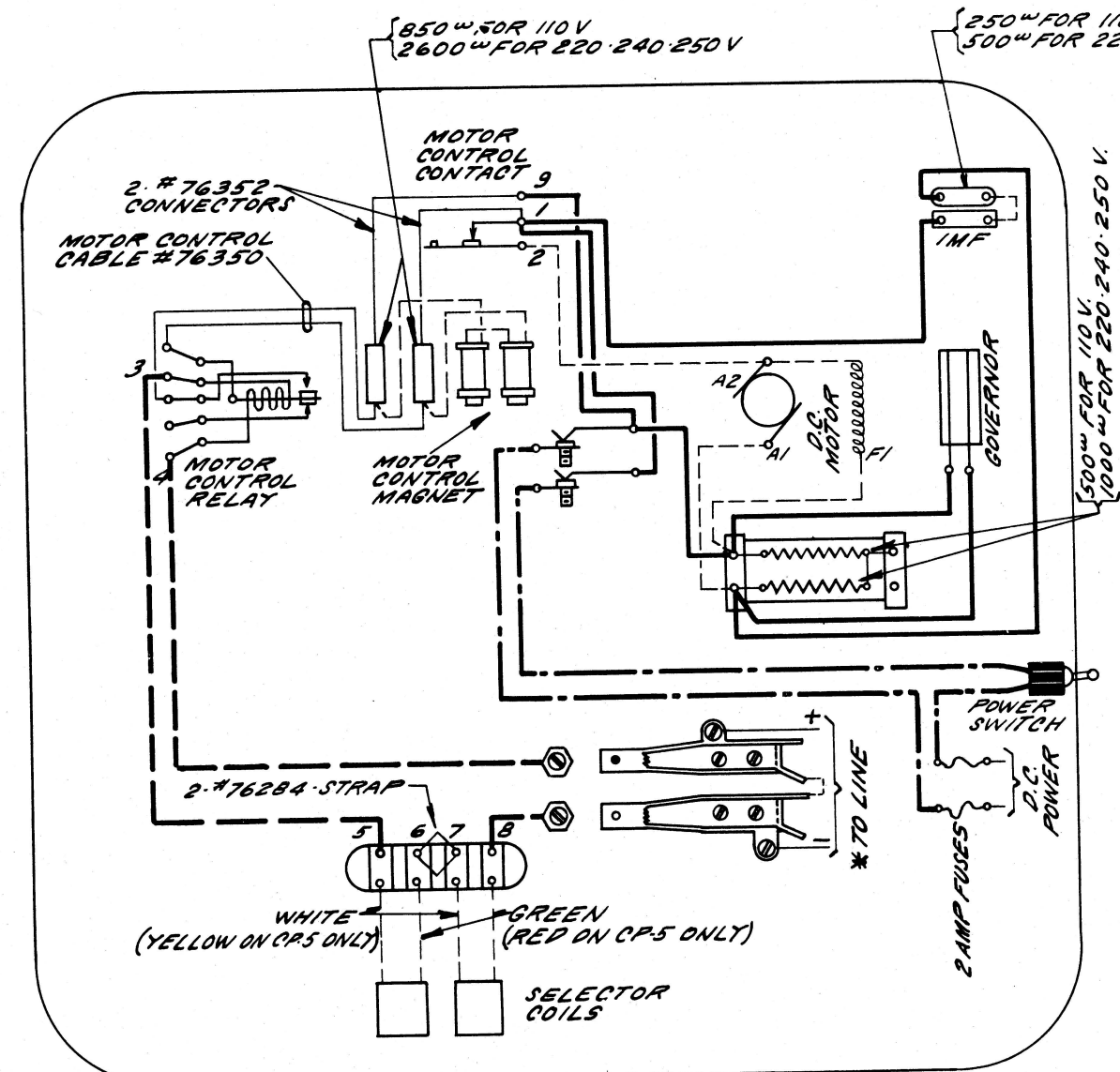
SCHEMATIC DIAGRAM OF A.C. SERIES MOTOR CIRCUIT



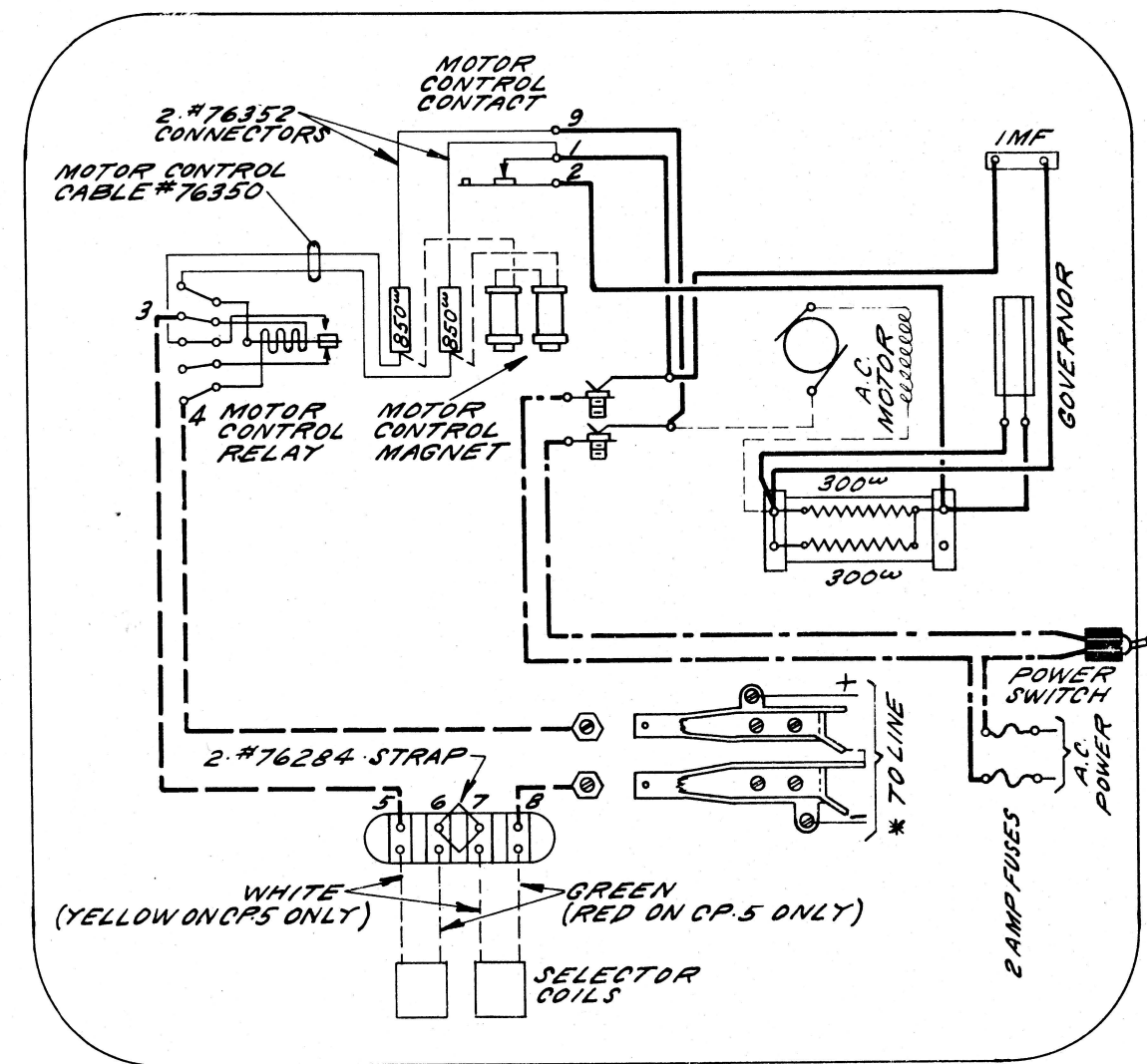
SCHEMATIC DIAGRAM OF INDUCTION MOTOR CIRCUIT.

ASSOCIATED CABLES	
—	#76356 - D.C. MOTOR UNIT
—	#76266 - A.C. SERIES MOTOR UNIT
—	#76265 - SELECTOR UNIT
—	#76267 - BASE
—	#76352 - CONNECTOR
—	#76350 - MOTOR CONTROL
—	#76284 - STRAP

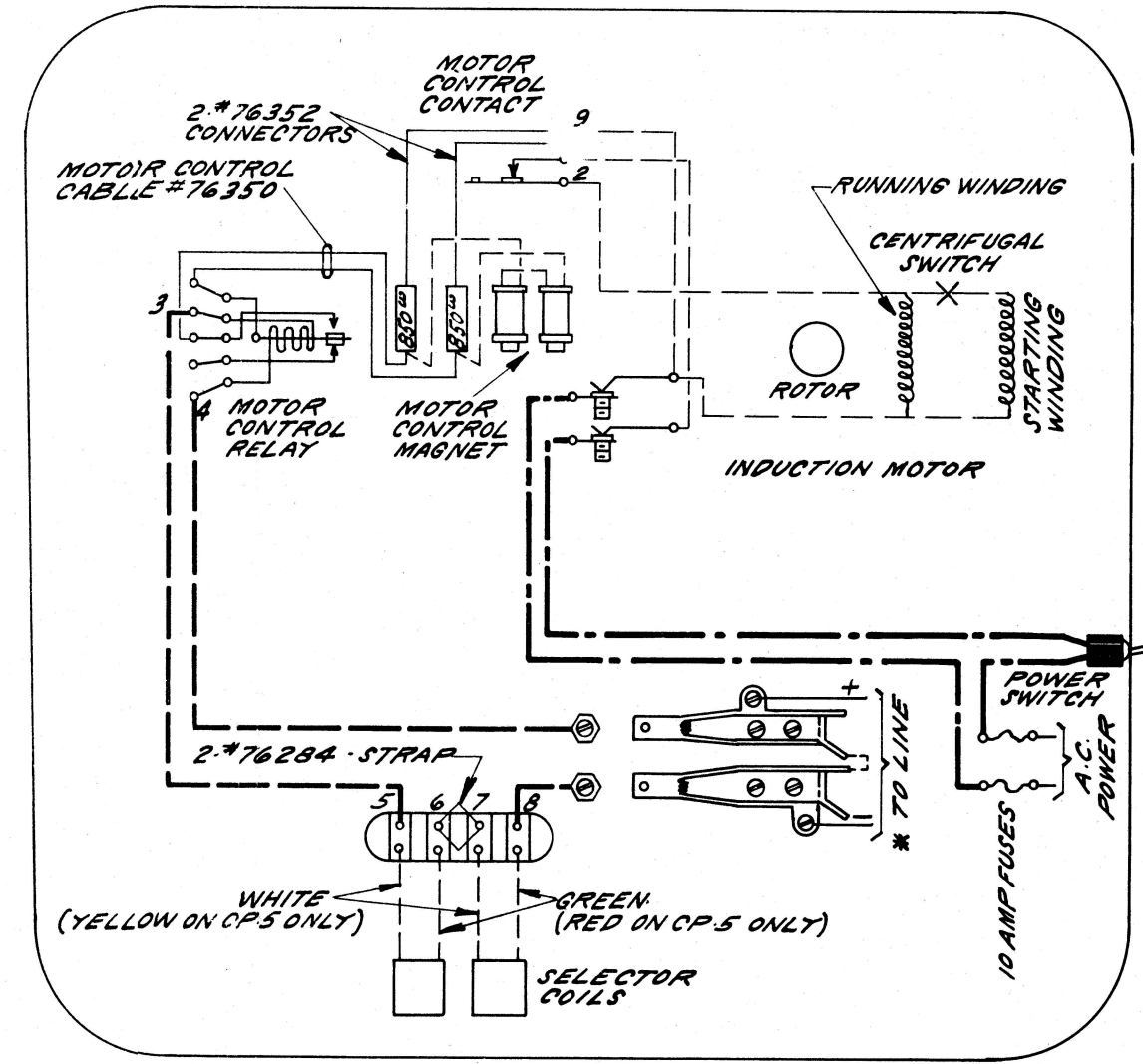
- REVISIONS**
- ① TWO WIRES FROM 6 TO 7 INSTEAD OF ONE. H.I.R.
 - ② CHANGE LINE JACK H.I.R.
 - ③ ADDED MOTOR CONTROL MAGNETS. H.I.R.
 - ④ MOTOR CONTROL MAGNET WIRING CHANGED. A.E.
 - ⑤ D.C. MOTOR CIRCUIT CHANGED. A.E.
 - ⑥ MOTOR CONTROL CIRCUIT CHANGED. A.E.
 - ⑦ A.C. MOTOR CIRCUIT CHANGED. A.E.
 - ⑧ D.C. MOTOR CIRCUIT CHANGED. A.E.
 - ⑨ RETRACED & FIG. 3 ADDED. A.E.
 - ⑩ 220-240-250 V. OPERATION ADDED. A.E.
 - ⑪ ADDED # 8 & NOTE. A.E.
 - ⑫ REDRAWN & CABLE INFORMATION ADDED. 10-15-31 A.L.P. V.R.N.
 - ⑬ REMOVED SYNCHRONOUS MOTOR. 4-15-32 A.L.P. V.R.N.
 - ⑭ CP-14 OMITTED. 3-14-34 J.J.F.
 - ⑮ NOTE ADDED EXPLAINING POLARITY MARKING. 4-18-34 J.J.F.



TICKER TELETYPE WITH D.C. MOTOR (TOP VIEW) FIG. 1.



TICKER TELETYPE WITH A.C. SERIES MOTOR (TOP VIEW) FIG. 2.



TICKER TELETYPE WITH INDUCTION MOTOR (TOP VIEW) FIG. 3.

NOTES:-
ALL WIRES TO BE BLACK "DELTA BESTON" #18 ART SILK COVERED FIXTURE, EXCEPT MOTOR LEADS.
— THIN LINES INDICATE WIRES NOT IN CABLE.
WHEN CONTROL RELAY IS OMITTED SPLICE AND TAPE WIRES #1 TO WIRE #2 AND WIRE #3 TO #4, ALSO TAPE END OF WIRE #9.
TO CONNECT SELECTOR MAGNETS IN MULTIPLE: STRAP #5 TO #7 AND #6 TO #8.

NOTES CONT'D
TO CONNECT SELECTOR MAGNETS IN SERIES: STRAP #6 TO #7.
* - BASES EQUIPPED WITH LINE CORDS & PLUGS MUST BE CONNECTED WITH TIP TO TERMINAL MARKED "-" AND SLEEVE TO TERMINAL MARKED "+".
WHEN THE LINE POLARITY IS AS INDICATED THE SELECTOR MAGNET ARMATURE AND MOTOR CONTROL RELAY TONGUE SHOULD GO TO THE MARKING SIDE.

TELETYPE CORPORATION

967-M
OCT. 15, 1931

967-N

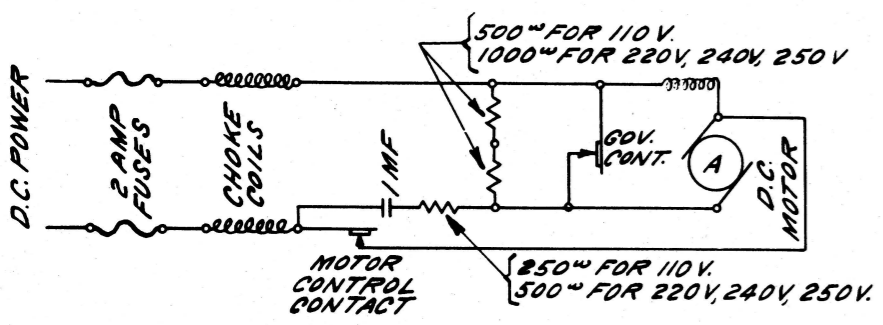
967-P
MARCH 17, 1934

967-Q
APRIL 18, 1934

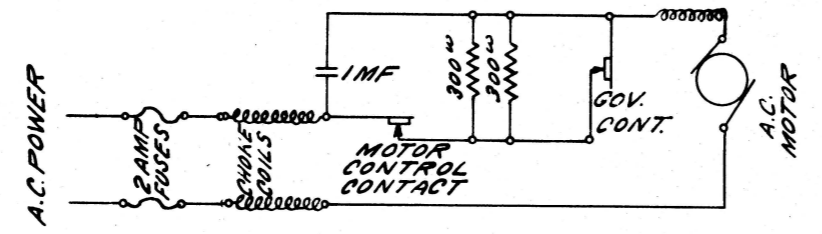
WIRING DIAGRAM
CP-1,2,3,4,5,7,11,
CB-1,2,7

TICKER TELETYPE
DR. A.L.P.
TR. A.L.P.
CH'K'D A.E.
ENGR'D H.I.R. & A.E.
APPROVED

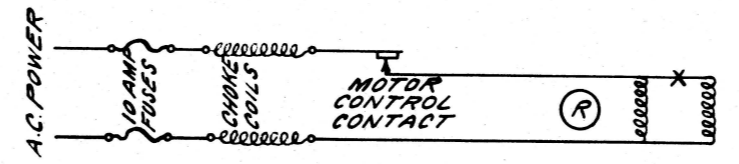
REVISIONS
 (A) NOTE ADDED EXPLAINING LINE POLARITY MARKING.
 4-18-34 J.J.F.



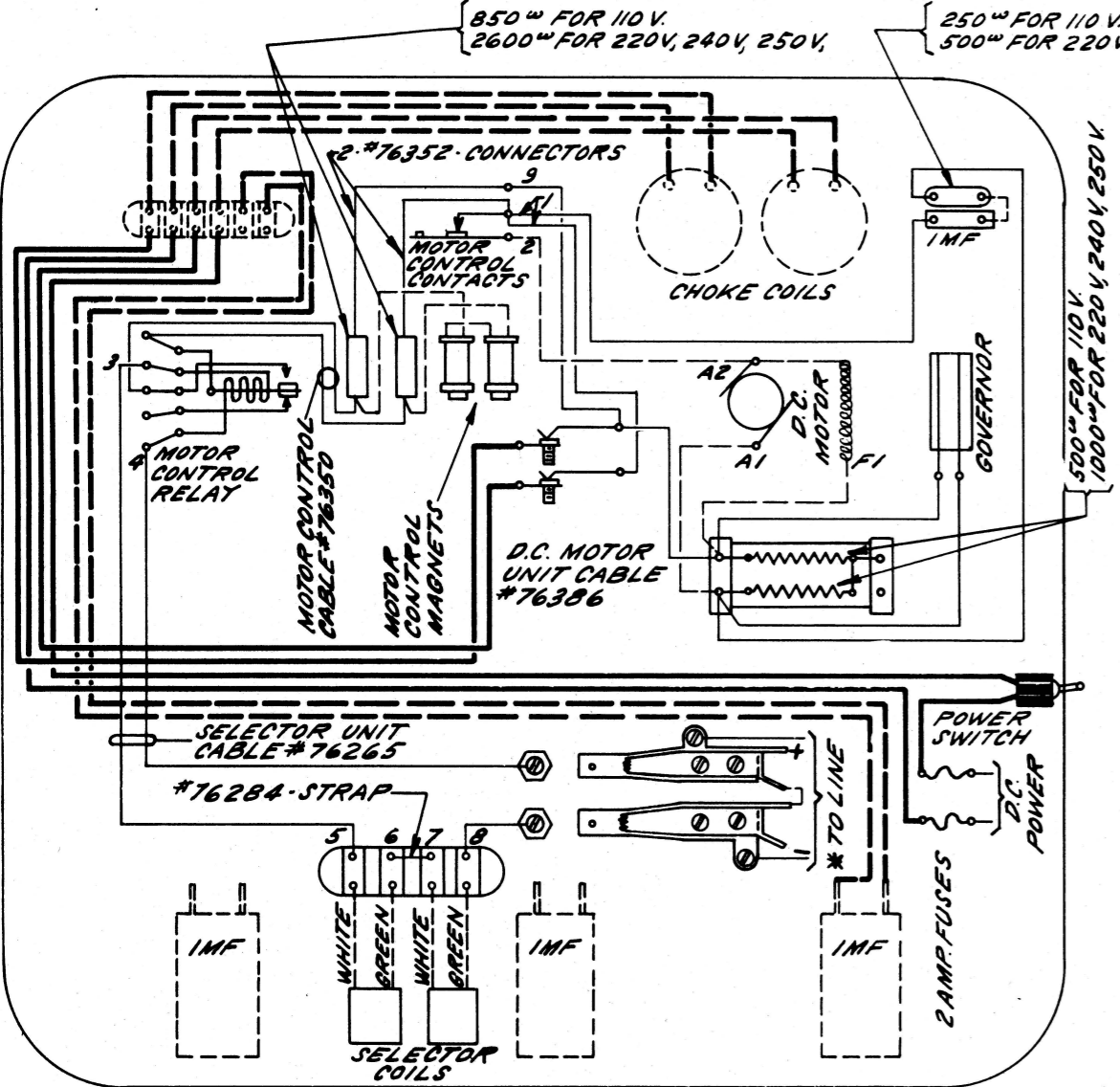
SCHEMATIC DIAGRAM OF D.C. MOTOR CIRCUIT



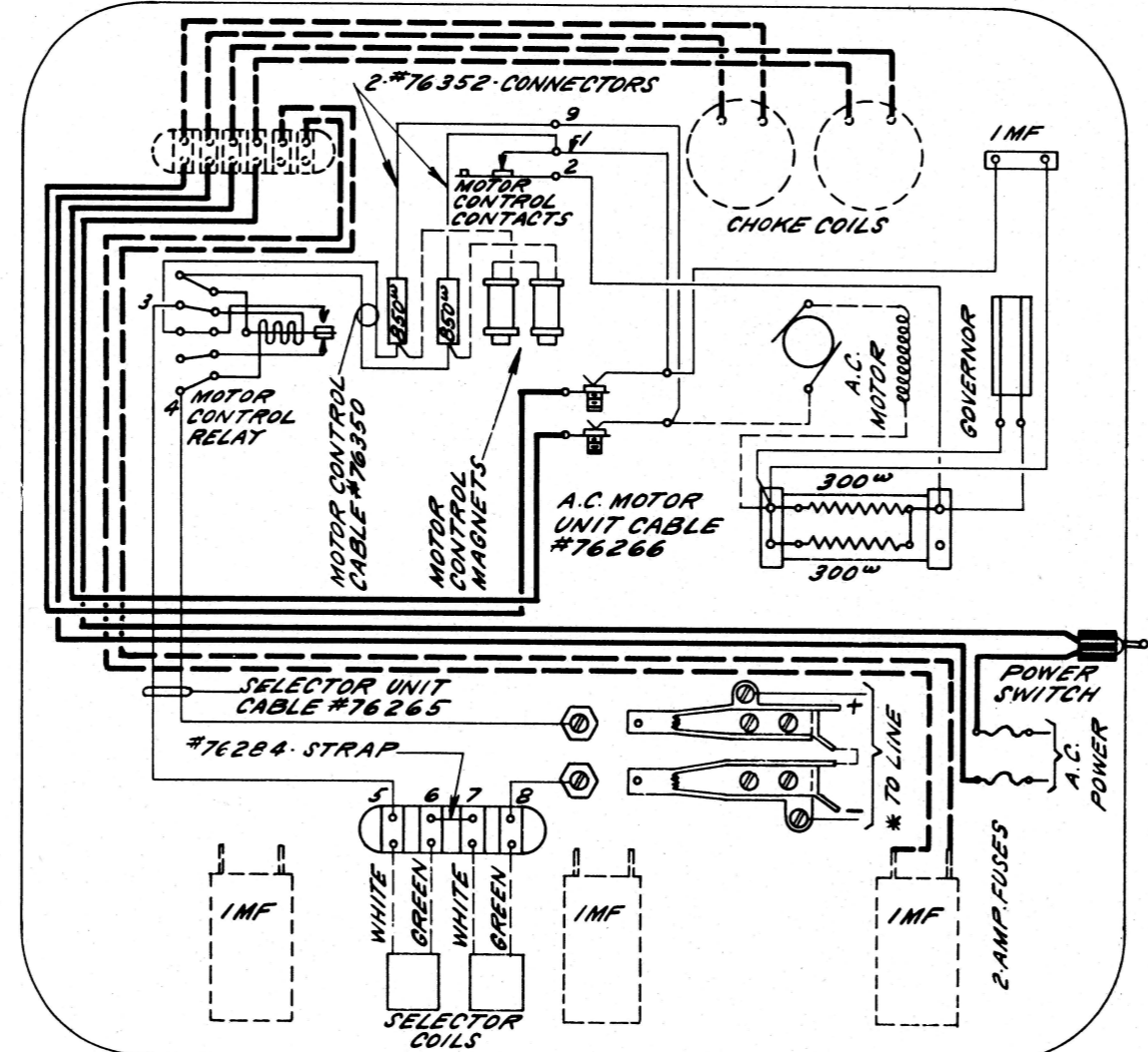
SCHEMATIC DIAGRAM OF A.C. SERIES MOTOR CIRCUIT



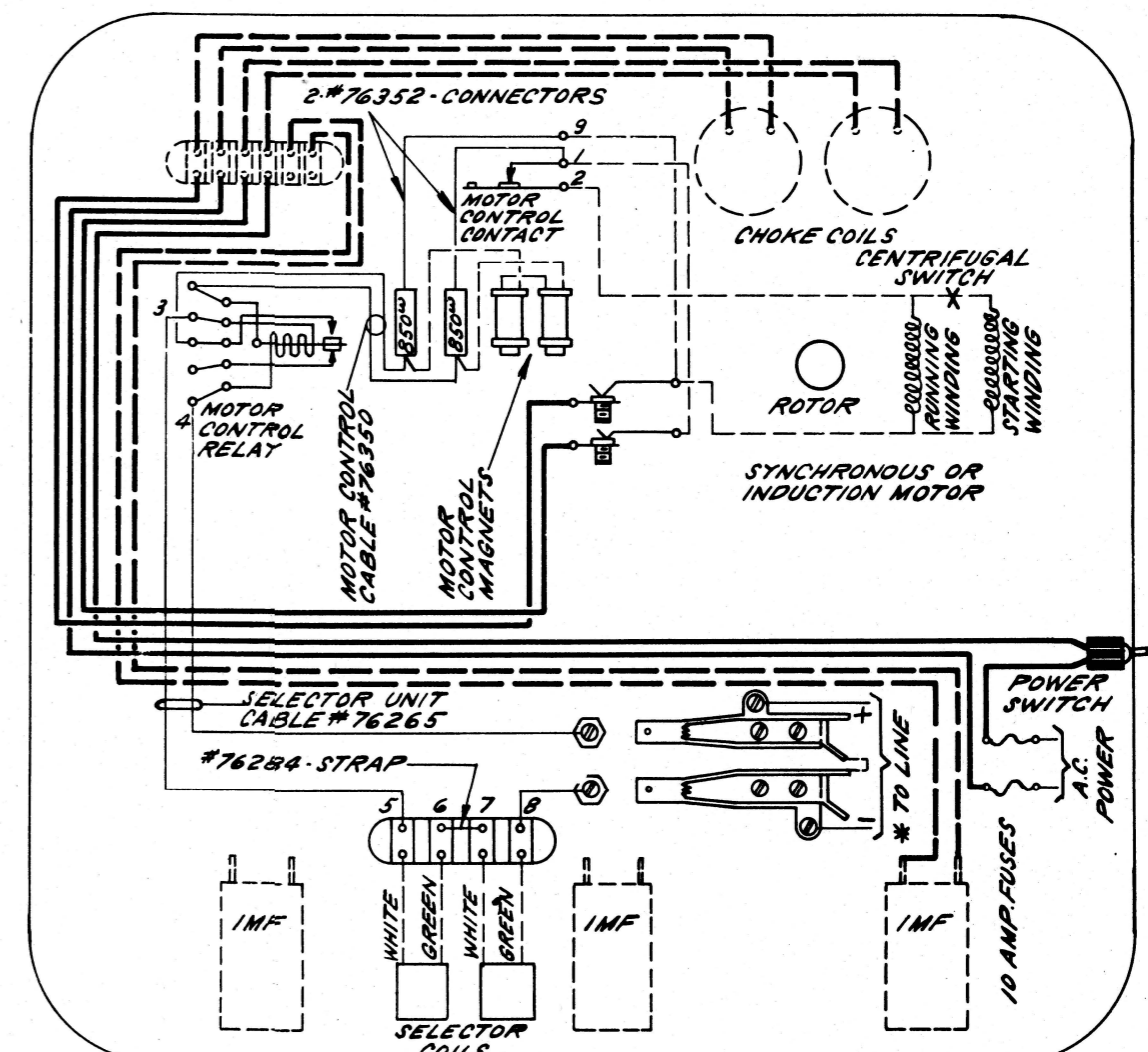
SCHEMATIC DIAGRAM OF A.C. SYNCHRONOUS OR INDUCTION MOTOR CIRCUIT



TICKER TELETYPE WITH D.C. MOTOR (TOP VIEW)



TICKER TELETYPE WITH A.C. SERIES MOTOR (TOP VIEW)



TICKER TELETYPE WITH SYNCHRONOUS OR INDUCTION MOTOR (TOP VIEW)

NOTES:
 ALL WIRES TO BE "DELTABESTON" #18 ART SILK COVERED, EXCEPT MOTOR LEADS.
 WHEN CONTROL RELAY IS OMITTED, SPLICE & TAPE WIRES DESIG. #1 TO WIRE #2 AND WIRE #3 TO #4, ALSO TAPE END OF WIRE #9.
 TO CONNECT SELECTOR MAGNETS IN MULT; STRAP #5 TO #7 & #6 TO #8.
 TO CONNECT SELECTOR MAGNETS IN SERIES; STRAP #6 TO #7.

NOTES CONT'D:
 * BASES EQUIPPED WITH LINE CORDS & PLUGS MUST BE CONNECTED WITH TIP TO TERM. MARKED "-" AND SLEEVE TO TERM. MARKED "+".
 ALL EQUIPMENT SHOWN DOTTED IS ON UNDERSIDE OF BASE.
 THIN LINES INDICATE WIRES NOT IN CABLE.
 WHEN THE LINE POLARITY IS AS INDICATED THE SELECTOR MAGNET ARMATURE AND THE MOTOR CONTROL RELAY TONGUE SHOULD GO TO THE "MARKING" SIDE.

ASSOCIATED CABLES

---	#80545 - BASE
---	#80543 - BASE
---	#76386 - D.C. MOTOR UNIT
---	#76266 - A.C. SERIES MOTOR UNIT
---	#76350 - MOTOR CONTROL
---	#76265 - SELECTOR UNIT
---	#76352 - CONNECTOR
---	#76284 - STRAP
---	CABLE #80544 - NOT SHOWN - IS SHIPPED WITH BASE.

TELETYPE CORPORATION
 1263
 AUG. 12, 1931
 1263-A
 APRIL 18, 1934

WIRING DIAGRAM CB-6

RADIO-INTERFERENCE SUB-BASE
 DRAWN G.S.P.
 TRACED G.S.P.
 CHECKED V.R.N.
 ENG'D
 APPROVED J.J.F.

ADDITION TO BULLETINS

Bulletin 127, Issue 3, Type Bar Tape Printer (Model 14) , Page 36
Bulletin 137, Issue 2, Typewheel Tape Printer (Ticker), Page 29
Bulletin 138, Issue 5, Type Bar Page Printer (Model 15), Page 50
Bulletin 141, Issue 3, Transmitter, Page 18
Bulletin 147, Issue 2, Single Magnet Reperforator, Page 14
Bulletin 159, Issue 2, Typewheel Page Printer (Model 26), Page 36
Bulletin 160, Issue 1, Type Bar Printer (Model 20), Page 38
Bulletin 170, Issue 1, Multiple Transmitter Distributor and Base, Page 9
Bulletin 171, Issue 2, Typing Reperforator, Page 22
Bulletin 175, Issue 1, Single Unit Transmitter and Base, Page 8
Bulletin 176, Issue 1, Translator Unit, Receiving Distributor and Pane, Page 8
Bulletin 178, Issue 1, Reperforator Transmitter Distributor, Page 36
Bulletin 182, Issue 1, Multiplex, Start-Stop Extensor Set, Page 22
Bulletin 183, Issue 1, Portable Signal Distortion Test Set, Page 5
Bulletin 185, Issue 1, Multiple Transmitter Distributors and Base, Page 12
Bulletin 186, Issue 1, Two Channel Start-Stop Transmitter Distributor, Page 20
Bulletin 189, Issue 1, XD79 and XD95 Distributors, Page 15
Bulletin 192, Issue 1, Teletype Automatic Wheatstone Perforator Set, Page 19
Bulletin 193, Issue 1, Reperforator Transmitter Distributor (Model 14), Page 9
Bulletin 197, Issue 1, Multiple Reperforator Set, Page 25

Add the following adjustment immediately preceding the "SPEED
ADJUSTING WHEEL FRICTION WASHER SPRING TENSION ADJUSTMENT":

ADJUSTMENTS FOR ALIGNMENT AND SQUARENESS OF GOVERNOR CONTACTS

All governor contacts can be adjusted for alignment of edges; only those governor shells which provide elongated mounting holes for the fixed contact bracket permit adjustment of the contact for height by positioning the contact bracket.

The governor contacts should be in line and meet squarely so that maximum contact surface is provided. (Check with the retractile spring tension Adjusted so that the contacts just make, or the the limit of the adjusting screw).

- (a) Line up edges of contacts by means of the floating contact hinge mounting screw.
- (b) Adjust contacts for squareness from right to left by positioning the height of the fixed contact bracket using the elongated mounting holes in the governor shell.
- (c) To adjust from front to back, twist the floating contact hinge, applying pressure to the arm near the contact.

NOTE: Check by use of a .002" gauge (smaller if available). Check with gauge between edges of contacts to see that the gauge enters (or does not enter equally on all sides.

* * *

CHANGES IN BULLETINS

- 137, Issue 2, Type Wheel Tape Printer (Ticker), Page 29
- 147, Issue 2, Model 14 and 20 Nontyping Reperforator, Page 14
- 159, Issue 2, Model 26 Type Wheel Page Printer, Page 36
- 170, Issue 1, Single and Multiple Transmitter Distributor and Base, Page 9
- 175, Issue 1, Single Unit Transmitter and Base, Page 8
- 176, Issue 1, Translator Unit, Receiving Distributor and Panel, Page 8
- 183, Issue 1, Portable Signal Distortion Test Set (Code Disc Operated), Page 5

SPEED ADJUSTING WHEEL FRICTION WASHER SPRING TENSION ADJUSTMENT

Change the tension requirement for starting the adjusting wheel moving to read "16 to 24 ozs." instead of "16 to 20 ozs."

Bulletin 137 - Change the requirement to read "16 to 24 ozs." instead of "8 to 12 ozs."

Bulletin 147 - Change the requirement to read "16 to 24 ozs." instead of "8 to 16 ozs."

* * *

CHANGES IN LUBRICATION SPECIFICATIONS
WHICH APPLY TO ALL TELETYPE APPARATUS

The following lubricants have been standardized for use on all types of Teletype apparatus. These lubricants supersede those referred to in preceding Teletype specifications. The lubricants can be ordered from Teletype as follows:

88970	1 Qt. of KS-7470 Oil
88971	1 Gal. of KS-7470 Oil
88973	1 Lb. of KS-7471 Grease
*88975	KS-8319 Grease Gun
97116	4-oz. Tube of KS-7471 Grease

The above grease is recommended instead of oil for lubricating motors equipped with ball bearings. The 88975 grease gun should be used for injecting grease into the bearings of Teletype ball bearing motors. The gun may be used also for applying grease to other parts of the apparatus and no other grease container need be carried. If this grease gun is not available, the oil listed in the foregoing should be substituted for lubricating ball bearing motors.

* Instructions for Filling the Grease Gun

1. Unscrew the lubricant tube from the cap casting of the grease gun.
2. Insert fresh lubricant through the open end of the tube with the fingers. Apply gradually to eliminate air pockets.
3. Tamp the lubricant down solidly in the tube by pounding the closed end solidly against the palm of the hand. Continue to add lubricant until the tube is completely filled and the metal follower rests against the perforated tube cover.
4. Fill the cap casting with lubricant flush to the bottom side of the tube threads.
5. Screw the lubricant tube into the cap casting part way only. Then insert a pencil or rod through the perforated tube cover and exert pressure against the metal follower so as to expel any entrapped air past the tube threads. When lubricant begins to ooze through the threads, tighten the lubricant tube securely in the cap casting.
6. Operate the handle back and forth for several strokes or until lubricant is pumped from the nozzle. The gun is then ready for use. If the lubricant does not flow from the nozzle in a solid stream, it is an indication that all air has not been expelled from the lubricant tube. Invert the gun and pound the cap casting end against the palm of the hand to jar the lubricant into the pump cylinder.

*Instructions for Lubricating Motor Ball Bearings

The motor bearings are packed with grease before the motor leaves the factory and under ordinary operating conditions need no additional lubrication for

approximately two months. At the regular lubricating intervals one or two strokes of the plunger of the gun should apply sufficient grease to each bearing. To lubricate, press the nozzle of the gun against the ball oiler and force the grease into the hole by pushing on the plunger of the gun. Care should be taken that the bearings are not overloaded. Overloading will result in the grease oozing out of the end castings and being forced into the motor or being thrown on other parts of the mechanism. After lubricating, the motor should be run for a few minutes and then any excess grease that has been forced out of the ends of the castings should be wiped off. Each time that the gun is used for lubricating a motor bearing, the plunger should first be depressed slightly to make sure that grease will be delivered.

ADJUSTMENTS OF TICKER SELECTOR MAGNET UNIT
WITH "T" SHAPED ARMATURE

To be used in conjunction with Bulletin 137 -
Description and Adjustments of the
Typewheel Tape Printer (Ticker).

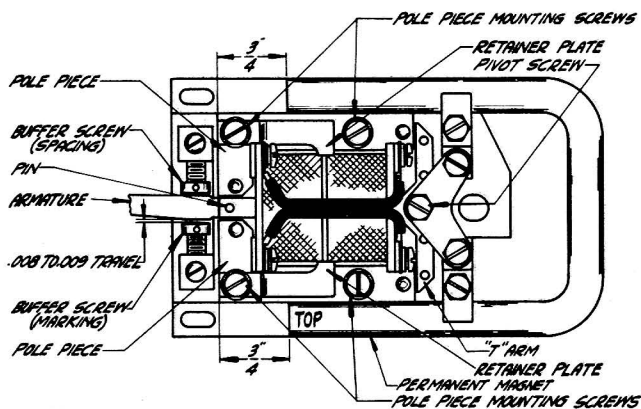
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Cancel: SELECTOR ARMATURE PIVOT SCREWS ADJUSTMENT.
SELECTOR ARMATURE POLE PIECES AND BUFFER SCREWS ADJUSTMENT, FIG. 7.

and substitute the following:

SELECTOR ARMATURE PIVOT SCREWS ADJUSTMENT:-Remove permanent magnet and back off armature buffer screws. Adjust the "up" and "down" position of the armature, by means of its pivot screws, so that the top surface of the armature is flush with the top surfaces of the right ends of the pole pieces, and so that the armature is free, without end play. Replace permanent magnet so that the mark "TOP" is uppermost.

PERMANENT MAGNET ADJUSTMENT:-Adjust the position of the permanent magnet so that the ends of the magnet are approximately $\frac{3}{4}$ " from the left ends of the pole pieces (See figure).



POLE PIECES ADJUSTMENT:-Loosen pole piece mounting screws. Move one pole piece as far toward the buffer screws as possible, holding it against the permanent magnet, and tighten the mounting screws just enough to hold the pole piece in this position. Hold the armature against this pole piece at the left end and adjust the other pole piece so that it just touches the "T" arm of the armature. Make sure that this pole piece is against the permanent magnet and tighten the mounting screws. Now hold the left end of the armature against this pole piece and adjust the other pole piece so that it just touches the "T" arm of the armature. Make sure that this pole piece is against the permanent magnet and tighten the mounting screws.

Note:-When tightening the left hand pole piece mounting screws hold the selector coil retainer plates so that the selector coils are held securely between the retainers.

BUFFER SCREWS ADJUSTMENT:- (A) Insert a .020" gauge between the left end of one pole piece and the armature. Hold the armature against the gauge and adjust the buffer screws so that there is from .004" to .005" space between each buffer screw and the side of the armature. Remove the .020" gauge. (B) Place the selector armature on the spacing side, hook an 8 oz. scale over the pin on the armature and pull at right angles toward the front of the printer. Observe the tension required to pull the armature to the marking side. Now hook the scale over the pin and pull at right angles toward the rear of the printer. Observe the tension required to pull the armature to the spacing side. If the two tensions are not within one ounce of being equal, refine the buffer screws adjustment. This adjustment should be made so that the armature will have from .008" to .009" travel between the buffer

(over)

screws (See figure).

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MAGNET BASE POSITION, FIG. 8 - change to read: "from .003" to .005" instead of "from .002" to .004".

Insert after MAGNET BASE POSITION, FIG. 8.

After tightening base mounting screws recheck BUFFER SCREWS ADJUSTMENT, item (B). If it is necessary to change the adjustment of the buffer screws recheck MAGNET BASE POSITION.

ADJUSTMENTS OF FIVE UNIT TICKER SHIFT MECHANISM

To be used in Conjunction with Bulletin #137 -
Description & Adjustments of Typewheel Tape Ptr. (Ticker)

For tickers equipped with the five unit shift mechanism add the following adjustments after flutter cam oiler adjustment on page 23, Bulletin 137.

1-Remove cover guide. Place the code discs in the spacing position. Loosen the shift pawl lever arm mounting screws and the shift bracket mounting stud and screw. Adjust the shift bracket so that there is from .070" to .080" space between the shift pawl lever roller and the lower shift pawl when the roller is against the upper shift pawl (near the upper end). Tighten the shift bracket mounting stud and screw and recheck the above adjustment.

2-Remove both shift pawl springs and check pawls for freeness. Replace springs.

3-Check to see that the shift pawl lever roller turns freely and that the pin is bent so as to be safe from falling out.

4-Check to see that the shift pawl lever is free and has not more than .006" end play.

5-Adjust the shift pawl lever arm so that the pin on the shift pawl lever does not bind in the selector lever when in either the marking or the spacing position and so that the travel of the shift pawl lever roller is centered between the upper and lower shift pawls. Tighten the shift pawl lever arm mounting screws and recheck the above adjustment.

6-Check to see that when the #6 selector lever is in the marking position there is a clearance of from .002" to .006" between the shift pawl lever roller and the lower shift pawl when the play of the shift pawl lever and roller is taken up in a direction to make this clearance a maximum. Make the same check between the shift pawl lever roller and the upper shift pawl with the #6 selector lever in the spacing position. If necessary readjust the shift pawl lever arm or the shift bracket to obtain the above clearances. If it is necessary to readjust either arm or bracket recheck adjustment #5.

7-Check to see that both upper and lower shift pawls are safely on their stop pin rollers and that they clear the front guide disc.

8-Place the code discs in the marking position and #6 selector lever in the spacing position and check to see that there is not more than .015" clearance between the shift pawl lever roller and the lower shift pawl when all the play of the shift pawl lever and roller is taken up in a direction to make this clearance a maximum.

Make the same check between the shift pawl lever roller and the upper shift pawl when #1, #2, #4 and #5 code discs and #6 selector lever are in the marking position and #3 code disc is in the spacing position.

9-Place the code discs in the spacing position and check to see that the center of the shift pawl lever roller is at least .010" below a line connecting the upper ends of the shift pawls.

10-UPPER AND LOWER SHIFT PAWL SPRING TENSION:- With the code discs in the spacing position hook a 32 oz. scale over each pawl at the end of the pawl and pull at right angles to the pawl. It should require from 10 1/2 to 14 ozs. to just start each pawl moving.

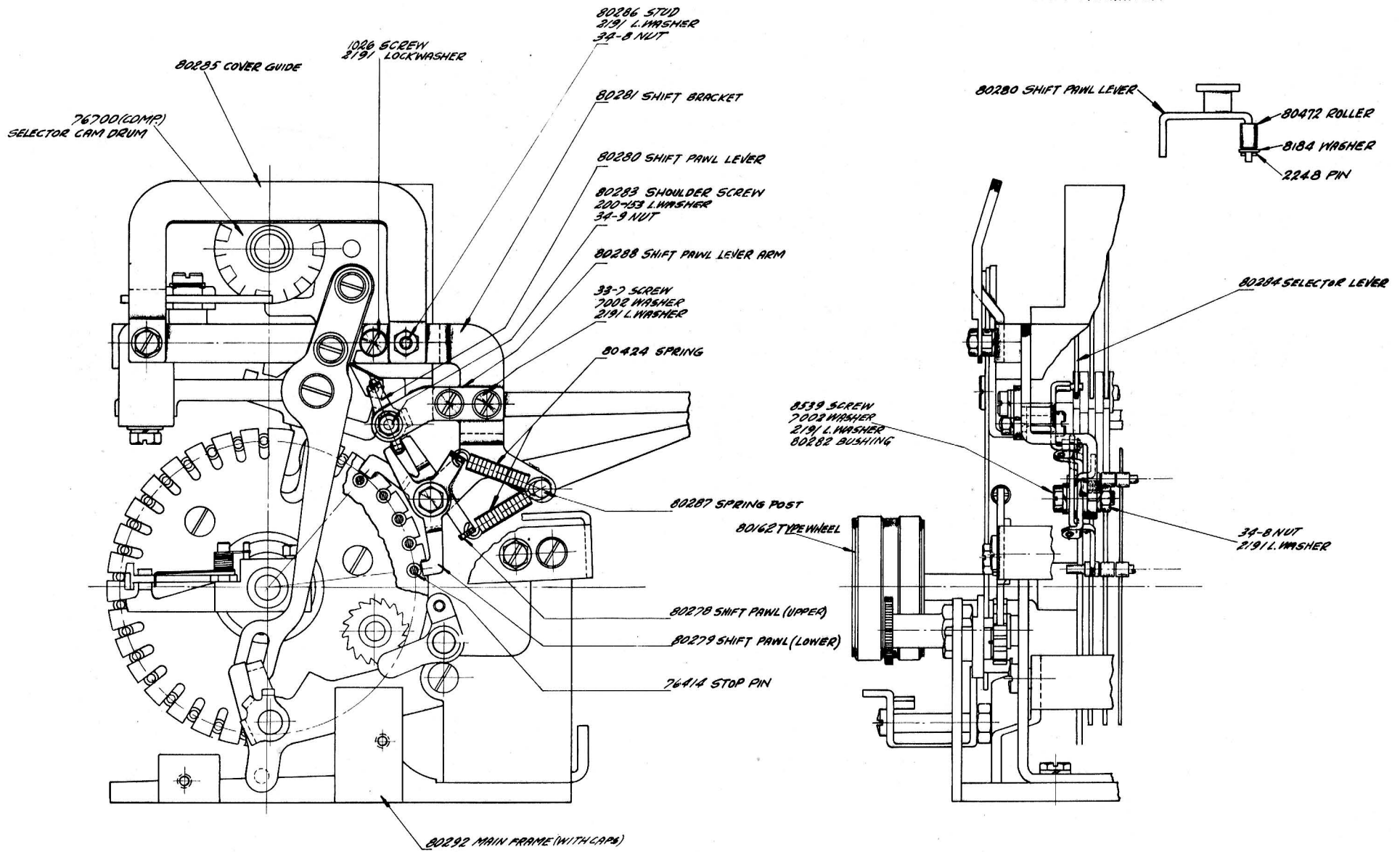
11-Replace cover guide.

LUBRICATION:

In addition to the parts listed on page 8, Bulletin 137, the following parts of the new shift mechanism should be lubricated in the same manner:

- | | | | |
|-----|--------------------------|-----|----------------------|
| (1) | Shift pawl lever roller | (3) | Shift pawl lever pin |
| (2) | Shift pawl lever bearing | (4) | Shift pawl bearing |

(over)



CP-14 USES #80285 POLAR MAGNET (COMP)

PARTS NOT LISTED HERE ARE THE SAME AS SHOWN ON PAGE #1 & 2 BULLETIN 1036

