

EQUIPMENT TEST LIST
MOTORS
POWER SYSTEMS EQUIPMENT

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11.7 DC MOTORS KS-5006	4	1. GENERAL	
11.8 IND-MOTOR KS-5007	4	1.01 This section provides an index and information access system to locate the standard tests applicable to equipment listed in the preceding table of contents. Test classification and frequency of periodic routine are also provided.	
11.9 AC-DC DPX KS-5020	4	1.02 This Equipment Test List (ETL) is reissued to incorporate changes which are indicated by an arrow to the left of each line which has been changed.	
11.10 KS-5039	5	1.03 Comments on this section should be made by following the instructions in Bell System Practices (BSP), Section 000-010-015.	
11.11 KS-5072, KS-5109 & KS-5224	5	1.04 Routine test information is arranged in the following order from left to right: Section number, issue/addendum, test letter or paragraph number, test title, test class, frequency, and the last space is for a locally assigned job number.	
11.12 KS-5123 SYNCHRONOUS MOTOR (50 HP)	5	1.05 Section 010-300-011 provides Equipment Test List instructions.	
11.13 KS-5196 (1/50HP)	6		
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NOTICE

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SECTION 159-001-012

11.0 MOTORS

11.1 MOTORS; TELECHRON MOTORS

FOR ALL UNITS

159-480-701	(6/0)	2.05	LUBRICATE RE-OILABLE TYPE MOTORS	MW 24M	-----
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11.2 MOTORS; ED-40026 GP1-GP2

FOR ALL UNITS

159-441-701	(2/0)	2.01	CLEAN RUBBER TIRE OF DRIVE WHEEL	MW 3M	-----
		2.02	CHECK LUBRICATION IN GEAR HOUSING	MW 12M	-----
		2.02	LUBRICATE FELT FRICTION DISCS	MW M	-----
		2.02	LUBRICATE LATCH BEARING	MW M	-----
		2.02	LUBRICATE REAR MOTOR BEARING	MW 12M	-----
		2.02	LUBRICATE SHAFT BEARINGS	MW 12M	-----
		2.02	LUBRICATE SHAFT SEAL	MW 12M	-----
		2.03	CHECK & ADJ CLUTCH TENSION	MW M	-----
		2.05	CHECK LATCH FREEDOM, ALIGNMENT, & DISENGAGEMENT	MW 6M	-----

11.3 MOTORS; ED-40026 GP3

FOR ALL UNITS

159-441-702	(2/0)	2.01	CLEAN RUBBER TIRE OF DRIVE WHEEL	MW 3M	-----
		2.02	CHECK LUBRICATION IN GEAR CASE	MW 12M	-----
		2.02	LUBRICATE CAM BEARINGS	MW 6M	-----
		2.02	LUBRICATE FELT FRICTION DISCS	MW 6M	-----
		2.02	LUBRICATE LATCH BEARING	MW 6M	-----
		2.02	LUBRICATE MICRO SWITCH ROLLER BEARING	MW 6M	-----
		2.02	LUBRICATE REAR MOTOR BEARING	MW 12M	-----
		2.02	LUBRICATE SHAFT OIL SEAL	MW 12M	-----
		2.04	CHECK & ADJ CLUTCH TENSION	MW 6M	-----
		2.05	CHECK LATCH FREEDOM OF OPERATION	MW 6M	-----
		2.08	CHECK FREEDOM OF SLACK TAPE ARM & CAM ASSEMBLY	MW 6M	-----
		2.10	CHECK LATCH/STOP CAM CLRNC	MW 6M	-----
		2.11	CHECK MICRO SWITCH POSITION	MW 6M	-----
		2.12	CHECK SLACK TAPE ARM POSITION	MW 6M	-----

11.4 MOTORS; ED-40027-01

FOR ALL UNITS

159-442-701	(1/0)	2.01	CLEAN ROLLER & DRUM ASSEMBLIES	MW 3M	-----
		2.02	LUBRICATE DRUM BEARINGS	MW 3M	-----
		2.02	LUBRICATE DRUM SHAFT BEARINGS	MW 3M	-----
		2.02	LUBRICATE FELT FRICTION DISC	MW 3M	-----
		2.02	LUBRICATE LATCH	MW 3M	-----
		2.02	LUBRICATE MOTOR BEARINGS	MW 12M	-----
		2.02	LUBRICATE MOTOR GEAR REDUCTION DRIVE	MW 12M	-----

159-442-701 (1/0)	2.02	LUBRICATE PRESSURE ROLLER BEARINGS	MW 3M	-----
	2.02	LUBRICATE ROLLER CAM SURFACES	MW 3M	-----
	2.02	LUBRICATE TRIP ARM BEARING	MW 3M	-----
	2.04	CHECK CLUTCH TENSION	MW 6M	-----
	2.05	CHECK PRESSURE OF ROLLER ON DRUM	MW 12M	-----
	2.06	CHECK LATCH DESENGAGEMENT, FREEDOM & ALIGNMENT	MW 6M	-----

◆ 11.5 MOTORS; ED40218 & ED40301

FOR ALL UNITS

159-443-701 (6/0)	2.01	CLEAN ROLLER & DRUM ASSEMBLY	MW 3M	-----
	2.02	DRUM BEARING	MW 3M	-----
	2.02	DRUM SHAFT BEARING	MW 3M	-----
	2.02	FELT FRICTION DISC	MW 3M	-----
	2.02	LATCH	MW 3M	-----
	2.02	LUBRICATION	MW 3M	-----
	2.02	MOTOR BEARINGS	MW 3M	-----
	2.02	ROLLER BEARINGS	MW 3M	-----
	2.02	ROLLER CAM SURFACES	MW 3M	-----
	2.02	SPEED REDUCER	MW 3M	-----
	2.02	TRIP ARM BEARING	MW 3M	-----

◆ 11.6 MOTORS; ED-40263-71, GROUP 1, 2 & 3

FOR ALL UNITS

159-440-701 (7/0)	2.01	CLEAN RUBBER TIRE OF DRIVE WHEEL	MW 3M	-----
	2.02	LUBRICATE FELT FRICTION DISCS	MW 6M	-----
	2.02	LUBRICATE GEAR CASE	MW 24M	-----
	2.02	LUBRICATE LATCH BEARING	MW 6M	-----
	2.02	LUBRICATE MOTOR BEARINGS (BODINE B-2258E-24 MOTOR ONLY)	MW 24M	-----
	2.04	CHECK CLUTCH FRICTION	MW 6M	-----
	2.05	CHECK LATCH FREEDOM OF MOVEMENT	MW 6M	-----
	2.08	FREEDOM OF SLACK TAPE ARM	MW 6M	-----
	2.12	CHECK WHEEL & SLACK TAPE ARM BLOCK CLEARANCE	MW 6M	-----
	2.13	CHECK SLACK TAPE ARM END POSITION	MW 6M	-----

OPTIONAL FEATURES, SELECT NO MORE THAN ONE CATEGORY

ED-40263-71, GROUP 1

159-440-701 (7/0)	2.02	LUBRICATE CAM BEARINGS	MW 6M	-----
	2.02	LUBRICATE MICRO SWITCH ROLLER BEARING	MW 6M	-----
	2.07	CHECK MOVEMENT OF LATCH ARM & CAM ASSEMBLY	MW 6M	-----
	2.09	CHECK FREEDOM OF CAM ASSEMBLY	MW 6M	-----
	2.11	(A) CHECK MICRO SWITCH POSITION (P-330892)	MW 6M	-----

ED-40263-71, GROUP 2

159-440-701 (7/0)	2.06	CHECK LATCH DISENGAGEMENT	MW 6M	-----
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ED-40263-71, GROUP 3

159-440-701 (7/0) 2.11 (B) CHECK MICRO SWITCH POSITION (ISMI) MW 6M -----

TROUBLE TESTS

ED-40263-71, GROUP 1

159-440-701 (7/0) 2.06 LATCH DISENGAGEMENT TT -----

2.10 CLEARANCE BETWEEN LATCH AND STOP CAM TT -----

11.7 MOTORS; DC MOTORS KS-5006

FOR ALL UNITS

159-405-701 (3/0) 2.01 (B-D) CHECK OIL LEVEL & RINGS MW M -----

2.01 LUBRICATION * (E) REPLACE OIL MW 24M -----

2.04 CHECK ALL ROTATING PARTS MW 12M -----

2.08 CHECK FOR NOISE & VIBRATION MW 12M -----

2.09 CLEAN & INSPECT COMMUTATOR MW 3M -----

2.11 (2.11 - 2.16) CLEAN & INSPECT BRUSH HOLDERS, BRUSHES, BRUSH ALIGNMENT, SPACING MW 3M -----

2.18 (2.18 - 2.20) CLEAN & INSPECT SPEED REGULATOR MW 3M -----

2.21 CHECK TEMPERATURE MW 3M -----

OPTIONAL FEATURES, SELECT NO MORE THAN ONE CATEGORY

WASTE-PACKED BEARINGS

159-405-701 (3/0) 2.01 (G) LUBRICATE WASTE PACKED BEARINGS MW 3M -----

2.01 LUBRICATION * (H) INSPECT THE WASTE MW 24M -----

BALL BEARINGS

159-405-701 (3/0) 2.01 (I) LUBRICATE BALL BEARINGS MW 24M -----

11.8 MOTORS; IND-MOTOR KS-5007

FOR ALL UNITS

159-406-701 (4/0) 2.01 (A-F) CHECK OIL LEVEL & RINGS MW M -----

2.01 LUBRICATION * (B) REPLACE OIL MW 24M -----

2.05 CHECK ROTATING PARTS MW 12M -----

2.07 CHECK NOISE & VIBRATION MW 12M -----

2.08 CHECK TEMPERATURE MW 3M -----

OPTIONAL FEATURES, SELECT NO MORE THAN ONE CATEGORY

WASTE-PACKED BEARINGS

159-406-701 (4/0) 2.01 (G) LUBRICATE WASTE PACKED BEARINGS MW 3M -----

BALL BEARINGS W/PRESSURE FITTINGS

159-406-701 (4/0) 2.01 (H) LUBRICATE BEARINGS WITH PRESSURE FITTINGS MW 12M -----

BALL BEARINGS W/O PRESSURE FITTINGS

159-406-701 (4/0) 2.01 (I) LUBRICATE BEARINGS WITHOUT PRESSURE FITTINGS MW 36M -----

11.9 MOTORS; AC-DC DPX KS-5020

FOR ALL UNITS

159-424-701 (5/0) 2.01 LUBRICATION MW 24M -----

2.02 CHECK BEARINGS AND ALL ROTATING PARTS MW 12M -----

159-424-701 (5/0)	2.04	CHECK BRUSH CLEARANCE, LENGTH, & FIT	MW 24M	-----
	2.08	CLEAN & INSPECT COMMUTATOR	MW 24M	-----
	2.11	CHECK END PLAY	MW 12M	-----
	2.12	CHECK NOISE & VIBRATION	MW 6M	-----
	2.13	CHECK TEMPERATURE	MW 6M	-----
	2.14	CHECK TRANSFER RELAY CONTACT THICKNESS, SURFACES, PRESSURE	MW 24M	-----
	2.19	CHECK OPERATION OF TRANSFER RELAY	MW 6M	-----
11.10 MOTORS; KS-5039				
FOR ALL UNITS				
159-408-701 (2/0)	2.01	(A) REFILL BEARING GREASE CUPS	MW 12M	-----
	2.01	(B) CLEAN & RELUBRICATE BEARINGS	MW 24M	-----
	2.03	CHECK MOTOR ARMATURE FREEDOM OF ROTATION	MW 12M	-----
	2.04	CHECK NOISE AND VIBRATION	MW 12M	-----
	2.05	CHECK MOTOR SPEED	MW 6M	-----
	2.06	CLEAN & INSPECT MOTOR ARMATURE COMMUTATOR SURFACE	MW 3M	-----
	2.08	CHECK BRUSH HOLDER-COMMUTATOR CLEARANCE (UPON REPAIR OF MOTOR OR PRFRMC INDICATES CHECK ADVISABLE)	MW *	-----
	2.09	CLEAN & INSPECT BRUSHES	MW 3M	-----
	2.10	CHECK MOTOR BEARINGS AND FRAME TEMPERATURE (UPON REPAIR OF MOTOR OR PRFRMC INDICATES CHECK ADVISABLE)	MW 6M	-----
◆ 11.11 MOTORS; KS-5072, KS-5109 & KS-5224				
FOR ALL UNITS				
159-416-701 (2/0)	2.01	LUBRICATE BEARINGS	MW 36M	-----
	2.02	CHECK ROTATING PARTS	MW 12M	-----
	2.04	CHECK NOISE & VIBRATION	MW 12M	-----
	2.06	CLEAN & INSPECT COMMUTATOR & COLLECTOR RINGS	MW 3M	-----
	2.08	CLEAN & INSPECT BRUSH HOLDERS & BRUSHES	MW 3M	-----
	2.10	INSPECT SPEED REGULATOR	MW 3M	-----
	2.11	CHECK TEMPERATURE	MW 3M	-----
◆ 11.12 MOTORS; KS-5123 SYNCHRONOUS MOTOR (50 HP)				
FOR ALL UNITS				
159-410-701 (2/0)	2.01	(A - C) CHECK OIL LEVEL AND LEAKS	MW M	-----
	2.01	(D) REPLACE BEARING LUBRICATING OIL	MW 24M	-----
	2.02	CHECK MOTOR SPEED	MW 6M	-----
	2.03	CHECK BEARING LININGS FOR EXCESSIVE WEAR (UPON REPAIR OF MOTOR OR PRFRMC INDICATES CHECK ADVISABLE)	MW *	-----
	2.04	CHECK EXCITER ARMATURE - POLE FACES AIR GAP (UPON REPAIR OF EXITER OR PRFRMC INDICATES CHECK ADVISABLE)	MW *	-----
	2.04	CHECK MOTOR ROTOR - STATOR AIR GAP (UPON REPAIR OF MOTOR OR PRFRMC INDICATES CHECK ADVISABLE)	MW *	-----

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159-410-701 (2/0)	2.06	CHECK BRUSH HOLDER CLEARANCE	MW 12M	-----
	2.07	(2.07 - 2.11) CHECK BRUSH LENGTH, FIT, ALIGNMENT, SPACING AND PRESSURE	MW 12M	-----
	2.12	CLEAN & INSPECT COMMUTATOR & COLLECTOR RING SURFACES	MW 6M	-----
	2.14	CHECK EXCITER RHEOSTAT SETTING	MW 6M	-----
	2.15	CHECK MOTOR ROTOR FREEDOM OF ROTATION	MW 12M	-----
	2.16	CHECK MOTOR NOISE & VIBRATION	MW 12M	-----
	2.17	CHECK OF COMMUTATOR, SLIP RINGS AND BRUSHES, MOTOR BEARINGS, FRAME AND WINDINGS	MW 6M	-----
◆ 11.13 MOTORS; KS-5196 (1/50HP)				
FOR ALL UNITS				
159-413-701 (2/0)	3.11	(3.11 - 3.14) LUBRICATE MOTOR BEARINGS	MW 6M	-----
	3.15	RELUBRICATE BEARINGS	MW 18M	-----
	3.21	CLEAN & INSPECT BRUSH HOLDERS, BRUSHES, WINDINGS AND MOTOR COMMUTATOR	MW W	-----
	3.22	CLEAN NICKLE OXIDE DUST FROM REGULATOR HOUSING INTERIOR	MW 6M	-----
	3.23	DISASSEMBLE, CLEAN AND INSPECT MOTOR	MW 18M	-----
	3.32	(3.32 - 3.33) CHECK SPEED REGULATOR ADJMT	MW 3M	-----
	3.34	CHECK POLARITY OF REGULATOR CONTACTS	MW 12M	-----
◆ 11.14 MOTORS; KS-5196 (1/60HP)				
FOR ALL UNITS				
159-414-701 (2/0)	3.21	(3.212) CLEAN & INSPECT SPEED REGULATOR	MW M	-----
	3.21	(3.213) DISASSEMBLE, CLEAN AND INSPECT MOTOR	MW 18M	-----
	3.22	(3.221) LUBRICATE BEARINGS	MW 6M	-----
	3.22	(3.224) CLEAN & RELUBRICATE BEARINGS	MW 18M	-----
	3.31	CLEAN & INSPECT BRUSH HOLDERS, BRUSHES & WINDINGS	MW 3M	-----
	3.31	CLEAN & INSPECT COMMUTATOR	MW 3M	-----
11.15 MOTORS; KS-5375				
FOR ALL UNITS				
159-418-701 (2/0)	3.21	(3.211) CLEAN THE MOTOR	MW 3M	-----
	3.22	(3.221) DISASSEMBLE & CLEAN MOTOR	MW 12M	-----
	3.32	LUBRICATE BEARINGS	MW 2W	-----
	3.34	CLEAN & RELUBRICATE BEARINGS	MW 12M	-----
11.16 MOTORS; KS-5388				
FOR ALL UNITS				
159-420-701 (2/0)	3.02	CLEAN & INSPECT SPEED REGULATOR	MW 3M	-----
	3.03	(3.031) CLEAN THE MOTOR	MW 3M	-----
	3.03	(3.032) CLEAN & INSPECT COMMUTATOR, BRUSH HOLDERS, BRUSHES	MW 3M	-----
	3.03	(3.033) CLEAN & INSPECT SPEED REGULATOR	MW 3M	-----
	3.03	(3.034) DISASSEMBLE & CLEAN MOTOR	MW 18M	-----

159-420-701 (2/0)	3.03	CLEAN SPEED REGULATOR HOUSING	MW 3M	-----
	3.04	(3.042) LUBRICATE BEARINGS	MW 6M	-----
	3.04	(3.045) CLEAN & RELUBRICATE BEARINGS	MW 18M	-----
11.17 MOTORS; KS-5394				
FOR ALL UNITS				
159-422-701 (1/0)	2.01	CLEAN & INSPECT CONTACT SURFACES	MW 3M	-----
	2.02	BRUSH HOLDER CLEARANCE	MW 3M	-----
	2.03	CHECK BRUSH LENGTH, PRESSURE & FIT	MW 3M	-----
	2.07	CHECK TEMPERATURE	MW 3M	-----
11.18 MOTORS; KS-5559 (EICOR)				
FOR ALL UNITS				
◆ 159-426-701 (5/0)	2.01	(A) LUBRICATE MOTOR BEARINGS	MW 12M	-----
◆	2.01	(B) REPACK GEAR CASE	MW 36M	-----
◆	2.01	(C) LUBRICATE GEAR CASE	MW 12M	-----
◆	2.01	(D) LUBRICATE SLEEVE BEARINGS	MW 12M	-----
◆	2.01	(E) LUBRICATE UNSEALED BALL BEARINGS	MW 36M	-----
	2.03	INSPECT FOR NOISE & VIBRATION	MW 3M	-----
	2.05	CHECK TEMPERATURE	MW 3M	-----
11.19 MOTORS; KS-5559 (HOLTZER-CABOT & BORG)				
FOR ALL UNITS				
◆ 159-426-701 (5/0)	2.01	(A) LUBRICATE MOTOR BEARINGS	MW 12M	-----
◆	2.01	(B) REPACK GEAR CASE	MW 36M	-----
◆	2.01	(C) LUBRICATE GEAR CASE	MW 12M	-----
	2.03	INSPECT FOR NOISE & VIBRATION	MW 3M	-----
	2.05	CHECK TEMPERATURE	MW 3M	-----
OPTIONAL FEATURES, SELECT NO MORE THAN ONE CATEGORY				
SLEEVE BEARINGS				
◆ 159-426-701 (5/0)	2.01	(D) LUBRICATE SLEEVE BEARINGS	MW 12M	-----
UNSEALED BALL BEARINGS				
◆ 159-426-701 (5/0)	2.01	(E) LUBRICATE UNSEALED BALL BEARINGS	MW 36M	-----
11.20 MOTORS; KS-5748				
FOR ALL UNITS				
159-428-701 (2/1)	2.01	LUBRICATION	MW 36M	-----
	2.02	CHECK BEARINGS & FREEDOM OF ROTATION	MW 12M	-----
	2.04	CHECK NOISE & VIBRATION	MW 12M	-----
	2.06	CLEAN & INSPECT THE COMMUTATOR	MW 3M	-----
	2.08	CLEAN & INSPECT BRUSH HOLDERS & BRUSHES	MW 3M	-----
	2.09	CHECK TEMPERATURE	MW 3M	-----
11.21 MOTORS; KS-5753				
FOR ALL UNITS				
159-429-701 (1/0)	2.02	CHECK ROTATING PARTS	MW 6M	-----

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159-429-701 (1/0)	2.06	CHECK NOISE & VIBRATION	MW 6M	-----
	2.08	CHECK TEMPERATURE	MW 6M	-----
11.22 MOTORS; KS-5773				
FOR ALL UNITS				
159-431-701 (2/0)	2.01	LUBRICATION	MW 12M	-----
	2.02	CHECK ROTATING PARTS	MW 12M	-----
	2.05	CHECK NOISE & VIBRATION	MW 12M	-----
	2.07	(A) CHECK STARTING SWITCH	MW 12M	-----
	2.08	CHECK TEMPERATURE	MW 12M	-----
11.23 MOTORS; KS-5777				
FOR ALL UNITS				
159-432-701 (1/0)	2.01	LUBRICATION	MW 36M	-----
	2.02	CHECK ROTATING PARTS	MW 6M	-----
	2.05	CHECK NOISE & VIBRATION	MW 6M	-----
	2.07	CLEAN & INSPECT COMMUTATOR & COLLECTOR RINGS	MW 6M	-----
	2.09	CLEAN & INSPECT BRUSH HOLDERS & BRUSHES	MW 6M	-----
	2.10	CHECK SPEED REGULATOR CONTACTS	MW 6M	-----
	2.11	CHECK TEMPERATURE	MW 6M	-----
11.24 MOTORS; KS-15609				
FOR ALL UNITS				
159-462-701 (2/0)	2.02	CHECK ROTATING PARTS	MW 6M	-----
	2.06	CHECK NOISE & VIBRATION	MW 6M	-----
	2.08	CHECK TEMPERATURE	MW 6M	-----
11.25 MOTORS; KS-15780				
FOR ALL UNITS				
159-464-701 (1/0)	2.02	CHECK ROTATING PARTS	MW 6M	-----
	2.06	CHECK NOISE & VIBRATION	MW 6M	-----
	2.08	CHECK TEMPERATURE	MW 6M	-----