STATION DIALS

QDB1-TYPE

IDENTIFICATION AND MAINTENANCE

(a) QDB1A

(b) QDB1M

Fig. 1 — QDB1-Type Dials

1. GENERAL

1.01 This section is issued to replace earlier Northern Electric Procedures and to add information on newer QDB1-type dials.

2. DESCRIPTION

2.01 The QDB1-type dials use plastic gears, plastic bearings, and a sound-deadening ring around the governor to make the operation smoother, quieter, and more reliable than the NE-7 type dials.

2.02 The fingerwheels for the QDB1-type dials have two features not found on previous plastic fingerwheels.

- A longer, more prominent tab to assist in correctly positioning the station number card.

- A small hole, between finger holes 3 and 4 for removing the number card with an NS-16750L3 releaser.

2.03 Some of the QDB1-type dials are direct replacements, both physically and electrically for NE-7 type dials (Table A).

2.04 With the exception of the fingerwheel (P097M849) none of the replaceable parts of the QDB1-type dials are interchangeable with those parts of the NE-7 type dial.

2.05 Table B lists the available colors for QDB1-type dials.

TABLE A
IDENTIFICATION — QDB1-TYPE DIALS

| DIAL	PULSING RATE (pps)	PERCENT BREAK	CONTACT ARRANGEMENT	REPLACES	APPLICATION
QDB1A	10 ± 0.5	62 ± 2	Fig.3(a)	NE-7C NE-7D	General station use.
QDB1B	10 ± 0.5	62 ± 2	Fig.3(b)	NE-7G NE-7H	Used in telephone sets for use with handsfree or key telephone systems.
QDB1C	10 ± 0.5	62 ± 2	Fig.3(a)	NE-7CQ1A NE-7DQ1A	Same as QDB1A except number plate has only numerals, used in QSK300A,B,F,G.
QDB1D	10 ± 0.5	62 ± 2	Fig.3(b)	NE-7QA	Same as QDB1B except number plate has only numerals.
QDB1E	10 ± 0.5	62 ± 2	Fig.3(c)	NE-7DQ3A	200 ms delay between digits instead of 100 ms.
QDB1G	10 ± 0.5	62 ± 2	Fig.3(a)	NE-7QH	Same as QDB1A except number plate has Arabic and English numerals 1 to 0.
QDB1H	10 ± 0.5	62 ± 2	Fig.3(c)	—	Same as QDB1E except number plate has Arabic and English numerals 1 to 0.
QDB1J	20 ± 1	64 ± 2	Fig.3(a)	NE-7QE	Number plate has Arabic and English numerals.
QDB1K	20 ± 1	64 ± 2	Fig.3(a)	NE-7QJ	Number plate has only numerals.
QDB1K1	18 ± 1	64 ± 2	Fig.3(a)	—	Same as QDB1K except pulsing rate is 18 pps, used in QSK301A.
QDB1L	10 ± 0.5	62 ± 2	Fig.3(a)	—	Number plate is 3.26 in. diameter with aiming dots only.
QDB1M	10 ± 0.5	62 ± 2	Fig.3(c)	—	Used on CENTURION coin telephones.
QDB1N	10 ± 0.5	62 ± 2	Fig.3(b)	—	Used in LOGIC telephone sets.
QDB1P	10 ± 0.5	62 ± 2	Fig.3(c)	—	Number plate has dots only, used in QSD300-type panel coin telephone sets.
QDB1R	10 ± 0.5	60 ± 2	Fig.3(a)	—	All numeral number plate used in QSK300C
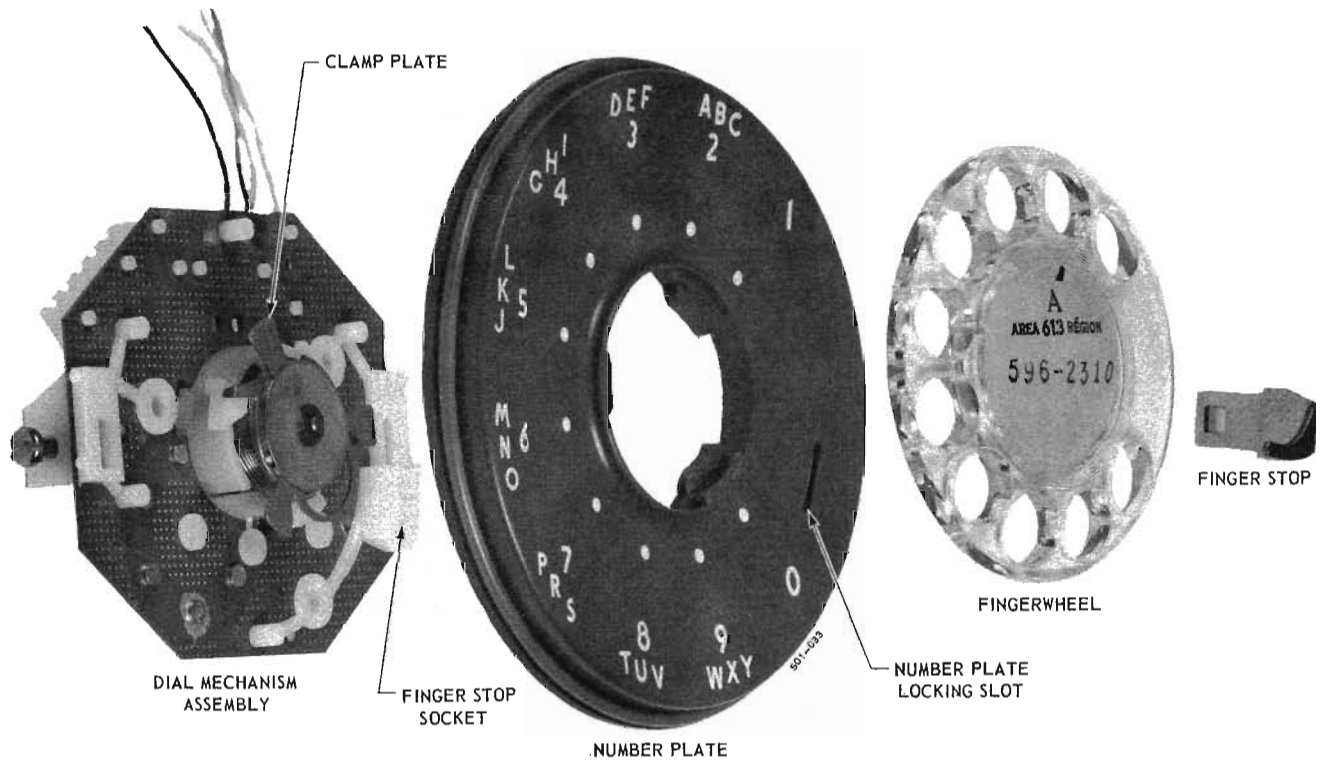
Fig. 2 — Assembly of Parts — Typical QDB1-Type Dial
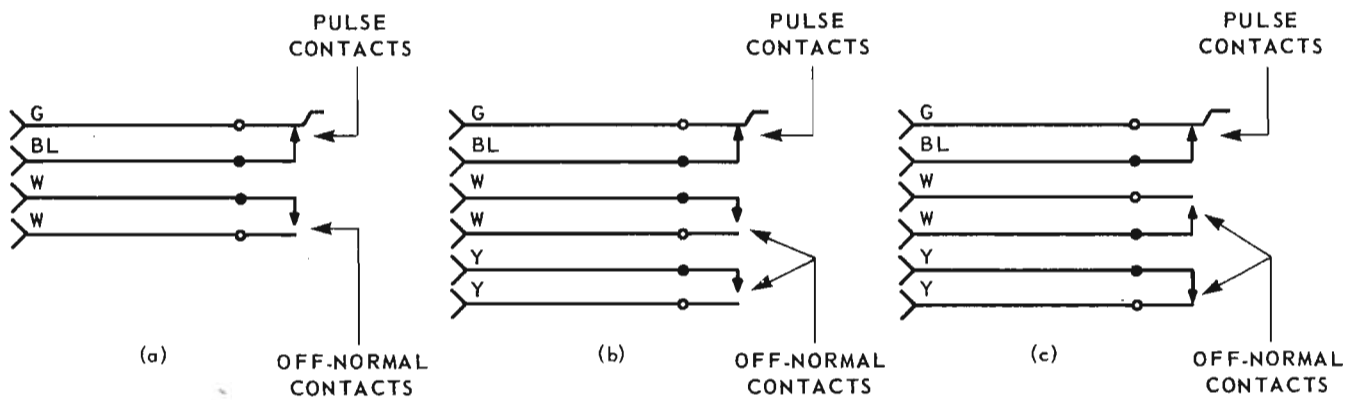
Fig. 3 — Dial Contact Arrangement

TABLE B
QDB1-TYPE DIALS - COLOR AVAILABILITY

COLOR	SUFFIX	QDB1A	QDB1B	QDB1C	QDB1D	QDB1E	QDB1G	QDB1H	QDB1J	QDB1K	QDB1K1	QDB1L	QDB1M	QDB1N	QDB1P	QDB1R
Black	-03	√	√	√	√	√	√	√	√	√	√	√		*		√
Ivory	-50	√	√	√	√	√	√	√	√	√	√	√				√
Green	-51	√	√	√	√	√	√	√	√	√	√	√				√
Red	-53	√	√	√	√	√	√	√	√	√	√	√				√
Oxford Gray	-52										√	√	√		√	
Orange	-29	√	√	√	√	√	√	√	√	√	√	√				√
Yellow	-56	√	√	√	√	√	√	√	√	√	√	√				√
White	-58	√	√	√	√	√	√	√	√	√	√	√				√
Rose Pink	-59	√	√	√	√	√	√	√	√	√	√	√				√
Light Beige	-60	√	√	√	√	√	√	√	√	√	√	√				√
Light Gray	-61	√	√	√	√	√	√	√	√	√	√	√				√
Aqua Blue	-62	√	√	√	√	√	√	√	√	√	√	√				√
Turquoise	-64	√	√	√	√	√	√	√	√	√	√	√				√
Chameleon Gray	-35	√														

* The QDB1N dial is available only with a white faceplate with black numerals.

Note: Bell Canada standard dials are: QDB1A-03, QDB1B-03, QDB1P-52, QDB1M-52, QDB1N.

TABLE C
REPLACEMENT PARTS QDB1-TYPE DIALS

DIAL	DIAL MECHANISM	FINGERWHEEL	FINGERSTOP	NUMBER PLATE
QDB1A	P0894297	P097M849	P097M988	P097A700* P096E300†
QDB1B	P0894298	P097M849		P097A700* P096E300†
QDB1C	P0894297	P097M849		P0897000
QDB1D	P0894298	P097M849		P0897000
QDB1E	P0896367	P0896361		P0899000
QDB1G	P0894297	P097M849		P0899900
QDB1H	P0896367	P0896361		P0896600
QDB1J	P0897522	P097M849		P0899900
QDB1K	P0897522	P097M849		P0897000
QDB1K1	P0892815	P097M849		P0897000
QDB1L	P0894297	P0892576		P0892600
QDB1M	P0514063	P0892576		P0502200‡
QDB1N	P0894298	P0892576		P0515909
QDB1P	P0514063	P0892576		P0892600
QDB1R	P0525816	P097M849		P0897000

* With "Operator"
† Without "Operator"
‡ Part name is Alpha Plate

3. MAINTENANCE

3.01 The following list of inspections and requirements are given for the maintenance of QDB1-type dials. The replaceable components are shown in Fig. 2 and listed in Table C.

● Parts of the dial must not be broken or missing

● The fingerwheel must be tight and undamaged.

● The fingerstop must not be loose or damaged.

● The dial must operate smoothly, without slipping or skipping. Check by operating the dial several times. Replace the dial mechanism, if it fails to meet this requirement.

● Replace the dial mechanism, if you suspect it of giving wrong numbers, or of improper dial speed or gear mesh.

● *Do not lubricate any part of the dial.*

● Do not attempt to adjust the pulsing rate or percent break.

● Do not lift or carry the dial by the dial leads.

3.02 Defective components can be replaced as described below.

A. Fingerwheel

Removal

(1) Rotate the fingerwheel as far as possible in a clockwise direction.

(2) Insert an NS-16750L3 releaser in the small hole located at the edge of the number card between the 9 and 0 finger holes (Fig. 4). Push down on the releaser to disengage the clamp spring.

(3) Rotate the fingerwheel further clockwise until it can be lifted off.

Assembly

(1) Place the fingerwheel on the clamp plate with the 0 finger hole over the dot above the digit 9.

(2) Rotate the fingerwheel counterclockwise until the clamp spring snaps into the notch on the underside of the fingerwheel.

B. Fingerstop

Removal

(1) Depress the plastic locking tab (Fig. 5) with an NS-16750L3 releaser.

(2) With the locking tab depressed, pull the fingerstop out until it is fully disengaged.

Assembly

Insert the fingerstop in the hole in the numberplate, and push in until it locks in position.

C. Number Plate

Removal

(1) Remove fingerstop and fingerwheel.

(2) Rotate the number plate counterclockwise until it is released.

(3) Raise the top of the number plate until it clears the clamp plate.

(4) Lift the number plate off the dial mechanism.

Assembly

(1) Place the number plate over the dial mechanism (using the clamp spring tab as an indicator pointing between digits 8 and 9). Insert the lower side of the number plate over the clamp spring first and then the top. Twist the number plate clockwise as far as possible.

(2) Replace the fingerstop and fingerwheel.

Fig. 4 — Removal of Fingerwheel
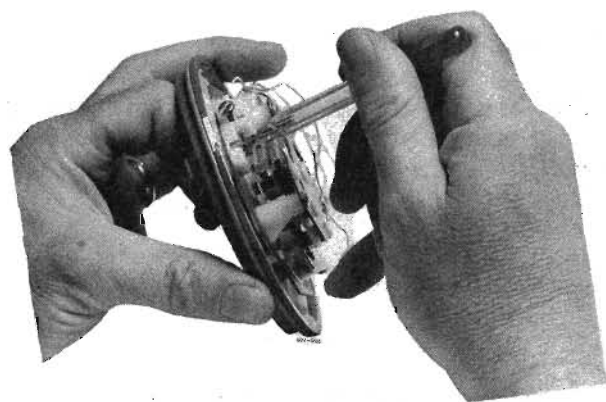
Fig. 5 — Removal of Fingerstop