

# MONGOLIAN HEAD FORMS, POSITIONAL FORMS, & VARIANT FORMS

August 9, 2015

(With great appreciation to Dr. Quejingzhabu for his many years of research and counsel and Microsoft staff Aaron Bell / Andrew Glass for our many man-years of collaboration)

Greg Eck - greyson@postone.net

## LEGEND

Head Character Form acts as both presentation form and isolate form

\* – Feminine ligatures formed using this consonantal isolate appear in the initial-medial, initial-final, medial-medial, medial-final positions

+ – Ligatures formed from this presentation form appear in the initial-medial, initial-final, medial-medial, medial-final positions

& – Variants used with the FVS only for reasons of stylistics, archaic anomalies as well as some few contemporary spelling anomalies, compound spellings, and foreign spellings; it should be noted that isolate variants are considered to be used primarily for lexical productions such as dictionaries

(X<sub>1</sub>X<sub>2</sub>X<sub>3</sub>X<sub>4</sub>) – shows script usage (X<sub>1</sub>=Mongolian, X<sub>2</sub>=Todo, X<sub>3</sub>=Sibe, X<sub>4</sub>=Manchu)

**Yellow highlighting** denotes a difference from the Chinese Standard GB/T 26226-2010

**Blue highlighting** notes a need for refinement or just additional information

NOTE: There is an appendix to this paper which discusses the MVS model (DS00-MVS) as well as the NNBSF model (DS00-NNBSF). Assumptions inherent to these models will impact certain notations in this paper.

## Punctuation

1800	(xx_)	?	MONGOLIAN BIRGA
11660	(xx_)	᠋?	MONGOLIAN BIRGA WITH ORNAMENT
11664	(xx_)	᠋᠋	MONGOLIAN BIRGA WITH DOUBLE ORNAMENT
11662	(xx_)	᠋᠋᠋	MONGOLIAN DOUBLE BIRGA WITH ORNAMENT
11663	(xx_)	᠋᠋᠋᠋	MONGOLIAN TRIPLE BIRGA WITH ORNAMENT
11661	(xx_)	᠋	MONGOLIAN ROTATED BIRGA
11665	(xx_)	᠋᠋	MONGOLIAN ROTATED BIRGA WITH ORNAMENT
11666	(xx_)	᠋᠋᠋	MONGOLIAN ROTATED BIRGA WITH DOUBLE ORNAMENT
11667	(xx_)	᠋	MONGOLIAN INVERTED BIRGA
11668	(xx_)	᠋᠋	MONGOLIAN INVERTED BIRGA WITH DOUBLE ORNAMENT
11669	(xx_)	᠋᠋᠋	MONGOLIAN SWIRL BIRGA
1166A	(xx_)	᠋᠋᠋᠋	MONGOLIAN SWIRL BIRGA WITH ORNAMENT
1166B	(xx_)	᠋᠋᠋᠋᠋	MONGOLIAN SWIRL BIRGA WITH DOUBLE ORNAMENT
1166C	(xx_)	᠋᠋᠋᠋᠋᠋	MONGOLIAN TURNED SWIRL BIRGA WITH DOUBLE ORNAMENT
1801	(xxxx)	••••	MONGOLIAN ELLIPSIS
1802	(xx_)	,	MONGOLIAN COMMA
1803	(xx_)	᠋᠋	MONGOLIAN FULL STOP
1804	(xxxx)	:	MONGOLIAN COLON
1805	(xx_)	᠋᠋᠋᠋	MONGOLIAN FOUR DOTS
1806	(_x_)	-	MONGOLIAN TODO SOFT HYPHEN
1808	(_x)	᠋	MONGOLIAN MANCHU COMMA
1809	(_x)	᠋᠋	MONGOLIAN MANCHU FULL STOP

## Marks

1885	(xx_x)	᠋᠋	MONGOLIAN LETTER ALI GALI BALUDA <i>(this is not a letter – it is a diacritic mark; should have the perforated circle added here)</i>
1886	(xx_x)	᠋᠋᠋	MONGOLIAN LETTER ALI GALI THREE BALUDA <i>(this is not a letter – it is a diacritic mark; should have the perforated circle added here)</i>
18A9	(x_)	᠋	MONGOLIAN LETTER ALI GALI DAGALGA <i>(this is not a letter – it is a diacritic mark)</i>

## Control Characters

180B	(xxxx)	᠋᠋᠋᠋	MONGOLIAN FREE VARIATION SELECTOR ONE
------	--------	------	---------------------------------------

180C	(xxxx)	᠋᠋᠋᠋	MONGOLIAN FREE VARIATION SELECTOR TWO
180D	(xxxx)	᠋᠋᠋᠋	MONGOLIAN FREE VARIATION SELECTOR THREE
180E	(x_)	᠋᠋᠋	MONGOLIAN VOWEL SEPARATOR

180F <reserved>

NOTE: A Mongolian vertical font should also include the control characters NNBSF (202F), ZWJ (200D) and ZNWJ (200C)

## Numbers

(rotated 90 degrees clockwise in vertical display)

1810	(xx_)	᠋	MONGOLIAN DIGIT ZERO
1811	(xx_)	᠋᠋	MONGOLIAN DIGIT ONE
1812	(xx_)	᠋᠋᠋	MONGOLIAN DIGIT TWO
1813	(xx_)	᠋᠋᠋᠋	MONGOLIAN DIGIT THREE
1814	(xx_)	᠋᠋᠋᠋᠋	MONGOLIAN DIGIT FOUR
1815	(xx_)	᠋᠋᠋᠋᠋᠋	MONGOLIAN DIGIT FIVE
1816	(xx_)	᠋᠋᠋᠋᠋᠋᠋	MONGOLIAN DIGIT SIX
1817	(xx_)	᠋᠋᠋᠋᠋᠋᠋᠋	MONGOLIAN DIGIT SEVEN
1818	(xx_)	᠋᠋᠋᠋᠋᠋᠋᠋᠋	MONGOLIAN DIGIT EIGHT
1819	(xx_)	᠋᠋᠋᠋᠋᠋᠋᠋᠋᠋	MONGOLIAN DIGIT NINE

NOTE: These digits should also be rotate-able 270 degrees clockwise from current display (either by the font or by upper-level layout)

NOTE: A Mongolian vertical font should also have Latin digits which will rotate 270 degrees clockwise from current display also (either by the font or by upper-level layout)

181A	<reserved>
181B	<reserved>
181C	<reserved>
181D	<reserved>
181E	<reserved>
181F	<reserved>

## Mongolian Characters

1807	(_x)	᠋	MONGOLIAN SIBE SYLLABLE BOUNDARY MARKER
ZWJ+1807+ZWJ	(_x)	᠋	<i>Medial Form</i> <i>(currently specified as a Mark – would probably be better specified as a character as it acts in all ways as a character and not a diacritic)</i>

180A	(xxxx)	-	MONGOLIAN NIRUGU
180A+ZWJ	(xxxx)		<i>Initial Form</i>
ZWJ+180A+ZWJ	(xxxx)		<i>Medial Form</i>
ZWJ+180A	(xxxx)		<i>Final Form</i>

(currently specified as a Mark – would be much better specified as a character as it acts in all ways as a character and not a diacritic; some fonts cannot carry out 180A functionality as specified with current feature set)

1820	(xxxx)	ᠠ	MONGOLIAN LETTER A
1820+FVS1		ᠡ (xx_)	<i>Second Isolate Form</i>
1820+ZWJ		ᠢ (xxxx)	<i>First Initial Form</i>
1820+FVS1+ZWJ		ᠣ (xx_)	<i>Second Initial Form</i> <small>(only implemented with NNBSF)</small>
ZWJ+1820+ZWJ		ᠣ (xxxx)	<i>First Medial Form</i>
ZWJ+1820+FVS1+ZWJ		ᠣ (xx_)	<i>Second Medial Form</i> <sup>ⓔ</sup>
ZWJ+1820		ᠣ (xxxx)	<i>First Final Form</i>
ZWJ+1820+FVS1		ᠣ (xx_)	<i>Second Final Form</i> <small>(only implemented with MVS/NNBSF)</small>

1821	(x_)	ᠡ	MONGOLIAN LETTER E
1821+ZWJ		ᠢ (x_)	<i>First Initial Form</i>
1821+FVS1+ZWJ		ᠣ (x_)	<i>Second Initial Form</i> <sup>ⓔ</sup>
ZWJ+1821+ZWJ		ᠣ (x_)	<i>Medial Form</i>
ZWJ+1821		ᠣ (x_)	<i>First Final Form</i>
ZWJ+1821+FVS1		ᠣ (x_)	<i>Second Final Form</i> <small>(only implemented with MVS/NNBSF)</small>

1822	(x_)	ᠢ	MONGOLIAN LETTER I
1822+ZWJ		ᠣ (x_)	<i>Initial Form</i>
ZWJ+1822+ZWJ		ᠣ (x_)	<i>First Medial Form</i>
ZWJ+1822+FVS1+ZWJ		ᠣ (x_)	<i>Second Medial Form</i> <sup>ⓔ</sup>
ZWJ+1822+FVS2+ZWJ		ᠣ (x_)	<i>Third Medial Form</i> <small>(needed to over-ride default context)</small>
ZWJ+1822+FVS3+ZWJ		ᠣ (x_)	<i>Fourth Medial Form</i> <small>(context-driven)</small>
1822+ZWJ		ᠣ (x_)	<i>Final Form</i>

1823	(x_xx)	ᠣ	MONGOLIAN LETTER O
1823+ZWJ		ᠣ (x_xx)	<i>Initial Form</i>
ZWJ+1823+ZWJ		ᠣ (x_xx)	<i>First Medial Form</i>
ZWJ+1823+FVS1+ZWJ		ᠣ (x_)	<i>Second Medial Form</i> <sup>ⓔ</sup>
ZWJ+1823		ᠣ (x_xx)	<i>First Final Form</i>
ZWJ+1823+FVS1		ᠣ (x_xx)	<i>Second Final Form</i> <sup>ⓔ</sup>

1824	(x_)	ᠤ	MONGOLIAN LETTER U
1824+FVS1		ᠥ (x_)	<i>Second Isolate Form</i>
1824+ZWJ		ᠦ (x_)	<i>Initial Form</i>
ZWJ+1824+ZWJ		ᠦ (x_)	<i>First Medial Form</i> <small>(also implemented with NNBSF)</small>
ZWJ+1824+FVS1+ZWJ		ᠦ (x_)	<i>Second Medial Form</i> <sup>ⓔ</sup>
ZWJ+1824		ᠦ (x_)	<i>First Final Form</i> <small>(also implemented with NNBSF)</small>
ZWJ+1824+FVS1		ᠦ (x_)	<i>Second Final Form</i> <sup>ⓔ</sup>

1825	(x_)	ᠦ	MONGOLIAN LETTER OE
1825+ZWJ		ᠦ (x_)	<i>Initial Form</i>
ZWJ+1825+ZWJ		ᠦ (x_)	<i>First Medial Form</i>
ZWJ+1825+FVS1+ZWJ		ᠦ (x_)	<i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1825+FVS2+ZWJ		ᠦ (x_)	<i>Third Medial Form</i> <sup>ⓔ</sup>
ZWJ+1825		ᠦ (x_)	<i>First Final Form</i>

ZWJ+1825+FVS1		ᠦ (x_)	<i>Second Final Form</i> <sup>ⓔ</sup>
1826	(x_)	ᠦ	MONGOLIAN LETTER UE
1826+FVS1		ᠦ (x_)	<i>Second Isolate Form</i>
1826+FVS2		ᠦ (x_)	<i>Third Isolate Form</i>

1826+ZWJ		ᠦ (x_)	<i>Initial Form</i>
ZWJ+1826+ZWJ		ᠦ (x_)	<i>First Medial Form</i> <small>(also implemented with NNBSF)</small>
ZWJ+1826+FVS1+ZWJ		ᠦ (x_)	<i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1826+FVS2+ZWJ		ᠦ (x_)	<i>Third Medial Form</i> <sup>ⓔ</sup>
ZWJ+1826		ᠦ (x_)	<i>First Final Form</i> <small>(also implemented with NNBSF)</small>
ZWJ+1826+FVS1		ᠦ (x_)	<i>Second Final Form</i> <sup>ⓔ</sup>

1827	(x_)	ᠦ	MONGOLIAN LETTER EE
1827+ZWJ		ᠦ (x_)	<i>Initial Form</i>
ZWJ+1827+ZWJ		ᠦ (x_)	<i>Medial Form</i>
ZWJ+1827		ᠦ (x_)	<i>Final Form</i>

1828	(xxxx)	ᠦ	MONGOLIAN LETTER NA
1828+ZWJ		ᠦ (xxxx)	<i>First Initial Form</i> <small>(also context-driven in Todo)</small>
1828+FVS1+ZWJ		ᠦ (x_)	<i>Second Initial Form</i> <sup>ⓔ</sup>
ZWJ+1828+ZWJ		ᠦ (xxxx)	<i>First Medial Form</i> <small>(context-driven)</small>
ZWJ+1828+FVS1+ZWJ		ᠦ (xxxx)	<i>Second Medial Form</i> <small>(context-driven)</small>

ZWJ+1828+FVS2+ZWJ		ᠦ (x_)	<i>Third Medial Form</i> <small>(needed to over-ride default context) (COLMON+FVS2+O+FVS1+DU) (NASUN+FVS2+U+FVS1+RTU)</small>
ZWJ+1828+FVS3+ZWJ		ᠦ (x_)	<i>Fourth Medial Form</i> <small>(context-driven, Todo only)</small>
ZWJ+1828		ᠦ (xxxx)	<i>First Final Form</i>
ZWJ+1828+FVS1		ᠦ (x_)	<i>Second Final Form</i> <small>(only implemented with MVS)</small>

1829	(x_x)	ᠦ	MONGOLIAN LETTER ANG
1829+ZWJ		ᠦ (x_)	<i>Initial Form</i>
ZWJ+1829+ZWJ		ᠦ (x_x)	<i>Medial Form</i>
ZWJ+1829		ᠦ (x_x)	<i>Final Form</i>

182A	(x_xx)	ᠦ	MONGOLIAN LETTER BA <sup>+</sup>
182A+ZWJ		ᠦ (x_xx)	<i>Initial Form</i>
ZWJ+182A+ZWJ		ᠦ (x_xx)	<i>Medial Form</i>
ZWJ+182A		ᠦ (x_xx)	<i>First Final Form</i>
ZWJ+182A+FVS1		ᠦ (x_)	<i>Second Final Form</i> <sup>ⓔ</sup>

182B	(x_)	ᠦ	MONGOLIAN LETTER PA <sup>+</sup>
182B+ZWJ		ᠦ (x_)	<i>Initial Form</i>
ZWJ+182B+ZWJ		ᠦ (x_)	<i>Medial Form</i>
ZWJ+182B		ᠦ (x_)	<i>Final Form</i>

182C	(x_)	ᠦ	MONGOLIAN LETTER QA
182C+FVS1		ᠦ (x_)	<i>Second Isolate Form</i> <sup>*</sup>
182C+FVS2		ᠦ (x_)	<i>Third Isolate Form</i> <sup>*</sup>
182C+ZWJ		ᠦ (x_)	<i>First Initial Form</i>
182C+FVS1+ZWJ		ᠦ (x_)	<i>Second Initial Form</i> <sup>ⓔ</sup>
ZWJ+182C+ZWJ		ᠦ (x_)	<i>First Medial Form</i>
ZWJ+182C+FVS1+ZWJ		ᠦ (x_)	<i>Second Medial Form</i> <sup>ⓔ</sup>
ZWJ+182C		ᠦ (x_)	<i>First Final Form</i>

ZWJ+182C+FVS1	ᠨᠯ (x_) <i>Second Final Form</i> <sup>Ⓢ</sup>
182D (x_) ᠭ	MONGOLIAN LETTER GA
182D+FVS1	ᠭ (x_) <i>Second Isolate Form</i> <sup>*</sup>
182D+FVS2	ᠮ (x_) <i>Third Isolate Form</i> <sup>*</sup>
182D+ZWJ	ᠭᠢ (x_) <i>First Initial Form</i>
182D+FVS1+ZWJ	ᠭᠢ (x_) <i>Second Initial Form</i> <sup>Ⓢ</sup>
182D+FVS2+ZWJ	ᠮ (x_) <i>Third Initial Form</i> <small>(context-driven)</small>
ZWJ+182D+ZWJ	ᠮ (x_) <i>First Medial Form</i>
ZWJ+182D+FVS1+ZWJ	ᠮᠢ (x_) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+182D+FVS2+ZWJ	ᠮᠢ (x_) <i>Third Medial Form</i> <small>(needed to over-ride default context)</small>
ZWJ+182D+FVS3+ZWJ	ᠮᠢ (x_) <i>Fourth Medial Form</i> <small>(context-driven)</small>
ZWJ+182D	ᠨᠯ (x_) <i>First Final Form</i>
ZWJ+182D+FVS1	ᠨᠯ (x_) <i>Second Final Form</i> <small>(needed to over-ride default context)</small>
ZWJ+182D+FVS2	ᠨᠯᠢ (x_) <i>Third Final Form</i> <small>(context-driven)</small>
ZWJ+182D+FVS3	ᠨᠯᠢ (x_) <i>Fourth Final Form</i> <small>(only implemented with MVS)</small>
182E (x_xx) ᠮ	MONGOLIAN LETTER MA
182E+ZWJ	ᠮ (x_xx) <i>Initial Form</i>
ZWJ+182E+ZWJ	ᠮ (x_xx) <i>Medial Form</i>
ZWJ+182E	ᠮᠤ (x_xx) <i>Final Form</i>
182F (xxxx) ᠯ	MONGOLIAN LETTER LA
182F+ZWJ	ᠯ (xxxx) <i>Initial Form</i>
ZWJ+182F+ZWJ	ᠯ (xxxx) <i>Medial Form</i>
ZWJ+182F	ᠯᠤ (xxxx) <i>Final Form</i>
1830 (xxxx) ᠰ	MONGOLIAN LETTER SA
1830+ZWJ	ᠰ (xxxx) <i>Initial Form</i>
ZWJ+1830+ZWJ	ᠰ (xxxx) <i>Medial Form</i>
ZWJ+1830	ᠰᠤ (xxxx) <i>First Final Form</i>
ZWJ+1830+FVS1	ᠰᠤ (x_) <i>Second Final Form</i> <sup>Ⓢ</sup>
ZWJ+1830+FVS2	ᠰᠤ (x_) <i>Third Final Form</i> <sup>Ⓢ</sup>
1831 (xx_) ᠱ	MONGOLIAN LETTER SHA
1831+ZWJ	ᠱ (xx_) <i>Initial Form</i>
ZWJ+1831+ZWJ	ᠱ (xx_) <i>Medial Form</i>
ZWJ+1831	ᠱᠤ (xx_) <i>Final Form</i>
1832 (x_) ᠲ	MONGOLIAN LETTER TA
1832+ZWJ	ᠲ (x_) <i>Initial Form</i>
ZWJ+1832+ZWJ	ᠲ (x_) <i>First Medial Form</i>
ZWJ+1832+FVS1+ZWJ	ᠲ (x_) <i>Second Medial Form</i> <sup>Ⓢ</sup>
ZWJ+1832	ᠲᠤ (x_) <i>Final Form</i>
1833 (x_) ᠳ	MONGOLIAN LETTER DA
1833+ZWJ	ᠳ (x_) <i>First Initial Form</i>
1833+FVS1+ZWJ	ᠳ (x_) <i>Second Initial Form</i> <small>(also implemented with NNBSF)</small>
ZWJ+1833+ZWJ	ᠳ (x_) <i>First Medial Form</i>
ZWJ+1833+FVS1+ZWJ	ᠳ (x_) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1833	ᠳᠤ (x_) <i>First Final Form</i>
ZWJ+1833+FVS1	ᠳᠤ (x_) <i>Second Final Form</i> <sup>Ⓢ</sup>

1834 (xxxx) ᠴ	MONGOLIAN LETTER CHA
1834+ZWJ	ᠴ (xxxx) <i>Initial Form</i>
ZWJ+1834+ZWJ	ᠴ (xxxx) <i>Medial Form</i>
ZWJ+1834	ᠴ (x_) <i>Final Form</i>
1835 (x_x) ᠵ	MONGOLIAN LETTER JA
1835+ZWJ	ᠵ (x_x) <i>Initial Form</i>
ZWJ+1835+ZWJ	ᠵ (x_x) <i>Medial Form</i>
ZWJ+1835	ᠵ (x_) <i>First Final Form</i>
ZWJ+1835+FVS1	ᠵ (x_) <i>Second Final Form</i> <small>(also implemented with MVS &amp; NNBSF)</small>
1836 (x_xx) ᠶ	MONGOLIAN LETTER YA
1836+ZWJ	ᠶ (x_xx) <i>First Initial Form</i>
1836+FVS1+ZWJ	ᠶ (x_) <i>Second Initial Form</i> <small>(context-driven)</small>
ZWJ+1836+ZWJ	ᠶ (x_) <i>First Medial Form</i>
ZWJ+1836+FVS1+ZWJ	ᠶ (x_xx) <i>Second Medial Form</i> <small>(context-driven AND also needed to over-ride default context)</small>
ZWJ+1836	ᠶ (x_) <i>Final Form</i>
1837 (xxx_) ᠷ	MONGOLIAN LETTER RA
1837+ZWJ	ᠷ (xxx_) <i>Initial Form</i>
ZWJ+1837+ZWJ	ᠷ (xxx_) <i>Medial Form</i>
ZWJ+1837	ᠷ (xxx_) <i>Final Form</i>
1838 (xxxx) ᠸ	MONGOLIAN LETTER WA
1838+ZWJ	ᠸ (xxxx) <i>Initial Form</i>
ZWJ+1838+ZWJ	ᠸ (xxxx) <i>First Medial Form</i>
ZWJ+1838+FVS1+ZWJ	ᠸ (x_) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1838	ᠸ (x_) <i>First Final Form</i>
ZWJ+1838+FVS1	ᠸ (x_) <i>Second Final Form</i> <sup>Ⓢ</sup>
1839 (x_) ᠹ	MONGOLIAN LETTER FA <sup>+</sup>
1839+ZWJ	ᠹ (x_) <i>Initial Form</i>
ZWJ+1839+ZWJ	ᠹ (x_) <i>Medial Form</i>
ZWJ+1839	ᠹ (x_) <i>Final Form</i>
183A (xxxx) ᠠ	MONGOLIAN LETTER KA <sup>+</sup>
183A+ZWJ	ᠠ (xxxx) <i>Initial Form</i>
ZWJ+183A+ZWJ	ᠠ (xxxx) <i>Medial Form</i>
ZWJ+183A	ᠠ (x_) <i>Final Form</i>
183B (xx_) ᠪ	MONGOLIAN LETTER KHA <sup>+</sup>
183B+ZWJ	ᠪ (xx_) <i>Initial Form</i>
ZWJ+183B+ZWJ	ᠪ (xx_) <i>Medial Form</i>
ZWJ+183B	ᠪ (xx_) <i>Final Form</i>
183C (x_) ᠳ	MONGOLIAN LETTER TSA
183C+ZWJ	ᠳ (x_) <i>Initial Form</i>
ZWJ+183C+ZWJ	ᠳ (x_) <i>Medial Form</i>
ZWJ+183C	ᠳ (x_) <i>Final Form</i>
183D (x_) ᠷ	MONGOLIAN LETTER ZA
183D+ZWJ	ᠷ (x_) <i>Initial Form</i>
ZWJ+183D+ZWJ	ᠷ (x_) <i>Medial Form</i>
ZWJ+183D	ᠷ (x_) <i>Final Form</i>
183E (x_) ᠬ	MONGOLIAN LETTER HAA
183E+ZWJ	ᠬ (x_) <i>Initial Form</i>

ZWJ+183E+ZWJ	ᠮ (x_)	Medial Form
ZWJ+183E	ᠮ (x_)	Final Form
183F (x_) ᠮ		MONGOLIAN LETTER ZRA
183F+ZWJ	ᠮ (x_)	Initial Form
ZWJ+183F+ZWJ	ᠮ (x_)	Medial Form
ZWJ+183F	ᠮ (x_)	Final Form
1840 (xx_) ᠮ		MONGOLIAN LETTER LHA
1840+ZWJ	ᠮ (xx)	Initial Form
ZWJ+1840+ZWJ	ᠮ (xx)	Medial Form
ZWJ+1840	ᠮ (x)	Final Form
1841 (x_) ᠮ		MONGOLIAN LETTER ZHI
1841+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1841+ZWJ	ᠮ (x_)	Medial Form
ZWJ+1841	ᠮ (x)	Final Form
1842 (x_) ᠮ		MONGOLIAN LETTER CHI
1842+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1842+ZWJ	ᠮ (x_)	Medial Form
ZWJ+1842	ᠮ (x)	Final Form

### Todo Characters

1843 (x_) ᠮ		MONGOLIAN LETTER TODO LONG VOWEL SIGN
1843+ZWJ	ᠮ (x_)	Initial Form <small>(context-driven)</small>
ZWJ+1843+ZWJ	ᠮ (x_)	Medial Form <small>(context-driven)</small>
ZWJ+1843	ᠮ (x_)	Final Form <small>(context-driven)</small> <small>(research needed here on final variant)</small>
1844 (x_) ᠮ		MONGOLIAN LETTER TODO E
1844+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1844+ZWJ	ᠮ (x_)	First Medial Form
ZWJ+1844+FVS1+ZWJ	ᠮ (x_)	Second Medial Form <sup>Ⓢ</sup>
ZWJ+1844	ᠮ (x_)	Final Form
1845 (x_) ᠮ		MONGOLIAN LETTER TODO I
1845+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1845+ZWJ	ᠮ (x_)	First Medial Form
ZWJ+1845+FVS1+ZWJ	ᠮ (x_)	Second Medial Form <small>(context-driven)</small>
ZWJ+1845	ᠮ (x_)	Final Form
1846 (x_) ᠮ		MONGOLIAN LETTER TODO O
1846+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1846+ZWJ	ᠮ (x_)	First Medial Form
ZWJ+1846+FVS1+ZWJ	ᠮ (x_)	Second Medial Form <sup>Ⓢ</sup>
ZWJ+1846	ᠮ (x_)	Final Form
1847 (x_) ᠮ		MONGOLIAN LETTER TODO U
1847+FVS1	ᠮ (x_)	Second Isolate Form
1847+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1847+ZWJ	ᠮ (x_)	First Medial Form
ZWJ+1847+FVS1+ZWJ	ᠮ (x_)	Second Medial Form <sup>Ⓢ</sup>
ZWJ+1847+FVS2+ZWJ	ᠮ (x_)	Third Medial Form <small>(context-driven)</small>
ZWJ+1847	ᠮ (x_)	First Final Form

ZWJ+1847+FVS1	ᠮ (x_)	Second Final Form <small>(context-driven)</small>
1848 (x_) ᠮ		MONGOLIAN LETTER TODO OE
1848+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1848+ZWJ	ᠮ (x_)	First Medial Form
ZWJ+1848+FVS1+ZWJ	ᠮ (x_)	Second Medial Form <sup>Ⓢ</sup>
ZWJ+1848	ᠮ (x_)	Final Form
1849 (x_) ᠮ		MONGOLIAN LETTER TODO UE
1849+FVS1	ᠮ (x_)	Second Isolate Form
1849+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1849+ZWJ	ᠮ (x_)	First Medial Form
ZWJ+1849+FVS1+ZWJ	ᠮ (x_)	Second Medial Form <sup>Ⓢ</sup>
ZWJ+1849	ᠮ (x_)	Final Form
184A (x_) ᠮ		MONGOLIAN LETTER TODO ANG
184A+ZWJ	ᠮ (x)	Initial Form
ZWJ+184A+ZWJ	ᠮ (x_)	Medial Form
ZWJ+184A	ᠮ (x_)	Final Form
184B (x_) ᠮ		MONGOLIAN LETTER TODO BA
184B+ZWJ	ᠮ (x_)	Initial Form
ZWJ+184B+ZWJ	ᠮ (x_)	Medial Form
ZWJ+184B	ᠮ (x_)	Final Form
184C (x_) ᠮ		MONGOLIAN LETTER TODO PA <sup>*</sup>
184C+ZWJ	ᠮ (x_)	Initial Form
ZWJ+184C+ZWJ	ᠮ (x_)	Medial Form
ZWJ+184C	ᠮ (x_)	Final Form
184D (x_) ᠮ		MONGOLIAN LETTER TODO QA
184D+FVS1	ᠮ (x_)	Second Isolate Form <sup>Ⓢ</sup>
184D+ZWJ	ᠮ (x_)	Initial Form
ZWJ+184D+ZWJ	ᠮ (x_)	Medial Form
ZWJ+184D	ᠮ (x_)	Final Form
184E (x_) ᠮ		MONGOLIAN LETTER TODO GA
184E+FVS1	ᠮ (x_)	Second Isolate Form <sup>Ⓢ</sup>
184E+ZWJ	ᠮ (x_)	Initial Form
ZWJ+184E+ZWJ	ᠮ (x_)	First Medial Form
ZWJ+184E+FVS1+ZWJ	ᠮ (x_)	Second Medial Form <small>(context-driven)</small>
ZWJ+184E	ᠮ (x_)	Final Form
184F (x_) ᠮ		MONGOLIAN LETTER TODO MA
184F+ZWJ	ᠮ (x_)	Initial Form
ZWJ+184F+ZWJ	ᠮ (x_)	Medial Form
ZWJ+184F	ᠮ (x_)	Final Form
1850 (x_) ᠮ		MONGOLIAN LETTER TODO TA
1850+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1850+ZWJ	ᠮ (x_)	Medial Form
ZWJ+1850	ᠮ (x_)	Final Form
1851 (x_) ᠮ		MONGOLIAN LETTER TODO DA
1851+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1851+ZWJ	ᠮ (x_)	Medial Form
ZWJ+1851	ᠮ (x_)	Final Form
1852 (x_) ᠮ		MONGOLIAN LETTER TODO CHA

1852+ZWJ	ᠠ (x_)	Initial Form
ZWJ+1852+ZWJ	ᠠ (x_)	Medial Form
ZWJ+1852	ᠠ (x_)	Final Form
1853 (xx_) ᠡ	MONGOLIAN LETTER TODO JA	
1853+ZWJ	ᠡ (xx_)	Initial Form
ZWJ+1853+ZWJ	ᠡ (xx_)	Medial Form
ZWJ+1853	ᠡ (x_)	Final Form
1854 (x_) ᠢ	MONGOLIAN LETTER TODO TSA	
1854+ZWJ	ᠢ (x_)	Initial Form
ZWJ+1854+ZWJ	ᠢ (x_)	Medial Form
ZWJ+1854	ᠢ (x_)	Final Form
1855 ᠣ	MONGOLIAN LETTER TODO YA	
1855+ZWJ	ᠣ (x_)	Initial Form
ZWJ+1855+ZWJ	ᠣ (x_)	Medial Form
ZWJ+1855	ᠣ (x_)	Final Form
1856 (x_) ᠣ	MONGOLIAN LETTER TODO WA	
1856+ZWJ	ᠣ (x_)	Initial Form
ZWJ+1856+ZWJ	ᠣ (x_)	Medial Form
ZWJ+1856	ᠣ (x_)	Final Form
1857 (x_) ᠤ	MONGOLIAN LETTER TODO KA <sup>+</sup>	
1857+ZWJ	ᠤ (x_)	Initial Form
ZWJ+1857+ZWJ	ᠤ (x_)	Medial Form
ZWJ+1857	ᠤ (x_)	Final Form
1858 (xx_) ᠤ	MONGOLIAN LETTER TODO GAA <sup>+</sup>	
1858+ZWJ	ᠤ (xx_)	Initial Form
ZWJ+1858+ZWJ	ᠤ (xx_)	Medial Form
ZWJ+1858	ᠤ (x_)	Final Form
1859 (x_) ᠥ	MONGOLIAN LETTER TODO HAA	
1859+ZWJ	ᠥ (x_)	Initial Form
ZWJ+1859+ZWJ	ᠥ (x_)	Medial Form
ZWJ+1859	ᠥ (x_)	Final Form
185A (x_) ᠦ	MONGOLIAN LETTER TODO JIA	
185A+ZWJ	ᠦ (x_)	Initial Form
ZWJ+185A+ZWJ	ᠦ (x_)	Medial Form
ZWJ+185A	ᠦ (x_)	Final Form
185B (xx_) ᠦ	MONGOLIAN LETTER TODO NIA	
185B+ZWJ	ᠦ (xx_)	Initial Form
ZWJ+185B+ZWJ	ᠦ (xx_)	Medial Form
ZWJ+185B	ᠦ (x_)	Final Form
185C (xx_) ᠦ	MONGOLIAN LETTER TODO DZA	
185C+ZWJ	ᠦ (xx_)	Initial Form
ZWJ+185C+ZWJ	ᠦ (xx_)	Medial Form
ZWJ+185C	ᠦ (x_)	Final Form

### Sibe Characters

185D (xx_) ᠨ	MONGOLIAN LETTER SIBE E	
185D+FVS1	ᠨ (x_)	Second Isolate Form
185D+ZWJ	ᠨ (xx_)	Initial Form
ZWJ+185D+ZWJ	ᠨ (xx_)	First Medial Form

ZWJ+185D+FVS1+ZWJ	ᠨ (xx)	Second Medial Form
ZWJ+185D	ᠨ (xx)	First Final Form
ZWJ+185D+FVS1	ᠨ (xx)	Second Final Form
	(context-driven)	(research needed here on final variant)
185E (x_) ᠮ	MONGOLIAN LETTER SIBE I	
185E+FVS1	ᠮ (x_)	Second Isolate Form
185E+ZWJ	ᠮ (x_)	Initial Form
ZWJ+185E+ZWJ	ᠮ (x_)	First Medial Form
ZWJ+185E+FVS1+ZWJ	ᠮ (x_)	Second Medial Form
	(context-driven)	
ZWJ+185E+FVS2+ZWJ	ᠮ (x_)	Third Medial Form
	(context-driven)	
ZWJ+185E	ᠮ (x_)	First Final Form
	(also implemented with NNBSF)	
ZWJ+185E+FVS1	ᠮ (x_)	Second Final Form
	(context-driven)	
ZWJ+185E+FVS2	ᠮ (x_)	Third Final Form
185F (xx) ᠯ	MONGOLIAN LETTER SIBE IY	
185F+ZWJ	ᠯ (x_)	Initial Form
ZWJ+185F+ZWJ	ᠯ (xx)	Medial Form
ZWJ+185F	ᠯ (xx)	Final Form
1860 (xx) ᠯ	MONGOLIAN LETTER SIBE UE	
1860+ZWJ	ᠯ (xx)	Initial Form
ZWJ+1860+ZWJ	ᠯ (xx)	First Medial Form
ZWJ+1860+FVS1+ZWJ	ᠯ (xx)	Second Medial Form
	(context-driven)	
ZWJ+1860	ᠯ (xx)	First Final Form
ZWJ+1860+FVS1	ᠯ (xx)	Second Final Form
	(context-driven)	
ZWJ+1860+FVS2	ᠯ (xx)	Third Final Form
	(context-driven)	(research needed here on final undotted variant)
1861 (xx) ᠮ	MONGOLIAN LETTER SIBE U	
1861+FVS1	ᠮ (x_)	Second Isolate Form
1861+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1861+ZWJ	ᠮ (xx)	Medial Form
ZWJ+1861	ᠮ (xx)	Final Form
1862 (x_) ᠮ	MONGOLIAN LETTER SIBE ANG	
1862+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1862+ZWJ	ᠮ (x_)	Medial Form
ZWJ+1862	ᠮ (x_)	Final Form
1863 (x_) ᠮ	MONGOLIAN LETTER SIBE KA	
1863+FVS1	ᠮ (x_)	Second Isolate Form <sup>*</sup>
1863+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1863+ZWJ	ᠮ (x_)	First Medial Form
ZWJ+1863+FVS1+ZWJ	ᠮ (x_)	Second Medial Form
	(context-driven)	
ZWJ+1863	ᠮ (x_)	Final Form
1864 (xx) ᠮ	MONGOLIAN LETTER SIBE GA	
1864+FVS1	ᠮ (xx)	Second Isolate Form <sup>*</sup>
1864+ZWJ	ᠮ (xx)	Initial Form
ZWJ+1864+ZWJ	ᠮ (xx)	Medial Form
ZWJ+1864	ᠮ (x_)	Final Form

1865	(__xx)	ᠰᠢᠪᠬᠠ	MONGOLIAN LETTER SIBE HA
1865+FVS1		ᠰᠢᠪᠬᠠᠰ	<i>Second Isolate Form</i>
1865+ZWJ		ᠰᠢᠪᠬᠠᠰ	<i>Initial Form</i>
ZWJ+1865+ZWJ		ᠰᠢᠪᠬᠠᠰ	<i>Medial Form</i>
ZWJ+1865		ᠰᠢᠪᠬᠠ	<i>Final Form</i>
1866	(__xx)	ᠰᠢᠪᠠ	MONGOLIAN LETTER SIBE PA <sup>+</sup>
1866+ZWJ		ᠰᠢᠪᠠᠰ	<i>Initial Form</i>
ZWJ+1866+ZWJ		ᠰᠢᠪᠠᠰ	<i>Medial Form</i>
ZWJ+1866		ᠰᠢᠪᠠ	<i>Final Form</i>
1867	(__xx)	ᠰᠢᠪᠱᠠ	MONGOLIAN LETTER SIBE SHA
1867+ZWJ		ᠰᠢᠪᠱᠠᠰ	<i>Initial Form</i>
ZWJ+1867+ZWJ		ᠰᠢᠪᠱᠠᠰ	<i>Medial Form</i>
ZWJ+1867		ᠰᠢᠪᠱᠠ	<i>Final Form</i>
1868	(__xx)	ᠰᠢᠪᠲᠠ	MONGOLIAN LETTER SIBE TA
1868+ZWJ		ᠰᠢᠪᠲᠠᠰ	<i>First Initial Form</i>
1868+FVS1+ZWJ		ᠰᠢᠪᠲᠠᠰ	<i>Second Initial Form</i> <small>(context-driven)</small>
ZWJ+1868+ZWJ		ᠰᠢᠪᠲᠠᠰ	<i>First Medial Form</i>
ZWJ+1868+FVS1+ZWJ		ᠰᠢᠪᠲᠠᠰ	<i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1868+FVS2+ZWJ		ᠰᠢᠪᠲᠠᠰ	<i>Third Medial Form</i> <small>no context currently – more research needed here</small>
ZWJ+1868		ᠰᠢᠪᠲᠠ	<i>Final Form</i>
1869	(__xx)	ᠰᠢᠪᠳᠠ	MONGOLIAN LETTER SIBE DA
1869+ZWJ		ᠰᠢᠪᠳᠠᠰ	<i>First Initial Form</i>
1869+FVS1+ZWJ		ᠰᠢᠪᠳᠠᠰ	<i>Second Initial Form</i> <small>(context-driven and also NNBS)</small>
ZWJ+1869+ZWJ		ᠰᠢᠪᠳᠠᠰ	<i>First Medial Form</i>
ZWJ+1869+FVS1+ZWJ		ᠰᠢᠪᠳᠠᠰ	<i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1869		ᠰᠢᠪᠳᠠ	<i>Final Form</i>
186A	(__x)	ᠰᠢᠪᠵᠠ	MONGOLIAN LETTER SIBE JA
186A+ZWJ		ᠰᠢᠪᠵᠠᠰ	<i>Initial Form</i>
ZWJ+186A+ZWJ		ᠰᠢᠪᠵᠠᠰ	<i>Medial Form</i>
ZWJ+186A		ᠰᠢᠪᠵᠠ	<i>Final Form</i>
186B	(__x)	ᠰᠢᠪᠶᠠ	MONGOLIAN LETTER SIBE FA
186B+ZWJ		ᠰᠢᠪᠶᠠᠰ	<i>Initial Form</i>
ZWJ+186B+ZWJ		ᠰᠢᠪᠶᠠᠰ	<i>Medial Form</i>
ZWJ+186B		ᠰᠢᠪᠶᠠ	<i>Final Form</i>
186C	(__x)	ᠰᠢᠪᠭᠠ	MONGOLIAN LETTER SIBE GAA <sup>+</sup>
186C+ZWJ		ᠰᠢᠪᠭᠠᠰ	<i>Initial Form</i>
ZWJ+186C+ZWJ		ᠰᠢᠪᠭᠠᠰ	<i>Medial Form</i>
ZWJ+186C		ᠰᠢᠪᠭᠠ	<i>Final Form</i>
186D	(__x)	ᠰᠢᠪᠬᠠᠰ	MONGOLIAN LETTER SIBE HAA <sup>+</sup>
186D+ZWJ		ᠰᠢᠪᠬᠠᠰ	<i>Initial Form</i>
ZWJ+186D+ZWJ		ᠰᠢᠪᠬᠠᠰ	<i>Medial Form</i>
ZWJ+186D		ᠰᠢᠪᠬᠠᠰ	<i>Final Form</i>
186E	(__xx)	ᠰᠢᠪᠳᠠ	MONGOLIAN LETTER SIBE TSA
186E+ZWJ		ᠰᠢᠪᠳᠠᠰ	<i>Initial Form</i>
ZWJ+186E+ZWJ		ᠰᠢᠪᠳᠠᠰ	<i>Medial Form</i>
ZWJ+186E		ᠰᠢᠪᠳᠠ	<i>Final Form</i>
186F	(__xx)	ᠰᠢᠪᠵᠠ	MONGOLIAN LETTER SIBE ZA

186F+ZWJ		ᠰᠢᠪᠵᠠᠰ	<i>First Initial Form</i>
186F+FVS1+ZWJ		ᠰᠢᠪᠵᠠᠰ	<i>Second Initial Form</i> <small>(context-driven)</small>
ZWJ+186F+ZWJ		ᠰᠢᠪᠵᠠᠰ	<i>First Medial Form</i>
ZWJ+186F+FVS1+ZWJ		ᠰᠢᠪᠵᠠᠰ	<i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+186F		ᠰᠢᠪᠵᠠ	<i>Final Form</i>
1870	(__xx)	ᠰᠢᠪᠷᠠᠠ	MONGOLIAN LETTER SIBE RAA
1870+ZWJ		ᠰᠢᠪᠷᠠᠠᠰ	<i>Initial Form</i>
ZWJ+1870+ZWJ		ᠰᠢᠪᠷᠠᠠᠰ	<i>Medial Form</i>
ZWJ+1870		ᠰᠢᠪᠷᠠᠠ	<i>Final Form</i>
1871	(__xx)	ᠰᠢᠪᠴᠠ	MONGOLIAN LETTER SIBE CHA
1871+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>Initial Form</i>
ZWJ+1871+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>Medial Form</i>
ZWJ+1871		ᠰᠢᠪᠴᠠ	<i>Final Form</i>
1872	(__x)	ᠰᠢᠪᠵᠠᠰ	MONGOLIAN LETTER SIBE ZHA
1872+ZWJ		ᠰᠢᠪᠵᠠᠰ	<i>Initial Form</i>
ZWJ+1872+ZWJ		ᠰᠢᠪᠵᠠᠰ	<i>Medial Form</i>
ZWJ+1872		ᠰᠢᠪᠵᠠᠰ	<i>Final Form</i>

### Manchu Characters

1873	(__x)	ᠰᠢᠪᠴᠠ	MONGOLIAN LETTER MANCHU I
1873+FVS1		ᠰᠢᠪᠴᠠᠰ	<i>Second Isolate Form</i>
1873+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>Initial Form</i>
ZWJ+1873+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>First Medial Form</i>
ZWJ+1873+FVS1+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1873+FVS2+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>Third Medial Form</i>
ZWJ+1873+FVS3+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>Fourth Medial Form</i>
ZWJ+1873		ᠰᠢᠪᠴᠠ	<i>First Final Form</i> <small>(also implemented with NNBS)</small>
ZWJ+1873+FVS1		ᠰᠢᠪᠴᠠᠰ	<i>Second Final Form</i>
ZWJ+1873+FVS2		ᠰᠢᠪᠴᠠᠰ	<i>Third Final Form</i>
ZWJ+1873+FVS3		ᠰᠢᠪᠴᠠᠰ	<i>Fourth Final Form</i> <small>(context-driven)</small>
1874	(__x)	ᠰᠢᠪᠴᠠ	MONGOLIAN LETTER MANCHU KA
1874+FVS1		ᠰᠢᠪᠴᠠᠰ	<i>Second Isolate Form</i>
1874+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>Initial Form</i>
ZWJ+1874+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>First Medial Form</i>
ZWJ+1874+FVS1+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1874+FVS2+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>Third Medial Form</i> <small>(context-driven)</small>
ZWJ+1874+FVS3+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>Fourth Medial Form</i>
ZWJ+1874		ᠰᠢᠪᠴᠠ	<i>First Final Form</i>
ZWJ+1874+FVS1		ᠰᠢᠪᠴᠠᠰ	<i>Second Final Form</i> <small>(context-driven)</small>
ZWJ+1874+FVS2		ᠰᠢᠪᠴᠠᠰ	<i>Third Final Form</i>
1875	(__x)	ᠰᠢᠪᠴᠠ	MONGOLIAN LETTER MANCHU RA
1875+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>Initial Form</i>
ZWJ+1875+ZWJ		ᠰᠢᠪᠴᠠᠰ	<i>Medial Form</i>
ZWJ+1875		ᠰᠢᠪᠴᠠ	<i>Final Form</i>
1876	(__x)	ᠰᠢᠪᠴᠠ	MONGOLIAN LETTER MANCHU FA

1876+ZWJ	ᠪ (x) <i>First Initial Form</i>
1876+FVS1+ZWJ	ᠪ (x) <i>Second Initial Form</i> (context-driven)
ZWJ+1876+ZWJ	ᠪ (x) <i>First Medial Form</i>
ZWJ+1876+FVS1+ZWJ	ᠪ (x) <i>Second Medial Form</i> (context-driven)
ZWJ+1876	ᠪ ( ) <i>Final Form</i>
1877 (x) ᠳ	MONGOLIAN LETTER MANCHU ZHA
1877+ZWJ	ᠳ (x) <i>Initial Form</i>
ZWJ+1877+ZWJ	ᠳ (x) <i>Medial Form</i>
ZWJ+1877	ᠳ ( ) <i>Final Form</i>
1878 <reserved>	
1879 <reserved>	
187A <reserved>	
187B <reserved>	
187C <reserved>	
187D <reserved>	
187E <reserved>	
187F <reserved>	

### Ali Gali Characters

1880 (xx_x)	ᠠ MONGOLIAN LETTER ALI GALI ANUSVARA (Mark or letter – not sure)
1880+FVS1	ᠠ (xx_x) <i>Second Form</i>
1881 (xx_x)	ᠡ MONGOLIAN LETTER ALI GALI VISARGA ONE (Mark or letter – not sure)
1881+FVS1	ᠡ (xx_x) <i>Second Form</i>
1882 (xx_x)	ᠢ MONGOLIAN LETTER ALI GALI DAMARU (Mark or letter – not sure)
1883 (xx_x)	ᠣ MONGOLIAN LETTER ALI GALI UBADAMA (Mark or letter – not sure)
1884 (xx_x)	ᠤ MONGOLIAN LETTER ALI GALI INVERTED UBADAMA (Mark or letter – not sure)
1887 (xx_x) ᠮ	MONGOLIAN LETTER ALI GALI A
1887+FVS1	ᠮ (x) <i>Second Isolate Form</i>
1887+ZWJ	ᠮ ( ) <i>Initial Form</i>
ZWJ+1887+ZWJ	ᠮ ( ) <i>Medial Form</i>
ZWJ+1887	ᠮ (x_x) <i>First Final Form</i>
ZWJ+1887+FVS1	ᠮ (x) <i>Second Final Form</i>
ZWJ+1887+FVS2	ᠮ (xx) <i>Third Final Form</i>
ZWJ+1887+FVS3	ᠮ (xx_x) <i>Fourth Final Form</i>
1888 (x_x) ᠨ	MONGOLIAN LETTER ALI GALI I
1888+ZWJ	ᠨ ( ) <i>Initial Form</i>
ZWJ+1888+ZWJ	ᠨ (x_x) <i>First Medial Form</i> (context-driven) (research needed here on purpose of shorter form)
ZWJ+1888	ᠨ (x) <i>First Final Form</i>
ZWJ+1888+FVS1	ᠨ (x) <i>Second Final Form</i> (context-driven)
1889 (xx) ᠯ	MONGOLIAN LETTER ALI GALI KA <sup>+</sup>
1889+ZWJ	ᠯ (xx) <i>Initial Form</i>
ZWJ+1889+ZWJ	ᠯ ( ) <i>Medial Form</i>
ZWJ+1889	ᠯ ( ) <i>Final Form</i>
188A (xx) ᠮ	MONGOLIAN LETTER ALI GALI NGA
188A+ZWJ	ᠮ (xx) <i>First Initial Form</i>
188A+FVS1+ZWJ	ᠮ (xx) <i>Second Initial Form</i> (context-driven)

ZWJ+188A+ZWJ	ᠮ (xx) <i>First Medial Form</i>
ZWJ+188A+FVS1+ZWJ	ᠮ (xx) <i>Second Medial Form</i> (context-driven)
ZWJ+188A	ᠮ ( ) <i>Final Form</i>
188B (xx) ᠮ	MONGOLIAN LETTER ALI GALI CA
188B+ZWJ	ᠮ (xx) <i>Initial Form</i>
ZWJ+188B+ZWJ	ᠮ (xx) <i>Medial Form</i>
ZWJ+188B	ᠮ ( ) <i>Final Form</i>
188C (xx) ᠮ	MONGOLIAN LETTER ALI GALI TTA
188C+ZWJ	ᠮ (x) <i>Initial Form</i>
ZWJ+188C+ZWJ	ᠮ ( ) <i>Medial Form</i>
ZWJ+188C	ᠮ ( ) <i>Final Form</i>
188D (xx) ᠮ	MONGOLIAN LETTER ALI GALI TTHA
188D+ZWJ	ᠮ (x) <i>Initial Form</i>
ZWJ+188D+ZWJ	ᠮ ( ) <i>Medial Form</i>
ZWJ+188D	ᠮ ( ) <i>Final Form</i>
188E (xx) ᠮ	MONGOLIAN LETTER ALI GALI DDA
188E+ZWJ	ᠮ (x) <i>Initial Form</i>
ZWJ+188E+ZWJ	ᠮ ( ) <i>Medial Form</i>
ZWJ+188E	ᠮ ( ) <i>Final Form</i>
188F (xx_x) ᠮ	MONGOLIAN LETTER ALI GALI NNA
188F+ZWJ	ᠮ (x) <i>Initial Form</i>
ZWJ+188F+ZWJ	ᠮ ( ) <i>Medial Form</i>
ZWJ+188F	ᠮ ( ) <i>Final Form</i>
1890 (x) ᠮ	MONGOLIAN LETTER ALI GALI TA
1890+ZWJ	ᠮ (x) <i>Initial Form</i>
ZWJ+1890+ZWJ	ᠮ ( ) <i>Medial Form</i>
ZWJ+1890	ᠮ ( ) <i>Final Form</i>
1891 (x) ᠮ	MONGOLIAN LETTER ALI GALI DA
1891+ZWJ	ᠮ (x) <i>Initial Form</i>
ZWJ+1891+ZWJ	ᠮ ( ) <i>Medial Form</i>
ZWJ+1891	ᠮ ( ) <i>Final Form</i>
1892 (xx_x) ᠮ	MONGOLIAN LETTER ALI GALI PA <sup>+</sup>
1892+ZWJ	ᠮ (x) <i>Initial Form</i>
ZWJ+1892+ZWJ	ᠮ ( ) <i>Medial Form</i>
ZWJ+1892	ᠮ ( ) <i>Final Form</i>
1893 (xx) ᠮ	MONGOLIAN LETTER ALI GALI PHA <sup>+</sup>
1893+ZWJ	ᠮ (x) <i>Initial Form</i>
ZWJ+1893+ZWJ	ᠮ ( ) <i>Medial Form</i>
ZWJ+1893	ᠮ ( ) <i>Final Form</i>
1894 (xx) ᠮ	MONGOLIAN LETTER ALI GALI SSA
1894+ZWJ	ᠮ (xx) <i>Initial Form</i>
ZWJ+1894+ZWJ	ᠮ (xx) <i>Medial Form</i>
ZWJ+1894	ᠮ ( ) <i>Final Form</i>
1895 (x) ᠮ	MONGOLIAN LETTER ALI GALI ZHA
1895+ZWJ	ᠮ (x) <i>Initial Form</i>
ZWJ+1895+ZWJ	ᠮ ( ) <i>Medial Form</i>
ZWJ+1895	ᠮ ( ) <i>Final Form</i>
1896 (xx) ᠮ	MONGOLIAN LETTER ALI GALI ZA
1896+ZWJ	ᠮ (xx) <i>Initial Form</i>

ZWJ+1896+ZWJ	ᠮ (xx_) <i>Medial Form</i>	ZWJ+18A1+FVS1+ZWJ	ᠮ ( ) <i>Second Medial Form</i>
ZWJ+1896	ᠮ ( ) <i>Final Form</i>	ZWJ+18A1	<span style="background-color: #e0f0ff;">(context-driven)</span> ᠮ ( ) <i>Final Form</i>
1897 (xx_) ᠣ	MONGOLIAN LETTER ALI GALI AH	18A2 ( )x ᠠ	MONGOLIAN LETTER MANCHU ALI GALI SSA
1897+ZWJ	ᠣ (x_) <i>Initial Form</i>	18A2+ZWJ	ᠠ (x_) <i>Initial Form</i>
ZWJ+1897+ZWJ	ᠣ ( ) <i>Medial Form</i>	ZWJ+18A2+ZWJ	ᠠ (x_) <i>Medial Form</i>
ZWJ+1897	ᠣ ( ) <i>Final Form</i>	ZWJ+18A2	ᠠ ( ) <i>Final Form</i>
1898 (x_) ᠮ	MONGOLIAN LETTER TODO ALI GALI TA	18A3 ( )x ᠨ	MONGOLIAN LETTER MANCHU ALI GALI C YA
1898+ZWJ	ᠮ (x_) <i>Initial Form</i>	18A3+ZWJ	ᠨ (x_) <i>Initial Form</i>
ZWJ+1898+ZWJ	ᠮ ( ) <i>Medial Form</i>	ZWJ+18A3+ZWJ	ᠨ (x_) <i>Medial Form</i>
ZWJ+1898	ᠮ ( ) <i>Final Form</i>	ZWJ+18A3	ᠨ ( ) <i>Final Form</i>
1899 (x_) ᠯ	MONGOLIAN LETTER TODO ALI GALI ZHA	18A4 ( )x ᠵ	MONGOLIAN LETTER MANCHU ALI GALI ZHA
1899+ZWJ	ᠯ (x_) <i>Initial Form</i>	18A4+ZWJ	ᠵ (x_) <i>Initial Form</i>
ZWJ+1899+ZWJ	ᠯ ( ) <i>Medial Form</i>	ZWJ+18A4+ZWJ	ᠵ (x_) <i>Medial Form</i>
ZWJ+1899	ᠯ ( ) <i>Final Form</i>	ZWJ+18A4	ᠵ ( ) <i>Final Form</i>
189A ( )x ᠭ	MONGOLIAN LETTER MANCHU ALI GALI GHA	18A5 ( )x ᠶ	MONGOLIAN LETTER MANCHU ALI GALI ZA
189A+ZWJ	ᠭ (x_) <i>Initial Form</i>	18A5+ZWJ	ᠶ (x_) <i>Initial Form</i>
ZWJ+189A+ZWJ	ᠭ (x_) <i>Medial Form</i>	ZWJ+18A5+ZWJ	ᠶ (x_) <i>Medial Form</i>
ZWJ+189A	ᠭ ( ) <i>Final Form</i>	ZWJ+18A5	ᠶ ( ) <i>Final Form</i>
189B ( )x ᠨ	MONGOLIAN LETTER MANCHU ALI GALI NGA	18A6 (xx_) ᠯ	MONGOLIAN LETTER ALI GALI HALF U
189B+ZWJ	ᠨ (x_) <i>Initial Form</i>	18A6+ZWJ	ᠯ (x_) <i>Initial Form</i>
ZWJ+189B+ZWJ	ᠨ (x_) <i>Medial Form</i>	ZWJ+18A6+ZWJ	ᠯ ( ) <i>Medial Form</i>
ZWJ+189B	ᠨ ( ) <i>Final Form</i>	ZWJ+18A6	ᠯ ( ) <i>Final Form</i>
189C ( )x ᠵ	MONGOLIAN LETTER MANCHU ALI GALI CA	18A7 (xx_x) ᠮ	MONGOLIAN LETTER ALI GALI HALF YA
189C+ZWJ	ᠵ (x_) <i>Initial Form</i>	18A7+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+189C+ZWJ	ᠵ (x_) <i>Medial Form</i>	ZWJ+18A7+ZWJ	ᠮ ( ) <i>Medial Form</i>
ZWJ+189C	ᠵ ( ) <i>Final Form</i>	ZWJ+18A7	ᠮ ( ) <i>Final Form</i>
189D ( )x ᠮ	MONGOLIAN LETTER MANCHU ALI GALI JHA	18A8 ( )x ᠮ	MONGOLIAN LETTER MANCHU ALI GALI BHA
189D+ZWJ	ᠮ (x_) <i>Initial Form</i>	18A8+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+189D+ZWJ	ᠮ (x_) <i>Medial Form</i>	ZWJ+18A8+ZWJ	ᠮ ( ) <i>Medial Form</i>
ZWJ+189D	ᠮ ( ) <i>Final Form</i>	ZWJ+18A8	ᠮ ( ) <i>Final Form</i>
189E ( )x ᠮ	MONGOLIAN LETTER MANCHU ALI GALI TTA	18AA ( )x ᠮ	MONGOLIAN LETTER MANCHU ALI GALI LHA
189E+ZWJ	ᠮ (x_) <i>Initial Form</i>	18AA+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+189E+ZWJ	ᠮ (x_) <i>Medial Form</i>	ZWJ+18AA+ZWJ	ᠮ (x_) <i>Medial Form</i>
ZWJ+189E	ᠮ ( ) <i>Final Form</i>	ZWJ+18AA	ᠮ ( ) <i>Final Form</i>
189F ( )x ᠮ	MONGOLIAN LETTER MANCHU ALI GALI DDHA		
189F+ZWJ	ᠮ (x_) <i>Initial Form</i>		
ZWJ+189F+ZWJ	ᠮ (x_) <i>Medial Form</i>		
ZWJ+189F	ᠮ ( ) <i>Final Form</i>		
18A0 ( )x ᠮ	MONGOLIAN LETTER MANCHU ALI GALI TA		
18A0+ZWJ	ᠮ (x_) <i>First Initial Form</i>		
18A0+FVS1+ZWJ	ᠮ (x_) <i>Second Initial Form</i>		
ZWJ+18A0+ZWJ	<span style="background-color: #e0f0ff;">(context-driven)</span> ᠮ (x_) <i>First Medial Form</i>		
ZWJ+18A0+FVS1+ZWJ	<span style="background-color: #e0f0ff;">(context-driven)</span> ᠮ (x_) <i>Second Medial Form</i>		
ZWJ+18A0	ᠮ ( ) <i>Final Form</i>		
18A1 ( )x ᠮ	MONGOLIAN LETTER MANCHU ALI GALI DHA		
18A1+ZWJ	ᠮ (x_) <i>First Initial Form</i>		
18A1+FVS1+ZWJ	<span style="background-color: #e0f0ff;">(context-driven)</span> ᠮ ( ) <i>Second Initial Form</i>		
ZWJ+18A1+ZWJ	ᠮ (x_) <i>First Medial Form</i>		