

# MONGOLIAN HEAD FORMS, POSITIONAL FORMS, & VARIANT FORMS

September 12, 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)

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## 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
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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<sup>Ⓢ</sup></i>
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<sup>Ⓢ</sup></i>
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<sup>Ⓢ</sup></i>
ZWJ+1822+FVS2+ZWJ		ᠣ (x_)	<i>Third Medial Form</i> <small>(needed to over-ride default context (NAI+FVS2+MA))</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<sup>Ⓢ</sup></i>
ZWJ+1823		ᠣ (x_xx)	<i>First Final Form</i>
ZWJ+1823+FVS1		ᠣ (x_xx)	<i>Second Final Form<sup>Ⓢ</sup></i>

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

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

1826	(x_)	ᠣ	MONGOLIAN LETTER UE
1826+FVS1		ᠣ (x_)	<i>Second Isolate Form</i>
1826+FVS2		ᠣ (x_)	<i>Third Isolate Form</i>
1826+ZWJ		ᠣ (x_)	<i>Initial Form</i>
ZWJ+1826+ZWJ		ᠣ (x_)	<i>First Medial Form</i> <small>(also implemented with NNBSF)</small>
ZWJ+1826+FVS1+ZWJ		ᠣ (x_)	<i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1826+FVS2+ZWJ		ᠣ (x_)	<i>Third Medial Form<sup>Ⓢ</sup></i>
ZWJ+1826		ᠣ (x_)	<i>First Final Form</i> <small>(also implemented with NNBSF)</small>
ZWJ+1826+FVS1		ᠣ (x_)	<i>Second Final Form<sup>Ⓢ</sup></i>

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

1828	(xxxx)	ᠣ	MONGOLIAN LETTER NA
1828+ZWJ		ᠣ (xxxx)	<i>First Initial Form</i> <small>(also context-driven in Todo)</small>
1828+FVS1+ZWJ		ᠣ (x_)	<i>Second Initial Form<sup>Ⓢ</sup></i>
ZWJ+1828+ZWJ		ᠣ (xxxx)	<i>First Medial Form</i> <small>(context-driven)</small>
ZWJ+1828+FVS1+ZWJ		ᠣ (xxxx)	<i>Second Medial Form</i> <small>(context-driven) (if implementation toggles, then the running text form is indeterminate)</small>
ZWJ+1828+FVS2+ZWJ		ᠣ (x_)	<i>Third Medial Form</i> <small>(needed to over-ride default context (AN+FVS2+AR))</small>
ZWJ+1828+FVS3+ZWJ		ᠣ (x_)	<i>Fourth Medial Form</i> <small>(context-driven, Todo only)</small>
ZWJ+1828		ᠣ (xxxx)	<i>First Final Form</i>
ZWJ+1828+FVS1		ᠣ (x_)	<i>Second Final Form</i> <small>(only implemented with MVS)</small>

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

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

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

182C	(x_)	ᠣ	MONGOLIAN LETTER QA
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182C+FVS1	ᠠ (x_)	Second Isolate Form*
182C+FVS2	ᠡ (x_)	Third Isolate Form*
182C+ZWJ	ᠢ (x_)	First Initial Form
182C+FVS1+ZWJ	ᠣ (x_)	Second Initial Form <sup>᠑</sup>
ZWJ+182C+ZWJ	ᠤ (x_)	First Medial Form
ZWJ+182C+FVS1+ZWJ	ᠥ (x_)	Second Medial Form <sup>᠑</sup>
ZWJ+182C	ᠨ (x_)	First Final Form
ZWJ+182C+FVS1	ᠯ (x_)	Second Final Form <sup>᠑</sup>
182D (x_)	ᠭ	MONGOLIAN LETTER GA
182D+FVS1	ᠠ (x_)	Second Isolate Form*
182D+FVS2	ᠡ (x_)	Third Isolate Form*
182D+ZWJ	ᠢ (x_)	First Initial Form
182D+FVS1+ZWJ	ᠣ (x_)	Second Initial Form <sup>᠑</sup>
182D+FVS2+ZWJ	ᠤ (x_)	Third Initial Form <small>(context-driven)</small>
ZWJ+182D+ZWJ	ᠥ (x_)	First Medial Form
ZWJ+182D+FVS1+ZWJ	ᠦ (x_)	Second Medial Form <small>(context-driven)</small>
ZWJ+182D+FVS2+ZWJ	ᠮ (x_)	Third Medial Form <small>(needed to over-ride default context) (COG+FVS2+A+FVS1+GULA)</small>
ZWJ+182D+FVS3+ZWJ	ᠮ (x_)	Fourth Medial Form <small>(context-driven)</small>
ZWJ+182D	ᠨ (x_)	First Final Form
ZWJ+182D+FVS1	ᠯ (x_)	Second Final Form <small>(needed to over-ride default context) (SIG+FVS1)</small>
ZWJ+182D+FVS2	ᠮ (x_)	Third Final Form <small>(context-driven)</small>
ZWJ+182D+FVS3	ᠮ (x_)	Fourth Final Form <small>(only implemented with MVS)</small>
182E (x_xx)	ᠮ	MONGOLIAN LETTER MA
182E+ZWJ	ᠮ (x_xx)	Initial Form
ZWJ+182E+ZWJ	ᠮ (x_xx)	Medial Form
ZWJ+182E	ᠮ (x_xx)	Final Form
182F (xxxx)	ᠮ	MONGOLIAN LETTER LA
182F+ZWJ	ᠮ (xxxx)	Initial Form
ZWJ+182F+ZWJ	ᠮ (xxxx)	Medial Form
ZWJ+182F	ᠮ (xxxx)	Final Form
1830 (xxxx)	ᠮ	MONGOLIAN LETTER SA
1830+ZWJ	ᠮ (xxxx)	Initial Form
ZWJ+1830+ZWJ	ᠮ (xxxx)	Medial Form
ZWJ+1830	ᠮ (xxxx)	First Final Form
ZWJ+1830+FVS1	ᠮ (x_)	Second Final Form <sup>᠑</sup>
ZWJ+1830+FVS2	ᠮ (x_)	Third Final Form <sup>᠑</sup>
1831 (xx_)	ᠮ	MONGOLIAN LETTER SHA
1831+ZWJ	ᠮ (xx_)	Initial Form
ZWJ+1831+ZWJ	ᠮ (xx_)	Medial Form
ZWJ+1831	ᠮ (xx_)	Final Form
1832 (x_)	ᠮ	MONGOLIAN LETTER TA
1832+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1832+ZWJ	ᠮ (x_)	First Medial Form
ZWJ+1832+FVS1+ZWJ	ᠮ (x_)	Second Medial Form <sup>᠑</sup>
ZWJ+1832	ᠮ (x_)	Final Form

1833 (x_)	ᠮ	MONGOLIAN LETTER DA
1833+ZWJ	ᠮ (x_)	First Initial Form
1833+FVS1+ZWJ	ᠮ (x_)	Second Initial Form <small>(also implemented with NNBS)</small>
ZWJ+1833+ZWJ	ᠮ (x_)	First Medial Form
ZWJ+1833+FVS1+ZWJ	ᠮ (x_)	Second Medial Form <small>(context-driven)</small>
ZWJ+1833	ᠮ (x_)	First Final Form
ZWJ+1833+FVS1	ᠮ (x_)	Second Final Form <sup>᠑</sup>
1834 (xxxx)	ᠮ	MONGOLIAN LETTER CHA
1834+ZWJ	ᠮ (xxxx)	Initial Form
ZWJ+1834+ZWJ	ᠮ (xxxx)	Medial Form
ZWJ+1834	ᠮ (x_)	Final Form
1835 (x_x)	ᠮ	MONGOLIAN LETTER JA
1835+ZWJ	ᠮ (x_x)	Initial Form
ZWJ+1835+ZWJ	ᠮ (x_x)	Medial Form
ZWJ+1835	ᠮ (x_)	First Final Form
ZWJ+1835+FVS1	ᠮ (x_)	Second Final Form <small>(also implemented with MVS &amp; NNBS)</small>
1836 (x_xx)	ᠮ	MONGOLIAN LETTER YA
1836+ZWJ	ᠮ (x_xx)	First Initial Form
1836+FVS1+ZWJ	ᠮ (x_)	Second Initial Form <small>(context-driven)</small>
ZWJ+1836+ZWJ	ᠮ (x_)	First Medial Form
ZWJ+1836+FVS1+ZWJ	ᠮ (x_xx)	Second Medial Form <small>(context-driven AND also needed to over-ride default context)</small>
ZWJ+1836	ᠮ (x_)	Final Form
1837 (xxx_)	ᠮ	MONGOLIAN LETTER RA
1837+ZWJ	ᠮ (xxx_)	Initial Form
ZWJ+1837+ZWJ	ᠮ (xxx_)	Medial Form
ZWJ+1837	ᠮ (xxx_)	Final Form
1838 (xxxx)	ᠮ	MONGOLIAN LETTER WA
1838+ZWJ	ᠮ (xxxx)	Initial Form
ZWJ+1838+ZWJ	ᠮ (xxxx)	First Medial Form
ZWJ+1838+FVS1+ZWJ	ᠮ (x_)	Second Medial Form <small>(context-driven)</small>
ZWJ+1838	ᠮ (x_)	First Final Form
ZWJ+1838+FVS1	ᠮ (x_)	Second Final Form <sup>᠑</sup>
1839 (x_)	ᠮ	MONGOLIAN LETTER FA <sup>+</sup>
1839+ZWJ	ᠮ (x_)	Initial Form
ZWJ+1839+ZWJ	ᠮ (x_)	Medial Form
ZWJ+1839	ᠮ (x_)	Final Form
183A (xxxx)	ᠮ	MONGOLIAN LETTER KA <sup>+</sup>
183A+ZWJ	ᠮ (xxxx)	Initial Form
ZWJ+183A+ZWJ	ᠮ (xxxx)	Medial Form
ZWJ+183A	ᠮ (x_)	Final Form
183B (xx_)	ᠮ	MONGOLIAN LETTER KHA <sup>+</sup>
183B+ZWJ	ᠮ (xx_)	Initial Form
ZWJ+183B+ZWJ	ᠮ (xx_)	Medial Form
ZWJ+183B	ᠮ (xx_)	Final Form
183C (x_)	ᠮ	MONGOLIAN LETTER TSA
183C+ZWJ	ᠮ (x_)	Initial Form

ZWJ+183C+ZWJ	ᠮ (x_) <i>Medial Form</i>
ZWJ+183C	ᠮ (x_) <i>Final Form</i>
183D (x_) ᠮ	MONGOLIAN LETTER ZA
183D+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+183D+ZWJ	ᠮ (x_) <i>Medial Form</i>
ZWJ+183D	ᠮ (x_) <i>Final Form</i>
183E (x_) ᠮ	MONGOLIAN LETTER HAA
183E+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+183E+ZWJ	ᠮ (x_) <i>Medial Form</i>
ZWJ+183E	ᠮ (x_) <i>Final Form</i>
183F (x_) ᠮ	MONGOLIAN LETTER ZRA
183F+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+183F+ZWJ	ᠮ (x_) <i>Medial Form</i>
ZWJ+183F	ᠮ (x_) <i>Final Form</i>
1840 (xx_) ᠮ	MONGOLIAN LETTER LHA
1840+ZWJ	ᠮ (xx) <i>Initial Form</i>
ZWJ+1840+ZWJ	ᠮ (xx) <i>Medial Form</i>
ZWJ+1840	ᠮ (x_) <i>Final Form</i>
1841 (x_) ᠮ	MONGOLIAN LETTER ZHI
1841+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+1841+ZWJ	ᠮ (x_) <i>Medial Form</i>
ZWJ+1841	ᠮ (x_) <i>Final Form</i>
1842 (x_) ᠮ	MONGOLIAN LETTER CHI
1842+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+1842+ZWJ	ᠮ (x_) <i>Medial Form</i>
ZWJ+1842	ᠮ (x_) <i>Final Form</i>

### Todo Characters

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

1847 (x_) ᠮ	MONGOLIAN LETTER TODO U
1847+FVS1	ᠮ (x_) <i>Second Isolate Form</i>
1847+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+1847+ZWJ	ᠮ (x_) <i>First Medial Form</i>
ZWJ+1847+FVS1+ZWJ	ᠮ (x_) <i>Second Medial Form</i> <sup>ⓔ</sup>
ZWJ+1847+FVS2+ZWJ	ᠮ (x_) <i>Third Medial Form</i> <small>(context-driven)</small>
ZWJ+1847	ᠮ (x_) <i>First Final Form</i>
ZWJ+1847+FVS1	ᠮ (x_) <i>Second Final Form</i> <small>(context-driven)</small>
1848 (x_) ᠮ	MONGOLIAN LETTER TODO OE
1848+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+1848+ZWJ	ᠮ (x_) <i>First Medial Form</i>
ZWJ+1848+FVS1+ZWJ	ᠮ (x_) <i>Second Medial Form</i> <sup>ⓔ</sup>
ZWJ+1848	ᠮ (x_) <i>Final Form</i>
1849 (x_) ᠮ	MONGOLIAN LETTER TODO UE
1849+FVS1	ᠮ (x_) <i>Second Isolate Form</i>
1849+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+1849+ZWJ	ᠮ (x_) <i>First Medial Form</i>
ZWJ+1849+FVS1+ZWJ	ᠮ (x_) <i>Second Medial Form</i> <sup>ⓔ</sup>
ZWJ+1849	ᠮ (x_) <i>Final Form</i>
184A (x_) ᠮ	MONGOLIAN LETTER TODO ANG
184A+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+184A+ZWJ	ᠮ (x_) <i>Medial Form</i>
ZWJ+184A	ᠮ (x_) <i>Final Form</i>
184B (x_) ᠮ	MONGOLIAN LETTER TODO BA
184B+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+184B+ZWJ	ᠮ (x_) <i>Medial Form</i>
ZWJ+184B	ᠮ (x_) <i>Final Form</i>
184C (x_) ᠮ	MONGOLIAN LETTER TODO PA <sup>*</sup>
184C+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+184C+ZWJ	ᠮ (x_) <i>Medial Form</i>
ZWJ+184C	ᠮ (x_) <i>Final Form</i>
184D (x_) ᠮ	MONGOLIAN LETTER TODO QA
184D+FVS1	ᠮ (x_) <i>Second Isolate Form</i> <sup>*</sup>
184D+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+184D+ZWJ	ᠮ (x_) <i>Medial Form</i>
ZWJ+184D	ᠮ (x_) <i>Final Form</i>
184E (x_) ᠮ	MONGOLIAN LETTER TODO GA
184E+FVS1	ᠮ (x_) <i>Second Isolate Form</i> <sup>*</sup>
184E+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+184E+ZWJ	ᠮ (x_) <i>First Medial Form</i>
ZWJ+184E+FVS1+ZWJ	ᠮ (x_) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+184E	ᠮ (x_) <i>Final Form</i>
184F (x_) ᠮ	MONGOLIAN LETTER TODO MA
184F+ZWJ	ᠮ (x_) <i>Initial Form</i>
ZWJ+184F+ZWJ	ᠮ (x_) <i>Medial Form</i>
ZWJ+184F	ᠮ (x_) <i>Final Form</i>
1850 (x_) ᠮ	MONGOLIAN LETTER TODO TA
1850+ZWJ	ᠮ (x_) <i>Initial Form</i>



ZWJ+1850+ZWJ	᠘ (x_) <i>Medial Form</i>
ZWJ+1850	᠘ (x_) <i>Final Form</i>
1851 (x_) ᠘	MONGOLIAN LETTER TODO DA
1851+ZWJ	᠘ (x_) <i>Initial Form</i>
ZWJ+1851+ZWJ	᠘ (x_) <i>Medial Form</i>
ZWJ+1851	᠘ (x_) <i>Final Form</i>
1852 (x_) ᠙	MONGOLIAN LETTER TODO CHA
1852+ZWJ	᠙ (x_) <i>Initial Form</i>
ZWJ+1852+ZWJ	᠙ (x_) <i>Medial Form</i>
ZWJ+1852	᠙ (x_) <i>Final Form</i>
1853 (xx_) ᠐	MONGOLIAN LETTER TODO JA
1853+ZWJ	᠐ (xx_) <i>Initial Form</i>
ZWJ+1853+ZWJ	᠐ (xx_) <i>Medial Form</i>
ZWJ+1853	᠐ (x_) <i>Final Form</i>
1854 (x_) ᠑	MONGOLIAN LETTER TODO TSA
1854+ZWJ	᠑ (x_) <i>Initial Form</i>
ZWJ+1854+ZWJ	᠑ (x_) <i>Medial Form</i>
ZWJ+1854	᠑ (x_) <i>Final Form</i>
1855 ᠒	MONGOLIAN LETTER TODO YA
1855+ZWJ	᠒ (x_) <i>Initial Form</i>
ZWJ+1855+ZWJ	᠒ (x_) <i>Medial Form</i>
ZWJ+1855	᠒ (x_) <i>Final Form</i>
1856 (x_) ᠓	MONGOLIAN LETTER TODO WA
1856+ZWJ	᠓ (x_) <i>Initial Form</i>
ZWJ+1856+ZWJ	᠓ (x_) <i>Medial Form</i>
ZWJ+1856	᠓ (x_) <i>Final Form</i>
1857 (x_) ᠎	MONGOLIAN LETTER TODO KA <sup>+</sup>
1857+ZWJ	᠎ (x_) <i>Initial Form</i>
ZWJ+1857+ZWJ	᠎ (x_) <i>Medial Form</i>
ZWJ+1857	᠎ (x_) <i>Final Form</i>
1858 (xx_) ᠏	MONGOLIAN LETTER TODO GAA <sup>+</sup>
1858+ZWJ	᠏ (xx_) <i>Initial Form</i>
ZWJ+1858+ZWJ	᠏ (xx_) <i>Medial Form</i>
ZWJ+1858	᠏ (x_) <i>Final Form</i>
1859 (x_) ᠐ᠠ	MONGOLIAN LETTER TODO HAA
1859+ZWJ	᠐ᠠ (x_) <i>Initial Form</i>
ZWJ+1859+ZWJ	᠐ᠠ (x_) <i>Medial Form</i>
ZWJ+1859	᠐ᠠ (x_) <i>Final Form</i>
185A (x_) ᠐ᠡ	MONGOLIAN LETTER TODO JIA
185A+ZWJ	᠐ᠡ (x_) <i>Initial Form</i>
ZWJ+185A+ZWJ	᠐ᠡ (x_) <i>Medial Form</i>
ZWJ+185A	᠐ᠡ (x_) <i>Final Form</i>
185B (xx_) ᠐ᠢ	MONGOLIAN LETTER TODO NIA
185B+ZWJ	᠐ᠢ (xx_) <i>Initial Form</i>
ZWJ+185B+ZWJ	᠐ᠢ (xx_) <i>Medial Form</i>
ZWJ+185B	᠐ᠢ (xx_) <i>Final Form</i>
185C (xx_) ᠐ᠣ	MONGOLIAN LETTER TODO DZA
185C+ZWJ	᠐ᠣ (xx_) <i>Initial Form</i>
ZWJ+185C+ZWJ	᠐ᠣ (xx_) <i>Medial Form</i>

ZWJ+185C	᠐ᠣ (x_) <i>Final Form</i>
<b>Sibe Characters</b>	
185D (xx_) ᠏	MONGOLIAN LETTER SIBE E
185D+FVS1	᠏ (x_) <i>Second Isolate Form</i>
185D+ZWJ	᠏ (xx) <i>Initial Form</i>
ZWJ+185D+ZWJ	᠏ (xx) <i>First Medial Form</i>
ZWJ+185D+FVS1+ZWJ	᠏ (xx) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+185D	᠏ (xx) <i>First Final Form</i>
ZWJ+185D+FVS1	᠏ (xx) <i>Second Final Form</i> <small>(context-driven)</small>
185E (x_) ᠏	MONGOLIAN LETTER SIBE I
185E+FVS1	᠏ (x_) <i>Second Isolate Form</i>
185E+ZWJ	᠏ (x_) <i>Initial Form</i>
ZWJ+185E+ZWJ	᠏ (x_) <i>First Medial Form</i>
ZWJ+185E+FVS1+ZWJ	᠏ (x_) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+185E+FVS2+ZWJ	᠏ (x_) <i>Third Medial Form</i> <small>(context-driven)</small>
ZWJ+185E	᠏ (x_) <i>First Final Form</i> <small>(also implemented with NNBSF)</small>
ZWJ+185E+FVS1	᠏ (x_) <i>Second Final Form</i> <small>(context-driven)</small>
ZWJ+185E+FVS2	᠏ (x_) <i>Third Final Form</i>
185F (xx_) ᠏	MONGOLIAN LETTER SIBE IY
185F+ZWJ	᠏ (x_) <i>Initial Form</i>
ZWJ+185F+ZWJ	᠏ (xx) <i>Medial Form</i>
ZWJ+185F	᠏ (xx) <i>Final Form</i>
1860 (xx_) ᠏	MONGOLIAN LETTER SIBE UE
1860+ZWJ	᠏ (xx) <i>Initial Form</i>
ZWJ+1860+ZWJ	᠏ (xx) <i>First Medial Form</i>
ZWJ+1860+FVS1+ZWJ	᠏ (xx) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1860	᠏ (xx) <i>First Final Form</i>
ZWJ+1860+FVS1	᠏ (xx) <i>Second Final Form</i> <small>(context-driven)</small>
ZWJ+1860+FVS2	᠏ (xx) <i>Third Final Form</i> <small>(context-driven)</small>
1861 (xx_) ᠏	MONGOLIAN LETTER SIBE U
1861+FVS1	᠏ (x_) <i>Second Isolate Form</i>
1861+ZWJ	᠏ (x_) <i>Initial Form</i>
ZWJ+1861+ZWJ	᠏ (xx) <i>Medial Form</i>
ZWJ+1861	᠏ (xx) <i>Final Form</i>
1862 (x_) ᠏	MONGOLIAN LETTER SIBE ANG
1862+ZWJ	᠏ (x_) <i>Initial Form</i>
ZWJ+1862+ZWJ	᠏ (x_) <i>Medial Form</i>
ZWJ+1862	᠏ (x_) <i>Final Form</i>
1863 (x_) ᠏	MONGOLIAN LETTER SIBE KA
1863+FVS1	᠏ (x_) <i>Second Isolate Form*</i>
1863+ZWJ	᠏ (x_) <i>Initial Form</i>
ZWJ+1863+ZWJ	᠏ (x_) <i>First Medial Form</i>
ZWJ+1863+FVS1+ZWJ	᠏ (x_) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1863	᠏ (x_) <i>Final Form</i>

1864	(__xx)	ᠭ᠎	MONGOLIAN LETTER SIBE GA
1864+FVS1		ᠭ᠎ᠡ᠋	(__xx) <i>Second Isolate Form*</i>
1864+ZWJ		ᠭ᠎ᠢ	(__xx) <i>Initial Form</i>
ZWJ+1864+ZWJ		ᠭ᠎ᠣ	(__xx) <i>Medial Form</i>
ZWJ+1864		ᠭ᠎ᠤ	(__ ) <i>Final Form</i>
1865	(__xx)	ᠬ᠎	MONGOLIAN LETTER SIBE HA
1865+FVS1		ᠬ᠎ᠡ᠋	(__xx) <i>Second Isolate Form*</i>
1865+ZWJ		ᠬ᠎ᠢ	(__xx) <i>Initial Form</i>
ZWJ+1865+ZWJ		ᠬ᠎ᠣ	(__xx) <i>Medial Form</i>
ZWJ+1865		ᠬ᠎ᠤ	(__ ) <i>Final Form</i>
1866	(__xx)	ᠮ᠎	MONGOLIAN LETTER SIBE PA <sup>+</sup>
1866+ZWJ		ᠮ᠎ᠡ᠋	(__xx) <i>Initial Form</i>
ZWJ+1866+ZWJ		ᠮ᠎ᠣ	(__xx) <i>Medial Form</i>
ZWJ+1866		ᠮ᠎ᠤ	(__ ) <i>Final Form</i>
1867	(__xx)	ᠰ᠎	MONGOLIAN LETTER SIBE SHA
1867+ZWJ		ᠰ᠎ᠡ᠋	(__xx) <i>Initial Form</i>
ZWJ+1867+ZWJ		ᠰ᠎ᠣ	(__xx) <i>Medial Form</i>
ZWJ+1867		ᠰ᠎ᠤ	(__x) <i>Final Form</i>
1868	(__xx)	ᠲ᠎	MONGOLIAN LETTER SIBE TA
1868+ZWJ		ᠲ᠎ᠡ᠋	(__xx) <i>First Initial Form</i>
1868+FVS1+ZWJ		ᠲ᠎ᠢ	(__xx) <i>Second Initial Form</i> <small>(context-driven)</small>
ZWJ+1868+ZWJ		ᠲ᠎ᠣ	(__xx) <i>First Medial Form</i>
ZWJ+1868+FVS1+ZWJ		ᠲ᠎ᠤ	(__xx) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1868+FVS2+ZWJ		ᠲ᠎ᠥ	(__xx) <i>Third Medial Form</i> <small>no context currently – more research needed here</small>
ZWJ+1868		ᠲ᠎ᠦ	(__xx) <i>Final Form</i>
1869	(__xx)	ᠳ᠎	MONGOLIAN LETTER SIBE DA
1869+ZWJ		ᠳ᠎ᠡ᠋	(__xx) <i>First Initial Form</i>
1869+FVS1+ZWJ		ᠳ᠎ᠢ	(__xx) <i>Second Initial Form</i> <small>(context-driven and also NNBSF)</small>
ZWJ+1869+ZWJ		ᠳ᠎ᠣ	(__xx) <i>First Medial Form</i>
ZWJ+1869+FVS1+ZWJ		ᠳ᠎ᠤ	(__xx) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1869		ᠳ᠎ᠦ	(__ ) <i>Final Form</i>
186A	(__x)	ᠵ᠎	MONGOLIAN LETTER SIBE JA
186A+ZWJ		ᠵ᠎ᠡ᠋	(__x) <i>Initial Form</i>
ZWJ+186A+ZWJ		ᠵ᠎ᠣ	(__x) <i>Medial Form</i>
ZWJ+186A		ᠵ᠎ᠤ	(__ ) <i>Final Form</i>
186B	(__x)	ᠶ᠎	MONGOLIAN LETTER SIBE FA
186B+ZWJ		ᠶ᠎ᠡ᠋	(__x) <i>Initial Form</i>
ZWJ+186B+ZWJ		ᠶ᠎ᠣ	(__x) <i>Medial Form</i>
ZWJ+186B		ᠶ᠎ᠤ	(__ ) <i>Final Form</i>
186C	(__x)	ᠷ᠎	MONGOLIAN LETTER SIBE GAA <sup>+</sup>
186C+ZWJ		ᠷ᠎ᠡ᠋	(__x) <i>Initial Form</i>
ZWJ+186C+ZWJ		ᠷ᠎ᠣ	(__x) <i>Medial Form</i>
ZWJ+186C		ᠷ᠎ᠤ	(__ ) <i>Final Form</i>
186D	(__x)	ᠸ᠎	MONGOLIAN LETTER SIBE HAA <sup>+</sup>
186D+ZWJ		ᠸ᠎ᠡ᠋	(__x) <i>Initial Form</i>
ZWJ+186D+ZWJ		ᠸ᠎ᠣ	(__x) <i>Medial Form</i>
ZWJ+186D		ᠸ᠎ᠤ	(__ ) <i>Final Form</i>

186E	(__xx)	ᠸ᠎	MONGOLIAN LETTER SIBE TSA
186E+ZWJ		ᠸ᠎ᠡ᠋	(__xx) <i>Initial Form</i>
ZWJ+186E+ZWJ		ᠸ᠎ᠣ	(__xx) <i>Medial Form</i>
ZWJ+186E		ᠸ᠎ᠤ	(__xx) <i>Final Form</i>
186F	(__xx)	ᠸ᠎	MONGOLIAN LETTER SIBE ZA
186F+ZWJ		ᠸ᠎ᠡ᠋	(__xx) <i>First Initial Form</i>
186F+FVS1+ZWJ		ᠸ᠎ᠢ	(__xx) <i>Second Initial Form</i> <small>(context-driven)</small>
ZWJ+186F+ZWJ		ᠸ᠎ᠣ	(__xx) <i>First Medial Form</i>
ZWJ+186F+FVS1+ZWJ		ᠸ᠎ᠤ	(__xx) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+186F		ᠸ᠎ᠦ	(__xx) <i>Final Form</i>
1870	(__xx)	ᠷ᠎	MONGOLIAN LETTER SIBE RAA
1870+ZWJ		ᠷ᠎ᠡ᠋	(__xx) <i>Initial Form</i>
ZWJ+1870+ZWJ		ᠷ᠎ᠣ	(__xx) <i>Medial Form</i>
ZWJ+1870		ᠷ᠎ᠤ	(__xx) <i>Final Form</i>
1871	(__xx)	ᠸ᠎	MONGOLIAN LETTER SIBE CHA
1871+ZWJ		ᠸ᠎ᠡ᠋	(__xx) <i>Initial Form</i>
ZWJ+1871+ZWJ		ᠸ᠎ᠣ	(__xx) <i>Medial Form</i>
ZWJ+1871		ᠸ᠎ᠤ	(__ ) <i>Final Form</i>
1872	(__x)	ᠸ᠎	MONGOLIAN LETTER SIBE ZHA
1872+ZWJ		ᠸ᠎ᠡ᠋	(__x) <i>Initial Form</i>
ZWJ+1872+ZWJ		ᠸ᠎ᠣ	(__x) <i>Medial Form</i>
ZWJ+1872		ᠸ᠎ᠤ	(__ ) <i>Final Form</i>

### Manchu Characters

1873	(__x)	ᠸ᠎	MONGOLIAN LETTER MANCHU I
1873+FVS1		ᠸ᠎ᠡ᠋	(__x) <i>Second Isolate Form</i>
1873+ZWJ		ᠸ᠎ᠢ	(__x) <i>Initial Form</i>
ZWJ+1873+ZWJ		ᠸ᠎ᠣ	(__x) <i>First Medial Form</i>
ZWJ+1873+FVS1+ZWJ		ᠸ᠎ᠤ	(__x) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1873+FVS2+ZWJ		ᠸ᠎ᠥ	(__x) <i>Third Medial Form</i>
ZWJ+1873+FVS3+ZWJ		ᠸ᠎ᠦ	(__x) <i>Fourth Medial Form</i>
ZWJ+1873		ᠸ᠎ᠦ	(__x) <i>First Final Form</i> <small>(also implemented with NNBSF)</small>
ZWJ+1873+FVS1		ᠸ᠎ᠦ	(__x) <i>Second Final Form</i>
ZWJ+1873+FVS2		ᠸ᠎ᠦ	(__x) <i>Third Final Form</i>
ZWJ+1873+FVS3		ᠸ᠎ᠦ	(__x) <i>Fourth Final Form</i> <small>(context-driven)</small>
1874	(__x)	ᠸ᠎	MONGOLIAN LETTER MANCHU KA
1874+FVS1		ᠸ᠎ᠡ᠋	(__x) <i>Second Isolate Form</i>
1874+ZWJ		ᠸ᠎ᠢ	(__x) <i>Initial Form</i>
ZWJ+1874+ZWJ		ᠸ᠎ᠣ	(__x) <i>First Medial Form</i>
ZWJ+1874+FVS1+ZWJ		ᠸ᠎ᠤ	(__x) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1874+FVS2+ZWJ		ᠸ᠎ᠥ	(__x) <i>Third Medial Form</i> <small>(context-driven)</small>
ZWJ+1874+FVS3+ZWJ		ᠸ᠎ᠦ	(__x) <i>Fourth Medial Form</i>
ZWJ+1874		ᠸ᠎ᠦ	(__x) <i>First Final Form</i>
ZWJ+1874+FVS1		ᠸ᠎ᠦ	(__x) <i>Second Final Form</i> <small>(context-driven)</small>
ZWJ+1874+FVS2		ᠸ᠎ᠦ	(__x) <i>Third Final Form</i>

1875	(__x)	ᠠ	MONGOLIAN LETTER MANCHU RA
1875+ZWJ		ᠠ (x)	<i>Initial Form</i>
ZWJ+1875+ZWJ		ᠠ (x)	<i>Medial Form</i>
ZWJ+1875		ᠠ (x)	<i>Final Form</i>
1876	(__x)	ᠡ	MONGOLIAN LETTER MANCHU FA
1876+ZWJ		ᠡ (x)	<i>First Initial Form</i>
1876+FVS1+ZWJ		ᠡ (x)	<i>Second Initial Form</i> <small>(context-driven)</small>
ZWJ+1876+ZWJ		ᠡ (x)	<i>First Medial Form</i>
ZWJ+1876+FVS1+ZWJ		ᠡ (x)	<i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1876		ᠡ ( )	<i>Final Form</i>
1877	(__x)	ᠢ	MONGOLIAN LETTER MANCHU ZHA
1877+ZWJ		ᠢ (x)	<i>Initial Form</i>
ZWJ+1877+ZWJ		ᠢ (x)	<i>Medial Form</i>
ZWJ+1877		ᠢ ( )	<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)	ᠠᠨ	MONGOLIAN LETTER ALI GALI ANUSVARA <small>(Mark or letter – not sure)</small>
1880+FVS1		ᠠᠨ (xx_x)	<i>Second Form</i>
1881	(xx_x)	ᠠᠨᠠ	MONGOLIAN LETTER ALI GALI VISARGA ONE <small>(Mark or letter – not sure)</small>
1881+FVS1		ᠠᠨᠠ (xx_x)	<i>Second Form</i>
1882	(xx_x)	ᠠᠨᠢ	MONGOLIAN LETTER ALI GALI DAMARU <small>(Mark or letter – not sure)</small>
1883	(xx_x)	ᠠᠨᠣ	MONGOLIAN LETTER ALI GALI UBADAMA <small>(Mark or letter – not sure)</small>
1884	(xx_x)	ᠠᠨᠤ	MONGOLIAN LETTER ALI GALI INVERTED UBADAMA <small>(Mark or letter – not sure)</small>
1887	(xx_x)	ᠠᠨᠤᠯᠠ	MONGOLIAN LETTER ALI GALI A
1887+FVS1		ᠠᠨᠤᠯᠠ (x)	<i>Second Isolate Form</i>
1887+ZWJ		ᠠᠨᠤᠯᠠ ( )	<i>Initial Form</i>
ZWJ+1887+ZWJ		ᠠᠨᠤᠯᠠ ( )	<i>Medial Form</i>
ZWJ+1887		ᠠᠨᠤᠯᠠ (x_x)	<i>First Final Form</i>
ZWJ+1887+FVS1		ᠠᠨᠤᠯᠠ (x)	<i>Second Final Form</i>
ZWJ+1887+FVS2		ᠠᠨᠤᠯᠠ (xx)	<i>Third Final Form</i>
ZWJ+1887+FVS3		ᠠᠨᠤᠯᠠ (xx_x)	<i>Fourth Final Form</i>
1888	(x_x)	ᠠᠨᠤᠯᠠᠢ	MONGOLIAN LETTER ALI GALI I
1888+ZWJ		ᠠᠨᠤᠯᠠᠢ ( )	<i>Initial Form</i>
ZWJ+1888+ZWJ		ᠠᠨᠤᠯᠠᠢ (x_x)	<i>First Medial Form</i>
ZWJ+1888+ZWJ+FVS1		ᠠᠨᠤᠯᠠᠢ (x_x)	<i>Second Medial Form</i> <small>(context-driven)</small> <small>(research needed here on purpose of shorter form)</small>
ZWJ+1888		ᠠᠨᠤᠯᠠᠢ (x)	<i>First Final Form</i>
ZWJ+1888+FVS1		ᠠᠨᠤᠯᠠᠢ (x_x)	<i>Second Final Form</i> <small>(context-driven)</small>
1889	(xx_)	ᠠᠨᠤᠯᠠᠬᠠ	MONGOLIAN LETTER ALI GALI KA <sup>+</sup>

1889+ZWJ		ᠠᠨᠤᠯᠠᠬᠠ (xx_)	<i>Initial Form</i>
ZWJ+1889+ZWJ		ᠠᠨᠤᠯᠠᠬᠠ ( )	<i>Medial Form</i>
ZWJ+1889		ᠠᠨᠤᠯᠠᠬᠠ ( )	<i>Final Form</i>
188A	(xx_)	ᠠᠨᠠᠭᠠ	MONGOLIAN LETTER ALI GALI NGA
188A+ZWJ		ᠠᠨᠠᠭᠠ (xx_)	<i>First Initial Form</i>
188A+FVS1+ZWJ		ᠠᠨᠠᠭᠠ (xx_)	<i>Second Initial Form</i> <small>(context-driven)</small>
ZWJ+188A+ZWJ		ᠠᠨᠠᠭᠠ (xx_)	<i>First Medial Form</i>
ZWJ+188A+FVS1+ZWJ		ᠠᠨᠠᠭᠠ (xx_)	<i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+188A		ᠠᠨᠠᠭᠠ ( )	<i>Final Form</i>
188B	(xx_)	ᠠᠨᠢᠭᠠ	MONGOLIAN LETTER ALI GALI CA
188B+ZWJ		ᠠᠨᠢᠭᠠ (xx_)	<i>Initial Form</i>
ZWJ+188B+ZWJ		ᠠᠨᠢᠭᠠ (xx_)	<i>Medial Form</i>
ZWJ+188B		ᠠᠨᠢᠭᠠ ( )	<i>Final Form</i>
188C	(xx_)	ᠠᠨᠣᠭᠠ	MONGOLIAN LETTER ALI GALI TTA
188C+ZWJ		ᠠᠨᠣᠭᠠ (x)	<i>Initial Form</i>
ZWJ+188C+ZWJ		ᠠᠨᠣᠭᠠ ( )	<i>Medial Form</i>
ZWJ+188C		ᠠᠨᠣᠭᠠ ( )	<i>Final Form</i>
188D	(xx_)	ᠠᠨᠤᠯᠠᠬᠠ	MONGOLIAN LETTER ALI GALI TTHA
188D+ZWJ		ᠠᠨᠤᠯᠠᠬᠠ (x)	<i>Initial Form</i>
ZWJ+188D+ZWJ		ᠠᠨᠤᠯᠠᠬᠠ ( )	<i>Medial Form</i>
ZWJ+188D		ᠠᠨᠤᠯᠠᠬᠠ ( )	<i>Final Form</i>
188E	(xx_)	ᠠᠨᠤᠯᠠᠳᠠ	MONGOLIAN LETTER ALI GALI DDA
188E+ZWJ		ᠠᠨᠤᠯᠠᠳᠠ (x)	<i>Initial Form</i>
ZWJ+188E+ZWJ		ᠠᠨᠤᠯᠠᠳᠠ ( )	<i>Medial Form</i>
ZWJ+188E		ᠠᠨᠤᠯᠠᠳᠠ ( )	<i>Final Form</i>
188F	(xx_x)	ᠠᠨᠠᠭᠠᠨᠠ	MONGOLIAN LETTER ALI GALI NNA
188F+ZWJ		ᠠᠨᠠᠭᠠᠨᠠ (x)	<i>Initial Form</i>
ZWJ+188F+ZWJ		ᠠᠨᠠᠭᠠᠨᠠ ( )	<i>Medial Form</i>
ZWJ+188F		ᠠᠨᠠᠭᠠᠨᠠ ( )	<i>Final Form</i>
1890	(x_)	ᠠᠨᠤᠯᠠᠲᠠ	MONGOLIAN LETTER ALI GALI TA
1890+ZWJ		ᠠᠨᠤᠯᠠᠲᠠ (x)	<i>Initial Form</i>
ZWJ+1890+ZWJ		ᠠᠨᠤᠯᠠᠲᠠ ( )	<i>Medial Form</i>
ZWJ+1890		ᠠᠨᠤᠯᠠᠲᠠ ( )	<i>Final Form</i>
1891	(x_)	ᠠᠨᠤᠯᠠᠳᠠ	MONGOLIAN LETTER ALI GALI DA
1891+ZWJ		ᠠᠨᠤᠯᠠᠳᠠ (x)	<i>Initial Form</i>
ZWJ+1891+ZWJ		ᠠᠨᠤᠯᠠᠳᠠ ( )	<i>Medial Form</i>
ZWJ+1891		ᠠᠨᠤᠯᠠᠳᠠ ( )	<i>Final Form</i>
1892	(xx_x)	ᠠᠨᠤᠯᠠᠯᠠᠭᠠ	MONGOLIAN LETTER ALI GALI PA <sup>+</sup>
1892+ZWJ		ᠠᠨᠤᠯᠠᠯᠠᠭᠠ (x)	<i>Initial Form</i>
ZWJ+1892+ZWJ		ᠠᠨᠤᠯᠠᠯᠠᠭᠠ ( )	<i>Medial Form</i>
ZWJ+1892		ᠠᠨᠤᠯᠠᠯᠠᠭᠠ ( )	<i>Final Form</i>
1893	(xx_)	ᠠᠨᠤᠯᠠᠯᠠᠭᠠᠬᠠ	MONGOLIAN LETTER ALI GALI PHA <sup>+</sup>
1893+ZWJ		ᠠᠨᠤᠯᠠᠯᠠᠭᠠᠬᠠ (x)	<i>Initial Form</i>
ZWJ+1893+ZWJ		ᠠᠨᠤᠯᠠᠯᠠᠭᠠᠬᠠ ( )	<i>Medial Form</i>
ZWJ+1893		ᠠᠨᠤᠯᠠᠯᠠᠭᠠᠬᠠ ( )	<i>Final Form</i>
1894	(xx_)	ᠠᠨᠤᠯᠠᠰᠠ	MONGOLIAN LETTER ALI GALI SSA
1894+ZWJ		ᠠᠨᠤᠯᠠᠰᠠ (xx)	<i>Initial Form</i>
ZWJ+1894+ZWJ		ᠠᠨᠤᠯᠠᠰᠠ (xx)	<i>Medial Form</i>

ZWJ+1894	ᠠ ( )	Final Form	ZWJ+18A0+FVS1+ZWJ	ᠠ ( )	Second Medial Form
1895 (x )	ᠠ (x )	Initial Form	ZWJ+18A0	ᠠ ( )	Final Form
1895+ZWJ	ᠠ ( )	Medial Form	18A1 ( )	ᠠ ( )	MONGOLIAN LETTER MANCHU ALI GALI DHA
ZWJ+1895+ZWJ	ᠠ ( )	Final Form	18A1+ZWJ	ᠠ ( )	First Initial Form
ZWJ+1895	ᠠ ( )	Final Form	18A1+FVS1+ZWJ	ᠠ ( )	Second Initial Form
1896 (xx )	ᠠ (xx )	Initial Form	ZWJ+18A1+ZWJ	ᠠ ( )	First Medial Form
1896+ZWJ	ᠠ (xx )	Medial Form	ZWJ+18A1+FVS1+ZWJ	ᠠ ( )	Second Medial Form
ZWJ+1896+ZWJ	ᠠ ( )	Final Form	ZWJ+18A1	ᠠ ( )	Final Form
ZWJ+1896	ᠠ ( )	Final Form	18A2 ( )	ᠠ ( )	MONGOLIAN LETTER MANCHU ALI GALI SSA
1897 (xx )	ᠠ (xx )	Initial Form	18A2+ZWJ	ᠠ ( )	Initial Form
1897+ZWJ	ᠠ ( )	Medial Form	ZWJ+18A2+ZWJ	ᠠ ( )	Medial Form
ZWJ+1897+ZWJ	ᠠ ( )	Final Form	ZWJ+18A2	ᠠ ( )	Final Form
ZWJ+1897	ᠠ ( )	Final Form	18A3 ( )	ᠠ ( )	MONGOLIAN LETTER MANCHU ALI GALI C YA
1898 (x )	ᠠ (x )	Initial Form	18A3+ZWJ	ᠠ ( )	Initial Form
1898+ZWJ	ᠠ ( )	Medial Form	ZWJ+18A3+ZWJ	ᠠ ( )	Medial Form
ZWJ+1898+ZWJ	ᠠ ( )	Final Form	ZWJ+18A3	ᠠ ( )	Final Form
ZWJ+1898	ᠠ ( )	Final Form	18A4 ( )	ᠠ ( )	MONGOLIAN LETTER MANCHU ALI GALI ZHA
1899 (x )	ᠠ (x )	Initial Form	18A4+ZWJ	ᠠ ( )	Initial Form
1899+ZWJ	ᠠ ( )	Medial Form	ZWJ+18A4+ZWJ	ᠠ ( )	Medial Form
ZWJ+1899+ZWJ	ᠠ ( )	Final Form	ZWJ+18A4	ᠠ ( )	Final Form
ZWJ+1899	ᠠ ( )	Final Form	18A5 ( )	ᠠ ( )	MONGOLIAN LETTER MANCHU ALI GALI ZA
189A (x )	ᠠ (x )	Initial Form	18A5+ZWJ	ᠠ ( )	Initial Form
189A+ZWJ	ᠠ ( )	Medial Form	ZWJ+18A5+ZWJ	ᠠ ( )	Medial Form
ZWJ+189A+ZWJ	ᠠ ( )	Final Form	ZWJ+18A5	ᠠ ( )	Final Form
ZWJ+189A	ᠠ ( )	Final Form	18A6 (xx )	ᠠ ( )	MONGOLIAN LETTER ALI GALI HALF U
189B (x )	ᠠ (x )	Initial Form	18A6+ZWJ	ᠠ ( )	Initial Form
189B+ZWJ	ᠠ ( )	Medial Form	ZWJ+18A6+ZWJ	ᠠ ( )	Medial Form
ZWJ+189B+ZWJ	ᠠ ( )	Final Form	ZWJ+18A6	ᠠ ( )	Final Form
ZWJ+189B	ᠠ ( )	Final Form	18A7 (xx_x )	ᠠ ( )	MONGOLIAN LETTER ALI GALI HALF YA
189C (x )	ᠠ (x )	Initial Form	18A7+ZWJ	ᠠ ( )	Initial Form
189C+ZWJ	ᠠ ( )	Medial Form	ZWJ+18A7+ZWJ	ᠠ ( )	Medial Form
ZWJ+189C+ZWJ	ᠠ ( )	Final Form	ZWJ+18A7	ᠠ ( )	Final Form
ZWJ+189C	ᠠ ( )	Final Form	18A8 (x )	ᠠ ( )	MONGOLIAN LETTER MANCHU ALI GALI BHA
189D (x )	ᠠ (x )	Initial Form	18A8+ZWJ	ᠠ ( )	Initial Form
189D+ZWJ	ᠠ ( )	Medial Form	ZWJ+18A8+ZWJ	ᠠ ( )	Medial Form
ZWJ+189D+ZWJ	ᠠ ( )	Final Form	ZWJ+18A8	ᠠ ( )	Final Form
ZWJ+189D	ᠠ ( )	Final Form	18AA (x )	ᠠ ( )	MONGOLIAN LETTER MANCHU ALI GALI LHA
189E (x )	ᠠ (x )	Initial Form	18AA+ZWJ	ᠠ ( )	Initial Form
189E+ZWJ	ᠠ ( )	Medial Form	ZWJ+18AA+ZWJ	ᠠ ( )	Medial Form
ZWJ+189E+ZWJ	ᠠ ( )	Final Form	ZWJ+18AA	ᠠ ( )	Final Form
ZWJ+189E	ᠠ ( )	Final Form			
189F (x )	ᠠ (x )	Initial Form			
189F+ZWJ	ᠠ ( )	Medial Form			
ZWJ+189F+ZWJ	ᠠ ( )	Final Form			
ZWJ+189F	ᠠ ( )	Final Form			
18A0 (x )	ᠠ (x )	Frst Initial Form			
18A0+ZWJ	ᠠ ( )	Second Initial Form			
18A0+FVS1+ZWJ	ᠠ ( )	First Medial Form			
ZWJ+18A0+ZWJ	ᠠ ( )	Final Form			