

MONGOLIAN BASE FORMS, POSITIONAL FORMS, & VARIANT FORMS

(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)

December 31, 2015 (greyson@postone.net)

TARGET AUDIENCE: Font developers

OBJECTIVE: Full specification of Mongolian/Todo/Sibe/Manchu/AliGali script base forms, positional forms, and variant forms. It should be noted that full specification of implementation logic is beyond the scope of this paper. It should be noted that the emphasis of this paper is stand-alone text rather than running text. However, all running text forms, aside from ligatures should be found here.

LEGEND

The first line of a given character section will always give the Unicode form. If the Unicode form matches the main isolate form, then there will be no line for the isolate and it will be understood that the first line of a section also gives the main isolate form. Given this situation along with there being another isolate, the second line will define the second isolate. Given the rare case where the Unicode presentation glyph is not the main stand-alone isolate, the first line will define the Unicode glyph as already stated, the second line will define the first/main isolate, the second line and following will define additional potential isolates.

\$ – Ligatures formed at this code-point appear in the initial-medial, initial-final, medial-medial, medial-final positions. These code-points should actually include an isolate loop to signify the initial/medial feminine forms which are found in the ligatures but never show up independently

* – Feminine ligatures formed using this consonantal isolate 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

% – Unicode code-point forms are not specified as an isolate therefore the only way of viewing these glyphs is by positional simulation using ZWJ. FVS specification should be a future consideration for ease of usage in stand-alone environments.

There are 13 such cases.

(X₁X₂X₃X₄) – denotes script usage (X₁=Mongolian, X₂=Todo, X₃=Sibe, X₄=Manchu); positional glyphs which show no “X” at all are to be understood as undefined

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

Blue highlighting notes a need for refinement or just additional information

Purple highlighting indicates the proposal for a new FVS assignment (in discussion with Prof. Quejingzhabu also)

Grey highlighting indicates a change from the previous DS01

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

Punctuation			
1800 (xx_)	፻	MONGOLIAN BIRGA	1808 (___x)
11660 (xx_)	፻	MONGOLIAN BIRGA WITH ORNAMENT	1809 (___x)
11664 (xx_)	፻	MONGOLIAN BIRGA WITH DOUBLE ORNAMENT	
11662 (xx_)	፻	MONGOLIAN DOUBLE BIRGA WITH ORNAMENT	
11663 (xx_)	፻	MONGOLIAN TRIPLE BIRGA WITH ORNAMENT	
11661 (xx_)	፻	MONGOLIAN ROTATED BIRGA	
11665 (xx_)	፻	MONGOLIAN ROTATED BIRGA WITH ORNAMENT	
11666 (xx_)	፻	MONGOLIAN ROTATED BIRGA WITH DOUBLE ORNAMENT	
11667 (xx_)	፻	MONGOLIAN INVERTED BIRGA	
11668 (xx_)	፻	MONGOLIAN INVERTED BIRGA WITH DOUBLE ORNAMENT	
11669 (xx_)	፻	MONGOLIAN SWIRL BIRGA	
1166A (xx_)	፻	MONGOLIAN SWIRL BIRGA WITH ORNAMENT	
1166B (xx_)	፻	MONGOLIAN SWIRL BIRGA WITH DOUBLE ORNAMENT	
1166C (xx_)	፻	MONGOLIAN TURNED SWIRL BIRGA WITH DOUBLE ORNAMENT	
1801 (xxxx)	----	MONGOLIAN ELLIPSIS	1885 (xx_x)
1802 (xx_)	'	MONGOLIAN COMMA	1886 (xx_x)
1803 (xx_)	"	MONGOLIAN FULL STOP	18A9 (x___)
1804 (xxxx)	:	MONGOLIAN COLON	
1805 (xx_)	◊	MONGOLIAN FOUR DOTS	
1806 (___x)	-	MONGOLIAN TODO SOFT HYPHEN	

Marks			
1808 (___x)	»	MONGOLIAN MANCHU COMMA	
1809 (___x)	»	MONGOLIAN MANCHU FULL STOP	
1885 (xx_x)	፻	MONGOLIAN LETTER ALI GALI BALUDA <small>(this is not a letter – it is a diacritic mark; should have the perforated circle added here)</small>	
1886 (xx_x)	፻	MONGOLIAN LETTER ALI GALI THREE BALUDA <small>(this is not a letter – it is a diacritic mark; should have the perforated circle added here)</small>	
18A9 (x___)	፻	MONGOLIAN LETTER ALI GALI DAGALGA <small>(this is not a letter – it is a diacritic mark)</small>	

Control Characters			
180B (xxxx)	፻	MONGOLIAN FREE VARIATION SELECTOR ONE	
180C (xxxx)	፻	MONGOLIAN FREE VARIATION SELECTOR TWO	
180D (xxxx)	፻	MONGOLIAN FREE VARIATION SELECTOR THREE	
180E (x___)	፻	MONGOLIAN VOWEL SEPARATOR	
180F (xxxx)	፻	MONGOLIAN FREE VARIATION SELECTOR FOUR	

STATUS: Check to see whether this is in the new 2016 Chinese Standard (graphic will show a "4")
NOTE: A Mongolian vertical font should also include the control characters NNBSP (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 Letters

1807	(__x)		MONGOLIAN SIBE SYLLABLE BOUNDARY MARKER
1807+ZWJ	(__)		<i>Initial Form</i>
ZWJ+1807+ZWJ	(__x)		<i>Medial Form</i>
ZWJ+1807	(__)		<i>Final Form</i>

180A	(xxxx)		MONGOLIAN NIRUGU
180A+ZWJ	(xxxx)		<i>Initial Form</i>
ZWJ+180A+ZWJ	(xxxx)		<i>Medial Form</i>
ZWJ+180A	(xxxx)		<i>First Final Form</i>
ZWJ+180A+FVS1	(xxxx)		<i>Second Final Form</i>

1820	(xxxx)		MONGOLIAN LETTER A
1820+FVS1	(xx_)		<i>Second Isolate Form</i>
1820+ZWJ	(xxxx)		<i>First Initial Form</i>
ZWJ+1820+ZWJ	(xxxx)		<i>First Medial Form</i>
ZWJ+1820+FVS1+ZWJ	(xx_)		<i>Second Medial Form</i> [¶]
ZWJ+1820+FVS2+ZWJ	(xx_)		<i>Third Medial Form</i> <small>(only implemented with NNBSP - actually processed as initial in ACA suffix)</small>
ZWJ+1820	(xxxx)		<i>First Final Form</i>
ZWJ+1820+FVS1	(xx_)		<i>Second Final Form</i> <small>(only implemented with MVS/NNBSP)</small>

1821	(__x)		MONGOLIAN LETTER E
1821+ZWJ	(__x)		<i>First Initial Form</i>
1821+FVS1+ZWJ	(__x)		<i>Second Initial Form</i> [¶]
ZWJ+1821+ZWJ	(__x)		<i>Medial Form</i>
ZWJ+1821	(__x)		<i>First Final Form</i>

ZWJ+1821+FVS1

(only implemented with MVS/NNBSP)

1822 (x__)

MONGOLIAN LETTER I

1822+ZWJ

ZWJ+1822+ZWJ

(also implemented with NNBSP - actually processed as initial with instrumental suffix)

ZWJ+1822+FVS1+ZWJ

ZWJ+1822+FVS2+ZWJ

STATUS: Check to see whether this is in the new 2016 Chinese Standard

(context-driven)

ZWJ+1822+FVS3+ZWJ

STATUS: Check to see whether this is in the new 2016 Chinese Standard

(needed to over-ride default context)

ZWJ+1822

(also implemented with NNBSP - actually processed as isolate in accusative suffix)

ZWJ+1822+FVS1

STATUS: Check to see whether this is in the new 2016 Chinese Standard

1823 (x_xx)

MONGOLIAN LETTER O

1823+ZWJ

ZWJ+1823+ZWJ

ZWJ+1823+FVS1+ZWJ

ZWJ+1823

ZWJ+1823+FVS1

1824 (x__)

MONGOLIAN LETTER U

1824

1824+FVS1

1824+ZWJ

ZWJ+1824+ZWJ

(also implemented with NNBSP - actually processed as initial in genitive suffix)

ZWJ+1824+FVS1+ZWJ

ZWJ+1824

(also implemented with NNBSP - actually processed as isolate in genitive suffix)

ZWJ+1824+FVS1

STATUS: Check to see whether this is in the new 2016 Chinese Standard

ZWJ+1824+FVS2

STATUS: Check to see whether this is in the new 2016 Chinese Standard

(dotted - only implemented with NNBSP - actually processed as isolate in genitive suffix)

1825 (x__)

MONGOLIAN LETTER OE

1825+ZWJ

ZWJ+1825+ZWJ

ZWJ+1825+FVS1+ZWJ

(context-driven)

ZWJ+1825+FVS2+ZWJ

ZWJ+1825

ZWJ+1825+FVS1

1826 (x__)

MONGOLIAN LETTER UE

1826

1826+FVS1

1826+FVS2	ᠮ (x____) <i>Third Isolate Form</i>
1826+ZWJ	ᠮ (x____) <i>Initial Form</i>
ZWJ+1826+ZWJ	ᠮ (x____) <i>First Medial Form</i> <small>(also implemented with NNBSP - actually processed as initial in genetive suffix)</small>
ZWJ+1826+FVS1+ZWJ	ᠮ (x____) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+1826+FVS2+ZWJ	ᠮ (x____) <i>Third Medial Form</i> ^{&}
ZWJ+1826+FVS3+ZWJ	ᠮ (x____) <i>Fourth Medial Form</i>
STATUS: Check to see whether this is in the new 2016 Chinese Standard <small>(needed to handle DUEGER without NNBSP)</small>	
ZWJ+1826	ᠥ (x____) <i>First Final Form</i> <small>(also implemented with NNBSP - actually processed as isolate in genetive suffix)</small>
ZWJ+1826+FVS1	ᠥ (x____) <i>Second Final Form</i> ^{&}
ZWJ+1826+FVS2	ᠥ (x____) <i>Third Final Form</i>
STATUS: Check to see whether this is in the new 2016 Chinese Standard <small>(dotted - only implemented with NNBSP - actually processed as isolate in genetive suffix)</small>	
1827 (x____) ᠮ	MONGOLIAN LETTER EE
1827+ZWJ	ᠮ (x____) <i>Initial Form</i>
ZWJ+1827+ZWJ	ᠮ (x____) <i>Medial Form</i>
ZWJ+1827	ᠮ (x____) <i>Final Form</i>
1828 (xxxx) ᠮ	MONGOLIAN LETTER NA
1828+ZWJ	ᠮ (xxxx) <i>First Initial Form</i> <small>(also context-driven in Todo)</small>
1828+FVS1+ZWJ	ᠮ (x____) <i>Second Initial Form</i> ^{&}
ZWJ+1828+ZWJ	ᠮ (xxxx) <i>First Medial Form</i> <small>(context-driven) (may be implemented as a toggle)</small>
ZWJ+1828+FVS1+ZWJ	ᠮ (xxxx) <i>Second Medial Form</i> <small>(context-driven as a toggle, so in actuality could be dotted or undotted) (AN+FVS1+AR must remove the dot)</small>
ZWJ+1828+FVS2+ZWJ	ᠮ (x____) <i>Third Medial Form</i> <small>(only implemented with MVS - actually processed as final when pre-MVS)</small>
ZWJ+1828+FVS3+ZWJ	ᠮ (x____) <i>Fourth Medial Form</i> <small>(context-driven, Todo only)</small>
ZWJ+182D+FVS4+ZWJ	ᠮ (x____) <i>Fifth Medial Form</i>
STATUS: Not expected to be in the new 2016 Chinese Standard	
ZWJ+1828	ᠮ (xxxx) <i>First Final Form</i>
1829 (x_xx) ᠮ	MONGOLIAN LETTER ANG
1829+ZWJ	ᠮ (x_xx) <i>Initial Form</i>
ZWJ+1829+ZWJ	ᠮ (x_xx) <i>Medial Form</i>
ZWJ+1829	ᠮ (x_xx) <i>Final Form</i>
182A (x_xx) ᠥ	MONGOLIAN LETTER BA ^s
182A+ZWJ	ᠥ (x_xx) <i>Initial Form</i>
ZWJ+182A+ZWJ	ᠥ (x_xx) <i>Medial Form</i>
ZWJ+182A	ᠥ (x_xx) <i>First Final Form</i>
ZWJ+182A+FVS1	ᠥ (x____) <i>Second Final Form</i> ^{&}
182B (x____) ᠥ	MONGOLIAN LETTER PA ^s
182B+ZWJ	ᠥ (x____) <i>Initial Form</i>
ZWJ+182B+ZWJ	ᠥ (x____) <i>Medial Form</i>
ZWJ+182B	ᠥ (x____) <i>Final Form</i>

182C (x____) ᠮ	MONGOLIAN LETTER QA
182C+FVS1	ᠮ (x____) <i>Second Isolate Form</i> [*]
182C+FVS2	ᠮ (x____) <i>Third Isolate Form</i> [*]
182C+ZWJ	ᠮ (x____) <i>First Initial Form</i>
182C+FVS1+ZWJ	ᠮ (x____) <i>Second Initial Form</i> ^{&}
182C+FVS2+ZWJ	ᠮ (x____) <i>Third Initial Form</i>
STATUS: Check to see whether this is in the new 2016 Chinese Standard	
ZWJ+182C+ZWJ	ᠥ (x____) <i>First Medial Form</i>
ZWJ+182C+FVS1+ZWJ	ᠥ (x____) <i>Second Medial Form</i> ^{&}
ZWJ+182C+FVS2+ZWJ	ᠥ (x____) <i>Third Medial Form</i> <small>(actually processed as final when pre-MVS) (Chinese Standard has dotted variant first - however all fonts show non-dotted variant first)</small>
ZWJ+182C+FVS3+ZWJ	ᠥ (x____) <i>Fourth Medial Form</i> ^{&} <small>(actually processed as final when pre-MVS) (Chinese Standard has dotted variant first - however all fonts show non-dotted variant first)</small>
182D (x____) ᠮ	MONGOLIAN LETTER GA
182D+FVS1	ᠮ (x____) <i>Second Isolate Form</i> [*] <small>(Chinese Standard uses ZWJ instead of FVS)</small>
182D+FVS2	ᠮ (x____) <i>Third Isolate Form</i> [*]
182D+ZWJ	ᠮ (x____) <i>First Initial Form</i>
182D+FVS1+ZWJ	ᠮ (x____) <i>Second Initial Form</i> ^{&}
182D+FVS2+ZWJ	ᠮ (x____) <i>Third Initial Form</i>
STATUS: Check to see whether this is in the new 2016 Chinese Standard <small>(context-driven)</small>	
ZWJ+182D+ZWJ	ᠥ (x____) <i>First Medial Form</i>
ZWJ+182D+FVS1+ZWJ	ᠥ (x____) <i>Second Medial Form</i> <small>(context-driven)</small>
ZWJ+182D+FVS2+ZWJ	ᠥ (x____) <i>Third Medial Form</i> <small>(only implemented with MVS) (actually processed as final when pre-MVS)</small>
ZWJ+182D+FVS3+ZWJ	ᠥ (x____) <i>Fourth Medial Form</i> <small>(context-driven)</small>
ZWJ+182D+FVS4+ZWJ	ᠥ (x____) <i>Fifth Medial Form</i>
STATUS: Check to see whether this is in the new 2016 Chinese Standard <small>(needed to over-ride default context) (COG+FVS2+A+FVS1+GULA)</small>	
ZWJ+182D	ᠥ (x____) <i>First Final Form</i> <small>(NOTE: error in Chinese Standard - missing)</small>
ZWJ+182D+FVS1	ᠥ (x____) <i>Second Final Form</i> <small>(needed to over-ride default context) (SIG+FVS1)</small>
ZWJ+182D+FVS2	ᠥ (x____) <i>Third Final Form</i> <small>(context-driven) (ABSIG+FVS2)</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	ᠮ (x_xx) <i>Final Form</i>
182F (xxxx) ᠮ	MONGOLIAN LETTER LA
182F+ZWJ	ᠮ (xxxx) <i>Initial Form</i>
ZWJ+182F+ZWJ	ᠮ (xxxx) <i>Medial Form</i>
ZWJ+182F	ᠮ (xxxx) <i>Final Form</i>
1830 (xxxx) ᠮ	MONGOLIAN LETTER SA

1830+ZWJ	ᡩ (xxxx) <i>Initial Form</i>	ZWJ+1837+ZWJ	ᡨ (xxx_) <i>Medial Form</i>
ZWJ+1830+ZWJ	ᡪ (xxxx) <i>Medial Form</i>	ZWJ+1837	ᡫ (xxx_) <i>Final Form</i>
ZWJ+1830	ᡱ (xxxx) <i>First Final Form</i>		
ZWJ+1830+FVS1	ᡲ (x_) <i>Second Final Form[‡]</i>		
ZWJ+1830+FVS2	ᡳ (__x) <i>Third Final Form[‡]</i>		
1831 (xx_)	ᡷ MONGOLIAN LETTER SHA	1838 (xxxx) ᡷ	MONGOLIAN LETTER WA
1831+ZWJ	ᡷ (xx_) <i>Initial Form</i>	1838+ZWJ	ᡷ (xxxx) <i>Initial Form</i>
ZWJ+1831+ZWJ	ᡷ (xx_) <i>Medial Form</i>	ZWJ+1838+ZWJ	ᡷ (xxxx) <i>First Medial Form</i>
ZWJ+1831	ᡷ (xx_) <i>Final Form</i>	ZWJ+1838+FVS1+ZWJ	ᡷ (x_) <i>Second Medial Form</i> <small>(context-driven)</small>
1832 (x_)	ᡷ MONGOLIAN LETTER TA	ZWJ+1838	ᡷ (x_) <i>First Final Form</i>
1832+ZWJ	ᡷ (x_) <i>Initial Form</i>	ZWJ+1838+FVS1	ᡷ (x_) <i>Second Final Form[‡]</i>
ZWJ+1832+ZWJ	ᡷ (x_) <i>First Medial Form</i>		
ZWJ+1832+FVS1+ZWJ	ᡷ (x_) <i>Second Medial Form[‡]</i>		
ZWJ+1832	ᡷ (x_) <i>Final Form</i>	1839 (x_) ᡷ	MONGOLIAN LETTER FA [§]
1833 (x_)	ᡷ MONGOLIAN LETTER DA	1839+ZWJ	ᡷ (x_) <i>Initial Form</i>
1833+ZWJ	ᡷ (x_) <i>First Initial Form</i>	ZWJ+1839+ZWJ	ᡷ (x_) <i>Medial Form</i>
1833+FVS1+ZWJ	ᡷ (x_) <i>Second Initial Form</i> <small>(also implemented with NNBSP)</small>	ZWJ+1839	ᡷ (x_) <i>Final Form</i>
ZWJ+1833+ZWJ	ᡷ (x_) <i>First Medial Form</i>		
ZWJ+1833+FVS1+ZWJ	ᡷ (x_) <i>Second Medial Form</i> <small>(context-driven)</small>	183A (xxxx) ᡷ	MONGOLIAN LETTER KA [§]
ZWJ+1833	ᡷ (x_) <i>First Final Form</i>	183A+ZWJ	ᡷ (xxxx) <i>Initial Form</i>
ZWJ+1833+FVS1	ᡷ (x_) <i>Second Final Form[‡]</i>	ZWJ+183A+ZWJ	ᡷ (xxxx) <i>Medial Form</i>
		ZWJ+183A	ᡷ (x_) <i>Final Form</i>
1834 (xxxx)	ᡷ MONGOLIAN LETTER CHA	183B (xx_) ᡷ	MONGOLIAN LETTER KHA [§]
1834+ZWJ	ᡷ (xxxx) <i>Initial Form</i>	183B+ZWJ	ᡷ (xx_) <i>Initial Form</i>
ZWJ+1834+ZWJ	ᡷ (xxxx) <i>Medial Form</i>	ZWJ+183B+ZWJ	ᡷ (xx_) <i>Medial Form</i>
ZWJ+1834	ᡷ (xxxx) <i>Final Form</i>	ZWJ+183B	ᡷ (xx_) <i>Final Form</i>
1835 (x_x)	ᡷ MONGOLIAN LETTER JA	183C (x_) ᡷ	MONGOLIAN LETTER TSA
1835+ZWJ	ᡷ (x_x) <i>Initial Form</i>	183C+ZWJ	ᡷ (x_) <i>Initial Form</i>
ZWJ+1835+ZWJ	ᡷ (x_x) <i>First Medial Form</i>	ZWJ+183C+ZWJ	ᡷ (x_) <i>Medial Form</i>
ZWJ+1835+FVS1+ZWJ	ᡷ (x_x) <i>Second Medial Form</i> <small>(implemented with MVS & NNBSP only actually processed as final when pre-MVS/NNBSP)</small>	ZWJ+183C	ᡷ (x_) <i>Final Form</i>
ZWJ+1835	ᡷ (x_x) <i>First Final Form</i>	183D (x_) ᡷ	MONGOLIAN LETTER ZA
		183D+ZWJ	ᡷ (x_) <i>Initial Form</i>
		ZWJ+183D+ZWJ	ᡷ (x_) <i>Medial Form</i>
		ZWJ+183D	ᡷ (x_) <i>Final Form</i>
1836 (x_xx)	ᡷ MONGOLIAN LETTER YA	183E (x_) ᡷ	MONGOLIAN LETTER HAA
1836+ZWJ	ᡷ (x_xx) <i>First Initial Form</i>	183E+ZWJ	ᡷ (x_) <i>Initial Form</i>
1836+FVS1+ZWJ	ᡷ (x_xx) <i>Second Initial Form</i> <small>(context-driven)</small>	ZWJ+183E+ZWJ	ᡷ (x_) <i>Medial Form</i>
ZWJ+1836+ZWJ	ᡷ (x_xx) <i>First Medial Form</i>	ZWJ+183E	ᡷ (x_) <i>Final Form</i>
ZWJ+1836+FVS1+ZWJ	ᡷ (x_xx) <i>Second Medial Form</i> <small>(context-driven AND also needed to over-ride default context)</small>	183F (x_) ᡷ	MONGOLIAN LETTER ZRA
ZWJ+1836+FVS2+ZWJ	ᡷ (x_xx) <i>Third Medial Form</i> <small>(implemented with MVS & NNBSP only actually processed as final when pre-MVS/NNBSP)</small>	183F+ZWJ	ᡷ (x_) <i>Initial Form</i>
ZWJ+1836	ᡷ (x_xx) <i>Final Form</i>	ZWJ+183F+ZWJ	ᡷ (x_) <i>Medial Form</i>
		ZWJ+183F	ᡷ (x_) <i>Final Form</i>
1837 (xxx_)	ᡷ MONGOLIAN LETTER RA	1840 (xx_) ᡷ	MONGOLIAN LETTER LHA
1837+ZWJ	ᡷ (xxx_) <i>Initial Form</i>	1840+ZWJ	ᡷ (xx_) <i>Initial Form</i>
		ZWJ+1840+ZWJ	ᡷ (xx_) <i>Medial Form</i>
		ZWJ+1840	ᡷ (__) <i>Final Form</i>

1841	(x__)	𠂇	MONGOLIAN LETTER ZHI
1841+ZWJ		𠂇 (x__)	<i>Initial Form</i>
ZWJ+1841+ZWJ		𠂇 (x__)	<i>Medial Form</i>
ZWJ+1841		𠂇 (x__)	<i>Final Form</i>
1842	(x__)	𠂈	MONGOLIAN LETTER CHI
1842+ZWJ		𠂈 (x__)	<i>Initial Form</i>
ZWJ+1842+ZWJ		𠂈 (x__)	<i>Medial Form</i>
ZWJ+1842		𠂈 (x__)	<i>Final Form</i>
Todo Letters			
1843	(x__)	𠂉	MONGOLIAN LETTER TODO LONG VOWEL SIGN
1843+ZWJ		𠂉 (x__)	<i>Initial Form</i>
		(context-driven)	
ZWJ+1843+ZWJ		𠂉 (x__)	<i>Medial Form</i>
		(context-driven)	
ZWJ+1843		𠂉 (x__)	<i>First Final Form</i>
		(context-driven)	
ZWJ+1843+FVS1		𠂉 (x__)	<i>Second Final Form</i>
STATUS: Check to see whether this is in the new 2016 Chinese Standard			
1844	(x__)	𠂊	MONGOLIAN LETTER TODO E
1844+ZWJ		𠂊 (x__)	<i>Initial Form</i>
ZWJ+1844+ZWJ		𠂊 (x__)	<i>First Medial Form</i>
ZWJ+1844+FVS1+ZWJ		𠂊 (x__)	<i>Second Medial Form</i> ^g
ZWJ+1844		𠂊 (x__)	<i>Final Form</i>
1845	(x__)	𠂋	MONGOLIAN LETTER TODO I
1845+ZWJ		𠂋 (x__)	<i>Initial Form</i>
ZWJ+1845+ZWJ		𠂋 (x__)	<i>First Medial Form</i>
ZWJ+1845+FVS1+ZWJ		𠂋 (x__)	<i>Second Medial Form</i>
		(context-driven)	
ZWJ+1845		𠂋 (x__)	<i>Final Form</i>
1846	(x__)	𠂌	MONGOLIAN LETTER TODO O
1846+ZWJ		𠂌 (x__)	<i>Initial Form</i>
ZWJ+1846+ZWJ		𠂌 (x__)	<i>First Medial Form</i>
ZWJ+1846+FVS1+ZWJ		𠂌 (x__)	<i>Second Medial Form</i> ^g
ZWJ+1846		𠂌 (x__)	<i>Final Form</i>
1847	(x__)	𠂍	MONGOLIAN LETTER TODO U
1847+FVS1		𠂍 (x__)	<i>Second Isolate Form</i>
1847+ZWJ		𠂍 (x__)	<i>Initial Form</i>
ZWJ+1847+ZWJ		𠂍 (x__)	<i>First Medial Form</i>
ZWJ+1847+FVS1+ZWJ		𠂍 (x__)	<i>Second Medial Form</i> ^g
ZWJ+1847+FVS2+ZWJ		𠂍 (x__)	<i>Third Medial Form</i>
		(context-driven)	
ZWJ+1847		𠂍 (x__)	<i>First Final Form</i>
ZWJ+1847+FVS1		𠂍 (x__)	<i>Second Final Form</i>
		(context-driven)	

1848	(x__)	𠂎	MONGOLIAN LETTER TODO OE
1848+ZWJ		𠂎 (x__)	<i>Initial Form</i>
ZWJ+1848+ZWJ		𠂎 (x__)	<i>First Medial Form</i>
ZWJ+1848+FVS1+ZWJ		𠂎 (x__)	<i>Second Medial Form</i> ^g
ZWJ+1848		𠂎 (x__)	<i>Final Form</i>
1849	(x__)	𠂏	MONGOLIAN LETTER TODO UE
1849+FVS1		𠂏 (x__)	<i>Second Isolate Form</i>
1849+ZWJ		𠂏 (x__)	<i>Initial Form</i>
ZWJ+1849+ZWJ		𠂏 (x__)	<i>First Medial Form</i>
ZWJ+1849+FVS1+ZWJ		𠂏 (x__)	<i>Second Medial Form</i> ^g
ZWJ+1849		𠂏 (x__)	<i>Final Form</i>
184A	(x__)	𠂐	MONGOLIAN LETTER TODO ANG [%]
184A		𠂐 (x__)	<i>Isolate Form</i>
184A+ZWJ		𠂐 (x__)	<i>Initial Form</i>
ZWJ+184A+ZWJ		𠂐 (x__)	<i>Medial Form</i>
ZWJ+184A		𠂐 (x__)	<i>Final Form</i>
184B	(x__)	𠂑	MONGOLIAN LETTER TODO BA [%]
184B		𠂑 (x__)	<i>Isolate Form</i>
184B+ZWJ		𠂑 (x__)	<i>Initial Form</i>
ZWJ+184B+ZWJ		𠂑 (x__)	<i>Medial Form</i>
ZWJ+184B		𠂑 (x__)	<i>Final Form</i>
184C	(x__)	𠂓	MONGOLIAN LETTER TODO PA ^s
184C+ZWJ		𠂓 (x__)	<i>Initial Form</i>
ZWJ+184C+ZWJ		𠂓 (x__)	<i>Medial Form</i>
ZWJ+184C		𠂓 (x__)	<i>Final Form</i>
184D	(x__)	𠂔	MONGOLIAN LETTER TODO QA
184D+FVS1		𠂔 (x__)	<i>Second Isolate Form</i> [*]
184D+ZWJ		𠂔 (x__)	<i>Initial Form</i>
ZWJ+184D+ZWJ		𠂔 (x__)	<i>Medial Form</i>
ZWJ+184D		𠂔 (x__)	<i>Final Form</i>
184E	(x__)	𠂕	MONGOLIAN LETTER TODO GA
184E+FVS1		𠂕 (x__)	<i>Second Isolate Form</i> [*]
184E+ZWJ		𠂕 (x__)	<i>Initial Form</i>
ZWJ+184E+ZWJ		𠂕 (x__)	<i>First Medial Form</i>
ZWJ+184E+FVS1+ZWJ		𠂕 (x__)	<i>Second Medial Form</i>
		(context-driven)	
ZWJ+184E		𠂕 (x__)	<i>Final Form</i>
184F	(x__)	𠂖	MONGOLIAN LETTER TODO MA [%]
184F		𠂖 (x__)	<i>Isolate Form</i>
184F+ZWJ		𠂖 (x__)	<i>Initial Form</i>
ZWJ+184F+ZWJ		𠂖 (x__)	<i>Medial Form</i>
ZWJ+184F		𠂖 (x__)	<i>Final Form</i>

1850	(<u>x</u>)	ᠮ	MONGOLIAN LETTER TODO TA		185A	(<u>x</u>)	ᠮ	MONGOLIAN LETTER TODO JIA
		ᠮ	<i>Initial Form</i>			ᠮ	<i>Initial Form</i>	
1850+ZWJ		ᠮ	<i>Medial Form</i>		ZWJ+185A+ZWJ		ᠮ	<i>Medial Form</i>
ZWJ+1850+ZWJ		ᠮ	<i>Final Form</i>		ZWJ+185A		ᠮ	<i>Final Form</i>
ZWJ+1850								
1851	(<u>x</u>)	ᠮ	MONGOLIAN LETTER TODO DA		185B	(<u>xx</u>)	ᠮ	MONGOLIAN LETTER TODO NIA
		ᠮ	<i>Initial Form</i>			ᠮ	<i>Initial Form</i>	
1851+ZWJ		ᠮ	<i>Medial Form</i>		ZWJ+185B+ZWJ		ᠮ	<i>Medial Form</i>
ZWJ+1851+ZWJ		ᠮ	<i>Final Form</i>		ZWJ+185B		ᠮ	<i>Final Form</i>
ZWJ+1851								
1852	(<u>x</u>)	ᠮ	MONGOLIAN LETTER TODO CHA		185C	(<u>xx</u>)	ᠮ	MONGOLIAN LETTER TODO DZA
		ᠮ	<i>Initial Form</i>			ᠮ	<i>Initial Form</i>	
1852+ZWJ		ᠮ	<i>Medial Form</i>		ZWJ+185C+ZWJ		ᠮ	<i>Medial Form</i>
ZWJ+1852+ZWJ		ᠮ	<i>Final Form</i>		ZWJ+185C		ᠮ	<i>Final Form</i>
ZWJ+1852								
1853	(<u>xx</u>)	ᠮ	MONGOLIAN LETTER TODO JA					Sibe Letters
		ᠮ	<i>Initial Form</i>					
1853+ZWJ		ᠮ	<i>Medial Form</i>		185D	(<u>xx</u>)	ᠮ	MONGOLIAN LETTER SIBE E%
ZWJ+1853+ZWJ		ᠮ	<i>Final Form</i>			ᠮ	<i>Isolate Form</i>	
ZWJ+1853					185D		ᠮ	<i>Initial Form</i>
1854	(<u>x</u>)	ᠮ	MONGOLIAN LETTER TODO TSA			ᠮ	<i>First Medial Form</i>	
		ᠮ	<i>Initial Form</i>			ᠮ	<i>Second Medial Form</i>	
1854+ZWJ		ᠮ	<i>Medial Form</i>		ZWJ+185D+ZWJ		ᠮ	<i>(context-driven)</i>
ZWJ+1854+ZWJ		ᠮ	<i>Final Form</i>		ZWJ+185D		ᠮ	<i>First Final Form</i>
ZWJ+1854					ZWJ+185D+FVS1		ᠮ	<i>Second Final Form</i>
1855		ᠮ	MONGOLIAN LETTER TODO YA					
		ᠮ	<i>Initial Form</i>		185E	(<u>x</u>)	ᠮ	MONGOLIAN LETTER SIBE I%
1855+ZWJ		ᠮ	<i>Medial Form</i>			ᠮ	<i>Isolate Form</i>	
ZWJ+1855+ZWJ		ᠮ	<i>Final Form</i>		185E		ᠮ	<i>Initial Form</i>
ZWJ+1855						ᠮ	<i>First Medial Form</i>	
1856	(<u>x</u>)	ᠮ	MONGOLIAN LETTER TODO WA			ᠮ	<i>Second Medial Form</i>	
		ᠮ	<i>Initial Form</i>		ZWJ+185E+ZWJ		ᠮ	<i>(context-driven)</i>
1856+ZWJ		ᠮ	<i>Medial Form</i>		ZWJ+185E+FVS1+ZWJ		ᠮ	<i>Third Medial Form</i>
ZWJ+1856+ZWJ		ᠮ	<i>Final Form</i>			ᠮ	<i>(context-driven)</i>	
ZWJ+1856					ZWJ+185E		ᠮ	<i>First Final Form</i>
1857	(<u>x</u>)	ᠮ	MONGOLIAN LETTER TODO KA ^s					
		ᠮ	<i>Initial Form</i>		ZWJ+185E+FVS1		ᠮ	<i>(also implemented with NNBSP - actually processed as isolate in accusative suffix)</i>
1857+ZWJ		ᠮ	<i>Medial Form</i>			ᠮ	<i>Second Final Form</i>	
ZWJ+1857+ZWJ		ᠮ	<i>Final Form</i>		ZWJ+185E+FVS2		ᠮ	<i>(context-driven)</i>
ZWJ+1857						ᠮ	<i>Third Final Form</i>	
1858	(<u>xx</u>)	ᠮ	MONGOLIAN LETTER TODO GAA ^s		185F	(<u>xx</u>)	ᠮ	MONGOLIAN LETTER SIBE IY
		ᠮ	<i>Initial Form</i>			ᠮ	<i>Initial Form</i>	
1858+ZWJ		ᠮ	<i>Medial Form</i>		185F+ZWJ		ᠮ	<i>Medial Form</i>
ZWJ+1858+ZWJ		ᠮ	<i>Final Form</i>		ZWJ+185F+ZWJ		ᠮ	<i>Final Form</i>
ZWJ+1858					ZWJ+185F			
1859	(<u>x</u>)	ᠮ	MONGOLIAN LETTER TODO HAA [%]		1860	(<u>xx</u>)	ᠮ	MONGOLIAN LETTER SIBE UE
		ᠮ	<i>Isolate Form</i>			ᠮ	<i>Initial Form</i>	
1859		ᠮ	<i>Initial Form</i>		1860+ZWJ		ᠮ	<i>First Medial Form</i>
ZWJ+1859+ZWJ		ᠮ	<i>Medial Form</i>		ZWJ+1860+ZWJ		ᠮ	<i>Second Medial Form</i>
ZWJ+1859		ᠮ	<i>Final Form</i>			ᠮ	<i>(context-driven)</i>	
ZWJ+1859					ZWJ+1860		ᠮ	<i>First Final Form</i>
ZWJ+1859					ZWJ+1860+FVS1		ᠮ	<i>Second Final Form</i>

ZWJ+1860+FVS2	ᠥ (context-driven) Third Final Form	ZWJ+1868+FVS1+ZWJ	ᠥ (context-driven) Second Medial Form
1861 (xx) ᠥ	MONGOLIAN LETTER SIBE U%	ZWJ+1868+FVS2+ZWJ	ᠥ (xx) Third Medial Form (no context currently – more research needed here)
1861	ᠥ (x) Isolate Form	ZWJ+1868	ᠥ (xx) Final Form
1861+ZWJ	ᠥ (x) Initial Form	1869 (xx) ᠥ	MONGOLIAN LETTER SIBE DA
ZWJ+1861+ZWJ	ᠥ (xx) Medial Form	1869+ZWJ	ᠥ (xx) First Initial Form
ZWJ+1861	ᠥ (xx) Final Form	1869+FVS1+ZWJ	ᠥ (xx) Second Initial Form (context-driven and also NNBSP)
1862 (x) ᠥ	MONGOLIAN LETTER SIBE ANG%	ZWJ+1869+ZWJ	ᠥ (xx) First Medial Form
1862	ᠥ () Isolate Form	ZWJ+1869+FVS1+ZWJ	ᠥ (xx) Second Medial Form (context-driven)
1862+ZWJ	ᠥ () Initial Form	ZWJ+1869	ᠥ () Final Form
ZWJ+1862+ZWJ	ᠥ () Medial Form	186A (x) ᠥ	MONGOLIAN LETTER SIBE JA
ZWJ+1862	ᠥ () Final Form	186A+ZWJ	ᠥ (x) Initial Form
1863 (x) ᠥ	MONGOLIAN LETTER SIBE KA%	ZWJ+186A+ZWJ	ᠥ (x) Medial Form
1863	ᠥ (x) First Isolate Form	ZWJ+186A	ᠥ () Final Form
1863+FVS1	ᠥ (x) Second Isolate Form*	186B (x) ᠥ	MONGOLIAN LETTER SIBE FA
1863+ZWJ	ᠥ (x) Initial Form	186B+ZWJ	ᠥ (x) Initial Form
ZWJ+1863+ZWJ	ᠥ (x) First Medial Form	ZWJ+186B+ZWJ	ᠥ (x) Medial Form
ZWJ+1863+FVS1+ZWJ	ᠥ (x) Second Medial Form (context-driven)	ZWJ+186B	ᠥ () Final Form
ZWJ+1863	ᠥ (x) Final Form	186C (x) ᠥ	MONGOLIAN LETTER SIBE GAA ^s
1864 (xx) ᠥ	MONGOLIAN LETTER SIBE GA	186C+ZWJ	ᠥ (x) Initial Form
1864+FVS1	ᠥ (xx) Second Isolate Form*	ZWJ+186C+ZWJ	ᠥ (x) Medial Form
1864+ZWJ	ᠥ (xx) Initial Form	ZWJ+186C	ᠥ () Final Form
ZWJ+1864+ZWJ	ᠥ (xx) Medial Form	186D (x) ᠥ	MONGOLIAN LETTER SIBE HAA ^s
ZWJ+1864	ᠥ (xx) Final Form	186D+ZWJ	ᠥ (x) Initial Form
1865 (xx) ᠥ	MONGOLIAN LETTER SIBE HA	ZWJ+186D+ZWJ	ᠥ (x) Medial Form
1865+FVS1	ᠥ (xx) Second Isolate Form*	ZWJ+186D	ᠥ () Final Form
1865+ZWJ	ᠥ (xx) Initial Form	186E (xx) ᠥ	MONGOLIAN LETTER SIBE TSA
ZWJ+1865+ZWJ	ᠥ (xx) Medial Form	186E+ZWJ	ᠥ (xx) Initial Form
ZWJ+1865	ᠥ (xx) Final Form	ZWJ+186E+ZWJ	ᠥ (xx) Medial Form
1866 (xx) ᠥ	MONGOLIAN LETTER SIBE PA ^s	ZWJ+186E	ᠥ (xx) Final Form
1866+ZWJ	ᠥ (xx) Initial Form	186F (xx) ᠥ	MONGOLIAN LETTER SIBE ZA
ZWJ+1866+ZWJ	ᠥ (xx) Medial Form	186F+ZWJ	ᠥ (xx) First Initial Form
ZWJ+1866	ᠥ (xx) Final Form	186F+FVS1+ZWJ	ᠥ (xx) Second Initial Form (context-driven)
1867 (xx) ᠥ	MONGOLIAN LETTER SIBE SHA	ZWJ+186F+ZWJ	ᠥ (xx) First Medial Form
1867+ZWJ	ᠥ (xx) Initial Form	ZWJ+186F+FVS1+ZWJ	ᠥ (xx) Second Medial Form (context-driven)
ZWJ+1867+ZWJ	ᠥ (xx) Medial Form	ZWJ+186F	ᠥ (xx) Final Form
ZWJ+1867	ᠥ (xx) Final Form	1870 (xx) ᠥ	MONGOLIAN LETTER SIBE RAA
1868 (xx) ᠥ	MONGOLIAN LETTER SIBE TA	1870+ZWJ	ᠥ (xx) Initial Form
1868+ZWJ	ᠥ (xx) First Initial Form	ZWJ+1870+ZWJ	ᠥ (xx) Medial Form
1868+FVS1+ZWJ	ᠥ (xx) Second Initial Form (context-driven)	ZWJ+1870	ᠥ (xx) Final Form
ZWJ+1868+ZWJ	ᠥ (xx) First Medial Form		

1871	(__xx)	ᠮ	MONGOLIAN LETTER SIBE CHA	ZWJ+1876+ZWJ	ᡨ (context-driven) <i>First Medial Form</i>
1871+ZWJ		ᠮ (__xx)	<i>Initial Form</i>	ZWJ+1876+FVS1+ZWJ	ᡨ (context-driven) <i>Second Medial Form</i>
ZWJ+1871+ZWJ		ᠮ (__xx)	<i>Medial Form</i>	ZWJ+1876	ᡨ (context-driven) <i>Final Form</i>
ZWJ+1871		ᠮ (__)	<i>Final Form</i>		
1872	(__x)	ᠮ	MONGOLIAN LETTER SIBE ZHA	1877	(__x)
1872+ZWJ		ᠮ (__x)	<i>Initial Form</i>	1877+ZWJ	ᡨ (__x) <i>Initial Form</i>
ZWJ+1872+ZWJ		ᠮ (__x)	<i>Medial Form</i>	ZWJ+1877+ZWJ	ᡨ (__x) <i>Medial Form</i>
ZWJ+1872		ᠮ (__)	<i>Final Form</i>	ZWJ+1877	ᡨ (__) <i>Final Form</i>
Manchu Letters					
1873	(__x)	ᡩ	MONGOLIAN LETTER MANCHU I %	1878	<reserved>
1873		ᡩ (__x)	<i>Isolate Form</i>	1879	<reserved>
1873+ZWJ		ᡩ (__x)	<i>Initial Form</i>	187A	<reserved>
ZWJ+1873+ZWJ		ᡩ (__x)	<i>First Medial Form</i>	187B	<reserved>
ZWJ+1873+FVS1+ZWJ		ᡩ (__x)	<i>Second Medial Form</i>	187C	<reserved>
ZWJ+1873+FVS2+ZWJ		ᡩ (__x)	<i>Third Medial Form</i>	187D	<reserved>
ZWJ+1873+FVS3+ZWJ		ᡩ (__x)	<i>Fourth Medial Form</i>	187E	<reserved>
ZWJ+1873		ᡩ (__x)	<i>First Final Form</i>	187F	<reserved>
(also implemented with NNBSP + actually processed as isolate in accusative suffix)					
ZWJ+1873+FVS1		ᡩ (__x)	<i>Second Final Form</i>	Ali Gali Letters	
ZWJ+1873+FVS2		ᡩ (__x)	<i>Third Final Form</i>	1880	(xx_x)
ZWJ+1873+FVS3		ᡩ (__x)	<i>Fourth Final Form</i>	1880+FVS1	ᡩ (xx_x) <i>Second Form</i>
1874	(__x)	ᡩ	MONGOLIAN LETTER MANCHU KA %	1881	(xx_x)
1874		ᡩ (__x)	<i>First Isolate Form</i>	1881+FVS1	ᡩ (xx_x) <i>Second Form</i>
1874+FVS1		ᡩ (__x)	<i>Second Isolate Form</i>	1882	(xx_x)
1874+ZWJ		ᡩ (__x)	<i>Initial Form</i>	1883	(xx_x)
ZWJ+1874+ZWJ		ᡩ (__x)	<i>First Medial Form</i>	1884	(xx_x)
ZWJ+1874+FVS1+ZWJ		ᡩ (__x)	<i>Second Medial Form</i>	1887	(xx_x)
ZWJ+1874+FVS2+ZWJ		ᡩ (__x)	<i>Third Medial Form</i>	1887+ZWJ	ᡩ (xx_x) <i>Initial Form</i>
ZWJ+1874+FVS3+ZWJ		ᡩ (__x)	<i>Fourth Medial Form</i>	ZWJ+1887+ZWJ	ᡩ (xx_x) <i>Medial Form</i>
ZWJ+1874		ᡩ (__x)	<i>First Final Form</i>	ZWJ+1887	ᡩ (x_x) <i>First Final Form</i>
ZWJ+1874+FVS1		ᡩ (__x)	<i>Second Final Form</i>	ZWJ+1887+FVS1	ᡩ (x_x) <i>Second Final Form</i>
ZWJ+1874+FVS2		ᡩ (__x)	<i>Third Final Form</i>	ZWJ+1887+FVS2	ᡩ (xx_x) <i>Third Final Form</i>
1875	(__x)	ᡩ	MONGOLIAN LETTER MANCHU RA %	ZWJ+1887+FVS3	ᡩ (xx_x) <i>Fourth Final Form</i>
1875		ᡩ (__x)	<i>Isolate Form</i>	ZWJ+1887+FVS4	ᡩ (x_x) <i>Fifth Final Form</i>
1875+ZWJ		ᡩ (__x)	<i>Initial Form</i>		
ZWJ+1875+ZWJ		ᡩ (__x)	<i>Medial Form</i>		
ZWJ+1875		ᡩ (__x)	<i>Final Form</i>		
1876	(__x)	ᡩ	MONGOLIAN LETTER MANCHU FA %	1888	(x_x)
1876		ᡩ (__x)	<i>Isolate Form</i>	1888+ZWJ	ᡩ (x_x) <i>Initial Form</i>
1876+ZWJ		ᡩ (__x)	<i>First Initial Form</i>	ZWJ+1888+ZWJ	ᡩ (x_x) <i>First Medial Form</i>
1876+FVS1+ZWJ		ᡩ (__x)	<i>Second Initial Form</i>	ZWJ+1888+FVS1	ᡩ (x_x) <i>Second Medial Form</i>
(context-driven) (research needed here on purpose of shorter form)					
1889	(xx_)	ᡩ		ZWJ+1888	ᡩ (x_x) <i>First Final Form</i>
				ZWJ+1888+FVS1	ᡩ (x_x) <i>Second Final Form</i>
					(context-driven)
1889	(xx_)	ᡩ	MONGOLIAN LETTER ALI GALI KA +		
				1889+ZWJ	ᡩ (xx_x) <i>Initial Form</i>

ZWJ+1889+ZWJ		<i>Medial Form</i>		
ZWJ+1889		<i>Final Form</i>		
188A (xx_)		MONGOLIAN LETTER ALI GALI NGA		
188A+ZWJ		<i>First Initial Form</i>	1893 (xx_)	
188A+FVS1+ZWJ		<i>Second Initial Form</i>	1893+ZWJ	
ZWJ+188A+ZWJ		<i>First Medial Form</i>	ZWJ+1893+ZWJ	
ZWJ+188A+FVS1+ZWJ		<i>Second Medial Form</i>	ZWJ+1893	
ZWJ+188A		<i>Final Form</i>		
188B (xx_)		MONGOLIAN LETTER ALI GALI CA	1894 (xx_)	
188B+ZWJ		<i>Initial Form</i>	1894+ZWJ	
ZWJ+188B+ZWJ		<i>Medial Form</i>	ZWJ+1894+ZWJ	
ZWJ+188B		<i>Final Form</i>	ZWJ+1894	
188C (xx_)		MONGOLIAN LETTER ALI GALI TTA	1895 (x_)	
188C+ZWJ		<i>Initial Form</i>	1895+ZWJ	
ZWJ+188C+ZWJ		<i>Medial Form</i>	ZWJ+1895+ZWJ	
ZWJ+188C		<i>Final Form</i>	ZWJ+1895	
188D (xx_)		MONGOLIAN LETTER ALI GALI TTHA	1896 (xx_)	
188D+ZWJ		<i>Initial Form</i>	1896+ZWJ	
ZWJ+188D+ZWJ		<i>Medial Form</i>	ZWJ+1896+ZWJ	
ZWJ+188D		<i>Final Form</i>	ZWJ+1896	
188E (xx_)		MONGOLIAN LETTER ALI GALI DDA	1897 (xx_)	
188E+ZWJ		<i>Initial Form</i>	1897+ZWJ	
ZWJ+188E+ZWJ		<i>Medial Form</i>	ZWJ+1897+ZWJ	
ZWJ+188E		<i>Final Form</i>	ZWJ+1897	
188F (xx_x)		MONGOLIAN LETTER ALI GALI NNA	1898 (x_)	
188F+ZWJ		<i>Initial Form</i>	1898+ZWJ	
ZWJ+188F+ZWJ		<i>Medial Form</i>	ZWJ+1898+ZWJ	
ZWJ+188F		<i>Final Form</i>	ZWJ+1898	
1890 (x_)		MONGOLIAN LETTER ALI GALI TA	1899 (x_)	
1890+ZWJ		<i>Initial Form</i>	1899+ZWJ	
ZWJ+1890+ZWJ		<i>Medial Form</i>	ZWJ+1899+ZWJ	
ZWJ+1890		<i>Final Form</i>	ZWJ+1899	
1891 (x_)		MONGOLIAN LETTER ALI GALI DA	189A (x_)	
1891+ZWJ		<i>Initial Form</i>	189A+ZWJ	
ZWJ+1891+ZWJ		<i>Medial Form</i>	ZWJ+189A+ZWJ	
ZWJ+1891		<i>Final Form</i>	ZWJ+189A	
1892 (xx_x)		MONGOLIAN LETTER ALI GALI PA ^s	189B (x_)	
1892+ZWJ		<i>Initial Form</i>	189B+ZWJ	
ZWJ+1892+ZWJ		<i>Medial Form</i>	ZWJ+189B+ZWJ	
ZWJ+1892		<i>Final Form</i>	ZWJ+189B	
			189C (x_)	
			189C+ZWJ	
			ZWJ+189C+ZWJ	
			ZWJ+189C	

189D	(__x)		MONGOLIAN LETTER MANCHU ALI GALI JHA		18A6	(xx__)		MONGOLIAN LETTER ALI GALI HALF U
189D+ZWJ			<i>Initial Form</i>		18A6+ZWJ			<i>Initial Form</i>
ZWJ+189D+ZWJ			<i>Medial Form</i>		ZWJ+18A6+ZWJ			<i>Medial Form</i>
ZWJ+189D			<i>Final Form</i>		ZWJ+18A6			<i>Final Form</i>
189E	(__x)		MONGOLIAN LETTER MANCHU ALI GALI TTA		18A7	(xx_x)		MONGOLIAN LETTER ALI GALI HALF YA
189E+ZWJ			<i>Initial Form</i>		18A7+ZWJ			<i>Initial Form</i>
ZWJ+189E+ZWJ			<i>Medial Form</i>		ZWJ+18A7+ZWJ			<i>Medial Form</i>
ZWJ+189E			<i>Final Form</i>		ZWJ+18A7			<i>Final Form</i>
189F	(__x)		MONGOLIAN LETTER MANCHU ALI GALI DDHA		18A8	(__x)		MONGOLIAN LETTER MANCHU ALI GALI BHA ⁺
189F+ZWJ			<i>Initial Form</i>		18A8+ZWJ			<i>Initial Form</i>
ZWJ+189F+ZWJ			<i>Medial Form</i>		ZWJ+18A8+ZWJ			<i>Medial Form</i>
ZWJ+189F			<i>Final Form</i>		ZWJ+18A8			<i>Final Form</i>
18A0	(__x)		MONGOLIAN LETTER MANCHU ALI GALI TA		18AA	(__x)		MONGOLIAN LETTER MANCHU ALI GALI LHA
18A0+ZWJ			<i>Frst Initial Form</i>		18AA+ZWJ			<i>Initial Form</i>
18A0+FVS1+ZWJ			<i>Second Initial Form</i> <small>(context-driven)</small>		ZWJ+18AA+ZWJ			<i>Medial Form</i>
ZWJ+18A0+ZWJ			<i>First Medial Form</i>		ZWJ+18AA			<i>Final Form</i>
ZWJ+18A0+FVS1+ZWJ			<i>Second Medial Form</i> <small>(context-driven)</small>					
ZWJ+18A0			<i>Final Form</i>					
18A1	(__x)		MONGOLIAN LETTER MANCHU ALI GALI DHA					
18A1+ZWJ			<i>First Initial Form</i>					
18A1+FVS1+ZWJ			<i>Second Initial Form</i> <small>(context-driven)</small>					
ZWJ+18A1+ZWJ			<i>First Medial Form</i>					
ZWJ+18A1+FVS1+ZWJ			<i>Second Medial Form</i> <small>(context-driven)</small>					
ZWJ+18A1			<i>Final Form</i>					
18A2	(__x)		MONGOLIAN LETTER MANCHU ALI GALI SSA					
18A2+ZWJ			<i>Initial Form</i>					
ZWJ+18A2+ZWJ			<i>Medial Form</i>					
ZWJ+18A2			<i>Final Form</i>					
18A3	(__x)		MONGOLIAN LETTER MANCHU ALI GALI C YA					
18A3+ZWJ			<i>Initial Form</i>					
ZWJ+18A3+ZWJ			<i>Medial Form</i>					
ZWJ+18A3			<i>Final Form</i>					
18A4	(__x)		MONGOLIAN LETTER MANCHU ALI GALI ZHA					
18A4+ZWJ			<i>Initial Form</i>					
ZWJ+18A4+ZWJ			<i>Medial Form</i>					
ZWJ+18A4			<i>Final Form</i>					
18A5	(__x)		MONGOLIAN LETTER MANCHU ALI GALI ZA					
18A5+ZWJ			<i>Initial Form</i>					
ZWJ+18A5+ZWJ			<i>Medial Form</i>					
ZWJ+18A5			<i>Final Form</i>					