# **Supplemental Arrows-B**

Range: 2900-297F

This file contains an excerpt from the character code tables and list of character names for the Unicode Standard, last updated for *The Unicode Standard, Version 4.0.* 

This file may be updated as necessary to reflect errata without notice. For an up-to-date list of errata, see <a href="http://www.unicode.org/errata/">http://www.unicode.org/errata/</a>

### Disclaimer

These charts are provided as the on-line reference to the character contents of the Unicode Standard, Version 4.0 but do not provide all the information needed to fully support individual scripts using the Unicode Standard. For a complete understanding of the use of the characters contained in this excerpt file, please consult the appropriate sections of The Unicode Standard, Version 4.0 (ISBN 0-321-18578-1), as well as Unicode Standard Annexes #9, #11, #14, #15, #24 and #29, the other Unicode Technical Reports and the Unicode Character Database, which are available on-line.

See http://www.unicode.org/Public/UNIDATA/UCD.html and http://www.unicode.org/reports/

A thorough understanding of the information contained in these additional sources is required for a successful implementation.

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See http://www.unicode.org/pending/pending.html and http://www.unicode.org/alloc/Pipeline.html.

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	290	291	292	293	294	295	296	297
0	<del>-1»</del>	<b>&gt;-</b> *	→•	×	0	$\overline{}$	1	
	2900	2910	2920	2930	2940	2950	2960	2970
1	<del>-  »</del>	····>	5	X	Q	1	1	≕
	2901	2911	2921	2931	2941	2951	2961	2971
2	#	<b>T</b>	2	X	$\rightarrow$	<b>-</b>	<b>=</b>	≃
	2902	2912	2922 2932		2942	2952	2962	2972
3	⇒	1	5	<b>~</b>	$\longleftrightarrow$	—	<b>→</b>   1	
	2903	2913	2923	2933	2943	2953	2963	2973
4	<b>⇔</b>	<b>&gt;</b> →	1	♪	$\stackrel{\longrightarrow}{\leftarrow}$	<b>T</b>	$\Rightarrow$	₹
	2904	2914	2924	2934	2944	2954	2964	2974
5	<b>→</b>	<del>&gt;#&gt;</del>	5	$\rightarrow$	<b>→</b>	1	1	€
	2905	2915	2925	2935	2945	2955	2965	2975
6	₩	<b>&gt;</b> ⇒	2	Ų	←+	<b>—</b>	$\stackrel{\smile}{\leftrightharpoons}$	₹
	2906	2916	2926	2936	2946	2956	2966	2976
7	$\Rightarrow$	<del>&gt;+&gt;</del>	X	<b>\</b>	<del>-×&gt;</del>	<b>→</b>	<u></u>	₩
	2907	2917	2927	2937	2947	2957	2967	2977
8	‡	<del>&gt;  ≫</del>	X	)	↔	1	$\rightleftharpoons$	≥
	2908	2918	2928	2938	2948	2958	2968	2978
9	7	$\prec$	X	(	<b>₹</b>	1	ightharpoons	U)
	2909	2919	2929	2939	2949	2959	2969	2979
Α	$\blacksquare$	<b>—</b>	X	<b>\</b>	<del></del>	4	<b>=</b>	$\parallel$
	290A	291A	292A	293A	294A	295A	296A	297A
В	₩	<b>-</b> «	×	7	~	$\vdash$	=	Ω
	290B	291B	292B	293B	294B	295B	296B	297B
С	←-	<b>&gt;</b> —	×	(	1	1	<b>=</b>	₽
	290C	291C	292C	293C	294C	295C	296C	297C
D	<b>-</b> →	<b>◆</b> ←	X	<b>(</b> +	1	Ţ	=	_ →
	290D	291D	292D	293D	294D	295D	296D	297D
Е	<b>←</b>	→•	X	Ŋ	<u> </u>	$\vdash$	11	Υ
	290E	291E	292E	293E	294E	295E	296E	297E
F	<b></b> →	<b>◆</b> ←	X	5		$\vdash$	11	ι
	290F	291F	292F	293F	294F	295F	296F	297F

Supplemental arrows				<del>&gt;#&gt;</del>	RIGHTWARDS TWO-HEADED ARROW
2900	- -+>	RIGHTWARDS TWO-HEADED ARROW			WITH TAIL WITH DOUBLE VERTICAL STROKE
		WITH VERTICAL STROKE			= z notation finite surjective injection
		= z notation partial surjection	2919	~	LEFTWARDS ARROW-TAIL
2901	<del>-  »</del>	RIGHTWARDS TWO-HEADED ARROW	291A		RIGHTWARDS ARROW-TAIL
		WITH DOUBLE VERTICAL STROKE	291B	~	LEFTWARDS DOUBLE ARROW-TAIL
2902	#	= z notation finite surjection LEFTWARDS DOUBLE ARROW WITH	291C	<b>&gt;</b>	RIGHTWARDS DOUBLE ARROW-TAIL
		VERTICAL STROKE	291D	•←	LEFTWARDS ARROW TO BLACK DIAMOND
2903	⇒	RIGHTWARDS DOUBLE ARROW WITH VERTICAL STROKE	291E	→•	RIGHTWARDS ARROW TO BLACK DIAMOND
2904	<b>#</b>	LEFT RIGHT DOUBLE ARROW WITH VERTICAL STROKE	291F	•⊢	LEFTWARDS ARROW FROM BAR TO
2905	₩	RIGHTWARDS TWO-HEADED ARROW			BLACK DIAMOND
		FROM BAR = maps to	2920	<b>→</b> •	RIGHTWARDS ARROW FROM BAR TO BLACK DIAMOND
2906	∉	LEFTWARDS DOUBLE ARROW FROM BAR	2921	5	NORTH WEST AND SOUTH EAST ARROW
		= maps from	2922	2	NORTH EAST AND SOUTH WEST
		→ 27FB ← long leftwards arrow from bar			ARROW
2907	$\Rightarrow$	RIGHTWARDS DOUBLE ARROW	2923	5	NORTH WEST ARROW WITH HOOK
		FROM BAR	2924	1	NORTH EAST ARROW WITH HOOK
		= maps to	2925	5	SOUTH EAST ARROW WITH HOOK
2000		→ 27FC → long rightwards arrow from bar	2926	2	SOUTH WEST ARROW WITH HOOK
2908	ţ	DOWNWARDS ARROW WITH HORIZONTAL STROKE	2927	×	NORTH WEST ARROW AND NORTH EAST ARROW
2909	<b>†</b>	UPWARDS ARROW WITH HORIZONTAL STROKE	2928	X	NORTH EAST ARROW AND SOUTH EAST ARROW
290A	Î	UPWARDS TRIPLE ARROW	2929	X	SOUTH EAST ARROW AND SOUTH
		→ 21D1 ↑ upwards double arrow			WEST ARROW
		→ 27F0 1 upwards quadruple arrow	292A	×	SOUTH WEST ARROW AND NORTH
290B	$\Downarrow$	DOWNWARDS TRIPLE ARROW	0000		WEST ARROW
		<ul> <li>→ 21D3 ↓ downwards double arrow</li> <li>→ 27F1 ⊎ downwards quadruple arrow</li> </ul>	292B	×	RISING DIAGONAL CROSSING FALLING DIAGONAL
290C	←-	LEFTWARDS DOUBLE DASH ARROW	292C	X	FALLING DIAGONAL CROSSING
290D	-→	RIGHTWARDS DOUBLE DASH ARROW			RISING DIAGONAL
290E	<b></b>	LEFTWARDS TRIPLE DASH ARROW	292D	X	SOUTH EAST ARROW CROSSING
290F		RIGHTWARDS TRIPLE DASH ARROW	2025		NORTH EAST ARROW CROSSING
2910	<b>&gt;-</b> *	RIGHTWARDS TWO-HEADED TRIPLE	292E	X	NORTH EAST ARROW CROSSING SOUTH EAST ARROW
		DASH ARROW	292F	×	FALLING DIAGONAL CROSSING
2911	>	RIGHTWARDS ARROW WITH DOTTED STEM		,,	NORTH EAST ARROW
2912	<b>T</b>	UPWARDS ARROW TO BAR	2930	X	RISING DIAGONAL CROSSING SOUTH EAST ARROW
2913	1	DOWNWARDS ARROW TO BAR	2931	×	NORTH EAST ARROW CROSSING
2914	*	RIGHTWARDS ARROW WITH TAIL WITH VERTICAL STROKE			NORTH WEST ARROW
		= z notation partial injection	2932	X	NORTH WEST ARROW CROSSING
2915	<del>)  )</del>	RIGHTWARDS ARROW WITH TAIL	2933	<b>~</b> →	NORTH EAST ARROW WAVE ARROW POINTING DIRECTLY
		WITH DOUBLE VERTICAL STROKE	2933	. 4	RIGHT
		= z notation finite injection			→ 219D ~ rightwards wave arrow
2916	≫	RIGHTWARDS TWO-HEADED ARROW	2934	٦	ARROW POINTING RIGHTWARDS
		WITH TAIL			THEN CURVING UPWARDS
		<ul><li>= bijective mapping</li><li>= z notation bijection</li></ul>	2935	J	ARROW POINTING RIGHTWARDS
2917	<b>≻+</b> ≫	RIGHTWARDS TWO-HEADED ARROW	2020	.1	THEN CURVING DOWNWARDS
_011		WITH TAIL WITH VERTICAL STROKE	2936	Ų	ARROW POINTING DOWNWARDS THEN CURVING LEFTWARDS
		= z notation surjective injection	2937	۲,	ARROW POINTING DOWNWARDS
					THEN CURVING RIGHTWARDS

2938	ý	RIGHT-SIDE ARC CLOCKWISE ARROW	2955	ļ	DOWNWARDS HARPOON WITH BARB RIGHT TO BAR
2939	Ç	LEFT-SIDE ARC ANTICLOCKWISE ARROW	2956	⊬	LEFTWARDS HARPOON WITH BARB DOWN TO BAR
293A	~	TOP ARC ANTICLOCKWISE ARROW	2957	→	RIGHTWARDS HARPOON WITH BARB DOWN TO BAR
293B	<u>ب</u>	BOTTOM ARC ANTICLOCKWISE ARROW	2958	1	UPWARDS HARPOON WITH BARB
293C	?	TOP ARC CLOCKWISE ARROW WITH MINUS	2959	1	LEFT TO BAR DOWNWARDS HARPOON WITH BARB
293D	4	TOP ARC ANTICLOCKWISE ARROW WITH PLUS	295A	4	LEFT TO BAR LEFTWARDS HARPOON WITH BARB
293E	ی	LOWER RIGHT SEMICIRCULAR			UP FROM BAR
293F	G	CLOCKWISE ARROW LOWER LEFT SEMICIRCULAR	295B	1	RIGHTWARDS HARPOON WITH BARB UP FROM BAR
2940	Ó	ANTICLOCK WISE ARROW ANTICLOCK WISE CLOSED CIRCLE	295C	1	UPWARDS HARPOON WITH BARB RIGHT FROM BAR
		ARROW  → 20DA © combining anticlockwise ring	295D	Ţ	DOWNWARDS HARPOON WITH BARB RIGHT FROM BAR
0044	_	overlay	295E	$\vdash$	LEFTWARDS HARPOON WITH BARB
2941	Ò	CLOCKWISE CLOSED CIRCLE ARROW  → 20D9 © combining clockwise ring overlay	295F	$\vdash$	DOWN FROM BAR RIGHTWARDS HARPOON WITH BARB
2942	↔	RIGHTWARDS ARROW ABOVE SHORT LEFTWARDS ARROW	2960	1	DOWN FROM BAR UPWARDS HARPOON WITH BARB
2943	$\leftarrow$	LEFTWARDS ARROW ABOVE SHORT RIGHTWARDS ARROW	2961	1	LEFT FROM BAR DOWNWARDS HARPOON WITH BARB
2944	↔	SHORT RIGHTWARDS ARROW ABOVE		`	LEFT FROM BAR
2945	<del>→</del>	LEFTWARDS ARROW RIGHTWARDS ARROW WITH PLUS BELOW	2962	=	LEFTWARDS HARPOON WITH BARB UP ABOVE LEFTWARDS HARPOON WITH BARB DOWN
2946	←	LEFTWARDS ARROW WITH PLUS BELOW	2963	11	UPWARDS HARPOON WITH BARB LEFT BESIDE UPWARDS HARPOON
2947 2948	<del>-×</del> >	RIGHTWARDS ARROW THROUGH X	2964	$\Rightarrow$	WITH BARB RIGHT RIGHTWARDS HARPOON WITH BARB
	<del>(0)</del>	LEFT RIGHT ARROW THROUGH SMALL CIRCLE			UP ABOVE RIGHTWARDS HARPOON WITH BARB DOWN
2949	₹	UPWARDS TWO-HEADED ARROW FROM SMALL CIRCLE	2965	11	DOWNWARDS HARPOON WITH BARB LEFT BESIDE DOWNWARDS
294A	<b>←</b>	LEFT BARB UP RIGHT BARB DOWN HARPOON	2966	_	HARPOON WITH BARB RIGHT LEFTWARDS HARPOON WITH BARB
294B	~	LEFT BARB DOWN RIGHT BARB UP HARPOON	2900	<b>=</b>	UP ABOVE RIGHTWARDS HARPOON WITH BARB UP
294C	1	UP BARB RIGHT DOWN BARB LEFT HARPOON	2967	=	LEFTWARDS HARPOON WITH BARB DOWN ABOVE RIGHTWARDS
294D	1	UP BARB LEFT DOWN BARB RIGHT HARPOON	0000		HARPOON WITH BARB DOWN
294E	_	LEFT BARB UP RIGHT BARB UP HARPOON	2968	=	RIGHTWARDS HARPOON WITH BARB UP ABOVE LEFTWARDS HARPOON WITH BARB UP
294F	ţ	UP BARB RIGHT DOWN BARB RIGHT HARPOON	2969	=	RIGHTWARDS HARPOON WITH BARB
2950	$\overline{}$	LEFT BARB DOWN RIGHT BARB			DOWN ABOVE LEFTWARDS HARPOON WITH BARB DOWN
2951	1	DOWN HARPOON UP BARB LEFT DOWN BARB LEFT	296A	<b>=</b>	LEFTWARDS HARPOON WITH BARB UP ABOVE LONG DASH
2952	<u>-</u>	HARPOON LEFTWARDS HARPOON WITH BARB	296B	=	LEFTWARDS HARPOON WITH BARB DOWN BELOW LONG DASH
2953	<b>–</b>	UP TO BAR RIGHTWARDS HARPOON WITH BARB	296C	=	RIGHTWARDS HARPOON WITH BARB UP ABOVE LONG DASH
2954	<b>T</b>	UP TO BAR UPWARDS HARPOON WITH BARB	296D	=	RIGHTWARDS HARPOON WITH BARB
2004	1	RIGHT TO BAR			DOWN BELOW LONG DASH

- 296E 11 UPWARDS HARPOON WITH BARB LEFT BESIDE DOWNWARDS HARPOON WITH BARB RIGHT
- 296F I DOWNWARDS HARPOON WITH BARB LEFT BESIDE UPWARDS HARPOON WITH BARB RIGHT
- 2970 = RIGHT DOUBLE ARROW WITH ROUNDED HEAD → 2283 ⊃ superset of
- 2971 ⇒ EQUALS SIGN ABOVE RIGHTWARDS ARROW
- 2972 → TILDE OPERATOR ABOVE RIGHTWARDS ARROW
- 2973 ← LEFTWARDS ARROW ABOVE TILDE OPERATOR
- 2974 ⇒ RIGHTWARDS ARROW ABOVE TILDE OPERATOR
- 2975 

  ⇒ RIGHTWARDS ARROW ABOVE ALMOST EQUAL TO
- 2976 ≤ LESS-THAN ABOVE LEFTWARDS ARROW
- 2977 ← LEFTWARDS ARROW THROUGH LESS-THAN
- 2978 ≥ GREATER-THAN ABOVE RIGHTWARDS ARROW
- 2979 ⊆ SUBSET ABOVE RIGHTWARDS ARROW
- 297A ← LEFTWARDS ARROW THROUGH SUBSET
- 297B ≥ SUPERSET ABOVE LEFTWARDS ARROW

## Fish tails

- 297C ← LEFT FISH TAIL
- 297D → RIGHT FISH TAIL
- 297E ↑ UP FISH TAIL