

2ND AUXILIARY SPINDLES (LINE BORING UNITS)

T301
T302
T303
.
T399

When used in either AUTO/MEM or MDI mode, the above T codes will cause:

- The indicated T code to become modal.
- All T codes not in the 300 series to be canceled.
- The indicated spindle to lower to the active position and rotate if an M03 is issued with an S code and the spindle down proximity switch is true.
- The accompanying spindle (if applicable) to lower to the active position if an M03 is issued with an S code and the spindle down proximity switch is true.
- All active spindles / tools not in the 300 series to raise to the inactive position and cease to rotate.

OPTIONAL BINARY T CODES - LINE BORING UNITS

The main advantage to programming the line boring unit(s) in binary code is to shorten cycle time.

T301 = T0001 M9#	T314 = T0001 M9#	T323 = T0001 M9#	T336 = T0001 M9#
T302 = T0002 M9#	T315 = T0002 M9#	T324 = T0002 M9#	T337 = T0002 M9#
T303 = T0004 M9#	T316 = T0004 M9#	T325 = T0004 M9#	T338 = T0004 M9#
T304 = T0008 M9#	T317 = T0008 M9#	T326 = T0008 M9#	T339 = T0008 M9#
T305 = T0016 M9#	T318 = T0016 M9#	T327 = T0016 M9#	T340 = T0016 M9#
T306 = T0032 M9#	T319 = T0032 M9#	T328 = T0032 M9#	T341 = T0032 M9#
T307 = T0064 M9#	T320 = T0064 M9#	T329 = T0064 M9#	T342 = T0064 M9#
T308 = T0128 M9#	T321 = T0128 M9#	T330 = T0128 M9#	T343 = T0128 M9#
T309 = T0256 M9#	T322 = T0256 M9#	T331 = T0256 M9#	T344 = T0256 M9#
T310 = T0512 M9#		T332 = T0512 M9#	
T311 = T1024 M9#	(T301-T322 are one	T333 = T1024 M9#	(T323-T344 are one
T312 = T2048 M9#	head)	T334 = T2048 M9#	head)
T313 = T4096 M9#		T335 = T4096 M9#	

M9# represents the main spindle associated with the line boring unit:

- M91 = a line boring unit associated with spindle 101 or 201
- M92 = a line boring unit associated with spindle 102 or 202
- M93 = a line boring unit associated with spindle 103 or 203
- M94 = a line boring unit associated with spindle 104 or 204
- M95 = a line boring unit associated with spindle 105 or 205
- M96 = a line boring unit associated with spindle 106 or 206

For example, to call T302, T305, T306 and T310 at once:

<u>existing code</u>	<u>binary code</u>	
T302	T0562 M91	(2+16+32+512 = 562)
T305	M03 S2000	
T306		
T310		
M03 S2000		

T301	T302	T303	T304	T305	T306	T307	T308	T309	T310	T311	T312	T313
T0001	T0002	T0004	T0008	T0016	T0032	T0064	T0128	T0256	T0512	T1024	T2048	T4096
0	1	0	0	1	1	0	0	0	1	0	0	0