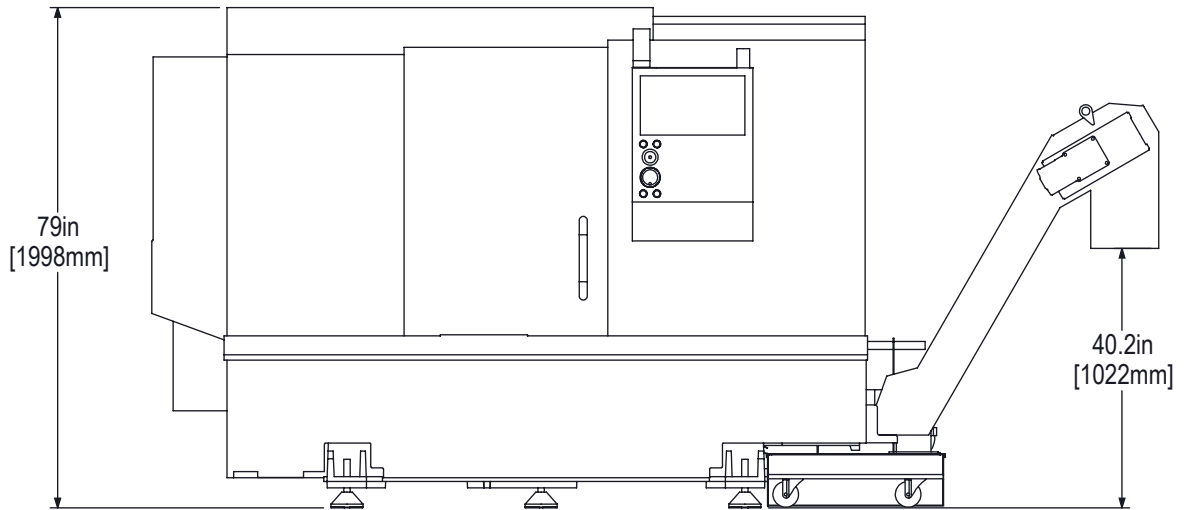
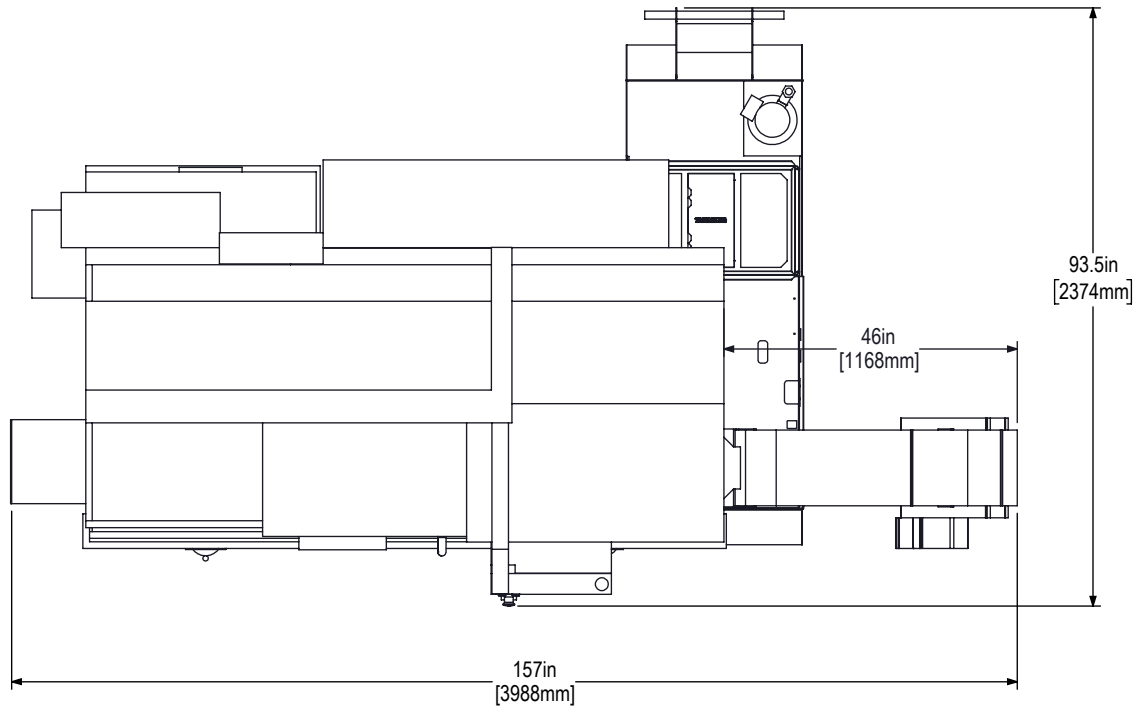


FRONT VIEW - OPERATIONAL HEIGHT DIMENSIONS



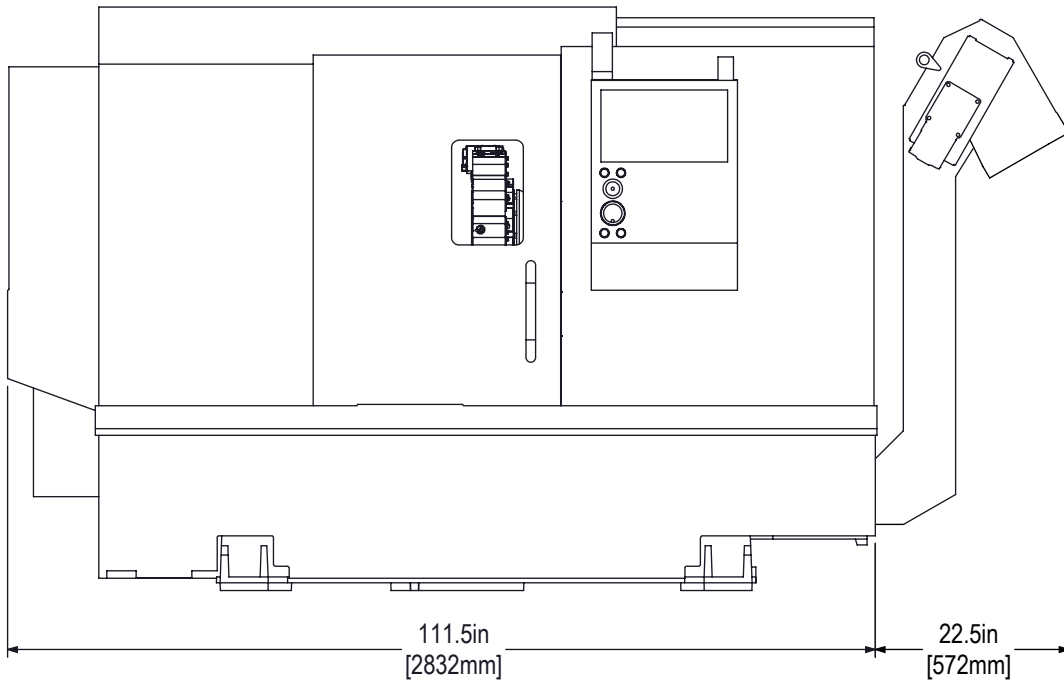
REFER TO THE INSTALLATION INSTRUCTIONS FOR STEP BY STEP GUIDANCE

TOP VIEW - OPERATIONAL DEPTH AND WIDTH DIMENSIONS



DRAWINGS NO TO SCALE

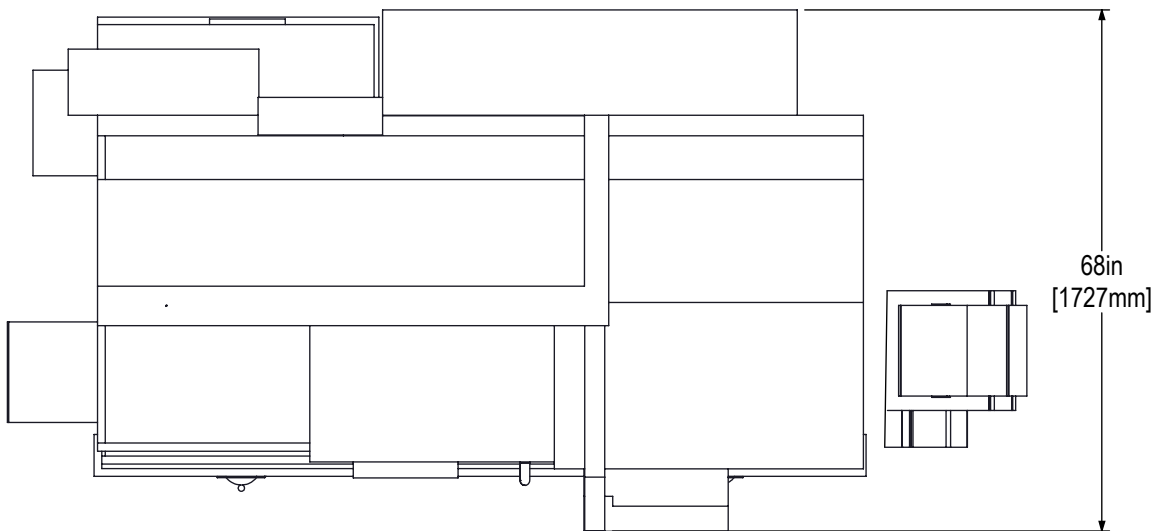
70in. [1778mm]
ADDITIONAL DISTANCE
NEEDED FOR INSTALLATION
OR REMOVAL OF CONVEYOR



TOP VIEW - OPERATIONAL DEPTH AND WIDTH DIMENSIONS

LEVELING SCREWS AND PADS ARE REMOVED TO REDUCE HEIGHT

TOP VIEW - SHIPPING

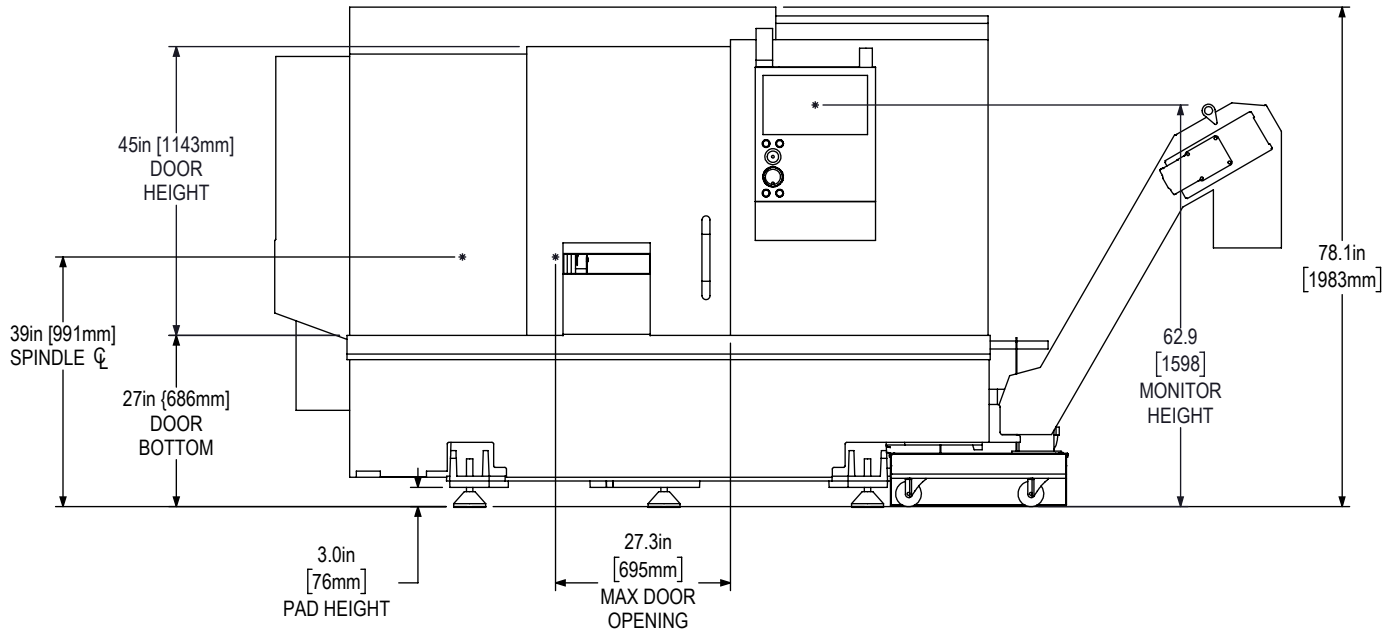


DIMENSIONS SHOWN WITH MACHINE OFF OF THE PALLET

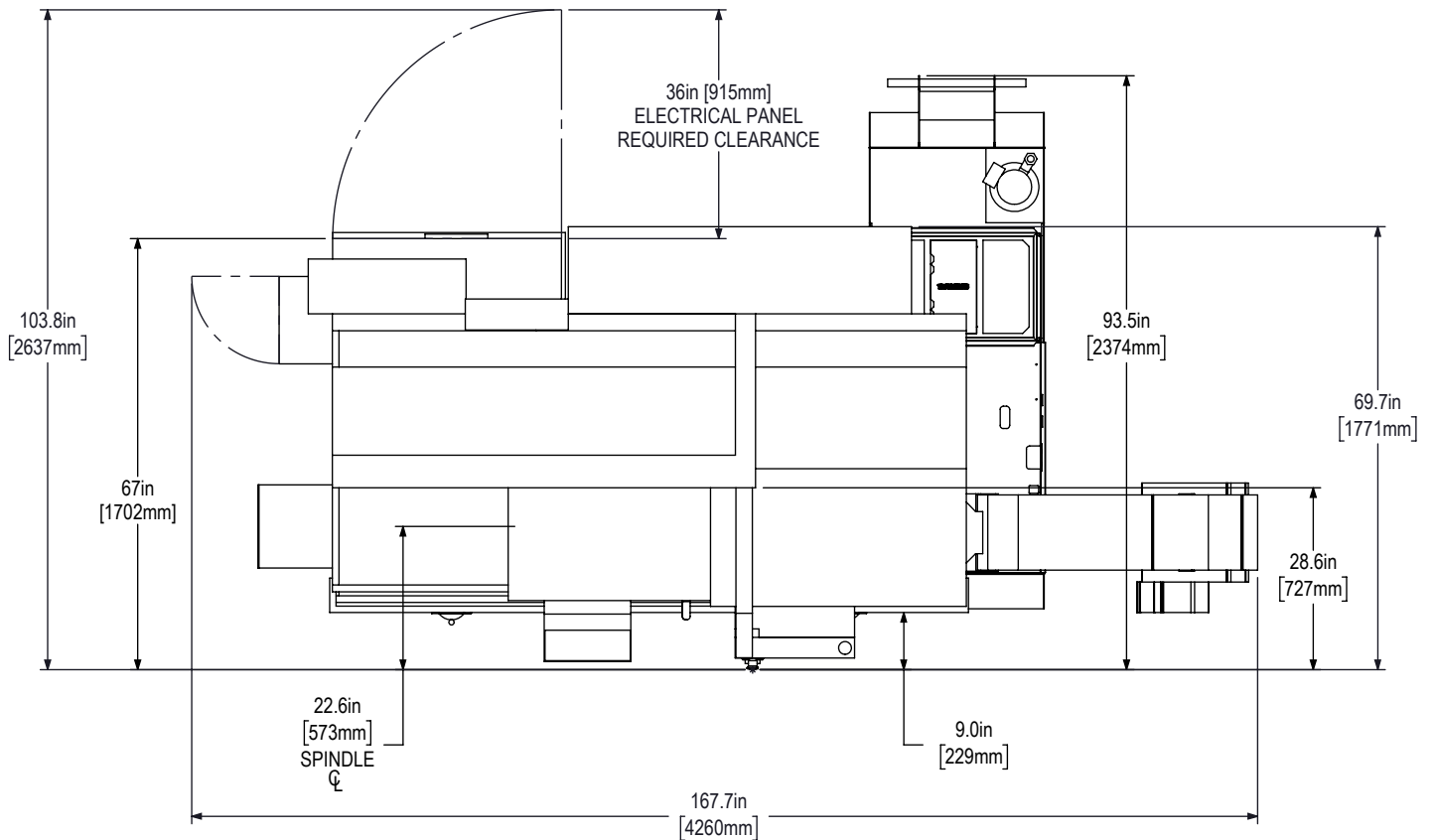
OPTIONAL CONVEYOR SHIPS BOLTED TO MACHINE AS SHOWN ABOVE



FRONT VIEW - HEIGHT DIMENSIONS



TOP VIEW - DEPTH AND WIDTH DIMENSIONS

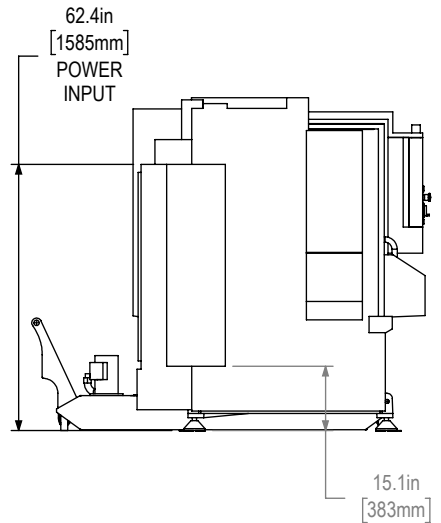
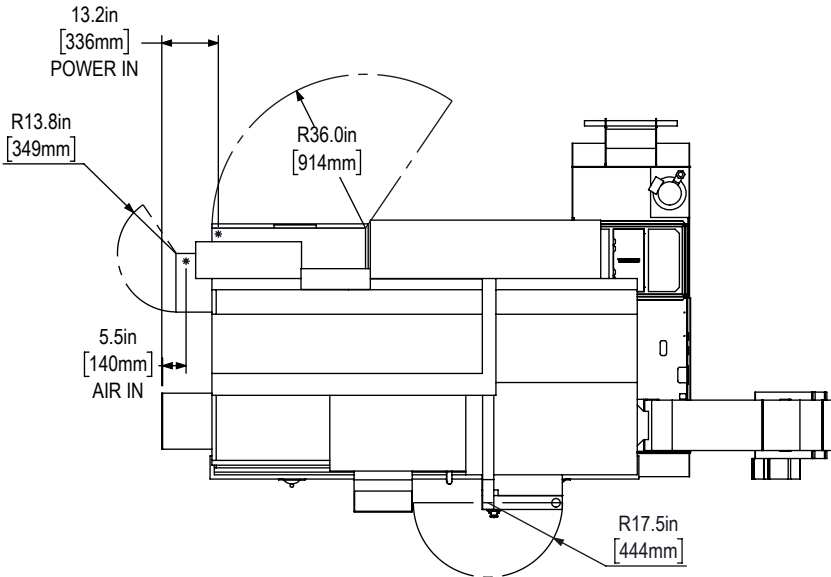




AIR & POWER

TOP VIEW

LEFT SIDE VIEW

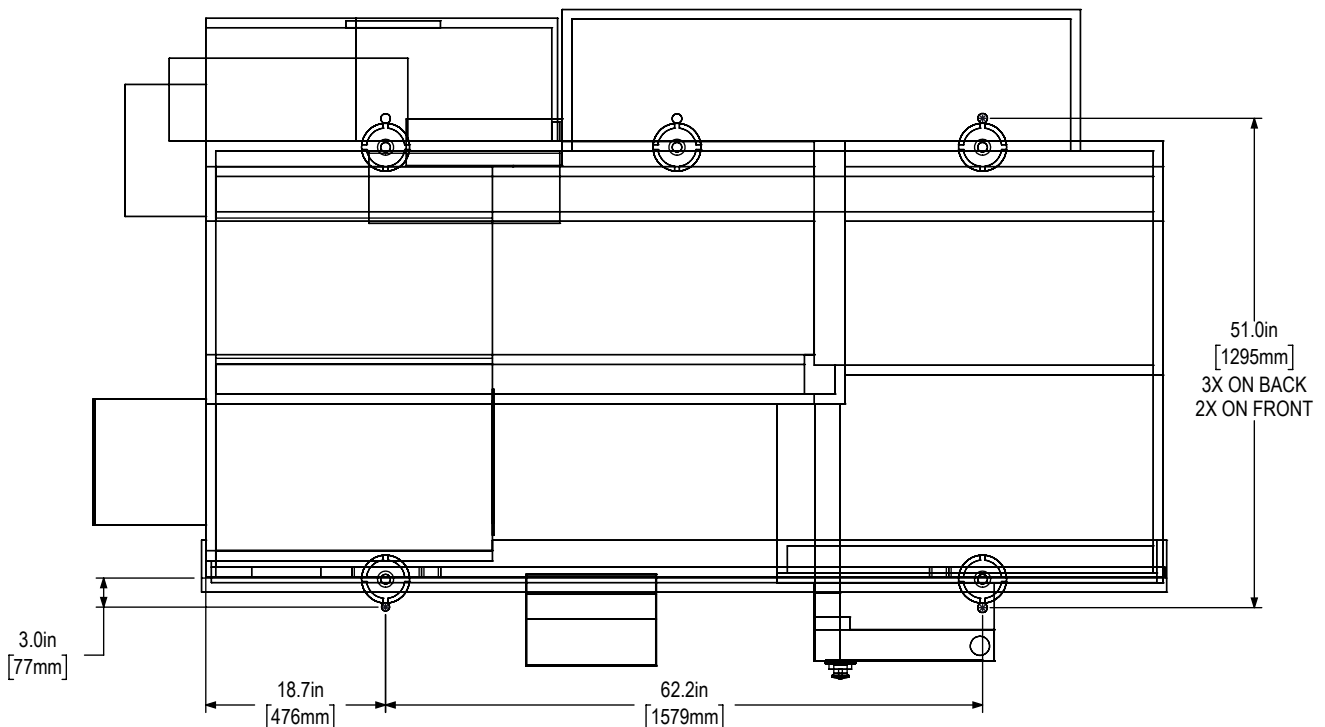


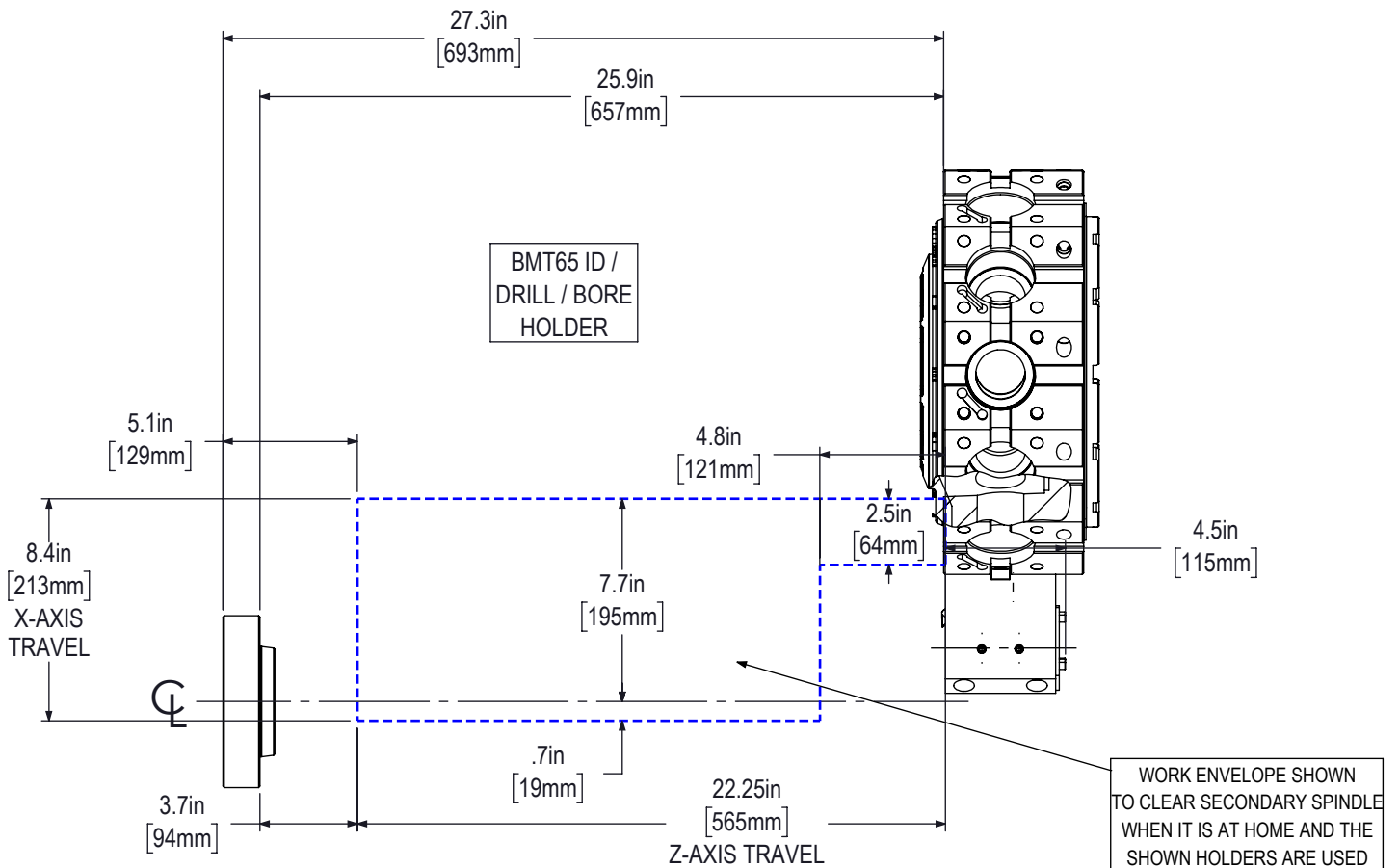
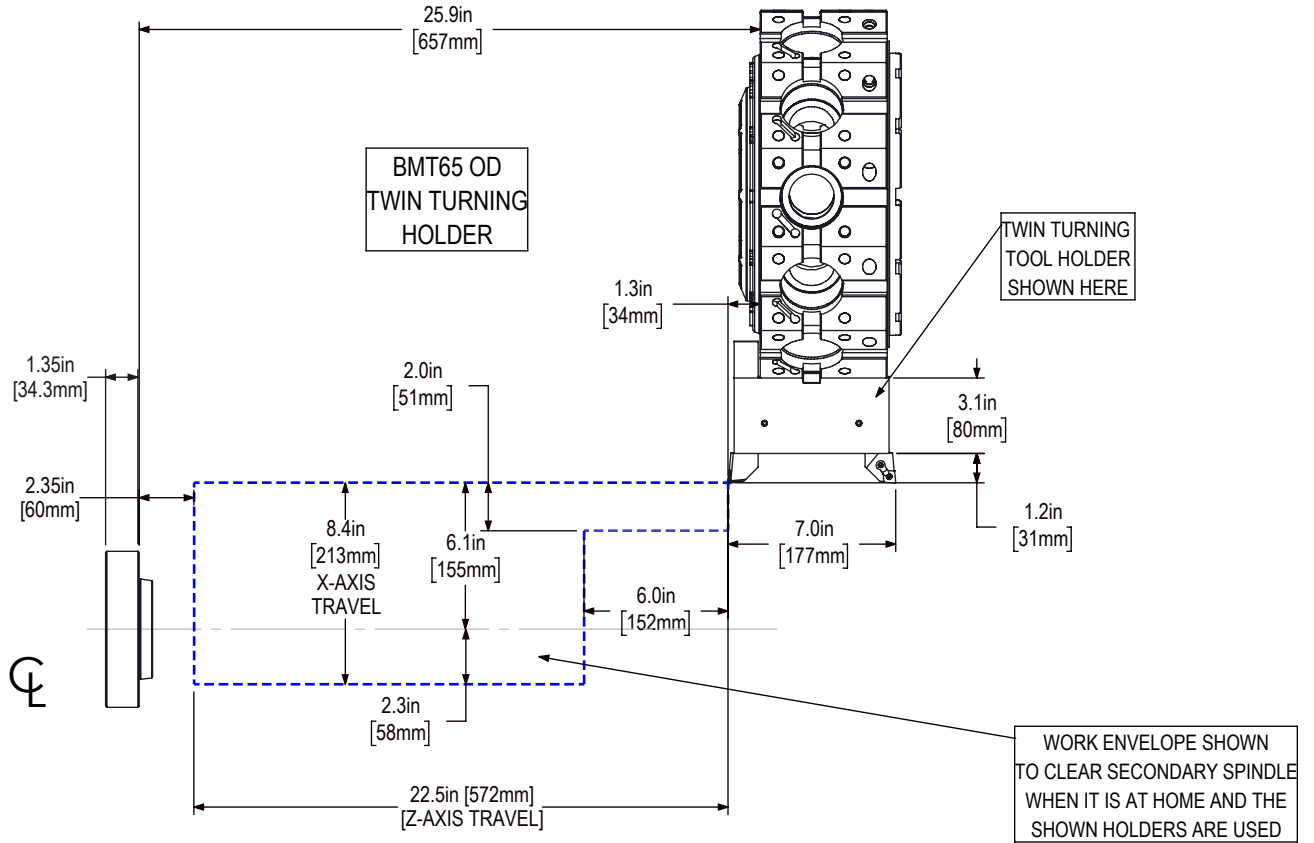
* MAINTAIN 3-ft [915mm] CLEARANCE TO THE NEAREST OBSTRUCTION AROUND ALL SIDES OF MACHINE PERIMETER

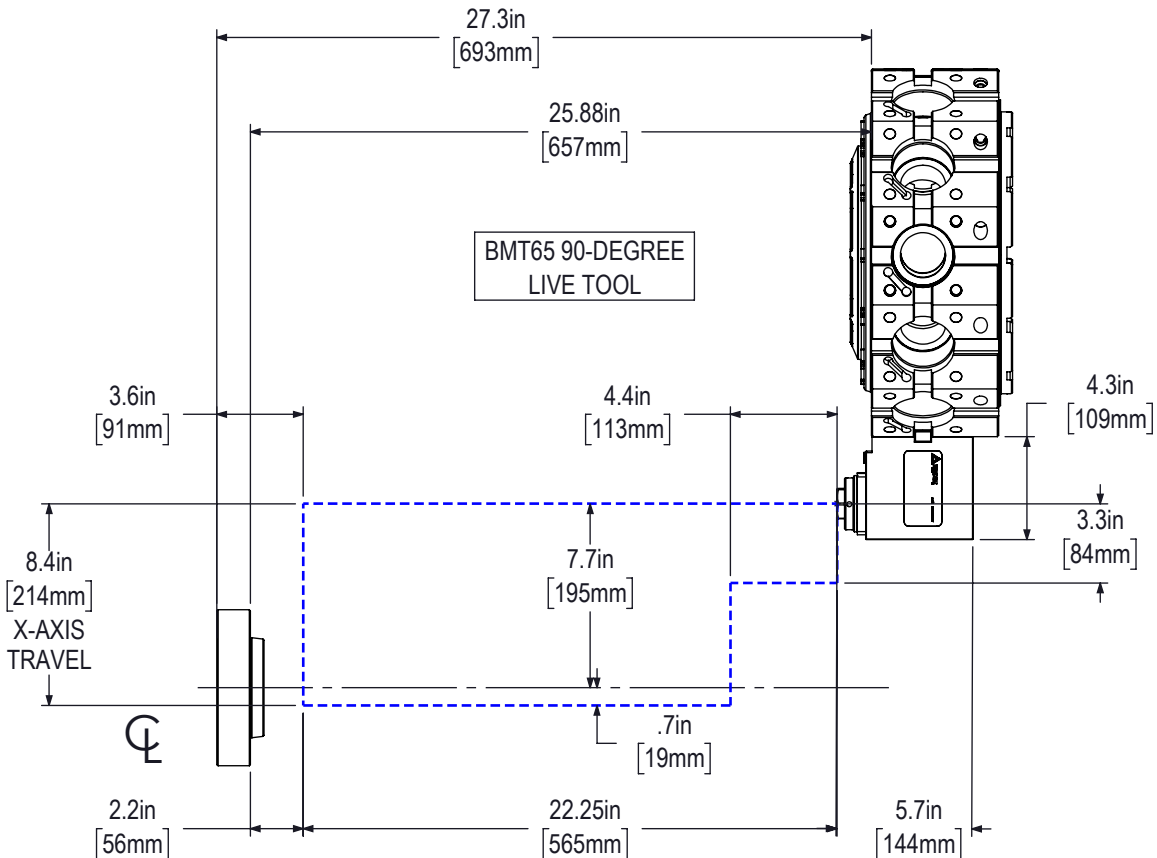
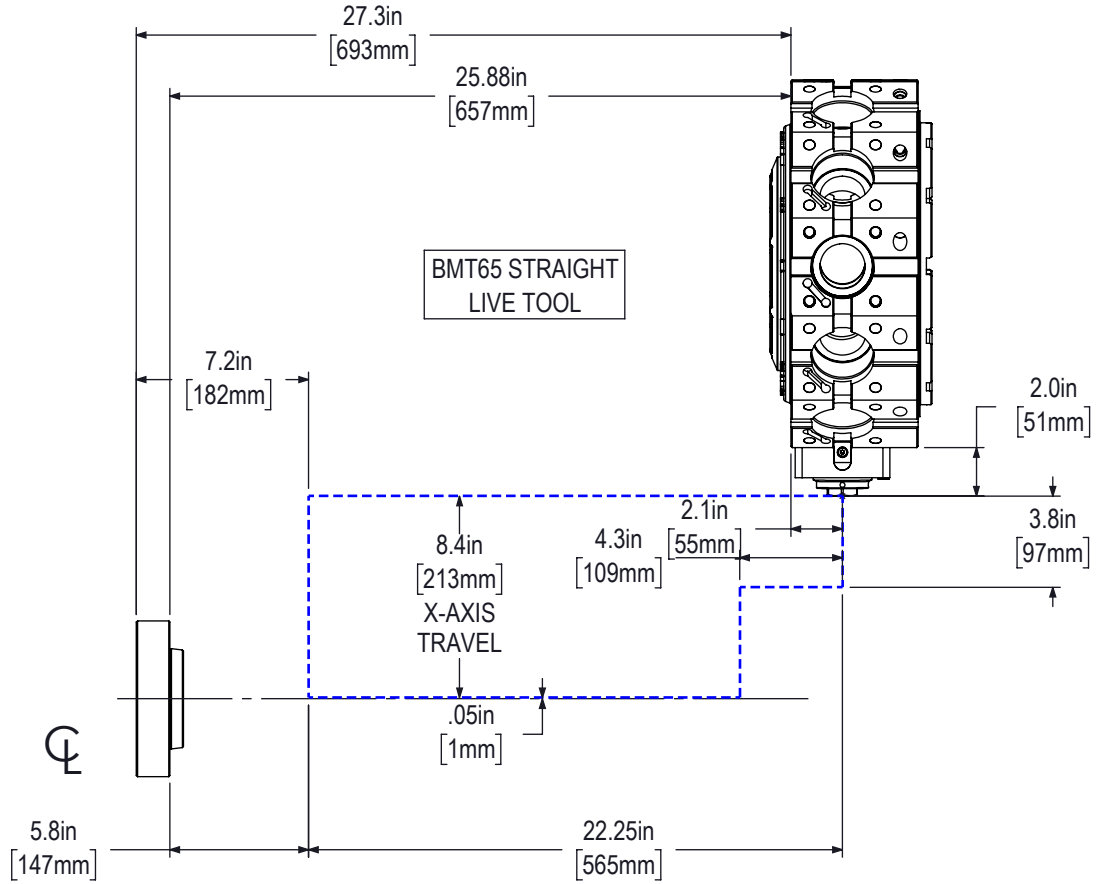
NOTE: MACHINE MUST BE PLACED ON ONE CONTINUOUS CONCRETE SLAB. SLAB SHOULD EXTEND 12in. [305mm] BEYOND ANCHOR HOLES IN ALL DIRECTIONS.

ANCHOR HOLE DETAILS:
 Ø 0.62in [16mm]
 ∇ 2in [51mm]
 ∇ 2.25in [57mm]

TOP VIEW - ANCHOR PATTERN

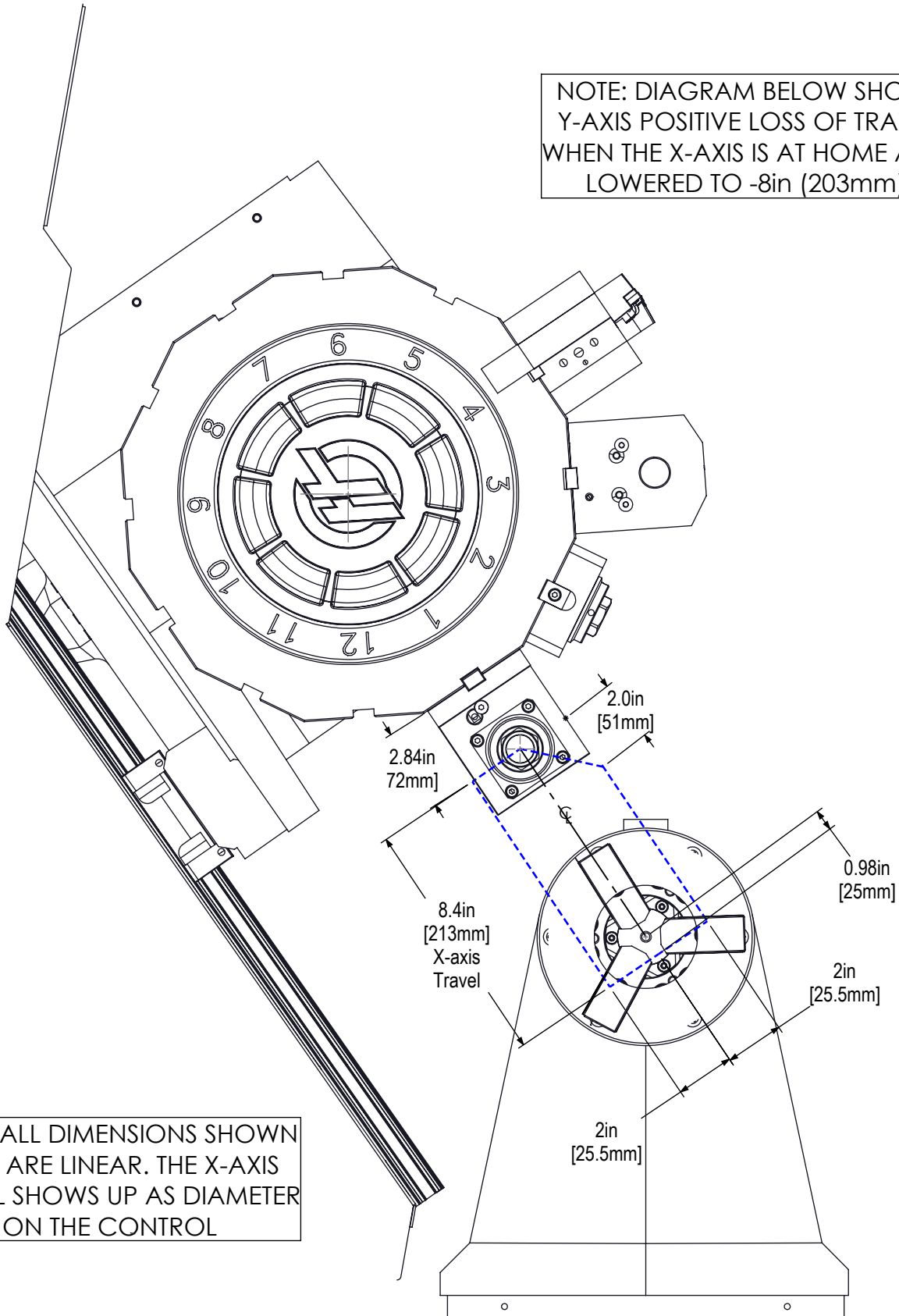






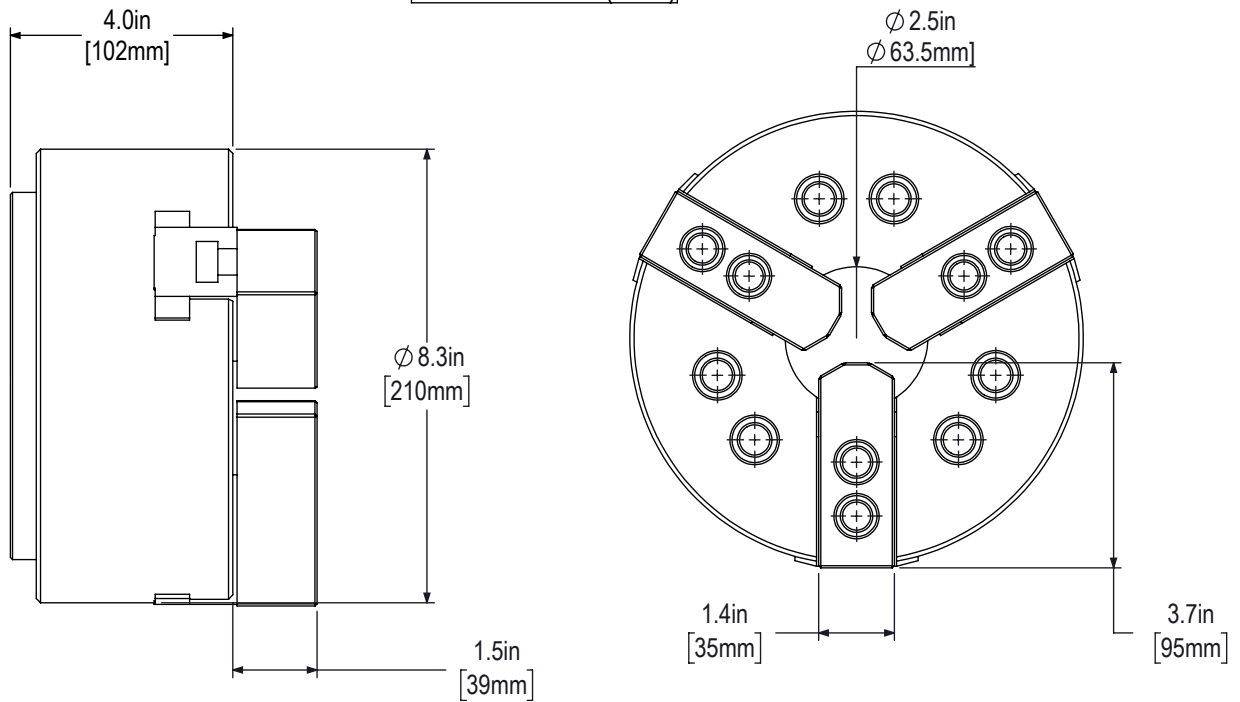
VIEW TOWARDS SUB-SPINDLE

NOTE: DIAGRAM BELOW SHOWS Y-AXIS POSITIVE LOSS OF TRAVEL WHEN THE X-AXIS IS AT HOME AND LOWERED TO -8in (203mm)



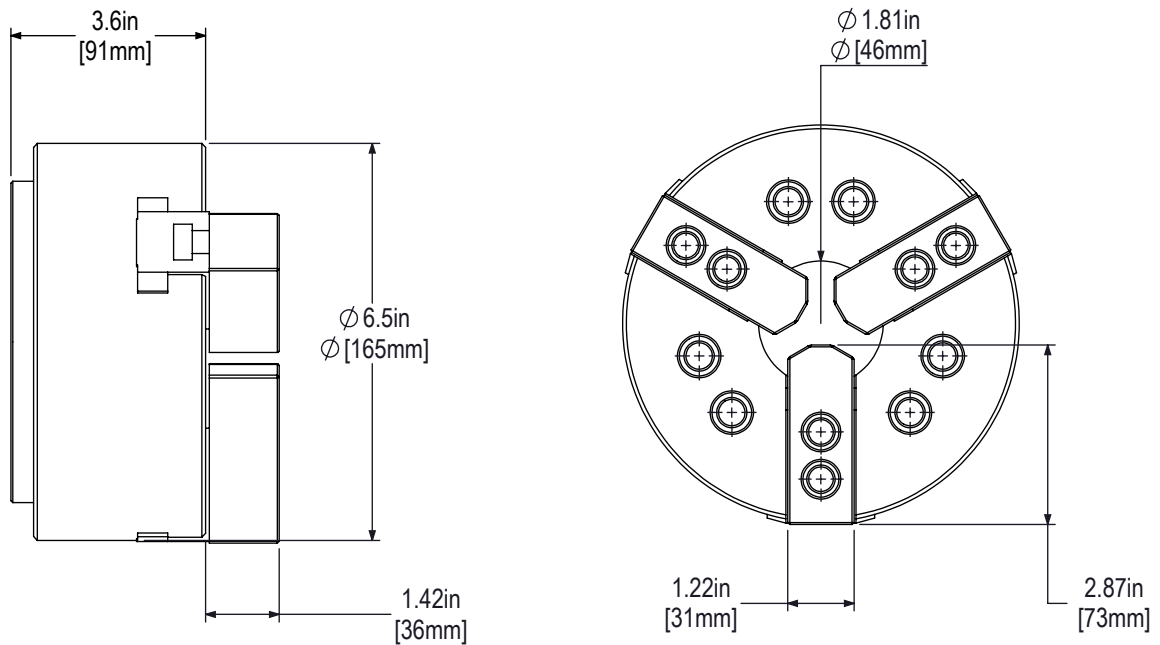
NOTE: ALL DIMENSIONS SHOWN HERE ARE LINEAR. THE X-AXIS TRAVEL SHOWS UP AS DIAMETER ON THE CONTROL

MAIN SPINDLE (A2-6)



DIMENSIONS MAY VARY PER MANUFACTURER

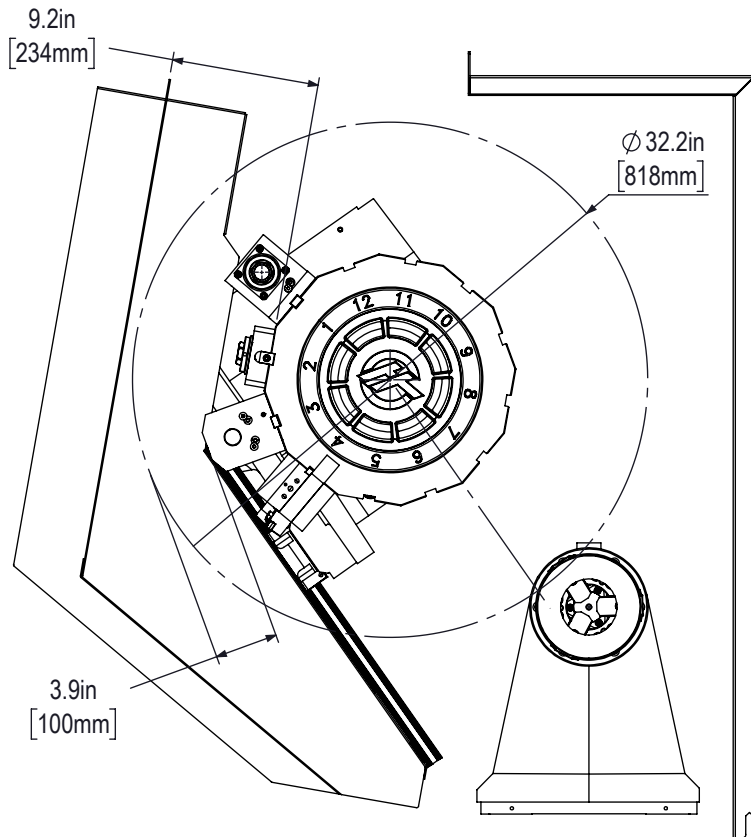
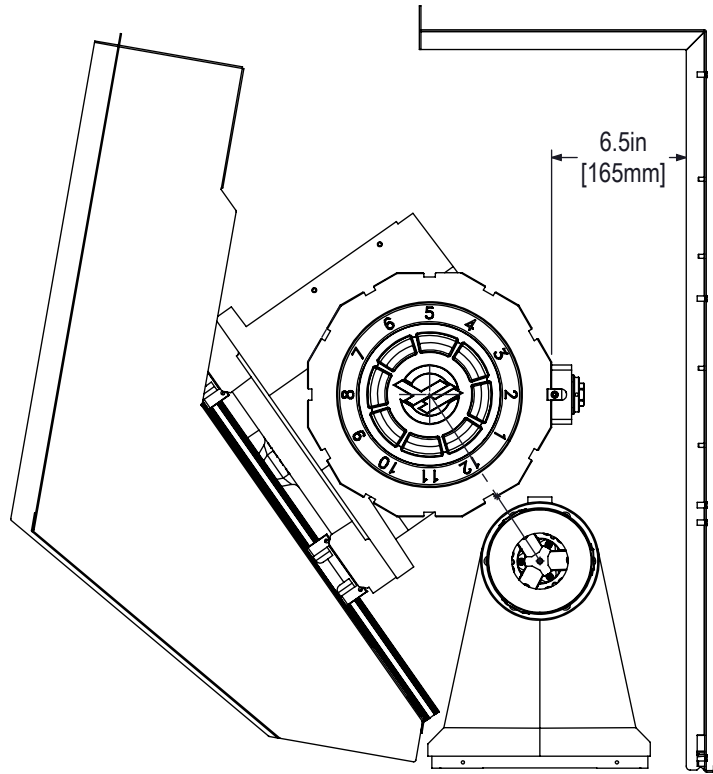
SECONDARY SPINDLE (A2-5)



DIMENSIONS MAY VARY PER MANUFACTURER

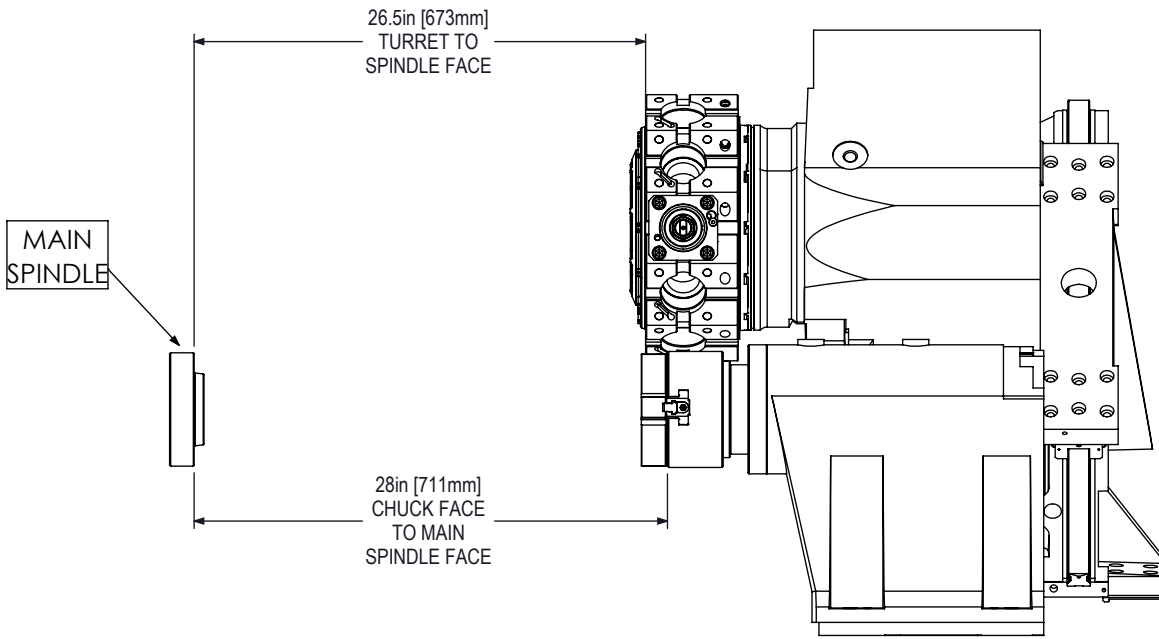
MAXIMUM TOOLING LENGTH
OF TOOLS BEFORE
INTERFERENCE, WHEN THE
Y-AXIS IS AT 2.0in [51mm]
AND THE X-AXIS FULL TRAVEL

OPERATOR MUST BE AWARE
OF THE POSSIBLE
INTERFERENCES AT ALL TIMES.
EVERY APPLICATION PRESENTS
DIFFERENT REQUIRMENTS

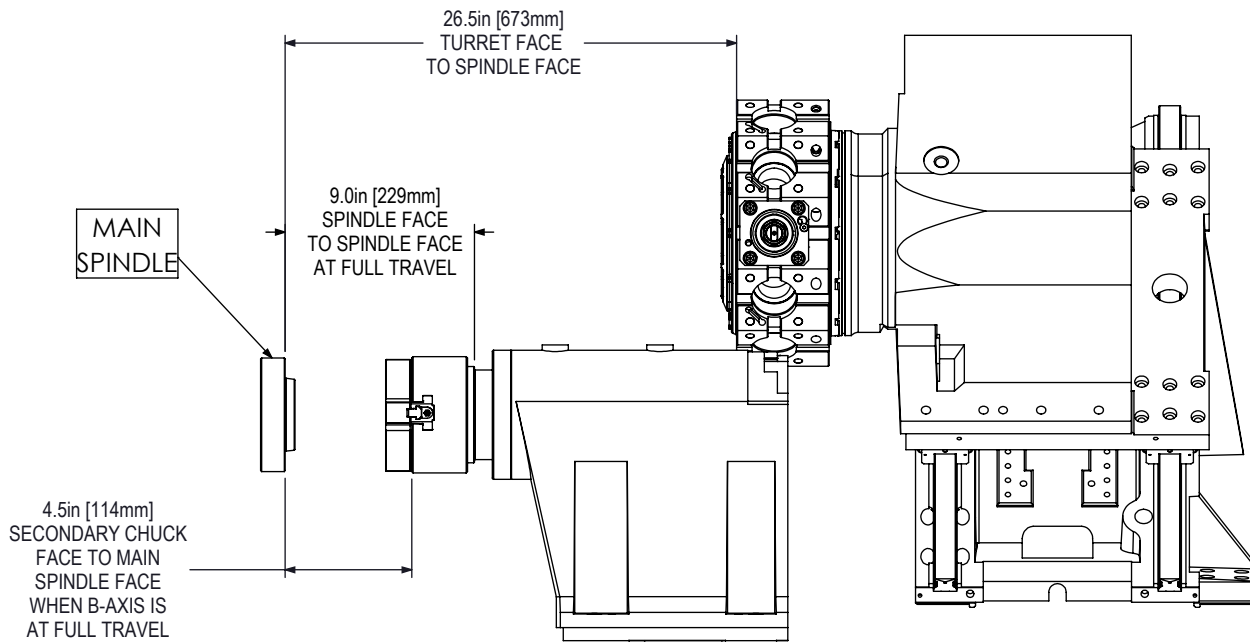


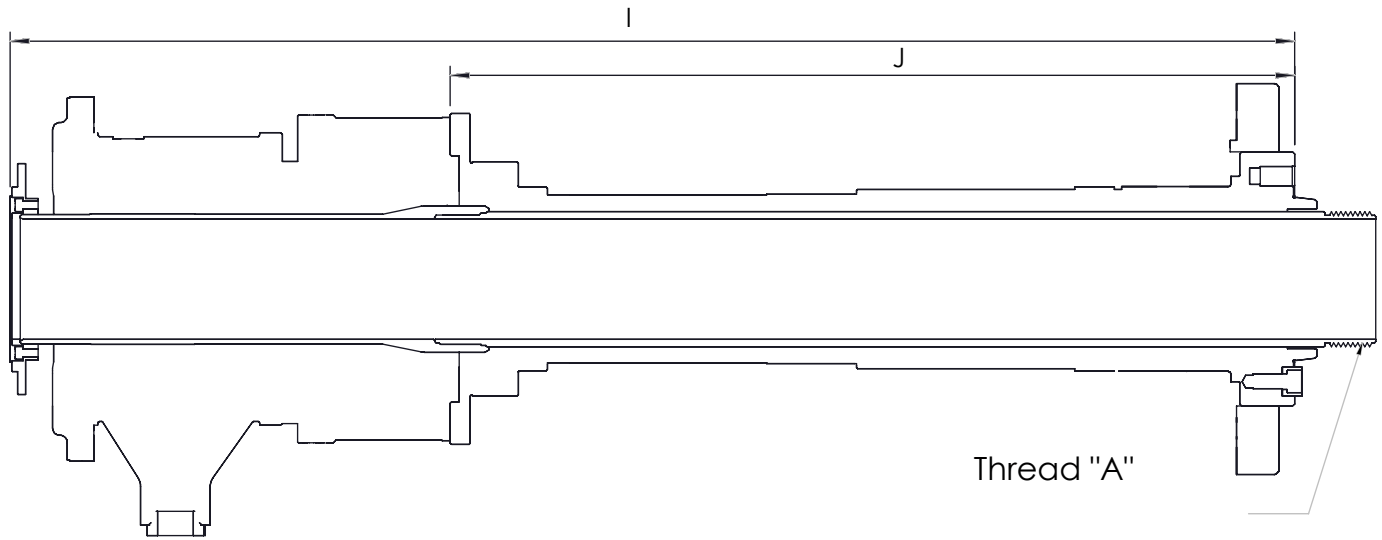
MAXIMUM TOOLING LENGTH
OF TOOLS BEFORE
INTERFERENCE IS AS SHOWN
WHEN THE Y-AXIS IS AT
-2.0in [51mm] AND THE
X-AXIS AT HOME

OPERATOR MUST BE AWARE
OF THE POSSIBLE
INTERFERENCES AT ALL TIMES.
EVERY APPLICATION PRESENTS
DIFFERENT REQUIRMENTS

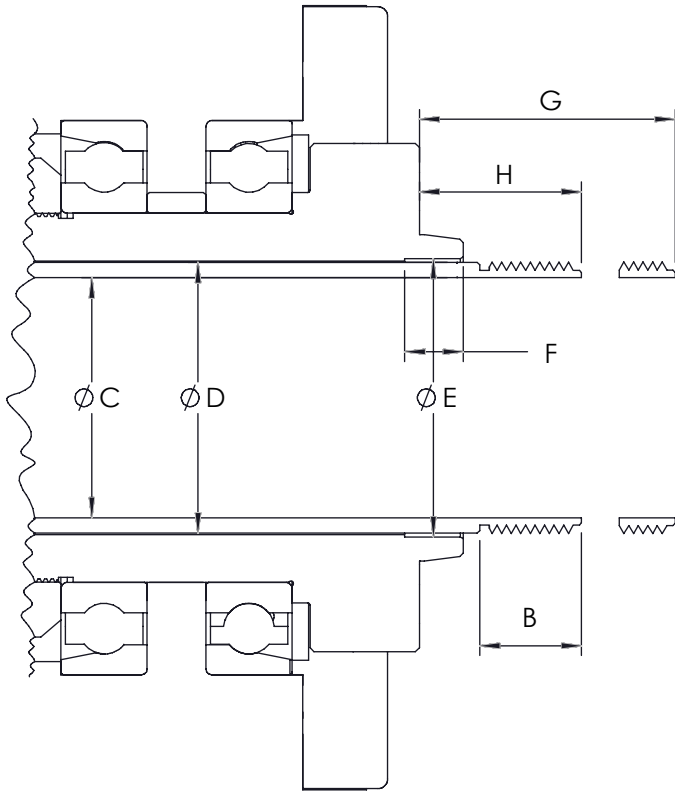


SECONDARY SPINDLE TRAVELS



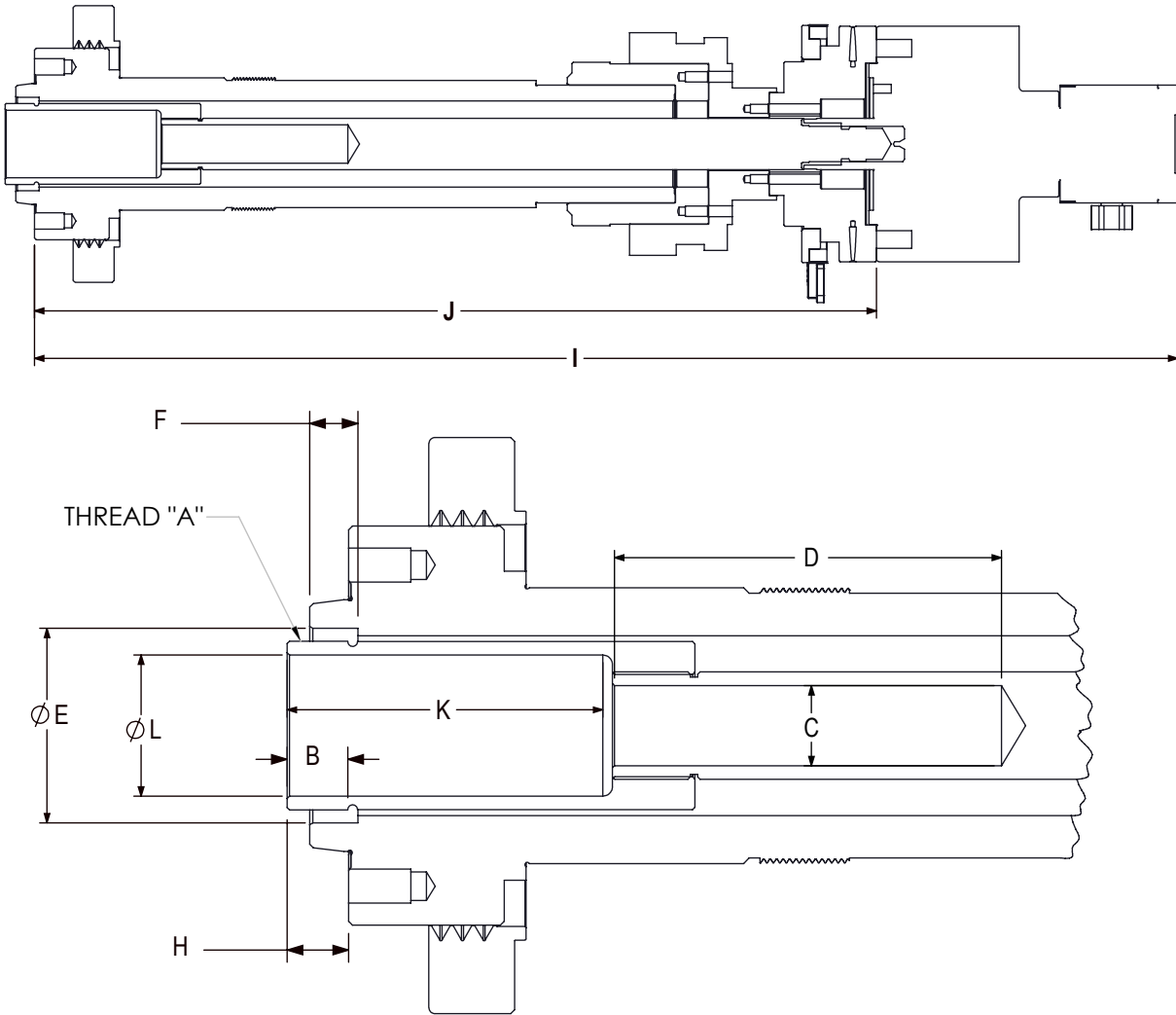


SPINDLE NOSE DETAILS
PER AMERICAN STANDARD
BULLETIN ASA B5.9 (ANSI)



DESCRIPTION	DIM LETTER	DS-20Y / 25Y	
		SAE (in)	METRIC (mm)
SPINDLE TYPE		A2-6	
THREAD TYPE	A	M75 X 2.0	
INTERNAL OR EXTERNAL		EXTERNAL	
LENGTH OF THREAD	B	1.26	32
DRAWTUBE INTERNAL \varnothing	C	2.56	65
SPINDLE INTERNAL \varnothing	D	3.50	89
COUNTERBORE INTERNAL \varnothing	E	3.250	82.6
COUNTERBORE DEPTH	F	1.50	38
*DRAWTUBE EXTENDED	G	2.4	61
*DRAWTUBE RETRACTED	H	1.4	36.0
SPINDLE FACE TO BACK OF UNION	I	31.50	800
SPINDLE FACE TO UNION ADAPTER	J	22.25	565

*DUE TO VENDOR VARIATIONS AND TOLERANCE BUILD-UP, HAAS STRONGLY RECCOMENDS MEASURING DIRECTLY ON THE MACHINE



SPINDLE NOSE DETAILS PER AMERICAN STANDARD BULLETIN ASA B5.9 (ANSI)

DESCRIPTION	DIM LETTER	DS-20Y / 25Y	
		SAE (in)	METRIC (mm)
SPINDLE TYPE		A2-5	
THREAD TYPE		M55 X 2.0	
INTERNAL OR EXTERNAL	A	EXTERNAL	
LENGTH OF THREAD	B	.84	21.3
DRAWBAR BORE Ø	C	1.03	26.2
DRAWBAR BORE DEPTH Ø	D	4.91	124.7
SPINDLE COUNTERBORE INTERNAL Ø	E	2.50	63.5
SPINDLE COUNTERBORE DEPTH	F	0.62	15.7
DRAWBAR EXTENDED	-	1.77	45
DRAWBAR RETRACTED	H	.79	20
SPINDLE FACE TO BACK OF UNION	I	30.71	780
SPINDLE FACE TO UNION ADAPTER	J	22.56	573
EJECTOR POCKET DEPTH	K	4.18	106.2
EJECTOR POCKET DIAMETER	L	1.81	46

*DUE TO VENDOR VARIATIONS AND TOLERANCE BUILD-UP, HAAS STRONGLY RECCOMENDS MEASURING DIRECTLY ON THE MACHINE