



## Sub Spindle PickUp – Hyundai-Kia SKT LMS Lathe Series

### Application Notes

The following code sequence contains all the pieces needed to perform a Sub-Spindle Pick off with a Hyundai-Kia SKT LMS series machine. Caution must be used when executing code. When the Sub-Spindle is in the forward position a collision between the turret and the Sub-spindle is possible.

### Sub-Spindle Pick-Up

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G28B0. (SEND Sub-Spindle (B-Axis) To Home Position)
G28U0.M05 (Send Turret (X-Axis) To Home Position)
G30W0. (Send Sub-Spindle to 2nd Home Position Clear Of Sub-Spindle)
G0 T0707 (Call Cut Off Tool)
G0W-1.25 (Move Tool Closer to the Main Spindle)
G97S0 (Change Spindle Mode to Rpm/Minute - Set to 0 Rpm)
M3 (Start Spindle Forward)
M110 (Activate Sub-Spindle)
M113 (Start Sub-Spindle Forward)
M160 (Command Non-Phased Synchronization)
M162 (Command Non-Phased Synchronization)
M119 (Open Sub-Chuck)
G54G0B-##.### (Position Sub-Spindle .05 Off Work Piece Z0.)
G98 (Command Feed/Minute)
G1B-##.###F10. (Feed On to Part Slowly)
G1B-##.###F20. (Feed to Pickoff Position)
M118 (Close Sub-Chuck)
M69 (Open Main Chuck)
G1B-##.###F20. (Pull Piece to Desired Cutoff Position)
M68 (Close Main Chuck)
(CUT OFF)
G99 (Command Feed/Rev Mode)
(Insert Turning Program Here)
G28U0. (Send Turret (X-Axis) To Home Position)
T0700 (Cancel Tool Offsets)
G98 (change to Feed/Minute)
G1B-##.###F30. (Move Spindle a Little Away From Work Area)
G0G30B0. (Send Sub-Spindle to 2nd Home Position)
M161 (Turn Off Synchronization)
M05 (Command Main Spindle Stop)
M115 (Command Sub-Spindle Stop)
G99 (Command Feed/Rev Mode)
G28U0.
G30W0.
(SUB WORK)
G0T0222(Call Tool 2 Tool Offset 22)
M55 (Command Work on Sub-Spindle)
M110 (Activate Sub-Spindle)
G97S357M114
G0G55X#.#5Z-.1 (Position Cutter Near Sub-Work Piece - Notice -Z Value)
(Insert Turning Program Here)
G0Z-.1
G30W0.M115
```



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G28U0.  
M54 (Command Work on Main Spindle)