

# Service Pointers

## The MARK V Vertical Drill Press & Horizontal Boring Machine

Here is a listing of the most common problems encountered by users of the Shopsmith Drill Press and Horizontal Boring Machine functions . . . along with their causes and recommended solutions. If you are encountering any of these problems, chances are, your solution is right here.

If you have tried these remedies and they didn't work...or if you're experiencing difficulties that are not listed here, feel free to call **Shopsmith's TOLL-FREE Technical Services Hotline (1-800-762-7555)** for the answer or send an e-mail to "ASK SMITTY".

<b>Problem</b>	<b>Possible Cause</b>	<b>Remedy</b>
Drill Chuck hard to adjust	Chuck is sticking	Apply graphite
	Chuck is corroded	Replace chuck
	Internal gears are broken	Replace chuck
Chuck wobbles	Chuck loose on spindle	Tighten chuck setscrew
	Defective chuck	Replace chuck
Bit wanders, resulting in off-center hole	Bit dull	Sharpen bit
	Bit loose in chuck	Tighten Chuck jaws
	Bit not aligned	Align bit
	Nylon drive is worn	Replace nylon drive
	Bit bent	Replace bit
	Chuck loose on spindle	Tighten chuck setscrew
	Main spindle bent	Replace spindle (factory job)
Entrance of hole is ragged	Quill bearing worn	Replace quill bearing (factory job)
	Bit dull	Sharpen bit
	Wrong type of bit	Switch to proper type of bit for the job

Exit of hole is ragged	Workpiece is not properly backed-up during drilling	Use scrap block back-up
	Bit dull	Sharpen bit
Hole sides are ragged	Wrong type of bit	Switch to proper type of bit for the job.
	Bit dull	Sharpen bit
Hole too big	Wrong type of bit	Switch to proper type of bit for the job.
	Wrong size bit	Change to correct size bit
	Stock not secured during drilling	Clamp stock into position before drilling
	Bit bent	Replace bit
	Main spindle bent	Replace main spindle (factory job)
Hole too deep or too shallow	Depth stop control improperly set	Set depth stop control properly
	Depth stop control not properly locked	Tighten the depth stop control handle
	Depth stop control broken	Replace depth stop control mechanism
	Rip fence or miter gauge back-up slipped during drilling	Secure rip fence and/or miter gauge and try again
	Chuck loose on spindle	Tighten chuck setscrew
	Carriage, table or headstock not locked	Lock carriage, table and/or headstock in position