GETTING BACK TO BASICS:

ROUTINE LATHE MAINTENANCE

Routine Maintenance Objectives

- Be effective, but get done quickly
- Remove wood chips and dust especially mating surfaces and lathe bed
- Remove stains and prevent rust everywhere
- Lubricate friction points but avoid securing or locking points
- Use tools and supplies that are readily available and inexpensive

Routine Lathe Maintenance

Focus Areas on the Lathe

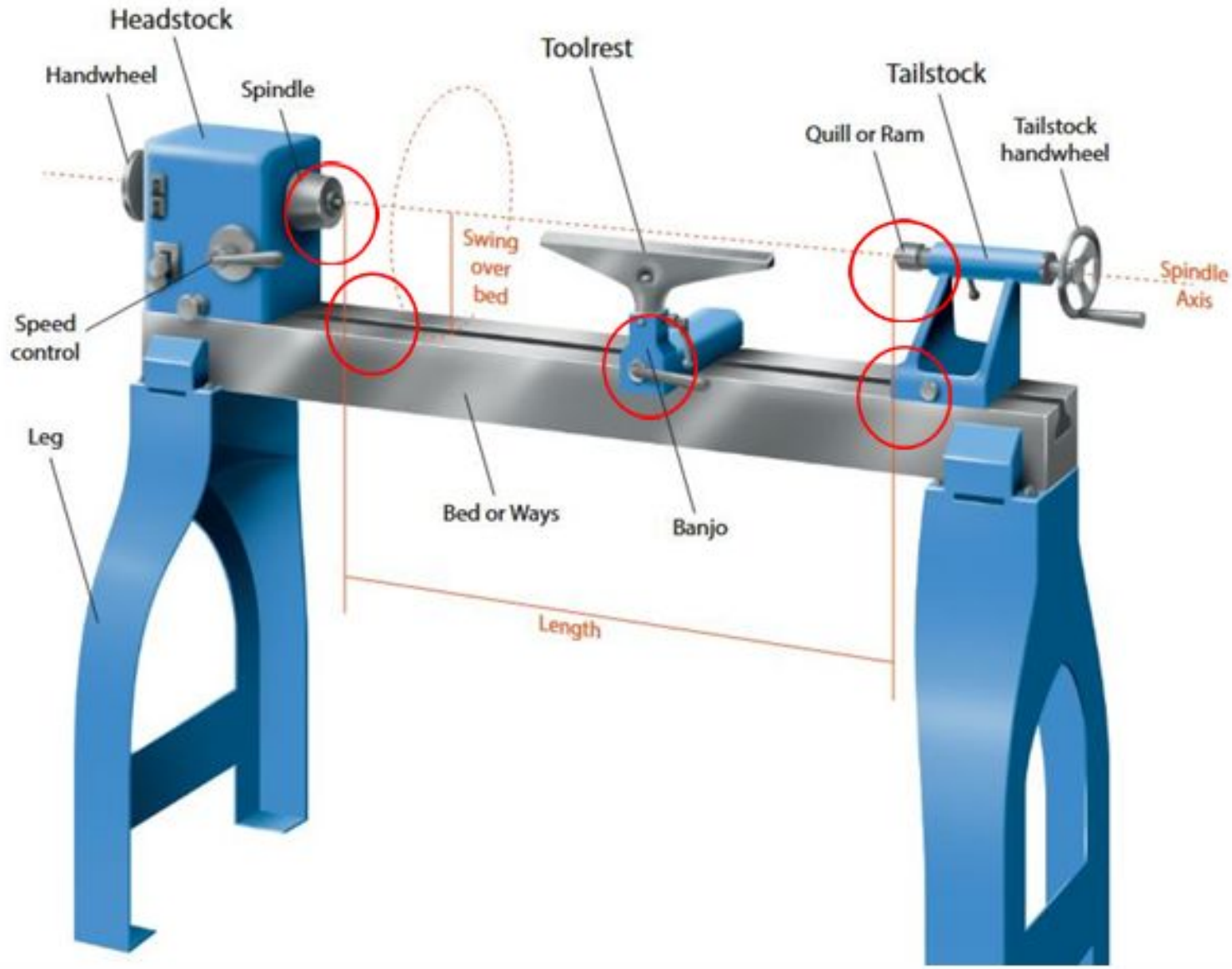
- Lathe bed (ways)—clean and lubricate
- Banjo and Tail Stock attachments (nut, washer, cam rod)—clean and lubricate
- Morse Taper (Head Stock and Tail Stock)
    - NO LUBRICATION
    - NO ABRASIVES

Areas of Concentration:

Lathe Bed/Ways

Morse Tapers at
-Head Stock Spindle
-Tail Stock Quill

Banjo and Tail Stock Attachments to Lathe Bed



Lathe Cleaning Supplies

- Use what you have on hand:
  - WD-40
  - Green 3M pad/0000 steel wool
  - Grit blocks/400-600 grit emery cloth
  - Chip Brush
  - Paper towels
- Cleaning the lathe bed (ways)
  - Clean with regular WD-40 and minor abrasives
  - Lubricate with WD-40
  - Dry Lubrication
- Cleaning the Banjo and Tail Stock
  - Locking mechanisms (nut, washer, rotating cam)
  - Clean with minor abrasives Lubricate with WD-40 dry lubrication
- Cleaning the Morse Tapers in the Head Stock and Tail Stock
  - Wood dowel/brass brush/plastic bottle brush
  - Denatured alcohol
  - Paper towels or cloth rag
  - NOTE: no grit or lubrication in the Morse Tapers!


BLASTER
DRY LUBE
WD-40
SPECIALIST
DRY LUBE
WD-40
SPRAYS 2 WAYS
SC Johnson
PASTE WAX


RUST FREE
BOESHIELD
T-9
RUST & CORROSION PROTECTION
WATERPROOF LUBRICATION
CMT
998.001.01
blade & bit cleaner
BLACK LABEL SERIES
Sprayway
PTFE DRY COAT LUBRICANT
T1
SLICK KOTE
QA
BLADE & BIT

Plastic Morse Taper Cleaners

Morse Taper 2 Cleaner (plastic)

Wooden handle and a brass 20 gauge shotgun cleaning brush

Commercial silicone bottle brush

Real World Example

- Paul turned a green walnut blank (roughly 14 inches in diameter, 8 inches depth).
- Turning time 60-90 minutes Tannins in the sap from oaks and walnuts will cause staining and rust on the lathe ways very quickly, almost upon contact.
- Some of the shavings felt moist, moisture dark spots visible on the outside of the bowl while turning, but moisture droplets were not seen while I was turning.

Ways with stains and rust immediately after bowl completed

Note areas covered by the banjo and tail stock are free of staining and rust (this is not always the case)

Tail Stock Locking Washer

Use compressed air or a small brush to remove the shavings from around these areas before cleaning or lubricating

Tail Stock Locking Handle

Stain removal with only WD-40

Grit bars and green tuffy pad abrasives

Ways after WD-40 and abrasive pads

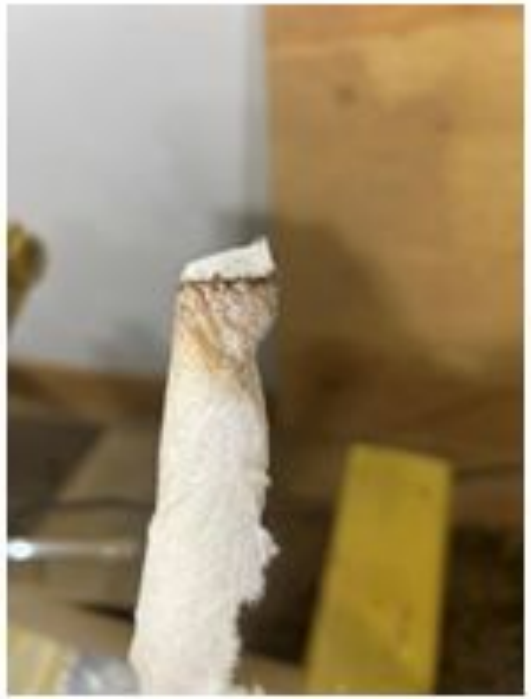
Ways after wiping with paper towels

Ways after WD-40 Dry Lubrication and wiped with paper towels

Cleaning Morse Tapers - Head Stock and Tailstock

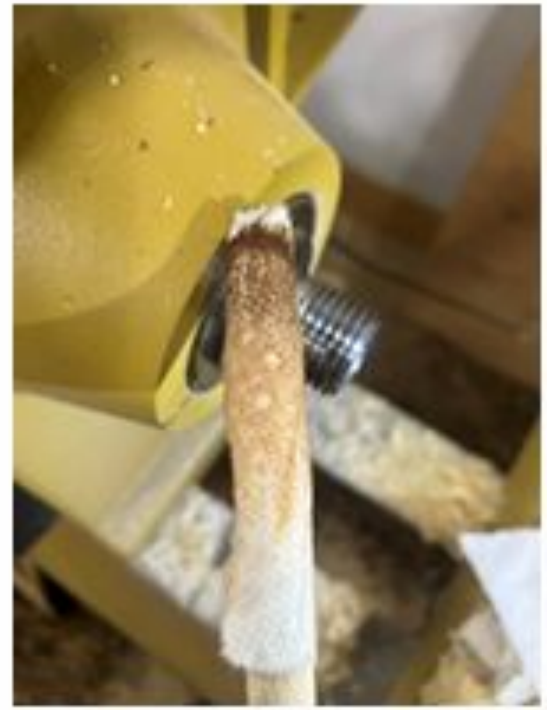
- No abrasives, no lubricants - no WD-40
- Use compressed air (if available)
- A simple wooden dowel wrapped with a paper towel with denatured
- Other commercial morse taper cleaners are available, but **do not** use morse taper reamers designed for metal lathes

NOTE: The length of a live/drive center morse taper is about 2 5/8 inches, so focus cleaning on the first 3 inches



Cleaning Head Stock Morse Taper

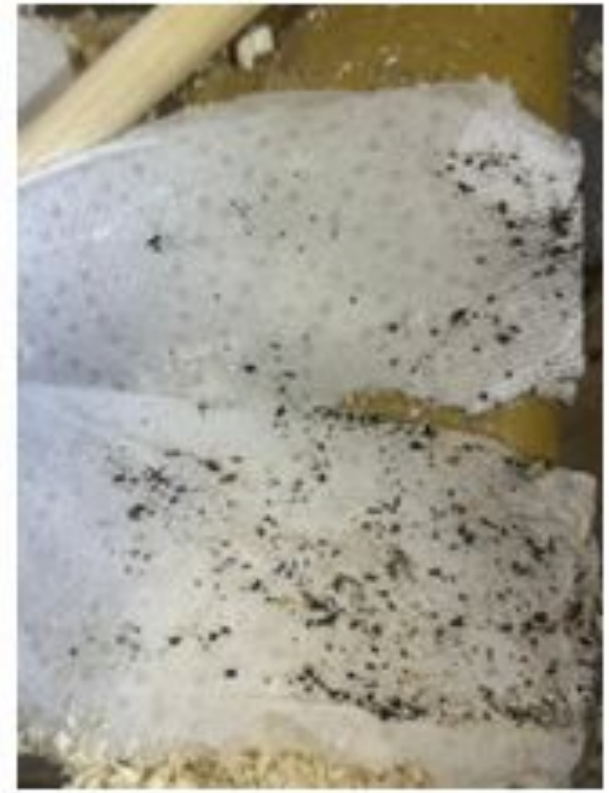
Mostly sawdust and some very small wood particles



Cleaning Tail Stock
Morse Taper

Mostly wood particles

Removed the whole quill to effectively clean it



Morse Taper Reamers

NOT FOR CLEANING

Miscellaneous

Banjo squeaks when you slide it

- Check the grip on the clamp block
- Lightly file or sand edges of banjo

Toolrest grabs your tools as they move across the rest

- Lightly file or sand the rest

Clean mating surfaces

- Headstock to accessories like faceplates and chucks

Clean and lubricate the bottom of lathe bed, banjo and tailstock

Concluding Thoughts

- Let the type of wood you are turning dictate the level of maintenance, but always perform some
- You should clean everything, but only lubricate friction points
- No strict rules on cleaning supplies
  - Use what you have on-hand
  - Focus on minimum abrasives to do the job