STEP- BY- STEP INSTRUCTIONS FOR TAPERED TANG BLADES

MATERIALSTOOLSBLADESCRIBEGUARD WITH PINSDRILLHANDLE MATERIALFILES

DRILL BITS JEWELERS SAW

MASKING TAPE VISE

PINS BALL PEIN HAMMER

EPOXY

SANDPAPER (200-600 GRIT)

- SELECT MATERIALS AND TOOLS REQUIRED FOR YOUR CUSTOM KNIFE. READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING.
- COVER SHARP EDGE OF BLADE WITH MASKING TAPE. THIS WILL PROTECT YOU AND THE BLADE.
- 3. FIT YOUR GUARD BY ALIGNING PIN HOLE IN GUARD AND BLADE. PIN GUARD TO BLADE MAKING SURE PIN PROTRUDES EQUALLY FROM BOTH SIDES. IF GUARD DOES NOT FIT TIGHTLY TO BLADE (IF ANY GAP SHOWS) IT WILL BE NECESSARY TO CLAMP AT TOP OF GUARD BEFORE GOING TO STEP 4.
- 4. PEIN PIN TO GUARD BY PLACING FIRMLY ON ANVIL. PEIN ONE SIDE THEN THE OTHER, ALTERNATING SIDES UNTIL PIN HAS "SCULLED" OUT INSIDE THE HOLE MAKING A VERY TIGHT FIT. AS YOU WORK DOWN YOUR GUARD, THE METALS WILL MESH AND YOU WILL NOT SEE THE PIN AT ALL, THE GUARD WILL APPEAR AS ONE PIECE. RESHAPE GUARD AND TANG AS DESIRED.
- MARK THE SIDE OF YOUR HANDLE
 MATERIAL THAT WILL FIT NEXT TO TANG
 BEING CAREFUL TO MATCH ANY COLOR
 PATTERNS THAT YOUR MATERIAL MAY
 CONTAIN. MARK END OF EACH PIECE
 THAT WILL FIT AGAINST GUARD.
- FIT HANDLE MATERIAL TO GUARD BY FILING AND SANDING UNTIL YOU HAVE A GOOD SQUARE FIT WITH NO GAPS OR LINES SHOWING. DO BOTH PIECES.
- 7. LAY BLADE ON HANDLE MATERIAL CAREFULLY MAKING SURE IT LIES SQUARELY AND TIGHTLY AGAINST GUARD. SCRIBE OUTLINE OF BLADE ONTO HANDLE, YOU MAY WANT TO CLAMP FIRST SO THE HANDLE WON'T SLIP. REPEAT WITH SECOND PIECE OF HANDLE MATERIAL USING OPPOSITE SIDE OF THE TANG.
- 8. LEAVING SLIGHTLY OVERSIZE, REMOVE EXCESS HANDLE MATERIAL WITH JEWELERS SAW, BELT SANDER OR OTHER MEANS AVAILABLE. **DO NOT OVER GRIND**
- 9. USING 220 GRIT SANDPAPER, SAND THE HANDLE MATERIAL FLAT ON THE SIDE THAT WILL FIT AGAINST TANG OF BLADE. SAND TANG OF BLADE WITH SAME PAPER. THIS WILL REMOVE ANY FOREIGN MATERIAL AND ASSURE A GOOD ADHESION OF BLADE TO HANDLE MATERIAL.

- 10. CAREFULLY ATTACH ONE (1) PIECE OF HANDLE MATERIAL TO TANG OF BLADE WITH EPOXY. MAKE SURE THE HANDLE MATERIAL IS CENTERED PROPERLY AND THAT IT FITS PERFECTLY AGAINST GUARD WITH NO GAPS. CLAMP AND ALLOW EPOXY TO SET. YOU MAY WANT TO ALLOW DRYING OVERNIGHT.
- 11. USING PIN HOLES IN BLADE AS A TEMPLATE, DRILL THESE HOLES WITH PROPER DRILL BIT. BE SURE TO DRILL IN CENTER HOLES WITH PROPER DRILL BIT. DRILL SLOWLY AND CAREFULLY SO YOU WILL NOT SPLINTER HANDLE MATERIAL, A DRILL PRESS IS BEST IF AVAILABLE. EXTREME CAUTION IS ADVISED WHEN USING YOUR BLADE AS A PATTERN FOR DRILLING HOLES. BE SURE THE BLADE AND HANDLE MATERIALS ARE CLAMPED SECURELY TO PROTECT THE OPERATOR FROM BEING CUT OR OTHERWISE INJURED IF THE DRILLING OPERATION TRIES TO TWIST OR GRAB THE WORK OUT OF THE VISE.
- 12. **OPTIONAL THONG HOLE:** IF YOU WISH TO USE A THONG HOLE, DRILL THIS HOLE USING THE BLADE HOLE AS A TEMPLATE.
- 13. REPEAT STEP 10 USING SECOND PIECE OF HANDLE MATERIAL.
- 14. DRILL HOLES FOR PINS AND THONG HOLE (IF DESIRED) AS IN STEPS 11 & 12 USING HOLES THROUGH HANDLE MATERIAL AS GUIDES. HOLES MUST BE DRILLED STRAIGHT AND PROPERLY CENTERED FOR PINS TO FIT CORRECTLY.
- 15. INSERT PINS THROUGH HOLES DRILLED IN HANDLE MATERIAL. IT MAY BE NECESSARY TO POLISH YOUR PINS AND THONG HOLE TUBING WITH EMERY CLOTH TO ASSURE THEY WILL SLIDE IN AND OUT OF THE HOLES EASILY. THEY SHOULD BE SNUG, BUT NOT TIGHT ENOUGH TO RISK CRACKING THE WOOD WHEN PUSHING IN OR OUT.
- 16. MIX A SMALL AMOUNT OF EPOXY. ROLL PINS AND THONG HOLE TUBING IN EPOXY. INSERT PINS IN HOLES. ALLOW TO DRY UNTIL SET. EXCESS PIN MATERIAL WILL BE SANDED OFF WHEN SHAPING AND BUFFING HANDLE.
- 17. YOU ARE NOW READY TO SHAPE YOUR GUARD AND HANDLE INTO ONE. POWER TOOLS SUCH AS BELT SANDERS AND DREMEL TOOLS WITH SANDING DRUMS AID GREATLY IN SPEEDING UP THE SHAPING AND ROUGHING WORK. HOWEVER, FINAL HAND SHAPING AND SANDING PRODUCE THE BEST RESULTS. USING A FILE, A HALF-ROUND SECOND CUT WORKS GREAT; SHAPE YOUR HANDLE TO DESIRED SHAPE FITTING TO YOUR HAND. SAND WITH SANDPAPERS, FINISHING WITH A 600 GRIT WET DRY. IF A POLISHED LOOK IS DESIRED, BUFF WITH A MUSLIN WHEEL AND WHITE ROUGE.
- REMOVE MASKING TAPE, CLEAN AND SHARPEN YOUR KNIFE TO A KEEN EDGE.