



GUIDE TO STOCK REFINISHING

WOOD: Typical stocks are made of varying grades of either Walnut or Beech.

FINISHES: Differing markets around the world have different preferences for type of finish, and manufacturers usually finish guns for their main markets. In the USA higher build gloss finishes are typical, while the English market prefers a matt oiled wood. Mass manufacturers use Cellulose finishes because of their quick drying properties suit volume production. Higher grade guns use oil/wax, but the drying/curing and layering process takes several days or even weeks/months, adding to production costs. How well the wood will take any desired finish, from matt oiled through to high gloss lacquered, will depend on the wood quality. More open grain woods can have the grain sealed to improve finish, and coloured finishes can bring out the grain and figuring.

PREPARATION: All old finishes need to be removed. Polyurethane / cellulose varnish can be removed with heat or alkaline paint removers. Oiled or wax finishes should be washed out with white spirit. The wood can be sanded with fine paper and finished with **0000 Wire Wool** and any bruises in the wood can be lifted by steaming.

OILING: The wood can be nourished with **RED-KITE Walnut Oil**. This helps prevent it drying out and cracking. **English Walnut Oil** provides a light brown tint. Brush into the grain and allow 24hrs to cure, wipe off any surplus. **Alkanet Oil** can be used instead of Walnut Oil. Repeat multiple times for maximum penetration.

COLOUR: Wood can be left natural, or have colour added. **RED-KITE dye stains** may be mixed for a range of colours from Honey Yew to Dark Walnut shades. These are water based dyes and should not be mixed with oil dyes or into oils / waxes - apply as a separate process and allow to dry. **RED-KITE Alkanet Oil** lifts grain colour and makes figuring show better. This has a reddish tint. Brush into grain, wipe over for evenness, and allow to dry 24 hrs. This will soak in and may need further applications. Primary colouring should be done before grain sealing, as once sealed the grain may not take up colour readily, but further applications of colour on top of the grain sealed finish will add further depth of colour.

GRAIN SEALING: Use **RED-KITE Shellac Grain Sealer**. Paint this on generously and allow to dry for 12hrs. Note that this process also waterproofs the wood. Use **Cellulose Grain Sealer** before Cellulose finishes. Finish with **RED-KITE Stock Wool 0000** extra fine wire wool.

FINISHING; Oiled: Use **RED-KITE London Wax Finish** for a traditional matt finish. **RED-KITE Carnauba Wax Finish** gives a harder finish, goes on matt by will buff up to desired polish level. Build up in layers allowing to dry between. Cut back with **Stock Wool**. Buff off with a lint free cloth. **Alkanet Oil** may be used to enhance colour in the grain before sealing and building the final finish. Dry in airing cupboard between coats. For a hi-build of wax, repeated applications are needed and the whole process may take several weeks to complete. Cure each layer in a warm place and then allow to cool off before buffing and or adding further layers.

Lacquer: For a harder wearing finish, use **RED-KITE Brushing Lacquer finish**. This is a natural spirit based NitroCellulose lacquer, available in satin or gloss. Thin the lacquer 1 part **RED-KITE Cellulose Thinners** to 3 parts lacquer and use a good quality brush to apply. May be sprayed by airbrush or fine spray gun. The cellulose finish can be flatted with **Stock Wool** and built up in layers if required. Allow 1hr between coats.

WARNING: Depth of colour and figuring relief may change as finishing layers build up. Some processes can be difficult to reverse. Always test your finishes on spare wood or areas that don't matter.

RED KITE GUIDE TO BARREL / ACTION REFINISHING

FINISHES: Gun barrel blue / black is formed by oxidising the outer molecular layer of the iron metal into a hard impervious layer of Ferrous Oxide. Ferric oxide forms naturally on unprotected surfaces and is red rust.

PREPARATION for REFINISHING: Remove all oxidation with soft wire brush and **Stock Wool 0000**. Neutralise heavy rust with **Rust Remover**. Polish scratched and pitted areas with **RED- KITE metal finish abrasives and polishes**. Remove unwanted areas of gun blue / black with **Gun Black Remover**. Thoroughly degrease and clean all areas with **RED-KITE Isopropyl cleaner**. Final finish quality depends very much on the quality of preparation.

GUN BLUE / BLACK: This is factory / professionally applied in a high temperature bath using highly noxious and toxic chemicals. Efficient ventilation systems, full PPE hands, eyes, nasal is required. The chemicals used are potentially explosive and only distributed by chemical suppliers to the trade with appropriate authority to purchase and store. Faded or patchy blue / black can be repaired using **RED-KITE cold selenium** solution. This cold treatment is a different chemical process on the metal and may not provide a perfect match to existing finishes, and is not a permanent or long lasting repair, but can help cosmetically and will help prevent rust bloom and further degradation of the factory finish. Selenium is poisonous and acidic and must be treated with care.

CASE HARDENING: This is a gun black finish that results in a colour variation like an oil slick. Blacks, blues and browns create a marbled effect. This can only be duplicated by professional hot finishes and there is no domestic cold finish that replicates this. **Selenium blue/ black** can be used for local patch repairs to case hardening.

BROWNING: Old muskets and fine Damascus barrels may have a brown oil finish. This helps relieve and display fine Damascus wire patterns on older guns. Use **RED-KITE Hot Browning Oil**. Apply liberally and heat off in an oven 200-250 °C / 400-500 °F - or use a high temperature air blower. The oil may ignite and burn if over heated; process in a safe and ventilated place. Multiple layers may be needed to build up a thick layer. Use **RED-KITE Stock Wool 0000** to polish back between layers, and to polish back to reveal Damascus patterns. **Cold selenium brown** is for repairing brown finishes on ferrous (iron) metals and antiquing cuprous (copper) metals.

WHITE FINISHES: Light weight alloy actions, nickel and chrome finishes are used on some parts or gun types. These are either polished metal that can be repaired by buffing back using appropriate abrasives and polishes from the **RED-KITE polish bar** range, or are electroplated and require stripping of old finishes and re-plating.

RUST: Rust penetration of gun black/blue and electro-plated surfaces can be removed with **RED-KITE Stock Wool 000** and **Gun Oil**. For heavy and engrained rust use **RED-KITE Rust Remover**, soak and wire brush rust away. Plating porosity can be lowered with **RED-KITE Lanolin Polish and Waterproofer** as a sealing end finish. This protects against rust bloom re-appearing.

WAX-OIL RE-PROOFING & LEATHER CARE

RED-KITE Wax-oil reproofer for wax jackets and oilskins, warm in micro-wave and rub into weave, use a hairdryer to soften and rub hard into fabric and achieve best penetration. Old dirty wax can be removed prior to re-waxing by heating and dissolving old finish with Isopropyl, white spirits, or Cellulose thinners. **Always test small areas before undertaking any removal and re-waxing.**

RED-KITE Liquid leather dressing is made to the British Museum conservators' formula for restoring suppleness and maximum waterproofing of leather. Note untanned soft leathers like seude will turn dark, test before use if colour change would be adverse. This formula contains lanolin, test for allergic reactions if worn next to skin. Paraffin oil content in the dressing may have an odour on first applications.

RED KITE GUIDE TO GUN CLEANING

WHY? Powder and load residues can be corrosive, and if not promptly cleaned out after shooting these can eat into the metal and cause pitting. This causes loss of value to the gun, and ultimately may make it out of proof and dangerous to fire. Build-ups may cause ballistic changes in the bore and rifling affecting velocity and grouping. Unburnt powder and residues in the action parts cause wear and malfunctions.

PATCH out loose residue from the barrel with linen or cotton patches on a jag, or fill the chamber with toilet tissues or kitchen roll and push through. Bore-snakes and pull-throughs can be used for field cleaning.

SOLVENTS: Use **Ed's Red bore cleaner** on shotguns and rifles. Use **RED-KITE Ed's Red Plus Copper solvent; Lead solvent, or Black powder solvent** when appropriate. These are toxic and powerful solutions - take care to keep off gun finishes. Spray in and roll around barrel, leave to work for 10 mins. Scrub hard with a wire brush, bronze or spiral wire, Payne Galway or Turks head. Patch out and inspect. Repeat as needed until all signs of fouling are removed. View the barrel in low or indirect light so that light haloes do not prevent seeing the remaining residues. Finish with a pass of a wool mop lightly oiled.

ACTION: Clean out action parts with **RED-KITE Isopropyl cleaner**. Use cotton buds, medical swabs, fine brushes, wooden picks etc to clean out all powder flakes and fouled oils/greases.

OIL: Gun oils are high temperature oils with a high viscosity. Use of light oils such as **WD-40** may result in the gun becoming "addicted" to oiling as these burn out and cease to lubricate after a short number of cycles, and may dissolve out long lasting oils, resulting in constant replacement being needed. Replace oils with **RED-KITE synthetic PTFE oil** or **RED-KITE traditional oil**. Wipe surplus away on a dedicated wiping rag. Use the wiping oil rag to leave an external moisture preventative on barrels and action. Do not touch metal areas with sweaty hands after final wiping. Store guns barrel down to drain excess oils away from wood. High melting point Molybdenum or white grease may be used in place of oils in some hard wearing areas such as pivot points, ejectors etc.

RUST: If rust bloom appears from moisture on the action and barrels, remove with 0000 wire wool. For stubborn rust and before re-finishing metal, use rust remover to neutralise rust. Rust remover will also remove gun-blue/black and other finishes, use with care. Patch finish if needed using **RED-KITE cold selenium** finishes (note, suitable for repairs, not complete re-finishing). Rust penetration of gun black/blue and electroplated surfaces can be removed with **Stock Wool 0000** and **Gun Oil**. Plating porosity can be lowered with **Lanolin Barrel Polish and Waterproofer**.

WARNING: *Effective cleaning and finishing agents can be corrosive, toxic and poisonous to humans and animals, and may cause burns to skin and medical problems if ingested or inhaled. Eye damage can occur from splashes. Always work in a clear ventilated space and wear appropriate PPE Personal Protective Equipment. Keep all chemicals away from children.*

Red Kite Gun Products
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Red Kite Cleaning/Finishing Product Range

SKU Ref.	Product	Info	Package	Small Posted	Medium Posted	Large Posted
RKC01	Stock Wool 0000	Finest finish wire wool	Display pack	1m £3.99	5m £7.95	10m £10.95
RKC02	Gun Black Cold Treatment	Selenium Di-oxide	Dropper P Bottle	50ml £10.95	100ml £15.95	250ml £2324.95
RKC03	Musket Brown Cold Treatment	Selenium Di-oxide	Dropper P Bottle	£10.95	£15.95	£24.95
RKC04	Pellet Lube	With PTFE Non-dressing	Spray P Bottle	£9.95	£13.95	£22.95
RKC05	Alkanet Stock Finish	Red Oil	Dropper P Bottle	100ml £8.95	250ml £12.95	500ml £20.95
RKC06	English Walnut Oil	Best Refined Oil	Dropper P Bottle	£8.95	£12.95	£20.95
RKC07	Gunsmiths London Wax Finish	Traditional Finish	P Bottle Tub	£9.95	£13.95	£20.85
RKC08	Gunsmith's Canauba Hi Wax	Hard Wax	Tub	£11.95	£15.95	£23.95
RKC09	Rosewood Stain Red Tone	Water based	Dropper P Bottle	£7.95	£10.95	£16.95
RKC10	Walnut Stain Dark	Water based	Dropper P Bottle	£7.95	£10.95	£13.95
RKC11	Honey Stain Light Oak/Beech	Water based	Dropper P Bottle	£7.95	£10.95	£13.95
RKC12	Shellac Grain Sealer-Brown	For Wax/Oil Finishes	Dropper P Bottle	£9.95	£13.95	£21.95
RKC13	Cellulose Grain Sealer-Clear	Clear sanding seal	Dropper P Bottle	£7.95	£10.95	£15.95
RKC14	Gloss Stock Finish	Cellulose brushing	Dropper P Bottle	£8.95	£10.95	£18.95
RKC15	Satin Stock Finish	Cellulose brushing	Dropper P Bottle	£8.95	£11.95	£18.95
RKC16	Brushing Thinners	Cellulose brushing	Glass Bottle	£7.95	£10.95	£14.95
RKC17	Synthetic Gun Oil	With PTFE	Spray P Bottle	£8.95	£12.95	£17.95
RKC18	Traditional Gun Oil	With Rangoon Oil	Spray P Bottle	£9.95	£13.95	£18.95
RKC19	Bore Cleaner	Ed's Red recipe	Spray P Bottle	£8.95	£12.95	£17.95

RKC20	Copper Solvent	Ed's Red Plus	Spray P Bottle	£8.95	£12.95	£20.95
RKC21	Black Powder Solvent	Concentrate	Dropper P Bottle	£8.95	£12.95	£23.95
RKC22	Degreaser Parts cleaner	Isopropyl	Glass Bottle	£7.95	£10.95	£14.95
RKC23	Rust Remover	Concentrate	Dropper P Bottle	£7.95	£10.95	£13.95
RKC24	Lead Fowling Remover	Concentrate	Spray P Bottle	£7.95	£10.95	£13.95
RKC25	Lanolin Water Dispellant	Barrel Polish	Tub	£8.95	£12.95	£22.95
RKC26	Hot Browning Oil	Damascus	Dropper P Bottle	£7.95	£10.95	£13.95
RKC28	Oil Wax Proofer	Wax Jacket/Boots	Tub	£10.95	£15.95	£24.95
RKC29	Liquid Leather Dressing	Museum Grade	Dropper P Bottle	£10.95	£15.95	£24.95

Smallest size of liquid products comes in a dispense container, i.e. plastic bottle with dropper or pump spray, unless marked as being in glass. Larger sizes may be either plastic or glass bottles or tubs with screw tops.
All RRP prices above are UK economy Postal rates inc. postal allowance £2-00 / item except 1m stock wool £1-00 / pack. Collected prices less post al allowance as included in above pricing.

C corrosive, skin and eye protection; F flammable, no naked flames; P poisonous, do not inhale / ingest

E&OE consumablesPDF/08/07/2015