

DRIVE-TRAIN OVERHAUL CHECKLIST

Not all steps apply to all bikes.

Torques are minimum recommended in absence of manufacturer specifications.

Check-off items done to specification. Mark items with "NA" when not applicable, or "X" when problems could not be repaired and/or are in need of further attention.

EXISTING CONDITIONS

- Derailleurs operated and performance evaluated.

DISASSEMBLY, CLEANING, AND INSPECTION

- Rear wheel removed.
- Rear cogs or freewheel removed.
- Freewheel or cassette cleaned in solvent.
- Freewheel or cassette inspected for wear and damage.
- Pedals removed.
- Crank arms removed, cleaned and inspected.
- Chainrings cleaned and inspected for wear.
- Chain removed and cleaned.
- Chain inspected for wear and damage.
- Derailleur cables removed and inspected for rust, frays, and kinks in the inner wires and housing.
- Rear derailleur removed, disassembled and cleaned.
- Rear derailleur inspected for damage and worn pulleys.
- Front derailleur removed, cleaned, and inspected.

ASSEMBLY AND INSTALLATION

- Rear derailleur threads, pivots, and springs lubricated and pivots assembled.
- Rear-derailleur pulley wheels lubricated and installed.
- Freewheel or cassette lubricated and installed (cassette lockring secured to 355in-lbs).
- Chainring bolts secured to 50in-lbs.
- Crank-arm bolts greased and arms secured to 390in-lbs.
- Threaded dustcaps lubed and gently secured.
OR One-key-release washers greased, cap threads prepped with Loctite 242, and caps gently secured.
- Pedal threads greased and pedals secured to 300in-lbs.
- Rear wheel mounted in proper alignment and security (rear axle nuts 240in-lbs).
OR Q.R. skewers set so force is required through out the last 90° of closure and base of lever ends up parallel to dropout.
- Derailleur hanger aligned to less than 4mm tool-to-rim gap at all points.
- Rear derailleur installed and secured to 70in-lbs.
- Front-derailleur pivots lubricated.
- Front derailleur set so bottom of outer cage plate clears outer chainring teeth by 1-3mm.
- Front derailleur rotated so outer cage plate is parallel to line of chain in outermost gear combination.
- Front derailleur secured to 35in-lbs.

DERAILLEUR ADJUSTMENTS

- New or existing derailleur housings sized and ends finished with end cap. (From controls to frame: sized as short as possible to allow full normal fork rotation. To rear derailleur: sized such that with derailleur body parallel to chain stay, housing enters adjusting barrel in a straight line.)
- New or existing derailleur cables lubricated where they pass through housings.
- Derailleur cables routed so they do not interfere with any other cables, and pinch mechanisms secured to 35in-lbs.
- Derailleur cables pre-stressed.
- Wobbling chainwheels aligned to less than .5mm wobble.
- Chain lubricated, sized to longest acceptable length in small/small gear combination, and installed.
- Chain inspected for tight links, protruding rivets, and too-short symptoms in big/big gear combination.
- Rear-derailleur limit screws set to tightest settings that allow shift to largest and smallest sprockets (with no excess noise).
- Rear-derailleur cable tension set to tightest setting that allows indexing without out-shift hesitation or post-shift chain-to-cog rubs.
- Front-derailleur outer-limit screw set to hold .5-1.0mm clearance between the chain and outer cage (with chain on outer/outer gear combination).
- Front-derailleur outer-limit screw set to hold .5-4.0mm clearance between the chain and inner cage (with chain on inner/inner gear combination).
- Front-derailleur overshift checked in all gear combinations.
- Front-derailleur cable tension set to create .0-.5mm clearance between inner cage and chain (chain on innermost rear cog and next-to-outermost chainring), with no audible rubs in any gear combination.

TEST RIDE AND INSPECTIONS

- Derailleurs checked for performance and overshift.
- Chain and freewheel cogs checked for skipping under load.

MECHANIC'S SIGNATURE _____

DATE _____