

Service-Information Motorcycle



BMW NA Service Department	Group: 1 Service Promotion	March 1991 XXXVIII/91 (2449)	For USA Only
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Maintenance Check Lists	1990 →
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The use of printed check lists for service inspections is a valuable tool in controlling the cost and overall thoroughness of your workshop's performance. Use of these check lists will provide your customer with a detailed listing of the work performed, thereby allowing your customer to balance the cost of the inspection against specific work operations. With today's liability climate, it is important to document the actual work operations performed whenever you work on anyone's motorcycle.

Maintenance check lists have been prepared for use in servicing all R and K model BHW motorcycles from model year 1990 onward. The check lists are printed in pads of 50 sheets. Each sheet provides information for R and K models and can be ordered from your Technical Services Manager using the numbers below. One pad of each is enclosed.

PDI and 600 Miles Inspection I & II and periodic maintenance	R Models	MCS-040
PDI and 600 Miles Inspection I & II and periodic maintenance	R Models	MCS-041
	K Models	MCS-042
	K Models	MCS-043

The most significant change to the service schedules is the elimination of input shaft spline lubrication every 12 months. For 1990 and onward input shaft and Paralever/drive shaft splines (models without drive shaft oil-bath) should be lubricated every 40,000 miles.

Also please note that K models with 16-valve engines only require valve adjustment (after 600-mile service) every 16,000 miles, which always comes due at an Inspection II.

As an environmentally-conscious company, BMW of North America, Inc. has opted to print the Maintenance Check Lists on re-cycled paper.

Very truly yours,

BHW of North America, Inc.

Frank Stevens
National Service Manager

Richard Dampf
National Technical Manager

FS;jel/367.24

Please initial and route to the following before filing				
Service	Parts	Sales	Warranty	Technicians

**** Maintaining The Legend ****

Motorcycle Receipt -- Set Up

- Check motorcycle and shipping crate for damage.
- Remove shipping label from crate and place in vehicle file.
- Uncrate motorcycle.
- Install parts removed for shipping purposes and torque/adjust handlebars and lever assemblies.
- Clean motorcycle.
- Clean brake rotors.

Service

- Battery
 - Remove from motorcycle
 - Fill and cool for one hour
 - Check venting
 - Charge to 1.260 - 1.280 s.g.
 - Install/grease terminals
- Check oil levels
 - Engine
 - Gearbox
 - Swing Arm (Not R100GS)
 - Rear Drive
- Check/tighten fuel petcocks
- Clean float bowls
- Ensure that fuel tank vent and drain lines are not kinked.
- Check condition and level of brake fluid. Replace if necessary.
- Torque nuts and bolts
 - Shock absorber mountings
 - Front wheel axle nut and clamping bolts
 - Rear wheel mounting bolts
- Check headlight beam adjustment
- Check condition of wheels and tires. Adjust tire pressures.
Front _____ PSI Rear _____ PSI
- Check/Adjust throttle and choke cable free play; synchronize.

- Road Test- Final inspection and safety checks for proper operation and adjustment of:
 - Clutch
 - Gearchange
 - Steering
 - Front and rear brakes
 - Instrument telltail/warning lights
 - All lighting and signalling equipment
 - All optional equipment
- Check/Adjust idle mixture and rpm.
- Check that the following items are present and complete in the Motorcycle Owner's Kit:
 - Motorcycle Tool Kit
 - Tire repair kit
 - Riders Manual
 - Roadside Assistance Information
 - Warranty Information/Service History booklet
 - Battery information
 - Authorized BMW Motorcycle Dealer Directory
 - Spare keys with key number tag
 - Dealership business cards
 - Helmet Visor Cleaner
 - BMW Engine Oil
 - BMW Motorcycle Battery Charger
- Record this service by stamping the appropriate box in the Warranty Information/Service History booklet.

Customer Delivery

- Complete retail delivery report card and mail to BMW NA, Motorcycle Group.
- Explain provisions of the motorcycle limited warranty
- Explain and demonstrate all controls, locks and switches using the Riders Manual as a guide

Ensure that the motorcycle is free of any cosmetic/transport damage at time of Retail Delivery.

Date

Customer Signature

Dealer Signature

- Change oils
 - Engine oil and oil filter
 - Gearbox
 - Driveshaft (Not Paralever)
 - Rear drive
 - Front fork
- Check/Adjust steering bearing preload
- Check/Adjust brake fluid level(s) and rear drum brake free play.
- * Remove exhaust header finned nut, anti-sieze and retorque,
- Check condition of wheels and tires. Adjust tire pressures.
Front _____ PSI **Rear** _____ PSI
- Check clutch adjustments
 - 1-Exposed cable length, lever arm at gearbox
 - 2-Clutch lever on handlebar
- * Retorque cylinder heads
- * Adjust valve clearance
- * Clean float bowls
- Check/Adjust ignition timing
- Lubricate
 - Side and center stand pivots
 - Shift linkage
 - Foot brake pivot
 - Throttle twist gear
 - Clutch pivots
 - Cable joints
- Torque nuts and bolts
 - Engine mountings
 - Centerstand to frame
 - Front wheel axle nut and clamping bolts
 - Rear wheel mounting bolts
 - Shock absorber mountings
 - Hose clamps at carburetors, fuel valves/lines, drive shaft boot
- * Check/Adjust throttle and choke cable free play; synchronize.
- Road Test -- Final inspection and safety checks for proper operation and adjustment of:
 - Clutch
 - Gearchange
 - Steering
 - Front and rear brakes
 - Instruments telltail/warning lights
 - All lighting and signalling equipment
 - All optional equipment in working order
- Adjust idle mixture
- * Adjust RPM
- Record this service by stamping the appropriate box in the Warranty Information/Service History booklet.

*Recommended additional services not required for Emissions Warranty.

Inspection I & II

R-Models 1990 →

Service Plan		BMW Inspection I 4,500 Mi. & Ea. Additional 8,000 Mi.	BMW inspection II 8,500 Mi. & Ea. Additional 8,000 Mi.
Change motor oil and oil filter		•	•
Change oil in gear box, drive shaft (not paralever), rear drive and front forks			•
Lubricate upper and lower clutch cable nipples, side and center stand pivots, keyed locks		•	•
Replace air filter element			•
Clean carburetor float bowls	**	•	•
Check condition of wheels and tires			
-- Tread depth		•	•
-- Adjust tire pressure			
Check condition of return springs on side and centerstand.		•	•
Check condition and level of brake fluid. Examine system for leakage, correct if necessary. Brake fluid should be changed once a year.	*		•
Check brake pads and rotors for wear; repair/replace if necessary	*		•
Check brake caliper function and check for leaks. Repair or replace as needed	*		•
Check rear drum brake linings for wear and renew if necessary. Check free play and adjust if necessary (where applicable).	*	•	•
Check clutch adjustments			
-- Exposed cable length, lever arm at gearbox	*	•	•
-- Clutch lever on handle bar			
Check/Adjust rocker arm end play	*		•
Retorque cylinder heads	**		•
Adjust valve clearance		•	•
Check spark plug electrode condition		•	•
Replace spark plugs			•
Check steering bearing preload; adjust if needed.	*	•	•
Check swing arm (and paralever pivot) bearing play; adjust and retorque as necessary.	*		•
Inspect and service battery			
-- Check specific gravity -- Charge if below 1.240 s.g.	*		•
-- Adjust acid level -- Clean and tighten connections			
Torque rear wheel mounting bolts		•	•
Torque nuts and bolts			
-- Engine mounting -- Shock absorber mountings			
-- Centerstand to frame -- Hose clamps at carburetors, fuel		•	•
-- Front wheel axle nut and valves/lines, drive shaft boot clamping bolts			
Adjust throttle and choke cable free play and synchronization	**	•	•
Road Test - Final inspection and safety checks for proper operation and adjustment of:			
-- Clutch -- Instruments telltail/warning lights			
-- Gearchange -- All lighting and signalling equipment		•	•
-- Steering -- All optional equipment in working order			
-- Front and rear brakes			
Adjust idle mixture	**	•	•
Adjust rpm	**	•	•
Record this service by stamping the appropriate box		•	•
Special Notes: * May involve operations with a separate charge for parts and labor ** Recommended additional services not required for Emissions Warranty			

Every 3 months

- Check battery acid level, top up with distilled water and charge as necessary to 1.240 s.g. or greater,

Every 3 months and at least every 2,000 miles

- Change engine oil and filter if the motorcycle is used at outside temperatures below 32 degrees F.

Every 6 months

- Change engine oil and filter if the motorcycle is used for short trips only.

Every 12 months

- Change all lubricants
 - Engine oil and oil filter
 - Gearbox
 - Driveshaft (Not Paralever)
 - Rear drive
 - Front forks
- Drain fuel tank and clean fuel petcock strainers.

- Brake fluid exchange

- Regardless of distance covered, brake fluid should be replaced annually.
- Replace brake fluid more often depending on usage and geographical location.

Every 4,000 miles

- Renew air cleaner if the motorcycle is used in very dirty or dusty conditions. Renew more frequently if necessary.

Every 16,000 miles

- Lubricate centrifugal advance mechanism. Verify smooth advance operation.

Every 25,000 miles

- Replace steering head and front wheel bearings. Replace more frequently in severe operating conditions.

Every 40,000 miles

- Inspect (lubricate or replace) swing arm pivot bearings and seals. Inspect more frequently under severe operating conditions.
- Lubricate input shaft and Paralever drive shaft splines.

*Recommended additional services not required for Emissions Warranty.

Motorcycle Receipt -- Set Up

- Check motorcycle and shipping crate for damage.
- Remove shipping label from crate and place in vehicle file.
- Uncrate motorcycle,
- Install parts removed for shipping purposes and torque/adjust handlebars and lever assemblies.
- Clean motorcycle.
- Clean brake rotors,

Service

- Battery
 - Remove from motorcycle
 - Fill and cool for one hour
 - Check venting
 - Charge to 1.260 - 1.280 s.g.
 - Install/grease terminals
- Check oil levels
 - Engine
 - Gearbox
 - Rear Drive
- Check coolant level
- Check condition and level of brake fluid. Replace if necessary.
- Check condition of wheels and tires. Adjust tire pressure.
Front _____ PSI Rear _____ PSI
- Check torque of rear wheel mounting bolts.
- Check headlight beam adjustment
- Check fuel hose connections for leaks
- Ensure fuel tank vent and drain lines are not kinked
- Check and adjust air gap at wheel sensors (ABS motorcycles only)

- Road Test- Final inspection and safety checks for proper operation and adjustment of:
 - Clutch
 - Gearchange
 - Steering
 - Front and rear brakes (including ABS where equipped)
 - Engine idle speed, CO%
 - Instruments telltail/warning lights
 - All lighting and signalling equipment
 - All optional equipment
- Check that the following items are present and complete in the Motorcycle Owner's Kit:
 - Motorcycle Tool Kit
 - Tire Repair Kit
 - Riders Manual
 - Roadside Assistance Information
 - Warranty Information/Service History booklet
 - Battery information
 - Authorized BMW Motorcycle Dealer Directory
 - Spare keys with key number tag
 - Dealership business cards
 - Helmet Visor Cleaner
 - BMW Engine Oil
 - BMW Motorcycle Battery Charger
- Record this service by stamping the appropriate box in the Warranty Information/Service History booklet.

Customer Delivery

- Complete retail delivery report card and mail to BMW NA, Motorcycle Group.
 - Explain provisions of the motorcycle limited warranty
 - Explain and demonstrate all controls, locks and switches using the Riders Manual as a guide
- Ensure that the motorcycle is free of any cosmetic/transport damage at time of Retail Delivery.**

Date

Customer Signature

Dealer Signature

- Change oils
 - Engine oil and oil filter
 - Gearbox
 - Rear drive
 - Front fork
- Check/Adjust steering bearing preload.
- Check valve clearances and adjust as necessary.
- * Check/Adjust ignition timing
- Check coolant level.
 - Check mixture ratio
 - Check coolant lines and clamps
- Clean speedometer inductive transmitter at rear drive
- Check/Adjust brake system connections, front (and rear) brake fluid level
- Check rear drum brake free play (where applicable).
- Check clutch adjustments
 - 1-Exposed cable length, lever arm at gearbox
 - 2-Clutch lever on handlebar
- Check and adjust sidestand retraction linkage
- Check fuel hose connections for leaks
 - Check clamps for tightness
 - Check condition of fuel lines
- Ensure fuel tank vent and drain lines are not kinked
- * Check free play at throttle and choke cables and adjust as necessary, then readjust throttle switch.
- Torque nuts and bolts
 - Engine mounting bolts
 - Exhaust system mounting and heatshield
 - Shock absorber mounting
 - Center stand to frame
 - Side stand
 - Rear wheel mounting bolts
 - Front axle nut and clamping bolt
- Check condition of wheels and tires. Adjust tire pressures.
Front_____PSI **Rear**_____PSI
- Road Test - Final inspection and safety checks for proper operation and adjustment of:
 - Clutch
 - Gearchange
 - Steering
 - Front and rear brakes (including ABS where equipped)
 - Engine idle speed/mixture, CO%
 - Instruments telltail/warning lights
 - All lighting and signalling equipment
 - All optional equipment in working order
- Record this service by stamping the appropriate box in the Warranty Information/Service History booklet.

*Recommended additional services not required for Emissions Warranty.

Every 3 months

- Check battery acid level, top up with distilled water and as necessary to 1.240 s.g. or greater,

Every 3 months and at least every 2,000 miles

- Change engine oil and oil filter if the motorcycle is used at outside temperatures below 32 degrees F.
Every 6 months
- Change engine oil and oil filter if the motorcycle is used for short trips only.

Every 12 months

- Change all lubricants
 - Engine oil and oil filter
 - Gearbox
 - Rear drive
 - Front forks
- Brake fluid exchange
 - Regardless of distance covered, brake fluid should be replaced annually.
 - Replace brake fluid more often depending on usage and geographical location,

Every 2 years

- Renew coolant using BMW recommended nitride-free solution.
- Drain fuel from tank and clean contaminants.

Every 4,000 miles

- Renew air cleaner if the motorcycle is used in very dirty or dusty conditions. Renew more frequently if necessary.

Every 8,000 miles

- Renew fuel filter if the fuel is of poor quality.

Every 16,000 miles

- Renew fuel filter under normal conditions

Every 25,000 miles

- Replace steering head and front wheel bearings. Replace more frequently in severe operating conditions.

Every 40,000 miles

- Replace timing chain tensioner slider rail (K100 models only).
- Lubricate input shaft, Paralever and drive shaft splines.
- Inspect (lubricate or replace) swing arm pivot bearings and seals. Inspect more frequently under severe operating conditions.