GREEN COUNTRY MODEL RAILROADERS' ASSOCIATION

RECOMMENDED REGULATIONS FOR ROLLING STOCK

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RECOMMENDED REGULATIONS FOR ROLLING STOCK (RS)

October 2009

1. PURPOSE

These regulations are intended to ensure that all rolling stock on the railroad operates reliably and is realistic in appearance. This document defines classes of equipment and requirements that apply to each class.

2. DEFINITIONS

2.1. Operator of the Day (OD) – shall be an individual who has volunteered or is appointed to be in charge of the general operation of the layout on the designated day. The OD has the option to delineate the theme of the fun run day he has agreed to officiate. It is the OD's responsibility to apply & uphold RP's & request quests & members to adhere to them while operating on the club layout.

2.2. Recommended Practice (RP) – are those practices that have been established through actual use or test & are found to be beneficial to operation. RP's are to be voted on by the membership after submittal to the Board for study & approval.

2.3. Rolling Stock (RS) – shall be any equipment (passenger, freight, or maintenance of way) which was used in regular rail transport of goods, passengers, or maintenance of way.

2.3.1. Rolling Stock Categories

2.3.1.1. Category I – Individually owned & operated equipment on the layout. Metal wheels are a minimum requirement. RS shall be removed from the layout for cause & taken home at the end of each session.

2.3.1.2. Category II – Member owned & maintained equipment which has been certified by the Car Department. The owner however has chosen to remove the RS form the layout after each session.

2.3.1.3. Category III – The same as Category II with the added requirement that the RS remains on the layout & becomes a part of regular registered RS & is available for use by any member during a session.

2.3.1.4. Category IV – High Value (brass, etc) equipment which the owner maintains separate from the Category III equipment & may only be used by permission of the owner.

2.4. Standards – a standard is a requirement that is mandatory. "Metal Wheels Only" is an example. A standard may be changed only by a vote of the Club Membership after proper procedures have been followed & the membership fully informed (i.e. announcement at 2 consecutive monthly general meetings & inclusion in said minutes.) Club vote shall be conducted at the following meeting (3rd).

2.5. Module – a module is a portable section of trackage laid on a table type structure which is a single part of a larger group of like table which, when assembled together, form a large & fully operating model railroad. By being portable, modules may be disassembled for transportation to public displays. Modules are built by individual club members with the specific purpose of interfacing with other modules to form a large layout which will vary in shape & size as available space permits. A module may be a single table or a group of tables. They must be capable of interface at each end but may deviate between these ends so long as the type of operation is not compromised or restricted. Modules used in the club layout must be built to a standardized set of dimensions that allow each unit to interface exactly with other units anywhere in the overall system.

2.6. Section – a section is a multi-module portion of track that is designed to function as a single unit. As such, its individual modules cannot be used except as a specific part of the assembled set of modules that form the section.

2.7. Routine Operation/Fun Run – Routine operation is an assembled GCMRA module or permanent layout whose purpose is for all members of the GCMRA, & their invited guests, to run their rolling stock & other equipment on the layout in a "fun & informal' manner. Such runs may or may not incorporate "work in progress" modules, "troubleshooting" sessions, testing of new or different control activities, let individuals test &/or run new or special equipment, incorporating building projects, including special interest activities, etc. In general, Routine Operation is a GCMRA activity to encourage member participation & Model Railroading activities in an informal setting. The 3rd Saturday is reserved for a scheduled Fun Run.

2.8. Show Run – A Show Run is an assembled GCMRA layout whose purpose is to present the modules & equipment of the GCMRA members in a formal setting. Show Runs are designed for general public viewing of the layout. GCMRA often asks for & receives a fee for setting up a Show Run. A Show Run incorporates only finished & tested modules in the layout. Active members are encouraged to run the layout. Show Runs are conducted as directed by the Club action.

2.9. Operating Sessions – An Operating Session is an assembled layout whose purpose is the enjoyment of operating on a time table in similar fashion to real railroads. All members of the GCMRA & their invited guests are encouraged to participate in Operating Sessions. All participants must use rolling stock & other equipment that has been checked-in, documented, & approved to the GCMRA RP's for use during the Operating Session. The 4th Thursday night is reserved for Operating Sessions.

2.10. Work Sessions – A Work Session does not require an assembled GCMRA layout & its primary purpose is to perform development, construction, maintenance, &/or repair to layout modules, electronic &/or control equipment. Such sessions are for all members of the GCMRA, & their invited guests & are likely to incorporate "work in progress" modules, "troubleshooting" sessions, testing of new or different control activities, let individuals test &/or run new or special equipment, incorporating building projects, including special interest activities, etc. Work Sessions are conducted each Tuesday evening & unscheduled Saturday mornings or when specially called by membership.

3. ROLLING STOCK (RS) REGISTRATION CATEGORIES

3.1. UNREGISTERED EQUIPMENT: Equipment that is normally operated only by or as directed by the owner, and is removed from the railroad when not in use. This equipment must not be operated in trains longer than 15 cars (siding length).

3.1.1 Class I, Uninspected: A Visitor's or member's personal equipment, which may be operated on the railroad on a 'one time basis only' with the approval of the Operator in Charge or Club Officer.

3.1.1.1. This equipment must not be operated in mixed trains with 'Limited Use Registration' (Class IV) equipment without approval of the Club Officer or Car Department Foreman and may only be operated in mixed trains with 'Regular Registration' equipment (Class III) with the specific consent of the registered car owner(s).

3.1.1.2. Rolling stock (RS) of any class shall have metal wheel sets. Plastic wheel sets will not be permitted on anyone's equipment placed or operated on the layout. Plastic wheel sets are a constant source of rail contamination & are a major factor for loss of electrical contact. RS determined to have plastic wheel sets should be removed immediately & a Bad Order form started (see Section 5.2).

3.1.1.3. Uninspected equipment causing any operating problems must be removed from the railroad immediately.

3.1.1.4. Members noticing problems with visitor or member equipment should bring them to the attention of the Operator in Charge or Club Officer, who should investigate and determine whether the equipment should be removed from the railroad.

3.1.1.5. Uninspected equipment must be removed from the railroad immediately at the close of the day's operation, except with the permission of the Operator in Charge for the following day.

3.1.1.6. In the absence of the owner or his designated representative, any Regular member may remove any uninspected equipment from the railroad at any time, exercising care to avoid damage. A **Bad Order** form should be filled out & co-signed.

3.1.1.7. Visitors & members operate their equipment on the club railroad at their own risk. The club will not be responsible for damage to visitor's equipment. Visitors may be held responsible for damage to the display attributed to the operation of their equipment.

3.2. REGISTERED EQUIPMENT: Equipment that meets all applicable requirements specified below and which is normally left on the railroad for use by other members during public operation or club operating sessions. The Car Department will maintain a Registry Inventory form for all equipment left on the layout. This form will record complete car history, condition and wheel type.

3.2.1. Class II, Inspected: Members' personal equipment, normally removed from the layout when not in use.

3.2.1.1. Equipment in this category will be inspected by the Car Department. The Car Department may inspect any or all equipment that a member intends to run on the railroad. The decision whether to inspect all, or a sample, may be based on:

a. Prior experience with this particular equipment.

b. Prior experience with a member's equipment generally.

3.2.1.2. Equipment may be operated pending inspection but is subject to inspection by the Car Department whenever it is on the railroad, and to Bad Order (Section IV, Part B) and removal from the railroad if not in compliance with any applicable requirement.

3.2.1.3. Inspected equipment must conform to applicable requirements detailed in Section 4.0, below, except those requirements enclosed in brackets.

3.2.1.4. This equipment must not be operated in mixed trains with 'Limited Use Registration' (Class IV) equipment without approval of a Club Officer or Car Department Foreman and may only be operated in mixed trains with 'Display Registration' equipment (Class III) with the specific consent of the registered car owner(s).

3.2.1.5. Members noticing problems with inspected equipment should bring them to the attention of the Operator in Charge or Club Officer, who should investigate and determine whether it should be removed from the railroad. If a specific defect is apparent, a **Bad Order** form should be completed and the piece of equipment removed from the railroad (Section 3.1.1.6.).

3.3. Class III, Regular Registration –Equipment that meets all applicable requirements detailed below in Section 4.0 and is therefore suitable for use in club operating sessions. Class III equipment is normally left on the railroad for daily public operation. This equipment must meet all the same requirements as 'Inspected Class II' equipment. This equipment will have a green bar marked across the "B" end draft gear to indicate its Regular Registration status.

3.4. Class IV, Limited Use Equipment –Class IV equipment meets all applicable requirements. Class IV is reserved for specialized or high value equipment such as brass passenger trains, etc. Class IV status is at the request of the owner. Class IV shall be used only during operation sessions or by permission of the owner.

4.0. STANDARDS AND REQUIREMENTS

4.1. General

4.1.1. All equipment must be in generally good condition and realistically, solidly and properly constructed, with all parts securely attached, and must not detract from the appearance or the operation of the railroad. All equipment shall have metal wheel sets.

4.1.2. All equipment must have standard safety appliances appropriate to the period being modeled, i.e., diaphragms, ladders, roofwalks, brake wheels, grab irons, etc.

4.1.3. Equipment owners shall provide all repairs/maintenance to their own equipment.

4.1.4. Each absentee equipment owner must name a designee in writing, who has agreed to maintain equipment left on the railroad in owner's absence. Otherwise, permission shall default to the Car Department.

4.1.5. All equipment must be of a type which might be found in regular service on a railroad.

4.1.6. All equipment must be suitable for viewing by all ages and not be morally questionable as to subject matter or purpose.

4.1.7. All equipment must be marked with the owners designated color-coded paint dot system on file in the Car Department and posted on the bulletin board. The GCMRA color code is Green and White. Such marks shall be permanently attached to the underside of the equipment. Any new member desiring to leave personal rolling stock on the railroad should examine the Color List and select his/her exclusive color code for them alone to use. The Car Department and/or owners may also apply additional markings or labels as needed for fleet management or security purposes (solid green bar marking on the "B" end draft gear indicates a car which has been inspected & meets RP's). These markings shall not be visible when the equipment is on the railroad. Reasonable efforts will be made to identify owners of unmarked equipment and return it to them. Unmarked equipment left on the railroad for long periods of time may be deemed "abandoned," and becomes the property of the club if it cannot be identified or goes unclaimed. This equipment should be removed from the railroad and kept by the Car Department pending further action.

4.2. NMRA Standards and Recommended Practices

4.2.1. All equipment must meet the following NMRA Recommended Practices: RP-2 (wheel gauge), RP-20.1 (weight & center of gravity), RP-25 (wheel contour & tread width) and RP-23 (bolster).

4.2.2. Members owning or maintaining Inspected or Registered Equipment should own both an NMRA Standards Gauge and a Kadee Coupler Height Gauge. These gauges must be checked against the appropriate Club reference gauge for calibration and adjustment and be certified by the Car Department to be accurate and correct. Members must demonstrate proper use of their gauges to the Car Dept.

4.2.3. All Limited Use (Class IV) and 'Regular' (Class III) Registration equipment must meet the NMRA Recommended Practices specified above, except that GCMRR Club standards for weight, roll-ability, center of gravity and their allowances (paragraphs 4.6-4.10 below) shall supersede the RP-20.1 weight table.

4.3. Wheels/Trucks

4.3.1. All rolling stock must have metal wheels of RP-25 contour (successor or equivalent), free from excessive wobble or run- out and the trucks should be of rigid construction.

4.3.2. Sprung (and/or equalized) trucks will only be allowed on the railroad on a "proof" basis and must be removed if they cause problems.

4.3.3. All trucks having single insulated metal axles (wheel sets), where the insulation cannot be readily seen without truck disassembly, will have said insulation identified by red paint band applied to the back of the insulated wheel, around the axle.

4.3.4. All cars having single insulated metal axles (wheel sets), will have every axle of that car oriented so that said insulation is aligned to the same car side. Locomotives or other track powered rolling stock (i.e.: lighted cars) excepted.

4.3.5 Trucks equipped with single insulated axles (wheel sets) must be mechanically prevented from reverse (180%) truck rotation to avoid short circuit of track power.

4.3.6. Single insulated axles in metal sideframe trucks must either have clearances such that the insulated wheel does not contact the metal sideframe or have insulating washers installed between face of wheel and sideframe.

4.3.7. Rolling stock with one piece metal underframes (or metal weights secured by metal truck or coupler screws) AND metal sideframe trucks MUST be equipped with double insulated wheel sets or insulated truck screws or have insulated coupler pockets.

4.3.8. All trucks must be secured to the car body by means of a metal screw of any type (machine, sheet metal, wood), size (No. 1 or 2 or metric

equivalent), thread (coarse or fine) or head (round or filister) appropriate to the application (NMRA RP 23).

4.3.9. Wheel treads should be smooth or polished, not roughened or abraded. A shiny, steely or silvery finish is preferred. A"brassy" appearance is to be avoided.

4.3.10. All equipment must pass a surface plate test, with trucks screwed tight to show misaligned wheel sets. Car must sit square and straight with all wheels in contact with surface plate. Trucks will be properly adjusted before entering service.

4.3.11. All existing equipment becoming 'Bad Order' must pass a complete and comprehensive inspection (including surface plate test) and trucks must be properly adjusted (for drag & rotation) before being returned to service.

4.4. Detection (to be addressed at a future date)

Rolling stock (RS) detection is a necessity for future train control operating systems. The following RP is recommended for all new RS of any classification but should be mandatory for "Registered" RS when a detection system is adopted.

A detection system for activation of signaling, etc. will be adopted by the Club sometime in the future. RP's will be developed as necessary depending on the system recommended and adopted by the membership.

4.5. Couplers

4.5.1 All rolling stock must be equipped with operating Kadee-compatible couplers. They shall be magnetically activated metal gladhands on both ends (unit train blocks and steam locomotive pilots MAY be equipped with non-operating Kadee compatible couplers).

4.5.2. Truck mounted (Talgo) couplers are prohibited unless they are prototypical or approved by the Car Department. Specialized draft gear arrangements will be evaluated and approved on an individual basis.

4.5.3. Couplers must center, be in gauge and couple with others without excessive force.

4.5.4. Coupler faces at rest must be aligned vertically within ± .010" (one gray washer) of the knuckle position of a standard gauge.

4.5.5. Coupler shank vertical free play must be limited to ±.015" from the position at rest using shims if necessary. Scale-body couplers (ie: #58) are limited to free-play of ± .010". Knuckles shall not raise up when pulled against standard gauge.

4.5.6. Couplers MUST NOT: sag or have excessive draft gear free play or excessive knuckle free play. Underframes must be made sufficiently

rigid to resist nominal bending moments, securing them to the floor or car body if necessary.

4.5.7. Coupler body will be crimped to limit excessive knuckle free play and/or sag, as necessary.

4.5.8. Screws, size No.2-56 (or smaller) of any thread, length or head type appropriate to the particular application are required to secure coupler draft gear to the car (counter-sunk flat-head No.1-72 or smaller work well and don't appear too large). Center hole or paired side hole mount holes on Kadee draft gear may be used.

4.5.9. Couplers should have polished, unpainted knuckle faces, but all other visible parts must be appropriately painted or weathered.

4.5.10. Extended (i.e. Duryea or Hydra-Cushion) type draft gear will be fitted to rolling stock where prototypical.

4.5.11. Coupler glad hands (operating levers) must NOT be shortened or cut, but MAY be re-bent or re-formed (Locomotives and passenger cars MAY be excepted).

4.5.12. To prevent undesired uncoupling against helper locomotive pilots, freight car gladhands may be rotated from the standard centerline knuckle offset an additional amount not too exceed 85° when knuckle is fully open (modified couplers will be provided on an exchange basis by the Car Department). Permanent transition cars so equipped may be used.

4.5.13. Coupler centering springs must be shimmed to eliminate any LATERAL play between the centering spring and the inner sides of the coupler pocket.

4.5.14. Whisker coupler springs (Kadee 100 series) are new to the market (2005) and may be used at the owner's discretion. Use history to date has been positive. Should operational problems arise the Car Department may submit RP's to insure reliable operation.

4.5.15. Scale couplers (new smaller #58's) due to their smaller profile, have a smaller matching coupler surface. Track work & the absence of vertical curves becomes critical in order to prevent uncoupling. To date, scale couplers have not proven themselves & are accepted on a trial basis only.

4.6. Weight

4.6.1. <u>The minimum weight for any car is 3.25 oz</u>. 'Inspected' rolling stock, Class II-IV (excepting Locomotives), must conform to NMRA Recommended practice RP20.1, with an absolute minimum weight of 1/4 oz. below or 1/2 oz.

above the calculated recommended practice. One ounce initially with an additional ½ ounce per inch of car length (measured end sill to end sill) is recommended.

4.6.2. Track slider (cleaner) cars should be weighted to the maximum weight for their car length and roll-ability category, and roll bench tested with their slider disengaged from rail contact. Finally, they must be successfully track tested on the railroad with the track slider (cleaner) fully engaged.

4.6.3. 'Registered' equipment, Class II-IV, must be weighted according to the appropriate weight/ body length/roll-ability/ Chart 4.8.11 Category I. The chart tolerance is as above and further allowances should be made according to paragraph 4.7.1, below. Every effort should be made to construct equipment to its charted 'target' weight. Freight cars regularly used in passenger service (e.g., express boxcars and refrigerator cars) will conform to the applicable standard in Category II Weight Table.

4.6.4. Model loads added to rolling stock should weigh as little as possible, except as provided in paragraph 4.7.1.b. following.

4.7. Allowances

4.7.1. Allowances to car weights MAY be made from the weight requirements at the discretion of the Car Department Foreman, on a 'proof' basis, as follows:

a. Cars having less than CG35, NO weight reduction.

b. Cars having CG35 or greater: allow 0.25 oz. (1/4 oz) reduction to weight requirement for every 5 degree increment to CG Index (CG40, CG45, etc).

4.7.2. There is no roll-ability exemption for cars in regular interchange service (i.e., freight cars). Cabooses MAY be excepted only if wipers , etc are installed for lighting effects.

4.8.1. Category I: Cars of Predominantly Non-Metal Construction (Freight Car Weights)

Table A

Nearest foot	Nearest ¼ inch	Ounces	
Car length* in scale feet	Car length* in inches	12 oz + ½ oz/inch car length	Car weight in grams
30	4.14	3.07	87.00
	4.25	3.13	88.59
34	4.69	3.34	94.82
	4.75	3.38	95.68
35	4.83	3.41	96.78
36	4.97	3.48	98.73
	5.00	3.50	99.22
	5.25	3.63	102.77
	5.50	3.75	106.31
40	5.52	3.76	106.55
	5.75	3.88	109.85
42	5.79	3.90	110.46
43	5.93	3.97	112.42
	6.00	4.00	113.40
44	6.07	4.03	114.37
45	6.21	4.10	116.33
	6.25	4.13	116.94
46	6.34	4.17	118.28
47	6.48	4.24	120.24
	6.50	4.25	120.48
48	6.62	4.31	122.19
	6.75	4.38	124.15
49	6.76	4.38	124.15
50	6.90	4.45	126.10
	7.00	4.50	127.57
51	7.03	4.52	128.06
52	7.17	4.59	130.01
	7.25	4.63	131.11
53	7.31	4.66	131.97
54	7.45	4.72	133.92
	7.50	4.75	134.66
55	7.59	4.79	135.88

*****Measure car length from “A” end ‘end sill’ to the “B” end ‘end sill’. Disregard coupler and draft gear when measuring car length.

4.8.2. Category II: Maximum weights for Passenger Cars and cars of Predominately Metal Construction

Table of car Weights (in ounces) by carbody Length (scale feet), versus Roll-ability (by percent of grade).

%grade>	1 / 2 %	1%
Scale ft		
40	5.0 oz.	5.5
45	5.5	6.0
50	6.0	6.5
55	6.5	7.0
60	7.0	7.5
65	7.5	8.0
70	8.0	8.5
75	8.5	9.0
80	9.0	9.5
85	9.5	10.0
90	10.0	10.5
95	10.5	11.0
100	11.0	11.5

Use length of RS & the ruling grade of the subject layout to determine weight (i.e. a 50' car on a layout with 1% grade should weigh 6.5 oz.).
GCMRA present ruling grade is 1% on the helix.

4.9. Roll-ability

4.9.1 Rolling stock (excluding locomotives and other track powered equipment) must initiate spontaneous motion on a grade of 2.0 % or LESS and continue a smooth, steady, uninterrupted roll for at least one full car body length.

4.10. Center of Gravity

4.10.1. Cars should be constructed to obtain the lowest possible center of gravity. (RP 20.1). This is achieved by proper weighting of equipment. A low Center of Gravity Index (CGI) helps to prevent "string lining" (flipping over) around the inside of a curve when a long train is being pulled (usually at the worst time while on a curve in a tunnel out of reach).

4.10.2. Any supplementary weight added to bring a car to its required weight should be kept as low as possible.(RP 20.1)

4.10.3. The center of gravity of each piece of rolling stock (locomotives excepted) shall be determined on a Protractor or Tilt Table and noted as its Center of Gravity Index (CGI), expressed in degrees, i.e., CG35 (orCG35). This shall be the farthest deflection from the normal upright (0 degree or vertical) position to which the car can be tilted, from a flat, level, horizontal surface (90 degrees) on which it stands without tipping over. This will be determined by using a vertical protractor arm moving against

the flat vertical side of the car, as the car is tipped sideways, the protractor pivot point coincident with said horizontal flat surface. Adapter blocks shall be used to establish a flat plane for the measurement of equipment not having flat sides. A high CG index number indicates a low center or gravity, i.e.: CG90.

4.10.4. Rolling stock will be tilt (protractor) tested on both sides of car to establish the CG Index. The poorest (lowest) reading will become the CG Index for that car.

4.10.5. Cars with hollow underframes may be required to have them filled with lead or lead putty (or other suitable material) to achieve optimum low center of gravity.

4.10.6. The minimum center of gravity index for any NEW registration car shall be 30 degrees (CG30), brass models MAY be exempted if modification ruins their value.

4.10.7. High value model (brass, one-off, etc) MAY be exempted if modification ruins value or appearance.

4.10.8. Equipment not meeting this RP shall be designated as “end-of-train” position ONLY to minimize operational problems.

4.11. Lettering/Numbering and Paint

4.11.1. The paint scheme will conform to that of the railroad or private car company being modeled in regard to color, lettering style and placement, reporting marks, and other miscellaneous stencils or markings. Colors will match prototype practice.

4.11.2. All items such as couplers, springs, axles, screws, etc., will be appropriately painted or weathered.

4.11.3. Decals must be correctly aligned and applied so as to minimize the visibility of the decal film and must be covered with a protective coating that blends with the adjacent surfaces. When decals or dry transfers are used to change a number on a pre-painted piece of equipment, type style, size and color of the decal digits must match the painted digits; otherwise the entire number must be replaced.

4.11.4. Reporting marks must conform to those listed in an issue of “The Official Railway Equipment Register” appropriate to the period of the model. End markings MUST include car initial and number. Exception: ‘Limited Use Registration’ equipment, Class IV, MAY omit end markings, however, when required,

4.11.5. No equipment may be registered with a car initial and number which duplicates that of any existing registered equipment.

4.11.6. Equipment lettered for fictitious companies will be so noted on the registration record. Such equipment will conform to the lettering and painting practices typical of the period the model represents. Initials representing fictitious railroads must not be the same as those of any other railroad companies, real or fictitious, EXCEPT: equipment bearing the initials of private car companies may be lettered for fictitious lessors.

4.12. Markers

4.13.1. Cars used at the rear of trains must be equipped to comply with Operating Department Rule 19 (marker or tail lights or end-of-train device).

4.13. Diaphragms

4.14.1. All equipment for which the prototype is or would be equipped with diaphragms must be so equipped.

4.14.2. Except when used between permanently coupled units, diaphragms must meet the following specifications:

4.14.2.1. Face plates of diaphragms must be in alignment with or protrude no more than 3/32 inch beyond the inside surface of the coupler knuckle.
4.14.2.2. Tabs or other protrusions on the face of the diaphragm are prohibited.
4.14.2.3. Diaphragms may be mated with others of any prototypical dimensions as long as they do not cause operating problems.

4.14. Other Equipment

4.15.1. Piggyback trailers/containers, passenger cars, cabooses, non-revenue (maintenance of way) cars and all on and off-rail equipment must meet the applicable Car Department Regulations and be registered.

4.15.2. TOFC/COFC trailers/containers or any other loads shall NOT be weighted, EXCEPT when the weights are mounted on the lower level of double-stack cars.

4.15. Other Tolerances, Allowances and Exceptions

4.16.1. There is no roll-ability tolerance for cars in general interchange service (Passenger cars, cabooses and maintenance of way equipment are not in such service).

4.16.2. Exceptions or exemptions beyond stated allowances are discouraged. The Car Department may grant them in exceptional circumstances, considering the risk of damage which may be caused to the layout and to other equipment. They may be revoked at any time if they cause problems.

4.16.3. Exceptions to these regulations may be granted ONLY by authority of the Club Officer or the Car Department Foreman or majority vote of the Regular Members as provided by the By-Laws. Such exception may be rescinded by majority vote of the Regular Members as provided by the By-Laws.

5.0. POLICIES AND PROCEDURES

5.1. Lubrication

5.1.1. The ONLY items to be lubricated are those for which a lubrication policy has been established.

5.1.2. The following items MAY be lubricated: couplers, axles, journals, bolsters.

5.1.3. Couplers will be lubricated with DRY type lubricants ONLY (i.e. Teflon or graphite).

5.1.4. Plastic trucks will be lubricated with DRY type lubricants ONLY.

5.1.5. Liquid, paste, or oil type lubricants may ONLY be used in locomotive gearboxes, journals or similar enclosures and must be applied carefully to avoid fouling roadbed.

5.2. Bad Orders

5.2.1. Defective or broken equipment MUST have a **Bad Order** form or facsimile thereof, COMPLETED and SIGNED as inspector by any member finding such equipment. In addition, the Bad Order form must be cosigned by either the OD or a club officer.

5.2.2. Bad Ordered equipment WITH completed form should then be placed in the ‘Bad Order’ box. The Car Dept. will return these cars to their owners for repairs. The Car Dept. keeps a record of all Bad Orders and cars must not be removed directly from the box for repair without authorization by the Car Dept. Club owned or operated equipment will be repaired by the Car Dept.

5.2.3. Rolling stock made “Bad Order” for ANY reason must have ALL other defects (chipped paint, missing or broken parts, etc.) repaired before

being returned to service. This includes items NOT cited on ‘Bad Order’ form.

5.2.4. Bad Order rolling stock must be submitted to Car Department for reinspection and approval BEFORE being returned to service.

5.2.5. Rolling stock not complying with rule 5.2.4, above, MAY have its number superseded on the roster by another car of same initial and number.

5.3. Removal of Equipment by Owner

5.3.1. Members removing their registered equipment (Class III & IV) from the Club premises for any reason except repair under an issued ‘Bad Order’ are requested to notify the Car Department in writing of all equipment removed by initial, number, and brief description. The Car department should also be notified before this equipment is returned to the railroad.

5.4. Enforcement

5.4.1. Repeated abuse or ignorance of any Car Department Regulations may result in loss of privilege as specified in the By-Laws.