

Introduction to Car Repair Billing

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AAR INTERCHANGE RULES AND CAR REPAIR BILLING

2014

FIELD MANUAL

OF THE

A.A.R.

**INTERCHANGE
RULES**



2014

OFFICE MANUAL

OF THE

A.A.R.

**INTERCHANGE
RULES**



RULE A

- ◆ These rules are formulated in two manuals, the Field Manual and Office Manual, as a guide to the fair and proper handling of interchange freight traffic.
- ◆ These rules make car owners responsible for and therefore chargeable with repairs to their cars due to ordinary wear and tear in fair service.
- ◆ These rules also place responsibility for damage to any car resulting from unfair usage.



RULE A (CONT.)

- ◆ When any component is determined to be handling line or defect card responsibility, the entire component is to be billed as such, even in the event of an owners defect is present.
- ◆ All freight railroads, interchange freight car owners, and running repair agents must subscribe to the AAR interchange rules.



RULE B

- ◆ **When specified in these rules, components must be reconditioned in a facility that has a current AAR M-1003 certification per AAR Specification for Quality Assurance, Section J.**



RULE B (CONT.)

- ◆ **Any deviation from correct repairs identified in the Rules herein will be considered a wrong repair unless owners permission is received.**



RULE 1 CARE OF FREIGHT CARS

- ◆ 1. Inspection
 - ◆ Each handling line is responsible for the condition of all cars on its line.

- ◆ 2. Repairs to foreign cars.

All Cars

- ◆ Cars should be repaired by car owner insofar as may be practical.
- ◆ Repairs to loaded cars must be confined to the minimum necessary for the safety of operating personnel, safe movement of cars, and protection of lading.
- ◆ Repairs to empty freight cars not to be subsequently loaded by repairing line, except repairs outlined in Section 2. b, as provided in this rule, must be confined to the minimum necessary for safety of trainmen and safe movement of car to home line.



RULE 1 CARE OF FREIGHT CARS

- ◆ *Repairs to foreign cars (cont.)*
 - ◆ Repairs to empty cars for subsequent loading by repairing line or any line in same switching district (approximate 50 mile radius) must not exceed 16 hours for protection of lading unless the owner is notified and approves except as shown in Section 2.b.(1)
 - ◆ Repairs must be made promptly and must conform to the original construction of car.
- ◆ *Gages and publications*
 - ◆ Rule 1 also lists all the gages and publications that are required by the AAR for all repair tracks.



USING THE AAR FIELD MANUAL

TABLE OF CONTENTS

- ◆ The table of contents is divided into various groups of the main components on freight cars.
- ◆ These main components are further subdivided into specific components listed by rule number.
- ◆ Also each rule lists the applicable job code range for that rule.



TABLE OF CONTENTS (CONT.)

Table of Contents

(Job Code Ranges follow the title of each rule)

Rule A

Rule B

Rule 1 - Care of Freight Cars

AIR BRAKE EQUIPMENT

Rule 2 - Vacant

Rule 3 - Testing of Air Brakes-(1139-1159)

Rule 4 - Air Brakes and Parts-(1116-1612)

Rule 5 - Air Brake Hoses and Hose Supports-(1165-1630)

Rule 6 - Brake Beams-(1650-1698)

Rule 7 - Brake Beam Hangers, Brackets, Wear Plates, and Brake Connection Pins, Hanger Pins or Bolts - (1742-1999)

Rules 8&9 - Vacant

Rule 10 - Brake Beam and Bottom Rod Supports-(1768-1770)

Rule 11 - Brake Levers, Guides and Brake Connection Rods-(1792- 1816)

Rule 12 - Brake Shoes and Shoe Keys-(1830-1852)

Rule 13 - Hand Brakes, Geared and Non-Geared-(1856-1992)



TABLE OF CONTENTS (CONT.)

COUPLERS, YOKES, DRAFT GEARS, UNCOUPLING LEVERS AND SUPPORT BRACKETS

- Rule 16 - Couplers, Type E and Parts – (2004-4474)
- Rule 17 - Couplers, Type E/F and Parts – (2056-4478)
- Rule 18 - Couplers, Type F and Parts – (2075-4478)
- Rule 19 - Yokes, Type E – (2312-4470)
- Rule 20 - Yokes, Type E/F and F – (2354-4470)
- Rule 21 - Draft Gears, Carriers and Followers – (2400-4470)
- Rule 22 - Uncoupling Levers and Support Brackets – (2480-2486)



RULE SECTIONS

- ◆ Each rule containing job codes has six sections. Sections A through F.
- ◆ Section - A
 - ◆ *Cause for attention*
 - ◆ *Wear limits*
 - ◆ *Gauging*
 - ◆ *Cause for renewal*
 - ◆ Such as:
 - ◆ worn out, broken, bent, missing, etc.



RULE SECTIONS (CONT.)

Section - B - *Correct repairs*

- ◆ What must be done to make the correct repair.
- ◆ Correct repair charts, if applicable.

B. Correct repairs: All couplers rigid shank except as noted

Removed	What can be Applied	Remarks
D obsolete Any size E obsolete	Any current applicable standard	Do not alter car structure without owner's premission.
E60 BE60 (21 1/4" shank)	E60CC E60CHT E60DC SBE60DC SBE60CC E60CE E60CHTE E60DE SBE60CE SBE60DE	Do not use E25B locklift assembly with SBE60DC or SBE60CC couplers. (see note 1)
BE60BHT (21 1/2 " shank with wear plate) BE60AHT	E60CC E60CHT E60DC SBE60DC SBE60CC E60CE E60CHTE E60DE SBE60CE SBE60DC	Do not use E25B locklift assembly with SBE60DC or SBE60CC couplers. (see note 1)



RULE SECTIONS (CONT.)

- ◆ **Section -B- (cont.)**
 - ◆ **All of section -B should be referenced when making a repair, not just the correct repair chart itself.**

Example from Rule 16, Section B:

All tank cars must have couplers replaced with double shelf couplers when couplers reach the wear limits, gauging or cause for renewal criteria stated in Section A of this rule. All DOT classification tank cars and all DOT and Non-DOT tank cars in hazardous materials service must be equipped with double shelf couplers.



RULE SECTIONS (CONT.)

◆ Section - C - *Recondition Requirements*

- ◆ This section contains the requirements needed to recondition freight car parts.

◆ Section - D - *Welding Requirements*

- ◆ This section determines whether or not you are allowed to weld on a particular car part.
- ◆ This section may also outline additional welding requirements.



RULE SECTIONS (CONT.)

- ◆ **Section - E - *General Information***

- ◆ This section covers any additional information that may be needed in performing the repair.

- ◆ **EXAMPLE:**

- ◆ **Rule 5 Sec. E (8) - Self-locking** nuts must not be used on any studs securing air brake portions to pipe brackets or to studs used to secure parts to portion.
- ◆ **Rule 44 Sec. E (1)** – Condition code as shown in this rule pertains to the material condition of the roller bearings only.



RULE SECTIONS (CONT.)

- ◆ **Section - E - (cont.)**
 - ◆ **Section E also lets you know if you cannot bill for straightening certain parts on the car.**
 - ◆ **Example: Rule - 11- Sec. E.1**
 - ◆ **No labor charge allowed for straightening these items on car.**
 - ◆ **Example: Rule - 53 - Sec. E**
 - ◆ **Section E in rule 53 doesn't list any items that cannot be straightened on car, therefore all parts listed under Rule 53 can be straightened on car and billed to the car owner.**



RULE SECTIONS (CONT.)

- ◆ **Section - E - (cont.)**

- ◆ **Example: Rule 13 - Sec. E**

- ◆ **No labor charge allowed for the following items when straightened on car, and billing repair card is not required.**
 - ◆ **Brake wheel or handle**
 - ◆ **Brake shaft**
 - ◆ **Brake shaft stirrup**
 - ◆ **Brake shaft stirrup support**



RULE SECTIONS (CONT.)

- ◆ When straightening or repairing parts on the car it is also important to remember that Rule 83 states:
- ◆ Charge for repairs or reconditioning, including R&R of part repaired or reconditioned, must not exceed gross value applied, of such item.



RULE SECTIONS (CONT.)

- ◆ **Section - F - *Billing Repair Card Requirements***
 - ◆ **Section F covers all information required to correctly bill for a repair.**
 - ◆ **Whether or not a location is required.**
 - ◆ **How the quantity is figured-**
 - ◆ each
 - ◆ per pound
 - ◆ per inch
 - ◆ per foot



RULE SECTIONS (CONT.)

- ◆ **Section - F (cont.)**

- ◆ ***Condition code.***

- ◆ A numeric code used to indicate the condition of material applied, such as, new - 01, second hand - 02, reconditioned - 03, or type of repairs performed, such as labor attention - 00, service attention - 07, R&R - 09 or RR&R - 08.

- ◆ ***Job code applied and job code removed.***

- ◆ The four digit number used to identify the car component applied or removed.



RULE SECTIONS (CONT.)

◆ Section - F (cont.)

◆ Car part

- ◆ Two digit alpha code used to identify the component repaired (per rule 83). Below are some examples of Car Part Codes listed in Rule 83.

Car Part Codes

17. Codes to be used on Billing Repair Card when car part identification code is required by Section F4 and F7 of a given repair Rule:

BRAKE EQUIPMENT		BRAKE EQUIPMENT	
AA	AIR BRAKE CYLINDER	AU	BOTTOM ROD BRACKET
AB	AIR BRAKE CYLINDER PUSH ROD	AV	BOTTOM ROD SAFETY SUPPORT
AC	AIR BRAKE EMERGENCY PORTION	AW	BRAKE BEAM
AD	AIR BRAKE HOSE	AX	BRAKE BEAM CYLINDER HOSE
AE	AIR BRAKE HOSE CHAIN	AY	BRAKE BEAM CYLINDER PUSH ROD
AF	AIR BRAKE HOSE CLAMP	AZ	BRAKE BEAM MOUNTED CYLINDER
AG	AIR BRAKE HOSE "S" HOOK	BA	BRAKE CYLINDER SUPPORT
AH	AIR BRAKE RELEASE ROD	BB	BRAKE HEAD WEAR PLATE
AJ	AIR BRAKE RESERVOIR	BC	BRAKE LEVER BADGE PLATE
AK	AIR BRAKE SERVICE PORTION	BD	BRAKE PIN
AL	AIR BRAKE VALVE	BE	BRAKE SHOE
AM	AIR BRAKE VALVE SUPPORT	BF	BRAKE SHOE KEY
AN	ANCHOR CLEVIS	BG	CLEVIS
AP	ANGLE COCK	BH	CONNECTING ROD
AQ	ANGLE COCK BRACKET	BJ	CUTOUT COCK
AR	ANGLE COCK "U" BOLT	BK	CYLINDER LEVER
AS	WIRE BRAID AIR HOSE	BL	CYLINDER LEVER GUIDE



RULE SECTIONS (CONT.)

◆ Section - F (cont.)

◆ Qualifier

- ◆ Two digit numeric code that identifies the manufacturer of the part applied or removed. Below are examples of qualifiers from Rule 16.

Qualifier	Trademark	Manufacturer
01	①	American Steel Foundries (ASF) Indiana Harbor
02	Ⓐ	American Steel Foundries (ASF) Alliance
03	Ⓑ	Buckeye Steel Castings (Buckeye)
04	CSF	Canadian Steel Foundries (CSF)
05	Ⓓ	Dominion Foundries & Steel, Ltd. (DOFASCO)
06	☆	Dresser Transportation Equipment (Gould)
07	Ⓔ	Fundiciones de Hierro y Acero, S.A. (FHASA)
08	Ⓚ	McConway & Torley Corporation (M&T) Kutztown, PA
09	Ⓜ	McConway & Torley Corporation (M&T) Pittsburgh, PA
10	Ⓝ	National Castings Div., Sharon (National)
11	Ⓞ	National Castings Div., Melrose Park (National)
12	Ⓟ	National Castings Div., Cicero (National)
13	Ⓢ	Omaha Steel Castings Co. (Omaha)
14	Ⓢ	Siderurgica Nacional, S.A. (Sidenal)
15	Ⓐ	Fundidora De Aceros Tepeyac, S.A. (FATSA)
16		Other



RULE SECTIONS (CONT.)

- ◆ Section - F (cont.)
 - ◆ *Why Made Codes*
 - ◆ Reason for making repair, such as:
 - ◆ 01 – worn out
 - ◆ 02 – Broken
 - ◆ 03 – Missing
 - ◆ Etc.
 - ◆ *Responsibility Codes*
 - ◆ 1 – Owner
 - ◆ 2 – Handling Line
 - ◆ 3 – Defect Card



RULE SECTIONS (CONT.)

- ◆ **Section - F (cont.)**
 - ◆ **9. Job codes and standard reporting descriptions.**
 - a. Job codes preceded by *** are to be used only when work is performed separately and not associated with any repair covered by a net applied Job Code.
 - b. Remaining Job Codes are net applied at any time and include all necessary labor and material to complete the operation, regardless of whether work is performed separately or in connection with any other repair, except where applicable per Section E of this Rule.

(Example from Rule 4)



RULE SECTIONS (CONT.)

◆ Section - F (cont.)

◆ 9. Job codes and standard reporting descriptions.

- a. Following Job Codes cover material only. Report applicable securement in order to obtain charge. No additional labor charges will be allowed except as provided in Section E of this rule. (Example from Rule 69)

Job Code	Description
4200	CHAIN Any size or type. Includes ring and/or clevis when required. Material, per pound. Not applicable for repairs per Rule 64. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03)
4202	HIGH STRENGTH LOW ALLOY STEEL Structural or pressed steel. Whether or not flanged or formed. Any thickness. Material, per pound. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 06, 09, 10, 25)
4204	CARBON STEEL, STRUCTURAL, PRESSED Structural or pressed steel. Whether or not flanged or formed. Any thickness. Material, per pound. (Condition Codes 1, 2) (Why Made Codes 01, 02, 03, 06, 09, 10, 25)



RULE 83 PREPARATION OF REPAIR RECORDS

- ◆ When car is on SHOP or REPAIR TRACK, the following must be performed.
 - ◆ Car carefully inspected.
 - ◆ Have an original record of repairs made at the car.
 - ◆ Have original record of repairs signed by authorized person.
(verified)

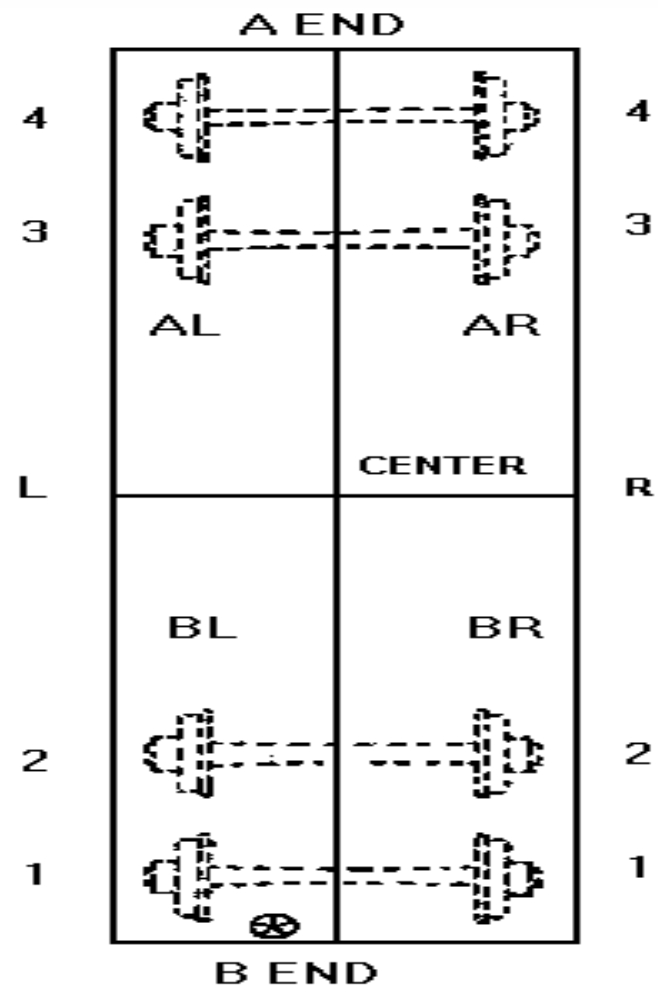


RULE 83 (CONT.)

- ◆ The original record of repairs must contain:
 - ◆ CAR INITIAL
 - ◆ CAR NUMBER
 - ◆ CAR KIND (not required in train yard)
 - ◆ DATE REPAIRS COMPLETED
 - ◆ Standard Point Location Code (SPLC).
- ◆ Repairs not covered by a specific JOB CODE must be reported under RULE 72.

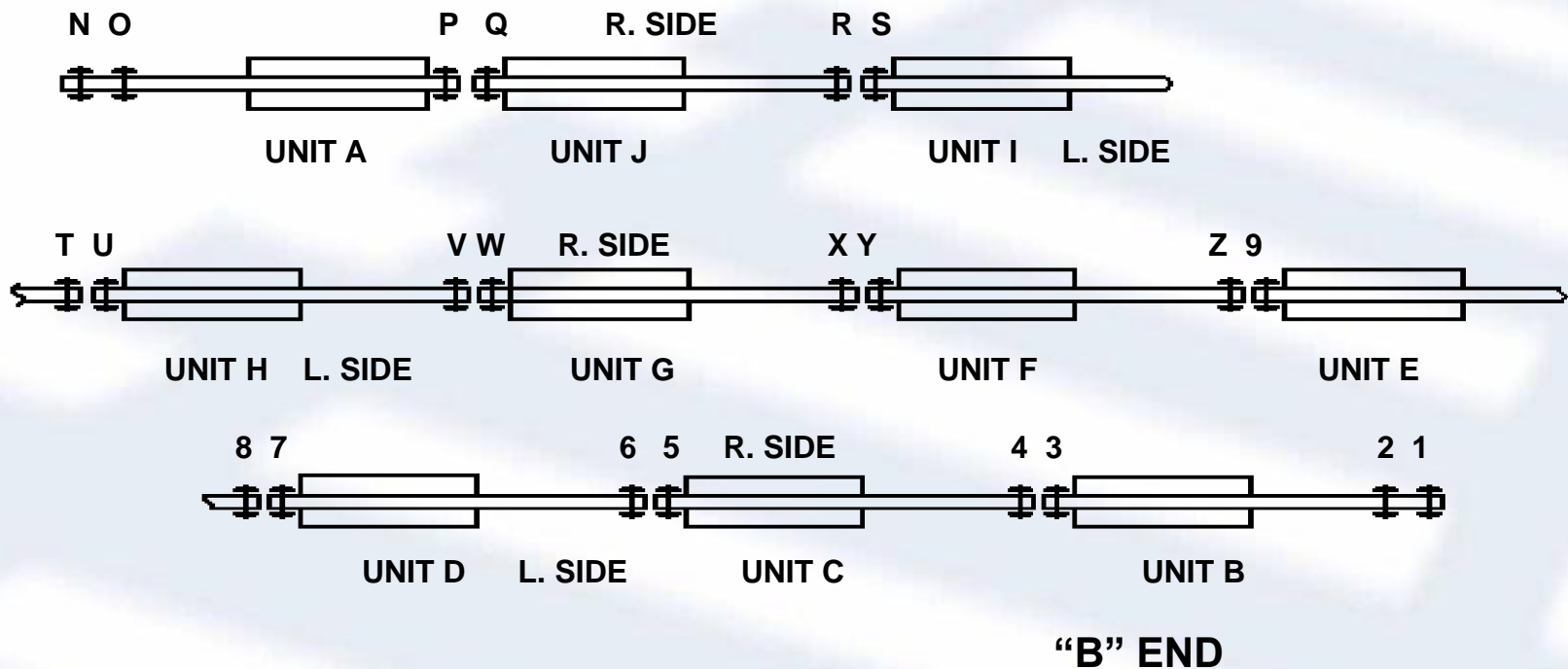


RULE 83 (CONT.)



RULE 83 (CONT.)

“A” END



RULE 83 (CONT.)

- ◆ Car part codes *identify* the part of the car where repairs are to be made.

Car Part Codes

17. Codes to be used on Billing Repair Cards when car part identification code is required by Section F4 and F7 of a given repair Rule:

BRAKE EQUIPMENT

AA AIR BRAKE CYLINDER	AT BOTTOM ROD
AB AIR BRAKE CYLINDER PUSH ROD	AU BOTTOM ROD BRACKET
AC AIR BRAKE EMERGENCY PORTION	AV BOTTOM SAFETY SUPPORT
AD AIR BRAKE HOSE	AW BRAKE BEAM
AE AIR BRAKE HOSE CHAIN	AX BRAKE BEAM CYLINDER HOSE
AF AIR BRAKE HOSE CLAMP	AY BRAKE BEAM CYLINDER PUSH ROD
AG AIR BRAKE HOSE "S" HOOK	AZ BRAKE BEAM MOUNTED CYLINDER
AH AIR BRAKE RELEASE ROD	BA BRAKE CYLINDER SUPPORT
AJ AIR BRAKE RESERVOIR	BB BRAKE HEAD WEAR PLATE
AK AIR BRAKE SERVICE PORTION	BC BRAKE LEVER BADGE PLATE
AL AIR BRAKE VALVE	BD BRAKE PIN
AM AIR BRAKE VALVE SUPPORT	BE BRAKE SHOE
AN ANCHOR CLEVIS	BF BRAKE SHOE KEY



RULE 83 (CONT.)

- ◆ Undefined car part codes are to be used when a car part cannot be identified by a specific car part code. These undefined car part codes will require a description of the part applied.

UNDEFINED PARTS
ZA UNDEFINED BRAKE EQUIPMENT
ZB UNDEFINED PIPING
ZC UNDEFINED TRUCK COMPONENTS
ZD UNDEFINED UNDERFRAME PARTS
ZE UNDEFINED COUPLER-YOKE-
GEAR ARRANGEMENT

UNDEFINED PARTS
ZF UNDEFINED CAR BODY PARTS
ZG UNDEFINED LADING EQUIPMENT
ZH UNDEFINED MECHANICAL
REFRIGERATION EQUIPMENT

(DESCRIBE UNDEFINED PART-SHOW
NARRATIVE DESCRIPTION TO PROPERLY
IDENTIFY PART. LIMIT DESCRIPTION TO
40 LETTERS; SPACES BETWEEN WORDS
TO COUNT AS LETTERS.)



RULE 83 (CONT.)

- ◆ Rule 83 lists all condition codes, why made codes, and responsibility codes that are listed throughout the Field Manual. This may help you when referencing one of these codes.



RULE 95 HANDLING AND/OR DELIVERING LINE RESPONSIBILITY

- ◆ Section -A- *Handling line resp. - At any time*
 - ◆ This section applies only when *handling line* has knowledge of damage to car resulting from unfair usage.
 - ◆ Repairs must be made to damaged car and car returned to service by the handling line.
 - ◆ If handling line is unable to make complete repairs a defect card must be issued by the handling line for un-repaired damage.



RULE 95 (CONT.)

- ◆ Some examples of unfair usage damage are:
 - ◆ Derailment
 - ◆ Cornering - side swiping
 - ◆ Striking fixed obstruction
 - ◆ Overloading
 - ◆ Submerged
 - ◆ Storm



RULE 95 (CONT.)

- ◆ Section -B- *Delivering Line Resp. - at interchange*
 - ◆ Delivering line is responsible for damage to the extent of Rule 95 B from unfair usage to car or cars moving without defect card protection for that damage outlined in 95 B.
 - ◆ If receiving road accepts car with Rule 95 B damage from unfair usage and it is not covered by a defect card this damage is now the receiving roads responsibility.

EXAMPLE

95. B.

1. Box Car

(a) 2 or more adjacent posts or braces cut through thickness of metal.



RULE 96 OWNERS RESPONSIBILITY

◆ Section -A- Owners Responsibility

- ◆ This rule covers loss, damage, or defects as listed below, on any car, unless otherwise designated as handling line responsibility in these rules.
 - ◆ Damage caused by couplers passing.
 - ◆ Damage to car resulting from cars shifting off center.
 - ◆ Damage caused by passing over obstruction on track.
 - ◆ Sagging or bowing sills.
 - ◆ Damage to protective coating or rubber lining in tank or covered hopper cars.
 - ◆ Damage to Plug doors.



Questions?



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