

SECTION B — PERFORMING OPERATIONS; TRANSPORTING

B61 RAILWAYS

B61F RAIL VEHICLE SUSPENSIONS, e.g. UNDERFRAMES, BOGIES, ARRANGEMENTS OF WHEEL AXLES; RAIL VEHICLES FOR USE ON TRACKS OF DIFFERENT WIDTH; PREVENTING DERAILING; WHEELS GUARDS; OBSTRUCTION REMOVERS OR THE LIKE (for vehicles in general B60; axles, wheels B60B; vehicle tyres B60C)

Subclass index

FRAMES, RUNNING GEAR

Underframes, bogies, connections therebetween.....	1/00, 3/00, 5/00
For different gauges.....	7/00
For preventing derailment.....	9/00
Track-engaging means other than wheels.....	11/00
WHEEL ARRANGEMENTS.....	13/00
AXLE-BOXES; FORM, MOUNTING; LUBRICATION THEREOF.....	15/00, 5/00, 17/00
WHEEL GUARDS, BUMPERS, OBSTRUCTION REMOVERS.....	19/00
SUBJECT MATTER NOT PROVIDED FOR IN OTHER GROUPS OF THIS SUBCLASS.....	99/00

1/00	Underframes (making railway vehicle underframes by forging or pressing B21K 7/12)	5/16	• • Centre bearings or other swivel connections between underframes and bolsters or bogies
1/02	• with a single central sill	5/18	• • • King-bolts
1/04	• of triangulated type	5/20	• • • with springs allowing transverse movements
1/06	• specially adapted for locomotives or motor-driven railcars	5/22	• • Guiding of the vehicle underframes with respect to the bogies
1/08	• Details	5/24	• • • Means for damping or minimising the canting, skewing, pitching, or plunging movements of the underframes
1/10	• • End constructions		
1/12	• • Cross bearers		
1/14	• • Attaching or supporting vehicle body structure	5/26	• Mounting or securing axle-boxes in vehicle or bogie underframes
3/00	Types of bogies (B61F 5/00 takes precedence)	5/28	• • Axle-boxes integral with, or directly secured to, vehicle or bogie underframes
3/02	• with more than one axle	5/30	• • Axle-boxes mounted for movement under spring control in vehicle or bogie underframes
3/04	• • with driven axles or wheels	5/32	• • • Guides, e.g. plates, for axle-boxes
3/06	• • • with three or more axles	5/34	• • • • Wedge mechanisms for adjusting clearance between underframes and axles
3/08	• • without driven axles or wheels	5/36	• • • Arrangements for equalising or adjusting the load on wheels or springs, e.g. yokes
3/10	• • • with three or more axles	5/38	• Arrangements or devices for adjusting or allowing self-adjustment of wheel axles or bogies when rounding curves, e.g. sliding axles, swinging axles
3/12	• specially modified for carrying adjacent vehicle bodies of articulated trains	5/40	• • Bogies with side frames mounted for longitudinal relative movements
3/14	• specially modified for reducing air resistance	5/42	• • Adjustment controlled by buffer or coupling gear
3/16	• with a separate axle for each wheel	5/44	• • Adjustment controlled by movements of vehicle body
5/00	Constructional details of bogies; Connections between bogies and vehicle underframes; Arrangements or devices for adjusting or allowing self-adjustment of wheel axles or bogies when rounding curves	5/46	• • Adjustment controlled by a sliding axle under the same vehicle underframe
5/02	• Arrangements permitting limited transverse relative movements between vehicle underframe or bolster and bogie; Connections between underframes and bogies	5/48	• • Trailing or leading bogies for locomotives or motor-driven railcars (B61F 5/40 takes precedence) [2]
5/04	• • Bolster supports or mountings (side bearings B61F 5/14)	5/50	• Other details
5/06	• • • incorporating metal springs	5/52	• • Bogie frames
5/08	• • • incorporating rubber springs		
5/10	• • • incorporating fluid springs		
5/12	• • • incorporating dampers	7/00	Rail vehicles equipped for use on tracks of different width
5/14	• • Side bearings		

B61F

- 9/00 **Rail vehicles characterised by means for preventing derailling, e.g. by use of guide wheels**
- 11/00 **Rail vehicles characterised by rail-engaging elements other than wheels, e.g. balls**
- 13/00 **Rail vehicles characterised by wheel arrangements, not otherwise provided for**
- 15/00 **Axle-boxes** (mounting or securing axle-boxes B61F 5/26; lubrication B61F 17/00; bearings in general F16C)
 - 15/02 • with journal bearings
 - 15/04 • • for locomotives
 - 15/06 • • for cars
 - 15/08 • • the axle being slidable or tiltable in the bearings
 - 15/10 • • • and having springs opposing such movements
 - 15/12 • with roller, needle, or ball bearings
 - 15/14 • • constructed for taking-up axial pressure
 - 15/16 • • the axle being slidable or tiltable in the bearings
 - 15/18 • • • and having springs opposing such movements
 - 15/20 • Details
 - 15/22 • • Sealing means preventing entrance of dust or leakage of oil
 - 15/24 • • • preventing oil leakage when vehicle is tilted or inverted
 - 15/26 • • Covers; Sealing thereof
 - 15/28 • • Axle-boxes modified to ensure electrical conductivity
- 17/00 **Lubrication specially adapted for axle-boxes of rail vehicles** (lubrication in general F16N)
 - 17/02 • with oil
 - 17/04 • • Lubrication by stationary devices
 - 17/06 • • • by means of a wick or the like
 - 17/08 • • • • Devices for pressing the wick or the like against the rotating axle
 - 17/10 • • • by means of an oil bath
 - 17/12 • • • by gravity
 - 17/14 • • Rotating lubricating devices
 - 17/16 • • • with rings
 - 17/18 • • • with chains
 - 17/20 • • • with scoops or the like attached to, or coupled with, the axle
 - 17/22 • • • with discs, rollers, or belts engaging the axle
 - 17/24 • • by built-in lubricating pumps
 - 17/26 • • by external feeding means, e.g. pneumatic devices
 - 17/28 • • Applications of oil cleaners not otherwise provided for
 - 17/30 • with grease
 - 17/32 • • by manually-operated lubricators, e.g. screw cups
 - 17/34 • • by automatic means, e.g. with spring action
 - 17/36 • with other, e.g. mixed, lubricating agents
- 19/00 **Wheel guards; Bumpers; Obstruction removers or the like** (for vehicles in general B60R 19/00)
 - 19/02 • Wheel guards
 - 19/04 • Bumpers or like collision guards
 - 19/06 • Nets, catchers, or the like for catching obstacles or removing them from the track (mailbag catchers B61K 1/02)
 - 19/08 • • of the drop-down type
 - 19/10 • • • automatically operated by engagement with obstacle
- 99/00 **Subject matter not provided for in other groups of this subclass [2006.01]**