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Freight containers — Container equipment data exchange (CEDEX) — Part 5: General communication codes for chassis

Conteneurs pour le transport de marchandises — Échange de données sur les équipements de conteneurs (CEDEX) — Partie 5: Codes des communications générales pour châssis

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 9897-5 was prepared by Technical Committee ISO/TC 104, *Freight containers*, Subcommittee SC 04, *Identification and communication*.

This first edition of ISO 9897-5, together with ISO 9897-2, ISO 9897-3, ISO 9897-4, ISO 9897-5 and ISO 9897-6, cancels and replaces ISO 9897:1997. Together with a thoroughly technical revision of the ISO 9897:1997, this international standard have been split into parts to simplify and relate the technical content of each part to each type of container and also, as far as possible, to harmonize the parts of ISO 9897 with the order of container types as contained in the parts of ISO 1496.

ISO 9897 consists of the following parts, under the general title *Freight containers — Container equipment data exchange (CEDEX)*:

- *Part 1: General communication codes for general purpose containers*
- *Part 2: Refrigerated containers*
- *Part 3: Tank*
- *Part 4: Special purpose containers*
- *Part 5: Chassis*
- *Part 6: Message sets for data transfer between trading partners and systems*

Freight containers — Container equipment data exchange (CEDEX) — Part 5: General communication codes for chassis

1 Scope

This International Standard specifies general communication codes for container equipment data exchange (CEDEX).

It is intended for business entities for use in communications relating to freight container transactions.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3166:1993, *Codes for the representation of names of countries*

ISO 6346:1995, *Freight containers — Coding, identification and marking*

ISO 9897-6:2010, *Freight containers — Container equipment data exchange (CEDEX) — Message sets for data transfer between trading partners and systems*

UN/C-FACT Draft Directory and Standard Directory

3 Principle

In ISO 9897, codes are assigned to pieces of information, called "data elements", which are commonly used in transactions relating to freight containers. These data elements are named and defined, and each element is assigned a CEDEX alphabetical or alphanumeric code. Separate code lists for each type of information (damage, component, repair, location, etc.) are maintained. A code may be reused in several different code lists, but a code is never used for more than one data element within a single code list.

The data element may be phrased about material of construction of a container. For example, CEDEX code "ST" in material type code list (Annex E) stands for "Steel, carbon". A code may define the component of the container that is damaged, its location, or its operating defect, depending on which data element is being defined. A selection is made from the appropriate code list to indicate which component, location, or defect, respectively, is chosen. Other coded data elements indicate essential physical characteristics of the container and information pertinent to the use and management of the container, such as names and addresses of owners.

It can be seen from these examples that the text of a message can be substantially reduced in length by using the CEDEX codes instead of plain language. Use of the CEDEX codes results in messages much reduced in length, transmission time and communication cost, yet conveying information as complete as a much longer plain-language message.

Through proper programming of a computer, a CEDEX-encoded message can be printed out in plain language for the benefit of the communicators, if so desired, or it can be left in its encoded form. The personnel using the code routinely will develop the skill of being able to read messages in coded form; in fact, experience using the code has borne out this assertion. Also, many operators will not require use of all

CEDEX codes assigned in ISO 9897, but only a portion of them due to the limited variety of containers and chassis in their domain.

Specific information about manufacturer, type and model of a container or chassis and its equipment is contained in the message, see 4.2.2.

4 Data elements and codes

4.1 Data elements

Data elements and corresponding code sets required to describe equipment components, their condition, repair methods, etc., are included in the appropriate Annex shown in table 1.

4.2 Data assignments

4.2.1 CEDEX codes

All codes assignments of CEDEX shall be taken as obligatory. That is, an operator shall not pick and choose alternative codes unilaterally, nor depart from the established protocol, nor introduce new codes without having registered the codes in accordance with 4.3.

However, two trading partners may agree mutually to use alternative codes if necessary code are not included in this standard. It is strongly recommended that such code be registered in accordance with 4.3 as soon as possible after introduction.

4.2.2 Message sets

Message sets as per ISO 9897-6 are alternative interface messages used for electronic data interchange transmission. An owner or operator can pick and choose amongst other standards and the standard serves as a list of required and optional data elements.

The specific information about manufacturer, type and model of a container or chassis and its equipment is contained in the message sets.

Annex A of ISO 9897-6 is normative; it describes the manner in which a directory of users is developed. The directory is maintained by BIC – Bureau International des Containers listed as BIC-LOCODES at www.bic-code.org.

Table 1 — Data elements and code sets

Data elements	Code set See Annex
Message type	A
Full/empty indicator (container)	B
Structural condition (container)	B
Repair condition (container)	B
Outside coating (container)	B
Inside coating (container)	B
Damage location	C
Damage type	D
Material type	E
Repair type	F
Measure unit specifier	G
Work scale (standard time factor)	G
Responsibility (for repair action)	H
Component for chassis	I
Mapping list AAR TO ISO Codes	L

4.3 Updating data elements

The ISO Council has, in accordance with the provisions of the Directives for the technical work of ISO, designated the Bureau International des Containers (BIC) as the Registration Authority for the data elements:

Registration Authority for ISO 9897
Bureau International des Containers (BIC)
41, rue Réaumur
FR 75003 Paris
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Telefax: +33 1 47660891
E-mail: bic@bic-code.org
www.bic-code.org

Additional data elements will be added to table 1 at the request of international organizations, ISO/TC 104 member bodies, and approval of TC 104/SC 4. The actual process of registration will be performed by the TC 104/SC 4 Secretariat in consultation with the experts of TC 104 /SC 4/WG 3.

Each additional data element will be allocated an alphabetic or alphanumeric code, not at present used within the same code list covering a type of data.

Annex A (normative)

Code - Message types

Numerical code	Name	Description	Message
01050	Damage / repair estimate	Description of damages and repair methods; authorization for repair work to proceed	DESTIM ^{a b}
01060	Damage / repair estimate	Description of damages and repair methods; authorization for repair work to proceed	WESTIM ^c WESTIMDT ^c

^a To be used for electronic data interchange transmissions. See appropriate message descriptions published by UN/C-FACT to determine messages to which the codes in this standard may apply. Further message types and equivalent EDIFACT codes will be added as released by C-FACT TBG3.

^b EDIFACT codes, message standards (including the relevant message type codes) are controlled by UN/C-FACT, a subsidiary organization to UN/ECE/WP.4. ISO has assented to this arrangement via a memorandum of understanding between ISO and UN/ECE.

^c To be used for electronic data interchange transmissions. See appropriate message descriptions in ISO 9897 Part 6. The messages of Part 6 of this standard are developed for trading partner systems that do not support EDI. These messages are also used for import and export of data between systems.

Annex B (normative)

Structural condition, repair condition, outside coating, inside coating, full /empty indicator

B.1 Structural condition, repair condition, outside coating, inside coating

Numerical code	Name	Description	Message
01110	Bad	Inferior quality or state of structural parts, workmanship, surface treatment, etc.	B
01120	Poor	Poor quality or state of structural parts, workmanship, surface treatment, etc.	P
01130	Medium	Average or acceptable quality or state of structural parts, workmanship, surface treatment, etc.	M
01140	Good	Good quality or state of structural parts, workmanship, surface treatment, etc.	G
01150	Excellent	Excellent quality or state of structural parts, workmanship, surface treatment, etc.	X
01110	Bad	Inferior quality or state of structural parts, workmanship, surface treatment, etc.	B
01120	Poor	Poor quality or state of structural parts, workmanship, surface treatment, etc.	P
01130	Medium	Average or acceptable quality or state of structural parts, workmanship, surface treatment, etc.	M

B.2 Full/empty indicator

Numerical code	Name	Description	Message
01160	Empty	Empty condition of equipment	E
01170	Full	Loaded condition of equipment	F

Annex C (normative)

Damage Location - Location coding convention for Chassis

C.1 First character

The first character of the location code for all chassis is always C.

C.2 Second character

The second character defines the major assembly of the chassis. The relevant codes are:

axle (full width)	A
bumper (rear end) area	B
frame (main)	F
frame (extension)	Y
kingpin/grid/upper coupler	K
landing gear	G
left wheel (s)	L
miscellaneous	Z
right wheel (s)	R
Sub frame/suspension	U
unspecified assembly	N
whole unit)	X

C.3 Third and fourth characters

On all chassis, the third and fourth characters indicate the section of the relevant assembly (defined by the second location code character) affected. Acceptable characters are shown in the table below:

SECOND CHARACTER: Assembly (code)	THIRD CHARACTER	FOURTH CHARACTER
Axle-full width (A)	N: Not applicable X: All wheels on axle	C: Centre axle (triauxle unit) F: Front axle N: Not specified R: Rear axle X: All axles
Bumper-rear end (B)	L: Left half N: Not specified R: Right half X: Both halves	N: Not applicable
SECOND CHARACTER: Assembly (code)	THIRD CHARACTER	FOURTH CHARACTER
Frame (main) (F)	Rearmost damaged section (identify left half, right half or both halves as applicable): 1: Aft section, left half (aft or forwardmost point on running gear or slider range if applicable) 2: Central section, left half (between	Forwardmost damaged section: Same codes as third character, except N also used when damage is limited to a single section

SECOND CHARACTER: Assembly (code)	THIRD CHARACTER	FOURTH CHARACTER
	landing gear and aft section) 3: Forward section, left half (forward of landing gear) 4: Aft section, right half 5: Central section, right half 6: Forward section, right half 7: Aft section, both halves 8: Central section, both halves 9: Forward section, both halves N: Not specified X: Entire frame	
Frame extension (Y)	L: Left half N: Not specified R: Right half X: Both halves	F: Front axle N: Not specified R: Rear half X: Both halves
Kingpin/grid/upper coupler (K)	L: Left half N: Not specified R: Right half X: Both halves	F: Front axle N: Not specified R: Rear half X: Both halves
Landing gear (G)	L: Left half N: Not specified R: Right half X: Both halves	N: Not applicable
Left wheel(s) (L)	I: Inside wheel N: Not applicable O: Outside wheel X: Both inside and outside wheels	C: Centre axle (triaxle unit) F: Front axle N: Not specified R: Rear axle X: All axles
Miscellaneous (Z)	N: Not applicable	N: Not applicable
Right wheel(s) ®	I: Inside wheel N: Not applicable O: Outside wheel X: Both inside and outside wheels	C: Centre axle (triaxle unit) F: Front axle N: Not specified R: Rear axle X: All axles
Sub frame/suspension (U)	L: Left half N: Not specified R: Right half X: Both halves	F: Front axle N: Not specified R: Rear half X: Both halves
Unspecified assembly (N)	N: Not applicable X: Entire assembly	N: Not applicable X: Entire assembly
Whole unit (X)	X: Entire assembly	X: Entire assembly

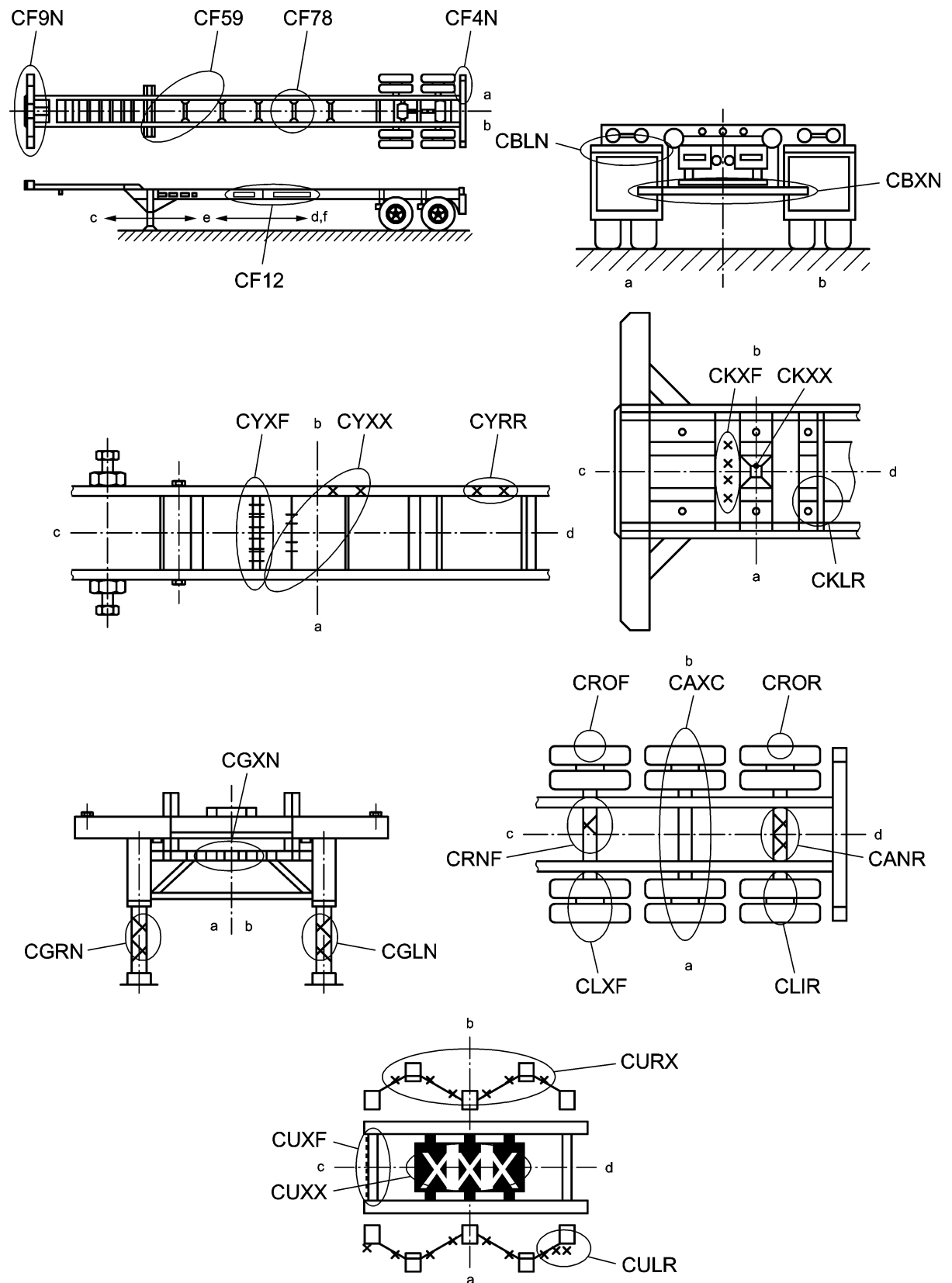


Figure C.1 — Examples of location coding for chassis

Annex D (normative)

Damage types

Numerical code	Name	Description	CEDEX code
04010	Bald	Tyre is bald or worn to less than legal tread depth remaining	WB
04020	Bent	Component is damaged by being bent	BT
04030	Bowed	Component is damaged by being bowed. Usually damage is gradual over the length of the component	BW
04040	Blocked	Drain, tube, outlet, etc. is blocked	BK
04050	Blowout	Tyre is unusable due to a blowout	BL
04060	Broken/split	Component is damaged by being broken or split	BR
04065	Bulged	Weakened wall permitting formation of a bulge due to internal pressure	BU
04069	Burned	Component whose surface is damaged by burns	BN
04070	Burned out	Electrical component is burned out	BO
04080	Casing/tread separation	Casing or tread has separated from the carcass of the tyre	TS
04100	Contaminated	Equipment is rendered unsuitable for cargo because of contamination by chemicals or other cargo products, or by infestation	CT
04110	Corroded/rusty	Component is corroded or rusty	CO
04115	Cracked	Crack apparent either in surface or through part or all of component profile	CK
04117	Cracked weld	Welding seam is damaged by being cracked	CW
04120	Cut	Component is damaged by being cut	CU
04130	Curbing	Tyre is rendered unusable by being damaged in the shoulder area by running up on the curb	CB
04150	Delaminated	Component, usually of wood, is damaged due to separation of laminations	DL

Numerical code	Name	Description	CEDEX code
04160	Dent	Component is damaged by being dented	DT
04170	Flat/puncture	Tyre is deflated due to being punctured	FP
04180	Flat spots	Tyre has spots or areas where tread is worn below legal limits for tread depth remaining	FS
04190	Frozen	Component is inoperable by being frozen or corroded	FZ
04200	Gouged	Component is damaged by being gouged	GD
04230	Holed	Component is damaged by being holed	HO
04240	Improper repair	A repair that does not conform to owner's requirements or industry standards	IR
04250	Leak	Equipment or component leaks	LK
04260	Loose	Component is loose	LO
04270	Low fluid level	Component or system has less than required amount of fluid	LF
04280	Markings/labels	Labels, marks, logos, and graffiti, etc., not required by owner	ML
04290	Motor failure	Motor will not function	MF
04300	Misaligned	Component, usually chassis tandem, is misaligned	MA
04310	Mismatched	Two adjacent tyres have different diameters and are, therefore, not acceptable as matched pair	MM
04320	Missing/lost	Component is missing or lost	MS
04330	Nails	Equipment is rendered unsuitable for cargo due to nails, usually in flooring	NL
04340	Not within ISO dimensions	Equipment is not usable because it is no longer within the ISO dimensional envelope	NI
04350	Not to TIR requirements	Equipment or component no longer complies with TIR regulations	NT
04355	Not applicable	A condition for which no specific damage type applies	ZZ
Numerical code	Name	Description	CEDEX code
04360	Not as required by owner	Equipment or component no longer complies with owner's requirements	NO
04365	Not as required by user	Equipment or component no longer complies with user's requirements	NV
04380	Oil saturated	Component, usually flooring, is damaged by being heavily contaminated with oil	OL
04390	Oil stains	Component, usually flooring, is damaged by being spotted with oil	OS
04400	Other unacceptable	Any repair deemed unacceptable by the	OU

Numerical code	Name	Description	CEDEX code
	repairs	owner or for reasons not specifically covered	
04410	Out-of-date	Renewal of a periodic inspection, test or document is overdue	OD
04420	Over-inflated	Tyre is damaged by being run while over-inflated	OI
04430	Under-inflated	Tyre is damaged by being run while under-inflated	UI
04440	Pin holes	Component is damaged with minute holes	PH
04450	Run flat	Tyre is damaged by being run with very little or no inflation	RF
04455	Scratched/abraded moving part	Moving part (bearing, piston, etc.) scored, scratched, or abraded by friction	SA
04460	Separated	Brake lining has separated from the brake shoe	SP
04470	Short/open circuit	Electrical system is inoperable due to a short or open circuit	SH
04480	Shrunk	Component, usually tarpaulin, cover, tilt, or flooring is damaged by shrinkage	SR
04490	Stretched	Component, usually tarpaulin, cover, or tilt is damaged by stretching	SD
04500	Switched	Tyre is not original and is not comparable to the other tyres on the chassis	SW
04510	Uneven tread	Adjacent tyres have different tread depth remaining	TU
Numerical code	Name	Description	CEDEX code
04520	Paint failure	Component suffers from a breakdown of the paint system	PF
04540	Warped	Component is damaged by being warped	WA
04550	Weathered	Tyre is rendered unusable due to long exposure to weather	WV
04560	Wear and tear	The unavoidable deterioration of a component during usage under proper operating conditions	WT
04570	Worn	Component is rendered unusable by being worn. For a tyre, worn to below legal tread depth remaining	WN
04580	Wrong material	Previous repair or replacement was carried out using the wrong material	WM

Annex E (normative)

Material types

Numerical code	Name	Description	CEDEX code
05000	Material unspecified	Material is not specified	MU
05100	Steel unspecified	Material is steel of no specific type	SU
05110	Steel, carbon	Material is of carbon steel	ST
05150	Steel, galvanized	Material is galvanized steel	SG
05200	Aluminium unspecified	Material is aluminium of no specific type	AU
05400	Plastic	Plastic, unspecified type	PU
05410	Plastic reinforced	Plastic reinforced with fibres	PE
05440	Rubber, unspecified	Rubber, unspecified type	RU

Annex F (normative)

Repair type

Numerical code	Name	Description	CEDEX code
06001	No Action Necessary	The damage to the component is within acceptable limits and will not require repair.	NA
06002	Special Repair	The work necessary to repair the component is not described by another single repair code. A series of different repair steps may be involved	SP
06005	Technical Bulletin completed	A specific schedule of work instructions has been completed. May apply to a set of instructions issued by the owner or manufacturer detailing procedures for a modification, repair, warranty etc.	TB
06010	Abrade and paint	To remove rust/loose paint using abrasive grit/shot blast and paint.	AB
06015	Mechanical Cleaning (scrape off paint)	To clean the surface of a component by mechanical means, (i.e. scrape or grind off paint)	MC
06060	Brand	Apply a name/initial or other mark to tyres to denote ownership or other information	BD
06070	Chemical clean	To clean a component with chemical wash	CC
06075	Deodorise	Neutralise odour in container	DO
06080	Drain	Drain the system	DR
06090	Drain and fill	Drain the system and fill with appropriate fluid	DF
06100	Inspect and report	Inspect equipment or component for proper function, damage or reason for non-operation, and re-estimate. An additional report will follow on completion	IP
06110	Free	To free a frozen, seized or stiff component by means of force, lubricants or heat	FR
06112	Free-Up and Lubricate	To free a frozen, seized or stiff component by means of force, lubricants or heat, and then apply lubricant	LF

Numerical code	Name	Description	CEDEX code
06115	Handling	Equipment must be handled in order to make available, but without other repair action	HN
06120	Insert	To remove and replace part of the cross sectional profile of a component over part of its length and/or width. The replacement portion is butt welded to the original component	IT
06125	Install	To fit a component for the first time	IN
06127	Reinforce	To provide additional support to a component	RI
06130	Lubricate	To apply lubrication	LC
06135	Modifications, miscellaneous	To alter a component such that its specification is changed	MD
06138	Not applicable	A condition for which no specific repair type applies	ZZ
06150	Paint	To apply paint	PA
06155	Overlay	Cover a surface with a thin layer of the same or similar material	OX
06160	Partial refurbishment	Remove localized corrosion and repaint the surface of the equipment fully or partially	PR
06170	Patch	Remove and replace a part of the cross-sectional profile of a component, over only part of the component's length and/or width. A patch is overlapped with and fillet-welded to the original component. The exterior of the patch is continuously welded to the original component. The interior may be continuously or skip-welded with sealer applied to the seams between skip welds	PT
06180	Preventive maintenance	Maintenance carried out under the owner's instruction	VM
06190	Re-align	a) Remove or unfasten a component, usually doors, and refit to bring into alignment b) Move chassis tandem to bring into alignment	RA
06200	Rebuild	Strip, clean, lubricate, and reassemble a mechanical component	RB

Numerical code	Name	Description	CEDEX code
06205	Re-bush	To remove and refit a bush(ing) into a component	RU
06210	Recharge	Supply a full charge of fluid to system	CH
06220	Recondition/refurbish	To refurbish the chassis in accordance with the owner's instructions	RX
06230	Refit	To refit a removable component to its proper position	FT
06250	Re-mark	Replace markings	MK
06270	Repairs prior to refurbishment	Repairs ordered by owner prior to refurbishment	PV
06280	Remove (without replacement)	To remove and not replace a component	RM
06290	Remove and refit	To remove and refit after repair	RR
06295	Remove glue and tape	To clean surfaces of glue and tape, including their residues	GT
06297	Remove markings	To remove unwanted labels, marks, logos, and graffiti	MV
06300	Replace	Remove and replace the complete cross sectional profile of a component over its entire length and width	RP
06305	Fit Part from Owners Stock	Renew using a component from the owners stock	EX
06310	Re-rate	To modify data relating to maximum gross mass or tare on any data plate or weight marking	RT
06315	Re-secure	To reapply or tighten fasteners on loose components	RE
06320	Rewire	Repair an electrical component or system by rewiring	RW
06325	Sand	To smooth a surface by sanding	SD
06330	Seal/reseal	a) To repair pin holes in a tarpaulin cover or tilt using sealant b) To apply sealant to or around component	SE
06340	Section	To remove and replace the complete cross sectional profile of a component over part	SN

Numerical code	Name	Description	CEDEX code
		of its length and/or width	
06350	Splice	To repair by section using rivets with, usually, a doubler piece or backing plate at the joint	SI
06360	Straighten	To repair by straightening	GS
06370	Straighten and re-secure	To repair by straightening and re-securing the component when repaired	RS
06380	Straighten and weld	To repair by straightening a component and re-welding it into position	GW
06390	Steam clean	To clean the component, usually the interior/ floor, using high pressure steam	SC
06400	Surface preparation and paint	To remove rust / loose paint using grinding / scraping and paint	PS
06420	Top up	Refill fluid to correct level	TP
06430	Water wash	To clean the component, usually the floor, using water	WW
06440	Weld	To repair by welding	WD
06450	Grind and weld	To repair by grinding and welding	XW
06460	Conversion	To amend the character or function of a component / Unit	CN
06470	Dry Out	To remove moisture, i.e. the floor or the interior of the unit	DU
06480	Combined Repair item	A series of repair processes which overlap	CR
06500	Temporary repair	Repair for temporary securement of cargo worthiness until a permanent repair can be made at a suitable repair shop	TR
06510	Off-hire	No action the chassis is designated for off-hire	OF

Annex G (normative)

Measure unit specifier, repair size dimension and work scales

G.1 Measure unit specifier

Numerical code	Name	Description	CEDEX code
07010	Inches	Measurement in inches	INH
07012	Square inches	Measurement in square inches	SQI
07014	Cubic inches	Measurement in cubic inches	CUI
07020	Feet	Measurement in feet	FOT
07022	Square feet	Measurement in square feet	SQF
07024	Cubic feet	Measurement in cubic feet	CUF
07030	Millimetres	Measurement in millimetres	MMT
07032	Square millimetres	Measurement in square millimetres	SQT
07034	Cubic millimetres	Measurement in cubic millimetres	CUT
07040	Centimetres	Measurement in centimetres	CMT
07042	Square centimetres	Measurement in square centimetres	SQC
07044	Cubic centimetres	Measurement in cubic centimetres	CUC
07050	Metres	Measurement in metres	MTR
07052	Square metres	Measurement in square metres	SQM
07054	Cubic metres	Measurement in cubic metres	CUM
07060	Pounds	Measurement in pounds	LBS
07070	Kilograms	Measurement in kilograms	KGS
07080	Pints	Measurement in pints	PNT
07090	Litres	Measurement in litres	LTR
07100	Hours	Measurement in hours	HRS
07110	Minutes	Measurement in minutes	MTS
07120	Quantity	Measurement in quantity	QTY

G.2 Size of repair

Size of repair, where required, is defined as either length, length and height, or length and width.

Example

Length only	15
Length and height	1 500 x 100
Length and width	60 x 30

G.3 Work scale

G.3.1

The work scale is a factor related to the standard time to reflect ease or difficulty of repair. The factor is a percentage shown as 2-numeric. In normal cases it may range from 05 (i.e. 50% easier work) to 10 (i.e. standard time) to 15 (i.e. 50% over the standard time needed).

G.3.2

The material scale is a factor related to the standard material amount to reflect differences of material used for combined repairs. The factor is a percentage shown as 2-numeric. In normal cases it may range from 05 (i.e. 50% easier work) to 10 (i.e. standard time) to 15 (i.e. 50% over the standard time needed).

Annex H (normative)

Responsibility

Numerical code	Name	Description	CEDEX code
08010	Manufacturer	The repair is necessary to correct a manufacturer's defect outside the warranty or guarantee period	H
08020	Depot	The repair is necessary to correct damage/negligence by depot and is for the account of the depot	D
08030	Terminal	The repair is necessary to correct damage/negligence by terminal and is for the account of the terminal	S
08040	User	The repair is for the user's / lessee's account	U
08050	Owner	The repair is for the owner's account	O
08060	Third party	The repair should be charged to a party responsible for the damages, usually not known at time of damage assesment	T
08070	Warranty	The repair is required under a manufacturer's warranty within the agreed period	W
08080	DPP /Insurance	The repair costs are covered by insurance or an insurance programme	I
08090	Consignor/ consignee	The repair costs are to be recovered from consignor and/or consignee	C
08100	Trucker	The repair costs are to recovered from the haulier	V

Annex I (normative)

Components of the chassis

Numerical code	Name	Description	CEDEX code
90010	Air coupling	Fittings for connecting air brake lines between vehicles. Alternative: Gladhand, 90310	KAC
90012	Air hose support spring	A device used to support brake hoses (component 90090) or brake lines (component 90092 and 90096) so they do not chafe on chassis components or pavement	KHS
90014	Air ride suspension assembly (without bladder)	A suspension which utilizes flexible pneumatic cushioning bladders, which are pressurized by tractor air and regulated by height control valves or variable pressure regulators	KAR
90015	Air suspension bladder	The flexible pneumatic cushioning device, pressurized by tractor air, in air ride suspension assembly	KAB
90016	Anchor pin	The pin which secures two brake shoes in a foundation brake, and about which the brake shoes rotate when brake application is made	KAP
90017	Anti-skid controller	The computerized control module in an anti-skid brake assembly	KSC
90018	Anti-skid assembly	Device which, when incorporated into a service brake system, automatically controls the degree of rotational wheel slip at one or more wheels of an undercarriage during braking	KSK
90020	Axle assembly	Rectangular, square, or circular steel tubes with spindles pressed onto the ends about which wheels rotate	KAX
90025	Axle nut (wheel axle)	The nut on the end of a wheel axle which retains the wheel bearings, wheel bearing cups, and wheel bearing lock washer. Code may also be used for intermediate nuts securing wheel bearings to the axle.	KAN
90030	Axle spindle	The machined shaft at each end of the axle	KAS

Numerical code	Name	Description	CEDEX code
90040	Bicycle guard	A railing, mounted along the outside of the chassis between the landing gear assembly and the rear axle assembly, to guard against bicyclists accidentally falling underneath	KBG
90050	Bolster	A transverse structural member designed to support the container in a fixed position	KBO
90055	Bolster support/bracing gusset	A gusset or brace which stiffens a chassis bolster to resist longitudinal shocks	KGU
90060	Brake assembly	The brake system	KBK
90070	Brake	Parts of the braking system in which the forces opposing the movement or tendency to movement of a vehicle are produced	KBC
90072	Brake chamber mounting bracket	A bracket attached to an axle for mounting the spring brake (component 90780)	KBM
90074	Brake chamber push rod	A rod which exists from chamber of the spring brake (component 90780) and extends outward upon brake application to rotate the brake slack adjuster and brake S-cam shaft, in turn engaging brake shoe lining and brake drum	KPR
90076	Brake clevis	A U-shaped metal shackle with the ends drilled to receive a clevis pin, which attaches the brake chamber push rod to the brake slack adjuster	KCV
90078	Brake clevis pin	A pin which inserts through the drilled ends of the brake clevis, to retain the brake clevis	KCP
90080	Brake drum	The cylindrical rotating member of a wheel acted upon by frictional material (brake shoes) of the brake system	KBD
90090	Brake hoses	A flexible or rigid conductor for the transmission or air pressure in the brake system	KBH
90092	Brake line, emergency	The hose which carries air from the tractor compressor through the chassis brake valve(s) to the reservoir (component 90680)	KBE
90096	Brake line, service	The hose which transmits the brake actuating signal from the tractor to the chassis brake valve(s)	KSR

Numerical code	Name	Description	CEDEX code
90100	Brake lining	The lining of the brake shoes that act upon the brake drum	KBL
90102	Brake quick release valve	A valve placed in the service brake line to accelerate the release of pressurized air in the line	KQR
90103	Brake rollers	Cylindrical rolling pins in the brake shoe assembly which, upon brake application, roll along the S-cam of the brake S-cam shaft, spreading the brake shoes apart, and causing contact of brake shoes and brake drum	KRO
90104	Brake S-cam bushing	A hollow cylinder which reduces friction at the rotation point of the brake S-cam through the brake spider	KCH
90105	Brake S-cam shaft	A shaft having an S-shaped cam which moves brake rollers, thereby spreading shoes apart to make linings contact the brake drum	KCS
90106	Brake shoe (with lining)	A curved, flange-stiffened metal plate with friction-absorbing material attached, which contacts the brake drum to cause braking	KSE
90108	Brake shoe assembly (with lining)	An assembly consisting of two lined brake shoes, brake rollers, and miscellaneous hardware including brake anchor pin, other pins, and springs	KSA
90110	Brake spider	The centre plate, either bolted or welded to the axle, to which the brake assembly is attached	KBS
90115	Automatic airing system	Automatic airing system	PAS
90116	Brake ABS valve	Brake ABS valve	KAV
90120	Bulb	Light bulb for lights	KSG
90130	Bumper	A structure designed to provide rear-end impact protection	KBP
90132	Bumper filler plate	A plate which fits between the uprights in the bumper, to which the licence plate may be attached	KBF
90134	Bumper uprights	The vertical stiffening members in the bumper	KBU

Numerical code	Name	Description	CEDEX code
90136	Bumper crosspiece	The horizontal member at the base of the bumper, which is attached to the bumper uprights	KBQ
90138	Chassis	Entire chassis, including sliding mechanism and running gear	MCH
90140	Circuit breaker	An electrical overload protection device which opens a circuit upon sensing excessive voltage or heat	KCB
90150	Certification label	A label permanently affixed, usually to the forward left side of the chassis, stating that the vehicle conforms to all applicable safety standards in effect on the date of original manufacture (for example in United States, as required by National Highway Traffic Safety Administration)	KCL
90160	Clearance lights	Lights which show to the front or rear of a vehicle, mounted on the permanent structure of the vehicle as near as practicable to the upper left and right extreme edges, to indicate the overall width and height of the vehicle. The front and rear clearance lights of a container chassis are sometimes combined with the front and rear side marker lights, respectively	KLT
90170	Connection box	Contains fittings for chassis emergency and service brake connections and electrical connector to which the lines from the towing vehicle may be connected (also called „Nose box“, 90580)	KBX
90180	Container guides	A structural member on the front of a container chassis to serve as gathering device for guiding a container into its proper place on the chassis Alternative: Horn, 90350	KCG
90185	Cross-member, chassis main frame	Transverse member in the chassis main frame	KXM
90188	Cross-member gusset/stiffener	A plate or angle which reinforces and stiffens connections of main frame cross-member flanges and main rails	KXG
90190	Dock bumper	Cushioning devices (rubber, plastic, wood, etc.) mounted at the extreme rear of chassis to take the initial impact of the vehicle when it backs into loading dock	KDP

Numerical code	Name	Description	CEDEX code
		platform	
90200	Document holder	A pocket or tube for carrying documents (for example registration papers)	KDH
90210	Drain	A valve or petcock fitted to the air reservoir or other low point in the air system to allow for drainage of moisture that may have condensed in the air system	KDV
90220	Dummy coupler	A fitting used to seal the opening in an air brake hose connection (gladhand) when the connection is not in use; a dust cap	KDC
90230	Dust shield	A plastic or metal cover mounted on the brake spider to provide inner wheel protection from road debris	KDS
90240	Dust cover	A plastic or metal cover mounted on the landing gear to provide protection from road debris	KDM
90250	Electrical connector	A receptacle (socket) designed to accept truck tractor electrical cable plug Alternative: Seven-pin plug, 90720	KEC
90260	Extending assembly	Assembly on the main rails that provides a convenient means of extending the length of a chassis to carry different-length containers [for example 12 m (40 ft), 13,5 m (45 ft), 14,5 m (48 ft)]	KEX
90270	Emergency assembly	The part of the chassis air brake system used by the driver to stop the vehicle in an emergency. Loss of air caused by a rupture in the system or by a break-away will also cause an emergency brake application	KEA
90280	Fender	Rigid structure mounted over tyres to prevent damage from debris picked up by the tyres Alternative: Mudguard, 90570	KFD
90290	Flap	Protection for the inner tube in a tubed tyre	KFL
90292	Frame extension rollers/slide pads	Rolling pins or friction-inhibiting pads which facilitate movement of the chassis extending assembly during extension or retraction	KFS
90296	Frame extension pin lock	A locking mechanism which secures the chassis extending assembly in any	KFP

Numerical code	Name	Description	CEDEX code
		selected position	
90300	Gear box	Mechanism through which landing legs are raised or lowered	KGR
90310	Gladhand	See Air coupling, 90010	KAC
90315	Gladhand seal	A gasket fitted to the inside of a gladhand (air coupling) to prevent air leaks	KAA
90320	Gooseneck	The upper level of the front of a gooseneck chassis together with the structure connecting it to the lower level. The gooseneck rails fit into the tunnel recess of containers so constructed	KGN
90322	Grease fitting	A nipple used for the introduction of grease into moving parts	KBZ
90326	Grease seal (wheel bearing)	A device used to retain grease lubricant in the bearing area of a wheel bearing lubricated with grease	KGS
90330	Grommet	A tubular insert, transition piece or bushing which separates one part (frequently a fastener) from another part for purposes of reduced friction, insulation, ease of assembly, etc.	KGM
90335	Hardware, miscellaneous	Screws, nuts, bolts, and similar items	HWR
90340	Hitch	A connecting device at the rear of one vehicle used to pull a second semi-trailer or chassis by use of a convertor dolly Alternative: Pintle hook, 90630	KHI
90350	Horn	See Container guides, 90180	KCG
90360	Hub cap	A cap that fits over the end of the axle to seal in lubricant and keep out road dirt. In oil bearing axle, is fitted with an oil filling plug	KHC
90362	Hub cap-grease	A hub cap fitted on wheels having bearings lubricated with grease	KGH
90366	Hub cap-oil	A hub cap fitted on wheels having bearings lubricated with oil	KOH
90370	Hubodometer	Device positioned in the hub of the wheel on a chassis which records the mileage of	KHU

Numerical code	Name	Description	CEDEX code
		the chassis	
90380	Identification lights	Three lights at the rear in the horizontal row, mounted on the permanent structure near to the centreline and top of the vehicle	KIC
90390	Kingpin assembly	Consists of kingpin plate reinforcement framing and kingpin mounted on a chassis (also called „upper couples assembly“ or „upper fifth wheel“)	KKA
90400	Kingpin	Attaching pin on a semi-trailer chassis that mates with and pivots within the fifth wheel of a truck tractor or convertor dolly while coupling the two units together	KKP
90410	Kingpin plate	Part of the kingpin assembly that rests on the fifth wheel of the truck tractor	KKT
90420	Kingpin reinforcement framing	Part of the kingpin assembly that holds the kingpin in position	KKF
90430	Landing gear assembly	Devices generally adjustable in height, used to support the front end of a container chassis in an approximately level position when disconnected from the towing vehicle	KLA
90432	Landing gear axle housing	The lowest portion of the inner landing leg, which houses and retains the landing leg wheel/shoes axle	KHA
90436	Landing gear brace ear	A bracket through which landing gear braces are fastened to an outer landing leg	KLZ
90440	Landing gear handle	Handle for operating the landing gear mechanism	KLH
90445	Landing gear crank shaft	The shaft, turned manually by the landing gear handle, which works gearing to raise or lower the landing gear	KKS
90450	Landing gear cross-shaft	The shaft connecting the mechanism on the handle side leg to the mechanism on the other leg	KLY
90452	Landing gear internal gear	Gear which enables the landing legs to be raised or lowered at different speeds	KLJ
90455	Landing gear mounting-bracket	A bracket or box structure which protrudes from the main rail for the purpose of mounting a landing leg to the main rail	KLM
90457	Landing gear shaft	A cylinder used to facilitate rotation of	KLD

Numerical code	Name	Description	CEDEX code
	bushing	shafts in the landing gear assembly	
90458	Landing gear roll pin	Any round hollow pin which secures landing gear gears to shafts	KLR
90460	Landing leg bracing	Steel support for landing legs in forward or aft direction or between the two legs	KLB
90470	Landing leg assembly	Vertical adjustable supporting members of the landing gear, compressing an outer leg secured to the chassis frame and inner leg to which is attached sandshoes or wheels, which is raised or lowered by mechanical means	KLL
90480	Landing leg, outer	The outer part of the landing leg assembly	KLO
90490	Landing leg, inner	The inner part of the landing leg assembly	KLI
90500	Landing leg sandshoes	Flat plate or dish on the landing leg used to transmit the load to the ground (as an alternative to a wheel)	KLN
90510	Landing leg wheel	Wheel of the landing leg used to transmit the load on the landing gear to the ground (as an alternative to a sandshoes)	KLW
90520	Landing leg wheel/shoes axle	Axle used to secure the sandshoes on the wheel to the landing leg	KLE
90522	Landing leg duct cap	NOTE - Preliminary assignment; to be defined in a future edition	KLQ
90530	Lens	The translucent part of a lamp assembly through which passes light. Commonly coloured red or amber or, in the case of the licence plate light, white	KLS
90540	Licence plate	A plate exhibiting the registration number of a vehicle, mounted at the rear of a trailer	KLC
90550	Licence light	A white light used to illuminate the licence plate	KLG
90552	Licence light assembly	The lamp, lamp holder, and attached wiring used for illuminating licence plate	KLP
90555	Lug nut	Threaded nut which retains a tyre and rim assembly on the wheel when fully torqued onto the wheel studs (after mounting over rim clamps in the case of chassis equipped with spoke type wheels)	KLU

Numerical code	Name	Description	CEDEX code
90560	Mud flap	A curtain or shield at the rear of tyres to deflect downwards any splash guard, 90760	KMF
90565	Mud flap mounting bracket	A bracket or angle to which the mud flap is mounted	KMB
90570	Mudguard	See Fender, 90280	KFD
90580	Nose box	See Connection box, 90170	KBX
90590	Oil seal	A device used to retain lubricant in the bearing area of the wheel. The sealing member of the seal is usually made of a resilient material such as synthetic rubber which is assembled into a wheel or hub bore	KOS
90600	Main rail(s)	The main longitudinal structure member(s) of a container chassis	KMR
90610	Pick-up plate	A forward extension of the kingpin plate, usually turned upward to facilitate coupling of a truck tractor with the chassis	KPP
90620	Pin lock	A mechanically operated device normally used on a 12-metre (40-foot) gooseneck container chassis in order to restrain a container during transport or transfer by the use of pins projected into the front apertures of the container's bottom front corner fittings	KPL
90630	Pintle hook	See Hitch, 90340	KHI
90640	Reflectors (rear or side)	Devices used on vehicles to warn the driver of an approaching vehicle by reflecting light from the headlights of the approaching vehicle	KRF
90650	Registration certificate	Governmental registration of the vehicle, usually in paper form, kept in the document holder	KRG
90660	Relay emergency valve	A combination valve in an air brake system, which controls brake application and which also provides for automatic emergency brake application should the trailer become disconnected from the towing vehicle	KEV
90670	Relay valve	A control unit used to accelerate the application and release of air pressure in a part of the air brake system	KRV

Numerical code	Name	Description	CEDEX code
90680	Reservoir	A pressure vessel used to store compressed air for several applications of the vehicle service brakes. Also called „air tank“	KRS
90685	Air tank mounting bracket	NOTE - Preliminary assignment; to be defined in a future edition	KRB
90690	Rim	That part of the wheel on which the tyre is mounted and supported	KRM
90692	Rim clamp (lug)	Clamp mounted on wheel studs and secured by lug nuts which retains the rim assemblies on a spoke-type wheel	KRC
90696	Rim spacer	A ring which fills the void between two adjacent rims for wheels fitted with dual tyres, fixing the position of each rim in the transverse (lateral) direction	KRX
90700	Running lights	Marker, clearance, and identification lights of a vehicle required by regulations	KRL
90710	Service braking system	The part of a brake system normally used by the driver to apply and modulate the stopping force of the vehicle	KBA
90720	Seven-pin plug	See Electrical connector, 90250	KEC
90730	Side marker lights	Lights which show to the side of a vehicle, mounted to indicate the overall length of the vehicle. They may also be mounted at intermediate locations on the sides	KSL
90740	Slack adjuster	Adjustable mechanical lever used to transmit brake chamber force to the brake cam shaft when brakes are applied. They are so designed that they can be adjusted to compensate for lining wear	KAD
90750	Slider assembly	An undercarriage with a sub frame having provision for convenient fore-and-aft adjustment of its location on the chassis	KSD
90752	Slider locking pin assembly	The mechanism which secures the slider assembly in any selected position	KSX
90755	Slider locking pin	Any pin in the slider locking pin assembly which inserts through a hole in a main rail to secure the slider assembly to the main rails	KSY
90758	Slider lock handle	The operator's handle in the slider locking pin assembly, used to disengage the slider	KSZ

Numerical code	Name	Description	CEDEX code
		locking pins from the main rails	
90759	Slider lock handle retainer	NOTE - Preliminary assignment; to be defined in a future edition	KSV
90760	Splash guard	See Mud flap, 90560	KMF
90780	Spring brake	A unit which uses the stored energy of springs to actuate brakes	KSB
90790	Spring suspension assembly	A suspension using one or more cambered steel leaves to absorb road shocks from the axle and transfer loads through suspension components to the suspension sub frame. Consists of the components 90800 to 90870	KSU
90800	Adjustable radius rod	A member used to retain axle alignment and, in some cases, control axle torque. It may be extended or retraced for alignment purposes. Normally one adjustable radius rod per axle is used	KRR
90810	Equalizer beam	The suspension device used to transfer and maintain equal load distribution between two or more axles of a suspension. Made to accommodate the ends of the spring	KEQ
90820	Equalizer hanger	The bracket used to mount the equalizer beam of a multiple-axle spring suspension to the suspension sub frame. Made to allow for the beam's pivotal movement	KQH
90830	Front spring hanger	The bracket used to mount the front of the suspension on the suspension sub frame. Made to accommodate end of the spring	KFH
90840	Non-adjustable radius rod	A fixed-length member used to retain axle alignment. Normally one non-adjustable radius rod per axle is used	KNR
90850	Rear spring hanger	The bracket used to mount the rear of the suspension on the suspension sub frame. Made to accommodate the end of the spring	KRH
90855	Spring hanger stabilizer pipe	NOTE - Preliminary assignment; to be defined in a future edition	KHB
90860	Springs	The spring components of the spring suspension assembly	KSS

Numerical code	Name	Description	CEDEX code
90870	Spring seat	A suspension component used to support and locate the spring on the axle	KST
90880	U-bolt assembly	An assembly consisting of two bolts in the shape of a U, a spacer, and a saddle which secures the axle to the spring seat	KUB
90885	U-bolt saddle	The channel in the U-bolt assembly which supports the curved upper portion of the U-bolt and permits springs, spring seat, and axle to be clamped together	KUS
90890	Stop lights assembly	Lights giving warning to indicate that the vehicle brakes are being applied	KSO
90900	Stop, tail and/or turn light assembly	A combination of the stop, tail and/or turn lights in the same housing	KTL
90905	Sub frame rails and structure	The longitudinal structural members of the slider assembly sub frame and any associated cross-members	KSF
90910	Tail lights assembly	Lights used to show the rear of a vehicle	KTI
90912	Electrical connector boot	NOTE - Preliminary assignment; to be defined in a future edition	KEB
90915	Light bracket/light housing protector	A bracket on the rear bumper used to mount the tail lights and/or protect the tail lights from impact by use of a protruding flange	KTP
90917	Tension spring	Any of the springs in a foundation brake	KSI
90920	Tyre	a) Tubed: Tyre complete with inner tube, flap/boot b) Tubeless: Tyre complete with valve	KTA
90930	Tyre carrier (spare wheel carrier)	A rack for carrying a square tyre, usually mounted below the main chassis frame	KTC
90940	Tyre valve	Valve for tubeless tyre	KTV
90941	Wheels and tyres (TIR)	PSI-automatic airing system long hose	PLH
90942	Wheels and tyres (TIR)	PSI-automatic airing system long hose	PLS
90943	Wheels and tyres (TIR)	PSI-automatic airing system T-fitting	PTF
90944	Wheels and tyres (TIR)	PSI-automatic airing system hub cap	PHC
90945	Wheels and tyres (TIR)	PSI-automatic airing system regulator	PRC

Numerical code	Name	Description	CEDEX code
		control box	
90946	Wheels and tyres (TIR)	PSI-automatic airing system starter and filter assembly	PSF
90950	Transition area	The part of a gooseneck chassis at the transition between the main rails and the gooseneck	KTR
90960	Tube	Inner tube for tubed tyre	KTB
90970	Turn signal lights assembly	Lights mounted on the rear at the right and left sides of a container chassis which indicate an intended change in direction by giving flashing warning signals on the side toward which the turn will be made	KSH
90980	Twist lock	A mechanical device located at the corners of certain designs of container chassis which, when rotated into a locked position with the bottom corner fitting of a container, prevents container disengagement	KTW
90990	Twist lock handle/ Pin lock handle	The hand-operated part of the twist lock which permits turning of the shaft; i.e. locking and unlocking of the twist lock and identification of its correct positioning	KTH
90991	Twist lock or pin lock handle retainer	NOTE - Preliminary assignment; to be defined in a future edition	KTE
90992	Twist lock riser block spacer	NOTE - Preliminary assignment; to be defined in a future edition	KTK
90993	Twist lock housing	NOTE - Preliminary assignment; to be defined in a future edition	KTO
90995	Valve stem cap	Threaded cover to protect the end of the valve stem	KVC
91000	Wheel bearings	The machined parts, usually roller bearings, designed to reduce friction between the axle spindle and also support the load while rotating at high speeds	KWB
91010	Wheel bearing cup/race	The tapered ring which holds a wheel bearing cone in which the bearings rotate	KCU
91020	Wheel bearing lock washer	A lock washer which sits adjacent to a wheel bearing or axle retention nut and helps maintain the bearings in proper position	KWA

Numerical code	Name	Description	CEDEX code
91030	Wheel-spoke type	A type of wheel consisting of integral hub and spokes designed to accept demountable rims either singly or in pairs with a rim spacer for dual tyres	KSW
91040	Wheel stud	A threaded bolt or shaft integrally mounted in the wheel, used to attach the rims to the wheel	KWS
91060	Wiring harness/wiring	A harness encompassing a complete wiring system for chassis, including a wire for each separate circuit, and a ground (earth) wire; or any separate wire or portion of a wire within that harness	KWH
91070	Service Call / Mileage	Charge for over the road emergency repairs and associated service call and mileage fees.	KRG
91080	Axle Lock washer	Device that locks the axle nut in the adjusted position.	KAW
91090	Automatic Slack Adjuster	Device that keeps 'S' cam type brakes within their proper adjustment range through normal brake applications.	KSA
91100	S Cam Snap Ring	A locking device that retains the 'S' cam shaft in position.	KCR
91110	Brake Hardware Kit	Kit containing the parts necessary for a brake overhaul.	KBK
91120	Landing Leg Cross Brace Lower	Member that attaches to & between the bottom of the upper (outer) landing gear legs to provide lateral stability.	KLC
91130	Lens Retainer/O Ring	Spring clip device that holds the lens in place in flange mounted lights.	KRO
91140	Rim - Tubeless	The part of a wheel assembly to which the tire is mounted and used only for tubeless type tires.	KRL
91150	Tail Light Bulb	The replaceable part of a light assembly that glows when electricity is applied to it.	KTL
91160	Equalizer Bolt Kit	Kit containing the parts which retain the suspension equalizer within the equalizer hanger on tandem & tridem type suspensions.	KEB
91170	Anchor Pin Bushing	Bearing used with the anchor pins in 'S' cam type brake shoe installations.	KPB

Numerical code	Name	Description	CEDEX code
91180	Brake Shoe Roller Clip	Retaining device used with the rollers in 'S' cam type brake shoe installations.	KBR
91190	Gladhand Grommet/Seal	Rubber device used as the air seal between mating tractor and chassis airline connectors (gladhands).	KGG
91200	Side Lock	Specialized chassis use only. Locking devices for multi-container carrying chassis.	KLS
91210	Brake Shoe Return Spring	Retaining device used between top and bottom brake shoes to pull the linings away from the brake drum surface when the brakes are released.	KBR
91220	Cushion Foot/Pad	A type of shock absorbing foot used at the bottom of the inner (lower) landing gear leg.	KCF
91230	Hub Cap Gasket Only	A sealing device used between mating surfaces of the hub and hubcap to retain the wheel bearing lubricant.	KHG
91240	Mud flap Bracket	Part of the rear bolster to which the mud flap is bolted.	KFB
91250	Spring Bottom Plate	Component used to attach the torque rod to the axle.	KBP
91260	Gladhand nipple	A short metal tube with male threads both ends used to attach the gladhand to the bulkhead fitting.	KAQ
91270	Bulkhead fitting including gladhand	Assembly of the gladhand, nipple and the threaded metal device used to attach them all to the front bolster.	KAF
91280	Air valve cartridge	Device inside ABS air valves used to keep debris from entering the air valve mechanisms	KRK
91290	Air valve inlet filter (screen)	Device used to keep debris from entering the air system.	KVF
91300	Inner wheel bearing with race	One of a pair of bearing assemblies used to mount the hub to the axle.	KWI
91310	Outer wheel bearing with race	One of a pair of bearing assemblies used to mount the hub to the axle.	KWO
91320	Seven way plug mounting plate	Part of the front bolster to which the electrical 7 way plug is attached.	KEP

Numerical code	Name	Description	CEDEX code
91330	Bolster wiring harness	Part of the electrical wiring connecting the front & rear lights to the main wire harness.	KWR
91340	Rear bolster assembly	The part of the chassis to which the rear container securing twist locks are mounted.	KBR
91350	Front or back bolsters	The part of the chassis to which the front or rear container securing twist locks are mounted.	KBB
91360	License plate mounting bracket	A plate on the rear bolster used for securement of the license plate.	KPB
91370	Gooseneck cross member	A structural member welded between the gooseneck main rails for lateral stability.	KGX
91380	Interim frame cross members	A structural member welded between the main rails for lateral stability.	KIX
91390	Twin cross members over tandem	A pair of structural member welded between the main rails for lateral stability at the suspension.	KTX
91400	Landing leg cross brace	Member that attaches to & between the bottom of the landing gear legs to provide lateral stability.	KKB
91410	Index pin assembly	All of the parts of the locking pin on a sliding main frame or suspension.	KIA
91420	Index pin handle	Device used to operate the locking pins on a sliding main frame or suspension.	KIH
91430	Index pin retainer	Enclosure housing the locking pin assemblies on a sliding main frame or suspension.	KIR
91440	Mud flap assembly including bracket	A mud flap fastened to its attaching member.	KMA
91450	Tyre OEM	A brand new tire.	KTN
91450	Tattle cap	Anti-theft device used in conjunction with the wheel lug nuts.	KCA
91460	Landing gear mount, outrigger	Box shaped structure welded to the main rail for attachment of the landing gear leg.	KLF
91470	BIT Inspection	Periodic safety inspection required by the California Highway Patrol.	KBI
91480	Main frame structural assembly	Ladder frame structure of the chassis.	KFA

Numerical code	Name	Description	CEDEX code
91490	Gooseneck doubler plate or gusset	Gooseneck doubler plate or gusset	KGG
91500	Main frame mounted stop block	Device welded to the main rails to prevent the two sliding parts of the main frame or the sliding suspension from pulling apart.	KFX
91510	Main frame mounted guide plate	Part of the frame used to guide the rails of a sliding main frame or suspension.	KGP
91520	Main frame slider lock bracket	Part of the frame retaining the locking pin operating handle of a sliding main frame or suspension.	KFY
91530	Index pin spring	Device that retracts the locking pins from the frame holes on a sliding main frame or suspension.	KIS
91540	Pintle hook assembly	Attachment device at the rear used to connect the draw bar of a towing dolly.	KHX
91550	Pintle hook support plate	Part of the rear bolster assembly used to attach the pintle hook assembly.	KHP
91560	Pintle hook catch	Part of the pintle hook assembly used to retain the towing bar eye.	KHY
91560	Twist lock spring	Bolster mounted pin lock/twist lock return spring.	KTS
91570	Air decal plate	Tag for mounting the airline marker to the gladhand.	MAP
91580	Air decal	Marker used to identify either the service or the emergency air line gladhand.	MAD
91590	Reflective or conspicuity tape	An alternating combination of red and white reflective identity stripes.	KRT
91600	14GA Wiring	Part of the wiring harness.	KWG
91610	Receptacle cover	Spring loaded dirt/water protector on the 7 way electrical plug.	KEZ
91620	Clearance light, grommet type	A type of light assembly mounted to the chassis by use of a special rubber grommet.	KGC
91630	Stop/tail/turning light assembly, grommet type	A type of light assembly mounted to the chassis by use of a special rubber grommet.	KGT
91640	Air tank nipple	A short metal tube with male threads both ends used to attach the service valve to the	KRN

Numerical code	Name	Description	CEDEX code
		air reservoir.	
91650	Landing leg sand shoe/axle housing assembly	The part of the lower (inner) landing gear leg comprising the pivot shaft and the foot.	KAH
91660	Landing leg diagonal brace	Member that attaches to the upper (outer) landing gear legs and main frame structure to provide longitudinal & lateral stability.	KDB
91670	Slider retaining rail, bolted on type	Sliding suspension guide rail attached to the main frame with mechanical fasteners.	KSQ
91680	Slider retaining stop blocks, slider mounted	Device welded to the guide rails to prevent the two sliding parts the sliding suspension from pulling apart.	KSP
91690	Slider indexing locking pin	Device used to lock both parts of a sliding main frame or suspension in place.	KSN
91700	Slider locking pin orifice re-enforcement plate	A doubler plate welded to the main frame web to reinforce the locking pin holes for sliding main frame or suspension chassis.	KSM
91710	Central equalizer assembly	Components of the equalizer and its hanger bracket used on tandem & tridem suspensions.	KQA
91720	U-bolt only	Device used to assemble the springs and torque rod attachment brackets to the axle.	KUX
91730	U-bolt spacer plate	Component used to raise the spring a pre-determined height above the axle.	KUP
91740	Shock absorber	Specialized chassis applications only. Air ride shock absorber assembly common on trailer equipment only	KVD
91745	Rubber absorber for axles	Rubber pad between axle and U-bolt assembly	KRA
91750	Slider guide plates	Part of the mechanism of a sliding main frame or suspension.	KSJ
91760	Systematic Maintenance Check	Voluntary bi-annual inspection program as proposed by OCEMA	SMC
91770	FHWA Inspection/Plate	Annual Federal chassis inspection per CFR. FHWA/FHWA Plate (Use DT OD and RT IP for inspection work)	KFW

Annex J (normative)

Illustrations of Chassis Components Codes

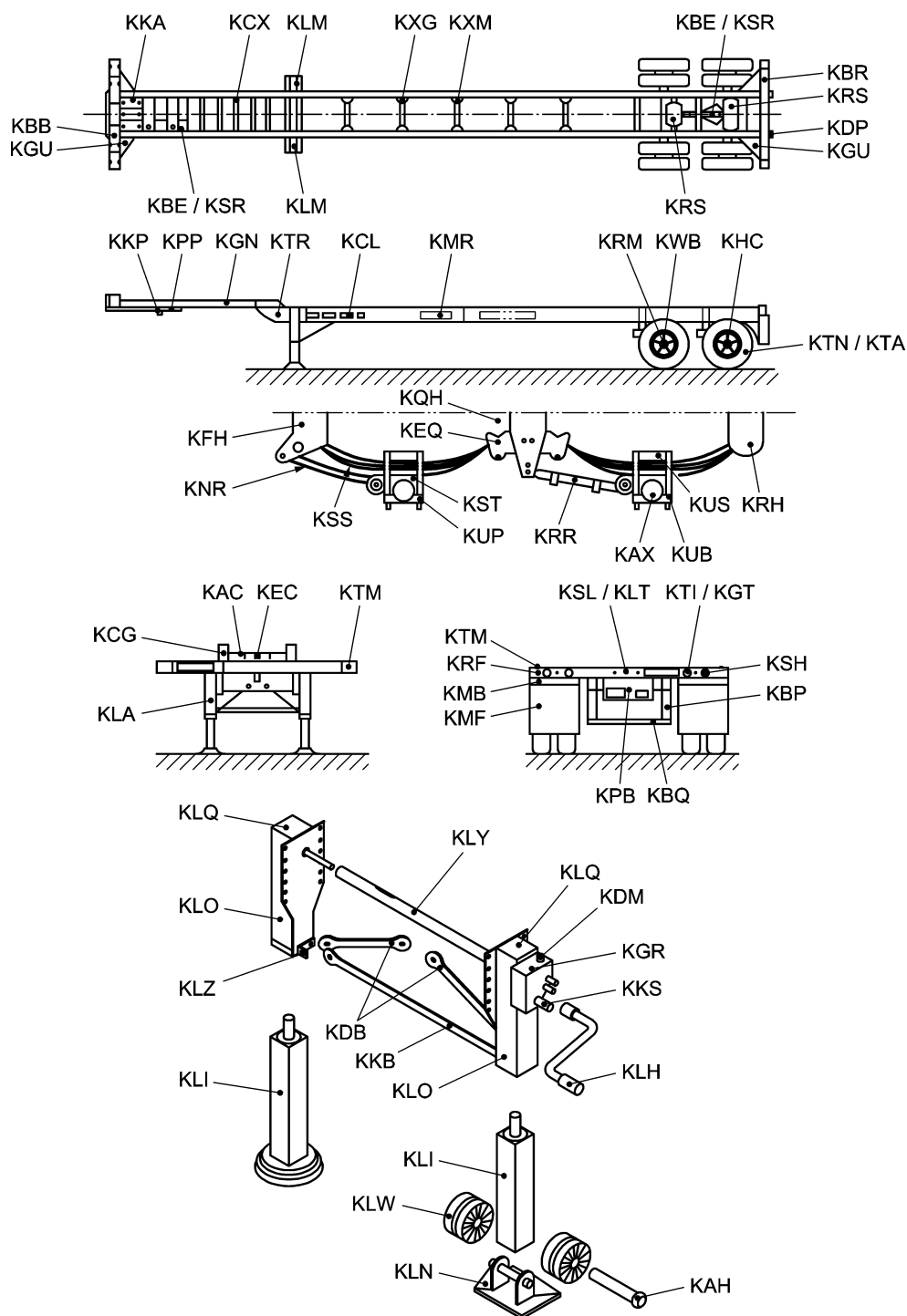


Figure J.1 — Illustrations of Chassis Components Codes

Annex K (informative)

Mapping table of ISO to AAR Codes

CEDEX	AAR	AAR / ISO Description
FTR	1100	FlatTireRepair
KTA	1115	BiasTire
KTN	1116	RadialTire
RTL	1207	Rim-Tubeless
KRM	1208	Rim-TubeType
KFL	1230	Flap
KTV	1254	ValveStem
KLU	1258	LugNut
WSN	1260	WheelStudandNut
KRX	1266	Spacer,Rim
LKR	1270	LockRing,Rim
KWS	1274	WheelStud
KRC	1278	LugClamp
TDF	1290	TireDisposalFee
ATR	1300	AirTires
KTB	1509	Tube
KSD	2001	SlideTandem/Tridem
KEQ	2005	EqualizerwithBushing
EQB	2006	EqualizerBushing
KFP	2012	SlidingTandem/TridemLockAssembly
KSZ	2013	SliderHandle
RSP	2014	SliderHandleReturnSpring
EPS	2015	SliderEndPlateStops

CEDEX	AAR	AAR / ISO Description
KSF	2018	Sub-FrameAssembly
KEX	2020	SliderRail
KSP	2021	SliderRailPad
HDW	2022	Tandem/TridemHoldDownClip
KWB	2107	Wheel,BearingAssembly
HCP	2110	HubCapPlug
KBW	2112	Wheel/Hub
KHU	2113	Hubometer
KHG	2114	HubCapGasket/O'ring
KHC	2115	HubCapAssemblyOilBath
HCG	2116	HubCapAssemblyGrease
WEC	2124	LubricateWheelBearing
KOS	2125	WheelSeal
KAX	2206	Axle
AAX	2207	AlignAxles
KAN	2210	AxleNut
KAW	2211	AxleLockwasher
RRF	2310	RadiusRodAssemblyFixed
KRR	2311	RadiusRodAssemblyAdjustable
RBK	2312	RadiusRodBoltKit
AJB	2400	AdjustBrakes
THW	2402	ThawFrozen(cold)Brakes
LFB	2403	Lubricate/Free-upBrakes
RAL	2404	RepairAirLeak
KRS	2408	AirReservoir
KBS	2423	BrakeSpider
KCH	2424	BrakeCamBushingandSeal

CEDEX	AAR	AAR / ISO Description
KPR	2435	BrakeChamber
BCC	2437	BrakeChamberClamp
KAD	2438	SlackAdjuster
ASA	2439	AutomaticSlackAdjuster
DPM	2440	BrakeChamberDiaphragm
AHC	2441	AirHoseClamp
KBM	2442	BrakeChamberMountingBracket
KHS	2443	AirHoseSpring
AHB	2444	AirHoseBracket
SCH	2445	SCamHanger
KCS	2446	SCam
BDB	2451	BrakeDrumw/BrakeReplacement
KBD	2452	BrakeDrum
GGS	2454	GladhandGrommet/Seal
AGH	2455	AuxillaryGladhand
EGH	2456	EmergencyGladhand(Red)
SGH	2457	ServiceGladhand(Blue)
KAF	2459	GladhandFittings/Hose
KPB	2465	AnchorPinBushing
KCR	2466	SCamSnapRing
KCV	2467	BrakeClevis
KAP	2468	AnchorPin
KCP	2469	ClevisPin
KBK	2471	BrakeHardwareKit
KDV	2473	DrainCock/SpitterValve
KRO	2474	BrakeShoeRoller
KBR	2475	BrakeShoeReturnSpring

CEDEX	AAR	AAR / ISO Description
BRC	2476	BrakeShoeRollerClip
KBH	2479	AirHose
KBL	2480	BrakeShoe
AHF	2483	AirLine/HoseFittings
KQR	2490	ServiceCombinationRelayValve
KEV	2498	EmergencyRelayValve
AXX	2500	ABSExtensionCable
KSK	2501	ABSSensorKit
AXC	2502	ABSECUCable
KSK	2503	ABSECU/ModulatorValveAssy
KAV	2504	ABSValve
AMB	2505	ABSMountingBracket
ALI	2506	ABSLightIndicator
KSC	2507	ABSECU
KVF	2509	ABSIn-LineFilter
PLH	2601	TireInflationSystemLongHose
PLS	2602	TireInflationSystemShortHose
PRC	2603	TireInflationsystemControlBox
PTF	2604	TireinflationSystemValve("T")
PHC	2605	TireInflationSystemHubCap
PSF	2606	TireInflationSystemStater/Filter
PTL	2607	TireInflationSystemTransmitLine
PCB	2608	TireInflSysControlBoxBracket
PPV	2609	TireInflSysProtectorValve
PLF	2610	TireInflSystemIn-LineFilter
PVF	2611	TireInflSysReliefValveFlapper
PDS	2612	TireInflSysDeflectorShield

CEDEX	AAR	AAR / ISO Description
PIL	2613	TireInflSystemIndicatorLight
PDF	2614	TireInflSystemSelfDrainingFilter
PBL	2615	TireInflationsystemControlBoxLid
PRV	2616	TireInflSysPressureRegValve
PFS	2617	TireInflSysFlowSensingSwitch
PBV	2618	TireInflSysBulkheadCheckValve
POV	2619	TireInflSysShutOffValve
PFF	2620	TireInflSysFlowSensingFitting
KFH	2703	SpringHanger
HBN	2704	SpringHangerRetainerBoltandNut
KUB	2705	SpringUBolt&Nuts
KHB	2706	SpringHangerStabilizer
KUS	2707	SpringTopPlate
KST	2708	SpringSeat
SBP	2709	SpringBottomPlate
KSS	2710	SuspensionSpring
SCB	2711	SpringCenterBolt
KAB	2800	AirSprings
ABW	2801	Axle/BeamWeldment
FBC	2802	FrameBracketChannel
FBB	2803	FrameBracketBrace
ASP	2804	AirSpringPlate
ASS	2805	AirSpringSpacer
ALC	2807	AlignmentCollars
BTS	2808	Bushing/TubeSpacers
KVD	2809	ShockAbsorber
STB	2810	ShockTower/Bracket

CEDEX	AAR	AAR / ISO Description
RBL	2811	ReboundLimiter
ACA	2812	UpperControlArmAssembly
LCA	2813	AdjustableLowerControlArmAssembly
NLC	2814	NonAdjustableLowerControlArmAssembly
HCA	2815	HeightControlValve
TAA	2816	TrailingArmAssembly
RDL	3100	RetimeLegs
KLW	3107	DollyWheel
KHA	3108	AxleHousing
DWA	3109	DollyWheelAxle
ACR	3110	AxleCollar
KLN	3111	Sandshoe
SSA	3112	SandshoeandAxle
KLE	3113	SandshoeAxle
KLZ	3119	LandingLegBraceBracket(Ear)
KLB	3120	LandingLegDiagonalBrace
KKB	3121	LandingLegCrossChannelUpper
CBL	3141	LandingLegCrossBraceLower
KLM	3144	LandingLegMountingBracket
GBC	3149	GearboxCover
KHR	3150	CrankHandleRetainerClip
KLH	3153	CrankHandle
LIL	3160	Lower/InnerLeg
LCW	3161	LandingLeg,CompleteSet,WithoutBraces
KLL	3162	LandingLeg,CompleteSet,WithBraces
KLI	3163	LandingLeg,Non-GearSide

CEDEX	AAR	AAR / ISO Description
LLG	3166	LandingLeg,GearSide
KCF	3171	CushionFoot/Pad
KLY	3183	Crossshaft/TimingBar
KLJ	3214	ReductionGear
KLR	3215	GearPin
KKS	3218	Crankshaft
KLD	3219	LandingGearShaftBushing
KPS	3226	PinionShaft
KDM	3228	UpperLegCover(DustCover)
KBP	3350	DOT/MOTUnder-rideGuard
KBF	3351	FillerPlate
KHI	3352	PintleHook
KBQ	3353	DOT/MOTBumperHorizontal-4"channel
KBU	3354	DOT/MOTBumperUpright-4"channel
BHT	3355	DOT/MOTBumperHorizontal-4"Tubular
KDP	3360	DockBumper
KMF	3403	Mudflap
KMB	3405	MudflapBracket
MFS	3407	MudflapStrap
KPB	3410	LicensePlateBracket
KLC	3455	LicensePlate
KKP	3506	KingPin
KKF	3558	GridSection
KPP	3560	PickUpPlate
GXP	3565	GridExtensionPlate
CSW	4100	Clean7wayReceptacle
TRS	4101	Trace&RepairElectricalShort

CEDEX	AAR	AAR / ISO Description
KCB	4109	CircuitBreaker
WIR	4112	ElectricalWire
BAL	4130	BulbandLens
KTP	4132	TailLightBracket
LPL	4133	LicensePlatelight
MLB	4134	MarkerLightBulb
TLB	4137	TailLightBulb
KWH	4139	WireHarness
BLR	4140	TailLightBulb,Lens,Retainer
KLS	4141	MarkerLens
TLL	4142	TailLightLens
LPS	4143	LicensePlateLens
KSH	4144	SideTurnSignalAssembly
KSL	4145	MarkerLightAssembly-BulbType
MAS	4146	MarkerLightAssembly-SealBeam
LAB	4149	LicensePlateLightAssembly-BulbType
LAS	4150	LicensePlateLightAssy-SealBeam
KRT	4151	ConspicuityTape- replacesReflectiveTape
KRF	4152	Reflector
LOR	4153	LensRetainer/ORing
KEB	4156	ElectricalJunctionBox
KSO	4157	TailLightAssembly-BulbType
KTI	4161	TailLightAssembly-SealBeam
MLC	4162	MarkerLightMountingClip/Base
LBS	4163	MarkerLightBracket(Steel)
TLG	4164	TailLightBracketGuard

CEDEX	AAR	AAR / ISO Description
SBG	4165	SealBeamGrommet
KTL	4166	CombinationStop/TurnAssembly
SWB	4250	7-WayReceptacleBase
BEA	4251	7-WayReceptacle
KEC	4253	7-WayReceptaclewithBreaker
PGT	4254	Pigtail
STU	4260	SatelliteTrackingUnit
KDH	4724	Registration/PermitHolder
KBO	5001	ChassisBolster
KGU	5002	BolsterGusset
KCG	5003	BolsterHorn(FrontGuide)
KPL	5010	TwistLock/PushPin
KTH	5011	TwistLockHandle
KTE	5012	TwistLockHandleKeeper
KTW	5013	TwistLockAssembly
HKB	5014	TwistLockHandleKeeperBracket
KMR	5020	MainFrameRail
KXM	5030	ChassisCrossmember
KGX	5031	ChassisCrossmemberGusset
KSV	5033	FrameExtensionLockingDevice
CDP	5034	ChassisDeckPlate
AKP	5623	ApplyKingPinLock
MFH	5651	FHWA-PI
KBI	5654	StateVehicleInspection(BIT)
IPT	5655	PretripInspection
WWE	5669	WashExterior
SVC	5686	ServiceCall

CEDEX	AAR	AAR / ISO Description
MLG	5687	Mileage
DPF	5688	DispatchFee
RMN	5689	ReportingMark/Number
MOL	5690	Logo
IDS	5692	InformationDecalStencil
CAI	5696	SeeAttachedInvoice
CTA	5698	Citations-replacesToll
UNS	6150	UnitSkins(panels)
CDU	6152	CondensingUnit
RGT	6757	RegistrationforChassis
SPG	6771	SplashGuards
CVL	6994	Depreciated/CasualtyValue,LessSalva ge
DCV	6995	Depreciated/CasualtyValue
STX	6996	StateSalesTax
CTX	6997	CityTax
UTX	6998	CountyTax
FEX	6999	FederalExciseTax

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