SECTION 22

LETTERING AND MARKING OF FREIGHT VEHICLES AND BOGIES

ROA MANUAL

SCHEDULE OF AMENDMENTS

SECTION 22

AMENDMENT NUMBER	PAGES AMENDED	AMENDMENT SUMMARY	DATE ISSUED

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22.1 SCOPE

22.1.1 This Section specifies the standard requirements for the lettering and marking of freight vehicles and bogies.

22.1.2 It includes details of vehicle data panels, the information thereon and the size and location of other data relating to the vehicle, bogies and brake equipment required for operation and maintenance purposes.

22.2 GENERAL PRINCIPLES AND REQUIREMENTS

22.2.1 Information on the vehicles and bogies shall identify the owning rail System or the System responsible for maintenance and repairs.

22.2.2 The classification and numbering of vehicles and bogies, which includes identification of the responsible System, shall be in accordance with the requirements of Section 23 of this Manual.

22.2.3 Information, data and their location shall be in accordance with the requirements of this Section and uniform between Systems.

22.2.4 The colour and quality of all paint used for lettering and marking shall comply with appropriate Government Paint Committee specifications.

22.3 DATA PANELS ON FREIGHT VEHICLES

22.3.1 Data panels shall be painted or stencilled directly onto vehicle bodies or onto a metal plate which is permanently secured to the vehicle. Alternatively, the required characters may be of self adhesive vinyl or similar material.

22.3.2 Data panels shall contain the following information,

Vehicle class	
Vehicle number	
Vehicle capacity	t
Vehicle tare	t
Unit length (coupling points)	'UL'
Load compensating and grade control indicator symbol (if fitted)	
Change over Load (where required)	
Waybill clip	
Builders name plate (optional)	

22.3.3 The size and format of data panels shall be as shown on diagrams 22-3, 22-4 and 22-5.

22.3.4 The background colour of the panels shall contrast with the body colour of the vehicle; the colour of the markings applied to the panels shall give maximum contrast for legibility.

22.3.5 The location of data panels on vehicles shall be as shown on diagrams 22-1, 22-6 and 22-7. Two (2) data panels are required per vehicle, located to the left of the vehicle's transverse centre line and diagonally opposite where possible.

22.4 OTHER MARKINGS

22.4.1 Other data and markings are required for operational and maintenance purposes. These are indicated on diagrams 22-1, 22-6 and 22-7.

22.4.2 These markings shall be painted directly onto the vehicle in a colour contrasting with the vehicle colour, or as specified on the diagrams.

22.4.3 As specified in Section 18.8, the rolling stock outline to which a vehicle conforms shall be painted directly onto the vehicle in a colour contrasting with the vehicle colour. This identification shall be of the form 'Outline Plate X', where 'X' is the plate reference of the appropriate rolling stock outline (Diagrams 18-1 to 18-6). Characters shall not be less than 50 mm in height.

This identification shall be located on both sides of the vehicle adjacent to the data panel.

22.5 LOGOS

22.5.1 Rail System logos, or corporate logos in the case of privately owned or leased vehicles, shall, if fitted, be applied to both sides of a vehicle; they shall be located at or to the left of the vehicle transverse centre line.

22.5.2 They may be painted or stencilled directly onto the body or onto a metal panel which is permanently secured to the vehicle. Alternatively, the logo may be of self adhesive vinyl or similar material.

22.6 BOGIES

22.6.1 Bogies shall be painted in the owning (responsible) System's distinctive colour.

22.6.2 The right hand end of each bogie side frame above the bearing pedestal shall be painted in accordance with the Bogie Patch Identification, Table 22-3. High Speed Bogies are those which have been authorised for operation at track speeds of 100 km/hr or greater.

22.6.3 Bogie identification and data shall be applied by painting, stencilling or in the form of stamped metal tags, located as shown on Diagram 22-2.

22.6.4 The identification and data shall comprise:

(a) Bogie classification code and serial number
(b) Bogie last overhauled (date)
(c) Axle bearings last overhauled (date)
(d) Axle bearings last greased (date)
(e) Type/model of side bearer fitted (where resilient constant contact side bearers are used)

22.6.5 Helical coil steel springs of three piece bogies shall be painted to comply with Spring Identification Table 22-4.

22.6.6 Pedestal axle box plugs shall be painted in accordance with the requirements detailed in Section 24..., Maintenance Standards.

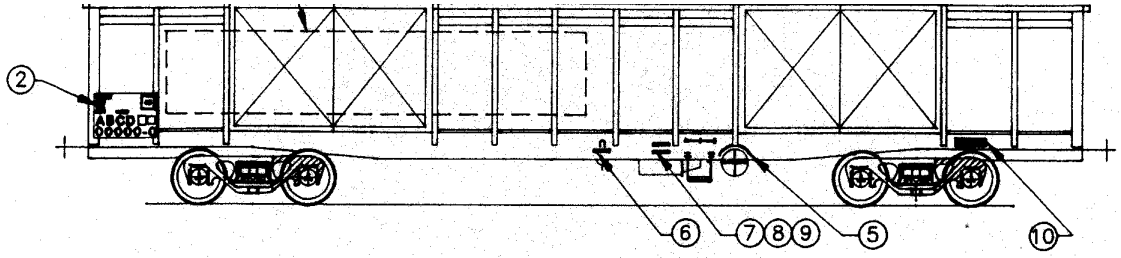
22.7 TANK CARS

22.7.1 Tank cars shall be marked in accordance with all relative requirements of this Section.

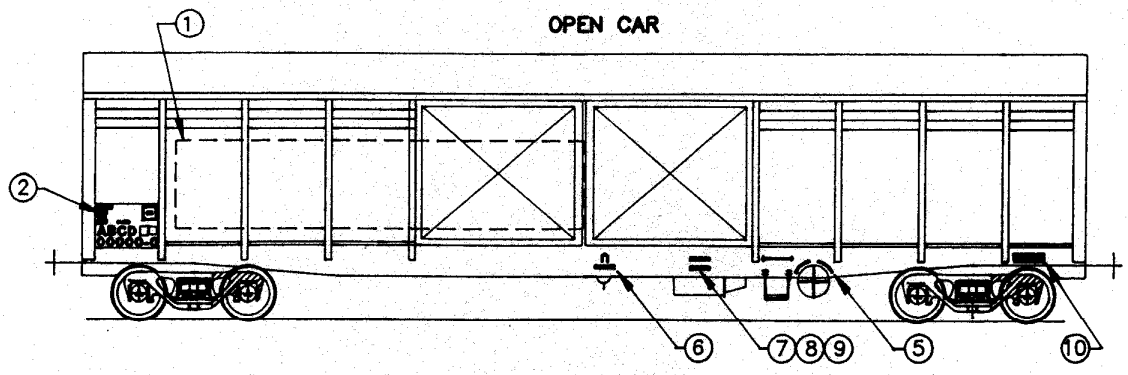
22.7.2 In addition to the standard markings, Non-Pressure Tank Cars shall be marked in accordance with Diagram 22-6 and Pressure Tank Cars in accordance with Diagram 22-7.

DIAGRAM 22-1

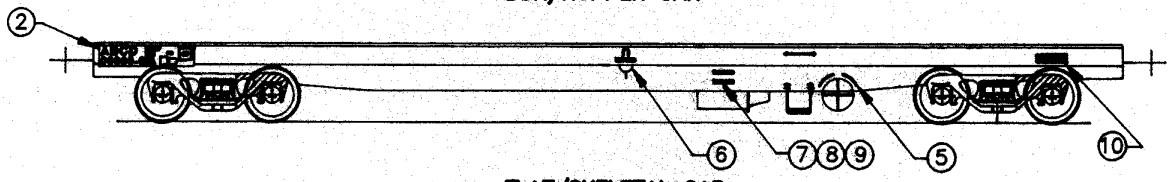
LETTERING AND MARKING FOR
BOX, OPEN, HOPPER AND FLAT CARS



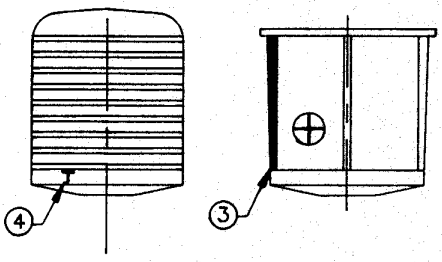
OPEN CAR

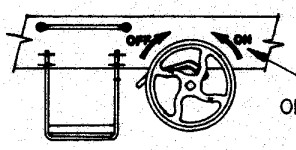


BOX/HOPPER CAR



FLAT/SKELETAL CAR





STENCILLING TO BE DIRECTLY OPPOSITE ON OTHER SIDE OF VEHICLE

VIEW SHOWING HANDBRAKE STENCILLING.

TABLE 22–1 VEHICLE IDENTIFICATION

ITEM	DESCRIPTION OF MARKINGS	REMARKS	MIN. SIZE
1	OWNERS IDENTIFICATION	SYSTEM LOGO, LEFT OF CENTRELINE OF VEHICLE,BOTH SIDES.	–
2	DATA PLATE	SEE DIAGRAMS 22–3 & 22–4, 2 PER/VEHICLE DIAGONALLY OPP.	–
3	END HANDBRAKE INDICATION	WHITE STRIP FROM HEADSTOCK TO FULL HEIGHT OF WAGON	–
4	TRANSVERSE HANDBRAKE NOTICE	YELLOW 'T' ON CONTRASTING BACKGROUND	200x200mm
5	HANDBRAKE ROTATION	EACH SIDE OF VEHICLE ADJACENT TO HANDWHEEL	25mm
6	AIR BRAKE RELEASE NOTICE	'RELEASE' OR 'Π' BOTH SIDES OF VEHICLE	50mm
7	BRAKE CYL. LAST TESTED	'B.C. 0–00'	25mm
8	SINGLE CAR LAST TESTED	'S.C. 0–00' AND LOCATION	25mm
9	TRIPLE VALVE LAST TESTED	'T.V. 0–00' (ONLY FOR PISTON TYPE TRIPLE VALVES)	25mm
10	BOGIE IDENTIFICATION PANEL (HIGH SPEED BOGIES)	BOG.ID.PANEL TO CONTAIN: BOGIE CAPACITY IN t. CCSB TYPE BOGIE SPEED km/hr. PANEL AND PRINT COLOUR TO CORRESPOND TO BOGIE PATCH IDENTIFICATION (SEE TABLE 22–2)	15mm
11	OUTLINE PLATE	SEE DIAGRAM 22.4.3	50mm

Adopted 18/9/91

DIAGRAM 22-2

LETTERING AND MARKING OF BOGIES

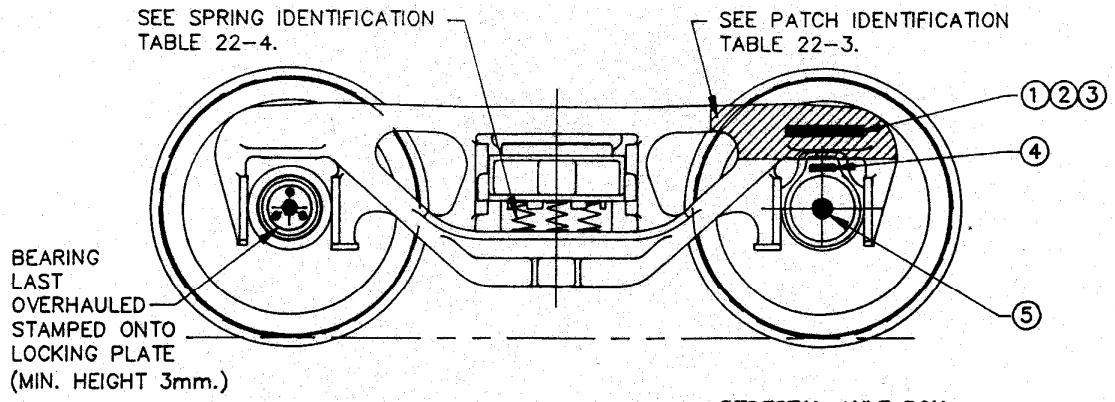


TABLE 22–2 BOGIE IDENTIFICATION

ITEM	DESCRIPTION OF MARKINGS	REMARKS	COLOUR	MIN. SIZE
1	BOGIE CLASSIFICATION LETTERS	TO BE SHOWN ON RIGHT SIDE OF BOGIE SIDE FRAME.	STENCILLED MARKINGS IN YELLOW OR WHITE	15mm
2	BOGIE LAST OVERHAULED	TO BE TAGGED OR STENCILLED B 0–00		
3	BOGIE SIDEBEARER TYPE	TO BE INCLUDED IF RESILIENT SIDEBEARERS ARE FITTED.		
4	BEARING LAST OVERHAULED	TO BE TAGGED ONTO AXLE BOX. 0–00		15mm
5	COLOUR PLUG	INDICATES BRG. LAST GREASED (ONLY FOR PEDESTAL BRGS.)	REFER SECT. 24	—
NOTE: TAGGING OF AXLE BOX AND COLOUR CODING OF AXLE BOX PLUGS TO BE IN ACCORDANCE WITH SECT.24 (MAINTENANCE STD.)				

TABLE 22–3 BOGIE PATCH IDENTIFICATION

HIGH SPEED BOGIES	PATCH COLOUR CODE	REMARKS
EXCHANGEABLE BOGIES (WITH CCSB'S)	GREEN	BOGIE TO BE PAINTED TO THE OWNING SYSTEMS COLOURS
OTHER BOGIES	BLACK	
BOGIES WITH HYDRAULIC STABILISERS FITTED.	ORANGE	
NON HIGH SPEED BOGIES	NO PATCH	

TABLE 22–4 SPRING IDENTIFICATION

SPRING TRAVEL	COLOUR CODE
64mm	RED
77mm	BLACK
94mm	WHITE OR SILVER
108mm	GREEN
EXPERIMENTAL/SPECIAL	ORANGE

NOTE:
COLOUR CODING OF HIGH SPEED BOGIES AND SPRING TRAVEL IDENTIFICATION ARE NOT RELATED AND NO PARALLEL SHOULD BE DRAWN.

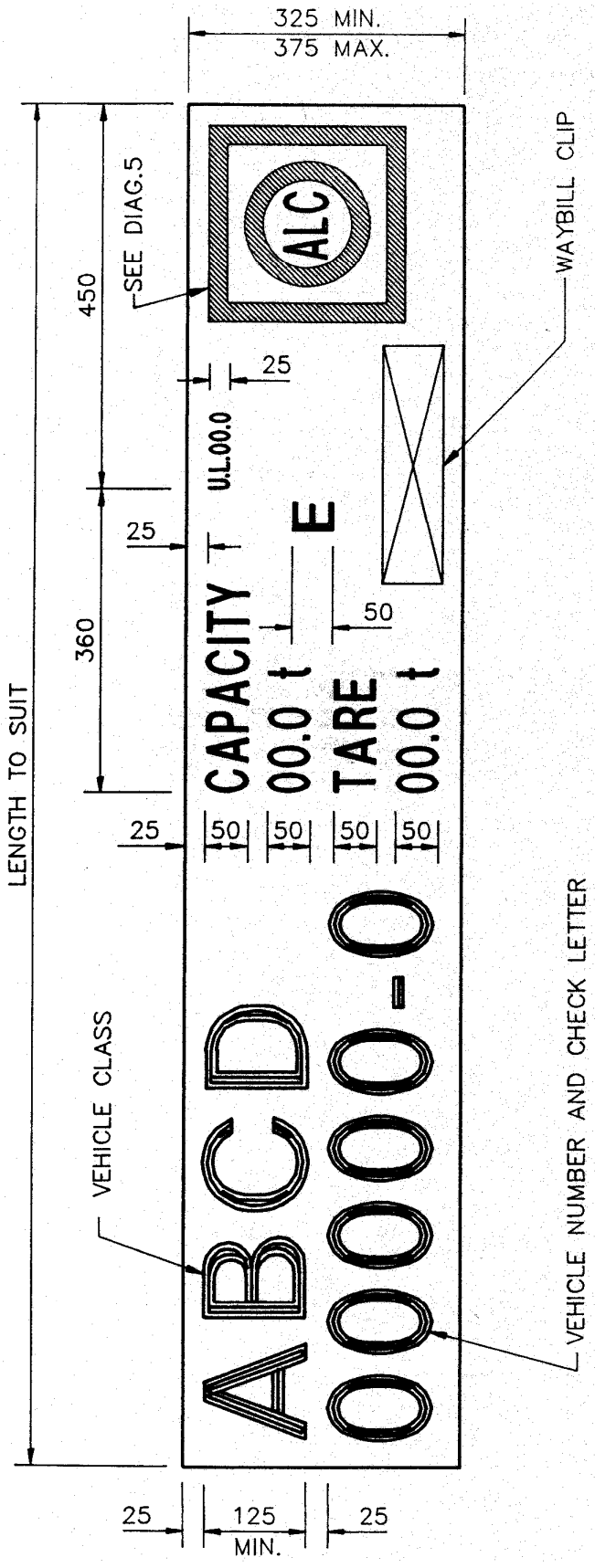
DIAGRAM 22-3

DATA PANEL
BOX, OPEN, HOPPER AND TANK CARS

PAGE NOT IN ORIGINAL
PRINTED DOCUMENT

DIAGRAM 22-4

LETTERING AND MARKING OF PRIMARY DATA PANEL FOR FLAT AND SKELETAL VEHICLES

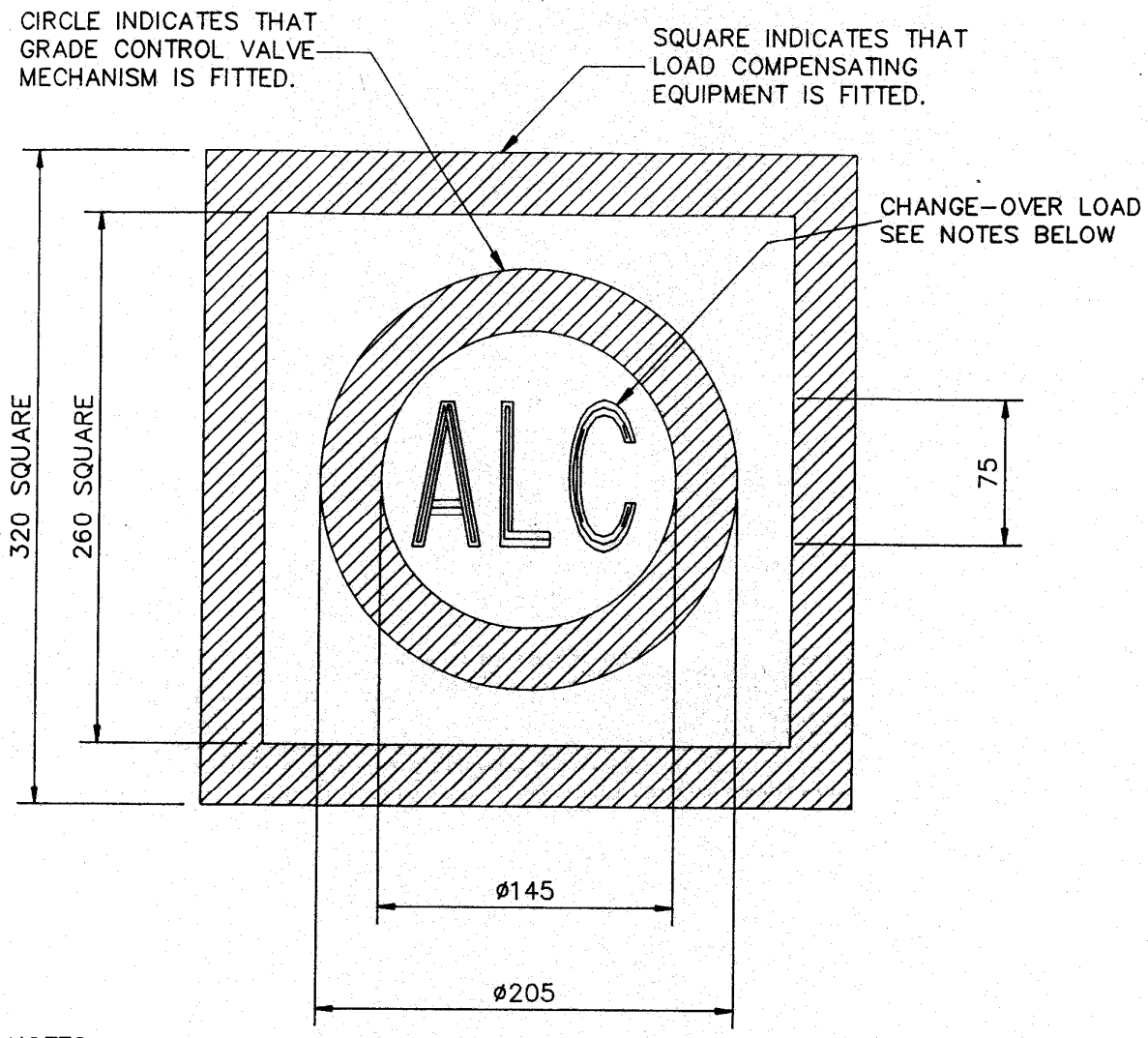


NOTES:

1. THE INFORMATION SHOWN ON THE ABOVE PLATE IS TO BE PLACED ON ALL FLAT CARS,ON A PERMANTLY ATTACHED PLATE OR PAINTED DIRECTLY ONTO THE VEHICLE.
2. LETTERING,NUMERALS AND BANDING ARE TO BE PAINTED/STENCILLED IN SUCH A MANNER CONTRAST BETWEEN MARKINGS AND BACKGROUND.
3. LETTERING NUMERALS TO BE IN HELVETICA BOLD AND/OR HELVETICA CONDENSED.
4. PAINT COLOURING AND QUALITY TO MEET GOVERNMENT PAINT COMMITTEE (GPC) SPECIFICATIONS.
5. SIZE OF LETTERING,NUMERALS AND SYMBOLS TO BE IN ACCORDANCE WITH THAT SPECIFIED.

DIAGRAM 22-5

DESIGNATION FOR GRADE CONTROL MECHANISM
AND
LOAD COMPENSATING EQUIPMENT
INCORPORATING THE CHANGE-OVER LOAD REQUIREMENT



NOTES:

1. THE SQUARE BANDING,CIRCULAR BANDING AND NUMERALS ARE TO BE PAINTED OR STENCILLED IN SUCH A MANNER AS TO GIVE MAX. CONTRAST BETWEENMARKINGS AND BACKGROUND.
2. THE LOAD COMPENSATING EQUIPMENT CONTROL SHALL BE PLACED IN THE 'EMPTY' POSITION WHEN THE LOAD IN THE VEHICLE (NET TONNAGE) IS LESS THAN THE FIGURE SHOWN AND PLACED IN THE 'LOADED' POSITION WHEN THE LOAD IN THE VEHICLE IS MORE THAN OR EQUAL TO THE FIGURE SHOWN.
3. IF A SQUARE,BUT NO FIGURE IS SHOWN,THE CHANGE–OVER LOAD SHALL BE DEEMED TO BE 20 TONNES.
4. THE FIGURE INDICATING THE 'CHANGE–OVER' MAY VARY FROM CLASS TO CLASS OF VEHICLE.
5. THE LETTERS 'ALC' WITHIN THE LOAD COMPENSATING FIGURE INDICATES THAT AUTOMATIC LOAD CONTROL EQUIPMENT IS FITTED TO THE VEHICLE.

DIAGRAM 22-6

LETTERING AND MARKING OF NON PRESSURE TANK CARS

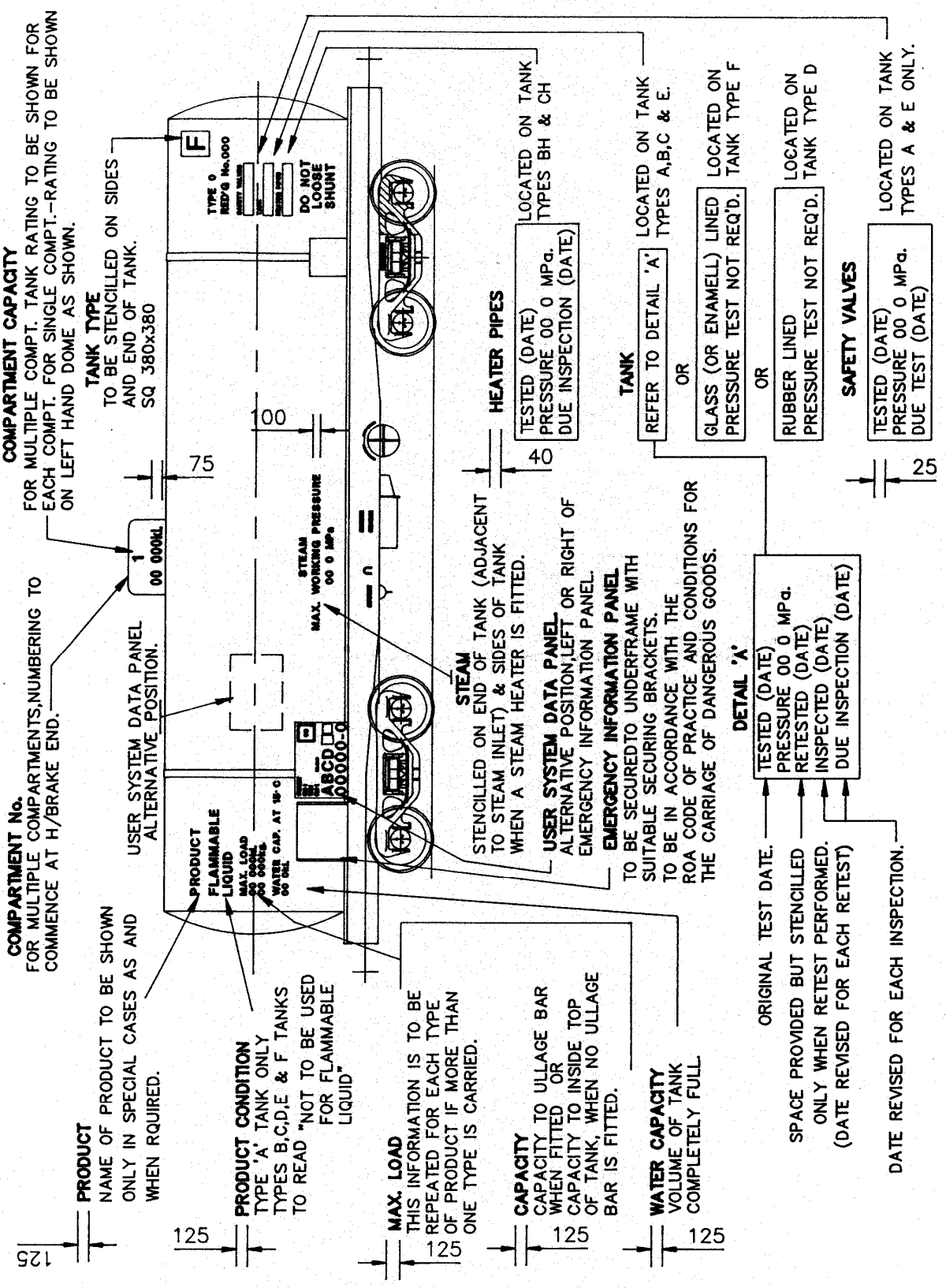


DIAGRAM 22-7

LETTERING AND MARKING OF PRESSURE TANK CARS