

Dart 18



Dart Catamarans International Limited

DART CATAMARANS INTERNATIONAL LIMITED DART 18 MANUAL

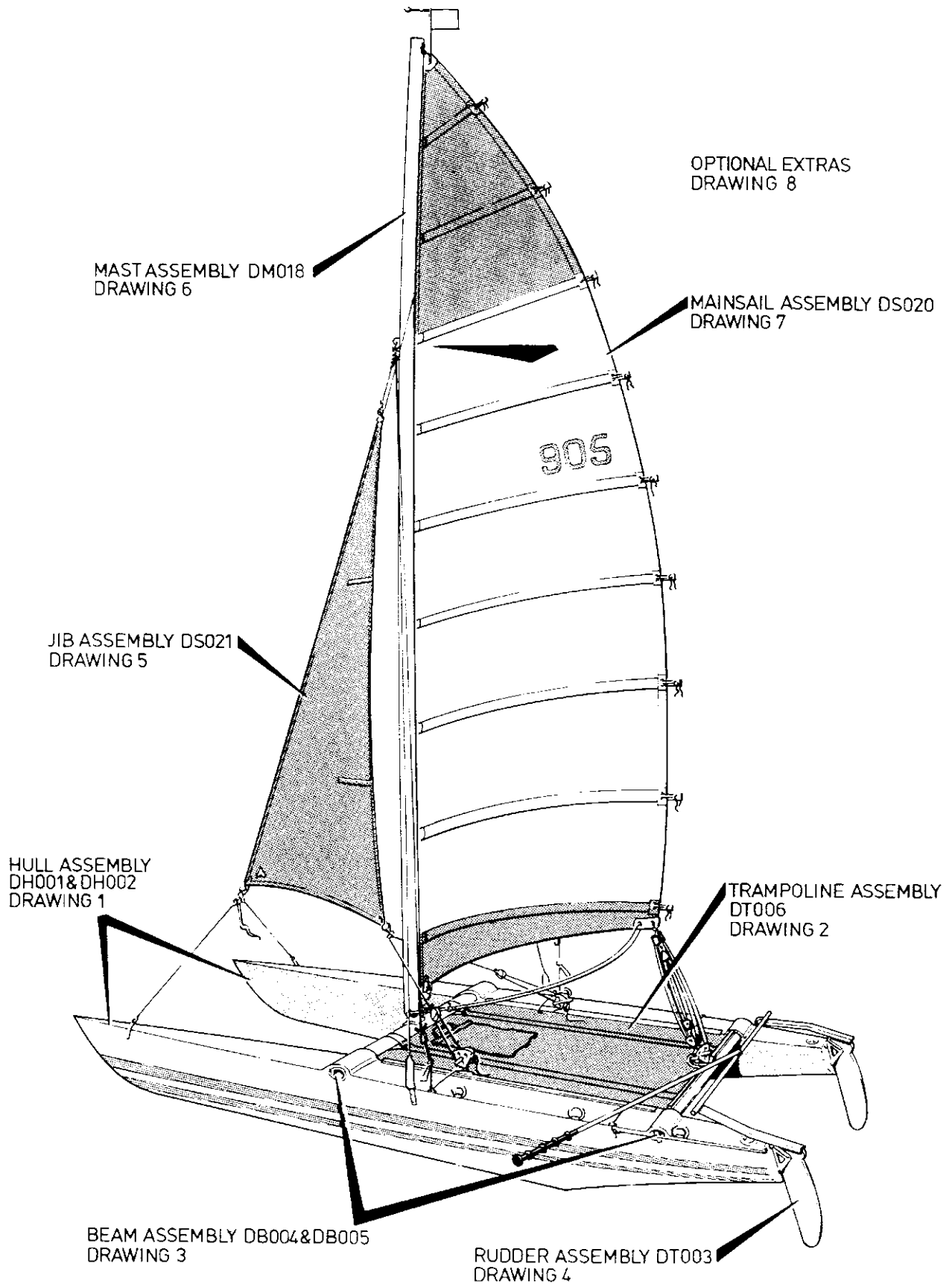
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DART CATAMARANS INTERNATIONAL LTD

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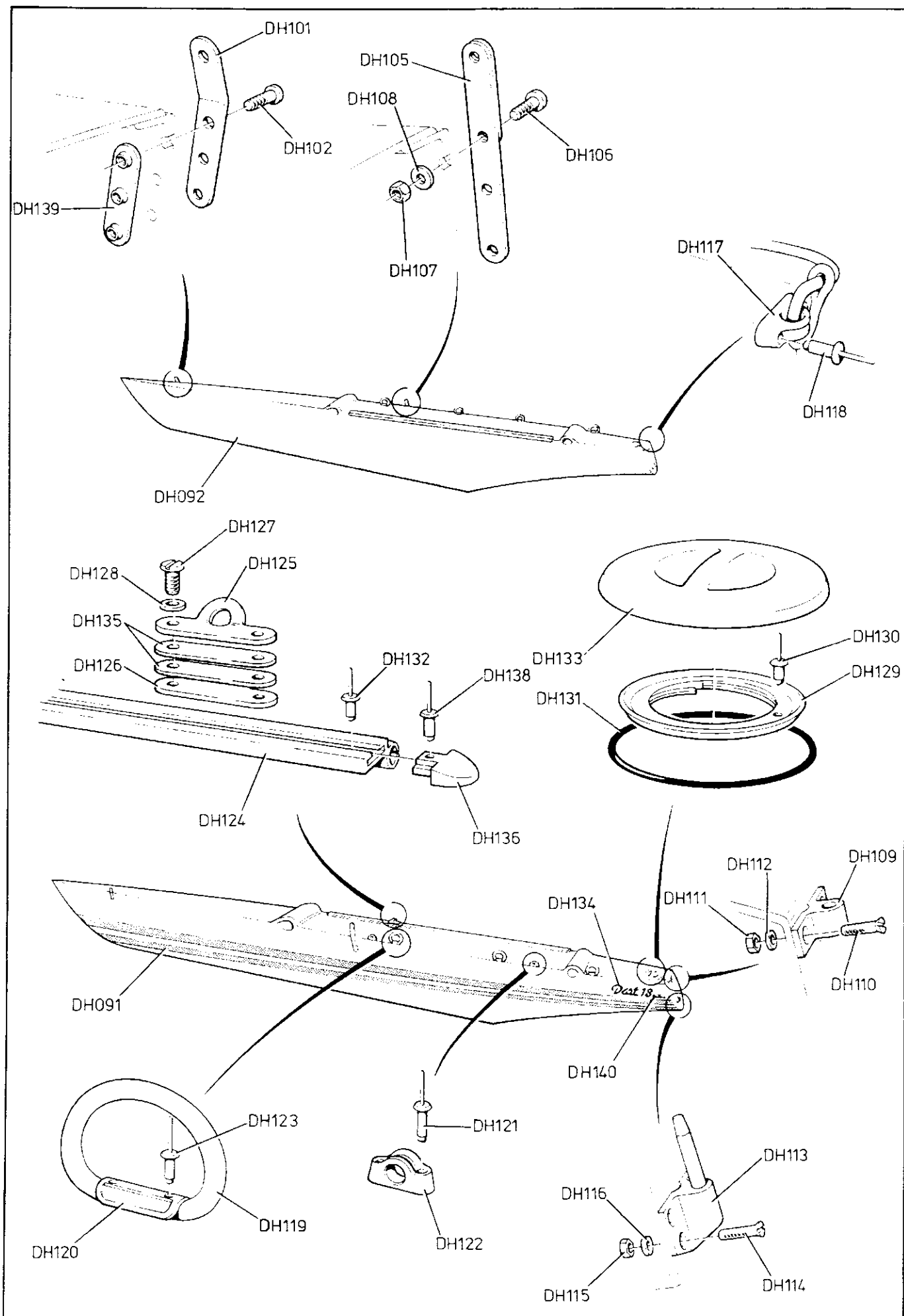
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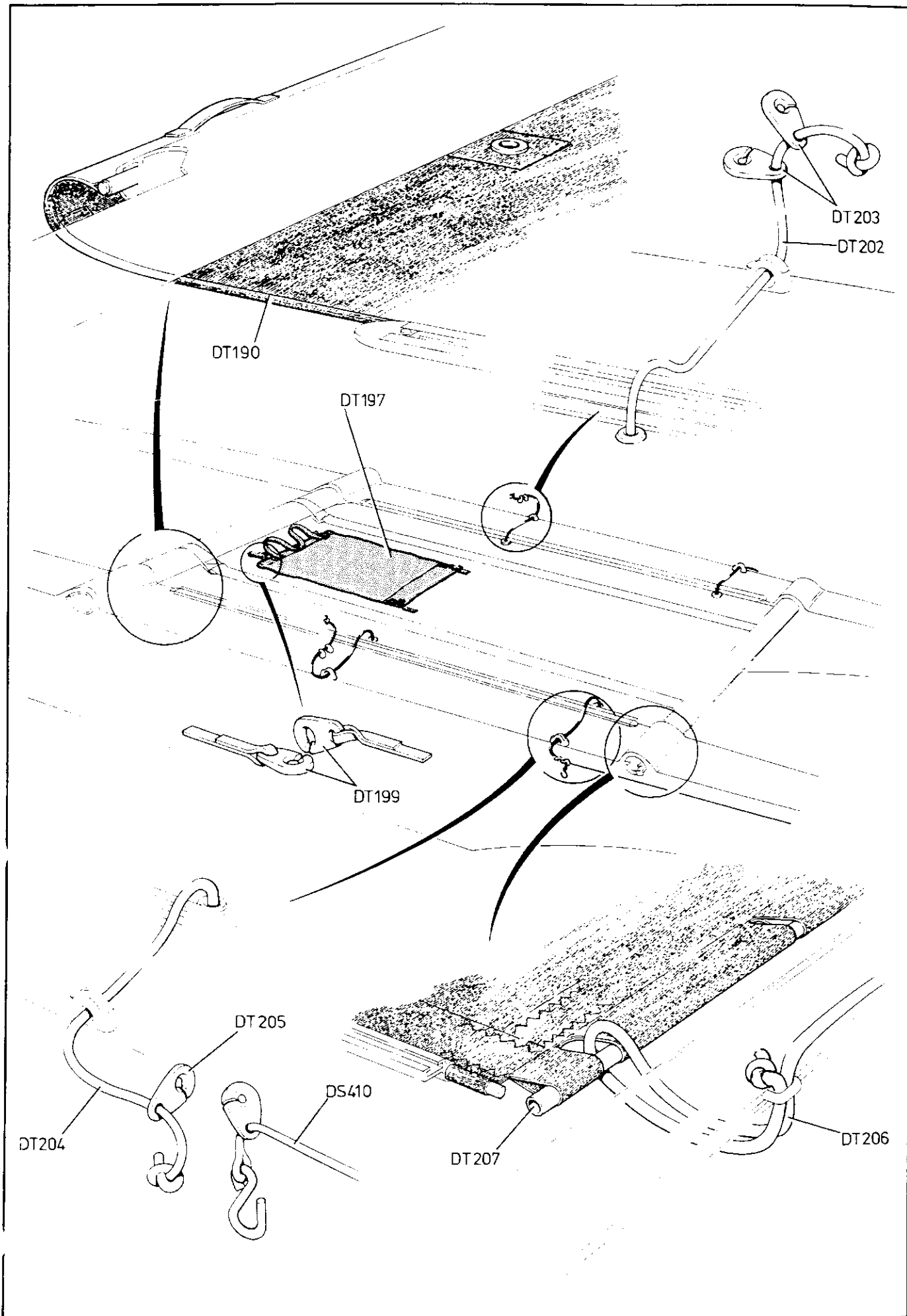


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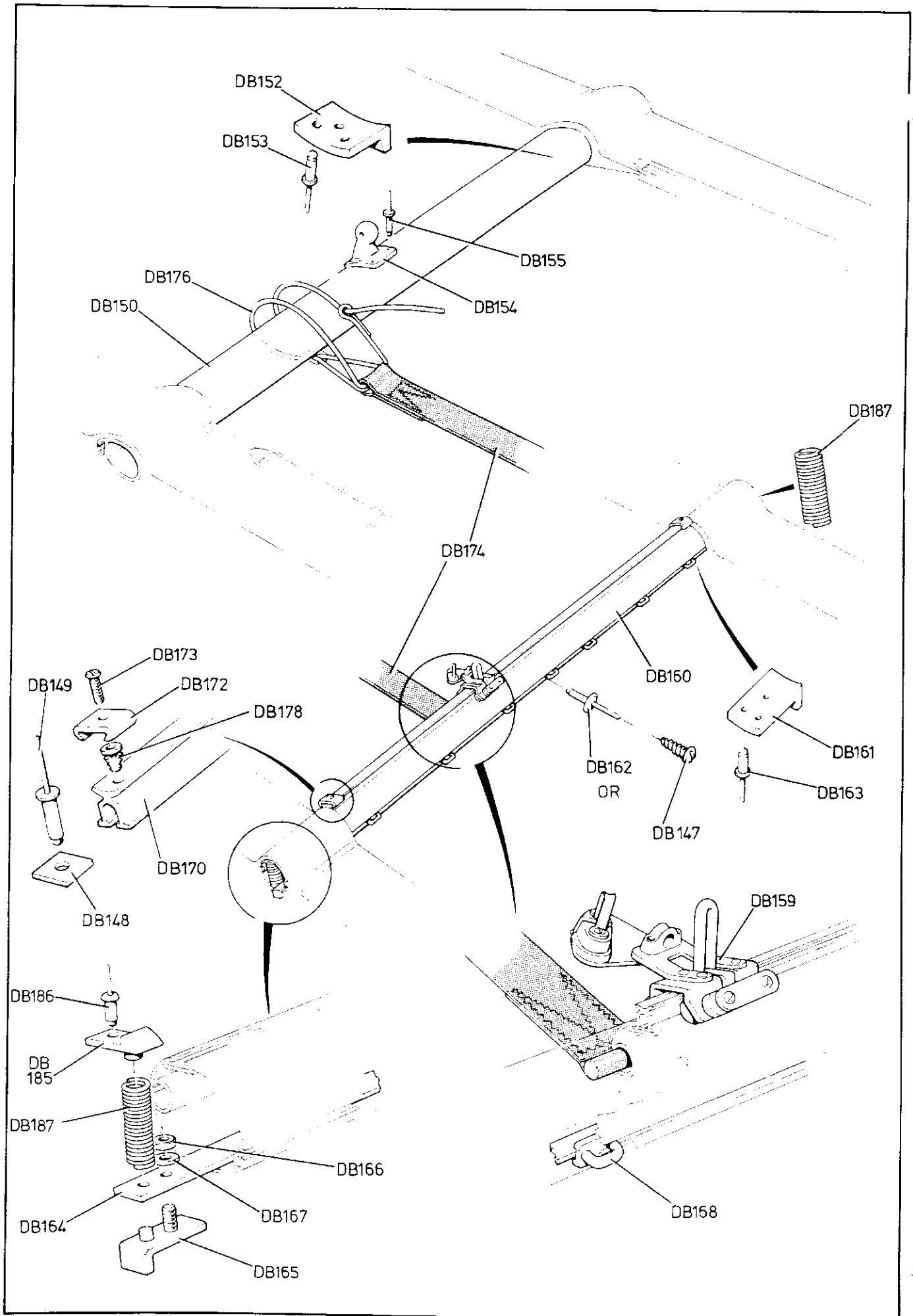
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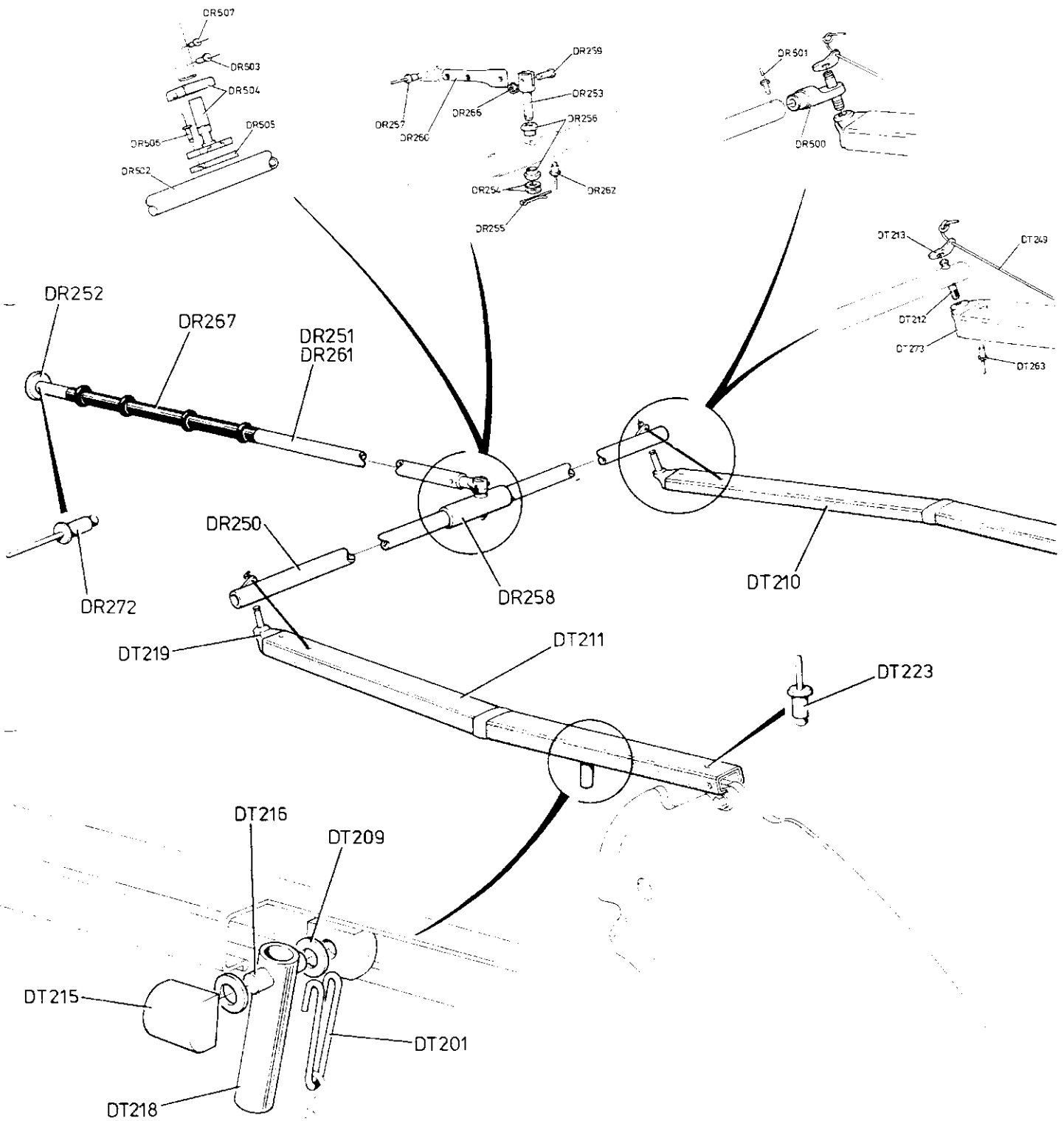
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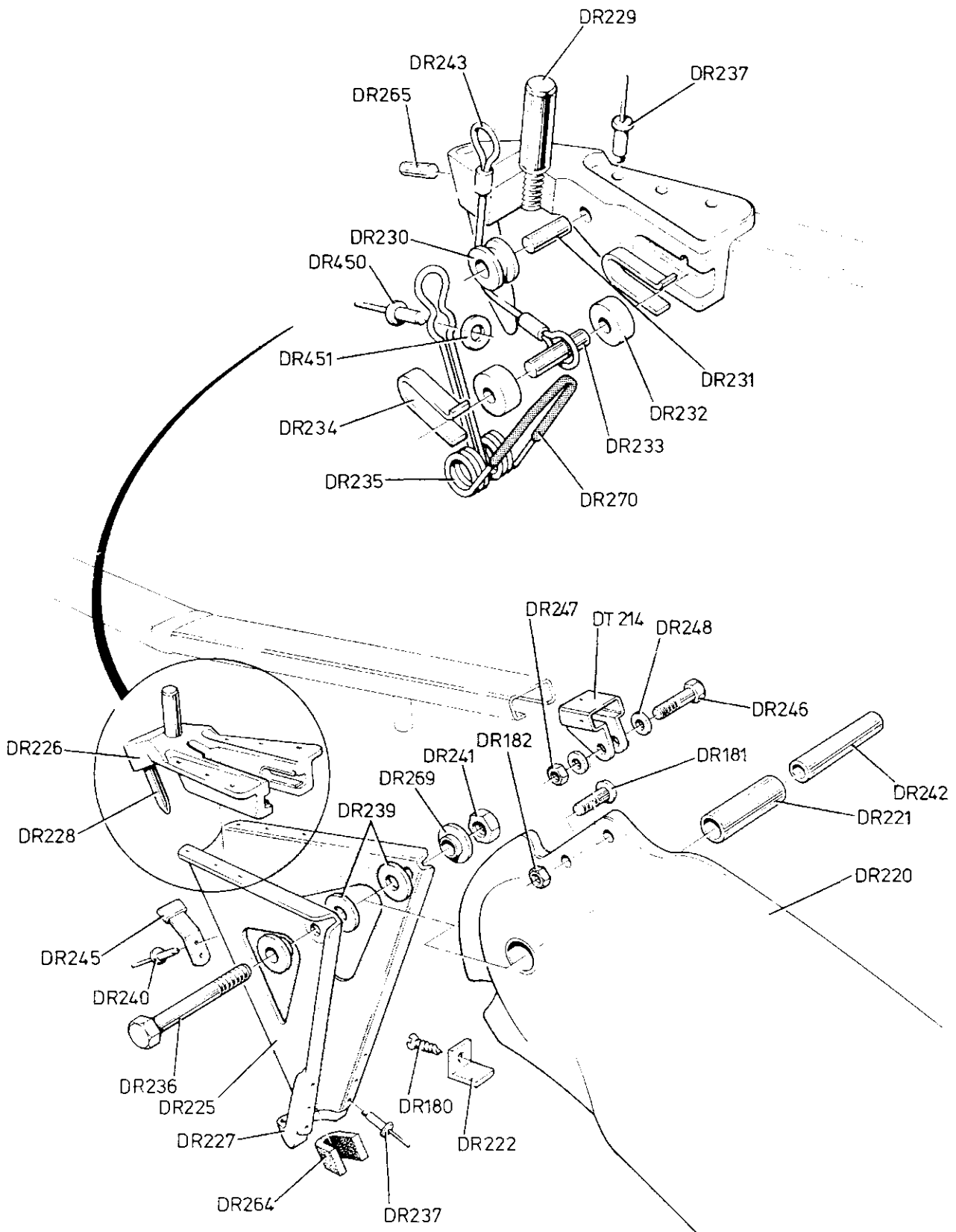


DRAWING 2 Trampoline details

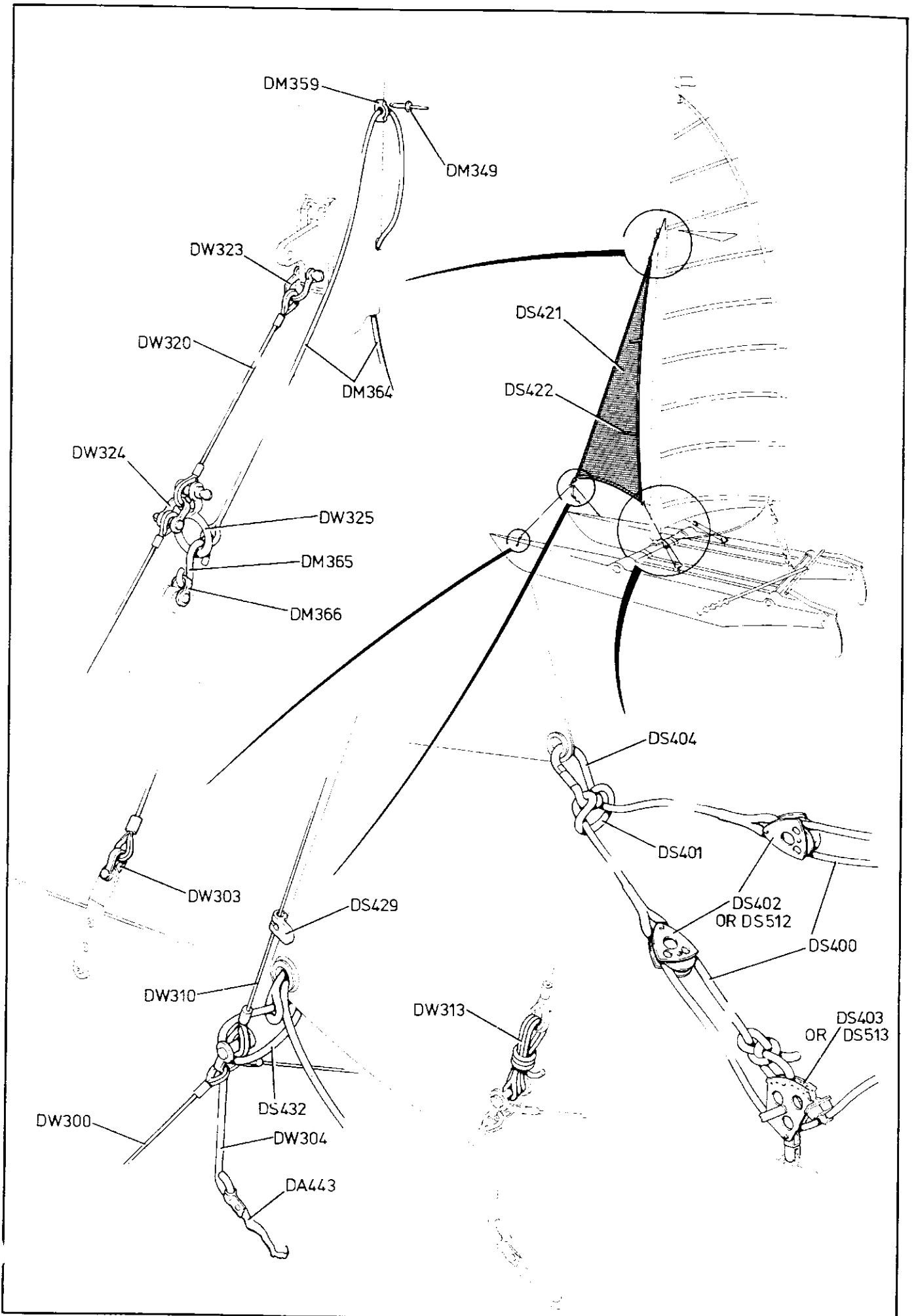




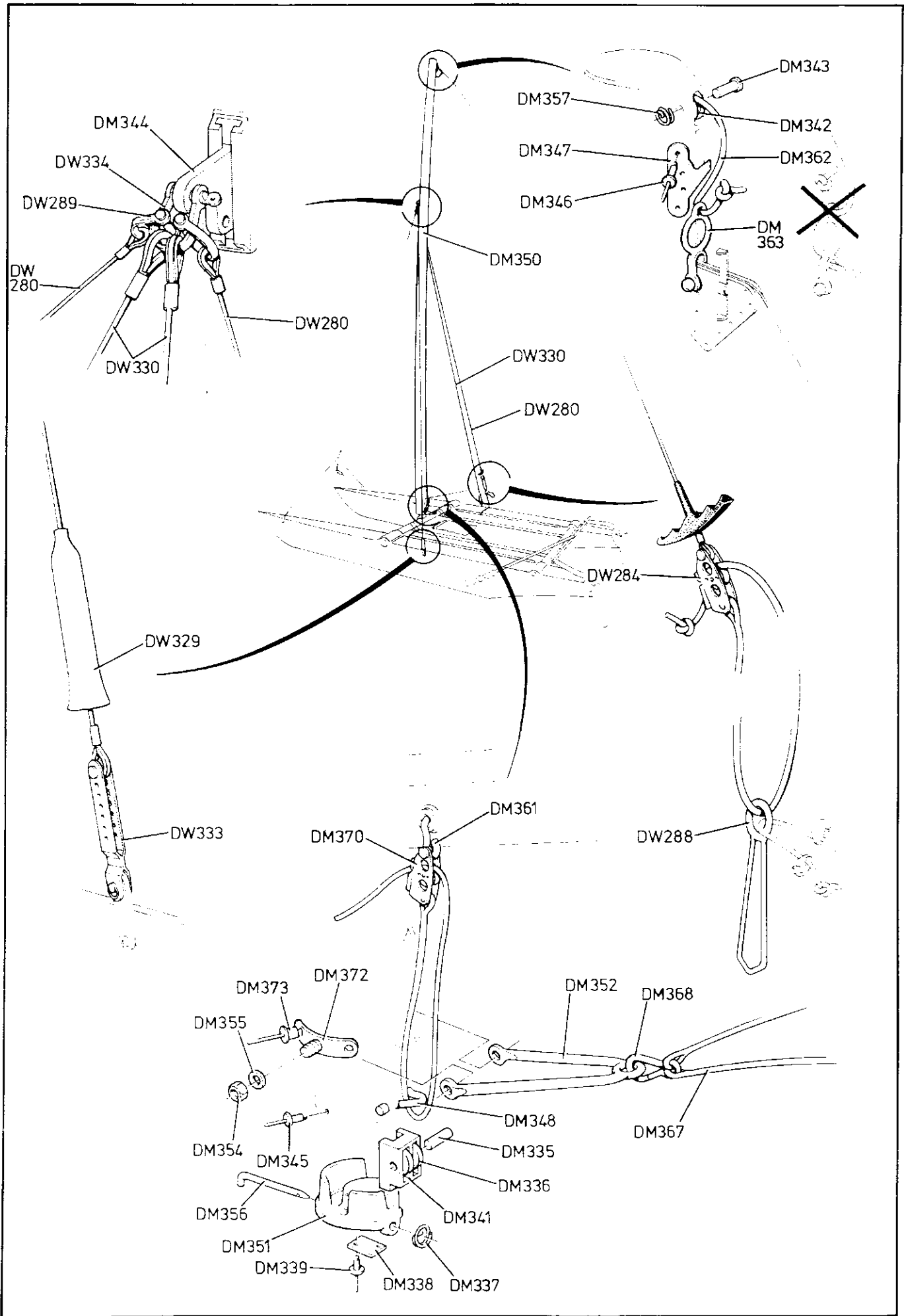
DRAWING 4 Rudder details



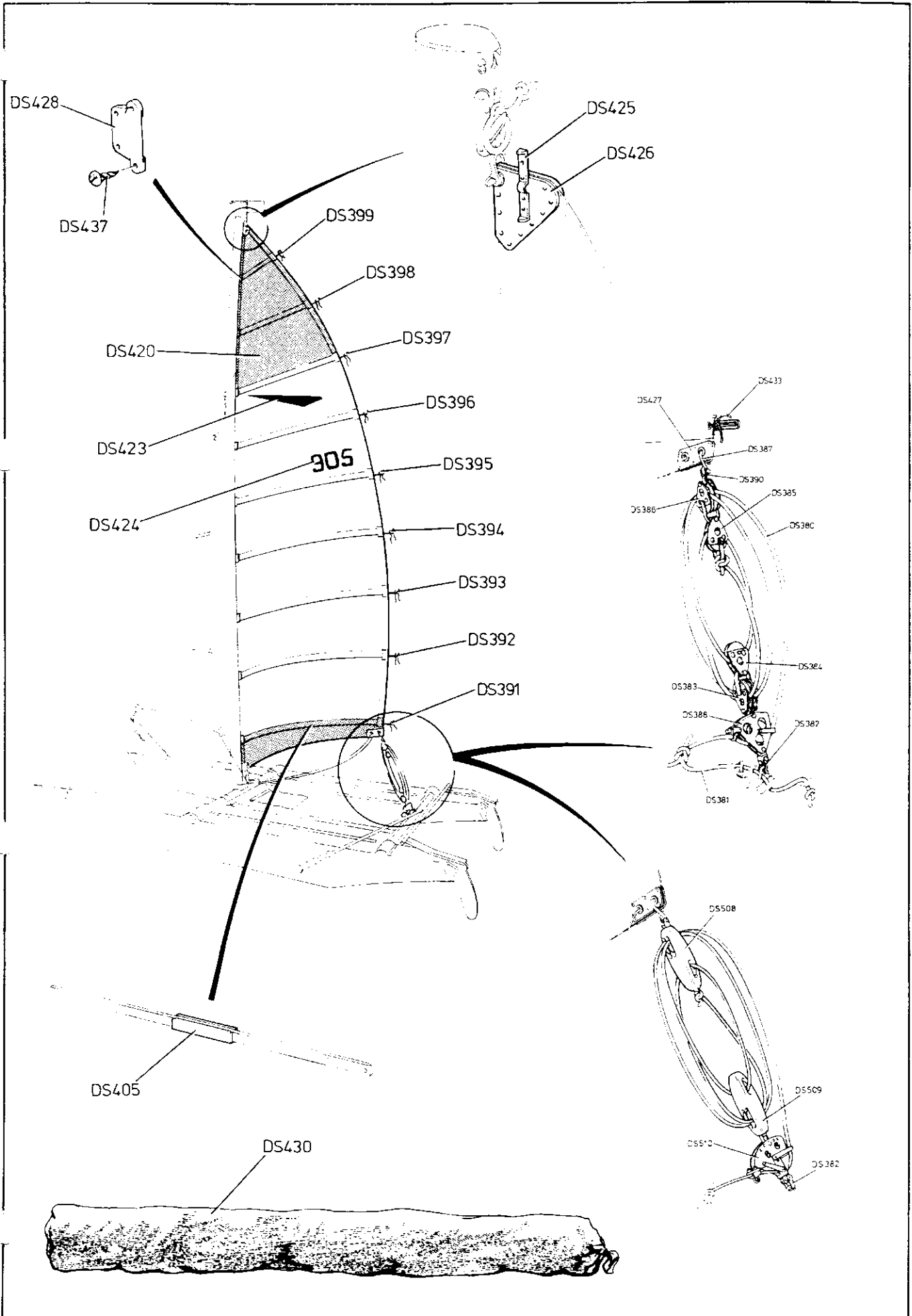
DRAWING 4



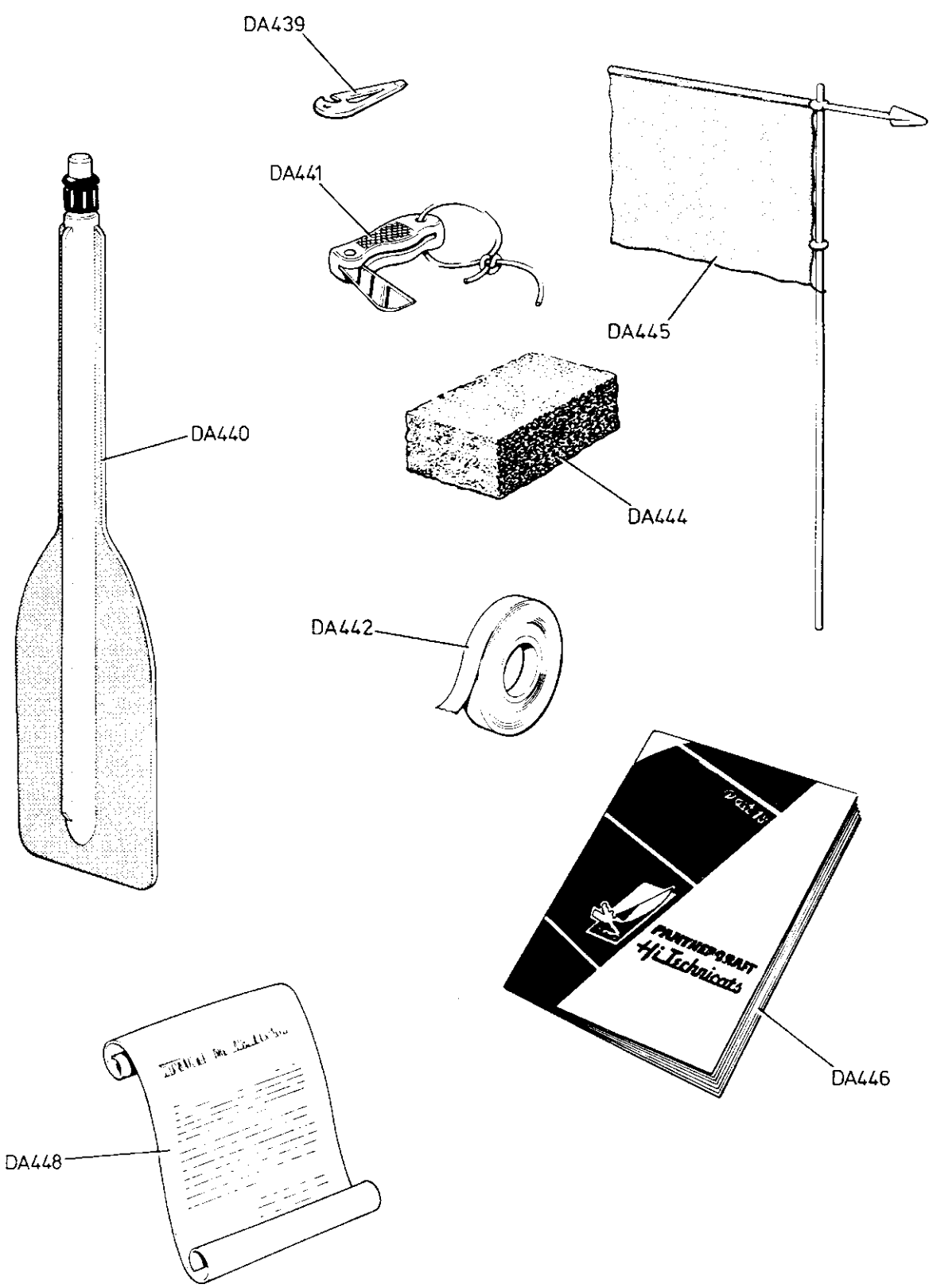
DRAWING 5 Jib details



Mast details DRAWING 6



DRAWING 7 Mainsail details



Optional extras DRAWING 8

CONSTITUTION OF THE INTERNATIONAL DART ASSOCIATION

1. TITLE - ASSOCIATION

The full title of the association shall be "THE INTERNATIONAL DART ASSOCIATION"

2. OBJECTS

The objects of the International Dart Association (I.D.A.) are to promote and develop the interests of Dart catamaran owners and sailors throughout the World:-

- (a) to encourage and foster the enjoyment and fellowship of recreational catamaran sailing.
- (b) to encourage and co-ordinate national and international events in the class.
- (c) to co-ordinate and manage the affairs of the class.
- (d) to maintain the class rules and production one-design character of the Dart catamaran.

3. HEADQUARTERS

The Headquarters of the Association shall be in England and the official language shall be English.

4. JURISDICTION AND ORGANIZATION

The I.D.A. has authority over all activities of the Dart Catamaran Class throughout the World and its powers shall be vested in and carried out by the International Committee, the international Dart Rules Committee and National or Regional Committees as provided in this Constitution.

5. INTERNATIONAL COMMITTEE

- (a) The Association shall be governed by the International Committee comprising the chairman of each National or Regional Committee from time to time holding office, the immediate Past Chairman of the International Committee, and such additional officers to be appointed by the Committee for such term as it may from time to time determine
- (b) The International Committee shall meet from time to time at the request of the Chairman or three other members.
- (c) The International Committee shall elect from amongst themselves the Chairman and Vice Chairman of the Association, who shall hold office until their successors are elected to office.
- (d) In the event that a National or Regional Chairman is unable to attend any meeting of the international Committee, the Secretary or any other member of the National or Regional Committee nominated for that purpose may attend and represent the Chairman and vote at such meeting of the International Committee.
- (e) In the absence of the Chairman of the international Committee the Vice Chairman shall act as Chairman and not the Vice Chairman's alternate. In the absence of both the Chairman and the Vice Chairman, the meeting shall be adjourned to a later date.
- (f) The quorum shall be half the number of National or Regional Association then in being rounded up to the nearest whole number
- (g) Each Committee member shall have one vote. Decisions shall be reached by a simple majority, and in the event of an equality of votes the Chairman of the meeting shall have an additional vote
- (h) The Designer, Rodney March Esq., and a representative nominated by Bryher Mouldings Ltd, shall have the right to attend and speak at all International Committee Meetings but shall have no voting rights unless elected as a Committee member.
- (i) Twenty-one days notice of International Committee Meetings must be given to all Committee Members, including the Designer and the nominated Bryher Mouldings Limited representative. The notice of the meeting shall include an agenda.
- (j) A Secretary (non-voting) shall be appointed by the International Committee, upon such terms as the International Committee may think fit.
- (k) The Secretary shall be responsible under the supervision of the Chairman for the maintenance of the affairs of the Association including the following:-

*Minutes of the International Committee
Minutes of the Advisory Council
Register of Members
Register of Boats*

- (l) The International Committee shall cause proper books of account to be kept of all income and expenditure and of all dealings with the assets of the Association and shall circulate annually to all members a duly audited income and expenditure account and balance sheet.
- (m) The international Committee shall refer all matters concerning the Dart Class Rules, including interpretations, to the International Dart Rules Committee (I.D.R.C.), for their decision.
- (n) The I.D.R.C. shall appoint on such terms as it may think fit, a Chief Inspector (non-voting)

Ref 5

6. INTERNATIONAL DART RULES COMMITTEE

- (a) The I.D.R.C. shall assist and co-operate with the International Committee in the carrying out of their responsibilities and shall have the duties and power provided by the constitution.
- (b) The I.D.R.C shall consist of the following three members:-
- Current Chairman of the I.D.A. International Committee.
A representative nominated by Bryher Mouldings Ltd.
A representative nominated by the International Yacht Racing Union Multi-hull Technical Committee.*
- (c) The three members shall form a quorum
- (d) The I.D.R.C shall have the absolute right to veto or approve amendments to either the Association Constitution or the Dart Class Rules.
- (e) Each member shall have one vote. Decisions shall be reached by a simple majority except on matters concerning the I.D.A. Constitution or the Dart Class rules. Approval for amendments to either the I.D.A. Constitution or the Dart Class rules must be carried by a unanimous vote, and conveyed to the International Committee in writing against the signatures of all three members

7. NATIONAL OR REGIONAL COMMITTEES

- (a) The International Committee may as and when it deems it necessary for the administration of the affairs of the Association, form National or Regional Associations.
- (b) The International Committee shall have power to approve, amalgamate or disband National or Regional Associations. In special circumstances the International Committee may approve separate regional Associations within one country
- (c) Each National or Regional Association shall elect annually a National or Regional Committee which shall consist of the following who must all be full or associate members of the Association:-
- Chairman,
Secretary,
Treasurer,
Not less than two others.*
- (d) Each National or Regional Committee shall manage within its area those affairs of the Association which may be delegated to it by the International Committee.
- (e) The National or Regional Committee shall be elected annually at the National or Regional Annual General Meeting (A.G.M) and each Committee member shall serve until the conclusion of the following National or Regional A.G.M
- (f) Four Members shall form a quorum
- (g) Each Committee member shall have one vote. Decisions shall be reached by a simple majority, and in the event of an equality of votes the Chairman of the meeting shall have an additional vote.
- (h) In the event of vacancies occurring on the Committee for any reason whatsoever, the Committee shall have the power to co-opt replacements.
- (i) Fourteen days notice of Committee Meetings must be given to all Committee Members. The notice of the meeting shall include an agenda.

8. NATIONAL OR REGIONAL ANNUAL GENERAL MEETINGS

- (a) The A.G.M. of each National or Regional Association shall be held during the first fourteen days of October, the date, time and place being at the National or Regional Committee's discretion.
- (b) Business at the A.G.M. shall comprise :-
- i) Chairman's report
 - ii) Secretary's Report
 - iii) Treasurer's Report and presentation of accounts
 - iv) Election of Officers and Committee.
 - v) Election of Hon. Auditors
 - vi) Proposals, of which notice has been received prior to the 1st September by the Secretary, who should in turn advise all Members of these proposals 21 days before the A.G.M
- (c) Extraordinary General Meetings may be called by the Association Committee, or shall be called by the Chairman upon receipt by the Secretary of a request in writing, signed by not fewer than ten members of the Association
- (d) At least 21 days notice, together with a copy of the agenda, shall be given to all Members of any General Meeting
- (e) At any General Meeting decisions shall be by simple majority
- (f) Voting to be by show of hands unless a poll is demanded by not fewer than three of the members present. At General Meetings both full and associate members may be allowed to join in discussion but only full members may vote. In the event of an equality of votes, the Chairman shall have an additional vote

9. FLEETS

- (a) Fleets may be formed by Association Members in any locality upon application to the National or Regional Committee or the International Committee where the locality is not within a National or Regional Association.
- (b) The National or Regional Committee or, if appropriate, the International Committee shall have the power to approve, amalgamate or disband fleets.
- (c) A Fleet Captain, and such other officers as the Fleet may deem necessary, shall be elected annually from among the members of the Fleet in such manner as is prescribed by the Fleet unless otherwise provided by the Constitution. The Fleet Captain and any other Fleet Officers shall be responsible to the National or Regional Committee (or, if appropriate, the International Committee) for the affairs and conduct of the Fleet, and due compliance by the members with the I.D.A. Constitution
- (d) Fleets may organise local sailing and social activities within the objects of the I.D.A.

10. NOTICE OF MEETINGS AND POSTAL VOTES

(a) Notice of meetings or ballot papers shall be deemed to be served if posted (by airmail if overseas) to the last known address of the member.

(b) Non-receipt of notices or ballot papers by members, or of postal votes by the auditors, shall not invalidate the proceedings of meetings, or the result of a postal ballot.

11. MEMBERSHIP

(a) Full Membership shall, upon payment of the prescribed annual subscription, be open to any owner of a Dart, or in the case of joint owners, to not more than one of them, or in case of a Dart owned by a Corporation or Association, to a nominated representative of that organisation.

(b) Associate Memberships shall, upon payment of the prescribed annual subscription, be open to any person or club interested in the Dart Class

(c) Honorary Membership. The International Committee may grant honorary life membership to any person as a mark of respect or appreciation of exceptional service to the Association. An honorary life member who would otherwise qualify for full membership under rule 4 (a) shall be entitled to all privileges and voting rights of such membership without payment of annual subscriptions

(d) A member of the Association 'ipso facto' belongs to the National or Regional Association in which he normally sails, even though such place may not be his permanent residence; but such member, for valid reason and with the approval of both National or Regional Chairman, may select instead the National or Regional Association in which he has his permanent residence.

12. SUBSCRIPTIONS

(a) Association subscriptions shall be the amounts determined by and shall be payable within the time prescribed by By-Law of each National or Regional Association, as determined by the International Committee, and shall include all amounts required for International Committee, National or Regional purposes as determined by each authority.

(b) The Association may ask for special contributions in addition to subscriptions, provided any such contribution shall be for a specific purpose and shall not be mandatory.

13. SUSPENSION OF MEMBERSHIP

A member may be suspended by the International Committee, on the recommendation of a National or Regional Association, for gross violation of the rules or By-Laws, for committing an unlawful act in relation to the Association or one of its members, or for any unsportsmanlike conduct contrary to the interests of the members of the Association. The duration of the suspension shall be fixed by the international Committee but may not exceed two years and a suspended member shall during such period be precluded from racing or enjoying any other rights of membership.

14. REMOVAL FROM OFFICE

A National or Regional Officer may be removed from office by the International Committee for a wilful and unjustifiable act of commission or omission detrimental to the Association or to its members

15. APPEALS

(a) Any dispute arising in relation to fleets, Championships Rules, regions, eligibility to race, the By-Laws or similar matter, other than any dispute as to the interpretation of this Constitution and the Class Rules, may be made to the International Committee, whose decision shall be final and binding.

(b) Any dispute as to the interpretation of this Constitution and the Class Rules may be made to the I.D.R.C., whose decision shall be final and binding.

16. AMENDMENTS TO THE CLASS RULES

The class rules shall only be amended by the I.D.R.C. Proposals for changes in the Class Rules may be submitted to the I.D.R.C. by the International Committee, provided that at least two-thirds of the National or Regional Associations have approved such proposed amendment at Special General Meetings of their Associations called for that purpose, or at the Annual General Meeting of their Associations, provided not less than twenty-one days notice of such proposed amendment has in each case been given.

17. AMENDMENTS TO THE CONSTITUTION

(a) This Constitution may be amended by the international Committee, with the approval of the I.D.R.C., provided that at least two-thirds of the National or Regional Associations have approved a proposed amendment at Special General Meetings of their Associations called for that purpose, or at the Annual Meetings of their Associations, provided not less than twenty-one days notice of a proposed amendment has in each case been given.

(b) Amendments to the Constitution shall be submitted for vote of National or Regional Association:-

i) by direction of the International Committee; or

ii) by direction of the International Secretary where notice of motion, signed by at least twenty members, has been submitted to and approved by at least two National or Regional Associations

18. INTERIM CONSTITUTION

(a) Until such time as there are five or more National or Regional Associations, the International Committee shall consist of the nominated members of the I.D.R.C. and the Chairman of the National or Regional Committees then in being.

(b) Three members of the international Committee shall form a quorum.

INTERNATIONAL DART CLASS RULES

1. GENERAL

- (a) The official language of the Class is English and in the event of dispute over interpretation the English text shall prevail
- (b) These rules and drawings referred to herein shall take precedence
- (c) The International Dart Association accept no legal responsibility in respect of these rules or any claim arising therefrom
- (d) Where there is no National Owners' Association, or the National Association does not wish to administer the Class, its function as stated in these rules shall be carried out by the I D A or its delegated representative
- (e) These rules shall be administered by the International Dart Rules Committee (I D R.C.).

2. BUILDING FEE

- (a) The Designer's Royalty Fee shall be paid by Bryher Mouldings Ltd., or its sublicensees in accordance with the agreement between Bryher Mouldings Ltd and the designer, Rodney March
- (b) Non-payment of the Royalty Fee for any reason whatsoever shall invalidate the Measurement Certificate.

3. BUILDERS

- (a) Builders of the Dart shall be only those licensed by Bryher Mouldings Ltd
- (b) Sail Makers shall be only those licensed by Bryher Mouldings Ltd

4. REGISTRATION

(a) Measurement Certificates shall be distributed by Bryher Mouldings Ltd to all licensed builders who shall issue a Certificate on delivery of a new boat to a customer or distributor. The Measurement Certificate shall carry a unique Serial Number which corresponds to the sail number. Bryher Mouldings Ltd shall issue sail numbers which shall be consecutive commencing from 'one'.

(b) Measurement Certificates shall carry the following information provided at the point of despatch of a new boat:-

Sail Number
Licensed Builder's stamp and witnessing signature, confirming that the Designer's Royalty has been paid
Port hull building number and colours
Starboard hull building number and colours
Month and year of manufacture

- (c) No boat shall be permitted to race in the Class unless it has a valid Measurement Certificate.
- (d) The I.D.A may charge a registration fee.
- (e) Notwithstanding anything contained in these rules, the I.D.R.C shall have the power to withdraw the Certificate of any boat.
- (f) Change of ownership invalidates the certificate but re-registration may be effected by returning the Certificate to the I.D.A., together with an application in writing containing the name and address of the new owner and the appropriate re-registration fee if any. Re-measurement is not necessary. The I.D.A shall issue an amended Certificate to the owner and shall amend the Class Register accordingly

5. RECOGNITION MARKS

- (a) The hull production number shall be indelibly marked in the laminate such that it can be read through the rear hatch opening
- (b) The sail numbers and Class emblems shall be placed on both sides of the mainsail, as shown on Drawing no 020. Sail numbers and emblems shall sharply contrast in colour with the sail and shall be placed at different heights on the two sides of the sail, those on the starboard side being uppermost. Class emblems, letters and numbers on the sail shall be of the size shown on Drawing nos Ds 423 and DS 424 respectively.
- (c) Sail Maker's marks, if any, shall be placed near the tack of the sails and shall not exceed 150mm by 150mm

Ref B

6. SPECIFICATION

(a) The specification of the Dart is contained in the following drawings and documents:-

(i) Owners drawings which detail the equipment and fittings which an owner may replace from any source, as stated in Rule 10(b). These drawings are available to all.

ii) One Design Drawings which describe the hull, spars and other equipment supplied by the approved sources stated in Rule 10(a). These drawings shall be in the custody of the I.D.R.C. and are available at the time of any dispute, only to officials approved by the I.D.R.C.

(b) This is a Production One Design Class. Measurement tolerances are intended to allow for random manufacturing variations only and shall not be deliberately used to alter the design. Any alterations to the hull, construction, equipment, spars, sails or running rigging, as supplied by the manufacturers, except as specifically authorised by these rules, is prohibited.

(c) All boats shall comply with the drawings and documents specified in 6(a). Whilst racing, all equipment shown in these drawings shall be carried and assembled as specified, except that listed in 10(c). When one person only is on board, the jib may be left ashore. Failure to comply shall invalidate the Measurement Certificate.

(d) In the case of a measurement dispute not explicitly covered by these drawings, the following procedure shall be adopted:-

A random sample of 15 boats shall be taken and measured using identical techniques. The dimensions of the disputed boat shall be equal to, or between, the maximum and the minimum dimensions obtained from these 15 boats. If the boat in question is outside these dimensions the matter, together with all relevant information, shall be referred to the I.D.R.C., who shall give a final ruling. If any of the dimensions of the sample are considered to be unusual, all relevant information shall be referred to the I.D.R.C.

(e) Hulls shall be built only by Licensed Builders from official moulds issued by Bryher Mouldings Ltd. All official moulds shall be produced only from master plugs approved and certified by the I.D.R.C.

The I.D.R.C. may inspect at any reasonable time all moulds and master plugs. The I.D.R.C. shall have power to withdraw from use any moulds, or master plugs, which, in their opinion, are not of a standard to preserve the strict one design of the Dart. The I.D.R.C. may delegate such inspection duties to an official inspector.

(f) Sails shall be manufactured only by licensed Sail Makers from patterns supplied by Bryher Mouldings Ltd., and approved and certified by the I.D.R.C.

(g) Only an official inspector recognised by the I.D.R.C. shall be able to verify the authenticity of a boat. Payment for the inspector's services is the responsibility of the owner.

(h) An official inspector shall not verify the authenticity of a boat or any part of a boat owned by himself.

(i) All certified boats shall be liable to examination at the discretion of the I.D.R.C. or Race Committee, but only by a recognised official inspector.

(j) In the event of any damage to a boat, necessary repairs may be made, subject to rule 6(a), provided that repairs are made in such a way that the essential shape or other characteristics are not affected. The boat shall be re-examined in respect of the affected parts by an official inspector.

(k) Any dispute regarding the measurement of a boat or the interpretation of these rules shall be referred to the I.D.R.C. for ruling. Any ruling shall require a unanimous decision. Which shall be final and binding.

7. MISCELLANEOUS

(a) The trapeze gear shall be used by only one person at a time, who shall have at least one foot in contact with the boat.

(b) Both rudders shall be at all times in the fully down position except when clearing underwater obstructions.

(c) No person may re-cut any sail or otherwise change or affect any aspect of the sail for any reason other than necessary repairs or placing racing numbers thereon.

(d) Hulls and rudder blades which require refinishing may be painted.

8. SAFETY

(a) The following equipment shall be carried on board whilst racing:-

A Paddle to conform to drawing no. DA 440.
Personal buoyancy for each crew member

9. PERSONS ON BOARD

(a) The crew, including helmsman, shall consist of one or two persons. When one person only is on board, the jib shall not be set or used.

Ref 9

10. REPLACEMENT PARTS

(a) Replacement hulls, spars and equipment other than that listed under Rule 10 (b), shall be supplied only by licensed builders and their agents or suppliers, approved by Bryher Mouldings Ltd.

(b) Only fastenings and equipment whose part numbers are listed in Table 1 may be replaced from any source, provided that they comply with the specifications, general appearance and dimensions shown in the accompanying drawings.

(c) The following parts may be removed:-

DA 443	DS 430
DA 445	DS 431
DM 356	DT 191
DM 357	DT 203
DR 251 Or DR 261	DT 205
DS 405	DW 313

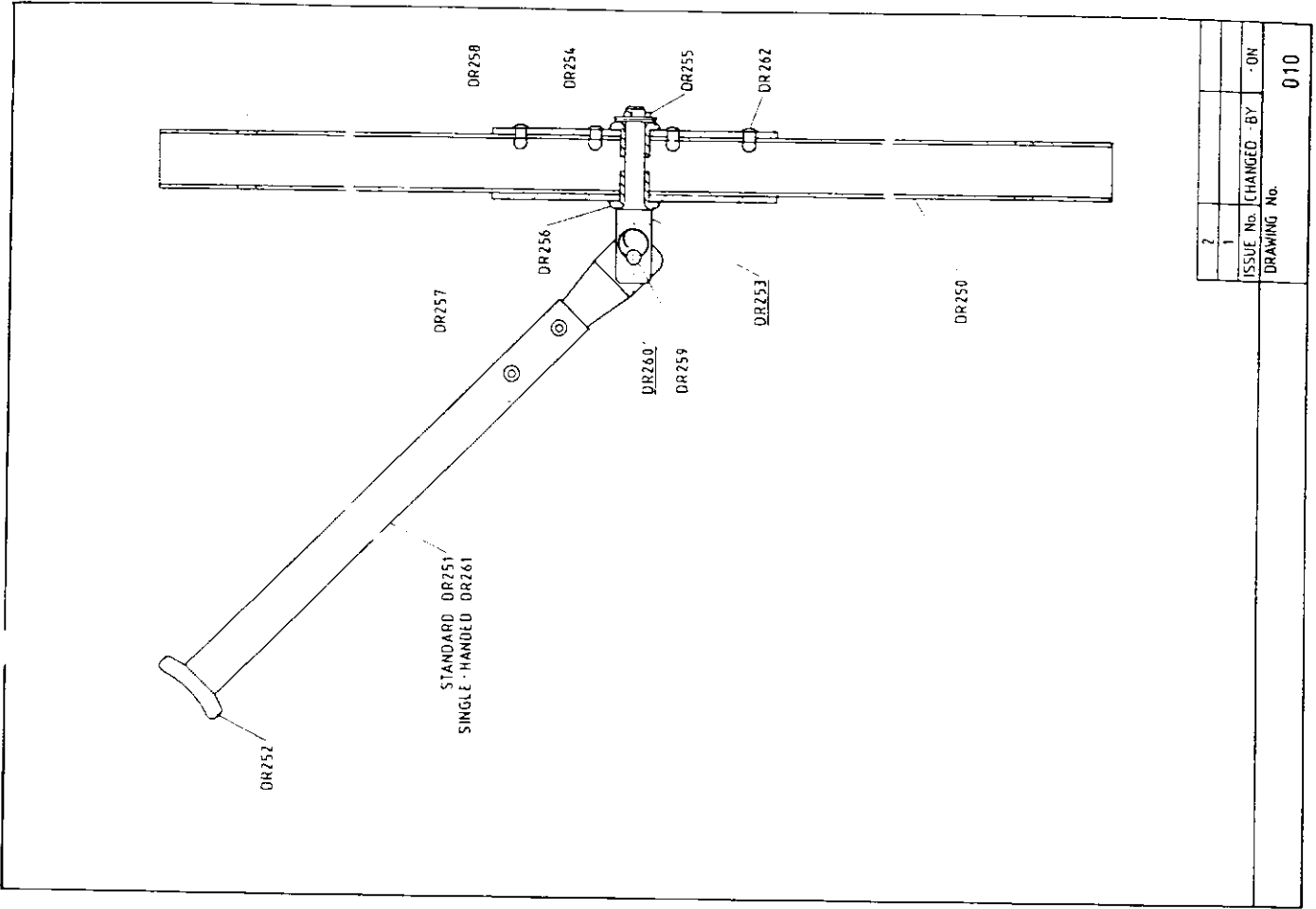
**TABLE 1
REPLACEMENT PART NUMBERS.**

Accessories	Beams	Hulls	Mast	Rudders	Sail / S.Cont.	Trampoline	Wires & Rigging
DA 440	DB 153	DH 110	DM 345	DR 250	DS 380	DT 192	DW 280
DA 443	DB 155	DH 111	DM 346	DR 251	DS 381	DT 193	DW 281
DA 445	DB 158	DH 112	DM 349	DR 252	DS 382	DT 194	DW 282
	DB 163	DH 114	DM 354	DR 254	DS 383	DT 195	DW 283
	DB 166	DH 115	DM 355	DR 255	DS 384	DT 196	DW 284
	DB 167	DH 116	DM 356	DR 256	DS 385	DT 198	DW 285
	DB 168	DH 117	DM 357	DR 257	DS 386	DT 199	DW 288
	DB 169	DH 118	DM 359	DR 258	DS 390	DT 200	DW 289
	DB 171	DH 119	DM 360	DR 259	DS 400	DT 202	DW 300
	DB 173	DH 120	DM 361	DR 261	DS 401	DT 203	DW 301
	DB 174	DH 121	DM 362	DR 262	DS 402	DT 204	DW 302
	DB 176	DH 122	DM 364	DR 502	DS 404	DT 205	DW 303
	DB 177	DH 123	DM 366		DS 405	DT 206	DW 310
	DB 178	DH 126	DM 367		DS 410	DT 207	DW 311
	DB 179	DH 127	DM 368		DS 412		DW 312
	DB 517	DH 128	DM 370		DS 419		DW 313
	DB 518	DH 130			DS 423		DW 320
		DH 131			DS 424		DW 321
		DH 132			DS 425		DW 322
		DH 135			DS 430		DW 323
					DS 431		DW 324
					DS 432		DW 329
					DS 433		DW 330
					DS 434		DW 331
					DS 512		DW 332
							DW 333
							DW 334

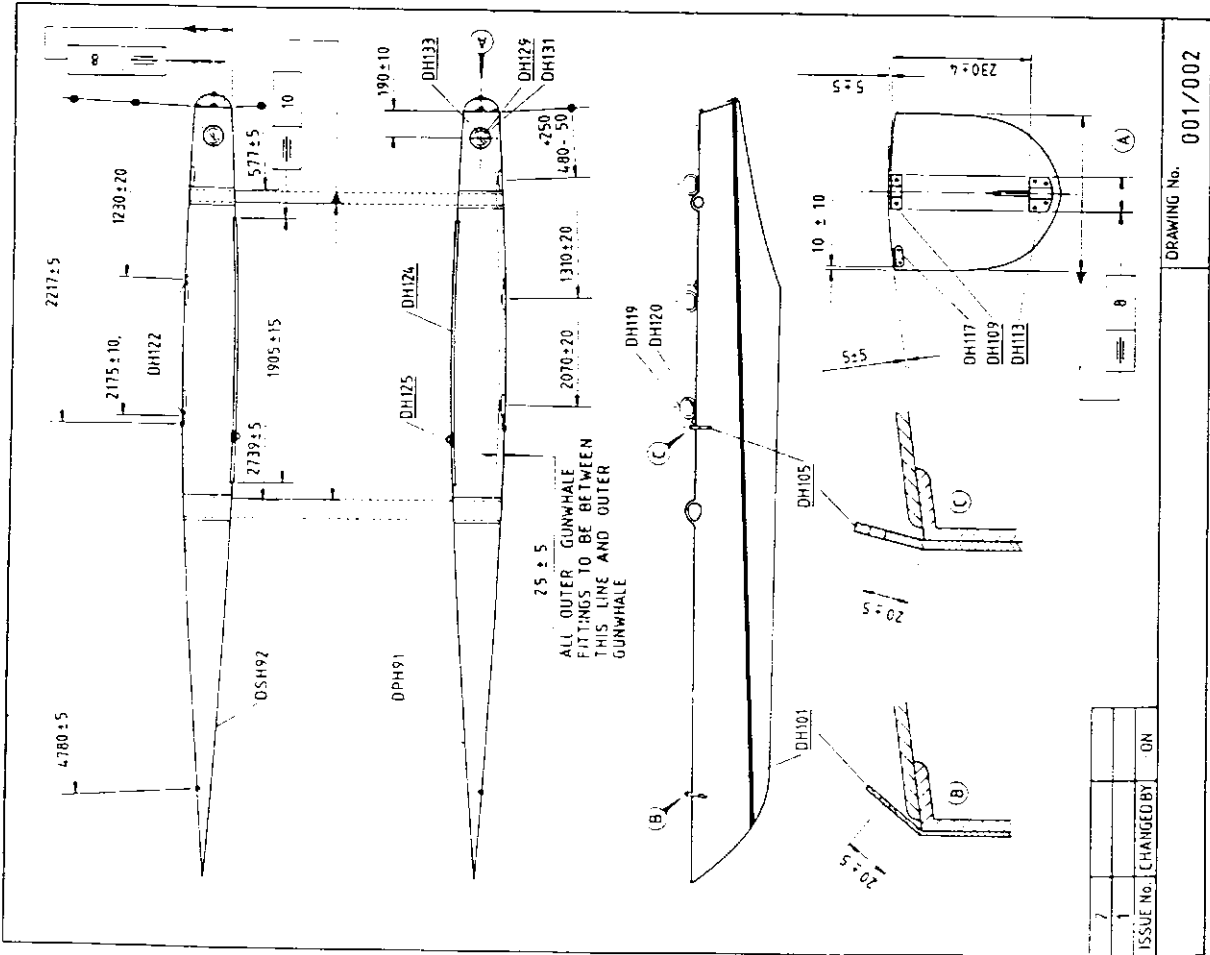
REPLACEMENT PARTS DRAWINGS

The following Drawings refer to Parts Listed in Table 1

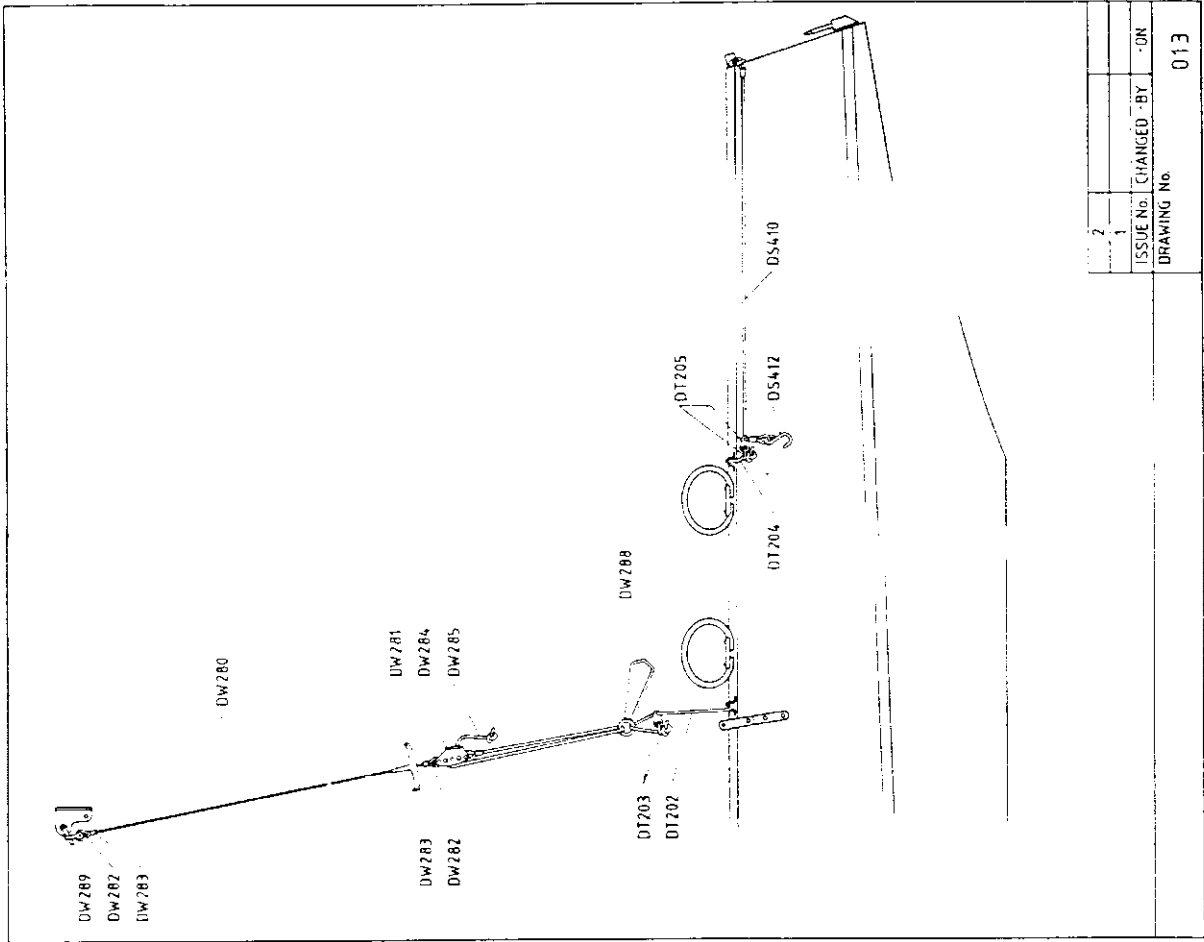
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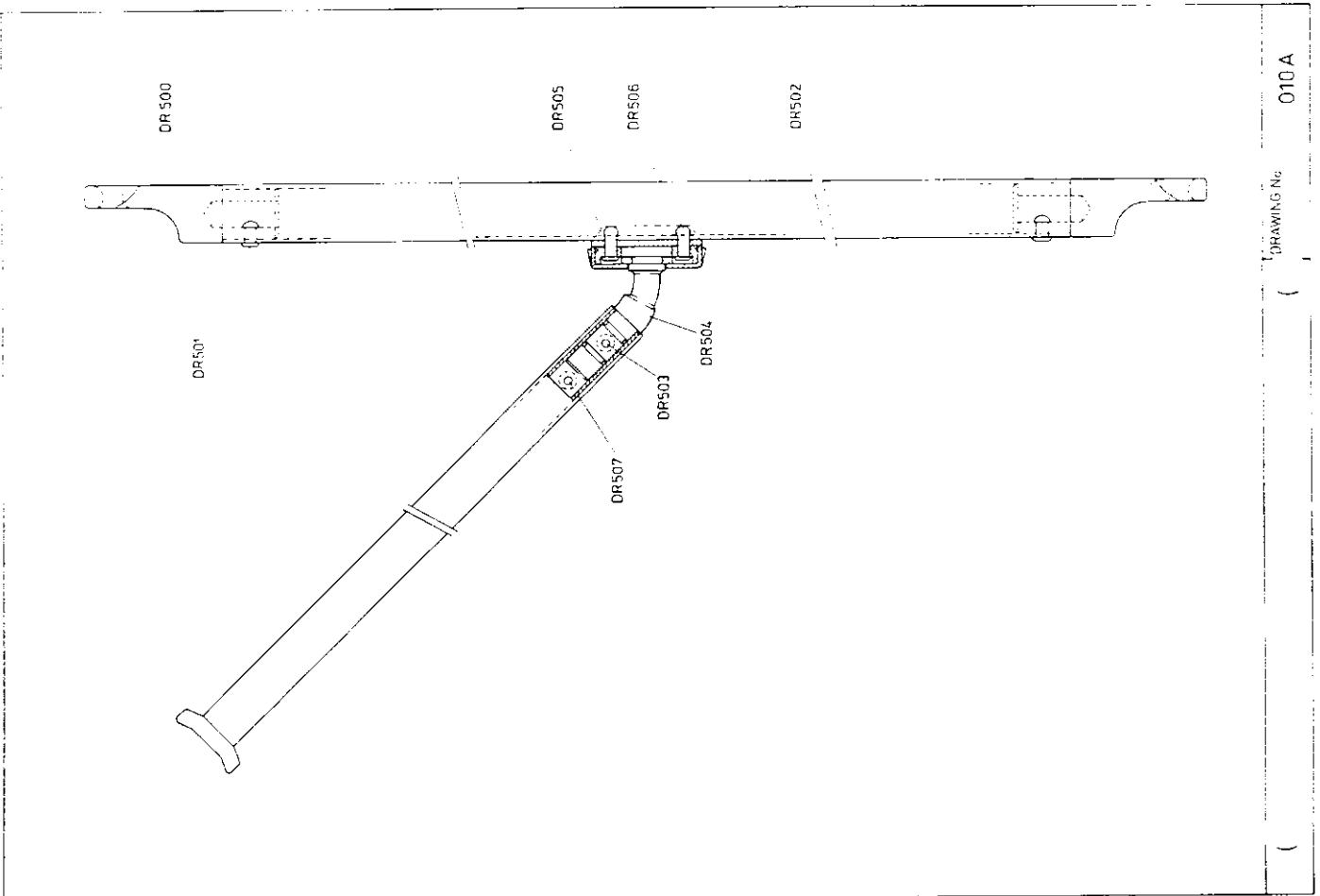
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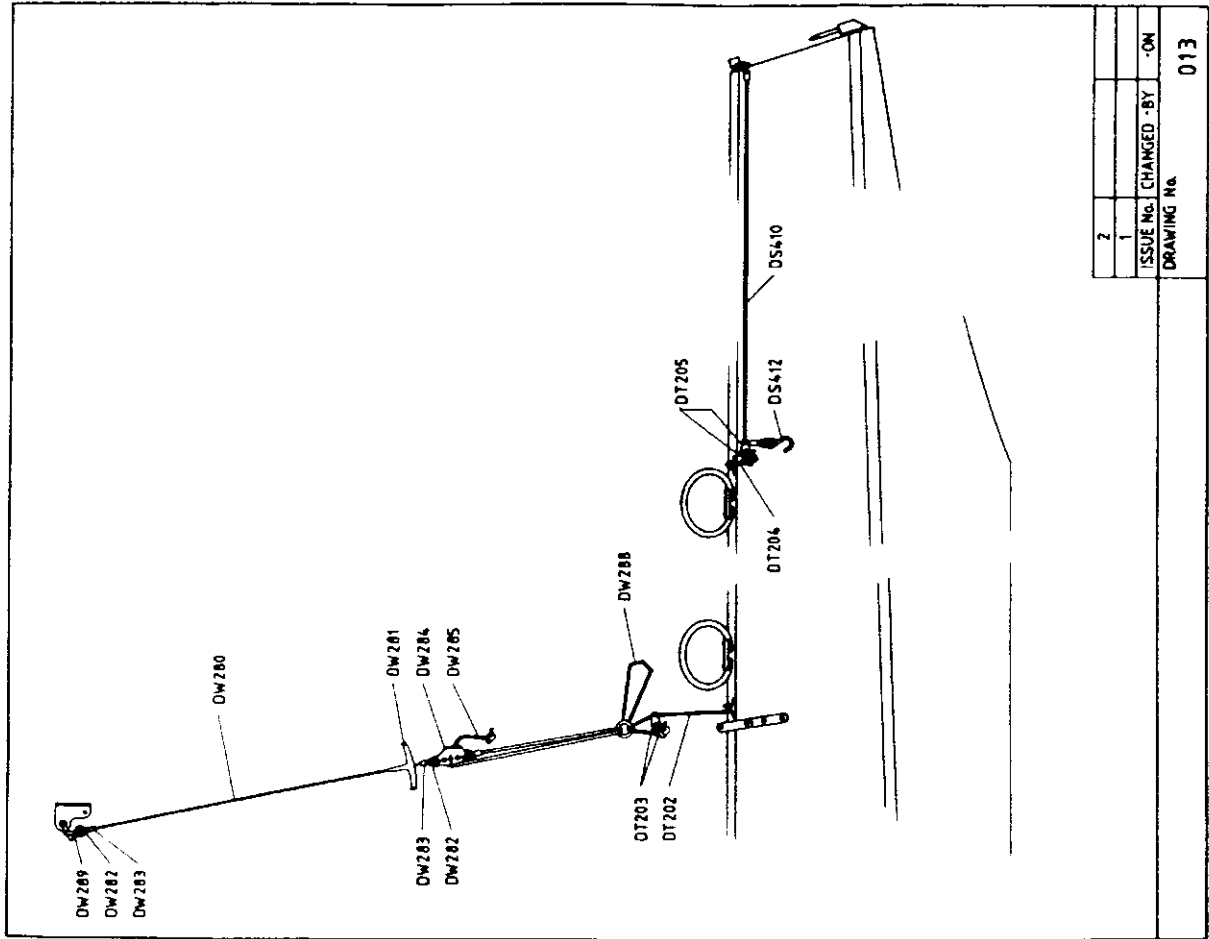
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DRAWING No.		001/002



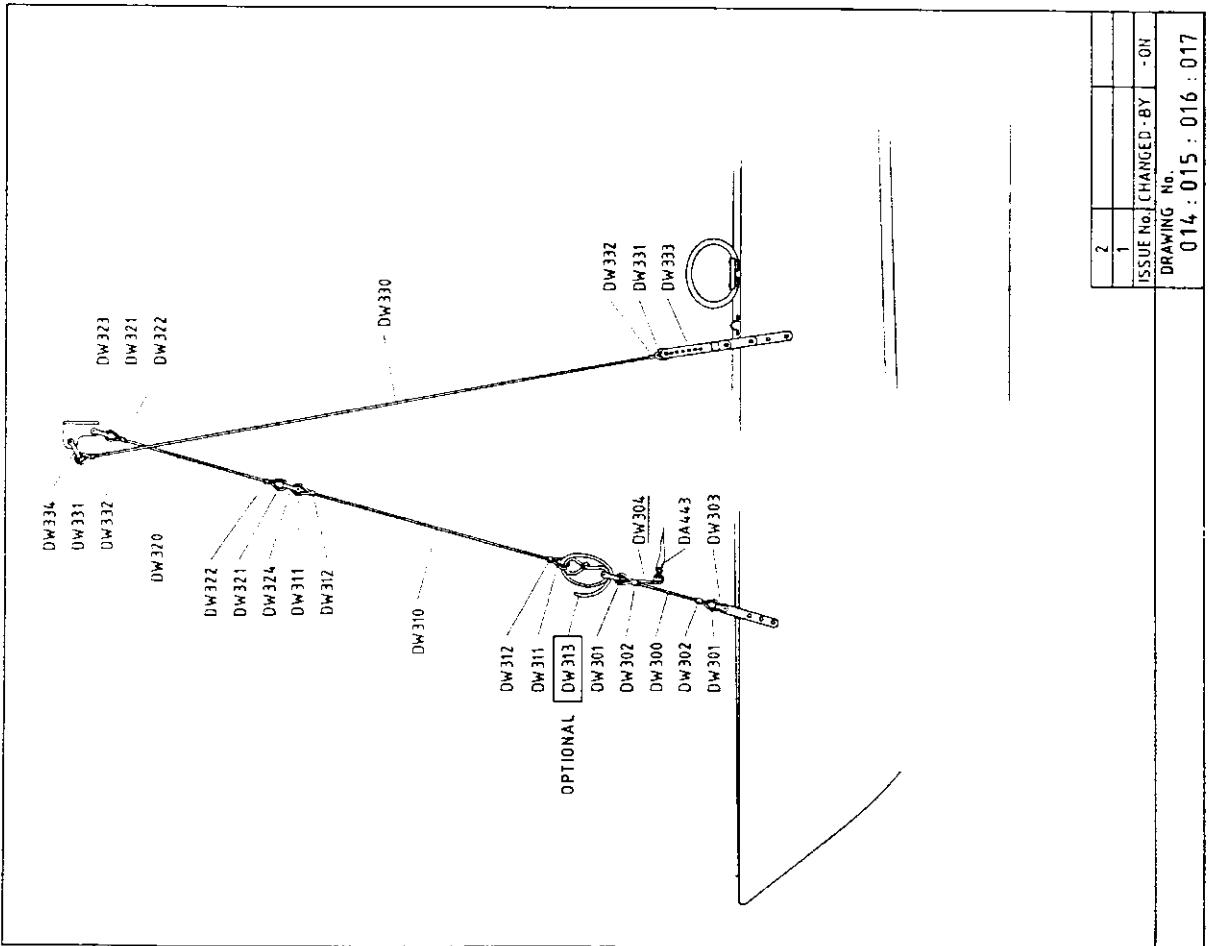
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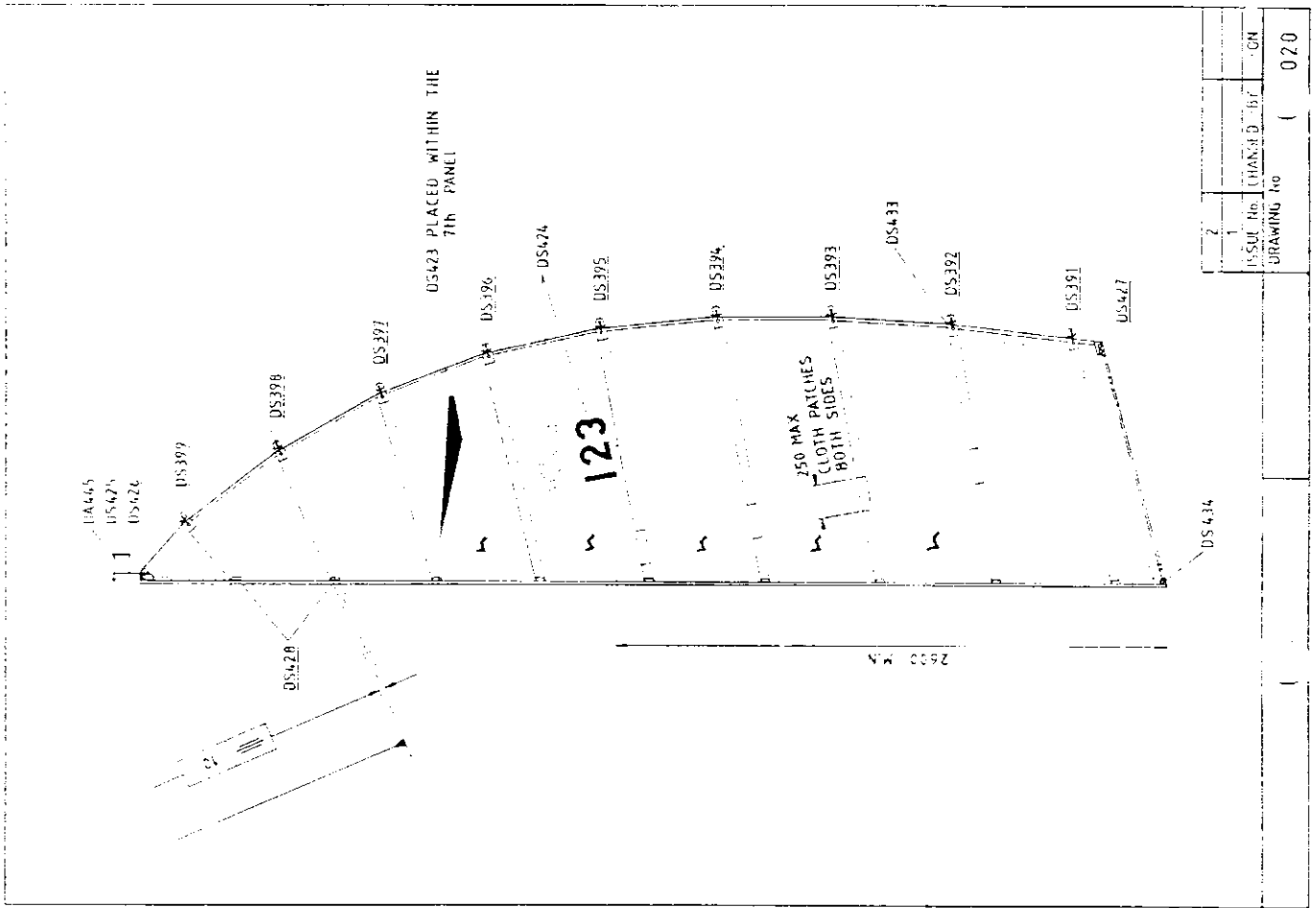
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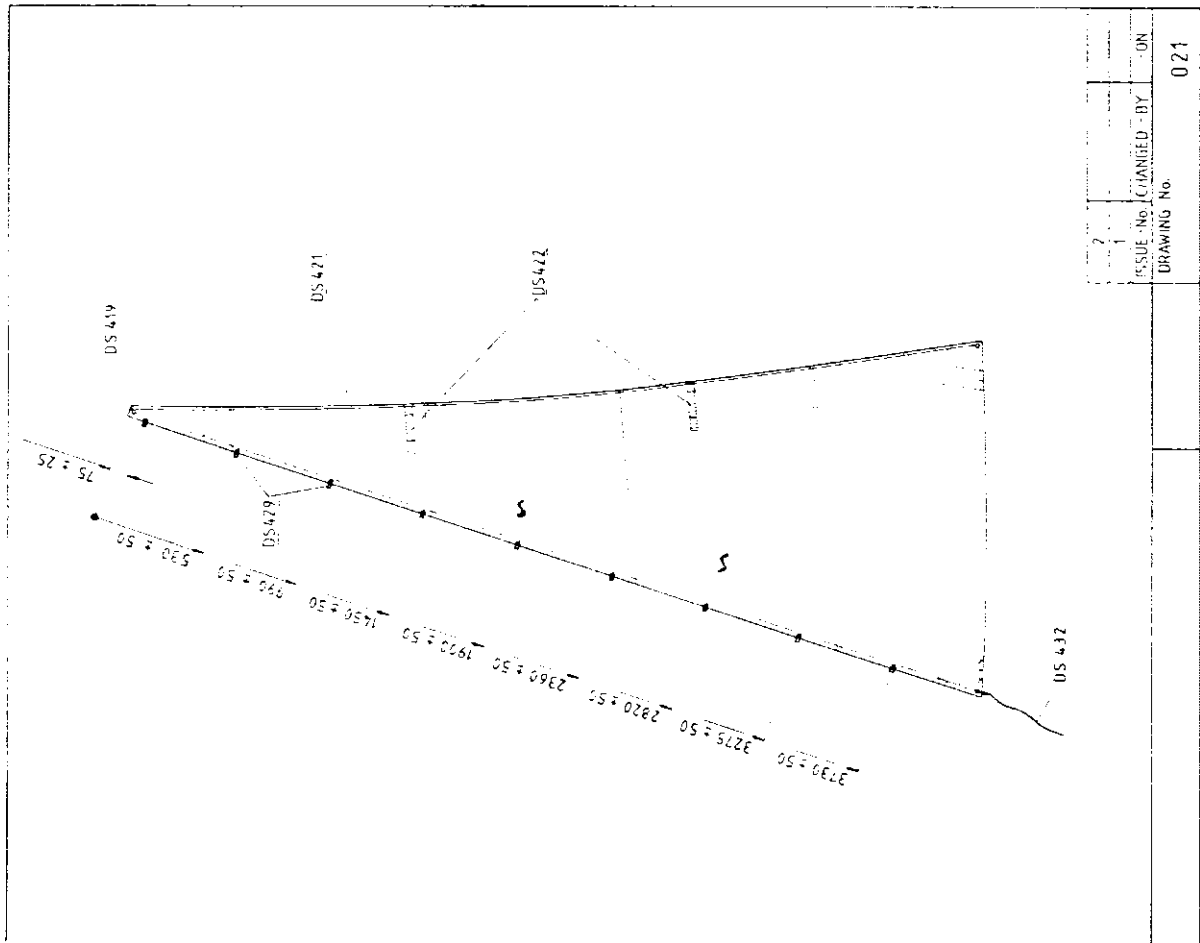
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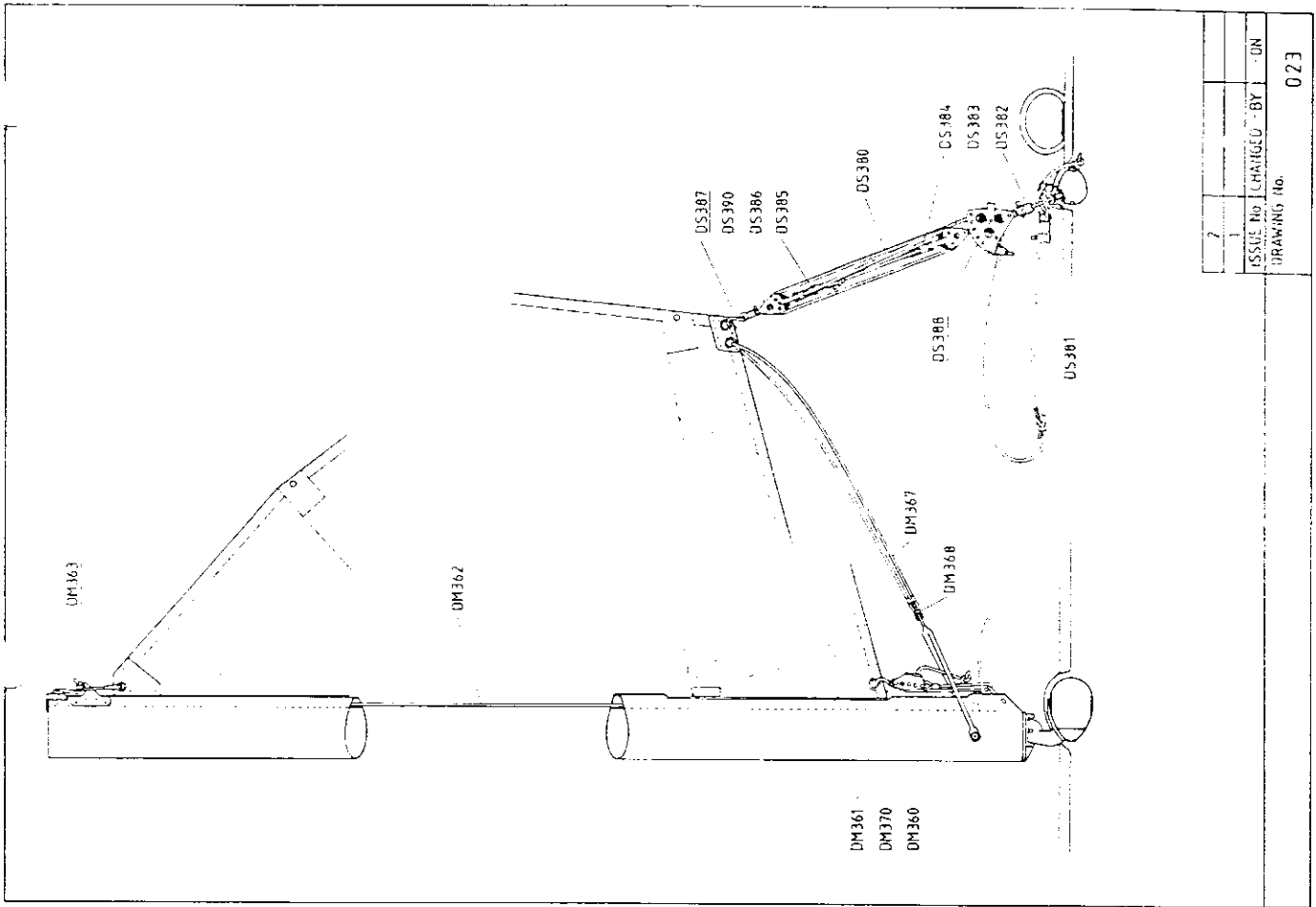
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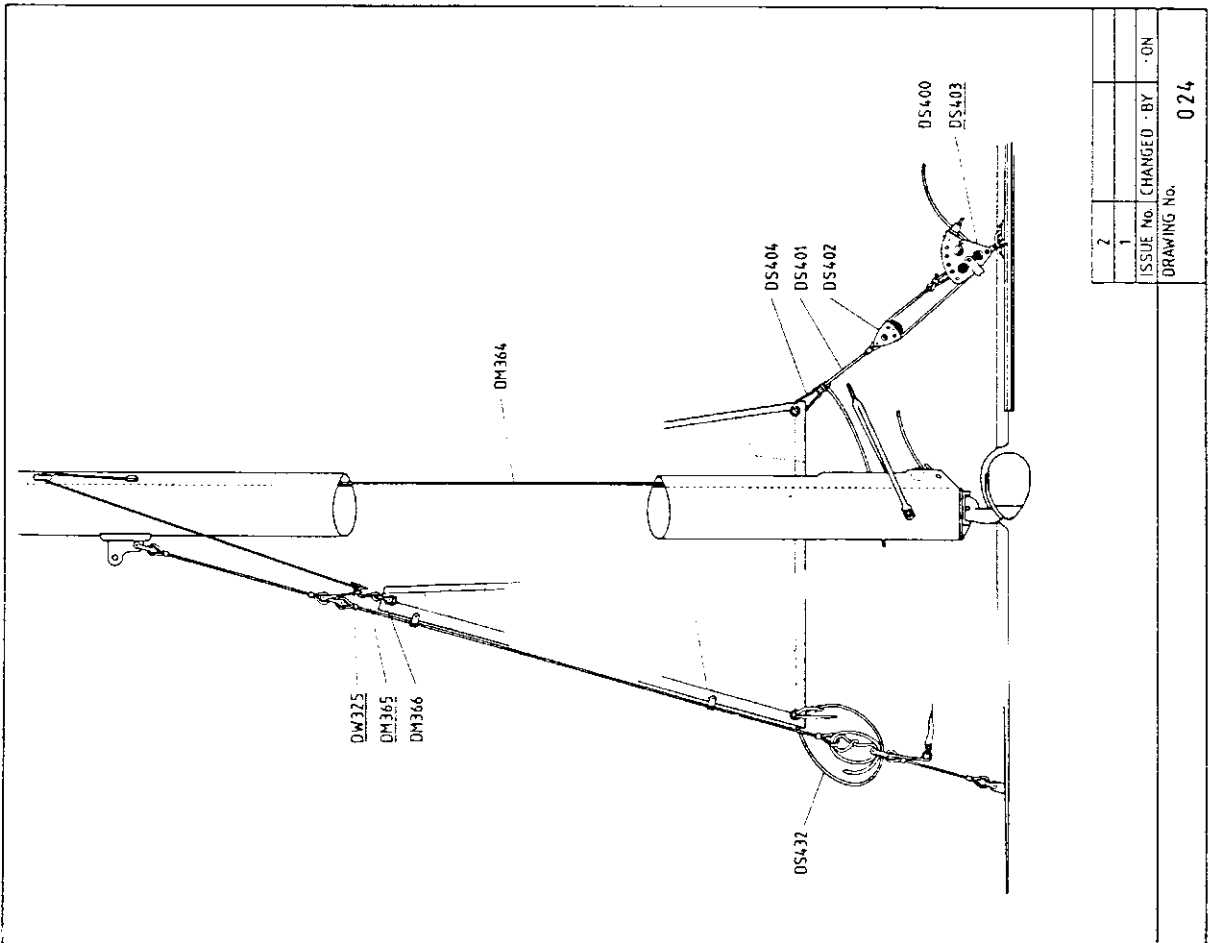
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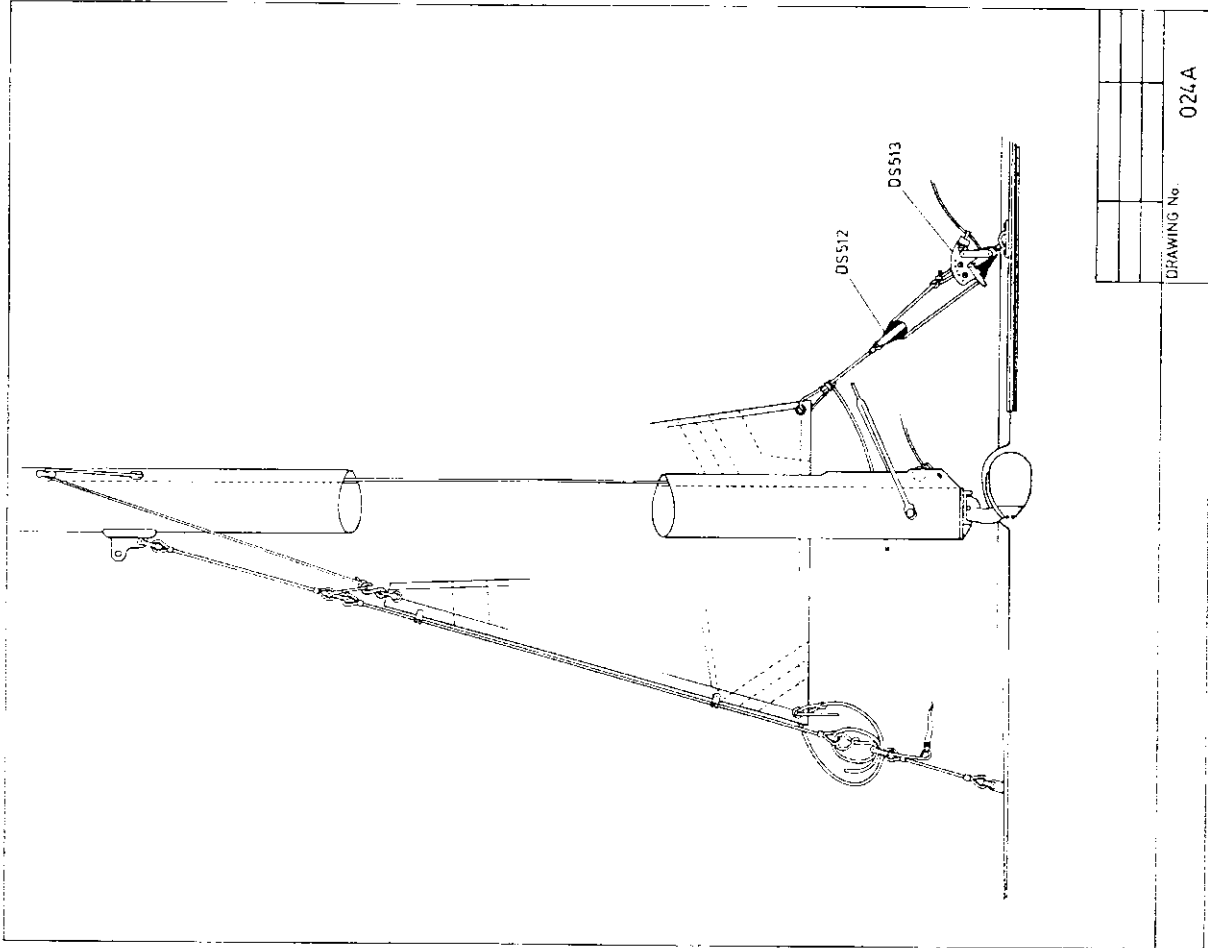
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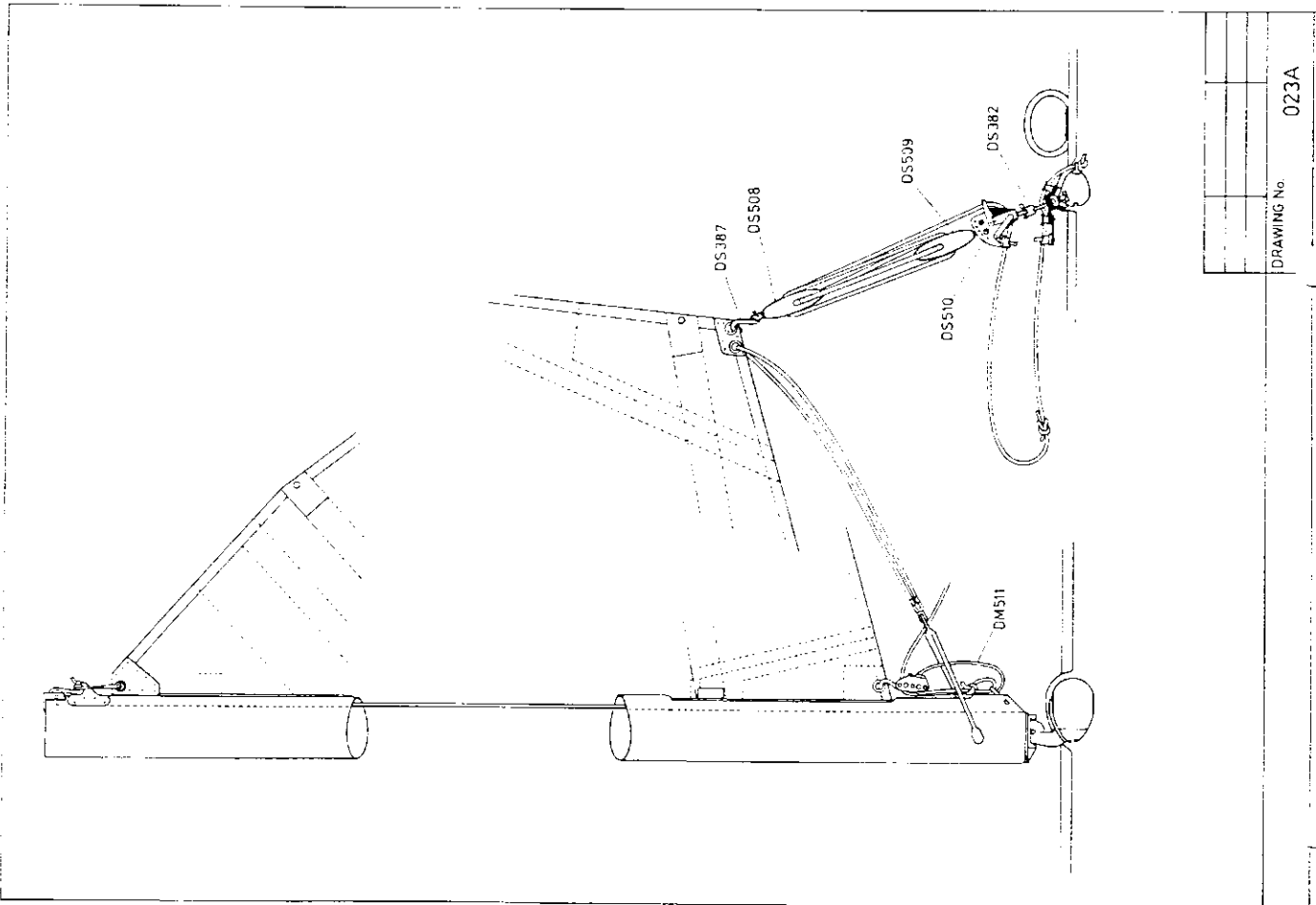
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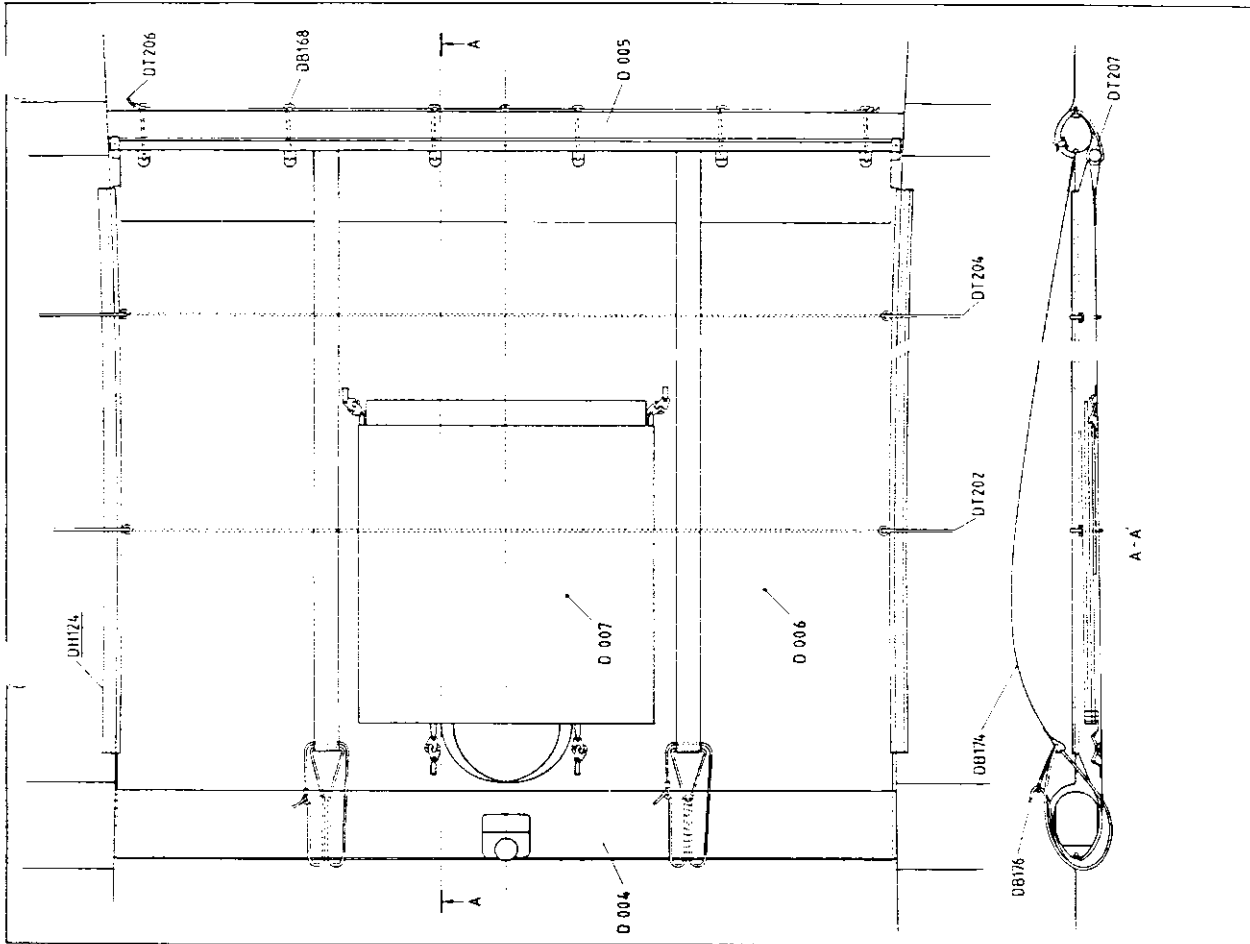
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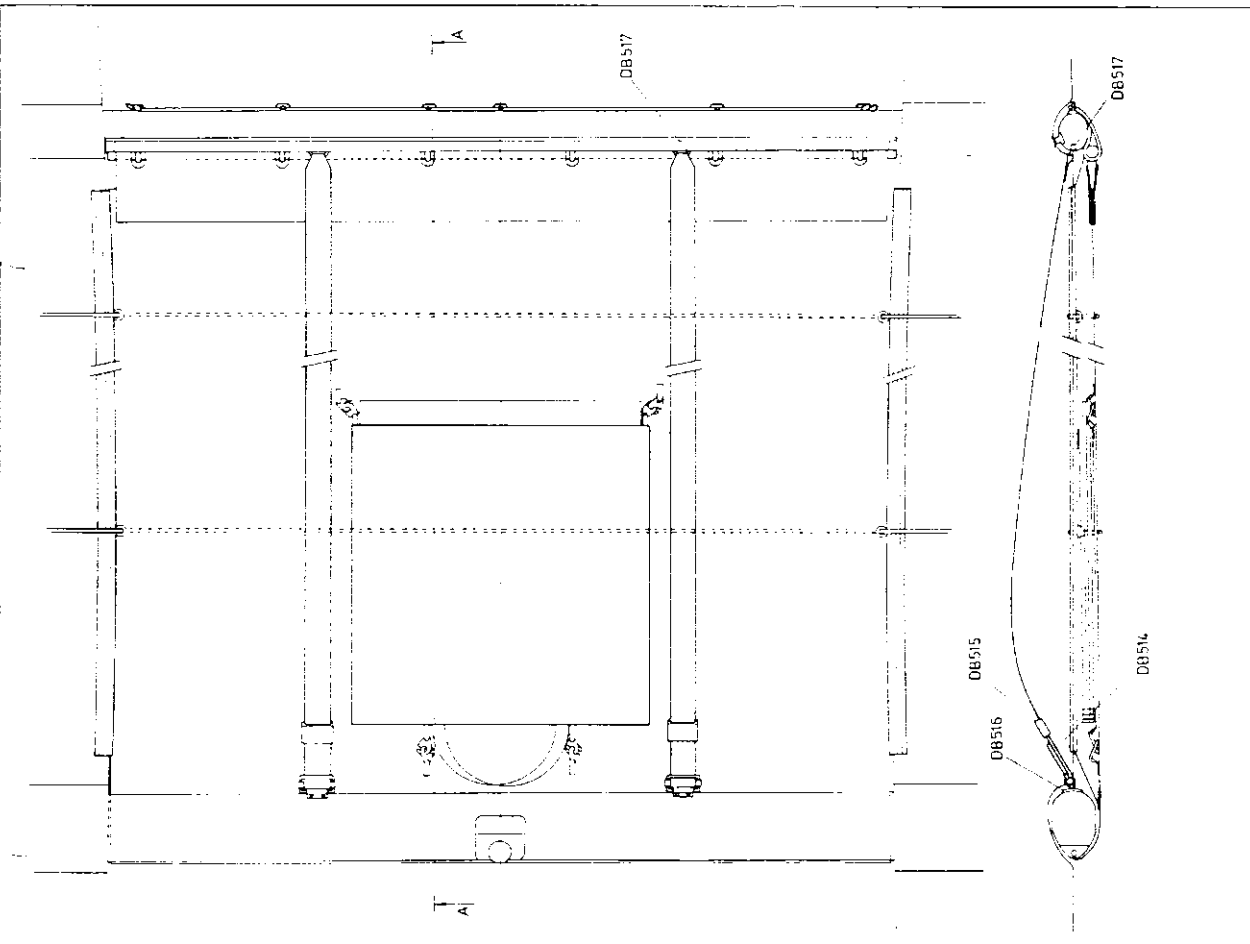
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DRAWING No. 023A



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ISSUE NO.		CHANGED BY	ON
DRAWING NO.		025	



DRAWING NO.		025 A	

	<p>MATERIALS - OPTIONAL</p>	<p>MINIMUM WEIGHT 300 GMS</p>	<p>DA440</p>
	<p>MATERIALS - FLEXIBLE CLOTH - FIBRES</p>	<p>DA443</p>	
<p>MATERIALS - OPTIONAL</p>	<p>DA445</p>		

	<p>MATERIAL - MONEL STAINLESS STEEL</p>	<p>DB155</p>	
	<p>MATERIAL - MONEL STAINLESS STEEL</p>	<p>DB153</p>	
	<p>MATERIAL - MONEL STAINLESS STEEL</p>	<p>DB158</p>	
	<p>MATERIAL - MONEL STAINLESS STEEL</p>	<p>DB163</p>	
	<p>MATERIAL - MONEL STAINLESS STEEL</p>	<p>DB166</p>	
	<p>MATERIAL - MONEL STAINLESS STEEL</p>	<p>DB167</p>	

<p>MATERIAL - ALUMINIUM ALLOY - STAINLESS STEEL</p>	<p>MATERIAL - PLASTIC COMPOSITE METAL</p>	<p>MATERIAL - STAINLESS STEEL</p>
<p>DB 177</p>	<p>DB 178</p>	<p>DH 110</p>
<p>MATERIAL - STAINLESS STEEL</p>	<p>MATERIAL - PLASTIC COMPOSITE METAL</p>	<p>MATERIAL - STAINLESS STEEL</p>
<p>DB 171</p>	<p>DB 173</p>	<p>DH 112</p>
<p>MATERIAL - ALUMINIUM ALLOY - STAINLESS STEEL</p>	<p>MATERIAL - PLASTIC COMPOSITE METAL</p>	<p>MATERIAL - STAINLESS STEEL</p>
<p>DB 174</p>	<p>DB 176</p>	<p>DH 115</p>

<p>MATERIAL - ALUMINIUM ALLOY - STAINLESS STEEL</p>	<p>MATERIAL - PLASTIC COMPOSITE METAL</p>	<p>MATERIAL - STAINLESS STEEL</p>
<p>DB 169</p>	<p>DB 168</p>	<p>DB 169</p>
<p>MATERIAL - ALUMINIUM ALLOY - STAINLESS STEEL</p>	<p>MATERIAL - PLASTIC COMPOSITE METAL</p>	<p>MATERIAL - STAINLESS STEEL</p>
<p>DB 171</p>	<p>DB 173</p>	<p>DB 173</p>
<p>MATERIAL - ALUMINIUM ALLOY - STAINLESS STEEL</p>	<p>MATERIAL - PLASTIC COMPOSITE METAL</p>	<p>MATERIAL - STAINLESS STEEL</p>
<p>DB 174</p>	<p>DB 176</p>	<p>DB 176</p>

For DB 514/515 & 517 - See Page: 39

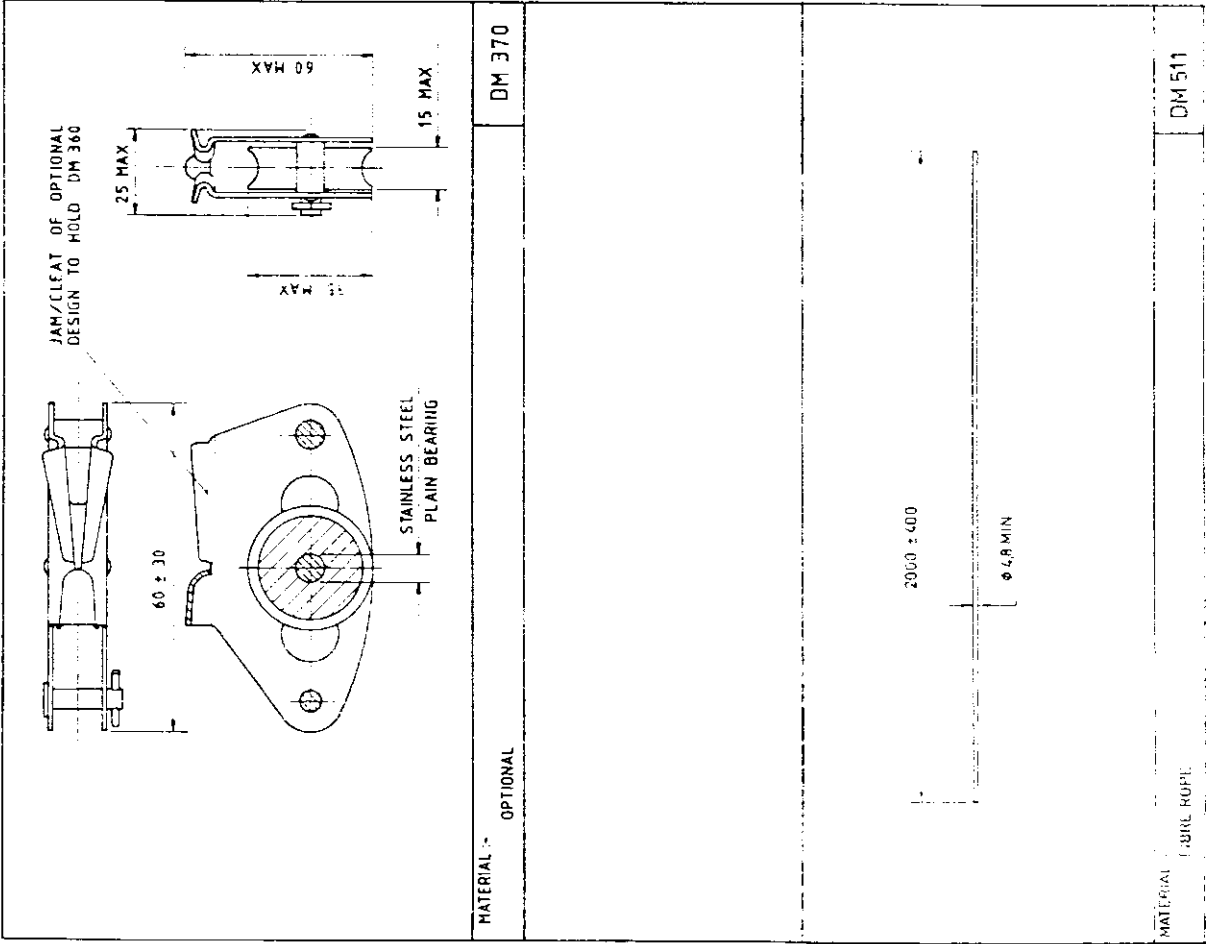
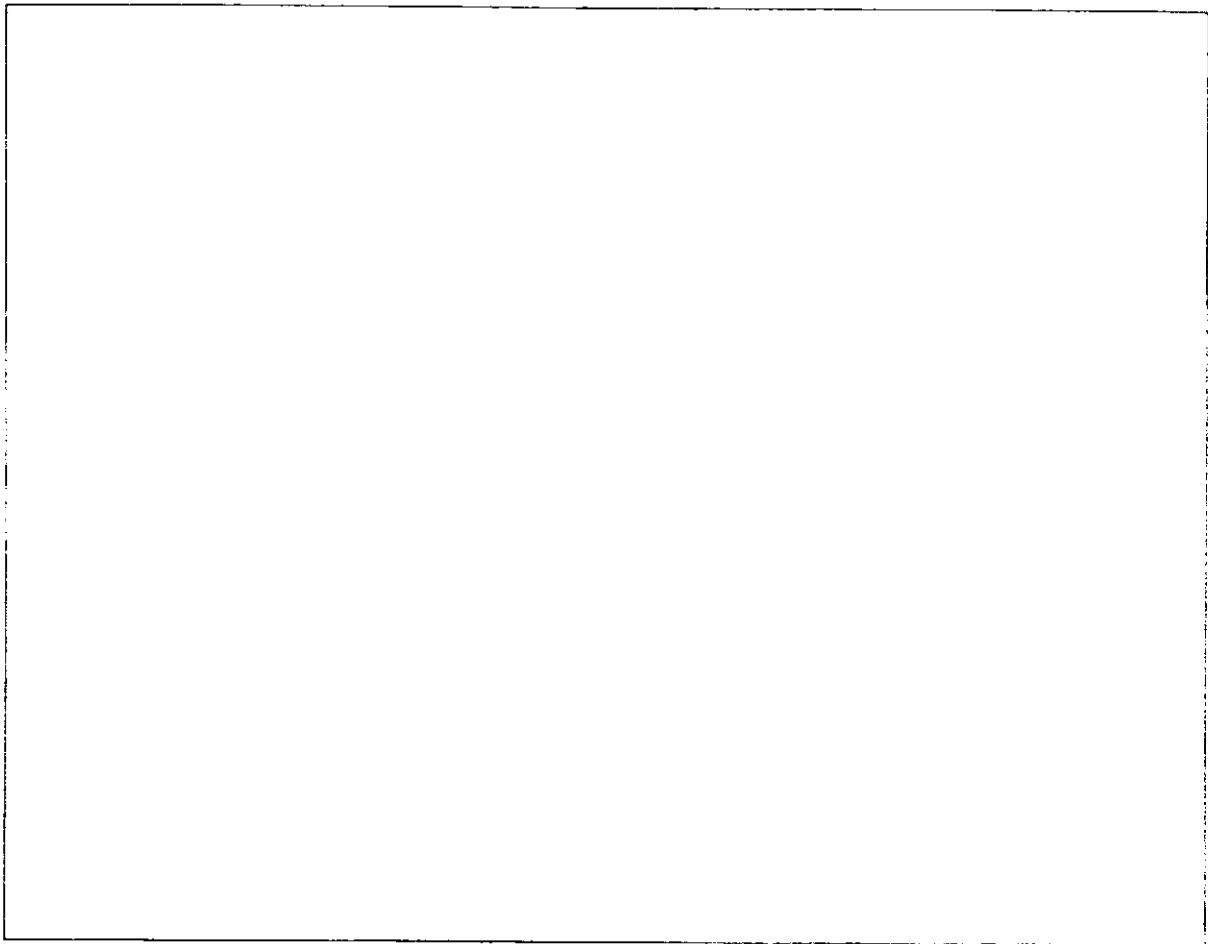
<p>MATERIAL - STAINLESS STEEL</p>	<p>MATERIAL - ALUMINIUM ALLOY, MONEL, STAINLESS</p>	<p>MATERIAL - OPTIONAL</p>	<p>MATERIAL - STAINLESS STEEL</p>	<p>MATERIAL - ALUMINIUM ALLOY, MONEL, STAINLESS</p>	<p>MATERIAL - PLASTIC, PLASTIC COMPOSITE, TUBE</p>	<p>MATERIAL - METAL, PLASTIC, PLASTIC COMPOSITE</p>	<p>MATERIAL - ALUMINIUM ALLOY, STAINLESS</p>	<p>MATERIAL - ALUMINIUM ALLOY, MONEL, STAINLESS</p>	<p>MATERIAL - STAINLESS STEEL</p>	<p>MATERIAL - ALUMINIUM ALLOY, STAINLESS</p>	<p>MATERIAL - METAL, PLASTIC, PLASTIC COMPOSITE</p>
<p>DH 114</p>	<p>DH 116</p>	<p>DH 118</p>	<p>DH 117</p>	<p>DH 122</p>	<p>DH 126</p>	<p>DH 120</p>	<p>DH 127</p>	<p>DH 123</p>	<p>DH 127</p>	<p>DH 121</p>	<p>DH 128</p>

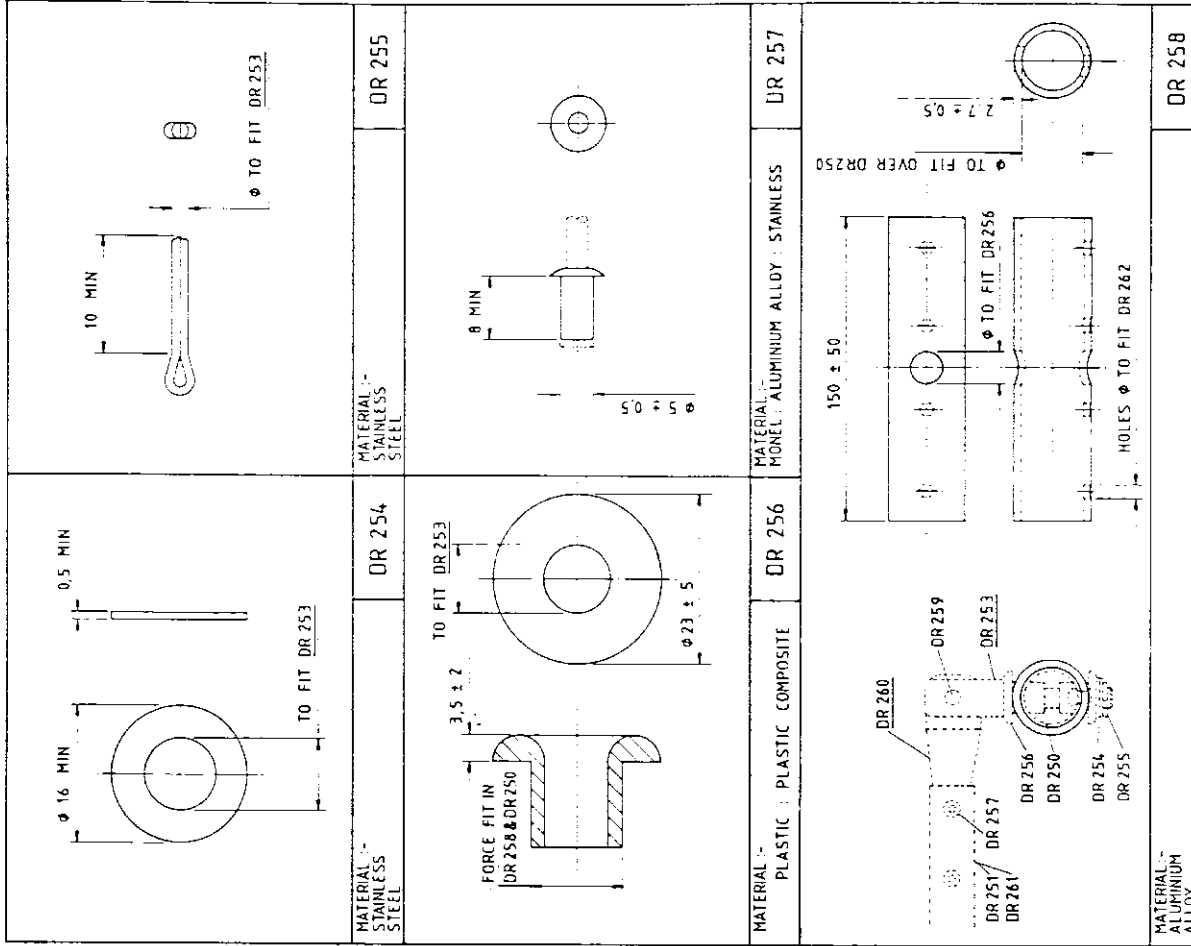
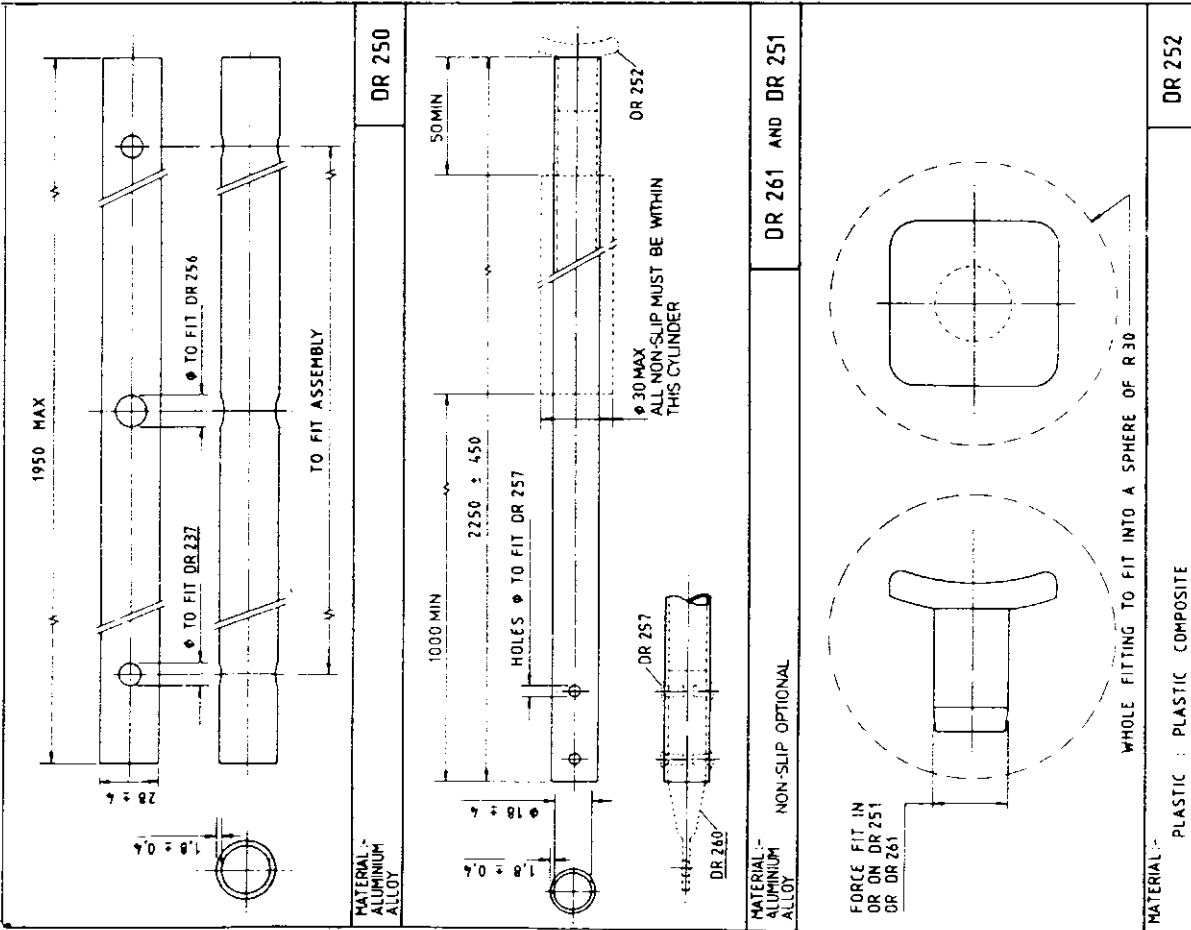
		MATERIAL - ALUMINUM ALLOY - MONEL - STAINLESS DH 130	MATERIAL - FLEXIBLE DH 131
		MATERIAL - ALUMINUM ALLOY - MONEL - STAINLESS DH 135	MATERIAL - ALUMINUM ALLOY - MONEL - STAINLESS DM 345
		MATERIAL - PLASTIC COMPOSITE DH 132	MATERIAL - ALUMINUM ALLOY - MONEL - STAINLESS DM 346
MATERIAL - MONEL - STAINLESS DM 346	MATERIAL - ALUMINUM ALLOY - MONEL - STAINLESS DM 349		

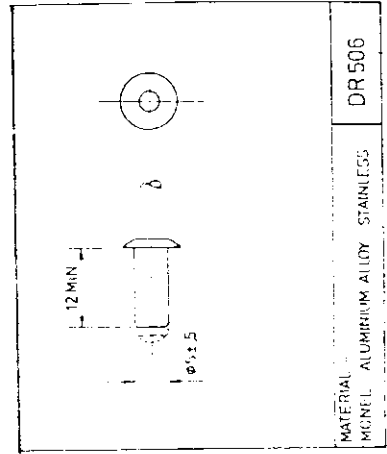
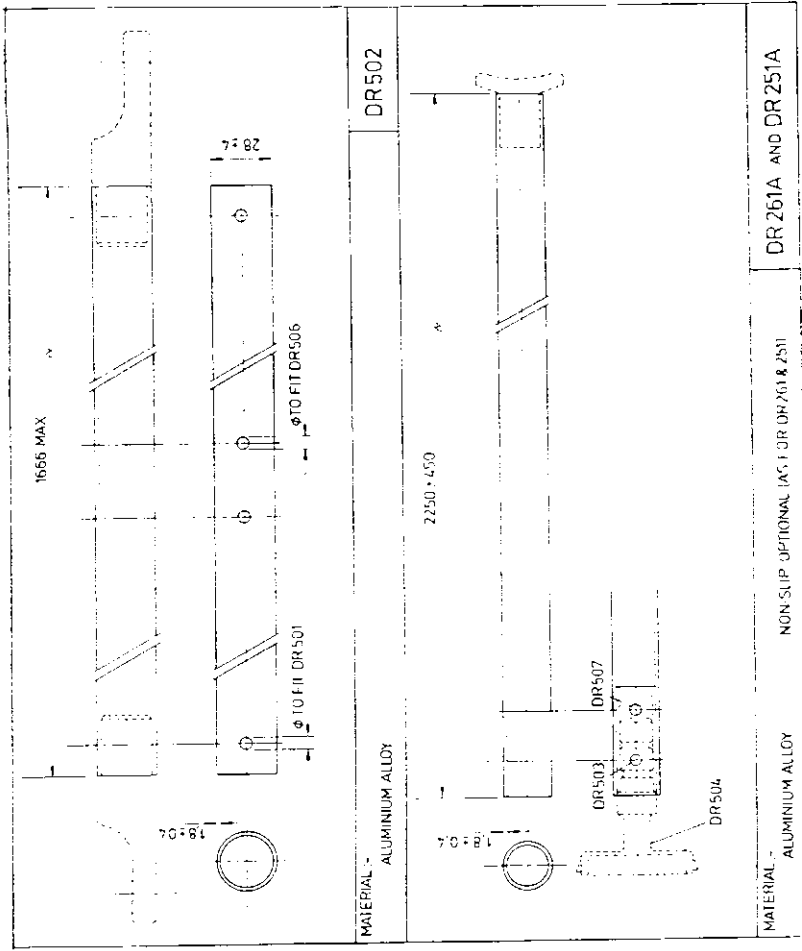
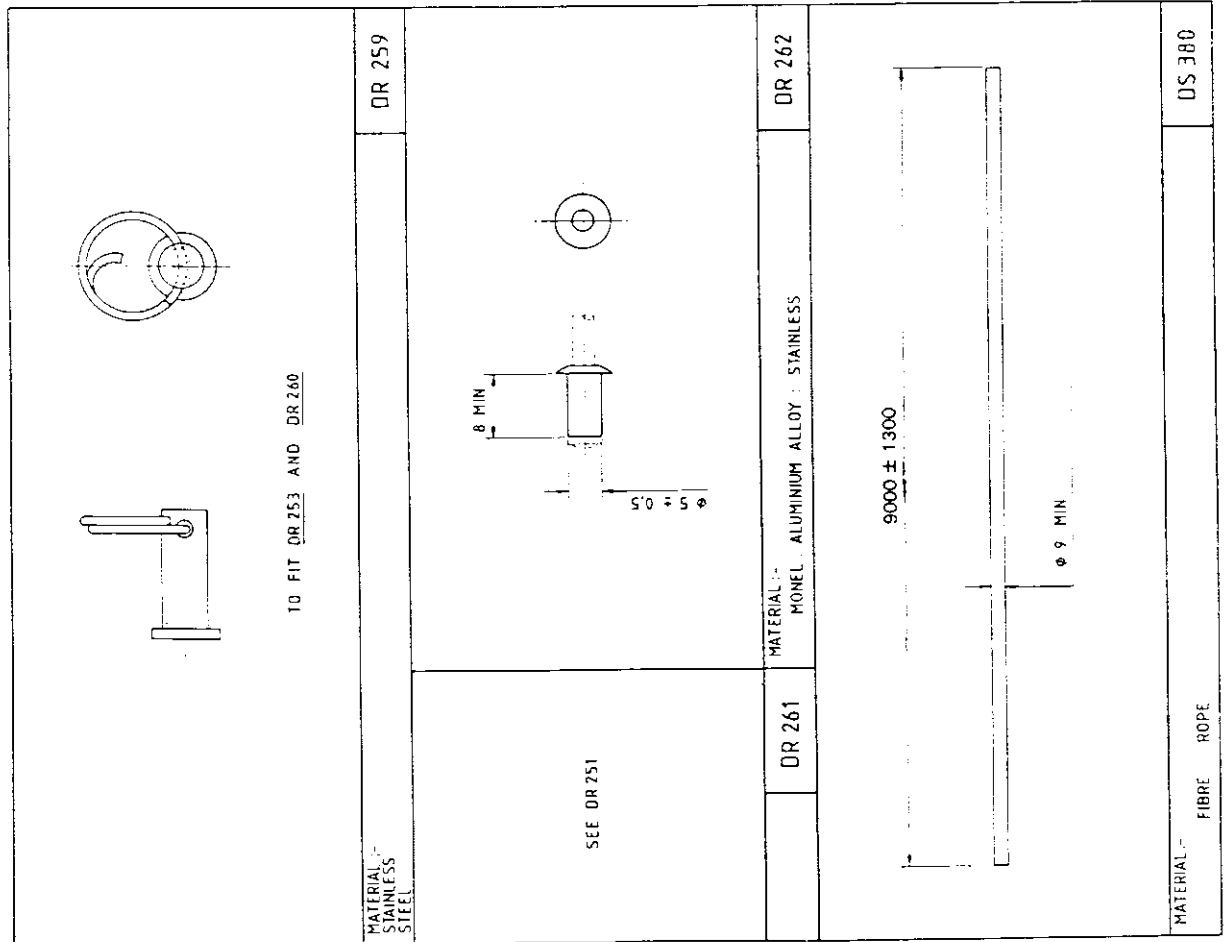
		MATERIAL - STAINLESS STEEL DM 354	MATERIAL - STAINLESS STEEL DM 355
		MATERIAL - STAINLESS STEEL PIVOT PIN DM 356	MATERIAL - STAINLESS STEEL PIVOT PIN DM 356
		MATERIAL - STAINLESS STEEL PIVOT PIN FASTENER DM 357	MATERIAL - STAINLESS STEEL PIVOT PIN FASTENER DM 359
MATERIAL - STAINLESS STEEL PIVOT PIN FASTENER DM 357	MATERIAL - STAINLESS STEEL PIVOT PIN FASTENER DM 359		

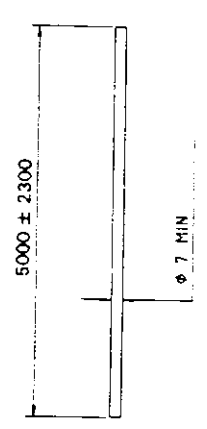
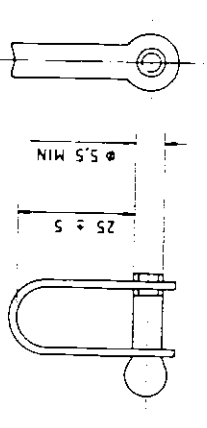
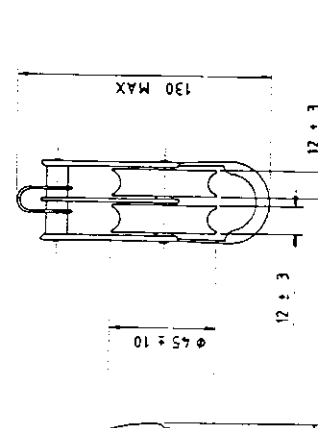
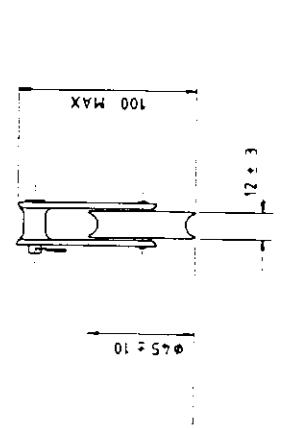
<p>850 ± 400 φ 4.8 MIN 100 ± 100</p>	<p>MATERIAL :- FIBRE ROPE</p>	<p>50 ± 20 35 ± 10 φ 6 ± 1.5 20 ± 5 φ 5.5 MIN TO FIT DM 370 TO FIT DS 434</p>	<p>MATERIAL :- STAINLESS STEEL</p>	<p>16300 ± 500 φ 5.5 MIN</p>	<p>MATERIAL :- FIBRE ROPE</p>	<p>DM 360</p>
<p>DM 361</p>						
<p>DM 362</p>						

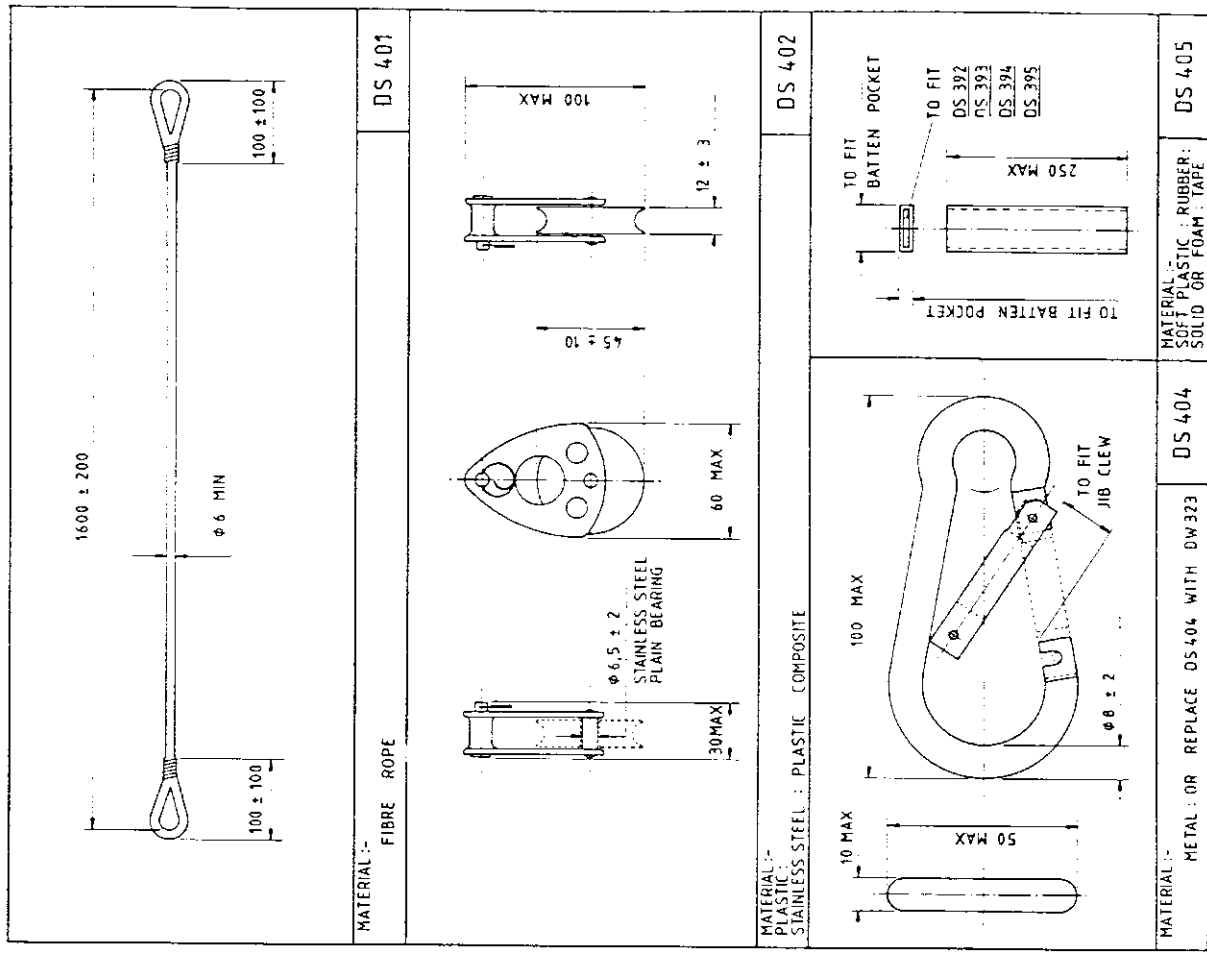
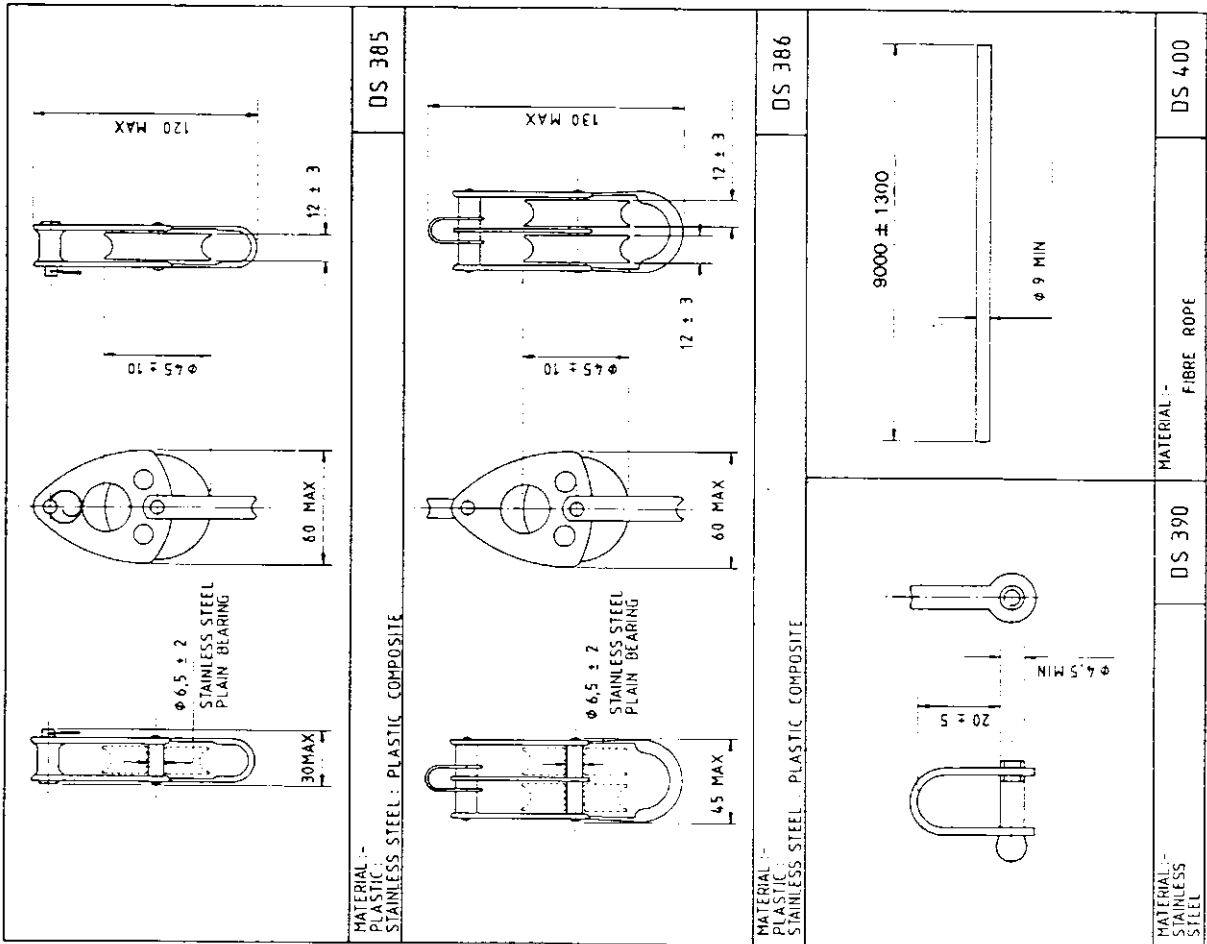
<p>11900 ± 500 φ 3.5 MIN 100 ± 100</p>	<p>MATERIAL :- FIBRE ROPE</p>	<p>3470 ± 50 φ 5 MIN 100 ± 75 20 ± 5 φ 5.5 MIN TO FIT DM 365 AND DS 419</p>	<p>MATERIAL :- STAINLESS STEEL</p>	<p>95 ± 15 φ 4.5 MIN</p>	<p>MATERIAL :- STAINLESS STEEL</p>	<p>DM 364</p>
<p>DM 367</p>						
<p>DM 366</p>						
<p>DM 367</p>						
<p>DM 368</p>						







 <p>5000 ± 2300 φ 7 MIN</p>	 <p>φ 5.5 MIN 25 ± 5</p>	<p>TO FIT DS 383 AND DS 388</p> <p>DS 382</p>
<p>MATERIAL : FIBRE ROPE</p> <p>DS 381</p>	<p>MATERIAL : STAINLESS STEEL</p> <p>DS 382</p>  <p>φ 6.5 ± 2 STAINLESS STEEL PLAIN BEARING</p> <p>45 MAX φ 4.5 ± 10 12 ± 3 12 ± 3 130 MAX</p>	
<p>MATERIAL : PLASTIC</p> <p>DS 383</p>	<p>MATERIAL : STAINLESS STEEL</p> <p>DS 383</p>  <p>φ 6.5 ± 2 STAINLESS STEEL PLAIN BEARING</p> <p>30 MAX φ 4.5 ± 10 12 ± 3 100 MAX</p>	
<p>MATERIAL : STAINLESS STEEL</p> <p>DS 384</p>	<p>MATERIAL : PLASTIC COMPOSITE</p> <p>DS 384</p>	



	<p>MATERIAL: OPTIONAL</p> <p>DS 425</p>
	<p>DS 430</p>
	<p>DS 431</p>
	<p>MATERIAL: FIBRE ROPE</p> <p>DS 432</p>

	<p>MATERIAL: FIBRE ROPE</p> <p>DS 410</p>
	<p>MATERIAL: METAL</p> <p>DS 419</p>
	<p>MATERIAL: METAL</p> <p>DS 419</p>
	<p>MATERIAL: STAINLESS STEEL</p> <p>DS 412</p>
	<p>MATERIAL: CLOTH OR PLASTIC</p> <p>DS 423</p>
	<p>MATERIAL: CLOTH OR PLASTIC</p> <p>DS 424</p>

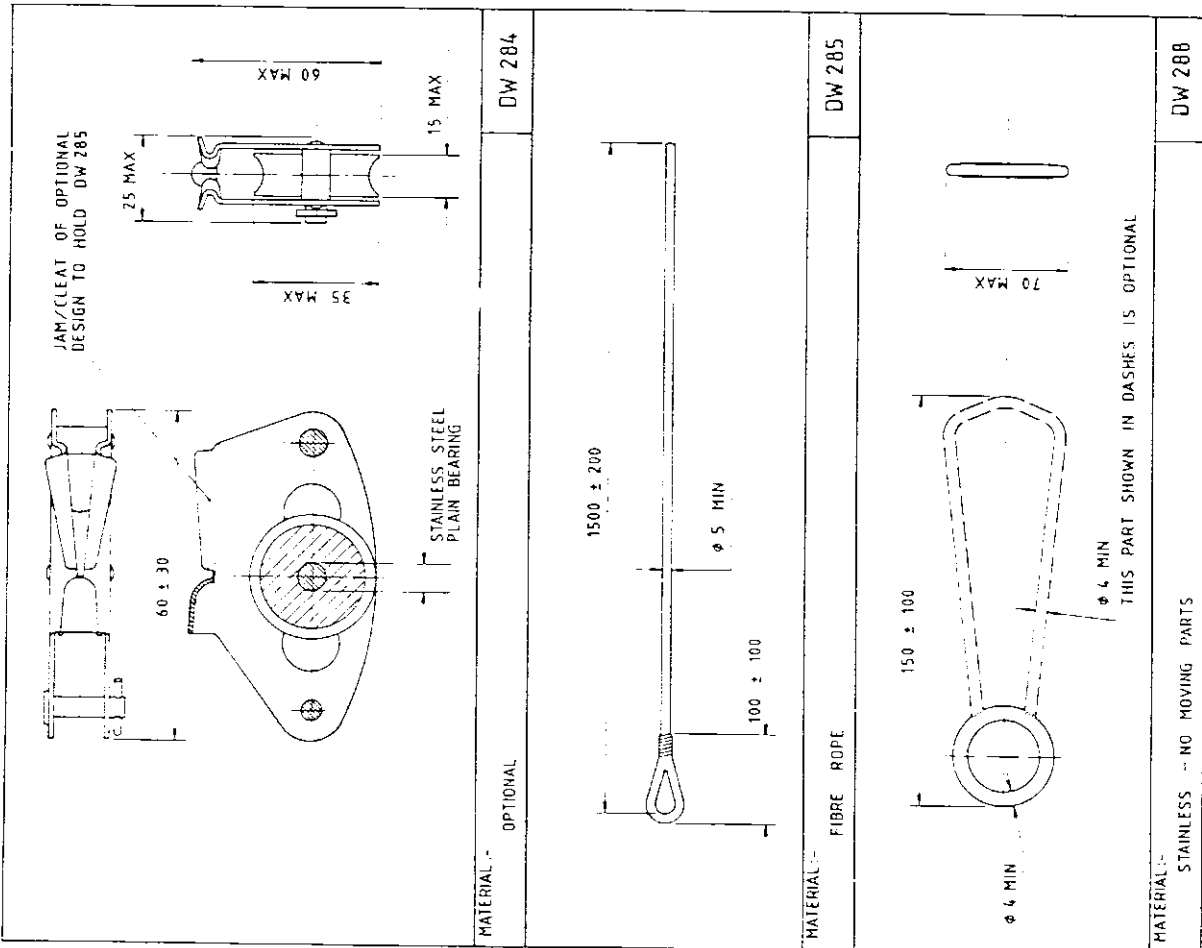
	<p>MATERIAL:- FLEXIBLE</p>	<p>DT 198</p>
	<p>MATERIAL:- FLEXIBLE</p>	<p>DT 200</p>
	<p>MATERIAL:- OPTIONAL</p>	<p>DT 199</p>
	<p>MATERIAL:- ELASTIC FIBRE</p>	<p>DT 202</p>
	<p>MATERIAL:- OPTIONAL</p>	<p>DT 203</p>

	<p>MATERIAL:- FIBRE ROPE</p>	<p>DS 433</p>
	<p>MATERIAL:- METAL</p>	<p>DS 434</p>
	<p>MATERIAL:- METAL</p>	<p>DT 192</p>
	<p>MATERIAL:- METAL</p>	<p>DT 193</p>
	<p>MATERIAL:- METAL</p>	<p>DT 194</p>
	<p>MATERIAL:- METAL</p>	<p>DT 195</p>
	<p>MATERIAL:- METAL</p>	<p>DT 196</p>

For DS 512 - See Page 39

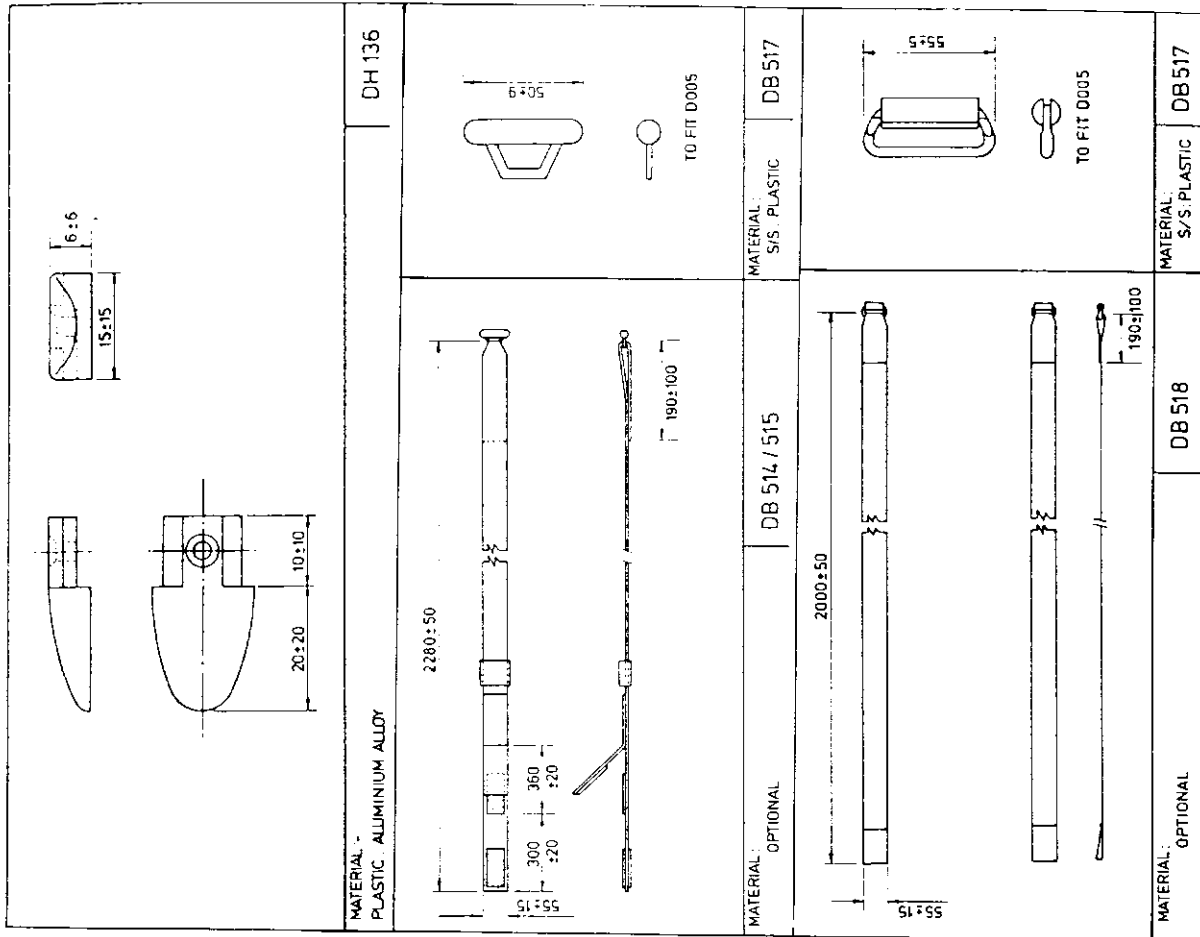
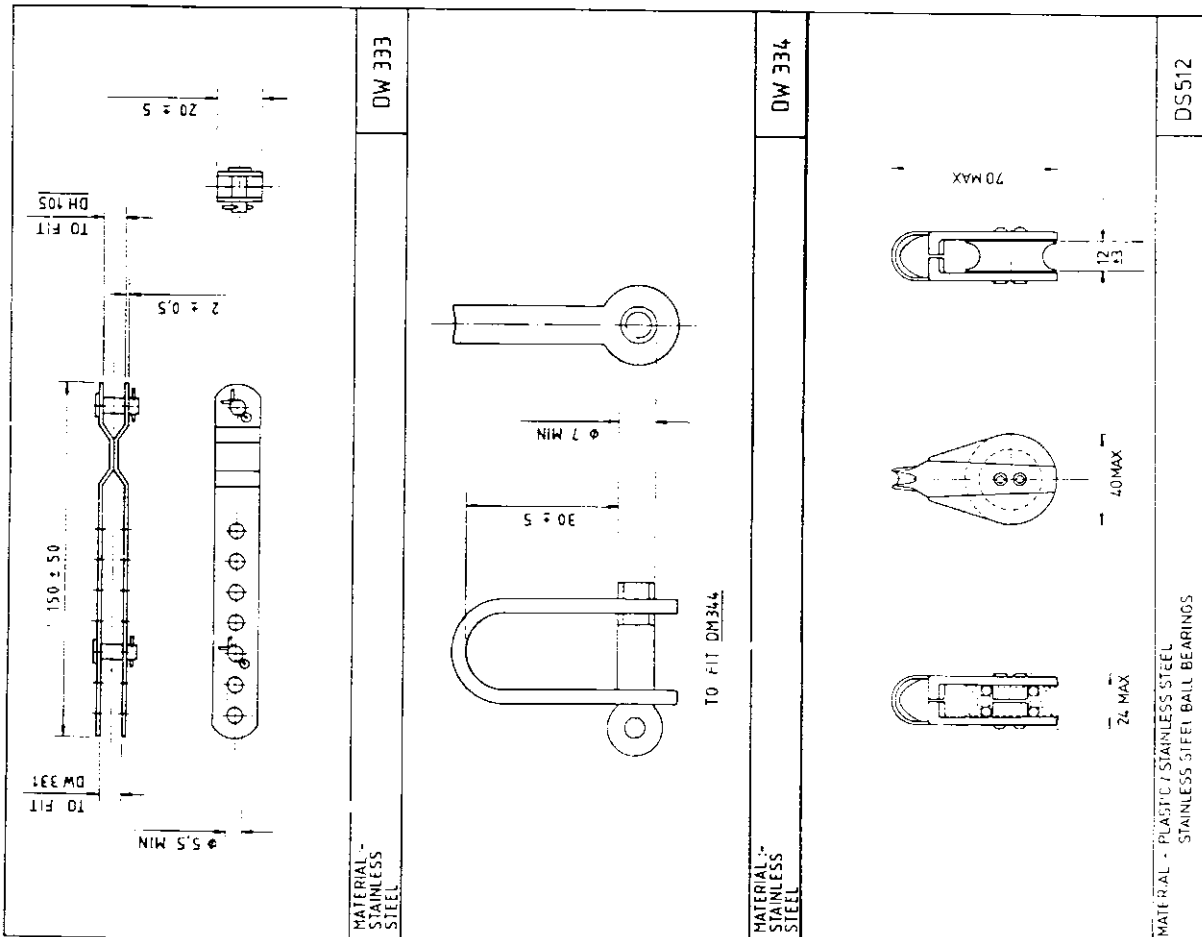
	<p>MATERIAL :- STAINLESS STEEL WIRE - MULTISTRAND</p>	<p>DW 280</p>	<p>DW 281</p>
	<p>MATERIAL :- OPTIONAL</p>	<p>DW 282</p>	<p>DW 283</p>
<p>TO FIT DW 280 DW 284</p>	<p>MATERIAL :- OPTIONAL</p>	<p>MATERIAL :- COPPER : COPPER ALLOY</p>	<p>DW 283</p>

	<p>MATERIAL :- ELASTIC FIBRE</p>	<p>DT 204</p> <p>DT 205</p>
<p>MATERIAL :- OPTIONAL</p>	<p>DT 205</p>	<p>DT 206</p>
<p>MATERIAL :- FIBRE ROPE</p>	<p>MATERIAL :- ALUMINIUM ALLOY</p>	<p>DT 207</p>



<p>TO FIT DW 311 DW 321</p>	<p>TO FIT DW 323</p>	<p>DW 324</p>
<p>MATERIAL - STAINLESS STEEL</p>		<p>MATERIAL - STAINLESS STEEL</p>
<p>DW 330</p>		
<p>MATERIAL - STAINLESS STEEL WIRE - MULTISTRAND</p>		
<p>TO FIT DW 330 DW 333 DW 334</p>	<p>TO FIT DW 331</p>	<p>DW 332</p>
<p>MATERIAL - STAINLESS STEEL</p>		<p>MATERIAL - COPPER : COPPER ALLOY</p>

<p>TO FIT DW 310</p>	<p>TO FIT DW 311</p>	<p>DW 312</p>
<p>MATERIAL - STAINLESS STEEL</p>		<p>MATERIAL - COPPER : COPPER ALLOY</p>
<p>DW 320</p>		
<p>MATERIAL - STAINLESS STEEL WIRE - MULTISTRAND</p>		
<p>TO FIT DW 320</p>	<p>TO FIT DW 321</p>	<p>DW 322</p>
<p>MATERIAL - STAINLESS STEEL</p>		<p>MATERIAL - COPPER : COPPER ALLOY</p>



RULES FOR WORLD AND CONTINENTAL CHAMPIONSHIPS AND GUIDANCE AT OTHER MEETINGS

1.0. RESPONSIBILITY FOR VENUE AND ORGANISATION

- 1.1. The International Dart 18 Association International Committee (I.D.A.I.C.) shall be responsible for considering and selecting suitable venues for World and Continental Championships
- 1.2. The I.D.A.I.C. shall send a copy of these rules to prospective host Clubs to ensure that they can be complied with
- 1.3. The I.D.A.I.C. having satisfied themselves that the host club can meet their requirements, may then delegate their responsibility to the National Dart 18 Fleet to conduct all aspects of the meeting in association with the host club, or if there is no National Dart 18 Fleet, to the host club
- 1.4. The National Dart 18 Fleet shall be responsible for arranging the financing of the meeting, or if there is no National Fleet, the host club.

2.0. APPOINTMENT OF JURY AND THEIR TERMS OF REFERENCE.

- 2.1. An international jury may be appointed as provided under I.Y.R.U. Racing Rules except that it shall not decide on matters relating to entries and measurement. These shall be the responsibility of the Class

3.0. ELIGIBILITY AND ENTRIES

- 3.1. The current champion shall have the right to defend his title without qualifying and without his entry affecting the number of boats his country may be allowed to enter
- 3.2. The host club shall not restrict the number of entries. However, entries received less than 14 days before the first scheduled Championship Race shall only be accepted at the discretion of the host club.
- 3.3. All helmsmen shall be members of the I.D.A. and their current membership card shall be produced
- 3.4. Crew substitutions shall only be allowed after the first race in case of sickness, accident or special circumstances, and only with the permission of the Jury. Weight of substituted crew shall be considered

4.0. INVITATIONS

- 4.1. Invitations shall be circulated to all national fleets of I.D.A. not later than eight weeks before the first race of the event
- 4.2. The entry fee shall be agreed between the National Dart 18 fleet and the host club

5.0. MEASUREMENT

- 5.1. The host club shall provide facilities for inspection and measurement of boats
- 5.2. The I.D.R.C. shall appoint an inspector who shall not be a competitor. The official inspector shall have the right to inspect all boats at his discretion
- 5.3. A boat shall be allowed to race only if a valid Measurement Certificate is presented
- 5.4. No alternative hulls, equipment or sails will be allowed in the event of any hull or equipment failure or irreparable sail damage the matter shall be reported to the Jury, who may at their discretion, if satisfied that the failure was the result of causes outside the control of the helmsman and crew, allow an approved new or second-hand replacement part to be used.
- 5.5. However any replacement sails shall only be taken from a stock of measured used sails in sealed bags, loaned to the host club by a licensed builder or their Agent who shall be entitled to charge the user a hiring fee payable in advance of not more than 10% of the current U.K. retail price of a corresponding new sail. The licensed builder or their agent shall be entitled to charge a deposit of not more than 50% of the current U.K. retail price of a corresponding new sail refundable against the return of the sail in an undamaged condition

The user shall only be permitted to inspect the sail after selecting a sealed bag and payment of the hiring fee and deposit if any
- 5.6. Major alterations or repairs to boat or sails shall be reported to and under the control of the official inspector. When the official inspector has reason to doubt the measurement of any part of a boat he shall have the power to disqualify that boat. However, the helmsman shall have the right to appeal in writing to the I.D.R.C. Until such a ruling is given the helmsman may replace the disputed item with an approved new or second-hand replacement
- 5.7. No measurement shall take place after the first points race except under 5.6 above

6.0. RACING CONDITIONS

6.1. All races shall be conducted under the Racing Rules of the International Yacht Racing Union and the Sailing Instructions laid down by the host club. The sailing instructions including the course signals and other procedural requirements shall conform as closely as practicable to those laid down by the I Y R U and shall be approved by the I.D.A.

6.2. The races shall be sailed in open waters, and it is desirable that the nearest mark of the course shall be within one nautical mile of the official boat park.

6.3. The Championship must be sailed on its own course, and not at the same time as any other event

6.4. The Championship may consist of seven completed races, of which the best six for each competitor shall score. If six races only are sailed, the best five shall score, if five races are sailed the best four shall score, and if four races are sailed, all four races shall count. If less than four races are completed, there shall be no Championship

6.5. Postponed or abandoned races shall be restarted within two hours of the advertised starting time of that race or postponed to another day. If postponed to another day a minimum of 18 hours notice must be given for the re-scheduled start of such a race.

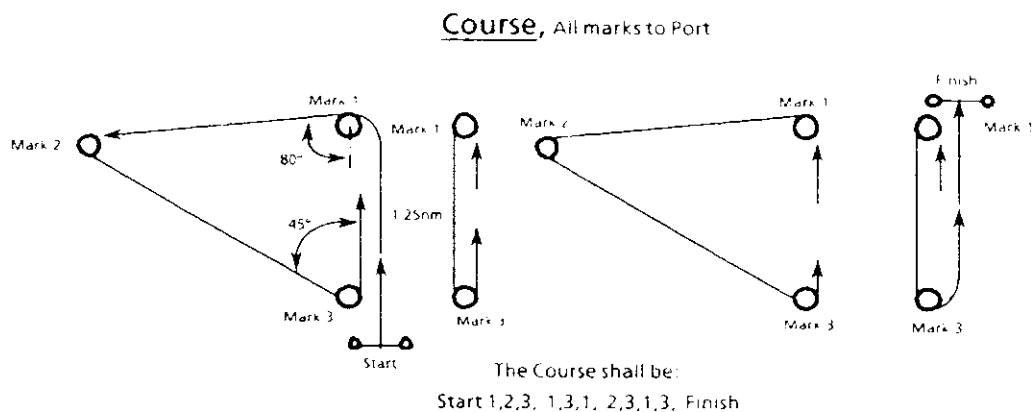
6.6. It is recommended that a second race shall not be started on any day when the wind and sea conditions during the first race physically exhausted crews or were such that accidental damage was sustained to boats

6.7. Rescue boats shall be provided in the ratio of one rescue boat per fifteen entered boats

7.0. COURSES

7.1. All starts shall be to windward. Compass bearings of course marks shall not be provided

7.2



8.0. TIME LIMIT

8.1. The time limit for the first boat to finish shall be two and half hours after the start gun.

8.2. If one boat finishes within the time limit, all boats finishing within the next 45 mins shall be timed. Remaining boats shall be treated as retiring

8.3. If the first boat fails to reach the weather mark within 45 mins after the start, the race may be abandoned

9.0. SCORING

9.1. The Olympic scoring system shall be used as laid down by the I Y R U.

10.0. PROTESTS

10.1. All protests shall be heard by the International Jury, if appointed, and, in accordance with the I Y R U. Racing Rules there shall be no appeal from decisions of the Jury

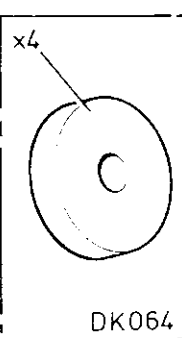
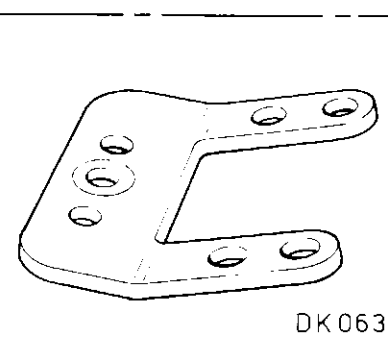
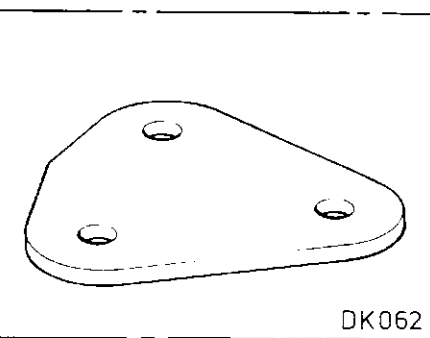
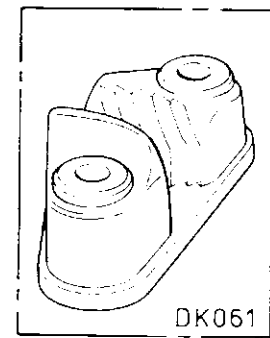
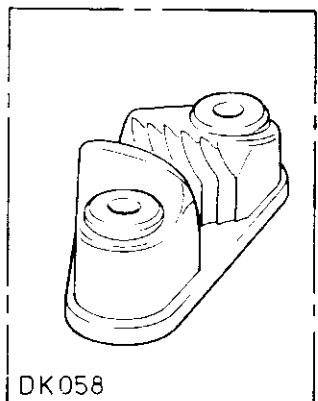
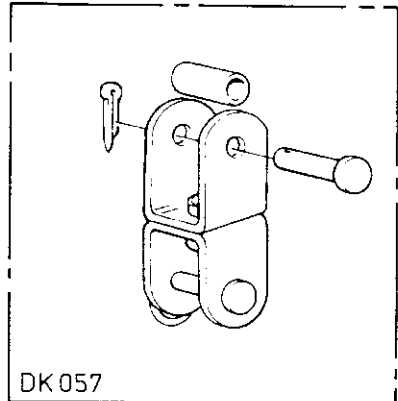
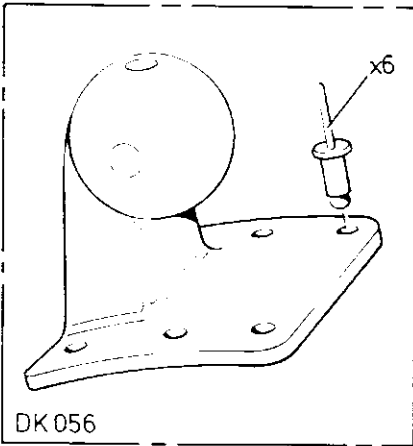
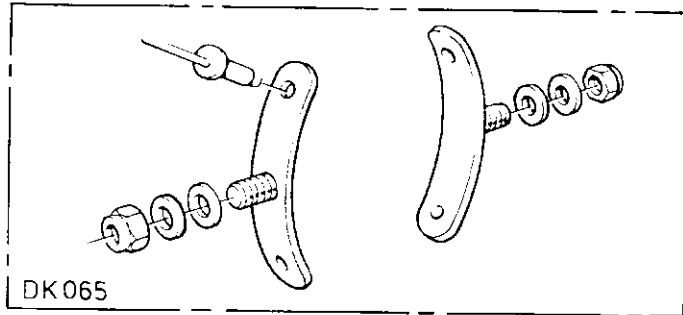
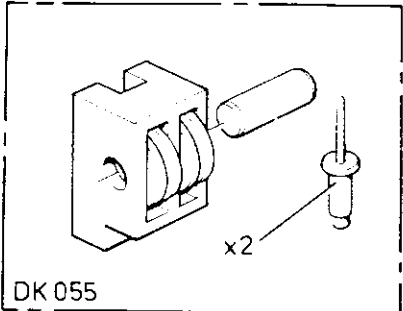
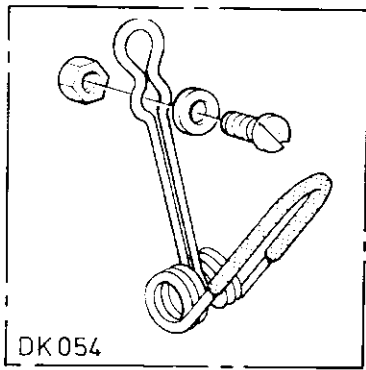
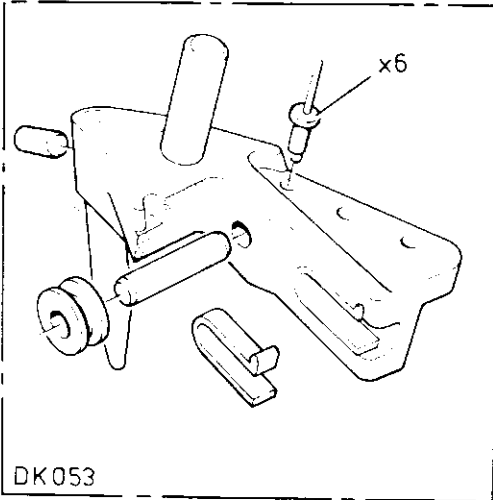
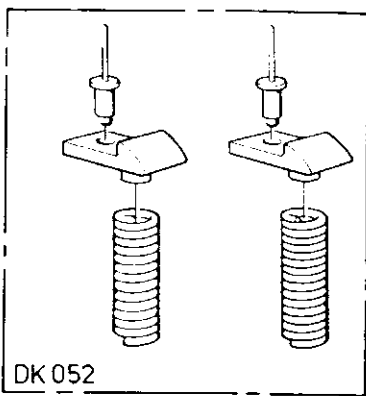
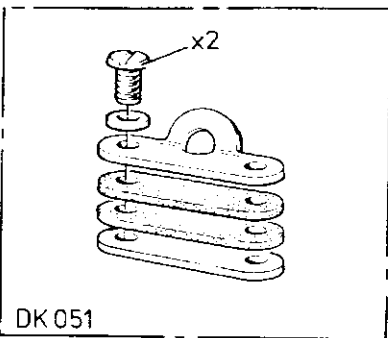
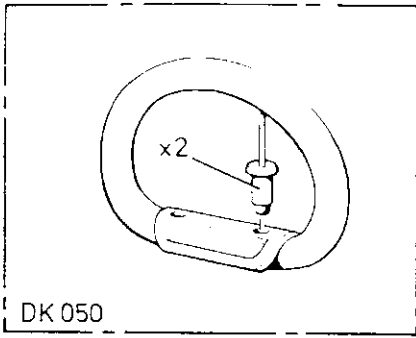
10.2. It is recommended that an alternative penalty of a 720 degree turn is introduced as provided for by the I Y R U Rules

11.0. TROPHIES AND PRIZES

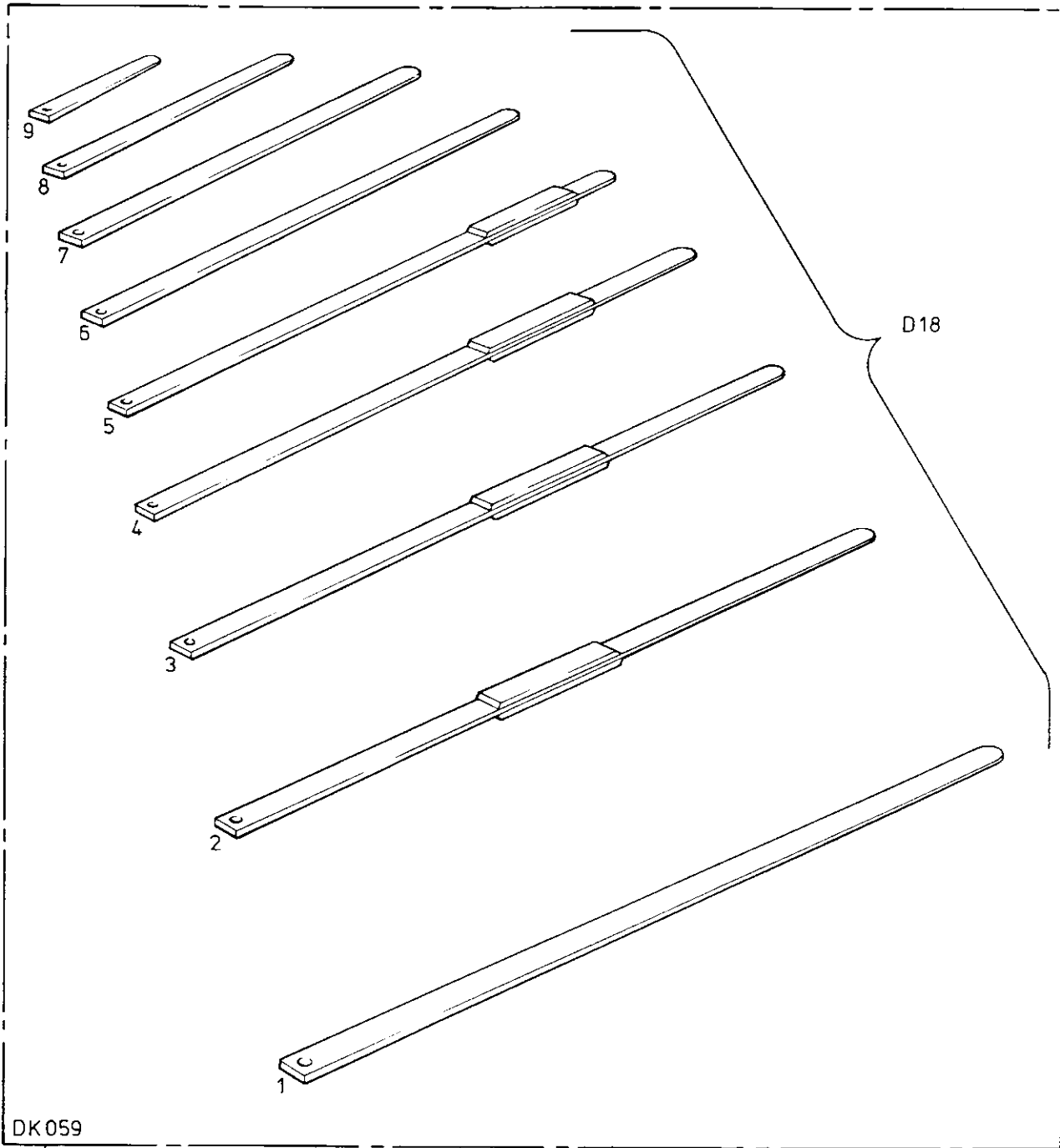
11.1. The Championship Perpetual Trophies shall be awarded annually to the winners

11.2. The host club is expected to present appropriate prizes for both helmsman and crew

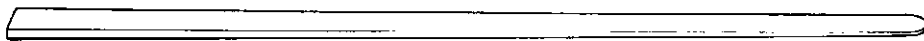
	SPARE PARTS KIT
DK050	FOOTLOOP ASSEMBLY
DK051	JIB FAIRLEAD ADJUSTER ASSEMBLY
DK052	REAR BEAM LOCK SPRING ASSEMBLY
DK053	RUDDER PINTLE CASTING ASSEMBLY
DK054	RUDDER LOCK ROLLER SPRING ASSEMBLY
DK055	MAST DOUBLE SHEAVE BOX ASSEMBLY
DK056	MAST BALL STEP
DK057	RATCHET BLOCK SWIVEL
DK058	RATCHET BLOCK CAM CLEAT
DK059	BATTEN SET
DK060	TRAVELLER PARTS
DK061	TRAVELLER CAM CLEAT
DK062	TRAVELLER TRIANGULAR PLATE
DK063	TRAVELLER 'U' PLATE
DK064	TRAVELLER ROLLERS
DK065	MAST SPANNER ANCHORAGE
DK066	BATTEN - LONG RED
DK067	BATTEN - LONG YELLOW



DRAWING 9 Spare Parts Packs

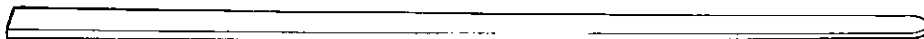


LONG RED

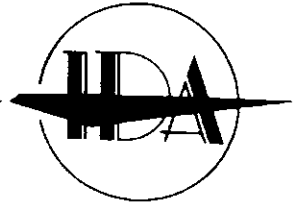


DK 065

LONG YELLOW



DK 067



International Dart 18 Rule Changes 1990

1) Main Luff Downhaul

Current Practice

Drawing 023 &

Proposal

To consist of same parts, but to allow as alternative the removal of the splice on DM 360, replacing with DM 511 and allow as many purchases as required. Fixing point can be either DM 348 or DM 370.

Change

An addition to current Rules Drawing as follows:
Drawing 023A & DM 511

**2) a) Tiller Connecting Bar / Tiller Extension Joint
b) Tiller Connecting Bar / Tiller Connection**

Current Practice

Drawing 010

Proposal

- 2) a) To allow as alternative to current spade/fork joint, a flexible rubber joint.
- 2) b) To allow as an alternative to holes in aluminium connection tube to nylon bush.
- c) To allow reduction of length of tiller connecting pin DT 212 to fit nylon bush DR 500

Change

An addition to current Rules Drawings as follows:
Drawing 010A, DR 502, DR 506, DR 261A & R 251A

**3) a) Mainsheet Blocks
b) Traveller**

Current Practice

Drawing 023

Proposal

- 3) a) To allow as alternative to blocks DS 383/DS 384 & DS 385/DS 386 two 'Dart' triple ball bearing blocks DS 509 & DS 508 respectively and DS 388 by ball bearing jamming block DS 510
- 3) b) To allow as alternative to eye leading traveller control line to cam cleat with similar sheaves as at rear of traveller.

Change

An addition to current Rules Drawings as follows:
Drawing 023A

4) Jib Clew Blocks

Current Practice

Drawing 024

Proposal

To allow as alternative to block DS 402 a ball bearing block DS 512, and to DS 403 a ball bearing jamming block DS 513

Change

An addition to current Rules Drawings as follows:
Add drawings 024A & DS 512

STAINLESS STEEL

Panthercraft use first quality steel, for use in salt water. Machining and surface defects will cause slight staining. Clean with detergent and a non-metallic brush, followed by a light oiling with 'WD40' or similar is recommended.

ACIER INOX

Panthercraft utilise la meilleure qualité d'acier inoxydable pour usage maritime. La légère oxydation qui peut apparaître est la cause du contact avec la machine de fabrication, nettoyer avec une brosse nylon et poudre détergente (genre NAB, VIM) et protéger avec du lubrifiant genre WD40.

ROSTFREIES STAHL

Panthercraft verwendet erstklassiges rostfreies Stahl, das zum Gebrauch in Salzwasser geeignet ist. Beschädigung der Oberfläche verursacht leichte Verfärbung. Zur Entfernung wird eine Reinigung mit einem entsprechendem Stahlreinigungsmittel empfohlen. Dabei eine nicht-Metallbürste verwenden. Danach leicht mit "WD40" oder einem ähnlichen Öl einreiben.

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