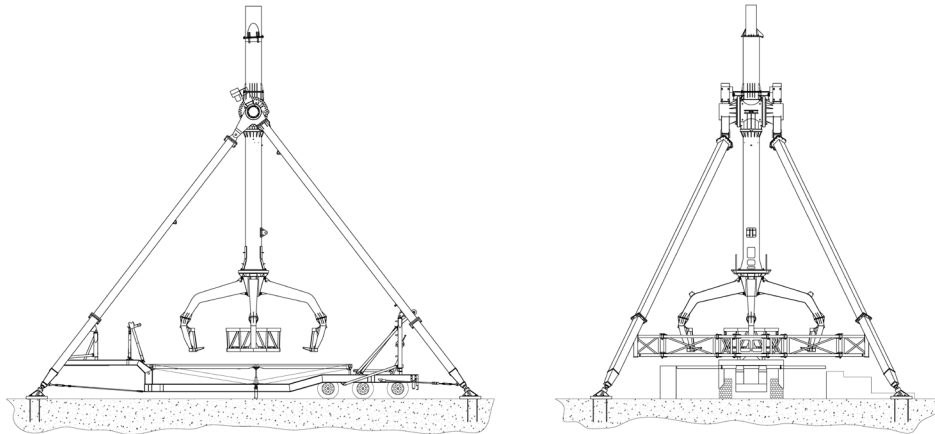


SERVICE BULLETIN

Ride Manufacturer: Technical Park	Affected Production Dates: from year 2003
Ride Name: Street Fighter / Street Fighter Revolution	
Model Number: 42.00.00 / 98.00.00	



Abstract of issue:
 Alignment of the rides with most current non-destructive testing (NDT) schedule.

Reason For Release:
 Documents updating.

Action To Be Taken:
 Follow the instruction of the updated NDT schedule “NDT checklist (V2_R1)”.

Contact the Manufacturer in case of any doubts or anomalies and hold the inspection report with the technical dossier of the ride.

REMEMBER THAT THE VERIFICATION AND CONTROL INDICATIONS REQUIRED AND CONTAINED IN THE USE AND MAINTENANCE MANUAL ARE MANDATORY AND, IF NOT IMPLEMENTED, CAN CAUSE SAFETY RISKS. THESE OPERATIONS INCLUDE, BY WAY OF EXAMPLE BUT NOT LIMITED TO, THOSE DESCRIBED BELOW AND SUBJECT OF THIS COMMUNICATION.

OUR COMPANY WILL NOT BE RESPONSIBLE FOR ANY DAMAGES ARISING FROM THE OPERATION OF ATTRACTIONS WHICH HAVE NOT BEEN SUBJECTED TO PLANNED INTERVENTIONS OF MAINTENANCE IN THE TERMS AND PROCEDURES DESCRIBED BY THE MANUAL OR THIS DOCUMENT.

THIS SAFETY ALERT BULLETIN MUST BE KEPT TOGETHER WITH THE USE AND MAINTENANCE MANUAL AND NOTED IN THE LOG BOOK (IF REQUIRED BY THE NATIONAL LEGISLATION). FAILURE TO IMMEDIATELY ADOPT THE ABOVE MEASURES AND CHECKS, IMPOSES A MACHINE STOP.

Detail of Issue:
(Text/Drawings/Schematics)

**STREET FIGHTER /
STREET FIGHTER REVOLUTION
Model 42.00.00 / 98.00.00**

NDT CHECKLIST V02 R01

The maintenance staff should be aware of the importance of the periodical inspections of the ride. By means of pictures below the critical locations to be investigated are herein highlighted. The maintenance operator is required to contact the manufacturer in case of doubt.

The sites to be checked by NDT are:

Welding lines:

NDT inspections by visual test (VT) or magnetic test (MT) must be performed with reference the UNI EN ISO 17635 or equivalent norms.

VT Test (Visual test) defects acceptability criteria should comply with ISO 5817 class B.

MT Test (Magnetic particle) to detect surface and slightly subsurface discontinuities. Defects acceptability criteria should comply with ISO 5817 class B.

- Alternating current (AC) is commonly used to detect surface discontinuities which is limited due to what is known as the skin effect, where the current runs along the surface of the part.
- Direct current (DC) is used to detect subsurface discontinuities where AC can not penetrate deep enough to magnetize the part at the needed depth.

Base material (nearby the welding lines): Ultrasonic Test (UT) according to EN 1714. Defects acceptability criteria should comply with ISO 5817 class B.

Pins: Ultrasonic Test (UT) should be done after disassembling safety related components - as structural pins - if they result to be potentially damaged after a simple visual inspection.

General rules:

Surface cracks of the painting layers is a tell-tale sign of a likely structural failure of the component. An extensive investigation on a reasonably wider area will be possible only on condition that the paint will be removed by means of chemical agents.

To prevent flaw hiding, mechanical grinding should be avoided. They may cause melting of the surface steel layer of the weld seam.

Extend the controls to the points highlighted in the pictures below.

Unexpected indications should immediately inhibit the ride operation. A safety warning should be addressed to the manufacturer for an appropriate action to be taken. The maintenance operator is requested to remove any ancillary items and/or protections from the area under investigation.

The testing procedure should be recorded in the log book of the ride. Attachments are excerpts from the structural analysis.

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Checking list on page 22 shall be used for test report control and recorded in the Maintenance Manual of the ride.

The personal protective equipment reference chapter “SAFETY MEASURES FOR MAINTENANCE” of use and maintenance manual.

Restoration of painting:

- Sandblasting SA 2.5 on the areas to check (Option paint remover / solvent it will be necessary further mechanical brushing type ST3 before making checks to decontaminate perfectly the area)
- Deep degrease with solvent after checking to remove the talc.
- Sanding of 15/20 cm from the sandblasted to level and creating a cohesion on the support already painted.
- Further manual degreasing with solvent.
- Protect at the end of area to paint and apply a coat of primer epoxy bi-component thickness 80/100µm.
- Apply a coat of varnish polyurethane bi-component of the same tint thickness 50/60µm.

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Should the testing procedure reveal unexpected local defects in a structural component, a detailed investigation must be extended through Magnetic particle Test (MT) or Dye Penetrant Test (PT) to all other recurring parts, even if they are not identical. Neighbouring elements of the damaged parts shall also be checked.

Hours of operation:

The hours of operation of the ride are shown on page “CYCLE” of the functioning touch screen on the Operator control panel. For further information refer to the Electrical manual.

1. TRAILER



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1.1 Front gates

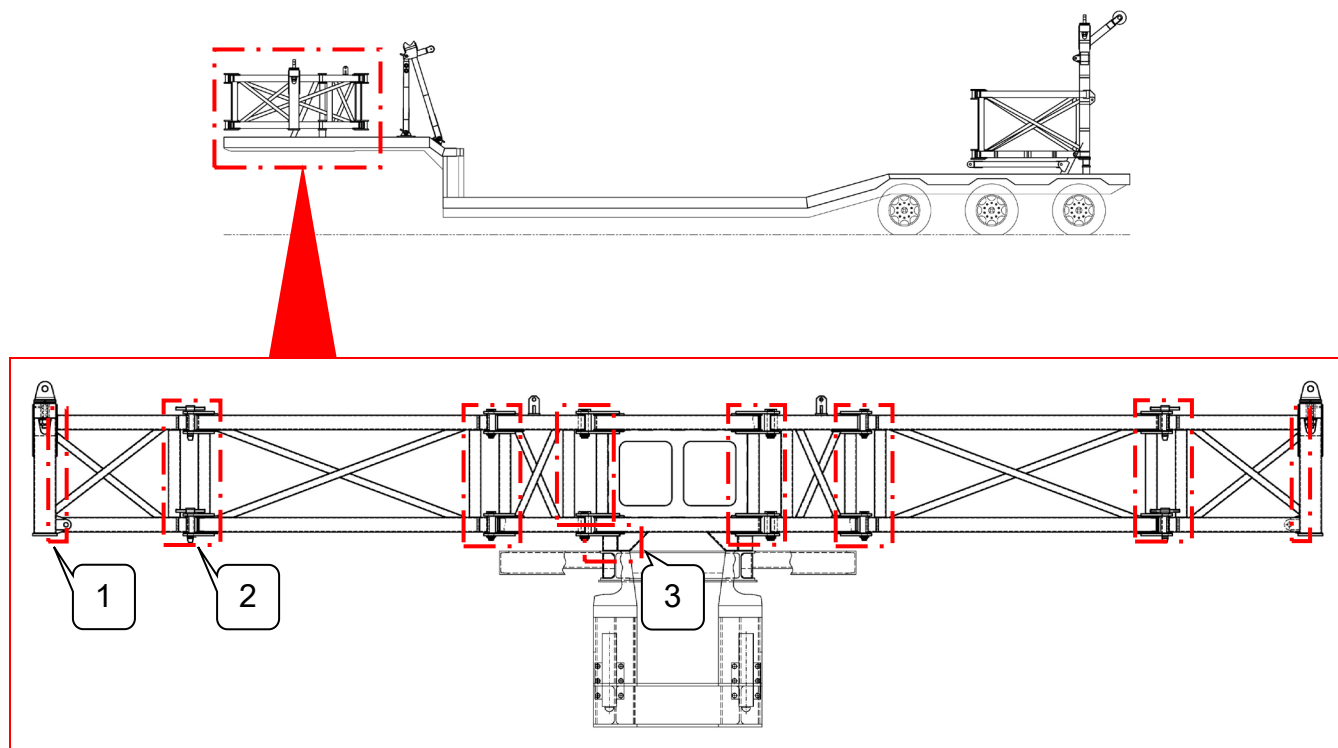


Fig. 1 – Front gates

	Position	Control	Frequency
1	Weldings of the extremity support pipes	VT	Every 2500 hours of operation (or every year)
2	Weldings of the connection hinges		
3	Weldings at the base		

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1.2 Rear gates

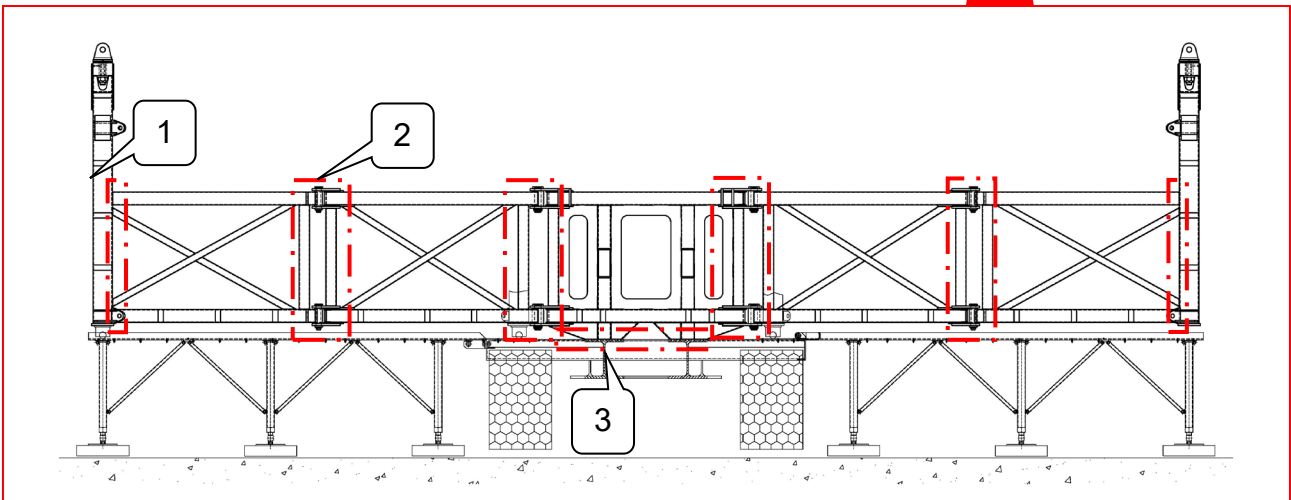
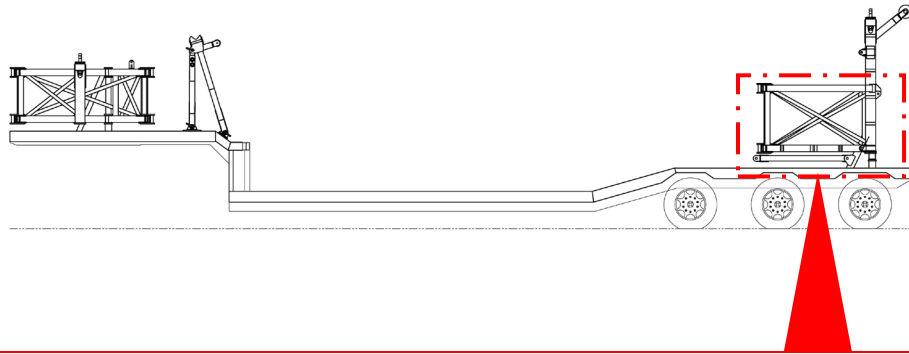


Fig. 2 – Rear gates

	Position	Control	Frequency
1	Weldings of the extremity support pipes	VT	Every 2500 hours of operation (or every year)
2	Weldings of the connection hinges		
3	Weldings at the base		

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1.3 Tie-rods

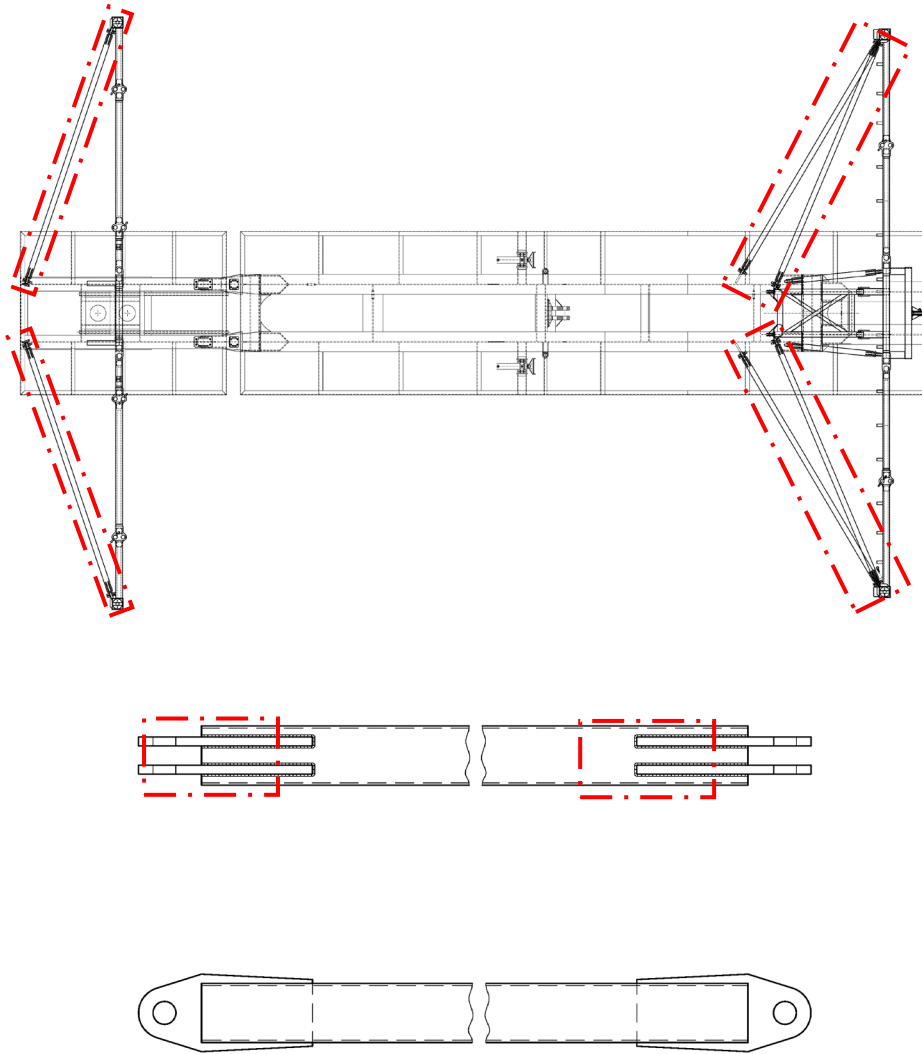
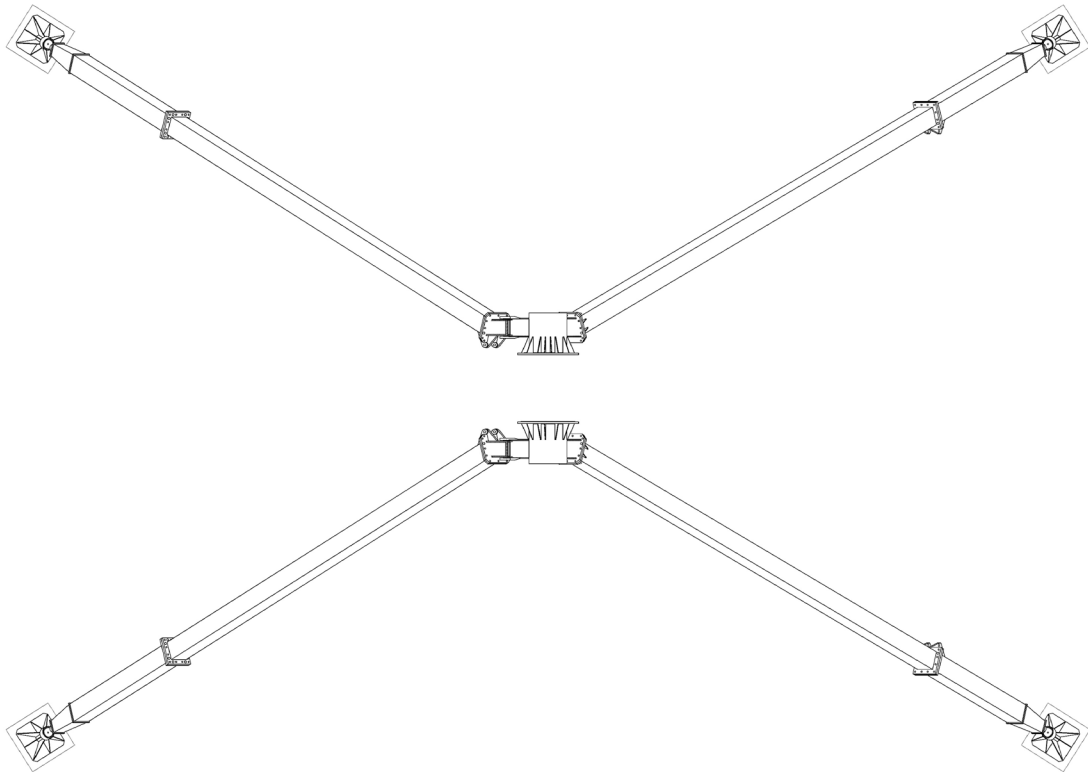


Fig. 3 – Tie-rods

	Position	Control	Frequency
1	Weldings of the extremity connection plates	VT	Every 2500 hours of operation (or every year)

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2. FIXED STRUCTURE



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2.1 Lower columns (short)

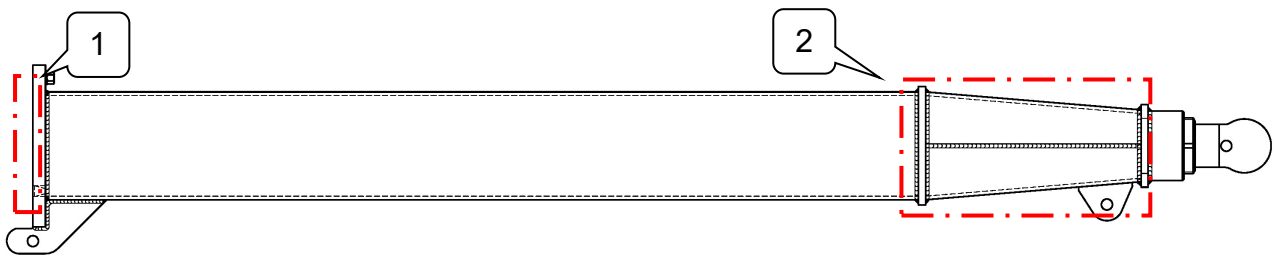


Fig. 4 – Lower columns (short)

Position		Control	Frequency
1	Circumferential welding of the connection flange	VT	Every 2500 hours of operation (or every year)
2	Weldings of the conic section		

2.2 Upper columns (long)

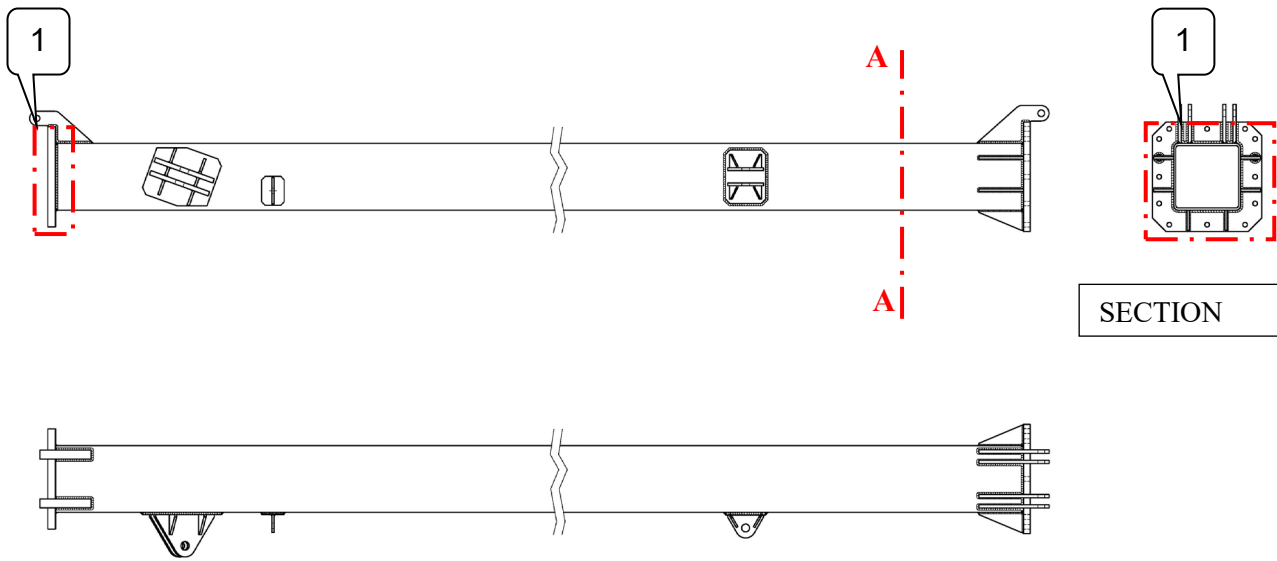


Fig. 5 – Upper columns (long)

	Position	Control	Frequency
1	Circumferential welding of the connection flange and reinforcement plates	VT	Every 2500 hours of operation (or every year)

2.3 Capitals

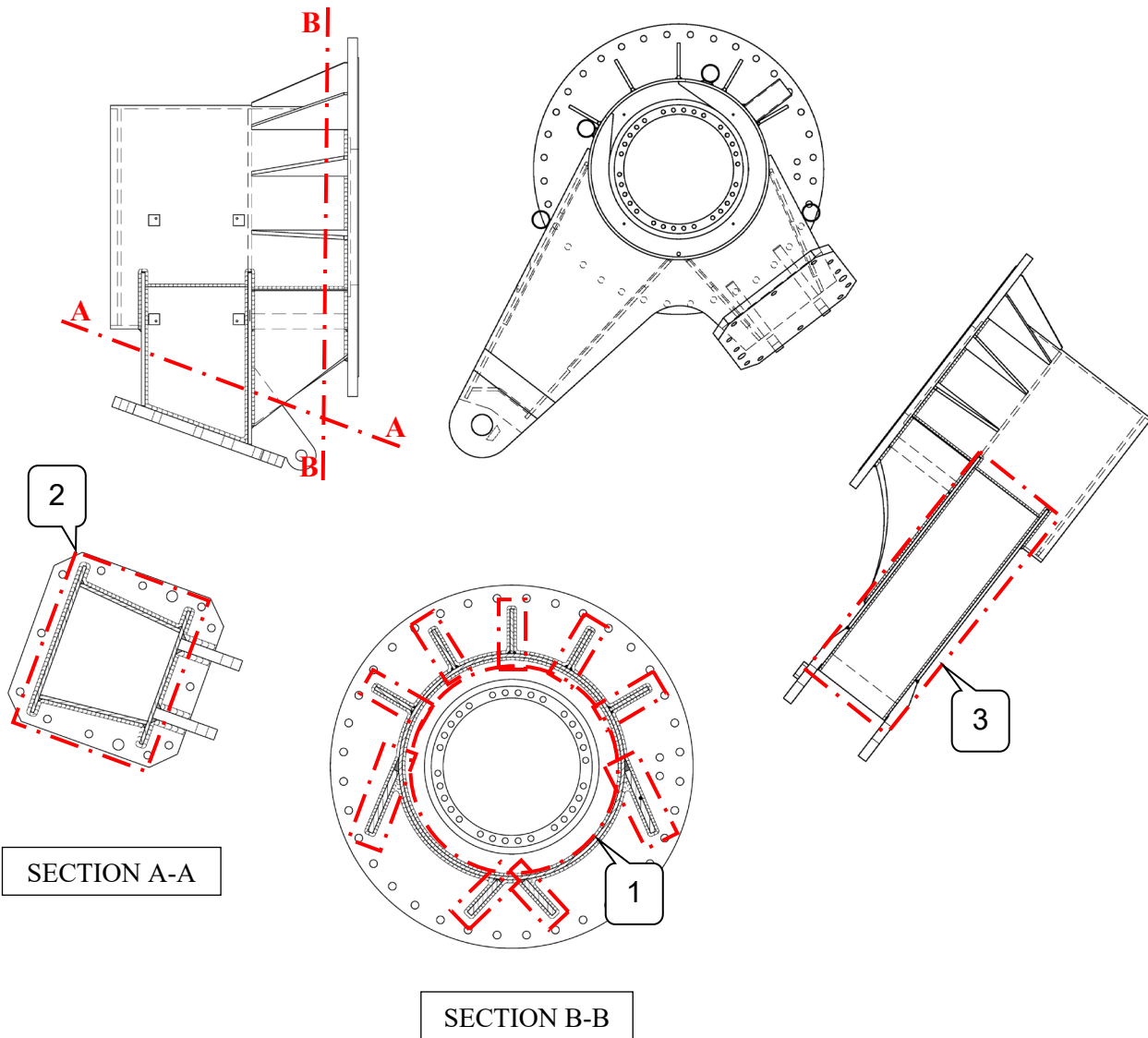


Fig. 6 – Capitals

	Position	Control	Frequency
1	Circumferential welding of the flange and reinforcement plates	VT	Every 2500 hours of operation (or every year)
2	Circumferential welding of the lower flange		
3	Weldings of the lateral arm		

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2.3.1 Articulated capital

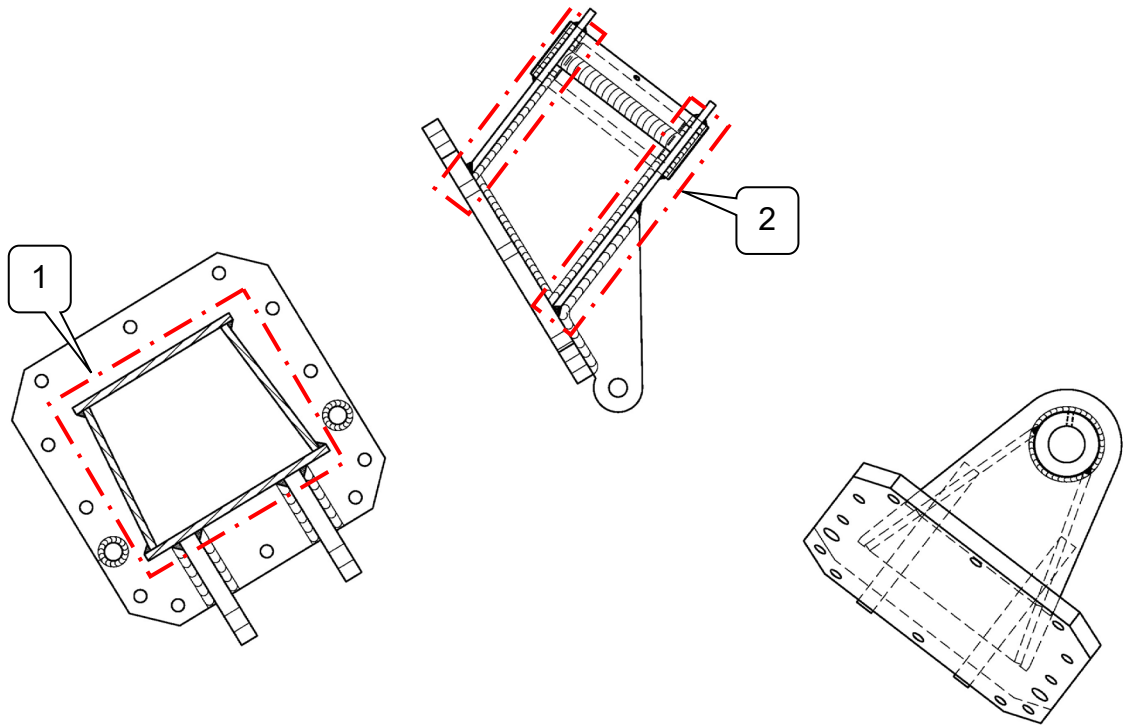


Fig. 7 – Articulated capital

	Position	Control	Frequency
1	Circumferential welding of the flange and connection plates	VT	Every 2500 hours of operation (or every year)
2	Bushing weldings and lateral sheets weldings		

3. SWINGING ARM

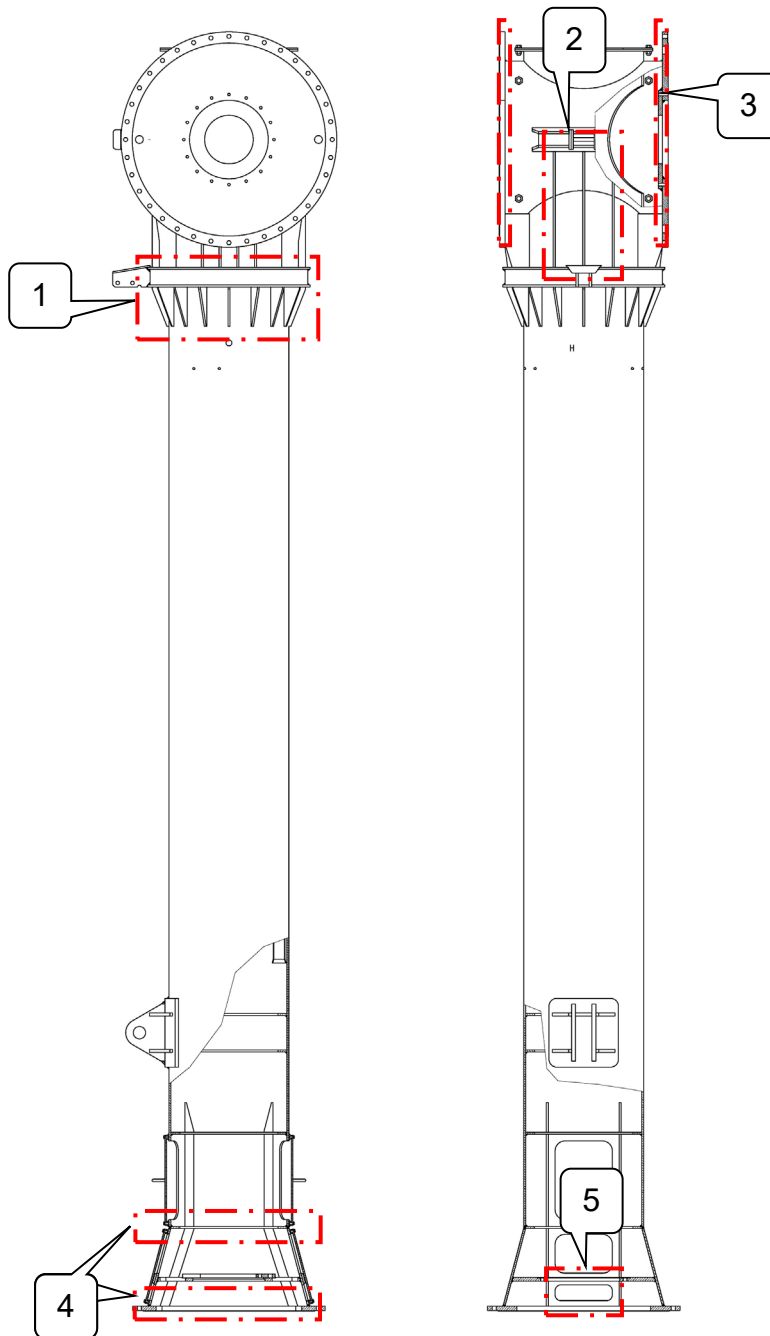


Fig. 8 – Swinging arm

	Position	Control	Frequency
1	Weldings of the lateral reinforcement plates (both sides)	VT	Every 2500 hours of operation (or every year)
2	Weldings of the circumferential reinforcement plates		
3	Circumferential welding of the flanges		
4	Circumferential welding of the flange		
5	Circumferential welding of the inspection window		

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4. COUNTERWEIGHT

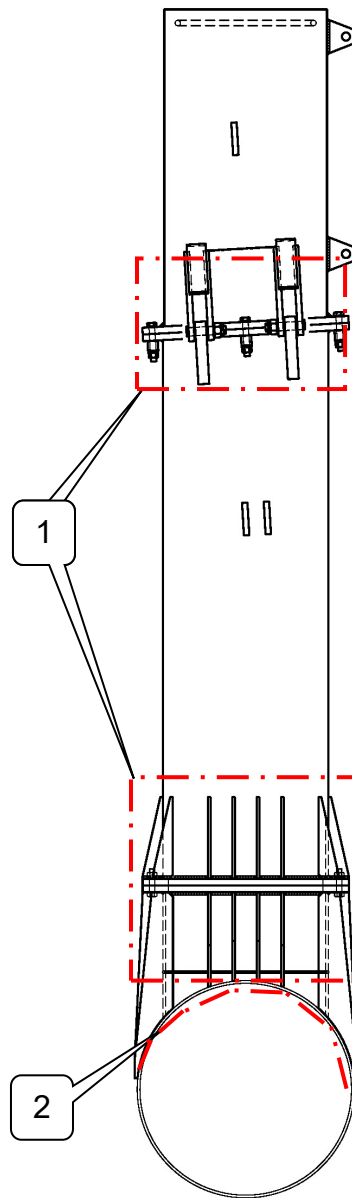


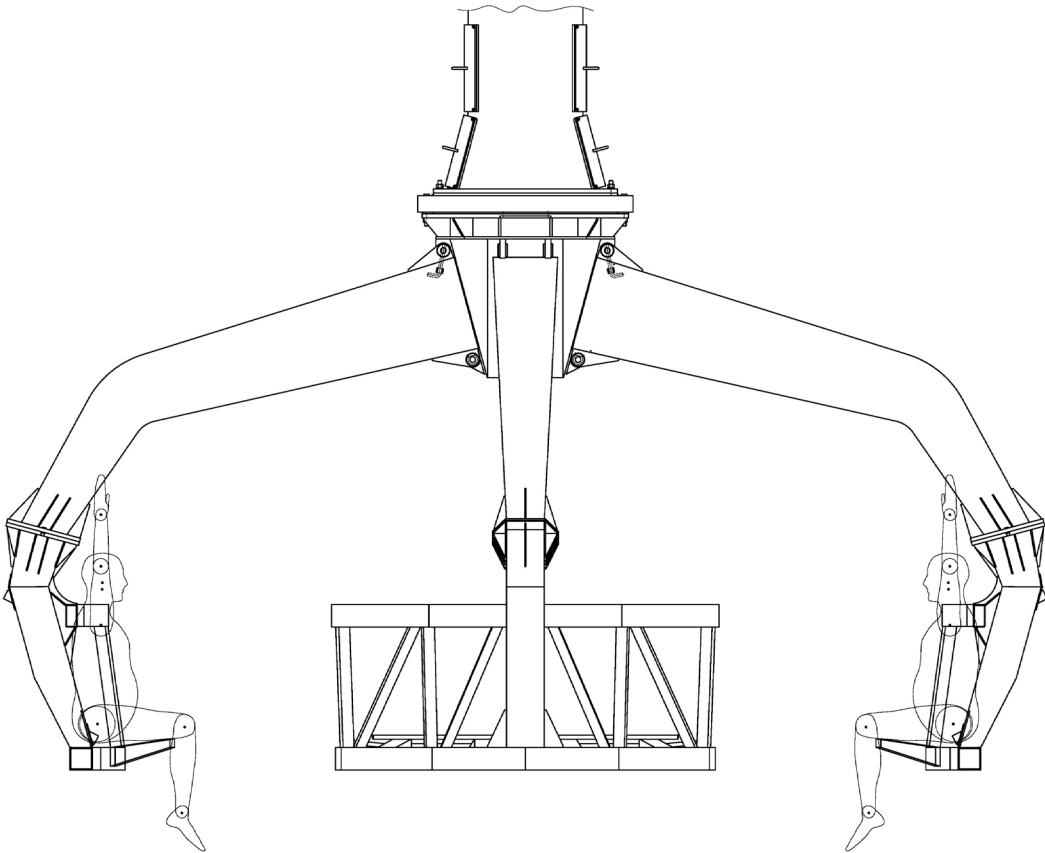
Fig. 9 – Counterweight

	Position	Control	Frequency
1	Weldings of the lateral reinforcement plates (both sides)	VT	Every 2500 hours of operation (or every year)
2	Weldings of the circumferential reinforcement plates		

Only in case of Street Fighter Revolution (model 98.00.00)

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5. SWIVEL UNIT



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5.1 Rotating center

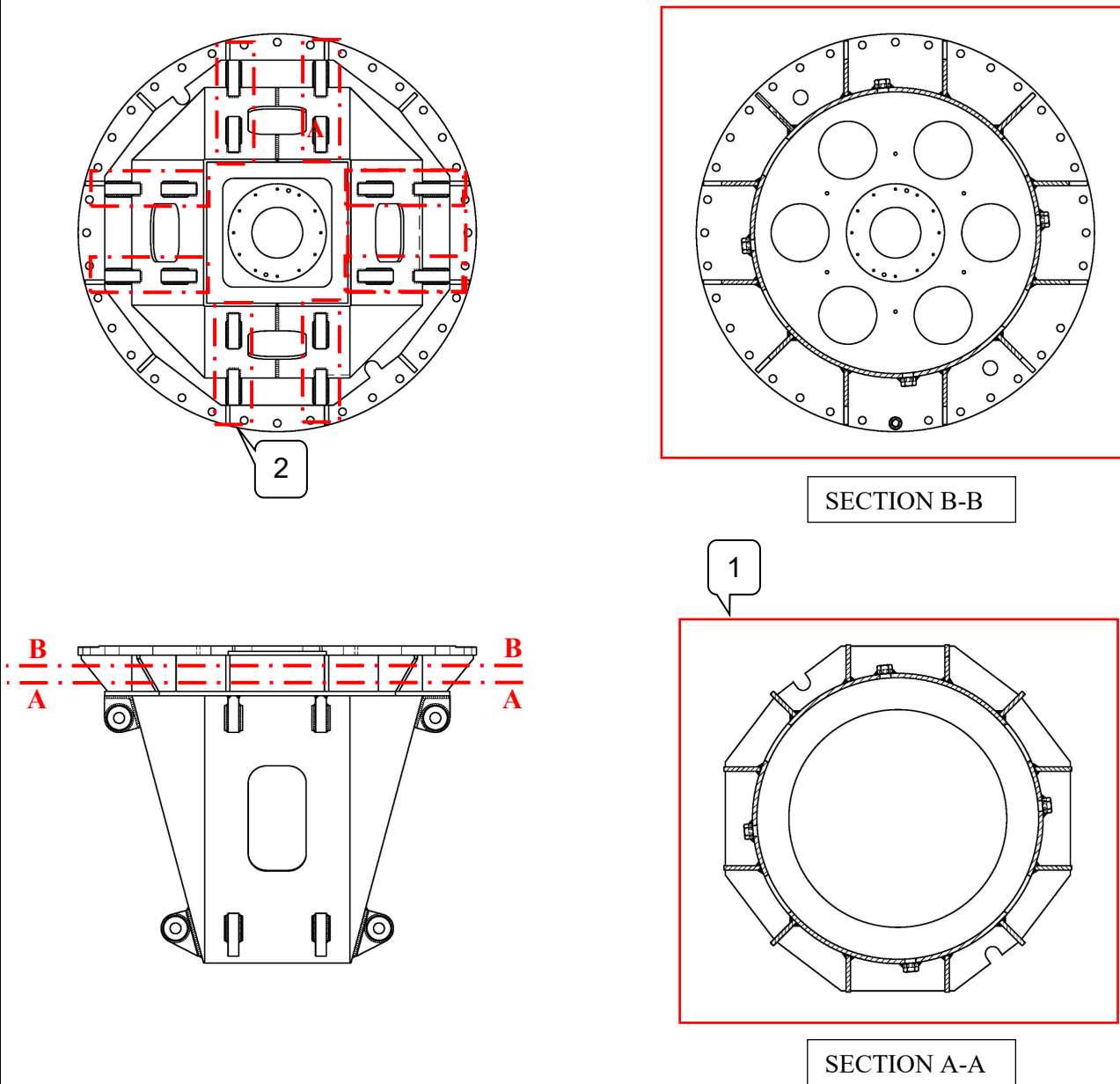


Fig. 10 – Rotating center

	Position	Control	Frequency
1	Weldings of the connection ears	VT	Every 2500 hours of operation (or every year)
2	Circumferential weldings of the flanges and reinforcement plates		

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5.2 Arms

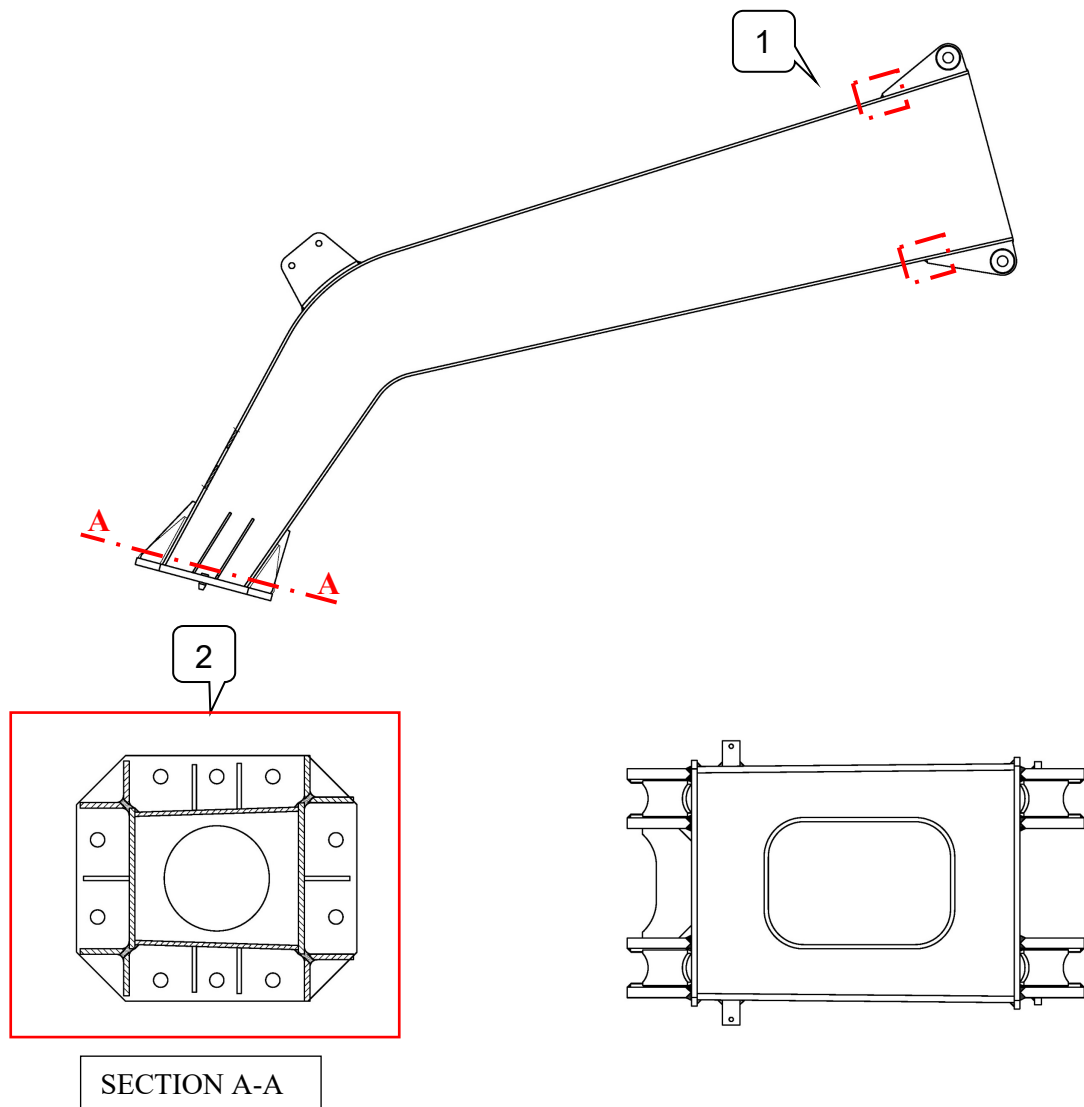


Fig. 11 – Arms

	Position	Control	Frequency
1	Extremity weldings of the upper and lower connections ears	VT	Every 2500 hours of operation (or every year)
2	Circumferential welding of the flange and reinforcement plates		

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5.3 Passenger units

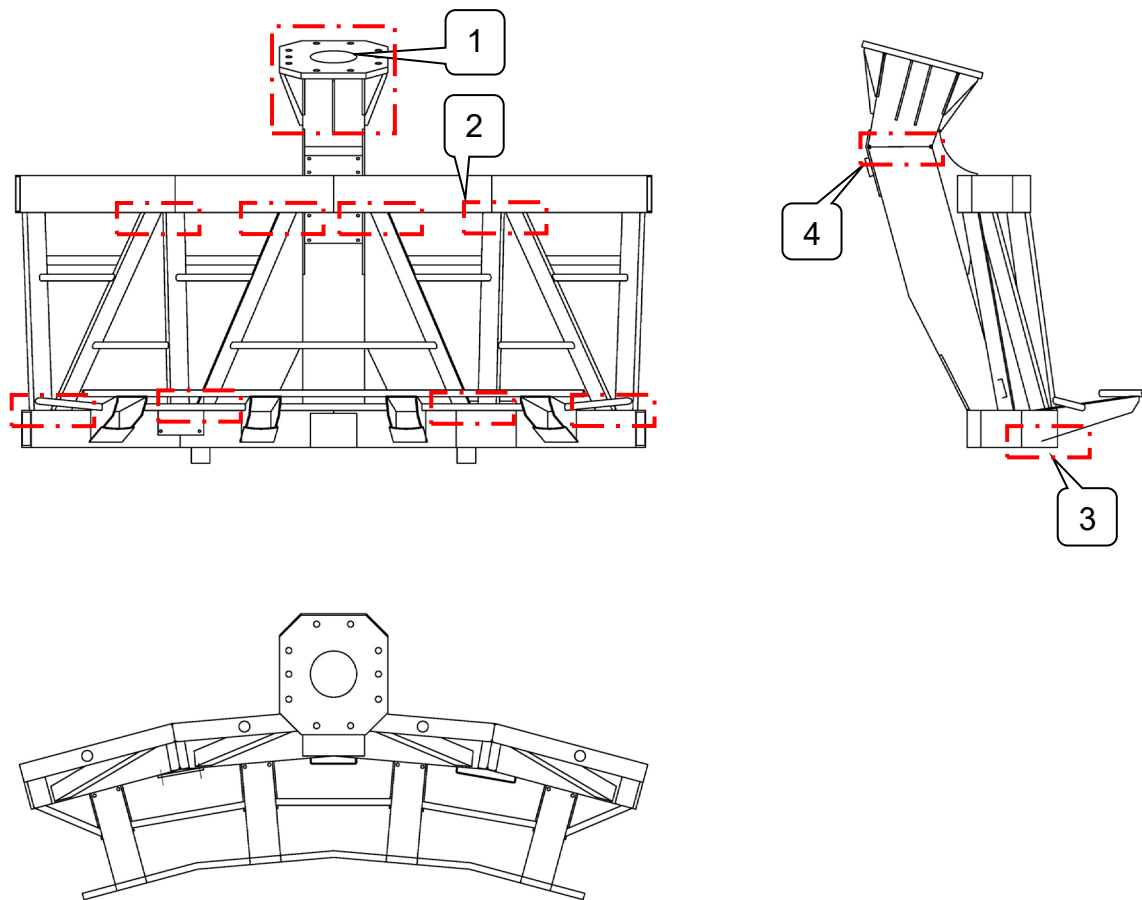


Fig. 12 – Passenger unit

Position		Control	Frequency
1	Circumferential welding of the connection flange and reinforcement plates	VT	Every 2500 hours of operation (or every year)
2	Upper and lower end of the diagonal pipes		
3	Weldings of the seats		
4	Horizontal welding of the main pipe		

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5.3.1 Safety lapbars

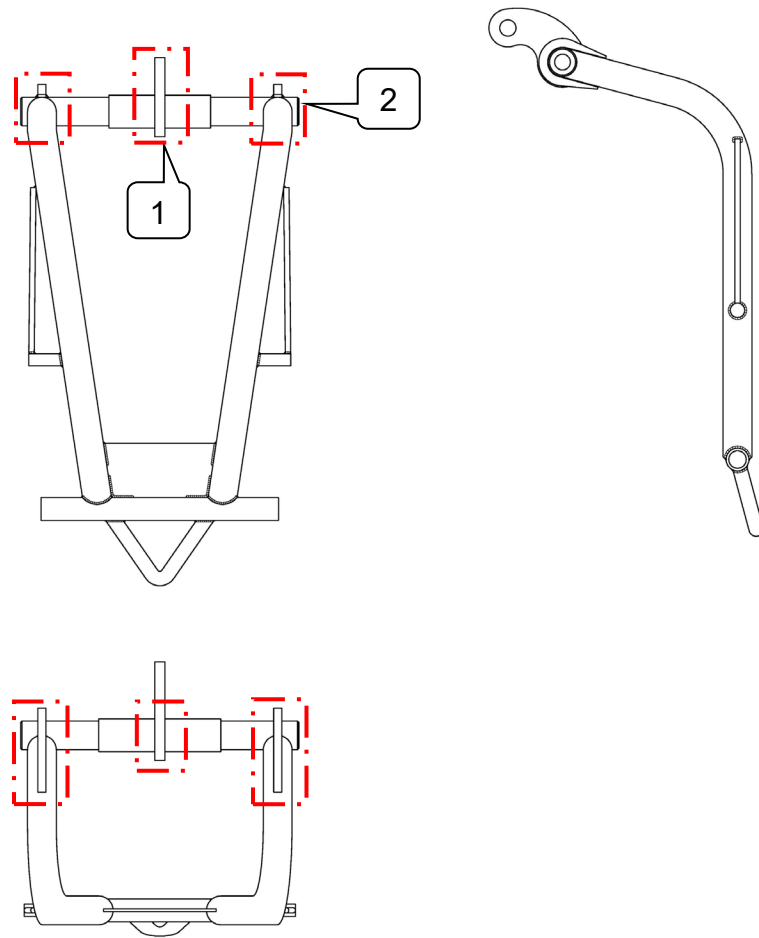
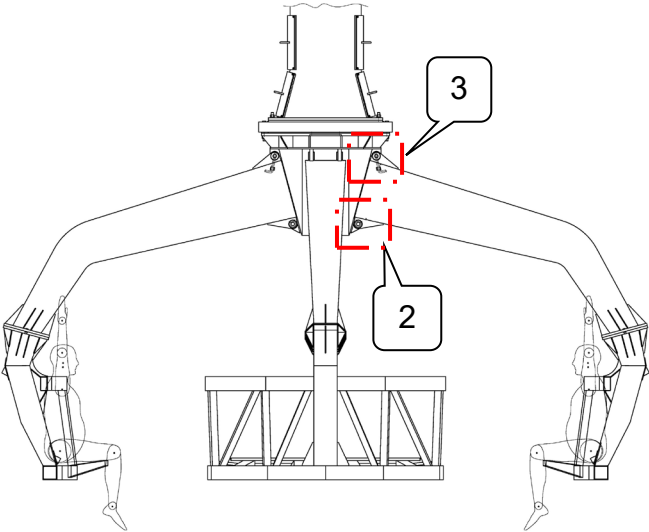
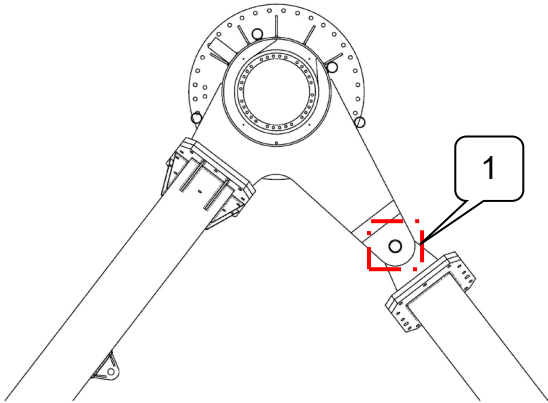


Fig. 13 – Safety lapbars

	Position	Control	Frequency
1	Welding of the central connection ear	VT	Every 2500 hours of operation (or every year)
2	Welding of the lateral clamping plates and connection area between horizontal rod and shoulders pipes		

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6. PINS



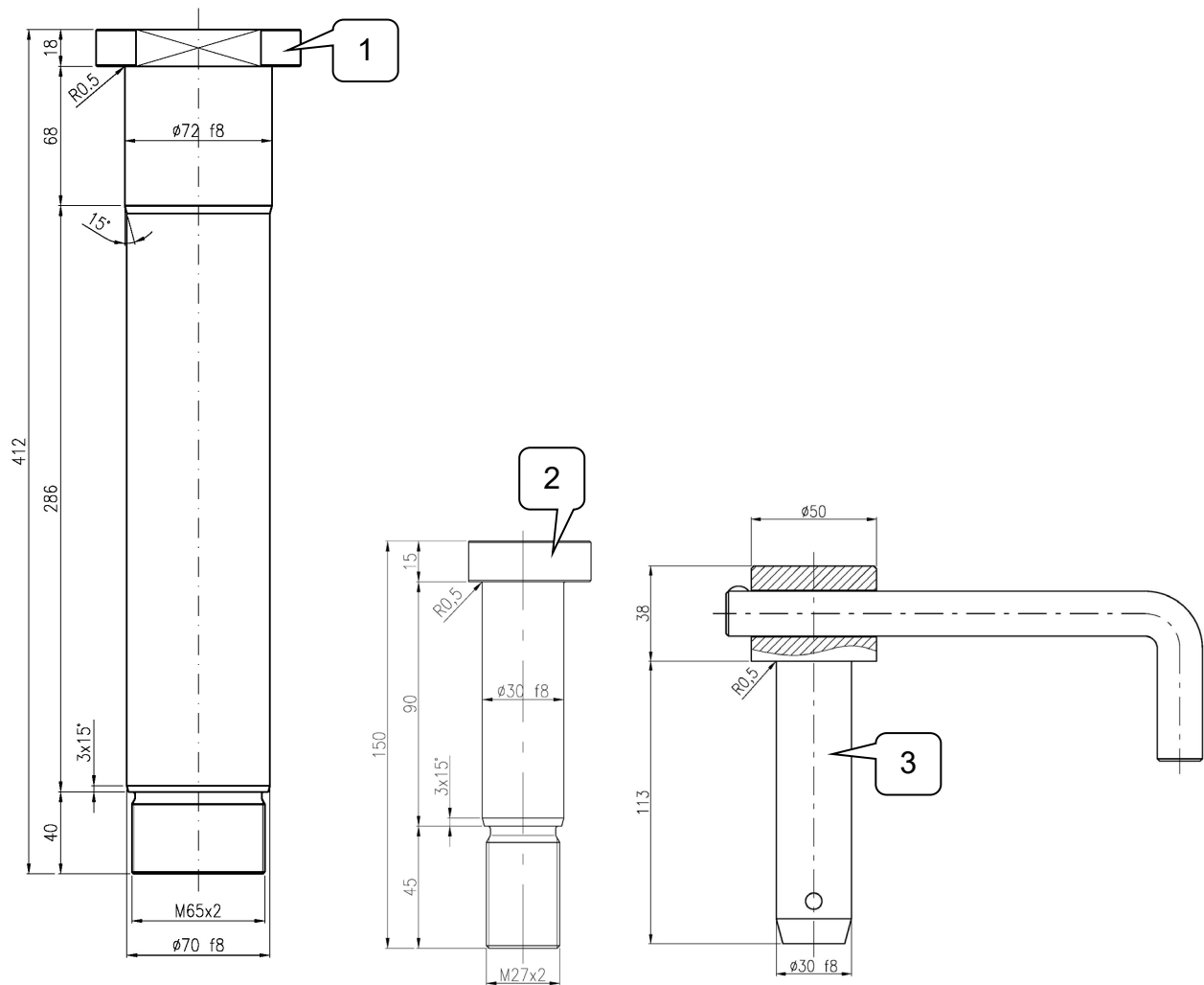


Fig. 14 – Main pins

Position		Control	Frequency
1	Fixed pin of the capital-column articulation	UT	FOR FIXED PINS: UT every 2500 hours of operation or every year
2	Fixed pin of the arm		
3	Removable pin of the arm	UT + MT	FOR REMOVABLE PINS: UT + MT every 2500 hours of operation or every year

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STREET FIGHTER REVOLUTION
NDT CHECKLIST - RECORD TABLE

FIGURE	POINT	NDT	INSPECTIONS SCHEDULE	DATE	PERFORMED BY	RESULT	NOTES	SIGN
1	1	VT	2500 hours (or every year)					
	2	VT	2500 hours (or every year)					
	3	VT	2500 hours (or every year)					
2	1	VT	2500 hours (or every year)					
	2	VT	2500 hours (or every year)					
	3	VT	2500 hours (or every year)					
3	1	VT	2500 hours (or every year)					
4	1	VT	2500 hours (or every year)					
5	1	VT	2500 hours (or every year)					
6	1	VT	2500 hours (or every year)					
	2	VT	2500 hours (or every year)					
	3	VT	2500 hours (or every year)					
7	1	VT	2500 hours (or every year)					
	2	VT	2500 hours (or every year)					
8	1	VT	2500 hours (or every year)					
	2	VT	2500 hours (or every year)					
	3	VT	2500 hours (or every year)					
	4	VT	2500 hours (or every year)					
	5	VT	2500 hours (or every year)					
9	1	VT	2500 hours (or every year)					
	2	VT	2500 hours (or every year)					

TABLE TO BE UPDATED WITH THE FREQUENCY OF THE CHECK

FIGURE	POINT	NDT	INSPECTIONS SCHEDULE	DATE	PERFORMED BY	RESULT	NOTES	SIGN
10	1	VT	2500 hours (or every year)					
	2	VT	2500 hours (or every year)					
11	1	VT	2500 hours (or every year)					
	2	VT	2500 hours (or every year)					
12	1	VT	2500 hours (or every year)					
	2	VT	2500 hours (or every year)					
	3	VT	2500 hours (or every year)					
	4	VT	2500 hours (or every year)					
13	1	VT	2500 hours (or every year)					
	2	VT	2500 hours (or every year)					
14	1	UT	2500 hours (or every year)					
	2	UT	2500 hours (or every year)					
	3	UT+MT	2500 hours (or every year)					

TABLE TO BE UPDATED WITH THE FREQUENCY OF THE CHECK