prep huba skurwyysny

zapierdalamy an ie sie obijamy

REQUIRED TOOLS AND EQUIPMENT

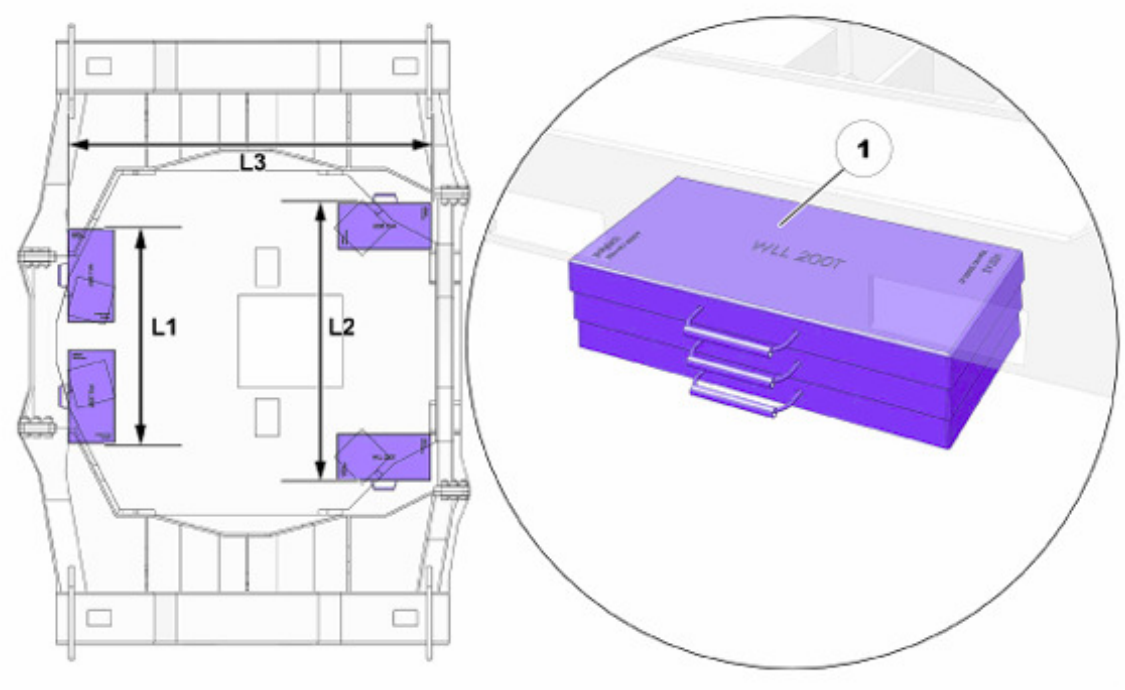
Category	Required (field subset)
Sockets / Spanners	13 mm (M8) 17 mm (M10) 19 mm (M12) 24 mm (M16) 30 mm (M20) 36 mm (M24) 55 mm ring spanner (M42/M48 area)
Torque / Power tools	Torque wrench 10-50 Nm Torque wrench 40-200 Nm Cordless torque tool kit >= 500 Nm Cordless torque tool kit >= 1300 Nm + reaction arm Impact sockets: 30 mm (3/4 and 1 inch), 36 mm (1 inch recessed)
Lifting / Handling	Stacking blocks (rated) Slings 1 t (2 m) + shackles Guiding ropes (as needed) M8 swivel eye bolts + shackles
Consumables	Loctite 243 Never-Seez (anti-seize) Marking pen/paint

mała daga i duża daga co robi tryk tryk
srednie bacho

TORQUE OVERVIEW (LOW TO HIGH)

Bolt / Fastener	Torque [Nm]	Where used
M8 (hatches)	12	Module 14
M10 x 40	35	Ladder install (OEM)
M20 lock nuts (ladder brackets)	40	Ladder install (OEM)
M10 x 50 A4-70	33	Module 8 / Module 13
M12 x 60 (8.8)	62	Module 5
M16 A4-70	140	Modules 5 / 7 / 12
M20 bolts	270	Module 13
M20 x 100	425	Module 4
M24 x 80 (8.8)	535	Spinner front/rear brackets (OEM)
Lifting shaft pins	>= 550	Transport frame removal (OEM)

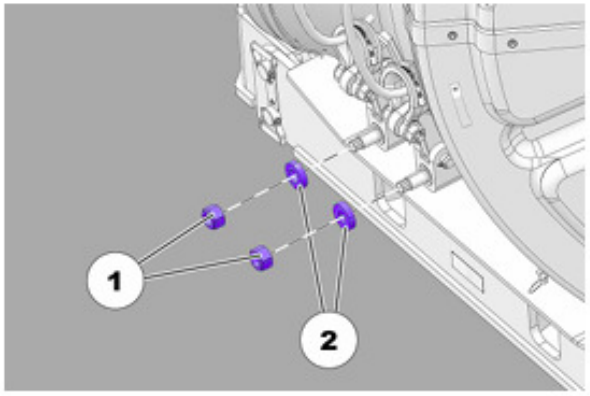
MODULE 1 - HUB OFFLOAD POSITIONING



- Purpose: correct hub positioning during offload
- Hub on level ground
- Use stacking blocks (4 groups x 3 blocks) in designated areas
- Distances L1 / L2 / L3 per drawing

MODULE 2 - TRANSPORT BOLT REMOVAL

5 Remove the 6 x M42 nuts (1) and the 6 washers (2).

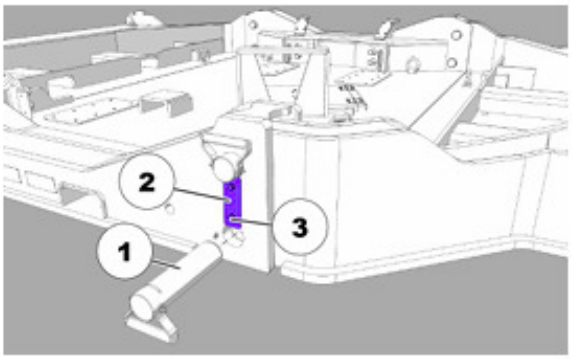


- Remove 6 x M42 nuts and 6 washers (transport bolts)
- Use correct heavy-duty socket
- Support load before removal

MODULE 3 - TRANSPORT FRAME PIN REMOVAL

---

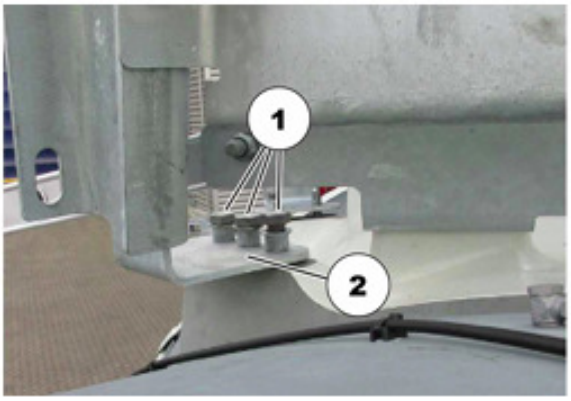
1 Remove the 8 pins that attach the 2 side supports of the transport frame.



- Remove 8 pins fixing the 2 side supports of the transport frame
- Pins must NOT be pulled before side support is supported
- Do not pull pins under load

MODULE 4 - PLATFORM (FLOOR) INSTALLATION

Install the 3 x M20 x 100 bolts (1) on each of the 6 positions on the spinner structure (2) by the use of bushings and washers.

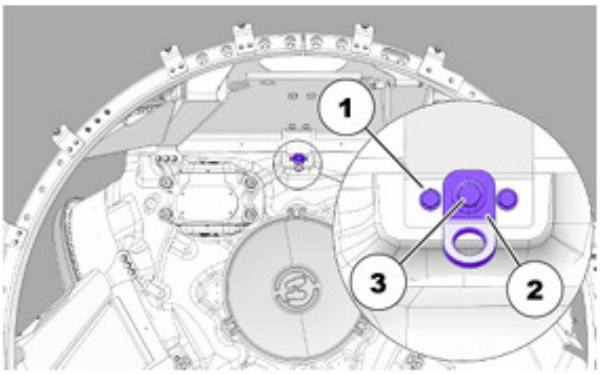


- Install 3 x M20 x 100 bolts at each of 6 positions (use bushings + washers)
- Lubricate M20 bolts (Never-Seez)
- Torque: M20 x 100 = 425 Nm
- Tighten evenly across all positions

MODULE 5 - ANCHOR POINTS (SPINNER STRUCTURE)

---

9 Install the 3 anchor points (2) in the spinner structure (1) by the use of M16 A4-70 bolts (3).

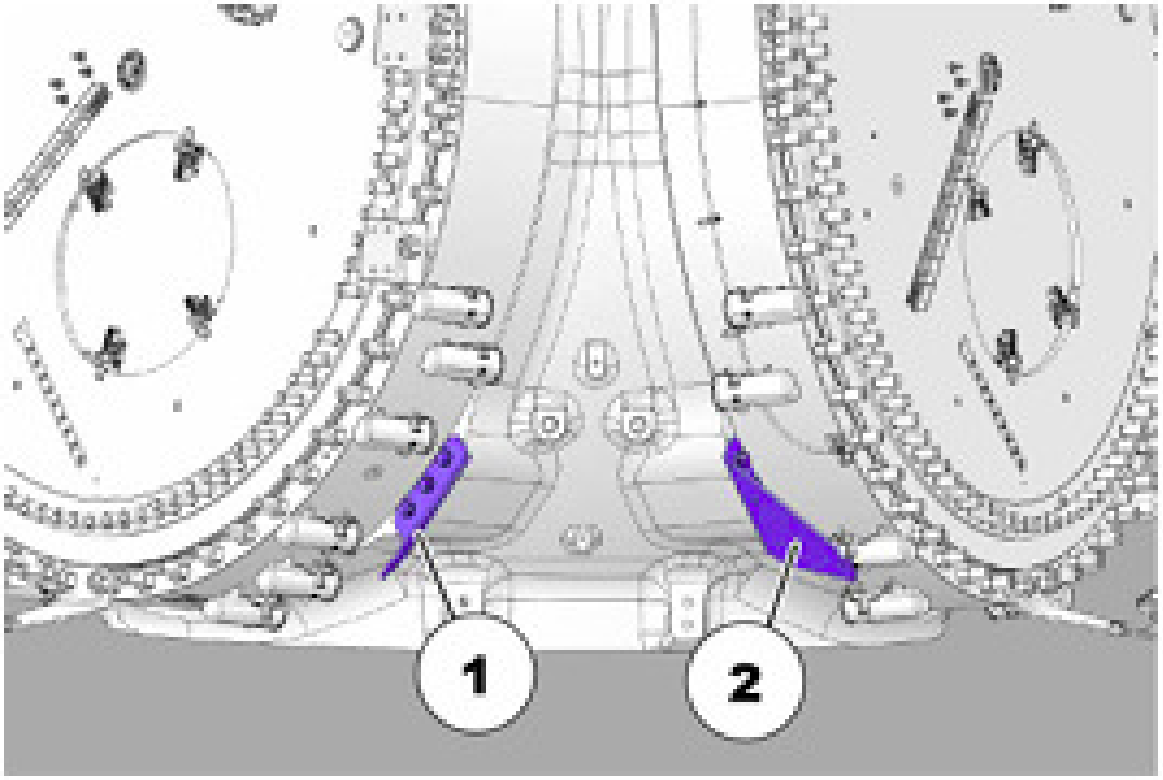


a Lubricate the M12 x 60 8.8 bolts and M16 A4-70 bolts with Never-Seez®.

b Torque the M12 x 60 8.8 bolts to 62 Nm and the M16 A4-70 bolts to 140 Nm.

- Install 3 anchor points in spinner structure
- Lubricate M12 x 60 (8.8) and M16 A4-70 (Never-Seez)
- Torque: M12 x 60 (8.8) = 62 Nm
- Torque: M16 A4-70 = 140 Nm

MODULE 6 - TRIANGLE BRACKET INSTALLATION



- Install triangle brackets in designated positions
- Correct LH / RH orientation required
- Anchor hole must point upwards

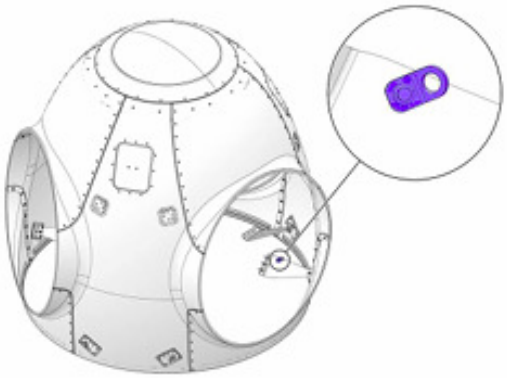
ostra krawedz patrzy do gory

dziura od ancher pointa i skylotec patrzy do gory

MODULE 7 - ANCHOR POINT (RH ONLY)

! Install the anchor point on the spinner support bracket by the use of the M16 A4-70 bolt.

The anchor point must be installed only on the right-hand side of the spinner support bracket.



a Lubricate the M16 A4-70 bolt with Never-Seez®.

b Torque the M16 A4-70 bolt to 140 Nm.

- Install anchor point only on RIGHT-HAND side (reference: looking from manhole)
- Lubricate M16 A4-70 bolt (Never-Seez)
- Torque: M16 A4-70 = 140 Nm
- Left-hand side installation NOT allowed

tylko prawa strona jak patrzymy od dziurki

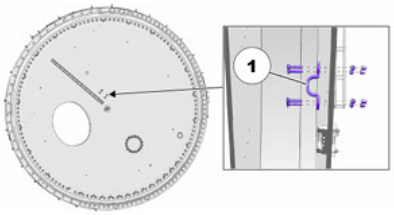
MODULE 8 - ANCHOR POINT POSITION CHECK (BLADE BEARINGS)

13 Do a check to see if the 3 anchor points are installed on the outer side of the 3 blade bearings.

If they are installed on the outer side of the blade bearing, the remaining procedure is not required. If the 3 anchor points are installed on the inner side, the steps that follow must be done.

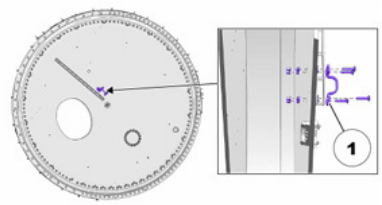
---

14 Remove the anchor point (1) from the inner side of all blade bearings.



---

15 Install the anchor point (1) onto the outer side of all blade bearings.



a Torque the M10X50 A4-70 bolts to 33 Nm.

- Check 3 anchor points on blade bearings
- Correct position: OUTER side of blade bearing
- If correct: no further action required
- If inner side: relocate; torque M10 x 50 A4-70 = 33 Nm

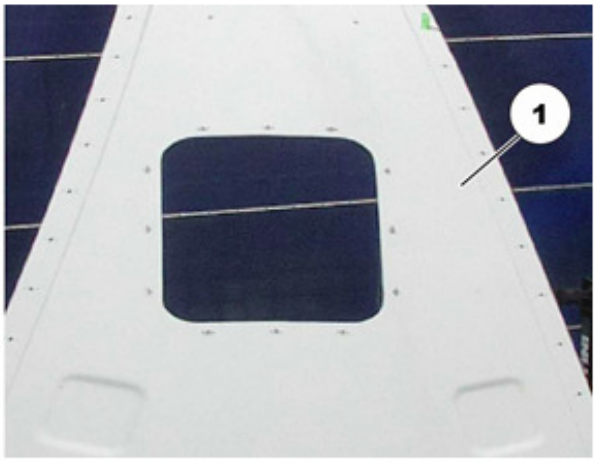
jak jest git to git

Jak nie jest git to poprawiamy

MODULE 9 - HATCH REMOVAL (IF INSTALLED)

---

1 Remove the hatch from the large spinner shell (1), if installed.

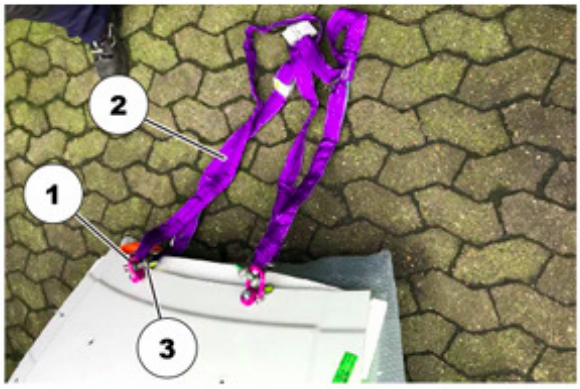


- Remove hatch from large spinner shell if installed

jak sa hatche to sciagamy ale nie wiem po chuj moga byc od razu chyba przykrecone

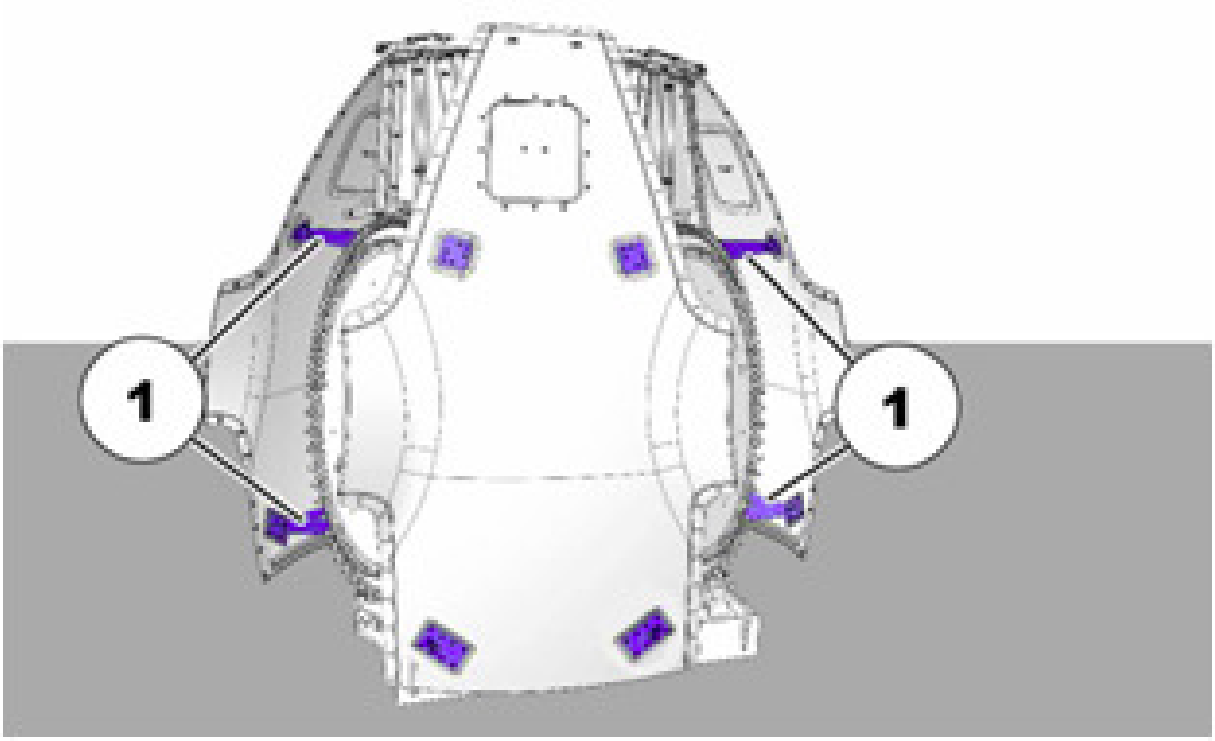
MODULE 10 - LIFTING ATTACHMENT (LARGE SPINNER SHELL)

3 Attach the 2 x M8 swivel eye bolts (1) to the 2 lifting slings (2) by the use of shackles (3).

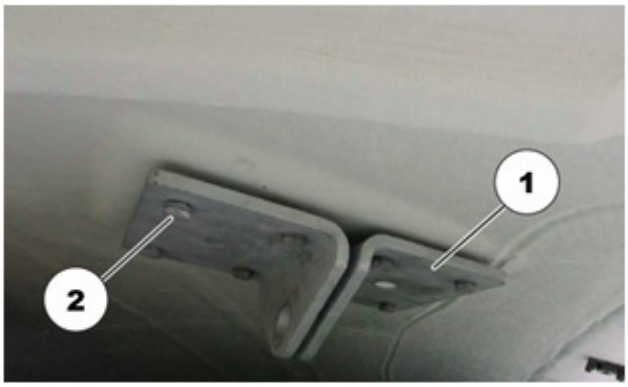


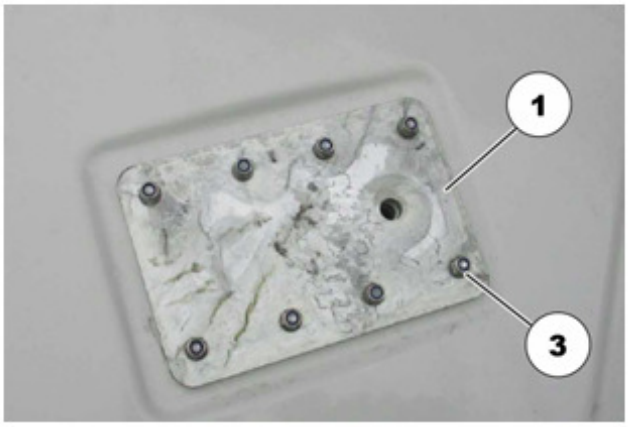
- Install 2 x M8 swivel eye bolts
- Connect 2 lifting slings using shackles
- Second image shows correct lifting setup

MODULE 11 - BRACKET INSTALLATION (ON GROUND)

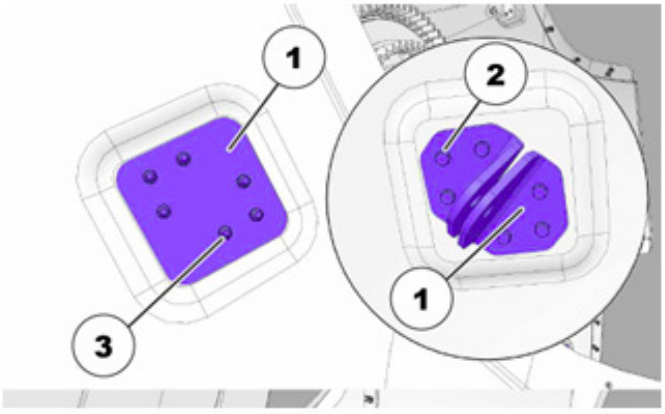


Install the bracket (1) for the lower structure on the large spinner shell by the use of M10 x 50 bolts (2) on the inner side and the nuts (3) on the outer side.





Install the bracket (1) for the front structure on the large spinner shell by the use of M10 x 50 bolts (2) on the inner side and the nuts (3) on the outer side.

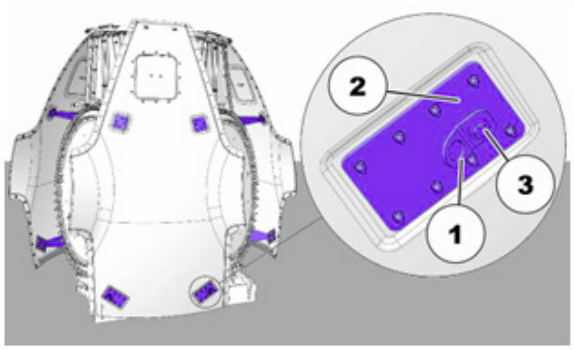


- Install brackets on large spinner shell ON GROUND (site method)
- Use M10 x 50 bolts from INNER side; nuts on OUTER side
- Lubricate M10 x 50 bolts (Never-Seez)
- Lower bracket = image 2; upper/front bracket = image 3

skierowane zawsze do srodka zeby weszly w trojkaty

MODULE 12 - ANCHOR POINTS ON LOWER BRACKETS + TAGS

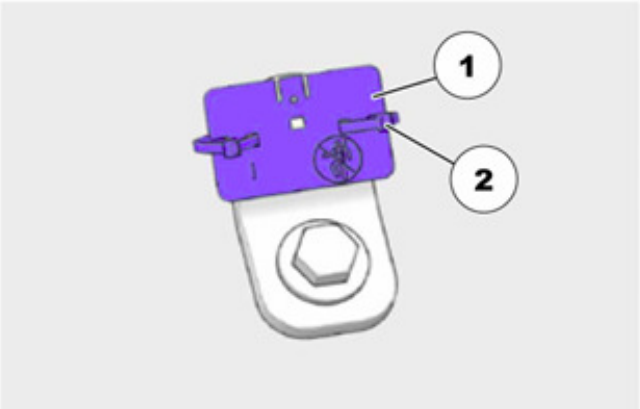
9 Install the anchor point (1) on the bracket (2) for the lower structure by the use of M16 A4-70 bolt (3).



a Lubricate the M16 A4-70 bolt with Never-Seez®.

b Torque the M16 A4-70 bolt to 140 Nm.

Put the tag (1) on the top of the anchor plate and attach the cable ties (2) on each side.

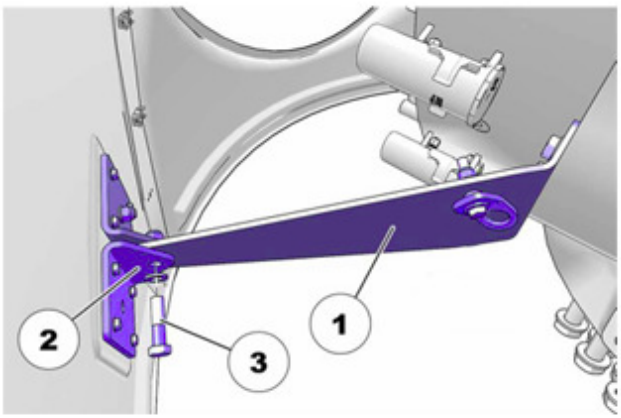


- Install anchor point on lower bracket using M16 A4-70 bolt
- Lubricate bolt (Never-Seez)
- Torque: M16 A4-70 = 140 Nm
- Install retaining tag plate on top + secure with cable ties on both sides

anchery tylko od dolu, instrukcja dla blaszki

MODULE 13 - TRIANGLE TO BRACKET CONNECTION

Connect the spinner support brackets (1) and the spinner shell brackets (2) by the use of M20 bolts (3).



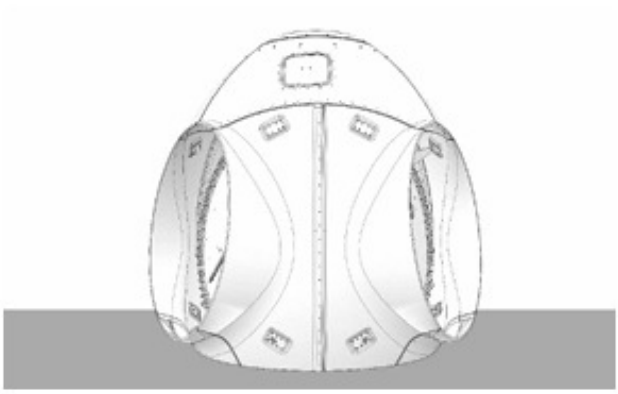
- Connect spinner support brackets and spinner shell brackets using M20 bolts
- Lubricate M20 bolts (Never-Seez)
- Torque: M20 bolts = 270 Nm
- Torque: M10 bolts on front/rear spinner brackets = 33 Nm
- M20 nuts must point away from each other

nakrętka do blade bearinga

główki patrzą na siebie pomiedzy trojkatami

MODULE 14 - HATCHES (INFO + INSTALLATION)

Install the 3 hatches in the spinner shells by the use of M8 bolts.



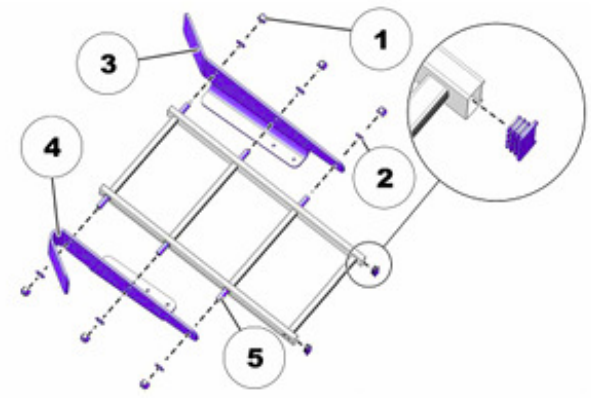
a Apply Loctite® 243™ to the M8 bolts.

- Install 3 hatches in spinner shells using M8 bolts
- Apply Loctite 243 to M8 bolts
- Torque: M8 bolts = 12 Nm (from inner side)

MODULE 15 - LADDER CONNECTION

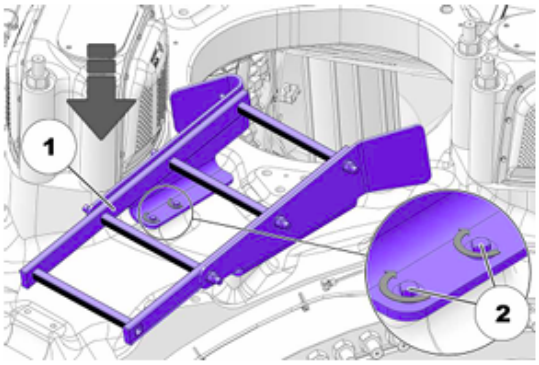
---

1 Put the 3 threaded rods (5) (item no. 29018500) one after the other into the ladder rungs.

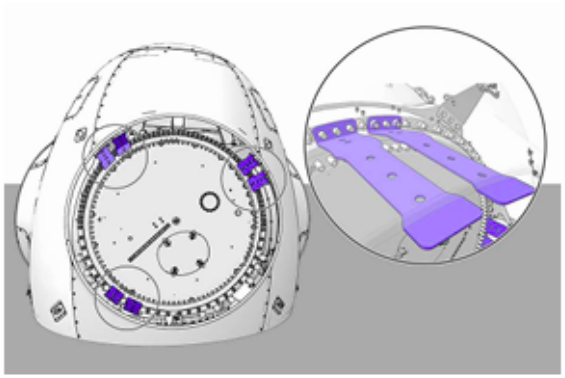


- Correct connection of ladder sections using threaded rods
- Install 3 threaded rods into ladder rungs (one after another)
- Alignment correct before tightening

drabinki przykrecamy na trick od szefa prepów Pancia



4 Install the 6 HIM yoke guide tools on blade bearing A, as the hub will be lifted on blade bearing A.



a Torque the M36 nuts to 100 Nm.