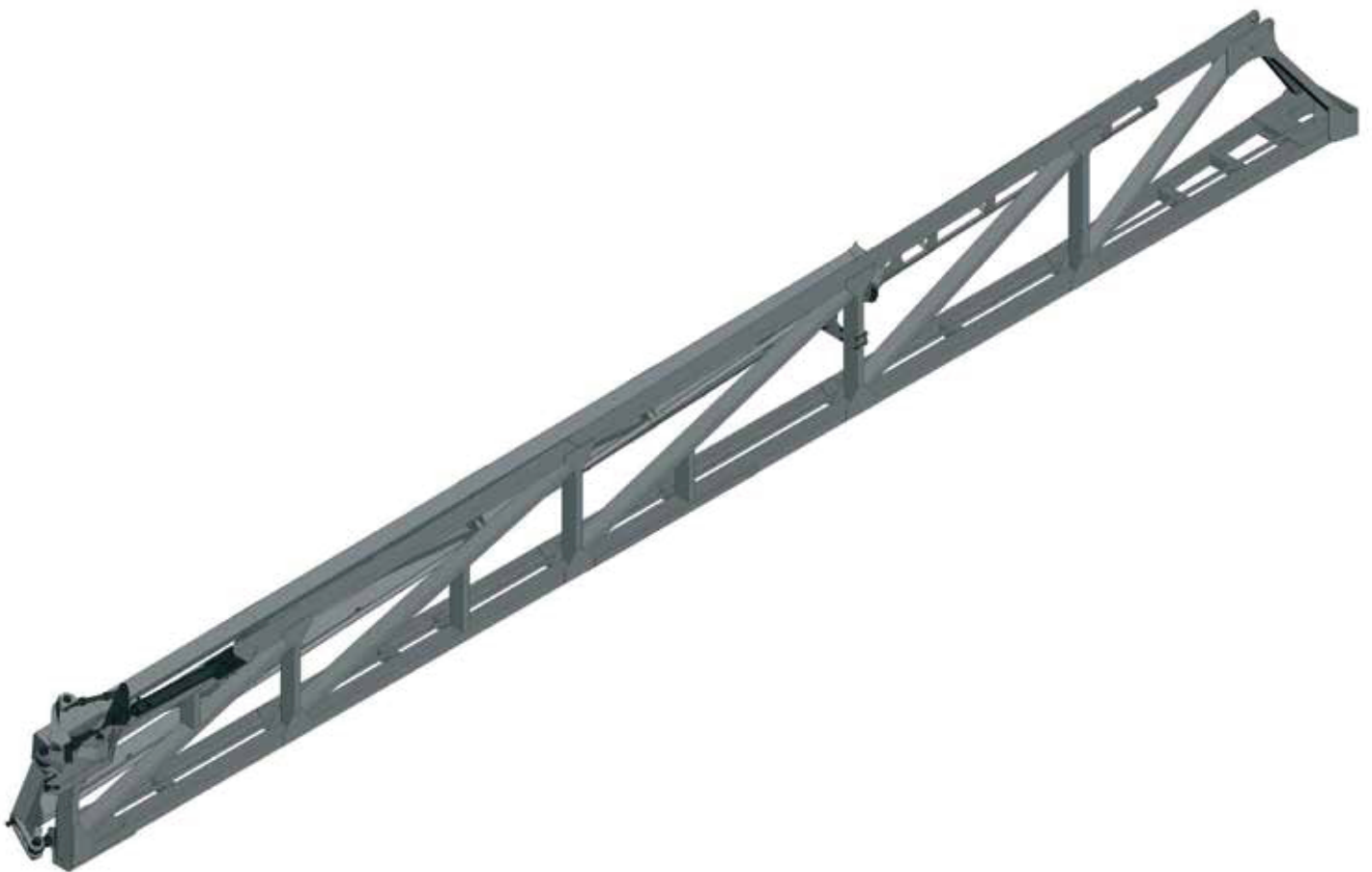


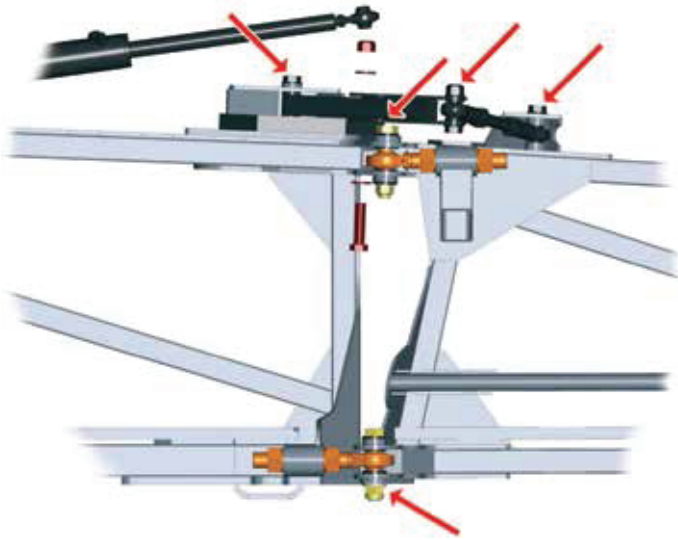
# *Adjustment and maintenance instructions*

## *RA-Falcon boom*



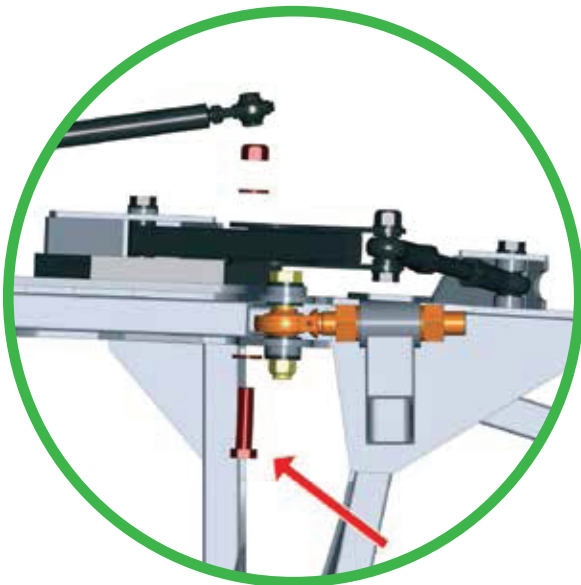
[www.pommier-scebp.com](http://www.pommier-scebp.com)

# RA-Falcon boom adjustments

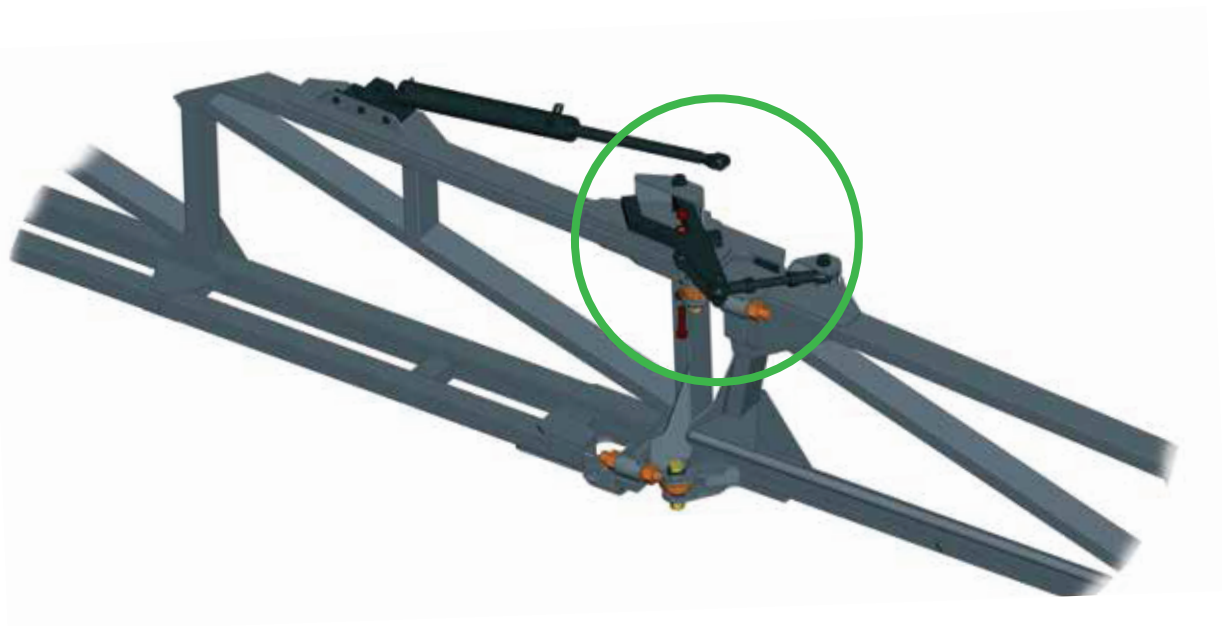


Before adjusting the boom, tighten all the bolts at the linkage points.

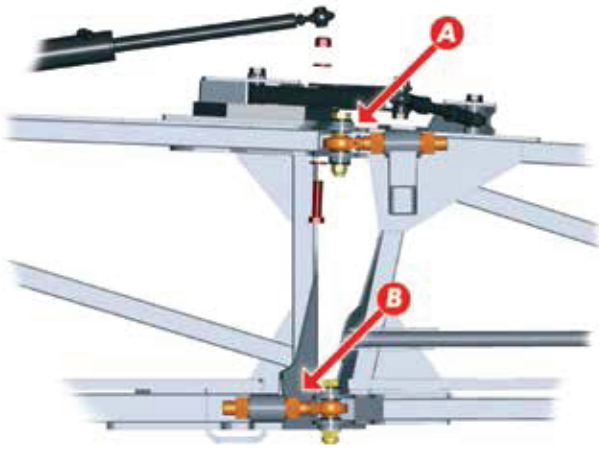
Use a wrench with a tube to tighten the bolts to maximum.



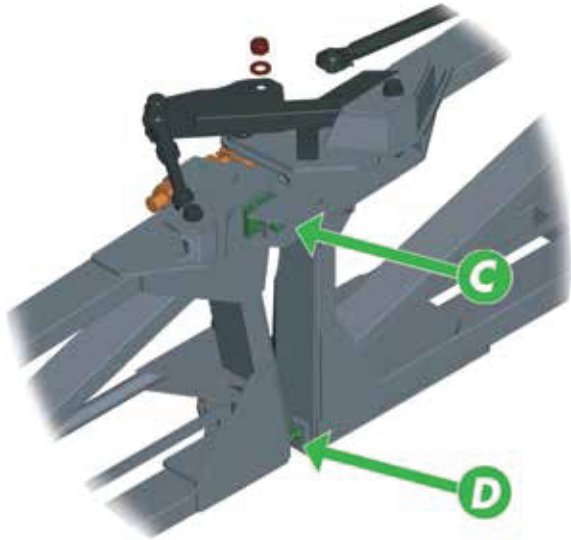
1/ Unfold the boom and remove the bolt at the cylinder rod end.





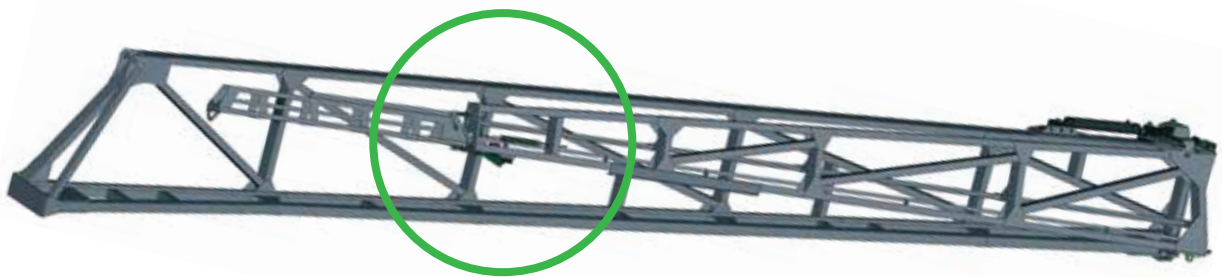


2/ Check if inner and outer sections are perfectly horizontal.  
 If not, screw or unscrew the two ball joints **A** and **B**.  
 Tighten the ball joint nuts very slightly once the boom is perfectly horizontal.



At the same time, pre-adjust the two stops **C** and **D** between inner and outer sections so that the boom is well straight.

3/ Fold the boom by hand so that the outer section gently rests in its bracket on the inner section.



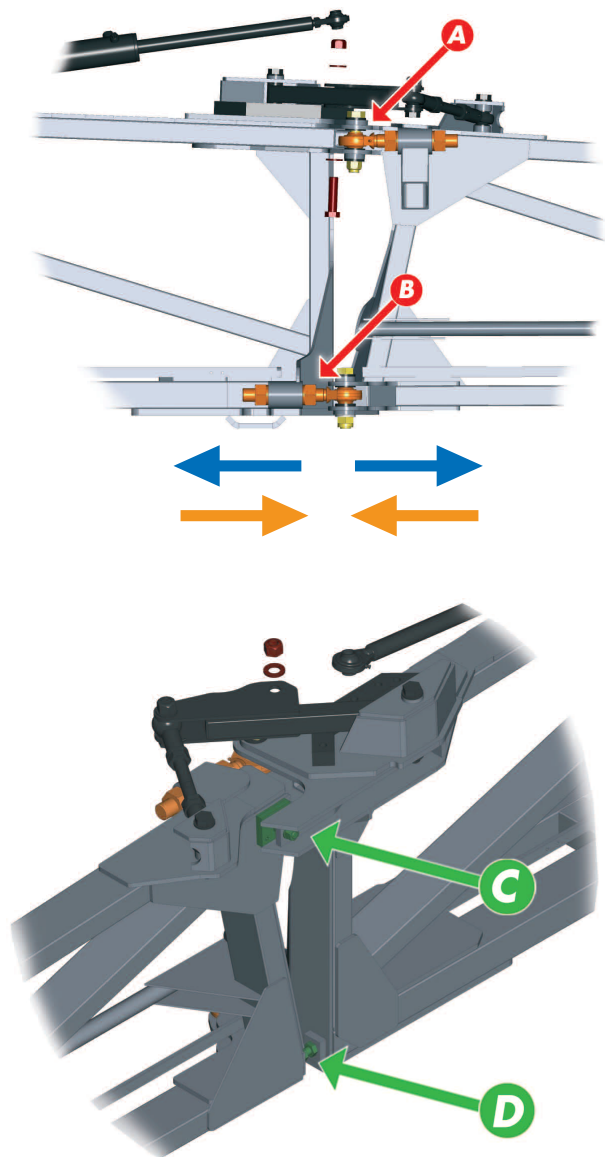
Adjustment too low



Correct adjustment



Adjustment too high



4/ If the outer section is too high, unfold the boom again and without disturbing the horizontal setting, adjust the two ball joints A and B.

You must move away the outer section from the inner section.

On the other hand, if in folded position, the outer section is too low, you have to bring the outer section closer to the inner section.

When the outer section sits correctly on its bracket, tighten the ball joint nuts. To ensure a proper tightening, we recommend to use a tube as an extension at the end of the wrench.

Check again the alignment of the boom by refining the adjustment of stops C and D.

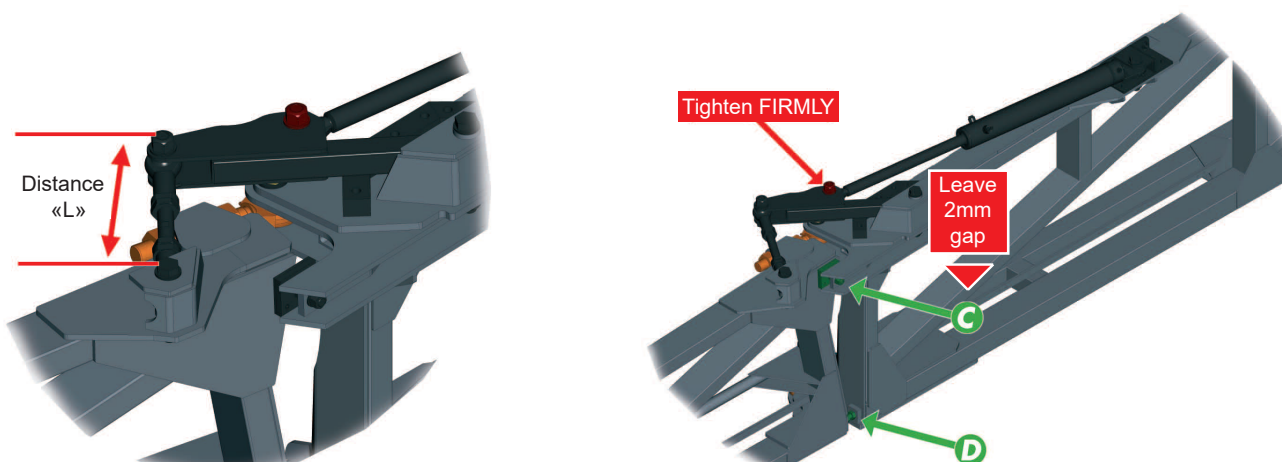
### VERY IMPORTANT

- Stop D must be in contact
- There must be a 2mm gap between stop C and the aluminum

5/ Re-attach the cylinder rod to the hinge arm and tighten strongly the bolt.

6/ Reduce the distance «L» as much as possible on the double ball joint. Hydraulically, fully extend the cylinder and then increase the distance «L» until stop D is in contact.

When stop D is in contact, stop C should be at 2mm of touching the aluminum.



7/ Continue to increase the distance «L» of the double ball joint until stop C comes in contact.

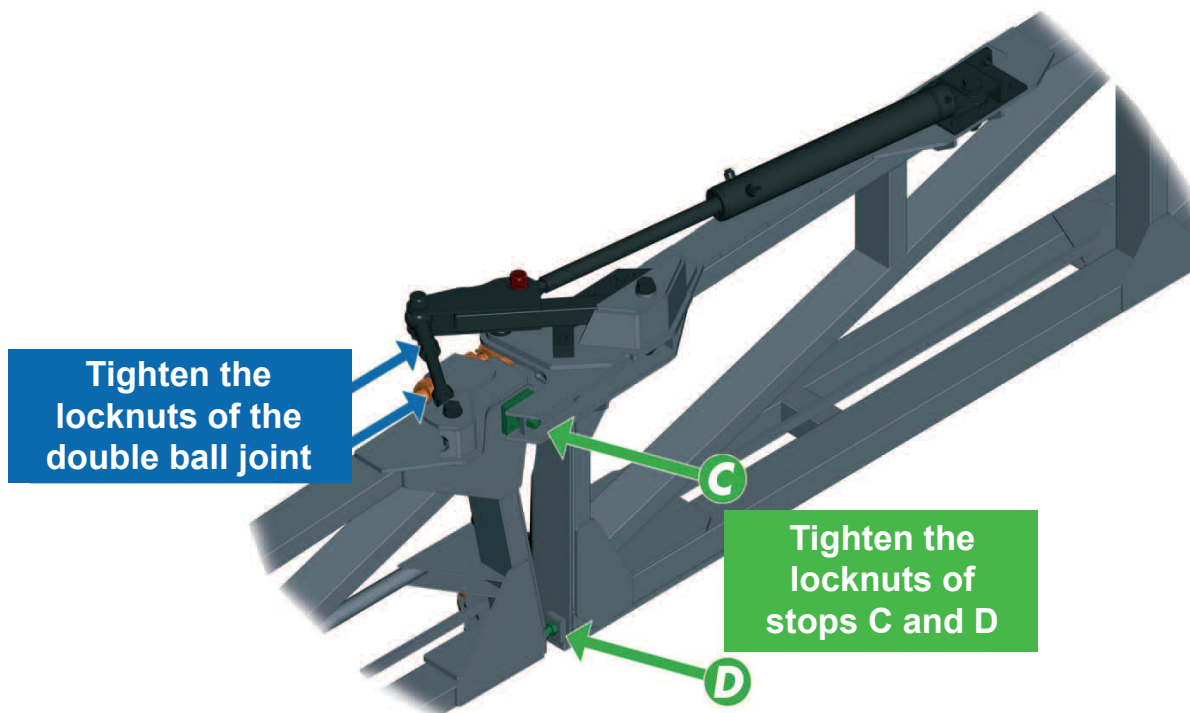
8/ Continue to unscrew the double ball joint until a slight buckling is visible on the cylinder rod. (The buckling corresponds approximately to 2 to 3mm of additional stroke on the rod).

**Caution!** During this operation, verify that the cylinder is fully extended so when you unscrew the double ball joint, this is not the cylinder that retracts.

9/ Check again that the boom is still well aligned with the cylinder under hydraulic pressure because it could maladjust slightly the boom.

Repeat step 6 if you need to readjust stops C and D.

When the boom is perfectly straight, tighten strongly the locknuts of stops C and D as well as those of the double ball joint.



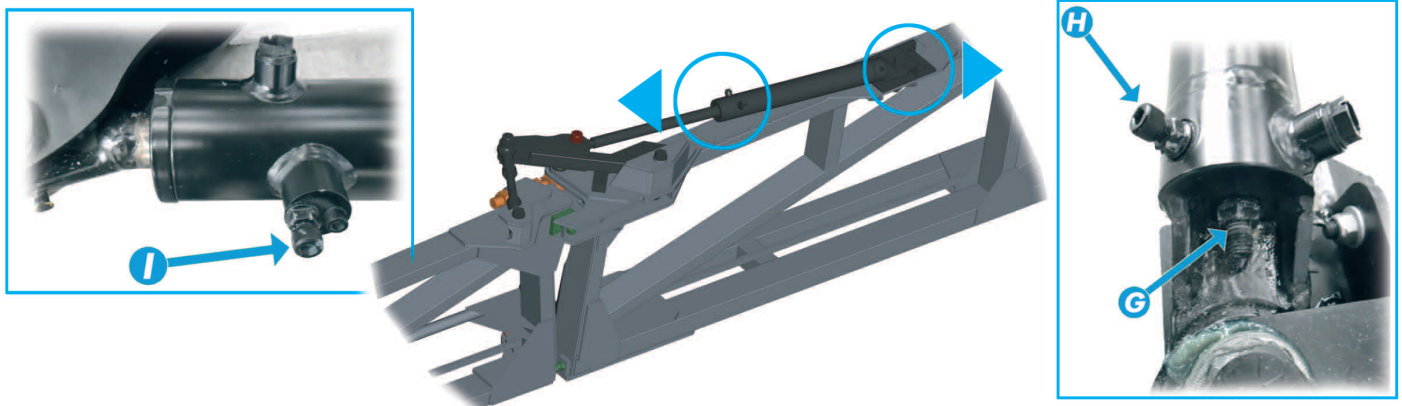
## 10/ Adjustment of the hydraulic soft closures:

Screw **H** adjusts the hydraulic soft closure for folding the boom; screw **I** adjusts the hydraulic soft closure for unfolding the boom.

Unfold the boom approximately halfway, then loosen the locknut and tighten screw **H** completely but do not force. Fold the boom completely.

The boom will suddenly stop at the point where the soft closure takes effect. Now loosen screw **H** to control and adjust the hydraulic soft closure. The boom must not smash into its bracket but close gently on it.

As the setting is very sensitive, proceed slowly by rotating the screw of one tenth of a turn at a time. It is better to make the adjustment when the oil is warm. Once the adjustment is complete, hold firmly screw **H** and tighten the locknut. You can now adjust screw **I** for the soft closure in opening by repeating the same operations.



## 11/ (only applicable to the booms equipped with a folding cylinder having a grub screw and a locknut on the location as shown on the picture).

Remove the hydraulic hoses and unscrew screw **G**. Fold the boom manually until the outer section is in its bracket on the inner section.

Tighten screw **G** until you feel resistance. This means the screw is pushing against the cylinder rod. When the screw is in contact with the rod, unscrew it by approximately 2 to 3 mm, then tighten the locknut. Screw **G** adjusts the retraction stroke of the cylinder rod.

## Cleaning the aluminum boom

-Clean the boom once a year with a suitable product as «SUPER NET ALU».



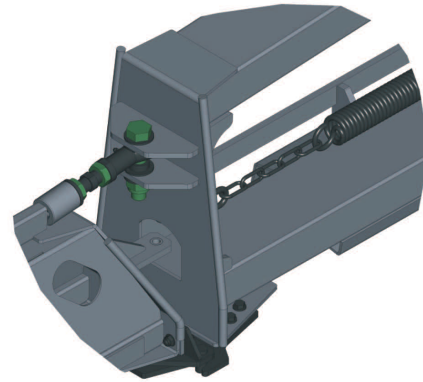
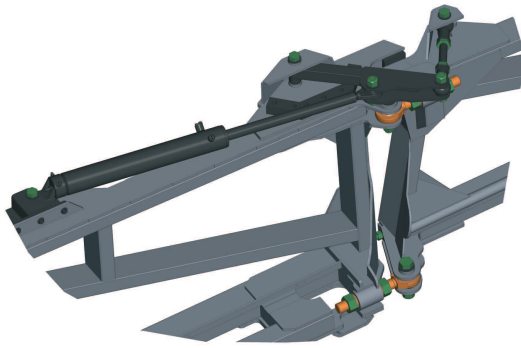


# Maintenance & care of your aluminum boom

## Weekly checks

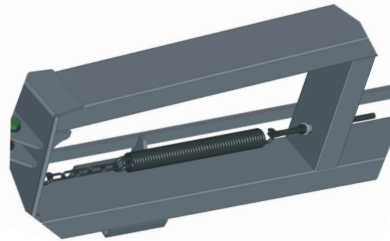
### Bolts and nuts check

-Check that all the bolts and nuts are correctly tightened or if necessary tighten them with suitable tools (**wrench with 1 meter long extension tube**).



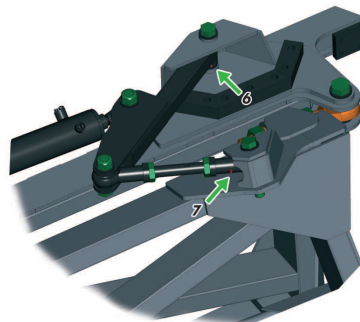
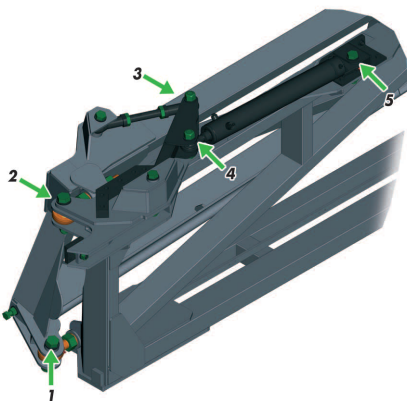
### Spring

-Check the breakaway spring tension. The tension of the spring is its zero state plus **100mm (4 inches)**.

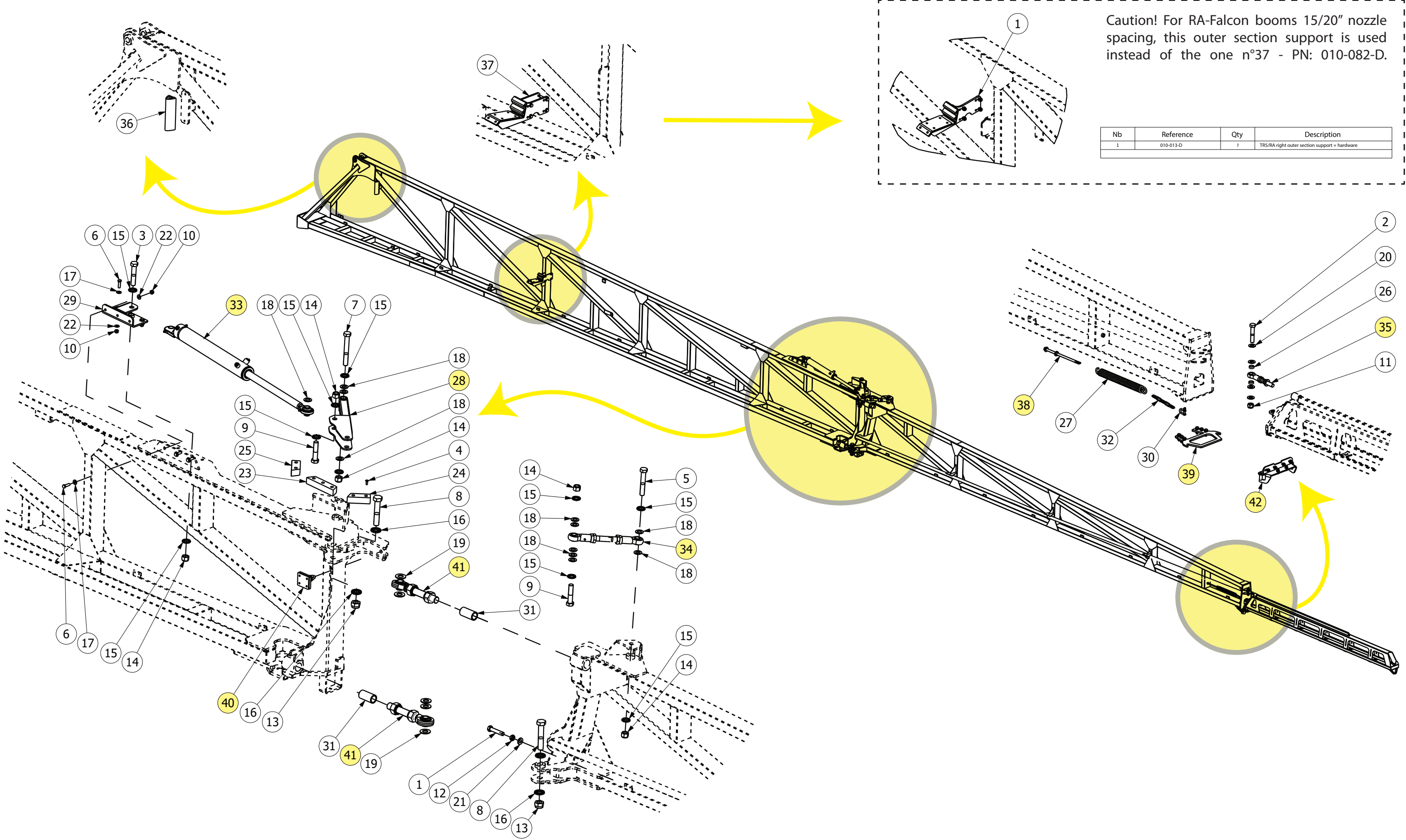


### Lubrication

-Lubrication of all linkage points as well as all ball joints and pin joints. (**8 grease fittings along the boom**).



# Standard RA-Falcon boom nomenclature



Caution! For RA-Falcon booms 15/20" nozzle spacing, this outer section support is used instead of the one n°37 - PN: 010-082-D.

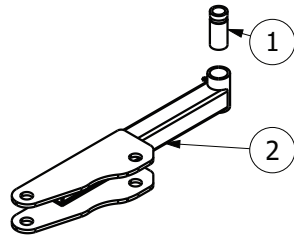
Nb	Reference	Qty	Description
1	010-013-D	1	TR5/RA right outer section support + hardware



# Standard RA-Falcon boom nomenclature

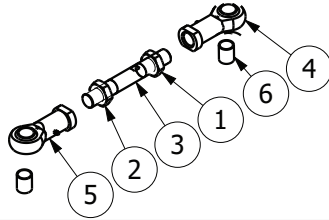
Repère	Référence	Qté(s)	Désignation
1	000-015-0	1	HH screw M20x100 DIN933 Deltaprotekt
2	000-016-0	1	HH screw M20x100 DIN931 Deltaprotekt
3	000-024-0	1	HH screw M1"x5" DIN931 Deltaprotekt
4	000-038-0	7	Socket flat head screw M8x25 DIN933 Deltaprotekt
5	000-232-0	1	HH screw M1"x6" DIN931 Deltaprotekt
6	000-257-0	5	HH screw M12x40 DIN933 Deltaprotekt
7	000-264-0	1	HH screw M1"x7 1/2" DIN931 Deltaprotekt
8	000-347-0	2	HH screw M30x160 DIN931 Deltaprotekt
9	000-363-0	2	HH screw M1"x4 1/2" DIN931 Deltaprotekt
10	000-484-0	5	Lock nut M12 stainless
11	000-486-0	1	Lock nut M20 stainless
12	000-510-0	1	Low hex nut M24 200 right pitch
13	000-627-0	2	Lock nut M30 stainless
14	000-641-0	5	Lock nut 1" stainless
15	000-702-0	10	Self-locking washer Ø1" large
16	000-703-0	4	Self-locking washer Ø30 large
17	000-795-0	5	Flat washer Ø12 Deltaprotekt
18	000-813-0	11	Flat washer Ø26 Deltaprotekt
19	000-814-0	5	Flat washer Ø30 Deltaprotekt
20	000-819-0	4	Flat washer Ø20 Deltaprotekt
21	000-831-0	1	Contact washer Ø20
22	000-837-0	5	Contact washer Ø12
23	001-029-0	1	Hinge arm plastic support 178/220x50x40 drilled
24	001-031-D	1	Right hinge arm plastic support 115/135x50x40 drilled
25	001-031-G	1	Left hinge arm plastic support 115/135x50x40 drilled
26	001-231-0	2	Bushing Øext28/Øint20 thk 9.5 Deltatone
27	001-285-0	1	Traction spring wire Ø7.5 lg: 405 mm
28	001-795-D	1	Right hinge arm with bushing
29	002-513-D	1	TR5/RA folding cylinder right fastening
30	002-563-0	1	Clevis Ø8mm stainless
31	002-643-0	2	Bushing for Ø39mm ball joint
32	002-743-0	1	Chain 5 links 35x10 wire Ø5 Deltatone
33	003-634-D	1	Cylinder DA Ø70/40 S500 right painted
34	010-007-0	1	Double ball joint with bushings Øint 26 and threaded rod lgth 220mm
35	010-017-0	1	Ball joint Ø20 with threaded rod M20 lgth 125mm
36	010-027-0	1	Triangular rubber lg 200mm + screws
37	010-082-D	1	RA Falcon outer section right support + back plate + screws
38	010-090-0	1	Complete breakaway spring hook
39	010-098-0	1	RA breakaway hinge plate + screws
40	010-106-0	1	Radial stop + screws
41	010-252-0	2	Ball joint Ø30.2 threaded M39x200 + screws
42	010-303-0	1	TR5/RA breakaway reinforced hinge angle + screws

**28** 001-795-D  
001-795-G



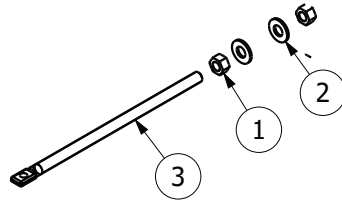
Nb	Reference	Qty	Description
1	001-799-0	1	Bushing Øext35 thk5mm lgth 82mm
2	002-773-D	1	Right hinge arm without bushing

**34** 010-007-0



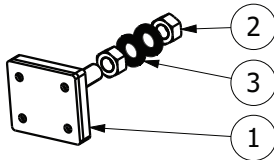
Nb	Reference	Qty	Description
1	000-514-0	1	Low hex nut M24 200 right pitch
2	000-515-0	1	Low hex nut M24 200 right pitch
3	001-007-0	1	Threaded rod RH/LH M30 pitch 200 lg 220
4	001-602-D	1	Female Ball joint Ø30 Right threaded
5	001-602-G	1	Female Ball joint Ø30 left threaded
6	001-933-0	2	Steel bushing Ø30 x Ø26 x30.6

**38** 010-090-0



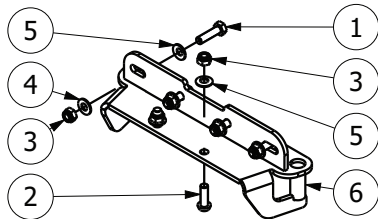
Nb	Reference	Qty	Description
1	000-500-0	2	Hex nut M12 Deltaprotekt
2	000-795-0	2	Flat washer Ø12 Deltaprotekt
3	002-086-0	1	Spring hook

**40** 010-106-0



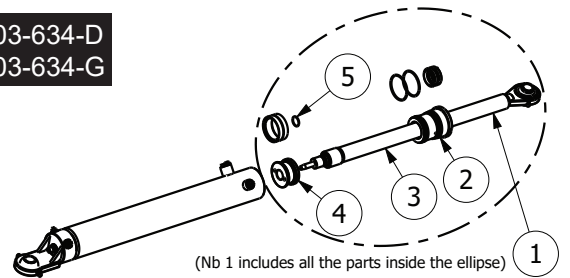
Nb	Reference	Qty	Description
1	001-205-0	1	Radial stop for RA boom
2	000-502-0	2	Hex nut M18 Deltaprotekt
3	000-712-0	2	Self-locking washer Ø18 large

**42** 010-303-0



Nb	Reference	Qty	Description
1	000-178-0	4	HH screw M8x30 DIN933 Deltaprotekt
2	000-250-0	2	Button screw M8x25 DIN933 Deltaprotekt
3	000-538-0	6	Lock nut M8 stainless
4	000-797-0	4	Flat washer Ø8 Deltaprotekt
5	000-833-0	6	Contact washer Ø8
6	020-706-0	1	TR5/RA breakaway reinforced hinge angle

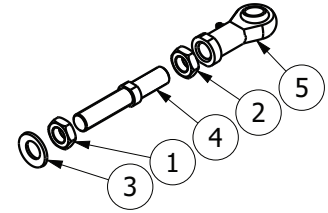
**33** 003-634-D  
003-634-G



(Nb 1 includes all the parts inside the ellipse)

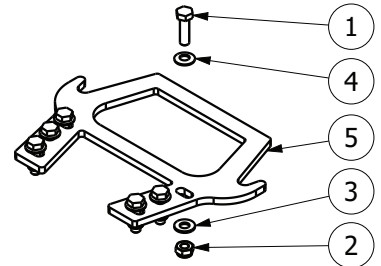
Nb	Reference	Qty	Description
1	002-190-0	1	Complete Ø70/40 S500 cylinder rod with head + seals
2	002-557-0	1	Cylinder head DA 70/40
3	003-707-0	1	Cylinder rod DA Ø70/40 S500
4	002-583-0	1	Piston DA 70/40
5	001-178-0	1	Cylinder seals kit DA 70/40

**35** 010-017-0



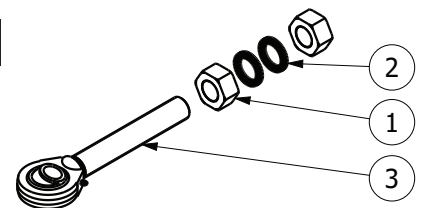
Nb	Reference	Qty	Description
1	000-510-0	1	Low hex nut M24 200 right pitch
2	000-512-0	1	Low hex nut M24 200 right pitch
3	000-831-0	1	Contact washer Ø20
4	001-004-0	1	Threaded rod LH M20x150 / RH M20x250 lg 125 Deltatone
5	001-601-G	1	Female ball joint Ø20mm left thread

**39** 010-098-0



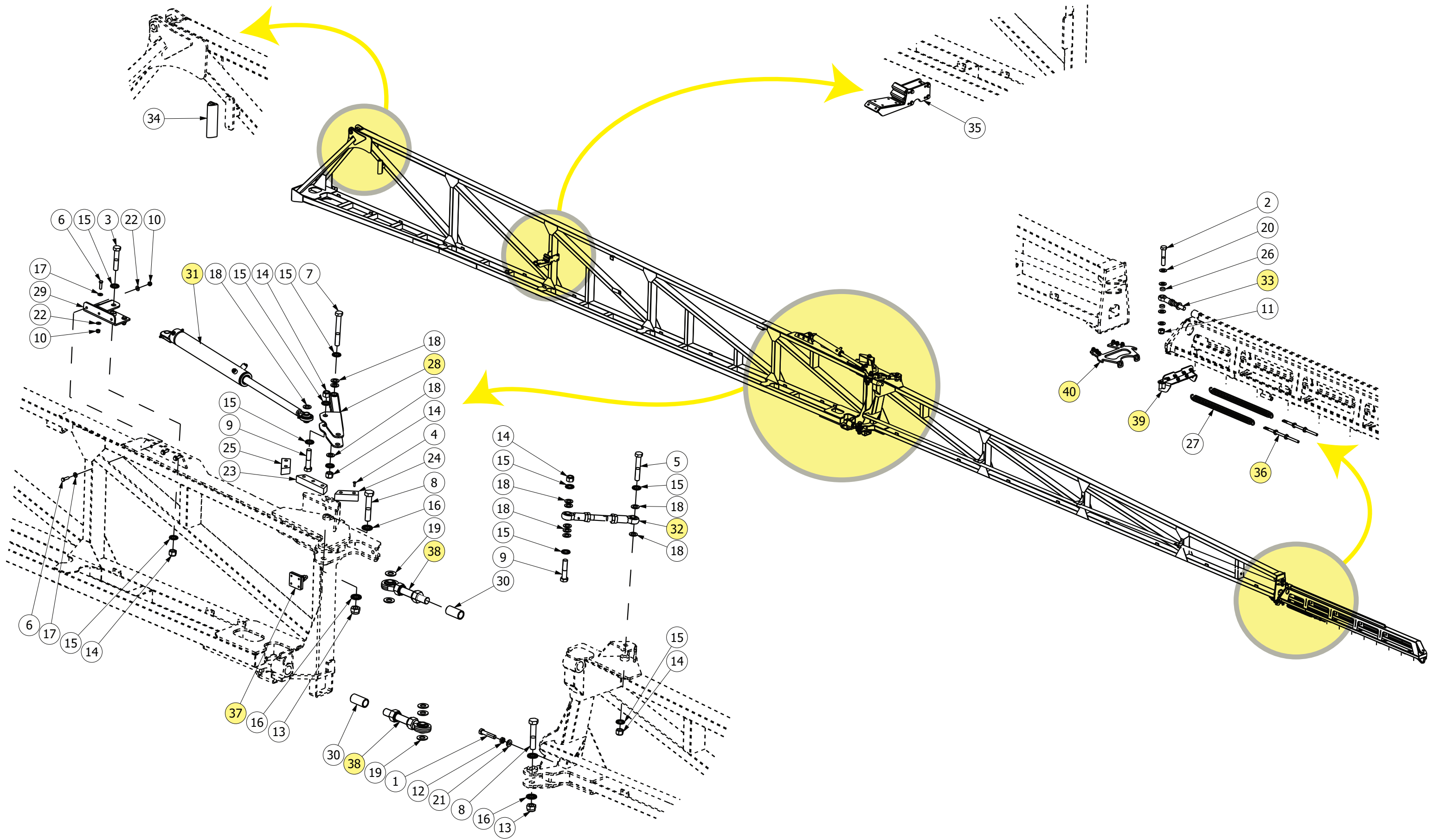
Nb	Reference	Qty	Description
1	000-197-0	6	HH screw M10x35 DIN933 Deltaprotekt
2	000-539-0	6	Lock nut M10 stainless
3	000-796-0	6	Flat washer Ø10 Deltaprotekt
4	000-838-0	6	Contact washer Ø10
5	001-987-0	1	RA breakaway hinge plate

**41** 010-252-0



Nb	Reference	Qty	Description
1	000-630-0	2	Hex nut M39 pitch 200 Deltaprotekt
2	000-713-0	2	Self-locking washer Ø39 large
3	002-153-0	1	Ball joint Ø30.2 threaded M39x200

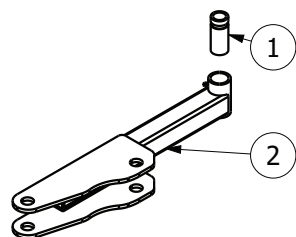
# RA-Falcon boom 250mm nozzle spacing nomenclature



# RA-Falcon boom 250mm nozzle spacing nomenclature

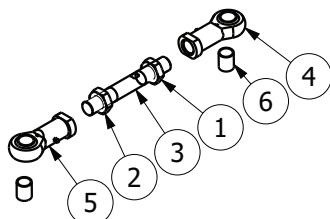
Repère	Référence	Qté(s)	Désignation
1	000-015-0	1	HH screw M20x100 DIN933 Deltaprotekt
2	000-016-0	1	HH screw M20x100 DIN931 Deltaprotekt
3	000-024-0	1	HH screw M1"x5" DIN931 Deltaprotekt
4	000-038-0	7	Socket flat head screw M8x25 DIN933 Deltaprotekt
5	000-232-0	1	HH screw M1"x6" DIN931 Deltaprotekt
6	000-257-0	5	HH screw M12x40 DIN933 Deltaprotekt
7	000-264-0	1	HH screw M1"x7 1/2" DIN931 Deltaprotekt
8	000-347-0	2	HH screw M30x160 DIN931 Deltaprotekt
9	000-363-0	2	HH screw M1"x4 1/2" DIN931 Deltaprotekt
10	000-484-0	5	Lock nut M12 stainless
11	000-486-0	1	Lock nut M20 stainless
12	000-510-0	1	Low hex nut M24 200 right pitch
13	000-627-0	2	Lock nut M30 stainless
14	000-641-0	5	Lock nut 1" stainless
15	000-702-0	10	Self-locking washer Ø1" large
16	000-703-0	4	Self-locking washer Ø30 large
17	000-795-0	5	Flat washer Ø12 Deltaprotekt
18	000-813-0	11	Flat washer Ø26 Deltaprotekt
19	000-814-0	5	Flat washer Ø30 Deltaprotekt
20	000-819-0	4	Flat washer Ø20 Deltaprotekt
21	000-831-0	1	Contact washer Ø20
22	000-837-0	5	Contact washer Ø12
23	001-029-0	1	Hinge arm plastic support 178/220x50x40 drilled
24	001-031-D	1	Right hinge arm plastic support 115/135x50x40 drilled
25	001-031-G	1	Left hinge arm plastic support 115/135x50x40 drilled
26	001-231-0	2	Bushing Øext28/Øint20 thk 9.5 Deltatone
27	001-311-0	2	Steel traction spring wire Ø5.5 Øext34 lg 503mm
28	001-795-D	1	Right hinge arm with bushing
29	002-513-D	1	TR5/RA folding cylinder right fastening
30	002-643-0	2	Bushing for Ø39mm ball joint
31	003-634-D	1	Cylinder DA Ø70/40 S500 right painted
32	010-007-0	1	Double ball joint with bushings Øint 26 and threaded rod lgth 220mm
33	010-017-0	1	Ball joint Ø20 with threaded rod M20 lgth 125mm
34	010-027-0	1	Triangular rubber lg 200mm + screws
35	010-082-D	1	RA Falcon outer section right support + back plate + screws
36	010-090-0	2	Complete breakaway spring hook
37	010-106-0	1	Radial stop + screws
38	010-252-0	2	Ball joint Ø30.2 threaded M39x200 + screws
39	010-303-0	1	TR5/RA breakaway reinforced hinge angle + screws
40	010-391-0	1	RA breakaway hinge plate for 250mm nozzle spacing + screws

**28** 001-795-D  
001-795-G



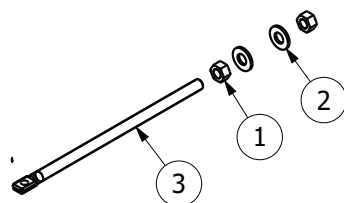
Nb	Reference	Qty	Description
1	001-799-0	1	Bushing Øext35 thk5mm lgth 82mm
2	002-773-D	1	Right hinge arm without bushing

**32** 010-007-0



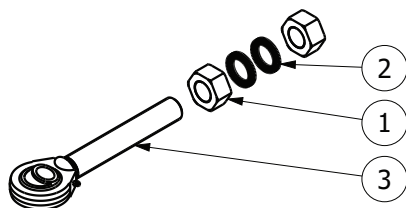
Nb	Reference	Qty	Description
1	000-514-0	1	Low hex nut M24 200 right pitch
2	000-515-0	1	Low hex nut M24 200 right pitch
3	001-007-0	1	Threaded rod RH/LH M30 pitch 200 lg 220
4	001-602-D	1	Female Ball joint Ø30 Right threaded
5	001-602-G	1	Female Ball joint Ø30 left threaded
6	001-933-0	2	Steel bushing Ø30 x Ø26 x30.6

**36** 010-090-0



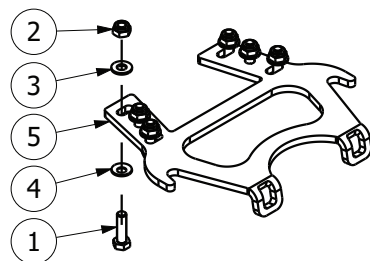
Nb	Reference	Qty	Description
1	000-500-0	2	Hex nut M12 Deltaprotekt
2	000-795-0	2	Flat washer Ø12 Deltaprotekt
3	002-086-0	1	Spring hook

**38** 010-252-0



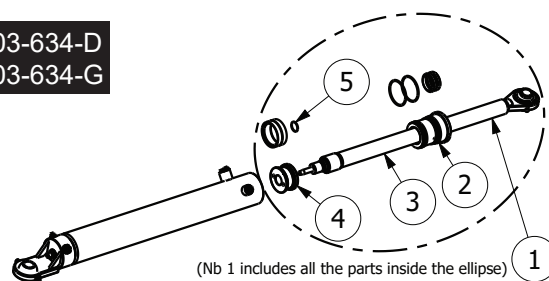
Nb	Reference	Qty	Description
1	000-630-0	2	Hex nut M39 pitch 200 Deltaprotekt
2	000-713-0	2	Self-locking washer Ø39 large
3	002-153-0	1	Ball joint Ø30.2 threaded M39x200

**40** 010-391-0



Nb	Reference	Qty	Description
1	000-197-0	6	HH screw M10x35 DIN933 Deltaprotekt
2	000-539-0	6	Lock nut M10 stainless
3	000-796-0	6	Flat washer Ø10 Deltaprotekt
4	000-838-0	6	Contact washer Ø10
5	003-815-0	1	RA breakaway hinge plate for 250mm nozzle spacing

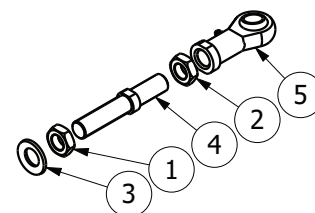
**31** 003-634-D  
003-634-G



(Nb 1 includes all the parts inside the ellipse)

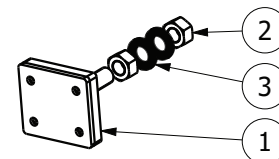
Nb	Reference	Qty	Description
1	002-190-0	1	Complete Ø70/40 S500 cylinder rod with head + seals
2	002-557-0	1	Cylinder head DA 70/40
3	003-707-0	1	Cylinder rod DA Ø70/40 S500
4	002-583-0	1	Piston DA 70/40
5	001-178-0	1	Cylinder seals kit DA 70/40

**33** 010-017-0



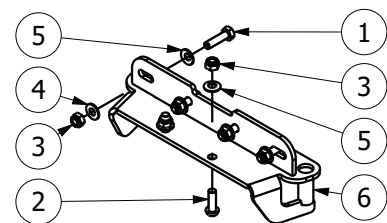
Nb	Reference	Qty	Description
1	000-510-0	1	Low hex nut M24 200 right pitch
2	000-512-0	1	Low hex nut M24 200 right pitch
3	000-831-0	1	Contact washer Ø20
4	001-004-0	1	Threaded rod LH M20x150 / RH M20x250 lg 125 Deltatone
5	001-601-G	1	Female ball joint Ø20mm left thread

**37** 010-106-0



Nb	Reference	Qty	Description
1	001-205-0	1	Radial stop for RA boom
2	000-502-0	2	Hex nut M18 Deltaprotekt
3	000-712-0	2	Self-locking washer Ø18 large

**39** 010-303-0



Nb	Reference	Qty	Description
1	000-178-0	4	HH screw M8x30 DIN933 Deltaprotekt
2	000-250-0	2	Button screw M8x25 DIN933 Deltaprotekt
3	000-538-0	6	Lock nut M8 stainless
4	000-797-0	4	Flat washer Ø8 Deltaprotekt
5	000-833-0	6	Contact washer Ø8
6	020-706-0	1	TR5/RA breakaway reinforced hinge angle



All our booms are designed and built using over 30 years knowledge and experience.

Pommier's expertise and the quality of our products have made us a world-renowned designer and manufacturer of spray booms.

Since the first boom left our factory in 1986, we have delivered over 30,000 more to our customers.

Our expert designers and engineers work closely with our customers, and we tailor our booms to their machines in accordance with their requests and requirements.

Pommier also work with a large number of sprayers manufacturers in France and worldwide.



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