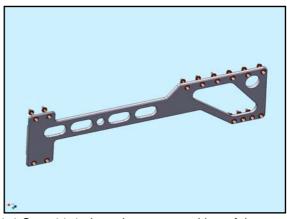
## STORM 500 R.G. WING ASSEMBLY – Retractable Landing Gear

## FITTING THE RETRACTABLE MAIN GEAR FLANGE

Main retractable landing gear are installed before riveting the inboard leading edge and the inboard bottom skin of the wing. The first step is to install the flange SL501000-01-02 to the main spar (DWG Fase 11 – Step 11 and DWG Fase 11-1 Step 11-1). This flange is bolted to the main spar with bolts M5. We suggest to install the flange when the RH and LH Main spars are assembled and before to install the wing ribs.



Locate the flange, clamp and mark its position. DWG Fase 11-1 Step 11-1 show the exact position of the flange, holes and dimensions. Datum point is the first hole M5 of the spar.

After having locked everything in the right position, put the spar on plane.

Start drilling with a drill press or an electric drill with a 3,2 mm drill, lubricate with water/oil during the drilling.

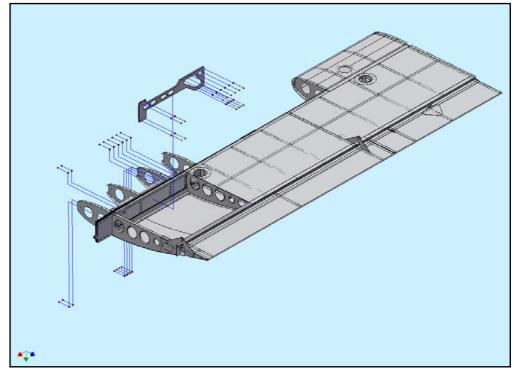
**Proceed this way:** make the four external holes diagonally to the flange, Special attention must be given to drilling the four holes and the following.

If you do drill a wrong hole into the reinforcing bar, you have compromised the strength of the spar to an unknown extent, and there may be no practical repair.

When you are convinced that the flange coupling is correct, drill these holes 4 mm, insert four 4 mm bolts to lock the pack to be drilled in a safer way.

Now drill all the holes to 3,2 mm, then 4 mm, then 4,8 mm; with a low revolutions number (350-500 rpm) you must now ream to 5 mm.

Remember to use sharp drills, do not feed



too much during the drilling, and always lubricate. If you are drilling manually, you better let a friend help you to make sure you are working perpendicularly.

Install the bolts M5, whashers and SL nuts M5 ( Check the length of the bolts, must be the same indicated on DWG) d remove the four 4 mm, drill to 5 mm with the same procedure install the 4 bolts M5 to complete your work.

See DWG Fase 11 - Step 11 DETAIL A - B - C - D - E - F

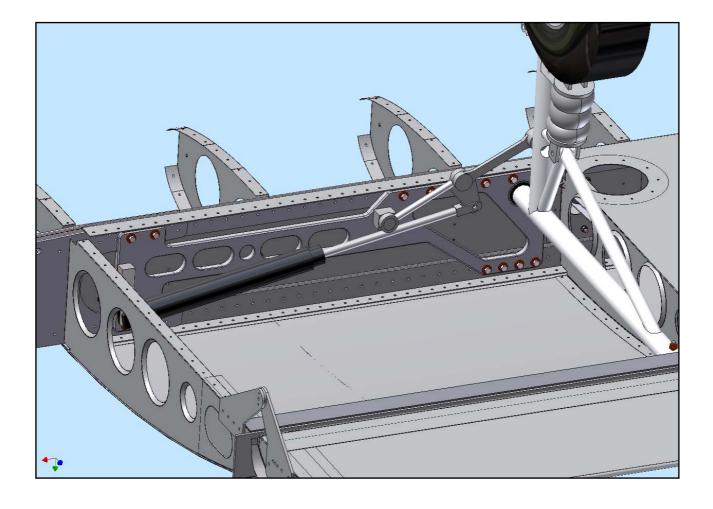
Tightening Torque bolts M5: Go to the table below.

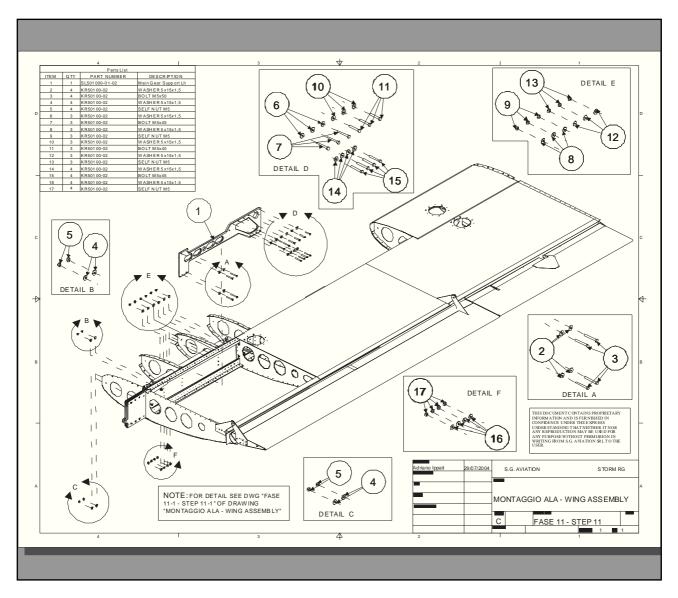
## STORM 500 R.G. WING ASSEMBLY – Retractable Landing Gear

Dimensions		Torque: Nm
Profile ISO		Value: Nm
Diameter	Pitch (milimeter)	8.8
M3 (3 mm)	0.5	1.09
		1.34
M4 (4 mm)	0.7	2.49
		3.04
M5 (5 mm)	0.8	4.99
		6.00
M6 (6 mm)	1	8.44
		1043
M8 (8 mm)	1.25	20.3
		24.94
M10 (10 mm)	1.5	40.81
		50.31
M12 (12 mm)	1.75	69.45
		85.66

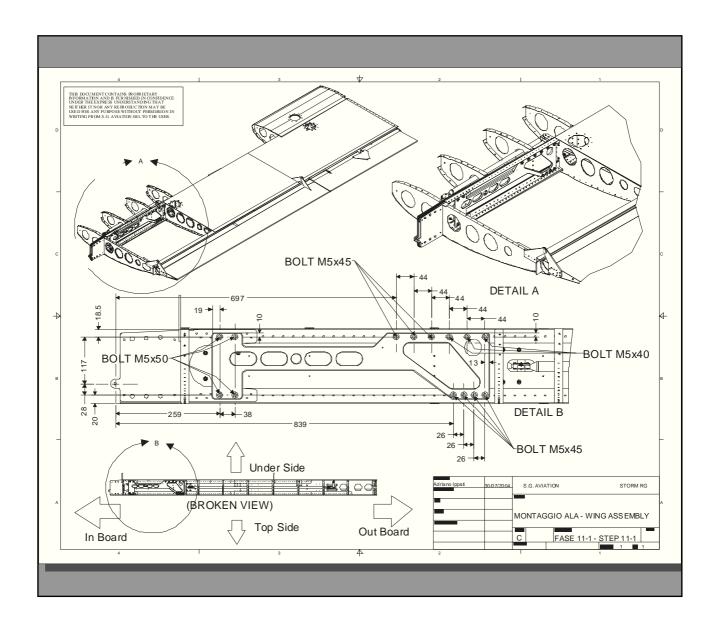
TABLE of TIGHTENING TORQUE 8.8

## STORM 500 R.G. WING ASSEMBLY – Retractable Landing Gear





DWG: Fase 11 - Step 11



DWG: Fase 11-1 - Step 11-1