


**Aero Twin, Inc. Nose Gear Gravel Deflectors,
Kit No. NGDQ-100
for
Quest Model 100**

INSTALLATION INSTRUCTIONS

Manual NGDQ-IM

Note: This document contains important installation and weight and balance data. Do not discard. For maintenance instructions, required inspection and maintenance intervals, and an illustrated parts list, see the Instructions for Continued Airworthiness, Document No. NGDQ-ICA.

September 18, 2017

LOG OF REVISIONS			
REVISIONS		PAGES REVISED AND DESCRIPTION OF REVISIONS	AERO TWIN SIGNATURE
NO.	DATE		
N/C	10/10/11	Original Issue	Jason Kepler
A	09/18/17	Pages 1-4, Per ECO AT-171	

Aero Twin, Inc. Nose Gear Gravel Deflectors P/N NGDQ-100

NOTE: This gravel deflector is to be installed only on Quest Model 100 aircraft equipped with a 22 x 8.00-8 size nose gear tire.

1.0 Installation (Config. 1)

NOTE: Installation on aircraft with fork 100-410-7001 which does not have mounting holes for the nose gear gravel deflector.

1. Measure distance between the two side plates of the gravel deflector frame, item -1, at the large holes. The distance should be 10.75 ± 0.1 inches. If this dimension is not within tolerance, gently bend the forward ends of the deflector together or apart to match the required dimension. When measuring, ensure that the part is at rest, i.e. the measurement is taken after the material springs back.
2. Position item -1 so that the curved protrusions on items -4 and 5 will rest in the pockets on the outsides of the nose gear fork just above the wheel axel.
3. Using the bolts, item -8, with washers, item -9, and nuts, item -10, clamp the top of the gravel deflector frame to the nose gear fork by bolting through the frame, the front and aft blocks, items -2 and -3, and the clamp plates, item -4, -5 and -6, as shown in Figure 1.
4. Execute FAA form 337, stating that this gravel deflector kit was installed in accordance with this STC. Update the aircraft empty weight and balance. The total change in airplane empty weight and balance is +10 lb at fuselage station -36.5.

1.1 Installation (Config. 2)

NOTE: Installation on aircraft with fork P/N 100-410-7013 or later which has mounting holes for the nose gear gravel deflector.

1. Measure distance between the two side plates of the gravel deflector frame, item -1, at the large holes. The distance should be 10.75 ± 0.1 inches. If this dimension is not within tolerance, gently bend the forward ends of the deflector together or apart to match the required dimension. When measuring, ensure that the part is at rest, i.e. the measurement is taken after the material springs back.
2. Using the bolts, item -8 and -14, with washers, item -9 and -15, and nuts, item -10 and -16, clamp the top of the gravel deflector frame to the nose gear fork by bolting through the frame, the front and aft blocks, items -2 and -3, and the clamp plates, item -13, as shown in Figure 2.
3. Execute FAA form 337, stating that this gravel deflector kit was installed in accordance with this STC. Update the aircraft empty weight and balance. The total change in airplane empty weight and balance is +10 lb at fuselage station -36.5.

2.0 Parts List

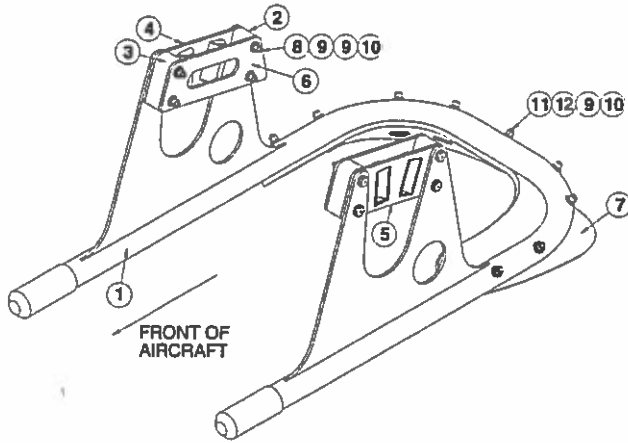


Figure 1. Nose Gear Gravel Deflector – Config. 1

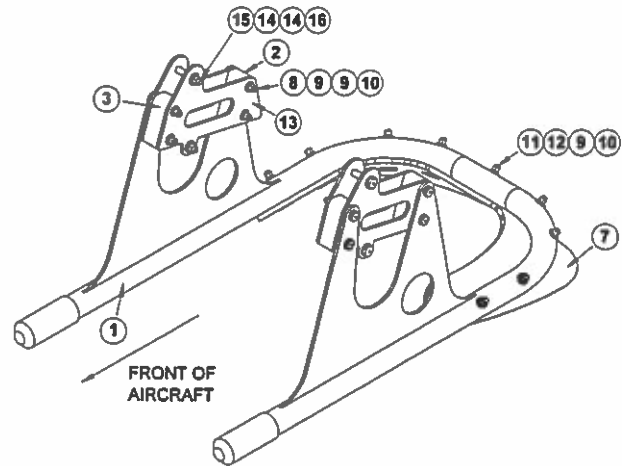


Figure 2. Nose Gear Gravel Deflector – Config. 2

Item	Qty	Part Number	Item Description
1	1	NGDQ-115	Gravel Deflector Frame
2	2	NGDQ-111	Aft Clamp Block
3	2	NGDQ-110	Forward Clamp Block
4	1	NGDQ-112	Right Outside Clamp Plate
5	1	NGDQ-113	Left Outside Clamp Plate
6	2	NGDQ-109	Inside Clamp Plate
7	1	NGDQ-103	Mud Flap
8	8	AN3-14A	Bolt
9	25	NAS1149F0332P	Washer
10	17	MS21042L3	Nut
11	9	MS24694S65	Countersunk Screw
12	9	A3235-028-935	Countersunk Washer
13	4	NGDQ-116	Clamp Plate
14	4	AN4-13A	Bolt
15	8	NAS1149F0432P	Washer
16	4	MS21042L4	Nut

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