



Beam Gentries Maintenance & Repair Manual



Issue: 6

Date: December 20

REGULAR MAINTENANCE: On Station

The beam should be brought back to the unload/load position and the ladder(s) or stowed item ideally removed, to facilitate cleaning. The beam should be hosed out (top and underside) when the vehicle is washed. After Washing use a lint free cloth to remove any remaining debris from the underside, once completed the beam should be given a light spray of silicon to lubricate the slide channels (**UNDER NO CIRCUMSTANCES MUST OIL OR GREASE BE USED ON THE BEAM**).

NOTE: All excess lubricant must be removed as failure to do this can result in road dirt etc Accumulating and severely affecting the ease of use of the gantry.

ANNUAL/BI-ANNUAL MAINTENANCE: At Workshops

When the vehicle is overhauled the ladder(s) or stowed item(s) should be removed from the Gantry.

Carry out a thorough visually inspection of the gantry ensuring the tightness of bolts, rivets or screws and that there are no cracks or apparent defects. The two polyurethane shock absorbing stop blocks on top and under the beam should be inspected and replaced if necessary.

Note: - Some Beam Gentries have a facility be be interchangeable with differing ladders, in this instance the beam gantry is installed with an adjustable pivot stop block to allow the beam to be only be correctly obtained once the gantry has been fitted by the OEM Vehicle builder. Therefore the new gantry will be supplied with an un-tightened adjustable block to the OEM; this means it is the OEM's responsibility to set/tighten the adjustable stop themselves. The correct bolt setting for the single M8 socket bolt within the stop block is 15N/m. When it is required to adjust the pivot beam stop block in the field/ Brigade Workshop based on setting different ladders, it is also the responsibility of the Workshop technician to set to the above torque setting. Failure to do this will result in the beam to slide past its fulcrum and off the back of the vehicle when operating the removal of the gantry.

The final check post adjustment is to mark (tape or dry wipe marker) to the underside of the beam's pivot position in line with the gantry profile and carry out normal beam deployment. Then check to see if the Adjustable pivot has moved. If it is correctly tightened then you should observe no movement.

Beam Gantry Generic/OEM

The majority of our standard beams have a polyurethane stop block (G1204) to protect the contact of the pivot base and headslide when deploying the beam from the vehicle. The stops blocks are housed by 2 off M8 socket head bolts. The correct torque setting of these bolts are 15N/m. Exceeding this value will damage the stop block insert. Which intern will prevent the stop block from being removed and its correct function.

This torque setting above also applies when first installing the beam gantry onto the relevant vehicle at OEM, as it requires the removal/fixture of the pivot stopblock (G1204 & G1203) when housing the beam onto the pivot base.

Where fitted check the head slide bearings by sliding it the out of the front of the beam having removed the front stop block.

Inspect the pivot bearings by removing the mid beam stop blocks and sliding the beam backwards off of the pivot assembly. If any foreign material is embedded in the bearings it should be picked out using a scribe or similar tool. Ensure that the stop blocks are replaced in the correct positions.

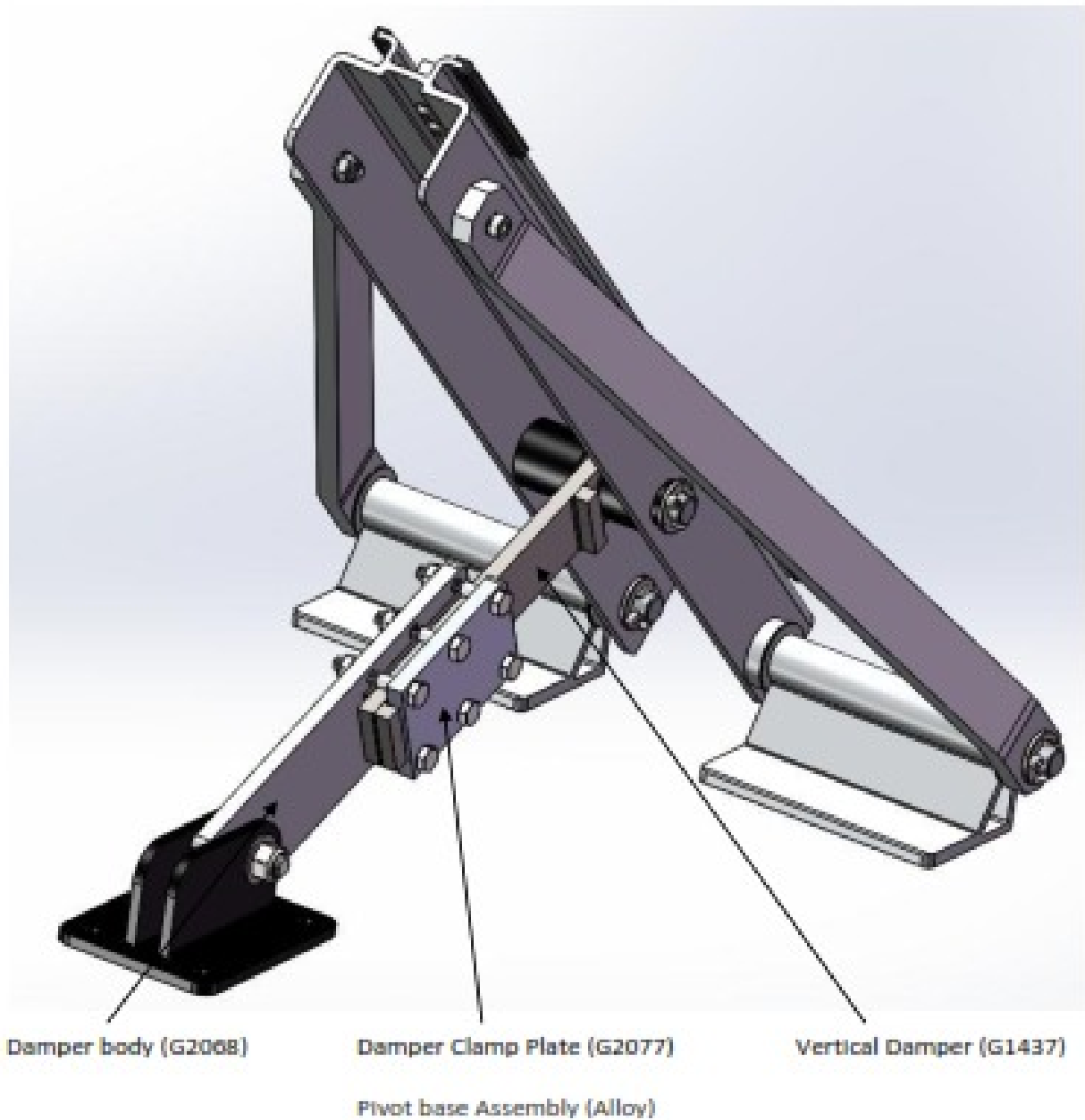
The beam should be wiped clean and lubricated using a silicon spray. **DO NOT USE OIL OR GREASE.**



Only the gantry roller axles are to be greased.

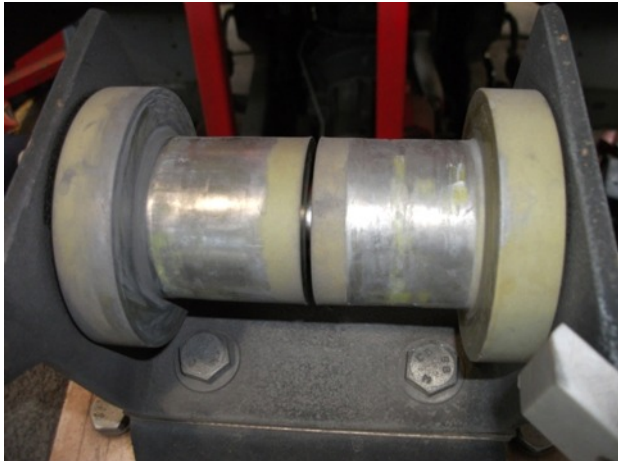
Check the operation of the gantry.

For beam gantry repairs where required please see the following pages of exploded views Which assist in ordering parts and show the method of assembly. The pivot base by its nature is vitally important if this is damaged it should be replaced as a whole unit.



Examples of wear to the beam and roof rollers:

This is caused by lateral movement of the beam on the roller. The beam can wear over a long period of time leaving aluminium deposits, which with water and other grime turns into a cutting paste speeding up the degradation. Cleaning the beam regularly will help to reduce this wear but won't eradicate the problem.

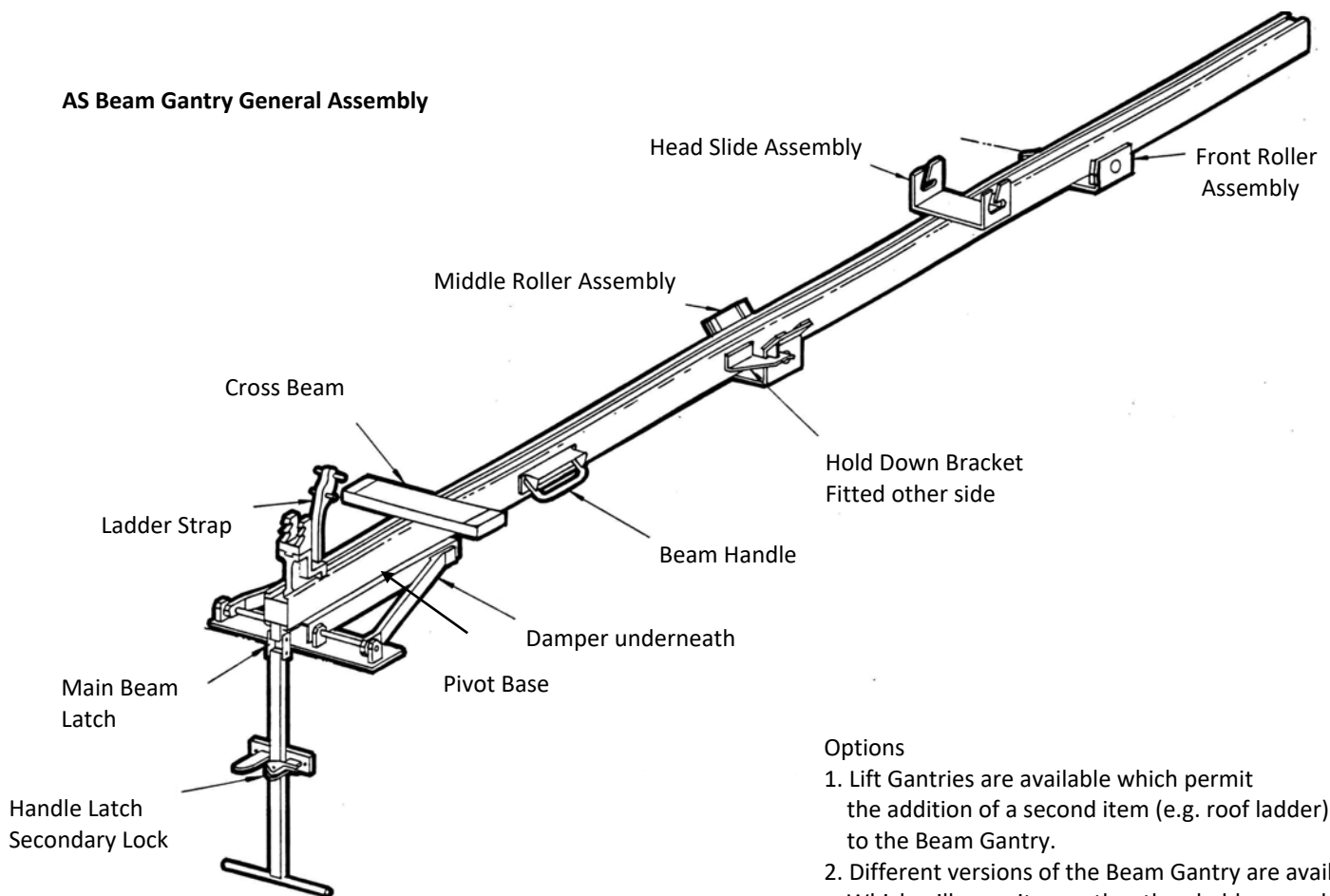


Examples of wear on the gantry straps and the ladder:

This may indicate that there is too much play in the ladder on the gantry and the stop block on the headslide has worn or possibly broken. As a result the bottom rung on the ladder has worn. It is easy and cheaper to replace the strap than it is to replace the ladder rung.



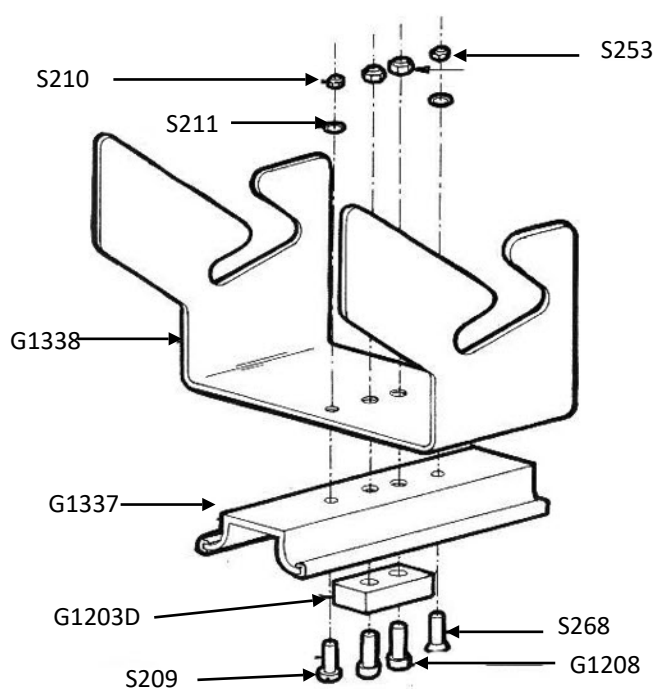
AS Beam Gantry General Assembly



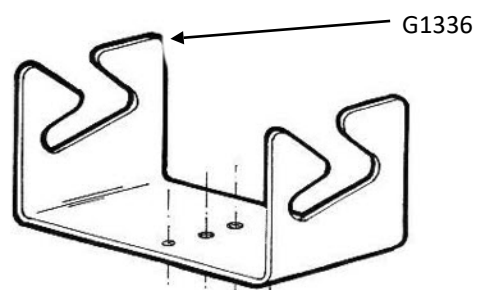
Options

1. Lift Gantries are available which permit the addition of a second item (e.g. roof ladder) to the Beam Gantry.
2. Different versions of the Beam Gantry are available Which will carry items other than ladders e.g. boats, Suction hoses etc.

AS Head Slide Options

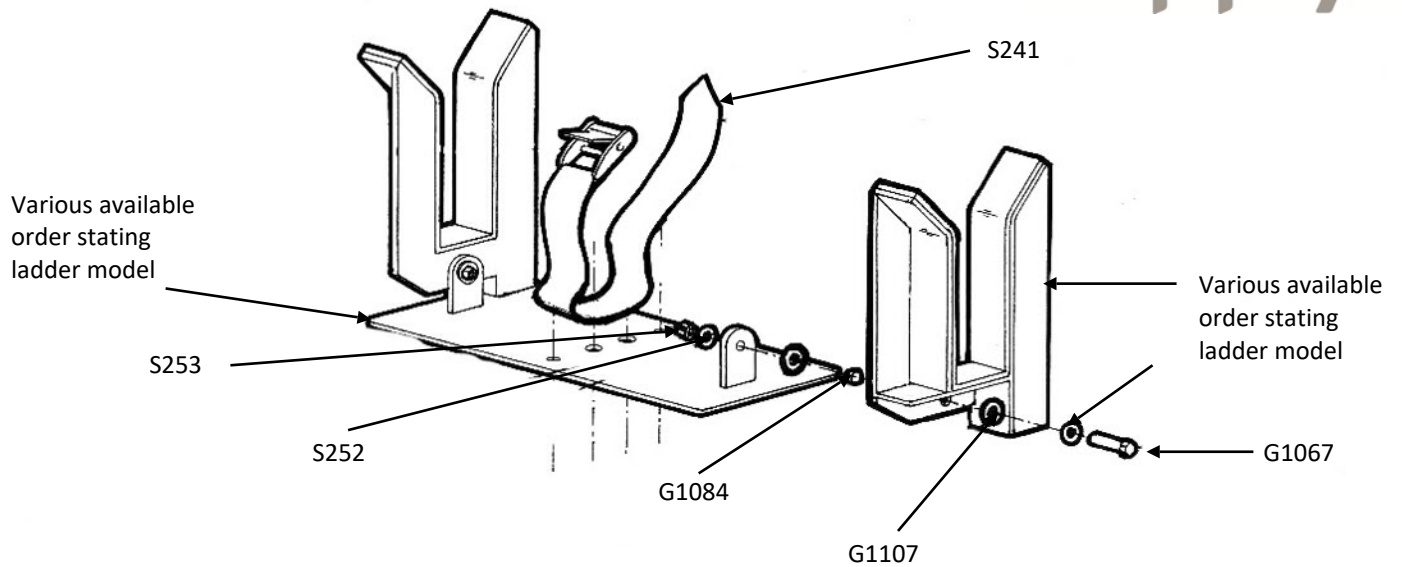


G1334 BG Head Slide Assembly AS 464 Ladders

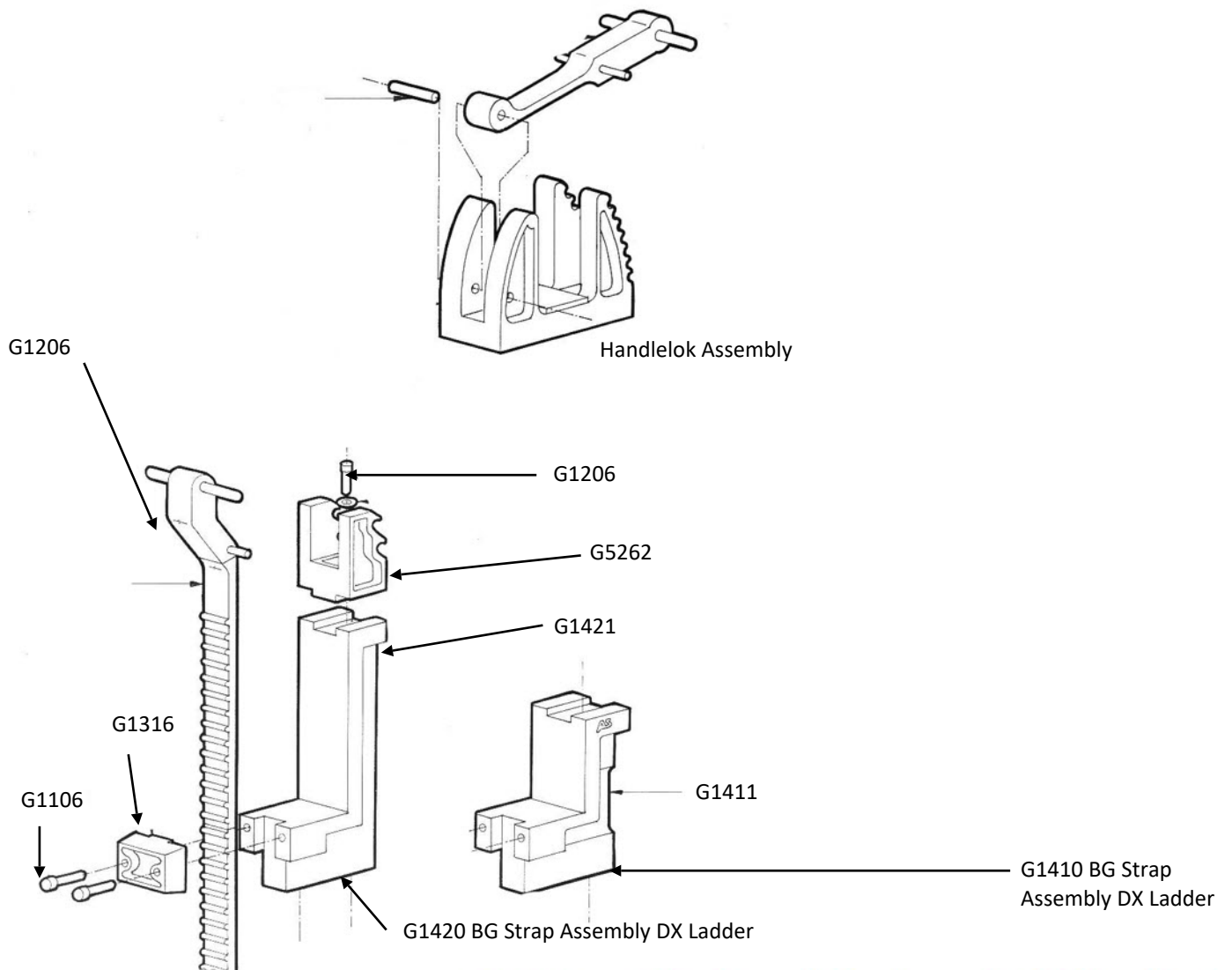


G1335 BG Head Slide Assembly AS DX Ladders

BG Head Slide Assembly for Ladders Without Wall Wheels (various available)



Beam Gantry Ladder Strap Options



PART No	QTY	DESCRIPTION	DRAWING No
G1221	1	BG BEAM ASB4 FOR AS 10m	GST/221/E
G1201	2	BG END CAP	
G1202	1	BG GRAB HANDLE	GST/202/A
G1203	4	BG STOP BLOCK	GST/203/E
G1204	2	BG STOP BLOCK POLY URETHANE	GST/204/E
G1205	10	M8x70 SOCKET HEAD CAP SCREW	
G1206	6	M8x90 SOCKET HEAD CAP SCREW	
G1208	6	M8x25 SOCKET HEAD CAP SCREW	
G1349	1	BG HOLD DOWN BRACKET	GST/349/E
G1356	1	BG BEAM LATCH ASSEMBLY	GST/356/E
G1410	1	BG LADDER STRAP ASSEMBLY DX	GST/410/E
P3054	1	SERIAL NUMBER PLATE	GST/349/E
R2102	6	POP RIVET 3.2D X 3.2GL	
R2158	1	SERIAL NUMBER LABEL	SS/158/A
S124	2	DO NOT GREASE OR OIL LABEL	LST/124/A
S242	2	M8x20 HEX HEAD BOLT	
S253	14	M8 NUT SELF LOCKING	

