Fitting and User Instructions for

WILLANS

COMPETITION HARNESS

Please read these instructions before attempting to install or wear your Willans Harness

MODEL CLUB 6 / SILVERSTONE 6

FITTING AND USER INSTRUCTIONS FOR "WILLANS" COMPETITION HARNESS

Club 6 / Silverstone 6 - 6 Point Single Seater Harness

PLEASE read instructions right through before commencing fitting. No alterations should be made to the assembly or method of fitting.

IF IN DOUBT CONSULT WILLANS

GENERAL

This harness complies with F.I.A. 8853/98 and is designed for use by drivers in automobile competition to minimise the risk of bodily harm in an accident.

WARNING This product is intended solely for competition use and **must not** be regarded as suitable for safety or use under any other circumstances.

The correct installation, use and maintenance of the harness is paramount to its continued performance and reliability.

The harness will require provision for six anchorage points. If suitable anchorage points are already provided by the vehicle manufacturer these should be used in preference to constructing new points. However if these anchorage points are not placed where these instructions recommend, new points should be constructed.

IMPORTANT WARNINGS

1. Inspect the harness every time before use. Check condition of stitching, webbing, adjusters, anchorages and the release mechanism.
2. Do not under any circumstances modify this harness. Alterations may render the harness ineffective.
3. Webbing must never be allowed to rub against sharp surfaces on seats or bodywork or come into contact with **Battery Acid.**
4. **Harnesses that have been cut, frayed, damaged or used on vehicles involved in accidents should be replaced.**
5. Do not use bleach, solvents, petrol or dye as they will affect the performance of the webbing.
6. Always use the harness correctly adjusted and never run a loose harness.
7. Do not attempt to drill any mounting holes in bodywork before checking for wiring, pipes, tanks, double skin or unsuitable load bearing bodywork.
8. Do not contaminate this harness with grease or petrol.
9. The use of a thickly upholstered seat and/or a seat which may distort or collapse in an accident **will** reduce the performance of this harness.
10. Lap belt/strap anchorages which are not vertically below the hip joint **will** reduce the performance of this harness.

If in doubt about installation, use or serviceability of this harness contact WILLANS.
Our advice is given willingly and its free.

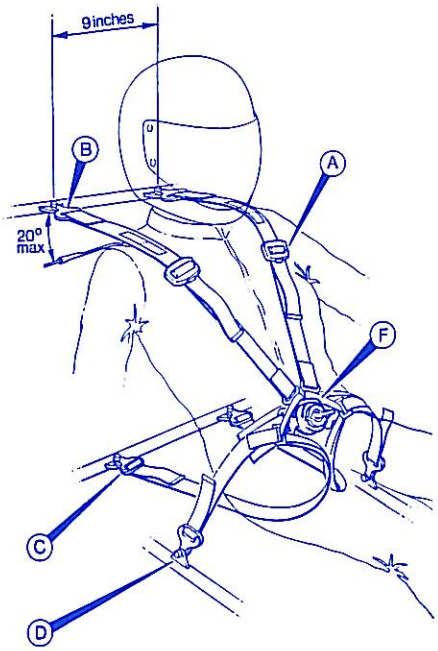
INSTALLATION REQUIREMENTS

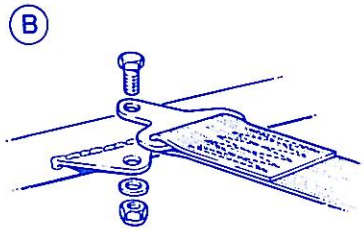
Lap and shoulder anchorage points should be capable of accepting a static load of 3500 lbf (1590 kg). Crotch strap anchorage points should be capable of accepting a minimum of 1770 lbf (770kg). If two straps attach to the same point, that point should withstand the sum of both anchor point load requirements.

Vehicle anchorage points should accept 5/16" (8mm) diameter high tensile steel bolts. If non-standard anchor plates have been specified, a high tensile steel anchorage bolt of compatible size must be used. Non-standard sizes are 1/4" (6mm), 3/8" (9mm) or 7/16" (11mm) diameter. Bolts should work in shearing stress and not in tension.

Refer to figure 1 which illustrates the typical layout of webbing and anchor points. Straps should run directly to their anchorage point with no obstruction or deviation. Straps should not be twisted and severe twists should not be induced by the installation when the harness is worn.

Figure 1 - Club 6 / Silverstone 6





The lap belt and crotch straps should not pass over the sides of the seat but through it, in order to wrap and hold the pelvic region over the greatest possible surface, the lap belt crossing it below the anterior-superior iliac spines (bony part of the hip). Under no circumstances should it be worn over the region of the abdomen. Lap straps must terminate vertically downwards and not forwards or rearwards of the hip joint. Lap straps should terminate symmetrically about the wearer on either side of the seat about 20" (500mm) apart. The distance between the seating surface and anchorage points should be kept to a minimum to prevent submarining.

Lap strap adjustment is by pinch plates. Various anchorage arrangements are available as illustrated. (Figures D1, D2, D3.)

Figure D1

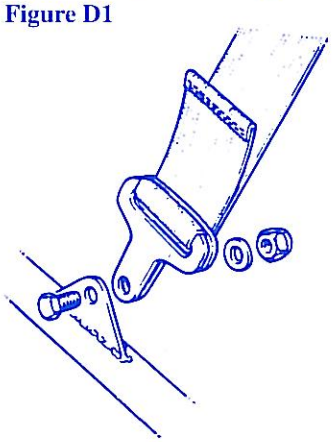


Figure D2

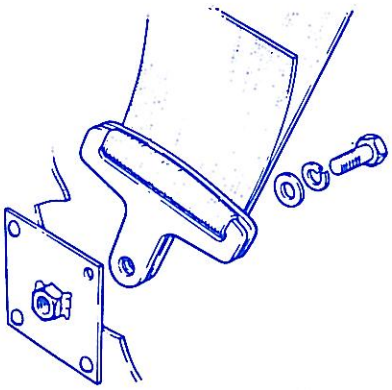
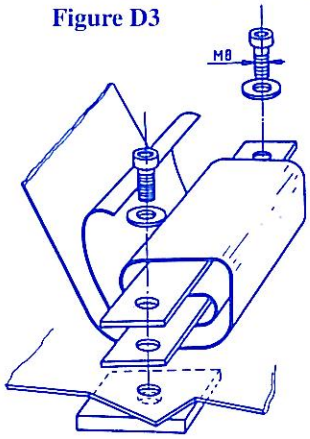
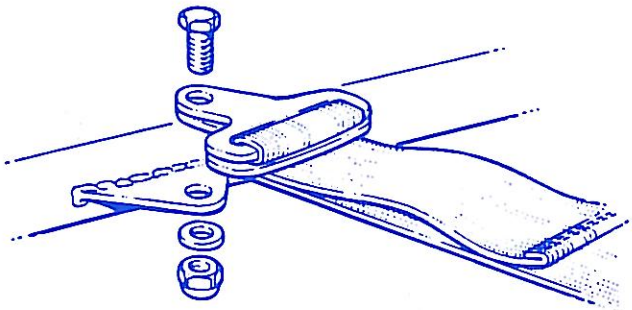


Figure D3



The location for crotch strap mounting should be to the rear of the driver and 10" (250mm) to 12" (300mm) apart. Crotch strap adjustment is by pinch plate (Figure C)

Figure C



Shoulder strap anchor points (Figure 1) should be horizontal to 20° below horizontal and set 9" (230mm) apart, symmetrical to driver for optimum restraint

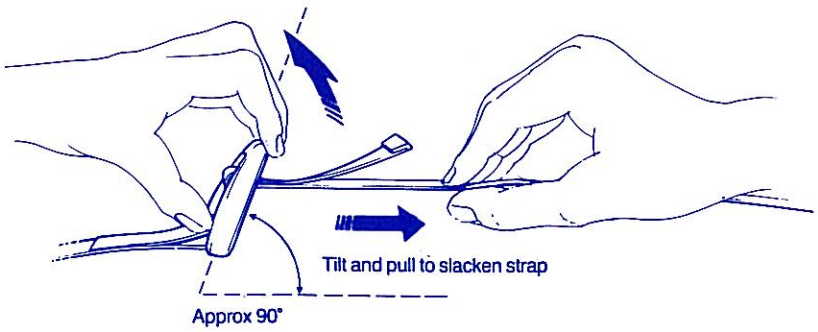
Installed strap lengths should be kept as short as possible for best performance of the harness.

Attach the harness anchor plates to the vehicle anchorage points using the appropriate high tensile steel bolts secured by suitable locked full nut or locked into threaded anchorage. Lap and crotch strap pinch plates should be tightened after adjustment is made to position the release box central to the wearer and keeping the lap strap as low as is practically possible.

USING THE HARNESS

Extend the shoulder straps by tilting the adjuster at about 90° to its normal position and pulling the webbing through as shown in figure 2.

Figure 2



Before getting into the car lift the shoulder and lap straps clear of the seat, and lay the crotch straps forward.

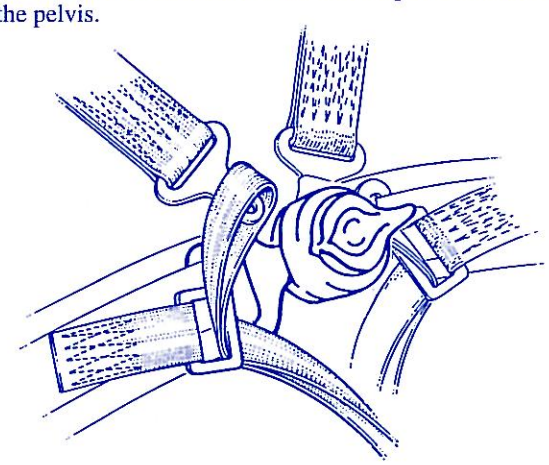
When seated, plug the left and right lap straps into the box.

Next pass the right crotch strap upward across the inside of the right thigh and upward through the ring on the right lap strap, see Figure F. Bring the right shoulder strap over the shoulder and through the sewn loop at the end of the crotch strap, and plug the shoulder strap into the release box.

Repeat the above procedure for the left hand strap.

Note that lap and crotch strap adjustment should have been set on installation to position the release box so that the lap strap is tight and is held in the correct position across the pelvis.

Figure F



The harness is supplied with the release box permanently fixed to either the left or right hand lap strap. The remaining lap strap tongue and both shoulder strap tongues should be pushed into their respective slots in the box. Each can be fed in independently and each should be accompanied by a positive 'click' to signify correct engagement.

UNDER NO CIRCUMSTANCES SHOULD THE HARNESS BE USED WITHOUT BOTH SHOULDER STRAPS BOTH LAP STRAPS AND BOTH CROTCH STRAPS CONNECTED.

Finally, tension the shoulder straps by pulling the loose end of the webbing through each adjuster. These straps should pull firmly on the shoulders but not so tight that they start to pull the lap strap upwards.

The release box is designed so that the latch mechanism remains open when operated. The release box must be operated to close the latch system before tongues are inserted.

To release the harness rotate the release knob in either a clockwise or anti-clockwise direction. On full rotation the knob will stay in the unlocked position. Return the knob to the neutral-lock position after the harness has been released.

NOTE! The release box is fitted with a "lost motion" knob which complies with F.I.A. Requirements.

CLEANING

Use only a mild detergent to clean webbing. All other parts should be kept clear of dirt as they cannot be dismantled for cleaning. If in any doubt contact **WILLANS** for further advice.

Designed and Manufactured by

STOCKBRIDGE RACING LIMITED,
GROSVENOR GARAGE, STOCKBRIDGE, HAMPSHIRE, ENGLAND

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In order that we are able to offer restraint harnesses which incorporate the most up-to-date design features and legislative requirements, we reserve the right to make changes without notice.