

DOOR WINDOWS- ELAN COUPE & DROP HEADELECTRIC DOOR WINDOWS - Description

The door windows are raised and lowered by an electric motor which is situated in the base of the door. Operation is controlled by toggle switches fitted in the door (early models only) or by switches on the facia panel. The switches are two-positional, self-cancelling. There are no limit switches in the electrical circuit, and at extremities of travel, the motor stalls. In this condition the consumption is approximately 7.5 amps. In all other conditions the consumption is approximately 3.5 amps.

If it is desired to carry out any work on the winding mechanism, the window frame complete with glass must be removed from the door. The motor can be removed independently, after removal of the trim panel.

Door Frame and Glass Removal

1. Push back the door lock remote control escutcheon to expose the handle securing pin. Remove pin, handle and escutcheon.
2. Remove the trim panel by releasing the kick plate and push-in fasteners. The kick plate is not fitted to later cars.
3. Remove the setscrews, washers, and shakeproof washers securing the lock remote control to the door. Remove clip retaining remote control arm to the door lock lever, access to which is gained through a hole at the top rear of the door. The remote control is removed by drawing it forwards.
4. Remove countersunk head screws and withdraw door lock.
5. Remove weatherproofing from bottom of door giving access to motor. On earlier cars a metal plate retained by setscrews must also be removed.
6. Disconnect electric feed cables to motor, release the setscrews and remove the motor.
7. Remove the two mushroom headed screws in the rear of the door and the four bolts and washers from the inside face of the door. **IMPORTANT:** Carefully observe position and number of any packing shims fitted as these control the fit of the window frame to the door surround seal. It should also be noted that the four main securing bolts are locked with "Loctite" on original assembly. "Loctite" should of course be used on re-assembly.
8. Carefully raise the rear of the frame, and guiding the lower part of the frame past the bobbins, withdraw the frame complete. Note that with the frame removed, it will be observed that there is an anti-rattle felt attached to the inside top edge of the door, along the path of the remote control connection.

Assembly of Window Frame and Glass

Examine all components for damage replacing where necessary.

1. Insert window "silent channel" into frame section, securing with a suitable adhesive such as Dunlop 758. The longer length starts at the front lower channel and ends at the door lock. The area of the seal in which there are slits should be fitted at the rear corner of the frame as this has the smaller radius. The shorter length abuts the other, and completes the lining of the channel.
2. Fit window brushes to frame dividing strips.
3. Fit cable pulleys and secure with their circlips. Grease with a graphite base grease. Do NOT use silicone grease as this could increase the frictional resistance of the window lift mechanism, which is undesirable.



4. Knot cable 40in. (101.6 cm.) from one end, and fit to drive pulley so that the knot is opposite the web and the ends are passing through the two holes in the centre groove of the drive pulley. Wind cable equally on pulley to give three complete turns, and temporarily secure with an adhesive tape.
5. Grease drive pulley bearing surfaces and fit pulley to door frame securing with bracket, using countersunk screws, nuts and spring washers. Note that the shorter part of the cable faces forwards.
6. Route cable from drive pulley, positioning clamp studs as shown (Fig.1). The two free ends of the cable pass through the forward clamp stud in opposite directions, this providing a method of tensioning and securing to the window.
7. Insert window in frame, attaching clamp studs to glass using copper washers, fibre washers and nyloc nuts (Figure 2).
8. Lightly tension cable, balancing window between studs and operate full travel by hand. **IMPORTANT.** The cable should be so adjusted that at the extremities of window travel, there still remains approximately 1/3 turn of cable left on drive pulley before cable enters its hole. Check that all pulleys revolve freely.
9. Fully tension cable and finally tighten both clamp stud nuts to a torque loading of 6 lbs. ft. (.83 kg.m.). An indication of correct tension of the cable may be obtained by attaching a spring balance to the cable and noting the deflection. For a pull of 10 lbs.(4.5 kg.), the cable should deflect 1 in. (2.5 cm.) see (Figure 3).
10. Using a suitable adhesive, attach rubber anti-rattle blocks to position indicated by an "X" (Figure 3). These are located behind the cable. Attach rubber block to bearing bracket, this acting as a down stop.
11. Before fitting the frame and motor to the door, the bolts retaining the gear unit to the motor should be withdrawn, their threads covered with "Loctite" and then re-assembled. Re-correct electric feed cables to motor and carry out a functional test.
12. For the remainder of the door assembly, reverse the dismantling procedure.

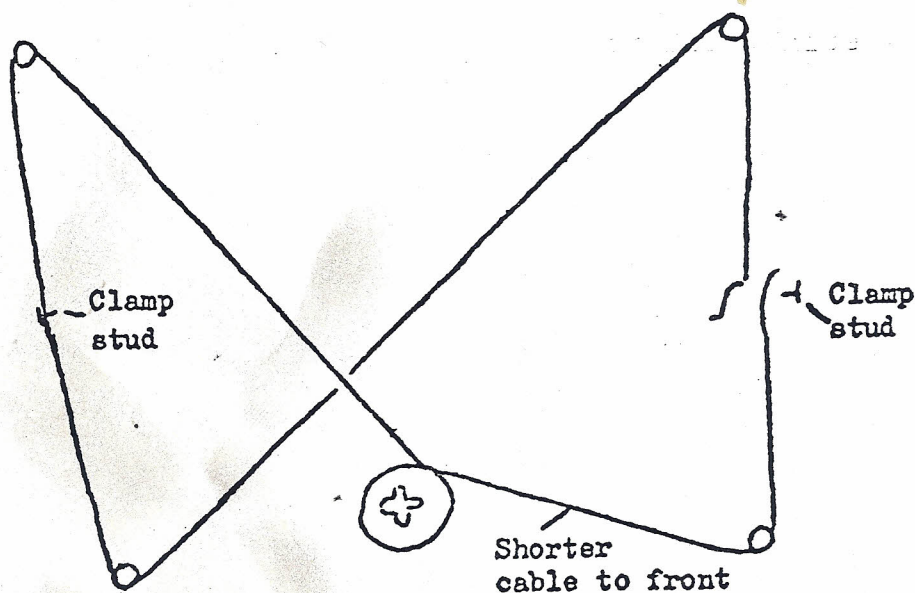


Figure 1

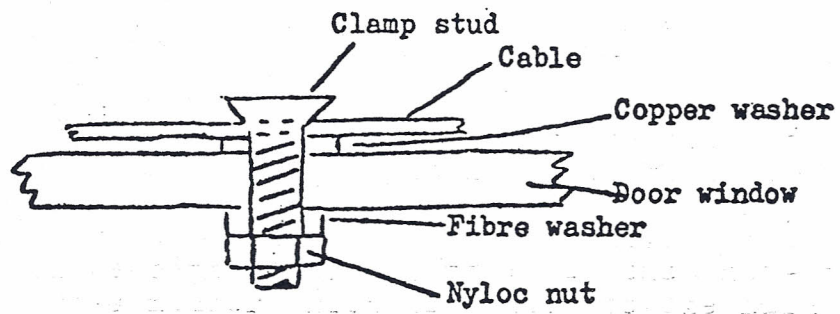
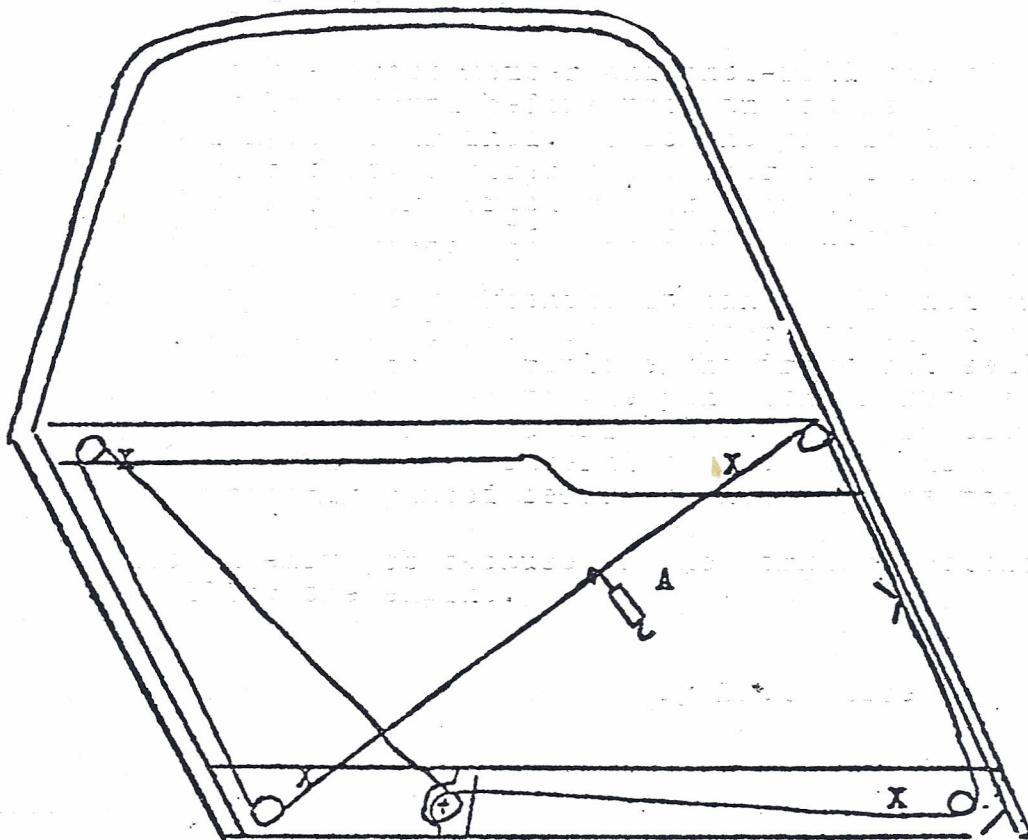


Figure 2



A - Spring balance approx. centre position

X - Approx. location of anti-vibration blocks  
between cable and frame.

Figure 3