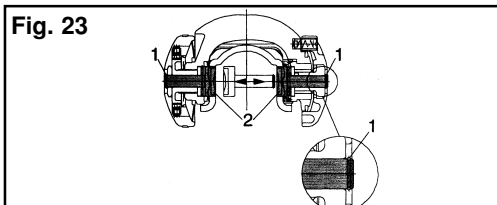


Replacing Friction Pads:

Loosen retaining ring (Fig. 23/Item 1) with pointed object. Push out friction pad (Fig. 23/Item 2) from outwards to inwards. Please only replace one pad at a time. Fit new pad, replace ball race and secure with a new retaining ring. Proceed in the same way on the other side. Remember, if any washers come away with the pad, please replace on the new pad.



GENERAL INFORMATION

Manoeuvring by hand:

Stabilising lever may not be used as a manoeuvring handle. Please use the handles on your caravan or the AL-KO manoeuvring handle which can be purchased separately to attach to your jockey wheel.

Failure to comply results in danger of overloading component parts.

Noises when driving

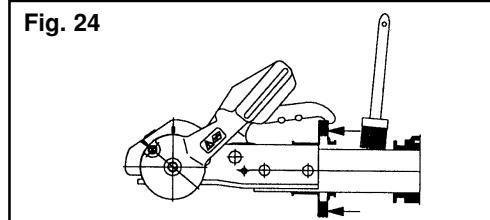
As a rule the friction linings DO NOT MAKE A NOISE when driving! Any clicking, creaking, or squeaking noise arising, could have the following causes:

- 1) Foreign bodies or dirt between the friction pad and towball.
Remedial action:
Clean the towball and clean friction pads by lightly rubbing over the pad with sandpaper (100-200 grain).
- 2) Dry operation of the towball shaft in the sleeve of the overrun equipment.
Remedial action:
Lubrication of the sleeves through the grease nipples (use multi-purpose grease DIN 51825 KTA 3K), additionally pull the gaiter off the overrun, towards the front and grease all of the exposed drive shaft (see Fig. 24).

- 3) The towball on the towing vehicle has too much play in the locking mechanism (if detachable).
Remedial action:
Go to specialist workshop. Have the towball checked for damage. If necessary change towball or if permissible re-lubricate locking mechanism.

- 3) The towball on the towing vehicle has too much play in the locking mechanism (if detachable).
Remedial action:
Go to specialist workshop. Have the towball checked for damage. If necessary change towball or if permissible re-lubricate locking mechanism.

- 3) The towball on the towing vehicle has too much play in the locking mechanism (if detachable).
Remedial action:
Go to specialist workshop. Have the towball checked for damage. If necessary change towball or if permissible re-lubricate locking mechanism.



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Part No. 1385181 Iss. 2 - 01/04

ASSEMBLY AND OPERATING INSTRUCTIONS FOR AL-KO AKS 1300 STABILISER & AL-KO SECURITY DEVICE

PLEASE ENSURE YOU READ THESE INSTRUCTIONS CAREFULLY, BEFORE COMMENCING TO OPERATE THIS PRODUCT.

REGULATIONS:

- 1) The AKS 1300 must be used in conjunction with 50 mm dia. towballs which conform to EC Directive 94/20 (DIN 74058 or local equivalent).
- 2) Suitable for attachment to drawbars or approved overrun braking equipment for single axle (and some tandem axle) trailers, with a minimum weight of 180 Kg and a maximum permissible weight of 1360 Kg.
- 3) EC design approval has been given to the AL-KO AKS 1300 coupling under permit No. e1*94/20*0030*00.
- 4) This design approval has been recognised by all EC member states and must be implemented with effect from 01.12.95.
- 5) The AL-KO Security Device (Hitch Lock) Anti-Theft Device is effective against the following unauthorized operations:
 - a) Uncoupling from the towing vehicle
 - b) Coupling onto another towing vehicle
 - c) Theft of the Stabiliser from the trailer/caravan.

RESTRICTIONS OF USE:

Spare wheels fitted to rear door of vehicle, or vehicle with platforms etc:

- 1) the AKS 1300 Stabiliser is based on the latest regulations. This means the new DIN 74070 (dimensions of couplings) are also adhered to.
- 2) The trailer coupling may only be connected to towing vehicles where the clearance for the stabiliser can be observed, in accordance with Directive 94/20 EC (DIN 74058). If these clearances are infringed by special attachments, then the use must be checked separately.
- 3) Not suitable for use with overrun devices which revolve above 25°.
- 4) For Swan Neck towbars (fixed or detachable), refer to clearances on page 4.
- 5) This product is not suitable for use where the overrun has a reverse lock fitted, on the side (Fig. 1).
- 6) For GB Use, please use the extended neck towball included with this kit (A50-X).
- 7) AL-KO recommends the use of the AL-KO Safety Ball to complement the AL-KO Security Device. The Safety ball is inserted into the coupling area of the Stabiliser, before the AL-KO Safety is locked into position (Fig. 2). This prevents your caravan from being coupled to any other tow hook or smaller towball and being towed away.

APPROVAL:

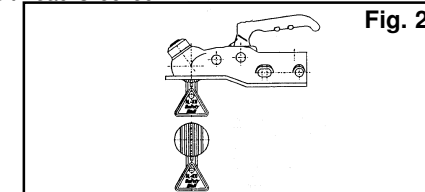
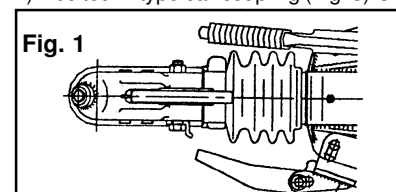
- 1) The AL-KO Security Device holds full TUV approval and is also Sold Secure Approved.

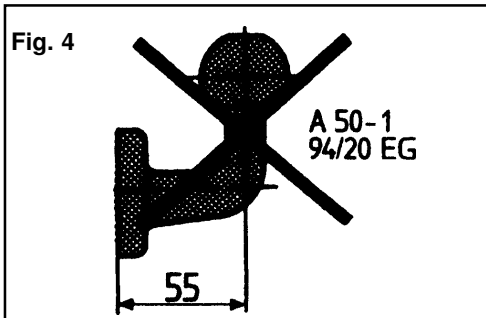
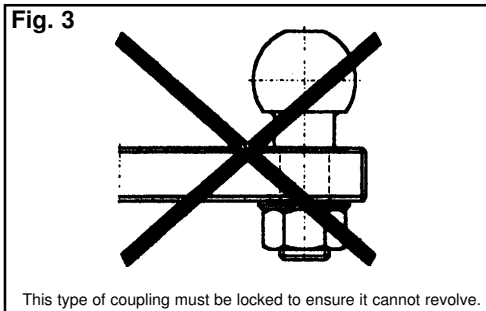
WARRANTY:

- 1) Product warranty is given in accordance with S10, Clause 1-7 of the General Terms of Business and is usually 12 months from date of purchase.

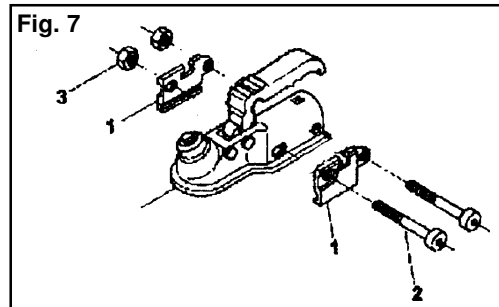
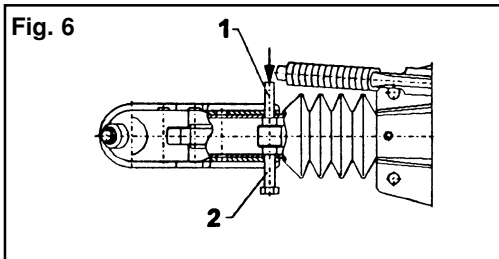
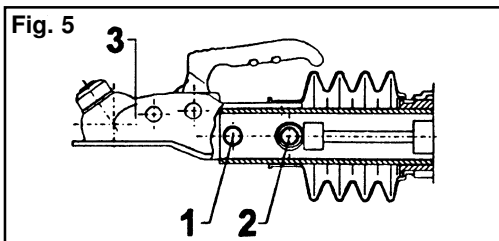
WARNINGS:

- 1) In accordance with EC Directive 94/20, couplings type A 50-1 cannot be used (see Fig. 4).
- 2) A bolted-in type ball coupling (Fig. 3) is only permissible if the thread is locked.





Removal of existing fixing bolts:
Before you start to remove the existing fixing bolts, please note the following: On most over-run assemblies, the shock absorber is secured by the fixing bolt (Fig. 5/Item 2).



Warning:
The shock absorber (damper) extends independently. Enclosed with this box is a retaining pin (Fig. 6) to aid assembly.

- Remove gaiter
- Loosen self-locking nut from hexagon cap bolt (Fig. 5, Items 1/2)
- Push or knock out hex. cap bolt (Fig. 5/Item 1)
- Knock through retaining pin (Fig. 6/2) with (Fig. 6/Item 1) and leave the pin in the shaft for centring the shock absorber (damper).
- Any spacers originally fitted must be re-used.

Fitting of AL-KO Security Device:
Horizontal Bolt Fitting: (for AL-KO Overruns)
Parts configuration as Fig. 7

- Item**
- Locking plates left/right
 - Allen Bolt M12 8.8 with flat head to DIN 7984
 - Self locking nut M12

Cross-type Bolt Fitting: (for other overruns)
Parts configuration as Fig. 8

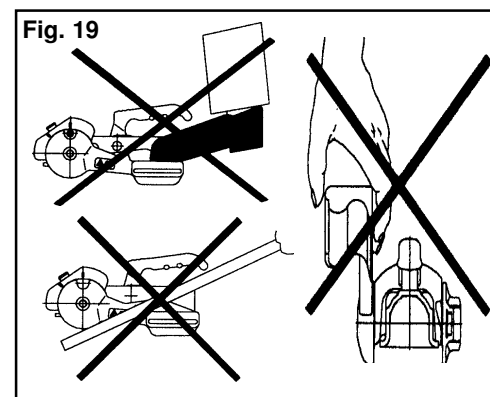
- Item**
- Locking plates left/right
 - Allen Bolt M12 8.8 with flat head to DIN 7984
 - Dome Head Bolt M12 8.8
 - Half moon shaped fixing lugs
 - Section washer (not included in this kit) - please use original washer from coupling head you are removing
 - Self locking nut M12

When opening or closing the stabilising lever, care should be taken not to trap fingers between the lever and the coupling handle (Fig. 20). See grip areas (Fig. 20). When applying the stabiliser lever some resistance should be experienced. Should this not be the case, then the handwheel may possibly be jammed.

IF NO STABILISING EFFECT IS FELT

Cause: The handwheel has been turned forcibly against the end top on opening.

Remedy: Contact AL-KO Service Station.

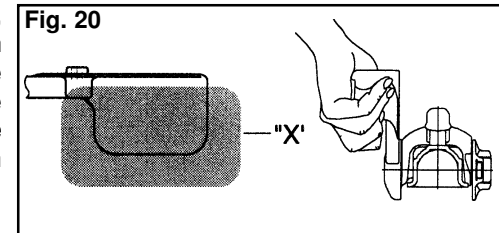


Important Operating Factors:

The towball should be completely free of grease and other residue. Clean thoroughly with Thinners, White Spirit or Brake Cleaning fluid.

Hints: The surface of the towball must be free of grooving, rust and scratch marks, Otherwise increased wear and tear will occur. If pads are contaminated by paint or if they are glazed, they can be cleaned with 100-200 grain sandpaper,

Painted towballs or similar coatings: In the event of the ball being coated, this must be thoroughly removed (with 100-200 grain sandpaper). Otherwise reduced stabilising effect, increased wear and damage to AKS 1300 components may occur.



During winter use, spray a tiny amount of de-icer onto the indicator button. Ensure that this fluid does not come into contact with the friction pads.

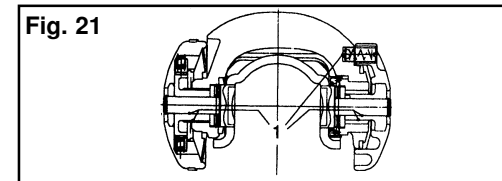
Stabilising Unit

Should lubrication of the stabiliser unit parts become necessary then the following must be observed:

- Clean all parts thoroughly.
- Areas may only be covered with a thin film of grease (see Figs. 21/22).
- Use multi-purpose grease to DIN 51825 KTA 3 K (or local equivalent)

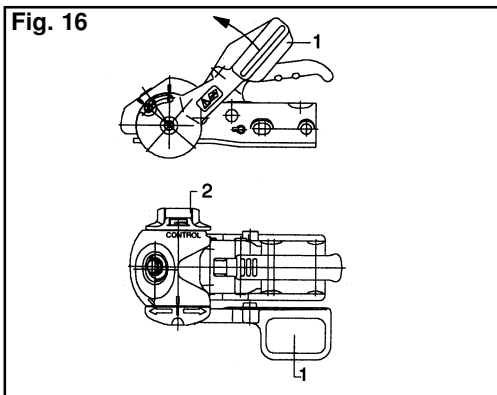
Warning: When lubricating - no oil or grease should be allowed to come into contact with the friction pads or onto the ball holding area.

If friction pads are contaminated with grease, they should not be cleaned as this will have a reduced stabilising effect. Therefore friction pads should be replaced.



Coupling Mechanism

In order to maintain the easy action of the coupling mechanism and to achieve a longer life for the AKS 1300, the coupling mechanism must be lubricated at regular intervals (at least once a year). See Fig. 22.



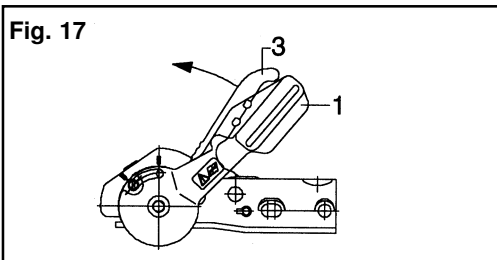
Stabiliser Unit:

Starting Position: The AKS 1300 is connected to the towball. Turn the handwheel to the right (clockwise) (Fig. 18/Item 2), until the torque limit can be heard and felt to ratchet. Press the stabilising lever (Fig. 18/Item 1) down. The AKS 1300 is now functional

Uncoupling:

Uncoupling of the trailer from the towing vehicle takes place in reverse order. Pull the stabiliser lever up, until the marking on the stabiliser lever (Fig. 18/Item 6) matches the marking on the stabiliser cover (top end position of the stabilising lever). Turn the hand wheel in an anti-clockwise direction (left) until it will not go any further. Open coupling handle and lift AKS 1300 from the towball of the towing vehicle.

Coupling and uncoupling can be made easier by use of the jockey wheel.

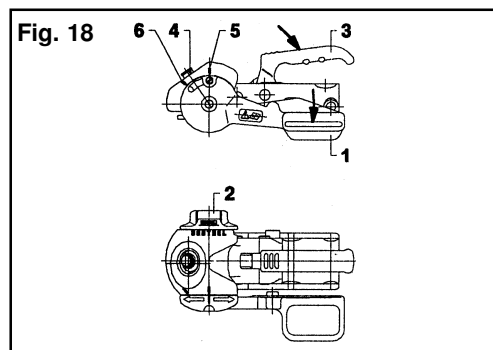


Coupling Up

Open coupling handle - to do this, pull the coupling handle (Fig. 17/Item 3) in the direction of arrow. The coupling mechanism has an open position, i.e. as long as the AKS 1300 is not placed on the ball, the coupling handle will remain open. Place the open coupling onto the towball. The coupling handle should audibly click back into starting position.

Safety Warning: If the stabiliser is correctly coupled to the towball, then the green edge of the safety indicator is visible. The coupling mechanism is correctly positioned when the hand lever can no longer be pressed down even by hand.

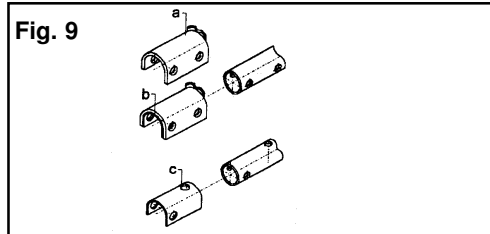
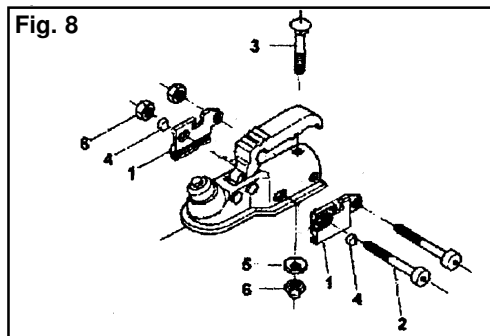
If the AKS 1300 is not correctly coupled to the towball, then the trailer/caravan can become disconnected from the towing vehicle!



Safety Tips:

The AKS 1300 should only be operated by one person when coupling or uncoupling.

Warning: Never operate with foot or extension bar! The components will be overloaded and damaged. (Fig. 19).



Procedure:

Push gaiter and AKS 1300 onto the draw shaft, with spacers (Fig. 9) if necessary, so that the fixing holes line up. If present, position the spacer sleeve in the draw shaft.

Fit parts as shown on Figs. 7/8. If a spacer sleeve is in the draw shaft, thread this on as well. Push retaining pin (Fig. 6/Item 1) through (with the bolt behind - horizontal or vertical). Shock absorber (damper), is threaded on.

For your own safety, please check:

To make sure the shock absorber (damper) is threaded on, push the draw shaft in and out. If you can feel resistance, then it is correctly positioned.

Always insert horizontal bolts from right hand side (when facing stabiliser), as this allows correct clearances.

Always insert vertical bolt from top to bottom (Fig 8/Item 3) and re-use original shim used on the overrun (not supplied- Fig. 8/Item 5).

With cross-type bolt fixing, do not forget to insert half moon shaped plates (Fig. 8/Item 4) and shim (not included - Fig. 8/Item 5).

For horizontal bolts, tighten with Allen Key (size 8), as the nuts are fixed and cannot be moved.

For vertical bolt: tighten nut and torque as follows:

Overrun Type	Torque Setting
AL-KO 30S	60 Nm
AL-KO 60S-60S/2	60 Nm
AL-KO 90S-90S/3	70 Nm
Other overruns with M12 (8.8) Bolts	86 Nm

Secure gaiter with tie wrap (or retaining ring).

Put security device on and lock. If the cover is difficult to put on or lock/unlock then you need to reposition the locking plates. Loosen front bolts and the plates can now move laterally. Re-tighten bolts to correct torque and check if safety cover now fits.

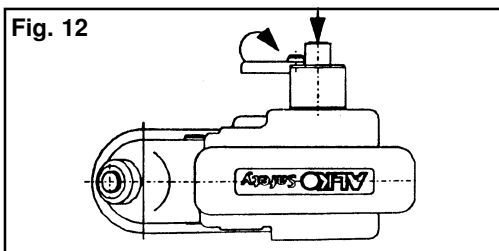
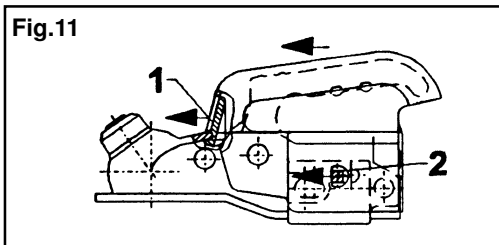
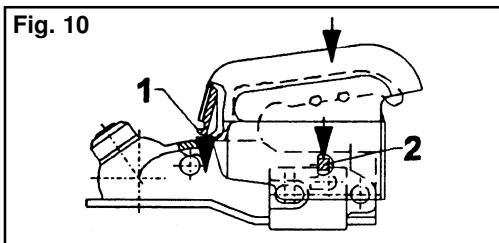
OPERATING INSTRUCTIONS (AL-KO SECURITY DEVICE):

Insert left and right lugs of security device into cutaway portion of the attached locking plates (Fig. 10/Item 2).

Push device firmly forward until it can go no further (Fig. 11/Item 1).

Hold security device in place, turn key to the right and press the lock cylinder in, until it clicks into place (Fig. 12). Turn the key to the left into the locked position. The strain bolt then moves out and locks.

Swing the dust cap over the lock cylinder to protect from dirt (Fig. 12).



Removing Security Device (reverse order to fitting cover):

Open dust cap.

Insert key and turn to the right, as far as it will go (about 60°). As a result the lock cylinder will slide up automatically. If necessary, press the cover forward and pull out the lock cylinder with the key (turned about 60°).

Pull safety cover back.

Remove security device and stow in vehicle or caravan. So that the dust cap is not damaged during transit, remove key (inserting lock) and swing dust cap over the lock cylinder.

Important Information:

Never attempt to fix or remove the security device with the aid of a hammer - this may result in damage to the cover.

MAINTENANCE

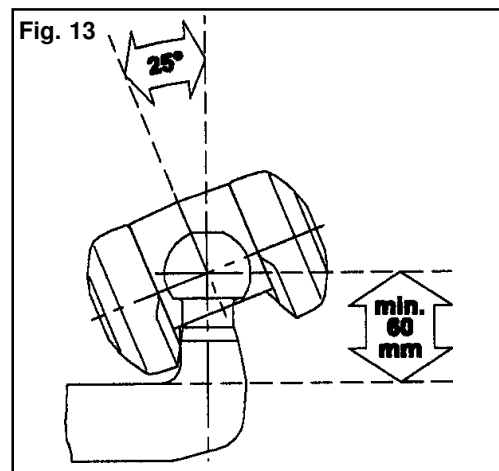
Clean strain bolt, locking bolts and the cutaway portion in the locking plates if they become dirty. A little grease may be applied but remove excess with a cloth so that only a thin film remains

Operate the locking cylinder periodically, if the cover has not been used for a while. If the lock only operates with difficulty, spray the cylinder with WD 40 (or similar)

PLEASE CHECK THE CONDITIONS FOR ATTACHMENT BY FOLLOWING THE STEPS LISTED BELOW.

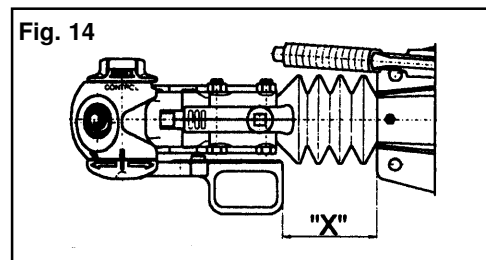
Towing vehicle with towball attachment:

The equipment may only be used for connecting to towballs to (DIN 74058 or local equivalent), where the clearance below the ball, measured from the centre of the coupling point, is at least 60 mm (Fig. 13). According to British Standards the prescribed rotation of ±25° will thus be achieved.



Stabiliser Lever Clearances (Fig. 14)

No component parts are allowed in the space marked X. The measurement of X should correspond at least to the travel of the overrun equipment (as a rule 80 - 100 mm according to type). Measurement is taken with a fully extended drawbar. AL-KO overrun equipment fulfils this requirement.



Coupling to Trailer Measurements (attachment hole dimensions B horizontal or cross) Please check dimensions of your coupling (Fig. 15) on your overrun equipment and also refer to table 1 for dimensional information.

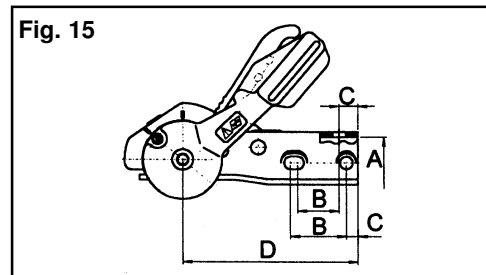


Table 1

Min Mass Kg	Total Permissible Weight Kg	Nose Weight Kg	Weight Kg	
180	1360	100	3.5	
Hole Type	Shaft Dia. (mm)	Distance Between Holes		Length D
	A	B	C	
Horiz	35, 40,50	50-54	12	168
Cross	45&50	40	18	168

All EC Countries:

The installation is to be examined in conformity to the stipulations in Appendix 1, No.5.10, according to the demands of Appendix VII of Directive EC 94/20. These installation and operating instructions are to be included with the caravan/trailer papers.

GB - Installation only possible with special tow ball attached to towing vehicle. Towball type A50-X (included with this kit). (see regulations and restrictions of use on page 1).



OPERATING INSTRUCTIONS(AL-KO AKS 1300)

AKS 1300 Delivery Specifications

- Fig. 16/Item 1: Stabilising Lever
- Fig. 16/Item 2: Handwheel
- Fig. 17/Item 3: Coupling Handle

Coupling/Uncoupling

Please Note: When coupling or uncoupling, the stabiliser lever must be in the up position (open) and the handwheel (2) must be as far open as possible (Fig 16).

Attention: Do not turn the handwheel against the stop by force.