

JAWA-ČZ

Sidecar Fitting Instructions

JAWA 350



FITTING INSTRUCTIONS FOR JAWA SIDECAR

The fitting of the sidecar to the motorcycle can be divided into four separate operations:-

Assembling the sidecar

Fitting the attachment brackets to the motorcycle

Fixing the sidecar to the motorcycle

Making final alignment adjustments

The sidecar is supplied with the necessary attachments and parts packed inside the body. Note that the attachment brackets are supplied loosely assembled so that the correct positions of parts can be easily seen.

To fit the sidecar follow the sequence below.

1. Assembling the sidecar

(a) Fit the windscreen and weather sealing strip. Place the sealing strip over the bottom edge of the windscreen. Align the drilled holes in the screen with those in the sealing strip. Fit the screen to the body with the bolts supplied, beginning at the centre of the screen. When all fixings are secure, trim the sealing strip flush with the outside edges of the screen.

(b) Fit the mudguard to the chassis brackets using the bolts which are supplied already fitted to the four holes in the mudguard. The plain washers should fit against the inside of the mudguard. The lamp wire should run down the rear of the mudguard and be taped to the chassis and lead up the rear attachment arm.

(c) Fit the sidecar wheel. The four wheel nuts are attached for transit to the wheel hub. Check that the wheel runs true. When correctly mounted the tyre valve faces outwards and the hub grease nipple appears in the cut-out in the wheel centre. The wheel nuts have a spherical face which fits a similar depression in the wheel.

2. Fitting attachment brackets to the motorcycle

(a) Place the motorcycle on its centre stand.

(b) Remove the four bolts from the front engine mounting plate and attach the front lower mounting bracket using the longer bolts supplied. Leave the bolts slack. (See fig.1).

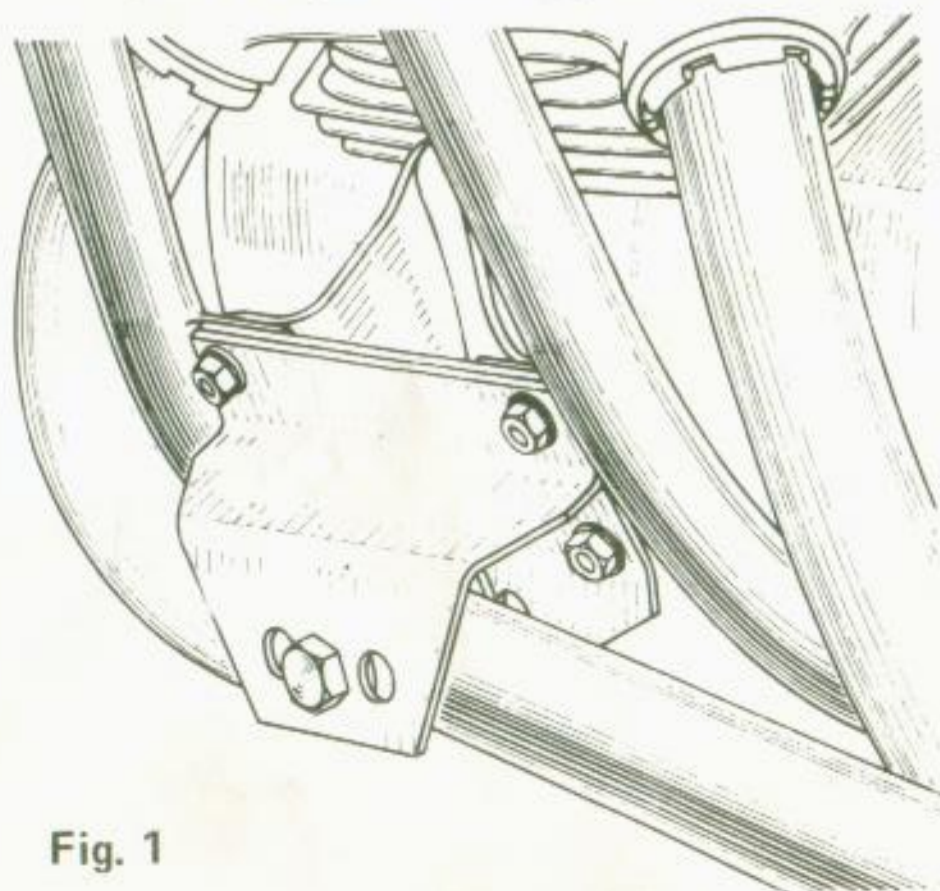


Fig. 1

(c) Remove the seat, the lifting handle and the bolt securing the nearside rear suspension unit to the frame. Loosely fit the rear upper mounting bracket using the holes left vacant by the lifting handle and the suspension mounting. Ensure that the shock absorber eye is sandwiched between the mounting plates and the frame. (See fig.2).

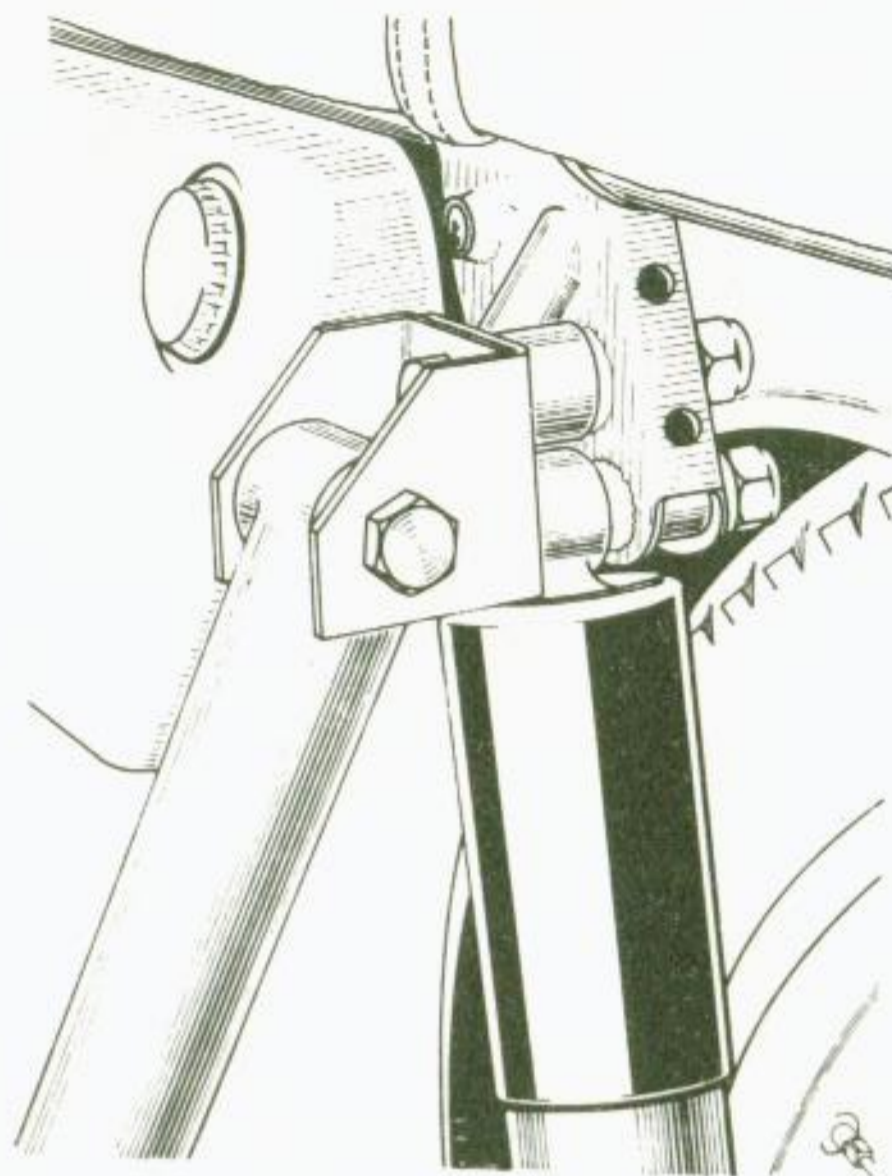


Fig. 2

(d) Remove the rear wheel spindle and fit this through the hole in the rear link attachment bracket. Ensure that the existing thick washer is between the head of the spindle and the bracket. Refit the spindle to the motorcycle ensuring that the bracket is on the nearside. Secure the spindle by means of the original nut and spring washer. Note that the bracket is offset to clear the silencer. (See fig.3).

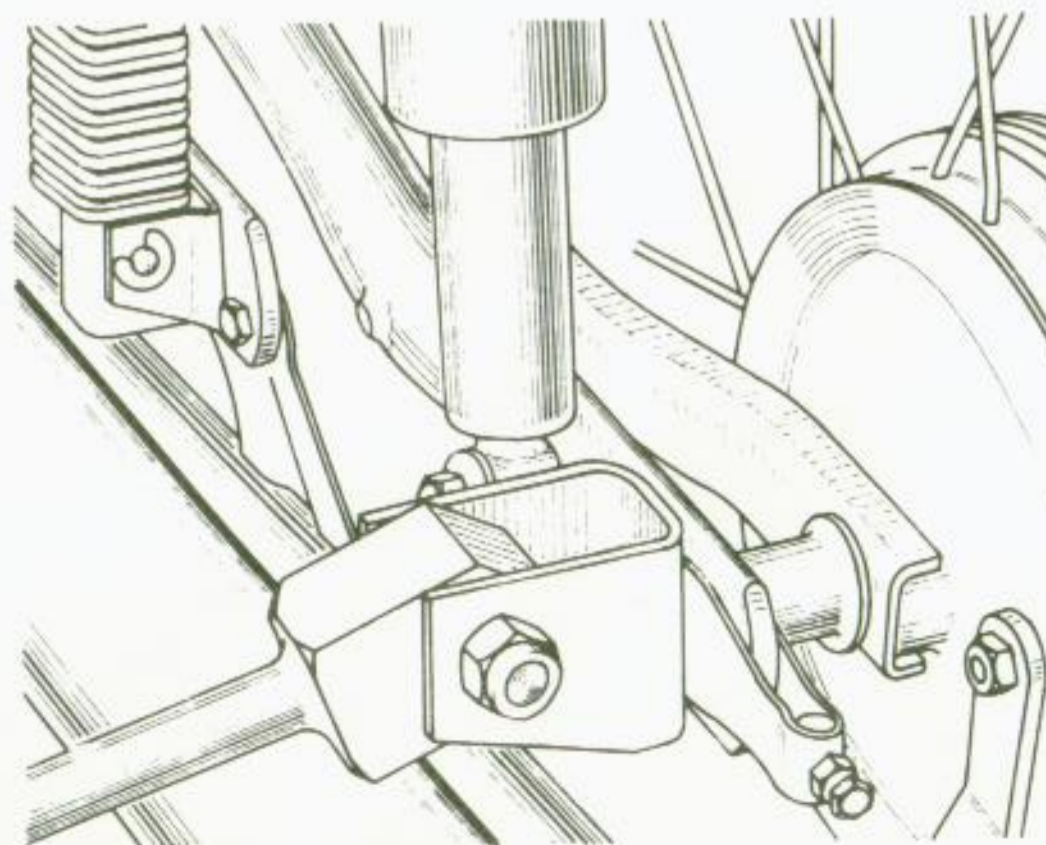


Fig. 3

3. Fixing the sidecar to the motorcycle

- (a) Bring the sidecar into position beside the motorcycle.
- (b) Fit the rear upper arm from the sidecar to the mounting bracket having first fitted the two rubber bushes into the eye on the end of the arm. Fit the securing bolt through the bracket and the bushed eye. Do not tighten. (See fig.2).
- (c) Assemble the front lower arm in the same manner as (b), fitting the securing bolt in the centre of the three hole pairs in the plate. (See fig.1).
- (d) Fit the rear lower link arm to the mounting bracket on the sidecar chassis, ensuring that the rubber washers are each side of the bracket. The nuts and steel washers are fitted in the same sequence as supplied. Leave this fixing as slack as possible so that the arm may later be moved to its final position in the bracket.
- (e) The front upper arm is fitted later, as detailed in section 4.

4. Making final alignment adjustments

- (a) Take the motorcycle off its centre stand.
- (b) Lean the motorcycle away from the sidecar by a very small amount – only just enough to notice (approx. $\frac{1}{2}$ " – 1" measured at the steering head away from the vertical). (See fig.4).

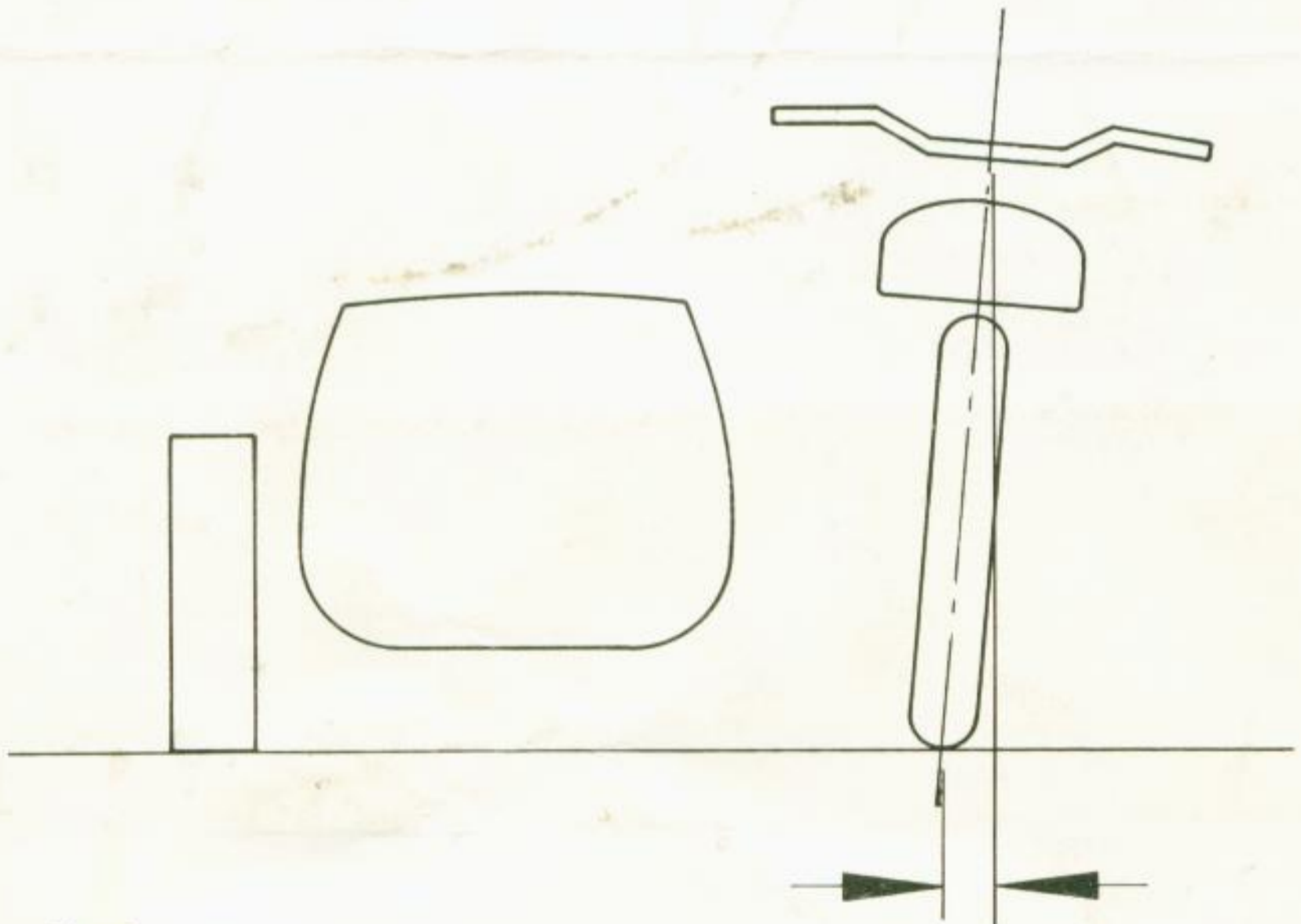
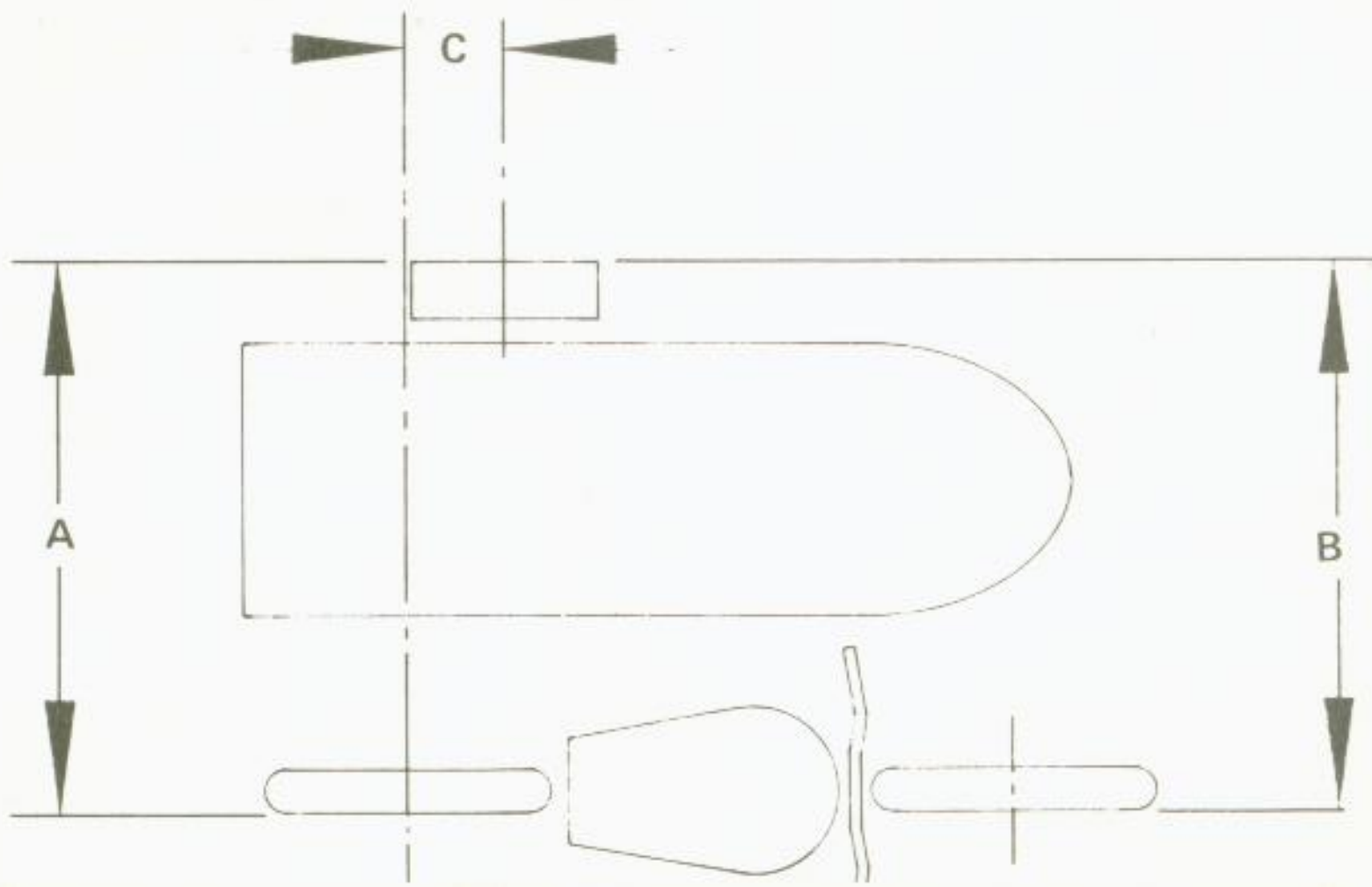


Fig. 4

- (c) Tighten the four bolts on the front lower mounting bracket and then tighten the lower arm securing bolt until the flanges of the rubber bushes begin to bulge slightly at each end.
- (d) Tighten the fixing bolt for the rear upper arm in the same manner, and then tighten the two bracket securing bolts finally.
- (e) Tighten the wheel spindle nut ensuring that the link bracket flanges remain vertical to the ground.
- (f) Re-check that the motorcycle lean out is still correct.
- (g) Tighten the nuts on the rear lower link arm which were left slack in 3 (d), so that the arm remains in its position through the chassis bracket, and that the rubber washers are just seen to be expanding. Lock the nuts when this is achieved.
- (h) Tighten the bolt securing the link arm onto the spindle bracket.
- (i) Check that the sidecar wheel toes in slightly towards the front of the motorcycle. This measurement is made by placing a straight edged plank against the sidecar wheel and reading the distance from each wheel rim of the motorcycle directly to the plank. The front measurement should generally be between $\frac{1}{4}$ " – $1\frac{3}{4}$ " less than that at the back. Should the toe in be incorrect, the front lower arm may be repositioned using whichever of the mounting plate holes will be appropriate. (See fig.5).



(j) Fit the front upper arm to the motorcycle by means of the clamp supplied. This is fitted to the down tube of the frame just under the cross tube beneath the steering head. The threaded end of the arm is fitted to the sidecar chassis bracket in the same manner as the rear link arm in 4(g). Adjusting the length of this arm will vary the lean out. (See fig. 6).

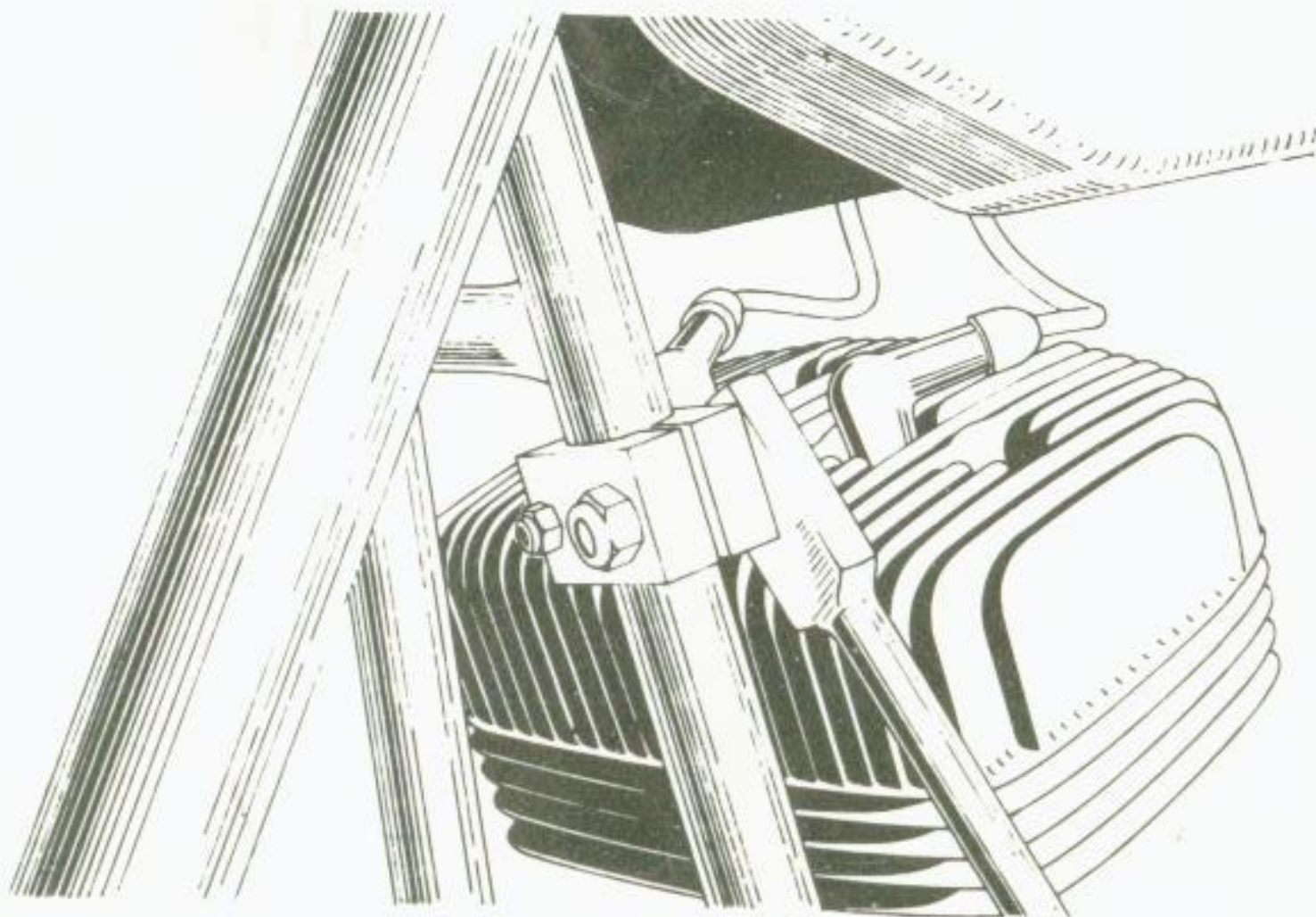


Fig. 6

Running Adjustments

Having checked that the alignments have been made in accordance with these instructions, the only further adjustment which may be necessary is that of lean out. On a light throttle the outfit should steer straight without pulling to the left or right. If the outfit pulls to the left the lean out should be increased, and vice-versa.

We would advise the consumer that if a sidecar is fitted to the Jawa 350 it is necessary to check the tension of the wheel spokes, the connection fitting screws on the front fork assembly and the tightness of the front wheel spindle.

THE MACHINE SHOULD NEVER BE USED WITH A LOOSE NUT ON THE FRONT WHEEL SPINDLE. THIS WILL AFFECT THE MOVEMENT OF THE FRONT BRAKE PLATE.

The Hood

Before erecting the hood, attach it to the hood bow by means of the four straps inside. The main bow is held by the rear most straps, and the smaller hinged bow by the front straps. The ends of the hood bow are located in the red plastic sockets positioned in the body just below the rear corner of the windscreen. Check that the shaped front edge of the hood is in position on the top edge of the windscreen. Stretch the elastic at each corner of the hood on to the appropriate studs fixed to the body.

The hood is supplied complete with four press stud fittings which have to be located on to windscreen itself in the best position for weather sealing. Instructions are supplied with the hood. When not in use, the hood may be detached from the bow and carried in the luggage compartment behind the seat. The hood bow may be stowed flat on the floor under the seat.

Tonneau Cover

When required, the tonneau cover is fitted by first clipping to the four press studs behind the windscreen, then slipping the elastic loops at each corner of the cover over the adjacent studs on the body.

Driving

Due to its layout the combination requires a unique but easily acquired driving technique. For the novice and particularly those with only solo experience, it is advisable to spend an hour or so in practice on a level open space before venturing onto the busy roads.

The normal riding reactions for solo motorcycling are different to those required for driving a combination, since a sidecar outfit has to be steered by positive movement of the handlebars. It is possible for the novice to forget this and attempt to steer by body lean only, allowing the front wheel to find its own path as on a solo. This will have no effect and the combination will not go in the direction intended. If, in addition, the brakes are applied without the necessary steering correction, the outfit may veer disconcertingly leaving the driver baffled. Great care and concentration is therefore necessary when gaining driving experience.

On acceleration the combination will tend to steer towards the sidecar and on slowing down will steer the other way. This is normal, though possibly disconcerting at first. A straight course is kept by steering in the appropriate direction, use of the throttle, or a combination of these depending on the circumstances. The characteristics of the motorcycle to accelerate around the sidecar, and the sidecar to over-run the motorcycle on deceleration is used as an aid to cornering.

Right hand bends are taken by closing the throttle thus allowing the momentum of the sidecar to carry the outfit round. Left hand turns have to be taken with caution on account of the possibility of the sidecar wheel lifting if taken too fast. It is important to slow down and change into a lower gear if necessary before turning left. The turn is then taken under gentle acceleration with the driver leaning towards the corner.

Entering of the sidecar which is initially a disconcerting experience and the reaction is to straighten the steering. With sufficient space this will effect a cure. The use of the rear brake can also help to turn the combination towards the corner as well as reducing the speed. Do not, however, take risks and until you are experienced, slow right down. A passenger in the sidecar will reduce the tendency for the wheel to lift, as will some ballast in the sidecar when there is no passenger.

Considerable improvements in handling can be obtained when turning left if the outfit is set-up with the motorcycle leaning in $\frac{1}{2}$ " as opposed to the setting shown overleaf (see fig.4). When using this setting a slight tendency to pull to the left will be noticed when the sidecar is fully laden but this is not disconcerting and may be fully acceptable to the inexperienced rider when the handling advantages are realised.

It should be stressed however, that this suggestion is only an alternative to the recommended settings which the rider can revert to as more experience is gained.