GENERAL INSTRUCTIONS

FOR THE

INSTALLATION AND ADJUSTMENT OF





Illustration showing one method of fitting Andre Shock Absorbers, using standard Brackets.

How to Install Andre Shock Absorbers

STANDARD TYPES 502/2, 506/2, 502M/2, 506M/2.

To obtain satisfactory results the Shock Absorbers must be carefully and properly fitted to the chassis. Study the blue print and special instructions supplied with every equipment. Place one Shock Absorber in position and secure lower bracket, then locate chassis bracket. Mark off the position of the bolt holes on the frame, and drill the bolt bracket into place. The double arm is attached to the axle, and the single arm to the chassis. In the case of the M. or Multiplex types, the reference would be the double and triple arms in their respective positions. The opening of the absorber arms should be approximately as shown on the blue print which should be always less than a right angle.

SINGLE ARM TYPE.

The special Single Arm models are designed for use on a number of cars to which the standard types cannot be easily applied. They are attached either direct or by means of a fixing plate to the chassis frame, and the single arm is connected to the front or rear axle by means of special link and axle brackets supplied. The arm and link is provided with "SILENTBLOC" bearings exactly similar to the standard models.

THE "SILENTBLOC" BEARING.

The famous "SILENTBLOC" Articulating Bearing is used in all Andre Shock Absorbers, and consists of an inner and outer steel sleeve, the space being filled with a special rubber material which is stretched in position and is therefore always under sufficient tension to prevent any movement taking place between the rubber and the outer and inner sleeves. The movement necessary to allow the Shock Absorbers to function takes place in the material itself without friction or slipping, therefore there is no wear, no lubrication or attention required, and further the elastic nature of the material also allows for the absorption of lateral strain and for the two parts to flex in relation to each other.

The "SILENTBLOC" bearing has been adopted after extensive and exhaustive tests under all conditions of service, and represents a most important advance in the adaption of Shock Absorbers to motor cars as it not only provides a perfect type of flexible coupling, but also eliminates all wear and consequent rattle so common with other models used.

It is important to note that the Andre Shock Absorber is the only one to which SILENTBLOCS are fitted.

How to Adjust Andre Shock Absorbers

FITTING INSTRUCTIONS.

The illustration shows exactly how the "SILENTBLOC" Coupling at the end of the arms of the Shock Absorbers is to be fitted to the bracket pins. The centre tube is mounted on the chassis pin and locked in position by means of a special cone nut which registers in the chamfer provided at the end of the central tube.

SPECIAL NOTE.

The cone nut must not be tightened until both arms of the Shock Absorbers are in position on the chassis, so that the "SILENTBLOC" Joint is in the neutral position and any movement of the arms either up or down, will, therefore, flex the elastic material each way from the neutral position.

B

A - STEEL LINER B - STEEL BUSH
C - EXTENSION D - ELASTIC BUSH
E - CHAMFER CASTLE NUT

ADJUSTMENT.

Each Shock Absorber is set to a certain initial tension before it leaves the factory (see schedule). No change in this adjustment should be made until the car has been driven about 100 miles on good and bad roads.

Carefully note the riding qualities of the car. If the spring action seems too free, increase the frictional resistance of each Shock Absorber by turning the centre adjusting nut to the right or clockwise by not more than one graduation at a time.

If the spring action seems too retarded and feels stiff, reduce the frictional resistance again by turning the adjusting nut to the left or counter-clockwise. Careful adjustment in this manner will produce an ideal condition. The springs will still have the required amount of flexibility for easy riding, but spring vibration will be reduced to a minimum, and violent rebound effectively eliminated.

Re-adjustment may only become necessary after several thousand miles of car travel, and should be made only when the spring movement seems too free and then the indicator should be moved not more than one-half of a graduation at a time.

It should be noted that the full benefit of the Shock Absorbers will not be felt when the car is travelling at low speeds, as under these conditions the spring movement is very limited, but as the speed increases their effect becomes more pronounced, especially over bad roads when the spring action is most severe.

Testing should therefore be carried out at comparatively high average touring speeds and adjustments made to suit these conditions.

IMPORTANT.

The frictional resistance required to effectively control the action of the springs is comparatively small, and care should be taken not to increase the pressure, when adjusting, more than is absolutely necessary to obtain the desired results. The initial Factory setting of the Shock Absorbers is approximately correct under normal conditions, but for fast Sports Cars and for Road and Track Racing, a considerable increase in pressure may be required.

How to Reset Andre Shock Absorbers

INSTRUCTIONS TO SERVICE AGENTS

The following table shows the correct initial Shock Absorber tension for the various types and different weights of cars:—

Type	App	rox. Weight of Ca	r	Initial Tension
502/2		up to 20 cwt.		20 lbs.
506/2		over 20 cwt.		25 lbs.
502M/2 Multiplex		over 30 cwt.		20 lbs.
506M/2 Multiplex		over 40 cwt.		25 lbs.
220	w			28 lbs.

To reset and adjust, clamp one arm of the Shock Absorber in a vice and test the tension with a spring scale attached to the outer end of the other arm.

If the tension registered is different from that shown in the above table, turn the adjusting nut in the direction necessary to secure the required tension—to the right to increase, to the left to decrease. Mark the ring or outer edge of the Shock Absorber opposite the pointer. Turn the adjusting nut to the left until the dial is free, counting the number of revolutions—complete turns—in doing so, and then move the dial so its zero (1) is opposite the mark previously made on the outer ring. See that the spider spring is in its place and tighten the adjusting nut, giving the wrench the same number of turns as before, but in the opposite direction. The pointer should be at the zero (1) mark when the requisite tension is obtained.

This gives the original adjustment at which the Shock Absorbers were set at the factory.—Re-attach the Shock Absorbers to the car and move the indicator to the adjustment which was found to give the best results or re-adjust according to the instructions above.

ANDRE (Components) LTD.

Head Office :-

FELSHAM WORKS,
PUTNEY, LONDON, S.W.15.

Telephone : PUTNEY 5751 (4 lines)