# SEAT Ibiza SC Trophy



# Workshop Manual



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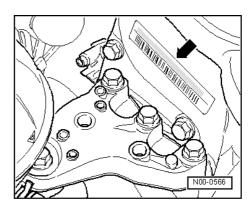




### **1. IDENTIFICATION NUMBERS**

#### Engine number

The code letters and the engine number appear on the sticker -arrow- next to the distribution casing and on the crankcase on the gearbox.



#### SEAT Sport engine number

The SSp identification number from SEAT Sport is placed on the crankcase lateral.



#### Gear box number:

**SEAR Sport gear box identification number** The SSp identification number from SEAT Sport is placed on the carcass.





All information on the work to be carried out on the SEAT Ibiza SC Trophy that are not described in this manual, can be find through programs available in the network of dealers.





### 2. ENGINE

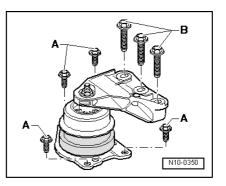
### 2.1. Engine tightening torques

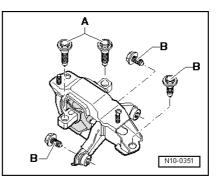
#### Engine support unit

Gear box support unit

 $-A^{-1}$  50 Nm + 90° (<sup>1</sup>/<sub>4</sub> vuelta) -B<sup>-1</sup> 40 Nm + 90° (<sup>1</sup>/<sub>4</sub> vuelta)

| -A- <sup>1)</sup>           | 20 Nm + 90°( <sup>1</sup> / <sub>4</sub> vuelta) |  |
|-----------------------------|--|--|
| -B- <sup>1)</sup>           | 30 Nm + 90°( <sup>1</sup> / <sub>4</sub> vuelta) |  |
| <sup>1)</sup> replace bolts |  |  |





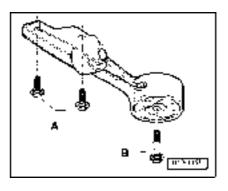
#### Pendulum support

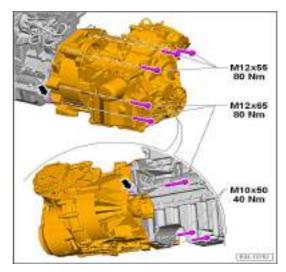
<sup>1)</sup> replace bolts

| -A- <sup>1)</sup>           | 30 Nm + 90° ( <sup>1</sup> / <sub>4</sub> vuelta) |  |
|-----------------------------|---|--|
| -B- <sup>1)</sup>           | 40 Nm + 90° ( <sup>1</sup> / <sub>4</sub> vuelta) |  |
| <sup>1)</sup> replace bolts |   |  |

#### Engine / gear box union

| M12x55 | 80 Nm |
|--------|-------|
| M12x65 | 80 Nm |
| M10x50 | 40 Nm |

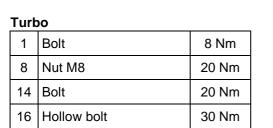


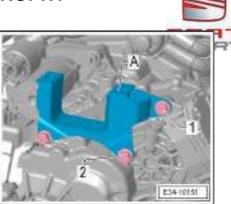


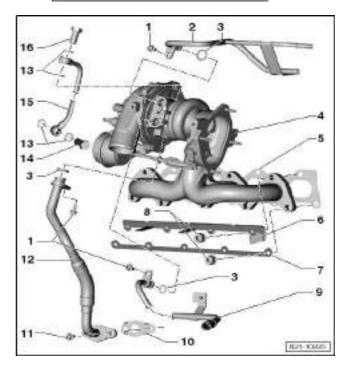


#### Intermediate bracket

| 1 | 60 Nm |
|---|-------|
| 2 | 60 Nm |

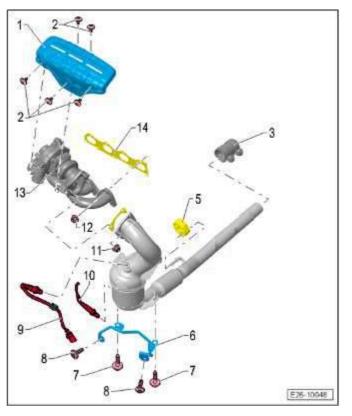






#### Exshaust

| No. | Tightening torque | Nm |
|-----|-------------------|----|
| 2   | Heat shield       | 5  |
| 3   | Clamp             | 25 |
| 7   | Bolt              | 25 |
| 8   | Bolt              | 10 |
| 10  | Lambda probe      | 50 |
| 11  | (add sealant)     | 40 |
| 12  | (add sealant)     | 20 |
| 14  | Always replace    |    |







### 2.2. Change the CAVE engine oil



Note: Rotation tool -T20050-

#### Warning!

Prevent the oil dripping onto vehicle components. Before starting the removal, cover the alternator with a cloth

First, loosen the oil filter -arrow- with the rotation tool -T20050- before completely unscrewing it.

Let several minutes pass for the oil to flow from the filter to the engine.

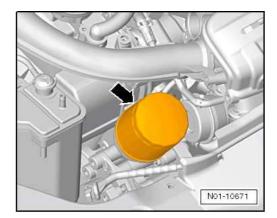
Clean the surface of the seal between the oil filter and the distribution casing.

Lightly lubricate the joint of the new filter.

Screw the new filter on by hand.

Screw the oil drain plug in with a new sealing ring. Replace the engine oil, specifications

| Tightening torque | Nm |
|-------------------|----|
| Oil filter        | 20 |
| Oil drain plug    | 30 |



#### **Oil level check**

Note the difference between the lower and upper zone "a" may be due to the temperature difference between hot and cold.

Marks of the measuring rod of oil level

1 - Mark max.

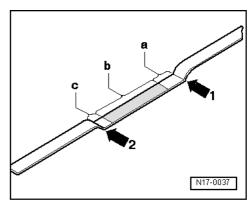
2 - Mark min.

a- - Area between the upper limit of the area recorded and the mark max .: Not adding oil.

b - The level is located in the area recorded: Can Be added oil

c - Area between the mark min and the bottom edge of the area recorded: Add a maximum 0.5 I of oil.



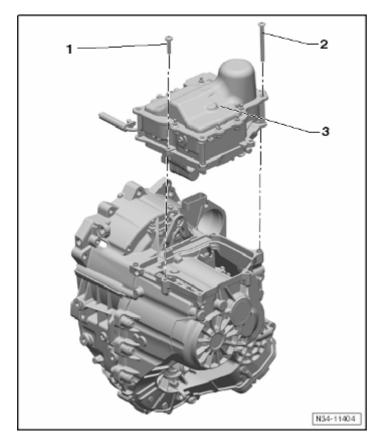




### 3. TRANSMISSION

### 3.1. Gear box union bolts

Mechatronica. Change



#### Control Cable from the lever rotary switch.

Verify:

From "P" and the pad holding, pull the gear lever about 5 mm rearward and keep in this position, without articulating "R".

Releasing the gear lever

The lever must return alone to "P". If not, adjust the control cable from the lever Put the gear lever in "N".

From "N" and the pad holding, pull the gear lever about 5 mm rearward and keep in this position, without articulating "D".

Releasing the gear lever

The lever must return alone to "N".

If not, adjust the control cable from the gear lever

From "N" and the pad pressed, push the gear lever about 5 mm forward and keep it in this position, without articulating "R".

Releasing the gear lever

The lever must return alone to "N".

If not, adjust the control cable from the gear lever.



#### Gear box lever adjustment:

Disconnect the power on. Loosen the screw of the slide.

### i Note:

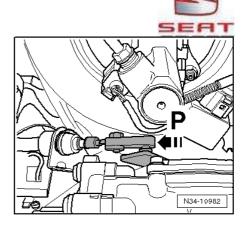
With the thumb screw tighten loose, the lever of the actuating mechanism of the change <u>must always remain</u> in "P"; otherwise the adjustment will not correct

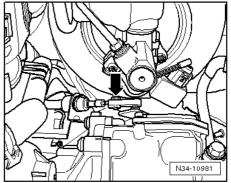
Put in "P" the gear box lever.

To do this, press the gear box lever (see arrow) towards the support of the control cable. Turn the front wheels one direction, ex. Pushing the vehicle forward until the pinion engage and lock the parking wheel.

The blockade of parking is not confined until the two wheels (tires) don't be able to turn at the same time in the same direction

Move with care the lever slightly backwards and forwards, without changing to another lever position. Tightening the screw -arrow - of the control cable from the lever rotary switch without jerks (torque: 13 Nm).





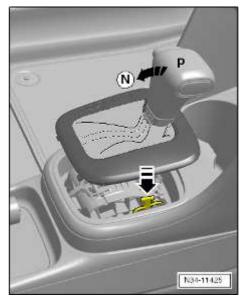
### 3.2. Emergency unlocking

It is only possible to change to "P" from an other position if the main and contact switch is powered. If for any reason there is no battery is possible to unlock the gear security block.

Lift the plastic cover and push down the yellow lever Push the gear shift lever button and move the gear shit lever to "N" (neutral).

### Marning!

Be careful because the car does not have parking brake and now there isn't any mechanism to block the car movement.







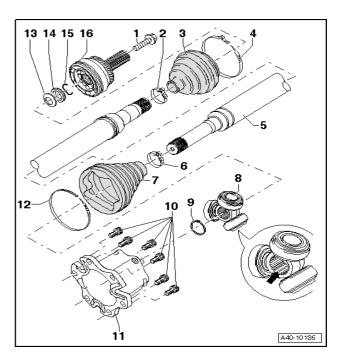
### 3.3. Drive shaft with AAR tripod joint

#### **Tightening torques**

| No. | Bolt                                  | Thread | Tightening torque (Nm)  |
|-----|---------------------------------------|--------|---|
| 1   | Securing the articulated shaft        | M16    | 240 Nm<br>loosening and tightening<br>240Nm + 90°   |
| 10  | Attachment of the articulated element |        | Prior: diagonally 10Nm<br>M8: diagonally 40Nm<br>M10: diagonally 70Nm<br>Replace after each removal |

#### Filling the joints with grease

|                   | Exterior joint |
|-------------------|----------------|
| Total quantity    | 120 g          |
| In the joint      | 80 g           |
| In the dust guard | 40 g           |
|                   | Tripod joint   |
| Total quantity    | 140 g          |
|                   | i ie g         |
| In the joint      | 70 g           |







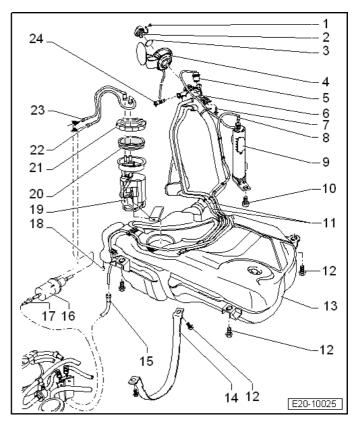
### 4. FUEL

### Safety precautions when working on the fuel supply system

### MARNING!

Fuel system is under pressure. Wear safety gloves and glasses to avoid injury and contact with skin. Before loosening hose connections, a cloth must be wrapped around the connection. Then release pressure by carefully pulling hose off connection.

5- Gravitational valve \*Perpendicular valve: open \*Valve inclined 45 ° closed 6- Earth connection 7- Bolt 10 Nm 8- Vent pipe 10-10 Nm 12-25 Nm 16- Fuel filter. Fitting position: The arrow indicates direction of flow The fuel pressure regulator is part of the fuel filter 18- 3 Nm 21- Seal bolt, 80 Nm 22- Supply pipe. Black 23- Return pipe. Blue

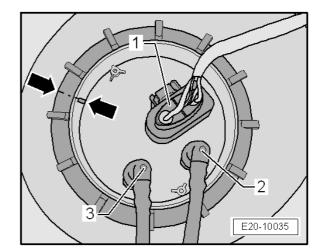


#### Fitting position of fuel delivery unit flange

The marks on the gauge and on the fuel tank must coincide -arrows-

Return pipe -2- (blue or with blue marking) to connection marked with an -R-

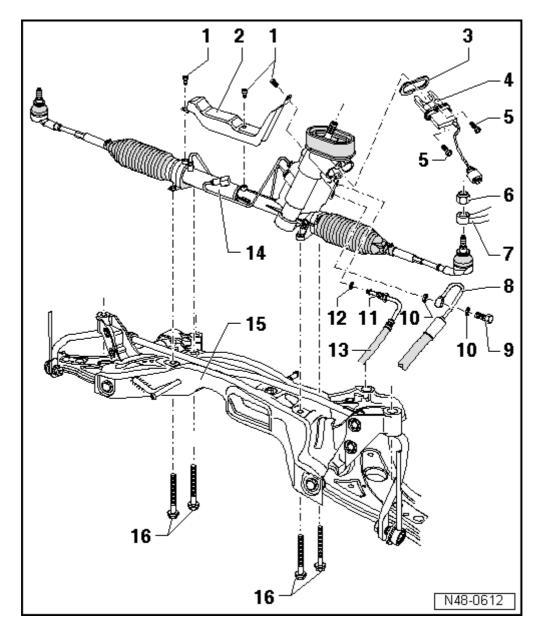
Black fuel supply line -3- to the connection marked with a -V-







### **5. STEERING RACK**



| No. | Bolt                         | Thread    | Tightening torque (Nm)                         |
|-----|------------------------------|-----------|--|
| 6   | For conic ball joint         | M12 x 1,5 | 20 Nm + <sup>1</sup> / <sub>4</sub> turn (90º) |
| 9   | Hollow bolt& retention valve |           | 40 Nm  |
| 16  | Steering rack fixation       | M10 x 84  | 50 Nm + <sup>1</sup> / <sub>4</sub> turn (90º) |





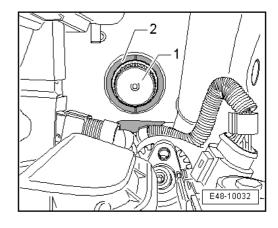
#### Power steering: check level, top up with hydraulic fluid as necessary

Note: Do not reuse drained hydraulic fluid.

-Unscrew the sealing plug -1 from the electro-hydraulic pump unit -2-.

-Wipe the oil dipstick with a clean rag.

-Screw the sealing plug in by hand and then unscrew it. -The oil level is only valid when the sealing plug is screwed in.

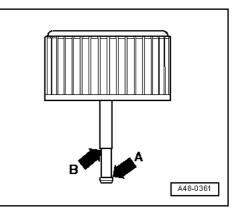


#### **Oil cold**

Engine should be off and front wheels straight. The oil should be between the lower mark -arrow A- and the higher -arrow B- on the dipstick.

#### Oil at operating temperature (from approx. 50 °C)

A level above the upper mark -arrow B- is acceptable when the oil is at operating temperature.



#### Power steering: bleeding system

-Raise the vehicle until the front wheels are free. -Open the sealing plug on the hydraulic fluid tank. -With the engine off, rotate the steering wheel 10 times from limit to limit.

-Check hydraulic fluid level and top-up if necessary. -Screw the sealing plug onto the hydraulic fluid tank, but do not tighten it.

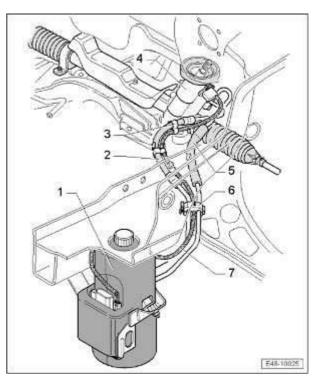
-Start engine and run for approx. 10 seconds.

-Check hydraulic fluid level and top-up if necessary -Shut engine off

-Screw the sealing plug onto the hydraulic fluid tank, but do not tighten it.

-Repeat the previous step until the oil level does not go down.

-Screw the sealing plug onto the hydraulic fluid tank by hand

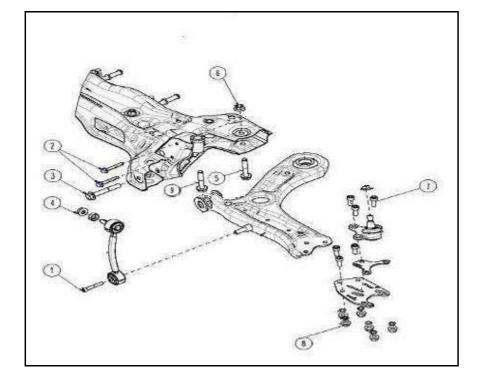






### 6. FRONT AXLE

### 6.1. Tightening torques



#### Front sub-chassis

| Bolted joint            | Thread          | Tightening torque (Nm) |
|-------------------------|-----------------|------------------------|
| To de bodywork          | M12 x 1,5 x 100 | 70 + 90°               |
| Support to the bodywork | M8 × 20         | 20 + 90°               |

#### Transverse swinging arm

| Bolted joint      | Thread             | Tightening torque (Nm) |
|-------------------|--------------------|------------------------|
| To the strut      | M12 x 1,5 x 70–110 | 70 + 90°               |
| To the ball joint | M10                | 40 + 45°               |
| To the strut      | M10 x 82           | 70 + 90°               |

#### Anti-roll bar

| Bolted joint                   | Thread  | Tightening torque (Nm) |
|--------------------------------|---------|------------------------|
| To the strut                   | M8 x 60 | 20 + 90°               |
| To coupling rod                | M12     | 40                     |
| Coupling rod to telescopio arm | M12     | 40                     |

#### **Telescopic arm**

| Bolted joint                     | Thread         | Tightening torque (Nm) |
|----------------------------------|----------------|------------------------|
| To the bodywork                  | M14 x 1.5      | 60                     |
| To the Wheelhub                  | M12 x 1,5 x 80 | 60 + 90°               |
| Suspensión rod to telescopio arm | M14 x 1,5      | 60                     |





#### Steering rack

| Bolted joint            | Thread    | Tightening torque (Nm) |
|-------------------------|-----------|------------------------|
| Swinging arm ball joint | M12 x 1,5 | 20 + 90°               |
| Front speed sensor      | M6 x 16   | 8                      |
| Steering ball joint     | M12 x 1,5 | 20 + 90°               |

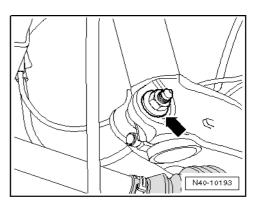
### 6.2. Shock absorber fixation

## Note

The drive shaft should never be left suspended because the internal joint would be damaged by excessive bending.

Secure the drive shaft to the body using a wire.

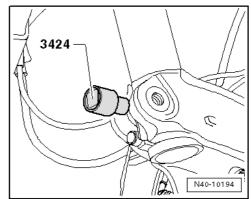
Separate the bolted steering knuckle/suspension strut joint –arrow



Insert the separator -3424- in the steering knuckle groove

Turn the wrench 90° and remove it from the tool - 3424-.

Remove the steering knuckle downwards with the shaft joint and extract it from the shock absorber pipe.

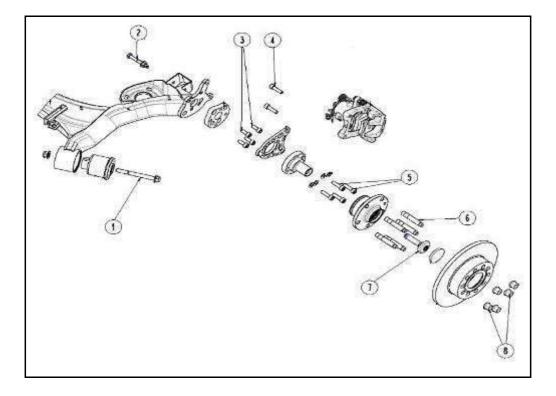






### 7. REAR AXLE

### 7.1.1. Rear axle scheme



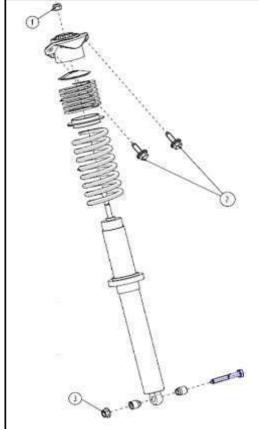
| Bolted joint   | Pos. | Tightening torque<br>(Nm) |
|--|------|---------------------------|
| Attachment of rear axle to the support<br>Always replace the nut and bolt!     | 1    | 100 Nm                    |
| Attachment of shock absorber to the rear axle Always replace the nut and bolt! | 2    | 80 Nm                     |
| Toe & camber spacer bolts  | 3    | 60 Nm                     |
| Caliper support to toe spacer  | 4    | (M12) 80 Nm               |
| Wheel hub to toe spacer  | 5    | 60 Nm                     |
| Brake line connection  |      | 14 Nm                     |
| Wheel nuts   |      | 90 Nm                     |





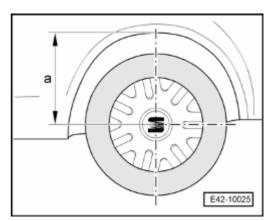
### 7.1.2. Rear shock absorber

| Position | Tightening torque<br>(Nm) |
|----------|---------------------------|
| 1        | By hand                   |
| 2        | 40 Nm                     |
| 3        | 80 Nm                     |

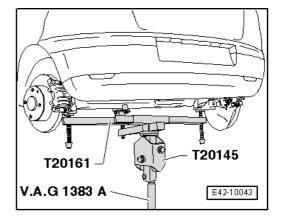


Replace:

Before lifting the vehicle off the ground, measure the height of the centre of the wheel to the body.



Once the strut has been replaced, tighten the rigid strut attachment bolts to the body with the centre of the wheel at running height. This process prevents stress in the silentblock.



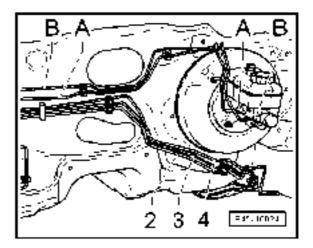




### 8. BRAKES

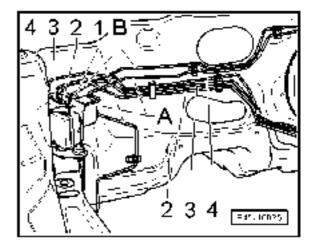
## 8.1. Connection of the master cylinder brake lines to the hydraulic unit.

- A From the brake master cylinder pressure-bar piston circuit to the hydraulic unit
- B Brake master cylinder floating piston circuit to the hydraulic unit
- 2 From the hydraulic unit to the rear right brake clip
- 3 From the hydraulic unit to the rear right brake caliper
- 4 Hydraulic unit to front left brake caliper



### 8.2. Connection of the brake lines in the hydraulic unit.

- A From the hydraulic unit to the brake master cylinder pressurebar piston circuit
- Distinctive marking on the hydraulic unit -HZ1-
  - B From the hydraulic unit to the brake master cylinder floating piston circuit.
- Distinctive marking on the hydraulic unit -HZ2-
  - Hydraulic unit to front right brake caliper
- Distinctive marking on the hydraulic unit -VR-
  - 2 From the hydraulic unit to the rear left brake caliper
- Distinctive marking on the hydraulic unit -HL-
  - 3 From the hydraulic unit to the rear right brake caliper
  - Distinctive marking on the hydraulic unit -HR-
  - 4 Hydraulic unit to front left brake caliper
- Distinctive marking on the hydraulic unit -VL-







### 8.3. Replace brake pads

#### Removal:

Extract the retaining spring from the pad by carefully levering with a screwdriver between the spring and the brake pad securing spring.



The spring is subject to pressure; protect your hand.

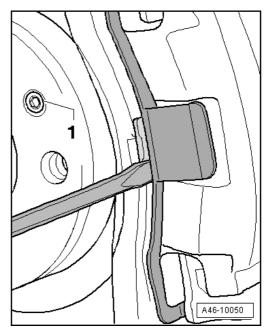
Pay particular attention to the brake pad spring fastener -arrow-.

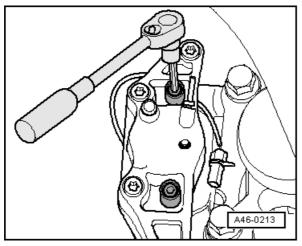
Take the brake pad retaining spring out of the brake caliper housing using a screwdriver as a lever and remove it.

Unscrew both guide pins from the brake caliper and remove them.

Remove the brake caliper housing and support it suitably, so that the weight of the caliper does not damage the brake pipe.

Remove the brake pads from the brake caliper housing.





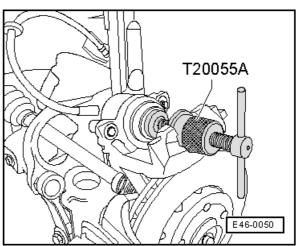
Fitting:



Retract the piston.

Before fitting new brake pads, the piston inside the cylinder must be extracted with the pressure tool -T20055A -.

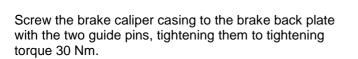
In the event that the brake fluid has been replaced, before extracting the piston towards the interior of the cylinder, part of this liquid must be sucked from the tank with the brake bleeder -SAT 1175B-. Otherwise brake fluid may spill out causing damage to the body.





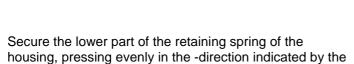


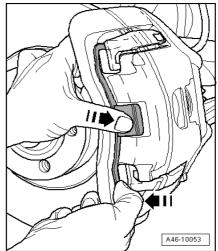
Position the brake pads -1- and -2- on the brake caliper.



Ensure that the brake hose is fitted tension-free.

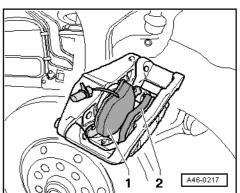
Place the retaining spring in the upper part of the housing and in the brake pad securing tab -arrows-.

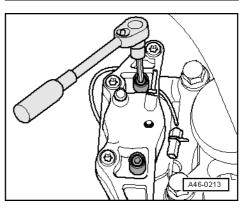


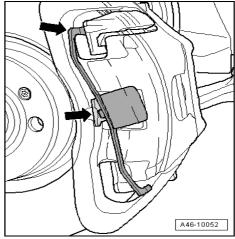




arrow-.









1

N01-10787

### 8.4. Bleeding

There are two ways.

- a) Vacuum tool.b) By hand.

We recommend by hand. It's advisable to bleed following that order: RR / RL / FL / FR.

Car status: Engine stoped Without contact



**i** Note

-Use the liquid indicated on the SEAT Ibiza SC

Trophy characteristic table or other with similar characteristics.

-ABS unit have a singular place, so the brackets must be in excellent conditions because the angle of the unit in front of the car alignment is very important. If for any reason the ABS unit must be disassembled, to fix again consult the dealer indications.

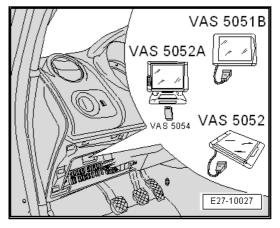




### 9. Electric

Diagnosis connection:

Mounting Location: the terminal for diagnosis is located below of the protector for the knees, to the left of the steering wheel.

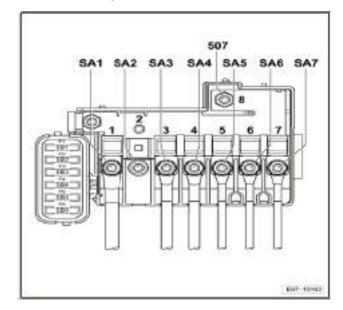


### 9.1. Fuses:

- 1 Fuses (SA) to the socked fuses A
- 2 Fuses (SB) to the socked fuses B
- 3 Not used
- 4 Fuses (SC) to the socked fuses C
- 5 Additional fuses (SF) to the socked fuses from socked relay.



#### 1. Fuses (SA) on the socked fuses A, in the cockpit





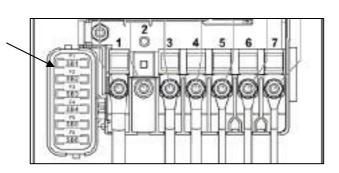


Fuses list (SA) to the socked fuses A,.

| -    |  |                  |   |          |
|------|--|------------------|---|----------|
| Núm. | Name in the scheme of power<br>circuit                             | Nominal<br>value | Function / component  | Terminal |
| 1    | Fuse 1 of the socked fuses<br>A -SA1-                              | 150 A            | Alternator -C-  | 30a      |
| 2    | Fuse 2 of the socked fuses<br>A -SA2-                              | -                | Free  |          |
| 3    | Fuse 3 of the socked fuses<br>A -SA3-                              | 110 A            | Cockpit   | 30a      |
| 4    | Fuse 4 of the socked fuses<br>A -SA4-                              | 50 A             | Power Steering Control Unit -J500-  | 30a      |
| 5    | Fuse 5 of the socked fuses<br>A -SA5-                              | 40 A             | ABS Control Unit-J104-  | 30a      |
| 6    | Fuse 6 of the socked fuses<br>A -SA6-                              | 40 A             | Control Unit for cooling system fans<br>C1781 -J293/ C24-                     | 30a      |
| 7    | Fuse 7 of the socked fuses<br>A -SA7-                              | 50 A             | Control Unit for the warming system -<br>J179- (BMS, CAYB, CAYC, CFHD y CFWA) | 30a      |
| 8    | Connection to screw (30),<br>of the socked fuse /battery -<br>507- | -                | Power terminal 30   | 30       |

#### 2. Fuses (SB) to the socked fuses B, on the cockpit engine

- Fuse colours 50 A - red 40 A - orange 30 A - green 25 A - white 20 A - yellow 15 A - blue 10 A - rojo 7,5 A - brown 5 A - beige 3 A - purple



Fuses list (SB) to the socked fuses B, After June 2011

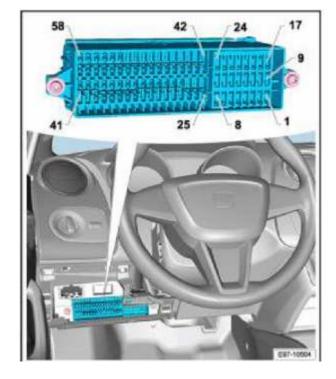
|            | . ,                                    |                  |  |          |
|------------|--|------------------|--|----------|
| Núm.       | Name in the scheme of<br>power circuit | Nominal<br>value | Function / component   | Terminal |
| <b>F</b> 1 | Fuse 1 of the socked<br>fuses B -SB1-  | 25 A             | ABS control unit -J104-  | 30a      |
| F2         | Fuse 2 of the socked<br>fuses B -SB2-  | 30 A             | Termo switch for the cooling systen -F18-  | 30a      |
|            | Fuse 3 of the socked<br>fuses B -SB3-  | 5 A              | Control Unit for the cooling system C1781 -J293-                                       | 30a      |
| F4         | Fuse 4 of the socked<br>fuses B -SB4-  | 10 A             | ABS Control Unit -J104-  | 30a      |
| F5         | Fuse 5 of the socked<br>fuses B -SB5-  | 5 A              | Control Unit for the Gateway -J519- (T73b/59)  | 30a      |
| F6         | Fuse 6 of the socked<br>fuses B -SB6-  | 30 A             | Control Unit for mechatronica from DSG gear box<br>DSG -J743- (BTS, CAVE, CAVF y CBZB) | 30a      |





4. Fuses (SC) to the socket fuses C bellow dashboard, left hand

Fuses colour 50 A - red 40 A - orange 30 A -green 25 A -white 20 A -yellow 15 A -blue 10 A -red 7,5 A -brown 5 A - beige 3 A - purple



Fuses list (SC) to the socket fuses C.

|      |   | 0110303          | 0.  |          |
|------|---|------------------|---|----------|
| Núm. | Name in the scheme of power circuit     | Nominal<br>value | Function / component  | Terminal |
| 1    | Fuse 1 of the socked fuses C -SC1-      | 7,5 A            | Level transmitter and oil temperature -G266- (CAVE, CAVF,<br>CAYB, CAYC, CFHD, CBZB, CFWA, CGGB, CGPA y CGPB) | 15a      |
|      |   |                  | Airflow sensor -G70- (CAYB y CAYC)  |          |
|      | -                                       |                  | Control Unit for power steering -J500-  |          |
| 2    | Fuse 2 of the socked fuses C -SC2-      | 10 A             | Connection for the diagnosis -U31- (T16/1)  | 15a      |
|      |   |                  | Switch heating -E16-  |          |
|      |   |                  | GRA switch -E45-  |          |
|      |   |                  | Hyght pressure sensor -G65-   |          |
|      |   |                  | Contro unit for the cooling fans C1781 -J293-   |          |
|      |   |                  | Control Unit for lights on/off -J665-   |          |
|      |   |                  | Control unit for fog light -J745-   |          |
| 3    | Fuse 3 of the socked fuses C -SC3-      | 5 A              | Fuel pump relay -J17- (BTS, CEKA, CGGB CGPA y CGPB)   | 15a      |
|      |   |                  | FUEL PUMP CONTROL UNIT -J538- (CAVE, CAVF y CBZB)   |          |
|      |   |                  | ENGINE CONTROL UNIT -J623- (BTS, CAVE, CAVF, CAYB, CAYC, CBZB, CEKA, CFHD, CFWA, CGGB, CGPA y CGPB)           |          |
| 4    | Fuse 4 of the socked fuses C -SC4-      | 10 A             | Push button for tire pressure -E226-  | 15a      |
|      |   |                  | Push button for ASR/ESP -E256-  |          |
|      |   |                  | Steering angle transmitter -G85-  |          |
|      |   |                  | ABS Control Unit -J104-   |          |
|      | -                                       |                  | Interfaze for diagnosis CAN BUS -J533- (Sólo con Start-Stop)  |          |
| 5    | Fuse 5 4 of the socked<br>fuses C -SC5- | 10 A             | Gear reverse Light switch -F4-  | 15a      |
|      |   |                  | Left ejector resistance for warming system -Z20-  |          |
|      |   |                  | Right ejector resistance for warming system -Z21-   |          |
| 6    | Fuse 6 4 of the socked<br>fuses C -SC6- | 5 A              | Dash-board Control Unit -J285-  | 15a      |





|    |   |       | SPOR   | 27  |
|----|---|-------|--|-----|
| 7  | Fuse 4 of the socked fuses<br>C -SC7-     | 7,5 A | Dash-board Control Unit -J285-   | 55a |
|    |   |       | Gate Way Controle Unit -J519- (T73a/6)   |     |
| 8  | Fuse 8 4 of the socked<br>fuses C -SC8-   | -     | Free   |     |
| 9  | Fuse 9 4 of the socked<br>fuses C -SC9-   | 10 A  | Intermitent widscreen wiper -E22-  | 15a |
|    |   |       | Intermitent windscreen wiper regulator -E38-   |     |
|    |   |       | Windscreen wiper pump -E44-  |     |
| 0  | Fuse 10 4 of the socked<br>fuses C -SC10- | 5 A   | Gate Way control Unit -J519- (T73a/44)   | 15a |
| 11 | Fuse 11 4 of the socked fuses C -SC11-    | 5 A   | Airbag control Unit -J234-   | 15a |
|    |   |       | Copilot airbag light indicator -K145-  |     |
| 12 | Fuse 12 4 of the socked<br>fuses C -SC12- | 10 A  | Gear lever -E313- (BTS, CAVE, CAVF y CBZB)   | 15a |
|    |   |       | DSG CONTROL UNIT -J743- (BTS, CAVE, CAVF y CBZB)   |     |
| 3  | Fuse 13 4 of the socked<br>fuses C -SC13- | 5 A   | Rearview external switch -E48-   | 15a |
| 14 | Fuse 14 4 of the socked fuses C -SC14-    | 15 A  | Light power module - left -J667-   | 15a |
| 15 | Fuse 15 4 of the socked<br>fuses C -SC15- | 15 A  | Light power module -right -J668-   | 15a |
| 16 | Fuse 16 4 of the socked<br>fuses C -SC16- | 15 A  | Free   | 15a |
| 17 | Fuse 17 4 of the socked<br>fuses C -SC17- | 5 A   | Inner copilot lights -E20-   | 58a |
|    |   |       | Number plate light -X-   |     |
| 18 | Fuse 18 4 of the socked fuses C -SC18-    | 5 A   | Wheel control for lights height -E102-   | 56b |
| 9  | Fuse 19 4 of the socked fuses C -SC19-    | 5 A   | Gate Way control Unit -J519- (T73a/42)   | 86s |
| 20 | Fuse 20 4 of the socked fuses C -SC20-    | 15 A  | Gate Way control unit-J519- (T73b/13)  | 30a |
| 21 | Fuse 21 4 of the socked fuses C -SC21-    | 5 A   | Steering angle transmitter-G85-  | 30a |
| 22 | Fuse 22 4 of the socked fuses C -SC22-    | 5 A   | Gate Way control Unit -J519- (T73a/64)   | 30a |
| 23 | Fuse 23 4 of the socked fuses C -SC23-    | 7,5 A | Gear lever module -E313- (BTS, CAVE, CAVF y CBZB)  | 30a |
|    |   |       | Motronic leed ralay -J271- (CAVE, CAVF y CBZB)   |     |
|    | ĺ   |       | Multifunction steering wheel -J453- (CAVE y CAVF)  |     |
|    |   |       | Engine Control Unit -J623- (BTS, CAVE, CAVF, CAYB, CAYC,   |     |
|    |   |       | CBZB, CEKA, CGGB, CFHD, CFWA, CGPA y CGPB)   |     |
| 24 | Fuse 24 of the socked<br>fuses C -SC24-   | 10 A  | Gate Way Control Unit -J519- (T73a/66)   | 30a |
| 25 | Fuse 25 of the socked<br>fuses C -SC25-   | 5 A   | Parquing control Unit -J446-   | 15a |
| 26 | Fuse 26 of the socked<br>fuses C -SC26-   | -     | Free   |     |
| 27 | Fuse 27 of the socked<br>fuses C -SC27-   | 15 A  | Free   | 15a |
| 28 | Fuse 28 of the socked<br>fuses C -SC28-   | 10 A  | Lambda prove warming system -Z19- (BTS, CAVE, CAVF, CAYB, CBZB, CEKA, CFHD, CGGB, CGPA, CFWA y CGPB) | 87a |
|    |   |       | Lambda prove warming 1 after catalizator -Z29- (BTS, CAVE,<br>CAVF, CBZB, CEKA, CGGB, CGPA y CGPB)   |     |
| 29 | Fuse 29 of the socked<br>fuses C -SC29-   | 20 A  | Vacuum pump relay -J57- (CAVE y CAVF)  | 87a |
|    |   |       | VACUUM BRAKE PUMP -V192- (CAVE y CAVF)   |     |
| 30 | Fuse 30 of the socked<br>fuses C -SC30-   | 10 A  | For other models   | 87a |
| 31 | Fuse 31 of the socked<br>fuses C -SC31-   | 10 A  | Fan cooling system control unit C1781 -J293- (CAVE, CAVF y CFHD) ( CBZB y CFWA Sólo con Start-Stop)  | 87a |
|    | i   |       | Relay for auxiliary cooling pump -J496- (CAVE, CAVF y CBZB)  |     |
|    |   |       | Inyector cylindre 1 -N30- (BTS, CEKA, CGGB, CGPA y CGPB)   |     |
|    |   |       | Inyector cylindre 2 -N31- (BTS, CEKA, CGGB, CGPA y CGPB)   |     |
|    |   |       | Inyector cylindre 3 -N32- (BTS, CEKA, CGGB, CGPA y CGPB)   |     |





|    |   |      | Invector cylindre 4 -N33- (BTS, CEKA y CGGB)  |     |
|----|---|------|---|-----|
|    |   |      | Electro valve for the overboost control -N75- (CAVE y CAVF)   |     |
|    |   |      | Valve 1- for the cam control -N205- (CAVE y CAVF)<br>Turbo air recirculation valve control -N249- (CAVE y CAVF) |     |
|    |   |      | Electro magnetic clutch for compresor -N421- (CAVE y CAVF)  |     |
| 32 | Fuse 32 of the socked                   | 15 A | Engine Control Unit motor -J623- (BTS, CAVE, CAVE, CAYE, CAYE,  | 87a |
|    | fuses C -SC32-<br>Fuse 33 of the socked | 5 A  | CAYC, CBZB, CEKA, CFHD, CFWA, CGGB, CGPA y CGPB)  |     |
| 33 | fuses C -SC33-                          |      |   | 87a |
| 34 | Fuse 34 of the socked fuses C -SC34-    | 15 A | Fuel pressure regulation valve -N276- (CAVE, CAVF y CBZB)   | 87a |
| 35 | Fuse 35 of the socked<br>fuses C -SC35- | 25 A | For other models  | 15a |
| 36 | Fuse 36 of the socked<br>fuses C -SC36- | 10 A | For other models  | 56a |
| 37 | Fuse 37 of the socked<br>fuses C -SC37- | 10 A | Dashboard control unit -J285-   | 56a |
|    | 1                                       | 1    | Light control unit, on/off -J665-   |     |
|    |   |      | Left Light lamp -M30-   |     |
|    |   | 1    | Flash relay -J828-  |     |
| 38 | Fuse 38 of the socked fuses C -SC38-    | 30 A | External engine ventilation switch -E9-   | 75a |
|    |   |      | Control unit for external ventilation engine -J126-   |     |
| 39 | Fuse 39 of the socked<br>fuses C -SC39- | -    | Free  |     |
| 40 | Fuse 40 of the socked<br>fuses C -SC40- | 15 A | Igniter -U1-  | 30a |
| 41 | Fuse 41 of the socked fuses -SC41-      | 25 A | Other models  | 75a |
| 42 | Fuse 42 of the socked fuses C -SC42-    | 20 A | Gate way control unit -J519- (T73a/73)  | 30a |
| 43 | Fuse 43 of the socked fuses C -SC43-    | 30 A | Other models  | 30a |
| 44 | Fuse 44 of the socked<br>fuses C -SC44- | 20 A | Gate way control unit -J519- (T73a/68)  | 30a |
| 45 | Fuse 45 of the socked<br>fuses C -SC45- | 30 A | Gate way control unit -J519- (T73b/67)  | 30a |
| 46 | Fuse 46 of the socked<br>fuses C -SC46- | 20 A | Steering Wheel control unit -E221-  | 30a |
| 47 | Fuse 47 of the socked<br>fuses C -SC47- | 5 A  | Conexión para la diagnosis -U31- (T16/16)   | 30a |
| 48 | Fuse 48 of the socked<br>fuses C -SC48- | 25 A | Unidad de control para red de a bordo -J519- (T73a/16)  | 30a |
| 49 | Fuse 49 of the socked<br>fuses C -SC49- | 30 A | Pilot door control unit -J386-  | 30a |
| 50 | Fuse 50 of the socked<br>fuses C -SC50- | 30 A | Rear door control unit  | 30a |
| 51 | Fuse 51 of the socked<br>fuses C -SC51- | 30 A | DSG Control Unit -J743- (BTS, CAVE, CAVF y CBZB)  | 30a |
| 52 | Fuse 52 of the socked<br>fuses C -SC52- | 15 A | Other models  | 30a |
|    | 14363 0 -0002-                          |      | Claxon -H12-  |     |
| 53 | Fuse 53 of the socked<br>fuses C -SC53- | 15 A | Unidad de control para bomba de combustible -J538- (CAVE,   | 30a |
| 54 | Fuse 54 of the socked<br>fuses C -SC54- | 15 A | Gateway control unit -J519- (T73b/11)   | 30a |
| 55 | Fuse 55 of the socked                   | 15 A | Coil 1 with final power stage-N70- (BTS, CAVE, CAVF, CGPA,  | 87a |
|    | fuses C -SC55-                          |      | CGGB y CGPB)<br>Coil 2 with final power stage -N127- (BTS, CAVE, CAVF, CGPA,                                    |     |
|    |   |      | CGGB y CGPB)<br>Processor power -N152- (CEKA y CBZB)  |     |
|    |   |      | Coil 3 with final power stage -N291- (BTS, CAVE, CAVF, CGGB,<br>CGPA y CGPB)                                    |     |
|    |   |      | Coil 4 with final power stage -N292- (BTS, CAVE, CAVF y CGGB)   |     |
|    | Fuse 56 of the socked                   | 10 A | Rear windscrren engine -V12-  | 75a |





| 57 | Fuse 57 of the socked fuses C -SC57-    | 15 A | Other models | 56b |
|----|---|------|--------------|-----|
| 58 | Fuse 58 of the socked<br>fuses C -SC58- | 15 A | Other models | 56b |

### 9.2. Diagnosis

The Leon SEAT Ibiza SC Trophy is equipped with two systems for diagnosis of failures.

- Logger Motrosport
- VAS / VAG
- 9.2.1. AIM Dashboard & Logger: (power kit optional)

It is possible to detect problems by analysing the data recorded in the logger. It is also possible to check the available channels in real time. With the car it's supplied a AIM data recorder user manual. Inside the cockpit, just bellow the AIM dashboard, there is available a auxiliary connector to connect 4 extra sensors. The connector scheme is the following.

|          | to U.S. +12 V<br>to U.S. +5 V | 0,35 RT<br>0,35 B/L |
|----------|-------------------------------|---------------------|
|          | to 8. DATALOGGER B            | 0,35 BL             |
|          | to 5, DATALOGGER B            | 0,35 V/N            |
|          | to 4, DATALOGGER B            | 0,35 B/G            |
|          | to 1, DATALOGGER B            | 0,35 GN             |
|          | to U.S. +5V                   | 0,35 B/L            |
| Internet | to 8, ENGINE COUPLING         | 0,35 BR             |
| X        | to 15, DATALOGGER B           | 0,35 BR             |

9.2.2. VAS

This powerful diagnosis system is standard from SEAT Ibiza and you can use trough dealers.





### 10. LIQUID & CAPACITY

| POSITION       | BRAND        | ТҮРЕ                    | QUANTITY          |
|----------------|--------------|-------------------------|-------------------|
| ENGINE         | CASTROL EDGE | 10W - 60                | 3.6 I with filter |
| GEAR BOX       | VW GROUP     | G 004 000 M2            | 11                |
| MECHATRONICA   |              |                         |                   |
| GEAR BOX       | VW GROUP     | G 052 171               | 1.7               |
| POWER STEERING | VW GROUP     | G 004 000 M2            | 1.5 l             |
| COOLING LIQUID | VW GROUP     | G 004 000 M2            | 6.5 l             |
| BRAKES         | MOTUL        | Motul 600               | 11                |
| HOMOCINETICA   | GKN          | <b>GKN Homocinetica</b> | ±100 gr.          |
| TRIPOD         | GKN          | GKN Tripode             | ±100 gr           |
|                |              | -                       |                   |

### 11. MAINTENANCE TABLE ACCORDING MILEAGE

| MAINTENANCE RECOMMEDATION    |               |                  |                  |                   |                       |  |  |
|------------------------------|---------------|------------------|------------------|-------------------|-----------------------|--|--|
| DESCRIPTION                  | Every<br>race | Every<br>2500 km | Every<br>5000 km | Every<br>10000 km | COMMENTS              |  |  |
| DIAGNOSIS                    |               |                  |                  |                   |                       |  |  |
| VAS Engine                   | Rev.          |                  |                  |                   |                       |  |  |
| VAS Gearbox                  | Rev.          |                  |                  |                   |                       |  |  |
| VAS CAN Bus                  | Rev.          |                  |                  |                   |                       |  |  |
| Data Logger                  | Rev.          |                  |                  |                   |                       |  |  |
| ENGINE                       |               |                  |                  |                   |                       |  |  |
| Engien complete              |               |                  |                  | Rev.              |                       |  |  |
| Spark plug                   |               | Change           |                  |                   | _                     |  |  |
| Airfilter                    | Rev.          | Change           |                  |                   |                       |  |  |
| Poli V belt                  |               | Change           | Change           |                   |                       |  |  |
| Engine oil                   | Rev.          | Change           | Ū                | -                 |                       |  |  |
| Engine oil filter            |               | Change           |                  |                   |                       |  |  |
| Fuel filter                  |               | Ŭ                | Change           |                   |                       |  |  |
| GEAR BOX                     |               |                  | Ŭ                | -                 |                       |  |  |
| Complete gear box            | -             |                  | Rev.             |                   |                       |  |  |
| Driver shaft                 |               | Rev.             |                  | -                 | <b>Replace</b> grease |  |  |
| Gear box oil                 |               |                  | Rev.             |                   | By SEAT Sport         |  |  |
| SDF                          |               |                  |                  |                   | <b>v</b>              |  |  |
| Shock absorber               | -             |                  | Change           |                   |                       |  |  |
| Wheel hub bearing            |               |                  | Change           |                   |                       |  |  |
| Steering rack tod boll joint |               |                  | Change           |                   |                       |  |  |
| Wishbone ball joint          |               |                  | Change           |                   |                       |  |  |
| Up ball join front shocks    |               |                  | Change           |                   |                       |  |  |
| Up ball join rear shocks     |               |                  | Change           |                   |                       |  |  |
| Wheel nuts                   |               |                  | Change           |                   |                       |  |  |
| Seguridad                    |               |                  | 0                | -                 |                       |  |  |
| Extinguisher                 | _             |                  |                  |                   | Caduca a 2 años       |  |  |
| Buquet                       |               |                  |                  |                   | Caduca a 5 años       |  |  |
| Amés                         |               |                  |                  |                   | Caduca a 5 años       |  |  |





# 12. ADITTIONAL INFORMATION & RECOMMENDATIONS

#### GENERAL

- Most pieces used in this car are series, therefore any information required to perform a job that you wish to carry out on the SEAT Ibiza SC Trophy and that are not described in this Workshop manual or in the Technical manual, can be find through available programs in the network of SEAT or VW Group dealers.
- To participate in a difference countries championship under SEAT Sport manuals or technical forms, car must maintain the sealed parts as original. Any reparation that oblige to break a seal must be done in SEAT Sport to recuperate the sealing.

#### SEGURITY

- Always that the vehicle is stationary and without pilot inside, the shift lever must be positioned at "P".
- Always that the vehicle is lifted on the air-jacks, the air-jack fixation must be placed

#### ENGINE

- It is advisable to check the engine oil level each time that comes to track.
- All the management systems (ECU, dashboard, gate way, abs, etc) of the SEAT Ibiza SC Trophy are series, and therefore any problem can be treated in a dealer as a standard car.

#### SUPENSION

• From time to time, check the suspension fixations, especially all union parts between suspended parts to the wheel.

ELECTRIC

- Don't let the car with the main switch launched because the consumption can be high and stay without battery in 1 hour.
- If there is that performing welding operations you must disconnect all the available modules.
- Before run, verifies that all the alarm lights in table of instruments are turned off and there is no alarm in dashboard motor sport.
- It is advisable to check the diagnosis VAS from time to time.







