415-421 THIRD AVENUE AT 7TH STREET BROOKLYN 15, NEW YORK

8423 WILSHIRE BLVD. BEVERLY HILLS, CALIFORNIA

# SERVICE BULLETIN #76

AMI 6 - 300 mile check-up

The following operations must be performed free of charge to the Customer at 300 miles. The Customer pays only for the new oil, grease and brake fluid (if the latter is added).

To save time the sequence of operations should be followed as listed.

### MECHANICAL

Check tire pressure. Correct if necessary

Tighten wheel lugs.

Tighten air shroud mounting screws.

Tighten the intake and exhaust manifold and the muffler support brace.

Check and tighten carburetor mounting screws.

Check for correct operation and, if necessary, adjust

- the accelerator linkage

- the choke cable.
- Check starter cable for correct operation.

Adjust tension of the generator belt.

- Start the engine. Let it run approximately 10 minutes. 9.
- Check the clutch pedal free play. Adjust if necessary. 10.
- Check operation of the crankcase breather valve. Check operation of the heating system. 11.

12.

- After the engine is hot shut it off and check engine 13. and gear box for oil leaks.
- 14. Tighten cylinder heads.
- 15. Adjust valve clearance.
- Adjust idling. 16.

#### Raise the car on a lift.

Tighten the front and rear crossmember mounting screws. 17.

18. Check the heights.

Drain the engine oil. 19.

Drain the transmission oil. 20.

Lubricate king pins and the clevis pins of the 21. suspension rods.

#### Lower the car

- 22. Lubricate drive shaft splined yokes, pedal shafts and linkage. Lubricate generator rear bearing.
- 23. Refill engine oil.
- 24. Refill transmission oil.

Raise car on a jack.

- 25. Adjust brakes and bleed brake lines. Adjust the emergency brake. Check brake fluid level in reservoir. Add fluid if necessary.
- 26. Tighten rear brake drum mounting nuts.

Lower the care

- 27. Check assembly of fuel gauge to tank.
- 28. Check toe-out and steering radius.

#### ELECTRICAL

- 29. Check battery fluid level. Tighten terminals.
- 30. Check and tighten the terminals of the generator, regulator and starter.
- 31. Check generator output.
- 32. Check operation and aim of headlights. Check operation of windshield wipers,
  - Stop and tail lights
  - directional lights
  - generator charge indicator
  - fuel gauge
  - parking lights

#### BODY

- 33. Check operation of doors, windows and trunk lid.
- 34. Tighten bumper mounting nuts.
- 35. Check operation of hood.
- 36. Lubricate hinges of doors, trunk and hood.

#### OPERATIONAL PROCEDURE:

1. Tire pressures (Cold)

Front: 19 psi Rear: 21 psi Spare: 24 psi

Size: 125 x 380 Michelin X

2. Tighten wheel lugs

Torque: 36 - 44 ft. lbs.

4. Tighten Manifolds

Torque: 11 ft. 1bs.

- 8. Generator belt tension.
  Remove the front half of the ventilation housing. (Loosen the mounting screws. Do not remove them) When reassembling maintain a clearance of .080" between the housing and the generator.
- 10. Clutch pedal free play.

  Tighten the adjusting nut to obtain .080" free play at the fork. To check press the fork lightly.
- 14. Tighten the cylinder heads.

  Remove the cylinder head covers. Torque the head to 18 ft. lbs. while the engine is <u>HOT</u>.
- 15. Adjust valve clearances.

  Adjust intake and exhaust valves at .008" clearance while the engine is <u>HOT</u>. Adjust one valve when the other is fully opened. It is not necessary to remove the fenders.
- 16. Adjust idling.
  A tachometer is necessary when adjusting the idling. Set the mixture screw and then adjust the throttle to obtain 650-700 rpm when the engine is <u>HOT</u>.
- 17. Tighten the front and rear crossmember mounting screws
  Torque: 19 ft. lbs.
- 18. Adjust the heights.

  Be certain the tire pressures and sizes are as indicated in operation #1. Remove the friction unit covers. Adjust the distance between the ground and the bottom of the suspension arm as follows:

Front: 
$$11'' \frac{1}{32''}$$
 Rear:  $14'' \frac{3}{16''}$ 

# 21/22. Main lubrication points.

Qty.	Description	Lubricant
2	King Pins	Chassis Grease
4	Clevis Pins - Suspension Rods	Engine Oil
2	Pedal Shafts	Engine Oil
2	Drive Shaft Splined Yokes	Chassis Grease
1	Generator Rear Bearing	Few drops of engine oil

23. Changing Oil (Engine).
Crank case capacity: - 2 quarts. The oil should be level with
the top of the indentation on the dipstick. The distance
between the bottom and top of the indentation ("Mini" and "Maxi")
corresponds to 1½ pints. Use S.A.E. 20 or S.A.E. 10W 30 oil
for summer and winter. Avoid mixing different brands of oil.

- 24. Gear box oil level. Capacity: 1 quart. Use S.A.E. 80 "EXTREME PRESSURE" (EP) oil.
- 25. A. Adjust brakes.
  - Jack up the front of the car. Using a 14 mm wrench turn the adjusting cam toward the axle (inward) while rotating the wheel until the lining contacts the drum. Reverse the cam until the wheel is free. Again, turn the cam inward until a slight pressure is felt on the drum. Never complete the adjustment by moving the shoe away from the drum. The shoe must be brought as close to the drum as possible to ensure a short pedal travel.
  - Adjust the other shoes and wheels in the same manner.

    CAUTION: When jacking the rear of the car be careful not to damage the brake lines located at the end of the suspension arms.
  - B. Bleeding the brakes.

NOTE: To operate efficiently it is imperative that no air be present in the brake lines.

- Check the fluid level in the reservoir. Use a quality

brand of brake fluid only.

Remove the rubber protection cap from the R/R wheel cylinder bleed screw. Install a 12" flexible tube with an inside diameter of 15/64" on the bleed screw. Immerse the loose end of the tube into a jar or bottle partially filled with brake fluid.

- Using an 8 mm wrench loosen the bleed screw  $\frac{1}{2}$  turn.

- Have an assistant pump the brake pedal repeatedly. Each time the pedal is depressed some liquid will drain into the jar carrying air bubbles with it. Continue pumping the brake pedal until all the air is expelled. Tighten the bleed screw only when the pedal is depressed all the way and the drain tube is submerged in the jar of brake fluid.
- Remove the bleeding tube and replace the rubber protection cap.
- Repeat the bleeding of all wheels in the following order: left rear, right front and left front.
- Recheck the fluid level in the reservoir.

  NOTE: The use of self-bleeding devices is highly recommended.

### Checking brakes for leaks.

- Depress the brake pedal very hard and hold it for 30 seconds to one minute. If the pedal resists firmly no leak exists. Should the pedal go down progressively it is an indication of leakage.

- Check the reservoir. If the fluid is being forced back the master cylinder cups are leaking. The unit should

be overhauled immediately.

- C. Brake reservoir fluid level. Use only quality brands of brake fluid.
- D. Adjusting the hand brake.
  Adjust the tension of the brake cables by tightening the wing nuts at the end of each cable. Braking action should begin at the third notch of the handle. At the fifth or sixth notch the wheels should be locked.
- 26. Tighten the front brake drum mounting nuts.

  Torque: 18 ft. lbs.
- 28. Check the toe-out and steering radius.
  - A. The front wheels must toe-out. The difference in the measurements between the front of the front wheels and the rear of the front wheels should be from .0393" to .1574". Use any commercial toe-in guage.
  - B. Before checking the steering radius, operation 18 (checking the heights) must be completed.

- Place the car on level ground.

- Turn the steering wheel to the left to "full-lock" position. Check the clearance between the left tire and the suspension arm. It should be at least .3937". At the right wheel, check the clearance between the damper and the suspension arm. It should be at least .1574".
- Correct the adjustment by means of the adjusting screw located on the suspension arm.
- Repeat the operation on the right wheel.

415-421 THIRD AVENUE AT 7TH STREET BROOKLYN 15, NEW YORK 8423 WILSHIRE BLVD, BEVERLY HILLS, CALIFORNIA

# SERVICE BULLETIN # 101

MODEL: AMI-6 STATION WAGON (AMB)

SUBJECT: MISCELLANEOUS DATA

The AMI-6 STATION WAGON (Model ref. AMB) mechanically differs from the AMI-6 SEDAN (Model ref. AM) by the following specifications:

#### SUSPENSION

# Suspension unit:

- Springs front & rear: special AMB
- Rear rods: identical to the 2 CV
- Anti-pitch buffer: identical to the Ami-6 Truckette (AK)

# Rear Shock Absorbers:

- Special to the AMB STATION WAGON (larger mounting eye)

# Rear Shock Absorbers Supports:

- Longer mounting shafts

# FRONT AND REAR AXLES

Front Suspension Arm: identical to the AK TRUCKETTE
Rear " : special to AMB STATION WAGON

# REAR BRAKES

Brake cylinders: diameter 19mm instead of 17.5 mm

TIRES

Size: 135 x 380 X Pressure front: 18 p.s.i.

rear: 24 p.s.i.

spare: 27 p.s.i.

HEIGHTS

The heights are measured from underneath the suspension arm hub:

Front: 288 ± 5mm (11" 3/8 ± 1/8)

Rear:  $383 \pm 5 \text{mm}$   $(15'' \pm 1/8)$ 

LOADING CAPACITY

Full gas tank: 660 lbs. in addition to the driver

415-421 THIRD AVENUE AT 7TH STREET BROOKLYN 15, NEW YORK

8423 WILSHIRE BLVD, BEVERLY HILLS, CALIFORNIA

### SERVICE BULLETIN # 121

MODELS: AMI-6 SEDAN and STATION WAGON (3 CV AM and AMB)

SUBJECT : MOTOR - Carburetor

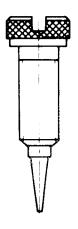
The parts designated below are modified:

### - Idle Mixture Screw :

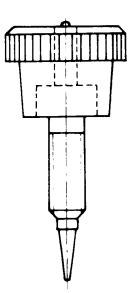
The slot in the head of the screw is no longer machined, the head is now covered with red bakelite. The regulation of the idle richness must be done by hand.

" IDLE RICHNESS ADJUSTING SCREW"

Previous model



New model



### - Acceleration Pump Suction Valve :

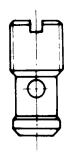
The sealing of the screw threads is assured by a ring seal placed under the head of the valve.

NOTE : The carburetors, thus modified, have on the throttle control lever:

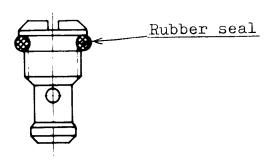
- the reference mark  $44^2$  for the type 40 PloS 2.
- the reference mark  $45^2$  for the type 40 PCIS 2.

### " ACCELERATION PUMP SUCTION VALVE "

Previous model



New model



### SERVICE :

It is possible to mount the new idling screw with the bakelite head on carburetors that were fitted to older cars.

It is not possible to install the new acceleration pump suction valve on older carburetors, the machining of the seat having been modified on the new carburators to permit use of the seal.

415-421 THIRD AVENUE AT 7TH STREET BROOKLYN 15, NEW YORK

8423 WILSHIRE BLVD, BEVERLY HILLS, CALIFORNIA

SERVICE BULLETIN # J/K-129

MODELS: 2 CV AZA - AZAM - AZU - AW

SUBJECT: BODY - Reinforcement of the front doors

The doors, part numbers AZU 841-02 C. AZU 841-02 D and AZ 841-02 D are reinforced under the lock mounting by a welded or riveted counter plate.

415-421 THIRD AVENUE AT 7TH STREET BROOKLYN 15, NEW YORK

8423 WILSHIRE BLVD. BEVERLY HILLS, CALIFORNIA

SERVICE BULLETIN # J-132

MODELS: AMI 6 - STATION WAGON

SUBJECT: GEAR BOX - New Gear Ratios

The gear ratio of the gear boxes mounted on the AMI-6 Station Wagon is identical to the gear boxes of the truckette AK.

### PARTS:

The main drive shaft AM 332-1 is replaced by a shaft No. AMF-332-1 (the helical angle is different). It can be used with either centrifugal or mechanical clutching.

The intermediate gear train AM 333-5 A (14x14x23x25) is replaced by the train AK 333-5 (14x14x23x27).

# Gear Reduction of Speeds and Theoretical Speeds:

Spe	ed: 1st	2nd	3rd	4 <sup>th</sup>	Reverse
Relation of the gear box and gear reduction	19x1/x13=0,165 27 31 25	19x 23x 13 = 0, 320 27 26 25	<u>13</u> = 0,520 25	19 = 0,704 27	19x14x13=0,165 27 31 25
Ratio of ring gear and pinion	8/29	8/29	8/29	8/29	8/29
Overall reduction	0,046	0,088	0,143	0,194	0,046
Speed in M.P.H. @ 1000 R.P.M. Tires 135x380 X developing 6.109 ft.	3.158	6.19	9•95	13•47	3.158

415-421 THIRD AVENUE AT 7TH STREET BROOKLYN 15, NEW YORK

8423 WILSHIRE BLVD, BEVERLY HILLS, CALIFORNIA

SERVICE BULLETIN # J-150

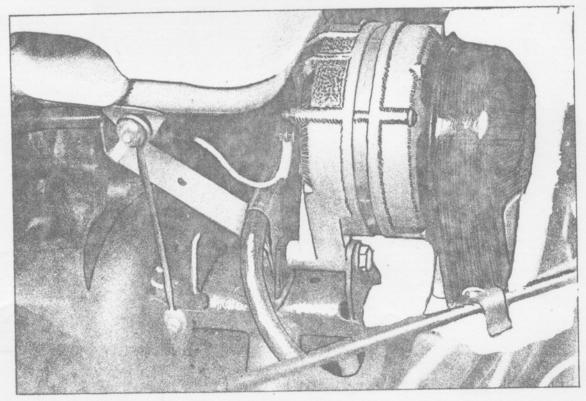
MODEL: AMI-6

SUBJECT: ELECTRICITY - Alternator

The electrical equipment of the AMI-6 models is modified.

The 6 volt generator is replaced by a 12 volt alternator, Ducellier reference 7522A, having an output of 240 watts.

The system for rectifying the current is incorporated in the apparatus.

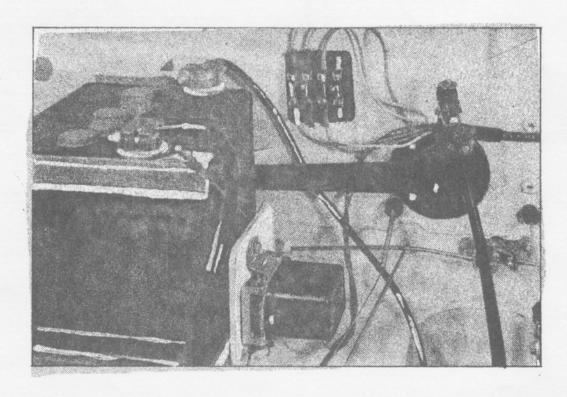


The electrical harnesses are modified and protected by a fuse box containing four fuses, one of which is a spare (see figure).

The charging indicator light is replaced by a charge indicator gauge (thermal voltmeter) incorporated in the dash board.

The regulator is replaced by a Ducellier regulator No. 8347B with a vibrating plate.

The 6 volt 40 A/H battery is replaced by a 12 volt 30 A/H battery.



The SEV-MARCHAL 35 or AC 43F spark plugs are replaced by CHAMPION XL 85 spark plugs with a "built-in" resistor.

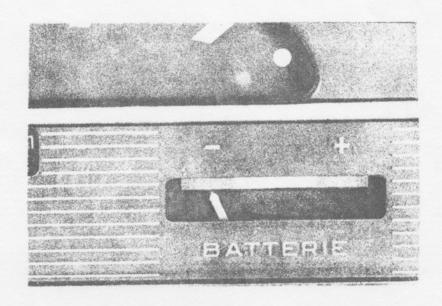
The intake-exhaust manifold is modified so as to mount the alternator.

The 6 volt starter is replaced by a 12 volt starter with a shorter housing.

The 6 volt "City Road" horn is replaced by a "High Frequency" unique sounding 12 volt horn mounted on a new support.

The ignition coil, the directional signal flasher, the windshield wiper motor, the fuel gauge and its rheostat, the charge indicator gauge and the various bulbs are of the 12 volt type.

# OPERATION OF THE CHARGE INDICATOR:



After a few minutes of operation the indicator needle should be in the white zone of the dial.

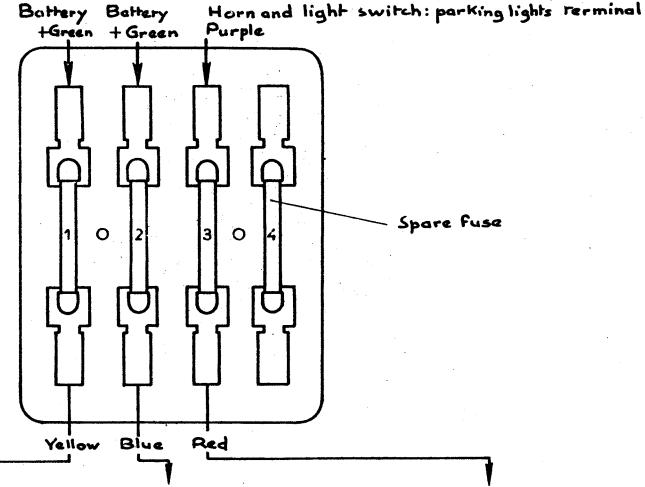
If the needle rests in the red zone to the left the alternator is not functioning (no output).

If the needle goes to the red zone to the right the regulator is not functioning.

# IMPORTANT NOTE:

ON A CAR EQUIPPED WITH AN ALTERNATOR, BEFORE UNDERTAKING ANY REPAIRS OF AN ELECTRICAL NATURE (BATTERY CHARGING, ARC OR SPOT WELDING, ETC.) DISCONNECT THE BATTERY TERMINALS.

.../...



Parking light switch: direct Feed Interior light Stop light Accessory terminal Ignition switch
Directional signal switch
Windshield wiper
Ignition coil
Fuel gauge
Voltage regulator
Charging indicator

Parking light switch: feed

through the switch

front and rear parking lights

License plate lights

Instrument panel

415-421 THIRD AVENUE AT 7TH STREET BROOKLYN 15, NEW YORK

8423 WILSHIRE BLVD, BEVERLY HILLS, CALIFORNIA

### SERVICE BULLETIN # J/K-151

MODELS: 2 CV - AZA - AZAM

AMI 6 - AM - AMB - AMC - AMF - AK

SUBJECT: MOTOR - Crankshaft

The "NADELLA" needle bearing, centering the main shaft of the gear box in the rear journal of the crankshaft is modified.

The length of the bearing is reduced from  $12 \, \text{mm}$ . to  $10 \, \text{mm}$ . and a seal ring  $(3 \, \text{x} \, 18, 2 \, \text{x} \, 11 \, \text{mm}$ . or  $3 \, \text{x} \, 18, 4 \, \text{x} \, 11 \, \text{mm}$ .) is placed to the rear of the bearing to assure protection.

The main shaft of the gear box is modified: the bearing surface at the end of the shaft is longer to accommodate the seal.

#### SERVICE:

1) Mount the new "NADELLA" bearing, part N° 620277 (10 x 18 x 12 mm) or N° 620278 (10 x 18,2 x 12 mm).

Coat the needle bearing with "silica-base" grease. Use only the grease sold by our Parts Department.

Set the needle bearing in place, the end having the manufacturer's name and reference toward the outside. Be sure it is inserted 3,5 mm (.138") below the surface.

Mount the seal ring, the side bearing the manufacturer's name and reference facing the needle bearing. Be sure it is inserted below the surface 0,5mm (.020").

#### NOTE:

Be careful not to damage the seal when coupling the gear box to the motor.

2) The "I.N.A." needle bearings, part N° 620102 (12x18x12mm) or N° 620256 (12x18,2x12mm) sold by the Parts Department, can be mounted (without the seal ring) on all the vehicles prior or later than this modification.

415-421 THIRD AVENUE AT 7TH STREET BROOKLYN 15, NEW YORK

6423 WILSHIRE BLVD, BEVERLY HILLS, CALIFORNIA

December 19, 1966 \*

SERVICE BULLETIN # J/K - 169

MODELS : 2CV - AZA - AZAM - AZU

AMI 6 - AM - AMB - AMC - AMF

AK

SUBJECT: GEAR BOX - Primary shaft

Since October 1966 the gear boxes of the above-mentioned wehicles have been modified.

The grooves of the primary shaft which drive the reverse speed reduction gear are replaced by teeth.

The spacer, AZ 332-87, used with the single row shouldered bearing 620270 as a replacement for the rear shouldered double row bearing 620013 of the primary shaft is eliminated.

The reverse reduction pinion is longer (7 mm: the thickness of the spacer AZ 332-87) and its grooves are replaced by teeth.

The conical spacer of the speedometer gear, the speedometer gear and the castellated nut are replaced by a speedometer gear formed as a nut, locked by peening metal into a groove instead of a cotter pin hole on the primary shaft.









### SERVICE:

It is possible to use the new parts in earlier gear boxes, on condition that the assembly mounted comprises:

-	1	Primary	shaft				AZ 332-3
-	1	Reverse	speed	reduction p	inion	• • • • ,	AZ 333-3a
					or	• • •,•	AM 333-3a
-	1	Bearing					620270
_	1	Speedome	eter nu	at	· • • • • • • • • • • • • • • • • • • •		AZ 381-3b
		•			or		AZU 381-3b
					or	• • • •	AM 381-3b

The operations for removal, replacement and adjustment, A 330-3a and AM 330-3 are identical to those appearing in the shop Repair Manuals N° 447 and N° 490.