Mistral Engineering

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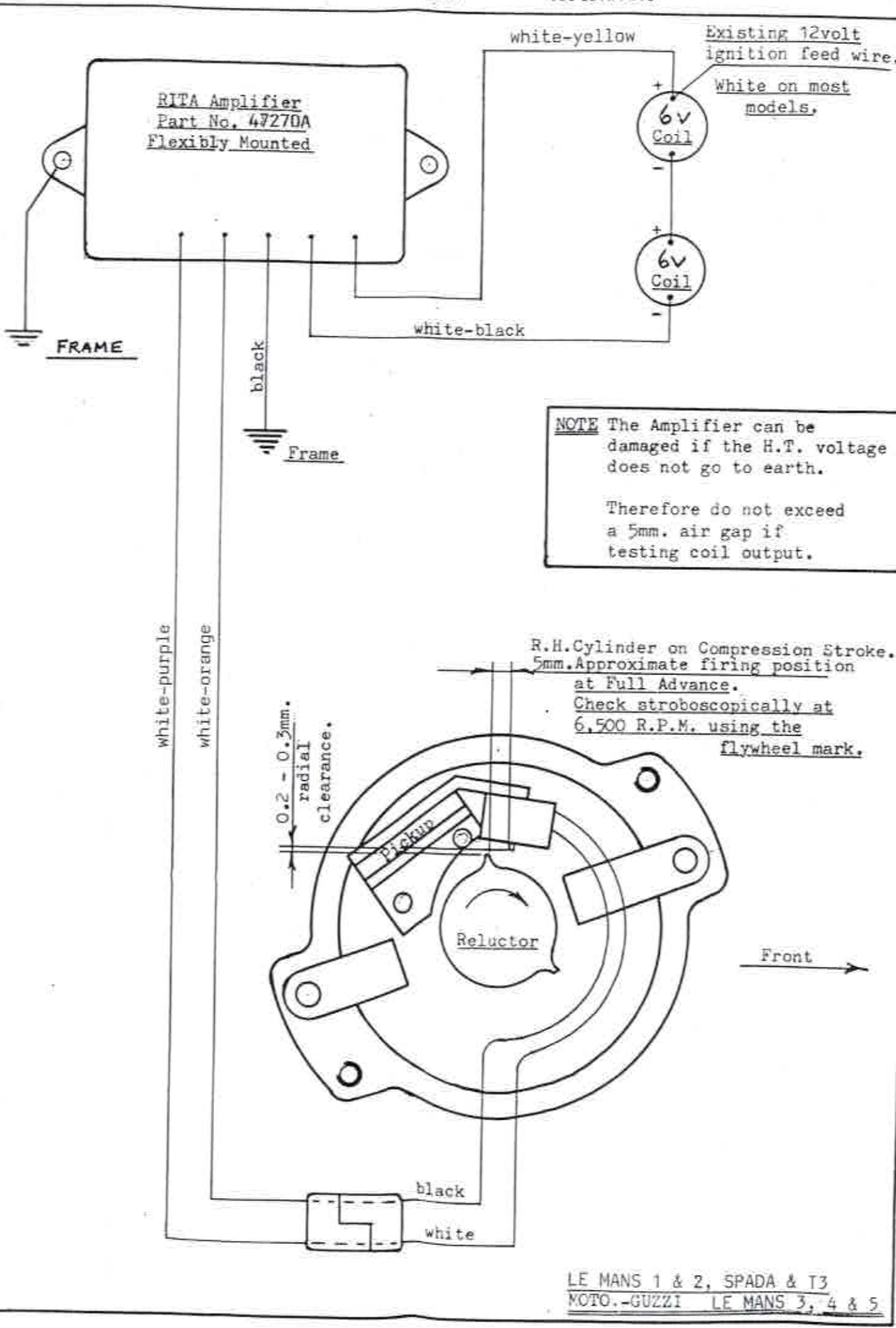

LE MANS 1 & 2, SPADA & T3
MOTO.-GUZZI LE MANS 3, 4 & 5

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FITTING INSTRUCTIONS
MOTO-GUZZI LE MANS MK III , IV & V.

FOREWORD : Changing the ignition system from contact breakers to a full electronic system is not a five minute job and we suggest that before dismantling the existing system you carry out 2 necessary parts of the new installation. i.e. Mounting the amplifier and painting-in the fully advanced timing marks on the flywheel. The machine can still be used on the original ignition when these 2 jobs have been completed.

1. Amplifier Mounting : Remove Petrol Tank, Unit and small two piece fairing above cylinders. Fit the amplifier on the top two screws of the Engine cover at the front of the Machine above the Horns. Use the longer allen screws and spacers supplied, placing the Amp. earth lead under the head of one of these screws. The cable outlet is to face the rear of the machine.

2. Timing Marks : Remove the rubber plug in the crankcase and remove the sparking plugs. Engage top gear. Turn the engine until compression is felt in the plug hole of the L.H. cylinder. Continue turning (very carefully) with a thin screwdriver touching the piston, until T.D.C is reached. A line with the letter "S" can now be seen on the fly-wheel. Align this centrally in the inspection hole. To find the fully advanced timing mark it is now necessary to turn the engine backwards counting exactly 9 teeth on the starter ring. Each tooth is 3.75° and full advance is specified by the makers as 34° B.T.D.C. The 34° mark has no identification letter and is normally a very faint scribed line. Paint this in with yellow or white paint using a narrow brush. Repeat for the R.H. cylinder, starting from T.D.C. on the compression stroke, which is identified by a line with the letter "D" stamped on it.

If you are now proceeding to dismantle the contact breakers and fit the RITA PICKUP and reluctor, leave the engine set in this position.

3. Remove the original coils and replace with the new 6V Coils and clamps. The small bracket supplied in the loose bag enables the clamps to be fitted to the frame lugs on the machine.
Use the original HT leads but fit new end fittings and rubber shrouds.
The white feed wire to the coils is looped as original. This link has to be removed or taped off. Do not link the coils with it.

4. Assembly : Set engine to 34° B.T.D.C. on the R.H. cylinder. Fit the reluctor drive plate on to the bob-weight carrier with the drive tongue upwards and towards the front of the machine. Fit the pickup plate assembly into the distributor in the position shown on the wiring diagram, using the original screws. Fit the reluctor on to the distributor shaft and locate the keyway on to the tongue of the drive plate. Secure to shaft using the M5 x 12 screw, thick washer and spring washer provided in the kit.

Turn the engine to bring the reluctor and pickup poles into alignment and set the 0.2 - 0.3 mm. air gap with feeler gauges. It is unnecessary to slacken the pivot screw: slacken only the screw holding the slotted end of the pickup. Check air gap on both reluctor poles and average any error.

Return the engine to 34° B.T.D.C. on either cylinder on the compression stroke and set the timing by moving the distributor body to trap the timing spacer (provided) between the pickup and reluctor as shown on the diagram.

If timing of reluctor to pickup cannot be achieved by turning the distributor body:- Remove clamps, lift distributor body to disengage gear and carefully turn Reluctor a small amount and drop distributor back into engine. The gear will engage on the next tooth to give a fairly coarse timing adjustment, which can then be finally set by moving the Distributor body and tightening the clamps.

5. Wiring and Strobe Timing : Wire up as shown on the diagram and tape or clip the wires to frame tubes where possible. Run the engine and when fully warm, it must be momentarily taken up to 6,500 R.P.M. when the 34° mark should be central in the inspection hole. Turn the distributor body to adjust if necessary. NOTE This is only practicable with a second person to assist.