

JEFFREES 0274 457451

Specifications

(RL250 SPECIFICATIONS SHOWN IN BRACKETS WHERE DIFFERENT FROM RL325)

DIMENSIONS AND WEIGHT

OVERALL LENGTH	2030mm = 80"
OVERALL WIDTH	838mm = 33"
OVERALL HEIGHT	1120mm = 44"
SEAT HEIGHT	775mm = 30.5"
WHEELBASE	132mm = 52"
GROUND CLEARANCE	330mm = 13"
FRONT WHEEL	2.75" x 21"
REAR WHEEL	4.00 x 18"
DRY WEIGHT	91.3kg = 201lbs

ENGINE

TYPE	AIR COOLED, SINGLE CYLINDER, 2 STROKE
CYLINDER TYPE	SLEEVED ALUMINIUM
BORE & STROKE	80mm x 64mm (70mm x 64mm)
CAPACITY	322cc (246cc)
COMPRESSION RATIO (corrected)	7.5 : 1 (6.7 : 1)
INDUCTION SYSTEM	CARBURETTOR : REED VALVE - PISTON PORT.
POWER OUTPUT	23B.H.P. @ 6500 r.p.m. (19B.H.P. @ 6000 r.p.m.)

FUEL SYSTEM

CARBURETTOR	28mm MIKUNI VM28 SH?
	Needle No. - 5CN6
	Slide No. - 1.5
	Main Jet - 120
	Needle Jet - 0.4
	Pilot Jet - 20 (27.5)

LUBRICATION

AIR CLEANER	OILED FOAM
ENGINE	4 star PETROL/OIL PREMIX 20:1
GEARBOX/CLUTCH	20-50 MULTIGRADE (800cc approx. level plug)

IGNITION SYSTEM

SPARK PLUG	NIPPONDENSO W22ES or NGK B7ES
GENERATOR	FLYWHEEL MAGNETO TRANSISTORISED C.D.I.
IGNITION TIMING	(SEE TEXT)

TRANSMISSION

PRIMARY DRIVE	GEAR
CLUTCH	WET MULTI-PLATE
GEARBOX	5 SPEED CONSTANT MESH
GEARCHANGE	LEFT FOOT OPERATED GEAR LEVER
FINAL DRIVE	5/8 x 1/4 or 520 HEAVY DUTY ROLLER CHAIN
	3.25 3.72 3.30
	12T (11T & 13T AVAILABLE)
	39T, 41T, 43T

SUSPENSION

FRONT	TELESCOPIC:- 7 inches movement
	*AIR ASSISTED:- 15p.s.i.
	*OIL DAMPED:- 195cc SAE 10/15/20
REAR	SWING ARM WITH 5 WAY ADJUSTABLE OIL DAMPED SUSPENSION UNITS. GIVING 4.5 inches rear wheel movement

FRAME

BRONZE WELDED REYNOLDS 531 TUBING. HARD CHROME FINISH

BRAKES

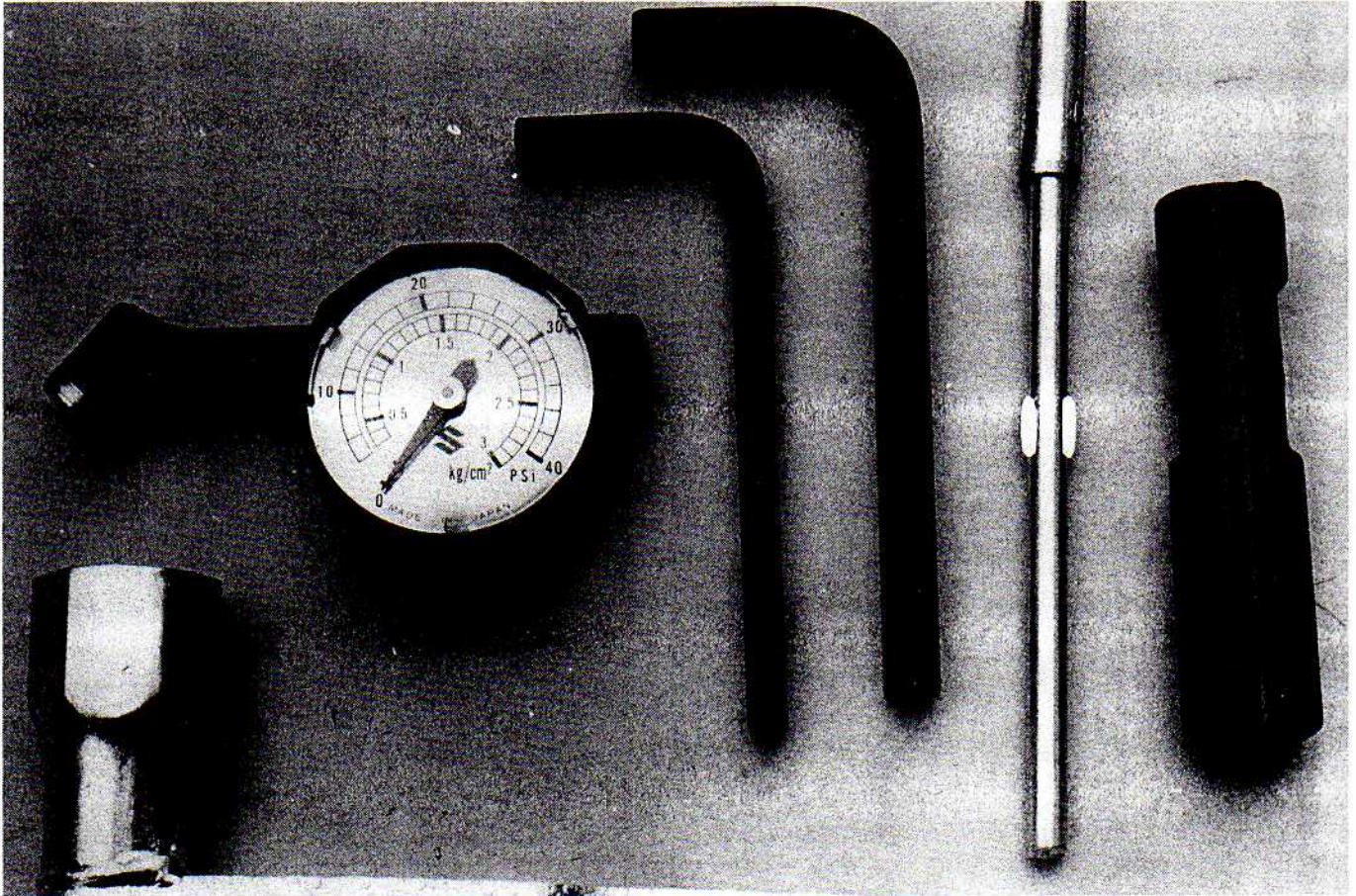
FRONT	RIGHT HAND CABLE OPERATED SINGLE LEADING SHOE
REAR	RIGHT FOOT ROD OPERATED SINGLE LEADING SHOE

LIGHTING

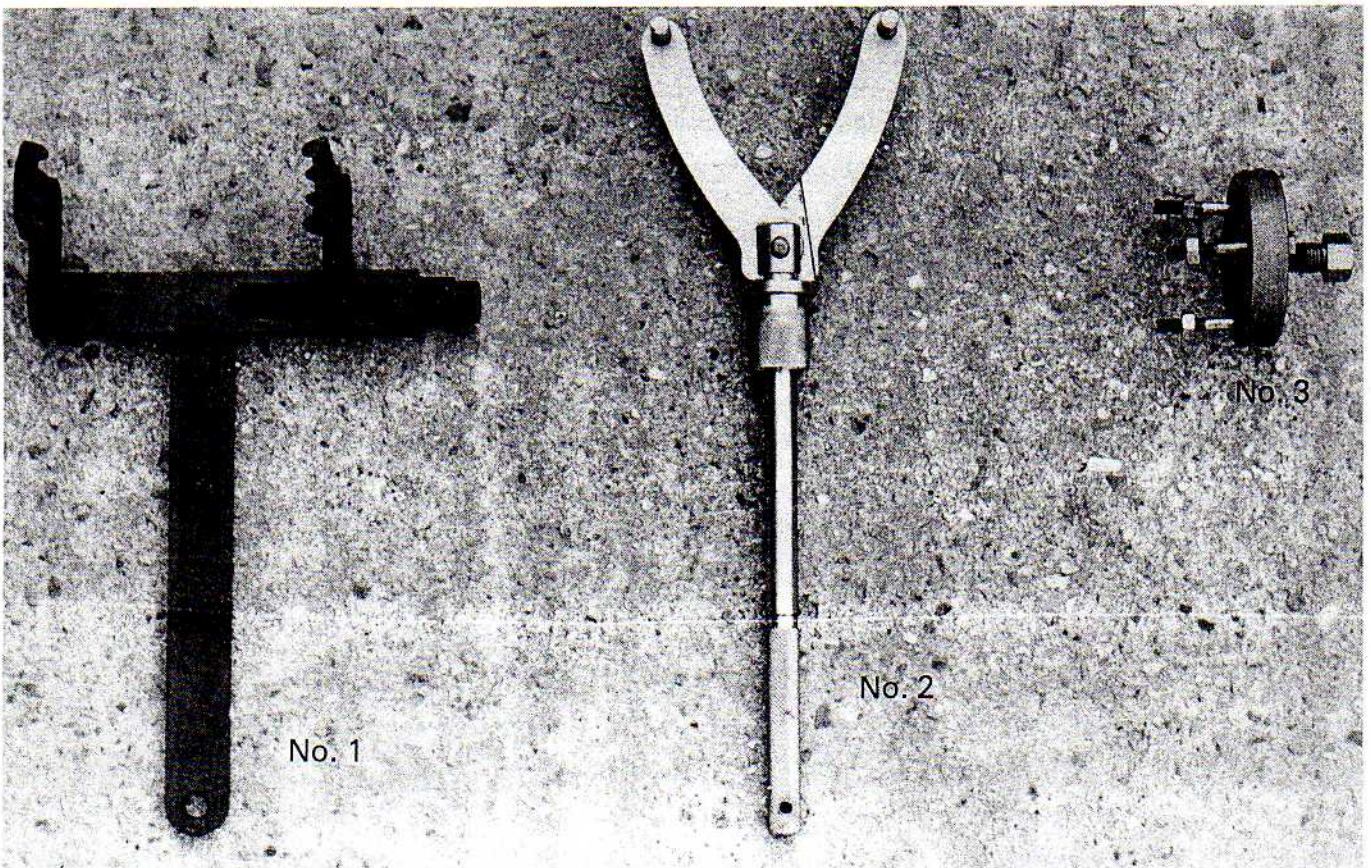
LIGHTING KIT AVAILABLE

BEAMISH MOTORS RESERVE THE RIGHT TO ALTER ANY SPECIFICATION AT ANY TIME

Tool Kit and Special Tools



THE TOOL KIT SUPPLIED WITH THE RL250/325



SPECIAL TOOLS REQUIRED FOR ENGINE STRIPDOWN

Running-in and General Maintenance

RUNNING-IN At least 2 hours of easy roadwork before attempting any off-road going will greatly enhance the life and smoothness of the engine. After 100 miles, change the Transmission oil and the front fork oil, check the ignition timing, clean the spark plug and check the gap and check all nuts, bolts and fixings for tightness.

TRANSMISSION OIL Oil change — remove drain plug through hole in sump plate and drain oil into suitable receptacle — Replace drain plug — Remove filler plug and transmission oil level screw from primary drive cover — With bike in upright position slowly pour approximately 800 cc of SAE 20-50 oil down the filler hole until it starts to seep out of the oil level hole — Replace the oil level screw and the filler plug and wipe away any spilt oil.

FRONT FORKS Oil change — **IMPORTANT**, drain and fill one fork leg at a time — Release air from valve in fork top

cap — Drain oil from fork leg by removing drain screw at bottom rear of leg — Replace drain screw — Remove fork top cap and slowly pour 195 cc of selected* weight of oil into fork leg — Replace fork top cap and inflate to 15 p.s.i.** approximately — Repeat for other fork leg.

*The weight of oil used varies, dependent on weight of rider, riding style, type of ground (mud or rocks, etc.), time of year. We suggest that you start at SAE 15 and experiment to suit your personal requirements.

**Air pressure is another variable, requiring personal fine tuning. 15 p.s.i. is the average setting to work from.

CARBURETTOR SETTINGS Standard setting for the Needle on the RL325 is the central notch; on the RL250 the Needle is set on the second notch from the top — Pilot jet screw for both capacity machines is 1 ½-2 ½ turns out and is dependent upon riding style, elevation and ambient temperature. Some jetting changes may be necessary in extreme conditions.

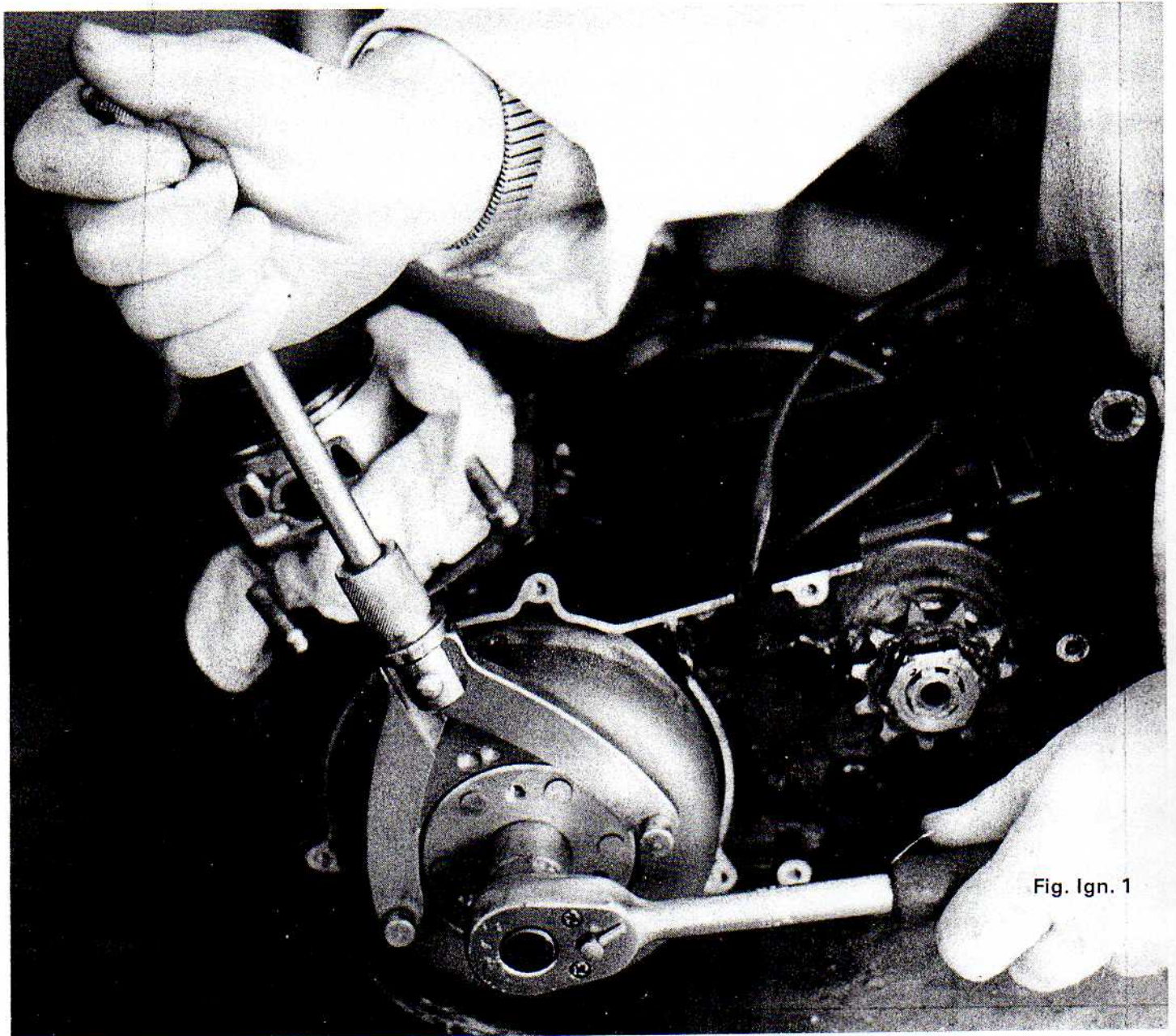


Fig. Ign. 1

AIR CLEANER Remove seat/sidepanel unit by releasing the two DZUS screws on each sidepanel — Remove Air top box — Remove foam air filter element — Clean element in degreasing solvent (Gunk, Jizer, etc.) and wash out with cold water — Leave element to dry naturally, do not wring or place near artificial heat — When dry, soak foam element in SAE 20-50 oil and squeeze, **DO NOT WRING OUT** excess — Replace element, air box top, etc.

IGNITION Remove gear lever, gearbox sprocket cover and magneto cover — Remove flywheel nut (22 mm r-hand thread), holding the flywheel with tool No. 2 as shown in Fig. Ign 1 — Remove lockwasher and washer — Remove flywheel using tool No. 3 as shown in Fig. Ign 2 — The ignition is correctly set when the line on the magneto

stator plate is in line with the mark on the crankcase as shown in Fig. Ign 3 — Reassemble in reverse order (tool No. 3 is not required to fit flywheel. Just ensure correct positioning of flywheel on crankshaft and woodruff key, then fit washer, lockwasher and nut and tighten).

LIGHTING Lighting coils are fitted as standard on the magneto stator plate and lighting equipment fitting instructions are supplied with the lighting kit, which is available through the Beamish Suzuki Dealer Network.

CLUTCH ADJUSTMENT There is no internal clutch adjustment method. The clutch is adjusted simply by the screw adjuster on the clutch cover and for fine adjustment at the handlebar lever.

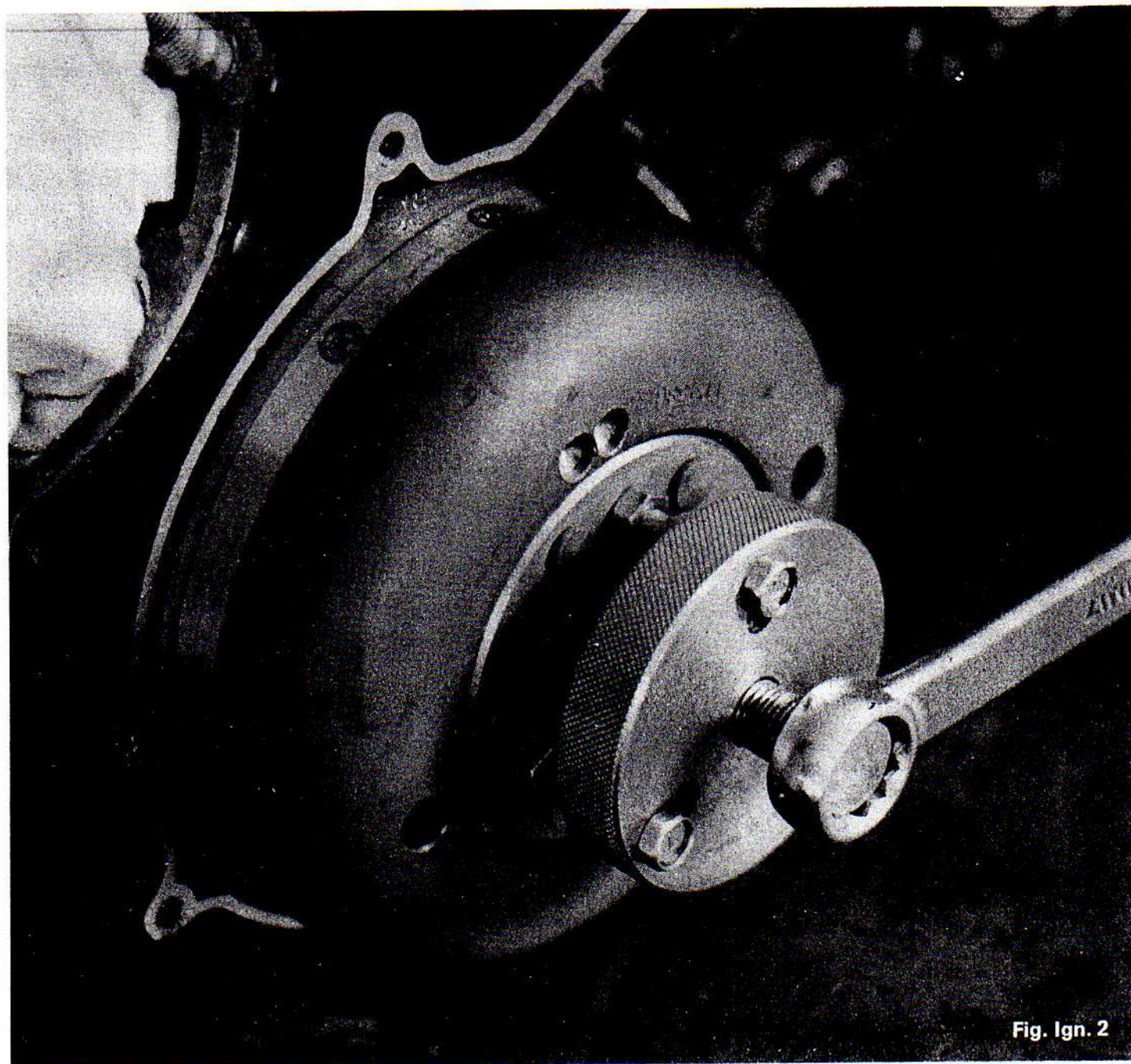


Fig. Ign. 2

TYRE PRESSURES Mud—6-7 p.s.i. front, 3-4 p.s.i.
rear
Rocks—8-9 p.s.i. front, 4-5 p.s.i.
rear

These are average pressures given for guidance purposes.
Personal adjustment is recommended with reference to
these figures.

PERIODIC MAINTENANCE

AFTER EVERY TRIAL Check spark plug gap and
condition — Clean air filter — Check condition of chain,
spokes and tyres — Lubricate chain — Lubricate all lever
pivot points — Tighten all fixings.

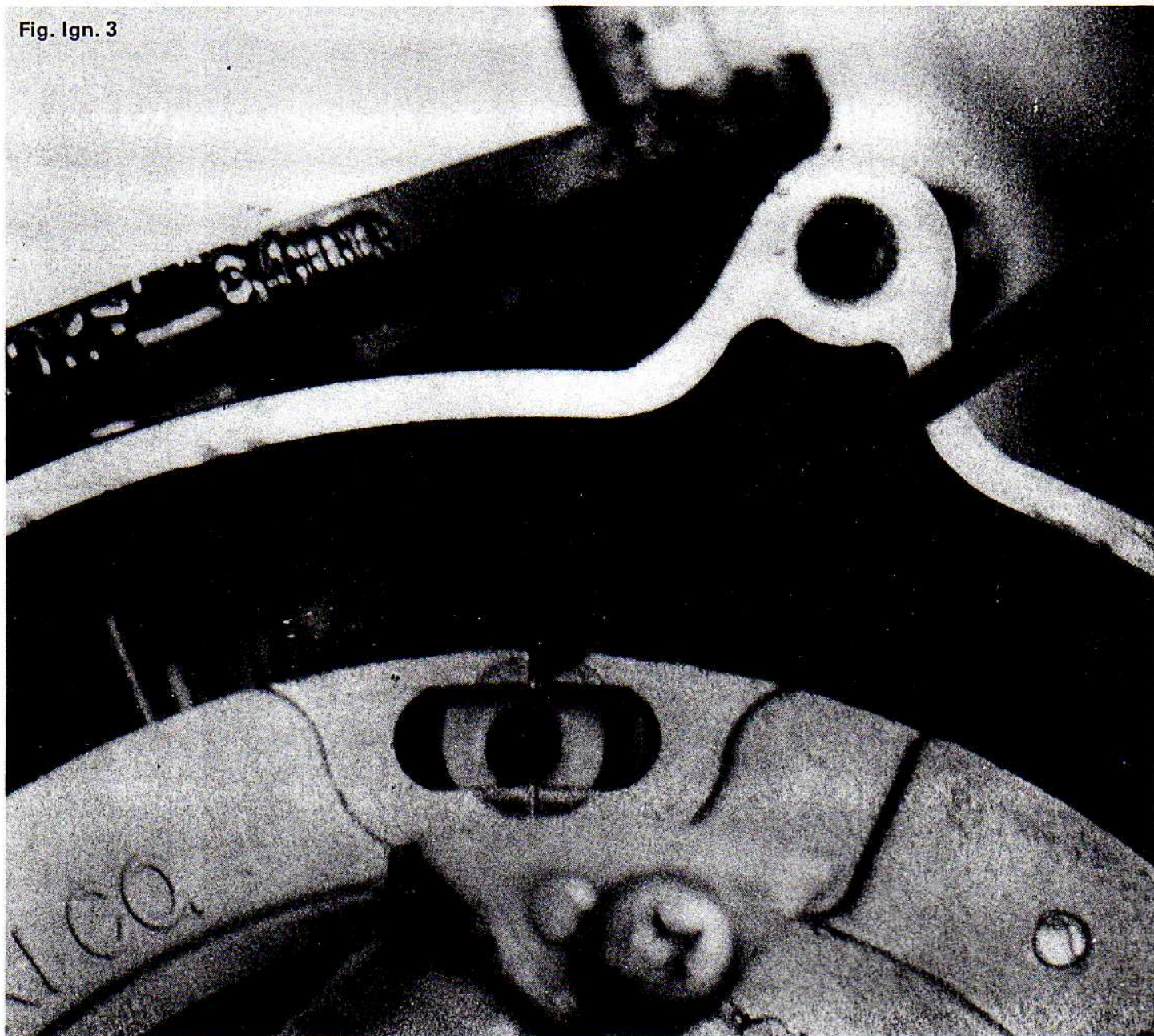
AFTER EVERY 5 TRIALS As above plus — Change
gearbox oil — Change fork oil — Check swing arm silent
bloc bushes for wear — Check chain tensioner rubber for
wear.

AFTER EVERY 10 TRIALS As above plus — Decoke
exhaust, cylinder head, piston crown.

ONCE EVERY FULL COMPETITION YEAR Replace
piston rings — Check bore for wear — Replace reed valve
petals.

Obviously items such as spark plugs, control cables, tyres,
drive chains, levers, etc., must be replaced as and when
required.

Fig. Ign. 3



Engine Strip Down

If you have never stripped an engine down before, then we recommend that you gain the assistance of someone who has.

PROCEED WITH CARE AND PATIENCE

- 1 Clean complete machine thoroughly.
- 2 Drain gearbox oil.
- 3 Remove petrol tank, seat/sidepanel unit.
- 4 Select neutral and remove rear chain.
- 5 Lift machine onto stand or box so that rear wheel is not in contact with ground.
- 6 Remove rear wheel, rear mudguard and rear silencer box.
- 7 Remove airbox by moving rearwards through frame.
- 8 Remove exhaust system — Release spring at exhaust manifold — Undo pinchbolt joining first and second sections — Undo exhaust mounting on top tube — Remove top rear engine bolt — Tap front pipe down and forwards to remove — Remove main exhaust by moving backwards and turning out through rear of frame.
- 9 Remove gearlever, engine sprocket cover and magneto flywheel cover.

TOP END

- 10 Remove cylinder head (6 x 14 mm) and gasket — Turn magneto flywheel so that piston is at T.D.C. and carefully scrape the carbon from the piston crown with blunted scraper — Remove carbon from head in similar fashion.
- 11 Remove carburettor and Reed valve assembly (4 x 10 mm).
- 12 Remove cylinder base nuts (4 x 14 mm) — Move piston to B.D.C. — Carefully lift cylinder off of the base studs and if top end overhaul only is anticipated, the crankcase mouth should be padded with clean rag to prevent any broken piston rings or other undesirable debris from falling into the crankcase — Carefully remove cylinder from piston and inspect both for wear/high spots, etc. — Remove piston rings, inspect and replace if worn.
- 13 Remove gudgeon pin circlips and discard, NEVER RE-USE THESE CIRCLIPS — The gudgeon pin can now

be pushed out, or if tight, support the connecting rod securely and use a drift to tap out the pin carefully — Remove piston and small end bearing.

REMOVAL OF ENGINE

- 14 Disconnect electrics at snap connector at forward end of top tube.
- 15 Disconnect clutch cable from clutch cover.
- 16 Remove front engine bolt and engine plates — Remove engine bolt underneath engine — To remove bottom rear engine mounting stud, remove allen screw and washer from either side of frame and carefully drift out the stud (8 ½ in. long).
- 17 Remove engine from frame.

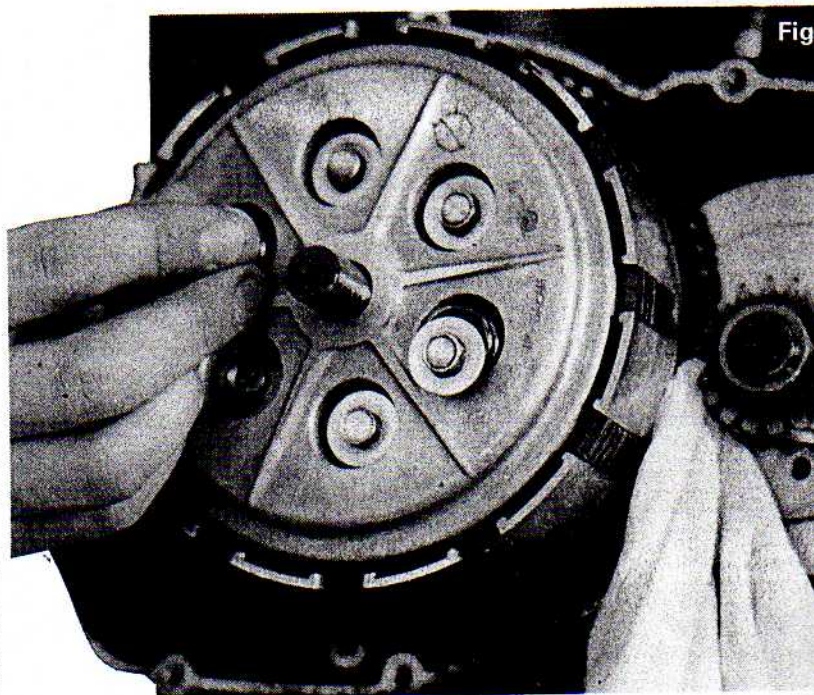


Fig.

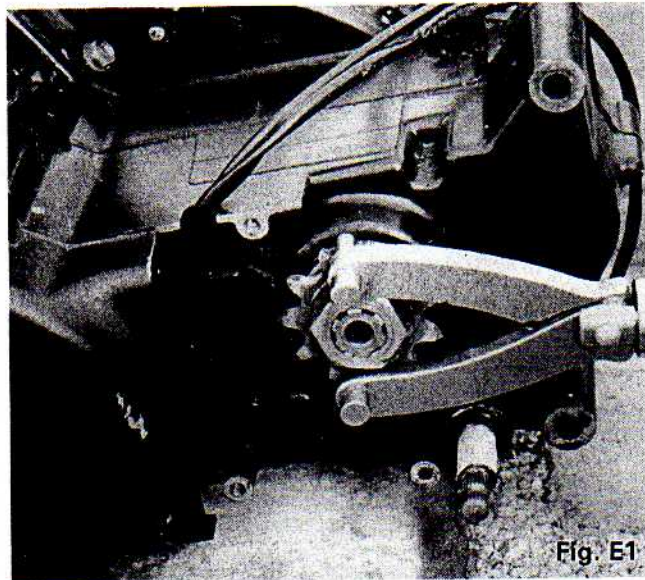


Fig. E1

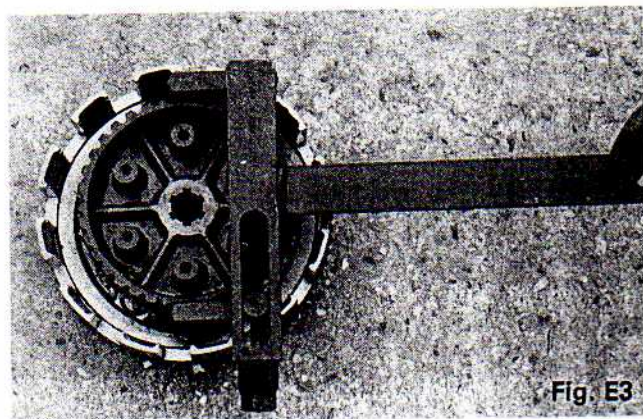


Fig. E3

