



# **ludix** *Trend*

## *50 cc IAE*

TECHNICAL NETWORK LEADERSHIP

## Datasheet

Reference : 757797

### GENERAL CHARACTERISTICS :

#### SPECIFICATIONS :

Company name : Ludix 10 Luxe

Mines type \*\* : L1AAAA

(\*\*official French body responsible for regulating weights and measures and changes made to motor vehicles).

#### DIMENSIONS (in mm) :

Length : 1650

Width : 665

Height (without rear-view mirrors) : 1070

Ground clearance : 110

Wheel base : 1210

#### WEIGHT (in kg) :

Laden weight : 73,5

#### STEERING :

Steering column mounted with ball-bearing cone and cup.

#### CAPACITIES (in litres) and RECOMMENDATIONS :

Fuel tank (including reserve) : 5,5 : super unleaded petrol (95 or 98) only.

Oil sump : 1,2 : semi synthetic for two stroke engines with separate oiling. Complies with API TC or ISO EGC or ISO EGD.

Crankcase : \*

Cooling system : \*

Relay box : 0,12 . SAE 80W90

Fork : \*

Braking circuit : DOT 3 or DOT 4

#### LUBRICATION :

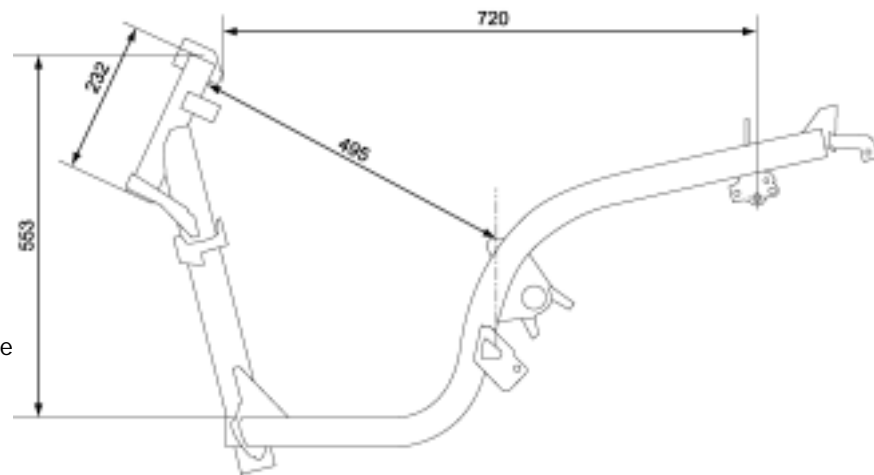
Separate lubrication by electric pump

Dell'Orto driven by a control

unit. The oil is injected directly into the carburettor.

#### COOLING :

By air circulation forced by a turbine fixed on the rotor of the flywheel magneto.



\* : Not completed

#### ENGINE :

2 stroke single-cylinder. Air-injection emissions control system and catalyser.

Direct intake via valves into the crankcase.

Scavenging by 5 transfers.

Cylinder capacity : 49,9 cm<sup>3</sup>

Bore x stroke : 39,9 x 39,8

Max power : 3,2 kW

Max power rating : 7100 rpm

Max torque rating : 6800 rpm

#### AIR PUMP

Type : Piston pump

Make : Dell'orto

#### OIL PUMP CONTROL UNIT :

Type : Electric

Make : Dell'orto

#### TRANSMISSION :

By 2 variable pulleys and V-type belt. 6-roller type drive pulley mounted on the left shank of the crankshaft. Fixed flange of the pulley equipped with cooling fins to cool the belt.

Driven/centrifugal 3-block lined clutch pulley mounted on the end of the relay box input shaft.

#### RELAY BOX :

By shaft and pinions. Double set of pinions.

• 1<sup>st</sup> gear teeth set : helical.

• 2<sup>nd</sup> gear teeth set : helical.

#### SUSPENSION :

Front suspension type : reverse telescopic fork.

Travel : 73 mm

Rear suspension type : 1 central combined hydraulic spring-shock absorber.

Travel : 65 mm

#### FRONT BRAKE :

Single disc type, hydraulic control.

Diameter of the brake piston : 32 mm

Disc diameter and thickness : 155 – 3 mm

Mini thickness : 2,5 mm

Diameter of the master-cylinder : 11 mm

#### REAR BRAKE :

Single cam drum type controlled by cable.

Brake drum diameter : 110 mm

Brake lining thickness : 3,8 mm

#### WHEELS AND TYRES :

Integral aluminium wheels and tubeless tyres.

|                    | Front       | Rear        |
|--------------------|-------------|-------------|
| Rim dimensions :   | 2,5" x 10"  | 2,5" x 10"  |
| Tyres dimensions : | 100/80 - 10 | 100/80 - 10 |
| Pressures (bar) :  | 2           | 2,2         |
| Maxi wheel disc :  | 0,8 mm      | 0,8 mm      |
| Balance :          | *           | *           |

### TIGHTENING TORQUES (Nm) :

#### ENGINE :

Cylinder head : 12 to 15

Exhaust mounting on the cylinder : 15 to 18

Crankcase : 8 to 12

Spark plug : 20

#### CYCLE PART :

Engine mounting on connecting rod : 57 to 70

Front wheel : 60 to 70

Upper nut on the steering column : 70 to 80

Rear wheel : 100 to 120

Shock-absorber mounting rear, upper : 43 to 50

Lower : 20 to 25

Front brake calliper : 25 to 35

Front brake disc : 27 to 32

### ADJUSTMENTS AND CHECKS :

#### CYLINDER / PISTON :

Ring gap clearance.

Upper : 0,025 ± 0,01 mm

Lower : 0,025 ± 0,01 mm

#### CONNECTING ROD / CRANKSHAFT :

Crankshaft run-out : 0,05 mm

#### CARBURATION :

Carburettor.

Make and type : GURTNER PY 12

Adjustment n° : 410

Main jet : 56

Idle jet : 36

Needle (type and adjustment step) : L 5035 E

Starter jet : 45

Mixture screw : 1 rev ¼ to 1 rev ½

Idle adjustment : 1600 rpm

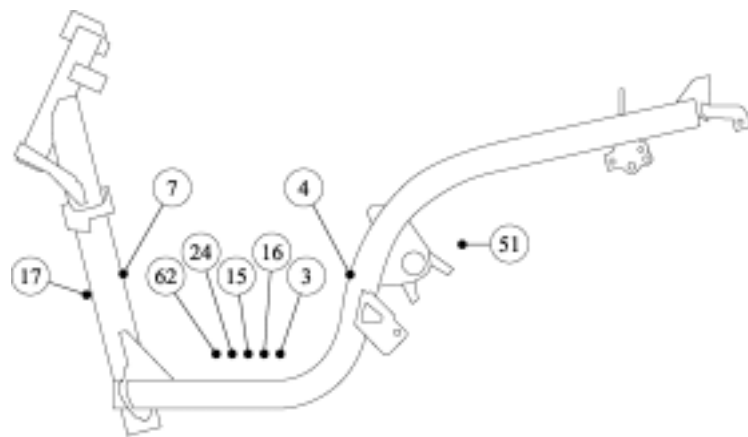
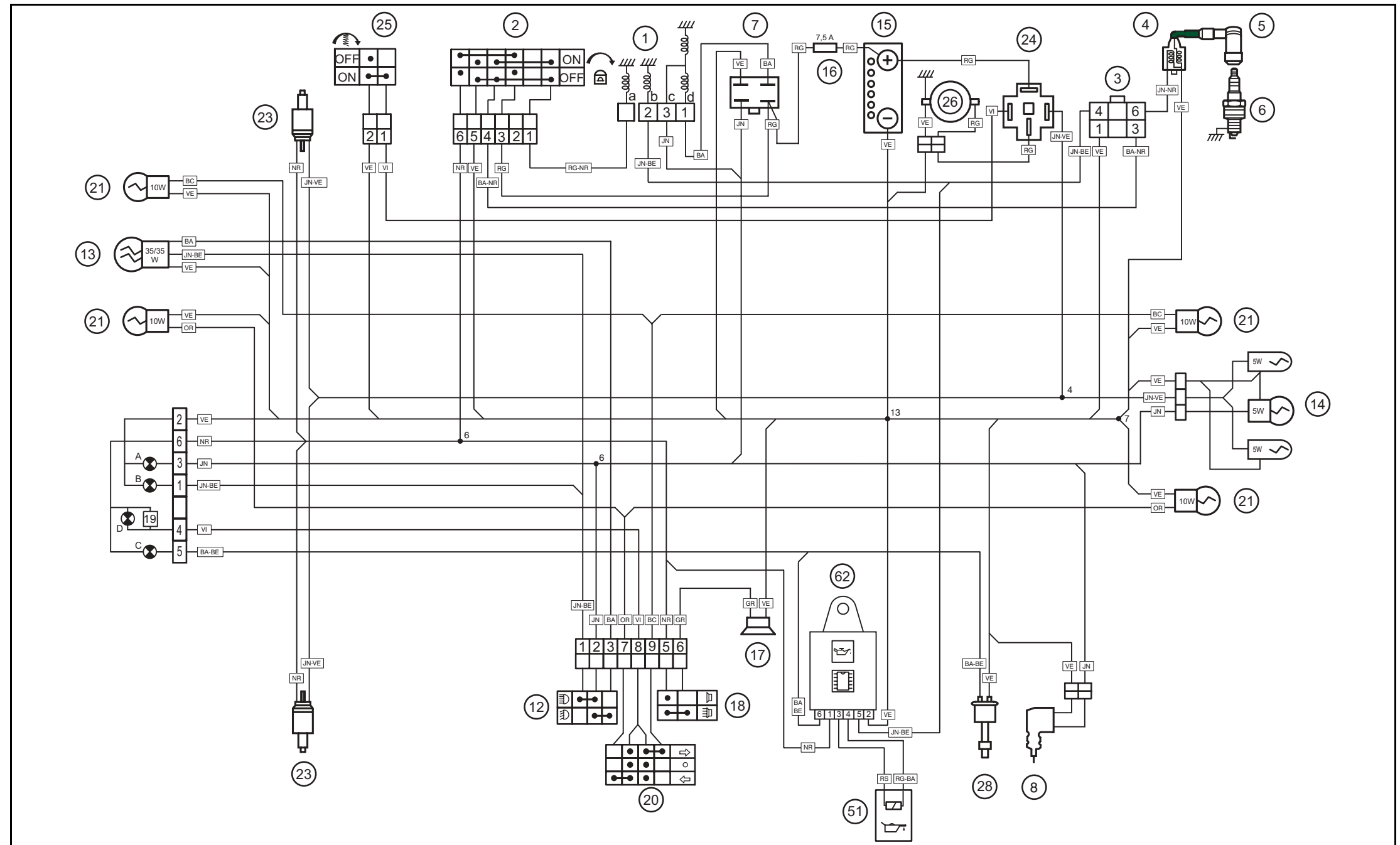
CO<sup>2</sup> % adjustment : \*

Ignition unit : CDI  
Spark plug : NGK BR 7HS or EYQUEM R 850  
Electrode gap : 0,6 to 0,7 mm  
Ignition advance : Fixed 13°  
Ignition coil : TEC MP11 or T11C X7A  
Primary winding resistance :  $0,26 \Omega \pm 20 \%$   
Secondary winding resistance :  $3 \text{ K}\Omega \pm 20 \%$   
Spark plug cap resistance :  $5 \text{ k}\Omega \pm 20 \%$   
Pick-up resistance :  $120 \Omega \pm 10 \%$

Current generator (type and power) : AC/DC 89 W  
Make : KOKUSAN  
Stator resistance : yellow wire 0,6  $\Omega$  - white wire 0,7  $\Omega \pm 25\%$   
Battery regulation voltage : 14  $\pm$  0,5 V  
Battery (type and capacity) : YUHASA YB4L-B or FIAMM 6ES-12  
12 V – 4 Ah  
Lighting voltage : alternating current regulation at : 13,1  $\pm$  0,5 V

Power : 150 W / 160 W  
Make : MITSUBA / MORIC

|                                    | Quantity | Power          |
|------------------------------------|----------|----------------|
| Headlamp (code light) :            | 1        | 12 V – 35/35 W |
| Red stop lamp :                    | 1        | 12 V – 10/5 W  |
| Indicator lamps :                  | 4        | 12 V – 10 W    |
| Number plate lightning :           | *        | *              |
| Dash board lighting :              | 1        | 12 V – 2 W     |
| Instrument panel indicator lamps : | 3        | 12 V – 1,2 W   |
| Main fuse :                        | 1        | 7,5 A          |
| Signalling fuse :                  | *        | *              |
| "Side light" bulbs :               | *        | *              |



|     |                                    |     |                                 |     |                           |         |              |         |             |
|-----|------------------------------------|-----|---------------------------------|-----|---------------------------|---------|--------------|---------|-------------|
| A   | Instrument panel lightning         | 12) | Dip switch (main/low headlight) | 37) | Oil pressure switch       | BA :    | White        | VE :    | Green       |
| B   | Main beam control                  | 13) | Headlight                       | 38) | Cooling fan               | BA-BE : | White/Blue   | VE-NR : | Green/Black |
| C   | Oil level warning light            | 14) | Stop /tail light                | 39) | Thermo-switch cooling fan | BA-NR : | White/Black  | VI :    | Purple      |
| D   | Indicator control light            | 15) | Battery                         | 42) | Switch "Reserve"          | BC :    | Light blue   |         |             |
| E   | Fuel gauge                         | 16) | Fuses                           | 43) | Speed sensor              | BE :    | Blue         |         |             |
| F   | LED "Anti theft device"            | 17) | Horn                            | 44) | Saddle actuator           | GR :    | Grey         |         |             |
| G   | Temperature gauge                  | 18) | Horn switch                     | 45) | Diagnostic plug           | JN :    | Yellow       |         |             |
| H   | Warning light "reserve"            | 19) | Indicator relay                 | 46) | Air injector              | JN-BA : | Yellow/White |         |             |
| J   | Oil pressure                       | 20) | Indicator switch                | 47) | Fuel injector             | JN-BE : | Yellow/Blue  |         |             |
| K   | Watch                              | 21) | Indicator bulb                  | 48) | Throttle unit             | JN-NR : | Yellow/Black |         |             |
| L   | EFI diagnostic light               | 22) | Fuel gauge pickup               | 50) | Fuel pump                 | JN-VE : | Yellow/Green |         |             |
| M   | ABS/PBS light                      | 23) | Stop light switch               | 51) | Oil pump                  | MC :    | Light Brown  |         |             |
| N   | Revolution counter                 | 24) | Starter relay                   | 62) | Oil pump control unit     | MR :    | Brown        |         |             |
| 1)  | Generator                          | 25) | Starter switch                  |     |                           | MR-BA : | Brown/White  |         |             |
| 2)  | Ignition switch                    | 26) | Starter motor                   |     |                           | NR :    | Black        |         |             |
| 3)  | CDI unit                           | 28) | Oil level switch                |     |                           | OR :    | Orange       |         |             |
| 4)  | Ignition coil (high voltage)       | 29) | Temperature sensor              |     |                           | RG :    | Red          |         |             |
| 5)  | Spark plug socket (resistive) 5 kΩ | 30) | Immobilizer                     |     |                           | RG-BA : | Red/White    |         |             |
| 6)  | Spark plug (resistive) 5 kΩ        | 31) | Antenna for anti-theft device   |     |                           | RG-JN : | Red/Yellow   |         |             |
| 7)  | Regulator, rectifier               | 32) | "Side light" bulb               |     |                           | RG-NR : | Red/Black    |         |             |
| 8)  | Automatic choke                    | 33) | Number plate light              |     |                           | RS :    | Pink         |         |             |
| 10) | Light switch                       | 36) | "Neutral" switch (gearbox)      |     |                           | VC :    | Light Green  |         |             |