<table>
<thead>
<tr>
<th>CONTENTS</th>
</tr>
</thead>
</table>

| CHARACTERISTICS | .................................................................................................................. 5 |
| Engine markings | .................................................................................................................. 5 |

| TIGHTENING TORQUES | .................................................................................................................. 5 |
| SPECIAL TOOLS | .................................................................................................................. 6 |

| IDENTIFICATION | Differences between the 3 types of assembly ................................................................. 7 |

| DISASSEMBLY | .................................................................................................................. 8 |
| To change the decompressor assembly | .................................................................................................................. 40 |
| To remove and fit a coil | .................................................................................................................. 39 |
| To change clutch shoes | .................................................................................................................. 37 |
| Drive pulley assembly | .................................................................................................................. 37 |
| To assemble the governor - type 2 | .................................................................................................................. 35 |
| Changing the starting jaws (with and without governor) types 1 and 2 | .................................................................................................................. 35 |
| To remove the coil assembly and the stator | .................................................................................................................. 31 |
| To fit the magneto flywheel | .................................................................................................................. 31 |
| To fit the governor (type 3) | .................................................................................................................. 30 |
| Fitting the with-governor drive pulley (type 2) | .................................................................................................................. 28 |
| Fitting the non-governor drive pulley (type 1) | .................................................................................................................. 26 |
| To fit the piston | .................................................................................................................. 23 |
| Assembling the casings | .................................................................................................................. 21 |
| To fit the bearing and seal in the LH casing | .................................................................................................................. 17 |
| To fit the bearing and seal in the RH casing | .................................................................................................................. 16 |
| To fit the crank assembly in the LH casing | .................................................................................................................. 15 |
| To remove the bearings and seals | .................................................................................................................. 14 |

| RE-ASSEMBLY | .................................................................................................................. 17 |
| To fit the bearing and seal in the LH casing | .................................................................................................................. 17 |
| To fit the bearing and seal in the RH casing | .................................................................................................................. 16 |
| To fit the crank assembly in the LH casing | .................................................................................................................. 15 |
| Assembling the casings | .................................................................................................................. 14 |
| To assemble the engine bottom end and engine mount | .................................................................................................................. 13 |
| To fit the valve and inlet manifold | .................................................................................................................. 13 |
| To fit the piston | .................................................................................................................. 12 |
| To fit the cylinder | .................................................................................................................. 11 |
| To fit the cylinder head | .................................................................................................................. 10 |
| Type 1 - drive pulley without governor, without kickstart | .................................................................................................................. 26 |
| Fitting the non-governor drive pulley (type 1) | .................................................................................................................. 26 |
| Type 2 - drive pulley with governor, without kickstart | .................................................................................................................. 28 |
| Fitting the with-governor drive pulley (type 2) | .................................................................................................................. 28 |
| Type 3 - drive pulley with governor, with kickstart | .................................................................................................................. 30 |
| To fit the governor (type 3) | .................................................................................................................. 30 |
| To fit the magneto flywheel | .................................................................................................................. 30 |
| To remove the coil assembly and the stator | .................................................................................................................. 30 |

| MISCELLANEOUS OPERATIONS | Drive pulley assembly | .................................................................................................................. 33 |
| Clutch adjustment (with and without governor) types 1 and 2 | .................................................................................................................. 34 |
| Changing the starting jaws (with and without governor) types 1 and 2 | .................................................................................................................. 35 |
| To assemble the governor - type 2 | .................................................................................................................. 35 |
| Drive pulley assembly | .................................................................................................................. 35 |
| To change clutch shoes | .................................................................................................................. 37 |
| To remove the drive pulley sprocket | .................................................................................................................. 37 |
| To remove and fit a coil | .................................................................................................................. 39 |
| To change the decompressor assembly | .................................................................................................................. 40 |
CHARACTERISTICS

<table>
<thead>
<tr>
<th>Engine</th>
<th>2-stroke with pre-compression in the cooling casings - either by natural air circulation - or by natural water circulation and a fanless radiator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore x stroke</td>
<td>40x39.1</td>
</tr>
<tr>
<td>Cubic capacity</td>
<td>49.13</td>
</tr>
<tr>
<td>Max. power output</td>
<td>1.9 kW / 2.2 kW</td>
</tr>
<tr>
<td>Maximum torque</td>
<td>0.37 Nm / 0.44 Nm</td>
</tr>
<tr>
<td>Gross compression ratio</td>
<td>8.5±1</td>
</tr>
<tr>
<td>Ignition</td>
<td>CDI</td>
</tr>
<tr>
<td>Spark plug</td>
<td>KVAS 850 / NGK BR7HS (depending on plug cap)</td>
</tr>
<tr>
<td>Carburettor</td>
<td>Gurtner or Dell’Orto</td>
</tr>
<tr>
<td>Inlet</td>
<td>Valves</td>
</tr>
<tr>
<td>Transmission</td>
<td>Automatic clutch with or without speed governor</td>
</tr>
<tr>
<td>Magneto flywheel</td>
<td>Peugeot electronic 12 V 4-pole or 6V 6-pole</td>
</tr>
</tbody>
</table>

TIGHTENING TORQUES

<table>
<thead>
<tr>
<th>Component</th>
<th>Torque (daN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder head</td>
<td>1.5</td>
</tr>
<tr>
<td>Decompressor</td>
<td>3.5</td>
</tr>
<tr>
<td>Spark plug</td>
<td>3</td>
</tr>
<tr>
<td>Magneto flywheel</td>
<td>4</td>
</tr>
<tr>
<td>Sensor</td>
<td>1</td>
</tr>
<tr>
<td>Clutch without governor</td>
<td>3</td>
</tr>
<tr>
<td>Clutch with governor</td>
<td>4</td>
</tr>
<tr>
<td>Governor</td>
<td>6</td>
</tr>
<tr>
<td>Cylinder casings</td>
<td>1</td>
</tr>
<tr>
<td>Engine mount</td>
<td>2.2</td>
</tr>
<tr>
<td>Inlet manifold</td>
<td>0.65</td>
</tr>
<tr>
<td>Driven pulley sprocket</td>
<td>8</td>
</tr>
</tbody>
</table>

Engine markings

<table>
<thead>
<tr>
<th>Engine type</th>
<th>T059 (version H)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T055 (version F.G)</td>
</tr>
<tr>
<td></td>
<td>T051 (version A)</td>
</tr>
<tr>
<td></td>
<td>T054 (version B.C)</td>
</tr>
</tbody>
</table>
### SPECIAL TOOLS

<table>
<thead>
<tr>
<th>Tool Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clutch bushing</td>
<td>53527</td>
</tr>
<tr>
<td>Casing extractor and opening tool</td>
<td>64706</td>
</tr>
<tr>
<td>Shoulder locator</td>
<td>64710</td>
</tr>
<tr>
<td>Pin Ø 10 mm pitch 100</td>
<td>64711</td>
</tr>
<tr>
<td>Shell for Ø 40mm bearing</td>
<td>64728</td>
</tr>
<tr>
<td>Shell for Ø 47mm bearing</td>
<td>64729</td>
</tr>
<tr>
<td>Pin Ø 11 pitch 100</td>
<td>64754</td>
</tr>
<tr>
<td>Engine mount</td>
<td>64765</td>
</tr>
<tr>
<td>Engine mount adapter</td>
<td>65255</td>
</tr>
<tr>
<td>Protective cap small model</td>
<td>68007</td>
</tr>
<tr>
<td>Decompressor removal/fitting tool</td>
<td>68048</td>
</tr>
<tr>
<td>Clutch strap</td>
<td>68460</td>
</tr>
<tr>
<td>Protective cap large model</td>
<td>69098</td>
</tr>
<tr>
<td>Butterfly nut</td>
<td>69104</td>
</tr>
<tr>
<td>Bearing and crank assembly seal guide</td>
<td>69108</td>
</tr>
<tr>
<td>Bearing and crank assembly seal remover</td>
<td>69109</td>
</tr>
<tr>
<td>Assembly guide</td>
<td>69110</td>
</tr>
<tr>
<td>Assembly plate tool</td>
<td>69111</td>
</tr>
<tr>
<td>Assembly guide</td>
<td>69112</td>
</tr>
<tr>
<td>Assembly guide</td>
<td>69113</td>
</tr>
<tr>
<td>Bearing and crank assembly seal remover</td>
<td>69114</td>
</tr>
<tr>
<td>Assembly guide</td>
<td>69115</td>
</tr>
<tr>
<td>Casing open/close bush</td>
<td>69137</td>
</tr>
<tr>
<td>Clutch setting plate</td>
<td>69140</td>
</tr>
<tr>
<td>Clutch fitting setting shaft</td>
<td>69141</td>
</tr>
<tr>
<td>Clutch alignment dowel</td>
<td>69142</td>
</tr>
<tr>
<td>Seal tapered dowel</td>
<td>69143</td>
</tr>
<tr>
<td>Magneto wheel extractor</td>
<td>69254</td>
</tr>
<tr>
<td>Pin Ø 10 mm pitch 125</td>
<td>750069</td>
</tr>
<tr>
<td>Plate for opening/closing casings</td>
<td>750369</td>
</tr>
<tr>
<td>Governor removal/refitting support</td>
<td>750411</td>
</tr>
<tr>
<td>1.5 mm base washer</td>
<td>750495</td>
</tr>
<tr>
<td>Piston clip pliers</td>
<td>752000</td>
</tr>
<tr>
<td>RCX/SPX driven pulley sprocket removal tool</td>
<td>754269</td>
</tr>
<tr>
<td>Adjustable pin wrench</td>
<td>755586</td>
</tr>
</tbody>
</table>
IDENTIFICATION

Differences between the 3 types of assembly
- Type 1 without governor and kickstart
- Type 2 with governor and without kickstart
- Type 3 with governor and with kickstart
DISASSEMBLY

**Fitting the engine to the support and adapter**
- Fit the engine to adapter P/N 65255 using a nut and bolt (1) diameter 8 x 110 mm
- Protect both ends of the engine mount with 2 washers (2)
- Fit the engine with its adapter to the stand P/N 64765, with the stand held in a vice

**To remove the drive pulley - types 1 and 2**
- Lock the clutch drum (1) with the strap 68460
- Remove the nut (2) from the end of the crank assembly

- Remove the drive pulley not forgetting the washer (3) under the drum
**To remove the governor - type 3**
Lock the bobweight plate (1) with the adjustable pin wrench P/N 755586
- Remove the nut (2) from the end of the crank assembly
- Remove the governor assembly (1)

**To remove the clutch pulley assembly**
- Remove the panels (1)
- Remove the kickstart lever (2)
- Remove the chain guard (3) and the RH footrest (4)

- Remove the quick-link and the chain (5)
- Remove the circlip (6), the sprocket (7) and its plastic washer
- Remove the governor cover (8)
- Remove the LH footrest (9)

- Slacken the engine tension spring (1)
- Remove the belt (11)
- Remove the clutch/transmission shaft assembly (12)
To remove the magneto flywheel
- Remove the flywheel cover
- Lock the rotor (1) with tool P/N 755586
- Remove the nut (2) from the end of the crank assembly

- Fit protective tool P/N 68007 to the crank assembly
- Fully tighten the flywheel extractor tool P/N 69254 on the rotor
- Lock the rotor with the adjustable pin wrench P/N 755586
- Tighten the flywheel extractor thrust bolt until the rotor is freed

To remove the coil assembly and the stator
Type 1: 6-pole assembly
- Remove the 2 bolts (3) from the coil assembly (5) and the 2 bolts (4) from the sensor (6)
- Remove the coil assembly
Type 2: 4-pole assembly
- Remove the 2 bolts (3) from the coil assembly
- Remove the coil assembly (5)

To remove the coil assembly plate
- Remove the 2 bolts (7) from the stator plate
- Remove the stator plate (8)
To remove the cylinder head and cylinder/piston
- Remove the 4 cylinder head bolts and lockwashers in the order shown
- Remove the cylinder head and its gasket
- Remove the cylinder and its gasket

- Remove one of the clips (1) with pliers P/N 752000
- Remove the gudgeon pin and the piston
- Remove the needle bearing cage

To remove the inlet manifold and valve
- Remove the inlet manifold (2) 4 bolts (1)
Remove:
  - the inlet manifold
  - the inlet valve and its seals
Opening the casings
- Remove the casing 6 assembly nuts and bolts (1)
- Remove the engine mount (2) and the belt guard bracket (3)

Special tooling required
- Protective cap P/N 69098
- Casing extraction and opening tool P/N 64706
- Casing opening/closing plate P/N 750369
- Casing opening/closing bush P/N 69137

+ Have handy 2 bolts Ø 5 x 40 mm

- On the RH casing, on the magneto flywheel side, fit:
  - bush P/N 69137 (large diameter side)
  - protector P/N 69098 on the end of the crank assembly
To remove the crank assembly

Special tooling required
- Protective cap P/N 69098
- Casing extraction and opening tool P/N 64706
- Casing opening/closing plate P/N
- Casing opening/closing bush P/N 69137

+ Have to hand 2 bolts and nuts Ø 6 x 80 mm

- On the LH casing on the clutch side, fit:
  - bush P/N 69137 (small diameter side)
  - protector P/N 69098 on the end of the crank assembly
  - tool P/N 64706 fitted with plate P/N 750369, fix the plate to the casing with 2 bolts (5) (Ø 6 x 80 mm) using the casing assembly holes

- Tighten the tool screw P/N 64706 until the crank assembly is withdrawn completely
To remove the bearings and seals

1) From the casings:
- Set the casing down on its mating face
- Heat the casing using a heat stripper (80 to 90°C) until the bearing drops out itself
- Remove the seal

2) On the crank assembly:

Special tooling required
- Protective cap P/N 69098
- Casing extraction and opening tool P/N 64706
- Shell for Ø 40 mm bearing P/N 64728
- Shell for Ø 47 mm bearing P/N 64729

- Fit protective cap P/N 69098 to the crank assembly on the side the bearing is to be removed from
- Fit tool P/N 64706 to the crank assembly 64706
- Clamp the bearing and tool P/N 64706 in the shells P/N 64728 or 64729 held together by the ring
- Tighten the tool screw P/N 64706 until the bearing is fully extracted

Carry out the same operation to extract the second bearing

Note: the bearing external diameter of 47 mm is on the drive pulley side
The bearing 40 mm external diameter is on the magneto flywheel side
RE-ASSEMBLY

To fit the bearing and seal in the LH casing

Special tooling required
- Bearing guide and crank assembly seal P/N 69108
- Fitting guide P/N 69110
- Bearing guide and crank assembly seal P/N 69109

Note: the tools and parts should be prepared before the operation
after heating the casing half, the work must proceed quite quickly

- Heat the casing half to 80 to 90°C
- Fit the casing half on the guide P/N 69108 with the mating surface upwards
- Fit the seal guide P/N 69110 (the knurled side facing upwards) into the bearing bore
- Fit the previously greased seal to guide P/N 69108 (with the lip facing upwards) and push it fully home into the casing half using tool P/N 69109 (small diameter side) 69109 (small diameter side)

- Remove the fitting tool and seal guide
- Fit the bearing to guide P/N 69108 and push it fully home into the casing half using tool P/N 69109 (large diameter side)
To fit the bearing and seal in the RH casing

Special tooling required
- Bearing fitting tool P/N 69111
- Fitting guide P/N 69115
- Fitting guide P/N 69112
- Fitting guide P/N 69113
- Bearing guide and crank assembly seal P/N 69114

Note: the tools and parts should be prepared before the operation
after heating the casing half, the work must proceed quite quickly

- Heat the casing half to 80 to 90°C
- Fit guide P/N 69112 (Ø 16 mm) into base P/N 69111
- Fit the casing half (with mating surface upwards) on tool P/N 69111
- Fit the seal guide P/N 69113 (the knurled side facing upwards) into the bearing bore
- Fit the previously greased seal to guide P/N 69112 (the lip facing upwards)
- Push the seal fully home into the casing using tool P/N 69114 (small diameter side)
- Remove the tool P/N 69114 and seal guide P/N 69113

- Without removing the casing from the base, remove the guide P/N 69112 (Ø 16 mm) from the top and in its place, through the seal, fit guide P/N 69115 (Ø 17 mm)
- Fit the bearing to guide P/N 69115 and push it fully home into the casing using tool P/N 69114 (large diameter side)
To fit the crank assembly in the LH casing

Special tooling required
- Casing extraction and opening tool P/N 64706
- Butterfly nut P/N 60104
- Shouldered centring tool P/N 64710
- Pin Ø 11 mm pitch 100 P/N 64754
- Pin Ø 10 pitch 125 P/N 64754 750069
- Casing opening/closing bush P/N 69137
- Taper dowel for seal P/N 69143
- Casing opening/closing plate P/N 750369

- Fit the magneto flywheel, this will act as a support
- Fit dowel P/N 69143 to the crank assembly to prevent damage to the seal
- Fit the crank assembly inside the bearing
- Fit bush P/N 69137 the small diameter side against the casing
- Tighten pin P/N 64754 against the end of the crank assembly

Note: for kickstart engines use pin Ø10 pitch 125 P/N 750069

- Fit tool P/N 64706 fitted with plate P/N 750369 over bush P/N 69137
- Centre assembly with 2 nuts and bolts (5) Ø 6 x 80 mm
- Fit the shoulder centring tool P/N 64710 and butterfly nut P/N 69104 to tool P/N 64706
- Tighten the butterfly nut P/N 69104 in order to bring the crank assembly into contact with the bearing while securing the assembly by the engine casing and ensuring that the connecting rod is correctly positioned.

**Assembling the casings**

**Special tooling required**
- Casing extraction and opening tool P/N 64706
- Butterfly nut P/N 60104
- Shouldered centring tool P/N 64710 64710
- Pin Ø 10 pitch 100 P/N 64754 64711
- Casing opening/closing bush P/N 69137
- Casing opening/closing plate P/N 750369

- Fit the drum, this will act as a support
- Fit the paper gasket (6) to the LH casing (do not use oil or grease)
- Insert the crank assembly into the RH casing (7) bearing

**Note:** take care not to damage the gasket with the pin, if the pin is still on the crank assembly
- To facilitate the assembly operation, fit the centring bolt (8) at (A) and also the other 2 bolts (9) to fit the gasket correctly
- Tighten the rod P/N 64711 on the crank assembly
- Fit bush P/N 69137 the large diameter side against the casing
- Fit tool P/N 64706 fitted with plate P/N 750369 over bush P/N 69137
- Centre this assembly with 2 bolts (4) Ø5 x 40 mm
- Fit the shouldered centring tool P/N 64710 to tool P/N 64706
- Tighten the butterfly nut P/N 69104 until the casings come into contact

**Note:** During assembly, check the casing gasket is correctly positioned

---

**To assemble the engine bottom end and engine mount**
- Remove the 3 previously fitted centring bolts
- Locate the engine bottom end between the engine mounting arms
- Fit the belt guard bracket (3)
- Fit the 6 assembly bolts beginning with the machined bolt (8)
- Fit the 3 lockwashers (10) with the 3 nuts on the engine mounting side
- Tighten to the recommended torque

- Trim the paper gasket in the casing at (A) and (B)
- Lubricate the crank assembly and check it rotates freely
To fit the valve and inlet manifold
Note: before fitting the valve, check the position of the 2 stops which must be 8 mm from the valve support

- Fit in the following order:
  - the gasket to the casing (1)
  - the valve (2)
  - the manifold gasket (3)
  - the inlet manifold
- Fit the 4 fixing bolts to the inlet manifold

To fit the piston
- Check the cylinder/piston pairing
- Fit the rings (1) the piston (2)
- Fit the previously greased bearing cage into the connecting rod little end
- Fit the piston to the connecting rod little end, with the arrow pointing towards the exhaust side
- Fit the gudgeon pin (3)
- Fit the circlips
Note:
- The circlip gaps (4) must face upwards or downwards, but under no circumstances to the side
- The circlips must be changed each time they are removed

To fit the cylinder
- Fit a new bottom gasket (5) without grease or oil to the casing which has been previously cleaned of all impurities
- Ensure that the piston ring gaps are opposite the piston positioning spigots
- Fit the cylinder (6) and lower it while compressing the rings
- Check that the piston runs freely (2) in the cylinder

To fit the cylinder head
1) Air cooled engine
- Check the condition of the cylinder head mating surface
- Fit a new cylinder head gasket (7) to the cylinder (the widest metal ring (A) pointing upwards)
- Fit the cylinder head
- Fit the 4 lockwashers and the 4 nuts
- Tighten the 4 nuts working diagonally, to the recommended torque
2) Liquid cooled engine
- Check the condition of the cylinder head mating surface
- Fit a new cylinder head gasket (7) to the cylinder (the widest metal ring pointing upwards)
- Fit a new O-ring (8) round the outer edge of the cylinder head
- Fit the cylinder head
- Fit the 4 lockwashers and the 4 nuts
- Tighten the 4 nuts working diagonally, to the recommended torque
Type 1 - drive pulley without governor, without kickstart

Drive pulley composition

Fitting method

*Fitting the non-governor drive pulley (type 1)*

Adjust the clutch before assembly (see chapter on adjusting the clutch)

Fit to the crank assembly in the following order:

- the washer (2) (the chamfer (A) facing the casing side)

- the drum (3)
- the adjuster washer (4)
- the 4-leg spring (5)
- the lining (6)
Prepare the following assembly:
- fit the 4 previously greased balls (8) to the thrust plate (9)
- fit the plate (7) to the thrust plate (9)

- Turn the assembly over and fit the lining (6)
  **Note:** the spring legs should be inserted in the slots (A) in the plate (7)

- Fit the countersunk washer (10) to the plate (with the countersink on the casing side)
- Fit the spacer (11)
- Lock the assembly with tool P/N 69142

- Fit the spring washer (12) over the countersunk washer (10)
- Fit the pulley (1) lining up the lining drive notches (6) with the cup drive notches cup drive notches (1C)
- Turn the assembly alternately in order to synchronise the pulley notches (1) with the lining drive notches (6)
- Fit the spring washer (13)
- Fit the washer (14)
- Fit the nut (15)
- Tighten the nut to the recommended torque
Type 2 - drive pulley with governor, without kickstart

Drive pulley composition

Fitting method

Fitting the with-governor drive pulley (type 2)
Adjust the clutch before assembly (see chapter on adjusting the clutch)

Fit to the crank assembly in the following order:

- the washer (2) (the chamfer (A) facing the casing side)
- the drum (3)
- the adjuster washer (4)
- the 2-leg spring (5B)
- the 4-leg spring (5A)
- the lining (6)
Prepare the following assembly:
- fit the 6 previously greased balls (8) to the thrust plate (9)
- fit the plate (7) to the thrust plate (9)

- Turn the assembly over and fit the lining (6)
  **Note:** the spring legs should be inserted in the slots (A) in the plate (7)

- Fit the countersunk washer (10) to the plate (with the countersink on the casing side)
- Fit the spacer (11)
- Lock the assembly with tool P/N 69142

**Drive pulley with governor**
Re-assemble the governor (see chapter on Governor assembly)
- Fit the pulley/governor assembly (1) lining up the lining drive notches (6) with the cup drive notches (1C)
- Turn the assembly alternately in order to synchronise the pulley notches (1) with the lining drive notches (6)
- Remove tool P/N 69142
- Fit the nut (15) and tighten to the recommended torque
Type 3 - drive pulley with governor, with
kickstart
Drive pulley composition

Fitting method

To fit the governor (type 3)
- Fit in the following order:
- the plain washer (1)
- the fixed flange (2)
- the washer (4), the spacer (5), the rotating flange
  (3) and the nylatron washer (6)
- the bobweight support (7)
- the plain washer (8)
- the nut (9)
- Lock the bobweight support with pin wrench P/N
  755586
- Tighten to the recommended torque
To fit the magneto flywheel

Coil assembly support
- Fit the half-moon key (9) into its housing in the crank assembly straight section
- Fit the stator plate (7) and its 2 bolts

Type 1: 6-pole assembly
- Fit the coil assembly (5) and its two bolts (3) and the sensor (6) two bolts (4)

To remove the coil assembly and the stator

Type 2: 4-pole assembly
- Fit the coil assembly (5) and its 2 bolts (3)
- Fit the rotor (1) ensuring it is correctly positioned over the key
- Tighten the nut (2) with the chamfered side facing inwards
- Immobiliser le rotor avec l’outil réf 755586
- Tighten the nut to the recommended torque
MISCELLANEOUS OPERATIONS

Drive pulley assembly

Composition of the drive pulley without governor

Composition of the drive pulley with governor
**Clutch adjustment (with and without governor) types 1 and 2**

**Special tooling required**
- Clutch fitting / adjustment rod P/N 69141
- Clutch adjustment plate P/N 69140
- Clutch fitting dowel P/N 69142
- Clutch spacer P/N 53527
- Washer base 1.5 m P/N 750495

Parts required: set of adjuster washers
Six thicknesses of washer (0.4 - 0.6 - 0.8 - 1 - 1.2 - 1.5 mm) are available from spares department

**Procedure:**
- Tighten tool P/N 69141 in a vice and fit in the following order:
  - the washer (2)
  - the adjustment tool P/N 69140
  - the 1.5 mm base washer
  - the spring (5A) + (5B) depending on model
  - the lining (6)
  - the clutch flange (7)
  - the balls (8) (4 or 6 depending on type)
  - the drum (9)
  - the washer (10)
  - the spacer (53527) for use on the engine with governor to replace the existing spacer
  - the nut (15) and tighten the assembly to the recommended torque depending on model
- Using shims (A), measure the gap between the lining (6) and the flange (7), and depending on the clearance required, change the 1.5 m base washer for the adjuster washer (4) the thickness of which is determined using the following formula:

**Formula:**
\[
\text{Clearance measured} - \text{Functional clearance} = \text{Adjustment washer thickness (4)}
\]

The functional clearance between the lining and the plate must be between
- 7 and 9/10 de mm for the drive pulley without governor (type 1)
- 3 and 5/10 mm for the drive pulley with governor (type 2)

After adjustment, check the functional clearance

**Example of measurement for a pulley with governor**

<table>
<thead>
<tr>
<th>Clearance measured 1 mm</th>
<th>Functional clearance 0.4 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>= Adjustment washer (4) 0.6 mm</td>
<td></td>
</tr>
</tbody>
</table>
Changing the starting jaws (with and without governor) types 1 and 2

To fit the return springs
- Fit the large loop on the spring inside slot (A) on the pivot and hook it on the pivot pin (B) (the spring loop openings should be facing the inside of the jaw)
- Hook the other end of the spring to the second peg (C) on the jaw
- Fit the cup (1C)

To assemble the governor - type 2

Governor composition
(main components)
- Bobweight support plate (1D)
- Bobweights (1E)
- Bobweights spindles (1F)
- Governor drive (1H)
- Rotating flange (1G)
- Fixed flange (1A)
- Nylon washers (12 and 13)

Special tooling required
- Governor fitting and removal support P/N 750411
**Disassembly**
- Remove the 2 nylon washers (12 and 13) located at each end of the stub
- Tighten tool P/N 750411 in a vice
- Fit the governor (1) on the tool
- Locate the bobweight mounting plate (1D) in the tool 4 pegs
- Fold down the nut locking tab (1J)
- Remove the 32 mm nut (1K)
- Remove the fixed (1A) and rotating (1G) flanges

- if necessary, unclip the moving flange (1G) drive system (1H) using a screwdriver

**Types 2 and 3**
- if necessary, remove each bobweight by removing the spindle locking device and spindle (1F)

**Re-assembly**
Proceed in reverse order to disassembly

**Note:** tighten the 32 mm nut to the recommended torque and close the washer locking tab
**Drive pulley assembly**

**Drive pulley composition**
( main components )
- Drive pulley (1)
- Pulley sprocket (2)
- Lock washer (3)
- Nut (4)
- Circlip (5)
- Stiffener plate (6)
- Spring washers (7)
- Clutch shoes (8)
- Springs (9)
- Clutch output shaft and cover (10)

---

**To change clutch shoes**

**Disassembly**
- Remove the 3 circlips (5)
- Remove the stiffener plate (6) and the 3 spring washers (7)
- Remove the 3 shoes (8) and the springs (9)

**Re-assembly**
Proceed in reverse order to disassembly

---

**To remove the drive pulley sprocket**

**Special tooling required**
- Drive pulley sprocket removal tool P/N 754269
Disassembly
- Remove the clutch shoes
- Tighten the support in a vice
- Position the pulley (1) on the support lining up the sprocket teeth (2) with the support teeth (3)

- Fold down the nut locking tab (4)
- Remove the nut (5) with the wrench
- Remove the sprocket (2)

Re-assembly
Proceed in reverse order to disassembly
Fit the nut locking plate (4)
To remove and fit a coil

1) 6-pole flywheel
- Unsolder the earth wire (1)
- Unsolder the harness connection wire (2)
- Fold down the metal tab (3)
- Remove the coil (4)

**Note:** Removal of the ignition coil requires removal of the coil(s) located either side. In the rest position, ensure the coil is fixed with no play on the coil assembly and that the tin solders are good quality. Apply a bead of silicon to the earth wire in order to secure it. All the coils and the sensor may be changed.

2) 4-pole flywheel
Remove the ignition coil
- Unsolder the earth wire (1)
- Unsolder the harness connection wire (2)
- Remove the clip (3)
- Remove the coil (4)

**Note:** The rest of the coil assembly coils cannot be serviced.
To change the decompressor assembly

Special tooling required
Decompressor removal/fitting tool P/N 68048

- Remove the cylinder head
- Cut off the end of the pin (1), compress the spring (2), remove the pin (1) and the lever (3)
- Remove the valve (4) from the decompressor
- Remove the spring (2) from the compressor body (5)
- Remove the decompressor casing (5) from the cylinder head

Note: Do not remove the copper seal (6) from the cylinder head
When re-assembling:

**NB:** coat the decompressor casing threads (5) with gasket compound
- Fit the decompressor casing (5) and tighten it to the recommended torque
- Fit the spring (2), the valve (4)
- Fit the lever (3) and the pin (1)
- Flatten the end of the pin (1) with tool P/N 68048 and a drift