

9/6



AFTER SALES SERVICE

Dear NSU dealer!

Compiled by experts this publication is intended to give NSU dealers and their workshop personnel instructions for correct and labour saving maintenance repairs. It gives instructions regarding the necessary special tools. Moreover the important technical data, fitting clearances etc., have been tabulated in order that they cannot be overlooked. We are also endeavouring to present in a form easily understandable to each trader, with the aid of illustrations, the removal and refitting as well as the dismantling and re-assembly of the power unit.

In due course you will be advised of new developments in the form of amendment sheets. We request you to add these sheets to this volume and make use of their contents as required.

For specific repair jobs reference numbers are allocated:

e. g. Removing and refitting power unit	= M 01
or dismantling and re-assembling the power unit	= M 02

These reference symbols are intended to save time when repair instructions are written out. Moreover they form the basis of a list of flat rate repair times which is included.

NSU WERKE AKTIENGESELLSCHAFT

Neckarsulm, February 1955



Engine	= NSU-QUICKLY, unit construction
Cylinder Barrel	= Light alloy, with hard chromed working surface
Method of operation	= 2-Stroke
Gas filling	= Through cylinder barrel porting
Lubrication	= Petroil
Mixing Ratio	= 1 : 24
Carburettor	= Bing Type 1/9/1, main jet 56, needle position 2, needle jet 2.10
Air cleaner	= Wet element type, mounted inside the frame with choke for easy starting
Cylinder bore	= 40 mm
Stroke	= 39 mm
Capacity	= 49 cc
Compression volume	= 10.9 cc
Compression Ratio	= 1 : 5.5
Maximum RPM	= 5,200
BHP	= 1.4
B. M. E. P.	= 38 lbs. p. s. i.
Piston clearance	= .0006" - .001"
End float on flywheel assembly	= Maximum .012", shim up if more
Conrod side clearance	= .008"
Gudgeon pin diameter	= .394" - .0002"
Small end bush diameter	= .394" + .001" + .0005"
End float of gearbox shafts	= .008" (not shimmed)
Ignition	= Flywheel magneto with lighting coil, 6 V 17 W
Ignition advance	= 2.1 mm (.082") = 24° before T. D. C.
Sparking Plug	= Bosch: W 240 T 11 KLG: F 80
Sparking Plug gap	= .020"
Contact breaker gap	= .012"
Clutch	= Multi plate type
Clutch operation	= By hand
Clutch spring pressure	= 105 lbs
Clutch adjustment	= On handlebar



Gearbox	= NSU 2-speed, unit construction
Primary Drive	= Gears
Engine/Gearbox ratio	= 5.33 : 1
Gearbox ratios	= 1.88 : 1 1 : 1
Gearbox/Rear wheel ratio	= 3 : 1
Overall gear ratios	= 30.06 : 1 15.99 : 1
Gearbox oil capacity	= Approx. 1/5 pt. SAE 30 in summer SAE 20 in winter
Secondary drive	= Chain 12.7 x 4.9 mm, 112 links <i>2-5 x 0.105"</i>
Sprocket sizes	= Gearbox 12 teeth, rear wheel 36 teeth
Frame	= Pressed steel, bridge type (welded)
Front forks	= Leading link
Fuel tank capacity	= 5 ¹ / ₃ pts.
Stand	= Centre stand
Overall height	= 37 ³ / ₄ " , adjustable
Maximum width	= 25 ¹ / ₄ "
Overall length	= 74 ¹ / ₂ "
Saddle height	= 33 ¹ / ₄ " , adjustable
Rims	= Wellbase type, 26 x 2
Spokes	= Front wheel left: 2.65 mm dia. 263 mm long Front wheel right: 3.00 mm dia. 235 mm long Rear wheel left: 3.00 mm dia. 235 mm long Rear wheel right: 3.00 mm dia. 263 mm long
Wheel building dimensions (rim displacement)	= Front wheel: from outside of brake drum to side of rim .806" Rear wheel: from outside of sprocket to side of rim 1.186"
Tyres	= Low pressure type, 26 x 2
Tyre pressures (approx.)	= Front 22 lbs p. s. i., rear 26 lbs p. s. i.
Permissible load	= 1 person
Footrests	= Pedals
Front brake	= Internal expanding shoe type
Rear brake	= Internal expanding shoe type
Brake operation	= Front by hand, rear by foot



Removing and Refitting the Power Unit

(M 01)

Special Tools Required:

None

1. Place the front wheel in a stand (a stand can easily be made up with local resources from timber or metal following the pattern of a conventional cycle stand).

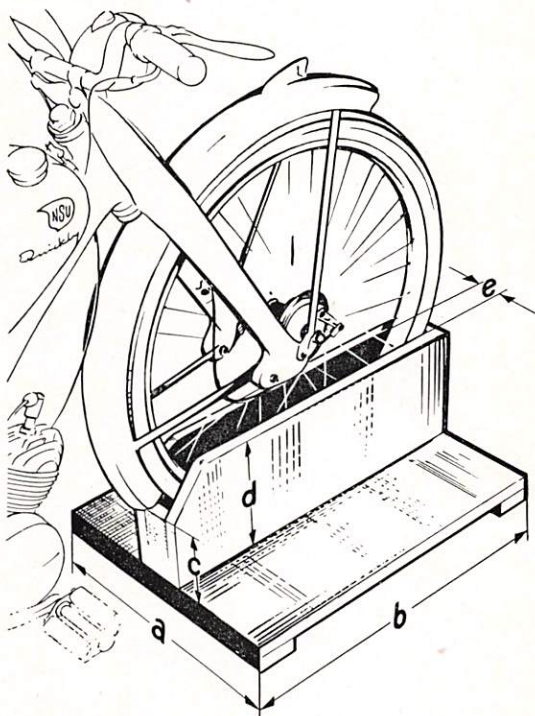


Fig. M 01/1

a = 55 cm b = 60 cm c = 15 cm
d = 20 cm e = 5 cm

2. Close the fuel tap.
3. Clean the engine externally.
4. Remove the front chainguard after slackening off the two slotted screws (note the distance piece).
5. Rotate the chain until the link is on the rear sprocket. Prise off the spring clip, remove the link, carefully lift off the chain and release the clutch lever.

6. Slacken the silencer clip and retaining screw on the frame. Unscrew the exhaust pipe nut from the cylinder. Remove exhaust pipe and silencer.
7. Remove the lefthand split pin of the centre stand and push out the tube to the right so that the stand is released from the crankcase.
8. Detach the brake rod from the cam arm after removal of the split pin.
9. Press the clutch arm inwards, detach the control cable and remove same through the slot in the lefthand crankcase cover.

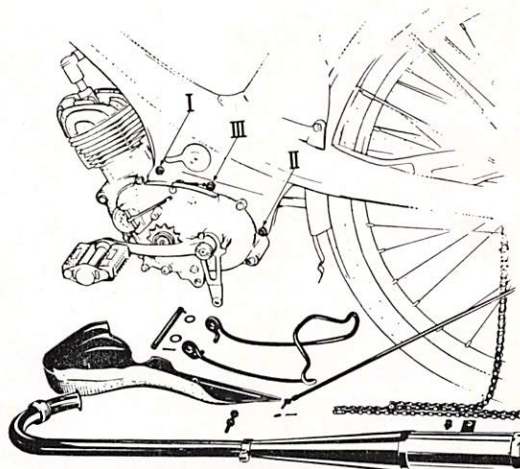


Fig. M 01/2-9

10. Detach the decompressor cable from the valve in the cylinder head.
11. Unscrew the mushroom countersunk-head screw from the flywheel magneto cover and remove the latter. Note the distance sleeve.
12. Detach the wiring lead at the terminal and withdraw through the rubber grommet.
13. Withdraw the rubber connecting hose between carburettor and air filter.
14. Slacken the two carburettor nuts using a T-spanner; remove carburettor and gasket.

15. Engage second gear by means of the twist-grip.
16. Press the selector arm inwards, detach the control cable and withdraw same through the hole in the crankcase cover.
17. Hold the engine or support from below. Undo the three retaining bolts and carefully withdraw these from the frame in the following order:

- I. Top
- II. Bottom
- III. Middle

Note: It is essential to take care that the engine is well supported in order that the unit will not suddenly fall out of position after removal of the third retaining bolt. This might easily cause damage.

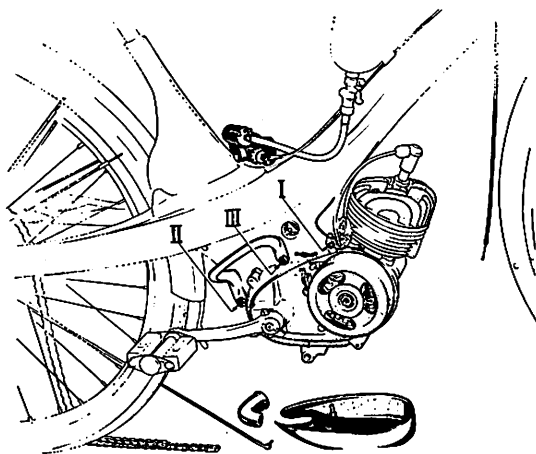


Fig. M 01/10-17

Re: Point 5

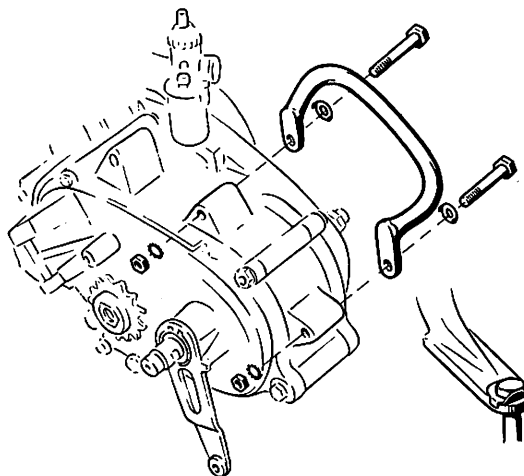
Note: The chain spring link must always lie to the outside and the closed end of the spring should lead in the normal direction of rotation of the chain.

Re: Point 6

When refitting the engine a sealing washer for the exhaust pipe should be placed into the exhaust port of the cylinder.

Re: Point 17

Special care has to be given to the 3 retaining bolts. It is of the utmost importance that one safety locking washer is placed under the head of each of the bolts, and one toothed locking washer is placed under each of the hexagon nuts, so that the retaining bolts cannot work loose and so possibly cause vibration. As may be seen from the illustration, the safety locking washers must be bent upwards at one side of the bolt head after the nuts are tightened.


Refitting

18. Refitting the engine is obviously carried out in the reverse order of removal from the frame.

Re: Point 4

Before refitting the two covers it is advisable to do a test run.

Dismantling the Power unit After Removal From the Frame

(M 02)

Special tools required:

One set Quickly special tools with mounting bracket, No. 16 91 00 914.

One rotor extractor of commercial pattern (30x1mm) or the NSU Fox extractor No. 048 422 007.

1 Fitting sleeve No. 048 110 282

1. Place the engine in the mounting bracket (16 91 00 901) in a vertical position.
2. Drain the oil by removing the slotted drain and level plugs from the lefthand cover.

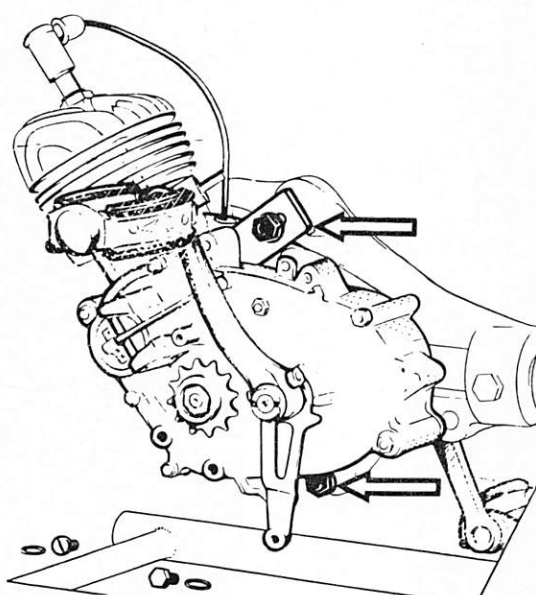


Fig. M 02/1-2

3. Use T-spanner (16 91 00 902) to remove the slotted nuts from both pedal shaft ends. Remove spring washers.

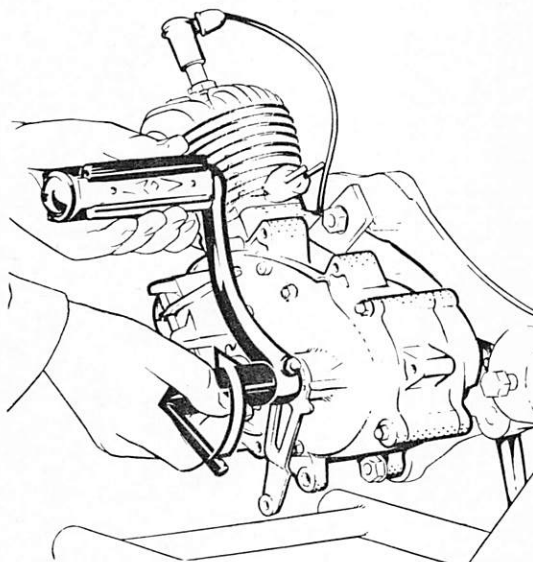


Fig. M 02/3

4. Remove nuts and washers from the cotter pins, drive out the cotters with a soft metal drift and withdraw the pedal cranks with pedals.
5. Remove HT lead terminal, unscrew sparking plug and remove plug cover from cable.
6. Unscrew cylinder head nuts. Remove washers. Lift off cylinder head, gasket and cylinder barrel.

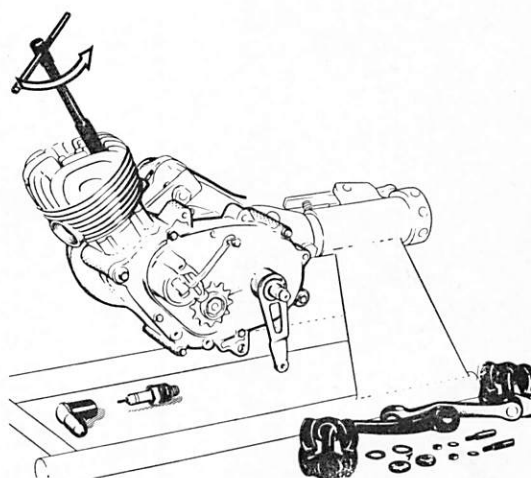


Fig. M 02/4-6

7. Close the crankcase mouth with a clean cloth. Prise out both circlips from piston. Warm up piston carefully and evenly to approximately 120° C. (250° F) and tapping the gudgeon pin with a soft drift (16 91 00 903). Remove piston and cylinder base washer.

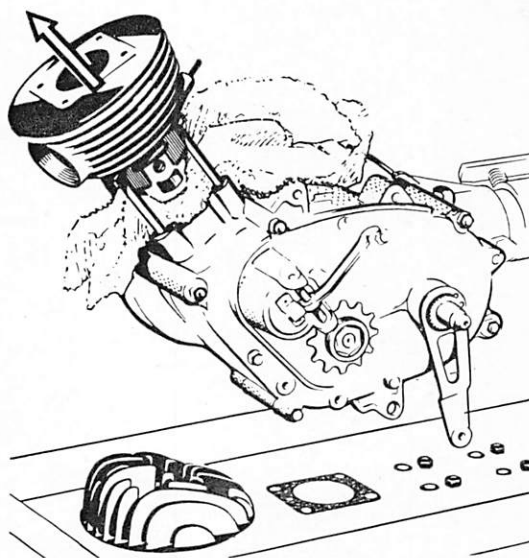


Fig. M 02/7

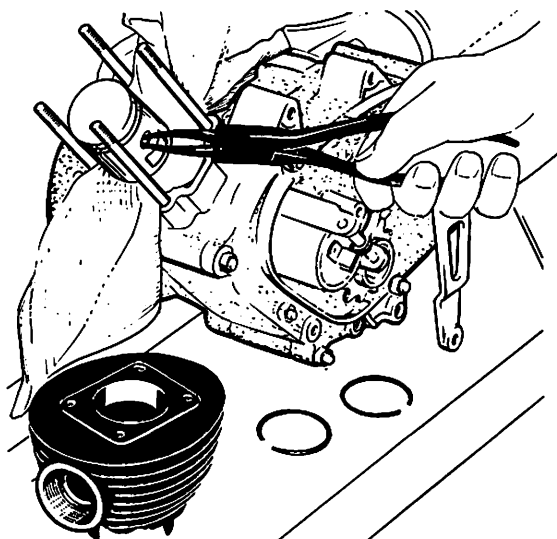


Fig. M 02/7a

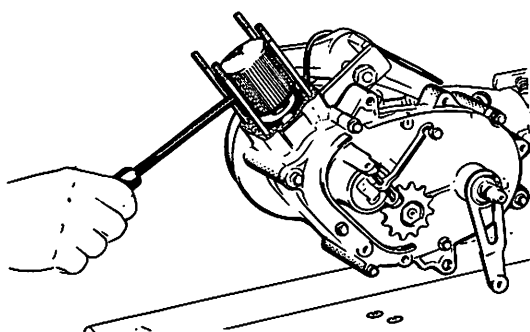


Fig. M 02/7b

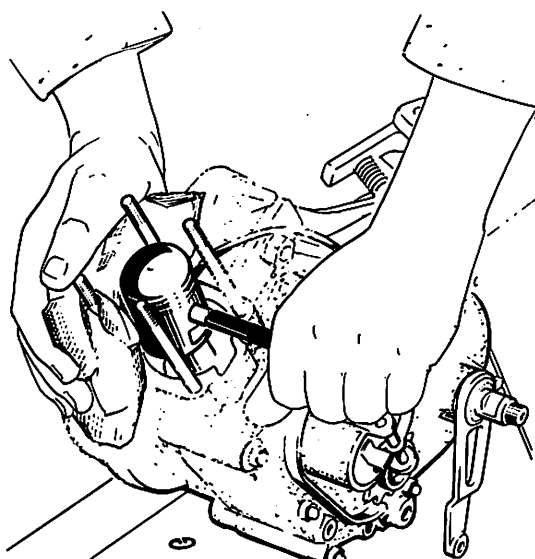


Fig. M 02/7c

8. Turn engine so that the righthand side faces upwards.

9. Unscrew the nut on the righthand mainshaft and withdraw flywheel with the aid of extractor (16 91 00 904). Remove nut. Use tool (16 91 00 913) to hold the flywheel.

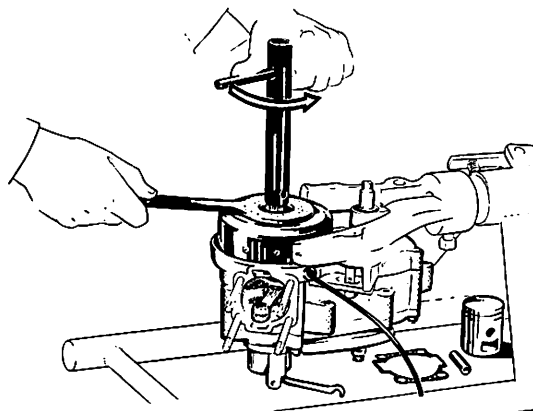


Fig. M 02/9

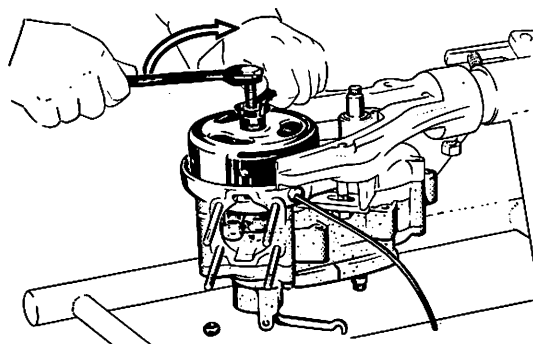


Fig. M 02/9a

10. Remove both screws with spring and plain washers from stator as well as the screw of the terminal plate. Remove stator with H. T. lead.

11. Remove circlip and thrust washer on selector shaft.

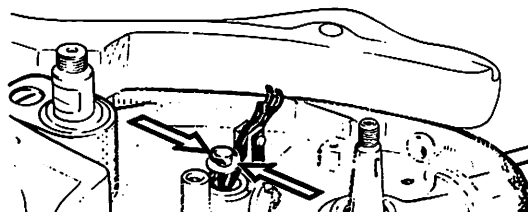


Fig. M 02/11

12. Turn the engine with the lefthand side upwards.

13. Unscrew the nut of the sprocket on the main-shaft; for this purpose hold the sprocket by means of a bar inserted between the sprocket and the clutch housing. Remove spring washer.

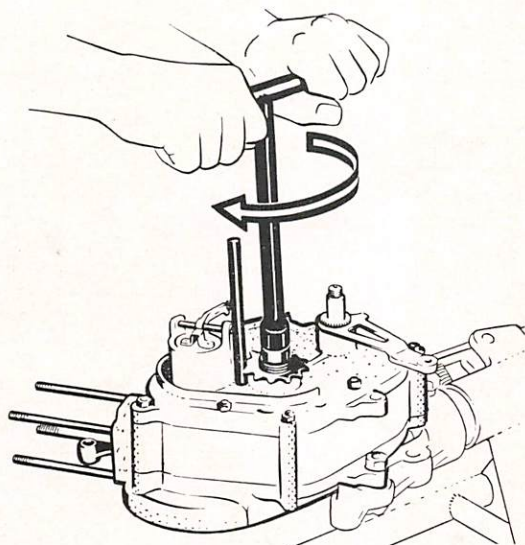


Fig. M 02/12-13

14. Withdraw sprocket with commercial pattern rotor extractor or use NSU Fox extractor (048 422 007). Remove key. Detach rubber sealing washer from sprocket.

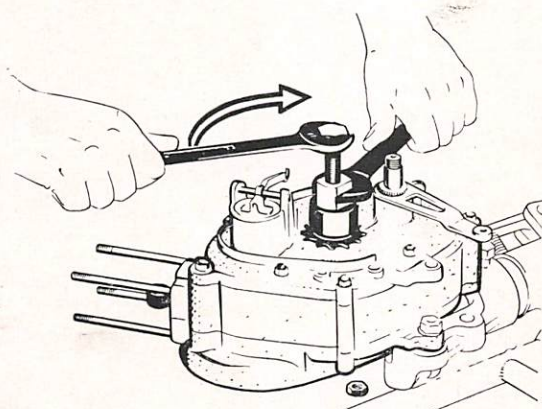


Fig. M 02/14

15. Remove outer circlip from brake lever, withdraw brake lever.

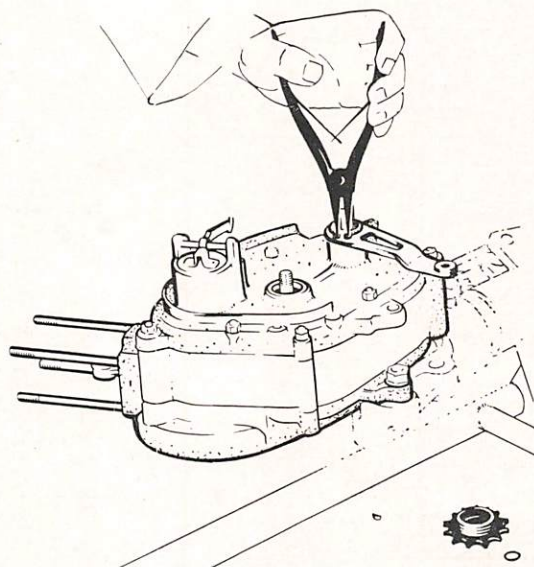


Fig. M 02/15

16. Remove seven nuts with spring washers and one screw with nut and spring washer from lefthand crankcase cover.

Note: Before removing the cover the Filling Piece (16 91 00 905) must be stuck with some grease into the milled flat of the pedal shaft in order to avoid that the two rubber sealing washers in the brake operating ratchet will be damaged by the sharp edges of the flat. If necessary loosen the cover by light taps with a soft mallet and lift off. Take the brake operating ratchet out of the cover after removal of the circlip. Lift off crankcase joint washer.

Note: Do not hit on the top portion of the cover where the clutch cable enters to avoid the possibility of fracture.

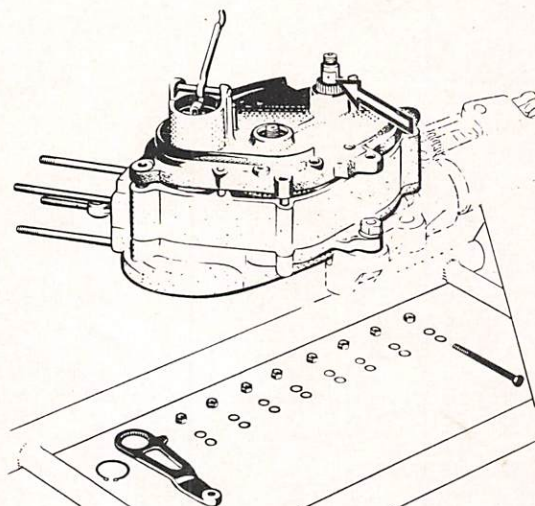


Fig. M 02/16

17. Use a screwdriver to remove the circlip from the clutch sleeve.

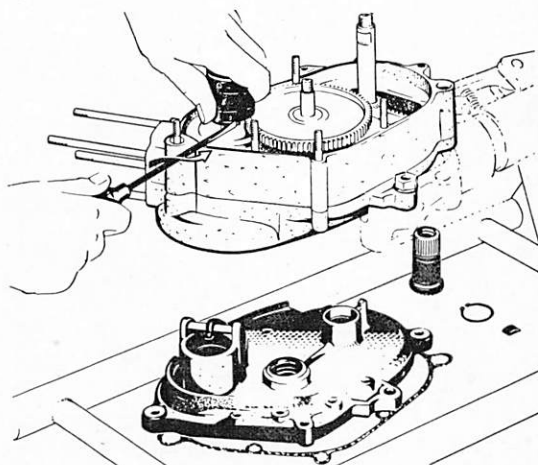


Fig. M 02/17

18. Lever off clutch sleeve with the aid of fitting levers (16 91 00 908).

Note: When using fitting levers strips of tin must be placed under the levers to avoid damage to the crankcase joint face.

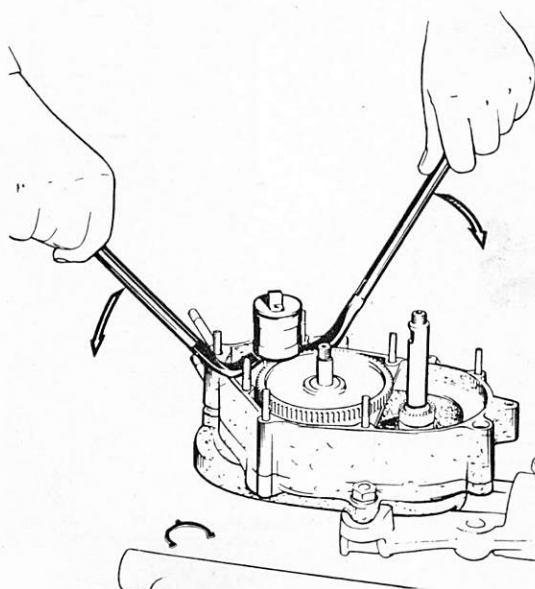


Fig. M 02/18

19. Unscrew the nut with two spring washers from the clutch shaft. To hold the shaft use tool (16 91 00 913) on the driving gear and if necessary insert a wooden „button-stick“ under the small end eye. Withdraw clutch spring with top spring cup as well as ball race with pressed-in lower spring cup.

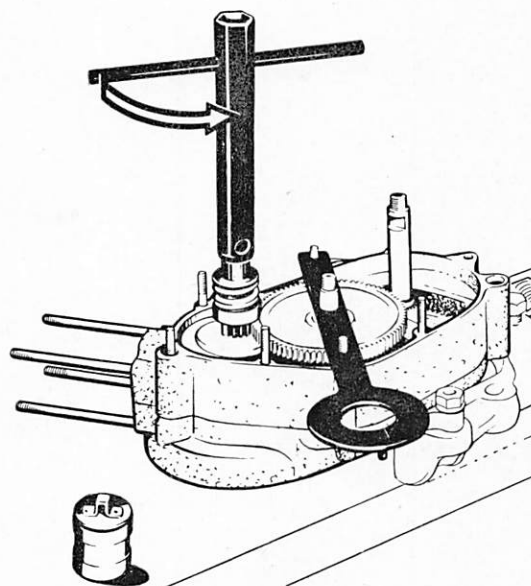


Fig. M 02/19

20. Remove driving gear and thrust washer.

Note: Do not use force as the selector fork may be fouling. Turn the driving gear slightly to the left or to the right to release the gear.

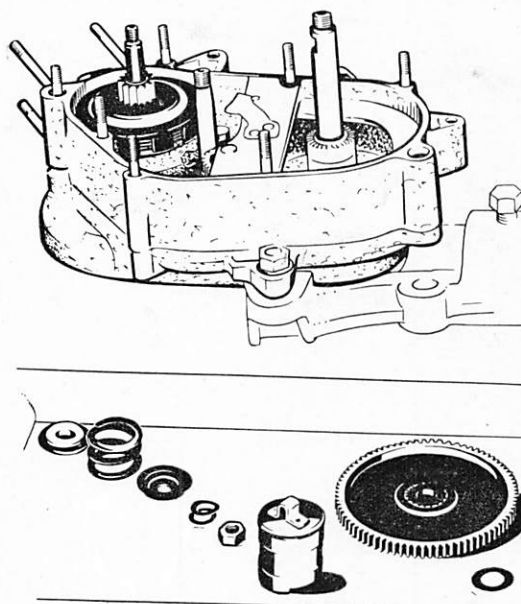


Fig. M 02/20

21. Withdraw the outer clutch drum with two lined and one steel plate.

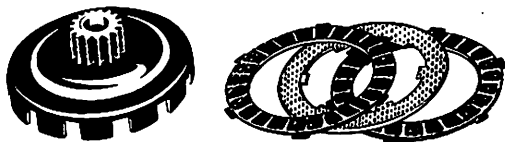


Fig. M 02/21

22. Remove circlip from the lefthand side of the shaft and lever off the clutch centre using fitting levers (1691 00908). Remove the rubber sealing washer after removal of the flywheel assembly.

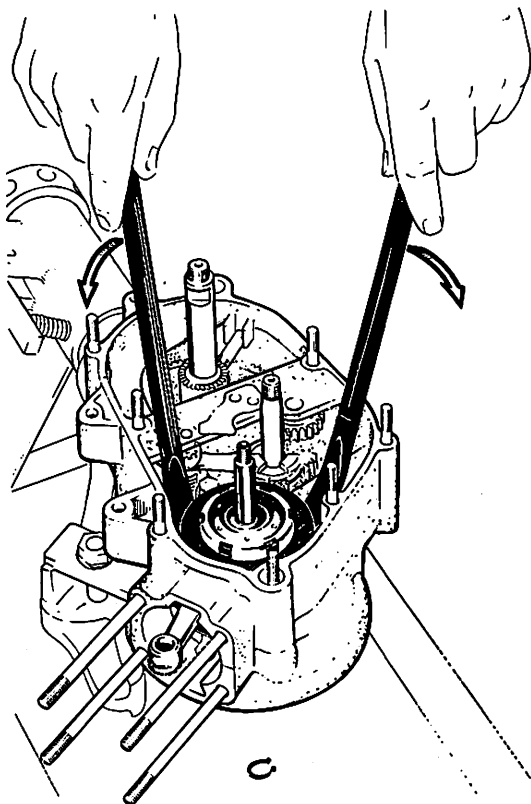


Fig. M 02/22

23. Remove the screw with nut and two spring washers situated approximately in the middle of the crankcase.

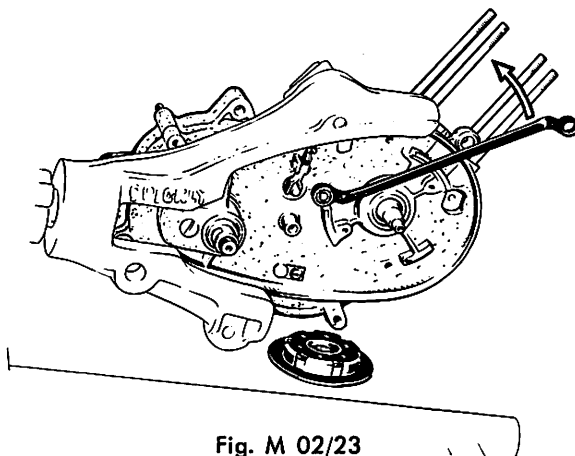


Fig. M 02/23

24. Turn the crankcase with the lefthand side facing upwards and take apart.

25. Lift the flywheel assembly and gearbox layshaft with top and bottom thrust washers out of the righthand crankcase, also the selector fork with selector spindle. (Remove the circlip on the selector shaft at the same time) Remove coil spring, shift dog, ratchet with slide spring, pedal shaft with driving gear, as well as mainshaft with first speed gear. Finally remove the washer.

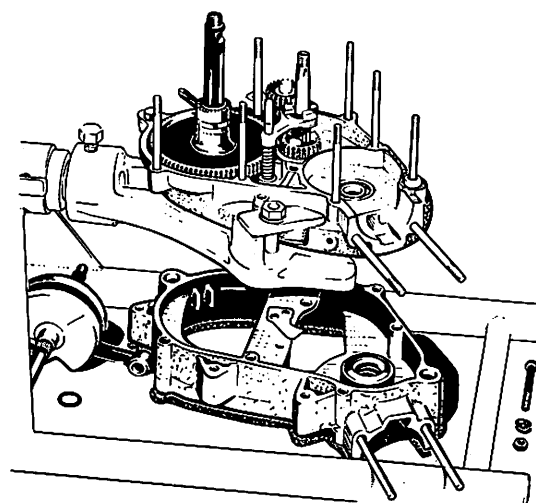


Fig. M 02/24

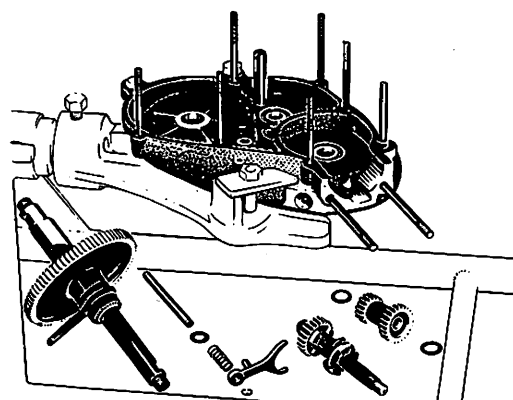


Fig. M 02/25

26. Detach crankcase from mounting bracket.

27. Clean and check all parts.

Re-assembling the Power Unit

(M 02)

28. Place the righthand crankcase half in the mounting bracket with the gearbox side facing upwards.
29. Stick the washer onto the crankcase.
30. Measure the lefthand and righthand crankcase halves as well as the flywheel assembly to ascertain the clearance. The flywheel assembly may not have more than .012" end play. The sum of $a + b - c = d$ which is the flywheel assembly end play. If this is found to exceed .008"-.012", shims as required must be fitted to the righthand mainshaft (i. e. the one which is not splined). Next the flywheel assembly is fitted. Naturally all moving parts should be well lubricated.
31. Insert mainshaft with first speed gear into the righthand crankcase half.
Note: The gear must rotate easily on the shaft and must not bind in any way.
32. Insert the selector spindle from the righthand side (i. e. inwards from the outside); mount the coil spring, the selector fork and the change speed dog. Press the circlip into position (selector fork side). All parts fitted must move freely. When fitting the selector fork it is necessary to note that the stop faces downwards.
33. Mount the pedal shaft with driving gear into the crankcase.
34. Slip the thrust washer over the layshaft. Fit layshaft gear as well as the second thrust washer on this shaft.
35. Smear lefthand crankcase half with sealing compound and when fitting make sure that the parts seat properly. Check that both locating dowels are in position. Mount the lefthand crankcase half on righthand crankcase half. The screw needed for holding together both halves must be provided with a toothed locking washer under the head and must then be slipped through the screw holes in the center of the crankcase halves from left inside to right outside. Then fix locking washer and nut and tighten slightly to avoid distortion of crankcase. (See also point 44). Fit operating ratchet with slide spring on pedal shaft in such a way that the narrow side of the ratchet rests in the driving gear. The eye of the slide spring must lie between the lugs provided in the lefthand crankcase half.

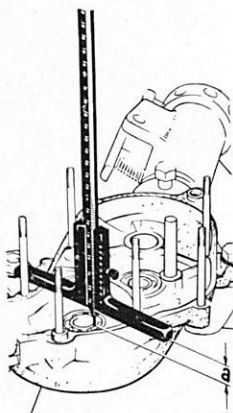


Fig. M 02/30

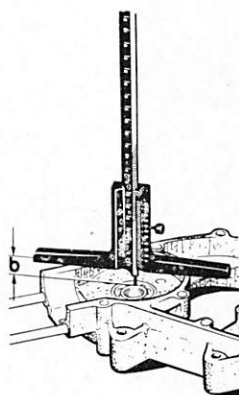


Fig. M 02/30a

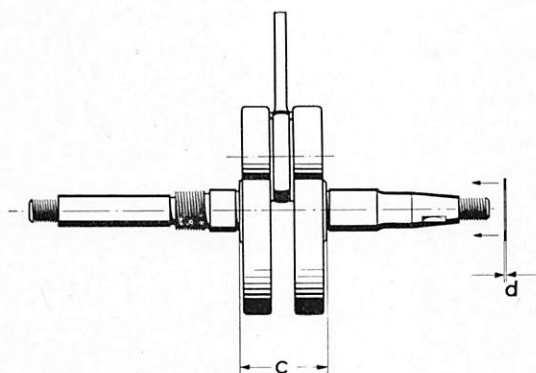


Fig. M 02/30b

$$a + b - c = d = \text{end play}$$

36. Slip the rubber "o"-ring over the splines of the lefthand mainshaft.
37. Mount the clutch centre and insert the circlip. Use tool (16 91 00 909) to press the centre downwards with the shaft nut. Press the circlip into its groove with the aid of two screwdrivers.

Note: It is not permissible to drive the centre home with mallet blows.

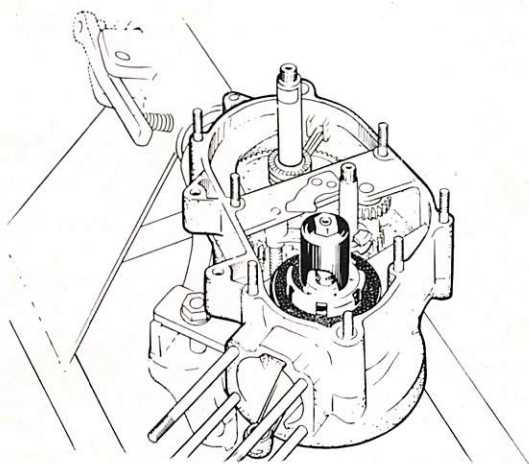


Fig. M 02/37

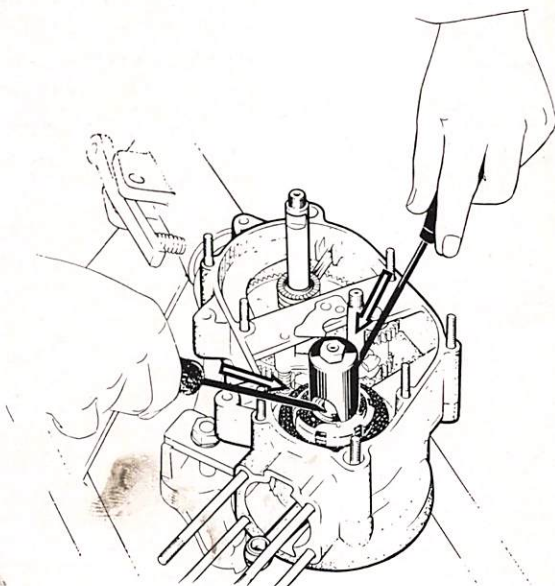


Fig. M 02/37a

38. Fit alternately one lined plate, one steel plate and subsequently another lined plate onto the clutch centre; next fit the outer clutch drum.

39. Slip the driving gear onto the gearbox mainshaft. If it will not seat immediately in the correct position the cause will be in the dogs fouling the layshaft 2nd speed gear. In this case the driving gear and the gearbox mainshaft must be slightly rotated to the left or to the right. This causes the space on the dog of the driving gear to slip over the layshaft gear; the driving gear will then easily fall into the correct position.

40. Fit thrust washer to driving gear, the ball race with pressed-in lower spring cup as well as the clutch spring with top cup onto the left-hand mainshaft. Use fitting tool (16 91 00 910) to press together. Fit two spring washers and tighten nut. To hold, place tool (16 91 00 913) on the driving gear and tighten the nut **until the clutch slips**.

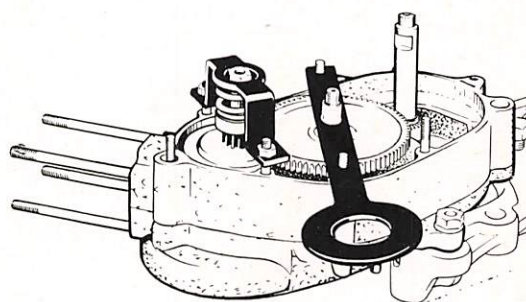


Fig. M 02/40

41. Next remove the tool and slip the clutch sleeve over spring and ball race. Fit the circlip into the clutch cup with a screwdriver. Next test the circlip for correct seating in its groove by means of pressure applied to the three lips of the circlip with the aid of a screwdriver.

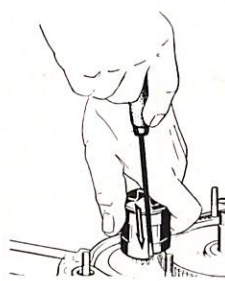


Fig. M 02/41



Fig. M 02/41a

42. Stick the washer on the left-hand crankcase half with some jointing compound.

43. Place fitting sleeve (16 91 00 906) and filling piece (16 91 00 905) on the pedal shaft. Instal the brake operating ratchet.

Note: There are two rubber sealing washers in the bore of the brake ratchet sleeve.

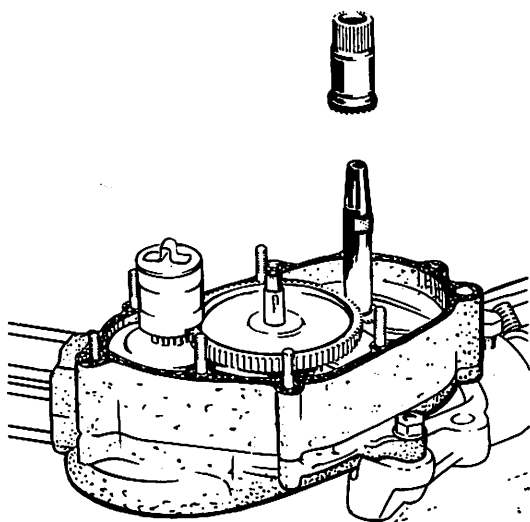


Fig. M 02/43

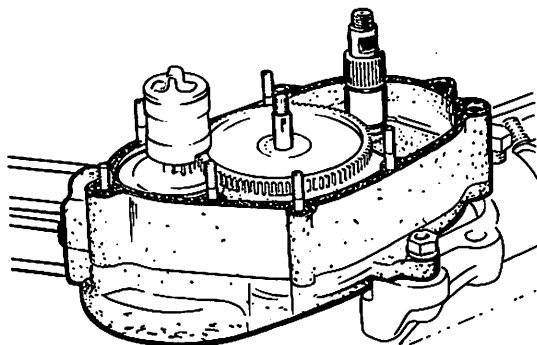
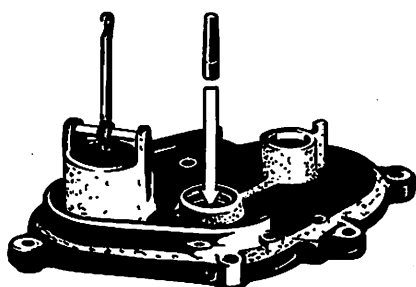


Fig. M 02/43a

44. When mounting the lefthand crankcase half on the righthand half it is essential to take special care that the soft part of the oil seal in the housing cover is not damaged by the sharp edge of the main shaft. The mounting sleeve (018 110 282) has therefore to be pressed into the oil seal from the outside (open end towards oil seal) down to the stop at the ball bearing very carefully. Put both fitting sleeves into the cover and then put cover carefully on lefthand crankcase half. The mounting sleeve is pressed out by the main shaft. Tighten crankcase cover with 7

nuts on studs with 2 spring washers each. Also fit the through bolt with nut and 2 spring washers. Finally tighten nut on right crankcase half (see also point 35).

45. Fit circlip to brake operating ratchet. Fit brake lever noting that the stop faces to the right. Next fit the second circlip.

46. Fit key to gearbox mainshaft and mount sprocket. Fit one rubber sealing washer and two spring washers. Next fit the nut and tighten. Hold the sprocket by inserting a soft metal bar between the sprocket and clutch housing. The nut may not be overtightened (approximately 20-25 ft. lbs). The sprocket and shaft when fitted must be easy to rotate.

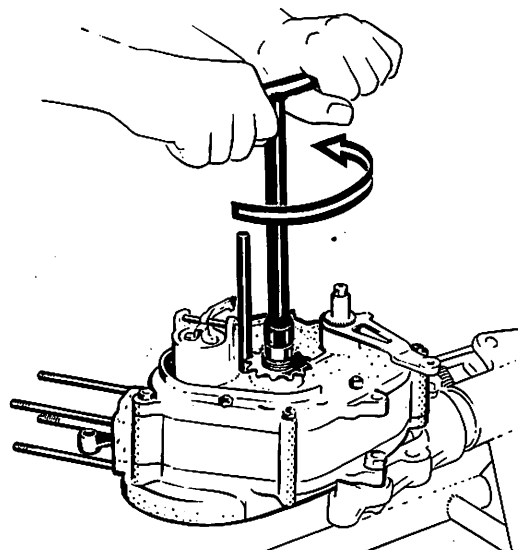


Fig. M 02/46

47. Fit drain plug.
48. Turn engine so that the righthand side faces up.
49. Slip a thrust washer over the arm on the selector shaft and press a circlip into position. The gearchange is checked by pressing the arm inwards (towards the crankcase) which gives first gear. At half way travel the arm must come back of its own accord (2nd gear).
50. Fit stator with H. T. lead to the crankcase using 2 screws with plain and spring washers. Instal terminal plate with screw and 2 spring washers. The terminal plate must be mounted in such a manner that the cable terminal lies nearest to the selector arm. It is essential to lubricate the felt pad.

51. Fit rotor, 2 spring washers and tighten nut. To hold use tool (16 91 00 913).
52. Place crankcase upright.
53. Insert mandrel (16 91 00 911) into small end bush and set con rod if necessary.

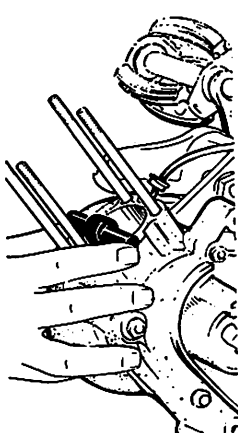


Fig. M 02/53

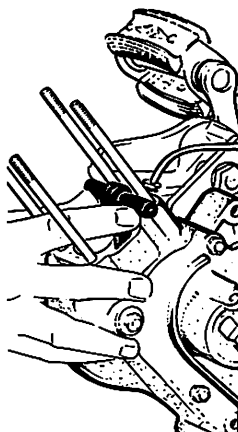


Fig. M 02/53a

54. Place cylinder base washer on crankcase. Warm up piston carefully and evenly to 120°C. (250° F), fit one circlip and drive gudgeon pin into position.

Piston is correctly fitted when the higher space in the porting aperture faces to the rear.

In the interest of safety it is again advisable to place a clean rag over the crankcase mouth. Fit circlip into piston.

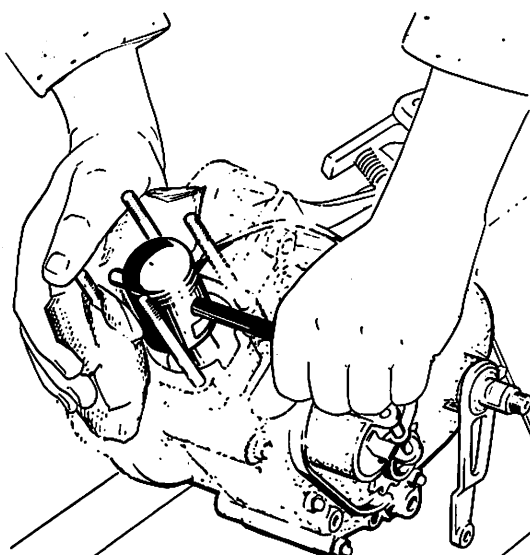


Fig. M 02/54

55. Insert connecting rod block under piston. Use ring-fitting tool (16 91 00 907) on the piston and make sure that the rings are seating correctly. Carefully press the cylinder barrel downwards; remove ring-fitting tool and „connecting rod block“.

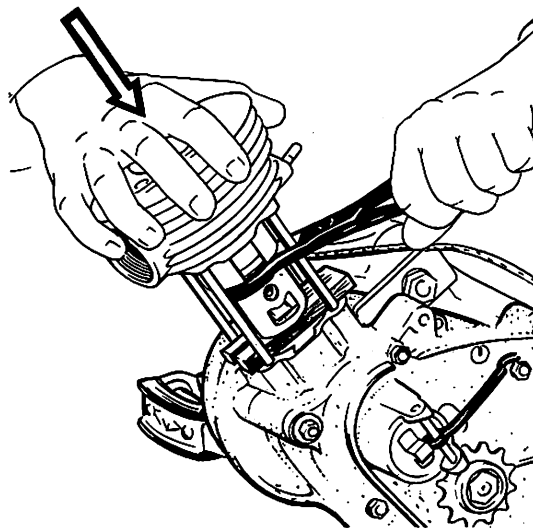


Fig. M 02/55

56. Next carefully tighten the cylinder barrel with 2 distance pieces and 2 nuts to avoid that rotating the flywheel assembly will cause the piston to lift the cylinder barrel which would render exact measurement impossible.

57. Place piston at T.D.C. **Set contact breaker gap (a) to .011"-.013" and next the ignition advance to 2.1 mm (.082").** The distance between the pole shoe and magnet must be between 9 and 12 mm (.354"-.472"). **Note: When setting the ignition timing it is essential to note that the engine rotates anti-clockwise viewed from the magneto side.** The rotor is stamped with an arrow to indicate the direction of rotation.

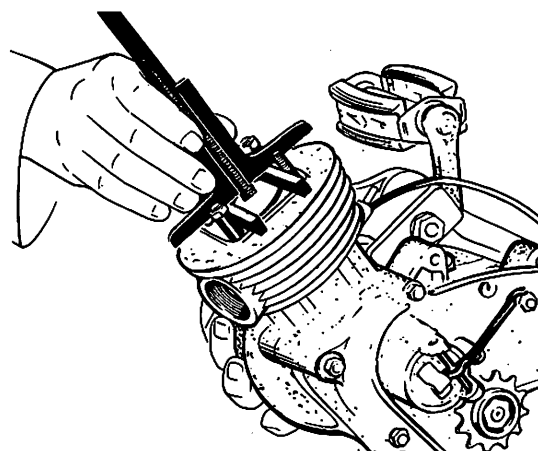


Fig. M 02/57

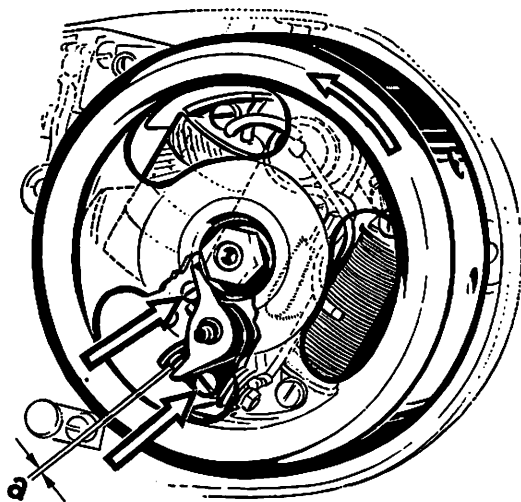


Fig. M 02/57a

a = distance between contacts 0,2-03 mm

58. Unscrew the 2 hexagon nuts and remove the distance pieces; instal cylinder head gasket and head. Fit 4 nuts with plain washers and tighten. When fitting the cylinder head gasket make sure that the hole for the decompressor duct is not obstructed.

59. Remove the slotted filling screw from the right-hand pedal shaft housing and fill up with approximately 1/5 pint (4 fl. oz) of engine oil using SAE 30 in summer and SAE 20 in winter. For checking the oil level a hole is provided in the front of the lefthand cover closed by a slotted screw. Refit oil filling screw.

60. First fit the righthand pedal crank with pedal on the righthand shaft and secure with cotter. Next fit the lefthand crank and likewise secure with cotter. Both cotters must be displaced 180° relative to each other. Note that the lefthand pedal is marked 'L' and the right-hand marked 'R'. Fit the slotted nuts to the righthand and lefthand pedal shaft ends and use the special spanner to tighten.

Note: The nut and plain washer of the cotters must lie on the milled side of the pedal crank. It is not permissible to turn the pedal shaft before both cranks have been tightly fitted.

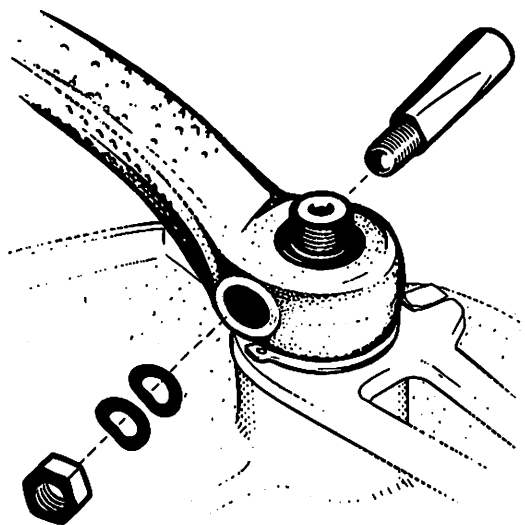


Fig. M 02/60

61. Fit sparking plug. Slip grommet over H. T. lead, mount plug cover and slip over sparking plug.

62. Take the engine out of the mounting bracket.

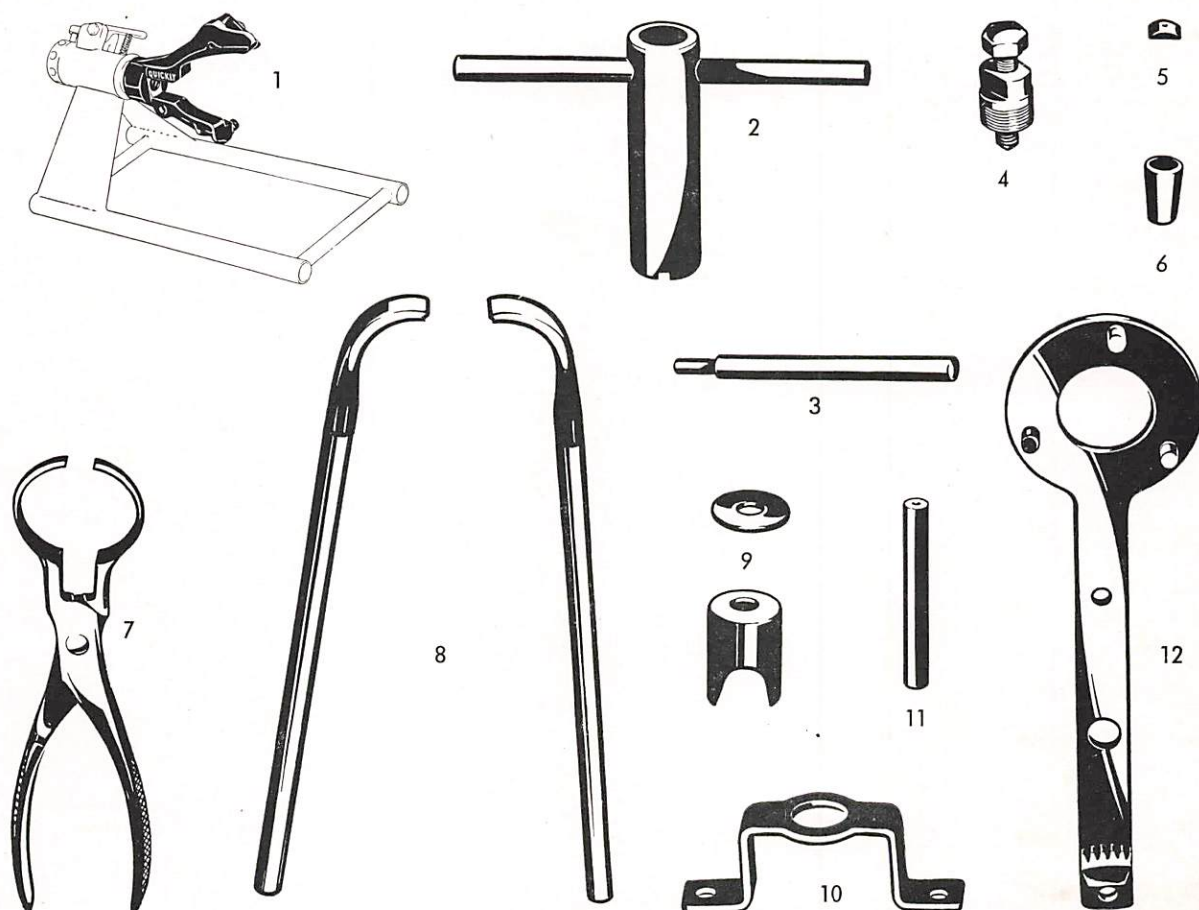


AFTER SALES SERVICE

SPECIAL TOOLS

QUICKLY

Issue February 1955



One set QUICKLY special tools consists of:

- | | | |
|---------|--|----------------|
| Fig. 1 | One mounting bracket for engine | (16 91 00 901) |
| | (when the NSU fitting stand is not available the mounting bracket can also be used in a vice). | |
| Fig. 2 | T-spanner for pedal shaft nuts | (16 91 00 902) |
| Fig. 3 | Piston gudgeon pin drift | (16 91 00 903) |
| Fig. 4 | One Rotor extractor | (16 91 00 904) |
| Fig. 5 | One fitting sleeve and filling piece for pedal shaft. | (16 91 00 905) |
| Fig. 6 | One fitting sleeve for pedal shaft lefthand | (16 91 00 906) |
| Fig. 7 | One piston ring-fitting tool | (16 91 00 907) |
| Fig. 8 | Two levers for dismantling clutch sleeve | (16 91 00 908) |
| Fig. 9 | One fitting tool for inner clutch cup | (16 91 00 909) |
| Fig. 10 | One fitting bracket for clutch spring | (16 91 00 910) |
| Fig. 11 | One checking mandrel for con rod | (16 91 00 911) |
| Fig. 12 | One holding tool for rotor and intermediate gear | (16 91 00 913) |

Delivery is made against Order No. **16 91 00 914** for the complete set packed.

For dismantling the chain sprocket a rotor extractor (048 422 007) is needed, and for assembling the crankcase it is necessary to have the mounting sleeve 018 110 282:



Manufacturers reserve the right to alter specifications and prices.



The time required for external cleaning of a vehicle is not included in these flat rate times.

Motor Power Unit

	Time (hours)	With additional work	Total time (hours)
M 01 Remove power unit from frame and refit	1 ¹ / ₂		
M 02 Dismantle power unit and reassemble	3 ³ / ₄	M 01	5 ¹ / ₄
M 04 Dismantle cylinder head and reassemble	1 ¹ / ₄		
M 10 Remove and refit cylinder barrel and piston	1 ¹ / ₄	M 04	1 ¹ / ₂
M 11 Decarbonise cylinder head, piston and exhaust system . . .	1 ¹ / ₄	M 04	1 ¹ / ₂
M 15 Remove clutch and refit, adjust and renew parts as required	1 ¹ / ₄	M 16	1 ¹ / ₂
M 16 Remove and refit chain cover	1 ¹ / ₄		
M 21 Remove and refit sprocket (power unit)	1 ¹ / ₄	M 16	1 ¹ / ₂
M 22 Remove and refit oil seal on chain sprocket	1 ¹ / ₄	M 16, M 21	3 ³ / ₄
M 25 Remove and refit rear driving chain	1 ¹ / ₄		
M 30 Remove and refit flywheel assembly with bearings	1 ¹ / ₄	M 01, M 02	5 ¹ / ₂
M 31 Remove and refit crankcase complete	1 ¹ / ₄	M 01, M 02	5 ¹ / ₂
M 32 Renew crankcase joint washer	3	M 01	4 ¹ / ₂
M 35 Remove and refit gearbox an selector mechanism, renew parts as required	1 ¹ / ₄	M 01, M 02	5 ¹ / ₂
M 36 Remove and refit gearbox shaft bearings and bushes . . .	1 ¹ / ₄	M 01, M 02	5 ¹ / ₂
M 50 Remove and refit cover right hand side	1 ¹ / ₄		

Ignition and Electrical Equipment

Z 01 Set ignition timing	1 ¹ / ₄	M 50	1 ¹ / ₂
Z 02 Remove and refit flywheel mag, adjust	1 ¹ / ₄	M 50	1 ¹ / ₂
Z 03 Remove and refit contact breaker points, adjust	1 ¹ / ₄	M 50, Z 02	3 ³ / ₄
Z 04 Remove and refit condenser, test	1 ¹ / ₄	M 50, Z 02	3 ³ / ₄
Z 05 Remove and refit ignition coil, test	1 ¹ / ₄	M 50, Z 02	3 ³ / ₄
Z 06 Remove and refit H. T. lead	1 ¹ / ₄	M 50, Z 02	3 ³ / ₄

Carburettor

V 01 Remove and refit air cleaner, clean	1 ¹ / ₄
V 02 Remove and refit carburettor, clean adjust, change parts . .	1 ¹ / ₄

Wheels, Hub and Forks

F 01 Remove and refit front wheel	1 ¹ / ₄		
F 02 Remove and refit rear wheel	1 ¹ / ₄		
F 03 Remove and refit ball races or seal in hub body	1 ¹ / ₂	F 01 or F 02	3 ³ / ₄
F 04 Remove and refit brake plate (front wheel)	1 ¹ / ₄	F 01	1 ¹ / ₂
F 05 Remove and refit brake plate (rear wheel)	1 ¹ / ₄	F 02	1 ¹ / ₂
F 08 Renew brake linings (per hub)	3 ³ / ₄	F 01, F 04 or F 02, F 05	1 ¹ / ₄



AFTER SALES SERVICE

FLAT RATE REPAIR TIMES

QUICKLY
FLAT RATE
 Page 2
TIMES
 Issue February 1955

		Time (hours)	With additional work	Totaltime (hours)
F 20	Remove and refit front forks	1 1/4	F 01	1 1/2
F 21	Remove and refit bearings cups, cones and steel balls . . .	1/4	F 20, F 01	1 3/4
F 24	Remove and refit swinging links (lefthand and righthand) . .	3/4	F 01	1
F 25	Rebush swinging links	3/4	F 01, F 24	1 3/4
F 26	Remove and refit front mudguard	1/4	F 01	1 1/2
<u>Levers and Control Cables</u>				
F 40	Remove and refit handlebar	3/4		
F 41	Remove and refit bare handlebar	1/4		
F 44	Remove and refit handlebar control levers	1/4		
F 45	Remove and refit throttle twistgrip	1/4		
F 46	Remove and refit gearchange twistgrip	1/4		
F 47	Remove and refit twistgrip rubber	1/4		
F 50	Remove and refit clutch cable	1/4	M 16	1 1/2
F 51	Remove and refit brake cable	1/4		
F 52	Remove and refit decompressor cable	1/4		
F 53	Remove and refit throttle cable	1/4		
F 54	Remove and refit gearchange cable	1/4	M 50	1 1/2
<u>Frame</u>				
F 60	Remove and refit	1/4	M01, F02, F20 F 62, F72, F75 F 80	4 1/2
F 62	Remove and refit rear mudguard	1/2	F 02	3/4
F 70	Remove and refit silencer system	1/4		
F 72	Remove and refit saddle	1/4		
F 74	Remove and refit stand	1/4		
F 75	remove and refit luggage carrier	1/4		
F 80	Remove and refit fuel tank	1/4		
F 82	Remove and refit fuel tap	1/4		
F 85	Remove and refit pedals	1/4		
<u>Electrical Equipment</u>				
E 02	Remove and refit tail light lead	1		
E 04	Remove and refit lighting lead	1		
E 09	Remove and refit tail lamp	1/4		
E 12	Remove and refit head lamp glass lens or head lamp insert	1/4		
E 13	Remove and refit head lamp	1/2		
<u>Care and Maintenance</u>				
W 01	Lubricate vehicle	1/4		