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# 1. MODIFICATIONS

(Compared with 1979 model EX440)

## A. ENGINE

There are no particular changes.

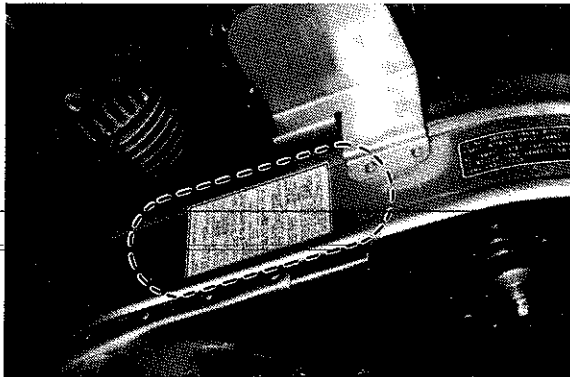
## B. DRIVE

There are no particular changes.

## C. CHASSIS

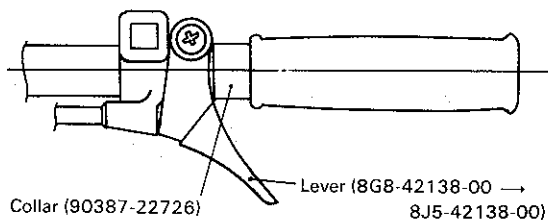
1. Tune-up label  
(8J8-77743-00)

As an aid to service, a tune-up label is attached to the drive belt guard.



## 2. Throttle

- a. To keep the throttle cable end, which is held by the throttle lever, from contacting the throttle grip, a collar is mounted and the lever is properly curved.

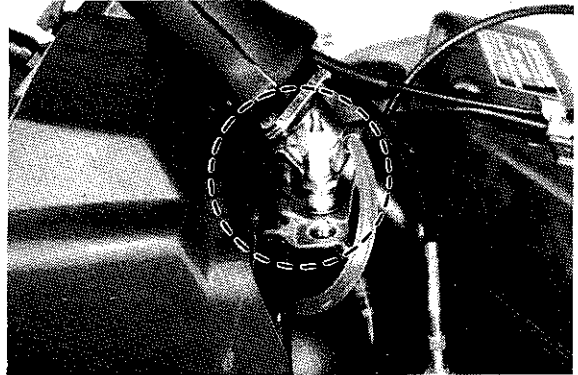


Lever (8J5-42138-00) and collar (90387-22726) can be used on both 1979 and 1980 models.

Lever (8G8-42138-00) can not be used on the 1980 model.

3. Spark plug holder  
(8G9-23885-00)

For better saleability, the spark plug holder is provided as standard (which is an option for the 1979 model).



4. Rear bumper  
(8E7-77341-00 → 8J8-77541-00)

For better strength, the pipe diameter is increased from 19.1 mm to 22.2 mm.

8J8-77541-00 can be used on both 1979 and 1980 models.

## D. ELECTRICAL

1. Spark plug  
(94701-00063 → 94701-00046)

The spark plug has been changed to a type because it is more easily available in the market and does not affect engine performance adversely.

B-9EV (N.G.K.) → B-9ES (N.G.K.)

Interchangeability: Yes

2. CDI magneto  
(8E7-85500-10 → 8J7-85500-10)

For better durability and easier service, the number of pulsers is decreased from 2 to 1:

Interchangeability: No

For the ignition timing adjustment, refer to "2. New service procedure."

3. CDI unit

(8H6-85540-10 → 8J7-85540-10)

Due to change in the CDI magneto, the circuit is modified.

Interchangeability: No

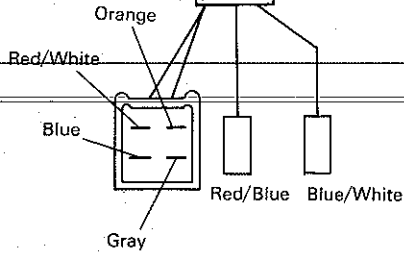
4. Main switch

(898-82508-20 → 8J7-82508-20)

For better safety, the circuits of the headlight, meter light and taillight are modified so that they are turned on as long as the engine is in operation, and their positions are changed.

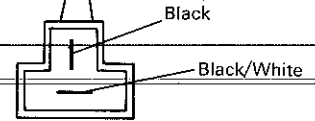
'79 model

Lead wire color	Gray	Orange	Red/Blue	Blue/White	Red/White	Blue
Position						
OFF	○ — ○					
ON			○ — ○			
LIGHT			○ — ○		○ — ○	



'80 model

Lead wire color	Black	Black/White
Position		
OFF	○ — ○	
ON/LIGHT		



Interchangeability: No

5. Wire harness

For better safety, the circuits are modified so that the headlight, meter light and taillight are turned on, whenever the engine runs. (Refer to "6. Wiring Diagram.")

Wire harness ass'y:

8G6-82590-20 → 8J7-82590-20

Wire harness ass'y 2:

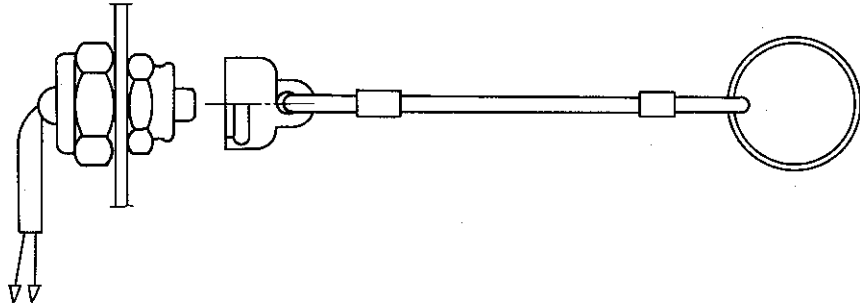
8G6-82580-20 → 8J7-82580-20

Interchangeability: No

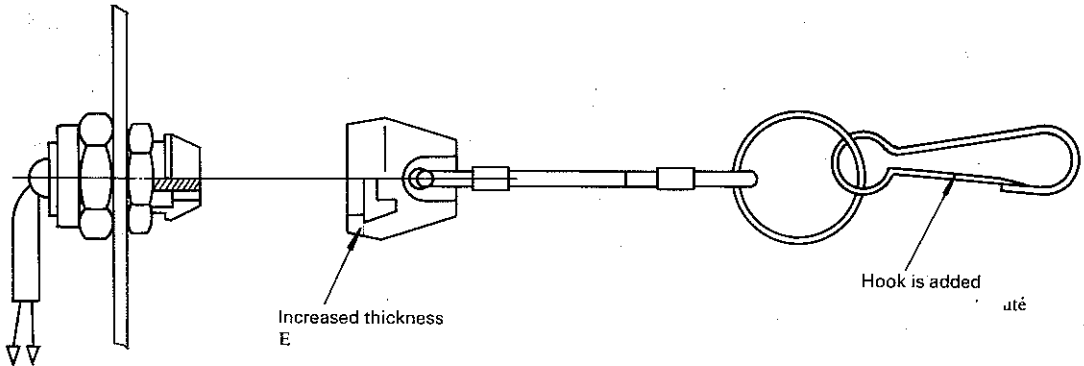
- 6. Tether switch  
(898-82550-00 → 8J7-82550-00)  
To prevent the switch from coming off easily, the rubber cap thickness is in-

creased, by which the durability and strength of the cap is also increased. The ring is provided with a hook so it can easily be hooked to the clothes.

'79 model



'80 model



Interchangeability: Yes

- 7. Headlight unit  
(8E7-84310-40 → 8H7-84310-41)  
The headlight is modified so that it meets the European regulations.

12V 60/60W → 12V 45/40W

Interchangeability: No

## 2. NEW SERVICE PROCEDURE

(New service procedure applied to the 1980 EX440)

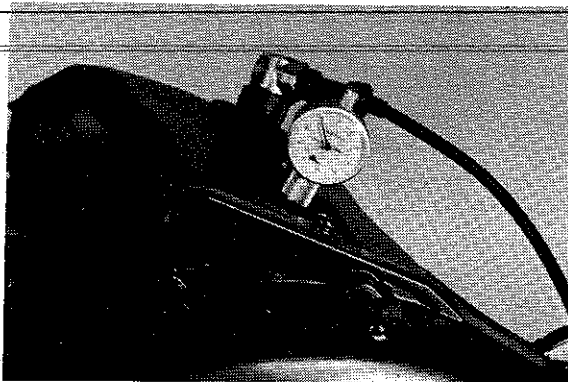
### Ignition timing

1. Remove the recoil starter assembly.
2. Remove the right side spark plug and screw the dial gauge stand into the spark plug hole.

Tool name	Tool No.
Dial gauge stand	90890-01195

3. Insert the dial gauge with needle into the stand.

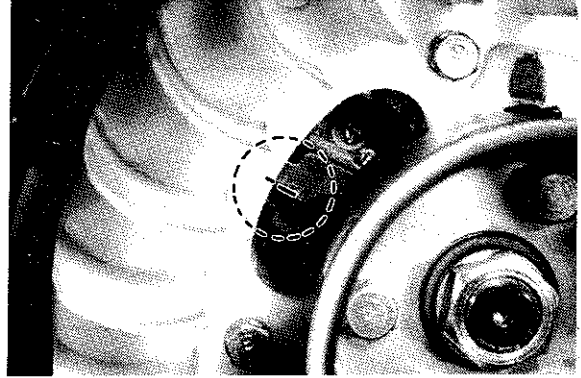
Tool name	Tool No.
Dial gauge	90890-01252
Dial gauge needle	90890-03098



4. Rotate the magneto flywheel unit piston is at top-dead-center (T.D.C.)  
Set the zero on dial gauge face to line up exactly with a dial gauge needle. Tighten the set screw on the dial gauge stand to secure the dial gauge assembly. Rotate the flywheel back and forth to be sure that the indicator needle does not go past zero.
5. Starting at T.D.C., rotate the flywheel counterclockwise until the dial gauge reads approximately 3-1/2 needle revolutions before-top-dead-center (B.T.D.C.).
6. Slowly turn the flywheel clockwise until the dial gauge reads specified ignition timing.

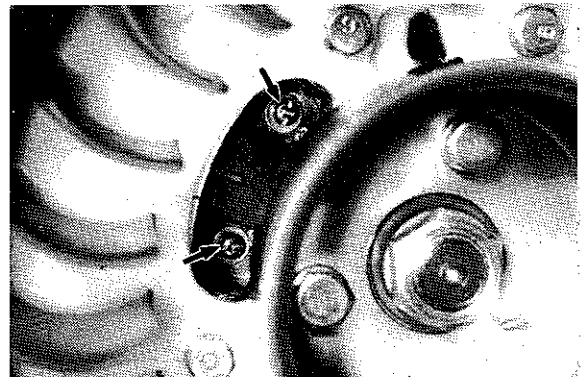
Ignition timing (B.T.D.C.)  
1.6 ± 0.1 mm (0.060 ± 0.004 in)

7. Check the marks on flywheel and pulser for alignment.



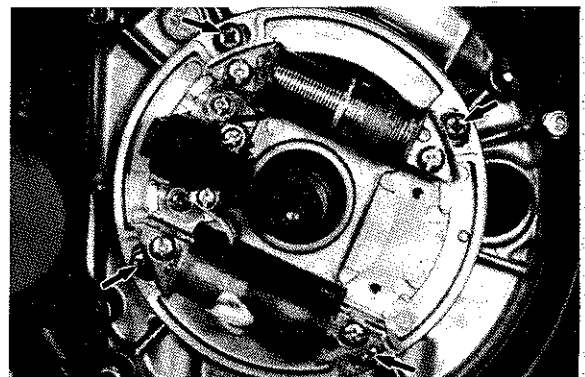
If not aligned, adjust ignition timing as follows:

- a. Loosen the pulser set screws and turn the pulser until mark alignment is achieved.



### NOTE:

If the marks can not be aligned by this adjustment, remove the flywheel rotor and turn the base (stator) assembly.



- b. Tighten the pulser set screws.
- 8. Remove the dial gauge and stand. Replace the spark plug and recoil starter.

**NOTE:**

The timing light should be used to check if the marks on the rotor and base are aligned when both are replaced with new ones. The marks should align at any specified timing.

Tightening torque
Spark plug: 28 Nm (2.8 m-kg, 20 ft-lb)
Starter assembly: 7 Nm (0.7 m-kg, 5 ft-lb)

### 3. MAINTENANCE INTERVAL

[PERIODIC MAINTENANCE]

Check point	Every			When necessary	Seasonally
	20 hrs. or 400 km (250 mi)	40 hrs. or 800 km (500 mi)	80 hrs. or 1,600 km (1,000 mi)		
<b>ENGINE:</b>					
Tightness of bolts and nuts	<input type="radio"/>				<input type="radio"/>
Bends, cracks and wear	<input type="radio"/>				<input type="radio"/>
Abnormal noise	<input type="radio"/>				<input type="radio"/>
<del>Loose connection and breaks of fuel and pulse pipes</del>	<input type="radio"/>				<input type="radio"/>
Loose connection and breaks of oil pipes	<input type="radio"/>				<input type="radio"/>
Loose connection and breaks of oil delivery pipe	<input type="radio"/>				<input type="radio"/>
Manual rope starter system		<input type="radio"/>			<input type="radio"/>
<b>Carburetor</b>					
● Operation of starter jet		<input type="radio"/>			<input type="radio"/>
● Mixing adjuster (pilot screw)				<input type="radio"/>	<input type="radio"/>
● Idling speed adjustment				<input type="radio"/>	<input type="radio"/>
Operation and adjustment of oil pump		<input type="radio"/>			<input type="radio"/>
Ignition timing					<input type="radio"/>
Cylinder compressions			<input type="radio"/>		<input type="radio"/>
Muffler joints	<input type="radio"/>				<input type="radio"/>
Cylinder head/exhaust pipe decarbonize					<input type="radio"/>
Spark plug condition, gap and cleaning	<input type="radio"/>				<input type="radio"/>
Tightening of the cylinder head**					<input type="radio"/>
<b>DRIVE:</b>					
Tightness of bolts and nuts	<input type="radio"/>				<input type="radio"/>
Wear on slide runners	<input type="radio"/>				<input type="radio"/>
Primary drive system		<input type="radio"/>			<input type="radio"/>
V-belt	<input type="radio"/>				<input type="radio"/>
Secondary drive system		<input type="radio"/>			<input type="radio"/>
Sheave distance		<input type="radio"/>			<input type="radio"/>
Sheave offset		<input type="radio"/>			<input type="radio"/>
Brake pad wear		<input type="radio"/>			<input type="radio"/>
Brake operation and adjustment		<input type="radio"/>			<input type="radio"/>
Guide wheel rubber		<input type="radio"/>			<input type="radio"/>
Wear of drive track wheel sprocket		<input type="radio"/>			<input type="radio"/>
Drive track adjustment		<input type="radio"/>			<input type="radio"/>
Breaks in drive track		<input type="radio"/>			<input type="radio"/>
Bends in front and rear axles		<input type="radio"/>			<input type="radio"/>
Checking of lock washers		<input type="radio"/>			<input type="radio"/>
Drive chain adjustment		<input type="radio"/>			<input type="radio"/>
Drive chain oil level		<input type="radio"/>			<input type="radio"/>

Check point	Every			When necessary	Seasonally
	20 hrs. or 400 km (250 mi)	40 hrs. or 800 km (500 mi)	80 hrs. or 1,600 km (1,000 mi)		
<b>BODY:</b>					
Tightness of bolts and nuts	○				○
Bends and cracks	○				○
Welded riveted, joints	○				○
Ski adjustment		○			○
Ski runner wear	○				○
Breaks in fuel tank		○			○
Cleaning of fuel tank					○
Fuel filter					○
Loose connection and breaks in fuel pipe		○			○
Breaks in oil tank		○			○
Oil filter					○
<b>ELECTRICAL:</b>					
Wear, breakage of wire covering		○			○
Breaks in high-tension cord	○				○
Voltage regulator working voltage					○
Operation of engine stop switch		○			○
Operation of tether switch		○			○
Headlight		○			○
Taillight		○			○
Brake light		○			○

\*\* Retighten every 10 hours from the first use.

### [LUBRICATION INTERVALS]

Lubrication point	Every			When necessary	Seasonally	Oil/Grease Brand name
	20 hrs. or 400 km (250 mi)	40 hrs. or 800 km (500 mi)	80 hrs. or 1,600 km (1,000 mi)			
<b>ENGINE:</b>						
Starter case					○	Aeroshell grease #7A or Esso Beacon 325 grease
Oil pump control box			○		○	
Pump drive cover			○		○	
Oil in the oil tank				○		YAMALUBE 2-cycle oil
<b>DRIVE:</b>						
Primary sheave weight and roller pins		○			○	Molybdenum disulfide snowmobile grease
Secondary shaft and sliding sheave		○			○	
Front axle housing		○			○	Light all-purpose grease
Shaft 1 and shaft 2 (Slide rail)			○		○	
Drive chain oil replacement		○			○	Gear oil API "GL-3" SAE #75 or #80
<b>BODY:</b>						
Steering column lower bearing		○			○	Light all-purpose grease
Steering column upper bearing		○			○	Motor oil
Steering links		○			○	Light all-purpose grease
Ski column		○			○	
Ski wear plate		○			○	
Ski retaining pin		○			○	
Brake wire and stopper and brake lever		○			○	Esso Beacon 325 grease

## 4. SPECIFICATIONS

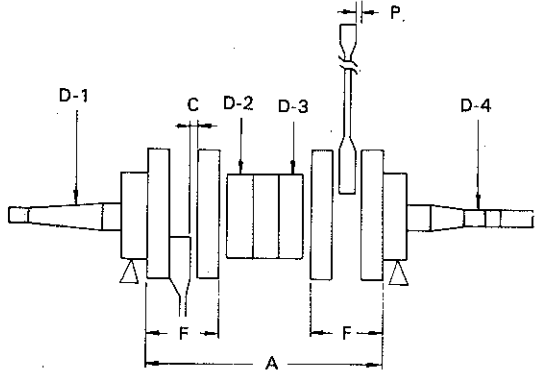
NOTE: \* ..... New specification  
(Compared with 1979 EX440)

### General

Model: Model (I.B.M. No.) Frame I.D. & starting number Engine I.D. & starting number	* EX440('80) (8J8) * 8G6-050101 * SS433-050101
Dimension: Overall length Overall width (std) Overall height (w/windshield)	* 2,550 mm (100.4 in) 980 mm (38.6 in) 995 mm (39.2 in)

### Engine

Description: Engine type  Engine model Displacement Bore × Stroke Effective compression ratio Starting system Ignition system Lubrication system	Fan cooled two-stroke 7-port torque induction, twin cylinders SS433 433 cm <sup>3</sup> (26.42 cu.in) 68 × 59.6 mm (2.68 × 2.35 in) 7.0 : 1 Recoil hand starter C.D.I. "Autolube" oil injection
Cylinder head: Combustion chamber volume (with spark plug) Compression chamber type Head gasket thickness	24.6 cm <sup>3</sup> (1.50 cu.in) Dome + Squish 0.5 mm (0.02 in)
Cylinder: Material Bore size Taper limit Out of round limit	Cast iron sleeves aluminum 68 mm (2.677 in) 0.05 mm (0.0020 in) 0.01 mm (0.0004 in)
Piston: Piston skirt clearance (Measuring point)  Piston oversize  Piston pin outside diameter × length	0.045 ~ 0.050 mm (0.0018 ~ 0.0020 in) (20 mm from piston skirt end) 1st 68.25 mm (2.687 in) 2nd 68.50 mm (2.697 in) 3rd 68.75 mm (2.707 in) 4th 69.00 mm (2.717 in) φ18 × 55 mm (φ0.709 × 2.17 in)
Piston ring: Piston ring design (Top) (2nd) Ring end gap (installed) (Top) (installed) (2nd)	Keystone Keystone 0.35 ~ 0.55 mm (0.014 ~ 0.022 in) 0.35 ~ 0.55 mm (0.014 ~ 0.022 in)
Small end bearing: Type	Needle bearing
Big end bearing: Type	Needle bearing
Crankshaft: Crankshaft assembly width (A)  (F)  Crankshaft deflection (D)	174 ± 0.1 mm (6.85 ± 0.004 in) 56 <sup>+0</sup> / <sub>-0.05</sub> mm (2.205 <sup>+0</sup> / <sub>-0.002</sub> in) 0.03 mm (D-1) 0.04 mm (D-2) 0.04 mm (D-3) 0.05 mm (D-4)

<p>Connecting rod large end side clearance (C) Connecting rod small end deflection (P)</p>  <p>Crank pin outside diameter × length Crank pin type Crank bearing type (Left) × q'ty (Center) × q'ty (Right) × q'ty Crank oil seal type (Left) × q'ty (Center) × q'ty (Right) × q'ty</p>	<p>0.25 ~ 0.75 mm (0.010 ~ 0.030 in) 2.0 mm (0.079 in)</p> <p>24 × 55 mm (0.945 × 2.165 in) Solid shaft assembly type with serration #6306 special × 2 pcs. #6206 special × 2 pcs. #6206 special × 1 pc. FWJ-32 78 9.5 × 1 pc. Labyrinth seal × 1 pc. FWJ-32 48 10 × 1 pc.</p>																																																							
<p>Carburetor:</p> <p>Type &amp; manufacturer/quantity I.D. Mark Main jet (M.J.) Main air jet (M.A.J.) Power jet (Pw.J.) Power air jet (Pw.A.J.) Slow jet (S.J.) Slow air jet (S.A.J.) Pilot screw (P.S.) Starter jet (St.J.) Float height Idling engine speed</p>	<p>BD44 × 38 KEIHIN × 1 pc. 8H600 #145 #180 #150 #200 #90 #100 1-5/8 #160 15 <sup>+2</sup>/<sub>-3</sub> mm (0.59 <sup>+0.08</sup>/<sub>-0.12</sub> in) 1,500 r/min</p>																																																							
<p>Main jet setting chart:</p>	<table border="1" data-bbox="466 1529 1342 1921"> <thead> <tr> <th rowspan="2">Altitude</th> <th colspan="6">Temperature</th> </tr> <tr> <th>-30°C (-22°F)</th> <th>-20°C (-4°F)</th> <th>-10°C (14°F)</th> <th>0°C (32°F)</th> <th>10°C (50°F)</th> <th>20°C (68°F)</th> </tr> </thead> <tbody> <tr> <td>Sea level</td> <td></td> <td></td> <td>#145 (Std.)</td> <td></td> <td></td> <td>#140</td> </tr> <tr> <td>~ 600m (2000 ft)</td> <td></td> <td>#145 (Std.)</td> <td></td> <td></td> <td></td> <td>#140</td> </tr> <tr> <td>~ 1200m (4000 ft)</td> <td></td> <td>#140</td> <td></td> <td></td> <td></td> <td>#135</td> </tr> <tr> <td>~ 1800m (6000 ft)</td> <td></td> <td>#135</td> <td></td> <td></td> <td></td> <td>#130</td> </tr> <tr> <td>~ 2400m (8000 ft)</td> <td></td> <td>#130</td> <td></td> <td></td> <td></td> <td>#125*</td> </tr> <tr> <td>~ 3000m (10000 ft) or more</td> <td></td> <td>#125*</td> <td></td> <td></td> <td></td> <td>#120*</td> </tr> </tbody> </table> <p>* Change the starter jet to #95 or #100.</p>	Altitude	Temperature						-30°C (-22°F)	-20°C (-4°F)	-10°C (14°F)	0°C (32°F)	10°C (50°F)	20°C (68°F)	Sea level			#145 (Std.)			#140	~ 600m (2000 ft)		#145 (Std.)				#140	~ 1200m (4000 ft)		#140				#135	~ 1800m (6000 ft)		#135				#130	~ 2400m (8000 ft)		#130				#125*	~ 3000m (10000 ft) or more		#125*				#120*
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Intake reed valve: Type Bending limit Valve lift Tightening torque	V type 0.3 mm (0.012 in) 10.4 mm (0.409 in) 0.8 Nm (8.0 cm·kg, 6.9 in·lb)
Lubrication: Autolube pump — Color code — Minimum stroke — Maximum stroke — Reduction ratio — Output Min./200 strokes — Output Max./200 strokes Autolube pump wire tree play Oil tank capacity Oil grade	Dark blue 0.20 ~ 0.25 mm (0.0079 ~ 0.0098 in) 1.65 ~ 1.87 mm (0.0650 ~ 0.0736 in) 1/44 0.95 ~ 1.19 cm <sup>3</sup> (0.0321 ~ 0.0402 oz) 7.84 ~ 8.89 cm <sup>3</sup> (0.2651 ~ 0.3006 oz) 25 ± 1 mm (0.98 ± 0.04 in) at idle 2.8 ℓ YAMALUBE 2-cycle

### Drive and track suspension

Transmission: Type Drive ratio Engagement rpm Primary spring: Part No. Color code	V-belt automatic centrifugal engagement 3.5 : 1 ~ 1 : 1 2,900 ~ 3,300 r/min  90501-45534 Blue/Green
Secondary spring: Part No. Color code Secondary spring pre-load (twist) Sheave distance Sheave off-set V-belt width and outer line length V-belt wear limit	90508-45286 Yellow 150° (Hole No. 1) 270 $\begin{smallmatrix} +0 \\ -3 \end{smallmatrix}$ mm (10.6 $\begin{smallmatrix} +0 \\ -0.12 \end{smallmatrix}$ in) 5.5 ± 0.5 mm (0.22 ± 0.02 in) 31.6 x 1,099 mm (1.24 x 43.3 in) 26 mm (1.02 in)
Track suspension: Type Damper type Spring color code Slide runner wear limit Track width Track deflection Length on ground Wheel sprocket material and number of teeth Stopper band length	Slide rail suspension Oil and gas damper No. painted 10 mm (0.4 in) 380 mm (15 in) 25 ~ 30 mm/10 kg (0.984 ~ 1.18 in/22 lb) 850 mm (33.5 in) Polyethylene 8T 214 mm (8.4 in) (3rd hole from the bottom)
Secondary drive: Type Reduction ratio Chain pitch × Number of links Free play Chain housing oil quantity Chain housing oil grade	Chain (#35-3) 29/17 (1.706) 9.525 mm (0.375 in) × 68L 10 $\begin{smallmatrix} +5 \\ -2 \end{smallmatrix}$ mm (0.4 $\begin{smallmatrix} +0.2 \\ -0.08 \end{smallmatrix}$ in) 320 cm <sup>3</sup> (10.82 oz) Gear oil API "GL3" (SAE #75 or 80)
Brake: Type Brake pad thickness Brake pad wear limit Gap between pad and disc	Floating pad type disc brake 13.5 mm (0.53 in) 9.5 mm (0.37 in) 0.15 mm (0.006 in)

## Chassis

Frame: Frame design & material	Aluminum + Steel
Steering system: Caster (ski column) Camber Ski length × width × thickness Ski stance Ski Toe-out Steering linkage type Lock to lock angle (ski)  Lock to lock angle (steering column)	25° 0° 980 × 140 × 2.6 mm (38.6 × 5.5 × 0.10 in) 800 mm (31.5 in) 0 ~ 6 mm (0 ~ 0.23 in) Tie-rod Right ski, L: 20.2° R: 27.6° Left ski, L: 27.6° R: 20.2° Right: 46.5° Left: 46.5°
Front suspension: Type damper type	Leaf spring Oil damper
Fuel tank: Capacity Fuel grade	30 Litre Regular gasoline

## Electrical

Ignition system: Type — flywheel magneto (C.D.I. Type) Model/manufacturer Voltage Pulser coil resistance Charging coil resistance	* F280-78/HITACHI 12V * 78Ω at 20°C (68°F) (White/Red — Black) * 113Ω at 20°C (68°F) (Brown — Black) * 29Ω at 20°C (68°F) (Blue — Black)
Ignition timing: B.T.D.C.	1.6 ± 0.1 mm (0.060 ± 0.004 in)
Ignition: Model/Manufacturer Spark gap  Primary winding resistance Secondary winding resistance Diode (Yes or No)	CM62-20/HITACHI 9 mm (0.35 in)/300 r/min 11 mm (0.43 in)/3,000 r/min 0.15Ω at 20°C (68°F) 3.6kΩ at 20°C (68°F) No
Spark plug: Type & Quantity Spark plug gap	* NGK B-9ES × 2 pcs. * 0.7 ~ 0.8 mm (0.028 ~ 0.031 in)
Spark plug cap: Type Noise suppressor resistance	Rubber type with noise suppressor (T-112) 5kΩ at 20°C (68°F)
C.D.I. unit: Model/Manufacturer	* TIA01-30/HITACHI
Lighting system: Lighting output Lighting coil resistance Headlight type Bulb wattage/q'ty Tail/brake light wattage Meter light wattage	12V/100W * 0.22Ω at 20°C (68°F) (Yellow — Black) Semi shield * 12V 45/40W × 1 pc. 12V 8W/23W 12V 3.4W

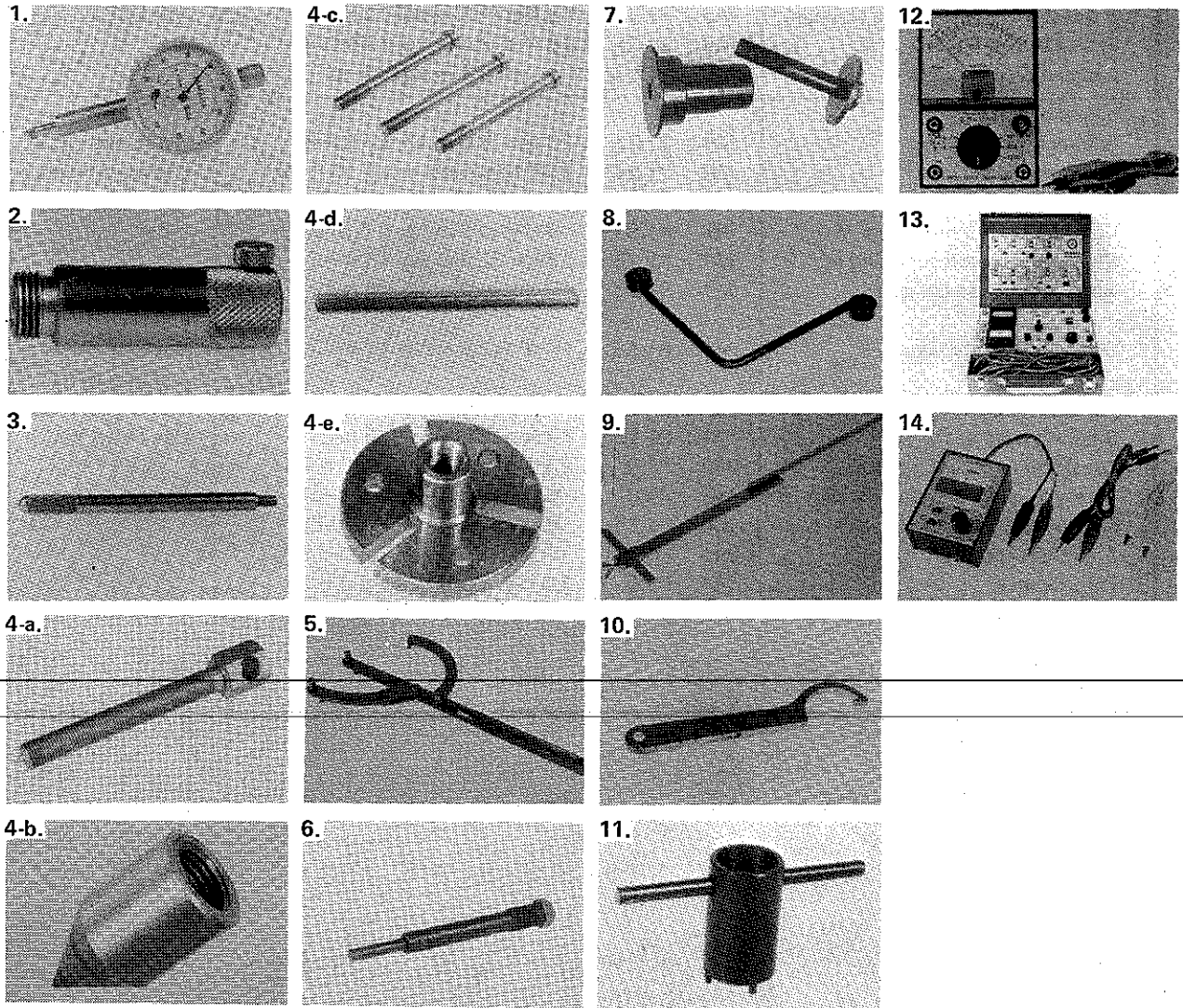
A.C. regulator: Model/Manufacturer Voltage	TRIZ-24B/HITACHI or S8516B/TOSHIBA 13.8 ± 0.5V
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**Tightening Torque**

Part to be tightened	Thread size	Tightening torque	Remarks
Engine:			
Spark plug	M14 P1.25	28 Nm (2.8 m-kg, 20 ft-lb)	
Cylinder head	M8 P1.25	25 Nm (2.5 m-kg, 18 ft-lb)	Special nut— Stud bolt
Cylinder head	M8 P1.25	25 Nm (2.5 m-kg, 18 ft-lb)	Nut—Stud bolt
Flywheel magneto	M16 P1.0	73 Nm (7.3 m-kg, 53 ft-lb)	
Crankcase upper and lower	M8 P1.25	First: 10 Nm (1.0 m-kg, 7.5 ft-lb) Final: 20 Nm (2.0 m-kg, 15 ft-lb)	
Tightening sequence			
Starter pulley	M8 P1.25	11 Nm (1.1 m-kg, 8 ft-lb)	
Crankcase and engine bracket	M10 P1.25	40 Nm (4.0 m-kg, 29 ft-lb)	Special nut— Stud bolt
Cylinder and exhaust pipe	M8 P1.25	20 Nm (2.0 m-kg, 15 ft-lb)	
Drive and track suspension:			
Primary sliding sheave and cap Installation of primary sheave	M6 P1.0 UNF 1/2"	11 Nm (1.1 m-kg, 8 ft-lb) Initial: 120 Nm (12 m-kg, 87 ft-lb) Loosen once and retighten: 60 Nm (6.0 m-kg, 43.5 ft-lb)	Use motor oil
Installation of secondary sheave	M10 P1.25	50 Nm (5.0 m-kg, 36 ft-lb)	
Bearing housing	M10 P1.25	65 Nm (6.5 m-kg, 47 ft-lb)	
Secondary shaft and Bearing collar	Socket screw	6 Nm (0.6 m-kg, 4 ft-lb)	
Brake caliper and Housing chain	M10 P1.25	50 Nm (5.0 m-kg, 36 ft-lb)	
Installation of drive chain sprocket	M14 P1.5	60 Nm (6.0 m-kg, 43.5 ft-lb)	Nut
Installation of driven chain sprocket	M10 P1.25	50 Nm (5.0 m-kg, 36 ft-lb)	Bolt
Chain housing and Frame	M8 P1.25	25 Nm (2.5 m-kg, 18 ft-lb)	
Installation of front axle L.H.	M22 P1.0	85 Nm (8.5 m-kg, 61.5 ft-lb)	
Front axle housing and Frame	M8 P1.25	25 Nm (2.5 m-kg, 18 ft-lb)	
Wheel sprocket and Front axle		5 Nm (0.5 m-kg, 3.5 ft-lb)	
Shaft 1 and Frame	M10 P1.25	65 Nm (6.5 m-kg, 47 ft-lb)	Use LOCK-TITE
Shaft 2 and Rear bracket	M10 P1.25	65 Nm (6.5 m-kg, 47 ft-lb)	Use LOCK-TITE
Rear bracket and Frame	M8 P1.25	30 Nm (3.0 m-kg, 21.5 ft-lb)	Use LOCK-TITE
Installation of suspension wheel	M6 P1.0	10 Nm (1.0 m-kg, 7 ft-lb)	
Installation of rear guide wheel	M8 P1.25	25 Nm (2.5 m-kg, 18 ft-lb)	Use LOCK-TITE
Installation of runner sliding 1	M6 P1.0	3 Nm (0.3 m-kg, 2 ft-lb)	Use LOCK-TITE
Installation of runner sliding 2	M6 P1.0	10 Nm (1.0 m-kg, 7 ft-lb)	Use LOCK-TITE
Pivot arm and Frame sliding 1	M6 P1.0	13 Nm (1.3 m-kg, 10 ft-lb)	Use LOCK-TITE

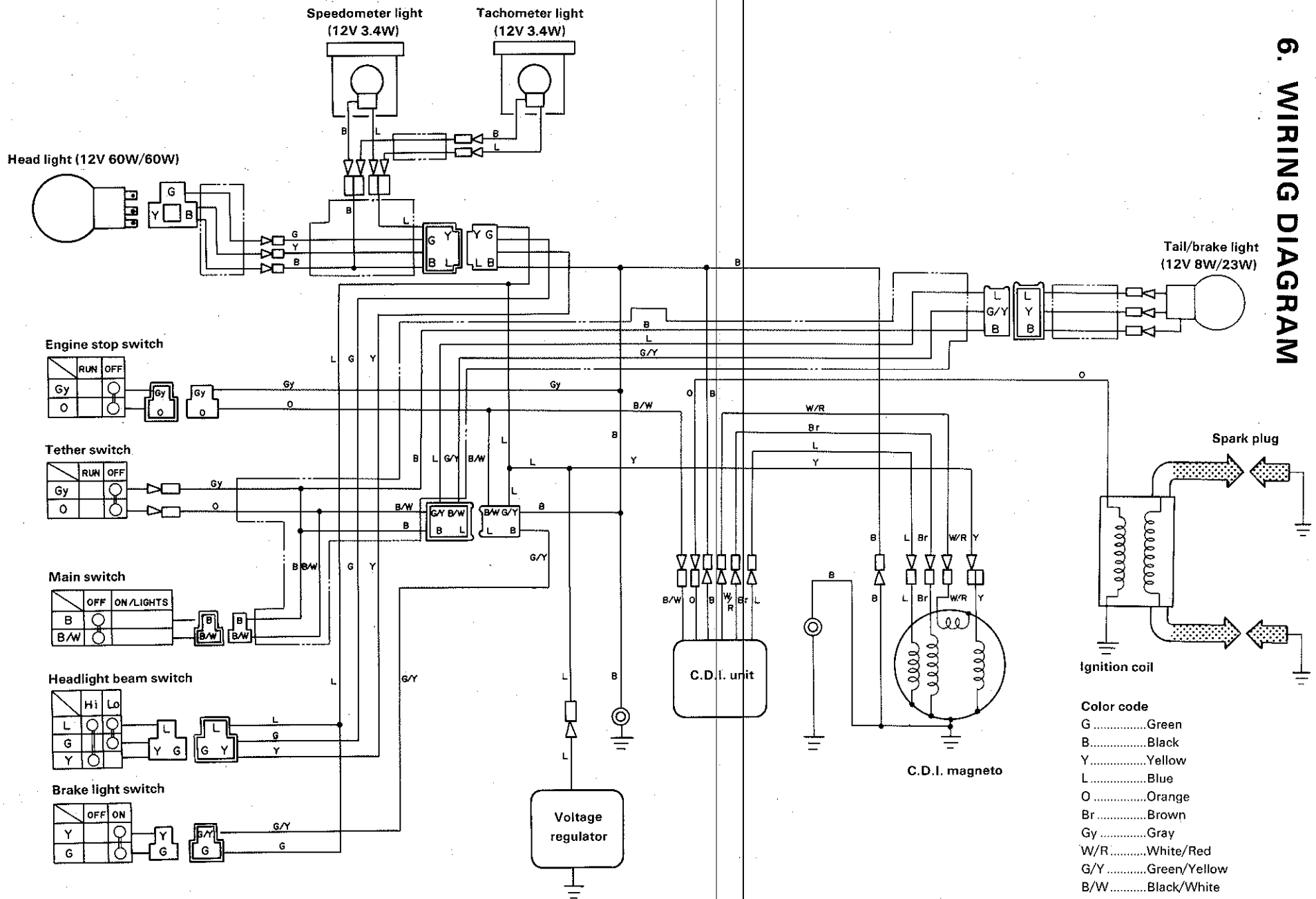
Part to be tightened	Thread size	Tightening torque	Remarks
Bracket 5 & 6 and Frame sliding 1	M6 P1.0	13 Nm (1.3 m-kg, 10 ft-lb)	Use LOCK-TITE
Frame sliding 1 and 2 & 3	M8 P1.25	25 Nm (2.5 m-kg, 18 ft-lb)	
Installation of stopper 1	M6 P1.0	4 Nm (0.4 m-kg, 3 ft-lb)	
Chassis:			
Engine mounting bolt	M10 P1.25	38 Nm (3.8 m-kg, 27.5 ft-lb)	Nylon nut Use plain washer and LOCK-TITE
Ski runner	M8 P1.25	14.5 Nm (1.45 m-kg, 10 ft-lb)	
Steering column and Gate	M6 P1.0	9 Nm (0.9 m-kg, 6.5 ft-lb)	Use lock washer and wave washer Use lock washer and LOCK-TITE Use lock washer Use cotter pin
Steering relay rod adjusting nut	M10 P1.25	25 Nm (2.5 m-kg, 18 ft-lb)	
Outside arm and Ski column	M10 P1.25	40 Nm (4.0 m-kg, 29 ft-lb)	
Steering lower bracket	M8 P1.25	15 Nm (1.5 m-kg, 11 ft-lb)	
Installation of steering column 1, 2	M6 P1.0	9 Nm (0.9 m-kg, 6.5 ft-lb)	
Steering relay ass'y	M10 P1.25	30 Nm (3.0 m-kg, 22 ft-lb)	
Level gauge securing bolt	M6 P1.0	2.5 Nm (0.25 m-kg, 1.8 ft-lb)	
Screw to install the front of seat	M6 P1.0	5 Nm (0.5 m-kg, 3.5 ft-lb)	
Nut to install the rear of seat	M8 P1.25	9 Nm (0.9 m-kg, 6.5 ft-lb)	
Brake level holder	M5 P0.8	4 Nm (0.4 m-kg, 3.0 ft-lb)	
Throttle lever	M6 P1.0	3.5 Nm (0.35 m-kg, 2.5 ft-lb)	

## 5. SPECIAL TOOLS

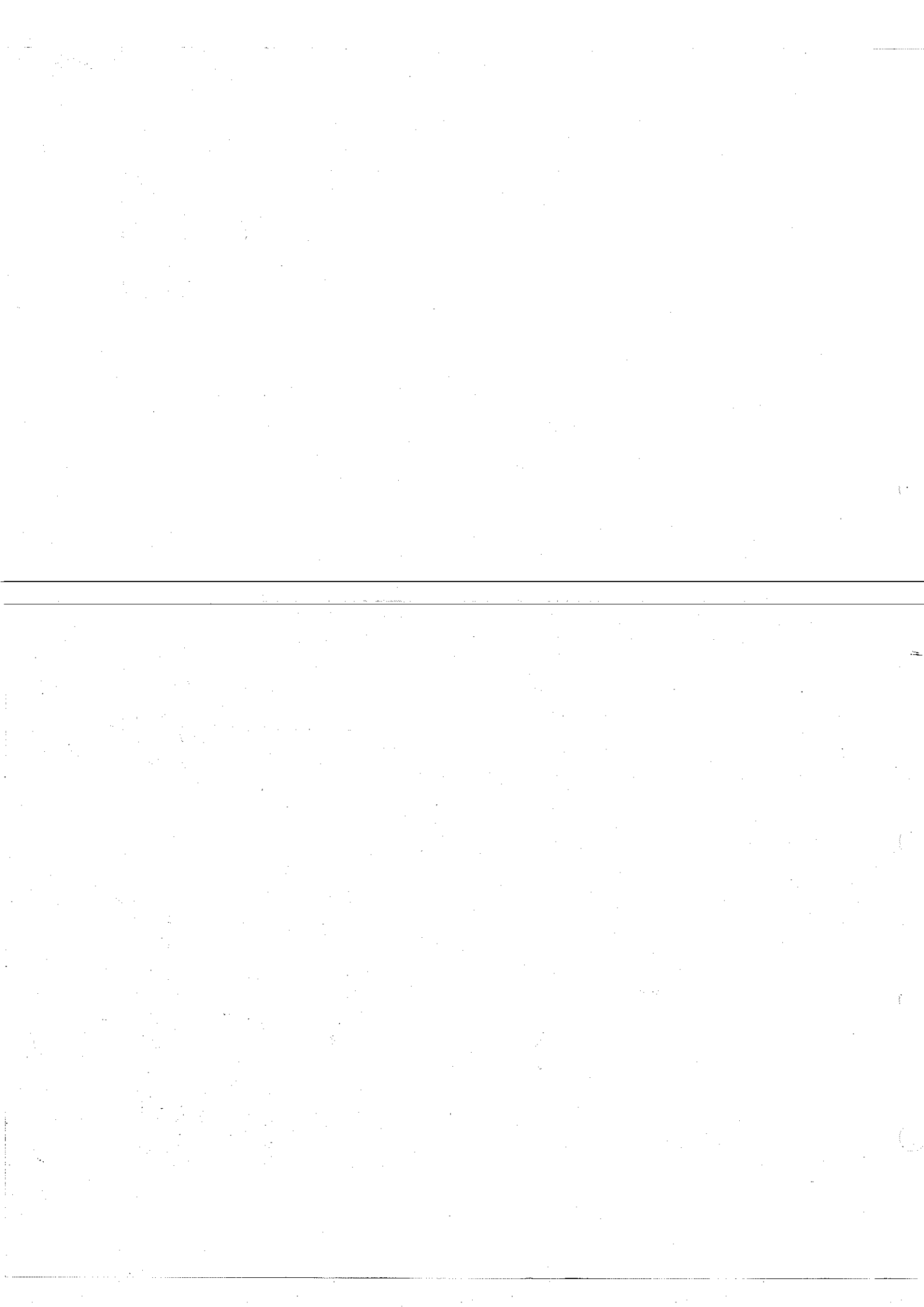


No.	Description	Tool No.
1	Dial gauge	90890-03097
2	Dial gauge stand No. 2	90890-01195
3	Dial gauge needle (56 mm)	90890-03098
4-a	Flywheel puller bolt	90890-01803
4-b	Flywheel puller attachment	90890-01804
4-c	Flywheel puller screw	90890-01806
4-d	Drive handle	90890-01817
4-e	Flywheel puller body	90890-01848
5	Rotor holding tool	90890-01235
6	Primary fixed sheave puller	90890-01859
7	Sheave sub-assembly tool	90890-01858
8	Bushing tool	90890-01877
9	Sheave gauge	90890-01875
10	Eccentric bearing installer	90890-01851
11	Main switch ring nut tool	90890-01857
12	Pocket tester	90890-03104
13	Electro tester	90890-03021
14	A.C. Regulator checker	90890-03090

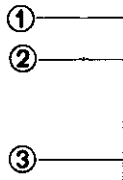
# 6. WIRING DIAGRAM



- Color code**
- G ..... Green
  - B ..... Black
  - Y ..... Yellow
  - L ..... Blue
  - O ..... Orange
  - Br ..... Brown
  - Gy ..... Gray
  - W/R ..... White/Red
  - G/Y ..... Green/Yellow
  - B/W ..... Black/White



# 7. WIRE AND PIPE ROUT



- 20. To engine crank case
- 21. To oil pump
- 22. To tachometer gear unit
- 23. To carburetor
- 24. Clamp
- 25. Clamp
- 26. Head light lead wire
- 27. Speedometer cable (Gray)
- 28. Tachometer cable (Black)
- 29. Spring
- 30. Shroud stopper
- 31. Starter wire
- 32. Brake wire
- 33. Throttle wire
- 34. Pump wire
- 35. Clamp
- 36. To tachometer gear unit
- 37. To speedometer
- 38. To tachometer

