

Read the clearance at the intake tappets of Nos. 1 and 2 cylinders and, if necessary, adjust the clearance to each specification.

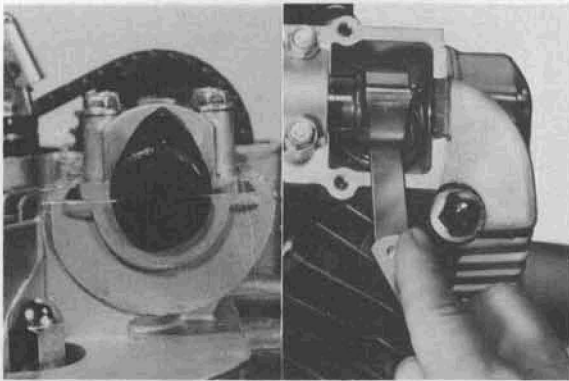


Fig. 3-9

3. Turn the crankshaft a further 180°, bringing the exhaust cam of No. 4 cylinder to the position indicated. Under this condition, repeat the checking and adjusting process outlined in step "1" at the exhaust tappets of Nos. 3 and 4 cylinders.

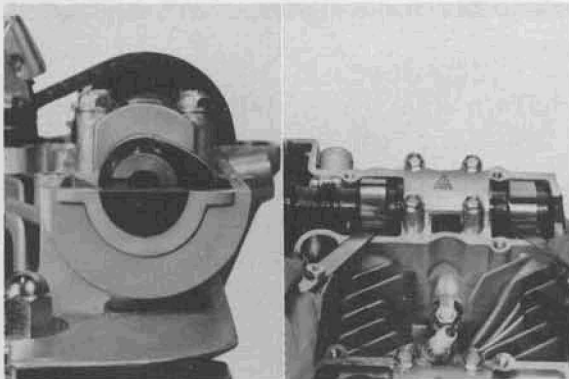


Fig. 3-10

4. Again turn the crankshaft a further 180°, bringing the intake cam of No. 4 cylinder to the position indicated. Similarly check and adjust the clearance at the intake tappets of Nos. 3 and 4 cylinders.

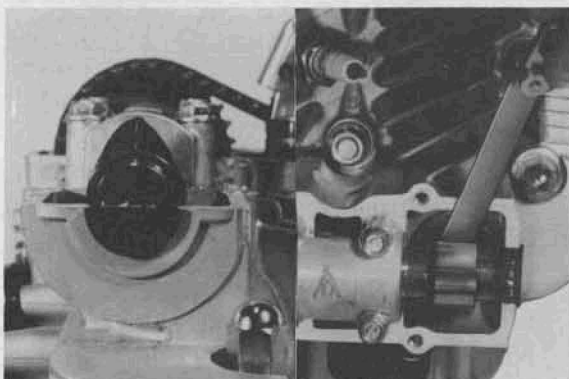


Fig. 3-11

TAPPET CLEARANCE ADJUSTMENT

The clearance is adjusted by replacing the existing tappet shim by a thicker or thinner disc.

1. Place a fingertip on the tappet, and turn it in place to bring notch ① to the position indicated.

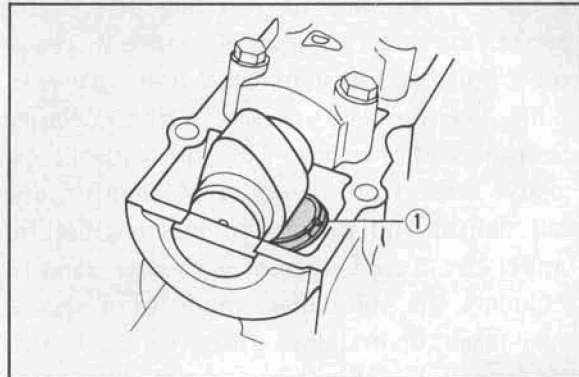


Fig. 3-12

2. Using the special tool, push down the tappet.

NOTE:

Make sure the tool exerts pressure on the tappet correctly, as shown, with the tip hitched securely.

| | |
|------------------|-------------|
| Tappet depressor | 09916—64510 |
|------------------|-------------|

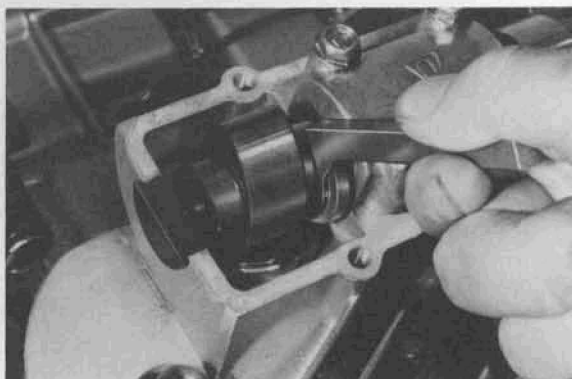
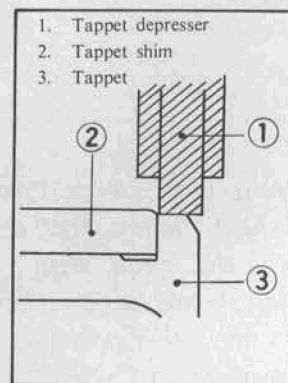


Fig. 3-13

3. Take out the tappet shim from the tappet, using special tool ①.

| | |
|---------|-------------|
| Forceps | 09916—84510 |
|---------|-------------|

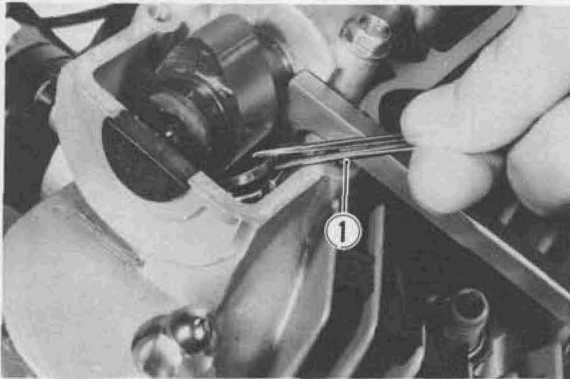


Fig. 3-14

4. Check the figures printed on the shim. These figures indicate the thickness of the shim, as illustrated.

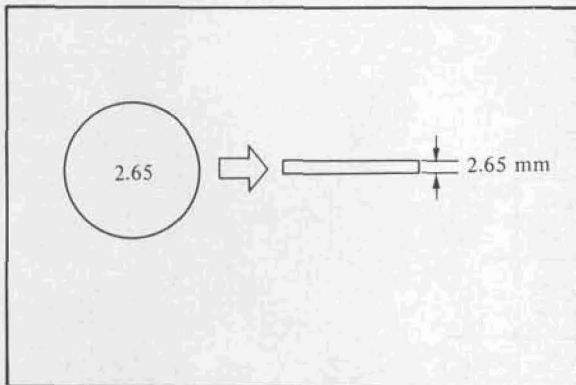


Fig. 3-15

5. Select a replacement shim that will provide a clearance within the specified range (0.03—0.08 mm). For the purpose of this adjustment, a total of 20 sizes of tappet shim are available ranging from 2.15 to 3.10 mm in steps of 0.05 mm. Fit the selected shim to the tappet, with numbers toward tappet. Be sure to check shim size with micrometer to insure its size.

Tappet shim size chart

| No. | Thickness (mm) | Part No. |
|-----|----------------|-------------|
| 1 | 2.15 | 12892-45000 |
| 2 | 2.20 | 12892-45001 |
| 3 | 2.25 | 12892-45002 |
| 4 | 2.30 | 12892-45003 |
| 5 | 2.35 | 12892-45004 |
| 6 | 2.40 | 12892-45005 |
| 7 | 2.45 | 12892-45006 |
| 8 | 2.50 | 12892-45007 |
| 9 | 2.55 | 12892-45008 |
| 10 | 2.60 | 12892-45009 |
| 11 | 2.65 | 12892-45010 |
| 12 | 2.70 | 12892-45011 |
| 13 | 2.75 | 12892-45012 |
| 14 | 2.80 | 12892-45013 |
| 15 | 2.85 | 12892-45014 |
| 16 | 2.90 | 12892-45015 |
| 17 | 2.95 | 12892-45016 |
| 18 | 3.00 | 12892-45017 |
| 19 | 3.05 | 12892-45018 |
| 20 | 3.10 | 12892-45019 |

NOTE:

Before fitting the tappet shim to the tappet, be sure to apply engine oil to its top and bottom faces.

6. After replacing the tappet shim, rotate the engine so that the tappet is depressed fully. This will squeeze out oil trapped between the shim and the tappet that could cause an incorrect measurement, then check the clearance again to confirm that it is within the specified range.

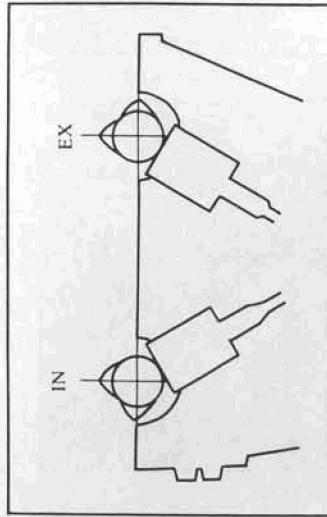
SHIM SELECTION CHART

PART NUMBER - PREFIX 12892

| P/N SUFFIX- | 45000 | 45001 | 45002 | 45003 | 45004 | 45005 | 45006 | 45007 | 45008 | 45009 | 45010 | 45011 | 45012 | 45013 | 45014 | 45015 | 45016 | 45017 | 45018 | 45019 |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Tappet Clearance (mm) | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | |
| 0.00~0.02 | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 |
| 0.03~0.08 | | | | | | | | | | | | | | | | | | | | |
| 0.09~0.13 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | |
| 0.14~0.18 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | |
| 0.19~0.23 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | | |
| 0.24~0.28 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | | | |
| 0.29~0.33 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | | | | |
| 0.34~0.38 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | | | | | |
| 0.39~0.43 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | | | | | | |
| 0.44~0.48 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | | | | | | | |
| 0.49~0.53 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | | | | | | | | |
| 0.54~0.58 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | | | | | | | | | |
| 0.59~0.63 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | | | | | | | | | | |
| 0.64~0.68 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | | | | | | | | | | | |
| 0.69~0.73 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | | | | | | | | | | | | |
| 0.74~0.78 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | | | | | | | | | | | | | |
| 0.79~0.83 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | | | | | | | | | | | | | | | |
| 0.84~0.88 | 2.95 | 3.00 | 3.05 | 3.10 | | | | | | | | | | | | | | | | |
| 0.89~0.93 | 3.00 | 3.05 | 3.10 | | | | | | | | | | | | | | | | | |
| 0.94~0.98 | 3.05 | 3.10 | | | | | | | | | | | | | | | | | | |
| 0.99~1.03 | 3.10 | | | | | | | | | | | | | | | | | | | |

SPECIFIED CLEARANCE/NO. ADJUSTMENT REQUIRED

PRESENT SHIM SIZE - mm



I. Measure tappet clearance. "ENGINE COLD"

II. Measure present shim size.

III. Match clearance in vertical column with present shim size in horizontal column.

EXAMPLE

- Tappet clearance is - 0.55 mm
- Present shim size - 2.40 mm
- Shim size to be used - 2.90 mm

SPARK PLUGS

| | | | | |
|-------|--------|--------|--------|-------|
| 6 000 | 12 000 | 18 000 | 24 000 | km |
| 4 000 | 7 500 | 11 000 | 15 000 | miles |

At initial 6 000 km, remove the carbon deposits with a wire or pin and adjust the spark plug gap to 0.6—0.8 mm (0.024—0.031 in), measuring with a thickness gauge.

Replace the plugs every 12 000 km and remove the carbon deposits and adjust the gap every 6 000 km after replacing the plugs.

Whenever removing the carbon deposits, be sure to observe the appearance of the plug, noting the color of the carbon deposit. The color indicates whether the standard plug is suitable or not. If the standard plug is apt to get wet, a hotter plug should be used. If the standard plug is apt to overheat, with the porcelain having a whitish appearance, replace with a colder one.

NOTE:

To check the spark plugs, keep the engine running on unleaded gasoline, and if all of the four are either sooty with carbon or burnt white, replace them altogether.

| | NGK | NIPPON DENSO |
|-----------|------|--------------|
| Hot type | B7ES | W22ES |
| Standard | B8ES | W24ES |
| Cold type | B9ES | W27ES |

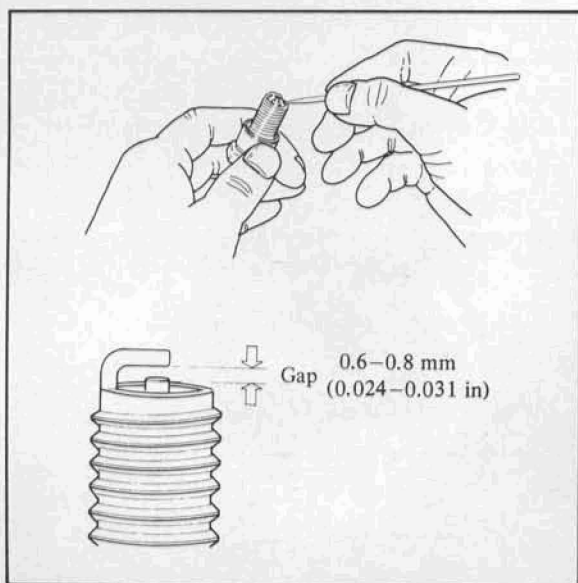


Fig. 3-16

FUEL LINE (Replace every two years)

Replace the fuel hose every two years.

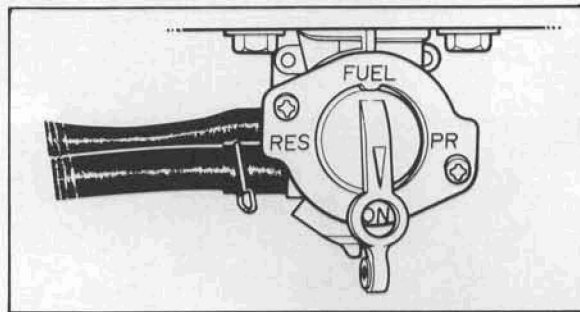


Fig. 3-17

CONTACT BREAKER POINTS

| | | | | | |
|-------|-------|--------|--------|--------|-------|
| 1 000 | 6 000 | 12 000 | 18 000 | 24 000 | km |
| 600 | 4 000 | 7 500 | 11 000 | 15 000 | miles |

Check and adjust the contact points as outlined on the next page. Inspect the contact points for wear and burning. If the point faces are dirty, wipe them clean with a clean and dry cloth.

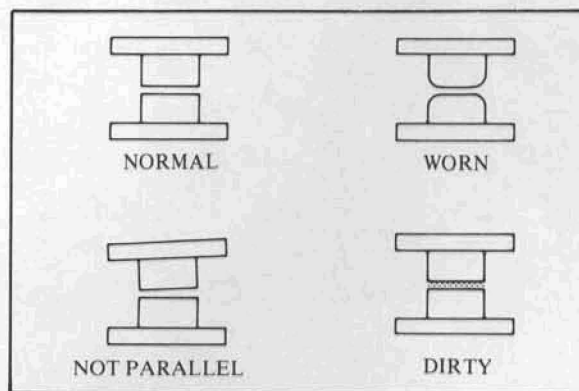


Fig. 3-18

IGNITION TIMING

| | | | | | |
|-------|-------|--------|--------|--------|-------|
| 1 000 | 6 000 | 12 000 | 18 000 | 24 000 | km |
| 600 | 4 000 | 7 500 | 11 000 | 15 000 | miles |

Ignition timing specifications

| | |
|-----------------|--|
| Point gap | 0.3—0.4 mm (0.012—0.016 in.) |
| Spark plug gap | 0.6—0.8 mm (0.024—0.031 in.) |
| Ignition timing | 17° B.T.D.C. below 1 500 r/min and 37° B.T.D.C. above 2 500 r/min |