

# 26. TROUBLESHOOTING

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### ENGINE DOES NOT START OR IS HARD TO START

#### 1. Fuel Line Inspection

Check the fuel flow to the carburetor.

**Does the fuel reach the carburetor?**

**YES** - GO TO STEP 4. ('04 - '05)  
GO TO STEP 2. (After '05)

**NO** -

- Clogged fuel line or strainer
- Clogged fuel valve
- Clogged fuel fill cap breather hose

#### 2. Throttle Cable Condition Inspection (After '05 only)

Operate the throttle lever.

**Do the throttle lever and throttle drum operate smoothly?**

**YES** - GO TO STEP 3.

**No** -

- Improper throttle lever free play adjustment
- Stuck throttle cable

#### 3. Closed Throttle Position Detection System Inspection (After '05 only)

Check the throttle lever and carburetor switches.

**Are the throttle lever and/or carburetor switches correct?**

**Yes** - GO TO STEP 4.

**No** -

- Faulty throttle lever switch
- Faulty carburetor switch

#### 4. Spark Plug Inspection

Remove and inspect the spark plug.

**Is the spark plug wet?**

**YES** -

- Flooded carburetor
- Throttle valve open
- Dirty air cleaner
- Improperly adjusted pilot screw
- Starting enrichment (SE) valve stuck open or damaged ('04 - '05)

**NO** - GO TO STEP 5.

#### 5. Spark Test

Perform spark test.

**Is there weak or no spark?**

**YES** -

- Faulty spark plug
- Fouled spark plug
- Loose or disconnected ignition system wires
- Broken or shorted spark plug wire
- Faulty ignition coil
- Faulty exciter coil
- Faulty ignition pulse generator
- Faulty engine stop switch
- Faulty ignition switch
- Faulty ignition control module (ICM)

**NO** - GO TO STEP 6.

#### 6. Engine Starting Condition

Start the engine by the following normal procedure.

**Does the engine start then stops?**

**Yes** -

- Improper choke operation
- Incorrectly adjusted carburetor
- Leaking carburetor insulator
- Improper ignition timing (Faulty ICM or ignition pulse generator)
- Contaminated fuel
- Improper hot start operation (TRX450R)

**NO** - GO TO STEP 7.

**7. Cylinder Compression**

Test cylinder compression.

*Is the compression low?*

- YES** -
- Valve clearance too small
  - Valve stuck open
  - Worn cylinder and piston rings
  - Damaged cylinder head gasket
  - Seized valve
  - Improper valve timing
  - Faulty decompressor cam

### ENGINE LACKS POWER

#### 1. Drive Train Inspection

Raise wheel off the ground and spin it by hand.

**Does the wheel spin freely?**

**YES** – GO TO STEP 2.

**NO** –

- Brake dragging
- Worn or damaged wheel hub or axle bearing
- Drive chain too tight

#### 2. Tire Pressure Inspection

Check tire pressure.

**Are the tire pressures low?**

**YES** –

- Faulty tire valve
- Punctured tire

**NO** – GO TO STEP 3.

#### 3. Clutch Inspection

Accelerate rapidly from low to second.

**Does the engine speed change accordingly when clutch is engaged?**

**YES** – GO TO STEP 4.

**NO** –

- Clutch slipping
- Worn clutch discs
- Warped clutch plates
- Weak clutch springs
- Damaged clutch lifter arm
- Additive in engine oil

#### 4. Engine Condition Inspection

Accelerate lightly.

**Does the engine speed increase?**

**YES** – GO TO STEP 5.

**NO** –

- Starting enrichment (SE) valve stuck open ('04 – '05)
- Carburetor choke is on (After '05)
- Fuel/air mixture too rich or lean
- Clogged air cleaner
- Restricted fuel flow
- Clogged muffler
- Restricted fuel fill cap breather hose
- Excessive carbon build-up in combustion chamber

#### 5. Engine Condition Inspection

Accelerate or run at high speed.

**Is there knocking?**

**YES** –

- Worn piston and cylinder
- Use of poor quality fuel
- Excessive carbon build-up in combustion chamber
- Ignition timing too advance (Faulty ignition control module (ICM) or ignition pulse generator)
- Lean fuel mixture

**NO** – GO TO STEP 6.

#### 6. Ignition Timing Inspection

Check the ignition timing.

**Is the ignition timing correct?**

**YES** – GO TO STEP 7.

**NO** –

- Faulty ICM
- Faulty ignition pulse generator

**7. Cylinder Compression Inspection**

Test cylinder compression.

***Is the compression low?***

- YES** – • Valve clearance too small  
• Valve stuck open  
• Worn cylinder and piston rings  
• Damaged cylinder head gasket  
• Seized valve  
• Improper valve timing  
• Faulty decompressor cam

**NO** – GO TO STEP 8.

**8. Carburetor Inspection**

Check carburetor for clogging.

***Is the carburetor clogged?***

- YES** – • Carburetor not serviced frequently enough  
• Carburetor dirty  
• Dirt getting past air cleaner

**NO** – GO TO STEP 9.

**9. Spark Plug Inspection**

Remove and inspect spark plug.

***Is the spark plug fouled or discolored?***

- YES** – • Plug not serviced frequently enough  
• Incorrect spark plug used  
• Incorrect spark plug gap

**NO** – GO TO STEP 10.

**10. Engine Oil Inspection**

Check oil level and condition.

***Is the oil level correct and in good condition?***

**YES** – GO TO STEP 11.

- NO** – • Oil level too high  
• Oil level too low  
• Contaminated oil

**11. Lubrication Inspection**

Remove cylinder head cover and inspect lubrication.

***Is the valve train lubricated properly?***

- NO** – • Faulty oil pump  
• Faulty pressure relief valve  
• Clogged oil passage  
• Clogged oil strainer

### POOR PERFORMANCE AT LOW AND IDLE SPEED

#### 1. Pilot Screw Inspection

Check the carburetor pilot screw adjustment.

*Is the adjustment correct?*

**YES** - GO TO STEP 3. ('04 - '05)  
GO TO STEP 2. (After '05)

**NO** - See page 7-23. ('04 - '05)  
See page 8-24. (After '05)

#### 2. Accelerator Pump Inspection (After '05)

Check accelerator pump for operation.

*Is the accelerator pump operation correct?*

**YES** - Faulty accelerator pump

**NO** - GO TO STEP 3.

#### 3. Intake Air Leak Inspection

Check for leaking carburetor insulator.

*Is there leaking?*

**YES** - • Loose carburetor insulator bands  
• Damaged insulator

**NO** - GO TO STEP 4.

#### 4. Spark Test

Perform spark test.

*Is there weak or intermittent spark?*

**YES** - • Faulty spark plug  
• Fouled spark plug  
• Loose or disconnected ignition system wires  
• Broken or shorted spark plug wire  
• Faulty ignition coil  
• Faulty exciter coil  
• Faulty ignition pulse generator  
• Faulty engine stop switch  
• Faulty ignition switch  
• Faulty ignition control module (ICM)

**NO** - GO TO STEP 5.

#### 5. Ignition Timing Inspection

Check the ignition timing.

*Is the ignition timing correct?*

**NO** - • Faulty ignition control module (ICM)  
• Faulty ignition pulse generator

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## POOR PERFORMANCE AT HIGH SPEED

### 1. Fuel Line Inspection

Disconnect the fuel line at the carburetor.

**Does fuel flow freely?**

**YES** – GO TO STEP 2.

**NO** –

- Clogged fuel line
- Clogged fuel fill cap breather hose
- Faulty fuel valve
- Clogged fuel strainer

### 2. Carburetor Inspection

Check carburetor for clogging.

**Is the carburetor clogged?**

**YES** – Carburetor not serviced frequently enough

**NO** – GO TO STEP 3.

### 3. Valve Timing Inspection

Check valve timing.

**Is the valve timing correct?**

**NO** – Camshaft not installed properly

**YES** – GO TO STEP 4.

### 4. Ignition Timing Inspection

Check ignition timing.

**Is the ignition timing correct?**

**NO** –

- Faulty ignition control module (ICM)
- Faulty ignition pulse generator

**YES** – GO TO STEP 5.

### 5. Valve Spring Inspection

Check valve springs.

**Are the valve springs weak?**

**YES** – Faulty valve springs

## POOR HANDLING

### Steering is heavy

- Steering shaft holder bolts too tight
- Damaged steering shaft bushing
- Damaged steering shaft bearing

### Any wheel is wobbling

- Excessive wheel bearing play
- Bent rim
- Improperly installed wheel hub
- Excessively worn swingarm pivot bearings
- Bent frame

### Vehicle pulls to one side

- Tire air pressure incorrect
- Faulty shock absorber
- Bent tie-rod
- Incorrect tie-rod adjustment
- Bent swingarm
- Bent frame
- Improper wheel alignment