

**2004-2014**



**SERVICE MANUAL**

**TRX450R/ER**

# HOW TO USE THIS MANUAL

This service manual describes the service procedures for the TRX450R/ER.

Follow the Maintenance Schedule (Section 4) recommendations to ensure that the vehicle is in peak operating condition and the emission levels are within the standards set by the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB).

Performing the first scheduled maintenance is very important. It compensates for the initial wear that occurs during the break-in period.

Sections 1 and 4 apply to the whole vehicle. Section 3 illustrates procedures for removal/installation of components that may be required to perform service described in the following sections.

Sections 5 through 25 describe parts of the vehicle, grouped according to location.

Find the section you want on this page, then turn to the table of contents on the first page of the section.

Most sections start with an assembly or system illustration, service information and troubleshooting for the section. The subsequent pages give detailed procedure.


If you are not familiar with this vehicle, read Technical Features in Section 2.

If you don't know the source of the trouble, go to section 26 Troubleshooting.

Your safety, and the safety of others, is very important. To help you make informed decisions we have provided safety messages and other information throughout this manual. Of course, it is not practical or possible to warn you about all the hazards associated with servicing this vehicle.

You must use your own good judgement.

You will find important safety information in a variety of forms including:

- Safety Labels – on the vehicle
- Safety Messages – preceded by a safety alert symbol  and one of three signal words, DANGER, WARNING, or CAUTION. These signal words mean:

**DANGER** You WILL be KILLED or SERIOUSLY HURT if you don't follow instructions.

**WARNING** You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.

**CAUTION** You CAN be HURT if you don't follow instructions.

- Instructions – how to service this vehicle correctly and safely.












As you read this manual, you will find information that is preceded by a **NOTICE** symbol. The purpose of this message is to help prevent damage to your vehicle, other property, or the environment.

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# SYMBOLS

The symbols used throughout this manual show specific service procedures. If supplementary information is required pertaining to these symbols, it would be explained specifically in the text without the use of the symbols.

|   |   |
|---|---|
|    | <p>Replace the part(s) with new one(s) before assembly.</p>   |
|    | <p>Use the recommended engine oil, unless otherwise specified.</p>  |
|    | <p>Use molybdenum oil solution (mixture of the engine oil and molybdenum grease in a ratio of 1:1)</p>  |
|    | <p>Use multi-purpose grease (lithium based multi-purpose grease NLGI #2 or equivalent).</p>   |
|    | <p>Use molybdenum disulfide grease (containing more than 3% molybdenum disulfide, NLGI #2 or equivalent).<br/>           Example: Molykote® BR-2 plus manufactured by Dow Corning U.S.A.<br/>           Multi-purpose M-2 manufactured by Mitsubishi Oil, Japan</p>   |
|   | <p>Use molybdenum disulfide paste (containing more than 40% molybdenum disulfide, NLGI #2 or equivalent).<br/>           Example: Molykote® G-n Paste manufactured by Dow Corning U.S.A.<br/>           Honda Moly 60 (U.S.A. only)<br/>           Rocol ASP manufactured by Rocol Limited, U.K.<br/>           Rocol Paste manufactured by Sumico Lubricant, Japan</p> |
|  | <p>Use silicone grease.</p>   |
|  | <p>Apply a locking agent. Use a medium strength locking agent unless otherwise specified.</p>   |
|  | <p>Apply sealant.</p>   |
|  | <p>Use DOT 4 brake fluid. Use the recommended brake fluid unless otherwise specified.</p>   |
|  | <p>Use fork or suspension fluid.</p>  |

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# 1. GENERAL INFORMATION

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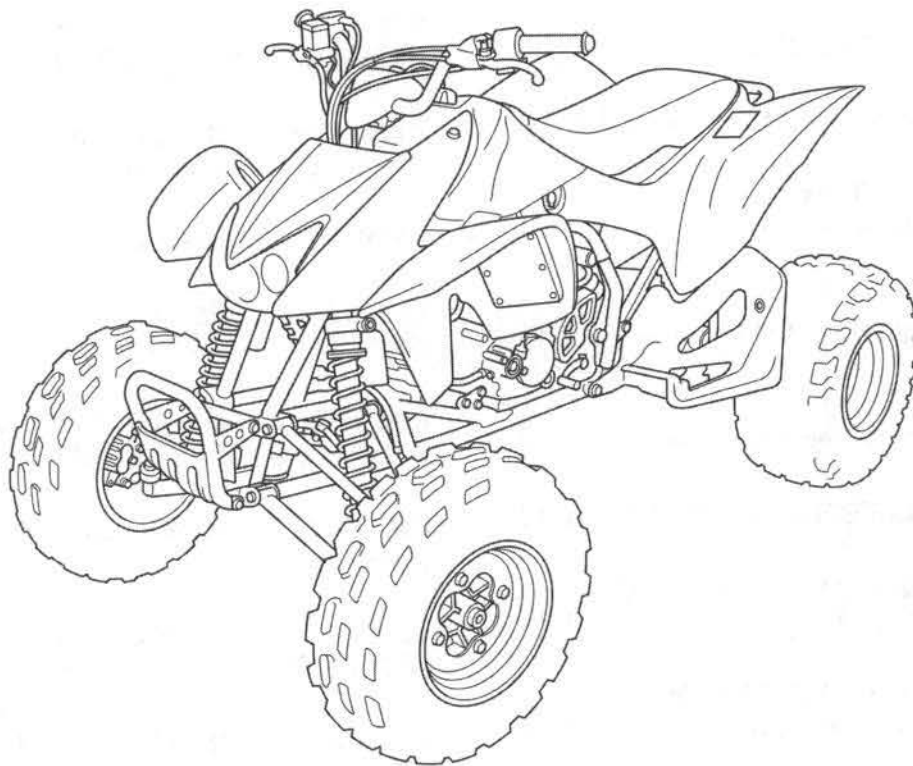
## GENERAL INFORMATION

### SERVICE RULES

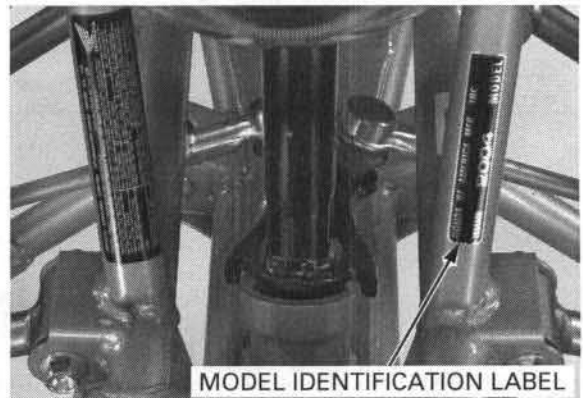
1. Use genuine Honda or Honda-recommended parts and lubricants or their equivalents. Parts that do not meet Honda's design specifications may cause damage to the vehicle.
2. Use the special tools designed for this product to avoid damage and incorrect assembly.
3. Use only metric tools when servicing the vehicle. Metric bolts, nuts and screws are not interchangeable with English fasteners.
4. Install new gaskets, O-rings, cotter pins, and lock plates when reassembling.
5. When tightening bolts or nuts, begin with the larger diameter or inner bolt first. Then tighten to the specified torque diagonally in incremental steps unless a particular sequence is specified.
6. Clean parts in cleaning solvent upon disassembly. Lubricate any sliding surfaces before reassembly.
7. After reassembly, check all parts for proper installation and operation.
8. Route all electrical wires as shown in the Cable and Harness Routing (page 1-29).

### MODEL IDENTIFICATION ('04 – '07)

'04 – '05 model shown, After '05 model similar

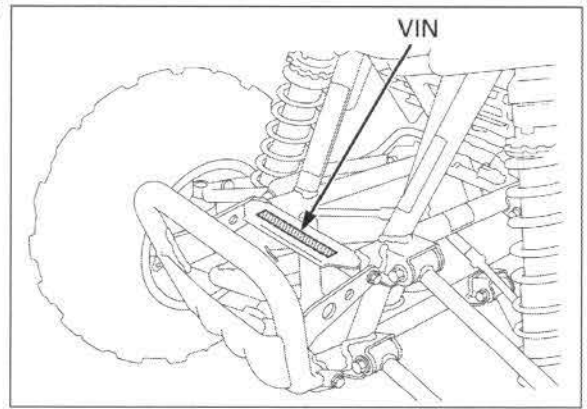


The model identification label is located on the left front frame pipe.

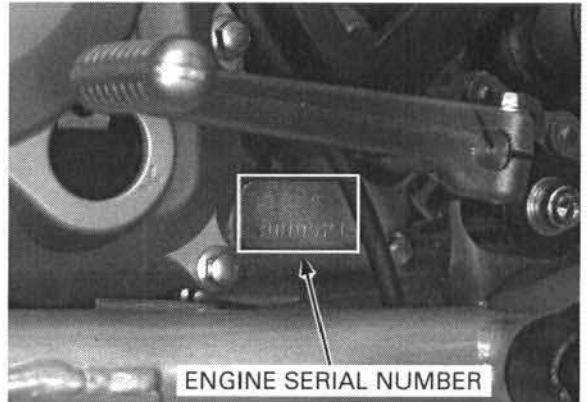


## GENERAL INFORMATION

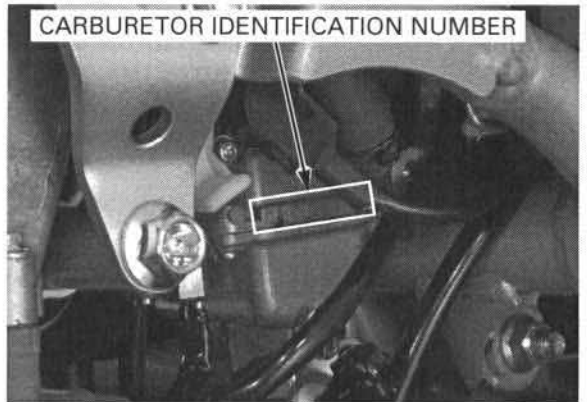
The vehicle identification number (VIN) is stamped on the front side of the frame.



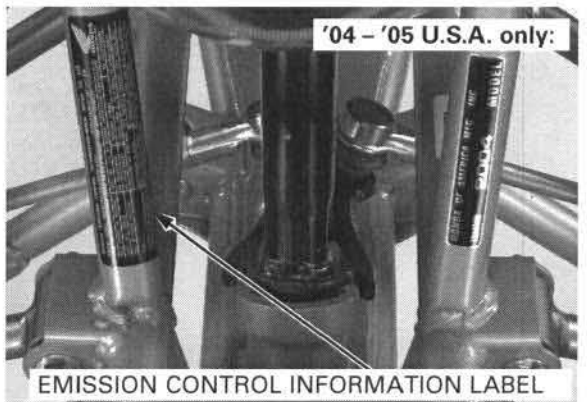
The engine serial number is stamped on the left side of the crankcase.



The carburetor identification number is stamped on the left side of the carburetor body.



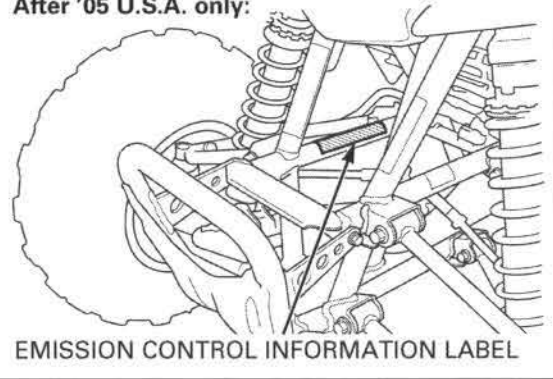
'04 - '05: The Vehicle Emission Control Information Label is attached on the right front frame pipe (U.S.A. only).



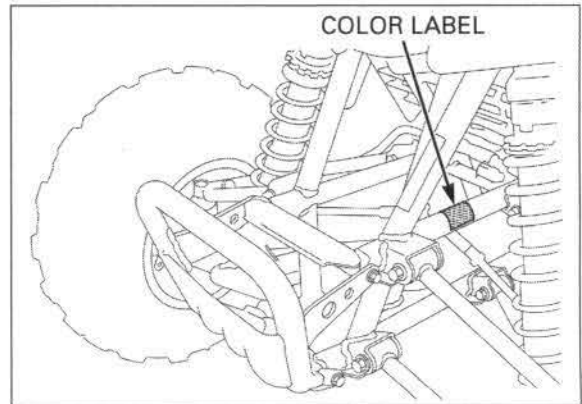
## GENERAL INFORMATION

After '05: The Vehicle Emission Control Information Label is attached on the right side of the front frame pipe (U.S.A. only).

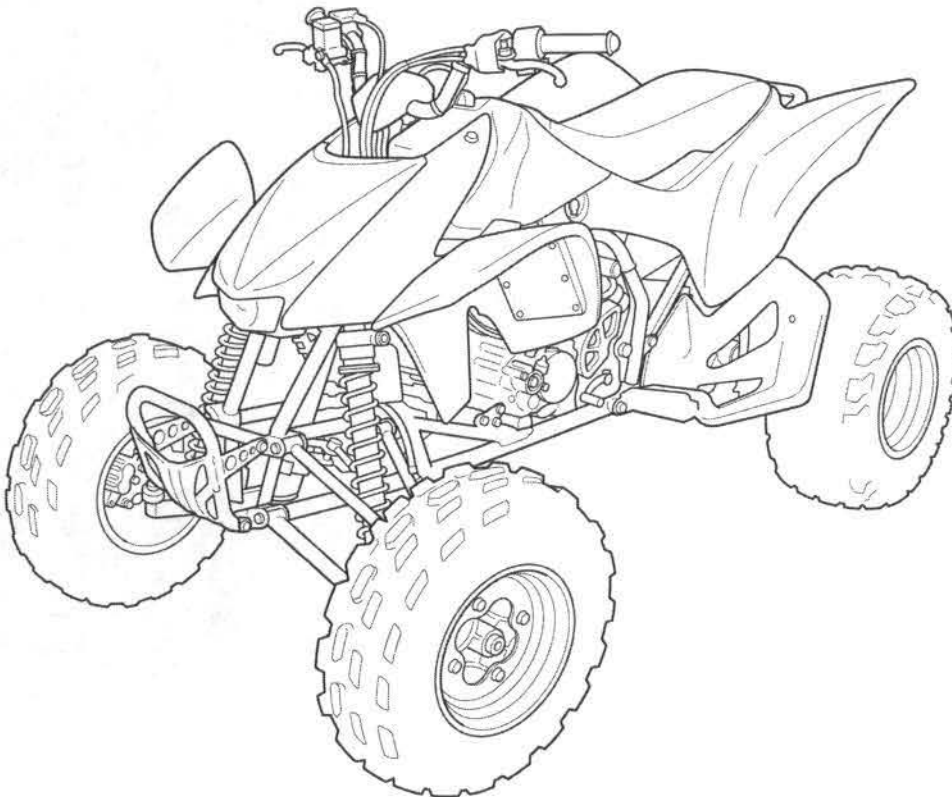
After '05 U.S.A. only:



The color label is attached on the left side of the front frame pipe. When ordering color coded parts, always specify the designated color code.



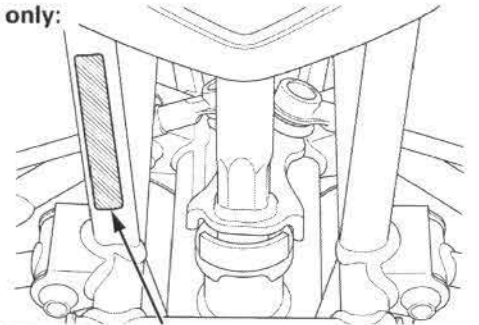
## MODEL IDENTIFICATION (After '07)



## GENERAL INFORMATION

'08: The model identification label (U.S.A. type) or safety certification label (Canada type) is located on the right front frame pipe.

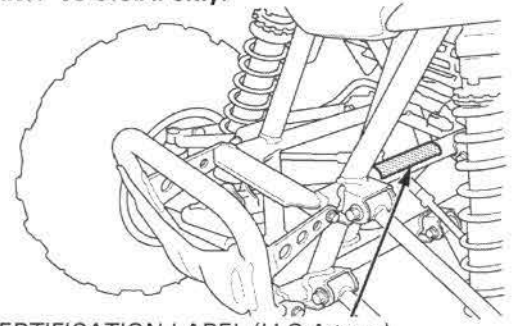
'08 only:



MODEL IDENTIFICATION LABEL (U.S.A type)  
SAFETY CERTIFICATION LABEL (Canada type)

After '08: The certification label (U.S.A. type) is located on attached on the right side of the front frame pipe.

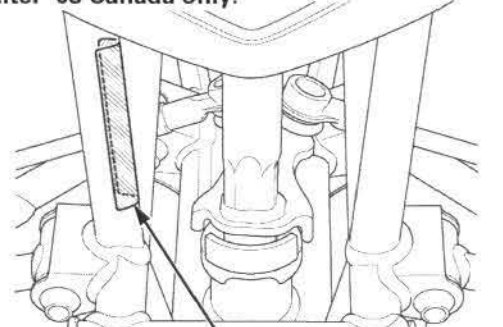
After '08 U.S.A. only:



CERTIFICATION LABEL (U.S.A type)

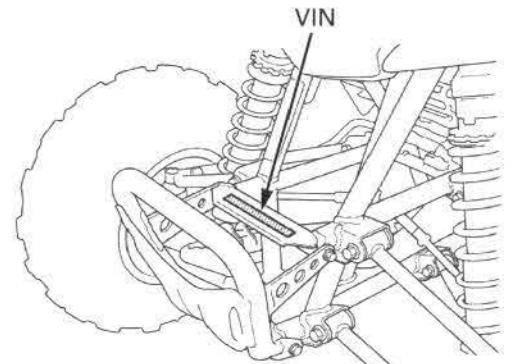
After '08: The safety certification label (Canada type) is located on the right front frame pipe.

After '08 Canada only:



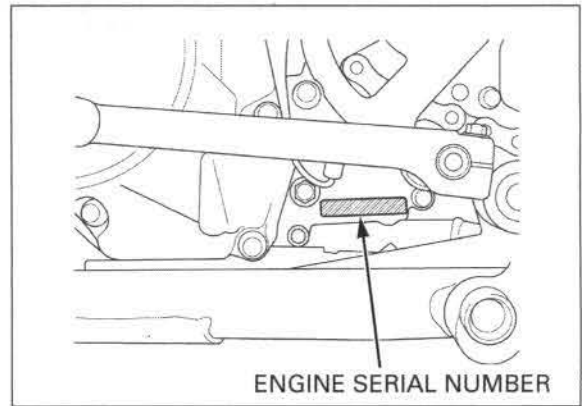
SAFETY CERTIFICATION LABEL (Canada type)

The vehicle identification number (VIN) is stamped on the front side of the frame.

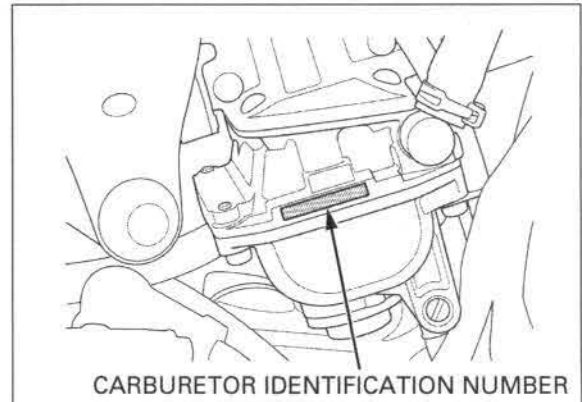


## GENERAL INFORMATION

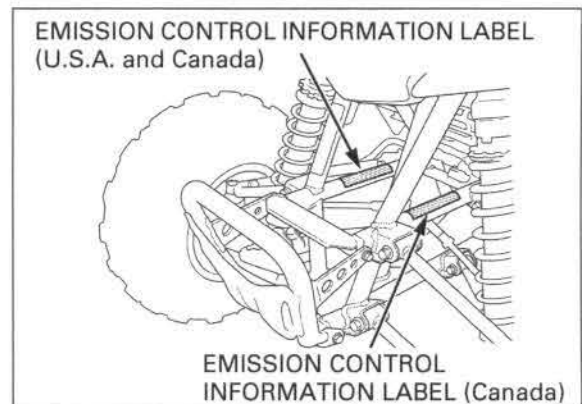
The engine serial number is stamped on the left side of the crankcase.



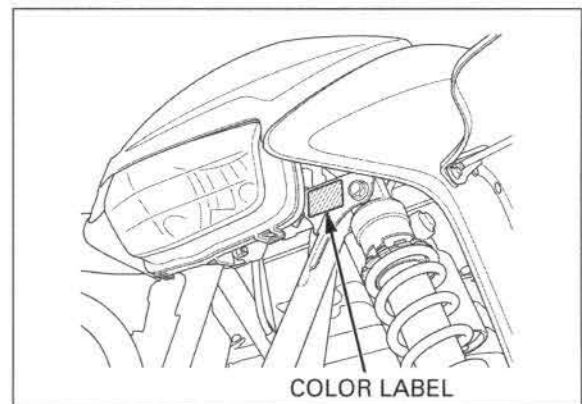
The carburetor identification number is stamped on the left side of the carburetor body.



The Vehicle Emission Control Information Label is attached on the right side (U.S.A.) or both sides (Canada) of front frame pipe.



The color label is attached on the left front side of the upper suspension bracket. When ordering color coded parts, always specify the designated color code.



## GENERAL SPECIFICATIONS ('04 – '05)

|                            | ITEM  | SPECIFICATIONS                          |
|----------------------------|---|---|
| DIMENSIONS                 | Overall length                              | 1,846 mm (72.6 in)                      |
|                            | Overall width                               | 1,177 mm (46.3 in)                      |
|                            | Overall height                              | 1,108 mm (43.6 in)                      |
|                            | Wheelbase                                   | 1,251 mm (49.2 in)                      |
|                            | Front tread                                 | 937 mm (36.8 in)                        |
|                            | Rear tread                                  | 920 mm (36.2 in)                        |
|                            | Seat height                                 | 829 mm (32.6 in)                        |
|                            | Footpeg height                              | 361 mm (14.2 in)                        |
|                            | Ground clearance                            | 114 mm (4.5 in)                         |
|                            | Curb weight                                 | 176 kg (388 lbs)                        |
|                            | Maximum weight capacity                     | 110 kg (243 lbs)                        |
|                            | FRAME                                       | Frame type                              |
| Front suspension           |   | Double wish-bone                        |
| Front wheel travel         |   | 215 mm (8.5 in)                         |
| Rear suspension            |   | Swingarm                                |
| Rear wheel travel          |   | 230 mm (9.1 in)                         |
| Rear damper                |   | Single tube                             |
| Front tire size            |   | AT22 x 7R10 ★ ★                         |
| Rear tire size             |   | AT20 x 10R9 ★ ★                         |
| Front rim size             |   | 10 x 5.5 AT                             |
| Rear rim size              |   | 9 x 8.0 AT                              |
| Front tire brand           |   | DUNLOP KT371                            |
| Rear tire brand            |   | DUNLOP KT335H                           |
| Front brake                |   | Hydraulic disc brake                    |
| Rear brake                 |   | Hydraulic/mechanical disc brake         |
| Caster angle               |   | 5.87°                                   |
| Trail length               |   | 25.58 mm (1.007 in)                     |
| Camber angle               |   | 0°                                      |
| Fuel tank capacity         | 12.0 liters (3.17 US gal, 2.64 Imp gal)     |   |
| Fuel tank reserve capacity | 1.9 liters (0.50 US gal, 0.42 Imp gal)      |   |
| ENGINE                     | Cylinder arrangement                        | Single cylinder, transversely installed |
|                            | Bore and stroke                             | 94 x 64.8 mm (3.70 x 2.55 in)           |
|                            | Displacement                                | 449.7 cm <sup>3</sup> (27.44 cu-in)     |
|                            | Compression ratio                           | 10.5 : 1                                |
|                            | Valve train                                 | Chain drive and OHC with rocker arm     |
|                            | Intake valve opens at 1 mm (0.04 in) lift   | 10° BTDC                                |
|                            | Intake valve closes at 1 mm (0.04 in) lift  | 40° ABDC                                |
|                            | Exhaust valve opens at 1 mm (0.04 in) lift  | 40° BBDC                                |
|                            | Exhaust valve closes at 1 mm (0.04 in) lift | 10° ATDC                                |
|                            | Lubrication system                          | Forced pressure (wet sump)              |
|                            | Oil pump type                               | Trochoid                                |
|                            | Cooling system                              | Liquid cooled                           |
| Air filtration             | Oiled urethane foam                         |   |
| Engine dry weight          | 34.7 kg (76.8 lbs)                          |   |
| CARBURETOR                 | Carburetor type                             | Piston valve                            |
|                            | Throttle bore                               | 42 mm (1.65 in)                         |

## GENERAL INFORMATION

| ITEM        |                         | SPECIFICATIONS                                |
|-------------|-------------------------|---|
| DRIVE TRAIN | Clutch system           | Multi-plate, wet                              |
|             | Clutch operation system | Cable operated                                |
|             | Transmission            | Constant mesh, 5-speed                        |
|             | Primary reduction       | 2.739 (63/23)                                 |
|             | Final reduction         | 2.714 (38/14)                                 |
|             | Gear ratio              | 2.071 (29/14)                                 |
|             |                         | 1.625 (26/16)                                 |
|             |                         | 1.333 (24/18)                                 |
|             |                         | 1.120 (28/25)                                 |
|             |                         | 0.963 (26/27)                                 |
|             | Gearshift pattern       | Left foot operated return system, 1-N-2-3-4-5 |
| ELECTRICAL  | Ignition system         | AC-CDI  |
|             | Charging system         | Triple phase output alternator                |
|             | Regulator/rectifier     | Triple phase full wave rectification          |
|             | Lighting system         | 12 V DC output                                |

## GENERAL SPECIFICATIONS ('06 - '07)

| ITEM                       |  | SPECIFICATIONS                          |                  |
|----------------------------|--|---|------------------|
| DIMENSIONS                 | Overall length                         | 1,862 mm (73.3 in)                      |                  |
|                            | Overall width                          | 1,177 mm (46.3 in)                      |                  |
|                            | Overall height                         | 1,100 mm (43.3 in)                      |                  |
|                            | Wheelbase                              | 1,275 mm (50.2 in)                      |                  |
|                            | Front tread                            | 967 mm (38.1 in)                        |                  |
|                            | Rear tread                             | 920 mm (36.2 in)                        |                  |
|                            | Seat height                            | 833 mm (32.8 in)                        |                  |
|                            | Footpeg height                         | 349 mm (13.7 in)                        |                  |
|                            | Ground clearance                       | 111 mm (4.4 in)                         |                  |
|                            | Curb weight                            | TRX450ER                                | 178 kg (392 lbs) |
|                            |  | TRX450R                                 | 175 kg (386 lbs) |
|                            | Maximum weight capacity                | 110 kg (243 lbs)                        |                  |
|                            | FRAME                                  | Frame type                              | Double cradle    |
| Front suspension           |  | Double wish-bone                        |                  |
| Front wheel travel         |  | 215 mm (8.5 in)                         |                  |
| Rear suspension            |  | Swingarm                                |                  |
| Rear wheel travel          |  | 237 mm (9.3 in)                         |                  |
| Rear damper                |  | Single tube                             |                  |
| Front tire size            |  | AT22 x 7R10 ★ ★                         |                  |
| Rear tire size             |  | AT20 x 10R9 ★ ★                         |                  |
| Front rim size             |  | 10 x 5.5 AT                             |                  |
| Rear rim size              |  | 9 x 8.0 AT                              |                  |
| Front tire brand           |  | DUNLOP KT371                            |                  |
| Rear tire brand            |  | DUNLOP KT335H                           |                  |
| Front brake                |  | Hydraulic disc brake                    |                  |
| Rear brake                 |  | Hydraulic/mechanical disc brake         |                  |
| Caster angle               |  | 5°                                      |                  |
| Trail length               |  | 23 mm (0.9 in)                          |                  |
| Camber angle               |  | - 1.9°                                  |                  |
| Fuel tank capacity         |  | 11.7 liters (3.09 US gal, 2.57 Imp gal) |                  |
| Fuel tank reserve capacity | 2.9 liters (0.77 US gal, 0.64 Imp gal) |   |                  |



## GENERAL INFORMATION

|             | ITEM   | SPECIFICATIONS  |
|-------------|--|---|
| FRAME       | Frame type<br>Front suspension<br>Front wheel travel<br>Rear suspension<br>Rear wheel travel<br>Rear damper<br>Front tire size<br>Rear tire size<br>Front rim size<br>Rear rim size<br>Front tire brand<br>Rear tire brand<br>Front brake<br>Rear brake<br>Caster angle<br>Trail length<br>Camber angle<br>Fuel tank capacity<br>Fuel tank reserve capacity  | Double cradle<br>Double wish-bone<br>215 mm (8.5 in)<br>Swingarm<br>237 mm (9.3 in)<br>Single tube<br>AT21 x 7R10 ★ ★<br>AT20 x 10R9 ★ ★<br>10 x 5.5 AT<br>9 x 8.0 AT<br>DUNLOP KT331H<br>DUNLOP KT355H<br>Hydraulic disc brake<br>Hydraulic/mechanical disc brake<br>5°<br>23 mm (0.9 in)<br>- 1.9°<br>10.3 liters (2.72 US gal, 2.27 Imp gal)<br>3.0 liters (0.79 US gal, 0.66 Imp gal) |
| ENGINE      | Cylinder arrangement<br>Bore and stroke<br>Displacement<br>Compression ratio<br>Valve train<br>Intake valve opens at 1 mm (0.04 in) lift<br>Intake valve closes at 1 mm (0.04 in) lift<br>Exhaust valve opens at 1 mm (0.04 in) lift<br>Exhaust valve closes at 1 mm (0.04 in) lift<br>Lubrication system<br>Oil pump type<br>Cooling system<br>Air filtration<br>Engine dry weight<br>TRX450ER<br>TRX450R | Single cylinder, transversely installed<br>96.0 x 62.1 mm (3.78 x 2.44 in)<br>449.4 cm <sup>3</sup> (27.42 cu-in)<br>12.0 : 1<br>Chain drive and OHC with rocker arm<br>10° BTDC<br>40° ABDC<br>40° BBDC<br>10° ATDC<br>Forced pressure (wet sump)<br>Trochoid<br>Liquid cooled<br>Oiled urethane foam<br>34.2 kg (75.4 lbs)<br>33.4 kg (73.6 lbs)  |
| CARBURETOR  | Carburetor type<br>Venturi diameter  | Piston valve<br>40 mm (1.6 in)  |
| DRIVE TRAIN | Clutch system<br>Clutch operation system<br>Transmission<br>Primary reduction<br>Final reduction<br>Gear ratio<br>1st<br>2nd<br>3rd<br>4th<br>5th<br>Gearshift pattern   | Multi-plate, wet<br>Cable operated<br>Constant mesh, 5-speed<br>2.739 (63/23)<br>2.923 (38/13)<br>2.230 (29/13)<br>1.785 (25/14)<br>1.437 (23/16)<br>1.181 (26/22)<br>0.962 (26/27)<br>Left foot operated return system, 1-N-2-3-4-5  |
| ELECTRICAL  | Ignition system<br>Starting system<br>Charging system<br>Regulator/rectifier<br>Lighting system  | AC-CDI<br>Electric starter motor (TRX450ER)<br>Kickstarter (TRX450R)<br>Triple phase output alternator<br>Triple phase full wave rectification<br>Battery (TRX450ER)<br>12 V DC output (TRX450R)  |

## LUBRICATION SYSTEM SPECIFICATIONS

| ITEM                         |                            |                     | STANDARD   | SERVICE LIMIT |
|------------------------------|----------------------------|---------------------|--|---------------|
| Engine oil capacity          | '04 - '05                  | After draining      | 0.78 liter (0.82 US qt, 0.67 Imp qt)   | -             |
|                              |                            | After filter change | 0.82 liter (0.87 US qt, 0.72 Imp qt)   | -             |
|                              |                            | After disassembly   | 1.20 liter (1.27 US qt, 1.06 Imp qt)   | -             |
|                              | After '05                  | After draining      | 0.65 liter (0.69 US qt, 0.57 Imp qt)   | -             |
|                              |                            | After filter change | 0.69 liter (0.73 US qt, 0.61 Imp qt)   | -             |
|                              |                            | After disassembly   | 0.85 liter (0.90 US qt, 0.75 Imp qt)   | -             |
| Recommended engine oil       |                            |                     | Pro Honda GN4 4-stroke oil (U.S.A. and Canada) or equivalent motor oil<br>API service classification: SG or Higher<br>JASO T 903 standard: MA<br>Viscosity: SAE 10W-30 | -             |
| Transmission oil capacity    | '04 - '05                  | After draining      | 0.55 liter (0.58 US qt, 0.48 Imp qt)   | -             |
|                              |                            | After disassembly   | 0.65 liter (0.69 US qt, 0.57 Imp qt)   | -             |
|                              | After '05                  | After draining      | 0.68 liter (0.72 US qt, 0.60 Imp qt)   | -             |
|                              |                            | After disassembly   | 0.80 liter (0.85 US qt, 0.70 Imp qt)   | -             |
| Recommended transmission oil |                            |                     | Pro Honda GN4 4-stroke oil (U.S.A. and Canada) or equivalent motor oil<br>API service classification: SG or Higher<br>JASO T 903 standard: MA<br>Viscosity: SAE 10W-30 | -             |
| Oil pump rotor               | Tip clearance              |                     | 0.15 (0.006)   | 0.20 (0.008)  |
|                              | Body clearance             |                     | 0.15 - 0.21 (0.006 - 0.008)  | -             |
|                              | Side clearance ('04 - '05) |                     | 0.05 - 0.13 (0.002 - 0.005)  | -             |
|                              | Side clearance (After '05) |                     | 0.04 - 0.13 (0.002 - 0.005)  | -             |

## FUEL SYSTEM SPECIFICATIONS ('04 - '05)

| ITEM                             | SPECIFICATIONS           |
|----------------------------------|--------------------------|
| Carburetor identification number | QA16A                    |
| Main jet                         | #118                     |
| Slow jet                         | #48                      |
| Pilot screw opening              | See page 7-23            |
| Float level                      | 15.9 mm (0.63 in)        |
| Idle speed                       | 1,600 ± 100 rpm          |
| Throttle grip freeplay           | 3 - 8 mm (1/8 - 5/16 in) |
| Hot starter lever freeplay       | 2 - 3 mm (1/16 - 1/8 in) |

## GENERAL INFORMATION

### FUEL SYSTEM SPECIFICATIONS (After '05)

| ITEM                                 |           | SPECIFICATIONS            |        |
|--------------------------------------|-----------|---------------------------|--------|
| Carburetor identification number     | '06 model | TRX450ER                  | FCR10A |
|                                      |           | TRX450R                   | FCR11A |
|                                      | '07 model | TRX450ER                  | FCR10B |
|                                      |           | TRX450R                   | FCR11B |
|                                      | After '07 | TRX450ER                  | FCR10C |
| TRX450R                              |           | FCR11C                    |        |
| Main jet                             | '06 – '07 | #120                      |        |
|                                      | After '07 | #122                      |        |
| Slow jet                             |           | #42                       |        |
| Starter jet                          |           | #75                       |        |
| Jet needle                           | '06 model | NHHU                      |        |
|                                      | After '06 | NJBU                      |        |
| Pilot screw initial opening          | '06 – '07 | 2-3/8 turns out           |        |
|                                      | After '07 | 2 turns out               |        |
| Float level                          |           | 8.0 mm (0.31 in)          |        |
| Idle speed                           |           | 1,700 ± 100 rpm           |        |
| Throttle grip freeplay               |           | 5 – 10 mm (7/32 – 3/8 in) |        |
| Hot starter lever freeplay (TRX450R) |           | 2 – 3 mm (1/16 – 1/8 in)  |        |

### COOLING SYSTEM SPECIFICATIONS

| ITEM                           |                     | SPECIFICATIONS  |
|--------------------------------|---------------------|---|
| Coolant capacity               | Radiator and engine | 1.5 liters (1.6 US qt, 1.3 Imp qt)  |
|                                | Reserve tank        | 0.34 liter (0.36 US qt, 0.30 Imp qt)  |
| Radiator cap relief pressure   |                     | 108 – 137 kPa (1.1 – 1.4 kgf/cm <sup>2</sup> , 16 – 20 psi)   |
| Thermostat                     | Begin to open       | 80 – 84°C (176 – 183°F)   |
|                                | Fully open          | 95°C (203°F)  |
|                                | Valve lift          | 8 mm (0.3 in) minimum   |
| Recommended antifreeze         |                     | Pro Honda HP Coolant or an equivalent high quality ethylene glycol antifreeze containing silicate-free corrosion inhibitors |
| Standard coolant concentration |                     | 1:1 mixture with distilled water  |

## CYLINDER HEAD/VALVE/CAMSHAFT SPECIFICATIONS ('04 - '05)

Unit: mm (in)

| ITEM                   |  |                           | STANDARD   | SERVICE LIMIT |
|------------------------|--|---------------------------|--|---------------|
| Cylinder compression   |  |                           | 745 kPa (7.6 kgf/cm <sup>2</sup> , 108 psi)                            | -             |
| Valve clearance        |  | IN                        | 0.16 ± 0.03 (0.006 ± 0.001)  | -             |
|                        |  | EX                        | 0.28 ± 0.03 (0.011 ± 0.001)  | -             |
| Decompressor clearance |  |                           | Right side exhaust valve clearance + 0.15 ± 0.02 mm (0.006 ± 0.001 in) | -             |
| Valve, valve guide     | Valve stem O.D.                            | IN                        | 5.475 - 5.490 (0.2156 - 0.2161)  | 5.46 (0.215)  |
|                        |  | EX                        | 5.455 - 5.470 (0.2148 - 0.2154)  | 5.44 (0.214)  |
|                        | Valve guide I.D.                           | IN/EX                     | 5.500 - 5.512 (0.2165 - 0.2170)  | 5.52 (0.217)  |
|                        | Stem-to-guide clearance                    | IN                        | 0.010 - 0.037 (0.0004 - 0.0015)  | 0.12 (0.005)  |
|                        |  | EX                        | 0.030 - 0.057 (0.0012 - 0.0022)  | 0.14 (0.006)  |
|                        | Valve guide projection above cylinder head | IN                        | 16.8 - 17.2 (0.66 - 0.68)  | -             |
|                        |  | EX                        | 17.9 - 18.3 (0.70 - 0.72)  | -             |
| Valve seat width       | IN   | 1.1 - 1.3 (0.043 - 0.051) | 2.0 (0.08)   |               |
|                        | EX   | 1.3 - 1.5 (0.051 - 0.059) | 2.0 (0.08)   |               |
| Valve spring           | Free length                                | IN                        | 40.68 (1.602)  | 39.7 (1.56)   |
|                        |  | EX                        | 43.16 (1.699)  | 42.2 (1.66)   |
| Exhaust rocker arm     | Arm I.D.                                   |                           | 12.000 - 12.018 (0.4724 - 0.4731)                                      | 12.05 (0.474) |
|                        | Shaft O.D.                                 |                           | 11.967 - 11.975 (0.4711 - 0.4715)                                      | 11.92 (0.469) |
|                        | Arm-to-shaft clearance                     |                           | 0.025 - 0.051 (0.0010 - 0.0020)  | 0.10 (0.004)  |
| Camshaft               | Cam lobe height                            | IN                        | 36.630 - 36.790 (1.4421 - 1.4484)                                      | 36.48 (1.436) |
|                        |  | EX                        | 34.753 - 34.913 (1.3682 - 1.3745)                                      | 34.60 (1.362) |
| Valve lifter O.D.      |  |                           | 25.978 - 25.993 (1.0228 - 1.0233)                                      | 25.97 (1.022) |
| Valve lifter bore I.D. |  |                           | 26.010 - 26.026 (1.0240 - 1.0246)                                      | 26.04 (1.025) |
| Cylinder head warpage  |  |                           | -  | 0.05 (0.002)  |

## CYLINDER HEAD/VALVE/CAMSHAFT SPECIFICATIONS (After '05)

Unit: mm (in)

| ITEM  |  |                           | STANDARD   | SERVICE LIMIT  |
|---|--|---------------------------|--|----------------|
| Cylinder compression                                    | TRX450ER                                   | '06 - '07                 | 343 - 382 kPa (3.5 - 3.9 kgf/cm <sup>2</sup> , 50 - 56 psi)            | -              |
|   |  | After '07                 | 343 - 441 kPa (3.5 - 4.5 kgf/cm <sup>2</sup> , 50 - 64 psi)            | -              |
|   | TRX450R                                    |                           | 961 - 1000 kPa (9.8 - 10.2 kgf/cm <sup>2</sup> , 139 - 145 psi)        | -              |
| Valve clearance   |  | IN                        | 0.16 ± 0.03 (0.006 ± 0.001)  | -              |
|   |  | EX                        | 0.28 ± 0.03 (0.011 ± 0.001)  | -              |
| Decompressor clearance (TRX450R and '06 - '07 TRX450ER) |  |                           | Right side exhaust valve clearance + 0.25 ± 0.02 mm (0.010 ± 0.001 in) | -              |
| Valve, valve guide                                      | Valve stem O.D.                            | IN                        | 5.475 - 5.490 (0.2156 - 0.2161)  | 5.46 (0.215)   |
|   |  | EX                        | 4.965 - 4.980 (0.1955 - 0.1961)  | 4.96 (0.195)   |
|   | Valve guide I.D.                           | IN                        | 5.500 - 5.512 (0.2165 - 0.2170)  | 5.52 (0.217)   |
|   |  | EX                        | 5.000 - 5.012 (0.1969 - 0.1973)  | 5.052 (0.1989) |
|   | Stem-to-guide clearance                    | IN                        | 0.010 - 0.037 (0.0004 - 0.0015)  | 0.12 (0.005)   |
|   |  | EX                        | 0.020 - 0.047 (0.0008 - 0.0019)  | 0.13 (0.005)   |
|   | Valve guide projection above cylinder head | IN                        | 16.1 - 16.3 (0.63 - 0.64)  | -              |
| EX  |  | 17.9 - 18.1 (0.70 - 0.71) | -  |                |
| Valve seat width  | IN   | 1.1 - 1.3 (0.043 - 0.051) | 2.0 (0.08)   |                |
|   | EX   | 1.3 - 1.5 (0.051 - 0.059) | 2.0 (0.08)   |                |
| Valve spring  | Free length                                | IN                        | 40.68 (1.602)  | 39.7 (1.56)    |
|   |  | EX                        | 42.82 (1.686)  | 42.2 (1.66)    |
| Exhaust rocker arm                                      | Arm I.D.                                   |                           | 12.000 - 12.018 (0.4724 - 0.4731)                                      | 12.05 (0.474)  |
|   | Shaft O.D.                                 |                           | 11.967 - 11.975 (0.4711 - 0.4715)                                      | 11.92 (0.469)  |
|   | Arm-to-shaft clearance                     |                           | 0.025 - 0.051 (0.0010 - 0.0020)  | 0.10 (0.004)   |
| Camshaft  | Cam lobe height                            | IN                        | 35.040 - 35.280 (1.3795 - 1.3890)                                      | 34.89 (1.374)  |
|   |  | EX                        | 34.214 - 34.454 (1.3470 - 1.3565)                                      | 34.06 (1.341)  |
| Valve lifter O.D.                                       |  |                           | 25.978 - 25.993 (1.0228 - 1.0233)                                      | 25.97 (1.022)  |
| Valve lifter bore I.D.                                  |  |                           | 26.010 - 26.026 (1.0240 - 1.0246)                                      | 26.04 (1.025)  |
| Cylinder head warpage                                   |  |                           | -  | 0.05 (0.002)   |

## GENERAL INFORMATION

### CYLINDER/PISTON SPECIFICATIONS ('04 – '05)

Unit: mm (in)

| ITEM                                   |                                      | STANDARD                          | SERVICE LIMIT                   |                |
|--|--------------------------------------|-----------------------------------|---------------------------------|----------------|
| Cylinder                               | I.D.                                 | 94.000 – 94.015 (3.7008 – 3.7014) | 94.05 (3.703)                   |                |
|  | Out-of-round                         | –                                 | 0.05 (0.002)                    |                |
|  | Taper                                | –                                 | 0.05 (0.002)                    |                |
|  | Warpage                              | –                                 | 0.05 (0.002)                    |                |
| Piston,<br>piston pin,<br>piston ring  | Piston O.D. at 20 (0.8) from bottom  | 93.960 – 93.990 (3.6992 – 3.7004) | 93.86 (3.695)                   |                |
|  | Piston pin hole I.D.                 | 21.002 – 21.008 (0.8268 – 0.8271) | 21.03 (0.828)                   |                |
|  | Piston pin O.D.                      | 20.994 – 21.000 (0.8265 – 0.8268) | 20.98 (0.826)                   |                |
|  | Piston-to-piston pin clearance       | 0.002 – 0.014 (0.0001 – 0.0006)   | 0.04 (0.002)                    |                |
|  | Piston ring end gap                  | Top                               | 0.20 – 0.35 (0.008 – 0.014)     | 0.50 (0.020)   |
|  |                                      | Second                            | 0.35 – 0.50 (0.014 – 0.020)     | 0.65 (0.026)   |
|  |                                      | Oil (side rail)                   | 0.20 – 0.70 (0.008 – 0.028)     | 0.9 (0.04)     |
|  | Piston ring-to-ring groove clearance | Top                               | 0.065 – 0.100 (0.0026 – 0.0039) | 0.115 (0.0045) |
|  |                                      | Second                            | 0.030 – 0.060 (0.0012 – 0.0024) | 0.075 (0.0030) |
| Cylinder-to-piston clearance           |                                      | 0.010 – 0.055 (0.0004 – 0.0022)   | 0.19 (0.007)                    |                |
| Connecting rod small end I.D.          |                                      | 21.016 – 21.034 (0.8274 – 0.8281) | 21.04 (0.828)                   |                |
| Connecting rod-to-piston pin clearance |                                      | 0.016 – 0.040 (0.0006 – 0.0016)   | 0.06 (0.002)                    |                |

### CYLINDER/PISTON SPECIFICATIONS (After '05)

Unit: mm (in)

| ITEM                                   |                                      | STANDARD                          | SERVICE LIMIT                   |                |
|--|--------------------------------------|-----------------------------------|---------------------------------|----------------|
| Cylinder                               | I.D.                                 | 96.000 – 96.015 (3.7795 – 3.7801) | 96.05 (3.781)                   |                |
|  | Out-of-round                         | –                                 | 0.05 (0.002)                    |                |
|  | Taper                                | –                                 | 0.05 (0.002)                    |                |
|  | Warpage                              | –                                 | 0.05 (0.002)                    |                |
| Piston,<br>piston pin,<br>piston ring  | Piston O.D. at 10 (0.4) from bottom  | 95.970 – 95.980 (3.7783 – 3.7787) | 95.87 (3.774)                   |                |
|  | Piston pin hole I.D.                 | 19.002 – 19.008 (0.7481 – 0.7483) | 19.03 (0.749)                   |                |
|  | Piston pin O.D.                      | 18.994 – 19.000 (0.7478 – 0.7480) | 18.98 (0.747)                   |                |
|  | Piston-to-piston pin clearance       | 0.002 – 0.014 (0.0001 – 0.0006)   | 0.04 (0.002)                    |                |
|  | Piston ring end gap                  | Top                               | 0.25 – 0.31 (0.010 – 0.012)     | 0.45 (0.018)   |
|  |                                      | Second                            | 0.23 – 0.33 (0.009 – 0.013)     | 0.48 (0.019)   |
|  |                                      | Oil (side rail)                   | 0.20 – 0.70 (0.008 – 0.028)     | 0.90 (0.035)   |
|  | Piston ring-to-ring groove clearance | Top                               | 0.065 – 0.100 (0.0026 – 0.0039) | 0.115 (0.0045) |
|  |                                      | Second                            | 0.065 – 0.100 (0.0026 – 0.0039) | 0.115 (0.0045) |
| Cylinder-to-piston clearance           |                                      | 0.020 – 0.045 (0.0008 – 0.0018)   | 0.18 (0.007)                    |                |
| Connecting rod small end I.D.          |                                      | 19.016 – 19.034 (0.7487 – 0.7494) | 19.04 (0.750)                   |                |
| Connecting rod-to-piston pin clearance |                                      | 0.016 – 0.040 (0.0006 – 0.0016)   | 0.06 (0.002)                    |                |

### CLUTCH/KICKSTARTER/GEARSHIFT LINKAGE SPECIFICATIONS ('04 – '05)

Unit: mm (in)

| ITEM                                       |                    | STANDARD                          | SERVICE LIMIT                     |               |
|--|--------------------|-----------------------------------|-----------------------------------|---------------|
| Clutch                                     | Lever freeplay     | 10 – 20 (3/8 – 3/4)               | –                                 |               |
|  | Spring free length | 45.7 (1.80)                       | 44.7 (1.76)                       |               |
|  | Disc A thickness   | 2.92 – 3.08 (0.115 – 0.121)       | 2.85 (0.112)                      |               |
|  | Disc B thickness   | 3.22 – 3.38 (0.127 – 0.133)       | 3.15 (0.124)                      |               |
|  | Plate warpage      | –                                 | 0.15 (0.006)                      |               |
| Kickstarter                                | Pinion gear I.D.   | 22.007 – 22.028 (0.8664 – 0.8672) | 22.05 (0.868)                     |               |
|  | Spindle O.D.       | 21.959 – 21.980 (0.8645 – 0.8654) | 21.95 (0.864)                     |               |
|  | Idle gear I.D.     | 21.020 – 21.041 (0.8276 – 0.8284) | 21.07 (0.830)                     |               |
|  | Idle gear bushing  | I.D.                              | 17.000 – 17.018 (0.6693 – 0.6700) | 17.04 (0.671) |
|  |                    | O.D.                              | 20.979 – 21.000 (0.8259 – 0.8268) | 20.96 (0.825) |
| Countershaft O.D. at kickstarter idle gear |                    | 16.966 – 16.984 (0.6680 – 0.6687) | 16.95 (0.667)                     |               |

## CLUTCH/STARTER CLUTCH/KICKSTARTER/GEARSHIFT LINKAGE SPECIFICATIONS (After '05)

Unit: mm (in)

| ITEM   |                    | STANDARD                          | SERVICE LIMIT                     |               |
|--|--------------------|-----------------------------------|-----------------------------------|---------------|
| Clutch   | Lever freeplay     | 10 – 20 (3/8 – 3/4)               | –                                 |               |
|  | Spring free length | 45.7 (1.80)                       | 44.7 (1.76)                       |               |
|  | Disc A thickness   | 2.92 – 3.08 (0.115 – 0.121)       | 2.85 (0.112)                      |               |
|  | Disc B thickness   | 3.22 – 3.38 (0.127 – 0.133)       | 3.15 (0.124)                      |               |
|  | Plate warpage      | –                                 | 0.15 (0.006)                      |               |
| Driven gear boss (TRX450ER)                          | I.D.               | 36.009 – 36.034 (1.4177 – 1.4189) | 36.034 (1.4189)                   |               |
|  | O.D.               | 45.660 – 45.673 (1.7976 – 1.7981) | 45.660 (1.7976)                   |               |
| Reduction gear A I.D. (TRX450ER)                     |                    | 12.010 – 12.050 (0.4728 – 0.4744) | 12.050 (0.4744)                   |               |
| Reduction gear B I.D. (TRX450ER)                     |                    | 10.045 – 10.085 (0.3955 – 0.3970) | 10.085 (0.3970)                   |               |
| Idle gear I.D. (TRX450ER)                            |                    | 12.010 – 12.050 (0.4728 – 0.4744) | 12.050 (0.4744)                   |               |
| Gear holder shafts O.D. (TRX450ER)                   |                    | 11.989 – 12.000 (0.4720 – 0.4724) | 11.989 (0.4720)                   |               |
| Reduction gear shaft O.D. (TRX450ER)                 |                    | 9.980 – 9.995 (0.3929 – 0.3935)   | 9.980 (0.3929)                    |               |
| Kickstarter (TRX450R)                                | Pinion gear I.D.   | 22.007 – 22.028 (0.8664 – 0.8672) | 22.05 (0.868)                     |               |
|  | Spindle O.D.       | 21.959 – 21.980 (0.8645 – 0.8654) | 21.95 (0.864)                     |               |
|  | Idle gear I.D.     | 21.020 – 21.041 (0.8276 – 0.8284) | 21.07 (0.830)                     |               |
|  | Idle gear bushing  | I.D.                              | 17.000 – 17.018 (0.6693 – 0.6700) | 17.04 (0.671) |
|  |                    | O.D.                              | 20.979 – 21.000 (0.8259 – 0.8268) | 20.96 (0.825) |
| Countershaft O.D. at kickstarter idle gear (TRX450R) |                    | 16.966 – 16.984 (0.6680 – 0.6687) | 16.95 (0.667)                     |               |

## CRANKCASE/TRANSMISSION/CRANKSHAFT SPECIFICATIONS ('04 – '05)

Unit: mm (in)

| ITEM              |                          | STANDARD                          | SERVICE LIMIT                     |
|-------------------|--------------------------|-----------------------------------|-----------------------------------|
| Shift fork, shaft | Fork I.D.                | Left, right                       | 12.003 – 12.024 (0.4726 – 0.4733) |
|                   |                          | Center                            | 11.003 – 11.024 (0.4332 – 0.4340) |
|                   | Shaft O.D.               | Left/right                        | 11.983 – 11.994 (0.4718 – 0.4722) |
|                   |                          | Center                            | 10.983 – 10.994 (0.4324 – 0.4328) |
|                   | Fork claw thickness      |                                   | 4.93 – 5.00 (0.194 – 0.197)       |
| Transmission      | Gear I.D.                | M4                                | 28.007 – 28.028 (1.1026 – 1.1035) |
|                   |                          | M5                                | 28.020 – 28.033 (1.1031 – 1.1037) |
|                   |                          | C1                                | 22.020 – 22.041 (0.8669 – 0.8678) |
|                   |                          | C2                                | 30.020 – 30.041 (1.1819 – 1.1827) |
|                   |                          | C3                                | 28.020 – 28.041 (1.1031 – 1.1040) |
|                   | Gear bushing O.D.        | M4, M5                            | 27.959 – 27.980 (1.1007 – 1.1016) |
|                   |                          | C1                                | 21.959 – 21.980 (0.8645 – 0.8654) |
|                   |                          | C2                                | 29.959 – 29.980 (1.1795 – 1.1803) |
|                   |                          | C3                                | 27.959 – 27.980 (1.1007 – 1.1016) |
|                   | Gear bushing I.D.        | M5                                | 25.020 – 25.041 (0.9850 – 0.9859) |
|                   |                          | C1                                | 19.020 – 19.041 (0.7488 – 0.7496) |
|                   |                          | C2                                | 27.020 – 27.041 (1.0638 – 1.0646) |
|                   |                          | C3                                | 25.020 – 25.041 (0.9850 – 0.9859) |
|                   | Mainshaft O.D.           | at M5                             | 24.967 – 24.980 (0.9830 – 0.9835) |
| Countershaft O.D. | at C1                    | 18.959 – 18.980 (0.7464 – 0.7472) |                                   |
|                   | at C2                    | 26.959 – 26.980 (1.0614 – 1.0622) |                                   |
|                   | at C3                    | 24.959 – 24.980 (0.9826 – 0.9835) |                                   |
| Crankshaft        | Runout                   | Left                              | –                                 |
|                   |                          | Right                             | –                                 |
|                   | Big end side clearance   |                                   | 0.05 – 0.60 (0.002 – 0.024)       |
|                   | Big end radial clearance |                                   | 0.006 – 0.018 (0.0002 – 0.0007)   |



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## GENERAL INFORMATION

# CRANKCASE/TRANSMISSION/CRANKSHAFT SPECIFICATIONS (After '05)

Unit: mm (in)

| ITEM                |                          |                                   | STANDARD                          | SERVICE LIMIT   |
|---------------------|--------------------------|-----------------------------------|-----------------------------------|-----------------|
| Shift fork, shaft   | Fork I.D.                | Left                              | 12.035 – 12.056 (0.4738 – 0.4746) | 12.07 (0.475)   |
|                     |                          | Right                             | 12.003 – 12.024 (0.4726 – 0.4734) | 12.04 (0.474)   |
|                     |                          | Center                            | 11.003 – 11.024 (0.4332 – 0.4340) | 11.04 (0.435)   |
|                     | Shaft O.D.               | Left/right                        | 11.966 – 11.984 (0.4711 – 0.4718) | 11.950 (0.4700) |
|                     |                          | Center                            | 10.969 – 10.980 (0.4319 – 0.4323) | 10.969 (0.4319) |
| Fork claw thickness |                          |                                   | 4.93 – 5.00 (0.194 – 0.197)       | 4.8 (0.19)      |
| Transmission        | Gear I.D.                | M4                                | 28.007 – 28.028 (1.1026 – 1.1035) | 28.05 (1.104)   |
|                     |                          | M5                                | 28.020 – 28.033 (1.1031 – 1.1037) | 28.06 (1.105)   |
|                     |                          | C1                                | 22.020 – 22.041 (0.8669 – 0.8678) | 22.07 (0.869)   |
|                     |                          | C2                                | 30.020 – 30.041 (1.1819 – 1.1827) | 30.07 (1.184)   |
|                     |                          | C3                                | 28.020 – 28.041 (1.1031 – 1.1040) | 28.07 (1.105)   |
|                     | Gear bushing O.D.        | M4, M5                            | 27.959 – 27.980 (1.1007 – 1.1016) | 27.94 (1.100)   |
|                     |                          | C1                                | 21.959 – 21.980 (0.8645 – 0.8654) | 21.94 (0.864)   |
|                     |                          | C2                                | 29.959 – 29.980 (1.1795 – 1.1803) | 29.94 (1.179)   |
|                     |                          | C3                                | 27.959 – 27.980 (1.1007 – 1.1016) | 27.94 (1.100)   |
|                     | Gear bushing I.D.        | M5                                | 25.020 – 25.041 (0.9850 – 0.9859) | 25.06 (0.987)   |
|                     |                          | C1                                | 19.020 – 19.041 (0.7488 – 0.7496) | 19.06 (0.750)   |
|                     |                          | C2                                | 27.020 – 27.041 (1.0638 – 1.0646) | 27.06 (1.065)   |
|                     |                          | C3                                | 25.020 – 25.041 (0.9850 – 0.9859) | 25.06 (0.987)   |
|                     | Mainshaft O.D.           | at M5                             | 24.967 – 24.980 (0.9830 – 0.9835) | 24.95 (0.982)   |
|                     | Countershaft O.D.        | at C1                             | 18.959 – 18.980 (0.7464 – 0.7472) | 18.94 (0.746)   |
| at C2               |                          | 26.959 – 26.980 (1.0614 – 1.0622) | 26.94 (1.061)                     |                 |
| at C3               |                          | 24.959 – 24.980 (0.9826 – 0.9835) | 24.94 (0.982)                     |                 |
| Crankshaft          | Runout                   | Left                              | –                                 | 0.05 (0.002)    |
|                     |                          | Right                             | –                                 | 0.03 (0.001)    |
|                     | Big end side clearance   |                                   | 0.30 – 0.75 (0.012 – 0.030)       | 0.75 (0.030)    |
|                     | Big end radial clearance |                                   | 0.006 – 0.018 (0.0002 – 0.0007)   | 0.05 (0.002)    |

## FRONT WHEEL/SUSPENSION/STEERING SPECIFICATIONS

Unit: mm (in)

| ITEM   |           |  | STANDARD                                       | SERVICE LIMIT |
|--|-----------|--|--|---------------|
| Minimum tire tread depth                       |           |  | –  | 4.0 (0.16)    |
| Cold tire pressure                             | '04 – '05 | Standard                                       | 27.5 kPa (0.275 kgf/cm <sup>2</sup> , 4.0 psi) | –             |
|  |           | Minimum  | 23.5 kPa (0.235 kgf/cm <sup>2</sup> , 3.4psi)  | –             |
|  |           | Maximum  | 31.5 kPa (0.315 kgf/cm <sup>2</sup> , 4.6 psi) | –             |
|  | '06 – '07 | Standard                                       | 27.5 kPa (0.275 kgf/cm <sup>2</sup> , 4.0 psi) | –             |
|  |           | Minimum  | 25.0 kPa (0.250 kgf/cm <sup>2</sup> , 3.6psi)  | –             |
|  |           | Maximum  | 30.0 kPa (0.300 kgf/cm <sup>2</sup> , 4.4 psi) | –             |
| After '07                                      |           | 27.5 kPa (0.275 kgf/cm <sup>2</sup> , 4.0 psi) | –  |               |
| Compression damping adjuster standard position | '04 – '05 | 1-7/8 turns out from full in                   | –  |               |
|  | '06 – '07 | 1/2 ± 1/8 turns out from full in               | –  |               |
|  | After '07 | 1-7/8 ± 1/8 turns out from full in             | –  |               |
| Rebound damping adjuster standard position     | '04 – '05 | 1-3/8 turns out from full in                   | –  |               |
|  | '06 – '07 | 7/8 ± 1/8 turns out from full in               | –  |               |
|  | After '07 | 1 ± 1/8 turns out from full in                 | –  |               |
| Tie-rod distance between the ball joints       | '04 – '05 | 409.5 (16.12)                                  | –  |               |
|  | After '05 | 398.0 (15.67)                                  | –  |               |
| Toe  | '04 – '05 | Toe-in: 11.4 ± 15 (0.45 ± 0.6)                 | –  |               |
|  | After '05 | Toe-in: 14 ± 15 (0.6 ± 0.6)                    | –  |               |

## REAR WHEEL/SUSPENSION SPECIFICATIONS

Unit: mm (in)

| ITEM   |                       | STANDARD                                       |  | SERVICE LIMIT |
|--|-----------------------|--|--|---------------|
| Minimum tire tread depth                       |                       | -  |  | 4.0 (0.16)    |
| Cold tire pressure                             | '04 - '05             | Standard                                       | 32.5 kPa (0.325 kgf/cm <sup>2</sup> , 4.7 psi) | -             |
|  |                       | Minimum  | 28.5 kPa (0.285 kgf/cm <sup>2</sup> , 4.1 psi) | -             |
|  |                       | Maximum  | 36.5 kPa (0.365 kgf/cm <sup>2</sup> , 5.3 psi) | -             |
|  | '06 - '07             | Standard                                       | 32.5 kPa (0.325 kgf/cm <sup>2</sup> , 4.7 psi) | -             |
|  |                       | Minimum  | 30.0 kPa (0.300 kgf/cm <sup>2</sup> , 4.3 psi) | -             |
|  |                       | Maximum  | 35.0 kPa (0.350 kgf/cm <sup>2</sup> , 5.1 psi) | -             |
| After '07                                      |                       | 32.5 kPa (0.325 kgf/cm <sup>2</sup> , 4.7 psi) |  | -             |
| Axle runout                                    |                       | -  |  | 3.0 (0.12)    |
| Drive chain                                    | Slack                 |  | 25 - 35 (1 - 1-7/16)                           | -             |
|  | Size/link ('04 - '05) | DID  | DID520V6/94                                    | -             |
|  |                       | RK   | RK520SMOZ10S/94                                | -             |
|  | Size/link ('06 - '07) | DID  | DID520V6/96                                    | -             |
|  |                       | RK   | RK520SMOZ10S/96                                | -             |
|  | Size/link (After '07) | DID  | DID520V/96                                     | -             |
|  |                       | RK   | RK520SMOZ10S/96                                | -             |
| Compression damping adjuster standard position |                       | '04 - '05                                      | 26 ± 1 clicks out from full in                 | -             |
|  |                       | '06 - '07                                      | 8 ± 1 clicks out from full in                  | -             |
|  |                       | After '07                                      | 26 ± 1 clicks out from full in                 | -             |
| Rebound damping adjuster standard position     |                       | '04 - '05                                      | 1-3/4 turns out from full in                   | -             |
|  |                       | '06 - '07                                      | 1-1/8 ± 1/8 turns out from full in             | -             |
|  |                       | After '07                                      | 1-3/4 ± 1/8 turns out from full in             | -             |

## HYDRAULIC BRAKE SPECIFICATIONS

Unit: mm (in)

| ITEM                    |                       | STANDARD                |  | SERVICE LIMIT |
|-------------------------|-----------------------|-------------------------|--|---------------|
| Recommended brake fluid |                       | DOT 4 brake fluid       |  | -             |
| Front brake             | Disc thickness        | 2.8 - 3.2 (0.11 - 0.13) |  | 2.5 (0.10)    |
|                         | Disc runout           | -                       |  | 0.30 (0.012)  |
|                         | Master cylinder I.D.  | 12.7 (0.55)             |  | -             |
|                         | Caliper cylinder I.D. | 25.4 (1.00)             |  | -             |
| Rear brake              | Disc thickness        | 3.8 - 4.2 (0.15 - 0.17) |  | 3.5 (0.14)    |
|                         | Disc runout           | -                       |  | 0.30 (0.012)  |
|                         | Master cylinder I.D.  | 12.7 (0.55)             |  | -             |
|                         | Caliper cylinder I.D. | 32.0 (1.26)             |  | -             |

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