# IHOHAIDA SERVICE MANUAL



**85-87** 

**TRX 250** 

FOURTRAX 250

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# **IMPORTANT SAFETY NOTICE**

WARNING Indicates a strong possibility of severe personal injury or loss of life if instructions are not followed.

CAUTION: Indicates a possibility of personal injury or equipment damage if instructions are not followed.

NOTE: Gives helpful information.

Detailed descriptions of standard workshop procedures, safety principles and service operations are not included. It is important to note that this manual contains some warnings and cautions against some specific service methods which could cause **PERSONAL INJURY** to service personnel or could damage a vehicle or render it unsafe. Please understand that those warnings could not cover all conceivable ways in which service, whether or not recommended by Honda might be done or of the possibly hazardous consequences of each conceivable way, nor could Honda investigate all such ways. Anyone using service procedures or tools, whether or not recommended by Honda *must satisfy himself thoroughly* that neither personal safety nor vehicle safety will be jeopardized by the service method or tools selected.

# HOW TO USE THIS MANUAL

Sections 1 through 3 apply to the whole Four Trax, while sections 4 through 18 describe parts of the Four Trax, grouped according to location.

Find the section you want on this page, then turn to the table of contents on page 1 of that section.

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

If you don't know what the source of a problem is, refer to section 19, Troubleshooting.

#### CONTENTS

	T		The state of the state of
		GENERAL INFORMATION	1
		LUBRICATION	2
		MAINTENANCE	3
		FUEL SYSTEM	4
		ENGINE REMOVAL/INSTALLATION	5
	ш	CYLINDER HEAD/VALVES	6
	ENGINE	CYLINDER/PISTON	7
		CLUTCH/OIL PUMP/KICK STARTER	8
		ALTERNATOR/STARTER CLUTCH/ GEARSHIFT LINKAGE	9
		CRANKCASE/CRANKSHAFT/ TRANSMISSION	10
100		FRONT WHEEL/SUSPENSION/STEERING	11
	SISS	BRAKES	12
	CHASSIS	REAR WHEEL/SUSPENSION/FINAL DRIVE	13
		CARRIERS/FENDERS/EXHAUST MUFFLER	14
		IGNITION SYSTEM	15
	ELECTRICAL	BATTERY/CHARGING SYSTEM	16
	ECT	STARTER SYSTEM	17
	П	LIGHTS/SWITCHES	18
		TROUBLESHOOTING	19

#### 1

# 1. GENERAL INFORMATION

GENERAL SAFETY	1-1	TORQUE VALUES	1-5
SERVICE RULES	1-1	TOOLS	1-7
MODEL IDENTIFICATION	1-2	<b>CABLE &amp; HARNESS ROUTING</b>	1-9
SPECIFICATIONS	1-3		

# **GENERAL SAFETY**

#### **WARNING**

If the engine must be running to do some work, make sure the area is well-ventilated. Never run the engine in a closed area. The exhaust contains poisonous carbon monoxide gas.

#### **WARNING**

The battery generates hydrogen gas which can be highly explosive. Do not smoke or allow flames or sparks near the battery, especially while charging it.

#### WARNING

Gasoline is extremely flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks in your work area.

#### WARNING

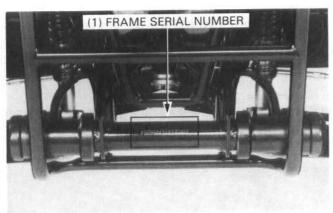
The battery electrolyte contains sulfuric acid. Protect your eyes, skin and clothing. In case of contact, flush thoroughly with water and call a doctor if electrolyte gets in your eyes.

# **SERVICE RULES**

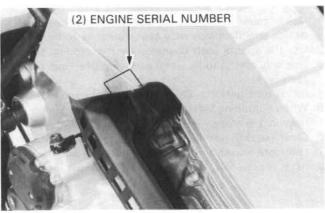
- Use genuine HONDA or HONDA-recommended parts and lubricants or their equivalents. Parts that don't meet HONDA's
  design specifications may cause damage to the Four Trax.
- 2. Use the special tools designed for this product to avoid damage and incorrect assembly.
- Use only metric tools when servicing this Four Trax. Metric bolts, nuts and screws are not interchangeable with English fasteners.
- 4. Install new gaskets, O-rings cotter pins, and lock plates when reassembling.
- When tightening bolts or nuts, begin with the larger-diameter or inner bolt first. Then tighten to the specified torque diagonally in 1-5 steps, unless a particular sequence is specified.
- 6. Clean parts in non-flammable or high flash point solvent upon disassembly.
- 7. Lubricate any sliding surfaces before reassembly.
- 8. After reassembly, check all parts for proper installation and operation.

# **MODEL IDENTIFICATION**



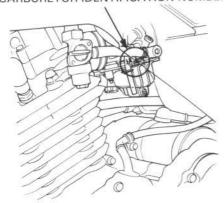


The frame serial number is stamped on the arm hinge.



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

#### (3) CARBURETOR IDENTIFICATION NUMBER



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

# **SPECIFICATIONS**

DIMENSIONS	Overall length		1,875 mm (73.8 in)
	Overall width		1,080 mm (42.5 in)
	Overall height		1,020 mm (40.2 in)
	Wheel base		
	Seat height		1,235 mm (48.6 in)
			765 mm (30.1 in)
	Foot peg height		290 mm (11.4 in)
	Ground clearance		160 mm (6.3 in)
	Dry weight	′85	212 kg (467 lb)
		AFTER '85	217 kg (478 lb)
FRAME	Туре		Semi-double cradle
	Rim size	Front	5.5 x 10 DC
		Rear	9.25 x 9 DC
	Front tire size, pressure		21 x 7.00-10, 0.2 kg/cm <sup>2</sup> (2.9 psi)
	Rear tire size, pressure		25 x 12.00—9, 0.15 kg/cm² (2.2 psi)
	Front brake		Hydraulic operated leading trailing shoe
	Rear brake		Cable operated leading trailing shoe
	Fuel tank capacity		
			10.0 liter (2.6 US gal, 2.2 Imp gal)
	Fuel reserve capacity		2.0 liter (0.5 US gal, 0.4 Imp gal)
	Toe-in		$0 \pm 7.5 \text{ mm } (0 \pm 0.30 \text{ in})$
	Caster angle		8°
	Camber angle		1°
	Trail length		42 mm (1.65 in)
	Tread	Front	800 mm (31.5 in)
		Rear	800 mm (31.5 in)
ENGINE	Туре		Gasoline, air-cooled 4-stroke
	Cylinder arrangement		Single cylinder inclined 20°
	Bore x stroke		74 x 57.3 mm (2.9 x 2.3 in)
	Displacement		246 cc (15.0 cu-in)
	Compression ratio		9:1
	Valve train		Overhead camshaft, chain driven
	Maximum horsepower		19.3 HP/7,000 rpm (SAE)
	The state of the s		
	Maximum torque		2.03 kg-m (14.7 ft-lb)/6,000 rpm (SAE)
	Oil capacity		2.5 liter (2.6 US qt, 2.2 lmp qt)
	I I an organización de la constitución de la consti		2.1 liter (2.2 US qt, 1.8 lmp qt) after draining
	Lubrication system		Forced pressure and wet sump
	Cylinder compression		$12.5 \pm 1.0 \text{ kg/cm}^2 (178 \pm 14 \text{ psi})$
	Intake valve	Opens	8° BTDC
		Closes	35° ABDC
	Exhaust valve	Opens	5° BBDC at 1 mm lift
	which are a state of the contract of the state of the sta	Closes	40° ATDC
	Valve clearance	Intake	0.08 mm (0.003 in)
	(Cold)	Exhaust	0.08 mm (0.003 in)
CARBURETOR	Туре		Dual valve
	Venturi dia.		
	The state of the first of the state of the s		27 mm (1.06 in)
	Main jet		#128
	Pilot screw opening		2-3/8 turns out
	[ ] [ ] [ ] - [ ] [ [ [ [ [ [ [ [ [ [ [		
	Jet needle		3rd groove
	[ ] [ ] [ ] - [ ] [ [ [ [ [ [ [ [ [ [ [		3rd groove 18.5 mm (0.73 in)

1-3

A self-s Antierie i A S Orbitan no W S A S Of S I was a A

DRIVE TRAIN	Clutch Transmission		Wet multi-plate, semi-automatic 5-speed constant mesh with reverse	
	Primary reduction		2.407 (65/27)	
	Gear ratio	S/L	4.083 (49/12)	
	Geal Tatio	1	2.389 (43/18)	
	10-5	ii	1.609 (37/23)	
	In Side	iii	1.179 (33/28)	
	194 - 757 14 - 774	IV	0.906 (29/32)	
	N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Reverse	5.397	
	Final reduction		5.684	
	Gearshift pattern		Left foot operated return system,	
			Forward: N-S/L-1-2-3-4	
	ALLENS ARE SEEN		Reverse: N-R	
ELECTRICAL	Ignition		CDI	
	Ignition timing	Initial	13° BTDC at idle	
		Full advance	31° BTDC at 3,500 rpm	
	Alternator	Capacity	200W/5,000 rpm	
	Battery		12V-12AH	
	Spark plug		DR8ES-L (NGK)	
	in a water knied yn a'r		X24ESR-U (ND)	
	Spark plug gap		0.6-0.7 mm (0.024-0.028 in)	
	Headlight		12V 45W/45W	
	Taillight		12V 3.4W x 2	
	Neutral indicator		12V 3W	
	Reverse indicator		12V 3W	
	Oil temperature indicator		12V 3.4W	

# **TORQUE VALUES**

ENGINE

Item	Q'ty	Thread Dia.	Torque		
item	Q ty	(mm)	N•m	kg-m	ft-lb
Cylinder head socket bolt	3	8	22-28	2.2-2.8	16-20
Cylinder head cap nut	4	10	35-45	3.5-4.5	25-33
Cylinder stud bolt	4	10	8-12	0.8-1.2	6-9
Crankcase bolt	14	6	8-12	0.8-1.2	6-9
Gearshift return spring pin	1	8	18-25	1.8-2.5	13-18
Output drive gear bearing outer lock nut	1	64	90-110	9.0-11.0	65-80
Output gear case socket bolt	3	8	20-25	2.0-2.5	14-18
Output driven gear bearing holder socket bolt	3	8	20-25	2.0-2.5	14-18
Output driven gear bearing outer lock nut	1	60	90-110	9.0-11.0	65-80
Output driven gear bearing inner lock nut	1	28	70-80	7.0-8.0	51-58
Kick starter stopper plate socket bolt	2	6	10-14	1.0-1.4	7-10
Flywheel bolt	1	12	100-120	10.0-12.0	72-87
Pulse generator screw	2	5	5-7	0.5-0.7	3.6-5.
Right crankcase cover bolt	12	6	8-12	0.8-1.2	6-9
Left crankcase cover bolt	11	6	8-12	0.8-1.2	6-9
Oil separator plate bolt	2	6	8-12	0.8-1.2	6-9
Clutch lock nut	1	18	100-120	10.0-12.0	72-87
Clutch lifter cap bolt	4	6	10-14	1.0-1.4	7-10
Centrifugal clutch lock nut	1	20	110-130	11.0-13.0	80-94
Cylinder base bolt	2	6	8-12	0.8-1.2	6-9
Cam sprocket bolt	2	7	17-23	1.7-2.3	12-17
Cylinder head cover bolt	7	6	8-12	0.8-1.2	6-9
Valve adjusting lock nut	2	6	15-18	1.5-1.8	11-13
Cam chain guide holder socket bolt	1	6	8-12	0.8-1.2	6-9
Oil pipe bolt	3	. 7	8-12	0.8-1.2	6-9
Spark plug	11	12	15-20	1.5-2.0	11-14
Intake pipe band screw	1	5	3-5	0.3-0.5	2-4
Oil filter cover bolt	3	6	8-12	0.8-1.2	6-9
Neutral/Reverse switch	2	10	11-15	1.1-1.5	8-11
Starter clutch socket bolt	6	8	18-25	1.8-2.5	13-18
Cam chain tensioner lifter bolt	2	6	8-12	0.8-1.2	6-9
Alternator stator bolt	3	6	8-12	0.8-1.2	6-9
Breather plate socket bolt	11	6	10-14	1.0-1.4	7-10
Clutch adjusting screw lock nut	1	8	19-25	1.9-2.5	14-18
Drain bolt	1	12	15-25	1.5-2.5	11-18
Cam chain tensioner lifter sealing bolt	1	6	8-12	0.8-1.2	6-9
Oil temperature sensor	1	12	15-20	1.5-2.0	11-14

#### FRAME

Item	Q'ty	Thread Dia. (mm)	Torque		
item	U ty		N•m	kg-m	ft-lb
Handlebar upper holder bolt	4	8	18-30	1.8-3.0	13-22
Handlebar lower holder nut	2	10	40-48	4.0-4.8	29-35
Steering stem nut	1	16	80-140	8.0-14.0	58-101
Steering bearing adjustment nut (initial)	1	-	25-35	2.5 - 3.5	18-25
Steering bearing adjustment nut (See page 11-15)	1	-	1- 2	0.1 - 0.2	0.7-1.4
Wheel nut	16	10	50-60	5.0-6.0	36-43
Front axle nut	2	16	80-120	8.0-12.0	58-87
Rear axle nut	2	16	80-120	8.0-12.0	58-87
Rear brake panel nut	4	10	80-90	8.0-9.0	58-65
Front shock absorber mount bolt	2	10	40-50	4.0-5.0	29-36
Swing arm right pivot bolt	1	30	16-20	1.6-2.0	12-14
Swing arm pivot lock nut	1	30	100-130	10.0-13.0	72-94
Final gear case mount bolt	4	10	50-60	5.0-6.0	36-43
	4	8	30-36	3.0-3.6	22-26
Rear left bearing housing bolt	4	8	30-36	3.0-3.6	22-26
Front engine hanger bolt	3	10	60-70	6.0-7.0	43-51
Upper engine hanger bolt	6	10	65-75	6.5-7.5	47-54
Rear engine hanger bolt	3	10	65-75	6.5-7.5	47-54
Lower engine hanger bolt (Front)	1	10	65-75	6.5-7.5	47-54
Lower engine hanger bolt (Rear)	1	10	80-90	8.0-9.0	58-65
Gearshift pedal bolt	1	6	10-14	1.0-1.4	7-10
Foot peg bracket bolt	4	10	40-50	4.0-5.0	29-36
Intake pipe bolt	2	6	6-9	0.6-0.9	4-7
Muffler clamp bolt	2	8	18-28	1.8-2.8	13-20
Direct current receptacle bolt	2	5	1.5-2.5	0.15-0.25	1.1-1.8
Master cylinder reservoir cover screw	2	4	1-2	0.1-0.2	0.7-1.4
Brake hose bolt	5	10	25-35	2.5-3.5	18-25
Ball joint/Tie rod nut	8	10	35-43	3.5-4.3	25-31
Kingpin lock nut	2	8	20-25	2.0-2.5	14-18
Front arm hinge bolt	2	35	80-100	8.0-10.0	58-72
Rear shock absorber mount bolt	2	10	80-90	8.0-9.0	58-65
Final gear case cover bolt	2	10	45-50	4.5-5.0	33-36
	6	8	23-28	2.3-2.8	17-20
Pinion joint nut	1	16	100-120	10.0-12.0	72-87
Pinion bearing lock nut	1	60	90-110	9.0-11.0	65-80
Trailer hitch bolt	2	10	70-80	7.0-8.0	51-58
Grease fitting	6		3-5	0.3-0.5	2-4
Wheel cylinder hose bolt	4	8	25-35	2.5-3.5	18-25

Torque specifications listed above are for the most important tightening points. If a torque specification is not listed, follow the standards given below.

#### STANDARD TORQUE VALUES

Item	Torque N·m (kg-m, ft-lb)	Item	Torque N·m (kg-m, ft-lb)
5 mm bolt, nut	4.5-6 (0.45-0.6, 3-4)	5 mm screw	3.5-5 (0.35-0.5, 2-4)
6 mm bolt, nut	8-12 (0.8-1.2, 6-9)	6 mm screw, 6 mm flange bolt with 8 mm head	7-11 (0.7-1.1, 5-8)
8 mm bolt, nut	18-25 (1.8-2.5, 13-18)	6 mm flange bolt, nut	10-14 (1.0-1.4, 7-10)
10 mm bolt, nut	30-40 (3.0-4.0, 22-29)	8 mm flange bolt, nut	24-30 (2.4-3.0, 17-22)
12 mm bolt, nut	50-60 (5.0-6.0, 36-43)	10 mm flange bolt, nut	35-45 (3.5-4.5, 25-33)

# **TOOLS**

SPECIAL

\* Newly designed for this model

DESCRIPTION	TOOL NUMBER	ALTERNATE TOOL	TOOL NUMBER	REF. PAGE
Universal bearing puller	07631-0010000-	-Equivalent commercially	(Felia	10-5, 13-18
Socket bit, 17 mm	07703-0020500-	available in U.S.A.	W	13-13, 15
Pivot lock nut wrench	07908-4690001-	Lock nut wrench	KS-HBA-08-469	13-13. 15
Steering stem socket	07916-3710100	L(U.S.A. only)		11-14
Lock nut wrench, 30 x 64 mm	07916-MB00001-	Lock nut wrench, 30 x 64 mm	07916-MB00000	10-18, 20
		Attachment (U.S.A. only)	07916-HA0020A	10-18, 20
Lock nut wrench, 34 x 44 mm	07916-ME50001-	Lock nut wrench, 34 x 44 mm		10-15, 16, 20,
		19.	2/01/01/05/05/05/05	21, 13-18, 21
		Attachment (U.S.A. only)	07916-HA0010A	10-15, 16, 20,
		Several and the transfer at the second at th		21, 13-18, 21
Clutch center holder	07923-KE10001			8-8, 11
Pinion holder	07924-HA00000			13-18, 19, 25
Shaft holder	07924-ME50000			10-14, 15, 21
Crank assembly tool set	07931-KF00000			10-7
- crankshaft assembly collar	07931-KF00100			10-7
- threaded adapter	07931-KF00200			10-7
- shaft puller	07931 - ME40000			10-7, 13-19
Bearing remover, 17 mm	07936-3710300			8-14, 10-6, 1
Bearing remover handle	07936-3710100	The second of th		8-14, 10-6,
searing removes mandie	07330-3710100			11, 17
Bearing remover weight	07741-0010201	Remover weight	07936-3710200	8-14, 10-6 11
bearing remover weight	07741-0010201	Hemover weight	07330-3710200	13, 14
Bearing remover set, 30 mm	07936-8890100			13-14
- remover head	07936-8890200	-Not available in U.S.A.		13-14
bearing remover, 30 mm	07936-8890300			13-14
Bearing remover, 15 mm	07936-KC10000			
remover weight	07741-0010201	Remover weight	07936-3710200	10-17 10-17
Bearing remover, 20 mm	07936-3710600	nemover weight	0/936-3/10200	
Pinion gear driver		Not available in U.S.A.		8-14
	07945-HA00000	Not available in U.S.A.		13-9, 10, 21
Attachment, 28 x 30 mm	07946-1870100	Landa and the state of the stat		8-14, 10-12
Attachment	07946-HA00000			10-19
Compressor base	07959 - MB10000			13-12
Kingpin driver	07965-VM50000			11-9
Spring compressor adapter	07967-VM50100			11-13
Collar	07967-GA70101			11-13, 13-17
Spring compressor adapter	07967-KC10000			13-12
Valve guide reamer	07984-2000000			6-8
Snap ring pliers	07914-3230001			12-10
* Inspection adapter (C1)	07508-0012500	П		15-2, 4
* Clutch holder	07923-HA80000	-Not available in U.S.A.		8-4, 7
* Camber/caster gauge attachment	07910-MJ30100	-		3-12
Attachment	07965-SA50600	Period in the second of		12-12
Digital multitester	07411-0020000	Digital multimeter (U.S.A.		
		only)	KS-AHM32-003	15-1, 16-1
Circuit tester (SANWA)	07308-0020000	Circuit tester (KOWA)	TH-5H-1	15-1, 16-1

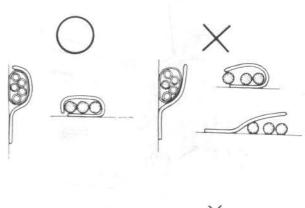
#### COMMON

DESCRIPTION	TOOL NUMBER	ALTERNATE TOOL	TOOL NUMBER	REF. PAGE
Float level gauge	07401-0010000	Equivalent commecially		4-10
Valve adjusting wrench, 10 x 12 mm	07708-0030200	available in U.S.A.		3-4
Valve adjusting wrench B	07708-0030400	Valve adjusting wrench	089201-200-000	3-4
Extension bar	07716-0020500	Equivalent commercially	1.3 - 2.5 - 2	11-14
Extension bar	07710 0020000	available in U.S.A.		22 20
Flywheel holder	07725-0040000			9-4, 5
Rotor puller	07733-0020001	Flywheel puller	07933-3950000	9-5
Valve guide remover, 5.5 mm	07742-0010100	Valve guide remover, 5.5 mm	07942-3290100	6-8
Attachment, 37 x 40 mm	07746-0010200	valve galde femover, 5.5 mm	07042 0200100	10-6, 13-14
Pilot, 17 mm	07746-0040400			8-14, 10-6
	07746-0040400			10-17
Pilot, 15 mm				8-14
Attachment, 42 x 47 mm	07746-0010300			
			- 7	10-5, 11, 16, 17
				11-15
4.1				
				12-6
TANKS OF FRANCISCO				13-18, 20
Pilot, 25 mm	07746-0040600			10-11
Pilot, 20 mm	07746-0040500			8-14, 10-11
	0			12-6
Pilot, 22 mm	07746-0041000			10-11
Attachment, 32 x 35 mm	07746-0010100			13-17, 19
Driver B	07746-0020100			13-21
Attachment, 52 x 55 mm	07746-0010400			10-12, 17,
				11-11, 13-9,
		_		10, 20
Pilot, 28 mm	07746-0041100			10-16, 17,
C N N N N N N N N N N N N N N N N N N N				13-10
Attachment, 62 x 68 mm	07746-0010500		ľ	13-20, 22
Pilot, 35 mm	07746-0040800			10-6, 7,
				13-20, 22
Attachment, 72 x 75 mm	07746-0010600			10-6, 7
Remover head, 20 mm	07746-0050600	Equivalent commercially		12-5
Bearing remover shaft	07746-0050100	available in U.S.A.		12-5
Driver	07749-0010000			8-14, 10-5,
				6, 7, 11, 12,
		10.15		16, 17 11-12
				15, 12-6, 12,
		1 =		13-9, 10, 14,
-				17, 18, 19,
				20, 22
Driver C	07746-0030100			10-17, 19,
		1		13-21
Attachment, 30 mm I.D.	07746-0030300			10-17
Atachment, 35 mm I.D.	07746-0030400			13-21
Valve spring compressor	07757-0010000	Valve spring compressor	07957-3290001	6-6, 11
Shock absorber compressor	07959-3290001		The second Contractor	11-13, 13-12
· · · · · · · · · · · · · · · · · · ·				17
Tire breaker set	07772-0050000	H		13-5
breaker arm compressor	07772-0050100	Universal bead	GN-AH-958-BB1	13-5
— breaker arm	07772-0050200	breaker (U.S.A. only)	and the second s	13-5

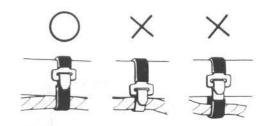
# **CABLE & HARNESS ROUTING**

Note the following when routing cables and wire harnesses:

- A loose wire, harness or cable can be a safety hazard. After clamping, check each wire to be sure it is secure.
- Do not squeeze a wire against a weld or end of its clamp when a weld-on clamp is used.
- Secure wires and wire harnesses to the frame with their respective wire bands at the designated locations. Tighten the bands so that only the insulated surfaces contact the wires or wire harnesses.
- Route harnesses so they are not pulled taut or have excessive slack.
- Protect wires and harnesses with electrical tape or tubes if they contact a sharp edge or corner.
   Clean the attaching surface thoroughly before applying tape.
- Do not use a wire or harness with a broken insulator. Repair by wrapping them with protective tape or replace them.
- Route wire harnesses to avoid sharp edges or corners. Also avoid the projected ends of bolts and screws.
- Keep wire harnesses away from the exhaust pipe and other parts that get hot.
- · Be sure grommets are seated in their grooves properly.
- After clamping, check each harness to be certain that it is not interfering with any moving of sliding parts.
- Wire harnesses routed along the handlebars should not be pulled taut, have excessive slack, be pinched by, or interfere with adjacent or surrounding parts in all steering positions.
- After routing, check that the wire harnesses are not twisted or kinked.

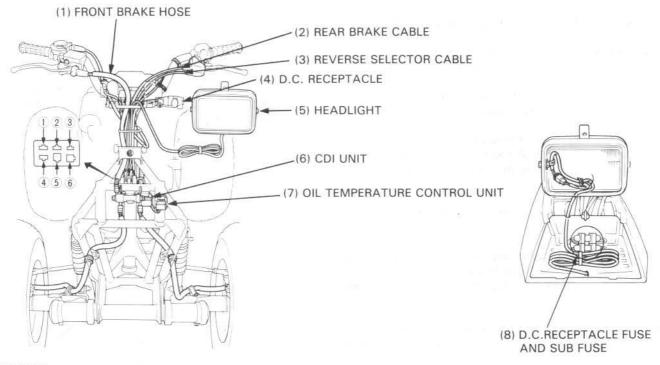




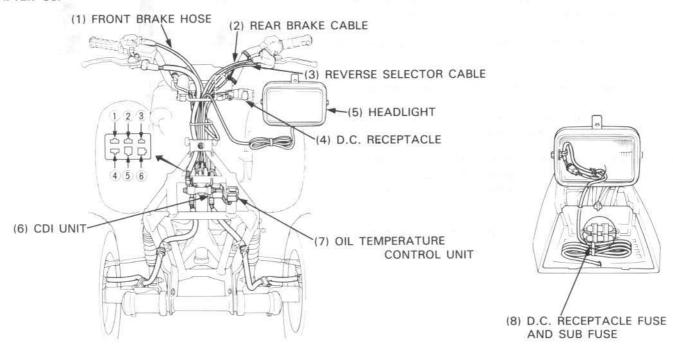


O: CORRECT x: INCORRECT

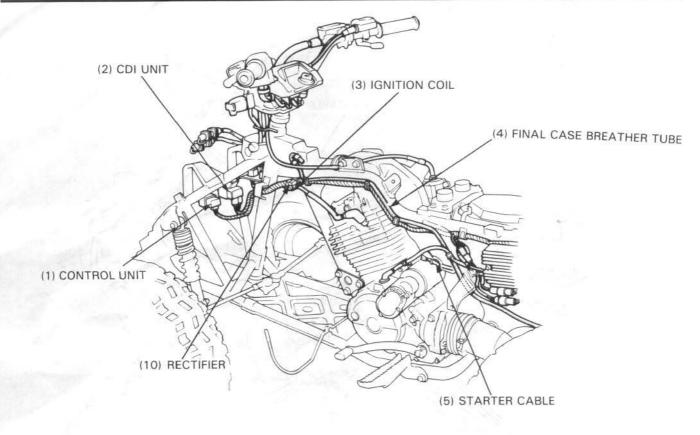
'85:

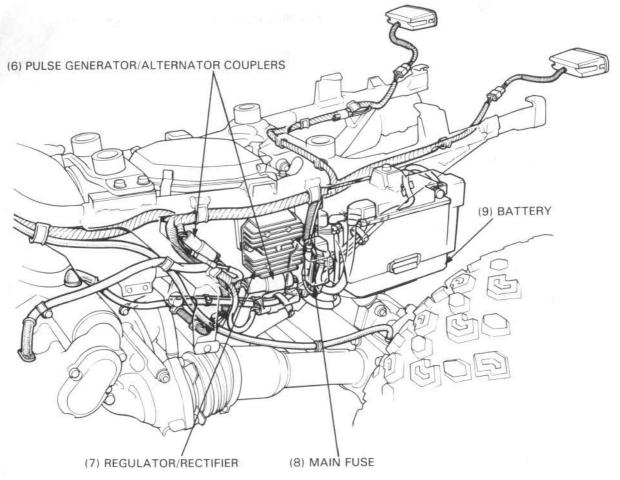


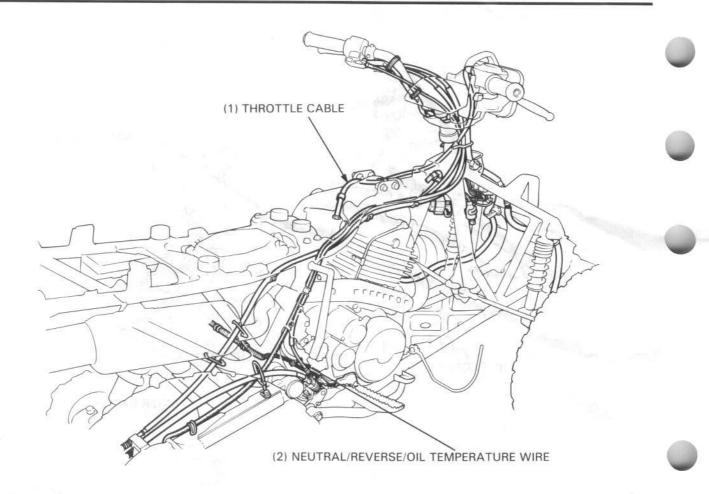




- 1 TAILLIGHT/STARTER RELAY
- 2 HEADLIGHT
- **3 CONTROL UNIT**
- 4 NEUTRAL/REVERSE/OIL TEMPERATURE SENSOR
- 5 SUB FUSE
- 6 IGNITION SWITCH



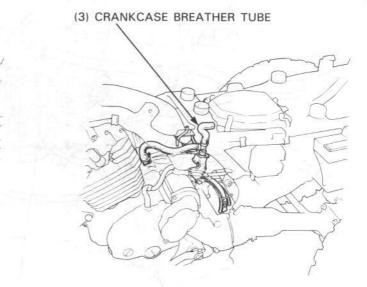




'85:

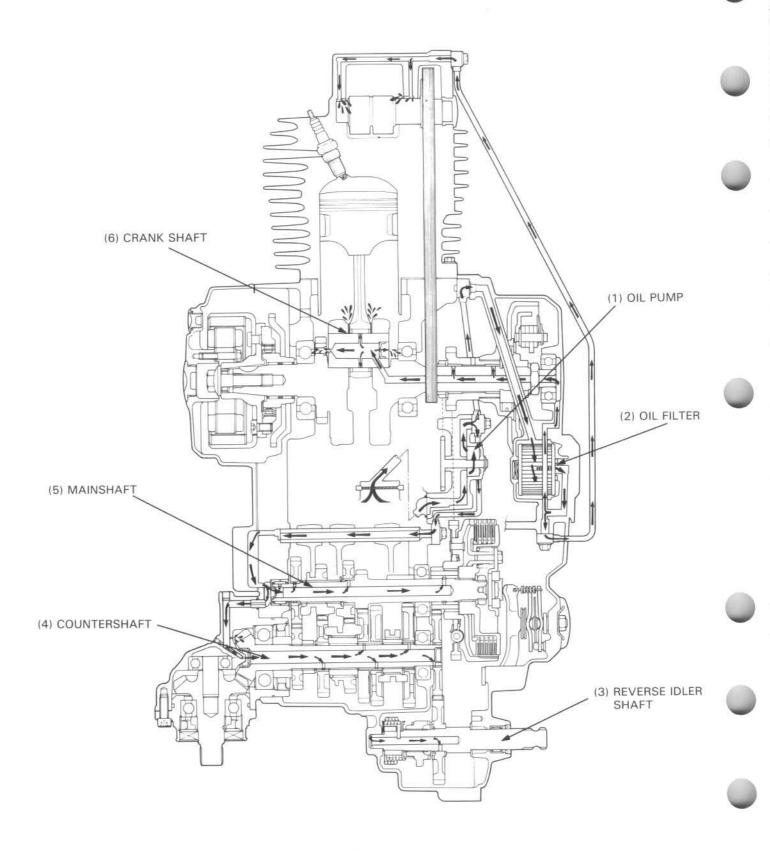
# (3) CRANKCASE BREATHER TUBE

AFTER '85:



# МЕМО

#### LUBRICATION DIAGRAM



# 2. LUBRICATION

SERVICE INFORMATION	2-1	ENGINE OIL & FILTER CHANGE	2-2
TROUBLESHOOTING	2-1	FINAL DRIVE OIL	2-3
ENGINE OIL LEVEL	2-2	LUBRICATION POINTS	2-4

# SERVICE INFORMATION

#### **GENERAL**

Section 8 shows how to service the oil pump.

#### **SPECIFICATIONS**

Engine oil capacity 2.5 lit (2.6 US qt, 2.2 Imp qt) after disassembly

2.1 lit (2.2 US qt, 1.8 Imp qt) at draining

Engine oil recommendation Use Honda 4-stroke oil or equivalent.

API Service Classification: SE or SF

Viscosity: SAE 10W-40

Other viscosities shown in the chart may be used when the average temperature in your riding area is within the indicated range.

Final drive oil capacity 90 cc (3.0 oz)

Final drive oil recommendation

Hypoid gear oil SAE #80

#### **TORQUE VALUES**

Engine oil drain bolt Final drive oil filler cap 15-25 N·m (1.5-2.5 kg-m, 11-18 ft-lb) 10-14 N·m (1.0-1.4 kg-m, 7-10 ft-lb)

# TROUBLESHOOTING

#### Oil level too low - high oil consumption

- Normal oil consumption
- External oil leaks
- Worn piston rings
- Oil not changed often enough
- · Faulty head gasket

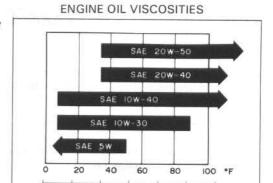
Oil contamination

· Oil or filter not changed often enough.

-20

0

- · Head gasket faulty.
- · Worn piston rings.



10

20

30

40 °C

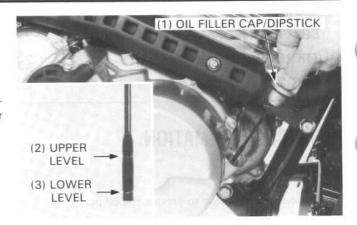
#### **ENGINE OIL LEVEL**

Place the Four Trax on level ground.

Check the oil level with the oil filler cap/dipstick.

Do not screw it in when making this check.

If the oil level is below or near the lower level line on the dipstick, add the recommended oil (page 2-1) up to the upper level line.



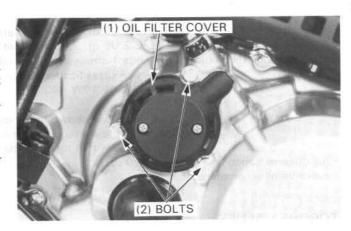
# **ENGINE OIL & FILTER CHANGE**

#### NOTE

 Change engine oil with the engine warm and the Four Trax on level ground to assure complete draining.

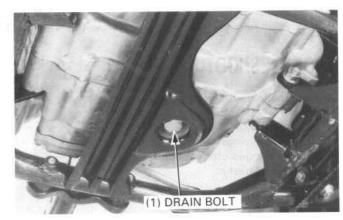
Remove the oil filler cap and drain bolt.

Remove the three bolts attaching the oil filter cover, oil filter and spring. Discard the oil filter.



Check that the sealing washer on the drain bolt is in good condition and install the drain bolt.

TORQUE: 15-25 N·m (1.5-2.5 kg·m, 11-18 ft-lb)



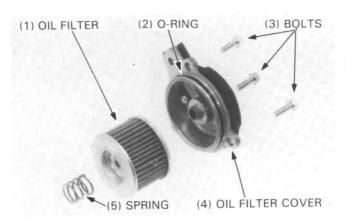
Make sure that the oil filter cover O-ring is in good condition. Install the oil filter spring, filter and cover using the three bolts.

Fill the crankcase with 2.1 liters (2.2 US qt, 1.8 lmp qt) of the recommended oil (page 2-1).

Install the oil filler cap/dipstick.

Start the engine and let it idle for 2 or 3 minutes.

Stop the engine and check that the oil level is at the upper level line on the dipstick. Make sure there are no oil leaks.



# **FINAL DRIVE OIL**

#### CHECK

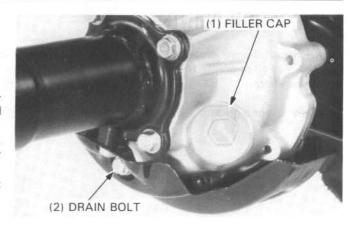
Remove the oil filler cap.

Level the rear wheels with the front whees by placing a support block under the engine. (The front and rear axles should be in the same plane).

Check that the oil level reaches the lower edge of the oil filler cap hole.

If the level is low, pour fresh oil through the oil filler hole until it reaches the lower edge.

Check for leaks.



#### CHANGE

Remove the oil filler cap and the drain bolt to drain all oil from the final gear case.

Install the drain bolt securely.

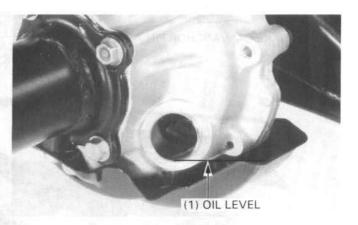
Fill the gear case with the recommended oil up to the correct level.

OIL CAPACITY: 90 cc (3.0 oz)

RECOMMENDED OIL: Hypoid gear oil SAE #80

Install the oil filler cap.

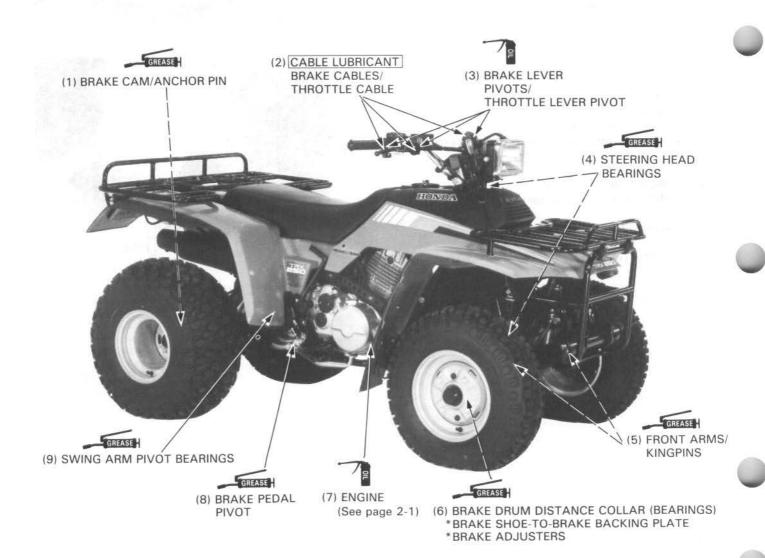
TORQUE: 10-14 N·m (1.0-1.4 kg-m, 7-10 ft-lb)



# **LUBRICATION POINTS**

Use general purpose grease when no other specification is given. Apply oil or grease to any 2 sliding surfaces and cables not shown here.

\* Apply silicone grease.



# 3. MAINTENANCE

SERVICE INFORMATION	3-1	BRAKE SHOES	3-8
MAINTENANCE SCHEDULE	3-2	BRAKE SYSTEM	3-8
AIR CLEANER ELEMENT	3-4	СLUТСН	3-10
SPARK PLUG	3-4	SUSPENSION	3-10
BREATHER TUBE	3-5	SPARK ARRESTER CLEANING	3-11
VALVE CLEARANCE	3-5	REVERSE LOCK MECHANISM	3-11
CARBURETOR IDLE SPEED	3-6	NUTS, BOLTS, FASTENERS	3-11
FUEL LINE	3-6	LIGHTING EQUIPMENT	3-12
FUEL FILTER	3-6	TIRES	3-12
CYLINDER COMPRESSION	3-7	STEERING HEAD BEARING	3-12
THROTTLE OPERATION	3-7	STEERING SYSTEM	3-13
BRAKE FLUID	3-7		

# SERVICE INFORMATION

SP	ECIF	FICA	TIO	NS

Spark plug gap: 0.6-0.7 mm (0.024-0.028 in) Recommended spark plugs: DR8ES-L (NGK)

X24ESR-U (ND) Valve clearance: Intake: 0.08 mm (0.003 in)

0.08 mm (0.003 in) Exhaust: Idle speed: 1,400 ± 100 rpm

Cylinder compression  $12.5 \pm 1.0 \text{ kg/cm}^2 (178 \pm 14 \text{ ps in})$ 

Throttle lever free play: 3-8 mm (1/8-5/16 in) Front brake lever free play: 25-30 mm (1-1-1/4 in) Rear (parking) brake lever free play: 15-20 mm (5/8-3/4 in)

Rear brake pedal free play: 15-20 mm (5/8-3/4 in) Reverse selector lever free play: 2-4 mm (1/16-1/8 in)

Front tire size: 21 x 7.00-10 Rear tire size: 25 x 12.00-9

Recommended tire pressure: '85 Front: 2.9 psi (20 kPa, 0.20 kg/cm<sup>2</sup>)

Rear: 2.2 psi (15 kPa, 0.15 kg/cm²) AFTER '85 Front: 3.0 psi (20 kPa, 0.2 kg/cm²)

2.2 psi (15 kPa, 0.15 kg/cm²) Rear:

Standard tire circumference: '85 Front: 1,745 mm (68.7 in) Rear: 1,940 mm (76.4 in)

AFTER '85 Front: 1,681 mm (66.2 in) Rear: 1,885 mm (74.2 in)

 $0 \pm 7.5 \text{ mm} (0 \pm 0.30 \text{ in})$ Front tire toe-in:

camber: 10 caster: 80

#### TORQUE VALUE

Clutch adjusting screw lock nut 19-25 N·m (1.9-2.5 kg-m, 14-18 ft-lb)

#### TOOL Special

07910-MJ30100, Not available in U.S.A. Camber/caster gauge attachment

Valve adjusting wrench, 10 x 12 mm 07708-0030200 or equivalent available in U.S.A.

Valve adjusting wrench B 07708-0030400 or valve adjusting wrench 089201-200-000

# MAINTENANCE SCHEDULE

The maintenance intervals shown in the following schedule are based upon average riding conditions. Four Traxs subjected to severe use, or ridden in unusually wet or dusty areas, require more frequent servicing. Items marked \* should be serviced by an authorized Honda dealer, unless the owner has the proper tools and is mechanically proficient. Other maintenance items are simple to perform and may be serviced by the owner.

Perform the Pre-ride Inspection in the Owner's Manual at each scheduled maintenance period.

1: C: A:	Inspect and Clean, Adjust, Lubricate or Replace, if necessary Clean R: Replace Adjust		INITIAL SERVICE PERIOD (First week of operation)	REGULAR SERVICE PERIOD (Every 30 operating days)	Refer to page
	ENGINE OIL	NOTE (1), (2)	R	R	2-2
*	ENGINE OIL FILTER		R	R	2-2
	AIR CLEANER ELEMENT	NOTE (2)		elema guan	3-4
	SPARK PLUG			1	3-4
	BREATHER TUBE			1	3-5
*	VALVE CLEARANCE		ľ	T.	3-5
*	CARBURETOR		I	saddens:	3-6
	FUEL LINE		I : (EVERY YEAR)		3-6
*	FUEL FILTER		C: (EVERY YEAR)		3-6
	THROTTLE OPERATION		1.5	L	3-7
	FINAL DRIVE OIL		I : (EVERY YEAR) R: (EVERY 2 YEARS)		2-3
	BRAKE FLUID (FRONT)		1	*R: (EVERY YEAR)	3-7
*	BRAKE SHOES		I : (EVERY YEAR)		3-8
	BRAKE SYSTEM		1 =	1	3-8
*	CLUTCH		А	A	3-10
*	SUSPENSION			1	3-10
*	SPARK ARRESTER		1 20 11	С	3-11
*	REVERSE LOCK MECHANISM		T.	1	3-11
	NUTS, BOLTS, FASTENERS			I I	3-11
	LIGHTING EQUIPMENT	14 17	THE TAX I		3-12
	TIRES		l l	l l	3-12
*	STEERING HEAD BEARINGS	101	A: (EVERY YEAR)		3-12
*	STEERING SYSTEM		I : (EVERY YEAR)		3-13

NOTE: (1) Replace every 30 operating days or every 3 months, whichever comes first.

(2) Service more frequently when riding in dusty areas.

#### AFTER '85

The maintenance intervals shown in the following schedule are based upon average riding conditions. Four Traxs subjected to severe use, or ridden in unusually wet or dusty areas, require more frequent servicing. Items marked \* should be serviced by an authorized Honda dealer, unless the owner has the proper tools and is mechanically proficient. Other maintenance items are simple to perform and may be serviced by the owner. \*\* In the interest of safety, we recommend these items be serviced only by an authorized Honda dealer.

if necessary C: Clean R: Repla	Clean R: Replace		REGULAR SERVICE PERIOD (Every 30 operating days)	Refer to page
ENGINE OIL		R	R	2-2
ENGINE OIL FILTER		R	R	2-2
AIR CLEANER	NOTE	(1)	1	3-4
SPARK PLUG		286		3-4
AIR CLEANER CASE	BREATHER NOTE	(2)		3-5
* VALVE CLEARANCE			1	3-5
* CARBURETOR IDLE	SPEED	1	1	3-6
* FUEL LINE	F 4500 1150	I : (EVE	I : (EVERY YEAR)	
* FUEL STRAINER		C: (EVE	C: (EVERY YEAR)	
* THROTTLE OPERATI	ON	1	1	3-7
* CARBURETOR CHOK	E		1	4-5
FINAL DRIVE OIL	L.L. KONSK		I : (EVERY YEAR) R: (EVERY 2 YEARS)	
BRAKE FLUID (FRON	T)		I *R: (EVERY 2 YEARS)	3-7
* BRAKE SHOES	NOTE	(2) I : (EVE	I : (EVERY YEAR)	
BRAKE SYSTEM	The state of the s	1	1	3-8
* CLUTCH SYSTEM	C2961	I I	1	3-10
* SUSPENSION			1	3-10
* SPARK ARRESTER	NOTE	(3)	С	3-11
* REVERSE LOCK SYS	ГЕМ	HI Lon	- I	3-11
* NUTS, BOLTS, FAST	ENERS	I I	T.	3-11
* * WHEEL			I	3-12
* * STEERING HEAD BEA	RINGS	I : (EVE	I : (EVERY YEAR)	
** STEERING SYSTEM		I : (EVE	I : (EVERY YEAR)	

NOTE: (1) Service more frequently when riding in dusty areas, sand or snow.

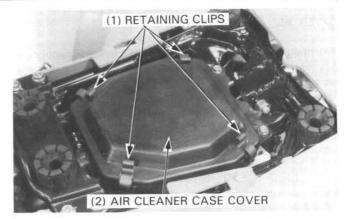
<sup>(2)</sup> Service more frequently after riding in very wet or muddy conditions.

<sup>(3)</sup> USA only.

# AIR CLEANER ELEMENT

Remove the seat by pulling the seat latch lever.

Release the retaining clips holding the air cleaner case cover, and remove the air cleaner case cover.



Loosen the air cleaner element band screw.

Remove the element holder attaching screw and remove the air cleaner element assembly from the case.

Remove the element holder by turning it counterclockwise. Remove the element band and remove the element from the element core.

Wash the element in non-flammable or high flash point solvent, squeeze out the solvent thoroughly, and allow to dry.

Soak the element in gear oil (SAE 80-90) and squeeze out excess.

Place the element onto the element core and replace the element band and holder.

Install the element in the air cleaner case. Install the air cleaner case cover and clips. Install the seat.

# **SPARK PLUG**

Disconnect the spark plug cap and remove the spark plug.

Visually inspect the spark plug electrodes for wear.

The center electrode should have square edges and the side electrode should have a constant thickness.

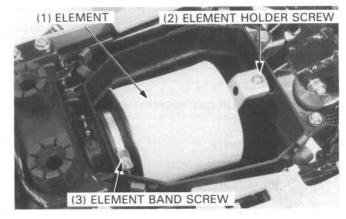
Discard the spark plug if there is apparent wear or if the insulator is cracked or chipped.

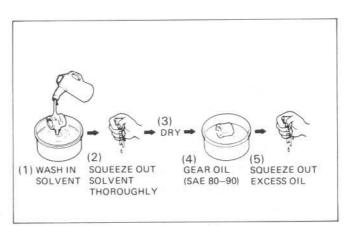
Measure the gap with a wire-type feeler gauge and adjust if necessary by carefully bending the side electrode.

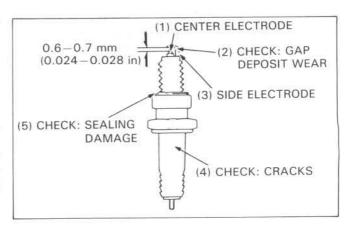
SPARK PLUG GAP: 0.6-0.7 mm (0.024-0.028 in)
RECOMMENDED SPARK PLUG: DR8ES-L (NGK)
X24ESR-U (ND)

Check the sealing washer and replace with a new one if damaged.

With the sealing washer attached, thread the spark plug in by hand to prevent crossthreading. Tighten the spark plug another 1/2 turn with a spark plug wrench to compress the sealing washer.









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