

Set-up Instructions

1983, 1984 Models ATC 250R



MPD 6169 8308

AMERICAN HONDA MOTOR CO., INC.
100 WEST ALONDRA BOULEVARD, GARDENA, CALIFORNIA 90247

WARNING

WARNING

WARNING

WARNING

SET-UP AND PRE-DELIVERY SERVICE MUST BE PERFORMED BY AN AUTHORIZED HONDA MOTORCYCLE DEALER. Proper set-up and pre-delivery service is essential to rider safety and reliability of the ATC. When a customer takes delivery of his brand new ATC, he expects it to be in excellent running condition. There are few things that will cause greater customer dissatisfaction than poor preparation of a new unit. An error or oversight made by the mechanic assembling and servicing a new unit can easily result in faulty operation, damage to the machine, or even injury to the rider.

THIS ISSUE OF THE ATC250R SET-UP INSTRUCTIONS REPLACES THE 1983 MODEL ATC250R SET-UP INSTRUCTIONS DATED 1/83. REMOVE AND DESTROY SUPERSEDED SET-UP INSTRUCTIONS.

1983 MODEL SHOWN; 1984 MODEL SIMILAR



NOTES:

- All steps apply to both the 1983 and 1984 models unless otherwise noted.
- Right and left are determined from the rider's view.

Date of Issue: 8/83

SET-UP INSTRUCTION REVISED PAGES

Pages Affected

1 through 25

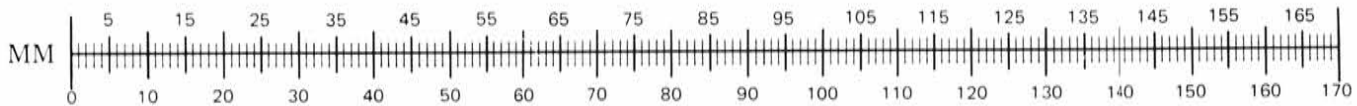
Orig. Issue Date

8/83

Rev. Date

Original

Remove and destroy superseded pages.



METRIC SCALE FOR DETERMINING BOLT LENGTHS/DIAMETERS

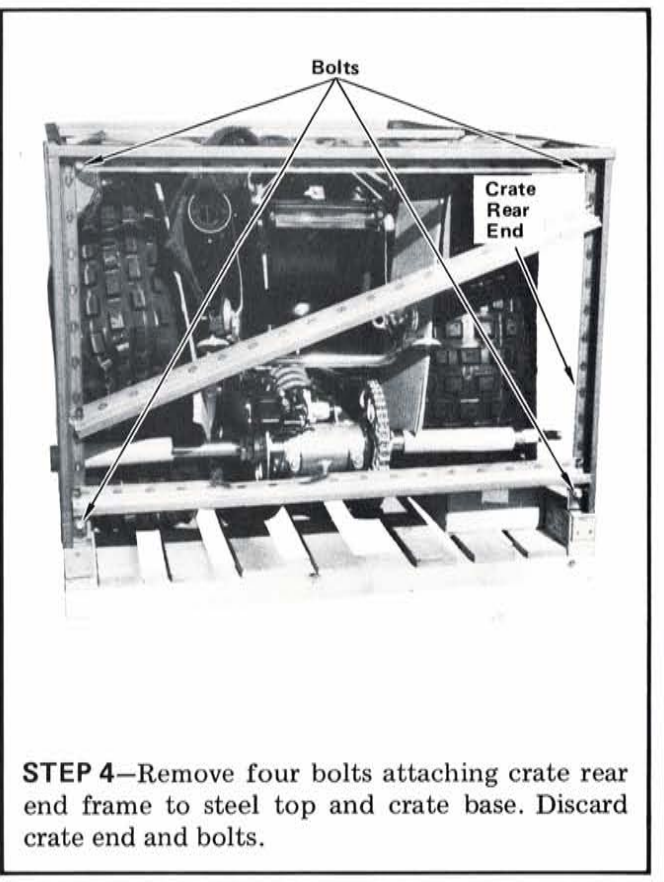
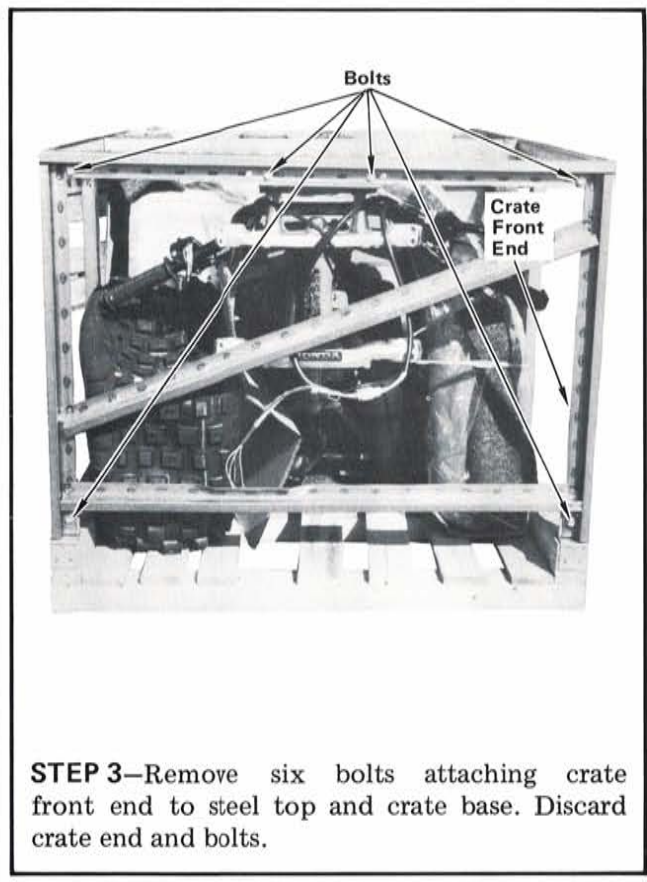
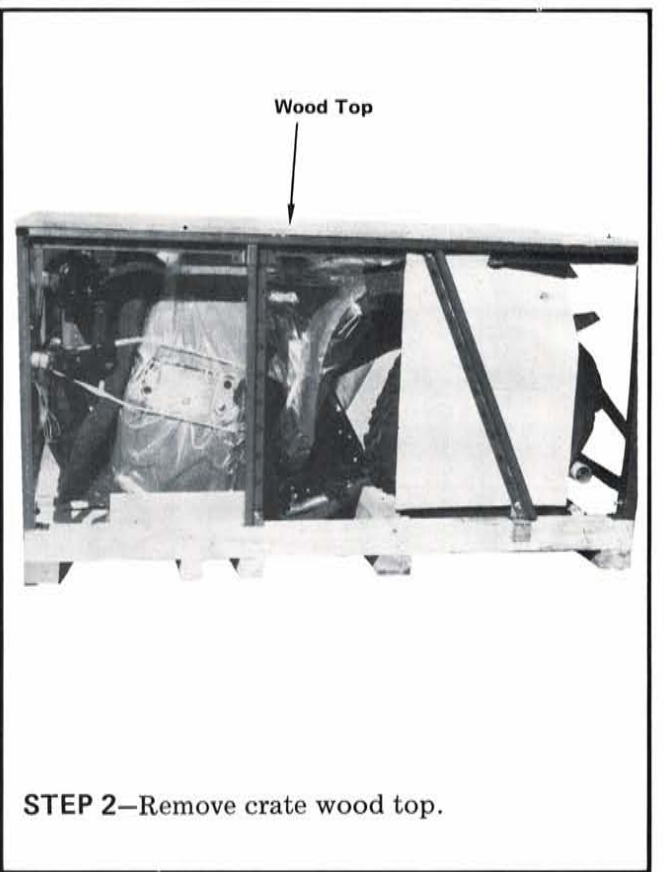
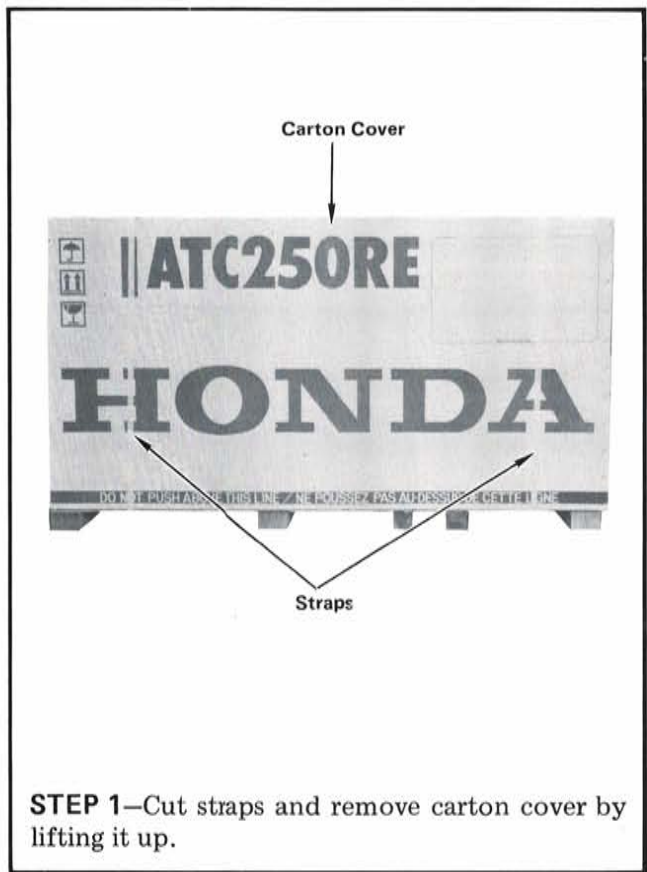
Pay special attention to warnings, cautions, and notes.

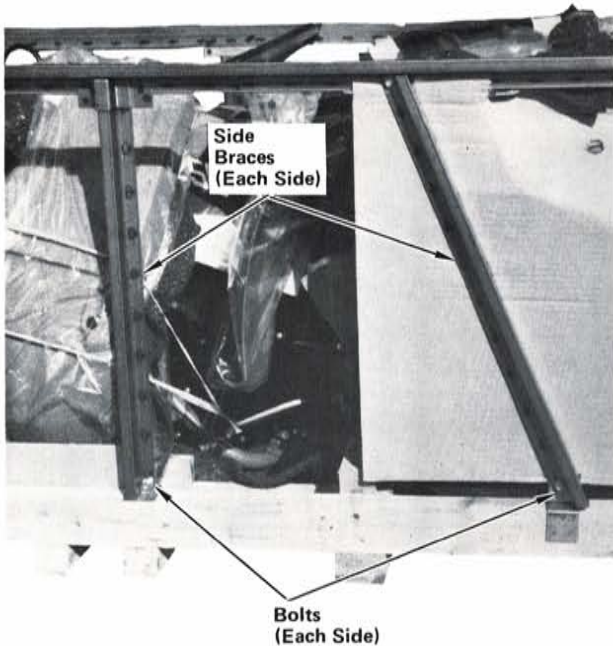
WARNING

means hazards or unsafe practices which could cause severe personal injury or death.

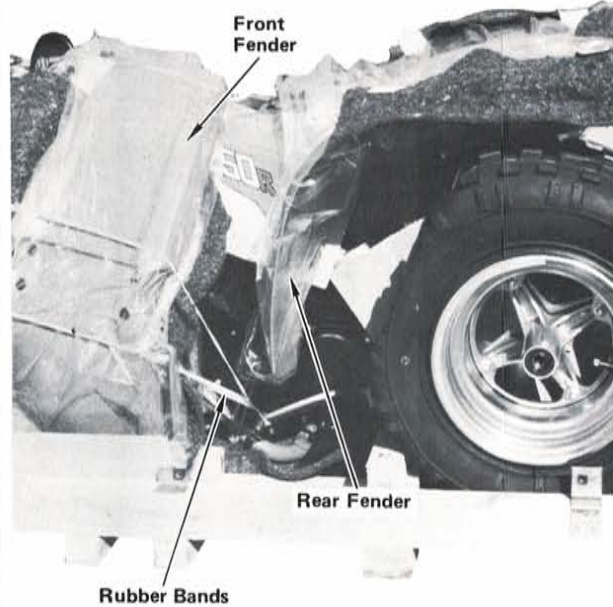
CAUTION: means hazards or unsafe practices which could cause minor personal injury or product or property damage.

NOTE: gives helpful information.

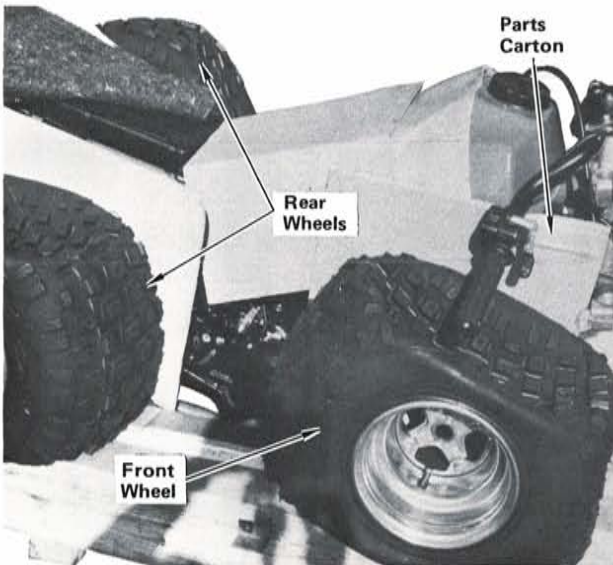




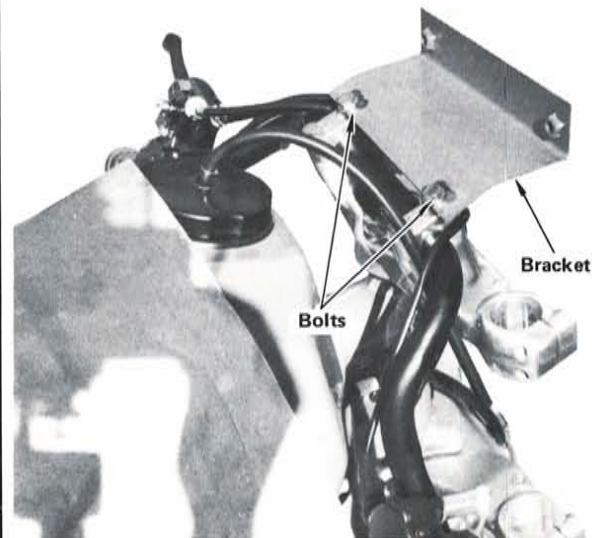
STEP 5—Remove bolts attaching side braces on each side, to crate base. Carefully lift off steel top. Discard side braces, steel top, and bolts.



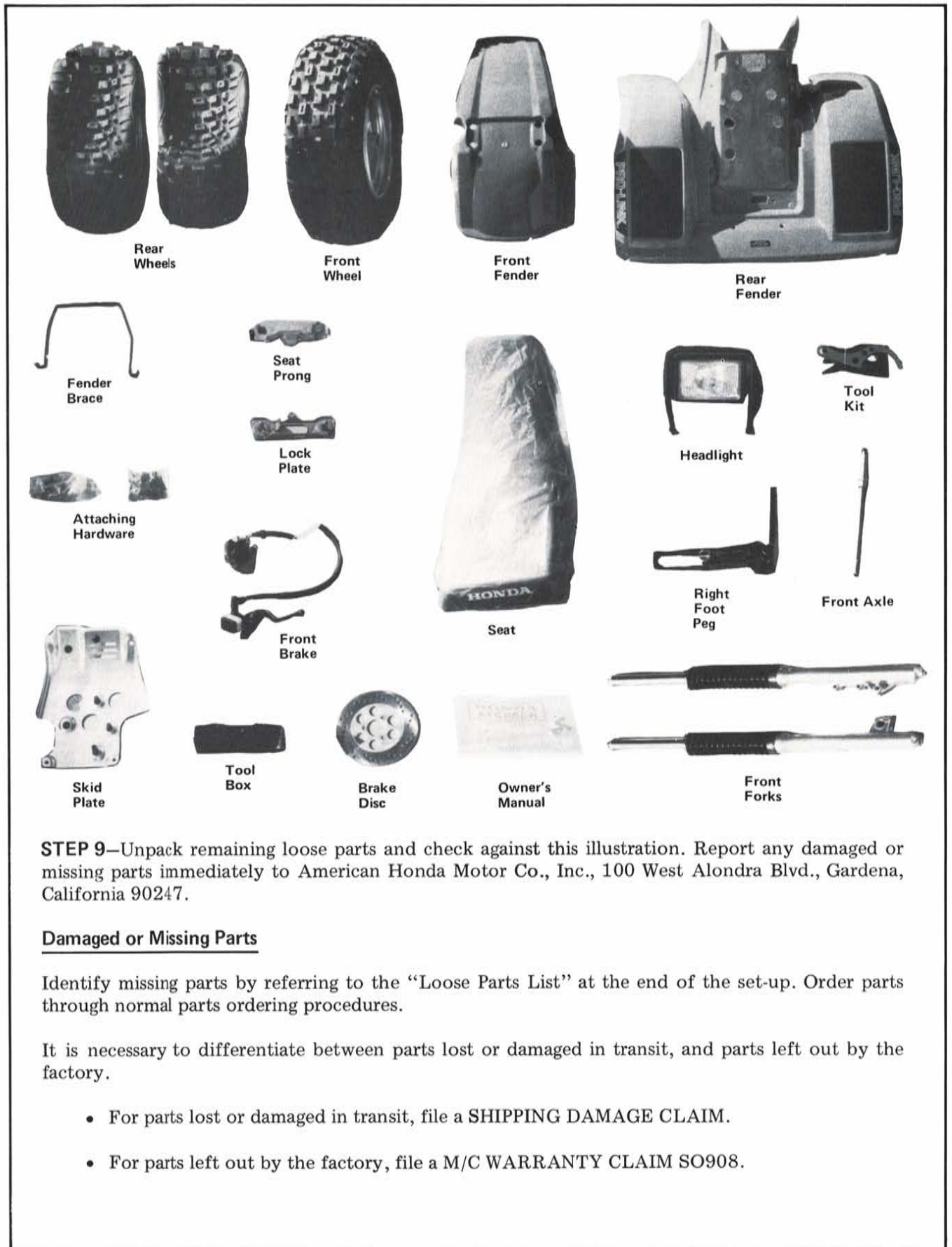
STEP 6—Remove seat, front and rear fenders by removing rubber bands.



STEP 7—Remove front and rear wheels and parts carton.



STEP 8—Remove bolts attaching front shipping brace bracket to handlebar lower holders. Discard bracket and reinstall bolts, but do not tighten.



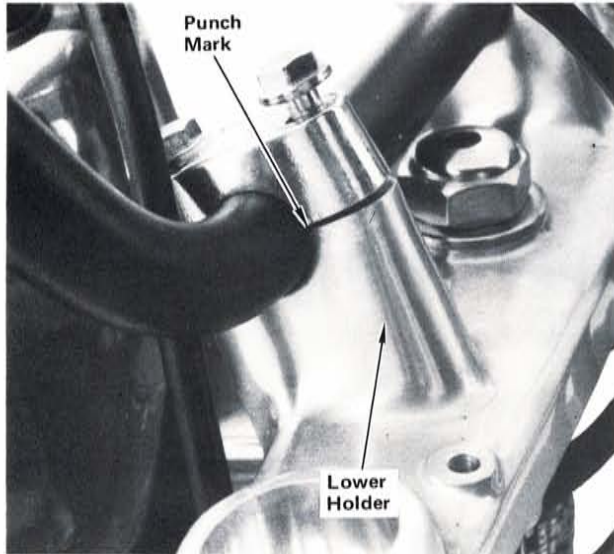
STEP 9—Unpack remaining loose parts and check against this illustration. Report any damaged or missing parts immediately to American Honda Motor Co., Inc., 100 West Alondra Blvd., Gardena, California 90247.

Damaged or Missing Parts

Identify missing parts by referring to the "Loose Parts List" at the end of the set-up. Order parts through normal parts ordering procedures.

It is necessary to differentiate between parts lost or damaged in transit, and parts left out by the factory.

- For parts lost or damaged in transit, file a SHIPPING DAMAGE CLAIM.
- For parts left out by the factory, file a M/C WARRANTY CLAIM SO908.

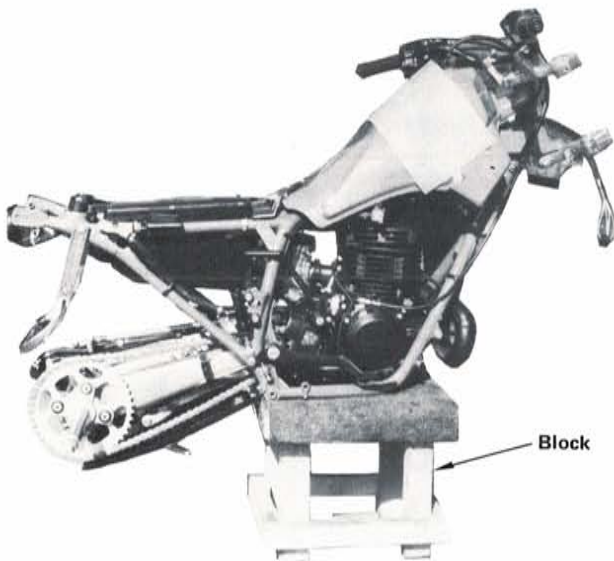


STEP 10—Lift handlebar grips up until punch mark on handlebar is aligned with top of lower holder. Tighten front bolts to specified torque first, then tighten rear bolts to same torque.

Torque specification:
2.7 kg-m (19 lb-ft)

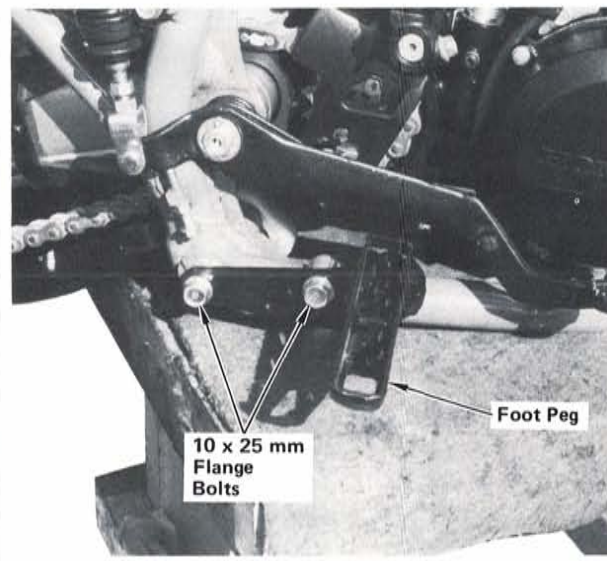


STEP 11—Insert end of fuel cap breather tube into hole in steering stem.



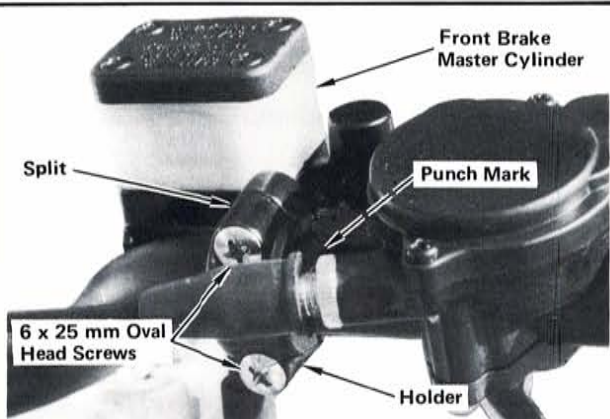
STEP 12—Carefully remove ATC from crate base and support on padded block centered under engine as shown. This will require two people.

CAUTION: The ATC can easily be tipped over until it is resting on the front and rear wheels.



STEP 13—Install right foot peg as shown using two 10 x 25 mm flange bolts. Tighten bolts to specified torque.

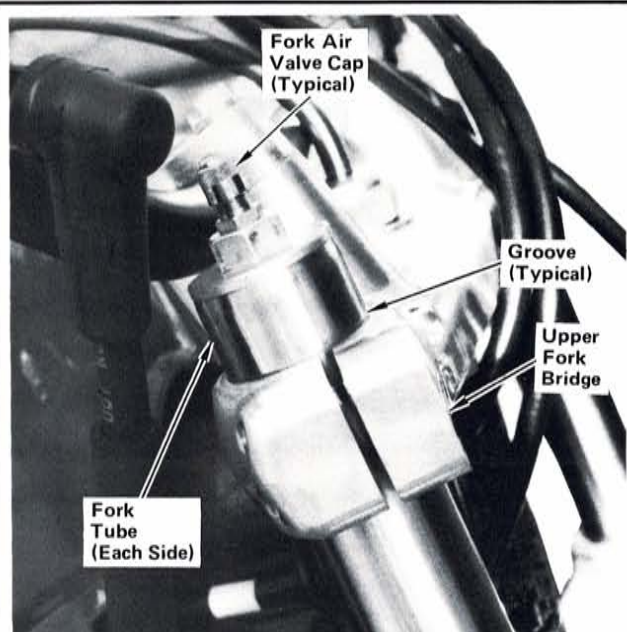
Torque specification:
3.5 kg-m (26 lb-ft)



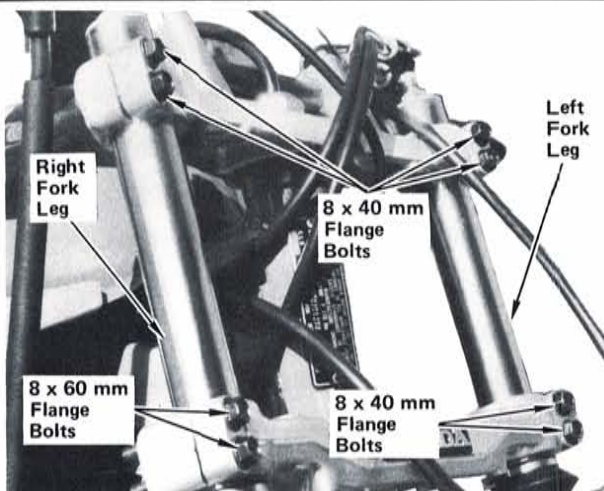
STEP 14—Assemble front brake master cylinder and holder on right handlebar as shown. Loosely install holder using two 6 x 25 mm oval head screws. Position master cylinder so split aligns with punch mark on handlebar. Tighten upper screw to specified torque first, then tighten lower screw to same torque. Check brake fluid level in front and rear brake reservoirs.

Torque specification:
0.9 kg-m (7 lb-ft)

NOTE: Do not turn master cylinder upside down, or air could enter brake line.

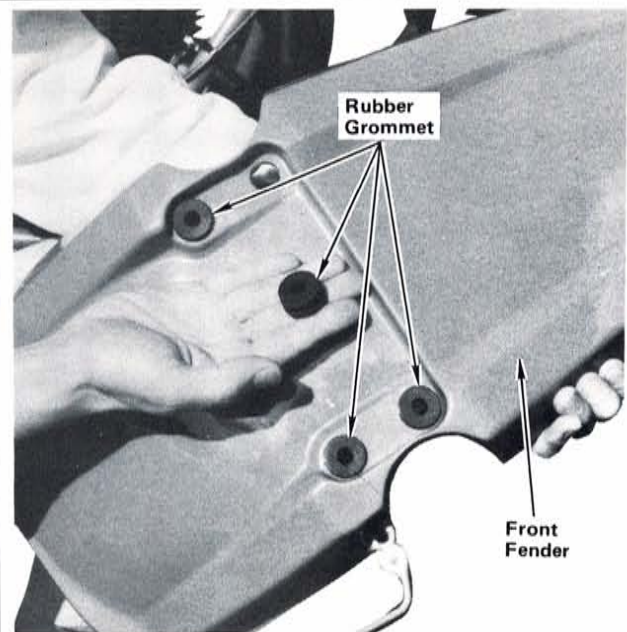


STEP 15—Slide right and left fork legs up through holes in lower and upper fork bridges. (Left fork leg has axle holder.) Position fork legs so that the groove around the fork tube is even with top of upper fork bridge as shown. Check that fork air valve caps are installed.

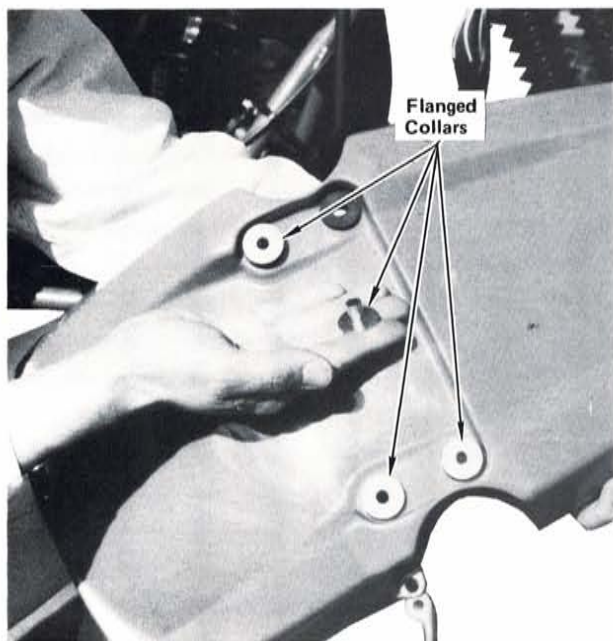


STEP 16—Secure left fork leg using four 8 x 40 mm flange bolts through upper and lower fork bridges. Secure right fork leg using two 8 x 40 mm flange bolts through upper fork bridge, and two 8 x 60 mm flange bolts through lower fork bridge. Tighten upper fork bridge bolts to specified torque first, then tighten bolts in lower fork bridge to same torque.

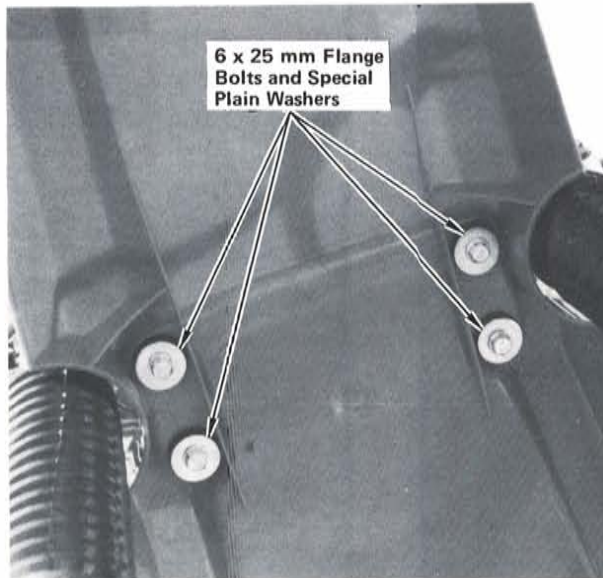
Torque specification:
2.1 kg-m (16 lb-ft)



STEP 17—Insert four rubber grommets into holes in front fender.



STEP 18—Insert four flanged collars into fender grommets from the top as shown.



STEP 19—Position front fender between fork legs and install using four 6 x 25 mm flange bolts and special plain washers. Tighten bolts to specified torque.

Torque specification:
1.2 kg-m (9 lb-ft)



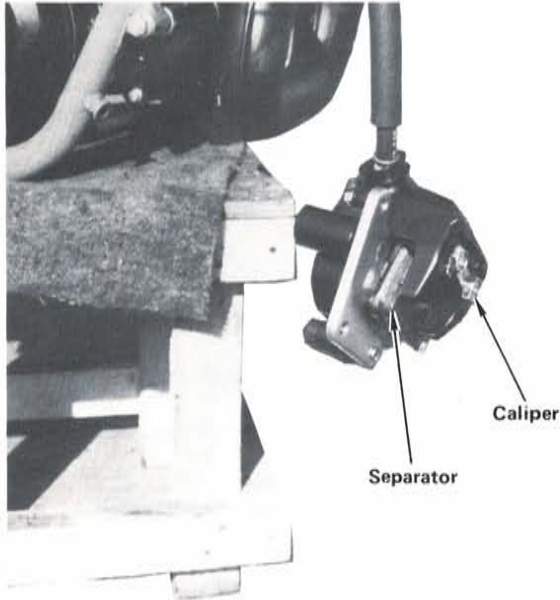
STEP 20—Remove rim protector from front wheel.



STEP 21—Inflate all three tires to specified tire pressure.

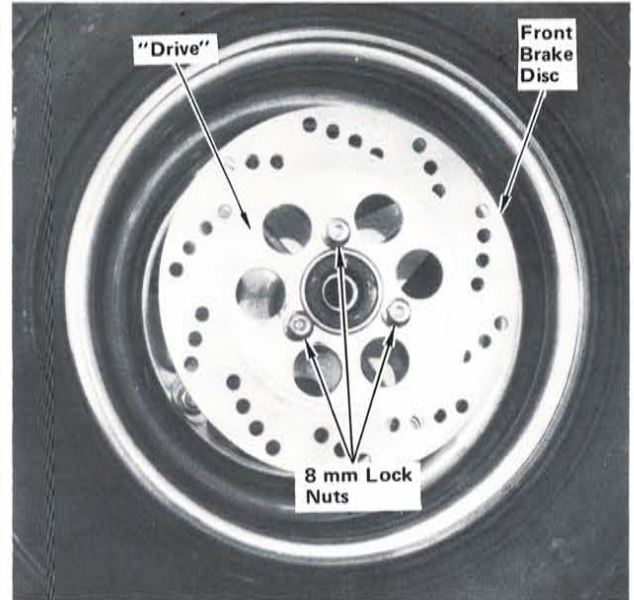
Tire pressure: Front: 3.3 psi.
Rear: 2.4 psi.

NOTE: Some pressure will be lost when checking tire pressure with a gauge.

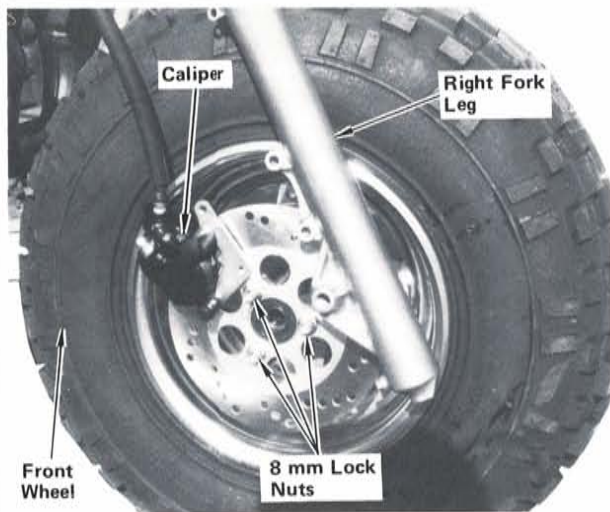


STEP 22—Remove separator from between front brake pads. Remove all preservative and residue from each brake pad.

NOTE: Do not operate front brake lever until brake caliper is installed on front wheel.

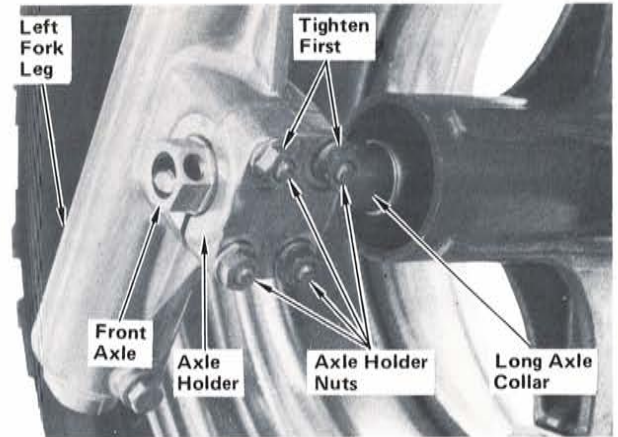


STEP 23—Position front brake disc on studs of front wheel with “DRIVE” mark side facing the outside. Loosely install brake disc using three 8 mm lock nuts. Do not tighten nuts at this time.



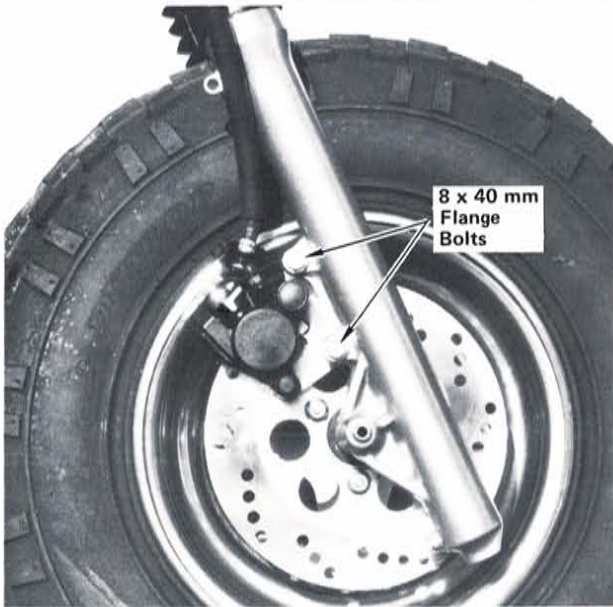
STEP 24—Position front wheel between fork legs. Carefully insert front brake disc between brake pads. Tighten front brake disc 8 mm lock nuts to specified torque.

Torque specification:
2.7 kg-m (19 lb-ft)



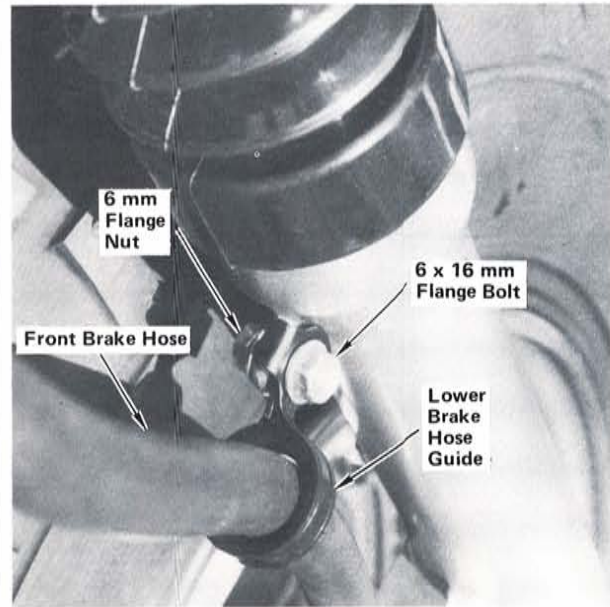
STEP 25—Insert front axle from left side, through axle holder, long axle collar, wheel hub, short axle collar, and screw axle into right fork leg. Tighten front axle to specified torque and position left fork leg so axle holder face is flush with flange of front axle. Tighten upper axle holder nuts to specified torque first, then tighten lower nuts to same torque.

Torque specifications:
Front axle: 9.0 kg-m (70 lb-ft)
Holder nuts: 1.2 kg-m (9 lb-ft)



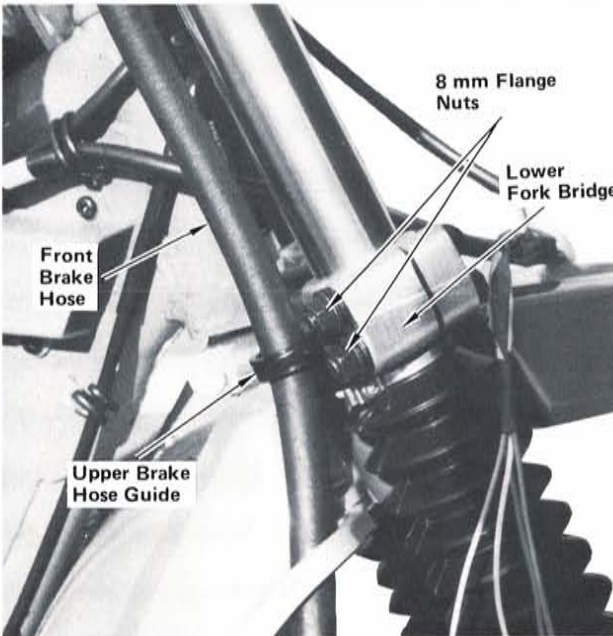
STEP 26—Align holes of caliper with holes in right fork leg. Install caliper using two 8 x 40 mm flange bolts. Tighten bolts to specified torque.

Torque specification:
2.7 kg-m (19 lb-ft)



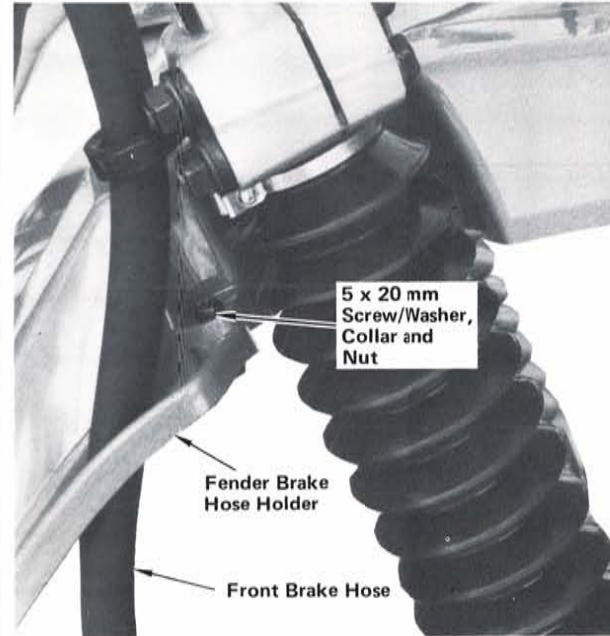
STEP 27—Install lower front brake hose guide on fork leg as shown using a 6 x 16 mm flange bolt and flange nut. Tighten nut to specified torque.

Torque specification:
1.2 kg-m (9 lb-ft)

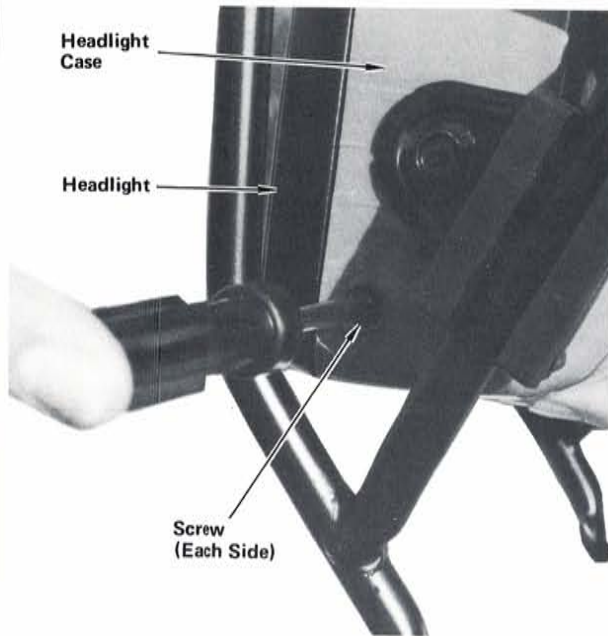


STEP 28—Install upper front brake hose guide on lower fork bridge as shown using two 8 mm flange nuts. Tighten nuts to specified torque.

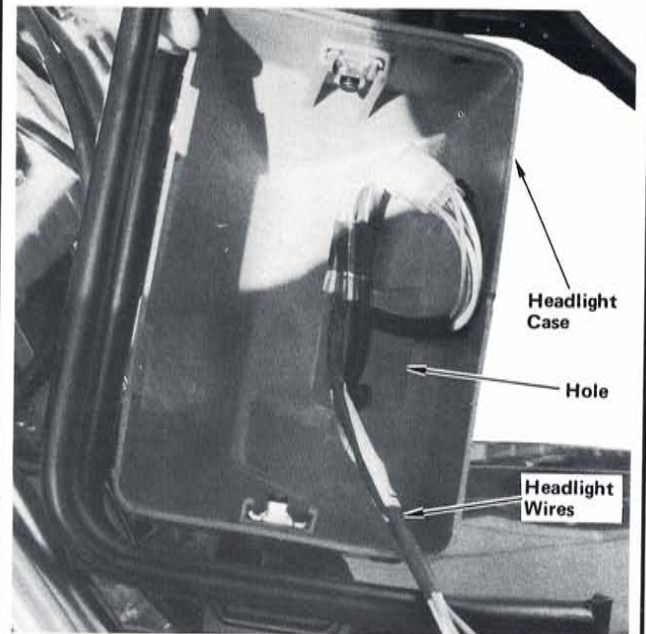
Torque specification:
2.7 kg-m (19 lb-ft)



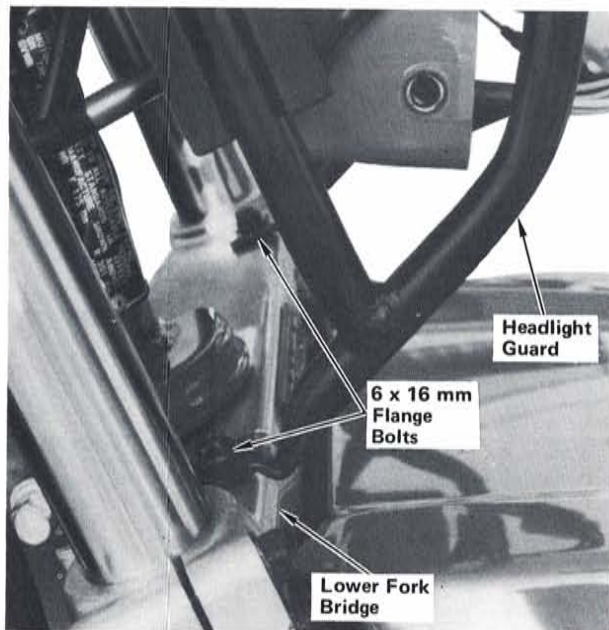
STEP 29—Route front brake hose through brake hose holder on front fender as shown and secure with a 5 x 20 mm screw/washer, collar, and flange nut as shown. Tighten screw securely.



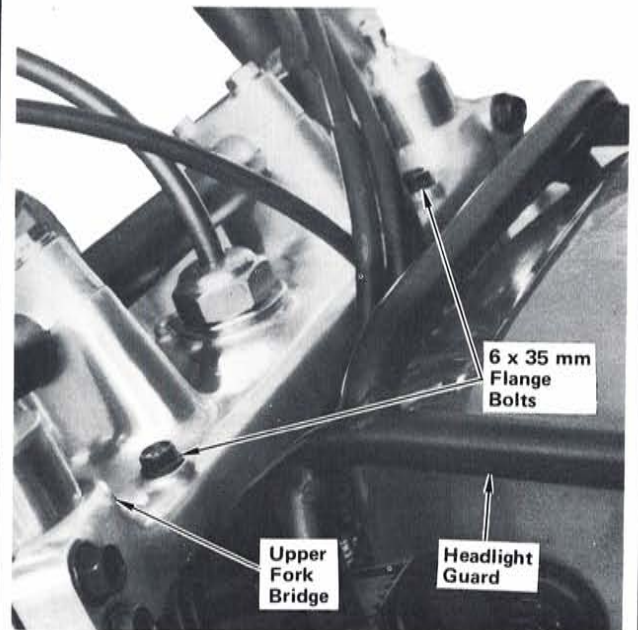
STEP 30—Remove headlight from headlight case by removing headlight screws.



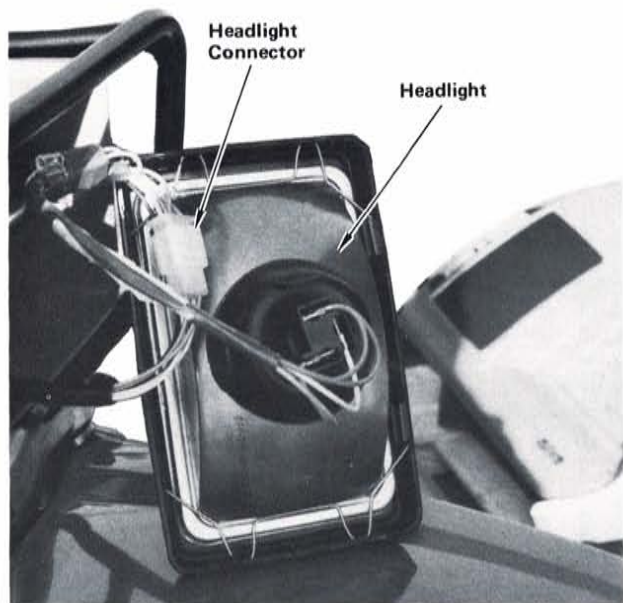
STEP 31—Route headlight wires through hole in headlight case as shown.



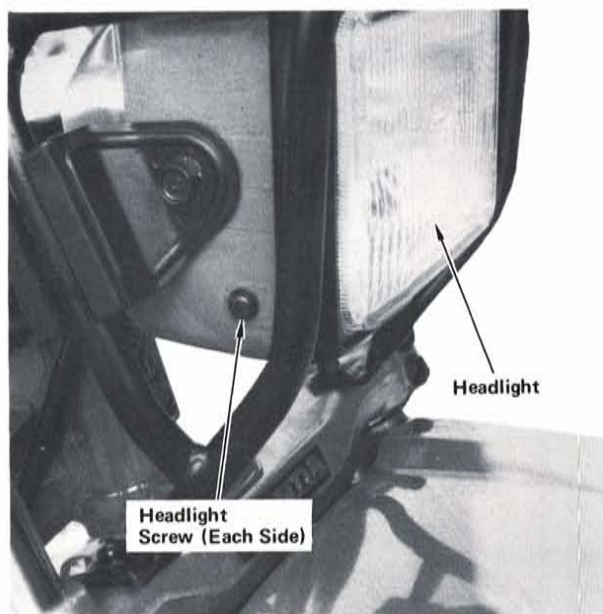
STEP 32—Install headlight case lower guard on lower fork bridge using two 6 x 16 mm flange bolts as shown. Tighten bolts securely.



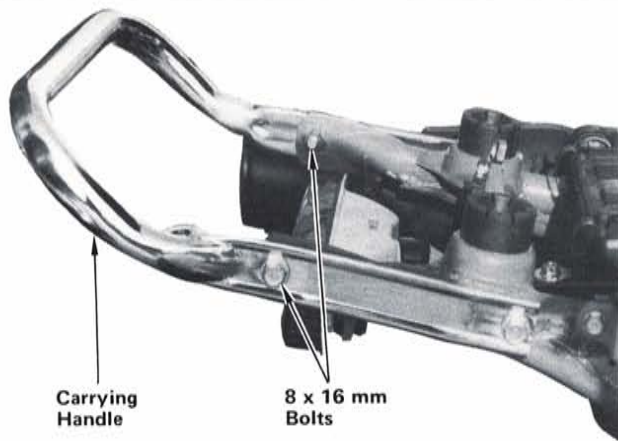
STEP 33—Install headlight case upper guard under upper fork bridge using two 6 x 35 mm flange bolts down through upper fork bridge as shown. Tighten bolts securely.



STEP 34—Connect headlight connector to headlight.



STEP 35—Reinstall headlight in headlight case using screws removed in Step 30.



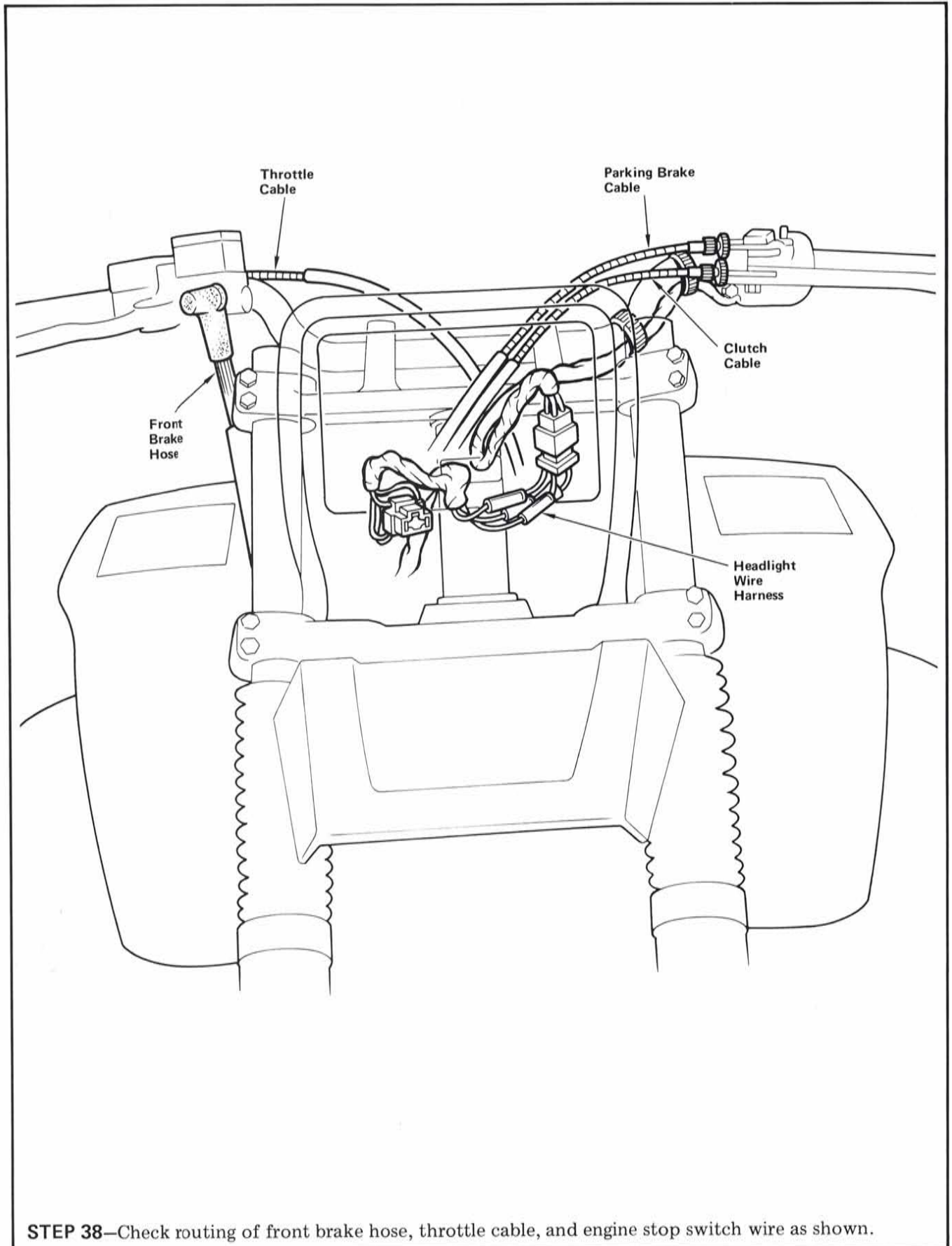
STEP 36—Raise rear carrying handle to align holes in handle with holes in frame. Install carrying handle using two 8 x 16 mm flange bolts. Tighten all four carrying handle bolts to specified torque.

Torque specification:
2.7 kg-m (19 lb-ft)

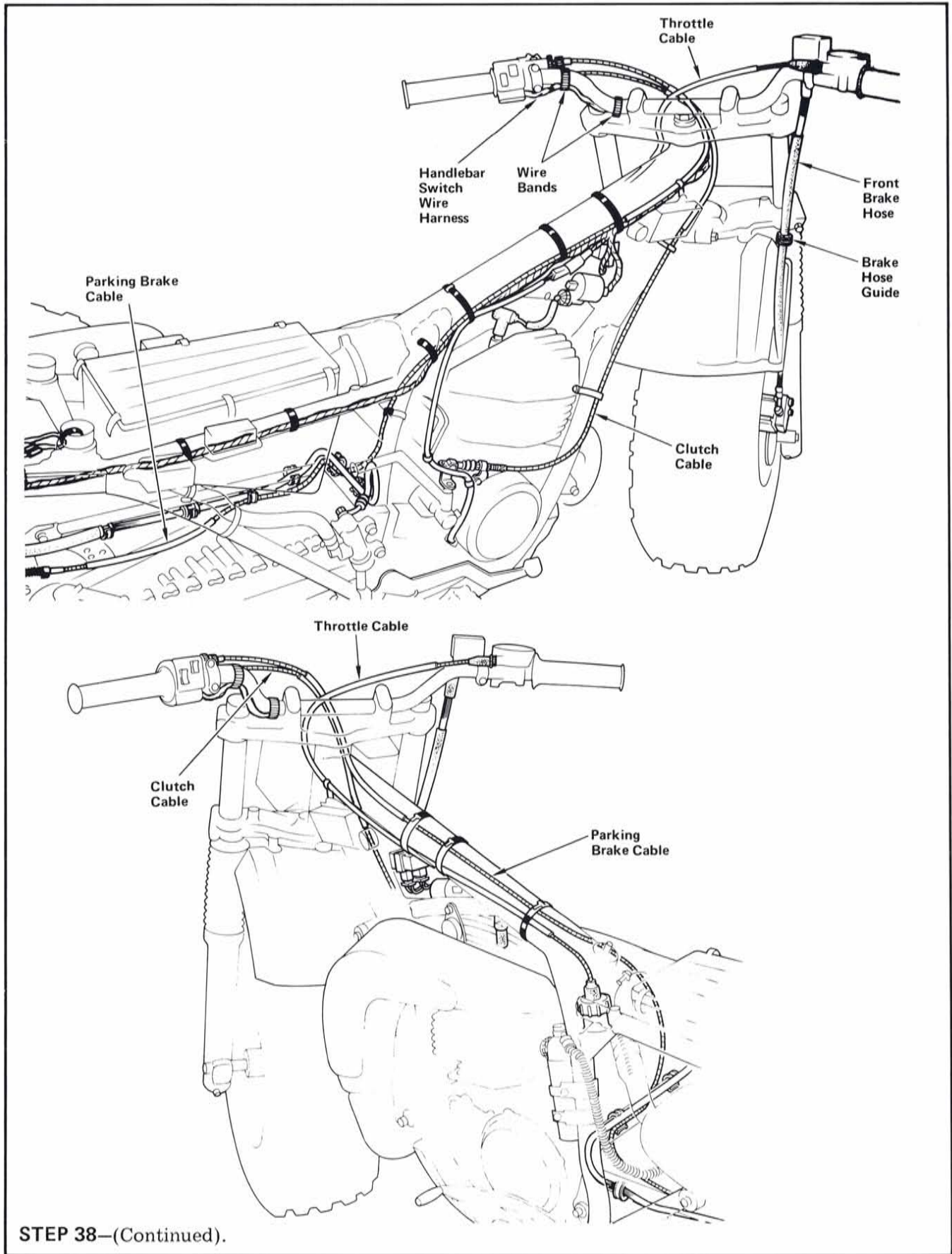


STEP 37—Grease rear axle splines and install rear wheels, with valve stems to the outside, using a plain washer and castle nut for each. Tighten both castle nuts equally to specified torque and install a cotter pin in each. Spread ends of cotter pins as shown.

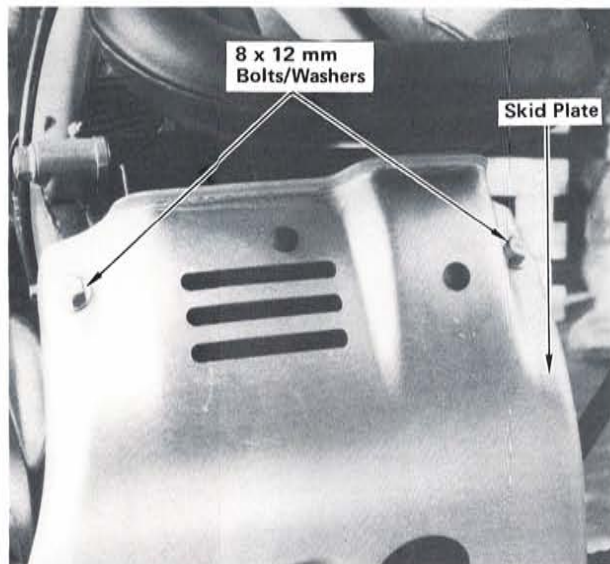
Torque specification:
9.0 kg-m (70 lb-ft)



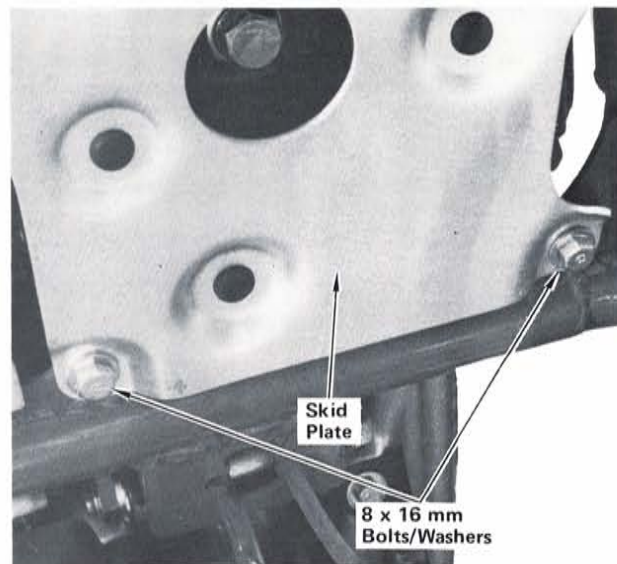
STEP 38—Check routing of front brake hose, throttle cable, and engine stop switch wire as shown.



STEP 38—(Continued).

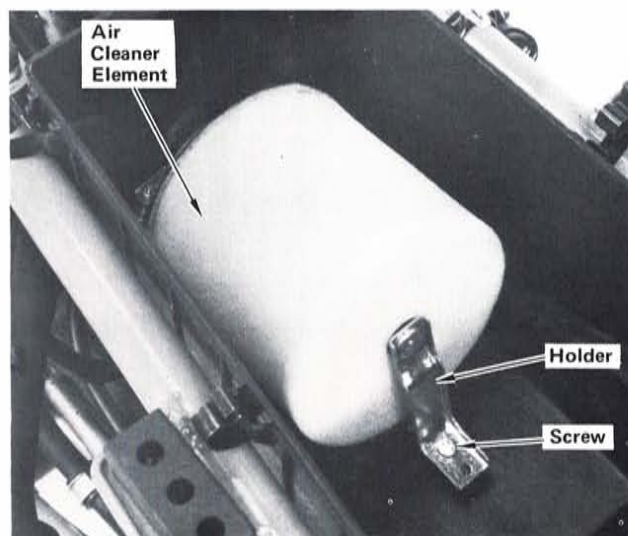
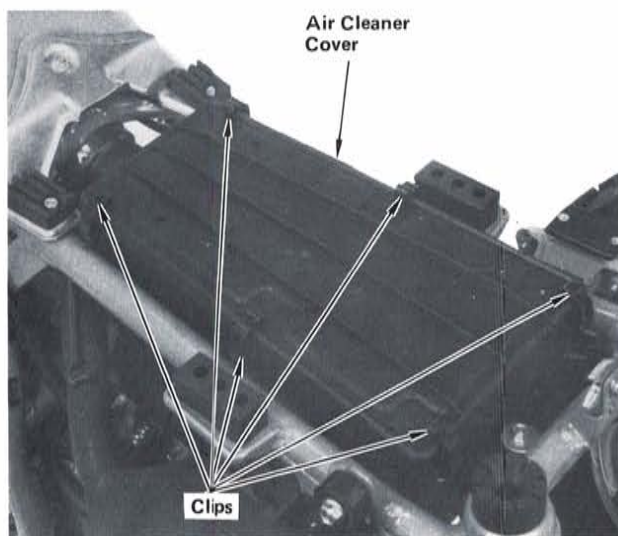


STEP 39—Position skid plate as shown and install front of skid plate using two 8 x 12 mm bolts/washers.

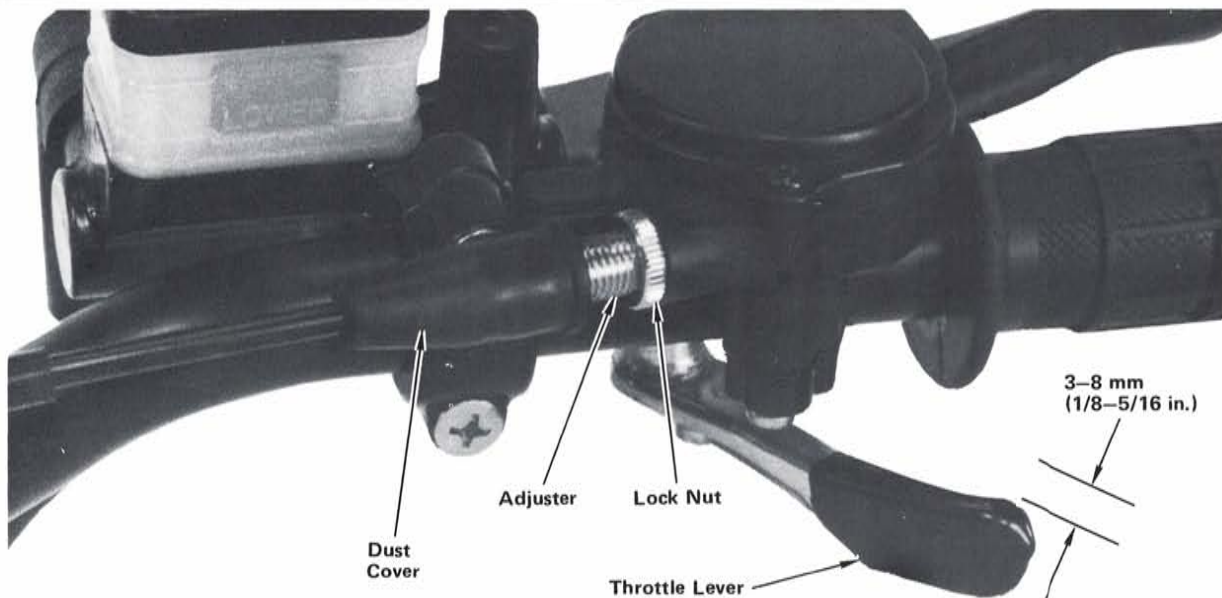


STEP 40—Install rear of skid plate as shown using two 8 x 16 mm bolts/washers. Tighten all four skid plate bolts to specified torque.

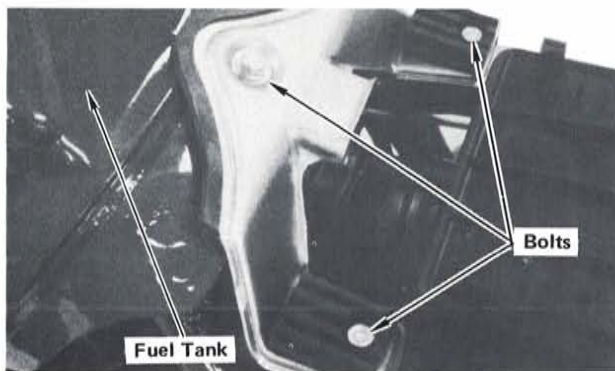
Torque specification:
2.1 kg-m (16 lb-ft)



STEP 41—Remove air cleaner cover by releasing six clips. Remove air cleaner element holder by removing screw. Check air cleaner element condition. If necessary, clean and oil element as described in owner's manual or shop manual. Reinstall air cleaner element holder and tighten screw securely. Reinstall air cleaner cover and engage clips.

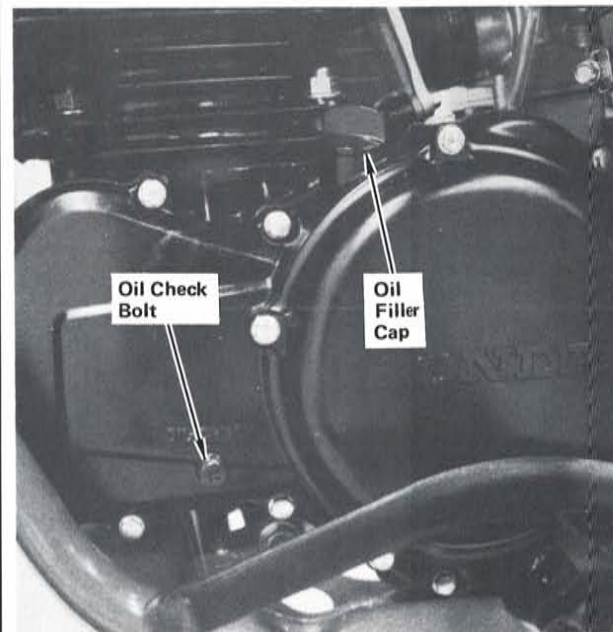


STEP 42—Check throttle cable condition. Check that throttle lever free play is within 3–8 mm (1/8–5/16 in.) at tip of throttle lever. Check for smooth operation of throttle lever from fully open to fully closed in all steering positions and that throttle lever automatically returns from fully open to fully closed when released. If necessary to adjust free play, loosen lock nut and turn adjuster to obtain correct free play. After adjustment, tighten lock nut and reinstall dust cover.



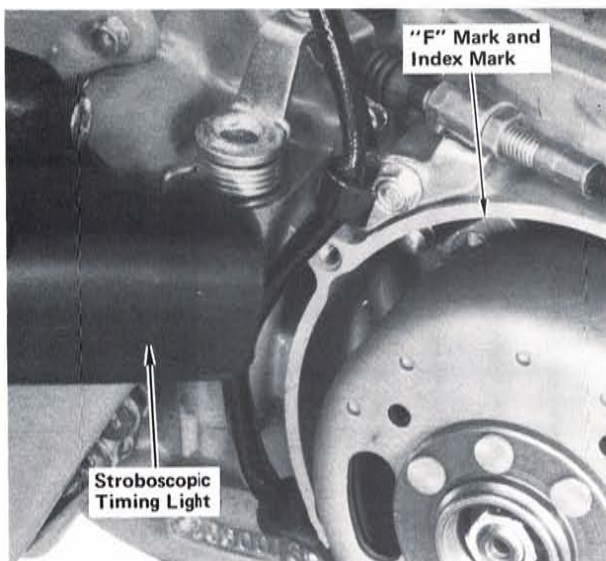
STEP 43—Drain fuel tank as described in shop manual. Remove fuel tank by removing mounting bolts at rear of tank, disconnecting fuel line, and moving tank towards the rear. Inspect and flush fuel tank. Reinstall fuel tank, connect fuel line, fill tank, turn on fuel petcock and check for leaks and flow through fuel filter. Tighten mounting bolts securely. Check that end of fuel cap breather tube is in hole in steering stem nut. Drain residual fuel from carburetor.

WARNING Fuel must be drained into a proper container. Gasoline is flammable and explosive under certain conditions. Do not smoke or allow flames or sparks near while draining fuel.

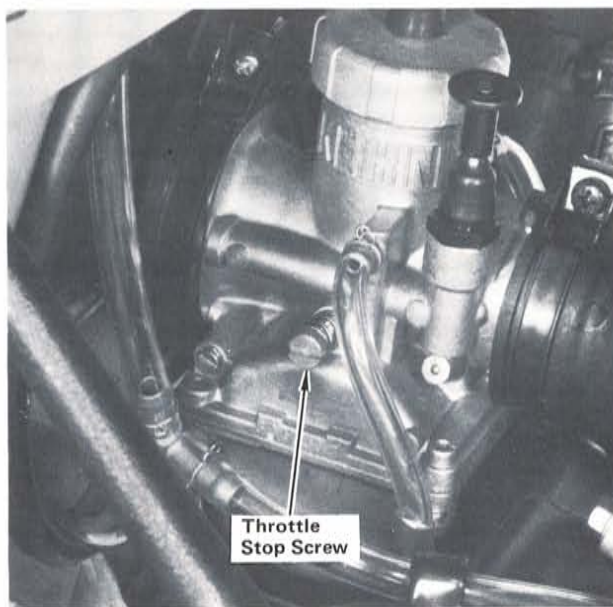


STEP 44—Check transmission oil level. If necessary, remove oil filler cap and fill transmission with recommended oil as described in owner's manual or shop manual. Reinstall and tighten oil filler cap.

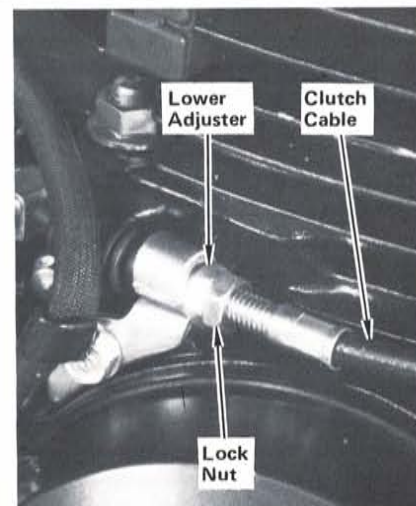
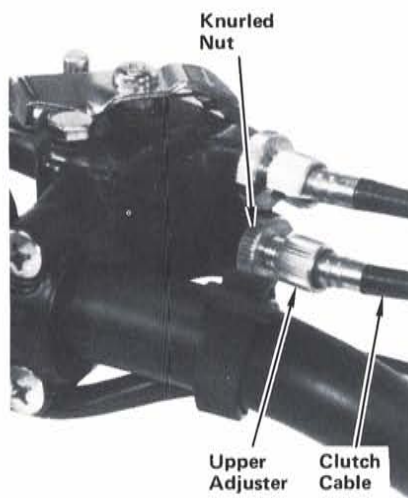
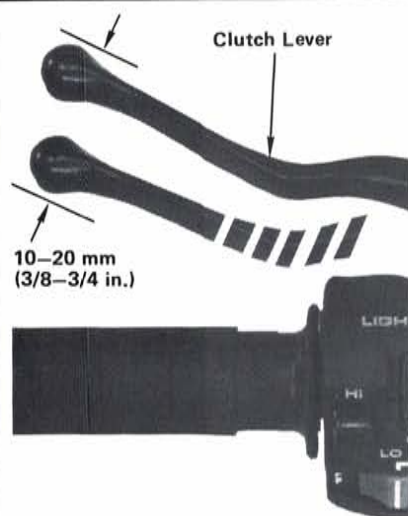
1983 MODEL ONLY



STEP 45—Check ignition timing as described in shop manual.

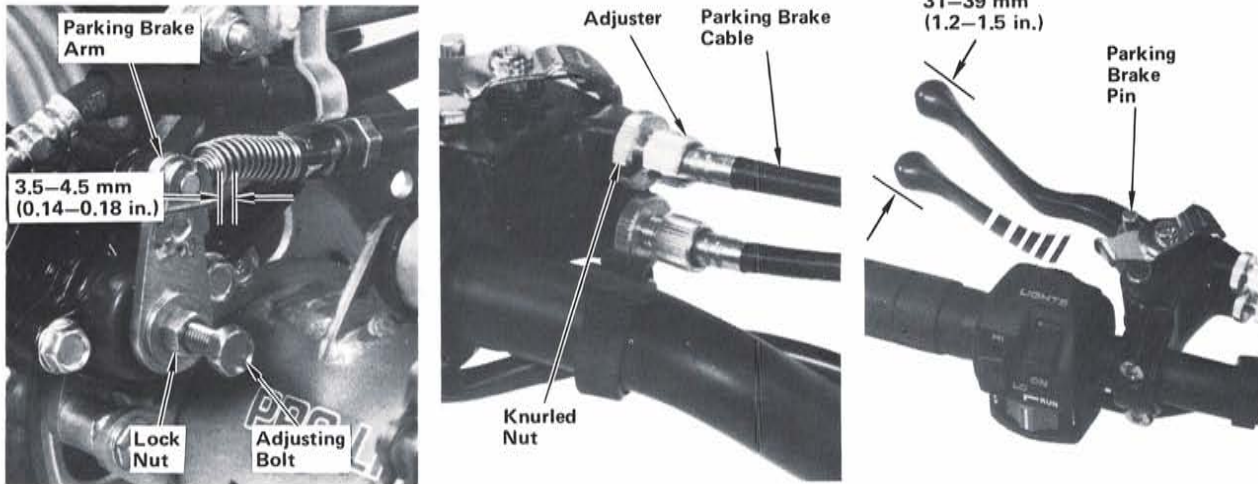


STEP 46—Connect a tachometer and check transmission in neutral. Start engine and allow it to warm up to operating temperature and check idle speed at $1,300 \pm 100$ rpm. If necessary, adjust idle speed using throttle stop screw. Remove tachometer.

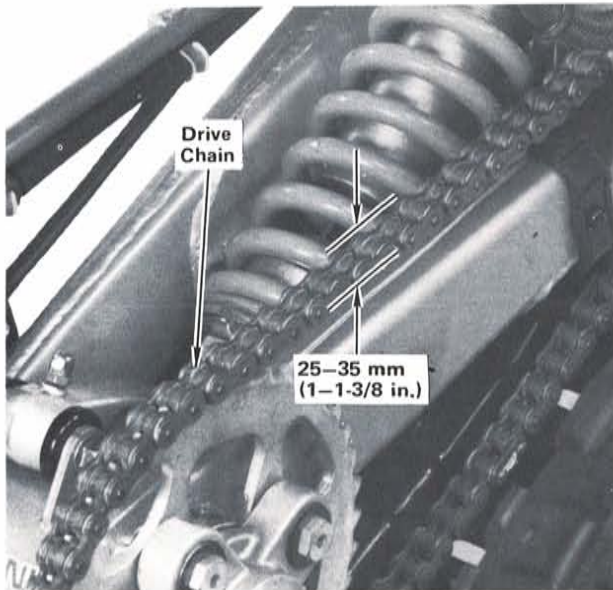


STEP 47—Check clutch lever free play at tip of clutch lever before clutch starts to engage. Free play, measured at tip of clutch lever should be between 10 and 20 mm (3/8–3/4 in.). To adjust free play, loosen knurled nut and turn upper adjuster. If upper adjuster is turned out near its limit and correct free play cannot be obtained, screw upper adjuster all the way in and tighten knurled nut. Then use lower adjuster to obtain correct free play as follows. Loosen lock nut and turn lower adjuster to obtain correct free play. After adjustment, tighten lock nut.

CAUTION: After adjusting clutch lever free play, start engine, pull in clutch lever and shift into gear. Check that engine does not stall and ATC does not creep. Gradually release clutch lever and open throttle, ATC should start smoothly and accelerate gradually.

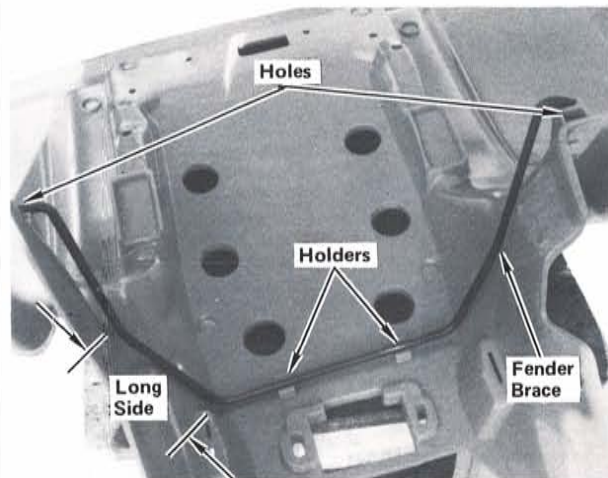


STEP 48—Check parking brake operation. Check that free play at tip of parking brake arm is 3.5–4.5 mm (0.14–0.18 in.). If adjustment is necessary, loosen lock nut on rear brake caliper and turn adjusting bolt until resistance is felt without squeezing clutch/parking brake lever. Tighten lock nut. Check that travel of clutch/parking brake hand lever is between 31 and 39 mm (1.2–1.5 in.) at tip of lever. If adjustment is necessary, loosen knurled nut, squeeze clutch/parking brake lever, and turn adjuster while pushing parking brake pin. Tighten lock nut and recheck brake arm free play at rear brake caliper.

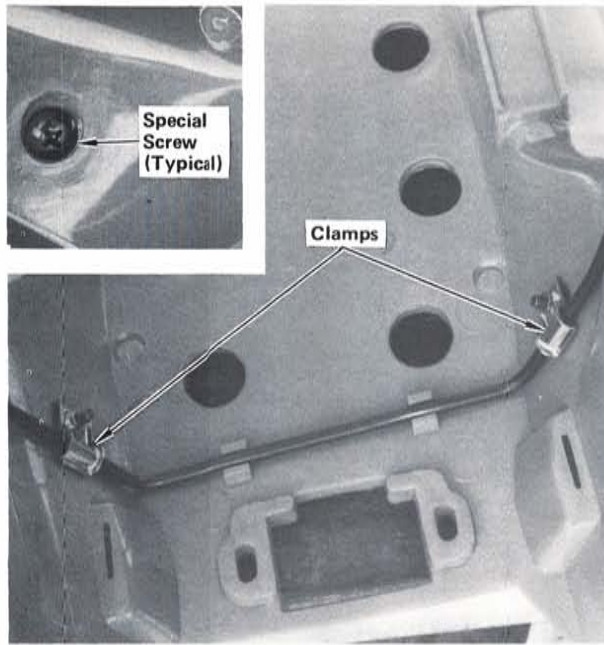


STEP 49—Check drive chain slack and lubrication. If necessary, adjust and lubricate drive chain as described in owner's manual or shop manual.

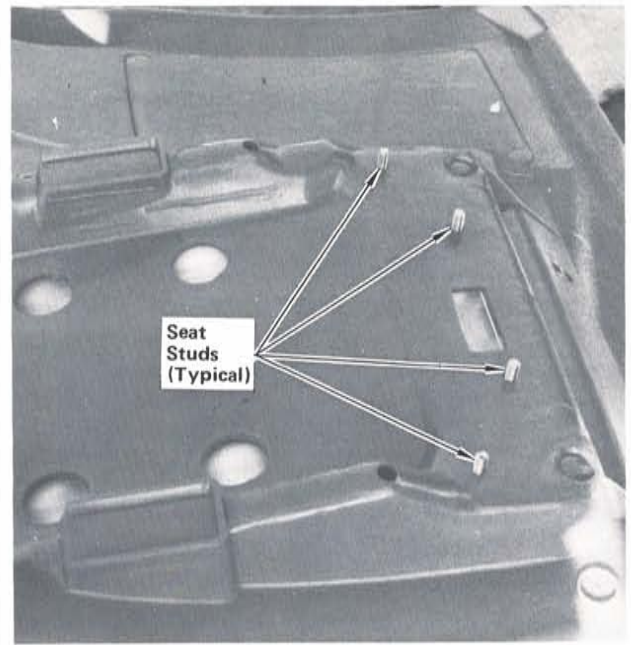
Drive chain slack:
25–35 mm (1–1/8 in.)



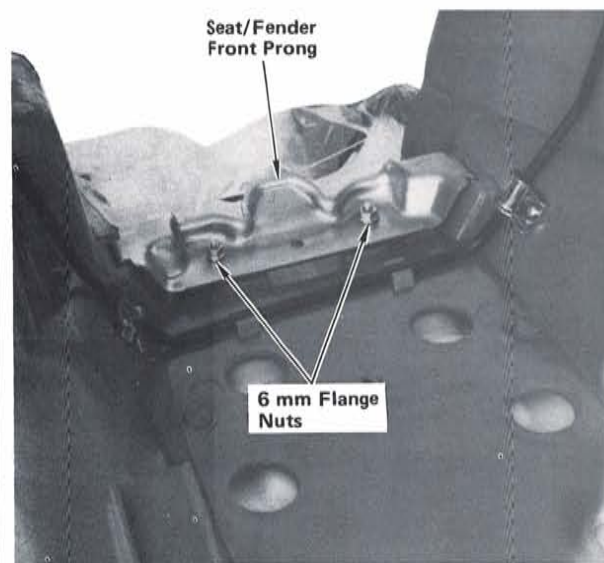
STEP 50—Insert ends of fender brace into holes in rear fender, with the long side on the left as shown. Position top of brace into the two holders as shown.



STEP 51—Install two clamps on fender brace, positioned as shown, using two special black screws inserted from the top of the fender as shown.

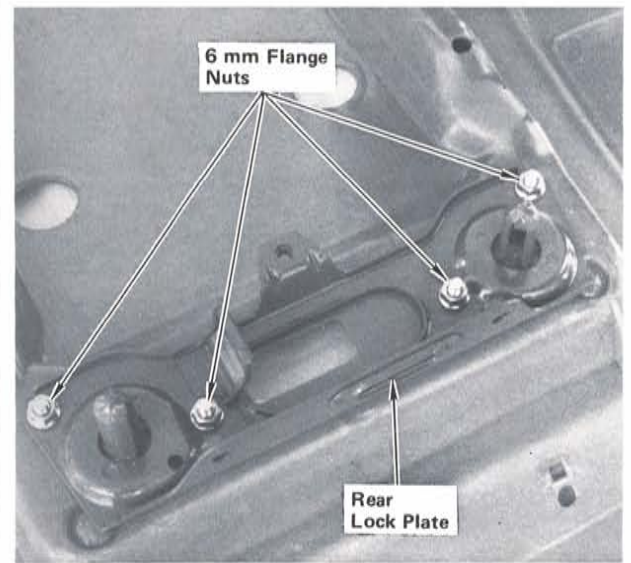


STEP 52—Place seat on top of rear fender, inserting studs through rear fender holes as shown.



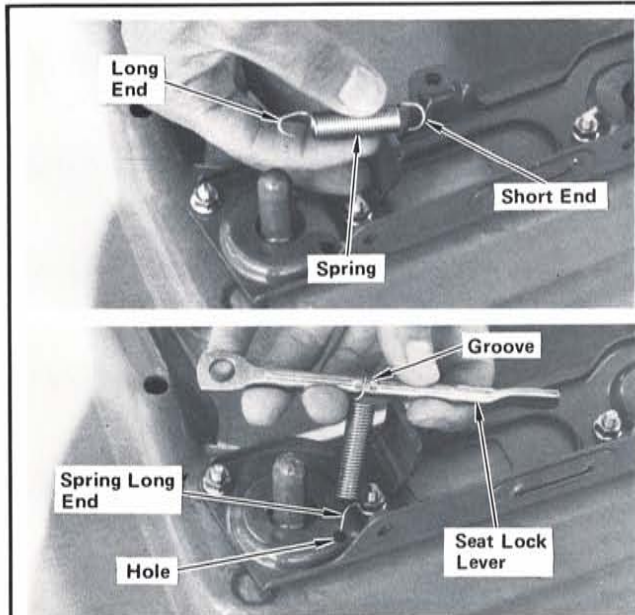
STEP 53—Position seat/fender front prong on two front studs as shown and install using two 6 mm flange nuts. Tighten nuts to specified torque.

Torque specification:
1.2 kg-m (9 lb-ft)

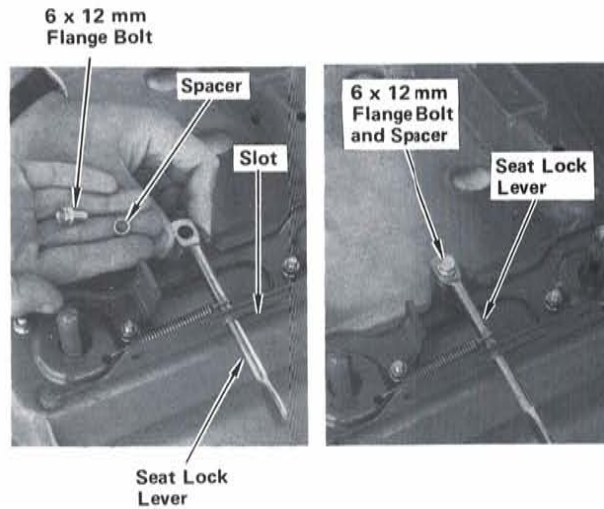


STEP 54—Position seat/fender rear lock plate on four rear studs as shown and install using four 6 mm flange nuts. Tighten nuts to specified torque.

Torque specification:
1.2 kg-m (9 lb-ft)

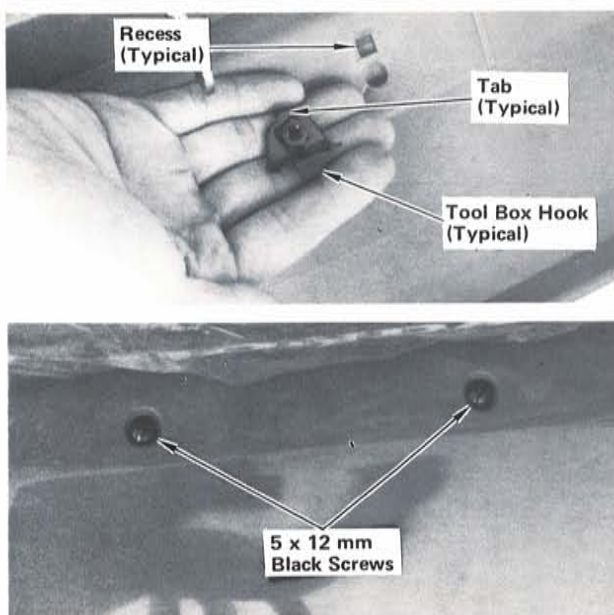


STEP 55—Hook long end of seat lock lever spring into hole in lock plate as shown, and insert seat lock lever through short end of spring. Position end of spring in groove in lock lever as shown.

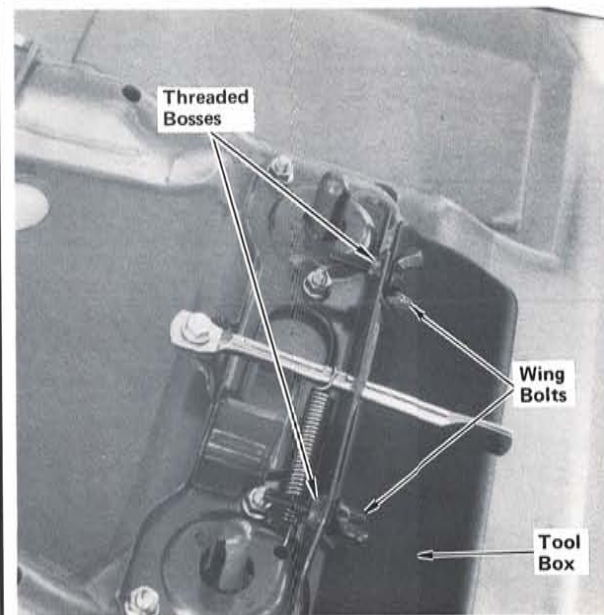


STEP 56—Insert seat lock lever through slot in lock plate as shown and install using a 6 x 12 mm flange bolt and special spacer. Tighten bolt to specified torque.

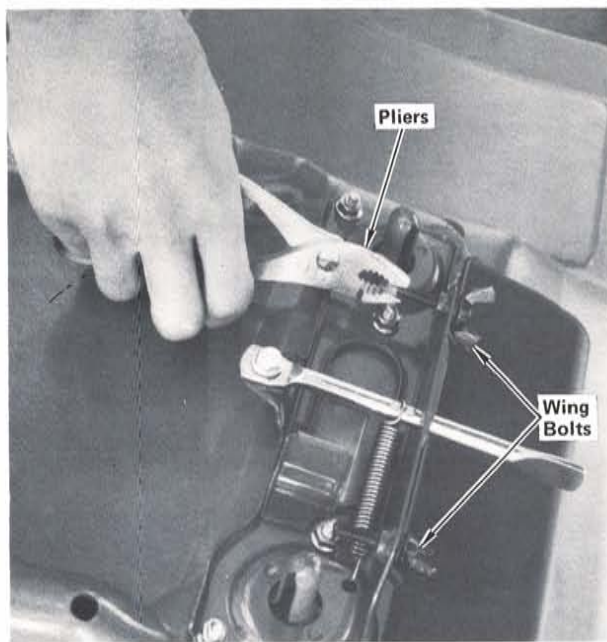
Torque specification:
1.2 kg-m (9 lb-ft)



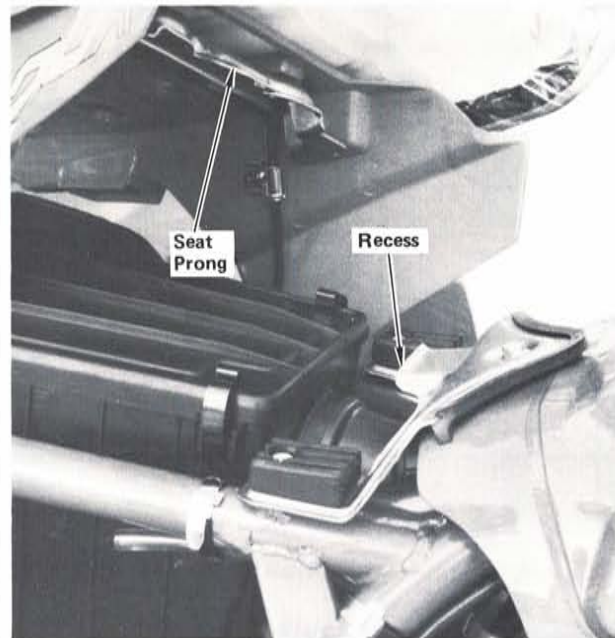
STEP 57—Position tool box hooks under rear fender/seat so tabs are inserted into recesses in rear fender. Install hooks using two 5 x 12 mm black screws inserted through holes from the top. Tighten screws securely.



STEP 58—Place tool kit in tool box. Install tool box by hooking slots at top of tool box over hooks just installed, and inserting two wing bolts through bottom flange of tool box and into threaded bosses of the lock plate as shown.



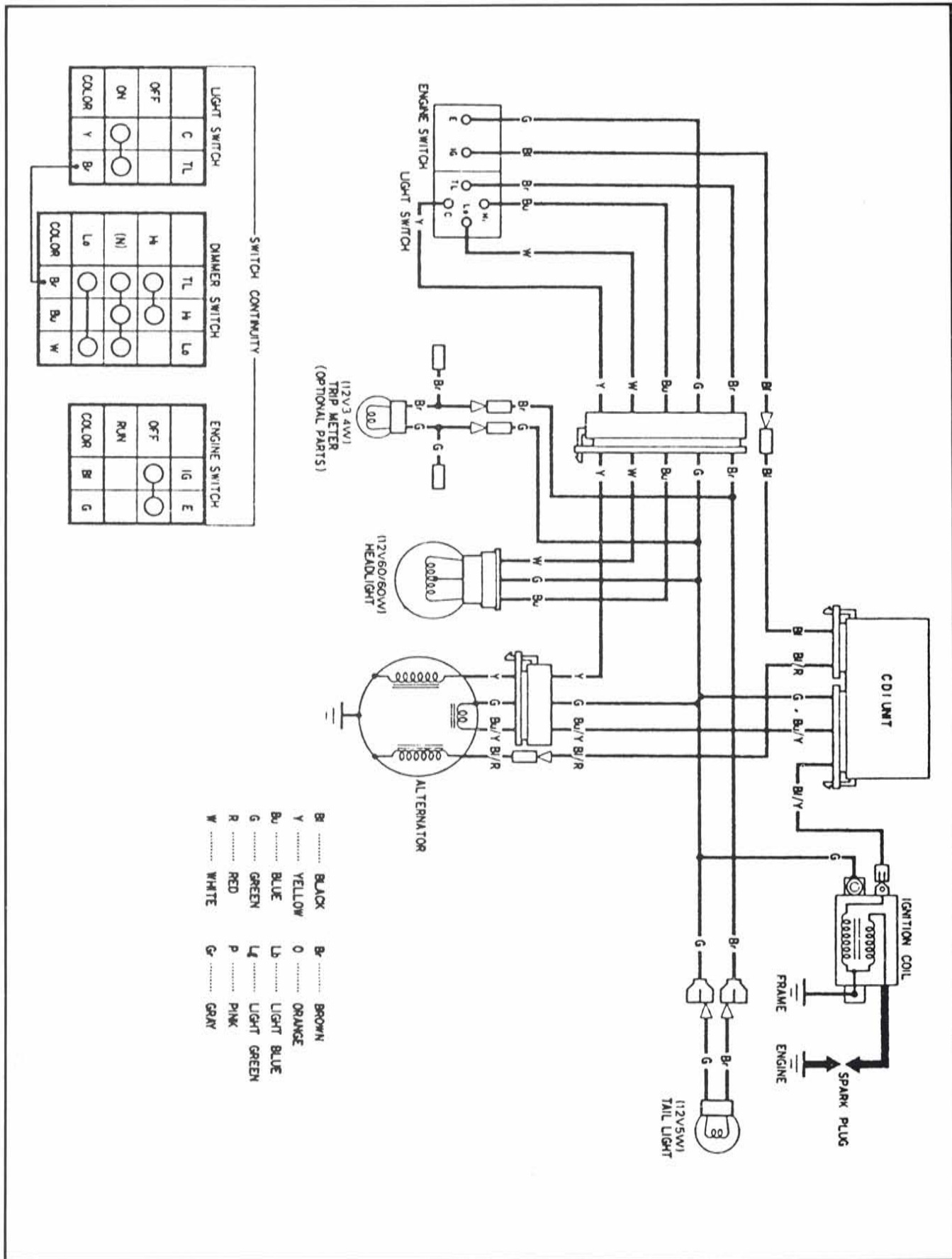
STEP 59—To prevent wing bolts coming out, flatten last three threads with pliers as shown.



STEP 60—Install rear fender/seat by inserting seat prong into recess at rear of fuel tank and pressing down on rear of seat to engage seat latch. Be sure alignment pegs are in the rubber grommets and the seat latch is fully engaged.

TORQUE TABLE

ITEM	SIZE	TORQUE
Handlebar upper holder bolts	8 mm	2.7 kg-m (19 lb-ft)
Foot peg bolts	10 mm	3.5 kg-m (26 lb-ft)
Master cylinder holder screws	6 mm	0.9 kg-m (7 lb-ft)
Fork leg bolts	8 mm	2.1 kg-m (16 lb-ft)
Front fender bolts	6 mm	1.2 kg-m (9 lb-ft)
Front brake disc nuts	8 mm	2.7 kg-m (19 lb-ft)
Front axle	-----	9.0 kg-m (70 lb-ft)
Axle holder nuts	-----	1.2 kg-m (9 lb-ft)
Front brake caliper bolts	8 mm	2.7 kg-m (19 lb-ft)
Front brake hose guide bolt	6 mm	1.2 kg-m (9 lb-ft)
Front brake hose guide nuts	8 mm	2.7 kg-m (19 lb-ft)
Carrying handle bolts	8 mm	2.7 kg-m (19 lb-ft)
Rear axle nuts	-----	9.0 kg-m (70 lb-ft)
Skid plate bolts	8 mm	2.1 kg-m (16 lb-ft)
Seat nuts	6 mm	1.2 kg-m (9 lb-ft)



NOTE: Check all items listed on the following Pre-delivery Service Check List. Refer to owner's manual or shop manual for specifications and detailed procedures. Always test ride the unit to make sure it is functioning properly.

PRE-DELIVERY SERVICE CHECK LIST

- | | |
|--|---|
| <ul style="list-style-type: none"><input type="checkbox"/> Fill front and rear brake master cylinder reservoirs with DOT 3 brake fluid. Bleed brake systems if necessary.<input type="checkbox"/> Adjust parking brake and check cable routing. Check front and rear brake operation and brake hose routing.<input type="checkbox"/> Check transmission oil level. If necessary, fill transmission with recommended oil.<input type="checkbox"/> Remove and inspect fuel tank, drain and flush. Clean fuel filter.<input type="checkbox"/> Drain residual fuel from carburetor.<input type="checkbox"/> Check air filter element. Clean and oil if necessary.<input type="checkbox"/> Adjust clutch, check cable routing and check operation.<input type="checkbox"/> Reinstall fuel tank, fill, turn on petcock and check for leaks.<input type="checkbox"/> Adjust idle speed.<input type="checkbox"/> Check ignition timing. (1983 Only)<input type="checkbox"/> Check throttle lever free play, cable routing, and operation in all steering positions.<input type="checkbox"/> Adjust and lubricate drive chain.<input type="checkbox"/> Check tire pressure.<input type="checkbox"/> Check front fork air pressure.<input type="checkbox"/> Check operation and adjustment of front and rear suspension. | <ul style="list-style-type: none"><input type="checkbox"/> Inspect electrical components for proper operation and adjustment.<ul style="list-style-type: none">• Headlight: Adjust.• Taillight.• Ignition switch.<input type="checkbox"/> Check security of all nuts, bolts, and other fasteners.<input type="checkbox"/> Check to ensure that all applicable recall and product update campaigns are complied with.<input type="checkbox"/> TEST RIDE: Check performance, handling, and operation.<ul style="list-style-type: none">• Transmission and clutch: Ease of shifting, clutch operation, etc.• Acceleration: Smoothness, etc.• Cruising: Smoothness, etc.• Handling: Stability and cornering.• Brakes: Smoothness and stopping power.• Idling: Smoothness, throttle response, and return to idle.• Recheck idle speed after 10 minutes of stop and go operation.• Parking brake operation: Check.• Upon completion of test ride, check for fuel and oil leaks. |
|--|---|

LOOSE PARTS LIST

The following is a list of items contained in the parts package carton and loose parts in the crate.

PARTS NAME	QTY	H/C	PART NUMBER
Front wheel assy	1	-----	44700-964-000
Rear wheel assy	2	-----	42700-964-000
Rear axle nut	2	-----	90306-329-770
Front brake assy	1	-----	-----
8 x 40 mm flange bolt	2	1028802	95800-08040-00
Fender support stay	1	-----	80116-964-000
Brake cable guide A	1	0686204	45467-428-000
Right front fork assy	1	1422468	51400-964-003
Left front fork assy	1	1422526	51500-964-003
Front fender	1	1415066	61100-964-003
Front fender mounting rubber	4	0680678	61103-430-000
Front fender mounting collar	4	0763946	61104-444-000
Front fender washer	4	1044288	90404-680-000
6 x 25 mm flange bolt	4	0484485	95700-06025-00
6 x 16 mm flange bolt	1	0496653	95700-06016-00
6 mm flange nut	1	0471623	94050-06000
8 x 40 mm flange bolt	6	1404698	90118-965-000
8 x 60 mm flange bolt	2	1404672	90113-965-000
Rear fender	1	1423656	80100-964-003
Skid plate	1	1423847	50365-964-000
8 x 12 mm washer/bolt	2	0485854	93481-08012-00
8 x 16 mm washer/bolt	2	0474965	93481-08016-00
Brake guide hose guide B	1	1085182	45468-961-000
Headlight assy	1	-----	-----
6 x 16 mm flange bolt	2	1007277	95700-06016-07
6 x 35 mm flange bolt	2	1057611	95700-06035-07
Seat compliment	1	1422898	77100-964-003
8 x 16 mm flange bolt	2	0631242	95700-08016-00
Front brake disk	1	1416114	43122-965-000
Front axle	1	1403807	44301-965-000
Front axle side collar, right	1	1403815	44311-965-000
Front axle side collar, left	1	1403823	44312-965-000
8 mm flange nut	3	1001197	90309-428-731
8 mm flange nut	2	0758375	90208-425-870
5 x 20 mm screw/washer	1	0496752	93891-05020-07
Grommet collar	1	0576215	18625-634-670
5 mm hex nut	1	0207399	94002-05000-0S

LOOSE PARTS (Cont'd)

PARTS NAME	QTY	H/C	PART NUMBER
Cotter pin	2	1047679	94201-40400
Bolt cover set	2	-----	90142-GC8-000
Rear axle washer	2	1045954	42322-961-000
Right step arm assy	1	-----	-----
10 x 25 mm flange bolt	2	0479014	95700-10025-00
Master cylinder holder	1	1046374	45517-961-000
6 x 25 mm oval screw	2	0420521	93700-06025-0B
Rear hinge comp.	1	1423664	80102-964-000
Front hook stay	1	1422914	80106-964-000
Tool box	1	1423672	83501-964-000
Tool set	1	1425446	89010-964-000
Tool box setting bolt	2	0622258	90103-671-960
6 mm flange nut	6	0612689	94050-06080
Seat lock lever	1	1423631	50221-964-000
Seat lock lever spring	1	1423649	50222-964-000
Lever set collar	1	1423722	90109-964-000
6 x 12 mm flange bolt	1	0487025	95700-06012-00
5 x 12 mm screw	1	1423714	90104-964-000
Tool box hook	2	1423680	83502-964-000
Support stay holder	2	-----	80118-964-000
Owner's manual (1983)	1	143618	31964600
Owner's manual (1984)	1	1533124	31964610



(

(

(

(

(

(

(

READ THIS READ THIS READ THIS

READ THIS READ THIS READ THIS

HONDA

Modifications which you have made, or should make in the future, to any Honda product, shall be deemed by our company to have been performed at your sole risk and responsibility, and without our company's or the manufacturer's approval or consent, implied or expressed. We further disclaim any and all liability, obligation, or responsibility for any defects of modified parts or of the modified product, and for any claims, demands, or causes of action for damage to property or for personal injuries resulting from the modification of said Honda product.

READ THIS READ THIS READ THIS