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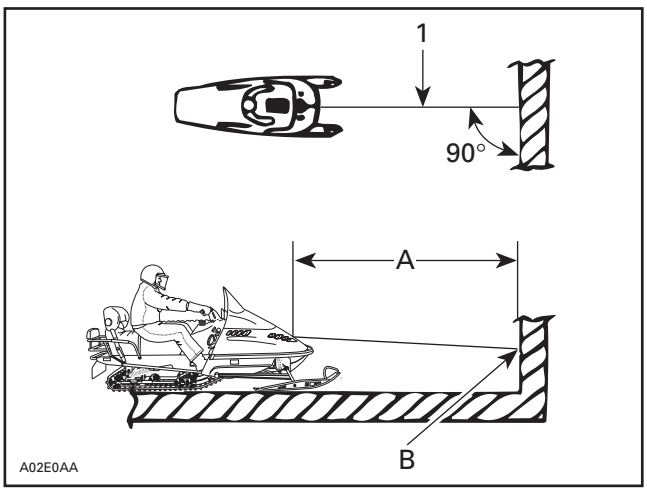
BODY

INSTALLATION AND ADJUSTMENT

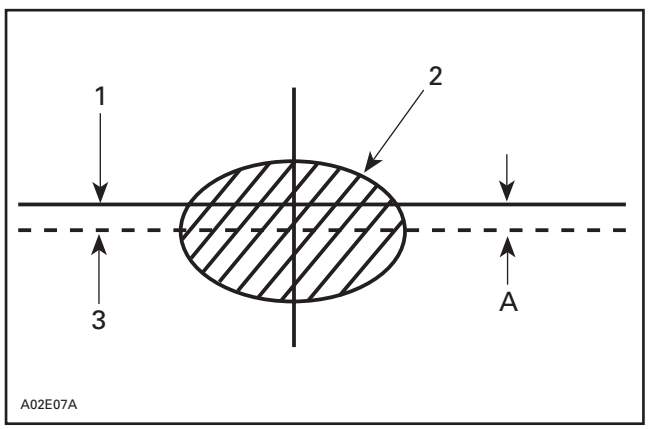
HEADLAMP BEAM AIMING

Beam aiming is correct when center of high beam is 25 mm (1 in) below the headlamp horizontal center line, scribed on a test surface, 381 cm (12 ft 6 in) away.

Measure headlamp center distance from ground. Scribe a line at this height on test surface (wall or screen). Light beam center should be 25 mm (1 in) below scribed line.



1. Headlamp center line
A. 381 cm (12 ft 6 in)
B. 25 mm (1 in) below headlamp center



1. Headlamp horizontal center line
2. Light beam (high beam) (projected on the wall)
3. Light beam center
A. 25 mm (1 in)

Required Conditions

Place the vehicle on a flat surface perpendicular to test surface (wall or screen) and 381 cm (12 ft 6 in) away from it.

Rider or equivalent weight must be on the vehicle.

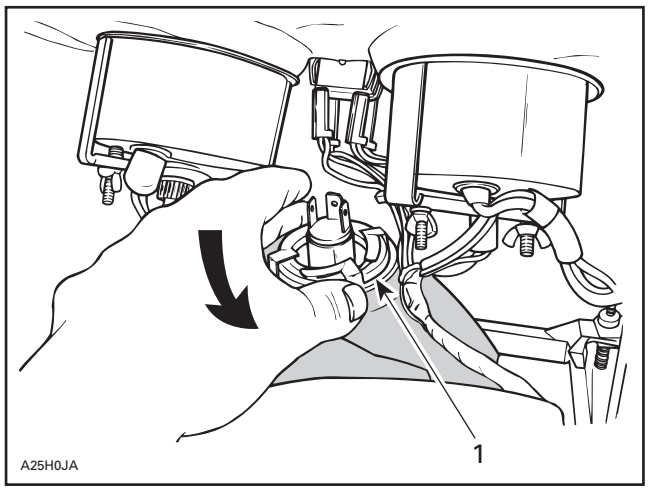
Select **high** beam.

Adjustment

Remove headlamp molding. Turn screws accordingly at upper headlamp attachment.

BULB REPLACEMENT

If headlamp bulb is burnt, tilt hood and unplug the connector from the headlamp. Remove the rubber boot and unfasten the bulb retainer clips or locking ring.



TYPICAL
1. Locking ring

Detach the bulb and replace. If the taillight bulb is burnt, expose the bulb by removing red plastic lens. To remove, unscrew the 2 retaining screws. Verify all lights after replacement.

▼ CAUTION

Never touch glass portion of an halogen bulb with bare fingers, as it shortens its operating life. If by mistake glass is touched, clean it with isopropyl alcohol which will not leave a film on the bulb.

DECAL

To remove a decal; heat old decal with a heat gun and peel off slowly.

Using isopropyl alcohol, clean the surface and dry thoroughly.

Apply liquid soap to new decal and carefully position the decal. Using a sponge or a squeegee, remove the air bubbles and surplus water working from the center toward the edges. Allow to air dry.

▼ CAUTION

Do not apply isopropyl alcohol or solvant directly on decals.

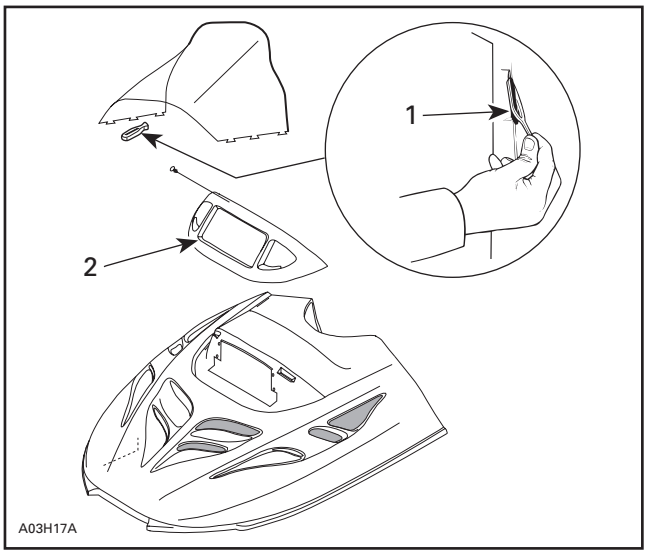
WINDSHIELD INSTALLATION

When peeling off the protective film some polyethylene particles may remain on the windshield. A soft clean cloth moistened with naphtha (camping equipment fuel) will easily remove the remaining particles.

◆ WARNING

Naphtha is flammable and explosive under certain conditions. Always manipulate in a well ventilated area. Do not smoke or allow open flames or sparks in the vicinity.

Position the windshield on the hood then push it down until the tabs are fully inserted into the hood slots. Lock the windshield tabs in position using latches as shown.



S-SERIES
1. *Latch*
2. *Temporary remove headlamp molding for windshield installation*

BELT GUARD

Disassembly and Assembly

NOTE: For additional information (ex.: exploded view) refer to the correspondent *Parts Catalog*.

◆ WARNING

Engine should be running only with guard well secured in place.

Inspection

Check guard mounting bosses, clips and retainers for wear.

NOTE: Guards are purposely made slightly oversize to maintain tension on their clips and retainers preventing undue noise and vibration. It is important that this tension be maintained when reassembling.

WIRING HARNESS

◆ WARNING

Ensure all terminals are properly crimped on the wires and that all connector housings are properly fastened. Keep wires away from any rotating, moving, heating and vibrating parts. Use proper fastening devices as required.

CABLES

◆ WARNING

Before installation, ensure that all cables are in perfect condition. Properly install the cable ends and secure them in place. Pay attention to route them properly, away from any rotating, moving, heating, or vibrating parts.

PIPING

◆ WARNING

Always ensure that the fuel, vent, primer, impulse, injection oil and rotary valve oil lines are properly fixed to their connectors, that they are not perforated or kinked and that they are properly routed away from any rotating, moving, heating or vibrating parts. Also check for leaks. Replace if required.

NOTE: Refer to proper *Parts Catalog* to find suitable clip part numbers.

PLASTIC REPAIR

REPAIR

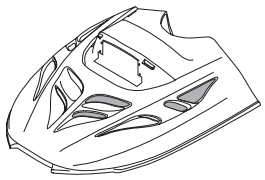
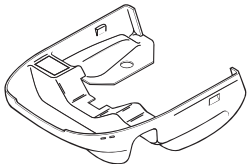
The very first step before repairing plastic materials is to find out exactly which type of material is involved. Refer to following chart.

▼ CAUTION

Consult chart and repair kit instructions carefully, some repair products are not compatible with certain plastics.

◆ WARNING

Polycarbonate windshields must **never** be repaired by welding or otherwise.

PART	MODEL	REPAIRABLE	IRREPARABLE	
		R.I.M. POLYURETHANE	HIGH DENSITY POLYETHYLENE	IMPACT COPOLYMER
HOOD  A03H0ZJ	Tundra/R			
	S-Series			
BOTTOM PAN  A06H1AJ	Tundra/R			
	S-Series			

MATERIAL REPAIR PROCEDURE

R.I.M. polyurethane is light colored (tan) on the inside with a smooth surface.

◆ WARNING

Material should be repaired and repainted in a well ventilated area only.

▼ CAUTION

Clean R.I.M. with isopropyl alcohol or Crest Hi-Solv product. **Never** use cleaners or products that contain **chlorine**.

▼ CAUTION

R.I.M. should never be exposed to temperatures exceeding 93°C (200°F).

NOTE: When working on a R.I.M. surface, never use a grinder or a high revolution tool such as an air or electric buffer. Use of such tools could overheat material and liberate agents in it thus causing a bad adhesion.

REPAIR PROCEDURE

For R.I.M. Polyurethane

Small Scratches

– Sand and scuff area.
– Feather out edges.
– Paint with a matching acrylic auto touch-up paint.

Deep Scratches

– Sand and scuff area.
– Make a V groove using a knife or a rough round file.
– Clean surface with isopropyl alcohol or Crest Hi-Solv stock no. AH-S product.
– Cover with TP-E epoxy mixed in equal quantities.
– Heat the surface with a heater lamp placed at 38 cm (15 in) for a period of 15 minutes.
– Sand the repair using a smooth dry sand paper.
– Use the same product if a final finish is required.
– Clean surface with Crest Hi-Solv product.
– Apply a flexible primer such as Crest Prima Flex stock no. AP-F.
– Wait 10 minutes.
– Repaint (air dry during 72 hours (approximately)).

Large Crack

– Sand and scuff outside and inside area by exceeding it 31.7 mm (1-1/4 in) on each side and 12.7 mm (1/2 in) at each end.
– Make a V groove (appr. 90°) on both sides of hood using a knife or a rough round file.
– Enlarge the crack to 2.4 mm (3/32 in) – 3.2 mm (1/8 in) using a sharp knife.
– Clean outside and inside surface with isopropyl alcohol or Crest Hi-Solv product.
– Apply aluminum tape RA-T from Crest to the damaged area **outside** surface. This will act as a back support during repair.
– Repair inside surface first.
– Apply Crest 50 mm (2 in) wide fiberglass tape to the damaged area **inside** surface.
– Apply Crest TP-E epoxy over the fiberglass tape.
– When epoxy is hardened, remove aluminum tape from outside surface.
– Cover outside surface with Crest TP-E epoxy filling the damaged area. Damaged area should be slightly higher.
– Heat surface with a heater lamp placed at 40 cm (15 in) for a period of 15 minutes.
– Sand outside repair area using a dry sand paper.
– Use Crest TP-E epoxy if a final finish is required.
– Sand repair area as needed.
– Clean surface to be painted with Crest Hi-Solv product.
– Apply a flexible primer such as Crest Prima Flex stock no. AP-F.
– Wait 10 minutes.
– Repaint (air dry during 72 hours approximately).

NOTE: R.I.M. material is high static plastics, painting must be done in a dust free area such as a paint booth.

Crest products used in R.I.M. repair procedure are available from following locations:

CREST MAIN OFFICE AND MANUFACTURING PLANT	
CREST INDUSTRIES, INC. 3841 13th Street Wyandotte, Michigan 48192	Phone: 313-283-4100 Toll Free: 1-800-822-4100 Fax: 1-800-344-4461 Fax: 313-283-4461

DISTRIBUTOR WAREHOUSE LOCATIONS		
UNITED STATES		CANADA
CREST EAST COAST, INC. P.O. Box 550 1109 Industrial Parkway Brick, New Jersey 08723 Phone: 908-458-9000 Fax: 908-458-5753 CREST PRODUCTS, INC. *Shipping Address:* 125 Production Drive Yorktown, Virginia 23693 Phone: 757-599-6572 Virginia: 1-800-572-5025 Outstate: 1-800-368-5033 Fax: 757-599-6630 *Mailing Address:* P.O. Box 2018 Grafton, Virginia 23692 CREST INDUSTRIES SOUTHEAST, INC. *Shipping Address:* 4300 Glen Haven Drive Decatur, Georgia 30035 Phone: 404-288-4658 Toll Free: 1-800-552-0876 Fax: 404-288-4658 *Mailing Address:* P.O. Box 254 Decatur, Georgia 30031	CREST INDUSTRIES, INC. (CREST MID-WEST) 231 Larkin Williams Ind. Court St. Louis, Missouri 63026 Phone: 314-349-4800 Toll Free: 1-800-733-2737 Fax: 314-349-4888 Toll Free Fax: 1-800-776-2737 **CREST MID WEST** **Regional Branch Warehouses** CREST INDUSTRIES, INC. P.O. Box 635 Mountain Home, Arkansas 72653 Phone: 501-491-5583 Toll Free: 1-800-733-2737 CREST INDUSTRIES, INC. 4200 Jackson Street, Unit 9 Denver, Colorado 80216 Phone: 303-320-3900 Toll Free: 1-800-733-2737 Fax: 303-320-6509 REM-CO DISTRIBUTING, INC. 5625 S. Adams Tacoma, Washington 98409 Phone: 206-474-5414 Toll Free: 1-800-735-7224 Fax: 206-474-7339	J2 PRODUCTS A Division of Sawill Ltd. 54 Audia Court, Unit 2A Concord, Ontario, L4K 3N4 *Phone:* Toronto: 416-665-1404 Concord: 905-669-9410 Montréal: 514-962-3932 *Fax:* Concord: 905-669-9419 Montréal: 514-962-3932 WHEEL-IN AUTOMOTIVE SUPPLY *Shipping Address:* No. 1, 3911A Brandon St. S.E. Calgary, Alberta, T2G 4A7 Office: 403-287-0775 *Mailing Address:* P.O. Box 40036 929-42nd Avenue S.E. Calgary, Alberta, T2G 5G5

FRAME

FRAME CLEANING

NOTE: For aluminum frames use only aluminum cleaner and follow instructions on container. (Dursol cleaner or equivalent).

Clean frame and tunnel with appropriate cleaners and rinse with high pressure hose.

Touch up all metal spots where paint has been scratched off. Spray all bare metal parts of vehicle with metal protector.

Seat Cleaning

For all models, it is recommend to clean the seat with a solution of **warm soapy water**, using a soft clean cloth.

▼ CAUTION

Avoid use of harsh detergents such as strong soaps, degreasing solvents, abrasive cleaners, paint thinners, etc. that may cause damage to the seat cover.

FRAME WELDING

Steel Frame:

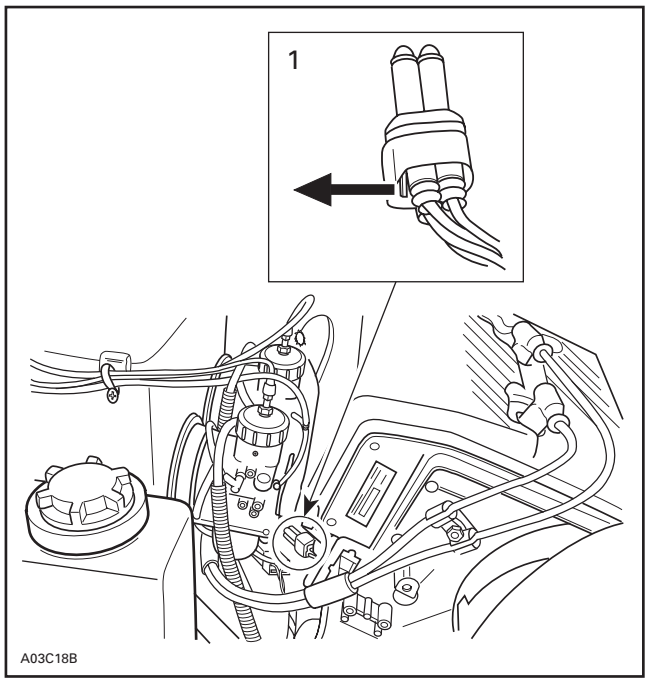
– electric welding
– amperage: 70-110 A
– voltage: 20-24 V
– rod: E-7014 (3/32 in)

Aluminum Frame: (refer to specialized welding shop)

– argon-oxygen/acetylene welding
– rod: ER-4043 (3/32 in)

▼ CAUTION

Before performing electrical welding anywhere on the vehicle, unplug the multiple connector at the electronic box. On models equipped with a battery, also unplug the negative cable. This will protect the electronic box and battery against damage caused by flowing current when welding.



TYPICAL

1. Unplug before electrical welding

▼ CAUTION

If welding is to be done near plastic material, it is recommended to either remove the part from the area or to protect it with aluminum foil to prevent damage.

FRAME COMPONENT REPLACEMENT

S-Series

Drilling Procedure

When drilling self-piercing rivets, use Supertanium™ drill bit (P/N 529 031 800), available in a 5 mm (3/16 in) size and shipped in packs of 2.

For proper drilling instructions and to prevent premature wear, follow the procedure below.

Always use a variable speed electric drill.

Partially drill rivet end — not the rivet head.


A03H2FA

Ground rivet end to the part retained by the rivet.

Remove part riveted.

Ground rivet to the chassis.

Drive out remaining rivet head using a punch.

Maintain a slow to medium speed at all times when drilling. The proper speed is attained when a constant chip is ejected.

NOTE: To increase bit life, use Bombardier synthetic chaincase oil (P/N 413 803 300) as a cutting oil.

▼ CAUTION

High speed drilling will cause excessive heat which may destroy the cutting edge of the bit, therefore avoid using pneumatic drills.