

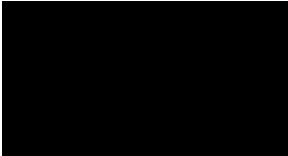


Ministry
of Defence

Defence Equipment and Support
Secretariat
#2043 Maple 0a
Ministry of Defence
Abbey Wood
Bristol BS34 8JH



Email: DES SEC-PolSec LE-JSC-WPNS@mod.uk



Our Reference:
FOI2021/04070
Date:
23 April 2021

Dear 

Thank you for your email of 29 March 2021, requesting the following information:

'For the currently being released (Yamaha Grizzly 450 PTL QUADBIKES) via Brightwells MOD disposals auctions, and to assist in the safe further operation of these vehicles by purchasers such as myself.

Could you supply copies in PDF format of the AESP publications and Manuals that exist for the Yamaha Grizzly 450 PTL QUADBIKE please?

Such as the following.

**TECHNICAL DESCRIPTION
ILLUSTRATED PARTS CATALOGUE
PURPOSE AND PLANNING
MODIFICATION INSTRUCTIONS
INSTALLATION INSTRUCTIONS'**

Your request has been handled in accordance with the Freedom of Information (FOI) Act 2000.

A search has been carried out of Ministry of Defence (MOD) records and we unfortunately do not hold any information relating to Technical Description, Purpose and Planning or Installation Instructions as copies of the relevant Army Equipment Support Publications (AESPs) no longer exist.

The Illustrated Parts Catalogue is held, but is a copy of Yamaha parts catalogue YFM45FGX, 1st Edition, which was published by Yamaha in August 2007. This has not been included as it is available to purchase direct from Yamaha; Section 21(1) of the FOI Act provides that information is exempt if it is reasonably available by other means.

Our search has revealed a document relating to Modification Instructions which falls within the scope of your request. This is:

- Army Equipment Support Publication (AESP) 2340-R-105-811 (August 2019) - ALL TERRAIN VEHICLE (QUAD) YAMAHA YMH450 GRIZZLY– Modification Instructions and Index

Defence Equipment & Support

A redacted copy is attached to this letter, which reflects the following.

Section 40(2) has been applied to the document in order to protect personal information as governed by the General Data Protection Regulations (GDPR). Section 40 is an absolute exemption and there is no requirement to consider the public interest in deciding to withhold the information.

However, it was also necessary to consider withholding information under Section 26(1)(a) and (b) (Defence) and Section 38(1) (a and b) of the FOI Act. Section 26(1)(b) (Defence) applies to information which if disclosed would, or would likely prejudice the capability, effectiveness or security of any relevant forces. Section 38(1) (a and b) (Health and Safety) applies to information which if disclosed would or would likely endanger the physical or mental health of any individual or endanger the safety of any individual.

As these two exemptions are both qualified it was necessary to undertake a Public Interest Test to determine whether the balance for withholding the information outweighs that for public disclosure.

There would be public interest in enhancing the accountability of government by releasing, which would also demonstrate the MOD's commitment to openness and transparency, thus making the Government more accountable to the electorate. The FOI Act also contains a presumption of release. However, releasing information about certain onboard equipment and components of the vehicle you own would provide a tactical advantage to those wishing to inhibit the MOD's current capability, effectiveness and security, thus resulting in the potential physical and mental harm to military personnel.

On balance, the weight of public interest lies in withholding under qualified exemptions Section 26 (Defence) and Section 38 (Health and Safety) of the FOI Act. I have set the level of prejudice against release of the exempted information at the higher level of "would" rather than "would be likely to". On this basis, the relevant information has been redacted from the attached document.

If you have any queries regarding the content of this letter, please contact this office in the first instance. If you wish to complain about the handling of your request, or the content of this response, you can request an independent internal review by contacting the Information Rights Compliance team, Ground Floor, MOD Main Building, Whitehall, SW1A 2HB (e-mail CIO-FOI-IR@mod.gov.uk). Please note that any request for an internal review should be made within 40 working days of the date of this response.

If you remain dissatisfied following an internal review, you may raise your complaint directly to the Information Commissioner under the provisions of Section 50 of the Freedom of Information Act. Please note that the Information Commissioner will not normally investigate your case until the MOD internal review process has been completed. The Information Commissioner can be contacted at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF. Further details of the role and powers of the Information Commissioner can be found on the Commissioner's website at <https://ico.org.uk/>.

Yours sincerely,

DE&S Secretariat



Ministry
of Defence

Army Equipment Support Publication

ALL TERRAIN VEHICLE (QUAD) YAMAHA YMH450 GRIZZLY

MODIFICATION INSTRUCTIONS AND INDEX

2340-R-105-811

2nd Edition Aug 2019

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Publications Authority: DES LE VST

Conventional Vehicle Solutions

Mail Point #3157

Cedar 1

Mod Abbeywood

Bristol, BS34 8JH

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AMENDMENT RECORD

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PREFACE

Sponsor: DES LE VST CVS
Project Number:
File Ref: OSVP/0025
Publication Authority: DES LE VST

INTRODUCTION

1. The purpose of this publication is to enable the User to maintain the equipment in a sound operational condition at all times. The information presented here must be applied in accordance with the text or damage to the equipment may result. Scheduled maintenance is a Unit responsibility and may be carried out by either Unit operator/personnel. Technical/REME tradesman assistance may be required for some tasks.
2. Users should forward any comments on this publication in accordance with Army Equipment Support Publication (AESP) 0100-P-011-013. All comments are only to be submitted using the electronic and interactive Form 10 which can be accessed and downloaded from the Joint Asset Management and Engineering Solutions (JAMES) Portal (via Hot Topic – Forms) or from DR TDOL (F10).
3. All electronic Form 10s are to be completed and forwarded to the Form 10 cell using the instructions accompanying the form in its template location. Security procedures are to be observed in accordance with Joint Services Publication (JSP) 440.
4. The Form 10 procedure is only to be used for the purpose of commenting on the content of an individual AESP and must not be used:
 - 4.1 In place of the Equipment Failure Reporting (EFR) procedure outlined in The Land Equipment Unit Maintenance Standards (LEUMS).
 - 4.2 For subjects which are the concern of the Technical Staff Suggestions outlined in Army General and Administrative Instructions (AGAI):
5. AESPs are issued under UK MoD authority, and where AESPs specify action is to be taken, the AESP will of itself be sufficient authority for such action and also for the demanding of the necessary stores, subject to the provisions of Para 6 below.

AUTHORITY


6. The subject matter of this publication may be affected by Defence Instructions and Notices (DINs), Standard Operating Procedures (SOPs), or by local regulations. When any such instruction, Order, or Regulation contracts any portion of this publication, it is to be taken as the overriding authority.

RESPONSIBILITIES

7. The person on a Unit or formation with delegated responsibility for the specified equipment, who is also competent and experienced in that role, is responsible for ensuring that the operations detailed in this Maintenance Schedule are properly carried out. The operations are only to be carried out by personnel who, through either professional trade training or an equipment specific formal training course, are appropriately qualified. The aforementioned responsible person may also order any operation to be carried out more frequently than specified, if conditions under which the equipment operated render it necessary.

MODIFICATION INSTRUCTION INDEX

Priority (Pty) is shown as: Immediate: I Routine: R

Instr No	Pty	Page Nos.	Amdt No.	Subject	Applicability
1	R	1-8		Fitment of an in-line fuel filter	
2	R	1-10		Fitment of Left-Hand Throttle	
3	R	1-26			
4	R	1-6		Autojaw 'R' Clip replacement	
5					
6					
7					
8					
9					
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**YAMAHA YFM450 GRIZZLY 450
MODIFICATION INSTRUCTION No. 1**

Sponsor: **GSV PT**
Project No.: **P900033500**
File Ref: **SUV 5/4 OR SUV 5/39**

Publication Authority: **GSV SV PT**

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
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Amdt No.	Incorporated By (Signature)	Date
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SUBJECT: Fitment of an in-line fuel filter

INTRODUCTION

1 This instruction provides the information and instruction necessary to fit an inline fuel filter.

1.1 Limitations on use of equipment. Nil.

APPLICABILITY

2

2.1 Fitted to subject EAC 1208 4106 Yamaha YFM450 Grizzly 450 Quad Bikes held by user units.

2.2 Unmodified stock, held at all levels of technical storage.

REASON FOR MODIFICATION

3

3.1 Code 3 - to improve reliability.

PRIORITY

4

4.1 ARMY: Routine.

4.2 RAF: Class 1.

ESTIMATED TIME REQUIRED

5

5.1 Embodiment: 1.0 man-hours.

MODIFICATION IMPLEMENTATION PLAN

6

- 6.1 This instruction is to be implemented by:
 - 6.1.1 ARMY – Units authorized to carry out levels 1, 2, 3 or 4 maintenance.
 - 6.1.2 RAF - Units not later than the next scheduled maintenance and Vehicle Depots before initial issue of vehicle.
- 6.2 Associated instructions. Nil.
- 6.3 Strike plate action: N/A. *

Action required by

7

- 7.1 Units and establishments holding equipment.
 - 7.1.1 Examine equipment documents to see if modification is applicable.
 - 7.1.2 Examine equipment to identify if the modification is required, demand the stores required.
 - 7.1.3 ARMY - On receipt of stores, request REME to modify equipment.
 - 7.1.4 ARMY - Record the AESP and instruction number in equipment documents.
 - 7.1.5 RAF - Record modification details on AF G1084A and Form 4870. Units operating STAMA are also to record modification details on ADP MTMS Job Certification Sheet and to follow the procedures laid down in AP 100C-08A.
- 7.2 Army units authorized to carry out levels 2, 3 and 4 maintenance and RAF units.
 - 7.2.1 ARMY - When requested by units or during overhaul of equipment on charge without REME 1st Line Support, obtain the items listed in Para 8 and carry out this modification.
 - 7.2.2 Record completion details of modification against appropriate entry in vehicle documents.
 - 7.2.3 Complete AF G1084A when reporting completion of the modification to FORWARD (RAF) using the following code:

RAF: MODIFICATION CODE AFK026

NOTE

RAF units operating STAMA are also to complete ADP MTMS Job Certification Sheet and to follow the procedures laid down in AP 100C-08A.

- 7.3 All recipients of this instruction. Add particulars to AESP 2320-R-105-811 Mod/Gen Instr Index.

Stores, tools and equipment

8

- 8.1 Stores to be demanded.
 - 8.1.1 The following item is to be demanded quoting this instruction as the authority.
 - 8.1.2 Registration/Serial number of vehicle/engine/assembly for equipment held by user units.

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
	7YAM	4330-99-345-7371 / MOD-YFM450-FFPM.	Fuel Filter Mod Kit Comprising of:	1
1	7YAM	2910-99-725-4096	Fuel Filter	1
2	7YAM	5340-99-871-6437	Fuel Line Clip	2

- 8.2 Stores or suitable equivalent to be obtained locally. Nil.
- 8.3 Tools and stores to be manufactured. Nil
- 8.4 Stores to be removed and returned through normal channels/reduced to scrap. Nil
- 8.5 Items/stores to be modified. Nil
- 8.6 Special tools and test equipment required. Nil

Sequence of operations

NOTE

The item numbers of Para 8 are used as reference throughout this instruction.

- 9 Carry out this instruction as follows:
 - 9.1 Set the Vehicle Parking Brake.
 - 9.2 Turn the Fuel tap to off and remove the ignition key.
 - 9.3 Remove the seat and the left-hand Fuel Tank Side Panel (See Figs 2 item 1 and 2).
 - 9.4 Disconnect the fuel line and clip from the carburettor retaining the clip (see Fig 3 Item 1).
 - 9.5 Cut 50mm from the front of the straight piece of fuel hose (as shown in Fig 4 and 5).
 - 9.6 Cut back the outer sleeving from each end of the cut hose by 20mm and attaché a green clip to each end.
 - 9.7 Fit the fuel filter to the hose noting the direction of flow on the filter body and attach this to the carburettor using the original clip.
 - 9.8 Attach the hose from the fuel tap to the other side of the filter using the new clip provided (See Fig 6).

9.9 Turn on the fuel tap and check for leaks.

9.10 Refit Fuel Tank Side Panel and Seat.

TESTING AFTER EMBODIMENT

10 Nil.

EFFECT ON WEIGHT

11 Negligible.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.

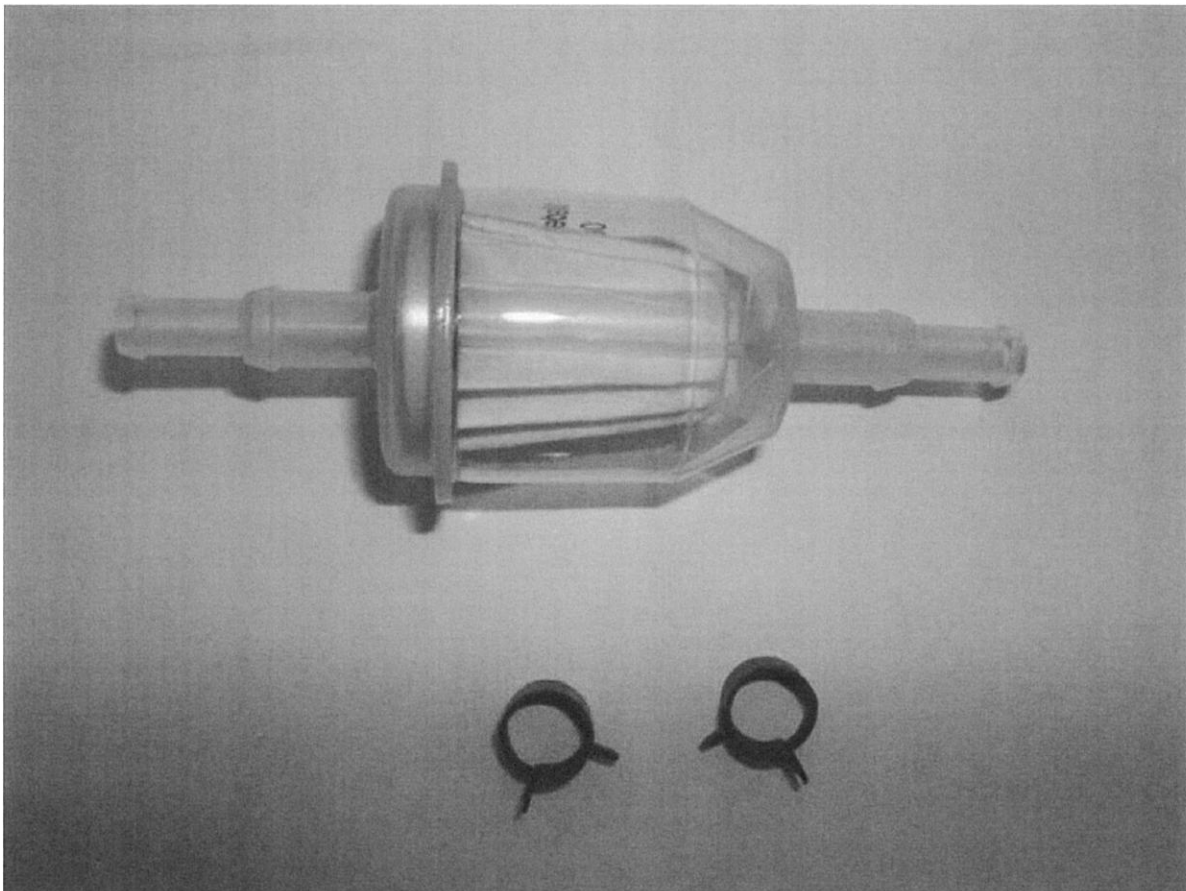
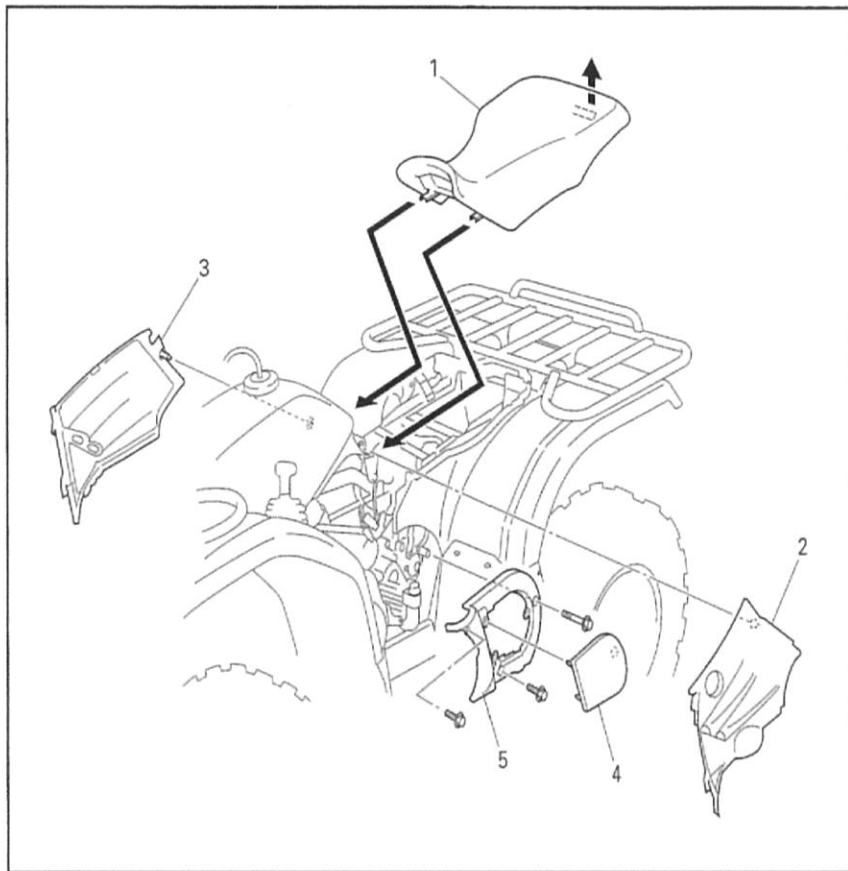
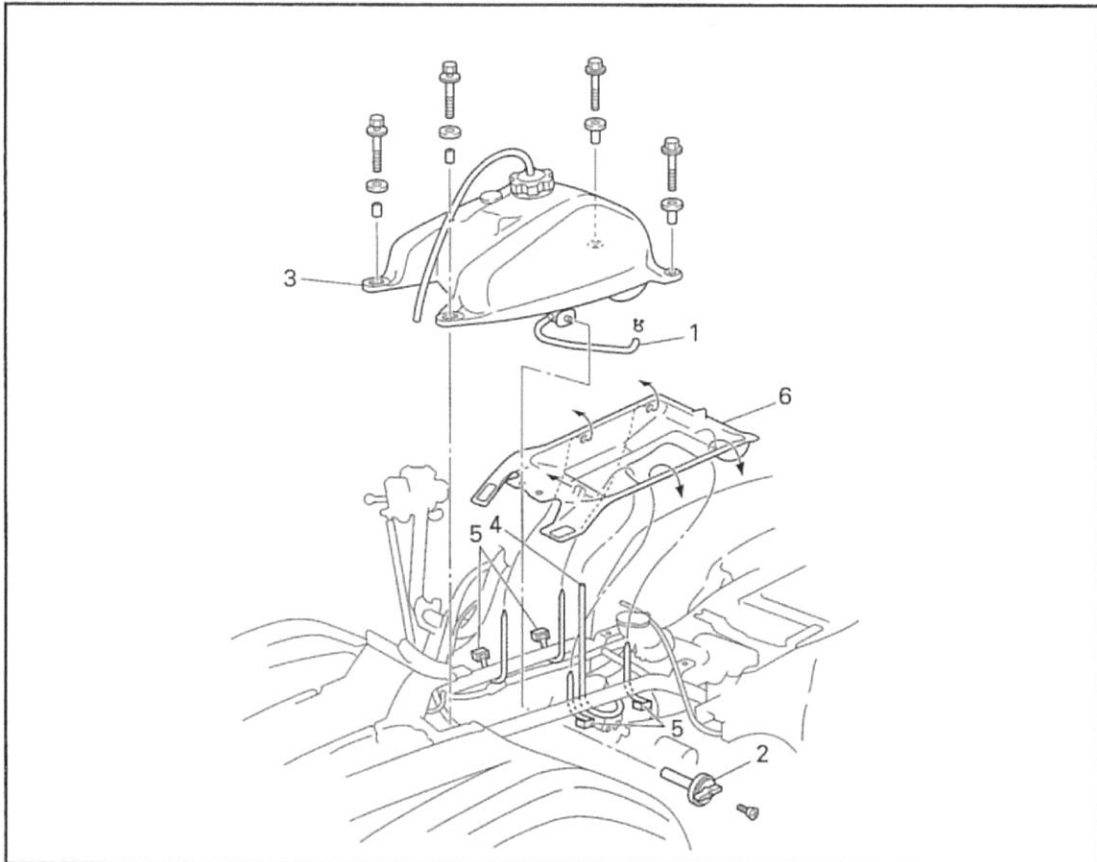


Fig 1 Fuel Filter and clips



Order	Job name/Part name	Q'ty	Remarks
1	Removing the seat and side panels Seat	1	Remove the parts in the order below. NOTE: _____ Pull up the seat lock lever, then pull up on the rear of the seat.
2	Fuel tank side panel (left)	1	
3	Fuel tank side panel (right)	1	
4	Engine side panel	1	
5	Engine side cover	1	
			For installation, reverse the removal procedure.

Fig 2 Seat and Side Panels



Order	Job name/Part name	Q'ty	Remarks
	Removing the fuel tank Seat and fuel tank side panels Fuel tank cover		Remove the parts in the order below. Refer to "SEAT AND SIDE PANELS". Refer to "FRONT CARRIER, FRONT BUMPER AND FRONT FENDER".
1	Fuel hose	1	NOTE: _____ Before disconnecting the fuel hose, turn the fuel cock to "OFF".
2	Fuel cock lever	1	
3	Fuel tank	1	NOTE: _____ When installing the fuel tank, pass the fuel tank breather hose through the hole of the handlebar protector.
4	Float chamber air vent hose	1	
5	Plastic band	4	
6	Rubber cover	1	
			For installation, reverse the removal procedure.

Fig 3 Fuel Pipe

Fig 4 Fuel Pipe Showing Position of Cuts (Pre-Cut)

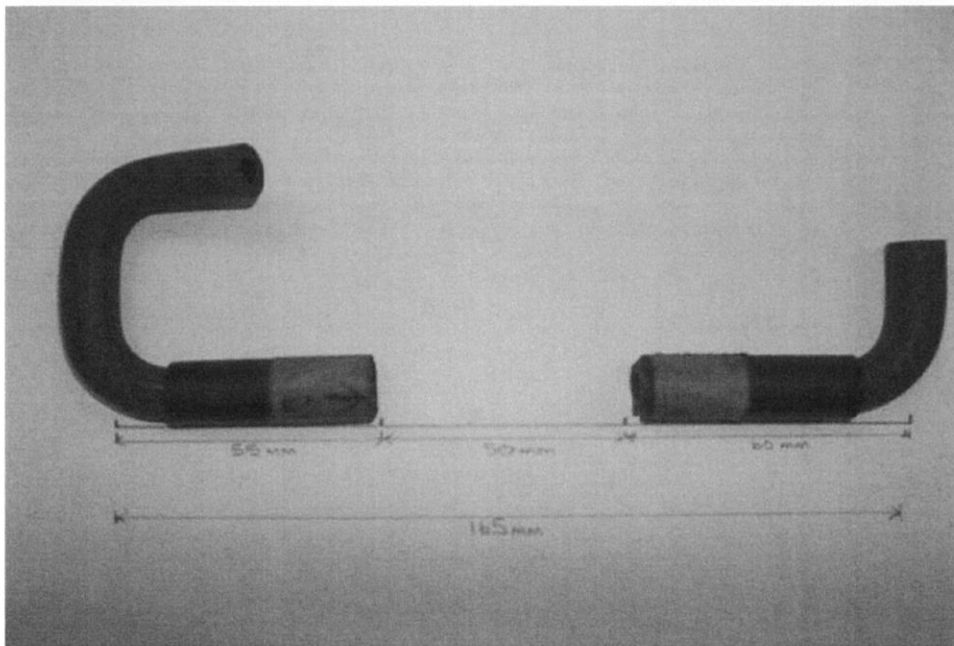
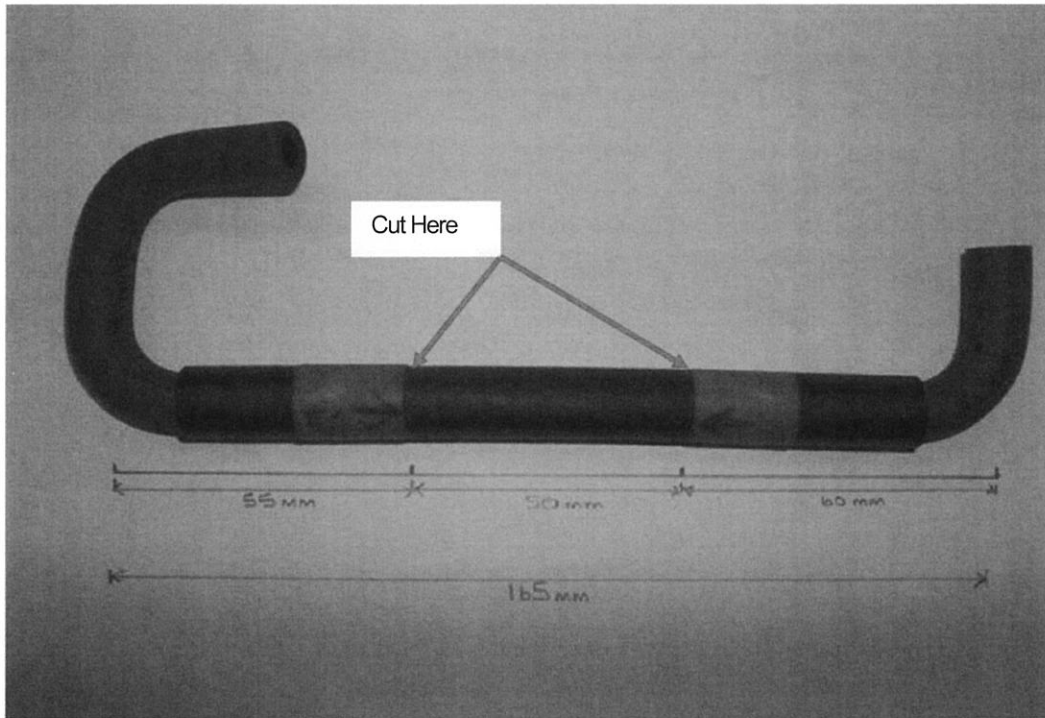


Fig 5 Fuel Pipe after Cutting



Fig 6 Fuel Filter Fitted and In Position

**YAMAHA YFM450 GRIZZLY 450
MODIFICATION INSTRUCTION No. 2**

Sponsor: **GSV SV PT**
Project No.: **P900033500**
File Ref: **SUV 5/4 OR SUV 5/39**

Publication Authority: **GSV SV PT**

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
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3		

Amdt No.	Incorporated By (Signature)	Date
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5		
6		

SUBJECT: Fitment of a Left-Hand Throttle

INTRODUCTION

1 This instruction provides the information and instruction necessary to fit a left-hand throttle to the system.

1.1 Limitations on use of equipment. Nil.

APPLICABILITY

2

2.1 Fitted to subject EAC 1208 4106 Yamaha YFM450 Grizzly 450 Quad Bikes held by user units.

2.2 Unmodified stock, held at all levels of technical storage.

REASON FOR MODIFICATION

3

3.1 Code 2 - to improve operational performance.

PRIORITY

4

4.1 ARMY: Routine.

4.2 RAF: Class 1.

ESTIMATED TIME REQUIRED

5

5.1 Dismantling: 0.50 man-hours.

- 5.2 Embodiment: 1.0 man-hours.
- 5.3 Assembling: 0.50 man-hours.
- 5.4 Testing: 0.20 man-hours.

MODIFICATION IMPLEMENTATION PLAN

6

- 6.1 This instruction is to be implemented by:
 - 6.1.1 ARMY – Units authorized to carry out levels 2, 3 or 4 maintenance.
 - 6.1.2 RAF - Units not later than the next scheduled maintenance and Vehicle Depots before initial issue of vehicle.
- 6.2 Associated instructions. Nil.
- 6.3 Strike plate action: N/A.

Action required by

7

- 7.1 Units and establishments holding equipment.
 - 7.1.1 Examine equipment documents to see if modification is applicable.
 - 7.1.2 Examine equipment to identify if the modification is required, demand the stores required.
 - 7.1.3 ARMY - On receipt of stores, request REME to modify equipment.
 - 7.1.4 ARMY - Record the AESP and instruction number in equipment documents.
 - 7.1.5 RAF - Record modification details on AF G1084A and Form 4870. Units operating STAMA are also to record modification details on ADP MTMS Job Certification Sheet and to follow the procedures laid down in AP 100C-08A.
- 7.2 Army units authorized to carry out levels 2, 3 and 4 maintenance and RAF units.
 - 7.2.1 ARMY - When requested by units or during overhaul of equipment on charge without REME 1st Line Support, obtain the items listed in Para 8 and carry out this modification.
 - 7.2.2 Record completion details of modification against appropriate entry in vehicle documents.
 - 7.2.3 Complete AF G1084A when reporting completion of the modification to FORWARD (RAF) using the following code:

RAF: MODIFICATION CODE AFK027

NOTE

RAF units operating STAMA are also to complete ADP MTMS Job Certification Sheet and to follow the procedures laid down in AP 100C-08A.

- 7.3 All recipients of this instruction. Add particulars to AESP 2320-R-105-811 Mod/Gen Instr Index.

Stores, tools and equipment

8

8.1 Stores to be demanded.

8.1.1 The following item is to be demanded quoting this instruction as the authority.

8.1.2 Registration/Serial number of vehicle/engine/assemblies for equipment held by units.
user

Item No.	DMC	NSN/Part No.	Designation	Qty
1	7YAM	2590-99-976-0530 / MOD-YFM450-LHTM	LH Throttle Mod Kit Comprising of:	1
2	7YAM	2590-99-847-4254/ YAM-VEN-LC4002	Throttle Cable	1
3	7YAM	2510-99-836-5265/ 583-26352-00	Left Hand Handlebar Grip	1
4	7YAM	2520-99-839-5089/ RSK-26-2129-001	Left Hand Throttle Assy (including Lever Boot, Locking Clip and Lanyard.	1
5	7YAM		Adhesive	1

8.2 Stores or suitable equivalent to be obtained locally. Nil.

8.3 Tools and stores to be manufactured. Nil

8.4 Stores to be removed and returned through normal channels/reduced to scrap. Nil

8.5 Items/stores to be modified. Nil

8.6 Special tools and test equipment required. Nil

Sequence of operations

NOTE

The item numbers of Para 8 are used as reference throughout this instruction.

9 Carry out this instruction as follows:

9.1 Set the Vehicle Parking Brake.

9.2 Turn the Fuel tap to off and remove the ignition key.

9.3 Remove the Seat and the Fuel Tank Side Panels (See Figs 1 item 1 and 2).

9.4 Remove the Fuel Filler Cap and the four-bolt securing the fuel tank cover (Fig 2 Item 10)

9.5 Disconnect the fuel line and clip (Fig 3 Item 1) and remove the fuel cock lever by unscrewing the central screw (Fig 3 item 2), remove the four bolts securing bolts and remove the fuel tank. Refit fuel cap to tank to prevent ingress of dirt.

- 9.6 Remove and retain the 2 re-useable cable ties from the right-hand side of the rubber cover (Fig 3 Item 6), fold the rubber cover to the left-hand side.
- 9.7 Cut/remove and discard the left-hand handlebar grip; clean the glue and rubber residue from the handlebar.
- 9.8 Move the left-hand brake lever away from the main handlebar switch to leave a gap of 15mm. Remove the main handlebar switch (Leave hanging by cable).
- 9.9 Remove the original throttle cable (Note where and how the cable runs/lays) as follows:
- 9.9.1 Remove the cap and gasket from the throttle assembly on the handlebars.
- 9.9.2 Hold the thumb throttle lever open, grip the wire cable with pliers and then release the lever, at this point twist the throttle cable from its holder.
- 9.9.3 Remove the side cover plate and gasket from the carburettor, twist the throttle wheel open and remove the cable from its slot.
- 9.9.4 Remove and retain the brass sleeve from the cable, withdraw the throttle cable.
- 9.10 Fit the Left-hand throttle lever butt to the brake lever, and position it so that the cable runs over the brake lever.
- 9.11 Fit the locking clip to the lanyard and secure the lanyard to the horn button clamp.
- 9.12 Apply adhesive to the inside of the grip and twist onto the handle bar, leave to dry (**Note the "L" arrow on the grip flange should face up**).
- 9.13 Lay the new dual throttle cable along the right-hand side of the frame, ensuring that it follows the same path as the original cable. The left-hand cable follows the same path as the right up to the first guide loop, then turns left in front of the steering tube, passing under the wiring then up to the handlebar running parallel with the brake cable (See Fig 4 Item 6). Fit the lever boot to the left-hand cable over adjuster; attach cable to lever, screwing adjuster fully home. **DO NOT ADJUST THE CABLE AT THIS POINT.**
- 9.14 Fit the cable through the mounting on the carburettor, screw in the adjuster and lock it in position. Refit the retained brass sleeve, twist the throttle wheel open and wing the cable into position – taking extreme care not to kink the cable wire. Refit the cover and gasket.
- 9.15 Screw the right-hand cable adjuster into the throttle lever and taking extreme care not to kink the cable wire reconnect the cable to the lever arm. Refit the cover and gasket. **DO NOT ADJUST THE CABLE AT THIS POINT.**
- 9.16 Replace the engine rubber cover and secure using retained cable ties, NOTE the cable ties also secure the wiring loom in place away from the exhaust pipe.
- 9.17 Refit the fuel tank, connect the fuel line and clip, refit the fuel cock lever and ensure that the choke cable runs OVER the shaft of the fuel cock lever. Turn on the fuel tap and check for leaks.
- 9.18 Remove fuel cap and refit fuel tank cover, refit tank cap and ensure vent pipe routed through the guide hole in the handlebar cover. Refit fuel tank side panels and seat.
- 9.19 Turn the handlebar to the full right lock position and adjust the right-hand throttle to give 3–5mm free play at the lever tip. If it is not possible to adjust either throttle at this point then the cable needs to be adjusted at the carburettor end, then repeat the process above.

9.20 Turn the handlebar to the full left lock position and adjust the left-hand throttle to give 2-3mm free play between the lever and its body lock adjuster. If it is not possible to adjust either throttle at this point then the cable needs to be adjusted at the carburettor end, then repeat the processes above.

9.21 Pull the boot cover over the left-hand throttle lever and then slide the cable boot over the adjuster. Turn the handlebar from lock to lock checking that there is sufficient free play in both throttles in all positions, also that both throttles operate smoothly, and snap shut in all positions.

9.22 Fit the locking clip into the left-hand throttle and ensure that the throttle will not operate with the pin fitted.

TESTING AFTER EMBODIMENT

10 Start and warm the engine, check for smooth operation of both throttles and check that the engine remains at idle in all handlebar positions, if not repeat steps 9.19-9.22.

EFFECT ON WEIGHT

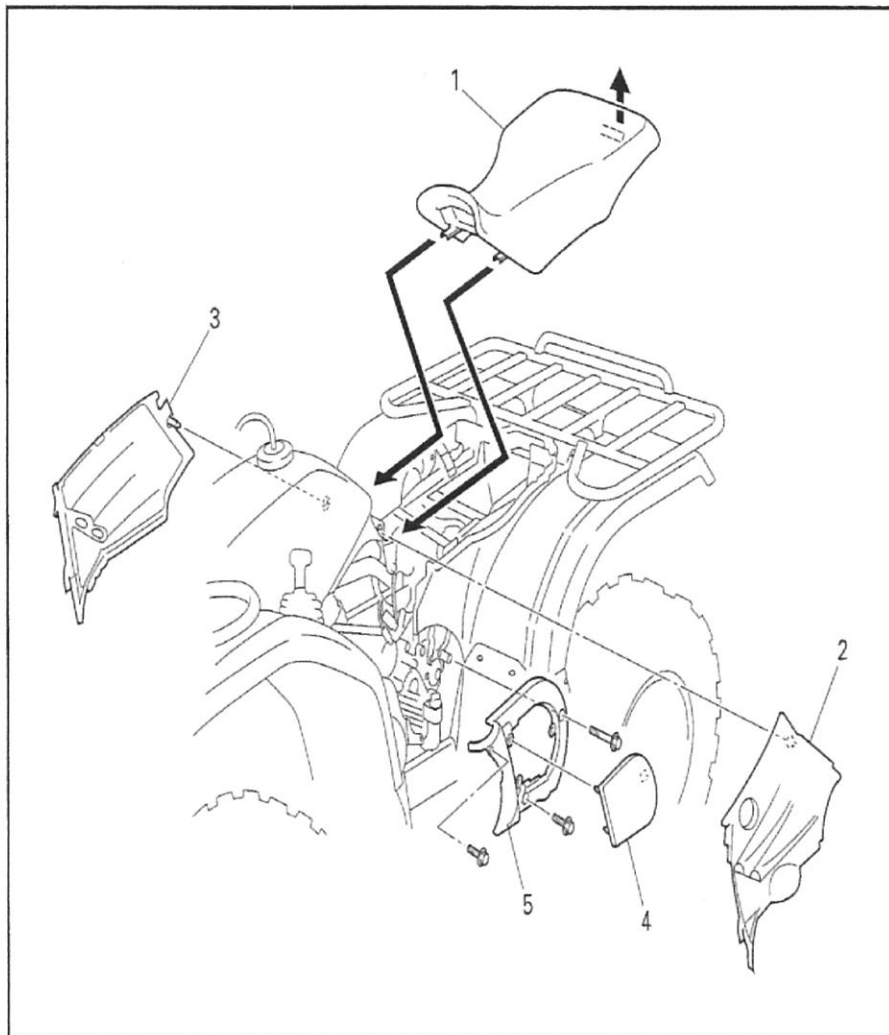
11 Negligible.

PUBLICATION AMENDMENTS

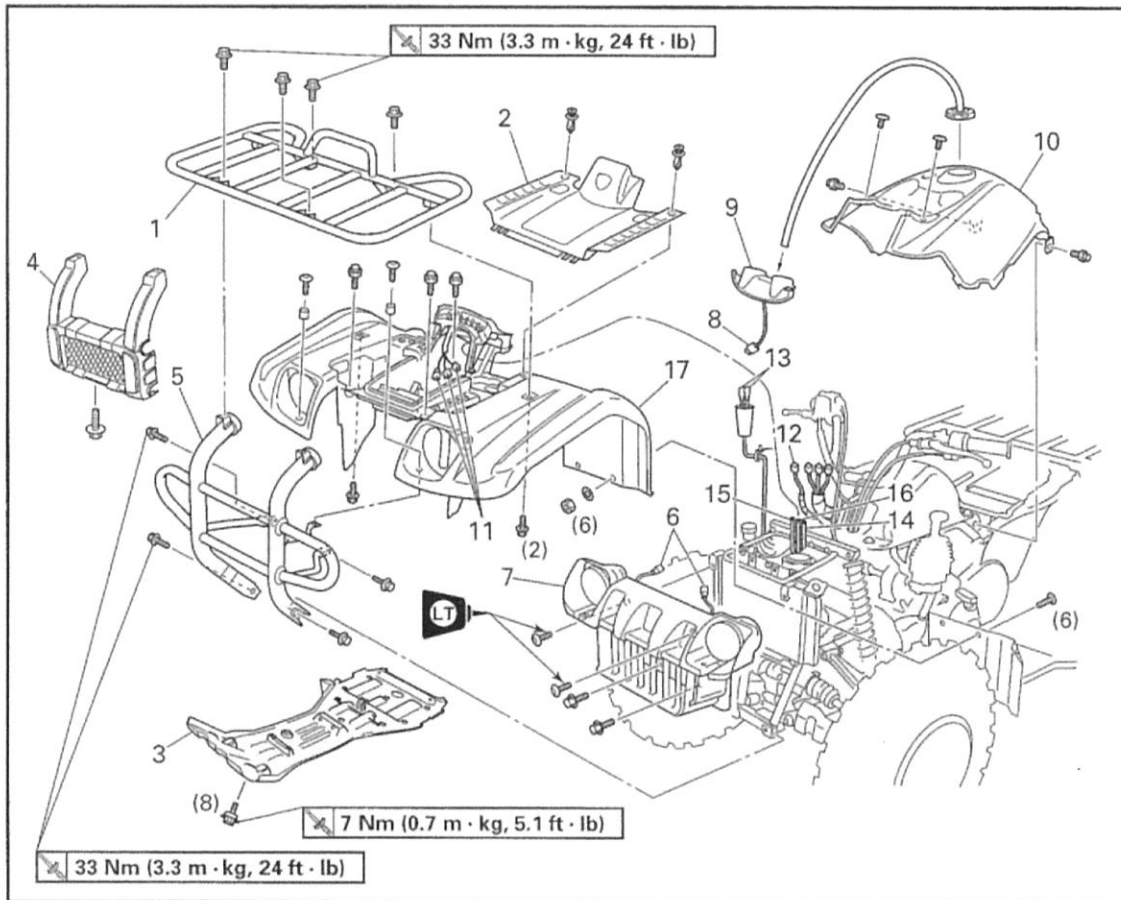
NOTE

Necessary amendments will be issued separately.

Fig 1 Seat
and Side
Panel
Removal

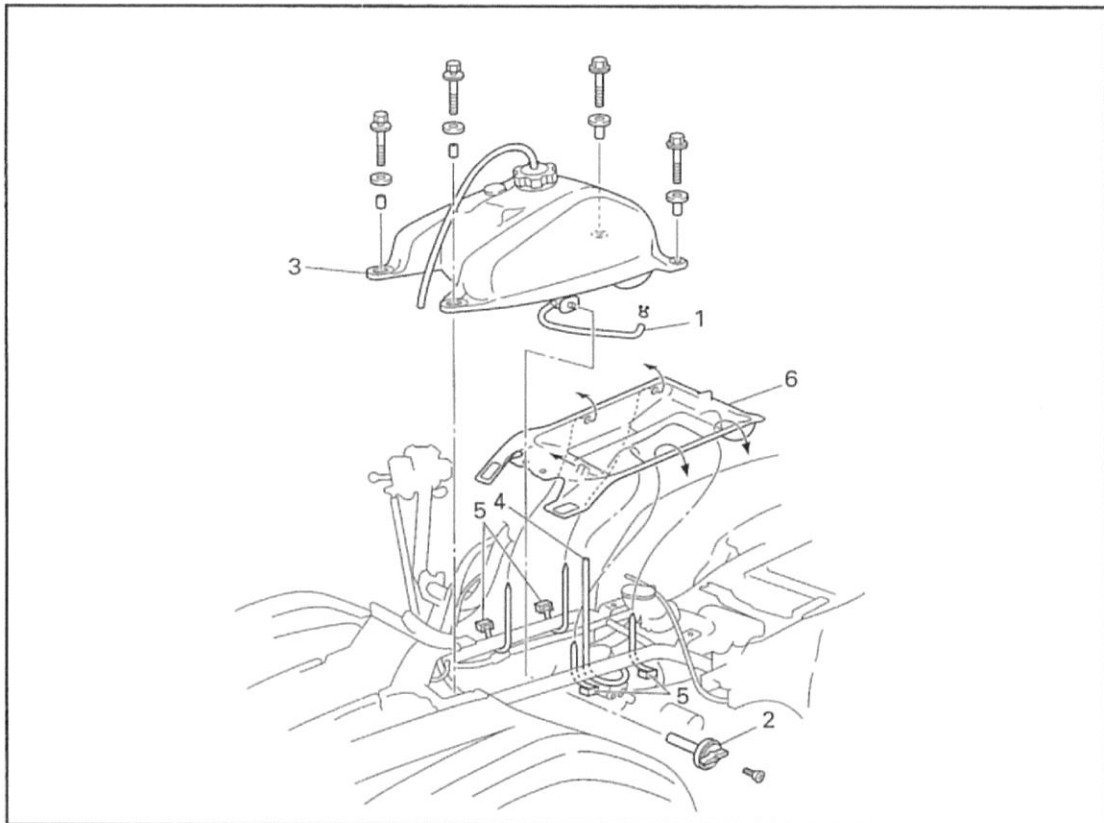


Order	Job name/Part name	Q'ty	Remarks
	Removing the seat and side panels		
1	Seat	1	Remove the parts in the order below. NOTE: _____ Pull up the seat lock lever, then pull up on the rear of the seat.
2	Fuel tank side panel (left)	1	
3	Fuel tank side panel (right)	1	
4	Engine side panel	1	
5	Engine side cover	1	
			For installation, reverse the removal procedure.



Order	Job name/Part name	Q'ty	Remarks
	Removing the front carrier, front bumper and front fender		Remove the parts in the order below.
	Seat and fuel tank side panels		Refer to "SEAT AND SIDE PANELS".
1	Front carrier	1	
2	Front fender panel	1	
3	Engine skid plate	1	
4	Front bumper cover	1	
5	Front bumper	1	
6	Headlight coupler	2	Disconnect.
7	Front grill	1	
8	Main switch coupler	1	Disconnect.
9	Handlebar cover	1	
10	Fuel tank cover	1	

Fig 2 Fuel Tank Cover Removal



Order	Job name/Part name	Q'ty	Remarks
	Removing the fuel tank		
	Seat and fuel tank side panels		Remove the parts in the order below. Refer to "SEAT AND SIDE PANELS". Refer to "FRONT CARRIER, FRONT BUMPER AND FRONT FENDER".
	Fuel tank cover		
1	Fuel hose	1	NOTE: Before disconnecting the fuel hose, turn the fuel cock to "OFF".
2	Fuel cock lever	1	
3	Fuel tank	1	NOTE: When installing the fuel tank, pass the fuel tank breather hose through the hole of the handlebar protector.
4	Float chamber air vent hose	1	
5	Plastic band	4	
6	Rubber cover	1	
			For installation, reverse the removal procedure.

Fig 3 Fuel Tank Removal

CABLE ROUTING

- | | |
|--|---|
| ① Rear brake lever light switch lead | ⑨ Main switch lead |
| ② Starter cable | ⑩ Wire harness |
| ③ Rear brake cable | ⑪ Fan motor lead |
| ④ Front brake hose | ⑫ Fan motor breather hose |
| ⑤ On-command four-wheel drive switch and differential gear lock switch | ⑬ Thermo switch 2 lead |
| ⑥ Throttle cable | ⑭ On-command four-wheel drive switch and differential gear lock switch lead |
| ⑦ Handlebar switch | ⑮ Coolant reservoir hose |
| ⑧ Handlebar switch lead | ⑯ Differential gear case breather hose |

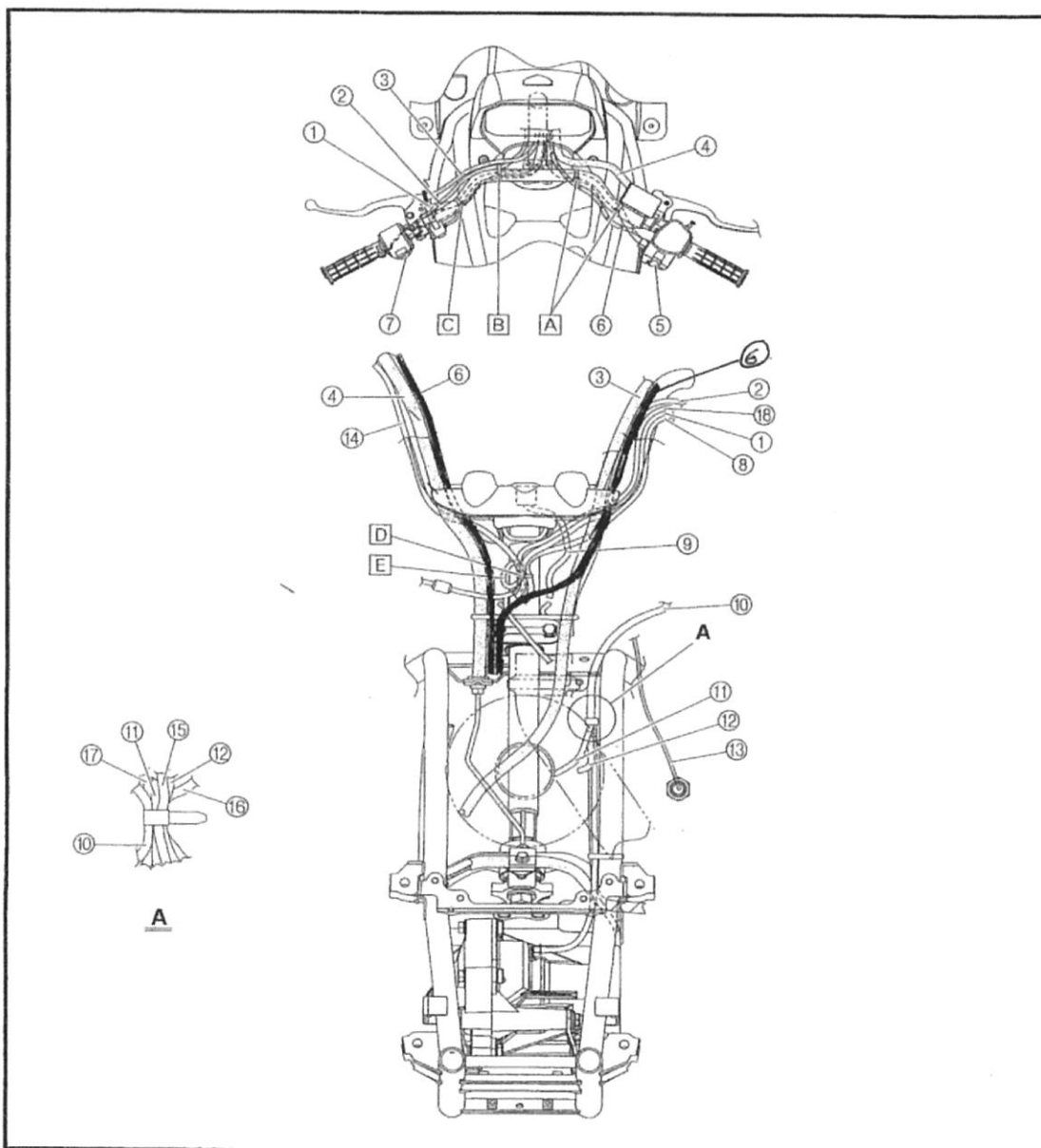


Fig 4 Throttle Cable Routing (Viewed from under the Quad)

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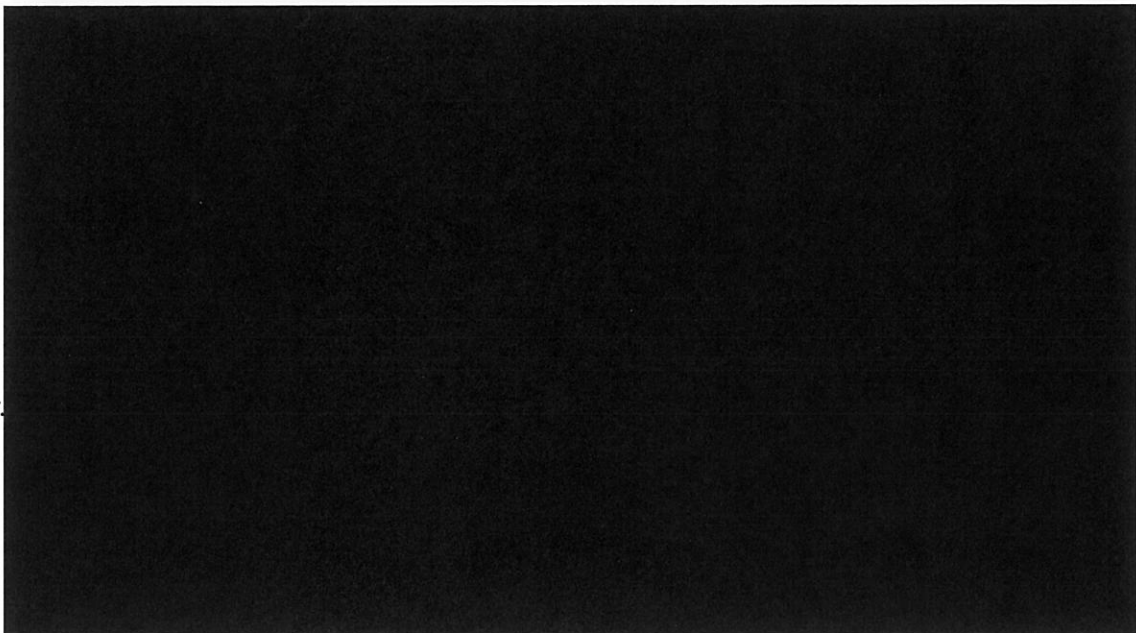
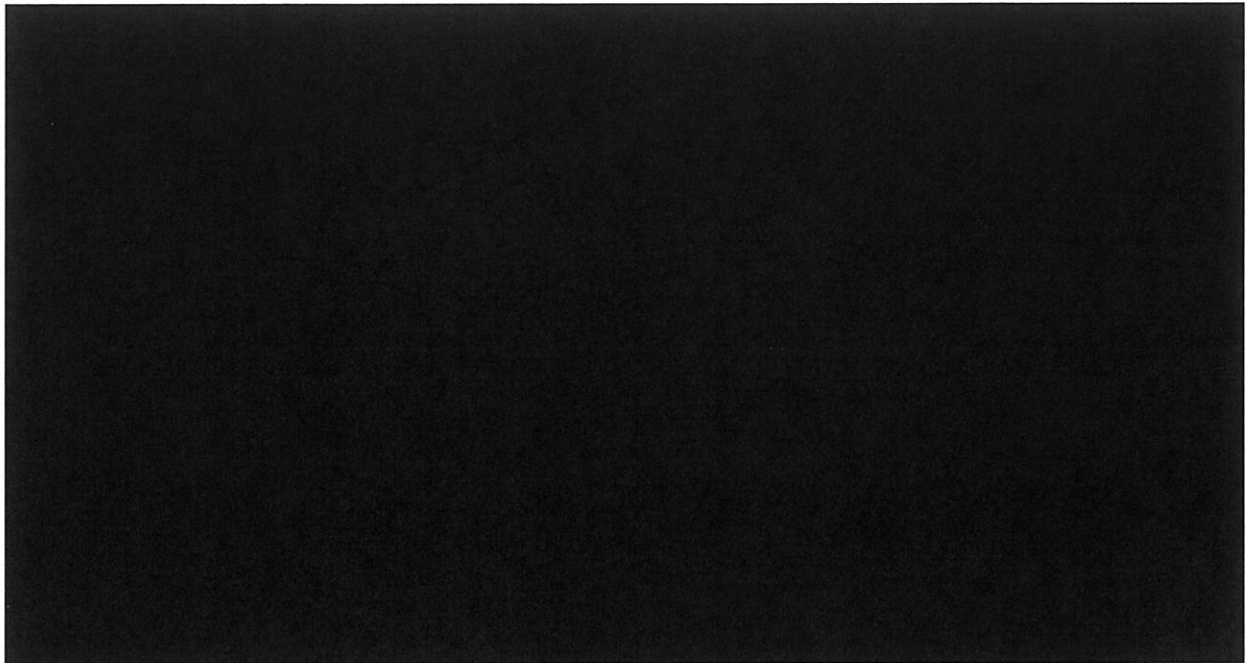
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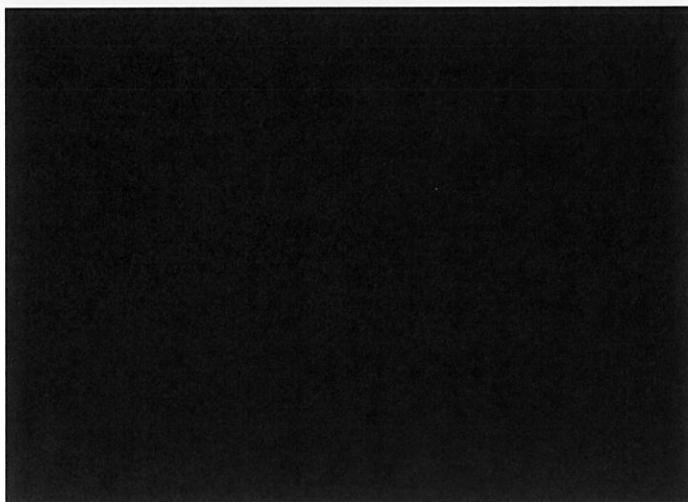
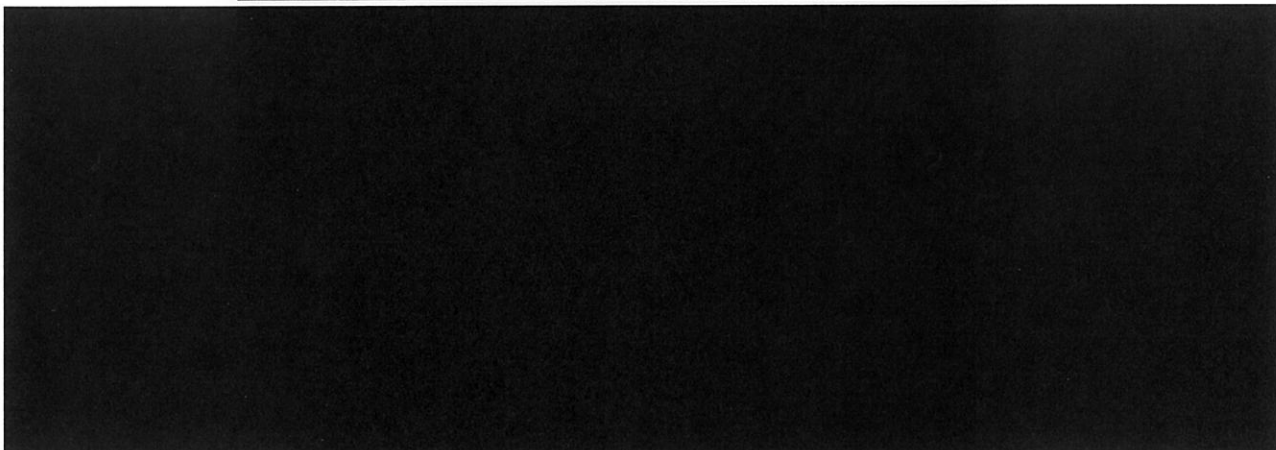
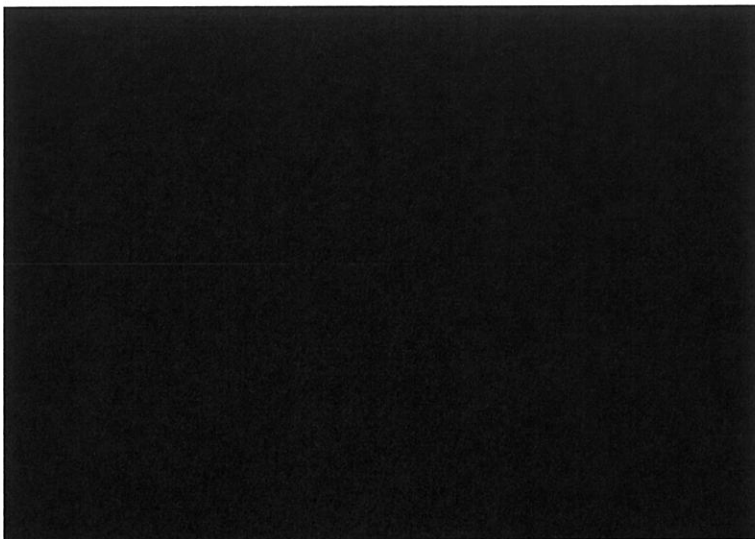
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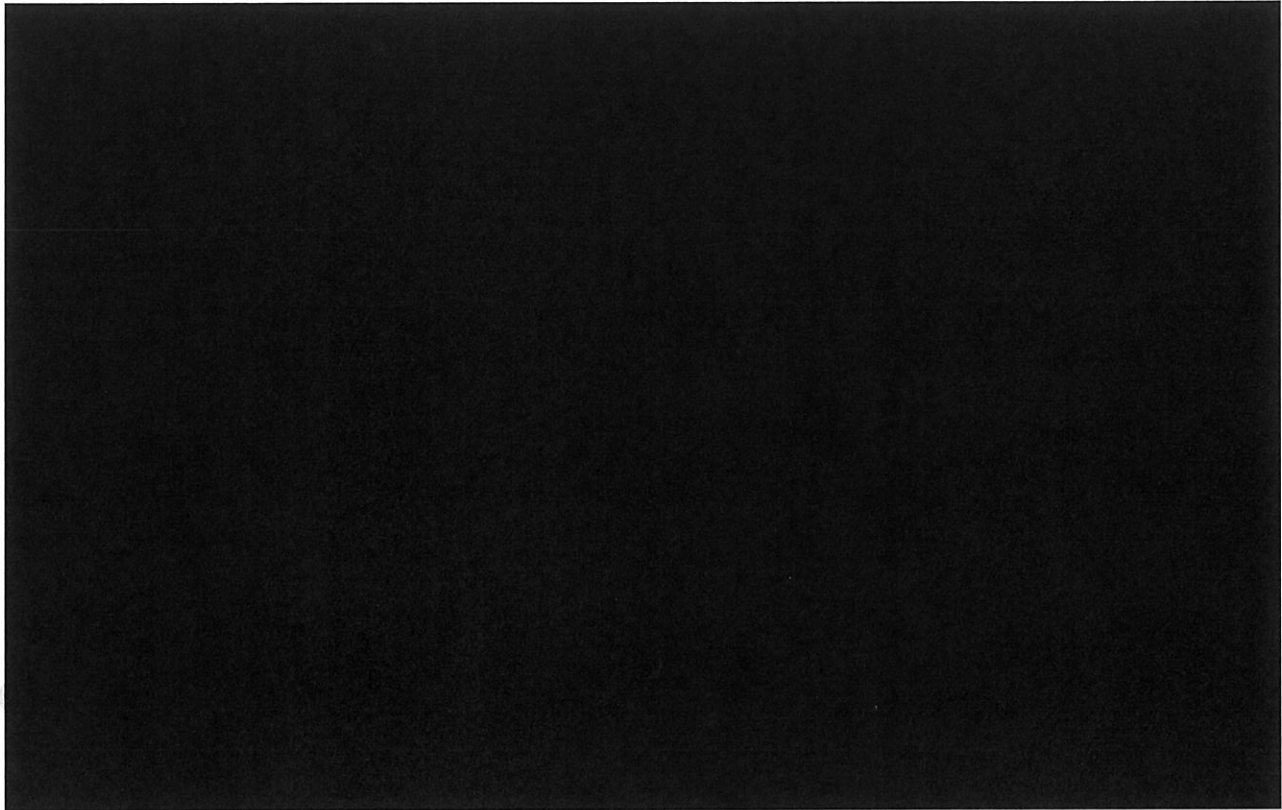
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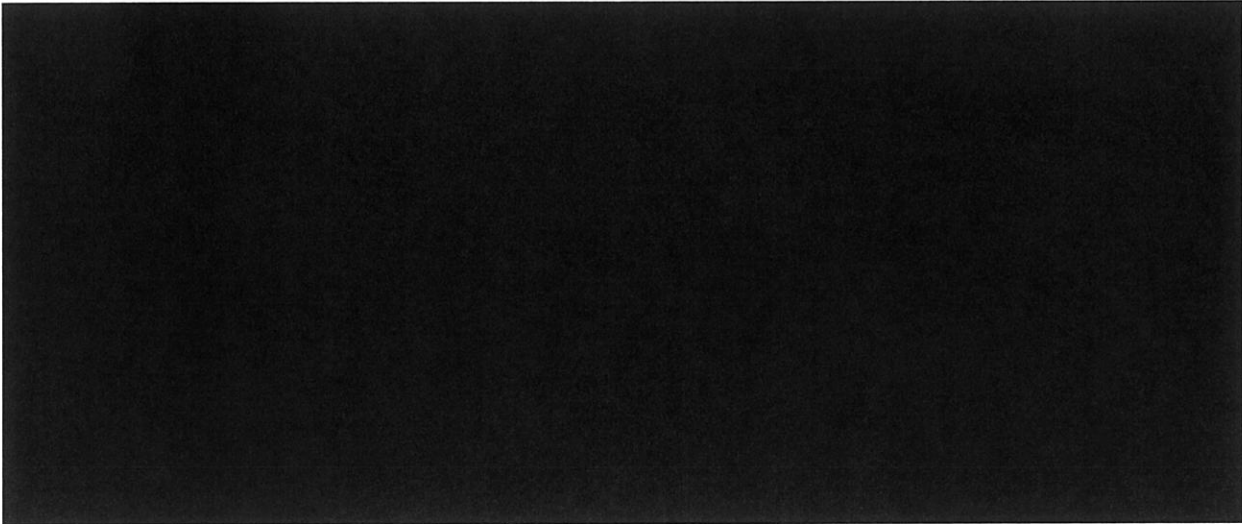


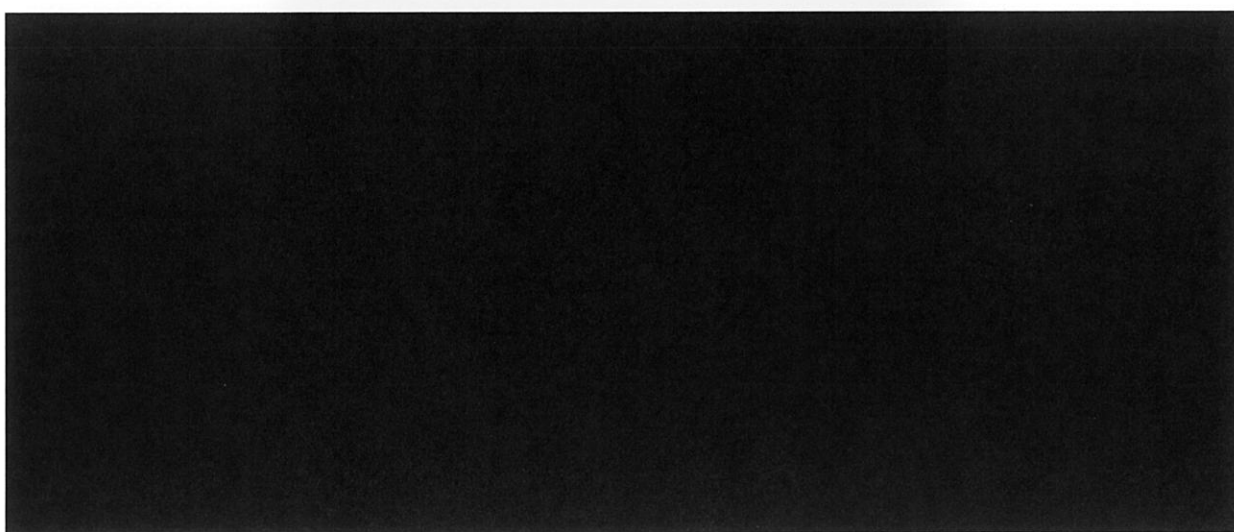
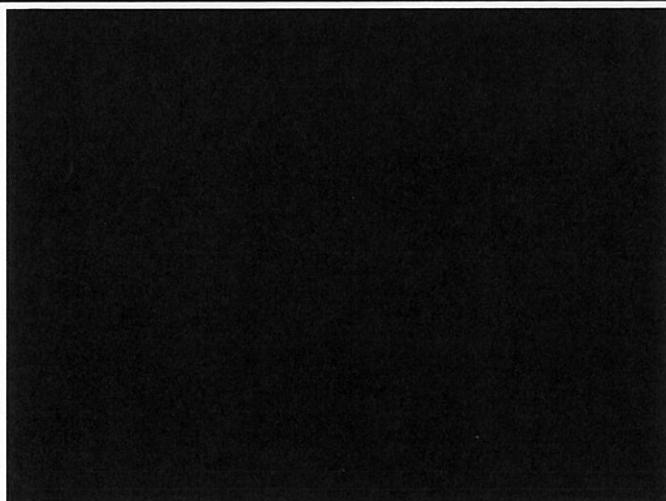
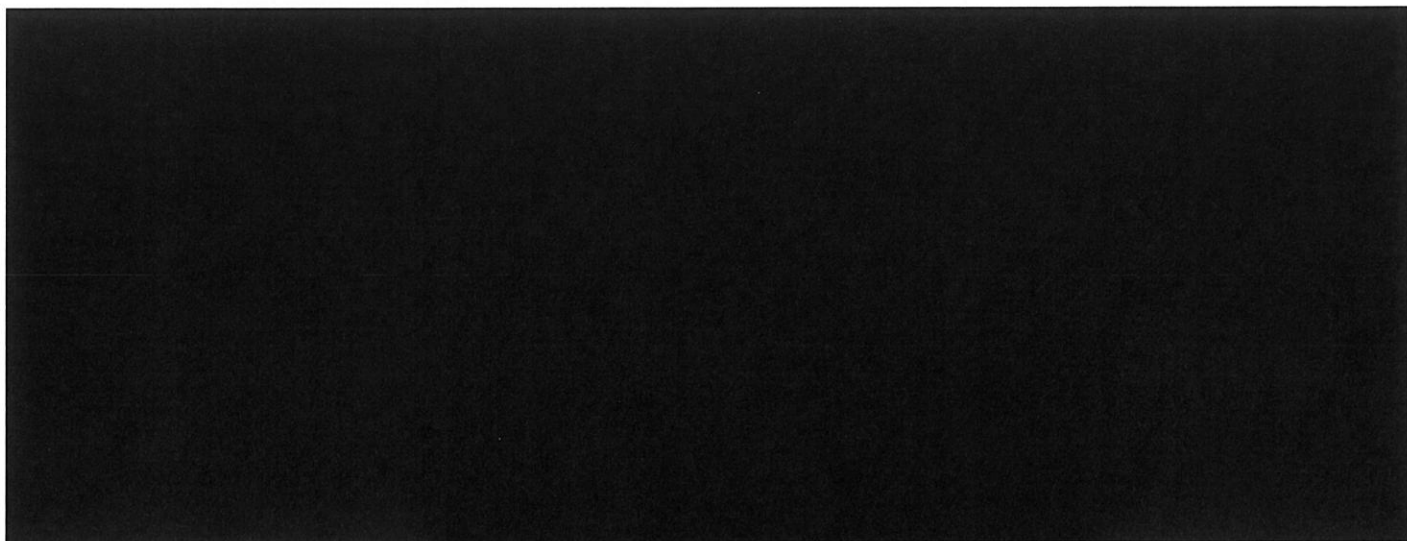


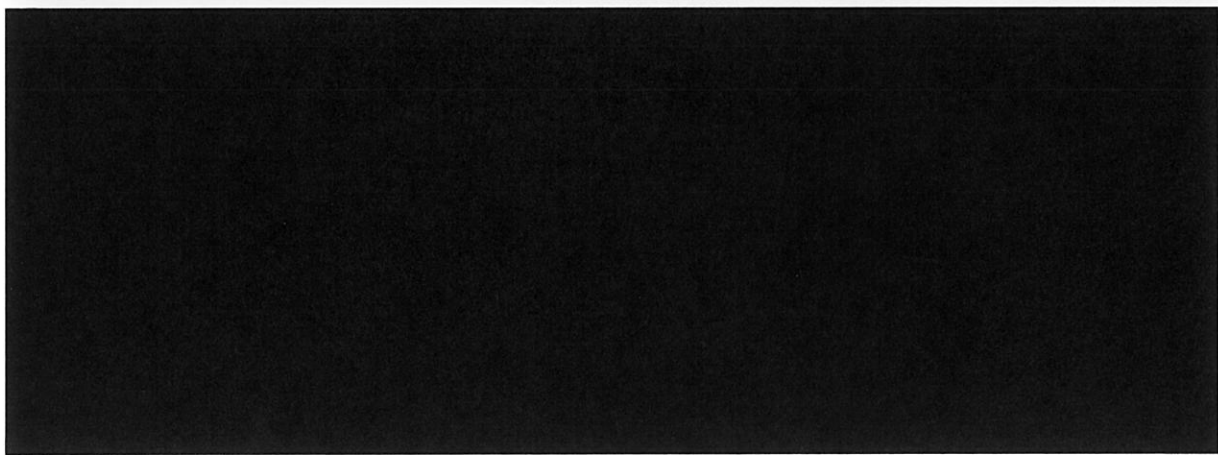
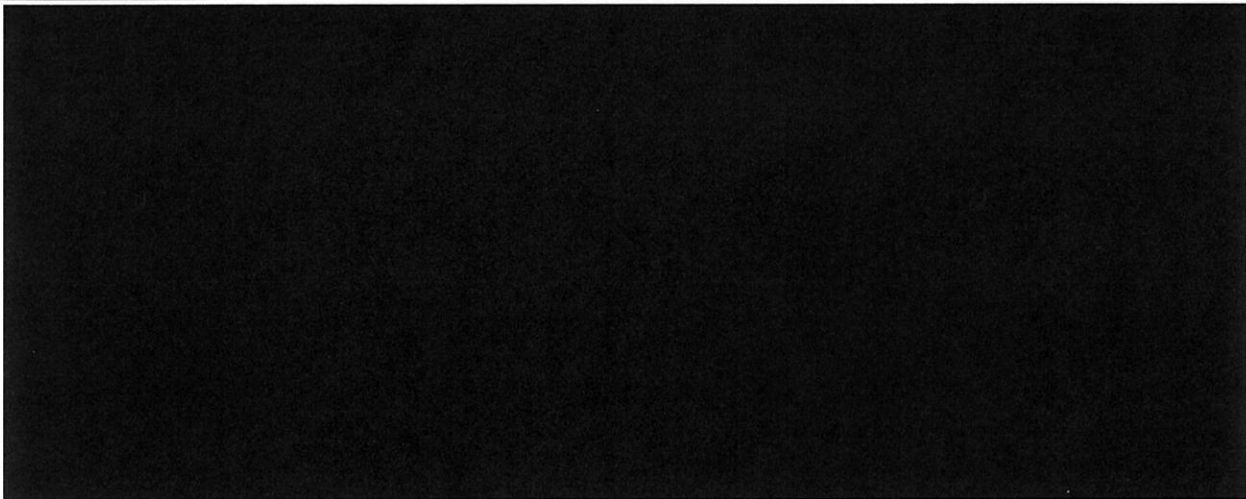
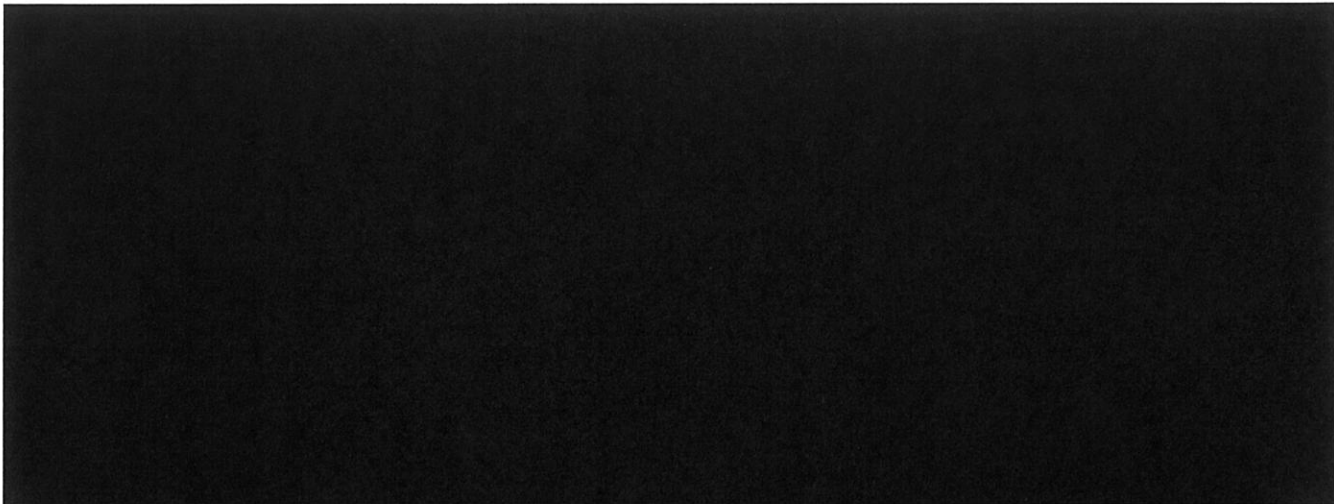
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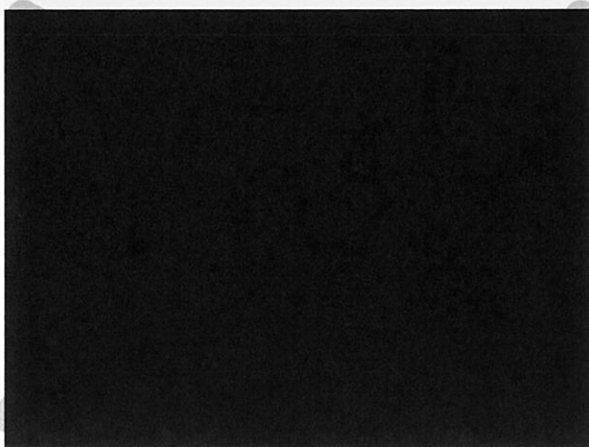
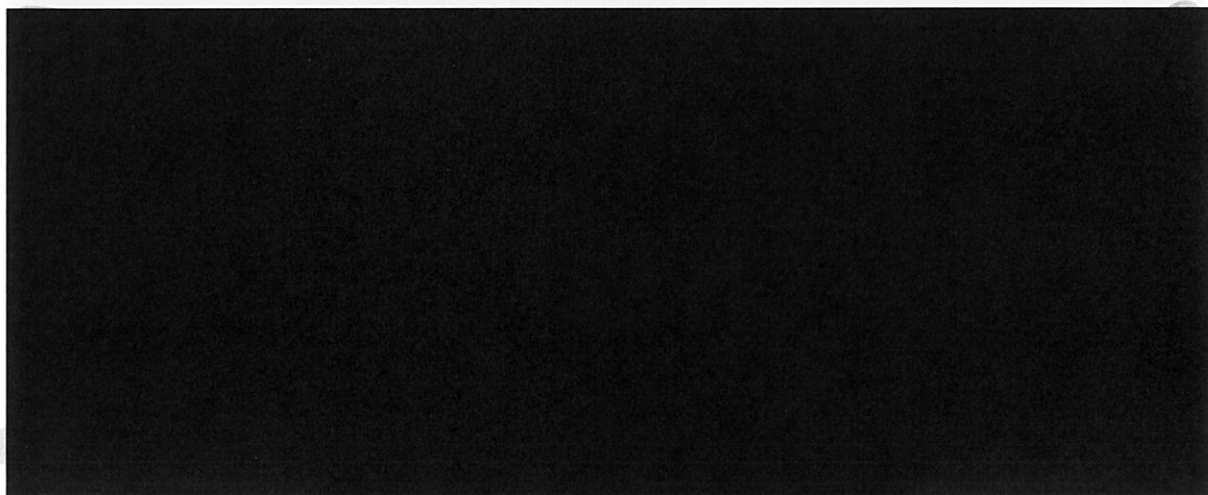
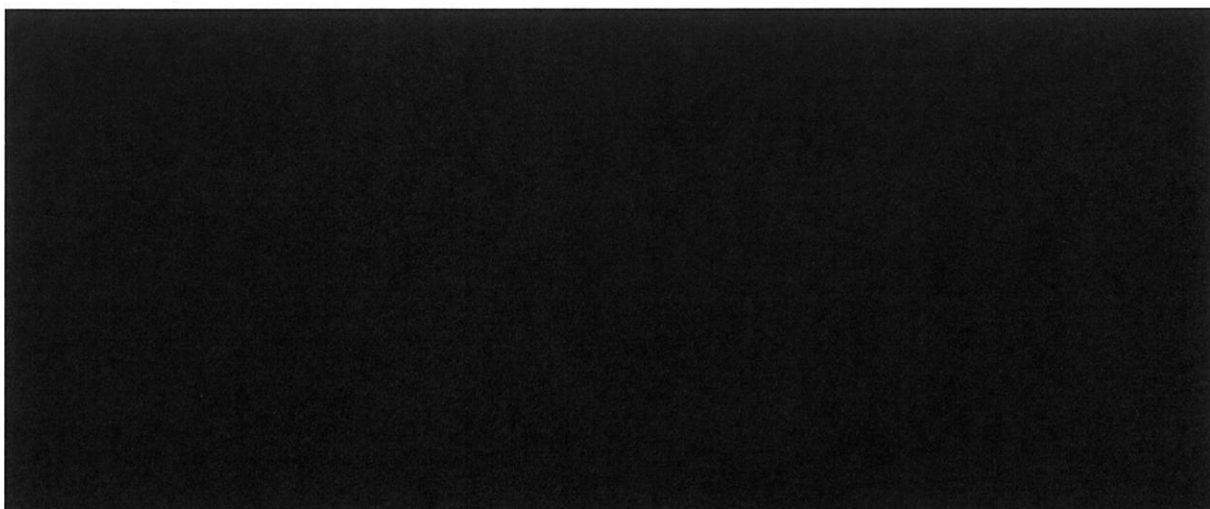
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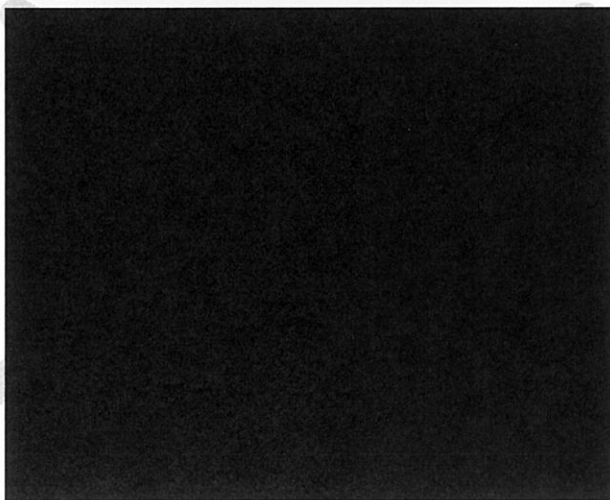
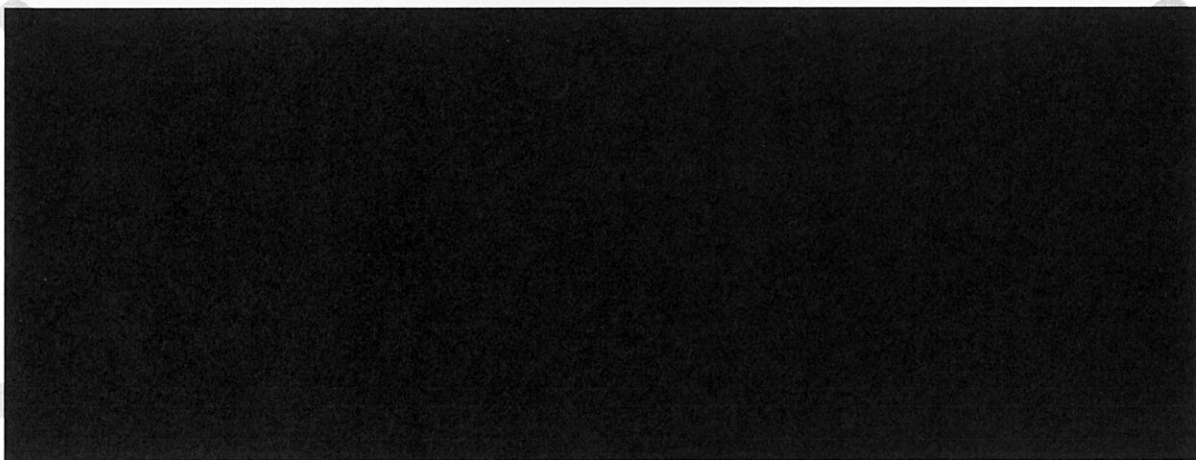
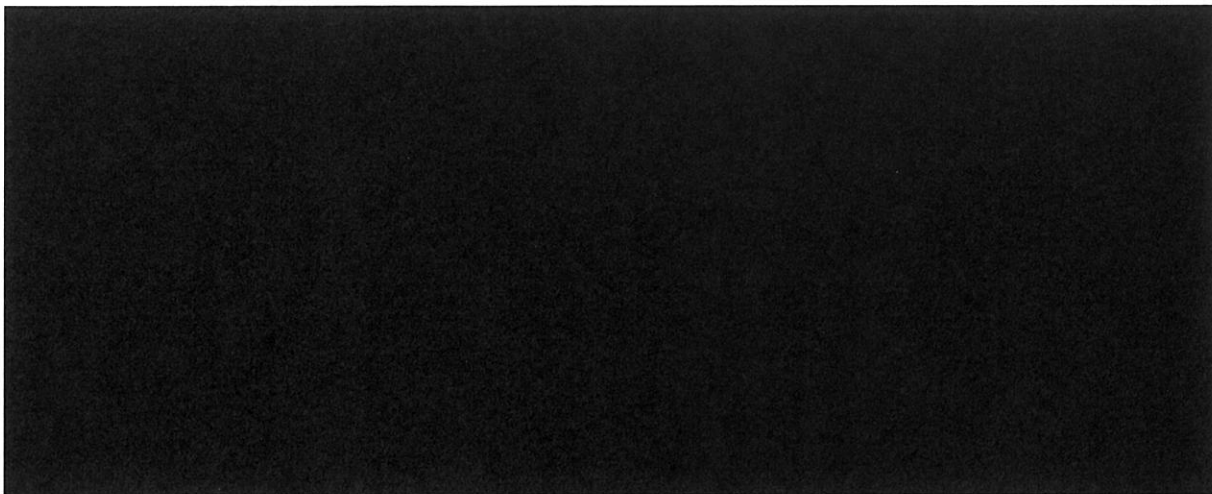
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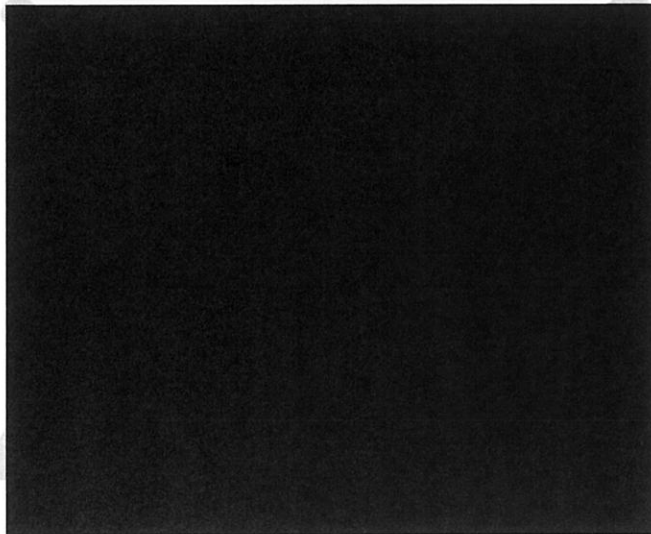
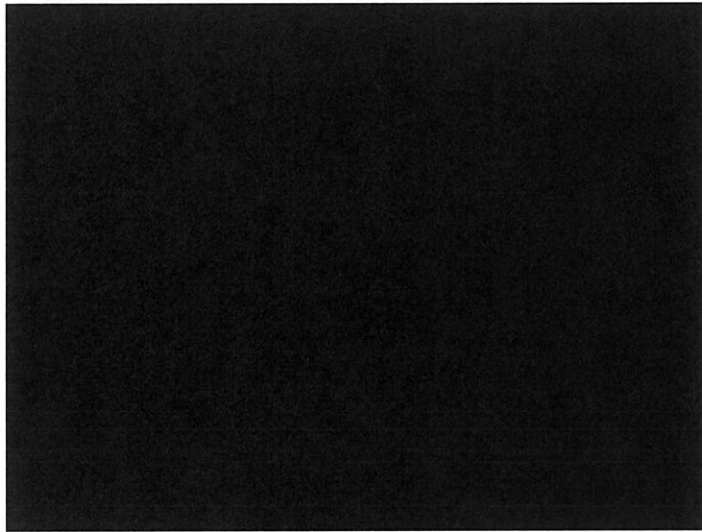
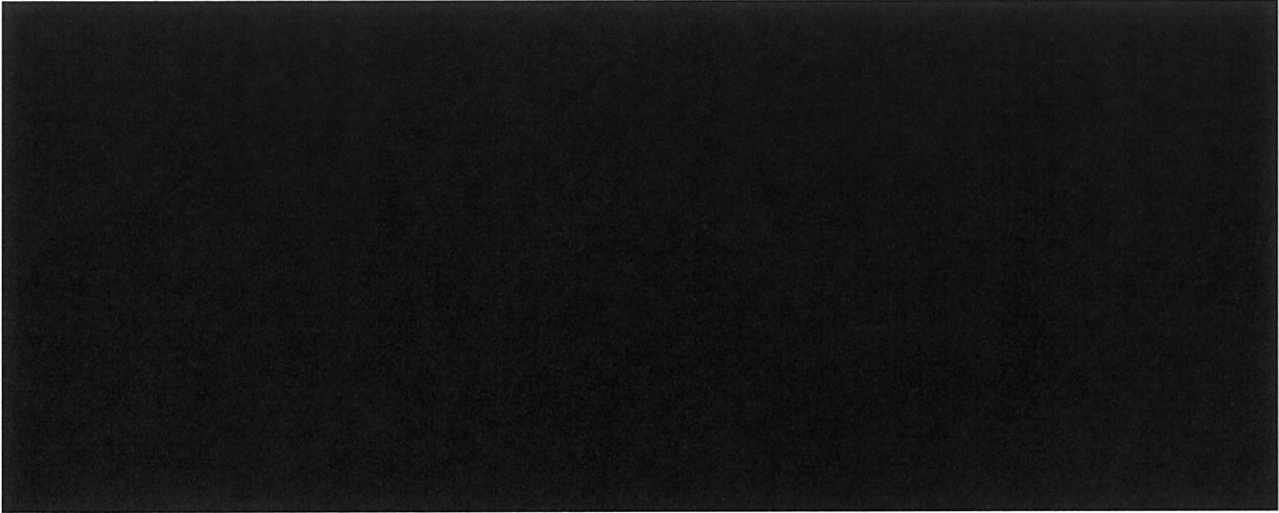


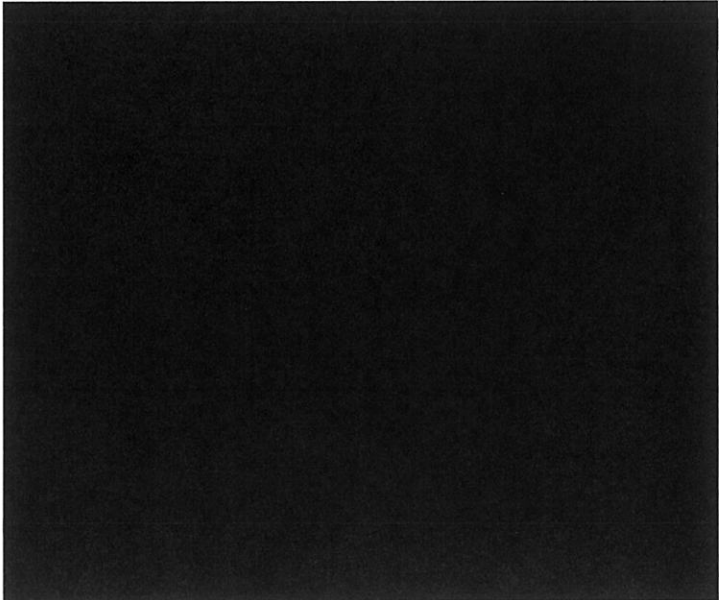
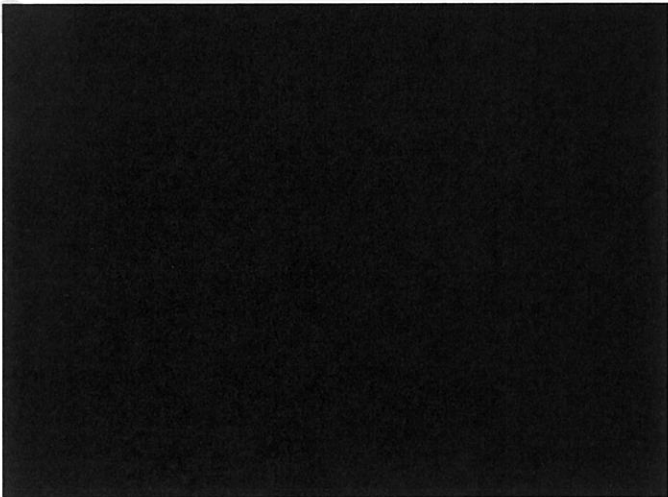
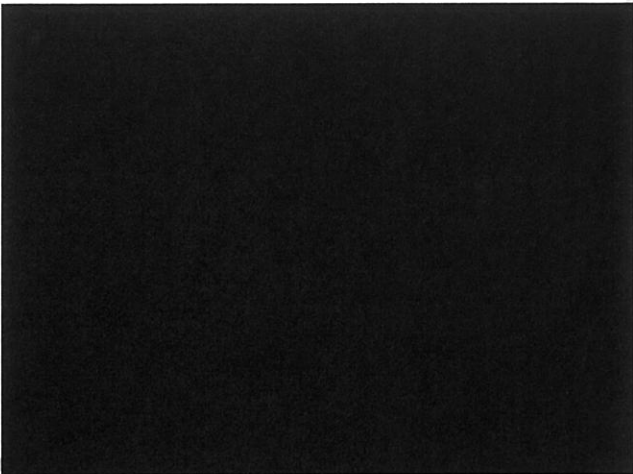


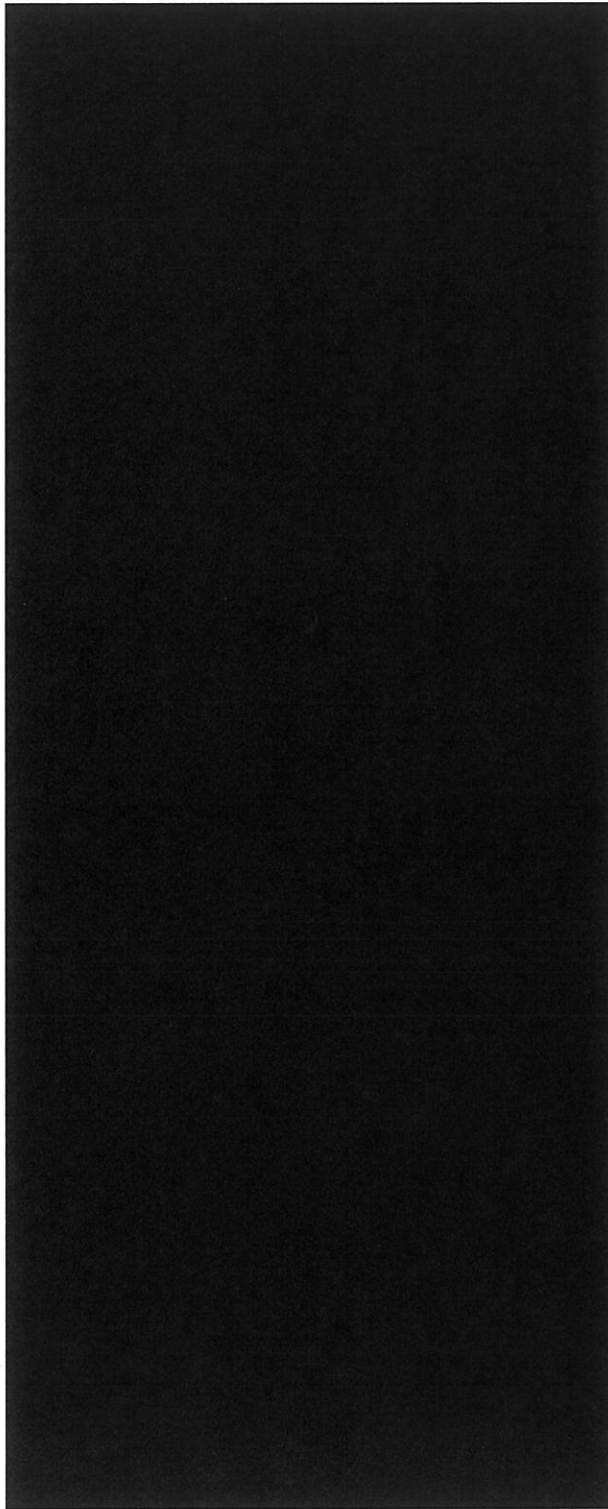


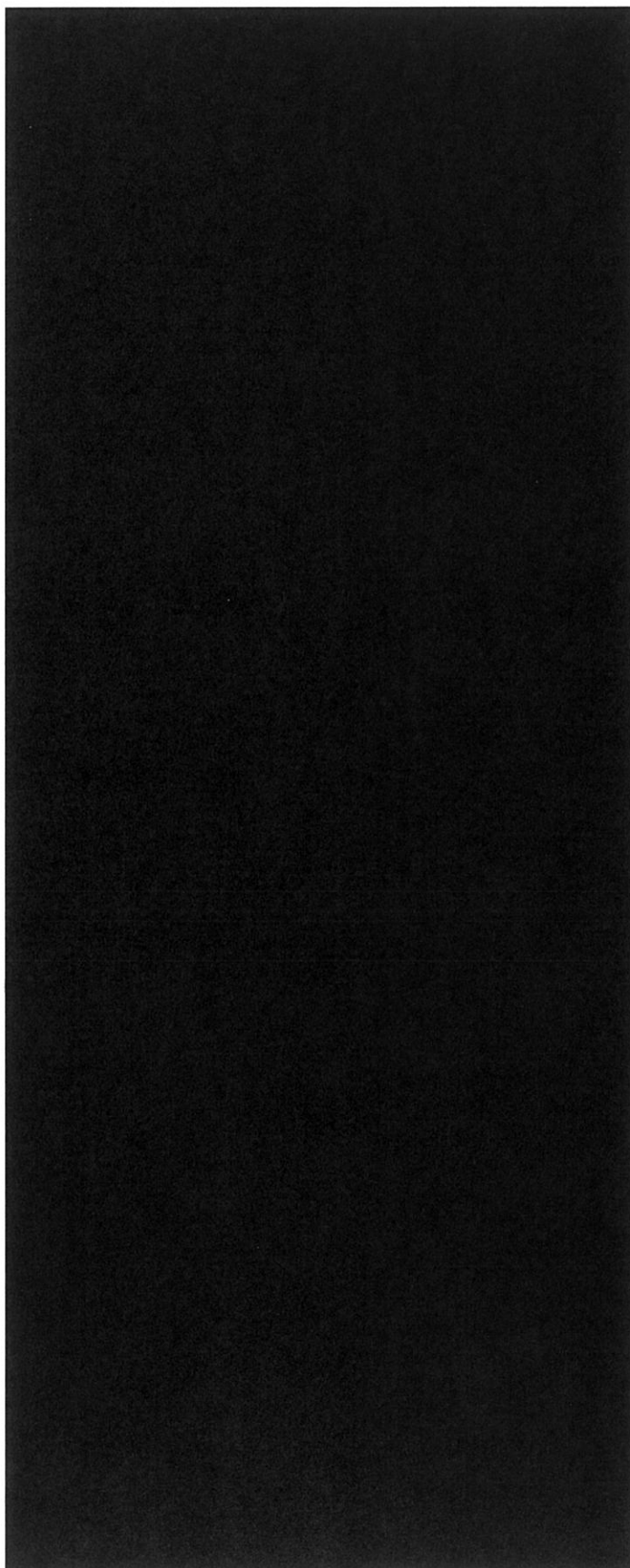


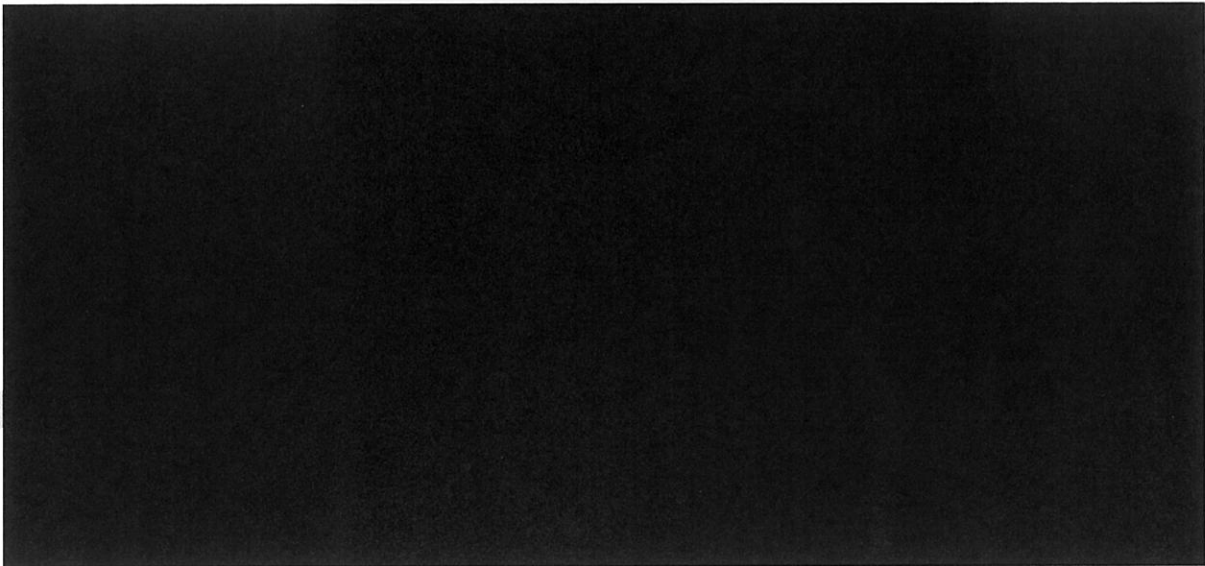
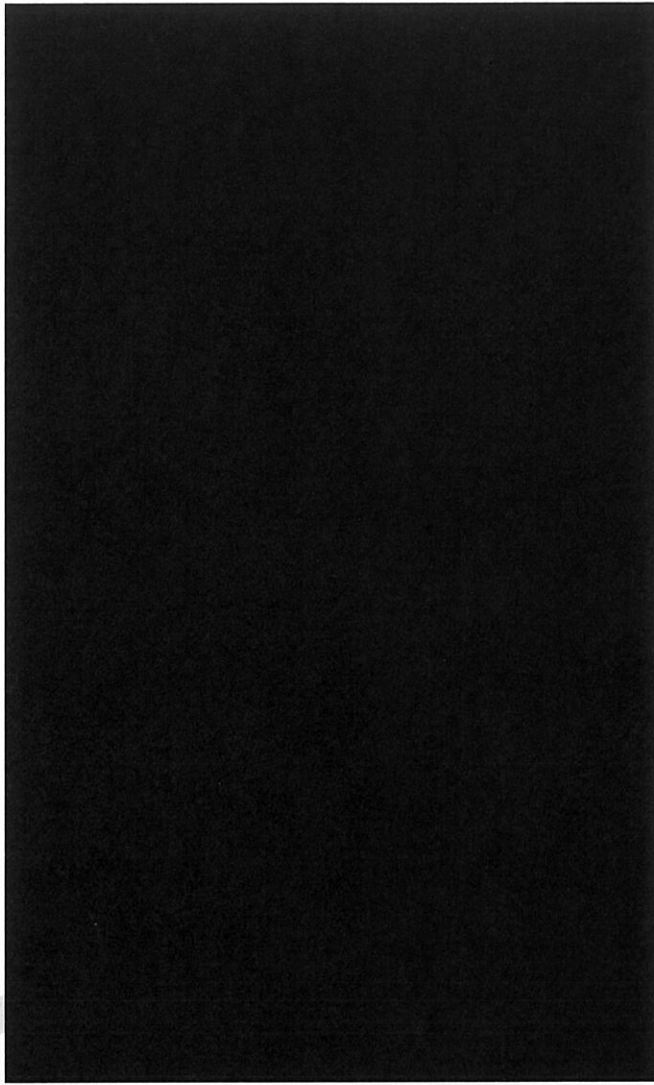


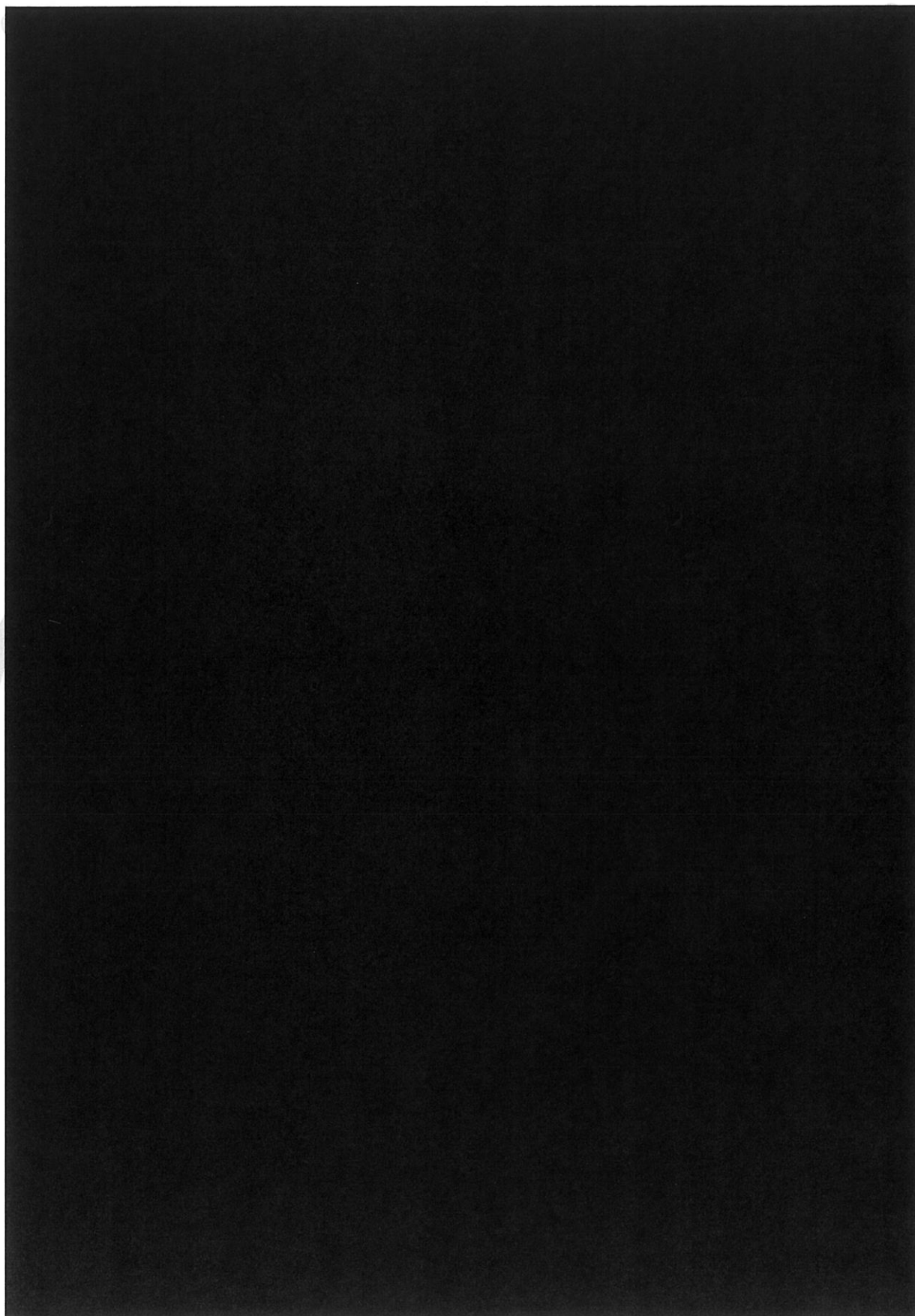


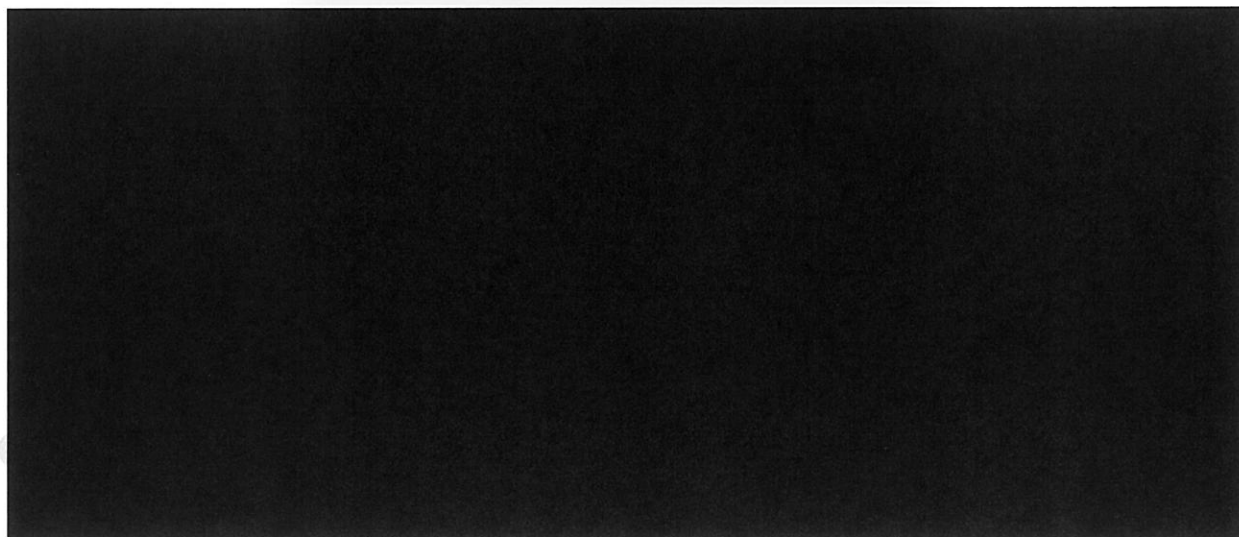
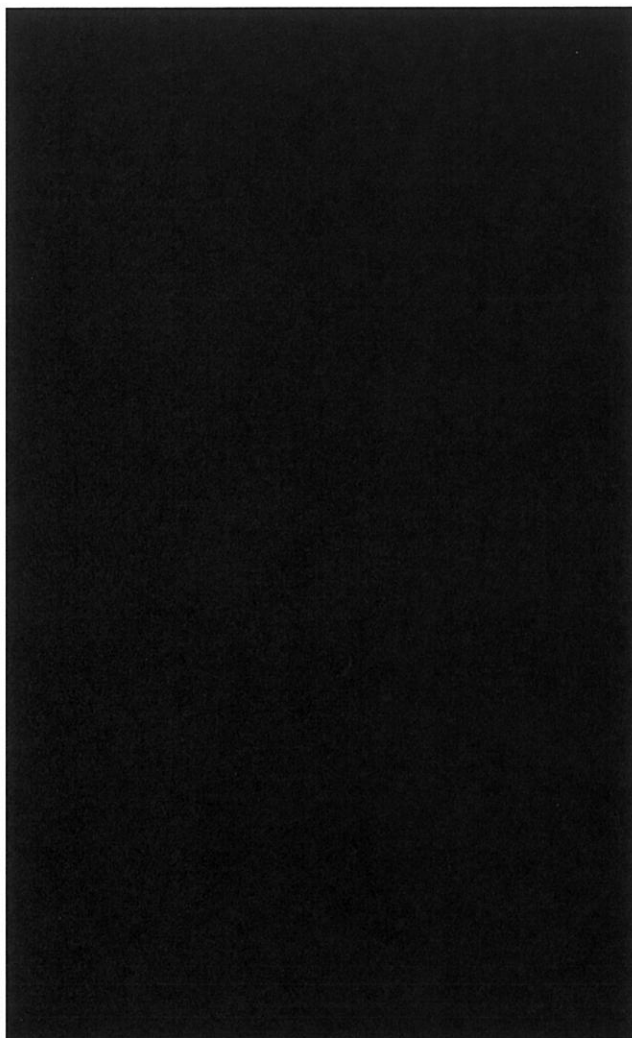


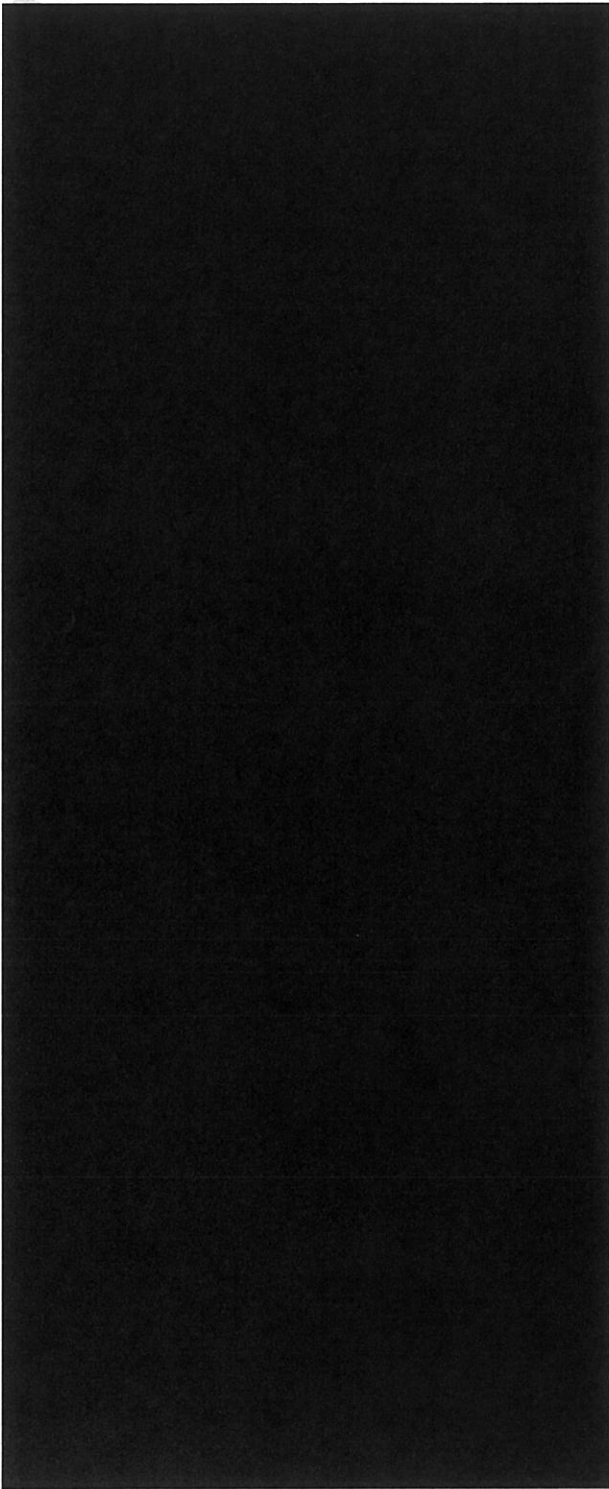


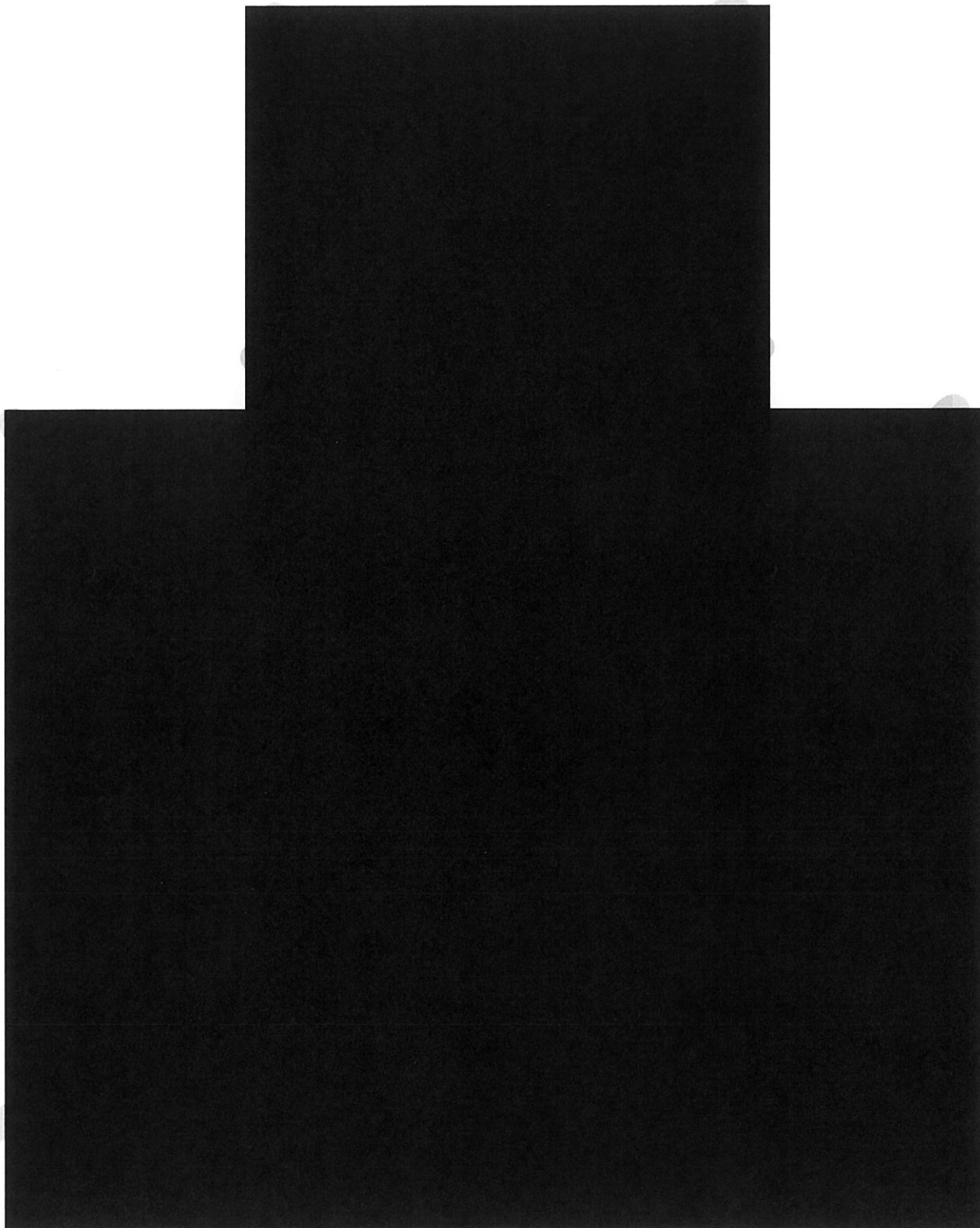


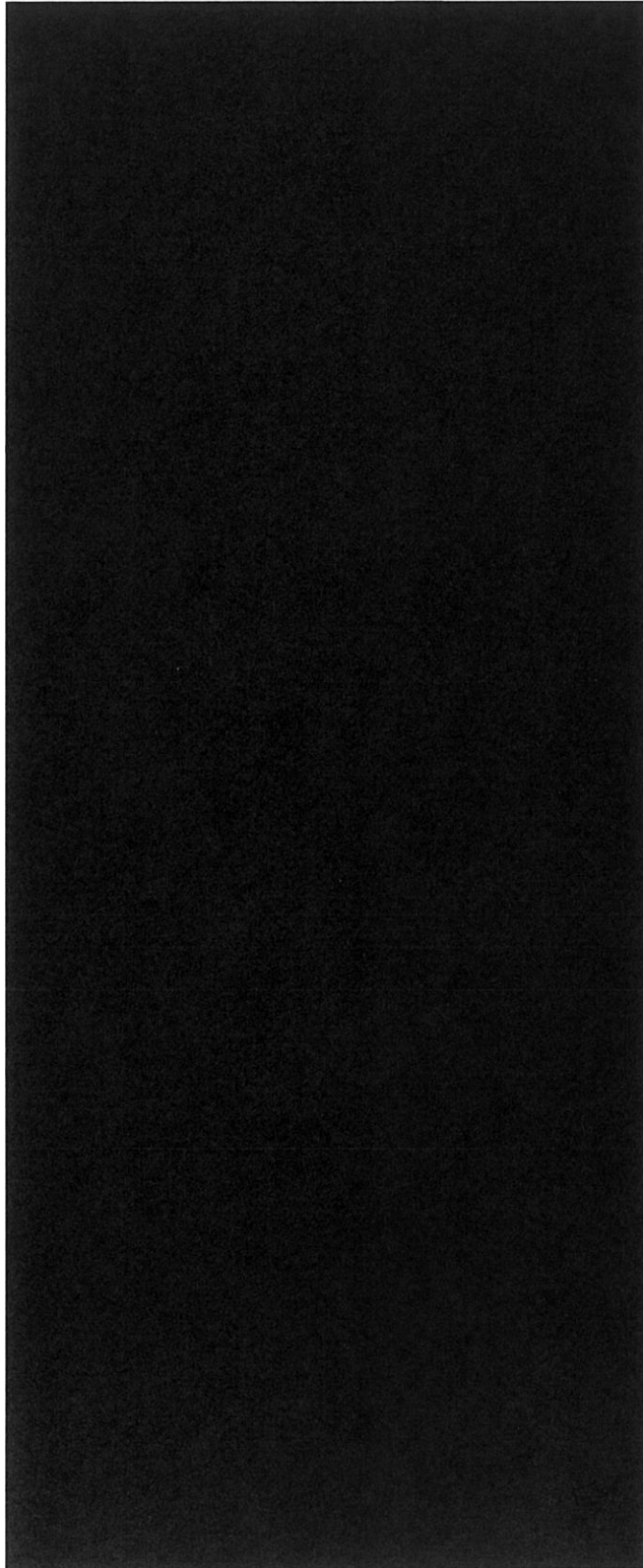


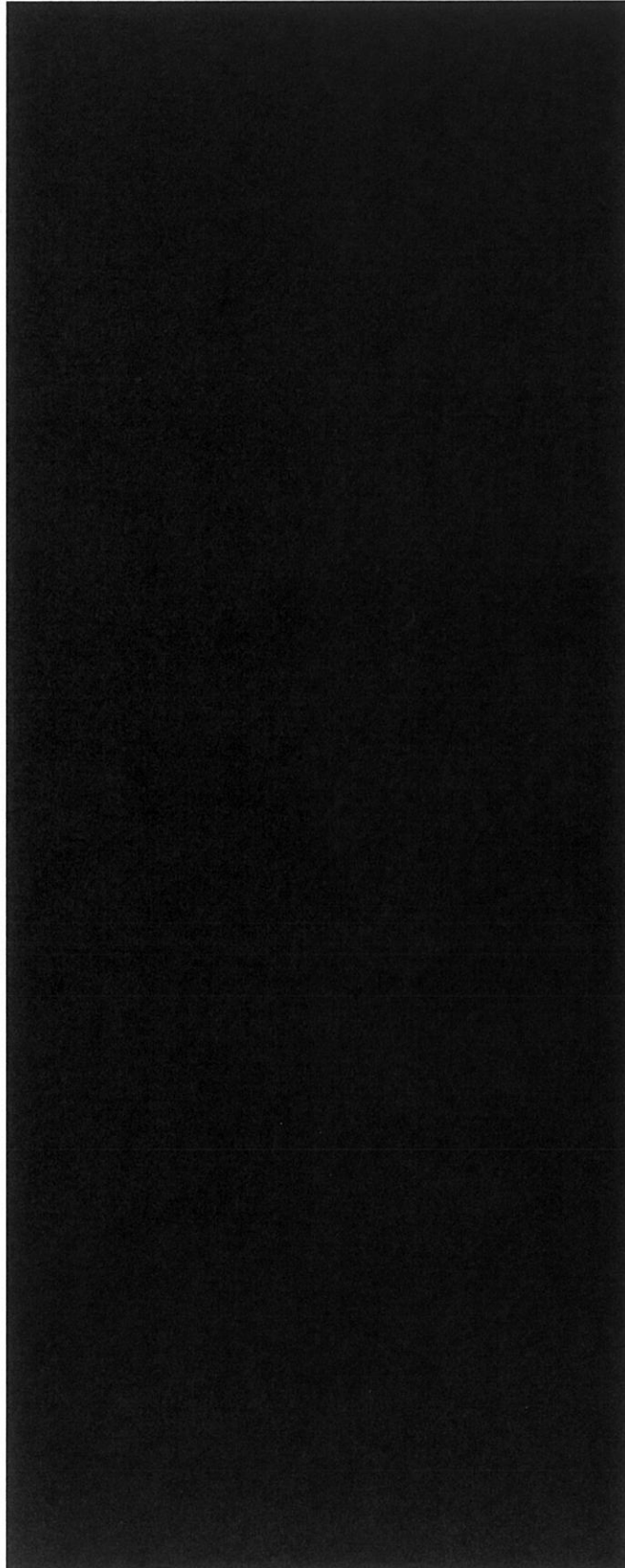


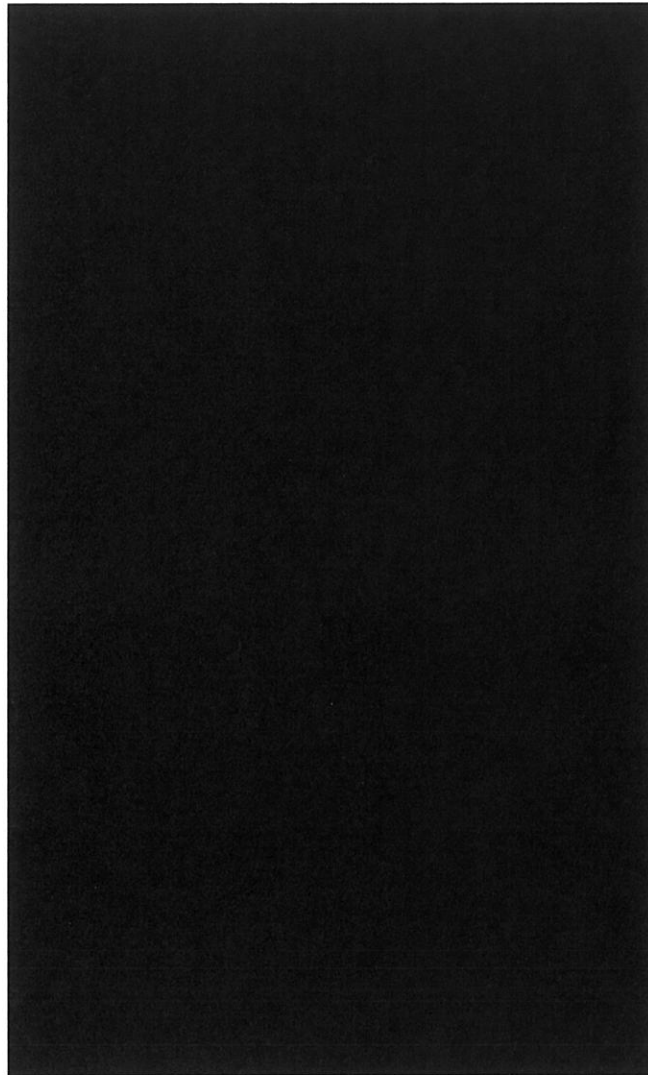












YAMAHA YFM450 GRIZZLY 450

MODIFICATION INSTRUCTION No. 4

Sponsor: **SLV PT**
Project No.: **P900033500**
File Ref: **SUV 5/4 OR SUV 5/39**

Publication Authority: **SLV PT Abbey Wood**

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
1		
2		
3		

Amdt No.	Incorporated By (Signature)	Date
4		
5		
6		

SUBJECT: Autojaw 'R' Clip replacement

INTRODUCTION

1 This instruction provides the information and instruction necessary to check and replace the Autojaw Assembly 'R' Clip an improved Pin

1.1 Limitations on use of equipment. Nil.

APPLICABILITY

2

2.1 Fitted to subject EAC 3078-1104, 3078-1105 Trailers held by user units.

2.2 Unmodified stock, held at all levels of technical storage.

REASON FOR MODIFICATION

3

3.1 Code 1 - to improve safety.

PRIORITY

4

4.1 ARMY: Routine.

4.2 RAF: Class 1.

ESTIMATED TIME REQUIRED

5

- 5.1 Embodiment: 0.2 man-hours.

MODIFICATION IMPLEMENTATION PLAN

6

- 6.1 This instruction is to be implemented by:
- 6.1.1 ARMY – Units authorized to carry out levels 1, 2, 3 or 4 maintenance.
 - 6.1.2 RAF - Units not later than the next scheduled maintenance and Vehicle Depots before initial issue of vehicle.
- 6.2 Associated instructions. Nil.
- 6.3 Strike plate action: N/A.

Action required by

7

- 7.1 Units and establishments holding equipment.
- 7.1.1 Examine equipment documents to see if modification is applicable.
 - 7.1.2 Examine equipment to identify if the modification is required, demand the stores required.
 - 7.1.3 ARMY - On receipt of stores, request REME to modify equipment.
 - 7.1.4 ARMY - Record the AESP and instruction number in equipment documents.
 - 7.1.5 RAF - Record modification details on AF G1084A and Form 4870. Units operating STAMA are also to record modification details on ADP MTMS Job Certification Sheet and to follow the procedures laid down in AP 100C-08A.
- 7.2 Army units authorized to carry out levels 2, 3 and 4 maintenance and RAF units.
- 7.2.1 ARMY - When requested by units or during overhaul of equipment on charge without REME 1st Line Support, obtain the items listed in Para 8 and carry out this modification.
 - 7.2.2 Record completion details of modification against appropriate entry in vehicle documents.

7.2.3 Complete AF G1084A when reporting completion of the modification to FORWARD (RAF) using the following code:

RAF: MODIFICATION CODE AFM195

NOTE

RAF units operating STAMA are also to complete ADP MTMS Job Certification Sheet and to follow the procedures laid down in AP 100C-08A.

7.3 All recipients of this instruction. Add particulars to AESP 2330-O-100-811 Mod/Gen Instr Index.

Stores, tools and equipment

8

8.1 Stores to be demanded.

8.1.1 The following item is to be demanded quoting this instruction as the authority.

8.1.2 Registration/Serial number of vehicle/engine/assembly for equipment held by user units.

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
1	7YAM	5360-99-255-8288	Circular Spring Clip	1
8.2	<u>Stores or suitable equivalent to be obtained locally. Nil.</u>			
8.3	<u>Tools and stores to be manufactured. Nil</u>			
8.4	<u>Stores to be removed and returned through normal channels/reduced to scrap.</u>			
2	7YAM	5340-99-976-9250	'R' Clip	1
8.5	Items/stores to be modified. Nil			
8.6	<u>Special tools and test equipment required. Nil</u>			

Sequence of operations

NOTE

The item numbers of Para 8 are used as reference throughout this instruction.

9 Carry out this instruction as follows:

9.1 Remove the original 'R' clip from the pin, see Fig 1. Note the pin and washer will be free to fall out at this point.



Fig 1 Removal of the 'R' Clip

9.2 Compare the two clips side by side, the circular 1.5mm spring clip is made from stainless steel. See Fig 2.

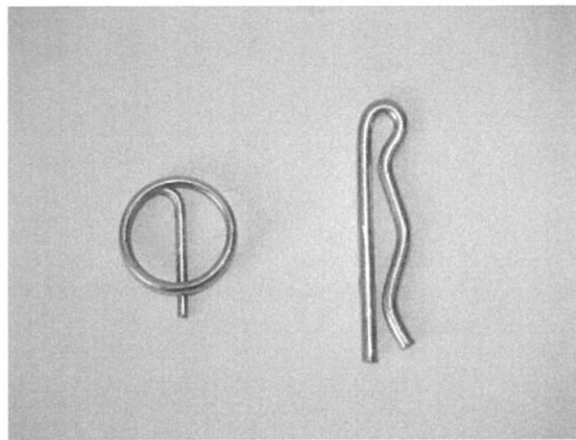


Fig 2 Comparison of the Clips

9.3 Ensuring that the pin is fully home and the washer is correctly located, insert the cross bar of the clip into the hole in the pin. Use the pin as a brace lift the spring coils away from the cross bar to allow the clip to clear the end of the pin. The cross bar can now be pressed fully home so that the coils are no longer under tension. See Fig 3.



Fig 3 Installed Circular Spring Clip

NOTE

It is recommended that this process is carried out using finger pressure only as excessive separation of the spring clip during insertion could cause the spring to be weakened.

TESTING AFTER EMBODIMENT

10 Nil.

EFFECT ON WEIGHT

11 Negligible.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.