Official Recall Campaign - BR250F (1982)

Steering and Slider Modifications

September 15, 1982

S83-008

The affected model, indicated below, may have three possible defects involving the outer steering arms, the sheet metal plate which positions the lower portion of the main steering shaft, and the forward edge of the track slider frame.

1) One defect involves insufficient reinforcement of the outer steering arms which control the movement of the skis. Under severe riding conditions, these arms may crack or break, resulting in partial loss of steering control.

2) Another possible defect involves inadequate penetration of the welds securing a sheet metal plate to the body of the snowmobile. This plate, which positions the lower portion of the main steering shaft, may separate from the body under extreme conditions, resulting in partial loss of steering control.

3) Another defect involves the possibility of the forward edge of the track slider frame entering the openings of the track. This may occur in instances of severe frontal impact on a track if the adjustment is too loose (i.e., which is not adjusted to Yamaha's specifications), resulting in rapid deceleration of the snowmobile.

YOU ARE HEREBY NOTIFIED THAT ALL UNITS LISTED BELOW MUST HAVE THE OUTER STEERING ARMS REPLACED ON BOTH SIDES. THE SHEET METAL PLATE WHICH ANCHORS THE LOWER PORTION OF THE MAIN STEERING SHAFT MUST BE RIVETED TO THE BODY AND EXTENSION CAPS MUST BE FITTED TO BOTH LEADING EDGES OF THE TRACK SLIDER FRAME. THESE MODIFICATIONS MUST BE PERFORMED ON ALL MACHINES DELIVERED FROM YAMAHA, WHETHER NOW OWNED BY THE CUSTOMER OR THE DEALER.

Owners of the affected models are being notified by mail that their machines require modifications. They have been asked to return their machines to an authorized Yamaha dealership for these modifications.

Affected Units

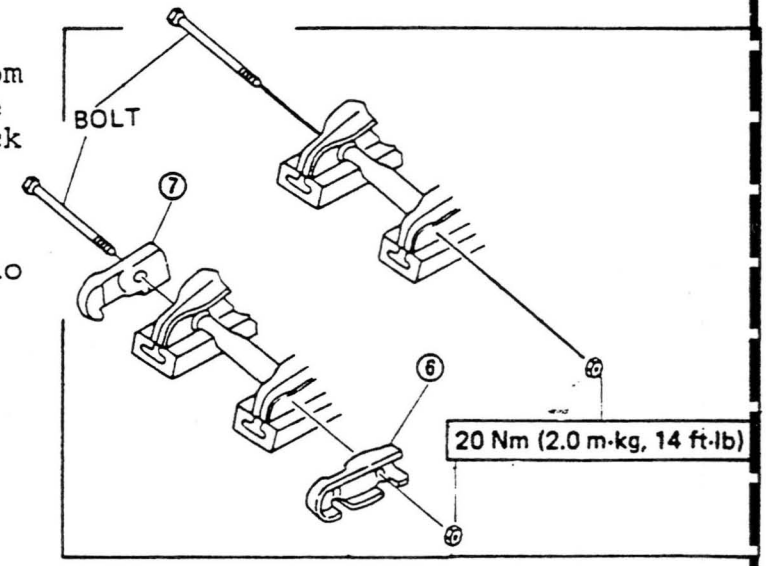
All 1982 BR250F model snowmobiles between the serial numbers of 8R4-010101 and 8R4-014711.

Modification Procedures

A EXTENSION CAP INSTALLATION (SUSPENSION RUNNERS)

1. Remove the long bolt from bracket 1 located at the leading edge of the track slider frame.

2. Install extension caps to both the right and left leading edges of the track slider frame, as illustrated.

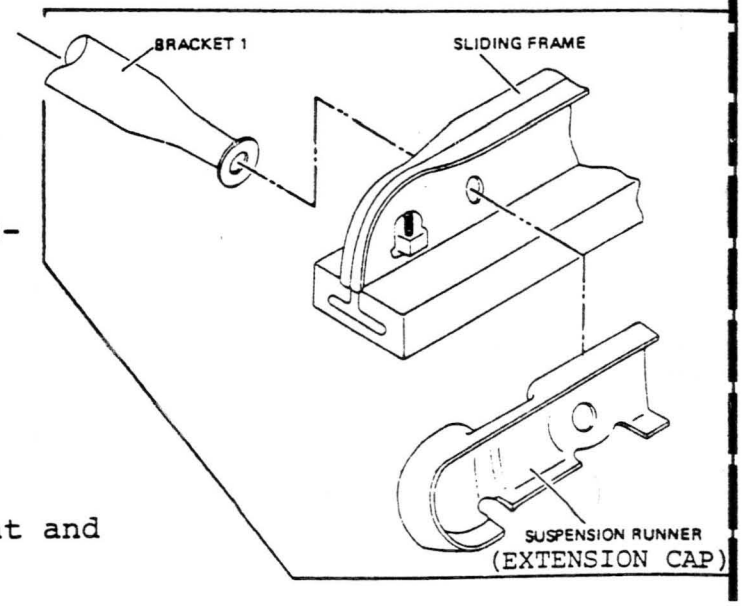


Note:

i) Be sure to position the extension caps properly.

ii) Cap 6 (8R4-47321-00) must be fitted to the left-hand side and cap 7 (8R4-47322-00) to the right-hand side.

iii) See the instruction sheet contained in the kit.



3. Adjust the track alignment and tension as specified.

Track tension: 25~30 mm (1.0~1.2 in.)/10 kg

B. REPLACEMENT OF OUTER STEERING ARMS AND RIVETING OF STEERING SHAFT BRACKET PLATE.

1. Remove the primary sheave clutch, the exhaust pipe, the fuel tank and the engine before proceeding.

Note:

i) Secure the shroud with a suitable piece of rope to protect against damage.

ii) Drain the fuel tank and disconnect the fuel and oil lines.

iii) Be sure to plug the fuel and oil lines.

iv) Use the following special tools for clutch removal:

90890-01878	Sheave puller
90890-01701	Sheave holder

v) Disconnect all electrical cables coming from the engine.

vi) Disconnect both the throttle and starter cables at the carburetor side.

2. Dismount the engine together with the carburetor and the air silencer.

Note:

Clean the engine area of the belly pan.

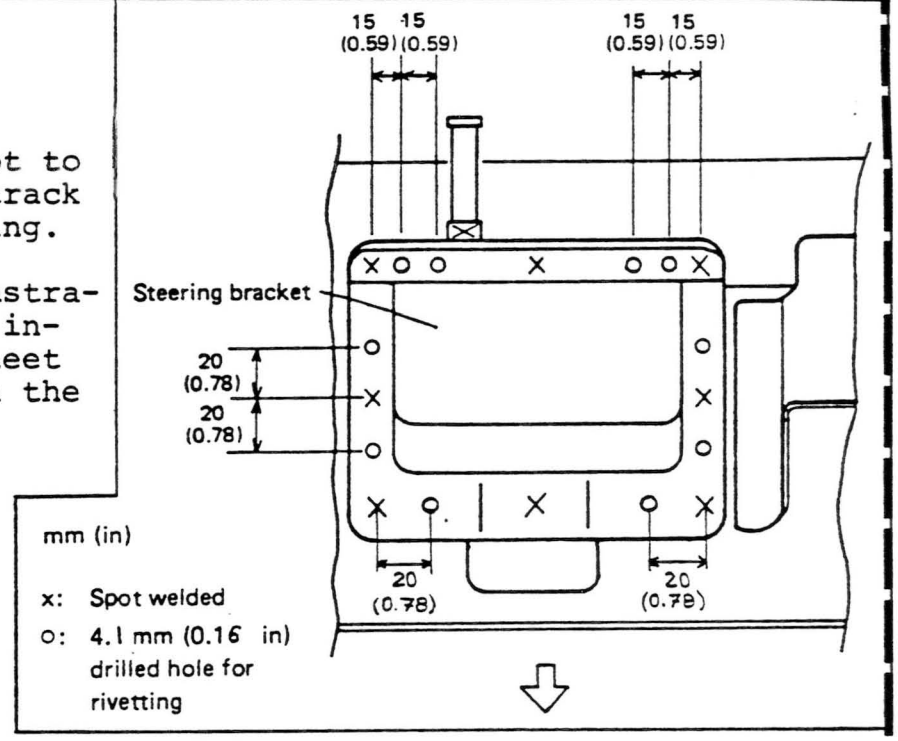
3. Drill ten (10) 4.1 mm holes (#20 drill or 0.16 in.) in the steering bracket plate at the positions indicated by an open circle on the illustration on the next page.

Note:

i) Before drilling, punch ten (10) guide points and apply cutting oil.

ii) Take care not to damage the track while drilling.

iii) See the illustration on the instruction sheet contained in the kit.

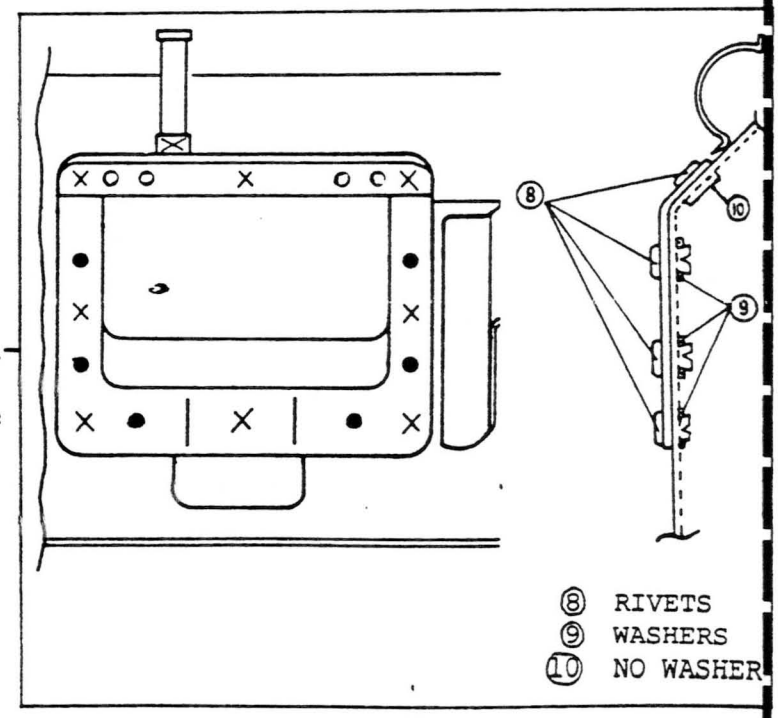


4. Rivet the ten (10) positions illustrated using the washers and rivets contained in the kit.

Note:

i) Use the six (6) washers supplied only at those positions indicated by a solid circle (●) on the back side of the belly pan.

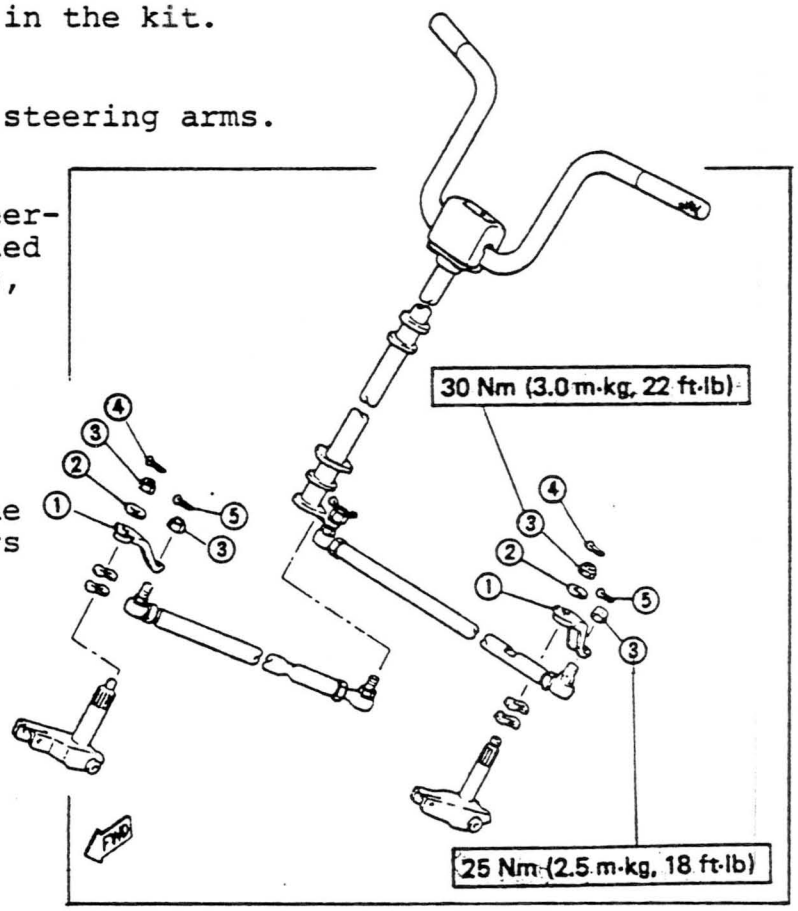
ii) No washers are to be used at the remaining four (4) positions indicatec by an open circle (O).



iii) See the illustration on the instruction sheet contained in the kit.

5. Remove the old outer steering arms.

6. Install new outer steering arms as illustrated using the new washers, nuts and cotter pins contained in the kit.

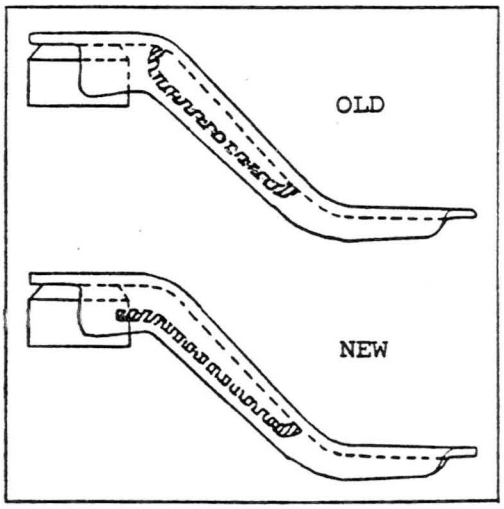


Note:

i) Do not re-use the old nuts, washers and cotter pins.

ii) The old outer steering arms must be destroyed.

iii) The new and old outer steering arms can be distinguished from one another by comparing them with the illustrations shown opposite.

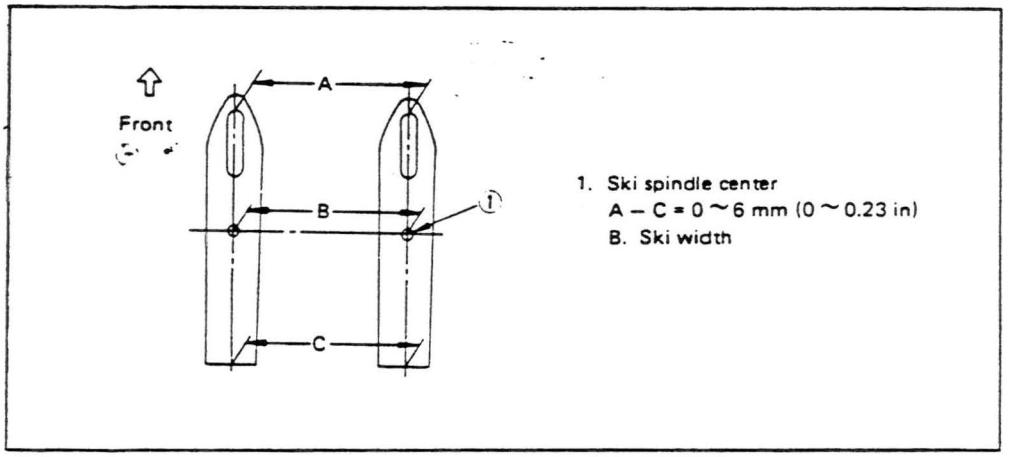


iv) See the instruction sheet contained in the kit.

7. Adjust the ski centre-to-centre distance and toe-out:

Centre-to-centre - 750 mm (29.5 in.)

Toe-out - 0 ~ 6 mm (0 ~ 0.23 in.)



1. Ski spindle center
   A – C = 0 ~ 6 mm (0 ~ 0.23 in)
   B. Ski width

8. For reassembly, reverse the above procedure.

Note:

i) Bleed the air from the Autolube pump.

ii) Be sure to adjust sheave centre-to-centre and offset as follows:

Centre-to-centre	266 ± 2.0 mm (10.47 ± 0.08 in.)
Offset	11.0 ± 3.0 mm (0.43 ± 0.12 in.)

iii) Tightening torques are as follows:

Engine mount bolt -	3.0 m-kg (22 ft-lb)
Engine mount nut -	1.4 m-kg (10 ft-lb)
Primary sheave bolt -	first 10.0 m-kg (72.5 ft-lb) second 6.0 m-kg (43.5 ft-lb)

iv) If you require further details, see the BR250F Service Manual (part number 8R4-28197-70).

Parts Ordering

All of the necessary parts for a complete modification are packaged as a complete kit.

Please order the quantity of modification kits you require from your Regional Parts Department.

MODEL	QUANTITY	DESCRIPTION	PART NUMBER	D/N
BR250F	1 kit/unit	BR250F Mod. Kit	90891-50026	$ 22.03

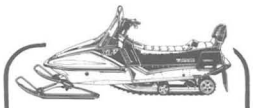
Warranty Coverage

Parts Allowance - The normal policy of dealer net + 10% will apply.

Labour Allowance - $40.00 per unit.

Claims should be submitted on a normal warranty claim form with mention of technical bulletin number S83-008. Claim only one unit on each warranty form.

** Submit a claim only for those units you have actually modified **



S82-008

Official Recall Campaign

1980 - SS440D, SR540D
1981 - SS440E, SR540E, SRX440E

~~Suction Pipe Cap Replacement - July 20, 1981~~

The affected models listed below are equipped with a suction pipe cap on the top of the fuel tank. This cap may have been overtightened at the factory, causing possible cracking of the suction pipe neck on the fuel tank to occur. Some fuel leakage may thus result when the tank is filled to capacity or the machine is tilted on its side.

YOU ARE HEREBY NOTIFIED THAT ALL MODELS LISTED BELOW MUST BE FITTED WITH A NEW SUCTION PIPE CAP AND UNDERGO A THOROUGH INSPECTION OF THE FUEL TANK, WHICH MUST BE REPLACED AT THE SAME TIME IF ANY SIGNS OF CRACKING ARE FOUND. THIS MODIFICATION MUST BE PERFORMED ON BOTH *CUSTOMER-* AND *DEALER-OWNED* MACHINES.

Owners of the affected models are being notified by mail that their machines require a modification. They have been asked to return their machines to an authorized Yamaha dealership for this modification.

Affected Models and Serial Numbers

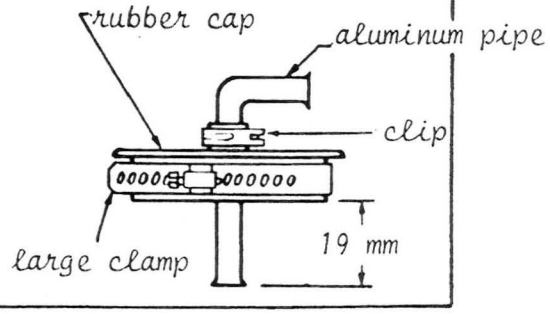
Model	Year	Serial Numbers
SS440D	1980	8K4-000101 ~ 005650
SS440E	1981	8L8-010101 ~ 014252
SR540D	1980	8L0-009101 ~ 009553
SR540E	1981	8L9-016101 ~ 019113
SRX440E	1981	8M6-000101 ~ 001770

Procedure

1. Assemble the new suction pipe kit as illustrated.

   Note:

   Slip the large hose clamp over the cap lip, but *do not tighten* the clamp at this point (see step 8).



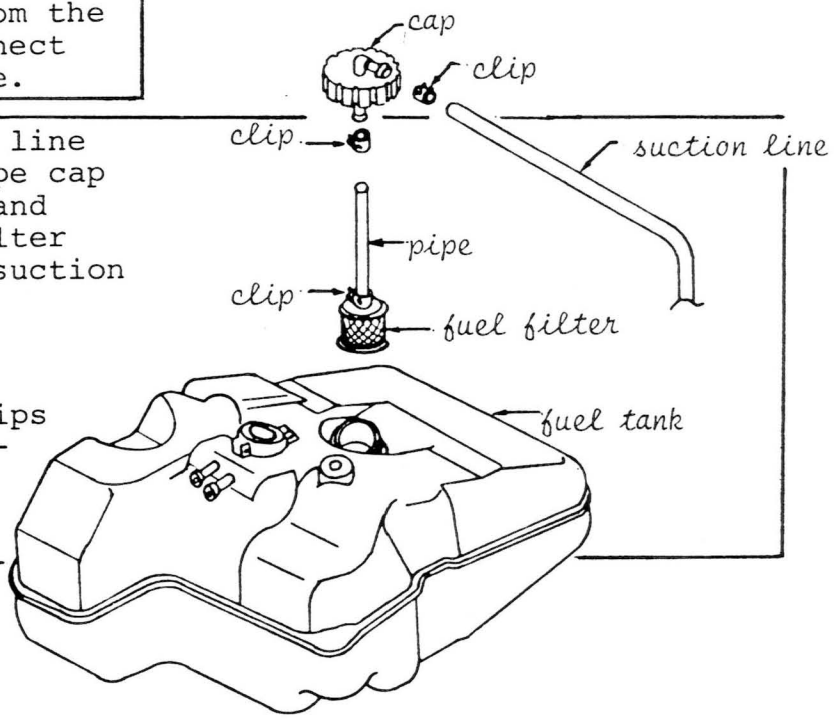
2. Drain the fuel from the gas tank.

3. Remove the seat from the machine and disconnect the taillight cable.

4. Remove the suction line and the suction pipe cap from the gas tank and remove the fuel filter assembly from the suction pipe cap.

Note:

Do not lose the clips as they must be re-used during this procedure.



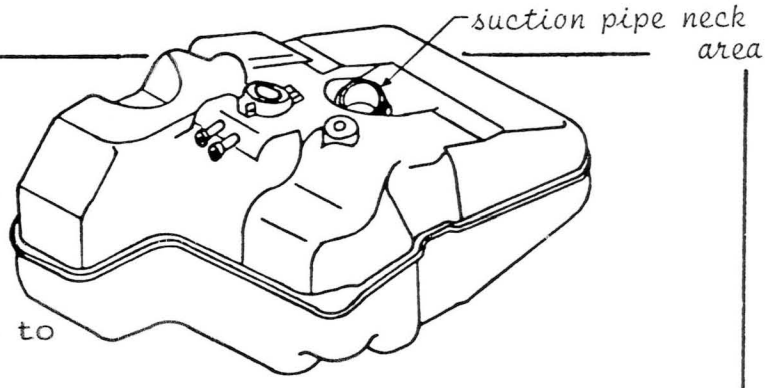
5. Inspect the neck (threaded area) of the suction pipe cap for cracks.

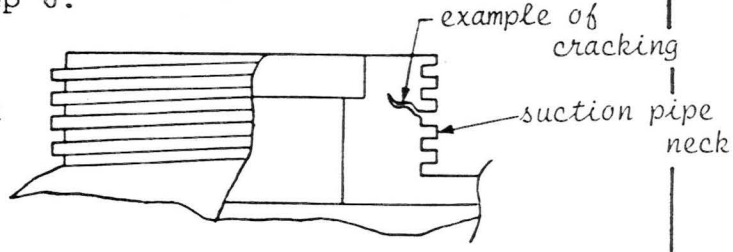
If no cracks are found, the fuel tank does not need replacing -- proceed to step 6.

If cracks are found, the fuel tank *must be replaced* before proceeding to step 6.

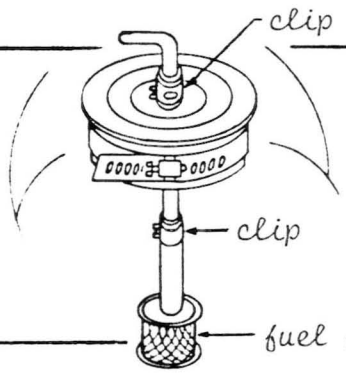
Note:

The instrument panel and louvers on the SRX440E must be removed before this inspection can be done.





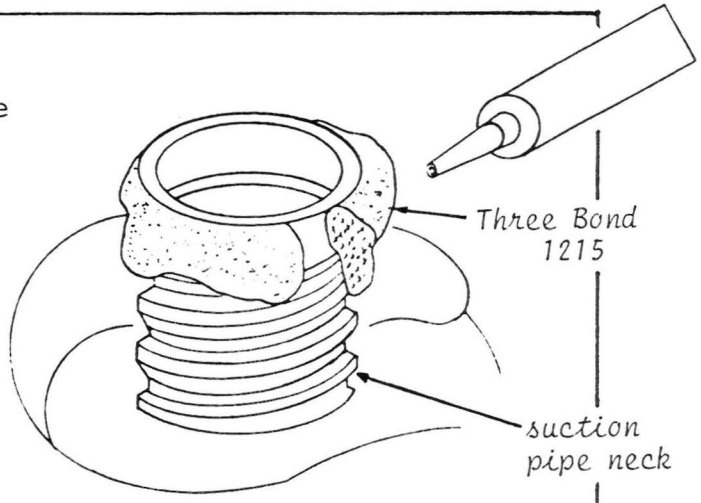
6. Install the fuel filter onto the new suction pipe assembled in step one.



7. *Clean* the neck (threaded area) of the suction pipe cap and apply Three Bond (#1215) to the threads, as illustrated.

Note:

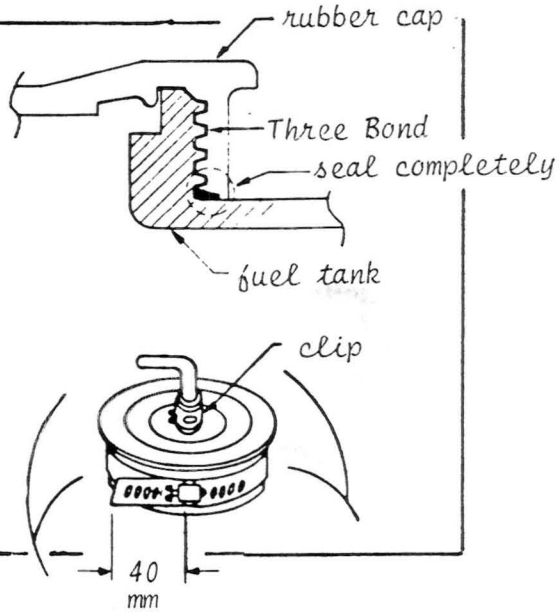
A tube of Three Bond (#1215) will be shipped to you automatically. One tube of Three Bond can be used for approximately 60 units.



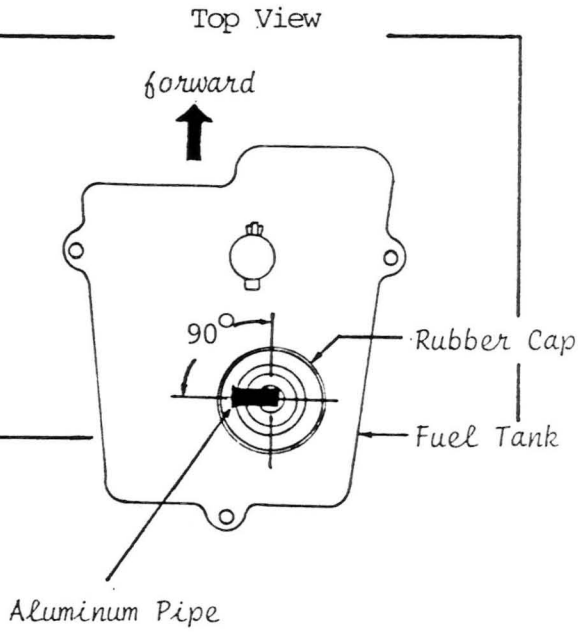
8. Install the suction pipe onto the gas tank and tighten the large hose clamp as illustrated.

Note:

Make sure to leave 40 mm (1.57 in.) at the end of the clamp. *Do not* leave more or less than is specified.



9. Turn the aluminum pipe so that it faces *left*, as shown in the illustration, and then connect the suction line to the pipe. Be sure to secure the line in place with the clips removed earlier.



10. Reconnect the taillight cable and reinstall the seat.

Parts Ordering

The following parts are required to perform this modification:

MODEL	QUANTITY	DESCRIPTION	PART NUMBER
SS440D, SS440E SR540D, SR540E SRX440E	1 kit/unit	Suction Pipe Kit	90891-50012
SS440D, SS440E SR540D, SR540E	1 pc./unit*	Fuel Tank	8K4-24111-00
SRX440E	1 pc./unit*	Fuel Tank	8M6-24111-00

Order the parts you require from your Regional Parts Department.

* *Please Take Note*

It is estimated that only 5% of all affected units will require a new fuel tank. Order these parts only if necessary. However, you must order one Suction Pipe Kit for every unit brought to your dealership for modification.

Warranty Coverage

Submit a claim for *each unit modified*. Calculate parts and labour using the following table.

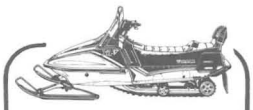
Job Description / Model	Suction Pipe Replacement only	Suction Pipe & Fuel Tank Replacement at same time	Fuel Tank Replacement after Suction Pipe has been replaced
SS440D, SS440E SR540D, SR540E	$8.00/unit	$11.00/unit	$3.00/unit
SRX440E	$15.00/unit	$18.00/unit	$3.00/unit

** Submit a claim only for those units you have actually modified **

PZ480H

Correction to clutch modification bulletin

January 11, 1984



S84-018A

CORRECTION

Please make the following correction to bulletin S84-018, page 3 of 4, procedure - item 2).

The primary spring contained in the kit is NOT colour coded. Eliminate "(colour code: blue-green)" from item 2).

ADDITIONAL INFORMATION

Contents of clutch modification kit (part no: 90891-50051)

Qty	Description
1	primary spring (part no: 90501-45534)
3	spacers

S84-018

BULLETIN TECHNIQUE/TECHNICAL BULLETIN

It has been determined that the PZ480H primary clutch may stick due to slight binding of the spider fingers to the plastic sliders and that the clutch weights may fall toward the engine side when the sled is lifted from the left side. When this happens, engagement & shift RPM may become slightly elevated. To avoid this, the plastic sliders must be removed and filed and a new clutch modification kit must be installed. These procedures must be performed during P.D.I. of unsold units or periodic maintenance of units already retailed.

Affected Models

All PZ480H's

Procedure for removing and filing the plastic sliders

1) Remove the primary clutch from the machine using the special tool.

Note - Primary sheave puller part no.: 90890-01898
Primary sheave holder part no.: 90890-01701

2) Remove the clutch cap by loosening the six bolts, then remove the primary spring.

Caution -

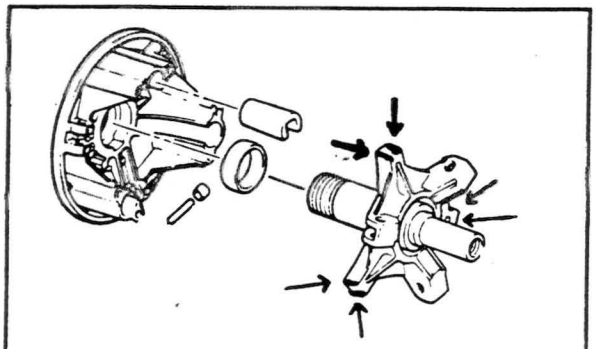
The primary spring is held under pressure by the clutch cap. Loosen the six bolts evenly in stages to prevent the cap from being jammed to one side.

3) Remove the three plastic sliders by carefully inserting a flat screwdriver under them and prying them up.

Note - It is not necessary to remove the sliding sheave from the spider post.

4) Using a small half-round file, remove a small amount of material from both corners of each spider finger, as illustrated.

Note - Before filing, place enough rags around the sliding sheave bushing to prevent filings from entering the sheave.



File around six corners

5) Use compressed air to blow the metal filings and dirt out of the clutch.

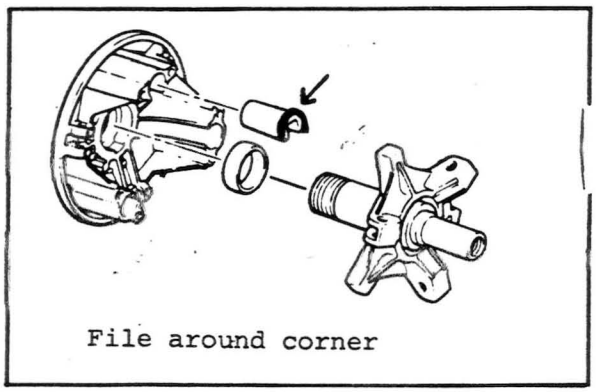
Caution -

Wear eye protection whenever using compressed air to avoid injury.

6) Spray contact cleaner on both sides of the sliding sheave bushing and its contact area on the post to remove all dirt and grease.

7) Again use compressed air to blow the metal filings and dirt out of the clutch.

8) Check the plastic sliders for burrs and file until smooth. See illustration below.

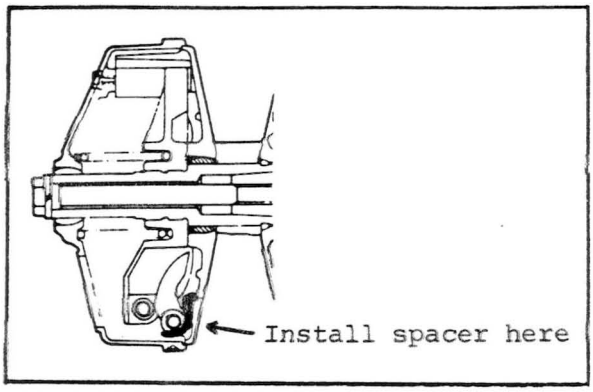


File around corner

9) Reinstall the sliders and check for smooth movement of the spider within the sliders.

Procedure for installing spacers and primary spring from kit

1) Install the three spacers contained in the kit between the sliding sheave and each of the clutch weights, as illustrated.



Note - a) After installing the spacers, check the clearance between all weights and rollers by pushing the sliding sheave toward the spider. If there is no clearance, remove the spacers.

b) Do not forget to place washers on both sides of the weights.

2) Install the new primary spring (colour code: blue-green) contained in the kit.

3) Install the clutch cap and the six cap bolts. Be sure to tighten the bolts evenly to specification.

Note - Tightening torque: 1.4 m-kg (10 ft-lb)

4) Reinstall the clutch on the machine and tighten the clutch bolt to specification.

Note - Tightening torque: A - 12.0 m-kg (85 ft-lb)
B - 6.0 m-kg (43 ft-lb)

Tighten the bolt to torque A first to seat the clutch on the taper; then loosen the bolt and retorque to the final specification torque B.

Sheave distance : 267~270 mm

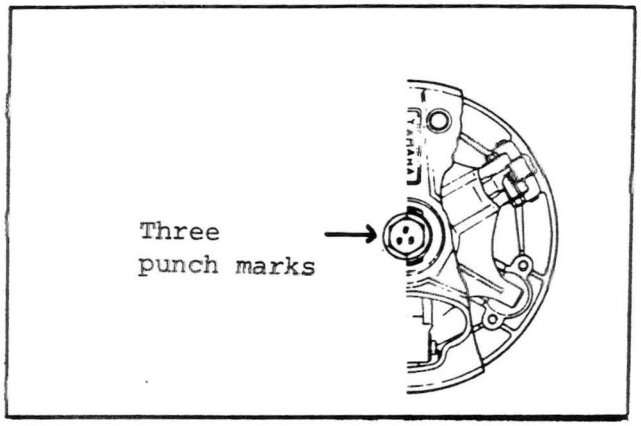
Sheave offset: 10.5~11.5 mm

Engagement RPM: 3,000~3,400

Shift RPM: 6,600~7,000

Final procedure

1) To indicate that the modification has been done, put three centre punch marks on the primary sheave holding bolt, as illustrated.



2) Make sure that the sled does not creep forward when idling.

Parts ordering

Please order the parts you require from your Regional Parts Department.

Description	Part Number	Qty.	Dealer Net
Clutch Mod. Kit	90891-50051	1 kit/unit	$1.78

Warranty coverage

When completing your warranty request form, make sure you clearly show:

Trouble code: S8418
Parts: 90891-50051
Labour code: 7001
Time: 0.6 hours

Note - a) Submit a separate warranty request for each unit modified. Do not claim several modifications on the same request form.

b) Submit a request only for those units you have actually modified.

BULLETIN TECHNIQUE/TECHNICAL BULLETIN

1984 EC340H (Excel III)

Front Axle Bearing Retainer

October 26, 1983

S84-015

It has been determined that the front axle bearing retainer has not been installed on affected models. This may cause damage to the bearing, the speedometer gear or the front axle when the snowmobile is driven.

A front axle bearing retainer (8F3-47551-00) MUST be installed on all affected units mentioned below whether new or already sold.

Affected Unit Serial Range

EC340H (Excel III) 8W8-146551 ~ 146750

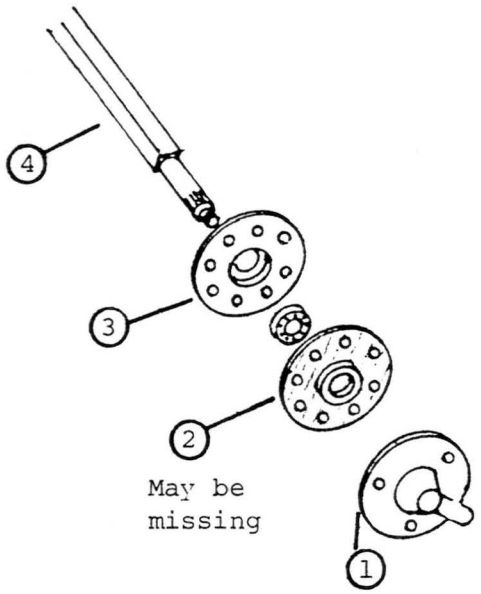
Procedure

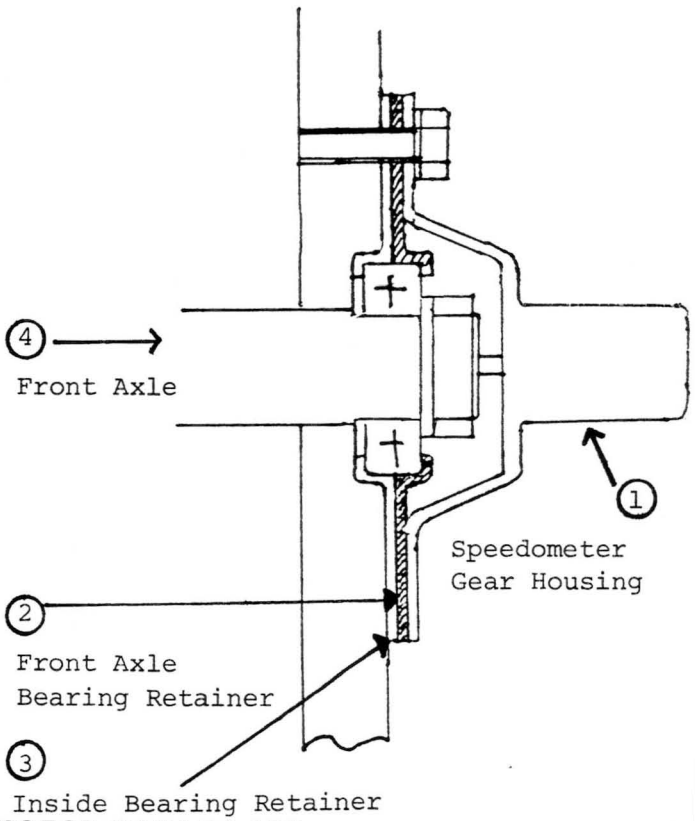
1. Inspect the right-hand front axle area of the engine compartment to determine whether the bearing retainer has been installed or not.

   NOTE:

   a) If three plates are located in this area, there is no need to proceed.

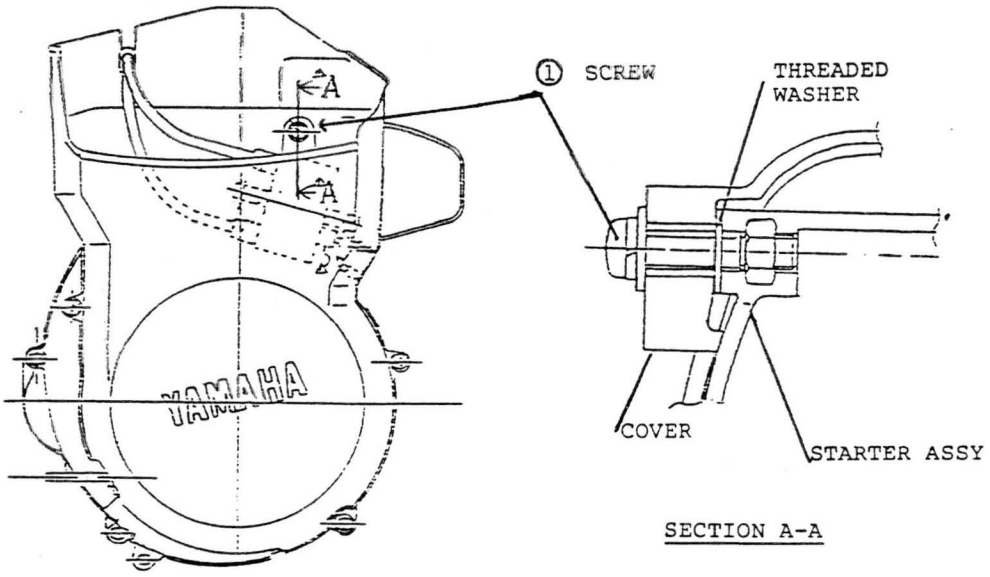
   b) If one plate (2) is missing from the right-hand front axle, proceed as follows.





2) Remove the fancase cover by loosening the three screws.

NOTE: The two bottom screws must be loosened first to prevent the washer behind the fan case cover at the top screw from coming loose.



SECTION A-A

3) Remove the battery and the starter solenoid switch bracket.

4) Elevate the right side of the machine by placing a suitable box under the right ski.

5) Remove the speedometer gear housing.

6) Install the front axle bearing retainer together with the speedometer gear housing.

NOTE: a) Make sure the speedometer drive coupler is properly installed in the speedometer gear housing.

b) Tightening torque: 2.3 kg-m (16 ft-lb).

7) Install the starter solenoid switch bracket, the battery and the fancase cover.

Parts Ordering

Please order the number of front axle beraing retainers you require from your Regional Parts Department.

Description	Part Number	Quantity	Dealer Net
Front axle bearing retainer	8F3-47551-00	1 pc/unit	$ 1.46

Warranty

IMPORTANT: Warranty coverage will be given only when the entire procedure is performed.

Parts: Dealer net plus 10% will be credited.

Labour: 0.5 hours of labour will be credited.

NOTE:

a) Bulletin number S8415 should be indicated in the trouble code area of the warranty request form.

b) Submit a separate warranty request for each unit. Do not list several units on one request form.

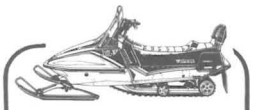
c) Submit a request only for those units in which you have actually installed a front axle bearing retainer.

BULLETIN TECHNIQUE/TECHNICAL BULLETIN

OFFICIAL RECALL CAMPAIGN - PZ480H (1984) SNOWMOBILE

Throttle Shafts Sticking

January 26, 1984



S84-023

The affected units listed below may encounter icing of the carburetor throttle shafts under certain riding or weather conditions. If this occurs the engine will not return to its normal idle speed and partial loss of machine control could result.

This problem may be encountered while the machine is being ridden or when first started after it has been sitting idle for a period of time.

IN ACCORDANCE WITH THE LEGISLATION SET OUT IN THE CANADIAN MOTOR VEHICLE SAFETY ACT, YOU ARE HEREBY NOTIFIED THAT ALL UNITS LISTED BELOW MUST BE FITTED WITH A DEEP SNOW KIT AND THE THROTTLE SHAFTS MUST BE CLEANED AND LUBRICATED WITH A LOW TEMPERATURE GREASE. THIS MODIFICATION MUST BE PERFORMED ON ALL CUSTOMER AND DEALER OWNED MACHINES AND ALL MACHINES SUBSEQUENTLY DELIVERED FROM YAMAHA.

Owners of the affected machines are being notified by mail that their machines require a safety-related modification. They have been asked to return their snowmobile to an authorized Yamaha snowmobile dealer for the modification and have been advised to avoid riding their snowmobiles until the modification has been carried out.

If you have not submitted a warranty registration card for any PZ480H units you have sold, you should do so immediately. Failure to comply could make you liable for any damages caused due to the above defect.

Affected Model and Serial Number Range

Model	Year	Serial number range
PZ480H	1984	8V0-019101 to 020107

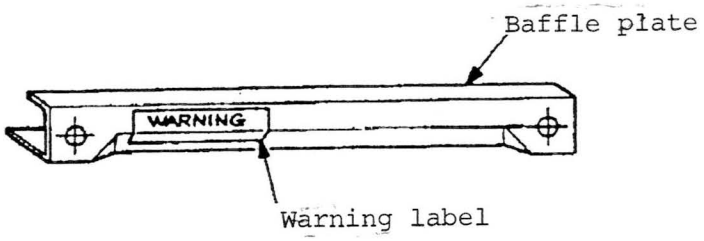
MODIFICATION PROCEDURE

1) INSTALLATION OF DEEP SNOW KIT

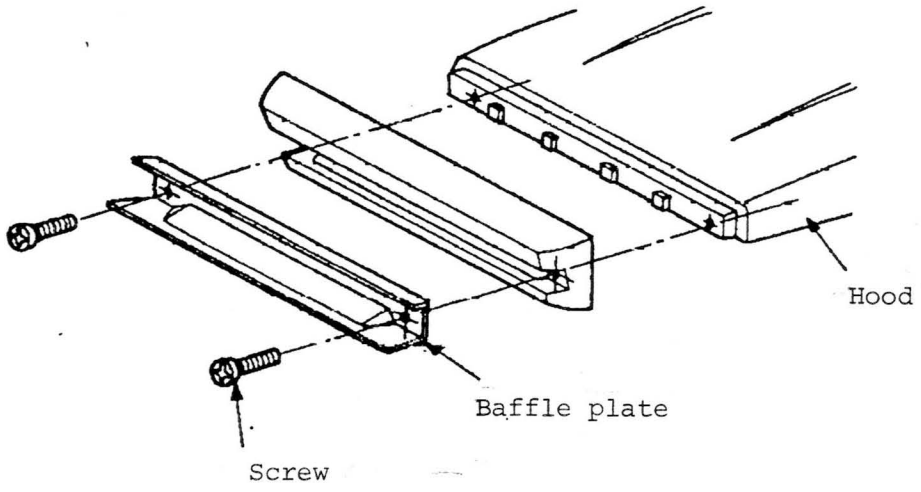
Note: Before installing the kit, please read the instructions contained in the kit.

a) Front Baffle Plate

1) Affix the warning label to the front baffle plate as shown.



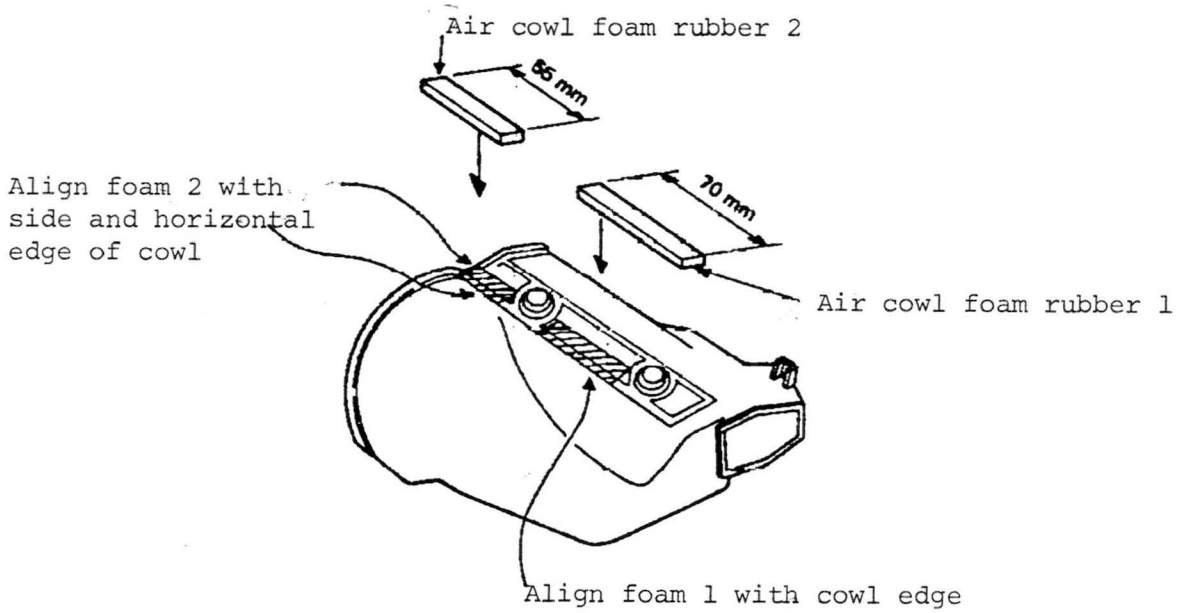
2) Install the baffle plate onto the front of the hood using the hood hinge securing screws; see illustration.

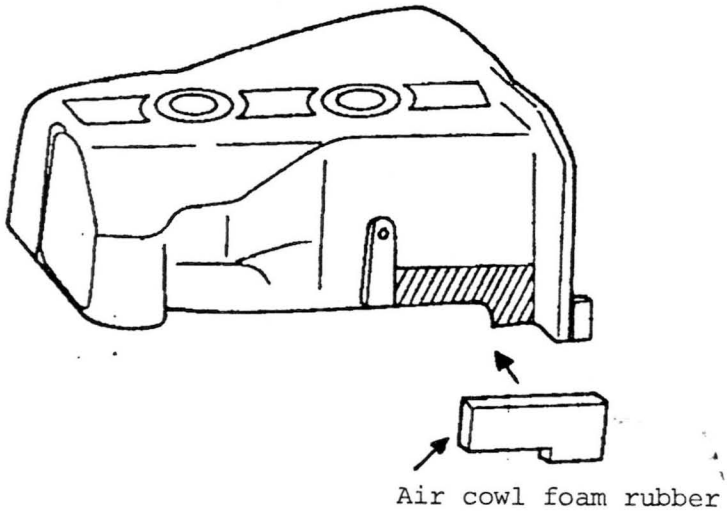


Caution: This baffle plate must be removed when the machine is operated at temperatures greater than 0° C.

b) Air Shroud Sealing

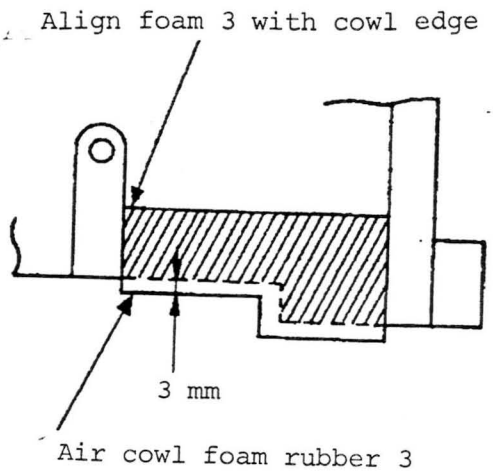
1) Clean the areas of the air shroud where the three foam rubber seals are to be affixed; see illustrations.





2) Remove the paper backing from the seals and apply them as indicated.

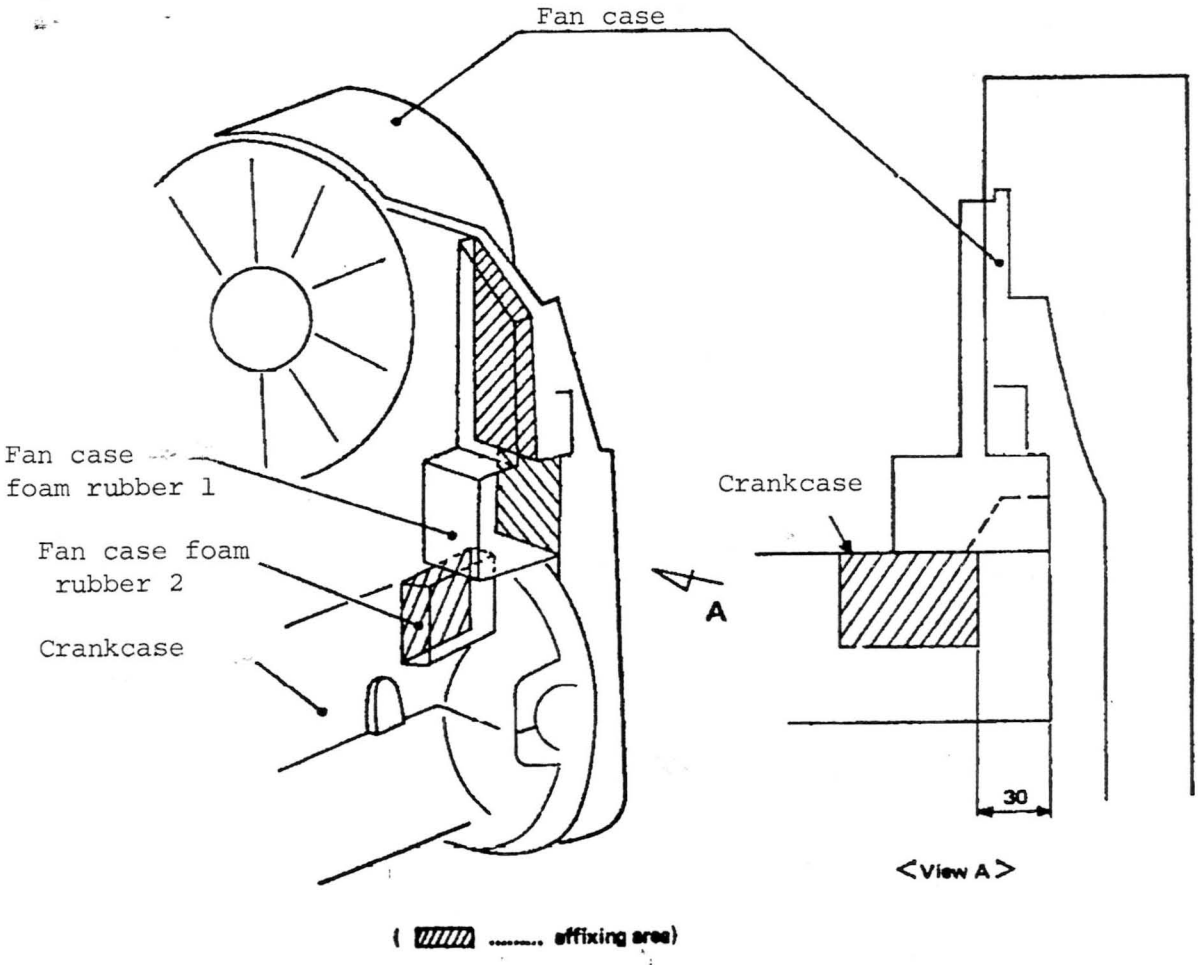
Note: The right-rear seal must be positioned so that 3 mm of seal material extends below the shroud; see illustration on following page.



c) Fan Case Sealing

1) Remove the air shroud.

2) Clean the areas of the fan case and crankcase where the fan case seals are to be affixed; see illustration.



3) Remove the paper backing from the seals and apply them as shown.

   Note: The uppermost seal adheres to the side of the fan case, and the lower seal adheres to the crankcase.

4) Reinstall the air shroud.

2) CARBURETOR SPRAYING

Using a water-displacing spray such as WD-40^{R} or silicone spray with a long, thin nozzle attachment, heavily spray the two throttle shaft pivot areas of both carburetors. It is essential that all water in these areas be removed to prevent possible throttle sticking. After spraying, apply a heavy coat of low-temperature grease (such as ESSO EP Arctic low-temperature lithium-base grease) to all throttle shaft pivot areas.

Parts Ordering

Please order all kits you require from your Regional Parts Department.

Description	Part Number	Quantity	Dealer Net
Deep Snow Kit	90891-50057	1 kit/unit	$5.63 each

Warranty Coverage

To obtain warranty coverage for this modification, indicate the following information on your warranty request form.

1) Trouble code S8423

2) Quantity 1 per unit

3) Part number 90891-50057

4) Description Deep Snow Kit

5) Labour time 0.5 hours per unit

Note: 1) Submit a separate warranty request for each unit modified. Do not claim several modifications on the same request form.

2) Submit a request only for those units you have actually modified.

BULLETIN TECHNIQUE/TECHNICAL BULLETIN

1984 PZ480H

Engine Misfiring and Erratic Headlight Operation

February 29, 1984

S84-024

Engine misfiring and erratic headlight operation of the affected units may be caused by a shorting out of the handlebar wiring harness.

This may occur at two locations. The first is where the harness passes through the cast handlebar and fairing mount: the sharp edges of the mount may penetrate the insulation. The second location is where the voltage regulator wire passes between the left body panel and the footrest plate: the wire may be pinched.

Procedures for repositioning the wires are provided below. Perform these procedures on all affected units when they are brought in for service. In addition, follow the procedures below if an affected unit exhibits the symptoms described.

Affected Units

All PZ480H

Procedures

A. Handlebar Wiring Harness

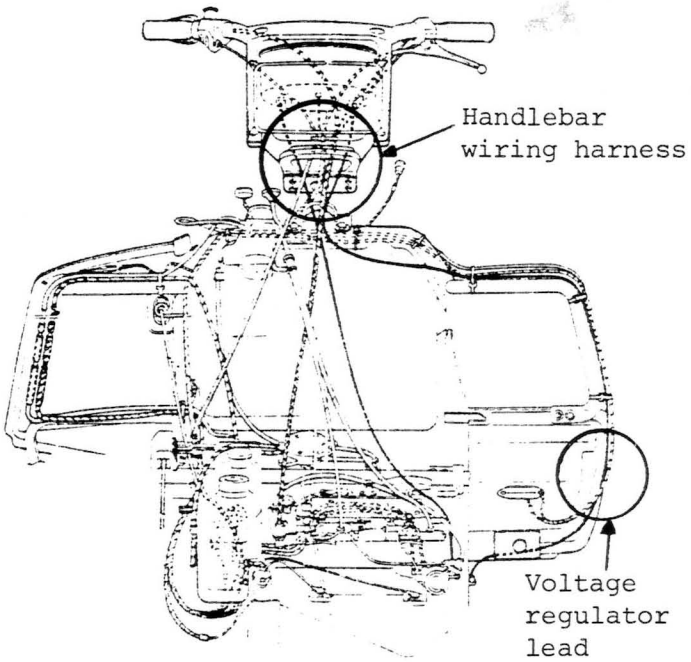
1) Remove the handlebar pads and the fairing.

2) Remove the strap holding the handlebar wiring harness to the handlebar and discard the strap.

3) Pull the harness away from the handlebar and inspect the wiring. Repair any damage as required.

4) Secure the wiring harness to the speedometer cable using electrical tape. Check to ensure that the harness is no longer touching any sharp edges; if necessary, use some emery paper to take off the sharp edges.

5) Reinstall the fairing and handlebar pads.



B. Voltage Regulator Lead

1) Reposition the voltage regulator lead in front of the footrest plate.

Warranty Coverage

To obtain warranty coverage for this modification, indicate the following information on your warranty request form.

1) Trouble code S8424
2) Labour time 0.6 hours per unit

Note: 1) Submit a separate warranty request for each unit modified. Do not claim several modifications on the same request form.

2) Submit a request only for those units you have actually modified.

BULLETIN TECHNIQUE/TECHNICAL BULLETIN

1984 VMX540H

C.D.I. MAGNETO STATOR PLATE

September 19, 1984

S85-015

It has been determined that the water pump case cover has not been machined properly. This results in uneven seating of the C.D.I. magneto stator plate and may cause the plate to become cracked or damaged through engine vibration.

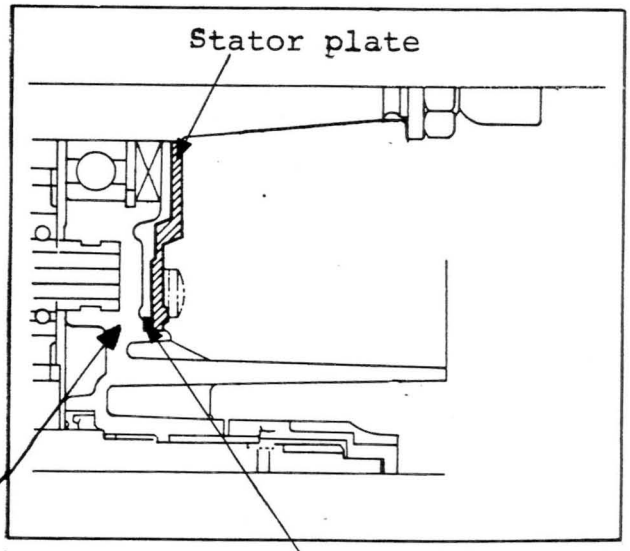
A spacer (90891-50060) which eliminates the uneven seating must be installed on all 1984 VMX540H units whether new or already sold. Please contact owners of delivered units so that this modification may be done.

Affected Units

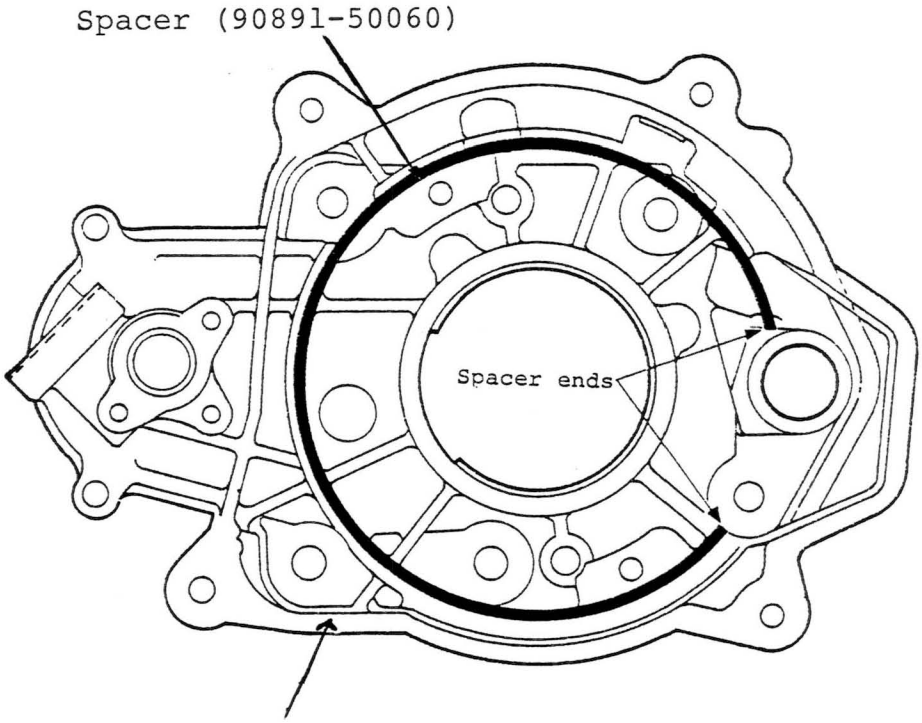
All 1984 VMX540H units.

Procedure

1. First, remove the engine from the chassis. To save time, you may choose to remove only those components which allow the right-hand end of the motor to be tilted for access to the recoil starter and magneto.
2. Remove the four bolts holding the recoil starter.
3. Remove the three bolts holding the starter pulley.
4. Using the flywheel puller, remove the flywheel magneto rotor and key.
5. Using a hand impact tool, remove the magneto stator plate bolts and check the stator for any cracks or damage.
6. Install the spacer between the stator plate and the pump cover as shown below.



NOTE: The spacer must be installed with the open ends positioned as shown below.



7. Reassembly is the reverse of disassembly. Remember to apply Loctite® to the stator plate bolts.

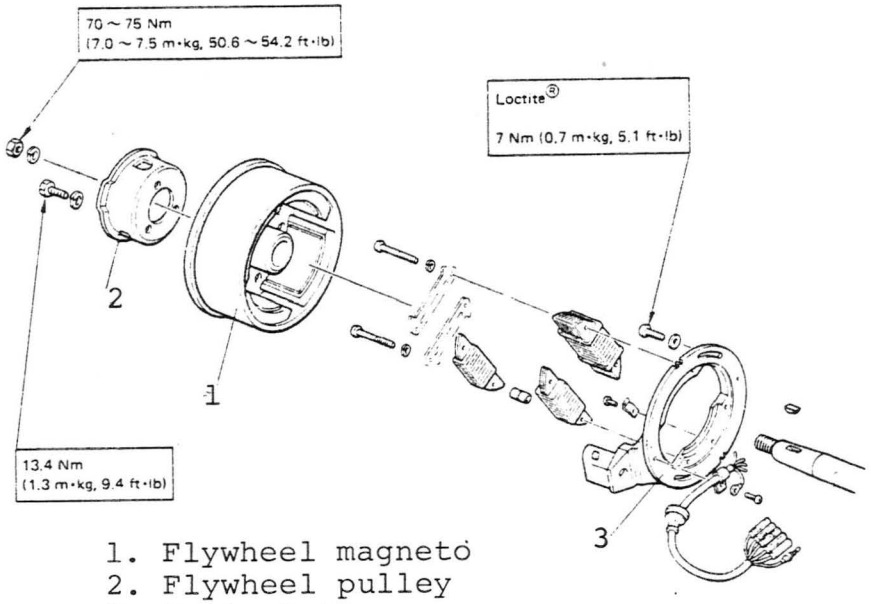
NOTE:

Reset:

(a) Ignition Timing - 1.6 ± 0.05 mm (0.063 ± 0.002 in.)

(b) Sheave centre-to-centre - 305 ± 1.5 mm (12.01 ± 0.06 in.)

(c) Sheave offset - 11 ± 0.5 mm (0.433 ± 0.02 in.)



1. Flywheel magneto
2. Flywheel pulley
3. Coil plate

Parts

Please order the number of spacers you require from your Regional Parts Department.

DESCRIPTION	PART NUMBER	QUANTITY	DEALER NET
Spacer	90891-50060	1pc/unit	$1.97

Warranty

To obtain warranty coverage for this modification, please indicate the following information on your warranty request:

TROUBLE CODE = S8515
PARTS = as indicated above
LABOUR = 3.5 hr./unit

NOTE: 1. You may indicate up to 10 serial numbers on a single request form provided the model name and trouble code are the same for all units.

2. Submit a request only for those units you have actually modified.

ET340J, EC340J, PZ480H/J/EJ, XL540J

Shaft-5 Suspension Improvements

August 14, 1985

S86-015

The suspension components to be discussed in this bulletin were originally designed for use on the 1984 Phazer model. Those components were then improved for greater durability on the 1985 PZ's, ET's, EC's, and XL's. A design change on the 1986 Shaft-5 has led to further improvements and reliability.

Only the newly-designed 1986 parts are now available. This eliminates confusion for those placing orders and ensures full use of all improvements.

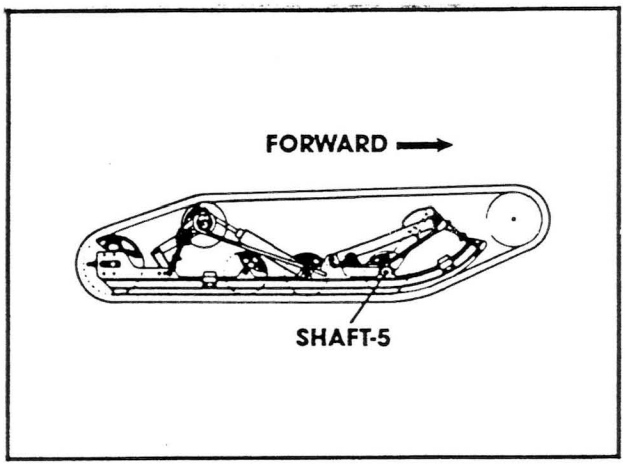
This bulletin will explain the differences among the '84,'85, and '86 Shaft-5 designs, and give you the necessary information for ordering and installing the proper parts if replacement should be necessary.

AFFECTED UNITS

1985	1984
All ET340J's	All PZ480H's
All EC340J's	
All PZ480J's	
All PZ480EJ's	
All XL540J's	

LOCATION OF SHAFT-5

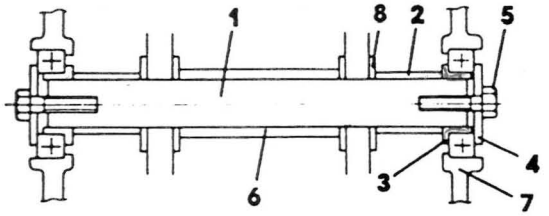
Shaft-5 is located near the front of the rear suspension system. If you have a broken or damaged Shaft-5, replace it with the replacement kit discussed in this bulletin.



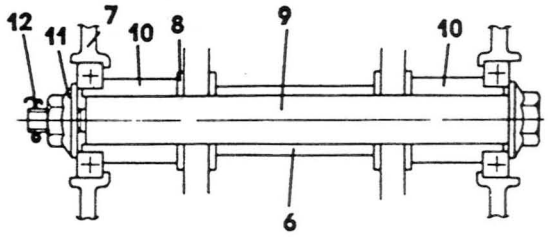
1985 ET340J; EC340J; PZ480J/EJ; XL540J SHAFT-5 REPLACEMENT PROCEDURE

Replace parts #1, #2, #3, #4, and #5 on the affected units with the parts in the replacement kit. Parts #6, #7 and #8 on the affected unit must be reused with the replacement kit.

'85 AFFECTED UNIT BEFORE REPLACEMENT



'85 AFFECTED UNIT AFTER REPLACEMENT



NOTE: When installing a new Shaft-5 assembly on an '85, use the new shaft to push out the old one. This will eliminate the need to remove the entire suspension assembly.

1985 PARTS ORDERING

NOTE: Do not order items 1 - 5 listed below.

REF. NO.	PART NUMBER	DESCRIPTION	QTY.	REMARKS
1		Shaft-5	1	These parts are superseded by the replacement kit.
2		Collar	2 ea.	
3		Collar	2 ea.	
4		Washer	2 ea.	
5		Bolts	2 ea.	
6		Collar	1	Reuse these parts. (If lost or damaged, you must reorder these parts.)
7		Suspension Wheel	2 ea.	
8		Washer	2 ea.	
9		Shaft-5	1	Shaft-5 replacement kit. This kit contains items 9 ~ 12.
10		Collar	2 ea.	
11	90891-50061-00	Nut	1	
12		Cotter pin	1	

NOTE: Replace Shaft-5 only if failure occurs. This is not a modification campaign.

1984 PZ480H SHAFT-5 REPLACEMENT PROCEDURE

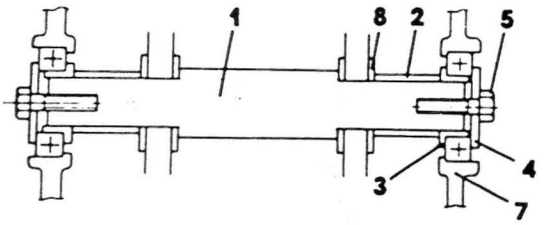
NOTE: Due to the design of Shaft-5 on 1984 Phazers, it is necessary to remove the suspension assembly to make the replacement of Shaft-5 easier.

Replace parts #1, #2, #3, #4, and #5 on the affected units with the parts in the replacement kit.

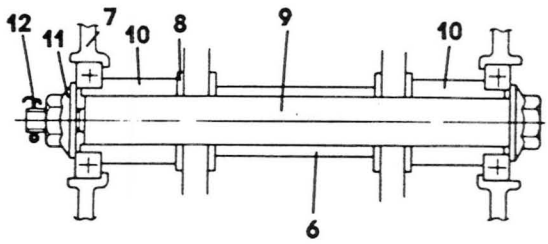
Order part #6. The Shaft-5 assembly design on 1984 Phazers does not include this collar over the centre of the shaft. However, this part is necessary with the new style shaft and must be ordered from your Regional Parts Department in addition to the replacement kit.

Parts #7 and #8 on the affected unit must be reused with the replacement kit.

'84 PHAZER BEFORE REPLACEMENT



'84 PHAZER AFTER REPLACEMENT



1984 PHAZER - PARTS ORDERING

NOTE: Do not order items 1 - 5 listed below.

REF. NO.	PART NUMBER	DESCRIPTION	QTY.	REMARKS
1		Shaft-5	1	These parts are superseded by the replacement kit.
2		Collar	2 ea.	
3		Collar	2 ea.	
4		Washer	2 ea.	
5		Bolts	2 ea.	
6	90387-160M7-00	Collar	1	**This part must be ordered.**
7		Suspension Wheel	2 ea.	Reuse these parts. (If damaged, you must reorder these parts.)
8		Washer	2 ea.	
9		Shaft-5	1	Shaft-5 replacement kit. This kit contains items 9 ~ 12.
10		Collar	2 ea.	
11	90891-50061-00	Nut	1	
12		Cotter pin	1	

NOTE: Replace Shaft-5 only if failure occurs. This is not a modification campaign.

WARRANTY

1985

Should this replacement be necessary within the normal warranty period, please indicate the following information on your warranty request:

TROUBLE CODE: S8615
PARTS: 90891-50061-00 (dealer net + 10% for handling will be credited to your parts account)
LABOUR: 0.4 hours

1984

Should this replacement be necessary within the normal warranty period, please indicate the following information on your warranty request:

TROUBLE CODE: S8615
PARTS: 90387-16077-00 (dealer net + 10% for handling will be credited to your parts account)
90891-50061-00

LABOUR: 1.5 hours

NOTE:

1. You may indicate up to 10 serial numbers on a single request form provided the model name, model year and trouble codes are the same for all units.

2. Submit a warranty request only for those units whose Shaft-5 has actually been replaced.

ET340TRK

SECONDARY CLUTCH SPRING SEAT REPLACEMENT

November 13, 1985

S86-018

It has been determined that the units listed below have spring seats which do not meet Yamaha engineering standards.

YOU MUST replace the spring seat before delivering ANY OF THE AFFECTED UNITS to customers. If a unit has already been released to a customer, the spring seat must be replaced at the first service check.

CAUTION: Customers must be advised that before shifting, the snowmobile must be stopped and the engine at idle or damage to the transmission may occur.

Affected Units

ET340TRK 81W-000623
81W-000646
81W-000651 to 000948

NOTE: Be sure to modify only those units listed.

Procedure

1. Remove choke cable.
2. Remove the intake silencer box (remove 3 bolts and loosen clamp on carburetor).
3. Remove the carburetor.

NOTE: It is not necessary to disconnect all the cables.

3. Remove the V-belt from the secondary clutch.
4. Remove the spring pin (shown in illustration 1) from the spring seat and secondary shaft using a pin punch.

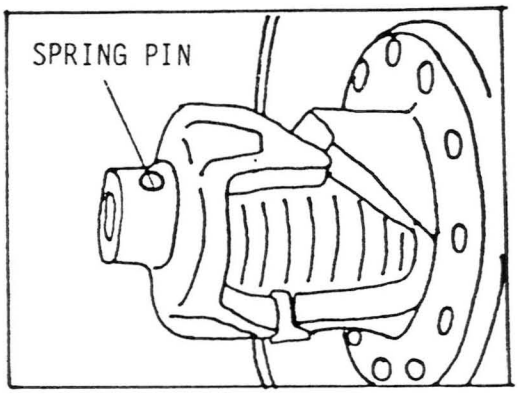


Illustration 1

NOTE: Be sure to hold the spring seat as the secondary spring preload may cause it to jump out.

5. Replace the old spring seat with a new spring seat identified by a blue paint mark.

TIPS FOR INSTALLING THE NEW SPRING SEAT

a) Position the secondary shaft so that the spring pin hole is at the top.

b) Engage one end of the secondary spring into the sliding sheave and the other into the spring seat.

c) Install the spring seat half way onto the secondary shaft by applying continuous force.

d) Insert an appropriate punch into the spring pin hole in the spring seat to prevent the spring seat from moving.

e) Rotate the sliding sheave 160 degrees (approximately 1/2 turn) counterclockwise, as shown in illustration 2, to set spring preload.

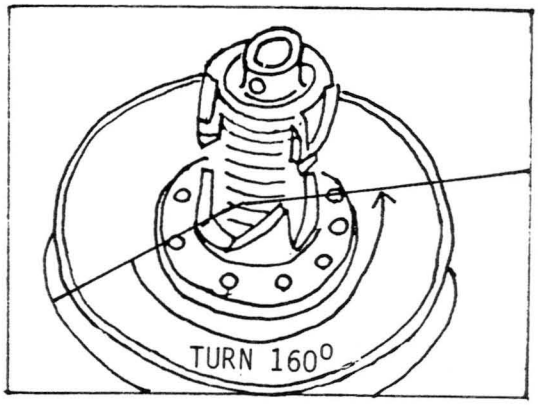


Illustration 2

f) Align the spring pin holes in the seat and secondary shaft by sliding in and rotating the spring seat, then insert a punch all the way through the seat and shaft.

g) Rotate the secondary clutch 180 degrees so that the punch points up from the bottom and apply the parking brake.

6. Insert the new spring pin contained in the kit through the spring seat to lock the seat onto the secondary shaft.

NOTE: Wiggle the punch to align the holes in the seat and shaft.

7. Reinstall the carburetor, silencer box, choke cable, belt and guard.

PARTS ORDERING

Please order the kits you require from your Regional Parts Department.

PART NUMBER	DESCRIPTION	QUANTITY	REMARKS	DLR. NET
90891-50071	Spring kit seat	1 kit/unit	Includes: spring seat.. 1 pc. ramp shoe.... 3 pcs. spring pin... 1 pc.	$9.79

WARRANTY

To obtain warranty coverage for this modification, please indicate the following information on your warranty request form:

TROUBLE CODE: S8618
PARTS : 90891-50071
LABOUR : 0.5 HRS.

NOTE:

1. You may indicate up to 10 serial numbers on a single request form provided the model name and trouble codes are the same for all units.

2. Submit a warranty request only for those units you have modified.

3. You must enclose the defective spring seat with your warranty request form.

BULLETIN TECHNIQUE/TECHNICAL BULLETIN

SR540K, XL540K

HOOD STOPPER WASHER

November 27, 1985

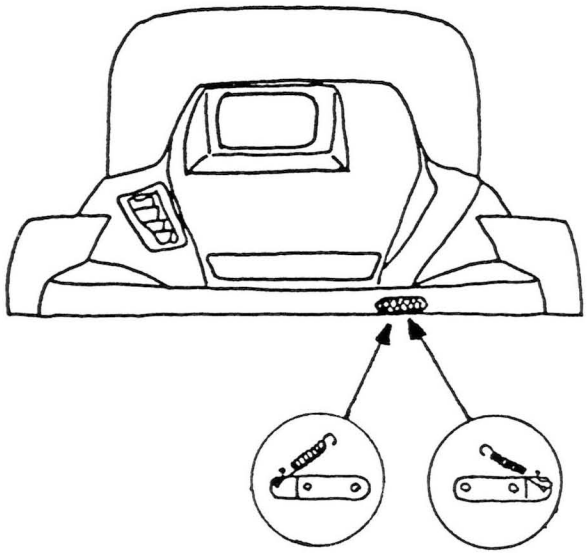
S86-019

It has been determined that the hood stopper washer has been installed incorrectly on some units. This may cause the washer to catch in the front baffle plate when the hood is opened and closed.

When performing P.D.I. and set-up, be sure to check the position of the hood stopper washer and reposition it as per illustration 1 if incorrectly installed.

Affected Units

ALL SR540K's
ALL XL540K's



Warranty Coverage

To obtain warranty coverage, please indicate the following information on your warranty request form.

TROUBLE CODE: 7090
LABOUR CODE : 5613
LABOUR HOURS: 0.1 HRS.

NOTE:

1. You may indicate up to ten serial numbers on a single request form provided the model name and trouble codes are the same for all units.

2. Submit a warranty request only for those units you have modified.

BULLETIN TECHNIQUE/TECHNICAL BULLETIN

CF300K

ADDITIONAL IDLER WHEEL INSTALLATION

December 23, 1985

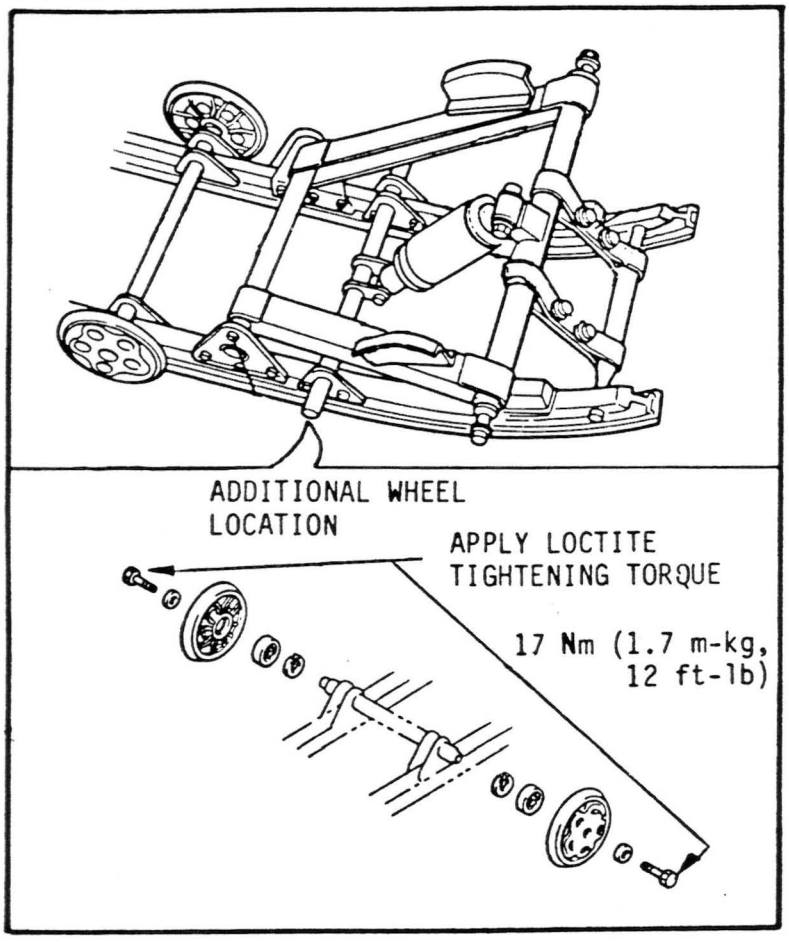
S86-021

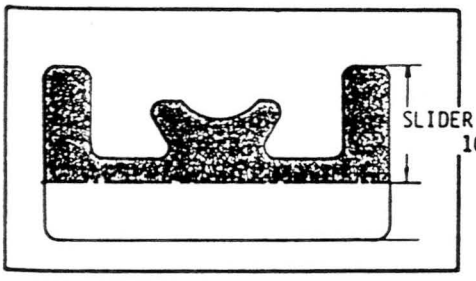
It has been determined during our early product testing that, under certain conditions, slider wear on the CF300K may be excessive. To eliminate this possibility, YOU MUST install the additional idler wheels on this model at P.D.I.

If the unit has been retailed and is in use, please contact your customer and arrange to have the unit brought in for this modification. If the unit has been used, check the sliders for wear and if the wear is beyond the limit, also replace the sliders.

Affected Units

All CF300K's





PARTS ORDERING

PART NUMBER	DESCRIPTION	QUANTITY	DEALER NET
8K2-47320-00	Suspension Wheel Comp.	2 pcs/unit	$ 15.21
93306-00416	Bearing	2 pcs/unit	$ 4.75
99009-42500	Circlip	2 pcs/unit	$ 0.90
90201-08681	Washer	2 pcs/unit	$ 1.42
90109-08559	Bolt	2 pcs/unit	$ 0.24

WARRANTY

To obtain warranty coverage for this modification, please indicate the following information on your warranty request form.

TROUBLE CODE: S8621
PARTS : As Listed
LABOUR : 0.2 Hrs

Note:

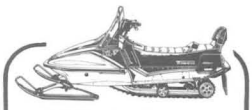
1. Submit a warranty request form only for those units you have modified.

2. For units requiring slider replacement:
   - You must submit a separate request form for each unit, including the the old parts.
   - The unit must have been registered.
   - No consideration will be given to requests received by Toronto Warranty Department after January 31, 1986.

EX570L

SPECIAL PREDELIVERY SERVICE PRECAUTIONS

October 29, 1986



S87-016

When the oil tank is first filled on the affected units, there may be a long delay before the oil level registers in the sight tube. This is because of the viscosity of the oil and the fact that the sight tube is dry. The simple procedure, below, eliminates this delay.

The affected units are filled with coolant at the factory, but levels must be checked during predelivery. The correct topping up procedure is also outlined below.

In addition, this bulletin gives the proper procedure for bleeding the cooling system. This procedure is to be used any time the cooling system is drained.

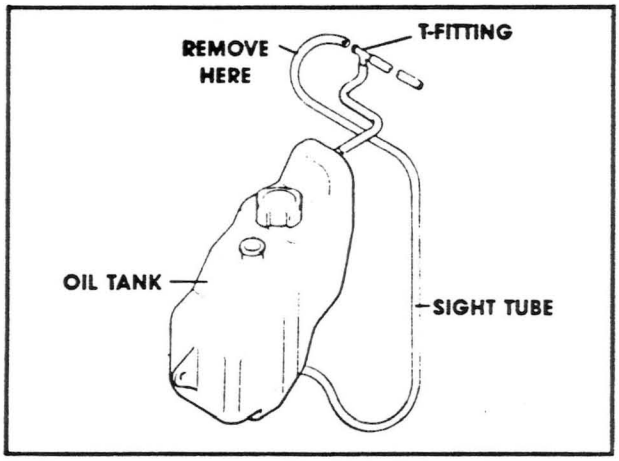
AFFECTED UNITS

All EX570L

PROCEDURE

OIL LEVEL SIGHT TUBE

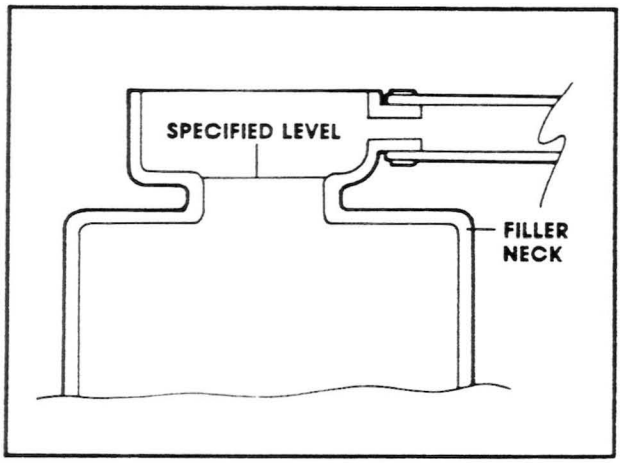
1. Before filling the oil tank, disconnect the sight tube from the T-fitting.

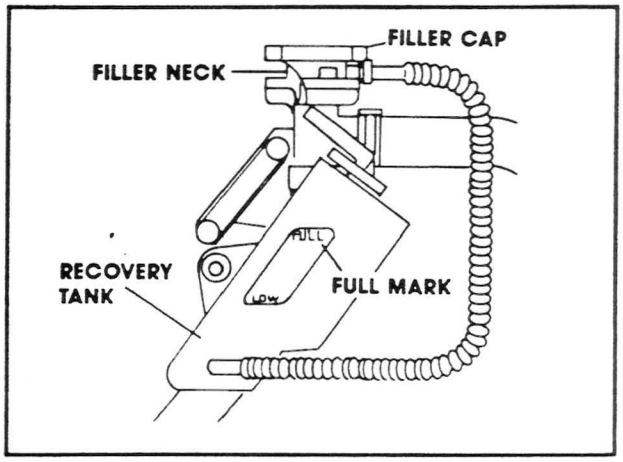


2. Fill the tube from a squirt can containing Yamalube 2, then reconnect the sight tube and fill the oil tank.

COOLING SYSTEM FILLING

1. Check the coolant levels in the recovery tank and filler neck. Add coolant as necessary to bring the levels to the FULL mark on the recovery tank and to the top of the filler neck. Replace the recovery tank filler cap.





2. With the track off the ground, run the engine at 4000 rpm until the thermostat opens and the coolant freely circulates. If the coolant level decreases in the filler neck, with the engine running, add coolant until the level is once again at the top of the filler neck, and replace the cap.

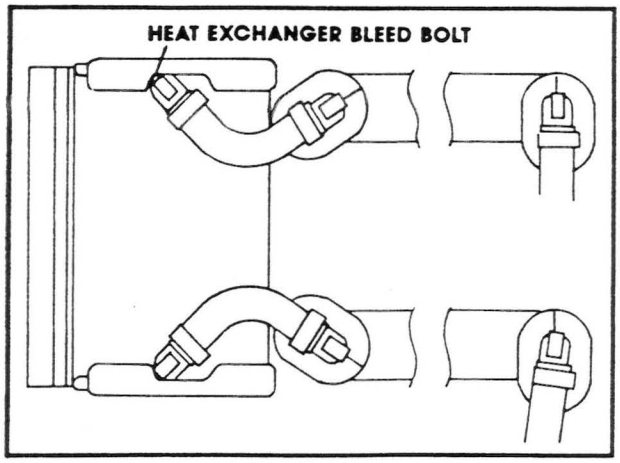
WARNING: To avoid being burned by hot coolant, before removing the filler cap, always be sure to carefully relieve any pressure build-up if the engine has been running.

WARNING: Avoid contact with the moving track. Entanglement in the machinery of shop towels, clothing, or body parts could result in serious injury.

COOLING SYSTEM BLEEDING PROCEDURE

If, for any reason, the cooling system is drained, it is essential when refilling the system that all air be removed, using the following method.

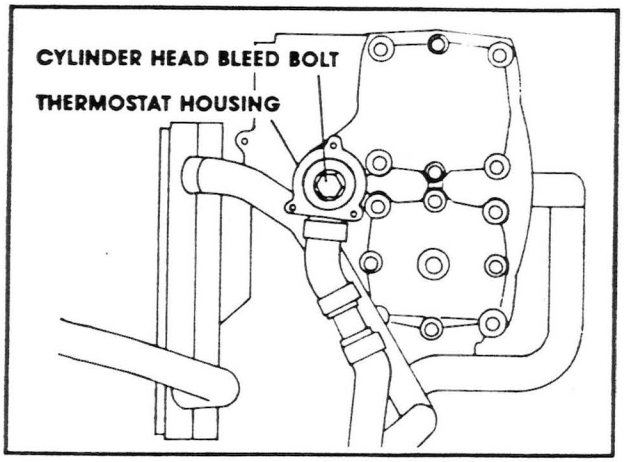
1. Remove the seat and both filler caps, and add coolant as necessary to bring the levels to the FULL mark on the recovery tank and to the top of the filler neck. Replace the recovery tank cap.



COOLING SYSTEM BLEEDING PROCEDURE CONT'D

2. Loosen (do not remove) the bleed bolt at the left side of the rear heat exchanger and allow coolant to run out until all air bubbles disappear from the coolant.

3. Tighten the bleed bolt and replace the lost coolant.



4. Loosen (do not remove) the bleed bolt on the cylinder head and, once again, allow coolant to run out until all air bubbles disappear.

5. Tighten the bleed bolt and replace the lost coolant.

WARNING: To avoid being burned by hot coolant, before removing the filler cap, always be sure to carefully relieve any pressure build-up if the engine has been running.

6. With the track off the ground, run the engine at 4000 rpm until the thermostat opens and the coolant freely circulates. If the coolant level decreases in the filler pipe, with the engine running, add coolant until the level is once again at the top of the filler neck, and replace the cap and seat.

WARNING: Avoid contact with the moving track. Entanglement in the machinery of shop towels, clothing, or body parts could result in serious injury.

WARRANTY INFORMATION

These procedures are part of normal predelivery service. No special warranty allowances applies.