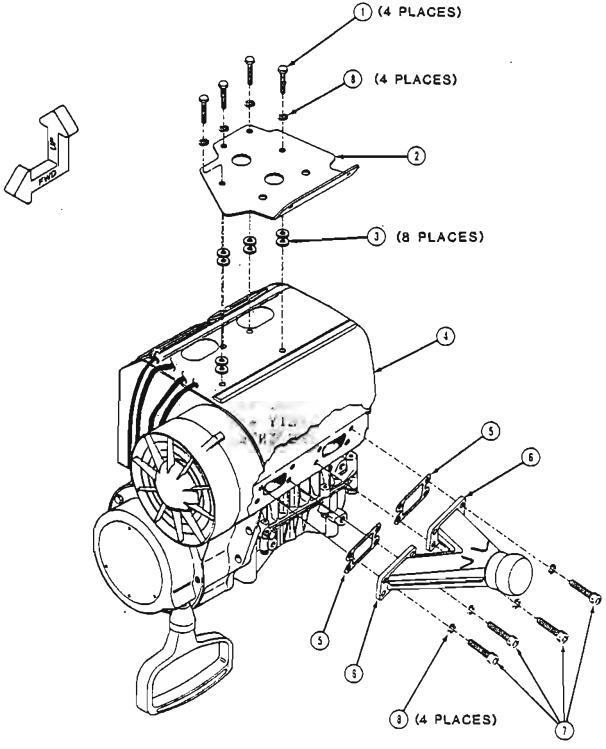

1 (4 PLACES)
9 (4 PLACES)
2
3 (8 PLACES)
4
5
6
7
8
FWD

MUFFLER ATTACHMENT

1. Attach the 90 Degree Exhaust Elbow (1) with THREE [3] Muffler Springs (2) as illustrated.

OPTIONAL: Apply Loctite "Anti-Seize" Spray to the OUTER surface of the Exhaust Manifold (Header) Ball Joint (11). This will reduce the likelihood of corrosion (rust) from forming and allow the Elbow to pivot or rotate freely around the joint.

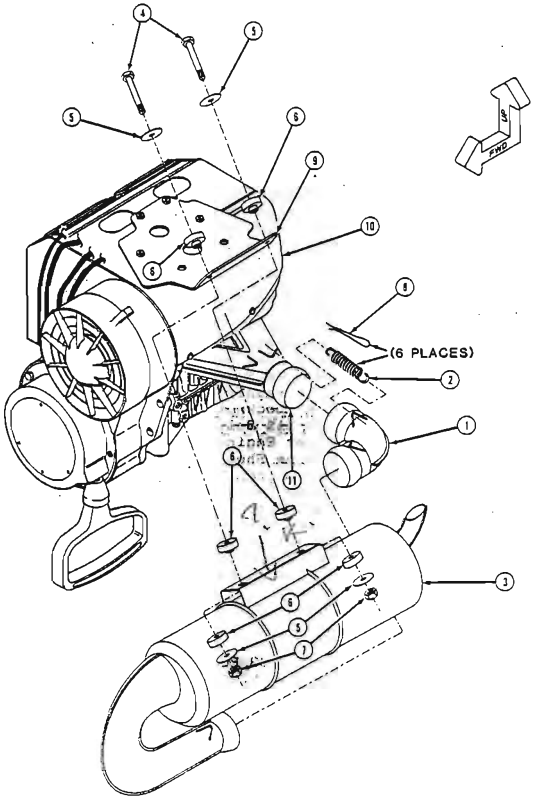
2. Attach the Muffler Assembly (1) with TWO [2] Springs as illustrated.

3. Cut the "Nipples" off of the LOWER TWO Shock Grommets (6) ONLY and assemble as illustrated. Tighten the Locknuts (7) however leave THREE to FOUR Bolt threads visible. DO NOT OVER TORQUE AND CRUSH THE GROMMETS (6).

4. Secure ALL Springs (2) with Safety Wire (8) as required. Pass ONE [1] end of the Safety Wire through the MIDDLE (INSIDE) of the Muffler Spring and bend it back around the corresponing attachment tab. Route the Spring back along the OUTSIDE of the Spring and secure the ends. Refer to the illustration on page 1-20 if necessary.

CAUTION: DO NOT USE ANY TOOL WHICH MAY SCRATCH OR SCORE THE SURFACE OF THE SAFETY WIRE DURING INSTALLATION AS THIS WILL COMPROMISE THE INTEGRITY OF THE SAFETY WIRE.

Item	P/N	Qty	Description
1	61082	1	90 Degree Exhaust Elbow
2	00838790	6	Muffler Spring
3	61066	1	Muffler Assembly
4	10320	2	AN5-15A Bolt
5	10600	4	5/16" Fender Washer
6	30380	6	Soft Rubber Shock Grommet
7	10540	2	5/16" Locknut
8	20467	A/R	Safety Wire, .041"
9	45821	1	Muffler Attach Bracket
10	61080		Rotax 503 Powerplant, Dual Carb, Dual Ignition
11			Exhaust Manifold "Ball Joint"
12	61045		Exhaust Manifold (Header) (R-503)


4
5
5
6
9
10
8
(6 PLACES)
2
1
8
11
3
6
5
7
FWD

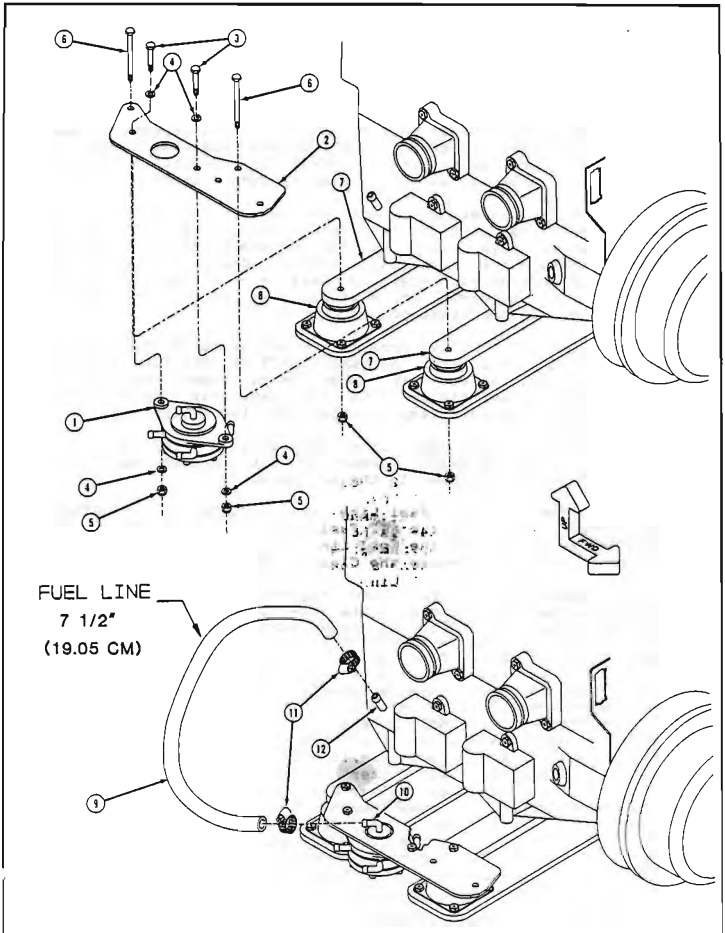
FUEL PUMP ATTACHMENT

1. Remove the Dual Carb Fuel Pump (1) from the Powerplant Carburetor Box and attach the Fuel Pump (2) to the Fuel Pump Mount Plate (2) as illustrated with Hardware (3,4 and 5). Tighten to proper torque.

2. Attach the Fuel Pump Mount Plate (2) to the Upper Engine Mounts (7) and the Shock Mounts (8) with Hardware (6) and (5) as illustrated. Tighten to proper torque.

3. Measure and cut a piece of Fuel Line (9) 7 1/2" (19.05 cm). Attach one end of the Fuel Line to the Pulse Port (10) located on the Fuel Pump (1). Slide on TWO Clamps (11). Attach the opposite end of the Fuel Line on the Pulse Port (12) of the Powerplant (13). CAREFULLY tighten the Clamps (11). DO NOT OVER TORQUE.

Item	P/N	Qty	Description
1	00994485	1	Dual Carburetor Fuel Pump (in Carburetor box)
2	45858	1	Fuel Pump Mount Plate (R-503)
3	10066	2	AN4-10A Bolt
4	10560	4	1/4" Washer
5	10510	4	1/4" Locknut
6	10185	2	AN4-21A Bolt
7	45837		Upper Engine Mount
8	61035		Engine Shock Mount
9	30220	A/R	Fuel Line, 7 1/2" (19.05 cm)
10			Pulse Port on Fuel Pump
11	30230	2	Fuel Line Clamp
12			Pulse Port on Powerplant
13	61080		Rotax 503 Powerplant w/ Dual Carb, Reduction Drive, Dual Ignition (as received)


FUEL LINE
7 1/2"
(19.05 CM)

CARBURETOR ATTACHMENT

1. Push the LARGER (INSIDE diameter) end of the Rubber Sockets (2) onto the Intake Sockets (8) of the Powerplant (10). Press them on until the "bead" on the INSIDE of the Rubber Socket "seats" with the "recesses" on the Intake Sockets. Loosen and slide the Clamps (3) onto the Sockets (2). Position the Screws (9) on the Clamps (3) so they can be tightened later.

2. Push the Carburetors (1) into the Rubber Sockets (2) until the "beads" seat with the "recesses". Ensure the TOP of each Carburetor is LEVEL with the TOP of the Powerplant. You may wish to consult the Powerplant (ROTAX) Operators Manual for additional information regarding Carburetor alignment. Tighten the Clamps (3) securely. There should be a gap of APPROXIMATELY 1/4" (6.4 mm) when tightened correctly.

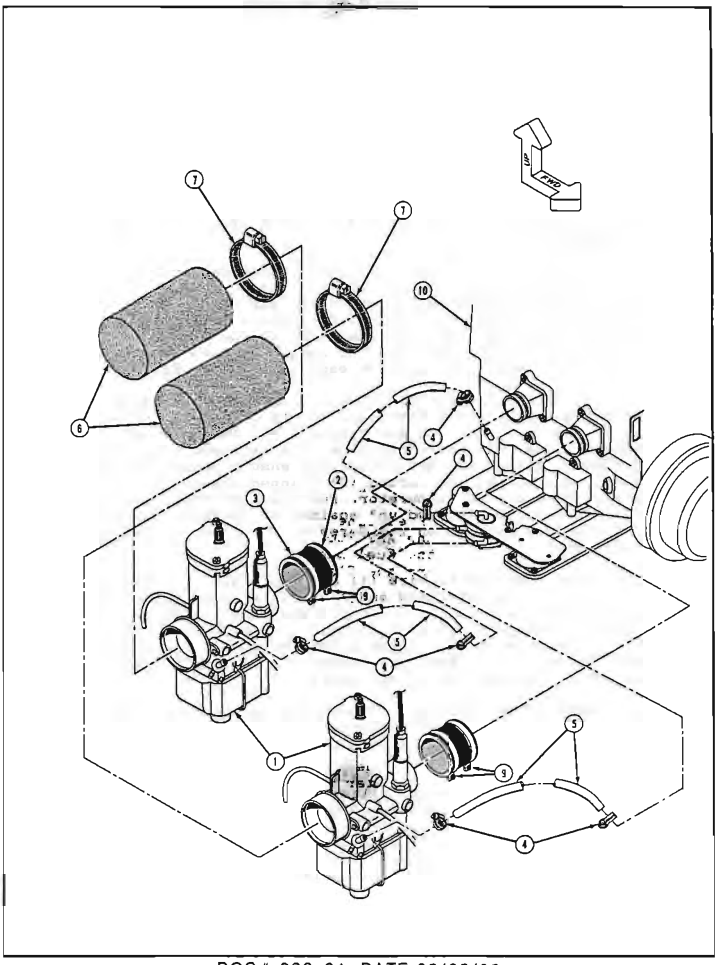
3. Wrap the Air Filter Spring (INSIDE the Air Filter) around the end of the Carburetor AT LEAST THREE OR FOUR TIMES. Attach the Air Filters (6) and Air Filter Clamps. Ensure the each Air Filter Clamp is positioned OVER the Previously wrapped Spring BEFORE Tightening the Clamp. Tighten the Clamps securely.

4. Cut a piece of Fuel Line (5) 18 1/-2 " (47 cm) to be attached to the FORWARD Carburetor. Cut another piece 17" (43.18 cm) to be attached to the AFT Carburetor.

5. Route the FORWARD Fuel Line AFT and OUTBOARD and BETWEEN the Carburetors. Route the AFT Fuel Line INBOARD or BEHIND the AFT Carburetor. Attach the Fuel Line (5) with Fuel Line Clamps (4) as illustrated. Secure the Clamps. DO NOT OVER TORQUE.

6. Tie Wrap the AFT Fuel Line together with the Fuel Pump Breather Line (11) located at the TOP CENTER of the Fuel Pump using a "stand-off". Refer to page 1-17 if necessary.

Item	P/N	Qty	Description
1	00995578	2	Bing Carburetor
2	00867484	2	Rubber Socket
3	00951510	4	Hose Clamps
4	30230	4	Fuel Line Clamp
5	30220	A/R	Fuel Line, 18 1/2" (47 cm), 17" (43.18 cm)
6	59999	2	Air Filter
7		2	Air Filter Clamp (part of P/N 59999)
8	00867400		Intake Socket
9			Hose Clamp Screw
10	61080		Rotax 503 Powerplant w/ Dual Carb, Dual Ignition, Reduction Drive (as received)
11			Fuel Pump Pulse Line
12			Pulse Line


UP
FWD
7
7
10
6
5
4
4
2
3
9
5
4
1
5
3
4

AIR FILTER SECUREMENT

IMPORTANT: Before starting the following assembly sequence cover ALL openings of the Carburetor (5). DO NOT ALLOW ANY METAL FILINGS FROM DRILLING AND DEBURRING TO GET INTO THE CARBURETOR.

1. Refer to Figures 1 and 2 and locate the Carburetor Tab (6) attached to the side of the Carburetor (5). Drill and deburr a 1/8" (3.2 mm) diameter hole thru the Carburetor Tab (6) as illustrated.

2. Refer to Figure 1. Cut a 12" (30.48 cm) piece of Saftey Wire (1). Insert ONE [1] end thru the TOP side of the Air Filter (just OUTBOARD of where the Air Filter Clamp (4) will be located). Wrap the Safety Wire around ONE [1] coil of the Internal Spring (3) then route the Safety Wire back thru the Foam Air Filter. Position the Safety Wire so it is CENTERED with EQUAL amounts of Wire on each side of the Spring.

3. Refer to Figure 2. Twist the Safety Wire (1) as illustrated. Loosen the Clamp (4) if necessary and slide it over the end of the Air Filter (2) Ensure the Screw/Nut assembly is at the UPPER side. Pull the end of the Spring SLIGHTLY out of the Air Filter and ensure the are a MINIMUM of SIX [6] coils of the Spring (3) wrapped around the "throat" or inlet side of the Carburetor. Position the Clamp over the SIX [6] Springs and "butted up" against or touching the Tab (6) on the Carburetor. Tighten the Screw on the Clamp (3) as tight as possible.

4. Twist the Safety Wire (1) ONE AND A HALF to TWO [1 1/2 to 2] turns as illustrated and route it around the Screw/Nut at the UPPER side of the Clamp. Twist the Safety Wire again BEFORE inserting it thru the previously drilled hole in the Tab. Insert ench end of the Safety Wire thru the hole. Secure the Safety Wire. Refer to "Safety Wire" in SECTION 1 of your Assembly Instructions if necessary.

5. Repeat Steps 1-3 on the remaining Carburetor if applicable.

Item	P/N	Qty	Description
1	20467	A/R*	.041" Safety Wire
2	60000		Air Filter
3			Internal Spring (part of P/N 60000)
4			Air Filter Clamp (part of P/N 60000)
5	00996417		Bing Model 54/36 mm Carburetor (part of P/N 61085)
6			Carburetor Tab

* As Required

FIG. 1

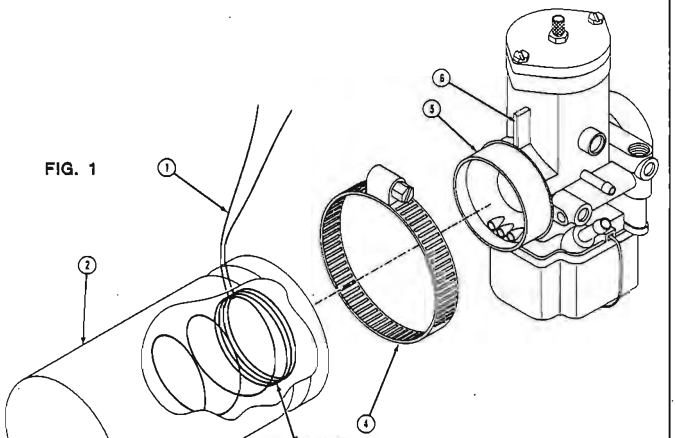
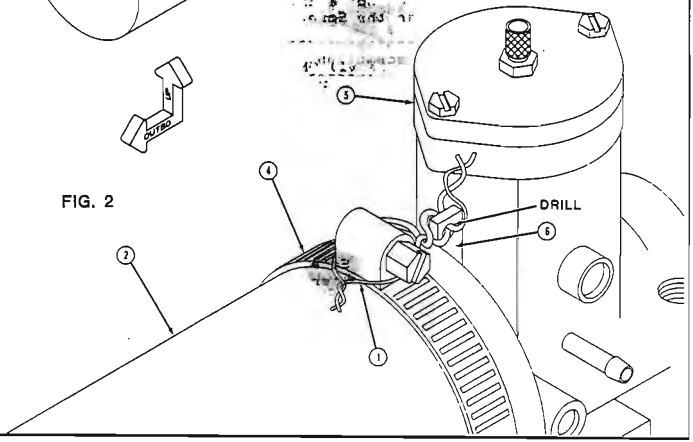


FIG. 2



GEAR OIL INSTALLATION AND SPARK PLUG ATTACHMENT

1. Remove and retain the Oil Vent Plug (2) at the TOP of the Gear Box (4). Remove and retain the Lower Level Cap Stan Screw (2).

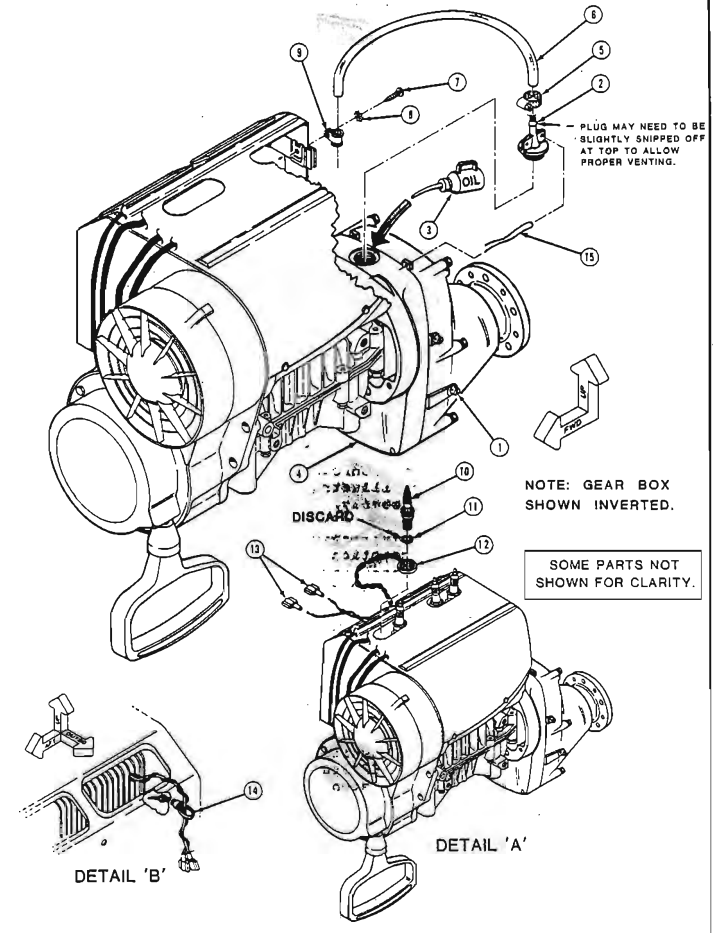
2. Fill the Gear Box (4) through the UPPER Vent Plug hole with the SPECIFIED GEAR OIL (3) up to the LOWER LEVEL Oil Plug (1). IMMEDIATELY install the LOWER Level Cap Stan Screw (1). Install and secure the Vent Plug (2) with Safety Wire (15).

3. Measure and cut a 9" (22.86 cm) piece of Fuel Line (6). Use a Fuel Line Clamp (5) to secure it to the Vent Plug (2). Attach the opposite end using Hardware (7, 8 attached to the Powerplant Shroud and 9) Tighten the Screw (7) securely.

4. Locate the FOUR [4] Spark Plugs (10) in the Powerplant Carburetor Box. Set the Gap to .020" (.05 mm). Install THREE ONLY into the Powerplant as illustrated . Torque to 240 in/lbs. Install the FOURTH [4th] and FORWARD Plug by removing the Washer (11) and installing the Temperature Sensor (12). Torque to 240 in/lbs. DO NOT ATTACH THE SPARK PLUG WIRES AT THIS TIME.

5. Thread the Temperature Sensor Wires past the Cylinder Head Cooling Fins (Under the Shroud) . Fasten the Electrical Connectors (13). Secure as illustrated with a Tie Wrap (14) and a Fuel Line "Stand-Off" Assembly.

Item	P/N	Qty	Description
1.	00841781	1	6 mm x 10 mm Cap Stan Screw (Oil Plug)
2.	00241925	1	18 mm x 1.5 mm Vent Plug
3.			API-GL5 or GL6SAE 140, 85W-140EP or SAE 90 Hypoid Gear Oil (ONE Pint required - not supplied)
4.			Gear Box (part of P/N 61080)
5.	30230	1	Fuel Line Clamp
6.	30220	A/R	Fuel Line
7.	00841490	1	4.8 mm x 16 mm Self Tapping Screw
8.	00845270	1	4.9 mm x 15.5 mm x 0.5 mm Washer
9.	20432	1	3/8" Cushioned Clamp
10.	00897050	4	NGK B6ES Spark Plug (in Carb Box)
11.			Compression Washer (part of Item 10)
12.	90129	1	Cylinder Head Temperature (CHT) Sensor (in box with Instrument P/N 90126)
13.	30075	2	Female Q.D. Connectors
14.	30480	1	7" Tie-Wrap
15.		A/R	Safety Wire,.041"
16.	61080		Rotax 503 Powerplant


6
5
2
9
7
8
PLUG MAY NEED TO BE SLIGHTLY SNIPPED OFF AT TOP TO ALLOW PROPER VENTING.
OIL
3
15
FWD
1
4
10
11
DISCARD
12
13
NOTE: GEAR BOX SHOWN INVERTED.
SOME PARTS NOT SHOWN FOR CLARITY.
14
DETAIL 'B'
DETAIL 'A'



POWERPLANT TO ROOT TUBE ATTACHMENT

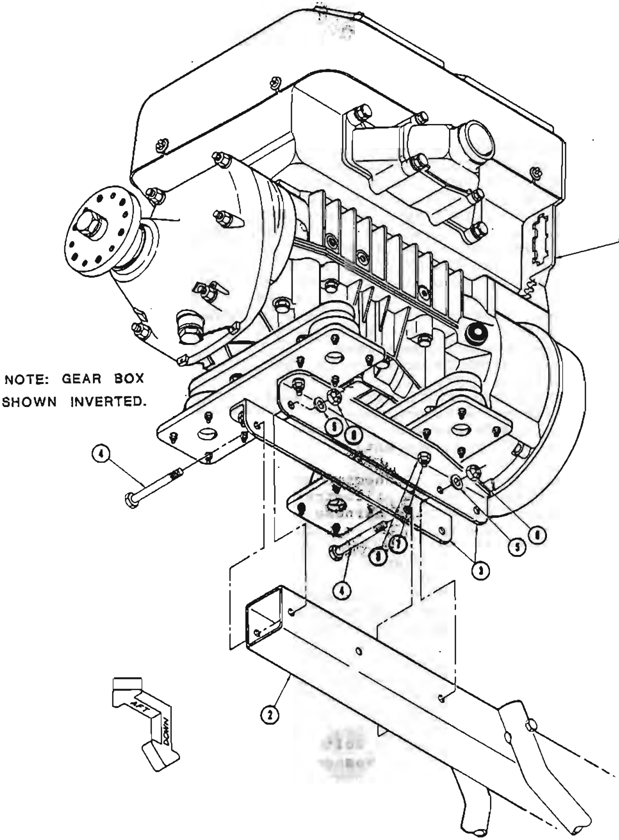
1. Assemble as illustrated. Tighten ALL Locknuts to proper torque.

NOTE: Bolts (7) and Locknuts (8) were previously installed only LOOSELY on Pages 4-2 and 4-3. Tighten the Locknuts (8) to proper torque at this time.

Item	P/N	Qty	Description
1	61080	1	Rotax 503 Powerplant (with Dual Carburetor, Dual Ignition and Reduction Drive) (as received)
2	45668		Root Tube
3	45836	2	Engine Angle Mount
4	10325	2	AN5-26A Bolt
5	10570	4	5/16" Washer
6	10540	2	5/16" Locknut
7	10062		AN4-7A Bolt
8	10510		1/4" Locknut






NOTE: GEAR BOX
SHOWN INVERTED.
AFT
DOWN

RECTIFIER/REGULATOR ATTACHMENT AND POWERPLANT WIRING

1. Attach the Rectifier/Regulator (1) as illustrated. Tighten ALL Locknuts (5) to proper torque.
2. Refer to Detail 'A'. Identify the YELLOW and the YELLOW/BLACK Wires from the Powerplant. Cut off the EXISTING FEMALE connectors and install (by crimping) the Insulated Female Wire Connectors (6). LIGHTLY pull on the Wire Connectors and verify there is a"good crimp" and the Wire Connector are secure.
3. Install (by crimping) the Insulated Male Wire Connectors (5) on the YELLOW Wires from the Rectifier/Regulator (7).
4. Identify the FEMALE Connector Housing (1). CAREFULLY determine which side is the TOP by comparing it to the illustration. Insert the Wires from the Powerplant direction. Wires without connectors (12) install as required.

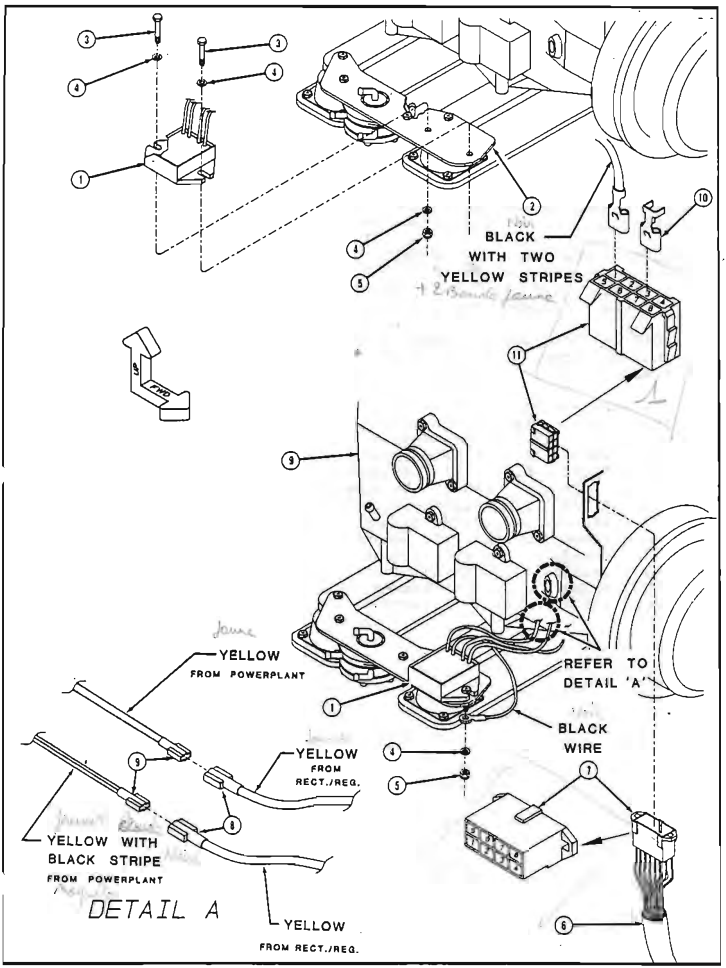
1 - BLACK with TWO (2) YELLOW Stripes (1 of 2 from Powerplant)
2 - RED from Regulator/Rectifier
3 - BLACK (from the Temperature Sensor)
4 - BLANK (leave empty)
5 - BLACK with TWO YELLOW Stripes (1 of 2 from the Powerplant)
6 - BROWN (from the Powerplant)
7 - WHITE (from Temperature Sensor)
8 - GREY (from the Powerplant)

5. Identify the MALE Connector Housing (2). CAREFULLY determine which side is "as illustrated" and insert the MALE Connectors from the Wiring Harness (11) as follows

1 - BLUE (LEFT Magneto)
2 - RED (DC POSITIVE)
3 - BLACK (Temperature Gauge)
4 - ORANGE (Electric Start)
5 - YELLOW (RIGHT Magneto)
6 - BROWN (DC NEGATIVE)
7 - WHITE (Temperature Gauge)
8 - GREEN (Tachometer)

5. Connect BOTH of the Housings (1) and (2) together at the Powerplant as illustrated. Secure ALL Wiring AWAY from ANY SHARP edges, MOVING Parts or EXTREME temperatures.

Item	P/N	Qty	Description
1	00866080	1	Rectifier/Regulator
2	45858		Fuel Pump Mount Plate
3	10020	2	AN3-7A Bolt
4	10550	4	3/16" Washer
5	10500	2	3/16" Locknut
6	45631	1	Wiring Harness
7	00866010	1	Male Connector Housing
8	30080	2	Male Snap Connector
9	30070	2	Female Snap Connector
10	30075	1	Female Locking Wire Connector
11	00866025	1	Female Connector Housing


BLACK
WITH TWO
YELLOW STRIPES
REFER TO
DETAIL 'A'
BLACK
WIRE
YELLOW
FROM POWERPLANT
YELLOW
FROM
RECT./REG.
YELLOW WITH
BLACK STRIPE
FROM POWERPLANT
DETAIL A
YELLOW
FROM RECT./REG.

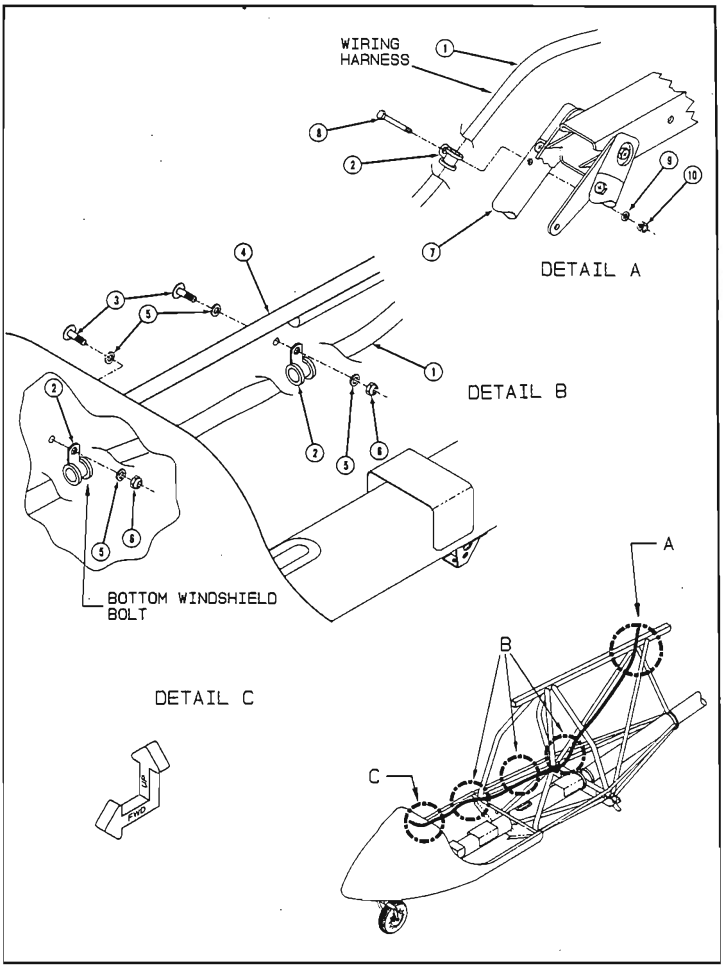
WIRING HARNESS ROUTING AND ATTACHMENT

1. Slide the Cushioned Clamps (2) onto the Wiring Harness (1). Drill a TOTAL of THREE 3/16" (4.7 mm) diameter holes in the RIGHT SIDE of the Pilot Enclosure and the Right Center Fairing as required to secure the Wiring Harness. Tighten ALL Locknuts to proper torque. Make sure the wiring harness has appropriate slack between the Engine and the cushion clamp (2) in Detail A.

NOTE 1: The Screw (3), Washer (5) and Locknut (6) in Detail 'C' have been previosly attached FINGER TIGHT ONLY on Pages 2-130 and 2-131. Add the Clamp (2) with the Wiring Harness (1) and tighten to proper torque at this time.

NOTE 2: The Bolt (8) was previously installed FINGER TIGHT ONLY on Pages 2-16 and 2-17. Tighten to proper torque at this time.

Item	P/N	Qty	Description
1	45631		Wiring Harness
2	20432	5	3/8" Cushioned Clamp
3	11075	4	AN525 10R10 Washer Head Screw
4	45578		Pilot Enclosure
5	10550	6	3/16" Washer
6	10500	3	3/16" Locknut
7	45465		Aft Downtube
8	10120		AN4-15A Bolt
9	10560		1/4" Washer
10	10510		1/4" Locknut


WIRING HARNESS
DETAIL A
DETAIL B
BOTTOM WINDSHIELD BOLT
DETAIL C
A
B
C
FWD
UP

FUEL LINE AND FUEL FILTER ROUTING AND ATTACHMENT

IMPORTANT: Note the direction of the Fuel Flow Arrow on the Fuel Filter (4). The Fuel Filter MUST be installed EXACTLY as illustrated.

1. Attach a piece of Fuel Line (3) to the Fuel Tank Cut-Off Valve (1).

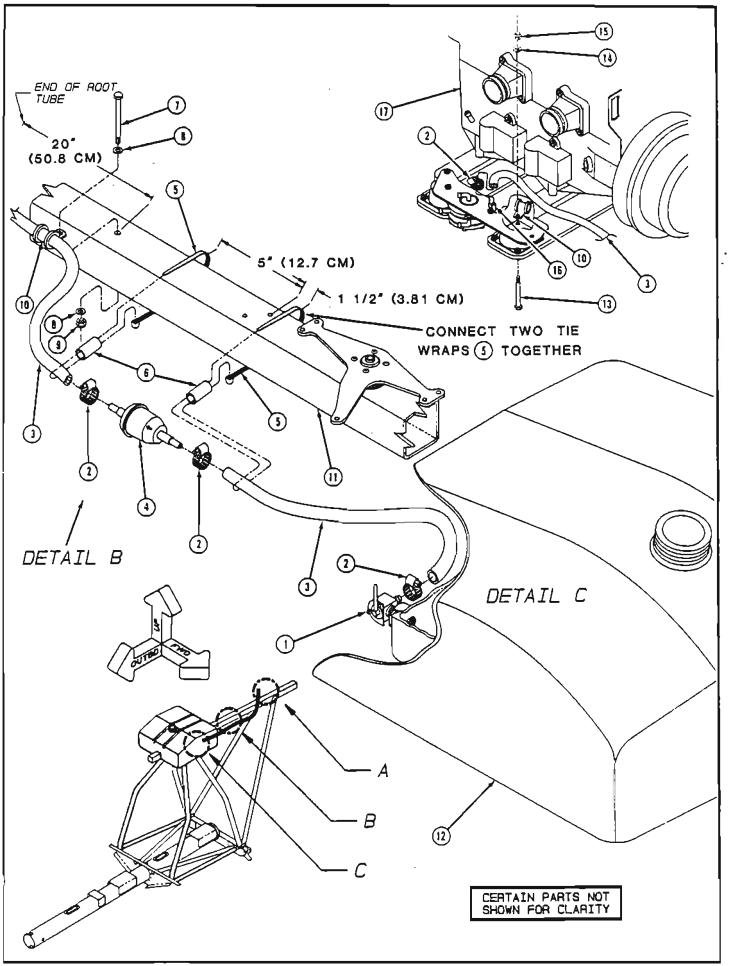
IMPORTANT: DO NOT OVER TORQUE the Fuel Line Clamps (2).

2. Add a Fuel Filter (4) and Secure with FOUR Tie Wraps (5) (attached together end to end) at TWO locations. Cut TWO Stand-offs (as required to space the Fuel Filter adequately) as illustrated.

3. Attach a Cushioned Clamp (10) to the Fuel Line and Root Tube (11) with a Bolt (7).

4. Slide a Cushioned Clamp (10) over the Fuel Line and attach to the previously attached (FINGER TIGHT ONLY) Bolt (13). Tighten Locknut (15) to proper torque.

Item	P/N	Qty	Description
1	30282		Cut-Off Valve
2	30230	4	Fuel Line Clamp
3	30220	A/R	Fuel Line
4	30210	1	Fuel Fiter
5	30480	4	7" Tie Wrap
6		2	Stand-Off (made from P/N 30220)
7	10235	1	AN4-25A Bolt
8	10560	2	1/4" Washer
9	10510	1	1/4" Locknut
10	20432	1	3/8" Cushioned Clamp
11	45668		Root Tube
12	30254	1	8.5 Gallon Fuel Tank Assembly
13	10010		AN3-5A Bolt
14	10550		3/16" Washer
15	10500		3/16" Locknut


END OF ROOT TUBE
20" (50.8 CM)
5" (12.7 CM)
1 1/2" (3.81 CM)
CONNECT TWO TIE WRAPS (5) TOGETHER
DETAIL B
DETAIL C
A
B
C
CERTAIN PARTS NOT SHOWN FOR CLARITY

A4-22

THROTTLE CABLE AND CHOKE CABLE
TO SPLITTTER BRACKET ATTACHMENT

1. Remove and disassemble the Recoil Starter Housing (10) as per the Rotax Manual. Tools are located in your Rotax Tool Kit.

2. Locate the CENTER of the Recoil Starter Housing. Measure 1 1/2" (38.1 mm) OUTBOARD (to your LEFT when facing the Housing) from the VERTICAL CENTERLINE. Mark this location. Measure 1" (25.4 mm) ABOVE and BELOW the HORIZONTAL CENTERLINE. Mark these locations. These hole locations should be 2" (50.8 mm) apart (CENTER to CENTER).

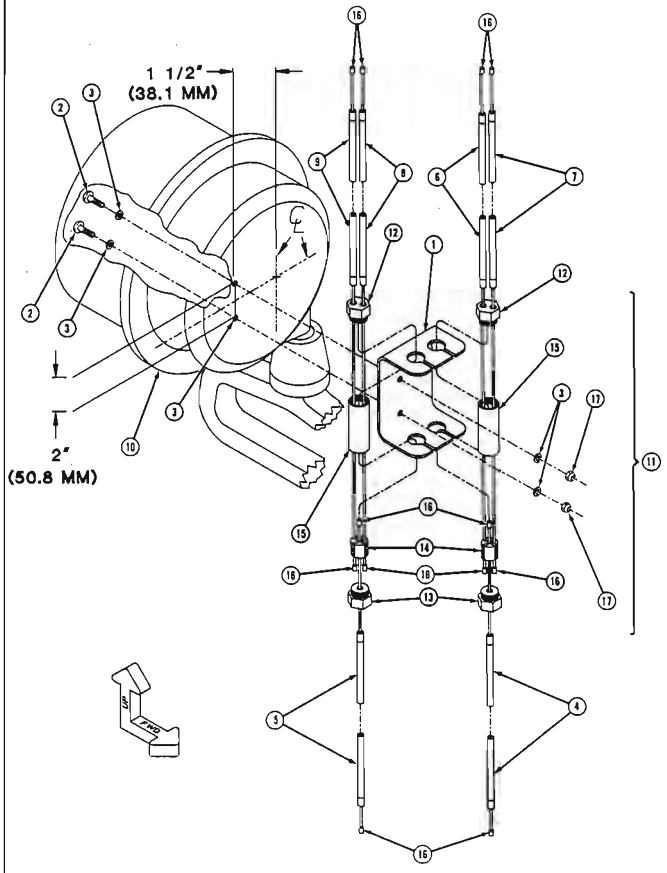
3. Position the Splitter Bracket (1) VERTICALLY against the Starter Housing (10) with the EXISTING holes in the Splitter Bracket CENTERED OVER your marks as illustrated.

NOTE: Ensure the Splitter Bracket (1) is orientated with the edge of the Bracket CLOSEST to the attachment holes positioned to your LEFT.

4. Drill and deburr TWO (2) 3/16" (4.8 mm) diameter holes into the Starter Housing (10) using the EXISTING holes in the Splitter Bracket (1) as a guide or template. Attach with Hardware (2, 16 and 17). Tighten to proper torque.

5. Connect the Throttle and Choke Cables (4) thru (9) as illustrated. Ensure ALL Cable Ferrules (16) seat completely or "all the way" down into the Cable Couplings (14).

Item	P/N	Qty	Description
1	46011	1	Splitter Bracket
2	11074	2	AN525-10R9 Washer Head Screw
3	10550	4	3/16" Washer
4	45811		Throttle Cable
5	45814		Choke Cable
6	90286	1	20" Throttle Cable Extension
7	90287	1	24" Throttle Cable Extension
8	90288	1	20" Choke Cable Extension
9	90289	1	24" Choke Cable Extension
10	00910107		Recoil Starter Housing (part of P/N 61085)
11	90285	1	1 into 2 Cable Splitter (consists of Items 12,13,14,15)
12		2	2 Hole Splitter End (part of P/N 90285)
13		2	1 Hole Splitter End (part of P/N 90285)
14		2	Cable Coupling (part of P/N 90285)
15		1	Splitter Housing (part of P/N 90285)
16			Cable Ferrule
17	10500	2	3/16" Locknut


1 1/2"
(38.1 MM)
2"
(50.8 MM)
UP
FWD

THROTTLE CABLE TO CARBURETOR ATTACHMENT

ESSENTIAL: Ensure your hands are CLEAN and your work area is free from dust and grit BEFORE proceeding.

CAUTION: Some Parts in this assembly sequence are EXTREMELY delicate. DO NOT USE FORCE!

IMPORTANT: BEFORE proceeing, Refer to Detail 'A'. Use a Marking Pen and draw a line crossing the SIDE of the Cover Plate (1) of the Carburetor (2) and the TOP of the Housing (3). These marks will be realigned at re-assembly.

1. Refer to Details 'A'and 'C'. Remove the Rubber Boot (4) and slip it onto the Throttle Cable (5) , positioned as illustrated. While holding DOWN on the Cover Plate (1) of the Carburetor (2) LOOSEN the TWO Hex Screws(6). REMOVE the Cover Plate (1) and the INTERNAL Piston Spring. (7). Compress the Spring with your thumb.

2. Note the seating position of the Jet Needle (10). Pass the END of the Throttle Cable (5) through (1),(7),(8) and the "keyhole" slot in the base of the Piston (9). Seat the Cable (5) as illustrated (See Detail B).

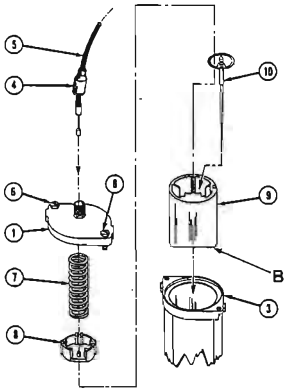
CAUTION: DO NOT BEND THE JET NEEDLE (10)!

3. Release the Spring and allow the Spring Cup (8) to re-seat on the TOP of the Jet Needle (10) and is all the way down in Carburetor Piston (9). Ensure the Jet Needle is correctly re-seated. Allow the Piston to LOCK back into the Carburetor Body (3). Ensure the Jet Needle locates correctly. DO NOT USE FORCE!

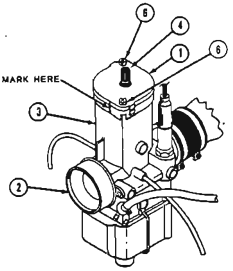
4 Ensure the pen marks align. Re-attach the Cover Plate (1). Tighten until "snug".

5. Repeat Steps 1-4 on the remaining Carburetor.

Item	P/N	Qty	Description
1	00963721		Cover Plate
2	00996415		Carburetor, Bing Model 54 x 36 mm
3			Carburetor Housing
4	00260370		Rubber Boot
5	45811		Throttle Cable
6	00241430		5 mm x 12 mm Hex Screw
7	00938655		Piston Spring
8	00827345		Plastic Spring Cup
9	00963679		Carburetor Piston
10			Jet Needle



DETAIL C



DETAIL A

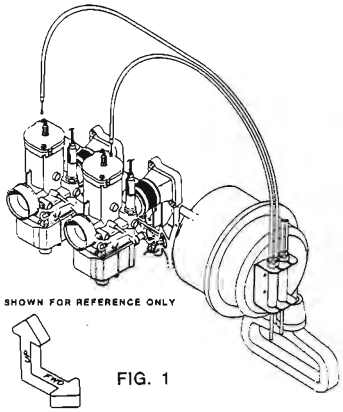
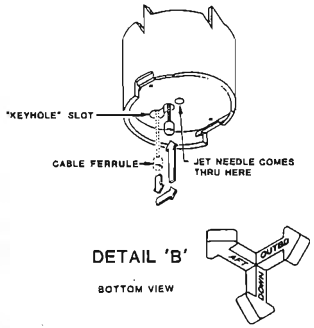


FIG. 1



DETAIL 'B'

BOTTOM VIEW

CHOKE CABLE TO CARBURETER ATTACHMENT

NOTE: The following sequence must be completed on each Carburetor. Use the LONGER (24") Choke Cable Extension on the AFT Carburetor.

1. Refer to Detail 'A'. Remove the EXISTING Rubber Cap (1), Manual Closure Screw (2), Manual Starting Piston and Spring Assembly (3) and DISCARD them.

2. Refer to Detail 'B'. Locate the NEW Choke Plunger Kit (12). Push the NEW Rubber Boot (6) onto the Choke Cable (7). Pass the Cable (7) through the Items (9,8,4,5 and 10).

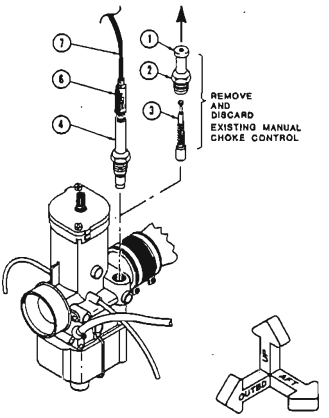
3. Thread the Jam Nut (8) APPROXIMATELY HALF-WAY onto the Cable Adjuster (9). Thread the Cable Adjuster (9) into the Remote Closure Screw (4) up to the Jam Nut (8). DO NOT Tighten. Compress the Spring (5) into the Closure Screw (4) by pushing on the Brass Sleeve (10).

4. Refer to Detail 'C'. Attach the Piston (11) to the Ferrule (13) on the END of the Cable (7).

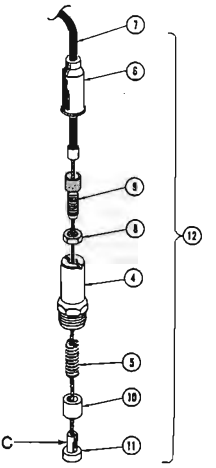
5. Screw the NEW Assembly into the SAME threads from which the OLD Choke Plunger Assembly was removed. Tighten until "snug". Tighten the Jam Nut (8) against the Closure Screw (4). Reposition the Rubber Boot (6) OVER the Cable Adjuster (9).

6. Repeat the sequence for the remaining Carburetor.

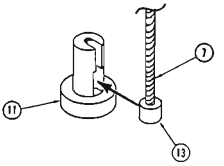
Item	P/N	Qty	Description
1	00260990		Rubber Cap (Manual Choke)
2	00261770		Closure Screw (Manual Choke)
3	00268847		Piston (Manual Choke)
4	00963750		Closure Screw
5	00661090		Starting Piston Spring
6	00260370		Rubber Boot
7	90288		20" Choke Cable Extension
	90289		24" Choke Cable Extension
8	00942541		6 mm x .75 mm Hex Nut
9	00241440		6 mm Cable Adjustment
10	00268450		Brass Sleeve
11	00963740		Remote Staring Piston
12	60216		Remote Plunger Kit
13			Cable Ferrule



DETAIL 'A'



DETAIL 'B'



DETAIL 'C'

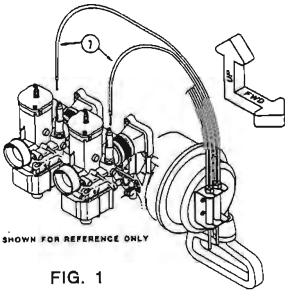
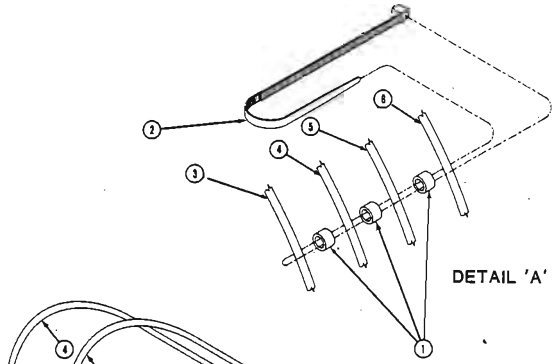


FIG. 1

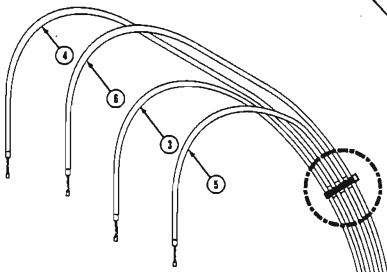
THROTTLE CABLE AND CHOKE CABLE "STAND-OFF" ASSEMBLY ATTACHMENT

1. Cut THREE Stand-offs and attach as illustrated. Refer to SECTION 1, page 1-17, "Stand-Off" Assembly, if necessary.

Item	P/N	Qty	Description
1	30220	3	Fuel Line "Stand-Off"
2	30480	1	7" Tie Wrap
3	90286		20" Throttle Cable Extension
4	90287		24" Throttle Cable Extension
5	90288		20" Choke Cable Extension
6	90289		24" Choke Cable Extension



DETAIL 'A'



REFER TO DETAIL 'A'



FIG. 1

THROTTLE AND CHOKE CABLE TO THROTTLE LEVER ATTACHMENT

NOTE: ROUTE THROTTLE CABLE AND CHOKE FROM ENGINE ALONG THE WIRING HARNESS (Refer to Figure 3) TO THE TROTTLE MOUNT PLATE AND ATTACH TO THE WIRING HARNESS WITH TIE-WRAPS AS PRESCRIBED IN SECTION 1, Page 1-17.

1. Refer to Figure 1. Attach the Throttle Cable (2) to the Throttle Mount Plate (7) as illustrated.

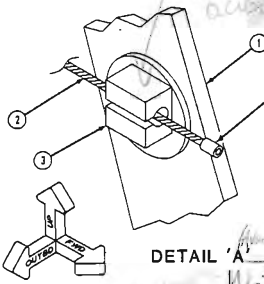
2. Refer to Detail 'A'. Slide the end of the Throttle Cable (2) into the Cable Swivel (3). Ensure the Cable Ferrule (16) is properly "seated".

3. Refer to Figures 1 and 2. Rotate the Throttle Lever FORWARD. Adjust the Jam Nuts (12) on the Conduit Thread Adjuster (13) and/or the Adjuster (14) on the TOP of the Carburetor so that the BOTTOM of the Carburetor Piston (17) is LEVEL with the TOP of the Carburetor Throat at FULL Throttle. When adjustment is complete tighten the Locknut (not illustrated) attached to the "FULL Throttle Stop" Bolt (18).

4. Refer to Figures 1 and 2. When the Throttle Lever is rotated into the AFT or to the "CLOSED" position you should hear a "click" as the Piston (17) comes into contact with the BOTTOM of the Carburetor Body. Adjust the Idle Screw (11) as required ,if necessary to allow the Piston to be positioned properly.

5. Insert the Choke Cable (6) through the Throttle Mount Plate (7) and attach the Hardware (4,5,8,9 and 10) as illustrated.

Item	P/N	Qty	Description
1	90215		Throttle Lever
2	45811		Throttle Cable
3	90250		Cable Swivel
4		2	Washer (part of P/N 45814)
5		1	Jam Nut (part of P/N 45814)
6	45814	1	Choke Cable
7	45474		Throttle Mount Plate
8	10064		AN4-11A Bolt (Throttle Stop)
9		1	Choke Cable Nut (part of P/N 45814)
10		1	Choke Cable Knob (part of P/N 45814)
11			Idle Screw
12		2	1/4" Jam Nut
13			Conduit Thread Adjuster (part of P/N 45811)
14			Carburetor Throttle Cable Adjuster
15			Rubber Boot
16			Cable Ferrule
17			Carburetor Piston



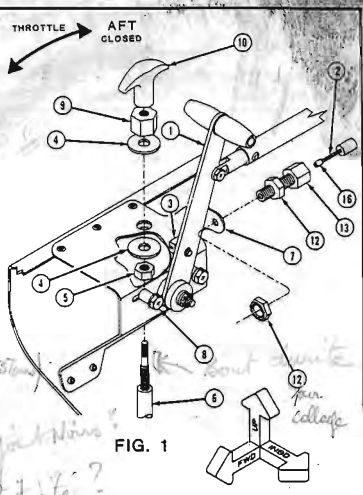


FIG. 1

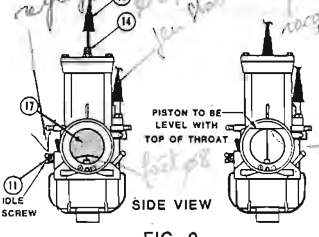


FIG. 2

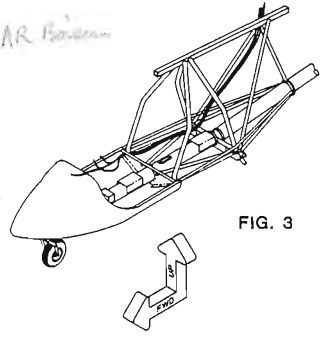


FIG. 3

SOME PARTS NOT SHOWN FOR CLARITY.

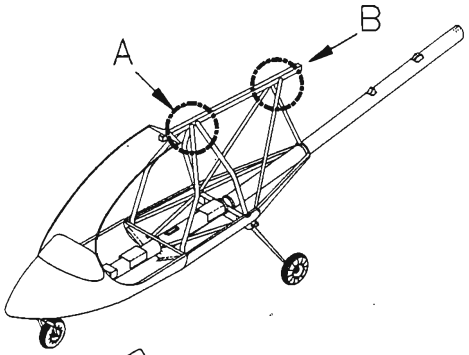
PULL STARTER ROPE ROUTING
AND PULL STARTER HANDLE ATTACHMENT

1. Slide the Boot (2) up the Starter Rope (1) exposing the knot in the end of the Rope. Pull the Knot out of the indentation in the Handle (3) and heat-cut the knot off the end of the Starter Rope. DO NOT BREATHE THE FUMES.

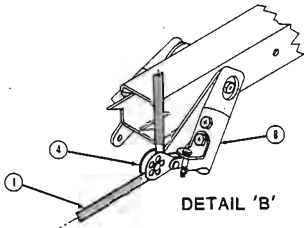
2. Re-route the Starter Rope (1) as illustrated. Tie the end as illustrated in Detail 'C'.

3. Heat seal the end of the Rope and "re-seat" the Knot in the Handle indentation. Pull the Boot OVER the end of the Handle and Secure the Boot.

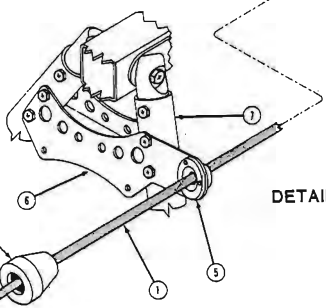
Item	P/N	Qty	Description
1	00952799		Pull Starter Rope (part of P/N 61085)
2	00960415		Boot (part of P/N 61085)
3	00852715		Handle (part of P/N 61085)
4	20228		Swivel Eye Pulley
5	20236		1/2" Aluminum Fairlead
6	45429		Forward Seat Belt Bracket
7	45471		Left Forward Fuselage Downtube
8	45465		Aft Downtube



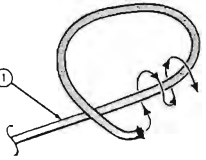




DETAIL 'B'



DETAIL 'A'



DETAIL 'C'

PROPELLER ATTACHMENT AND TRACKING ADJUSTMENT.

ESSENTIAL: Read "Propeller" in SECTION 1 BEFORE PROCEEDING. ALWAYS ASSUME THE PROP IS "HOT"! LABEL THEN DISCONNECT ALL SPARK PLUG WIRES BEFORE ROTATING THE PROPELLER.

NOTE: The AFT side of the Propeller (4) is the FLAT side of the blades.

1. Enlarge the SIX [6] EXISTING holes in Reduction Drive Hub (5) to .250". Assemble as illustrated. Tighten ALL SIX Bolts (2) until the Propeller fits "snuggly". Use up to a maximum of THREE [3] Washers on each side of the Bolt to ensure proper grip length.

2. Refer to Detail 'A'. Tighten the Bolts (2) CAREFULLY and ALTERNATELY, "A LITTLE AT A TIME". DO NOT CRUSH THE WOOD. DO NOT OVERTIGHTEN.

3. Rotate the Propeller (4) into a VERTICAL position. Measure the distance from the LOWER Propeller Blade to the Tail Boom Flange (6) where the Aft Down Strut (7) attaches. Rotate the Propeller 180 Degrees and measure the OPPOSITE Blade.

4. If the difference is within 1/8" (3.2 mm) you can "fine tune" the tracking by SLIGHTLY LOOSENING ONLY THREE [3] Bolts (2) on ONE SIDE ONLY and by SLIGHTLY TIGHTENING ONLY THREE [3] Bolts on the OPPOSITE side of the Propeller ONLY as required.

EXAMPLE: Loosen the side of the Propeller CLOSEST to the Flange attaching the Aft Downtube and TIGHTEN the Bolts (2) on the side FURTHEST from the Flange attaching the Aft Downtube. DO NOT OVER TIGHTEN AND CRUSH THE PROPELLER.

NOTE: If the measurements DIFFER by MORE THAN 1/8" (3.2 mm). Consult your QUICKSILVER Dealer for "Propeller Tracking Procedure". Re-attach ALL FOUR [4] Spark Plug Wires CORRECTLY.

Item	P/N	Qty	Description
1	10560	6*	1/4" Washer
2	10283	6	AN4-33 A Bolt
3	61062	1	Propeller Backing Plate
4	30350	1	68 x 30 Propeller
5			Reduction Drive Hub
6			Tail Boom Flange
7	45541		Tail Boom Down Strut
8	10510	6	1/4" Locknut

* NOTE: Additional Washers (1) may be required.

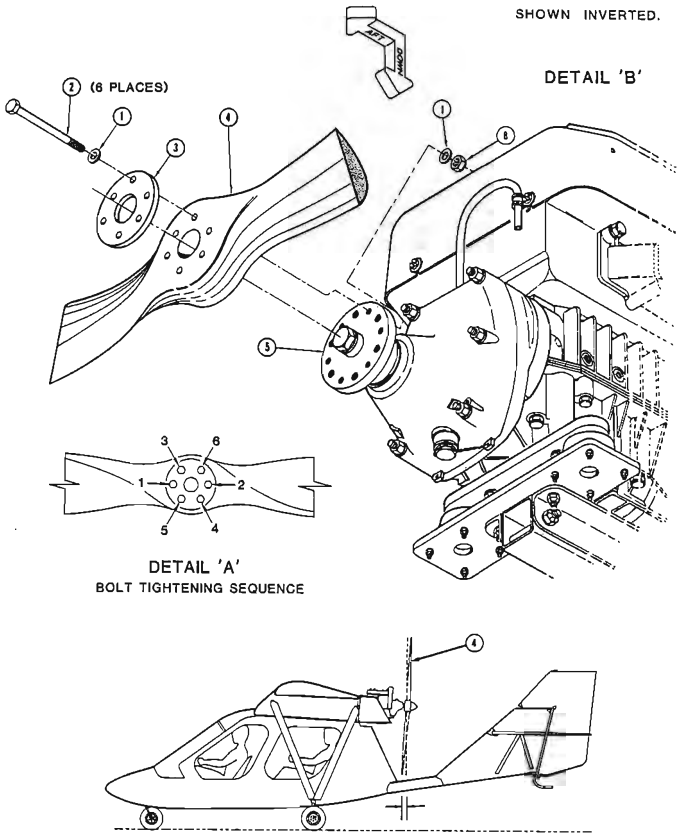

NOTE: GEAR BOX
SHOWN INVERTED.
DETAIL 'B'
(6 PLACES)
DETAIL 'A'
BOLT TIGHTENING SEQUENCE

FIG. 1

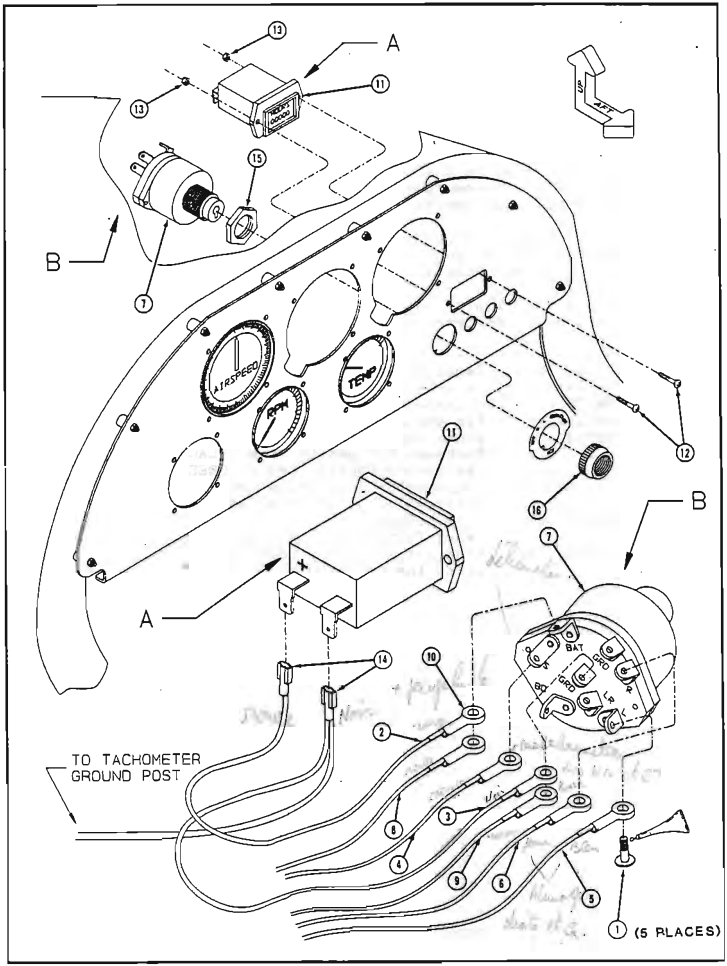
A4-36

KEYED IGNITION SWITCH AND HOUR METER INSTALLATION

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1. Refer to Detail 'A'. Locate the wiring for the Temperature Gauge (not illustrated). REMOVE the RED Wire (2) from its package and cut a 8" (20.32 cm) piece with Existing Molet Wire Connector on ONE (1) end. Cut a 4" (10.16 cm) piece and splice the 8" (20.32 cm) piece together with a Female Wire Connector (14) on the opposite end as the Molet Connector. Install a Ring Connector (10) to the other end of the 4" (10.16 cm) piece.
2. Refer to Detail 'B'. Install the RED wire from the Wiring Harness (8) and the RED wire Assembly (2)(Ring End) to the "BAT" terminal on the BACK of the Ignition Switch (7). Install the RED Wire Assembly (2) FEMALE Connector onto the POSITIVE (+) post on the Hour Meter. (11) The RED wire(2) with "Molet" Connector will be installed later.
3. Locate the wiring for the Temperature Gauge (not illustrated). REMOVE the BLACK Wire from its package. Cut a 4" piece. Install a Ring Connector (10) to ONE end. Remove Molet Connector from remaining BLACK wire (approx. 10") (25.4 cm). Splice the 4" and10" (3) BLACK wire with a Female Wire Connector (14). On the opposite end of the 10" BLACK wire (3) install a Female Wire Connector (14).
5. Refer to Detail B. Attach the Ring Connectors from the BROWN wire from the Wiring Harness (9) and the BLACK Wire (3)(4"piece) to the "GRD" (GROUND) post on the BACK of the Ignition Switch (7) as illustrated. Attach the BLACK wire (3) (Female Connector end) to the (-) Post of the Hobbs Meter, refer to Detail 'A'. The 10" BLACK wire will be installed in later sequence.
6. Connect the ORANGE (4) wire from the Wiring Harness to the "S" Post of the Ignition Switch (7). Connect the BLUE wire (5) from the Harness to the "L" post of the Ignition Switch (7). Connect the YELLOW Wire (6) from the Wiring Harness to the "R" post of the Ignition Switch (7).
7. Install Hobbs (11) into Instrument Panel as illustrated. Install Ignition (7) as illustrated. Adjust the Jam Nut (15) appropriately to allow Ignition Cover Nut (16) to tighten.

Item	P/N	Qty	Description
1		5	#4 Screw (part of P/N 30315)
2			RED Jumper Wire (part of P/N 90125)
3			BLACK Jumper Wire (part of P/N 90125)
4		1	ORANGE Wire (part of Wiring Harness)
5		1	BLUE Wire (part of Wiring Harness)
6		1	YELLOW Wire (part of Wiring Harness)
7	30315	1	Keyed Dual Ignition Switch
8		1	RED Wire (part of Wiring Harness)
9		1	BROWN Wire (part of Wiring Harness)
10	30073	2	Ring Connector, #4 Screw
11	90120	1	Hour Meter, (Hobbs)
12	11065	2	6-32 x 1" Phillips Hd Screw (w/ P/N 90120)
13	10067	2	Lock Nut (part of P/N 90120)
14	30070	3	Female Wire Connector
15		1	Jam Nut (part of P/N 30315)
16		1	Cover Nut (part of P/N 30315)


A
B
TO TACHOMETER
GROUND POST
(5 PLACES)

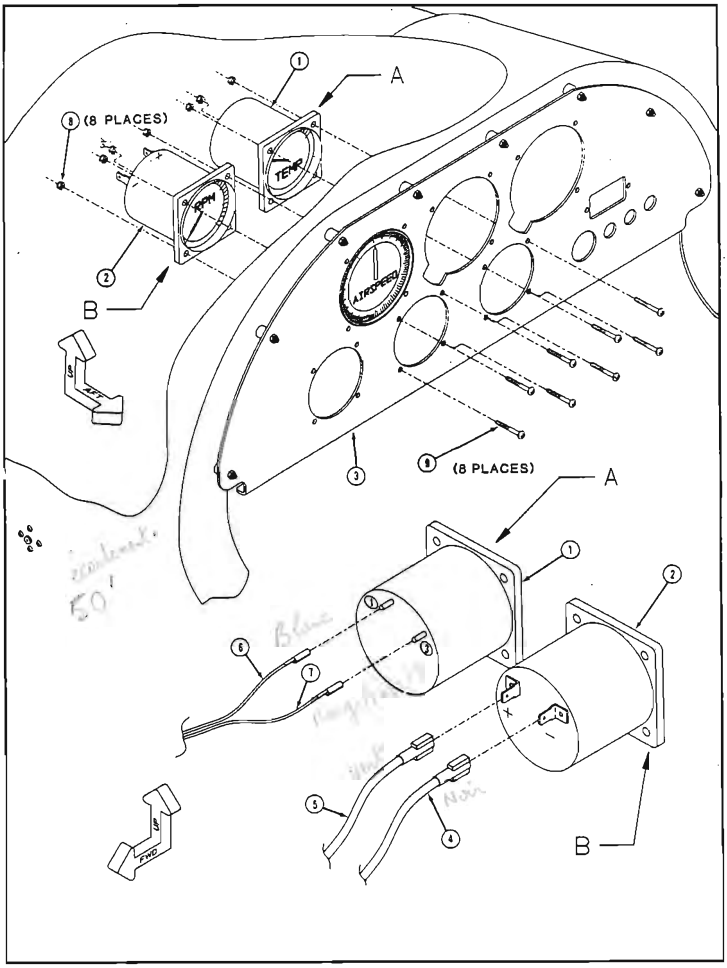
TACHOMETER AND CYLINDER HEAD TEMPERATURE GUAGE INSTALLATION

1. Install the RED Wire (7) from the POSIVE (+) side of the Hour Meter (not shown) to the #4 post of the Temperture Gauge (1). Connect the BLACK Wire (8) form the Wiring Harness to the #5 post of the Temperture Gauge. Connect the WHITE Wire (6) from the Wiring Harness to the #2 post on the Temperture Guage.

2. Connect the GREEN Wire (5) to the POSITVE (+) side of Tachometer (2). Connect the BLACK Wire (4) from the Hour Meter (not shown) to the NEGATIVE (-) post on the Tachometer.

3. Install the Instruments (1) and (2) using Hardware (9) and (10). Secure the Hardware properly.

Item	P/N	Qty	Description
1	90126	1	Cylinder Head Temperature (CHT) Guage
2	90128	1	Tachometer
3	45574		Instrument Panel
4			Tachometer Negative Wire (BLACK)
5			Tachometer Positive Wire (GREEN)
6			Temperature Guage Wire (WHITE)
7			Temperature Guage Wire (RED)
8	11067	8	6-32 Locknut [with Instruments (1) and (2)].
9	11065	8	6-32 x 1" Phillips Head Screw [with Instruments (1) and (2)].

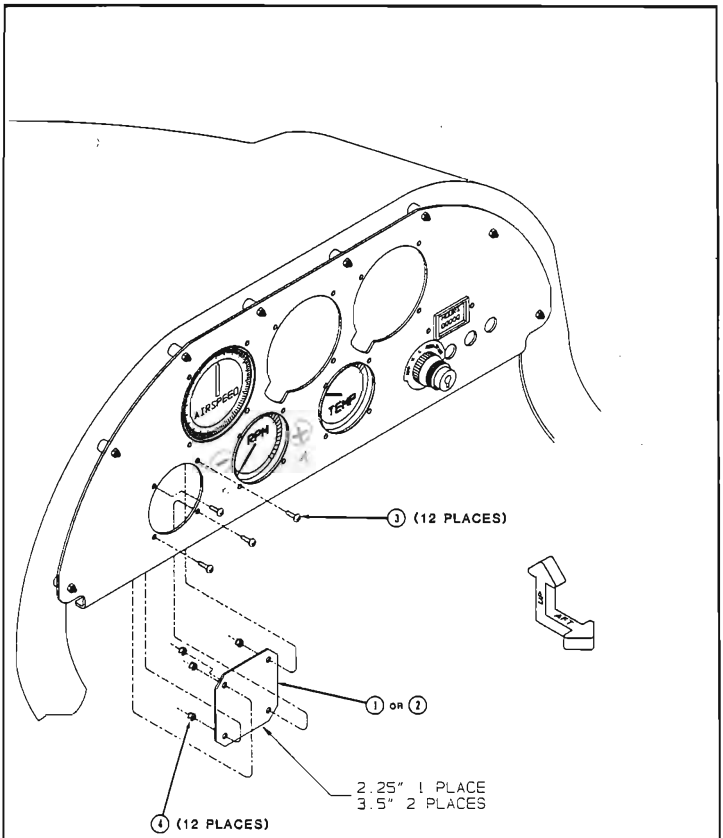

1
A
8 (8 PLACES)
TEMP
RPM
2
B
ATR-SPEED
3
9 (8 PLACES)
A
1
2
6
7
X
–
5
4
B

INSTRUMENT PANEL COVER PLATE ATTACHMENT

1. Attach ONE Cover Plate (1) to the Instrument Panel (5) as illustrated. Tighten ALL Locknuts.

2. Attach TWO Cover Plates (2) to the remaining TWO Instrument cut-out holes in the Panel as illustrated.

Item	P/N	Qty	Description
1	90148	1	2 1/4" Cover Plate
2	90149	2	3 1/8" Cover Plate
3	11066	12	6-32 x 1/2" (PPH) Screw (Phillips Pan Head) (Black)
4	11067	12	6-32 (Nylock) Locknut
5	45574		Instrument Panel


AIRSPEED
RPM
TEMP
3 (12 PLACES)
1 OR 2
2.25" 1 PLACE
3.5" 2 PLACES
4 (12 PLACES)

SPARK PLUG WIRE ATTACHMENT

1. Attach ALL FOUR [4] Spark Plug Wires to their repective Spark Plugs.

EXAMPLE: The LONGEST Plug Wire attaches to the AFT Spark Plug. The SHORTEST Plug Wire attaches to the FORWARD Spark Plug.

NOTE: Refer to your Powerplant (Rotax 503) Operators Manual for proper attachment of ALL FOUR Spark Plug Wires to the appropriate Spark Plugs if necessary.