

F-100 SUPER SABRE

GO FLY GOLD



Length: 83.5", Wing Span: 69"

120 – 140 Turbine
Dry weight 30lbs

ASSEMBLY AND OPERATING MANUAL

Version 2

April 2024

Equipped with HV Servos and should not be operated below 7.2 volts

CCU Pressure should be 75 PSI MAX

BVM

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F-100 Super Sabre
Assembly & Operation Manual

Table of Contents

INTRODUCTION	1
Disclaimer	1
List of BVM supplied items.....	Error! Bookmark not defined.
Recommended Accessories	2
BVM Accessories Used in Demo Model.....	2
Required Tools.....	3
List of Adhesives/Lubricants needed	3
List of Adhesives/Lubricants not necessarily needed.....	3
UNPACKING	4
Carbon Dowel Preparation	4
INSTALLING TAIL SURFACES	5
Install the Stabs	5
Install the vertical fin.....	5
WING PREPERATION AND INSTALLATION	6
Installing The Flaps	7
INLET REMOVAL	9
EQUIPMENT BOARD LAYOUT	10
Mounting RX and ECU Batteries.....	11
Turbine Mounting	11
Center of Gravity	12
Elevator Neutral	12
Control Surface Deflections and Expo Settings	13
Connecting RX wires.....	13
IX20,DX18, and DX18QQ Transmitter File	13
First Flight Profile	14
Flight Time	14
Taxi Test/Engine Run Up.....	14
Takeoff	14
Trim.....	14
Landing	14
RX Battery Consumption.....	14

INTRODUCTION

Thank you for purchasing the Go Fly F-100 Super Sabre. This model represents the latest in manufacturing technology and completion for the R/C jet enthusiast. The factory has expertly crafted and thoroughly inspected all aspects of the model. Only a small amount of work is required to complete the assembly of your Super Sabre.

This manual contains instructions for safety, operation, and maintenance. It is essential to read and follow all of the instructions and warnings in the manual.

Please read the entire manual to become familiar with the processes and procedures before you begin to assemble your aircraft.

Disclaimer

Bob Violett Models Inc. assumes no liability for the operation and use of these products. The owner and operator of these products should have the necessary experience and exercise common sense. Said owner and operator must have a valid Academy of Model Aeronautics license for operation in the U.S.A.

This is a sophisticated model aircraft. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or other property.

Notice: Do not use incompatible components or alter this product in any way outside of the instructions provided by BVM, Inc. The F-100 has been designed and flight tested using a 120-140 class turbine.

F-100 Super Sabre

Assembly & Operation Manual

Recommended Accessories

You may have some of these products in your shop, but if not, refer to this list.

- 120-140 class turbine.
- 20 Channel Power Safe Receiver (SPMAR20310T)
- (2) 7.4v Batteries 3600mAh RX (V-PLURX15-36002)
- Bavarian Demon Aero Cortex Pro Gyro (#V-DA-BD-Cortex Pro)
- BVM UAT (# 6044)



BVM Accessories Used in Demo Model

You may have some of these products in your shop, but if not, refer to this list.

- T-12 Turbine (120 class)
- Spektrum 20 Channel Telemetry Receiver (SPMAR20310T)
- (1) 7.4v Batteries Pulse 3600mAh RX (V-PLURX15-36002)
- Bavarian Demon Aero Cortex Pro Gyro (#V-DA-BD-Cortex Pro)
- BVM UAT (BVM6044)

F-100 Super Sabre

Assembly & Operation Manual

Required Tools

A combination of Metric and SAE hex socket and drivers along with a small standard and Phillips head drivers will be necessary.

- 9/64" Long Ball Driver
- 2.5mm Allen Driver
- 2mm Allen Driver
- Phillips Screwdriver

List of Adhesives/Lubricants needed Available at BVMJets.com

- Super O-Lube BVM #5779
- Axle Super Lube BVM #5784
- Dry Lube BVM# 1947
- Pacer Z-42 # PT42

List of Adhesives/Lubricants not necessarily needed Available at BVMJets.com

- BVM AeroPOxy # 9566
- BVM Qt Poxy # 9580
- Zap-A-Goo # PT12
- BVM Thin Lube for "O" Rings BVM # 1945



F-100 Super Sabre

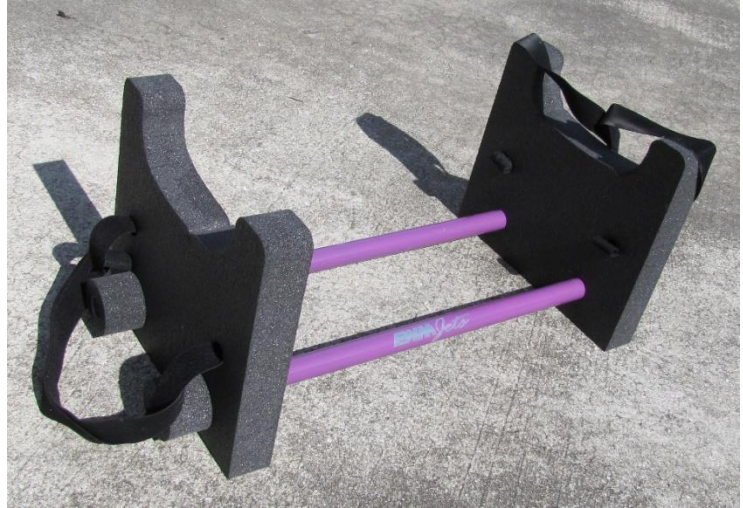
Assembly & Operation Manual

UNPACKING

Carefully remove items from the box. Open each package and inspect for shipping damage. After reading this entire manual, get familiar with the major kit components.

NOTE: Damaged parts must be reported to BVM within 7 days of receiving your kit. Become familiar with the work completed at the factory. It is important that you inspect and approve this work now.

Using a stand, such as the BVM General Purpose Jet Foam Cradle (PA-SR-0080) will aid in the assembly of the Bandit Evo.



Carbon Dowel Preparation

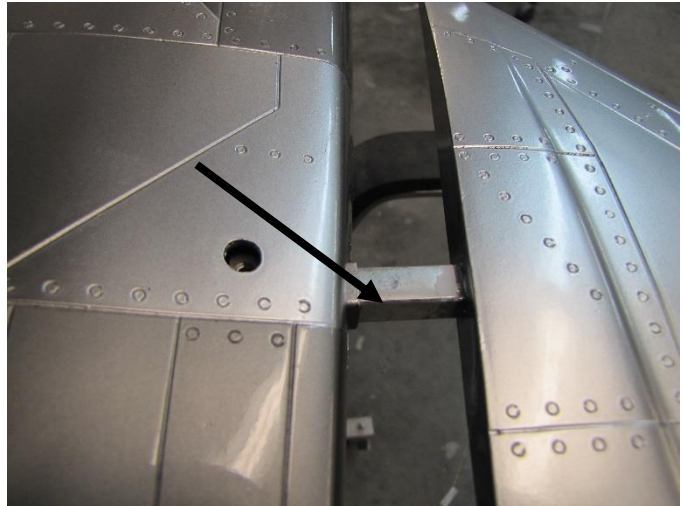
- Use BVM Dry Lube (BVM# 1947) on the Carbon Rods to allow easier installation into the wing receptacles.



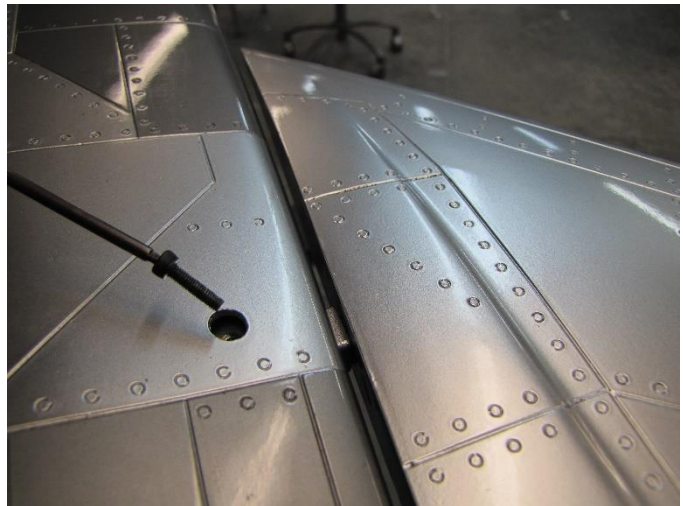
INSTALLING TAIL SURFACES

Install the Stabs

- Insert the Stabilator into the fuse bracket.

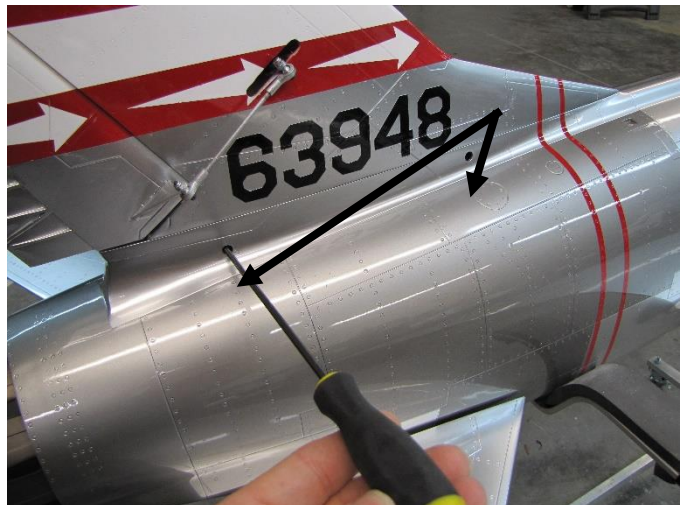


- Secure each Stabilator using the 3mm bolts. A 2.5mm wrench will be used here.



Install the vertical fin

- Connect the servo leads and secure with servo clips or tape.
- Insert the Carbon Rods into the receivers and secure with a 9/64th ball wrench.



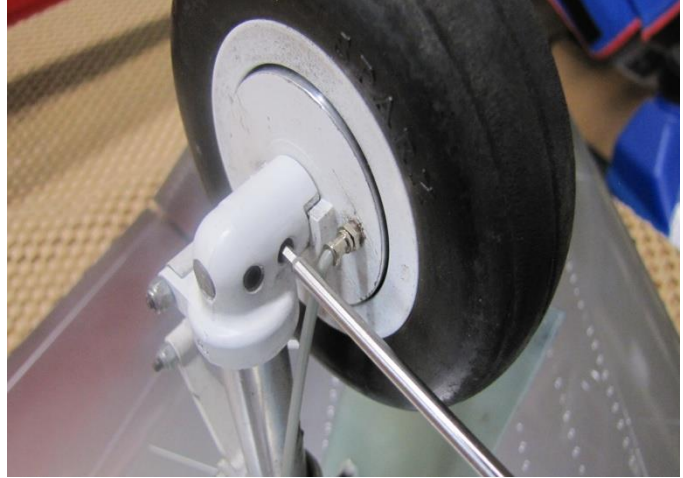
F-100 Super Sabre

Assembly & Operation Manual

WING PREPERATION AND INSTALLATION

- Remove the 2 set screws using a 2mm allen wrench. This will give you access to the axle and the O-ring.
- Lubricate the O-Rings with Super O-Lube (BVM#5779).

Note: pictures may be different from actual aircraft. Process is the same.

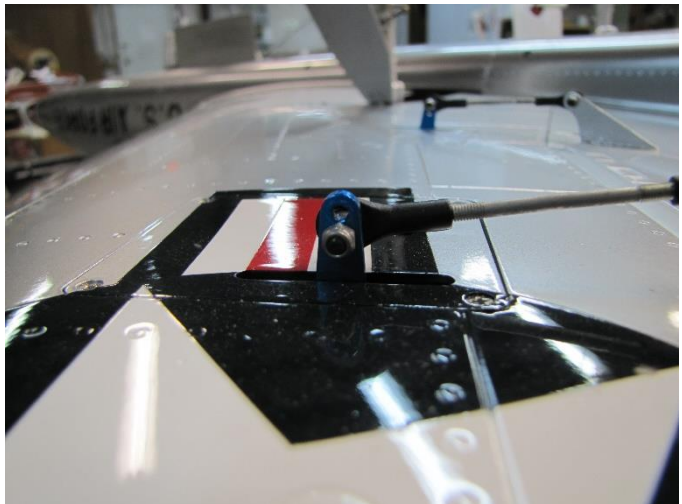


- Lubricate the axles with Super Lube (BVM# 5784).

Note: The outer scale cover is removable by the 3 Philips head screws.



- This is an option, but we use the lowest hole possible on the ailerons. This will improve resolution and feeling in flight.

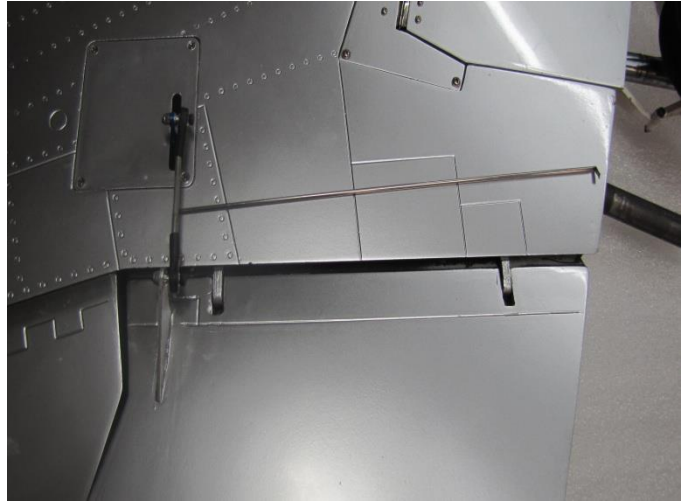


F-100 Super Sabre

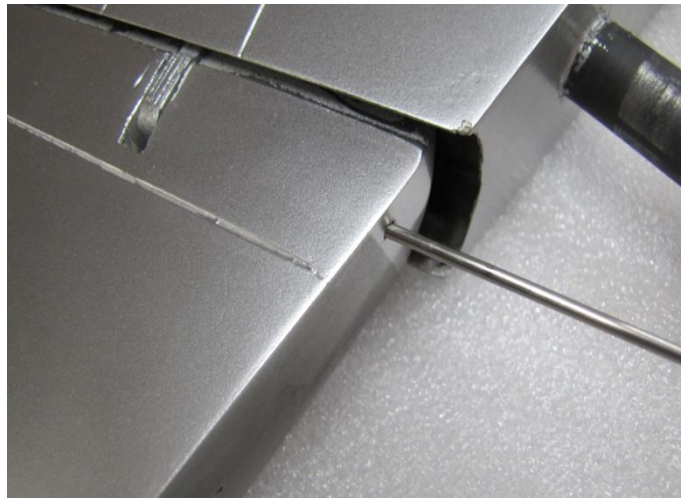
Assembly & Operation Manual

Installing The Flaps

- There is a long metal tube that pushes through the flap. You do not have to secure this as it sits against the fuse.



- Picture for reference. The end of the metal tube has a bend in it. This will sit against the flap.



F-100 Super Sabre

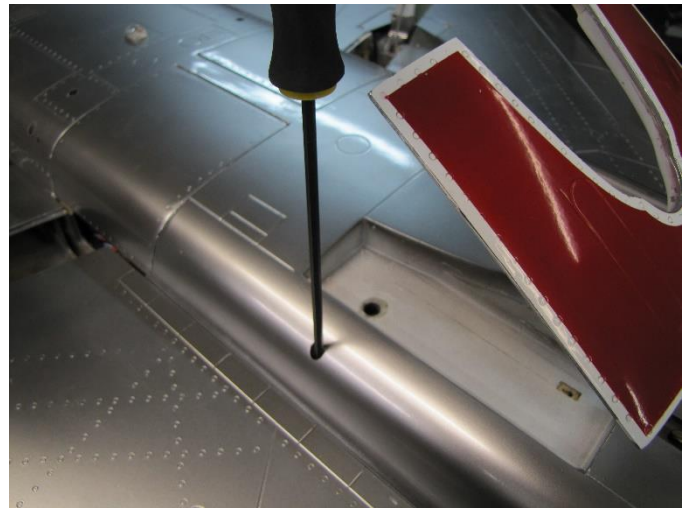
Assembly & Operation Manual

- Connect the servo leads and secure with servo clips or tape.
- Insert the Carbon Rods into the receivers.

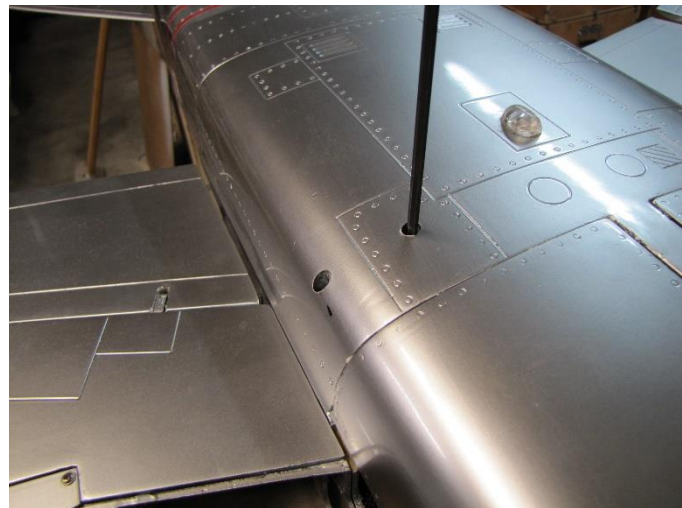


- Secure each wing by tightening the (4) clamp bolts with a 9/64 ball wrench.

Note: There are 2 sets per side. One front and one Aft.

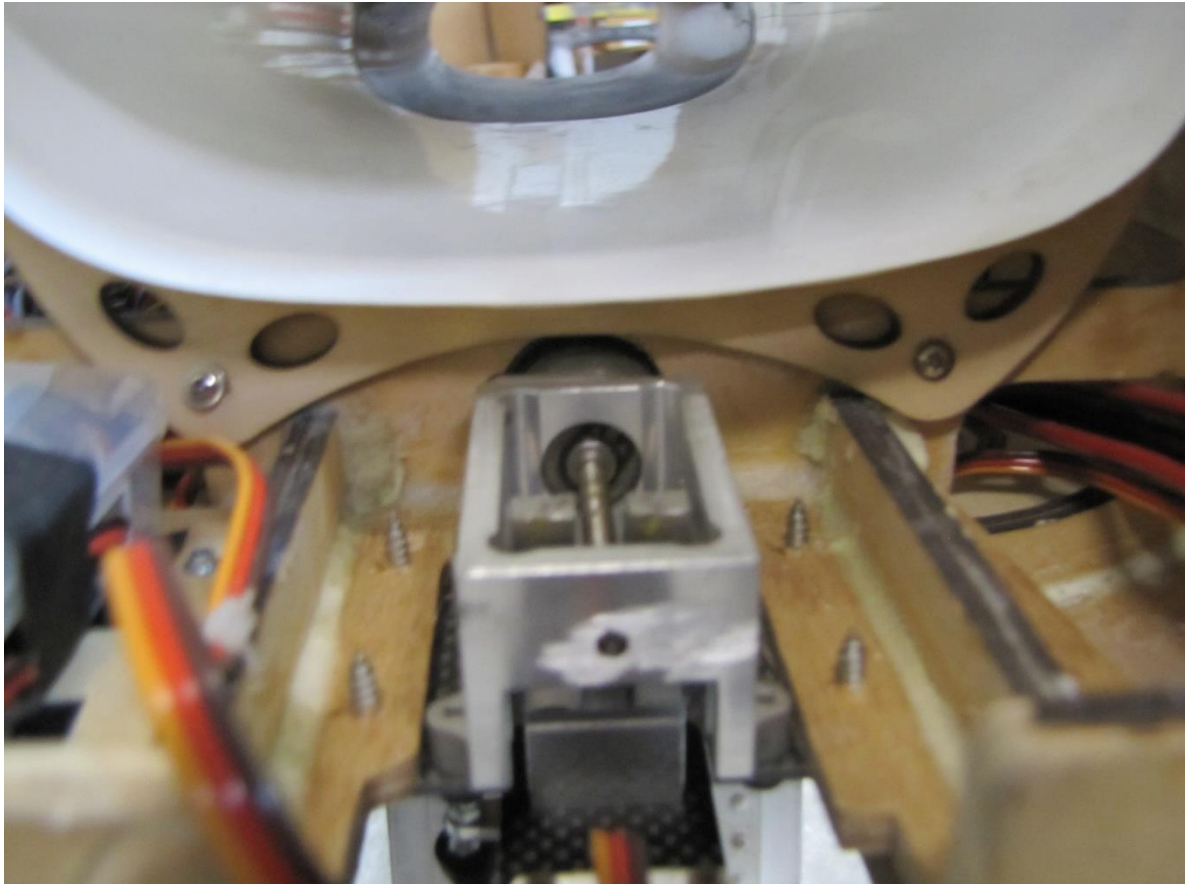


- The 2 back wing clamps.



INLET REMOVAL

There are 2 Philips head screws that hold the inlet in place. Once removed you will have access to the Equipment board.



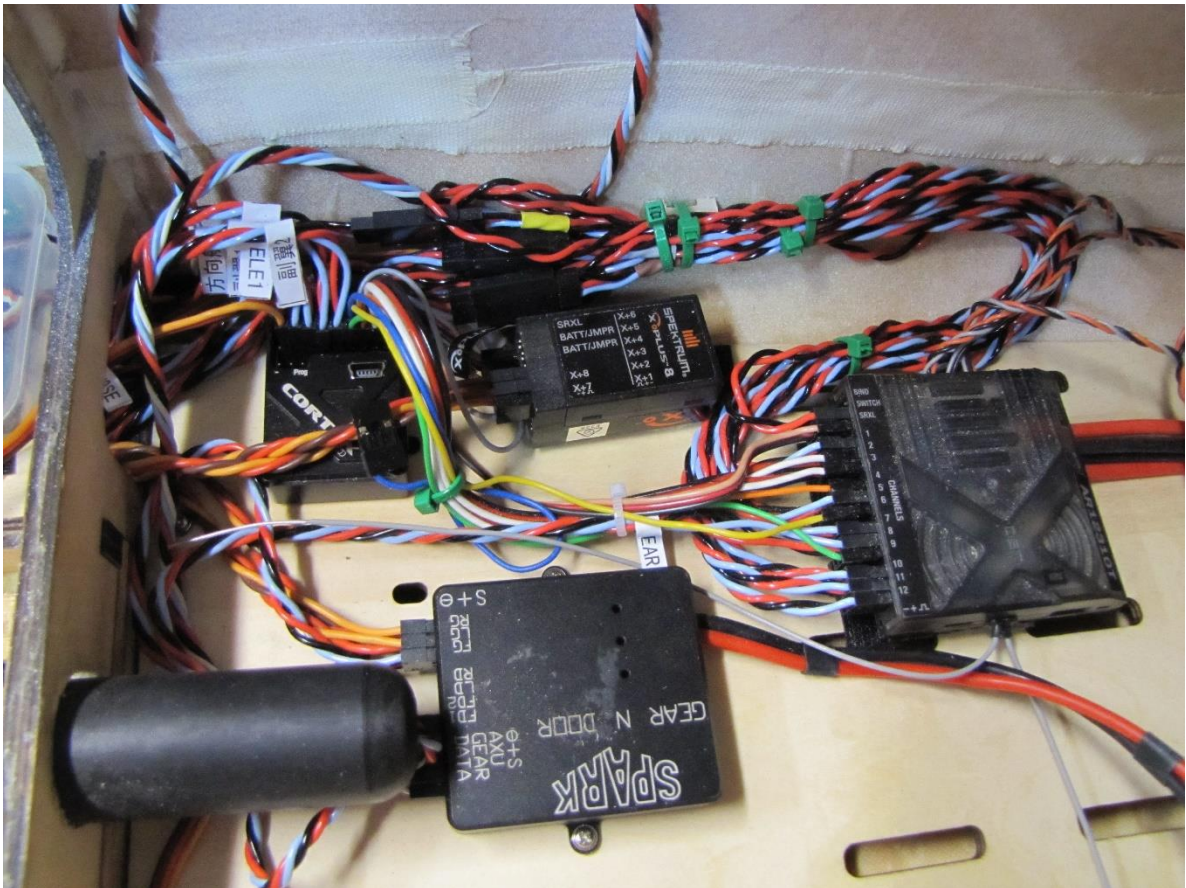
F-100 Super Sabre

Assembly & Operation Manual

EQUIPMENT BOARD LAYOUT

Originally, we used a 12 ch RX with a X-plus. Later we switched to a 20ch RX. Here in this photo, you can see the Cortex Pro Gyro system mounted.

The Inlet Extension is removed in this picture. You will not be able to see this once it is in place.



The demo model uses Electric Gear. We used the gear sequencer in the IX20 to close the main doors when the plane is on the ground. The stock Gear sequencer will only leave the doors open when the gear is down. We left the nose door plugged into the stock unit as it cannot close on the ground. The nose steering servo sits in the opening where the door would have to close.

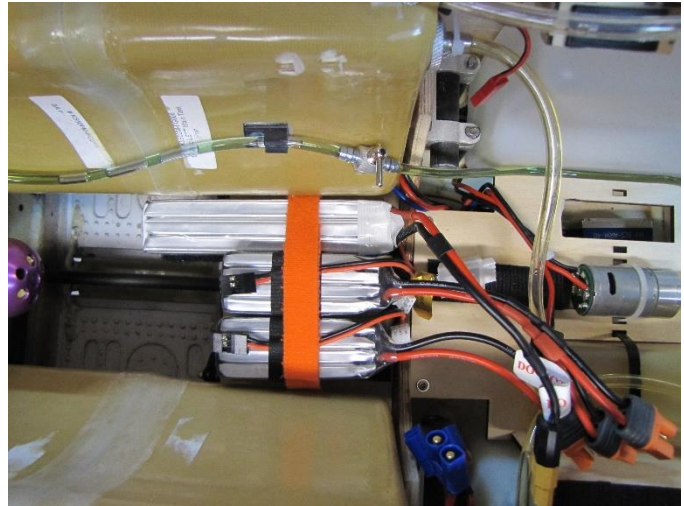
F-100 Super Sabre

Assembly & Operation Manual

Mounting RX and ECU Batteries

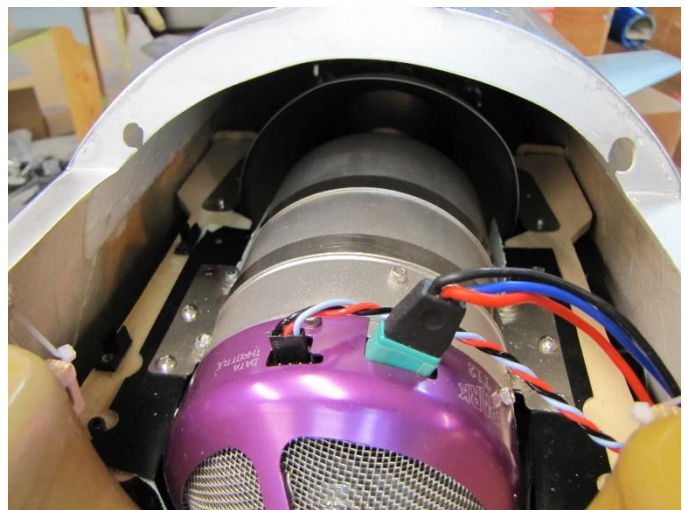
In the BVM demo model our RX packs and ECU pack sat between the main 2 tanks. This gave us a great feel in flight and on Takeoff.

Note: The demo model uses Electric gear and it shares one Rx Pack for the Gear.



Turbine Mounting

The BVM demo model uses a 120 class turbine. Mount your Turbine per your Manufactures specs.



F-100 Super Sabre

Assembly & Operation Manual

Center of Gravity

- The CG mark on the side of the fuse should be at 15.3 inches. This is a great starting point.

Balance the model fully assembled, with all batteries in and gear down.



Elevator Neutral

NOTE: The elevator neutral is .25" below the panel line at the fuse side.



F-100 Super Sabre

Assembly & Operation Manual

Control Surface Deflections and Expo Settings

NOTE: The BVM Demo plane is set up using the following Expo percentages. Positive values are used on Spektrum and JR radios, Futaba uses negative.

Control	High Rate Travels		Expo	D/R M	D/R L
Stab (measured at the fuse side LE.)	Up 1.75"	DN 1.25"	20	80%/15	50%/10
Aileron (measured at the flap aileron joint)	3/4"UP	5/8"DN	20	80%/15	50%/10
Flaps (measured at the flap aileron joint)	Take Off " 1"	Landing 2.5 "			
Rudder (measured at the Bot.)	L&R 1.5"		20	80%/15	50%/10

Connecting RX wires

The wires are labeled from the factory. If you are using the IX20, the program is available from BVM. Follow the chart below to connect the servos.

IX20 Connection Chart						
RX Port	(1)Throttle	(2)Aileron	(3)Elevator	(4)Rudder	(5)Gear	(6)Aux1
Surface	Throttle	Right Ail	Stabilator	Rudder	Left Flap	Left Ail
RX Port	(7)Aux2	(8)Aux3	(9)Aux4	(10)Aux5	(11)Aux6	(12)Aux7
Surface	Right Flap	Gear	Nose Wheel	Lights	WHL Brakes	SPD Brake
RX Port	(13) X+1	(14) X+2	(15) X+3			
Surface	Gyro	Main Door Left	Main Door Right			

IX20,DX18, and DX18QQ Transmitter File

The BVM Demo models are setup on Spektrum IX20 transmitters. The file, if requested, has all the mixes, rates, expos, and settings done for you. Setting the sub trim, switches, and travel adjustment must be accomplished by the modeler for the specific aircraft.

Important!!! Check the directions of all flight controls before each flight.

Switch/Lever/Trimmer	Channel	Output
Switch A	(8)Aux 3 Gear (14) X+2 (15) X+3 Main doors	Landing Gear, Down is Down. Doors will sequence on this switch also.
Switch B	(10) Aux 5 Lights	0 is Off, 2 Is ON
Switch C	(12) Aux 7 Speed Brake	0 is Closed 1 is Half 2 is Full
Switch D (Flight Modes)	Flaps	Up is Normal flight Mid Take Off Down is Landing
Switch E	Brakes (11) Aux 6	Pos 0-off, Pos 1-pulse, Pos 2-stop
L. Trim	Steering Trim(9)Aux 4	Down for leftt Steering Trim Up for right Steering Trim
Switch F	Aileron/ Elevator and Rudder Rates	Up (0) is High
Switch G	Gyro(13) X+1	Pos 0- off, Pos 1- low, Pos 2- high
Switch A	Timer	

F-100 Super Sabre

Assembly & Operation Manual

First Flight Profile

Make the first flight with the gyro "off". See also BVM article "Gyro Sense".

Flight Time

The BVM demo model's transmitter timer is set for 6 minutes. On the first flight, land a couple minutes early to check Fuel consumption. Adjust the flight timer accordingly.

Taxi Test/Engine Run Up

A taxi test should include a radio range check with the engine running at various power levels. Check that the wheel brakes are adequate, and the stopping action is without skidding or pulling left or right.

Takeoff

Begin the takeoff roll by slowly advancing the throttle. Maintain runway center while holding about 1/2 stick up elevator; the F-100 will rotate when it is ready. The Elevator will feel heavy upon liftoff. Leave your flaps at TO position until you start building speed on your downwind leg then put them up. The plane will nose over a bit when you retract the flaps. If there is a cross wind, hold a small amount of aileron into the wind, be prepared with opposite rudder.

Trim

Once in the air, find a medium cruise speed to set the trims. The aircraft should fly straight and level "hands off". When the landing gear come down, a few clicks of trim may be needed. This can be mixed in or use flight modes to trim automatically.

Landing

The landing is like most jets, "power on" during the approach. The F-100 does tend to sink on landing if you get too slow, but it responds well to throttle controlled approaches. The majority of the first flight should be spent trimming and practicing for the first landing. Save the aerobatics and air show stuff for later flights.

RX Battery Consumption

The average flight consumes 300 MAH per pack. We recommend two flights and recharge. Use this data to calculate how many flights you can achieve from your system.

BVM is synonymous with "Success Jets." It is very important to us that you are successful with our products. This extensive manual reflects our sincerity. As always, your comments and suggestions on BVM products are appreciated.

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