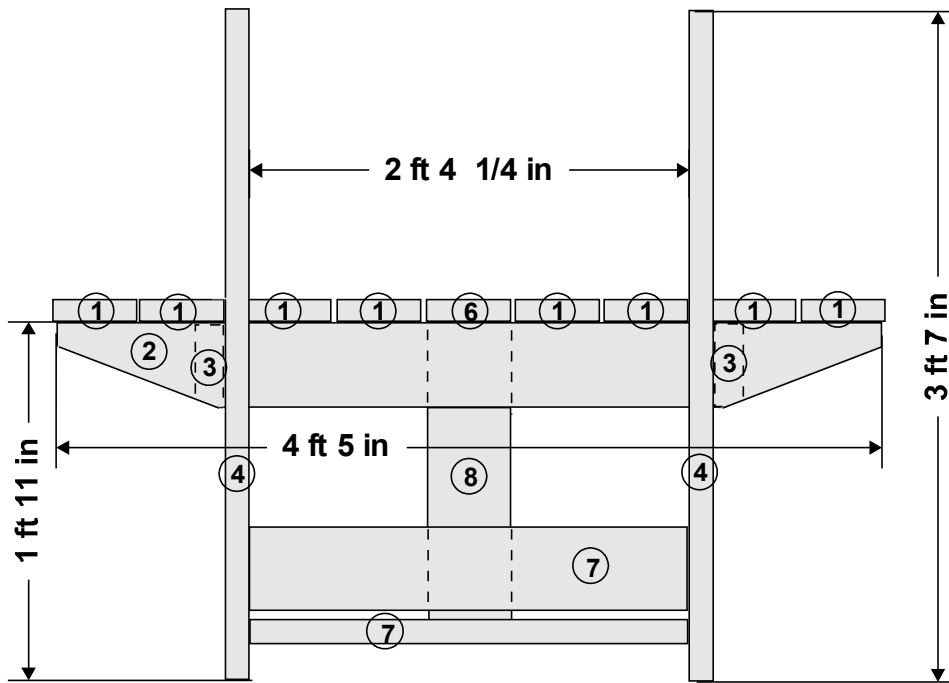


MODEL AIRCRAFT STARTING BENCH



FRONT VIEW

PARTS LIST

2"x6" LUMBER

PN	CUT LENGTH	QTY
1	2' 8"	8
2	4' 5"	2
3	1' 10-1/2"	2
4	3' 8" (4' start)	2
5	3' 9" (4' start)	2
6	5' 7 3/4"	1
7	2' 4 1/4"	2
8	1' 7 3/4"	1
3/4" SQ 4'	UNCUT RAILS for rear of PN 6	2

BILL OF MATERIALS

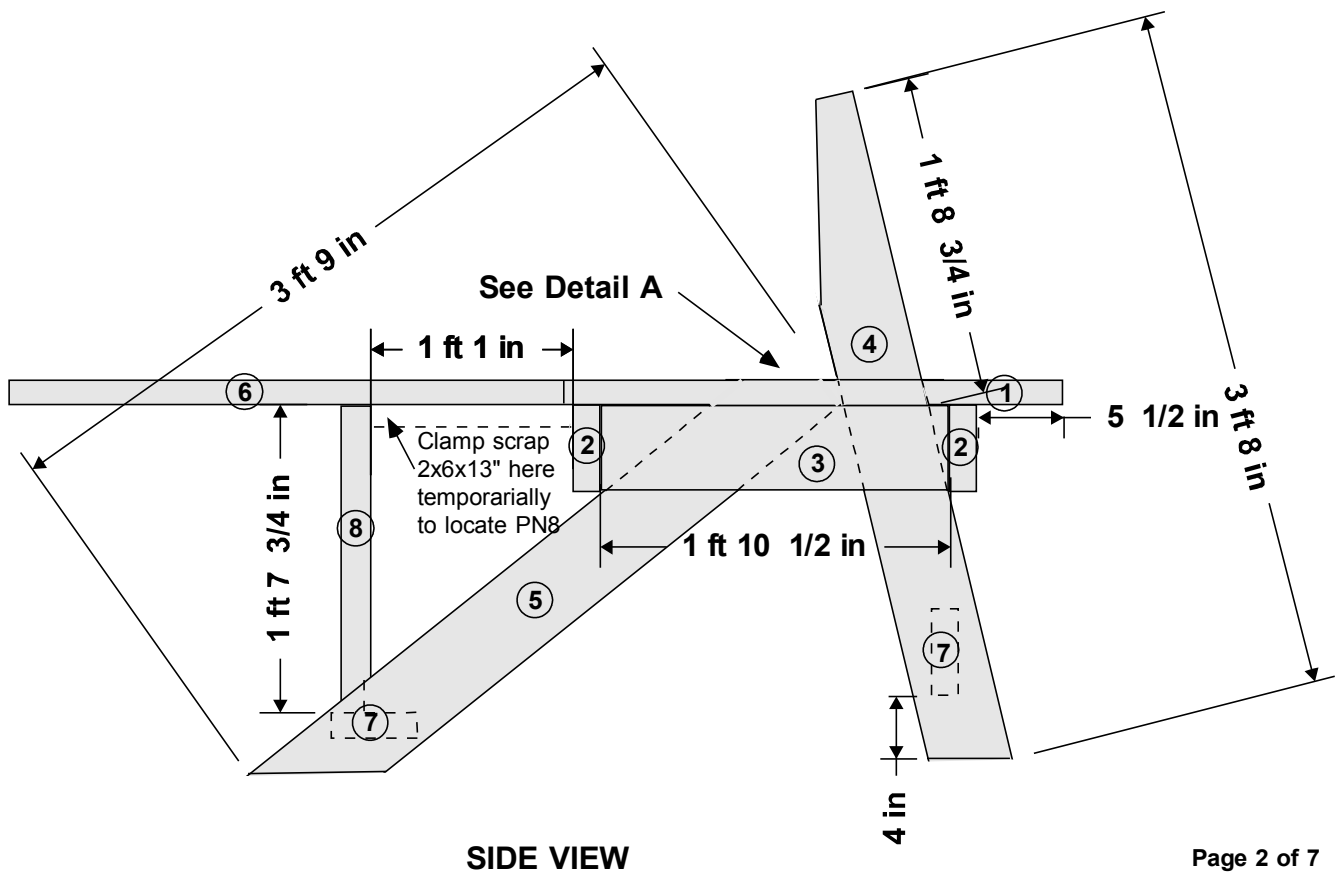
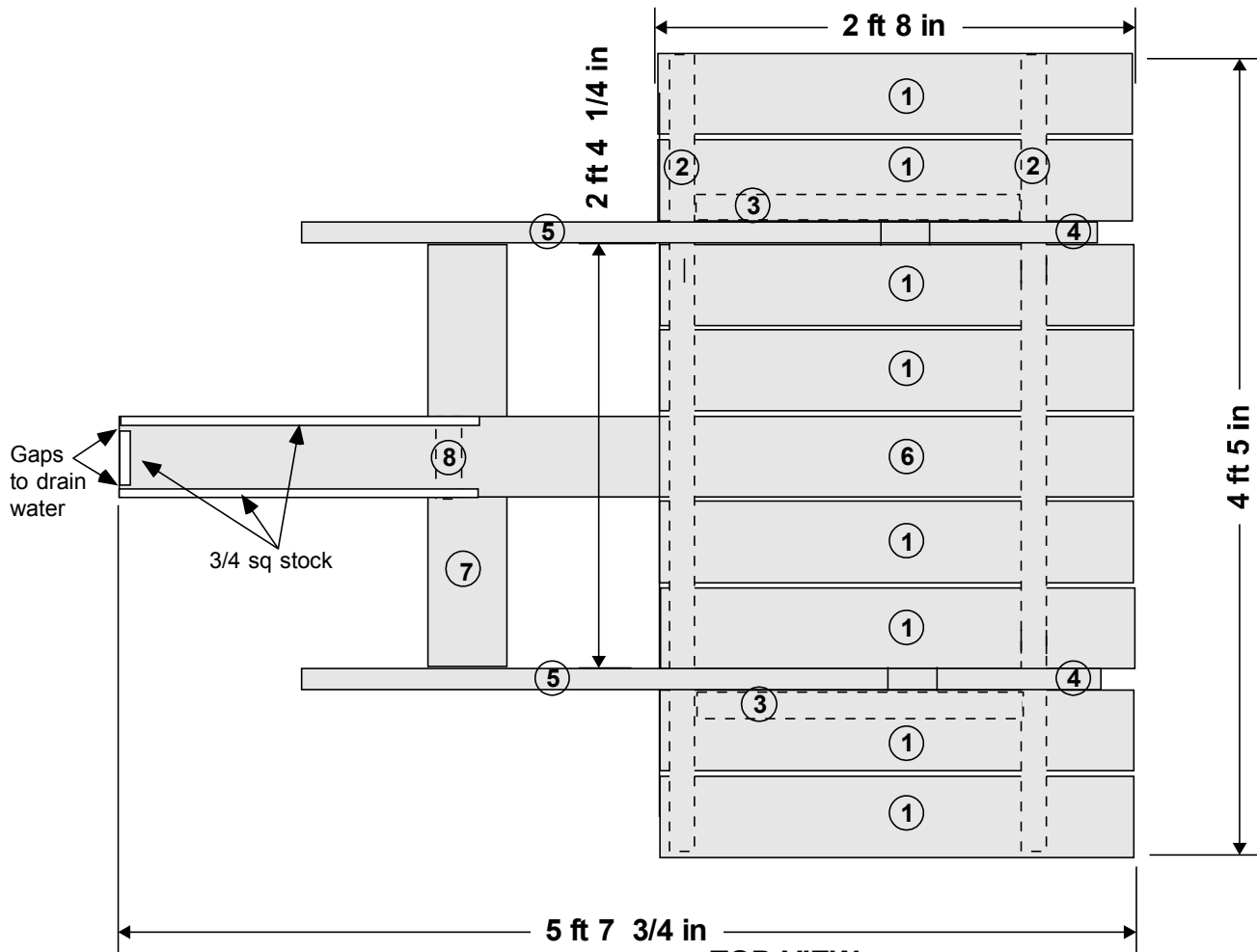
2"x6"x8' Wood	8 ea
3/4" sq x 4' Wood	2 ea
1-1/2" Nails	20 ea
3" Deck Screws	80 ea
1/2"x4"x18" Rubber mat material	2 ea
3/4" Drywall Screws	20 ea
15" Pipe Hanger	2 ea
Spar Urethane	1 qt

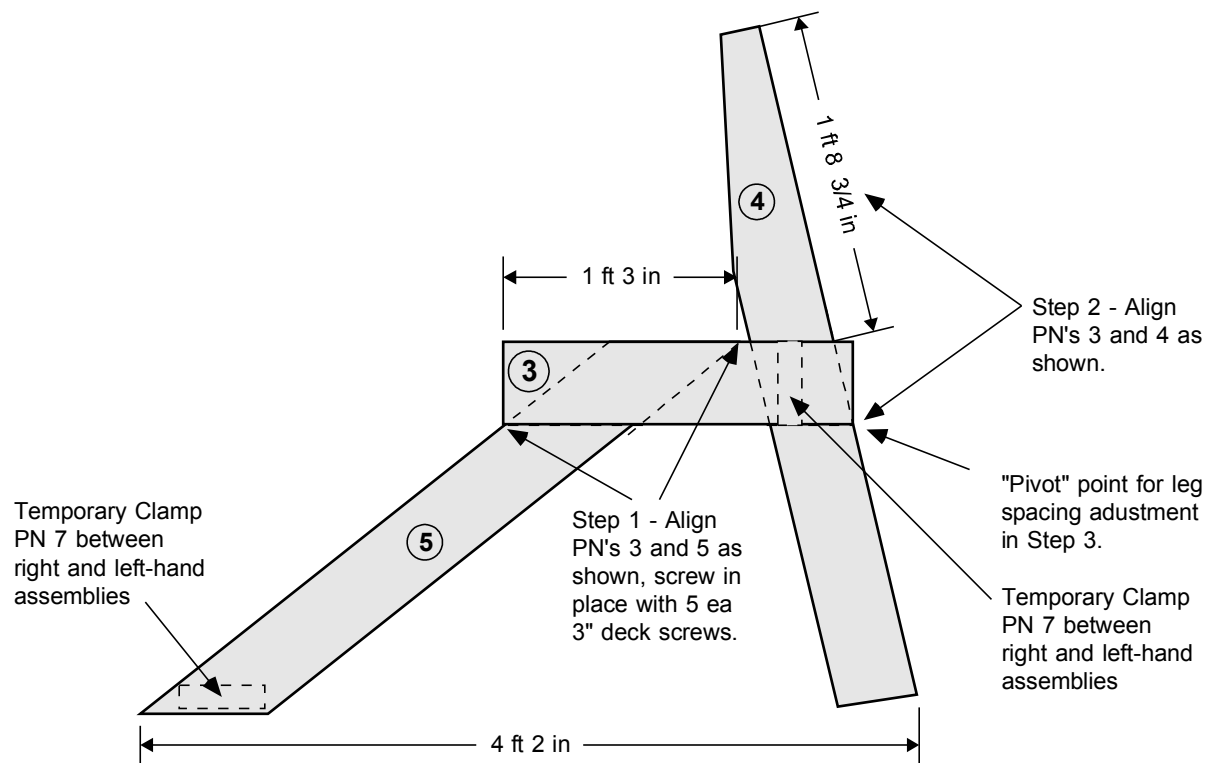
Revisions:

1 - Apr 12, 2007
BOM Update
Add info
2 - Dec 31, 2007
Disclaimer
3 - Oct 17, 2010
Add Cutting Detail B
Modified BOM
4 - Moved PN 3
Corrected misc errors
5 - Nov 3, 2010
Added dim's to pg 4
Moved Pn 7 on pg 3
6 - Dec 13, 2010
Added Assembly Inst.
7- Feb 15, 2011
Added Safety Precations
8- Jul 13, 2013
Added 1-3/4" to PN 6

Notes:

1. Put Urethane on top surfaces and bottom of legs.
2. Use Pipe hanger and drywall screws to put rubber mat material on top rear of PN 4 to prevent damage to wings.
3. No guarantee of safety is implied, use at your own risk.
4. Do not use for aircraft with over 20 lbs of thrust.





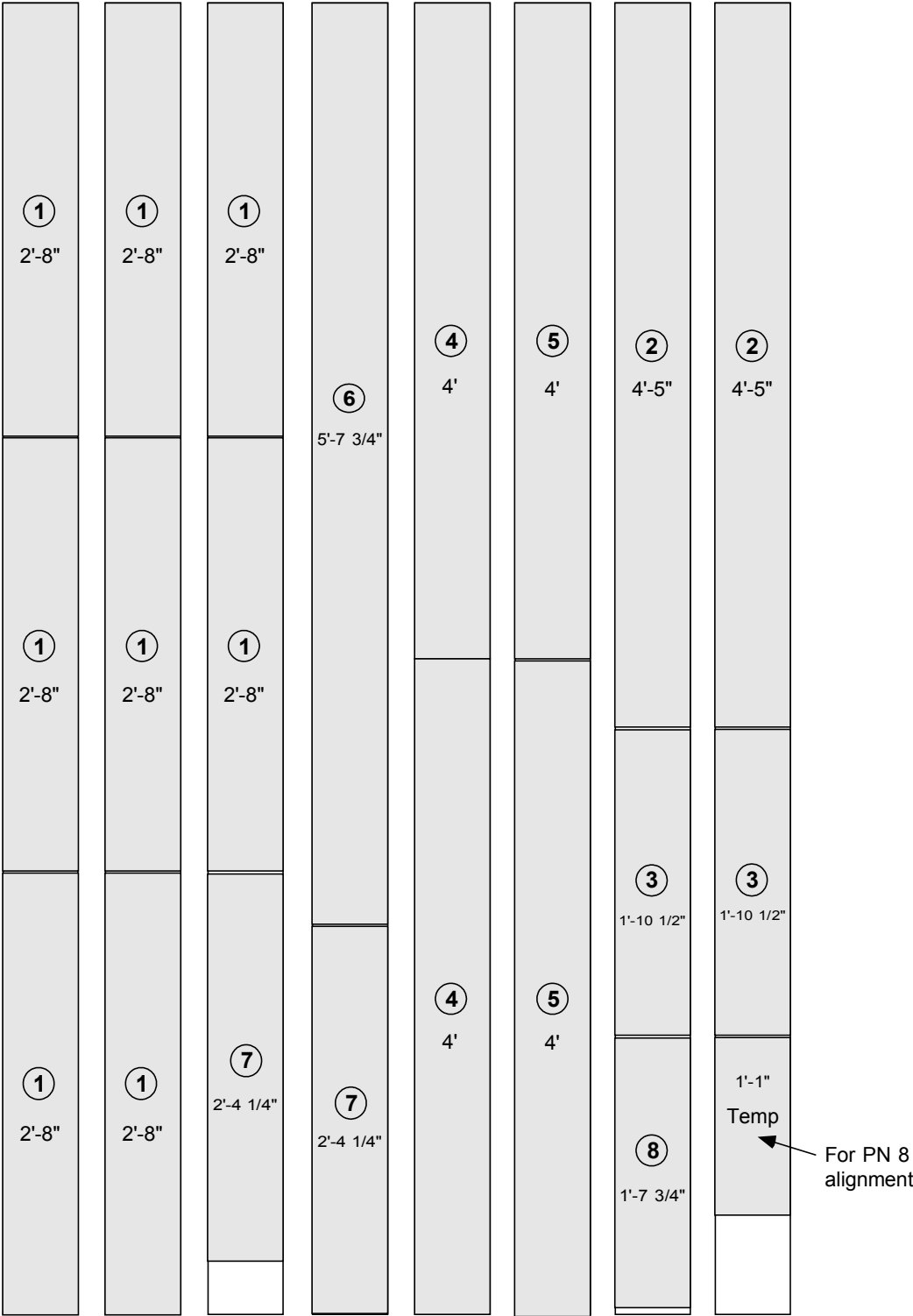
Step 3 - Adjust leg spacing to dimension shown by "pivoting" PN 4, and screw in place with 5 ea 3" deck screws.

**Assemble PN's 3, 4, and 5 as shown.
This is the right-hand leg assembly.
Use this as a pattern to make the
left-hand leg assembly.**

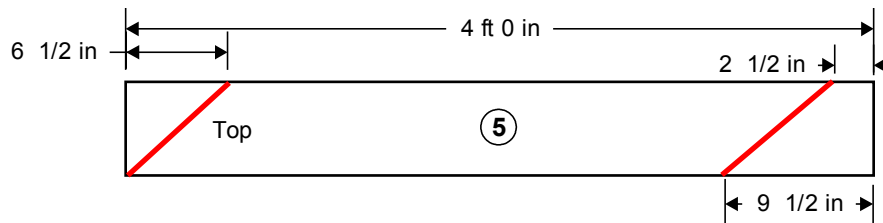
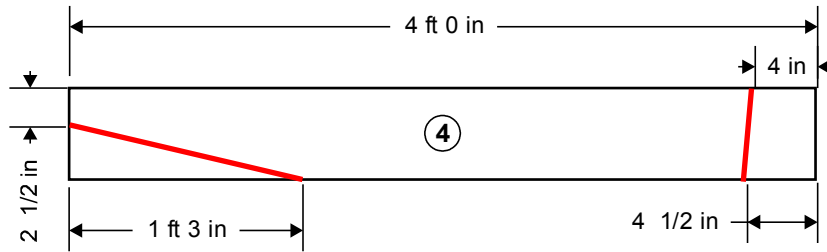
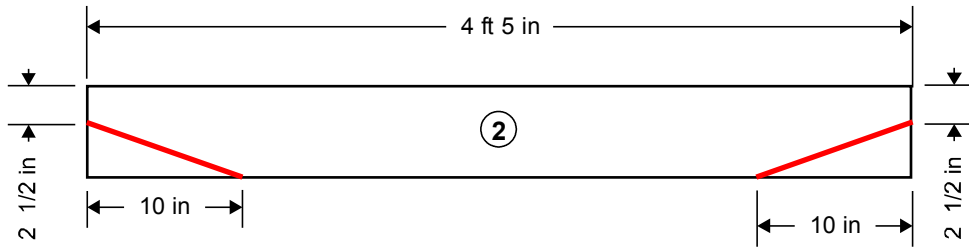
(See Sheet 5 for leg cutting Detail B)

Detail A

CUTTING DIAGRAM



2"x6"x8'
TREATED LUMBER



Cut = 

Cutting Detail B

Model Aircraft Starting Bench Assembly Instructions

1. Assemble PN's 3, 4 and 5 to make a "right-hand" leg assembly. See Detail A for instructions. Note - Right and left-hand orientation on the bench is the same as right and left on an airplane if it were sitting on the bench.
2. Use the "right-hand" leg assembly as a pattern to make a "mirror image" for the "left-hand" leg assembly using PN's 3, 4 and 5.
3. Clamp the "right-hand and left-hand leg assemblies together with 2 PN 7's temporally (do not fasten them) for spacing. Make sure that each PN 3 faces the outside of both leg assemblies. See Detail A for the location of PN 7's.
4. Put one PN 2 on the front of the leg assemblies and fasten to the ends of PN 3.
5. Put one PN 2 on the back of the leg assemblies and fasten to the ends of PN 3.
6. Fasten one PN 7 to the front; do not put the rear PN 7 on at this time.
7. Check to make sure assembly is square.
8. Lay PN 1's and PN 6 loosely on top between the uprights of the leg assemblies.
9. Center PN 6 with 5 ½" overhang at front and fasten with six 3" deck screws.
10. Space PN 1's evenly, with small gaps between them and PN 6, and fasten them with the same overhang at the front as PN 6.
11. Fasten PN 1's on the right and left side of the uprights of the leg assemblies. Note – make sure to leave a small gap (1/8" to 1/4") between PN 1's. Note - The extreme right and left hand PN 1's will overhang the ends of the PN 2's slightly.
12. Fasten PN 8 to PN 6. Note - Cut a scrap 2x6 to 13" long and temporally clamp it between PN 2 and PN 8 to act as a spacer and help keep PN 8 at a right angle to PN 6 while it is fastened.
13. Fasten PN 7 (2) to the bottom of PN 8 then to each side of PN 5.
14. Add 3/4" square strips to rear of PN 6.
15. Use the pipe hanger and drywall screws to fasten the rubber bumper material to the back of the uprights to prevent the wood from denting the aircraft wings.

Model Aircraft Starting Bench Safety Precautions

Some safety precautions for the ones who need written instructions:

Standard safety precautions for starting and running your engine should be followed when using this or any other bench.

Make sure your wing is secure on the fuselage.

Hold the airplane when starting the engine (it may run backwards.)

Use two hands when lifting the plane from the bench (it may be oily and slip.)

Make sure you have sure footing and balance when lifting.

Do not try to lift the plane over the uprights – pull it straight back until the prop is clear (you may slip and the prop will be near your neck.)

Hold, tie down, or use up-elevator/trim on the airplane when running the engine at high RPM (prevents the prop from hitting the bench.)

Leave your plane on the ground in high winds (it may blow off the bench.)

Don't drag the bench sideways (it will weaken the structure.)

If the engine has over 30 lbs of thrust put it on the ground (the bench could move forward or tip.)

This design has been tested with engines up to 20 lbs of thrust with no problems noted.