

ASSEMBLY INSTRUCTION FOR 3 SPREADER Rupprigger

To assist assembly, construct 2 or 3 stands from 2 x 4's as shown in Fig. 1.

1. Preassemble 3 spreader assemblies with spreader tubes. See Fig. 2 (lubricate "O" Rings for easier Installation).

2. Layout 2" dia. base tube on assembly stands with serial number palte down. See Fig. 3.

3. Remove bolt, SS washer, nylon washers and nut from base collar. Keep handy for reassembly on base tube.

4. Over the open of base tube slide on these parts in order: Base Anchor Collar, Hold-In-Arm (Hold-In Bolt toward base tube clevis). See Fig. 3A. The socket end of base anchor collar should be pointing away from the base tube clevis. See Fig. 3B.

5. Align base anchor collar with pre-drilled holes near middle of the base tube. Secure with screw, nylon washers and nut previously removed.

6. Remove eye bolt, washers and nut from preassembled 2' spreader assembly. Keep hardware handy.

7. Slide large end of collar over open end of of base tube and align holes with predrilled holes in base tube. See Fig. 4.

8. Insert double drilled end of of 1-3/4" second stage tube through the open end of of the spreader collar and 2" base tube. Align the first hole in this tube with the hole through spreader collar and 2" base tube. Bolt together using eye bolt, SS washer nylon washers and lock nut. See Fig. 6A for stacking order. Eye bolt up name plate down.

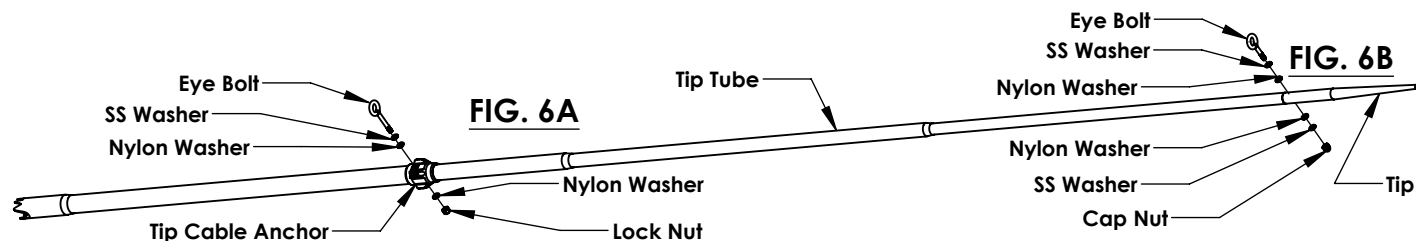
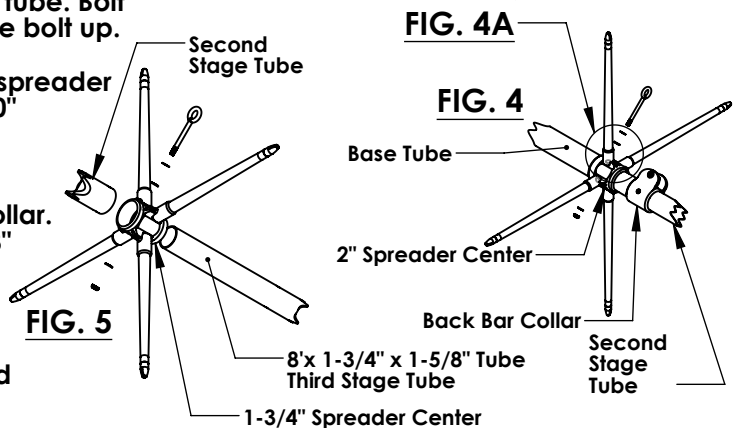
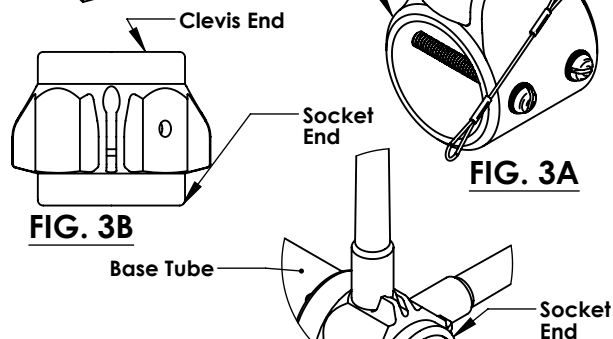
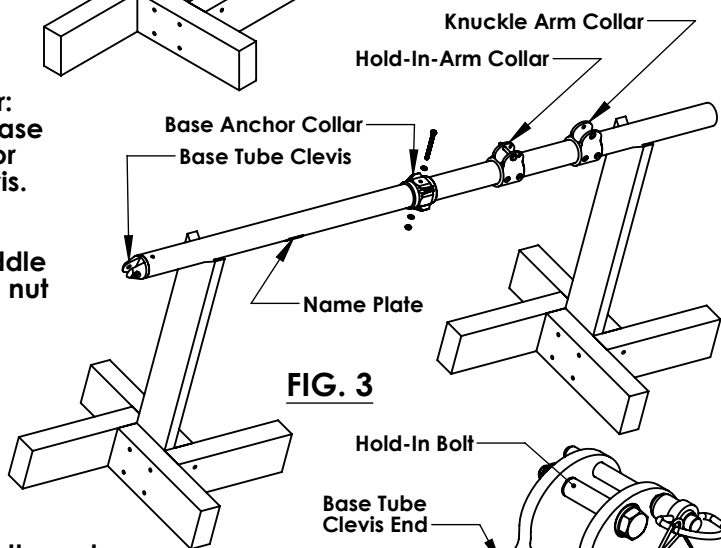
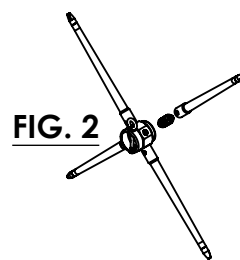
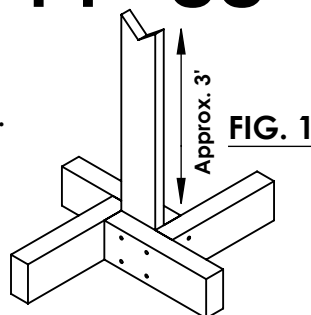
9. Over the open end of second stage tube, slide on back bar collar with ears up. See Fig. 4.

10. Remove eye bolt, nut and washers from 1-3/4" x 1-5/8" spreader collar. Keep these handy. Slide large end of collar over open end of second stage tube and align holes. Insert 1-5/8" x 8' 3rd stage tube with drilled hole approx 12" from end through collar and into top of second stage tube. Bolt the 3 units together. See Fig. 6A for stacking order, eye bolt up.

11. Using same procedure, slide large end of third stage spreader over open end of 1-5/8" x 1-1/2" x 8' tube slide the 90" stepped tube into the third stage spreader and bolt the 3 units together.

12. Remove eye bolt, washers and nut from tip anchor collar. Slide over open end of 90" stepped tube, insert the 98" stepped tube, align holes and bolt together.

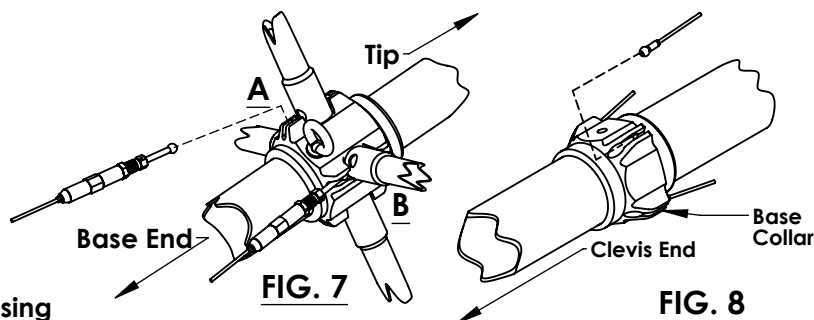
13. Remove eye bolt , washers and cap nut from rigger tip. Insert tip into open end of 98" stepped tube and bolt using stack order in Fig. 6B. All eye bolt eyes used in assemblies must be on the same side of the Rupprigger (up) and name plate (down).



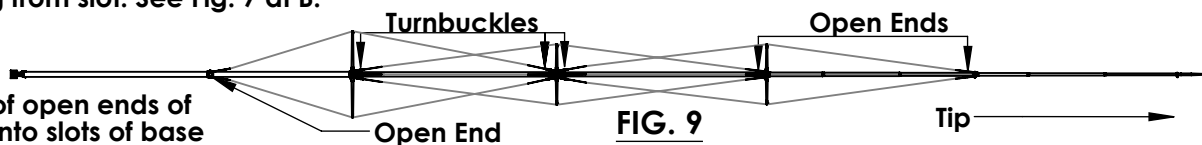
14. Installation and adjustment of Rupp Lock-Ball and Socket cable system.

A. Align holes at base of spreader tubes with slots of sockets on base end of 2nd stage spreader collar. See Fig 7 at A.

B. Insert Lock-Ball of turnbuckles into socket slots using the hole in spreader tubes. Rotate spreader tube to prevent Lock-Ball from withdrawing from slot. See Fig. 7 at B.



C. Insert Lock-Ball of open ends of (4) base cables into slots of base anchor collar sockets. See Fig. 8.

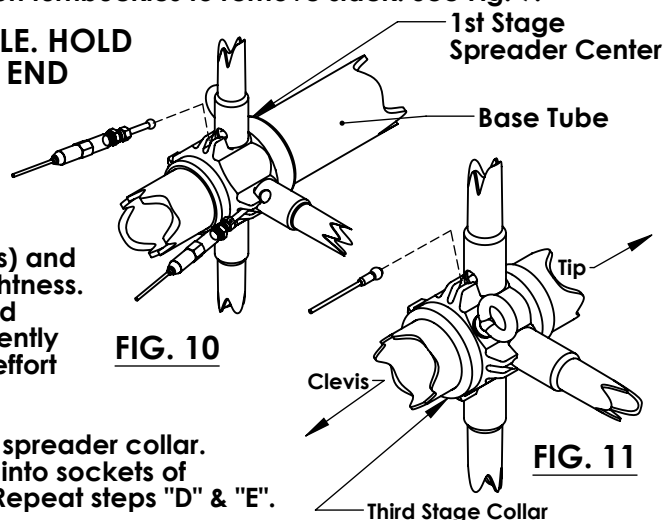


D. Stretch cables through slots in spreader tips and hand tighten turnbuckles to remove slack. See Fig. 9.

CAUTION #1: DO NOT ROTATE BARREL OF TURNBUCKLE. HOLD BARREL WHILE TIGHTENING LOCK-BALL END

CAUTION #2: NOTICE THE OFFSET OF THE 2nd STAGE SPREADER. THIS IS DONE TO PREVENT SPREADER CABLES FROM CHAFFING.

E. Place drop of Loc-Tite on turnbuckle threads (four locations) and tighten each turnbuckle three full turns and check for straightness. Adjust individual turnbuckles to correct bowing of tubes and continue tightening all around. Check for straightness frequently while tightening until all cables are equally tight and great effort is required to pull cable away from slots in spreader tips.



F. Align holes at base of spreader tubes with slots on 1st stage spreader collar. See fig. 10. Repeat "B" above. Insert Lock-Ball of open ends into sockets of 3rd stage spreader collar. (Align holes in tube) See Fig. 11. Repeat steps "D" & "E".

G. Align holes at base of spreader tubes with slots of sockets on tip end of second stage spreader. See Fig. 7 at A. Repeat "B" above. Insert Lock-Ball of open end into sockets of tip anchor collar. See Fig. 12. Repeat steps "D" & "E" above.

15. Position back bar collar as shown in Fig.13 with the collar ears on the same side of tube as the eyebolt eye on the 1st stage spreader collar. Insert 5/16" quick release pin through holes in collar and predrilled hole in 2nd stage tube. Head of pin should be on the cockpit side of the vessel for easy access.

