

RECEIVER REPAIR KIT For PP20FRM, PP20FTM and PP20FTM-AT

NOTICE: SERVICE PARTS FOR RECEIVER UNITS REMOVEABLE SNAP RINGS OR HEX HEAD POPPET SLIDE STUDS ARE NOT FURNISHED WITH THIS KIT. CONTACT RED HEAD VALVES™ FOR PROPER SERVICING OF UNITS WITH REMOVEABLE SNAP RINGS OR HEX HEAD POPPET SLIDE STUDS. IF YOU ARE UNSURE WHICH TYPE OF UNIT YOU HAVE, CONTACT RED HEAD VALVES™ FOR IDENTIFICATION.

CONTENTS:

1 each #73-Q4330-U	Quad ring seal: X-seal, large cross section
1 each #71-041-N	O Ring nitrile: Flange to black bulb seal with small cross-section
3 each #61-2019	Torsion spring
3 each #62-2020	Bush poppet slide
1 each #62-2027	Safety wire
3 each #61-2021	Snap Ring, Permanent-type (not reusable after installation)
1 each #69-RRK	Receiver Repair Kit installation instructions, snap ring tool drawing and NOTICE

INSTALLATION:

1. Read attached **Notice** before proceeding.
2. If applicable, remove black bulb cover.
 - a. Remove hose clamp.
 - b. Heat valve in oven to 65.56°C (150°F).
 - c. Remove black bulb cover from valve.
3. Replacing three (3) each #61-2019 torsion springs and three (3) each #62-2020 bushing poppet slides.

NOTE: Permanent-type nap rings must be installed with special tool (drawing included).

Removal of snap ring is not recommended or necessary for torsion spring replacement. **DO NOT RE-USE** any type of snap ring after installation has occurred.

DO NOT SUBSTITUTE; snap rings are not interchangeable.

- a. Remove X-seal. Depress poppet, roll X-seal out of groove or use a thin smooth blade (feeler gauge) between X-seal and groove sidewall and lift out. Machined surfaces are for sealing – “DO NOT DAMAGE”.
- b. Heat valve flange to 93.33°C (150°F). This will release red Loctite applied to threads on poppet slide studs.
- c. Remove safety wire. Carefully copy loop, tie and safety wire routing for later replacement.
- d. Loosen three (3) each poppet slide studs, leaving several threads engaged.
When gripping, do not damage bushing sliding surface.
- e. Remove only one poppet slide stud at a time. Do not damage bushing sliding surface
 1. Remove torsion spring and poppet slide bushing.
 2. Thoroughly clean poppet slide stud threads and flange female threads.
 3. Install new torsion spring and poppet slide bushing from service kit.
 4. Apply a drop of red Loctite to threaded hole and a drop to poppet slide stud threads.
 5. Replace poppet slide stud. Repeat steps 1 – 5 above for each slide stud.
4. Replacing one (1) each #73-Q4330-U X-seal – all units:

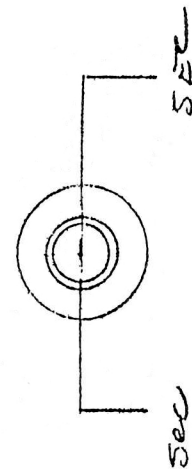
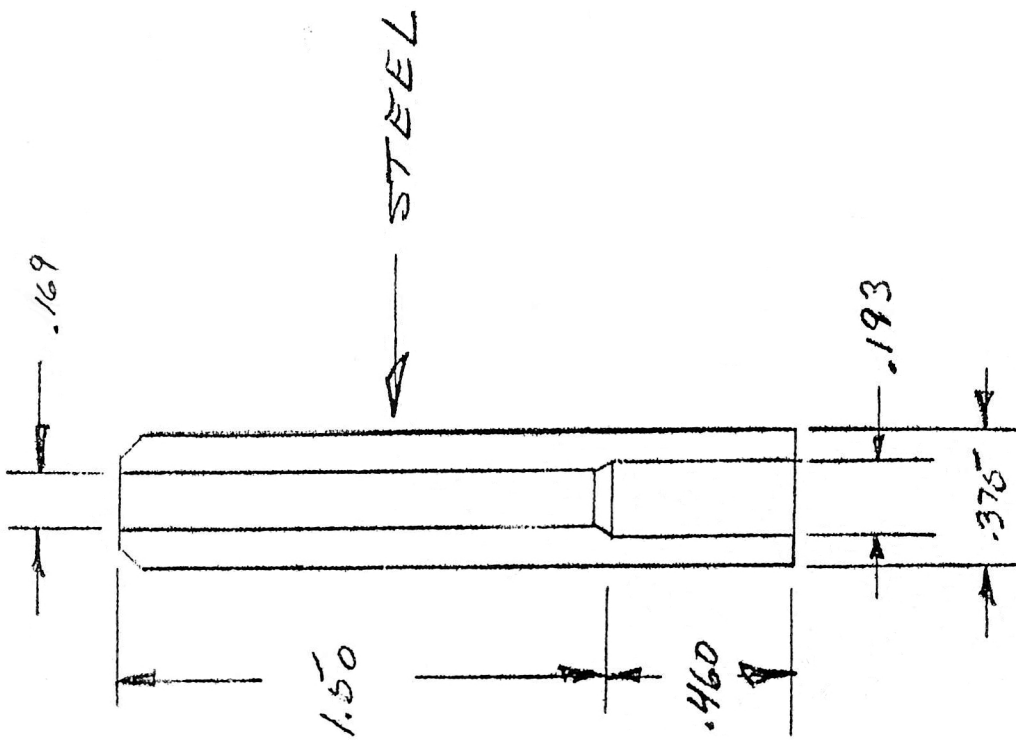
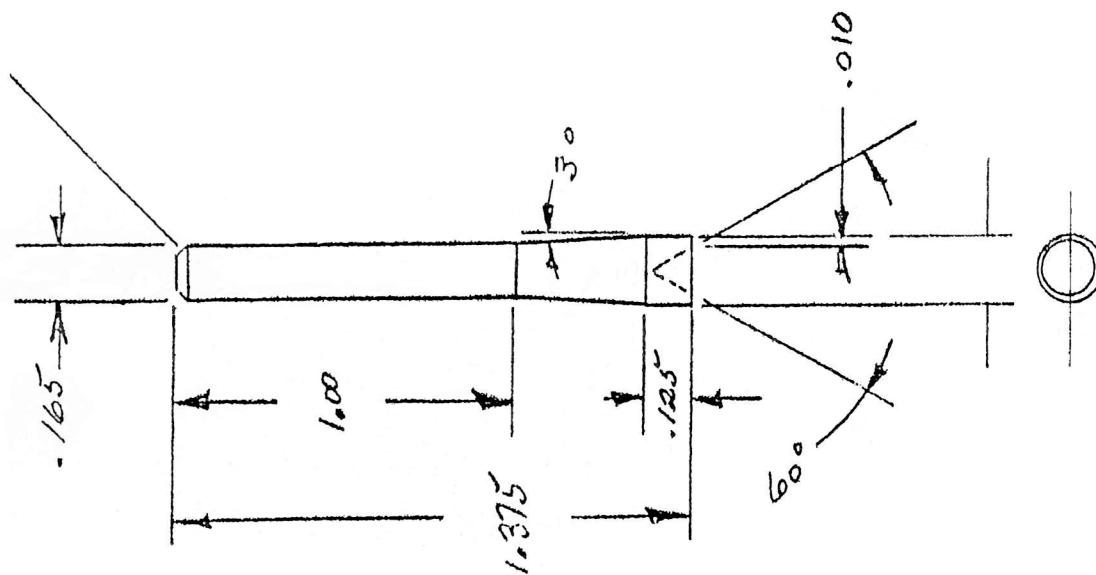
Find X-seal in service kit and note yellow identifying mark.

- a. Depress poppet, roll X-seal out of grooved or use a thin smooth blade (feeling gauge) between X-seal and groove sidewall and lift out. Machined surfaces are for sealing – “DO NOT DAMAGE”.
 - b. Install a new X-seal. Stretch X-seal over poppet ensuring X-seal does not roll or twist during installation. X-seal must be properly seated in groove.
5. If applicable, replace black bulb cover:
- a. Heat black bulb cover in oven to 65.56°C (150°F).
 - b. Replace flange O Ring (flange to bulb seal). Do not roll or twist during installation.
 - c. Press black bulb cover over flange being careful not to damage O Ring.
 - d. Install hose clamp.
6. Check valve for smooth operation and fluid seal.

You may contact Air & Allied Sales (Pacific) Pty Ltd if you need technical assistance.

Tool Steel RC 60+

SUMP RING TOOL





NOTICE

DO NOT USE your Red Head Valves™ product before reading this notice and warnings. If you have any questions relative to the use of this product. **DO NOT** use the product until you have contacted Red Head Valves™ or Air & allied Sales and your questions have been answered.

ASSUMPTION OF RISK. It is well recognised that automobile racing is a very dangerous activity. Even with the utmost of care, refuelling involves certain unavoidable risks. Persons using Red Head Valves™ refuelling connectors **ASSUME THE RISK** inherent in this type of activity.

LIMITED WARRANTY / DISCLAIMER. Red Head Valves™ will repair or replace, at its expense and its option, any Red Head Valves™ refuelling connector or refuelling accessory which, in the normal use, has proven to be defective in workmanship or material; provided that the purchaser notifies Red Head Valves™ of the alleged defect within ninety (90) days from purchase. Red Head Valves™ will not be responsible for any asserted defect which resulted from misuse, abuse or repair or alteration made or specifically authorised by anyone other than a representative of Red Head Valves™. Under no circumstances will Red Head Valves™ be liable for incidental or consequential damages resulting from defective products. This warranty is Red Head Valves™ sole warranty and sets forth the purchaser's or user's exclusive remedy, with respect to defective products; all other warranties, express or implied, whether of merchantability, fitness for purpose, or otherwise, are expressly disclaimed by Red Head Valves™.

WARNINGS

1. **ANY** modification of refuelling connectors may result in failure of the system.
2. **ALL** refuelling connectors should be inspected and tested before each race.
3. Lack of **PROPER MAINTENANCE** may result in failure of the system.
4. "O" rings should be **ROUTINELY INSPECTED** and any cracked, worn, torn or damaged "O" rings must be replaced immediately.
5. Certain fuel mixtures may have an adverse effect on seals used in Red Head Valves™ products. Users must **CAREFULLY WATCH** for sticky or swollen seals and replace as necessary.
6. "O" rings normally need no lubrication. If lubrication is necessary, **USE ONLY HIGH QUALITY BEARING GREASE** and apply lightly.
7. **ANY FAILURE IN ANY RED HEAD VALVES™ PRODUCT SHOULD BE REPORTED TO RED HEAD VALVES™ IMMEDIATELY AND THE CONNECTOR SHOULD BE SERVICED BEFORE FURTHER USE.**