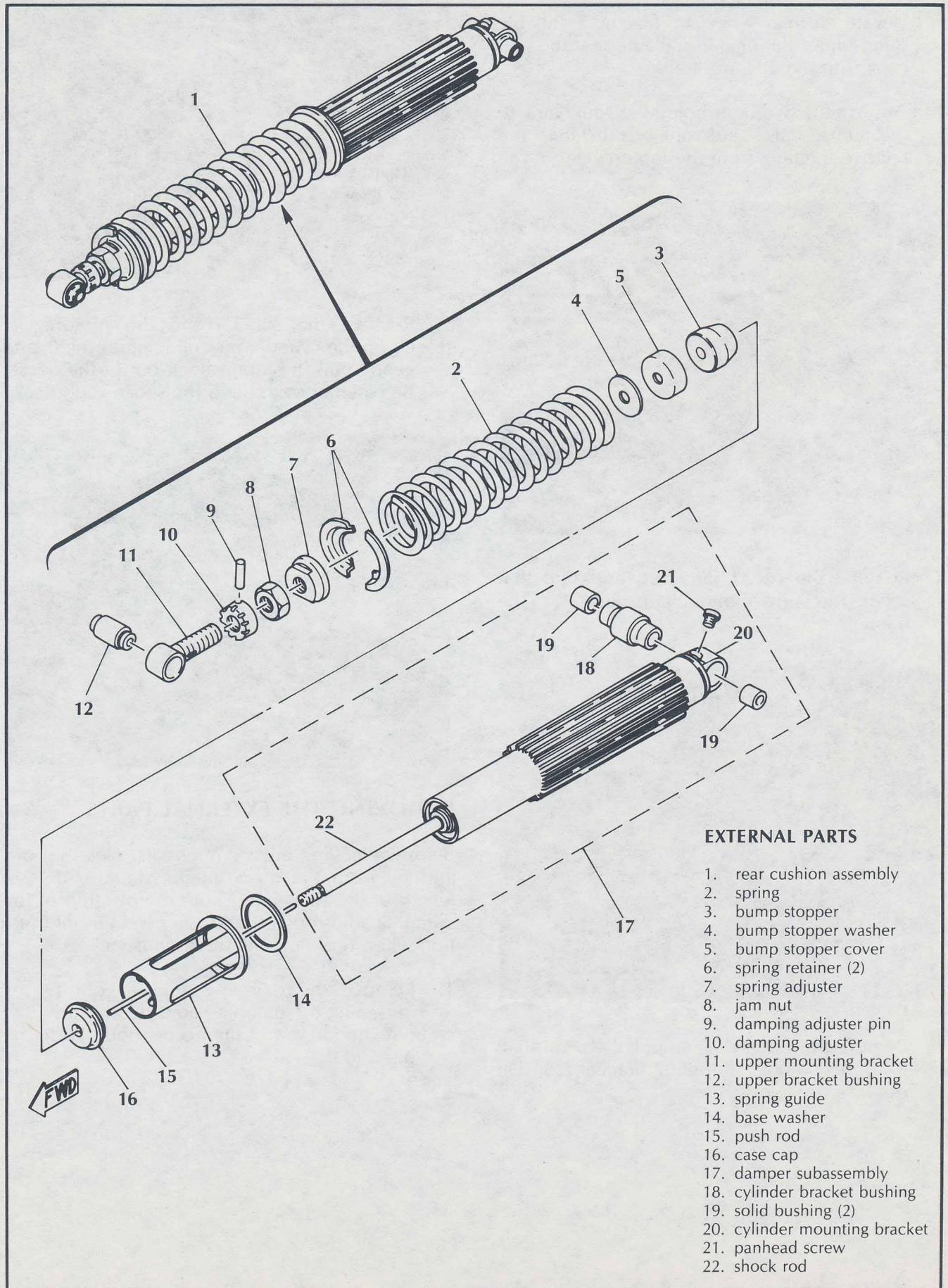


CHAPTER 4. THE X MONOSHOCK

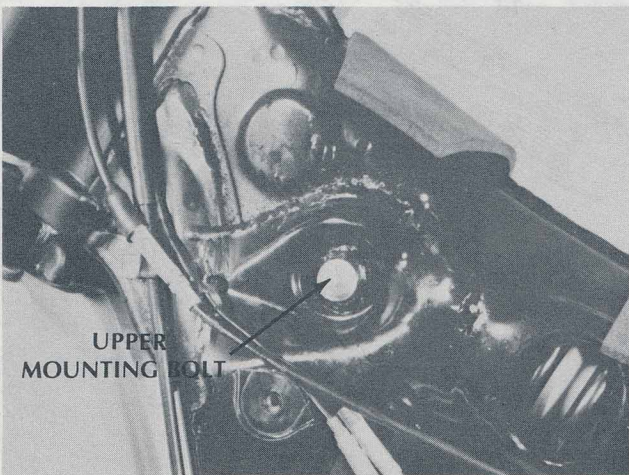


REMOVING THE MONOSHOCK FROM THE MOTORCYCLE

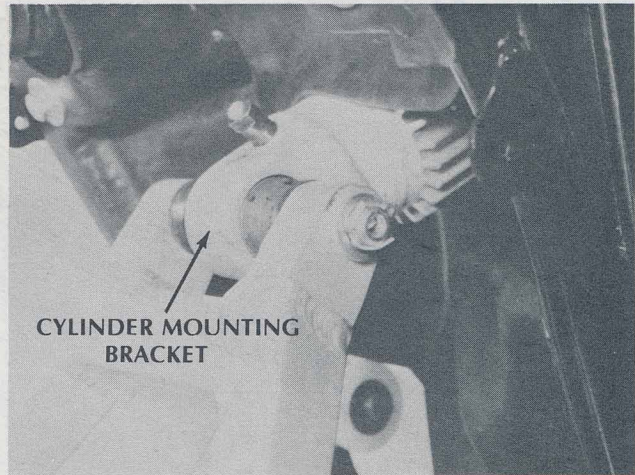
1. Elevate the rear wheel by placing a suitable stand under the engine. Be sure that the pet-cock is in the OFF position.
2. Remove the two bolts holding the fuel tank to the frame. Raise the front of the tank, and remove the tank from the motorcycle.



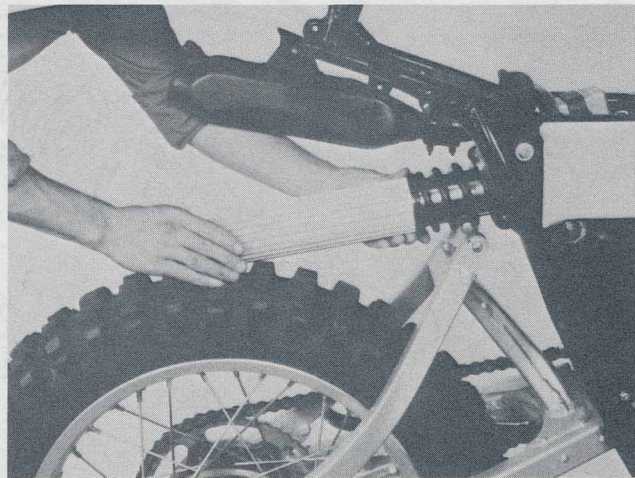
3. Remove the cotter pin, nut, and bolt that secure the upper mounting bracket (11) to the frame.



4. Remove the cotter pin and pull the pivot shaft from the cylinder mounting bracket (20). Do not lose the two washers.



5. Remove the shock from the motorcycle. Grasp the cylinder mounting bracket (20) and gently pull the monoshock out of the frame. Be careful not to bend the shock rod.

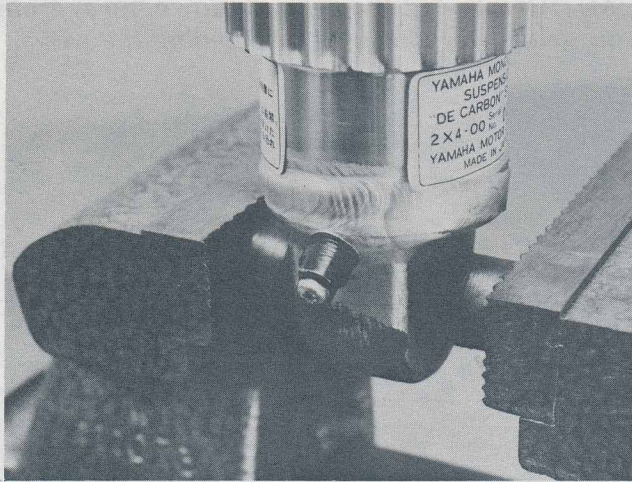


REMOVING THE EXTERNAL PARTS

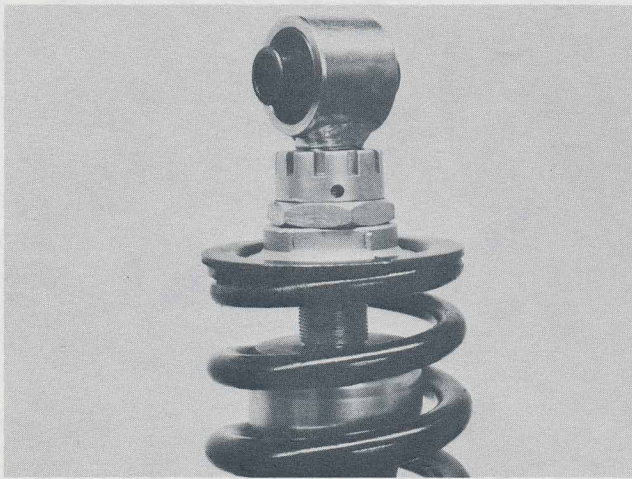
Before removing any components, clean all dirt and oil from the monoshock. Measure the set length of the spring and note the position of the damping adjuster (10). You will need this information when reassembling the monoshock.

1. Remove the damping adjuster pin (9) by loosening the damping adjuster (10) until the pin can fall out of the access hole. Place the pin aside.

- Secure the monoshock in a vise with soft jaws. The vise should grip the cylinder mounting bracket (20) as shown in the photograph.

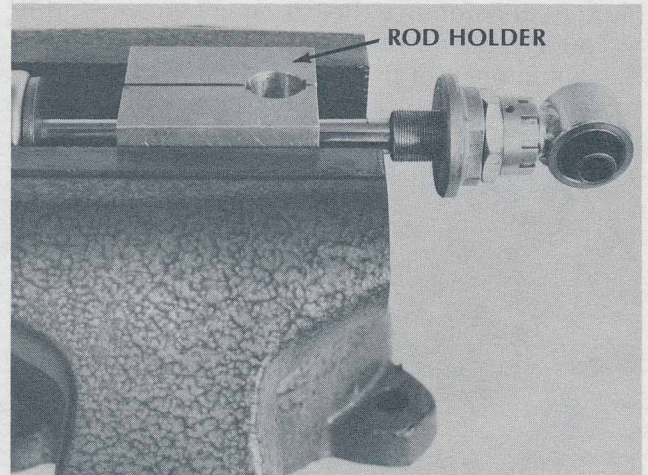


- Loosen the damping adjuster (10) until it contacts the upper mounting bracket (11).
- Loosen the jam nut (8) and thread it up against the damping adjuster (10).
Gerard Rouquette
- Loosen the spring adjuster (7) and thread it up against the jam nut (8).

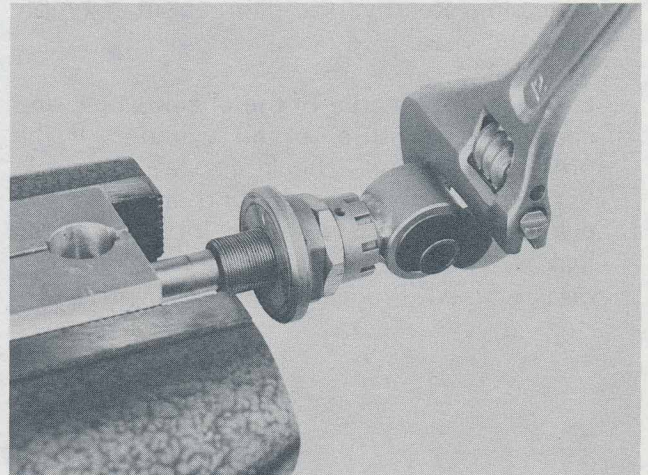


- Compress the spring (2) and remove both spring retainers (6).
- Remove the spring (2), spring guide (13), and base washer (14).
- Remove the damper subassembly from the vise. Clean all dirt and oil from the rod holder.
- Place the shock rod (22) in the rod holder and secure the rod holder in the vise. The rod holder must firmly grip the rod.

CAUTION: Do not slide the rod holder over the shock rod. The rod must not be scratched, nicked, or damaged in any way. Any damage to the rod could lead to a seal leak.



- Place a crescent wrench on the upper mounting bracket (11) as shown in the photograph. The flats of the wrench must rest against the eye of the bracket.



- Steady the wrench with your free hand and remove the upper mounting bracket (11) from the shock rod (22).

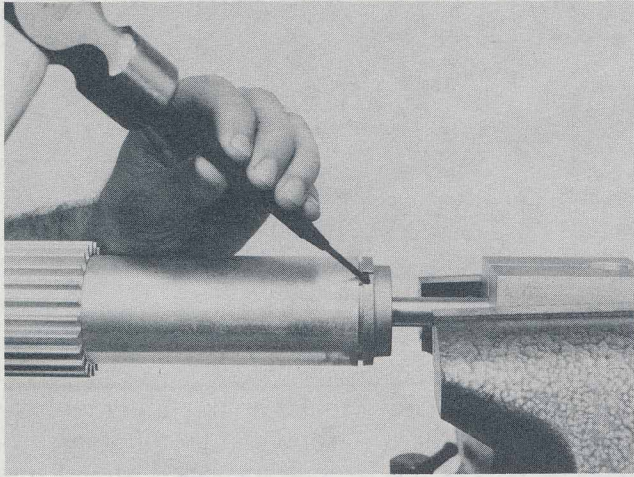
CAUTION: The bracket is secured to the shock rod with Loctite. Be sure the rod does not rotate in the rod holder.

- Remove the bump stopper washer (4), the bump stopper cover (5), and the bump stopper (3). The bump stopper and the bump stopper cover might come off as one unit.

13. Remove the push rod (15) from the shock rod (22).

CAUTION: Do not bend the push rod.

14. Carefully remove the case cap (16) with a drift punch. Be sure to drift around the entire circumference of the cap.

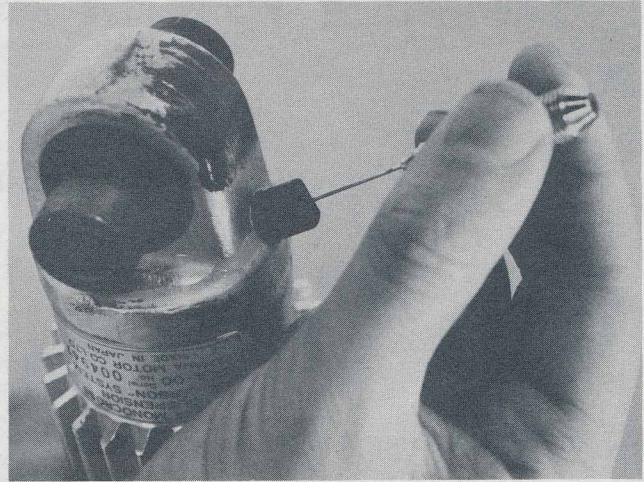


15. Remove the panhead screw (21) from the gas filler plug. Remove the damper subassembly from the vise.

16. Lubricate the needle of the check gauge and check the pressure in the cylinder. If the pressure is low, check for a gas leak. Repressurize the system, and immerse the cylinder in water. Note the location of the leak so you can repair it when the shock is disassembled. Proceed with your work.

17. Lubricate the monoshock needle and insert it in the gas filler plug. Bleed **all** the gas from the monoshock.

CAUTION: Direct the cylinder down, away from you, whenever checking or bleeding the gas.

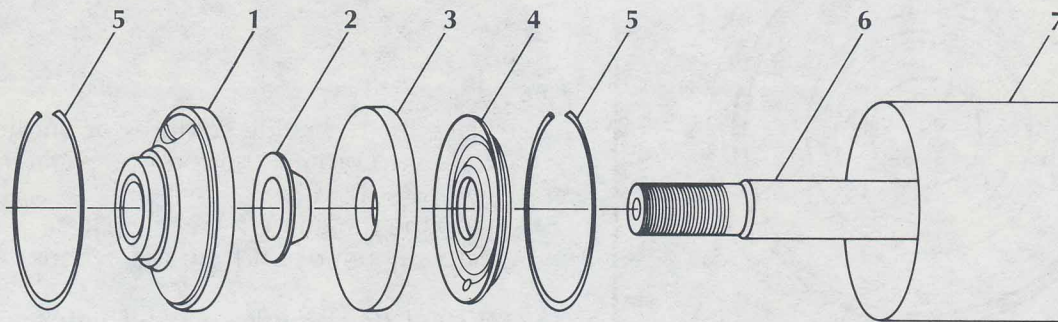


18. When the gas has been bled, gently push the shock rod (22) into the cylinder until it bottoms. This will help bleed any remaining gas. Keep the needle in the plug until instructed to remove it.

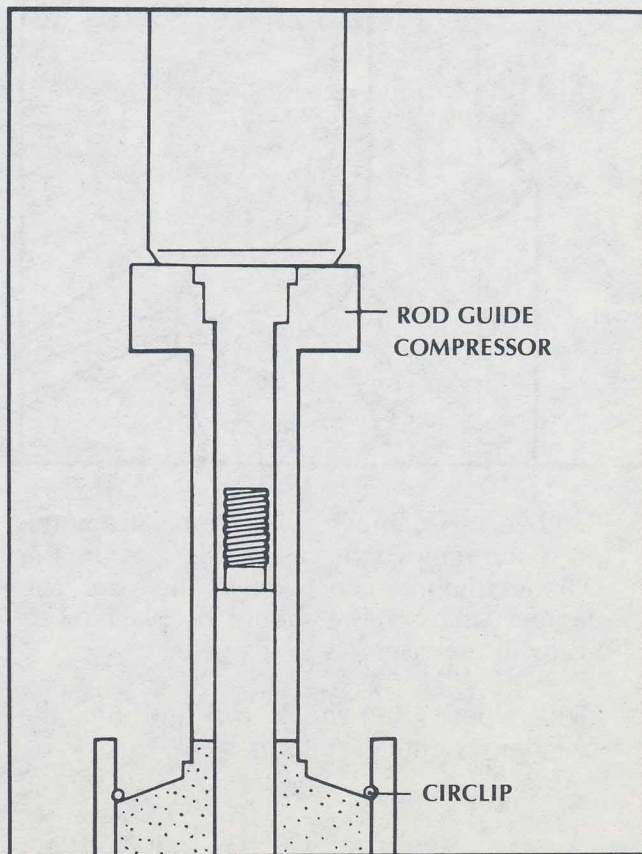
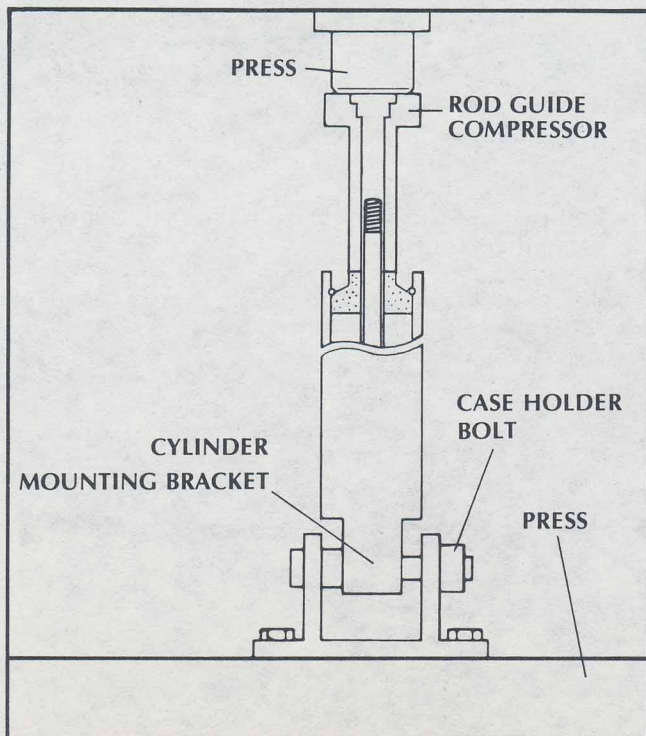
REMOVING THE ROD GUIDE AND RELATED PARTS

ROD GUIDE AND RELATED PARTS

1. rod guide
2. rod seal
3. static seal
4. seal retainer
5. circlip (2)
6. shock rod
7. cylinder

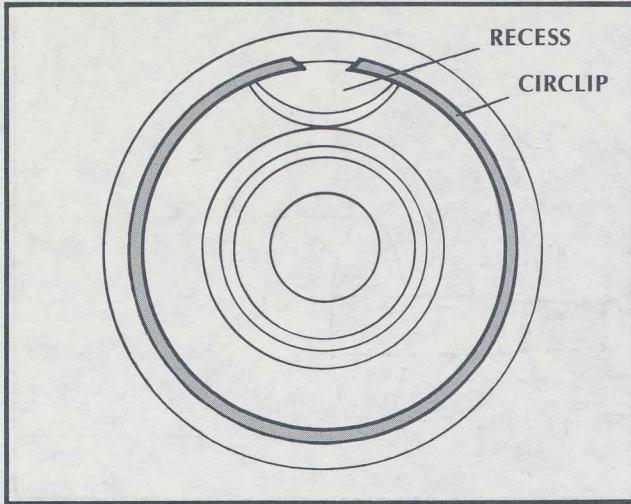


1. Place the case holder in the press.
2. Install the rod guide compressor on the damper subassembly, and secure the subassembly in the case holder. The case holder bolt must pass through the cylinder mounting bracket as shown in the illustration. Carefully align the damper subassembly in the press.
3. Slowly apply pressure to the rod guide compressor. Compress the rod guide (1) until the upper circlip (5) is exposed. Use a minimal amount of pressure. Excessive pressure could damage some of the internal parts.

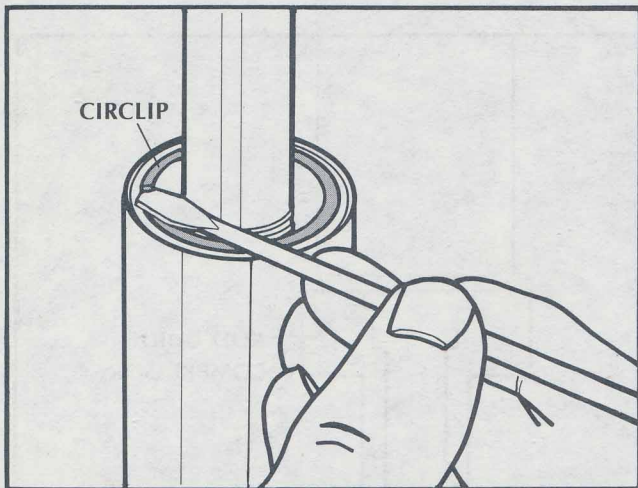


4. Rotate the circlip in the groove until the circlip ends are in the recess of the rod guide as shown in the illustration.

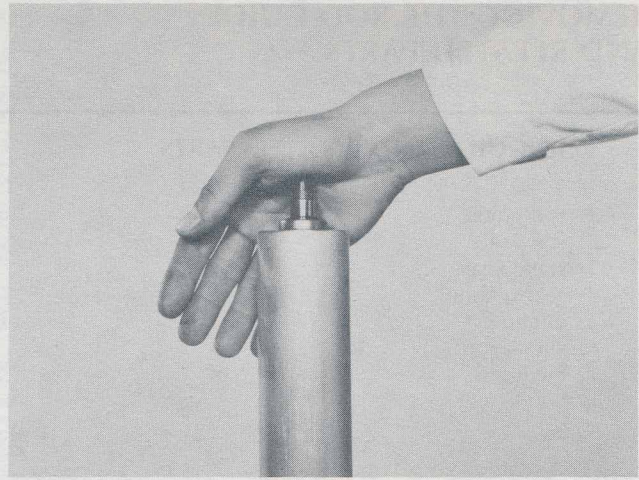
CAUTION: If the circlip cannot be rotated within the groove, the damper subassembly may be off center. Remove the damper subassembly and carefully realign it in the press.



5. Using a scribe or two small screwdrivers, carefully remove the upper circlip (5) from the cylinder. Be careful not to scratch the cylinder walls.



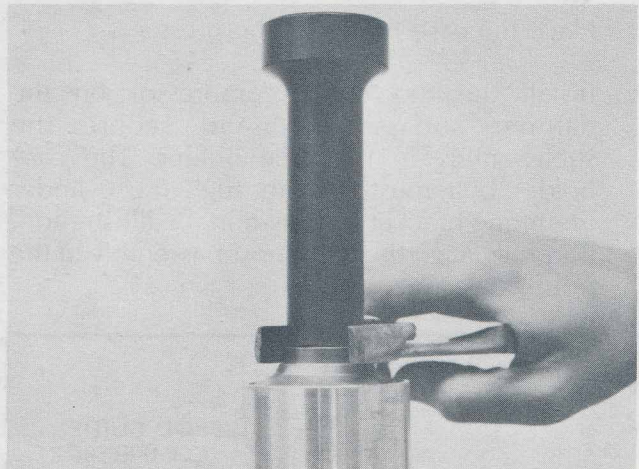
6. Remove the damper subassembly from the press and remove the case holder. Secure the cylinder mounting bracket in the vise. The damper subassembly should be placed vertically in the vise.
7. Gently push the shock rod (6) into the cylinder (7) until it bottoms.



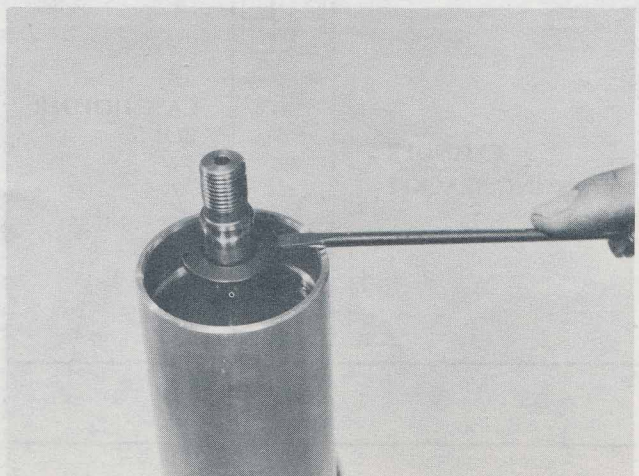
8. Place the rod guide compressor on the shock rod (6) to protect the rod from scratches.
9. Grip the rod guide (1) with a pair of pliers and carefully remove it from the cylinder (7).

Lee Waldie Craig Scott Chris Koira

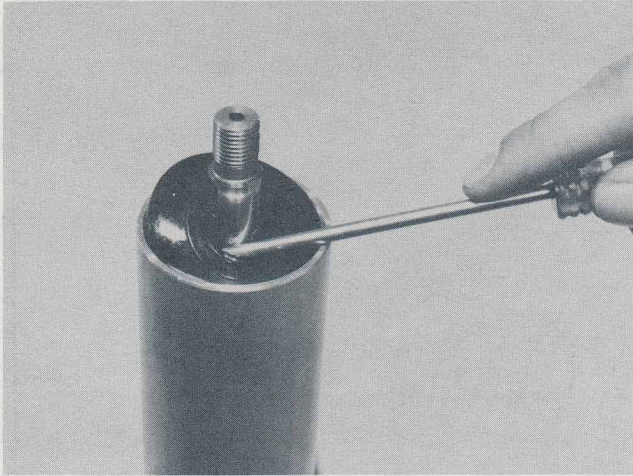
NOTE: Oil the cylinder walls if you have difficulty removing the rod guide.



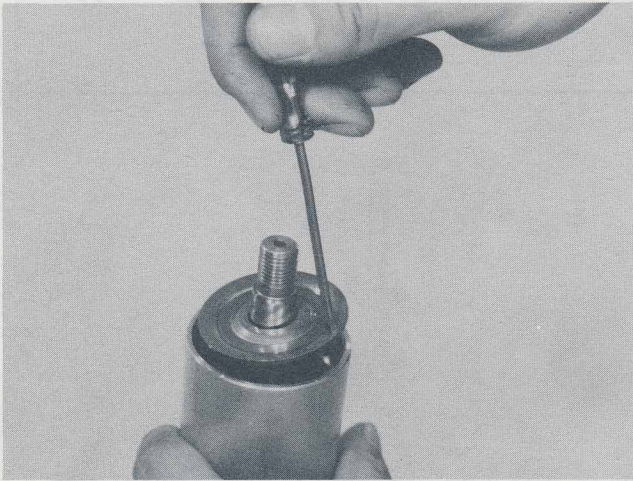
10. Remove the rod seal (2) from the cylinder with a small screwdriver.



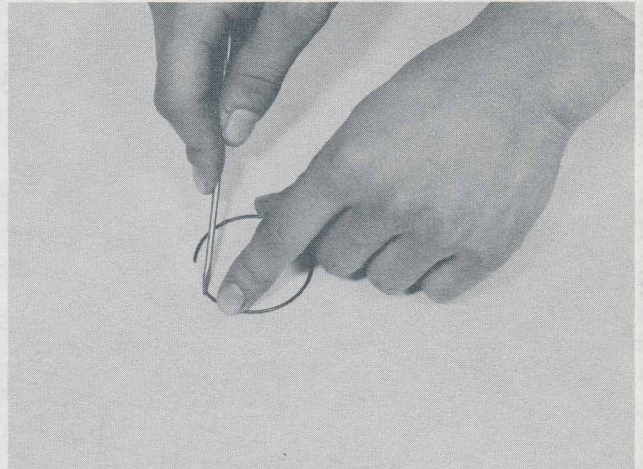
11. Remove the static seal (3) from the cylinder with a small screwdriver or a scribe.



12. Remove the seal retainer (4) from the cylinder.



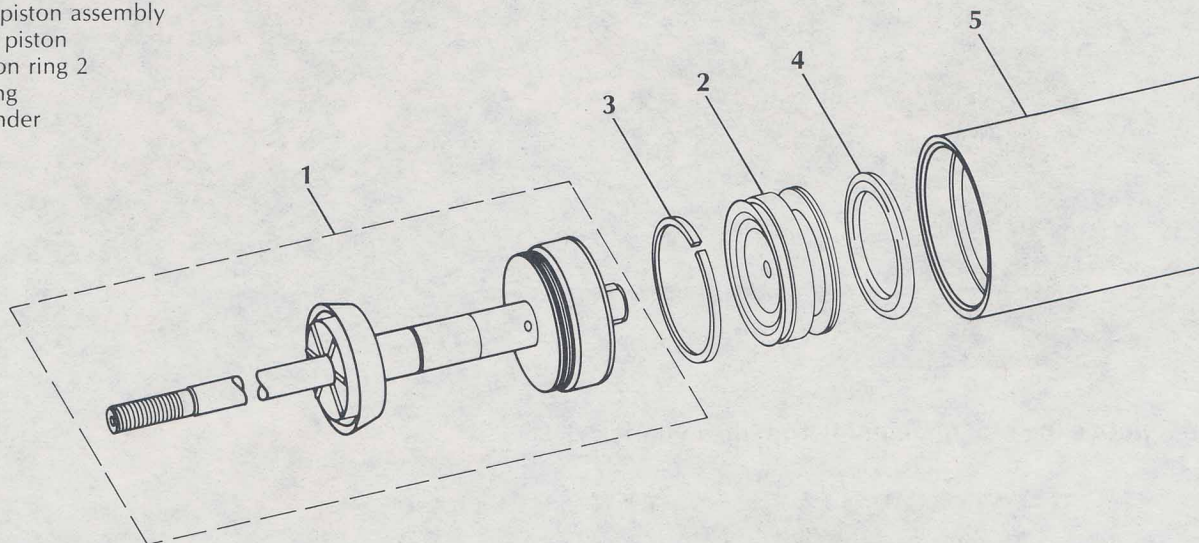
13. Remove the lower circlip (5) from the cylinder. Use a screwdriver and your forefinger as shown in the photograph.



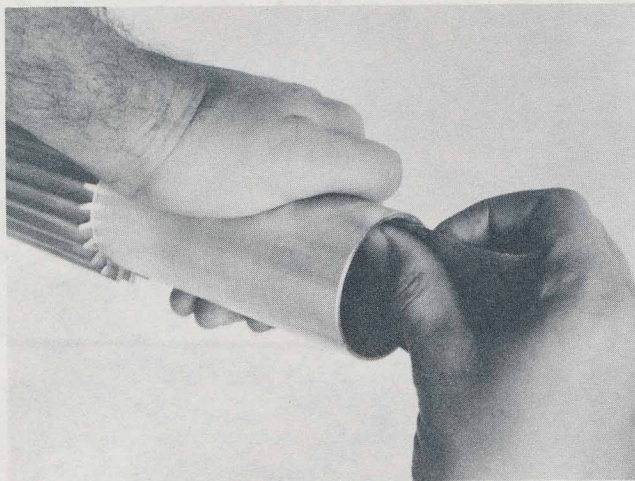
REMOVING THE ROD-PISTON ASSEMBLY AND FREE PISTON

CYLINDER

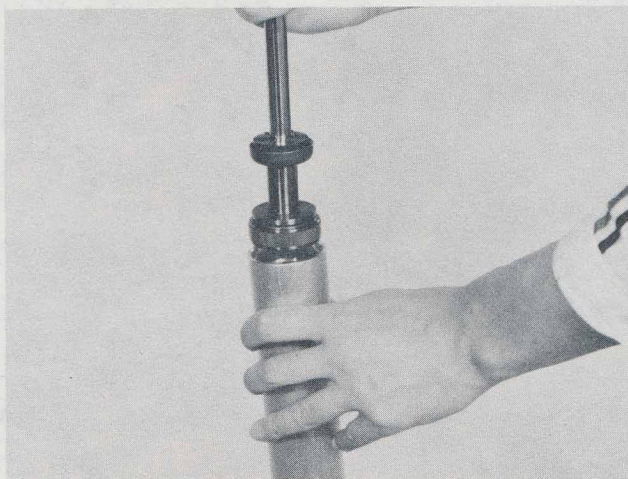
1. rod-piston assembly
2. free piston
3. piston ring 2
4. o-ring
5. cylinder



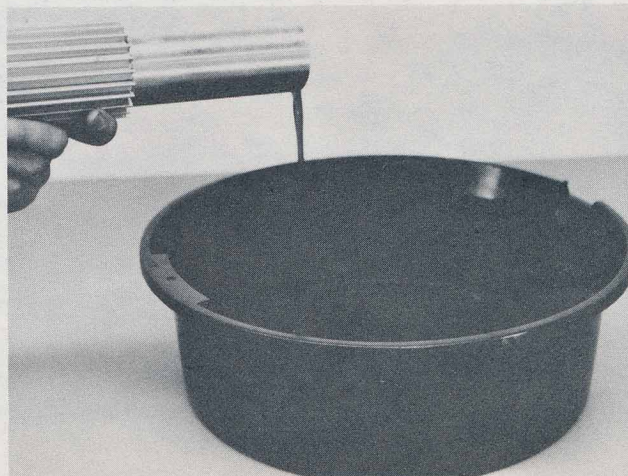
1. Drain some of the oil from the cylinder. Carefully deburr the circlip grooves in the cylinder (5) with 1200 grit sandpaper. This will prevent damage to the rod assembly (1) and the free piston (2) when they are removed.



2. Slowly remove the rod-piston assembly (1) from the cylinder (5) and place it aside.

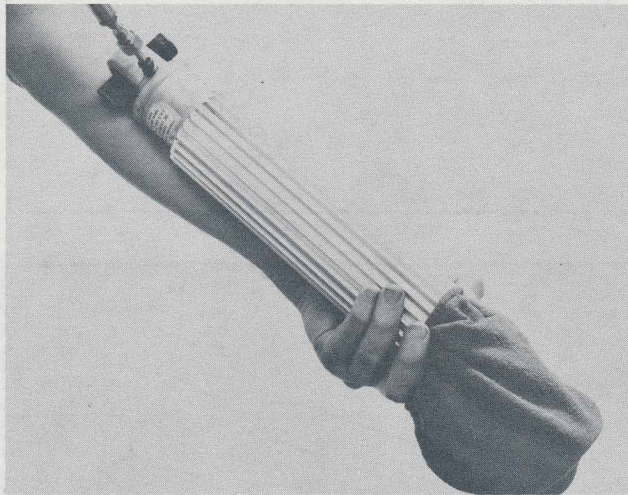


3. Drain the remaining oil from the cylinder.



4. Remove the free piston (2) from the cylinder. Cover the opening of the cylinder with a cloth and direct the opening downward. Blow a few short bursts of compressed air through the monoshock needle into the cylinder. The air will blow the free piston into the cloth. The cloth will catch the free piston and prevent damage to the piston.

WARNING: Do not use nitrogen or any other highly compressed gas to perform this procedure. Compressed air will be sufficient. Be sure to follow the instructions to the letter.



5. Remove piston ring 2 (3) and the O-ring (4) from the free piston. Pinch the O-ring until there is a loop for you to grasp.



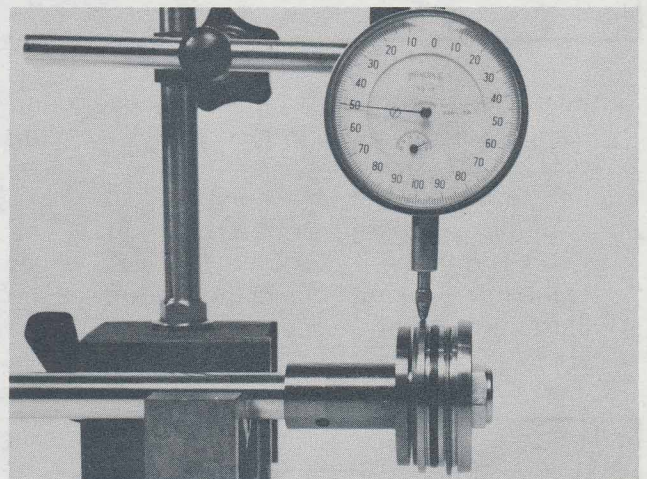
6. Remove the monoshock needle from the gas filler plug.

DISASSEMBLING THE ROD-PISTON ASSEMBLY

1. Measure the piston runout at the location shown in the photograph. Support both ends of the rod in V-blocks placed on a surface plate. Place the dial gauge at the piston and rotate the rod. If piston runout exceeds the maximum specification, replace the rod.

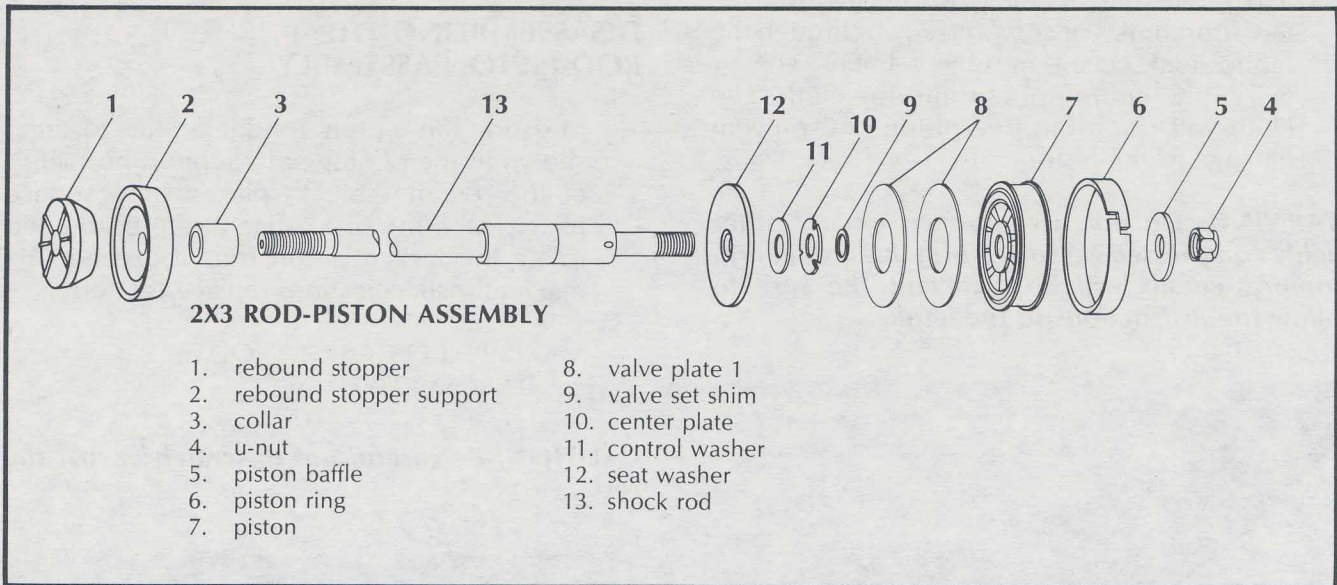
MAXIMUM PISTON RUNOUT:
0.08mm (0.0031 in.)

CAUTION: Be careful not to scratch or mar the rod.

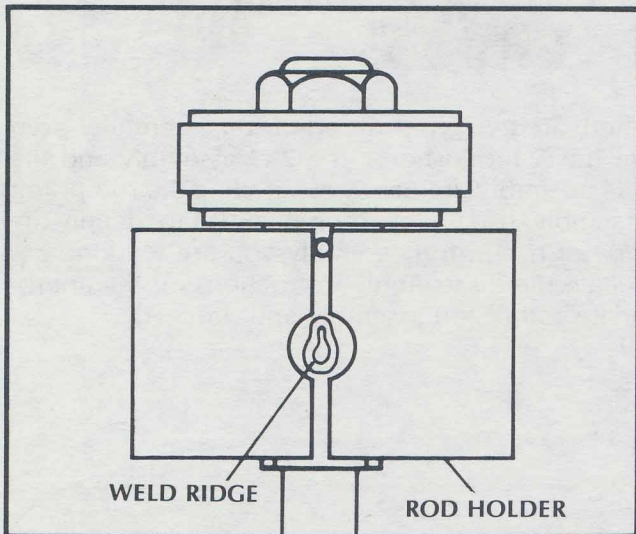
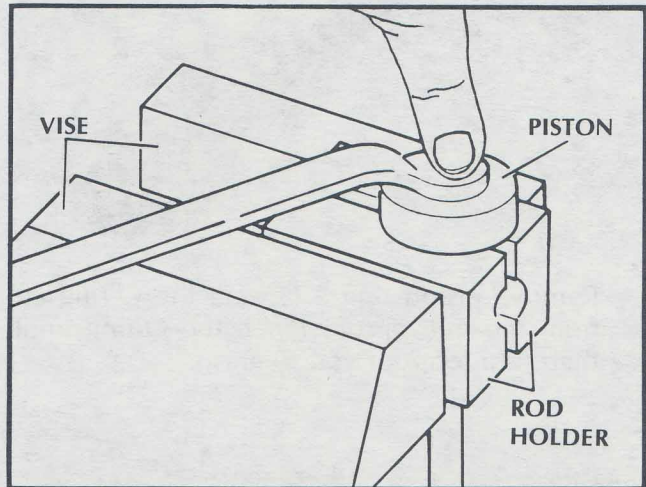


There are two types of rod-piston assemblies used on the X monoshock: the 2X3 assembly and the 2X4 assembly. Before disassembling the rod-piston assembly, use the chart on page 1-3 to identify the type of rod-piston assembly you are working on. Locate the disassembly instructions for the appropriate rod-piston assembly and proceed.

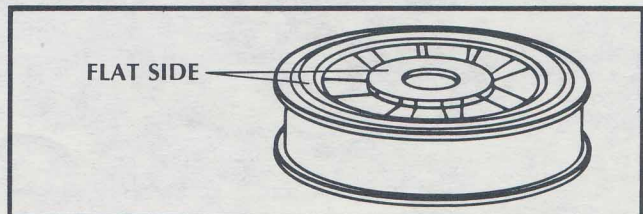
A. Disassembling the 2X3 Rod-Piston Assembly



1. Remove the rebound stopper (1), the rebound stopper support (2), and the collar (3) from the shock rod (13).
2. Carefully place the stepped portion of the shock rod in the rod holder. The weld ridges of the rod must **not** contact the holder; see the illustration below. Secure the holder in the vise.



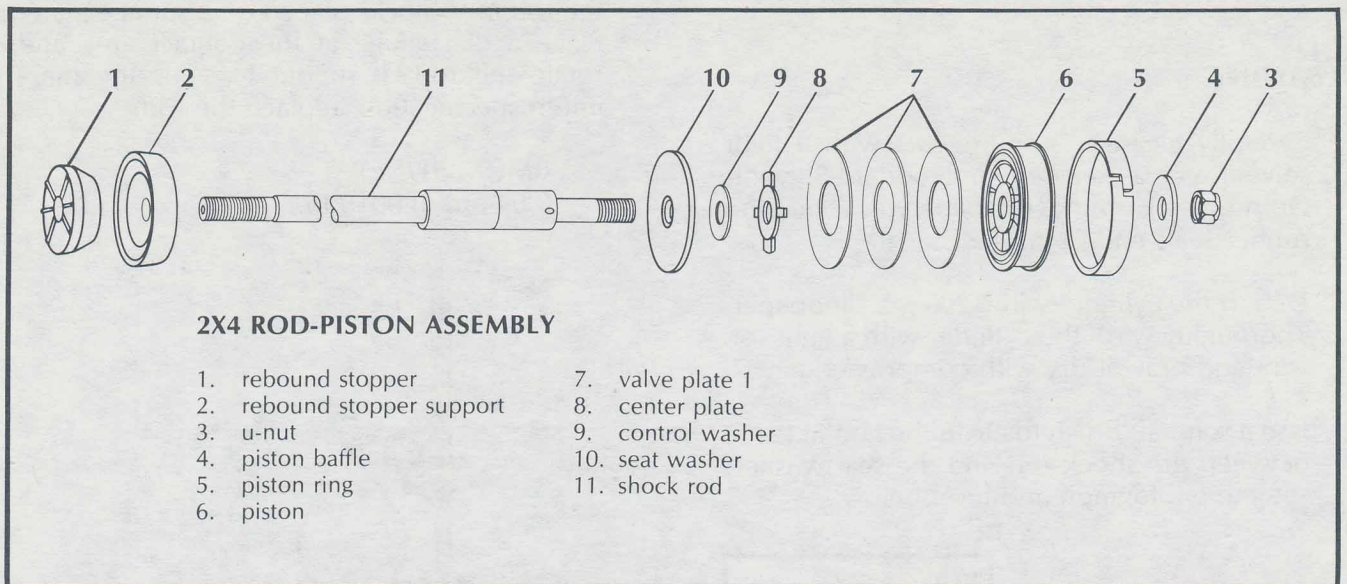
4. Remove the piston baffle (5) and the piston (7) from the rod, and place them aside. When placing the piston on the bench, be sure that the flat side faces upward.



3. Remove the piston ring (6) from the piston, and remove the U-nut (4).

5. Remove both pieces of valve plate 1 (8), the valve set shim (9), the center plate (10), the control washer (11), and the seat washer (12).

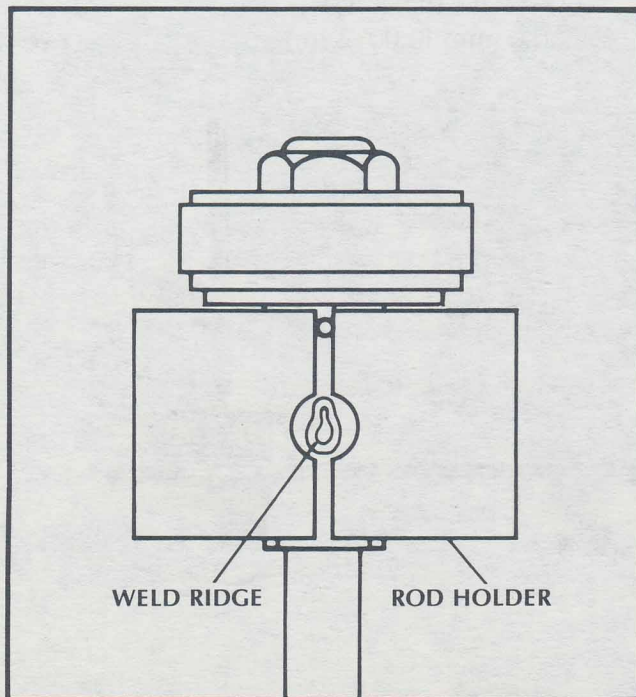
B. Disassembling the 2X4 Rod-Piston Assembly



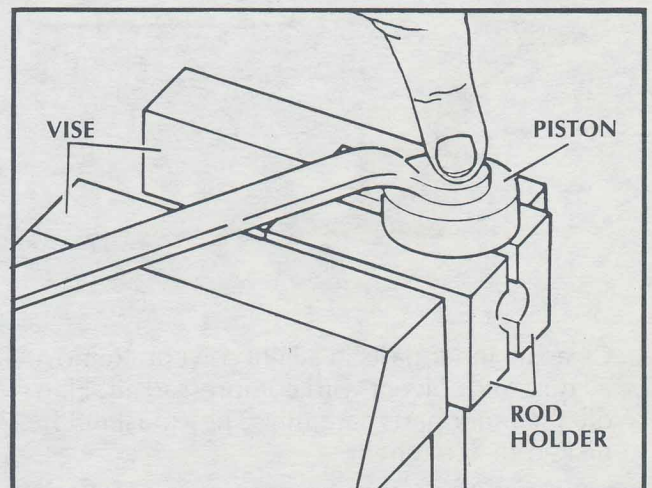
1. Remove the rebound stopper (1) and the rebound stopper support (2) from the shock rod (11).

Lee Waldie Craig Scott Chris Koira

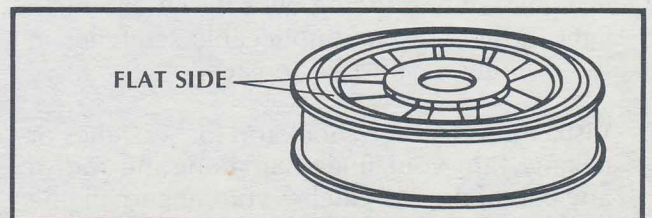
2. Carefully place the stepped portion of the shock rod in the rod holder. The weld ridges of the rod must **not** contact the holder; see the illustration below. Secure the holder in the vise.



3. Remove the piston ring (5) from the piston (6), and remove the U-nut (3).



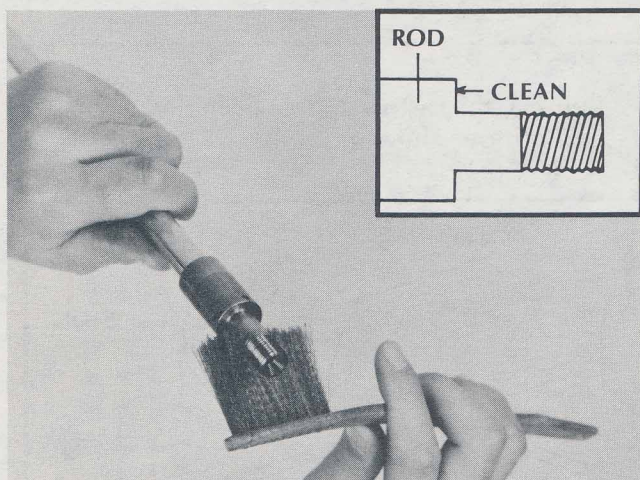
4. Remove the piston baffle (4) and the piston (6) from the rod, and place them aside. When placing the piston on the bench, be sure that the flat side faces upward.



- Remove all three pieces of valve plate 1 (7), the center plate (8), the control washer (9), and the seat washer (10).

CLEANING

- Carefully clean all components with a light solvent such as kerosene or Stoddard Solvent. Do not use gasoline. Gasoline will attack the rubber seals and O-rings.
- Deburr the cylinder with 1200 grit sandpaper. Thoroughly wash the cylinder with a light solvent and blow it dry with compressed air.
- Use a soft hair brush to clean the contact area between the shock rod and the seat washer; see the photograph and inset below.



- Clean all inner parts in a light solvent. Remove all dust and solvent with compressed air. Handle the inner parts carefully. They must not be nicked or scratched.

Mark Boddy

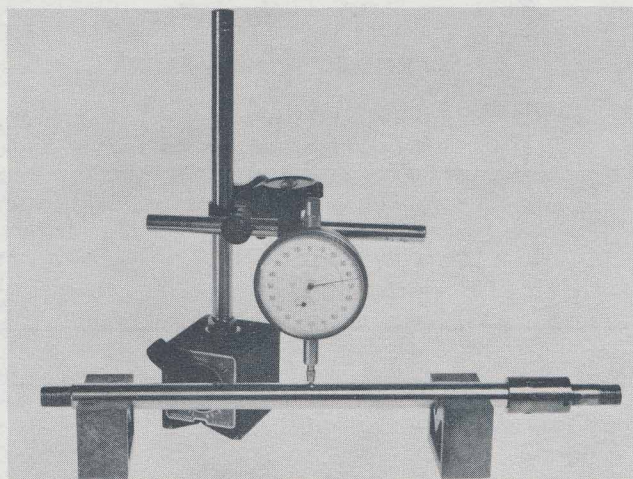
- Place all the cleaned parts on a tray to keep them dust free.

INSPECTION

- Visually inspect the cylinder. Sight down the cylinder while standing beneath an overhead light. If there are any noticeable scratches in the cylinder, it must be replaced.
- Visually inspect the shock rod for scratches or flaking. Run your fingernail along the rod. If any part of the rod catches your fingernail, the rod must be replaced.

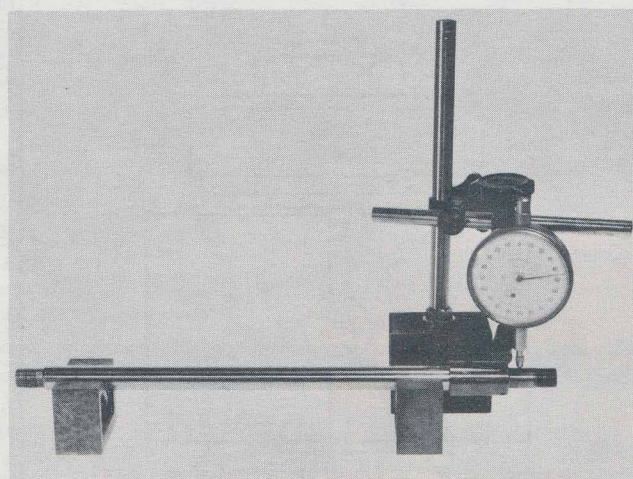
- Check the runout at the contact area between the rod and the rod seal. Support both ends of the rod in V-blocks placed on a surface plate. Place a dial gauge at the contact area and rotate the rod. If runout exceeds the maximum specification, replace the rod.

MAXIMUM RUNOUT:
0.04mm (0.0016 in.)

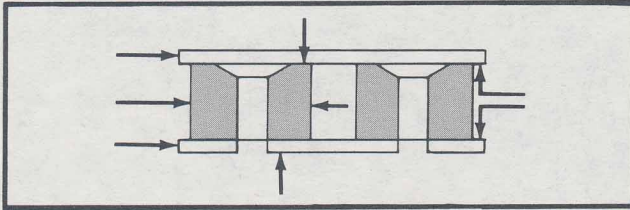


- Check the runout at the contact area between the shock rod and the piston. If runout exceeds maximum specifications, replace the rod.

MAXIMUM RUNOUT:
0.03mm (0.0012 in.)



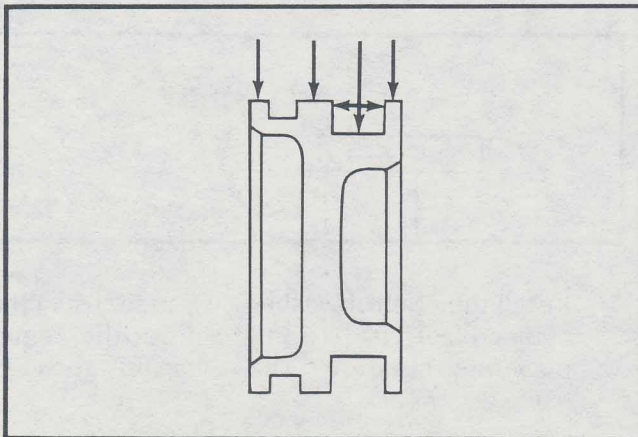
5. Inspect the piston. Pay particular attention to the outer surfaces and to the piston-to-valve-plate-1 contact area (the flat side). If the piston has any scratches that can catch your fingernail, replace the piston and all the valve parts.



6. Inspect the valve parts. If there are any high spots or scratches that can catch your fingernail, replace the piston and all the valve parts.

CAUTION: If any valve parts must be replaced or if the piston must be replaced, replace all the valve parts and the piston. The piston and valve parts must be replaced as an assembly.

7. Inspect the free piston. Pay particular attention to the O-ring groove and to the outer surfaces of the free piston. If the free piston has any scratches that can catch your fingernail, replace the free piston.



ASSEMBLY

Before installing any part on the monoshock, be sure that it is clean and free of all dust. Always blow the part clean with compressed air prior to installation.

Whenever reassembling a shock, always replace these parts with new ones.

PISTON

Piston Ring
U-nut

FREE PISTON

O-ring

ROD GUIDE

Static Seal
Rod Seal
Rebound Stopper

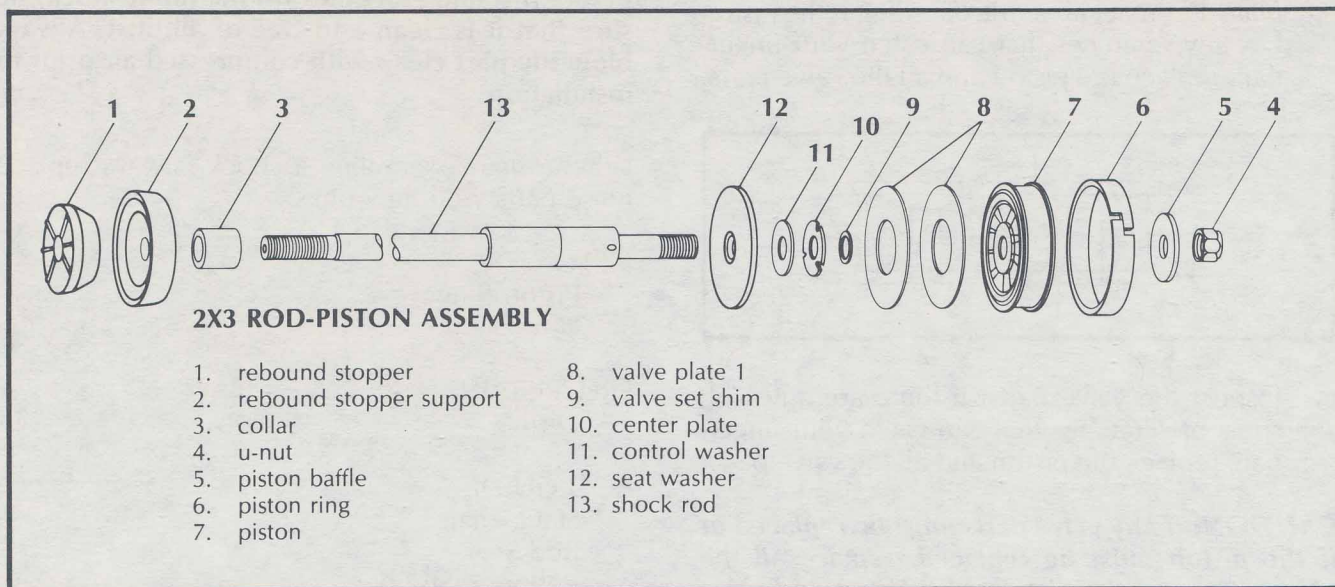
REPLACE ALL CIRCLIPS

ASSEMBLING THE ROD-PISTON ASSEMBLY

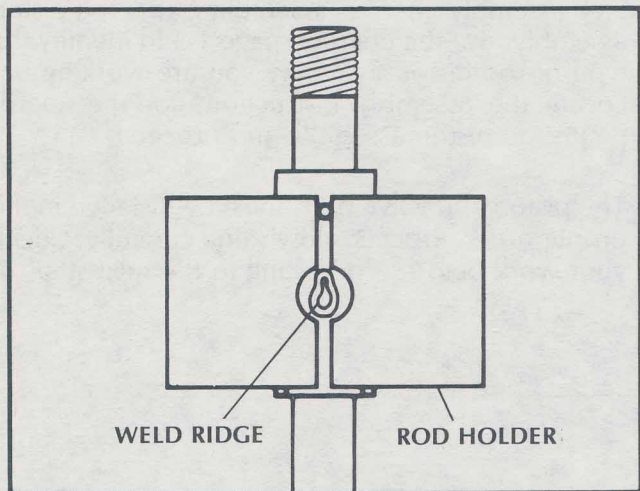
There are two types of rod-piston assemblies used on the X monoshock: the 2X3 assembly and the 2X4 assembly. Before assembling the rod-piston assembly, use the chart on page 1-3 to identify the type of rod-piston assembly you are working on. Locate the assembly instructions for the appropriate rod-piston assembly and proceed.

The piston and valve parts must be installed in the proper order. Proceed slowly and carefully. Check your work before proceeding to the next step.

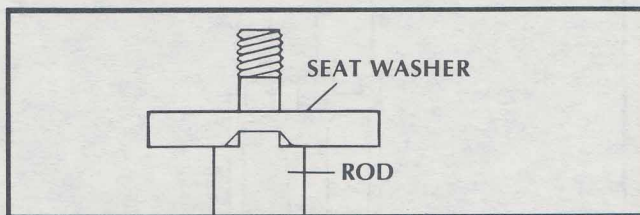
A. Assembling the 2X3 Rod-Piston Assembly



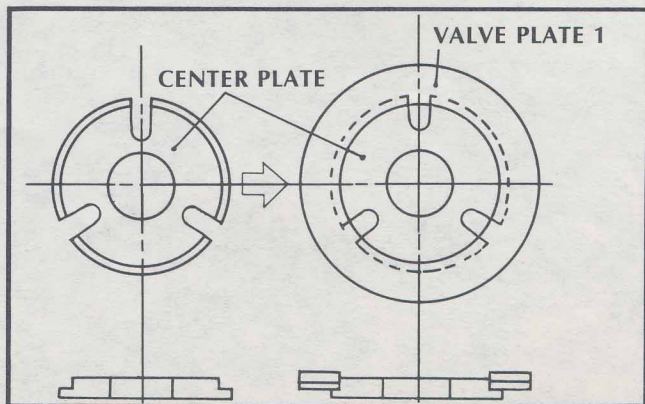
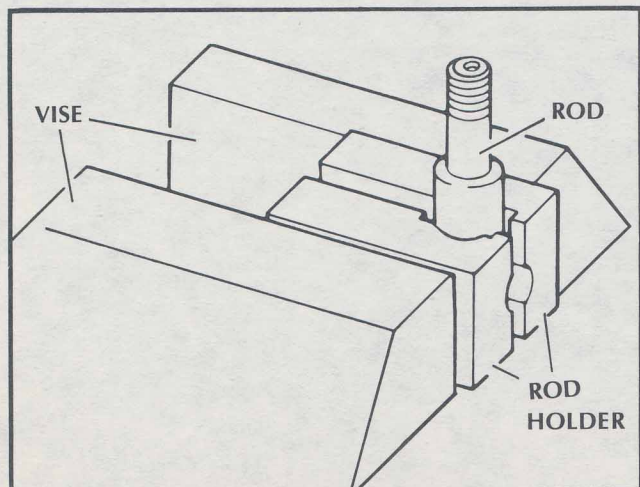
- Place the stepped portion of the shock rod (13) in the rod holder, and secure the holder in the vise. Carefully locate the shock rod in the rod holder so that the weld ridges of the rod do not contact the holder.

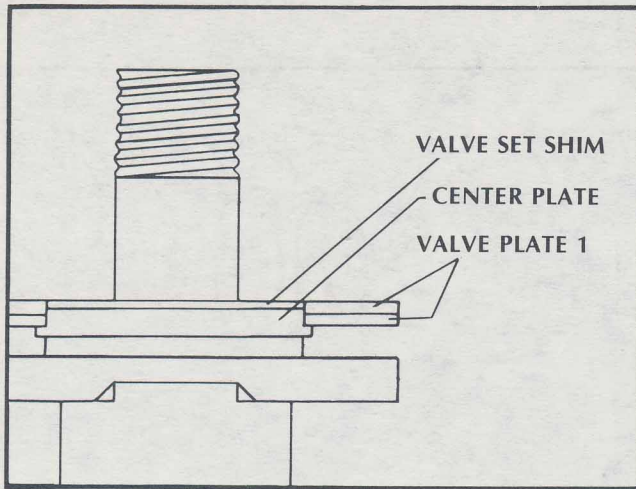


- Carefully clean the entire rod with compressed air.
- Install the seat washer (12) on the shock rod (13). The chamfered side of the seat washer (12) must face the stepped portion of the rod as shown in the illustration.



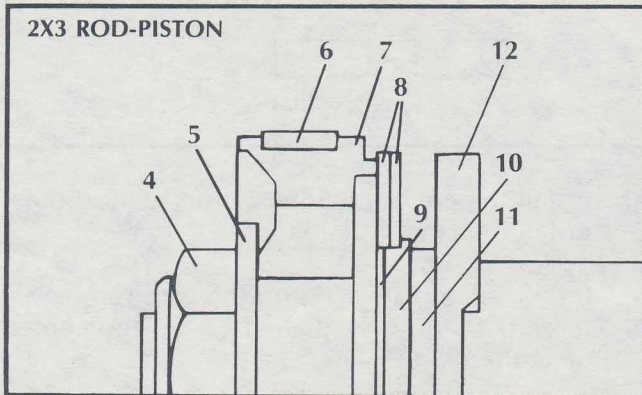
- Install the control washer (11); then install the center plate (10). The flat side of the center plate must face down and rest against the control washer (11).
- Install valve plate 1 (8) and center both pieces on the center plate (10). Install the valve set shim (9).





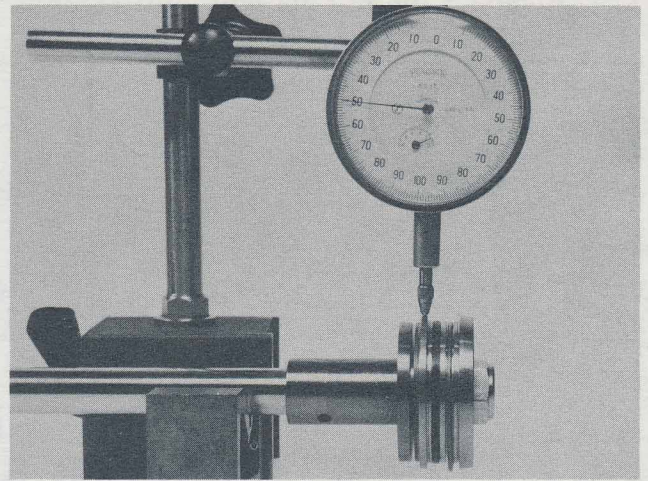
6. Clean the piston (7) and install it on the shock rod. The flat side of the piston must face down and rest on valve plate 1 (8).
7. Install the piston baffle (5).
8. Check valve plate 1 (8). When both pieces are properly centered, install a new U-nut (4). Use a small amount of Loctite, and torque the U-nut to specification.

TIGHTENING TORQUE:
375 kg-cm (27 ft-lbs)



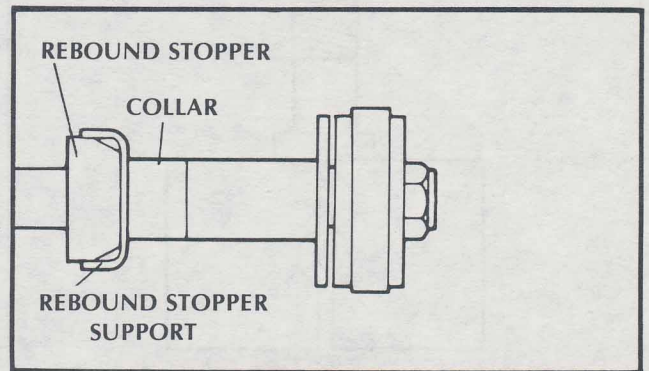
9. Remove the rod-piston assembly from the vise, and check for piston runout. Support the rod on V-blocks placed on a surface plate as shown in the photograph. If the runout exceeds specification, replace the rod.

MAXIMUM RUNOUT:
0.08mm (0.0031 in.)

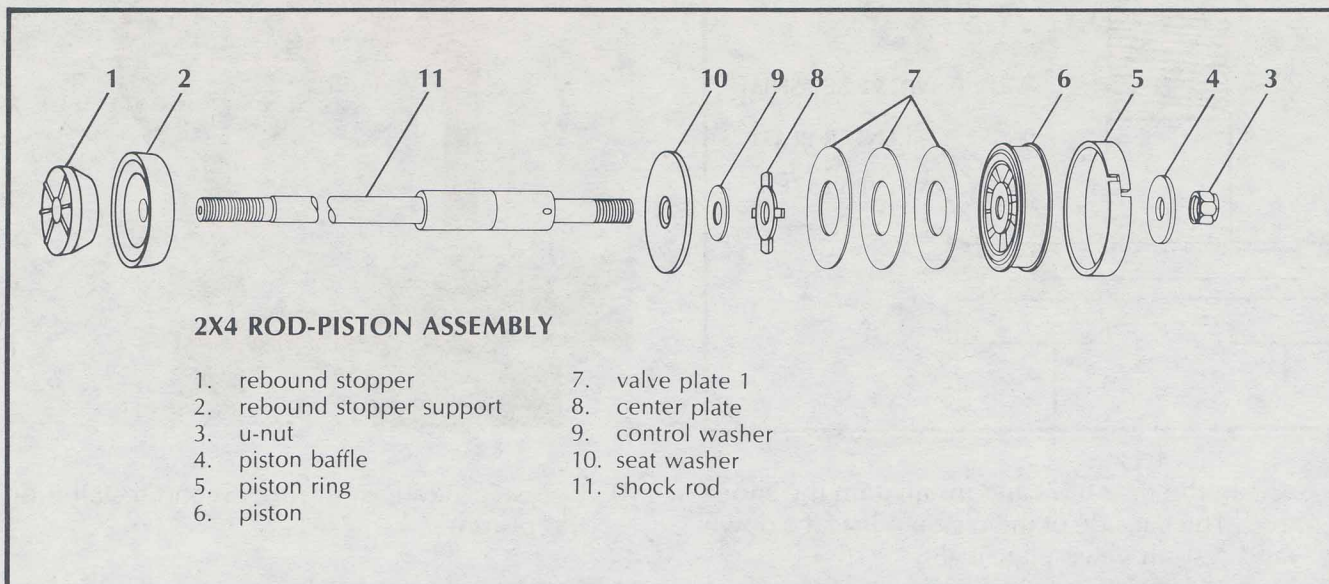


10. Grease a new piston ring (6) and install it on the piston.
11. Fit the collar (3) in place against the stepped portion of the rod.
12. Install the rebound stopper support (2) and seat it against the collar (3).
13. Install a new rebound stopper (1) and seat it against the rebound stopper support (2).

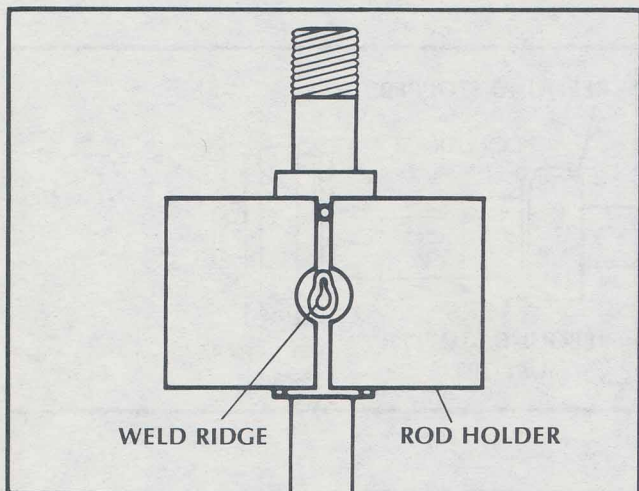
Lee Waldie Craig Scott Chris Koira



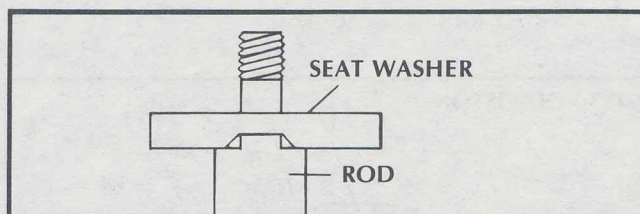
B. Assembling the 2X4 Rod-Piston Assembly



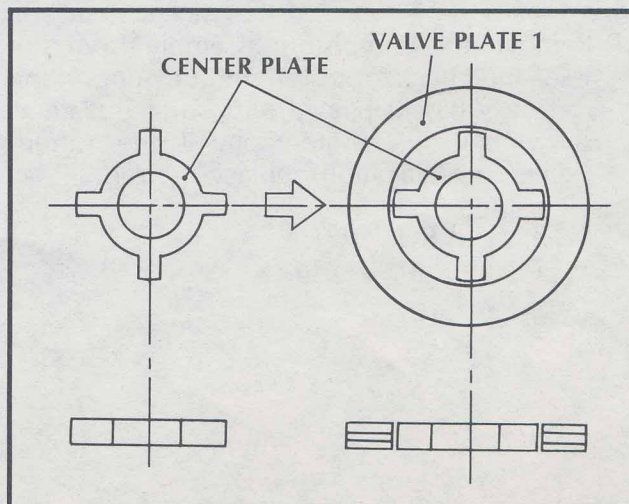
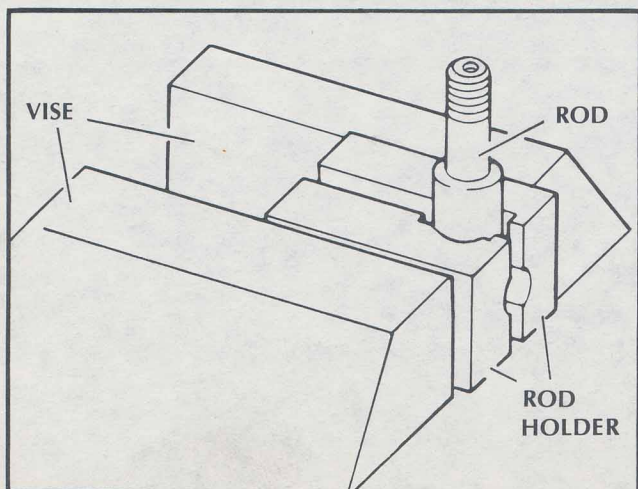
- Place the stepped portion of the shock rod (11) in the rod holder and secure the holder in the vise. Carefully locate the shock rod in the rod holder so that the weld ridges of the rod do not contact the holder.

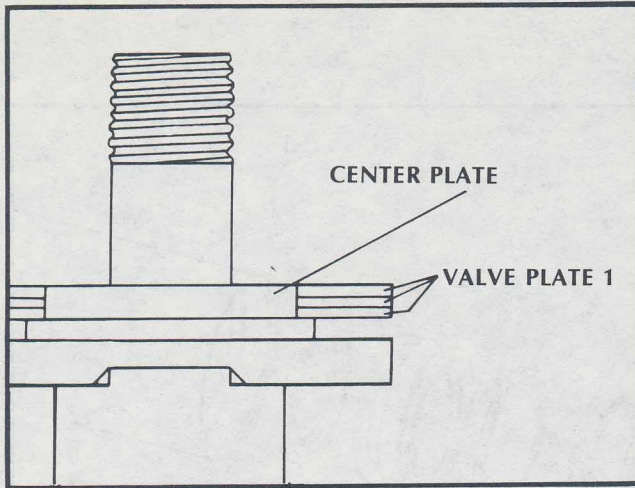


- Clean the entire rod with compressed air.
- Install the seat washer (10) on the shock rod (11). The chamfered side of the seat washer (10) must face the stepped portion of the rod as shown in the illustration.



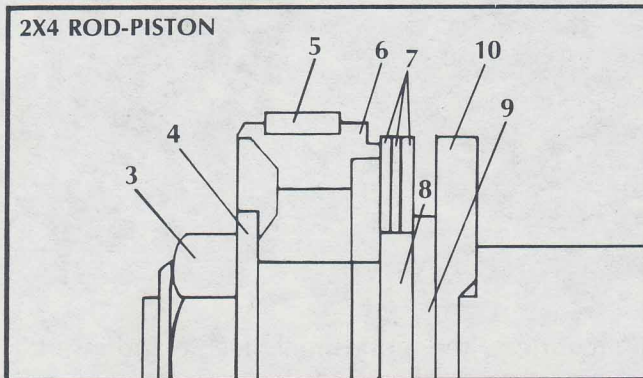
- Install the control washer (9) on the rod then install the center plate (8).
- Install valve plate 1 (7) on the rod. Center all three parts of valve plate 1 (7) on the center plate (8).





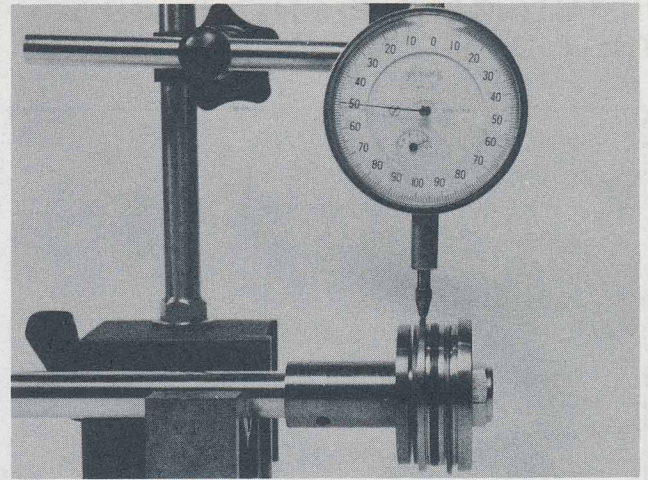
6. Clean the piston (6) and install it on the shock rod. The flat side of the piston must face down and rest on valve plate 1 (7).
7. Install the piston baffle (4).
8. Check valve plate 1 (7). When all three pieces are properly centered, install a new U-nut (3). Use a small amount of Loctite, and torque the U-nut to specification.

TIGHTENING TORQUE:
375 kg-cm (27 ft-lbs)

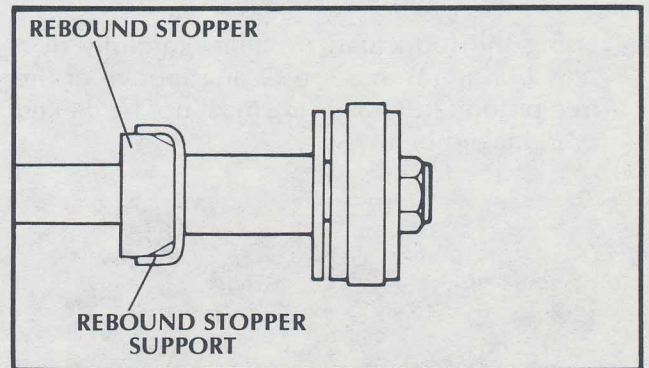


9. Remove the rod-piston assembly from the vise and check for piston runout. Support the rod on V-blocks placed on a surface plate as shown in the photograph. If the runout exceeds the specification, replace the rod.

MAXIMUM RUNOUT:
0.08mm (0.0031 in.)



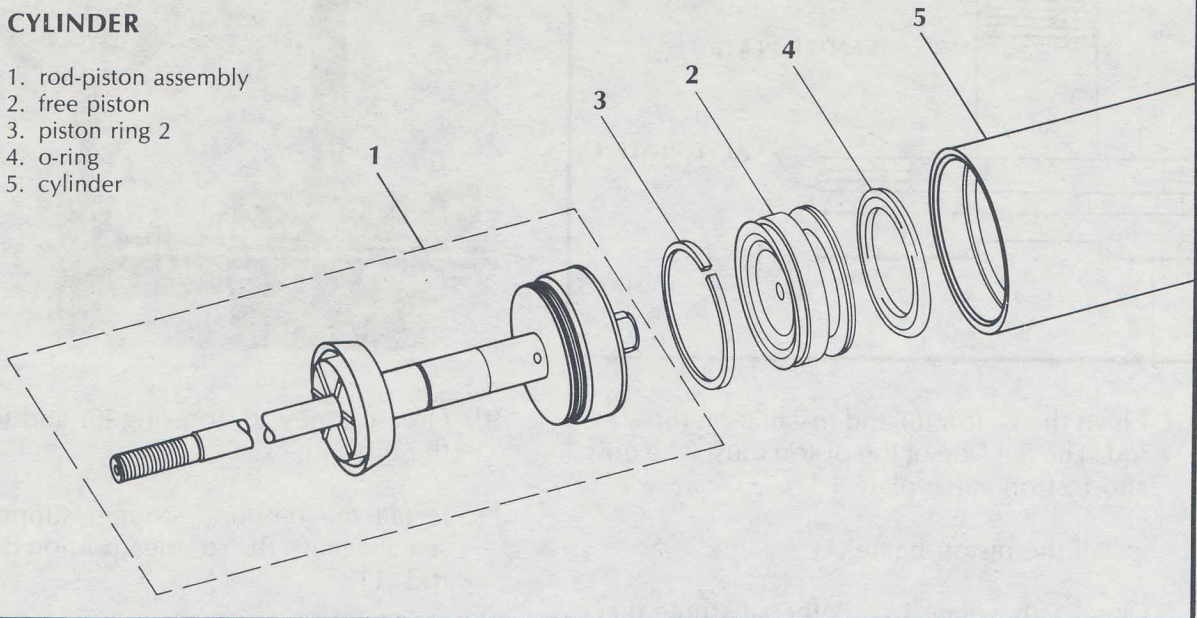
10. Grease a new piston ring (5) and install it on the piston.
11. Install the rebound stopper support (2) and seat it against the stepped portion of the shock rod (11).
12. Install a new rebound stopper (1) and seat it against the rebound stopper support (2).



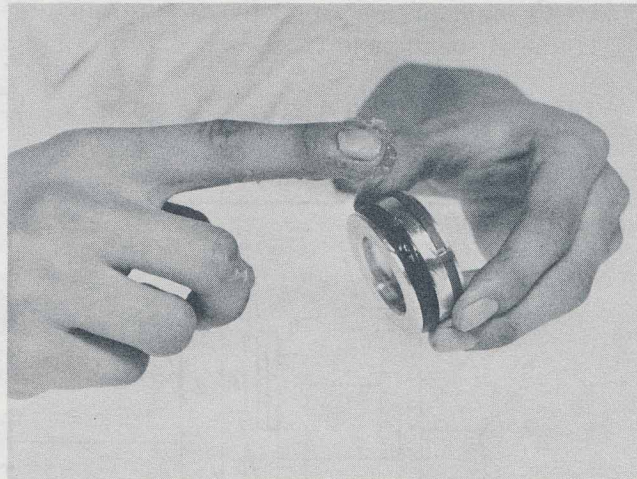
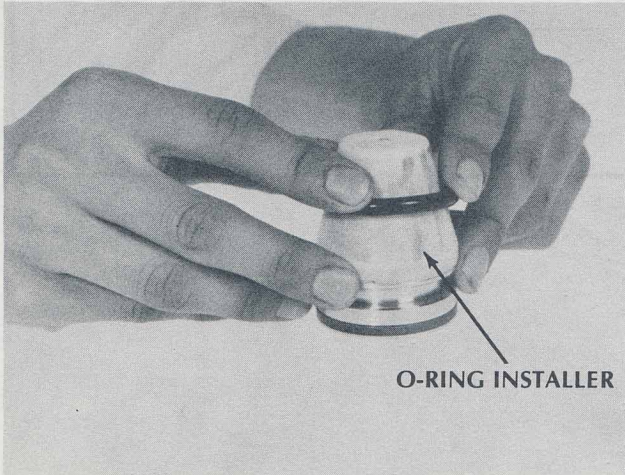
INSTALLING THE FREE PISTON AND THE ROD-PISTON ASSEMBLY

CYLINDER

1. rod-piston assembly
2. free piston
3. piston ring 2
4. o-ring
5. cylinder



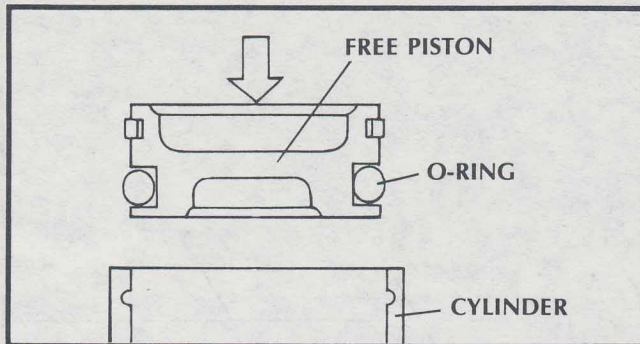
1. Grease the O-ring groove in the free piston (2), and grease the O-ring installer.
2. Using the lubricated installer, carefully fit a new O-ring (4) into the O-ring groove of the free piston (2). The O-ring must not be nicked or damaged in any way.



3. Fit piston ring 2 (3) onto the free piston (2). Apply grease to the entire free piston.

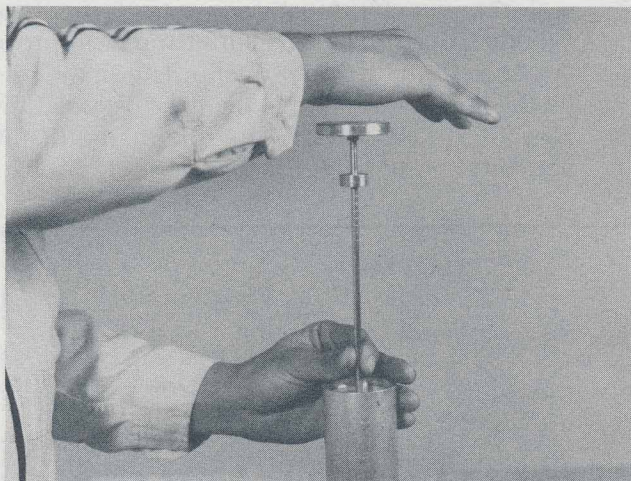
4. Lubricate the monoshock needle and insert it into the gas filler plug.
5. Oil the cylinder walls and secure the cylinder mounting bracket in a vise with soft jaws. The cylinder should be placed vertically in the vise.

- Carefully place the free piston (2) in the cylinder (5) and gently push the free piston down into the cylinder. The free piston must be installed with the O-ring side facing down into the cylinder.



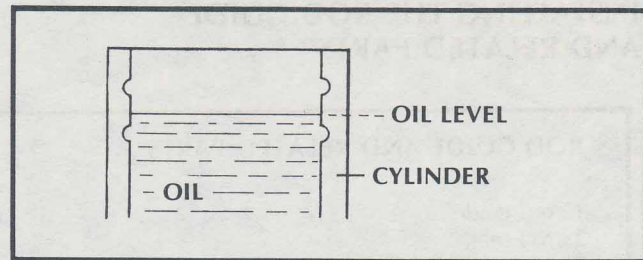
- Set the collar of the free piston stopper at 100mm and gently push the free piston 100mm into the cylinder as shown in the photograph.

NOTE: Proper free piston installation is essential if you are to achieve the maximum performance from the monoshock. Be sure that the free piston is correctly located in the cylinder.



- Add oil to the cylinder until the oil level is between the two circlip grooves. Wait a few minutes before proceeding so any air in the oil can rise to the surface.

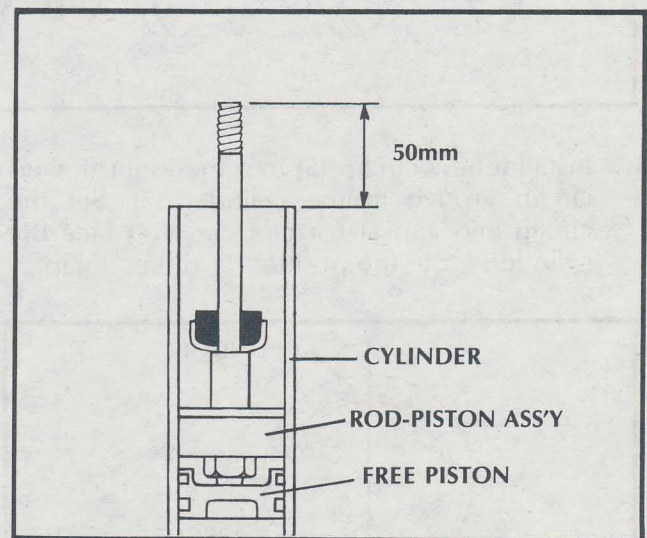
CAUTION: Always pour oil down the cylinder walls. This will help eliminate the possibility of air becoming trapped in the oil.



- Place the rod-piston assembly (1) in the cylinder, and slowly push it into the cylinder (5) until 50mm of the rod remain above the cylinder as illustrated. This procedure sets the free piston at the proper depth. Be careful not to scuff the cylinder walls.

CAUTION: Take extra care to perform this operation correctly. If the rod-piston assembly is pushed too far into the cylinder, you will have to disassemble the cylinder and begin again.

Lee Waldie Craig Scott Chris Koira

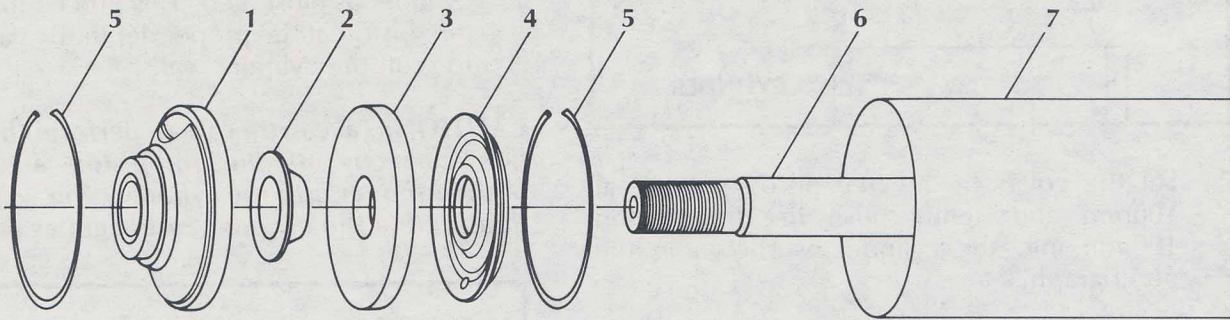


- Hold the rod at this position and remove the monoshock needle from the gas filler plug. This is a very critical operation. It effectively locks the free piston in place. Shock performance will suffer if the free piston is not set at the proper depth in the cylinder.

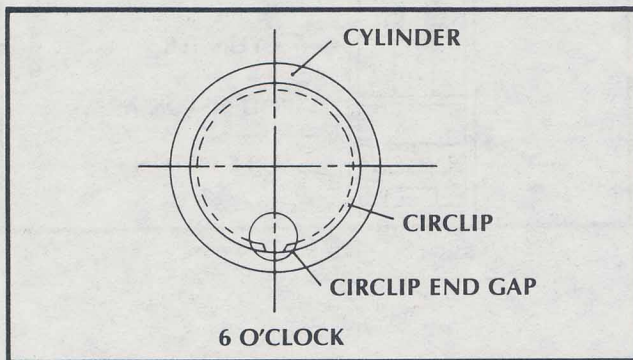
INSTALLING THE ROD GUIDE AND RELATED PARTS

ROD GUIDE AND RELATED PARTS

1. rod guide
2. rod seal
3. static seal
4. seal retainer
5. circlip (2)
6. shock rod
7. cylinder

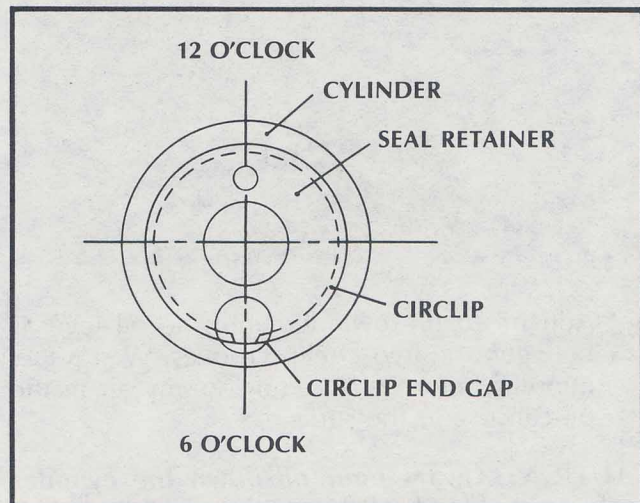


1. Install a new circlip (5) into the inner (lower) circlip groove in the cylinder (7). Set the circlip end gap at 6 o'clock as you face the cylinder. Note the position of the end gap.

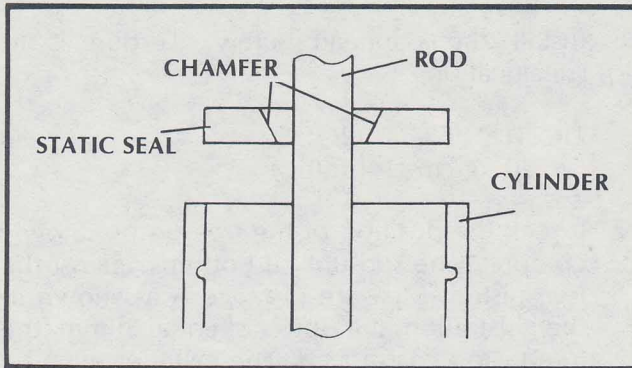


2. Very slowly pull the rod upward but do not expose the piston to air. Let the rod sink back into the oil until it bottoms. Hold the rod straight so it won't bind against the cylinder walls, but do not push it into the cylinder. This operation will help bleed trapped air from the system.
3. Place the dust seal guide on the rod. This will protect the seals during installation.

4. Slip the seal retainer (4) over the rod (6) and into the cylinder (7). The circlip land on the seal retainer (4) must face down into the cylinder, and the seal retainer must be properly seated on the inner circlip. The small hole on the seal retainer must be at 12 o'clock. It is very important that this hole be diametrically opposite the end gap of the inner circlip.

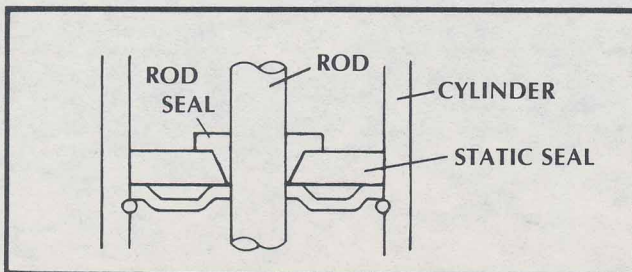
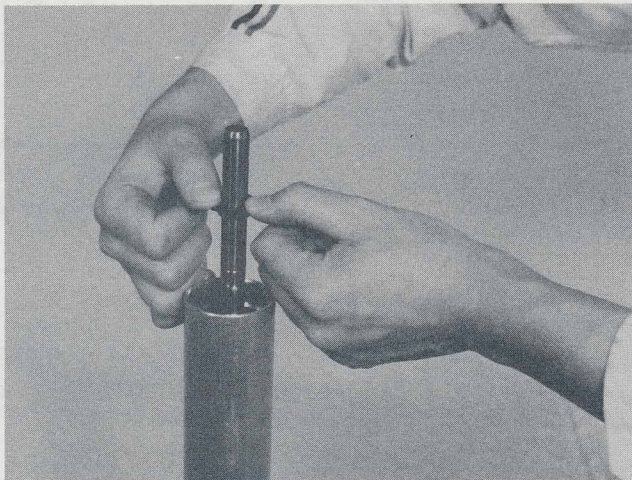


- Grease a new static seal (3), slip it over the rod (6), and install it in the cylinder (7). The chamfered side of the static seal must face upward (the i.d. markings should face down into the cylinder). Carefully seat the static seal (3) on the seal retainer (4).

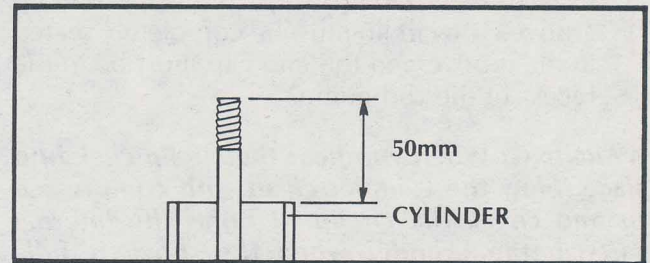


- Grease the entire surface of a new rod seal (2), slip it over the rod (6), and install it in the cylinder (7). The rod seal (2) fits into the chamfered hole of the static seal (3). The rod seal must be fully seated in the static seal (3).

NOTE: If the rod seal (2) cannot be fully seated in the static seal (3), the static seal (3) or the seal retainer (4) may not be properly installed. Remove them both and reinstall them. Take care that both the seal retainer (4) and static seal (3) are correctly installed in the cylinder (7).

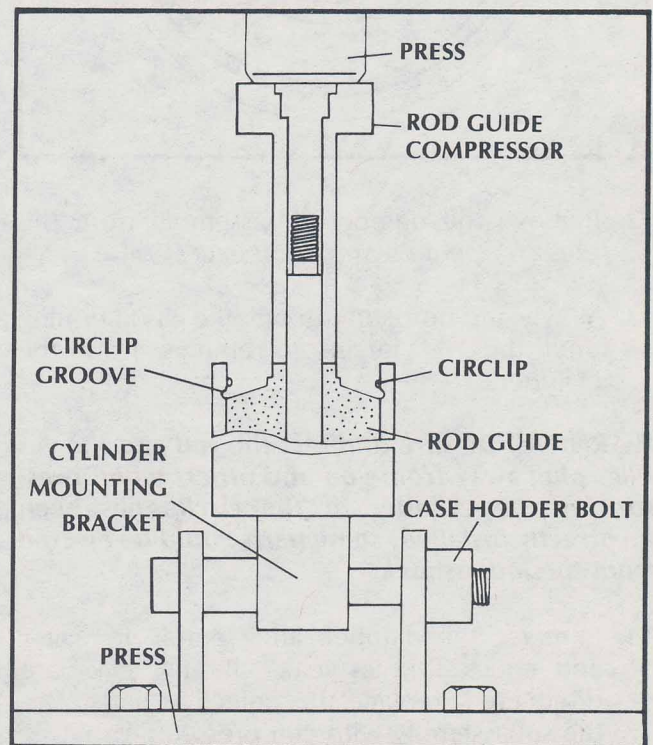


- Check the rod length. The rod should extend 50mm beyond the edge of the cylinder as shown in the illustration. If this is not the case, the free piston has moved. You must disassemble the cylinder and reassemble it correctly; otherwise, the monoshock will not perform to maximum capability.



Mark Boddy

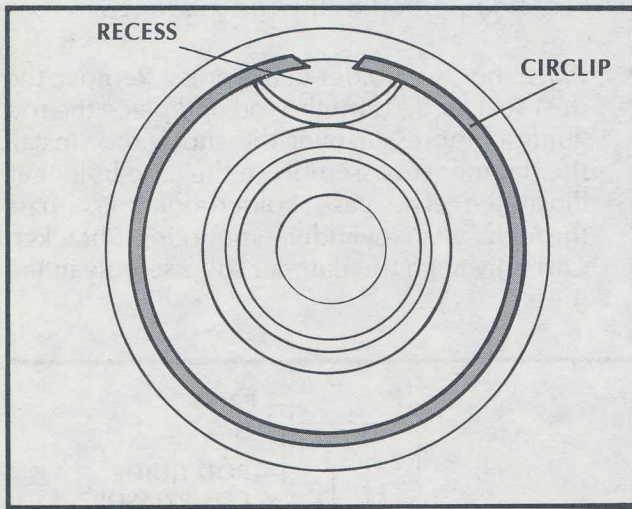
- Place the rod guide (1) in the cylinder and place a new circlip (5) around the rod guide (1). The circlip end gaps must be in the recessed portion of the rod guide (1).
- Place the case holder in the press. Remove the dust seal guide from the rod and place the rod guide compressor over the shock rod. Install the damper subassembly in the case holder as illustrated. The case holder bolt must pass through the cylinder mounting bracket. Carefully align the damper subassembly in the press.



10. Slowly apply pressure to the rod guide compressor and compress the rod guide (1) into the cylinder (7). Use a minimal amount of force. Compress the rod guide (1) until the upper circlip groove is completely exposed, but no further; see the illustration on the preceding page.

11. Install a new circlip (5) in the upper circlip groove. The circlip must be completely seated in the groove and the end gap must be in the recess of the rod guide.

WARNING: When you hear the circlip click into place, blow the cylinder clean with compressed air and check the circlip. It holds the internal parts in the cylinder when the shock is fully pressurized. Some parts could be ejected from the monoshock if this circlip is NOT correctly seated in its groove.



12. Remove the damper subassembly from the press. Wipe it clean of any excess oil.

13. Slowly add nitrogen through the gas filler plug until the rod begins to emerge from the cylinder.

WARNING: Be sure to direct the rod and the gas filler plug away from you and others when pressurizing the cylinder. If the circlip has been incorrectly installed, some parts could be ejected from the monoshock.

14. Immerse the damper subassembly in water and check for gas leaks. If any leaks are discovered, replace the defective parts. Dry the subassembly with compressed air.

15. If there are no leaks, adjust the gas pressure to specification. Always check the pressure with a monoshock gauge.

SPECIFIED GAS PRESSURE:

2X3 Shock: 15 kg/cm² (213 psi)

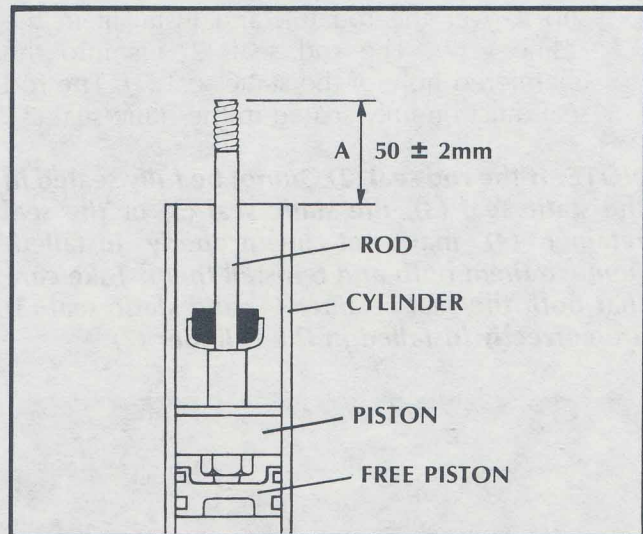
2X4 Shock: 17 kg/cm² (242 psi)

16. Install the panhead screw. Torque it to specification.

TIGHTENING TORQUE:

20 kg-cm (1.4 ft-lbs.)

17. Check the position of the free piston. Slowly compress the rod until it bottoms against the free piston. Measure distance A as shown in the illustration. If it does not equal 50mm, the free piston has moved. The cylinder must be disassembled and reassembled correctly.



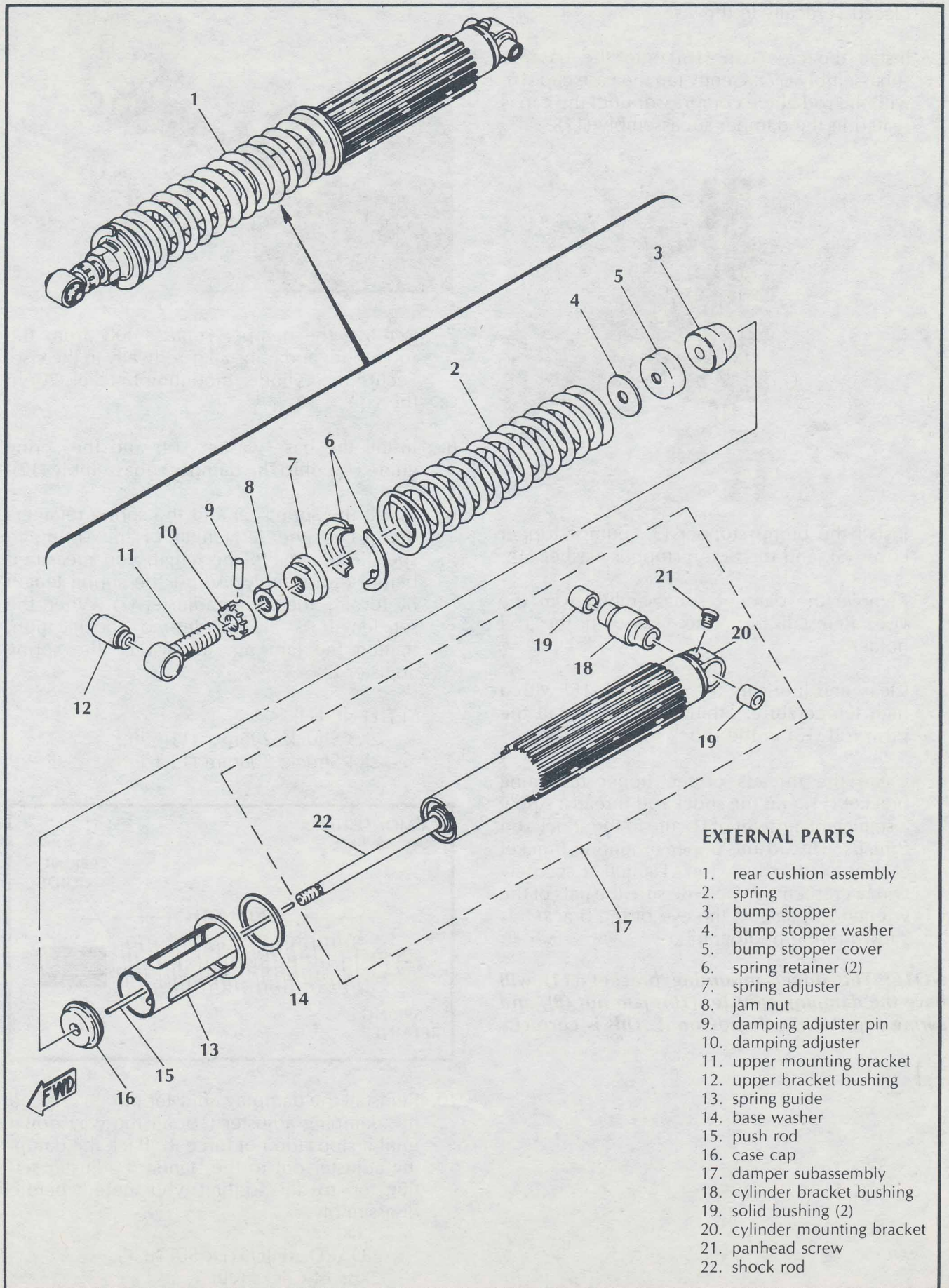
18. Check the stroke of the rod. Any deviation from specification will adversely affect the monoshock's performance. If the stroke is not within specification, disassemble the cylinder and reassemble it correctly.

DAMPING STROKE:

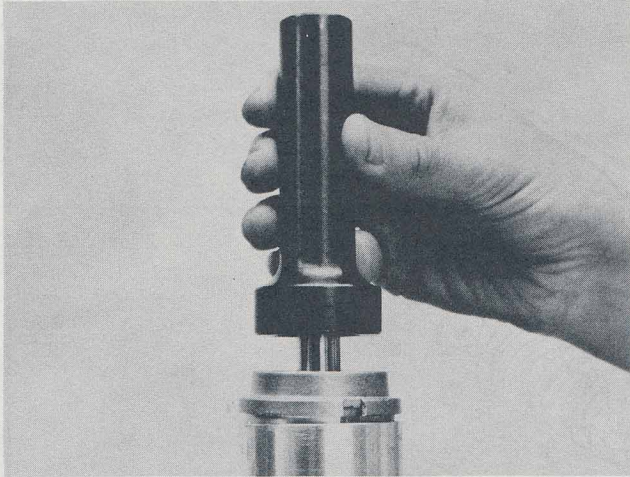
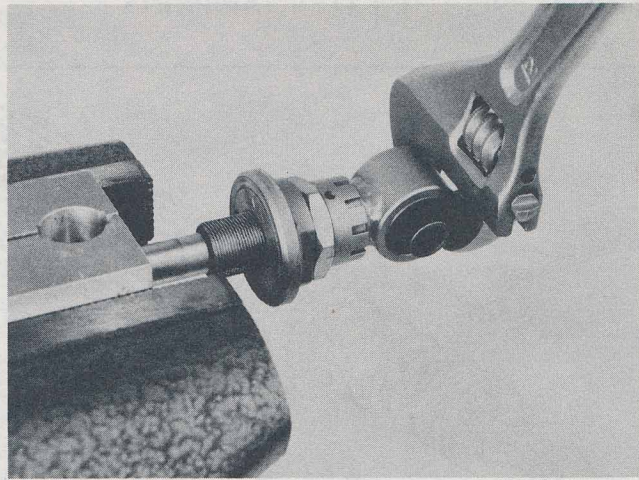
2X3: 148-154mm (5.8-6.1 in.)

2X4: 155-161mm (6.1-6.3 in.)

INSTALLING THE EXTERNAL PARTS



1. Secure the cylinder mounting bracket in the vise. The damper subassembly should be placed vertically in the vise.
2. Install the case cap (16) onto the damper subassembly (17). Gently tap the case cap (16) with the rod guide compressor until the cap is seated in the damper subassembly (17).



3. Install the bump stopper (3), bump stopper cover (5), and the bump stopper washer (4).
4. Remove the damper subassembly from the vise. Reinstall it in the vise with the rod holder.
5. Clean and lubricate the push rod (15) with a high temperature, lithium grease. Install the push rod (15) in the shock rod (22).
6. Clean the threads of the upper mounting bracket (11) and the shock rod threads. Apply a sufficient amount of Loctite to the shock rod threads. Thread the upper mounting bracket (11) onto the shock rod. Tighten it securely with a crescent wrench. Be sure the flats of the wrench rest against the eye of the bracket as shown in the photograph.

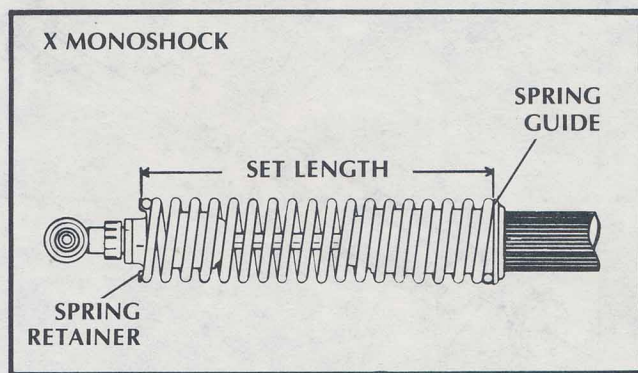
NOTE: The upper mounting bracket (11) will have the damping adjuster (10), jam nut (8), and spring adjuster (7) already on it. This is correct.

7. Remove the damper subassembly from the rod holder and reinstall it vertically in the vise. Secure the cylinder mounting bracket (20) in the vise.
8. Install the base washer (14) and the spring guide (13) onto the damper subassembly (17).
9. Install the spring (2) and the spring retainers (6). Adjust the set length of the spring to specification or to the length you measured before disassembly. Adjust the spring length by turning the spring adjuster (7). When the set length is at the desired specification, tighten the jam nut (8) against the spring adjuster (7).

SET LENGTH:

2X3 Shock: 295mm (11.6 in.)

2X4 Shock: 308mm (12.1 in.)



10. Reinstall the damping adjuster pin (9). Thread the damping adjuster (10) all the way down until it stops (do not force it). Back the damping adjuster out to the standard adjuster setting or to the setting you noted before disassembly.

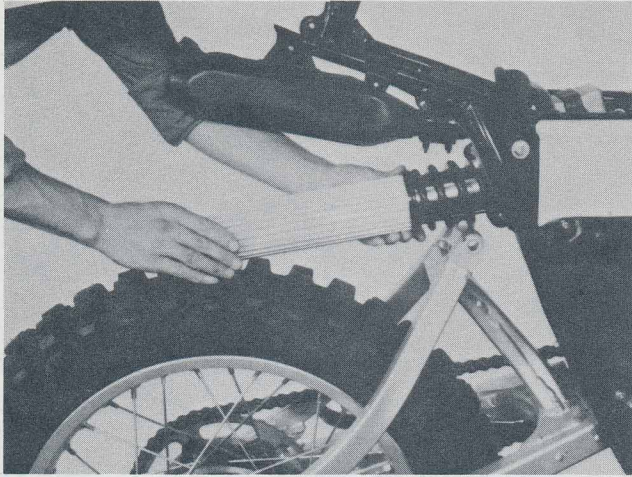
STANDARD ADJUSTER SETTING:

2X3: 14 Clicks Out

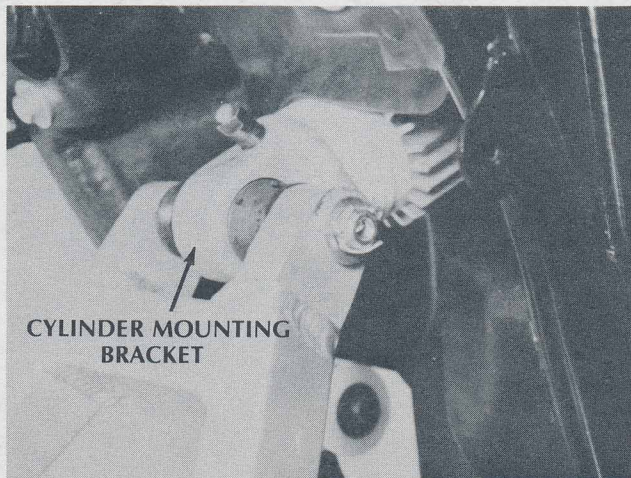
2X4: 12 Clicks Out

INSTALLING THE MONOSHOCK ON THE MOTORCYCLE

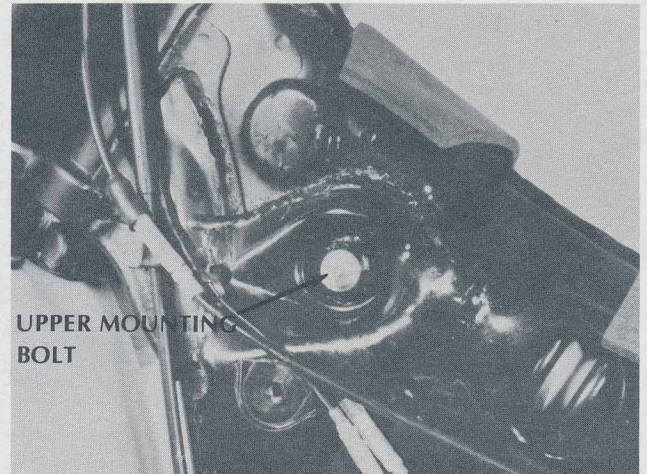
1. Carefully insert the monoshock into the frame from the rear of the bike. Be sure that the upper mounting bracket (11) faces the front of the motorcycle.



2. Reinstall the pivot bolt through the swingarm and through the cylinder mounting bracket (20). Be sure that a washer is between each bushing (19) and the swingarm pivot. Always use a new cotter pin.



3. Reinstall the upper mounting bracket (11) to the frame. Use a new cotter pin.



4. Reinstall the fuel tank on the motorcycle and secure it to the frame with the two bolts.

