

## CHAPTER THIRTEEN

# BODY AND FRAME

This chapter contains removal and installation procedures for all body panels and frame components.

### SEATS

#### Rider's Seat Removal/Installation

Refer to **Figure 1** for this procedure.

1. Remove the right-hand frame side cover as described in this chapter.
2. Remove the bolt, lockwasher and washer (A, **Figure 2**) at the front on each side.
3. Pull up on the front of the seat (B, **Figure 2**) and move the seat toward the front to disengage it from the rear retaining bracket on the pillion seat.

4. Partially remove the seat. Carefully remove the sidestand check relay (**Figure 3**) from the base of the seat.

5. Remove the seat assembly.

6. To install, move the seat onto the frame and reinstall the sidestand check relay into the base of the seat. Make sure the relay is secured correctly.

7. Insert the seat's rear tab under the retaining bracket on the pillion seat. Push the seat back and make sure the tab is located correctly under the bracket.

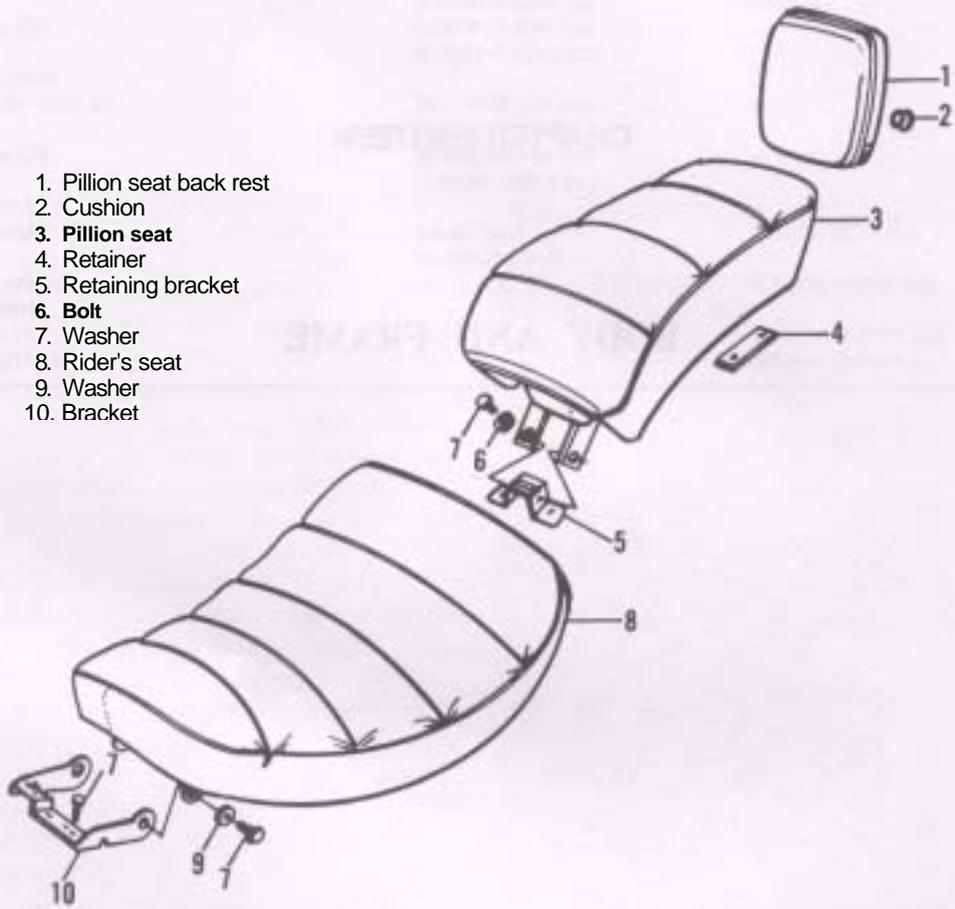
#### WARNING

*After the seat is installed, pull up on it firmly to make sure it is securely locked in place. If the seat is not correctly locked in place it may slide to one side or the other when riding the bike. This*

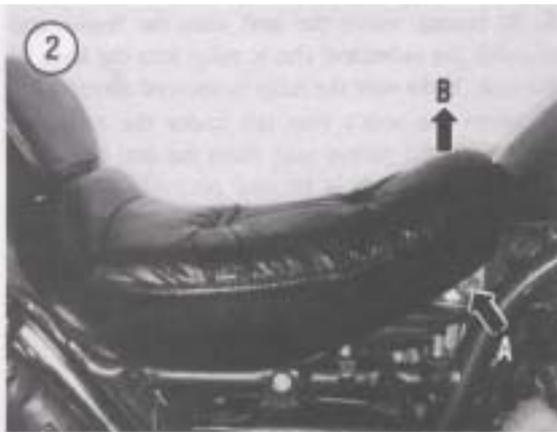
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## SEATS

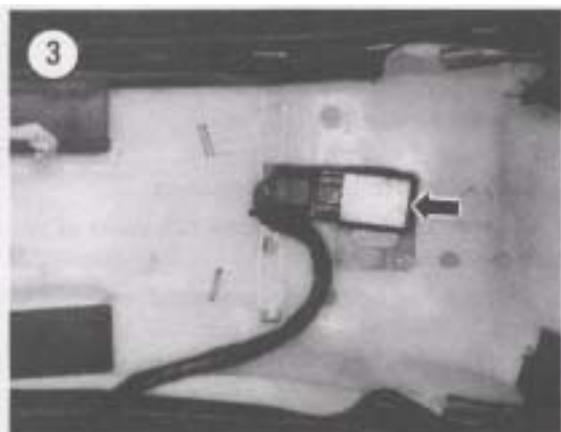
1. Pillion seat back rest
2. Cushion
3. Pillion seat
4. Retainer
5. Retaining bracket
6. Bolt
7. Washer
8. Rider's seat
9. Washer
10. Bracket

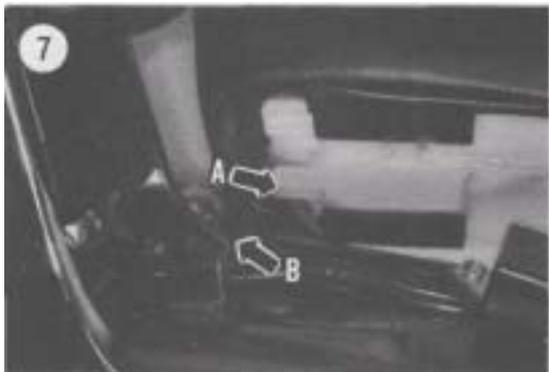
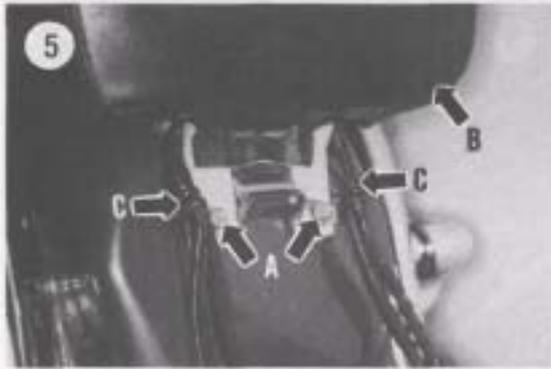


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3





*could lead to the loss of control and a possible accident.*

8. Push the front of the seat down and align the front mounting bolt holes with the mounting bracket on the frame. Install the washer, lockwasher and bolt (**Figure 4**) on each side and tighten securely.

9. Install both frame side covers as described in this chapter.

### **Pillion Seat and Backrest Removal/Installation**

Refer to **Figure 1** for this procedure.

1. Remove the rider's seat as described in this chapter.
2. Remove the bolts, lockwashers and washers (A, **Figure 5**) securing the pillion seat and retaining bracket to the rear fender.
3. Pull up on the seat toward the front and remove the seat assembly (B, **Figure 5**) from the rear retaining loop on the rear fender.
4. If necessary, carefully pull on both sides of the backrest and disengage it from the locating bosses on the tool box cover on the rear handle.
5. If removed, install the backrest onto the locating bosses on the tool box cover (**Figure 6**) on the rear handle. Move it from side to side to make sure it is secure.
6. Install the seat and insert the seat's locating tab (A, **Figure 7**) under the retaining loop (B, **Figure 7**) on the rear fender. Push the seat back and make sure the tab is located correctly under the loop.
7. Push the front of the seat down and align the front mounting bracket holes with the mounting holes in the fender. Be careful not to trap any of the electrical wires (C, **Figure 5**) under the mounting bracket. Install the washers, lockwashers and bolts (**Figure 5**) and tighten securely.
8. Install the rider's seat as described in this chapter.

### **FRAME SIDE COVERS**

#### **Removal/Installation**

1. On the right-hand side only, perform the following:
  - a. Remove the bolt and washer (**Figure 8**) securing the frame side cover to the frame rail at the front.

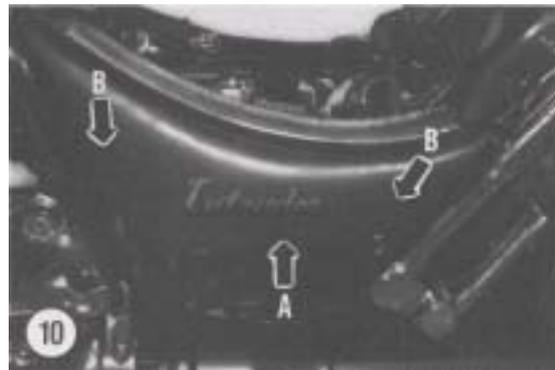
- b. Carefully pull the front section of the frame side cover off the mounting posts at locations shown in **Figure 9** and remove the cover.
  2. On the left-hand side only, perform the following:
    - a. Remove the rider's seat as described in this chapter.
    - b. Remove the screw (A, **Figure 10**) securing the frame side cover to the bracket between the fuel pump and fuse panel.
    - c. Carefully pull the front section of the frame side cover off the mounting posts at locations shown in B, **Figure 10** and remove the cover.
3. Install by reversing these removal steps, noting the following:
  - a. Make sure the rubber cushions are in place in the mounting brackets on the backside on both frame side covers.
  - b. On the right-hand side only, make sure the rubber cushion and metal collar are in place in the front mounting hole of the cover.
  - c. Tighten all screws securely.



### FRAME HEAD SIDE COVERS

#### Removal/Installation

1. Remove the fuel tank as described in Chapter Seven.
2. Remove the screws securing the left-hand frame head side cover (**Figure 11**).
3. Pull the cover straight off the frame and remove it.
4. Repeat for the other cover if necessary.



### FOOTPEGS

#### Front Footpeg Assembly

#### Removal/Installation

Refer to **Figure 12** for this procedure.

#### NOTE

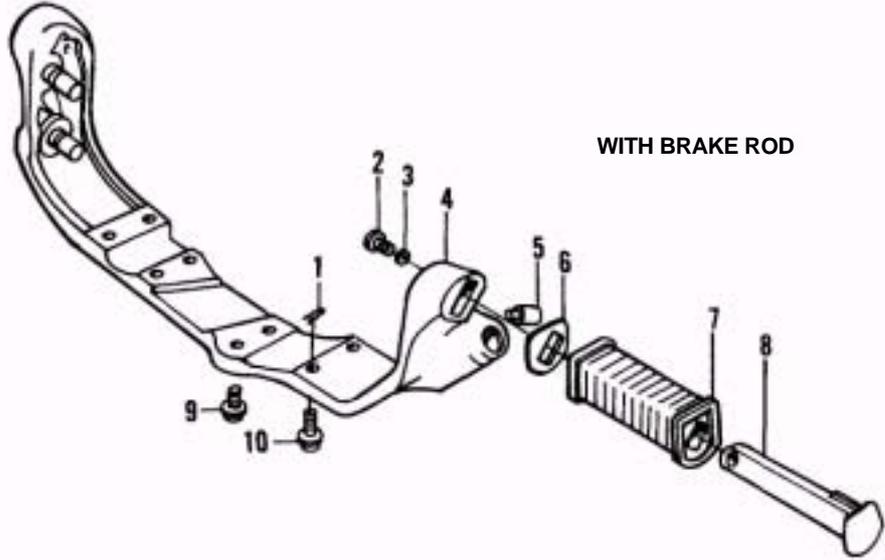
*The front footpeg assembly (**Figure 13**) cannot be completely removed from the frame without first removing the rear brake pedal assembly from the footpeg assembly.*

1. Remove the rear brake pedal assembly (**Figure 14**) from the front footpeg assembly as described



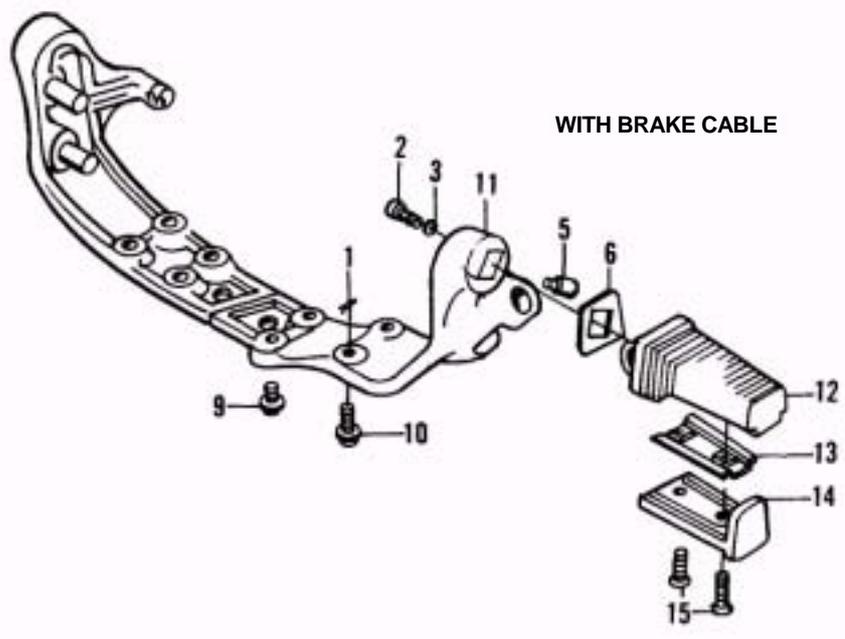
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### FRONT FOOTPEG ASSEMBLY



WITH BRAKE ROD

- |  |  |                     |
|--|--|---------------------|
| 1. Clip                                | 6. Spring washer<br>(with brake cable) | 11. Footpeg bracket |
| 2. Bolt                                | 7. Rubber pad                          | 12. Rubber pad      |
| 3. Washer                              | 8. Armature                            | 13. Plate           |
| 4. Footpeg bracket<br>(with brake rod) | 9. Bolt                                | 14. Bracket         |
| 5. Special bolt                        | 10. Bolt (with hole<br>for clip)       | 15. Bolt            |



WITH BRAKE CABLE

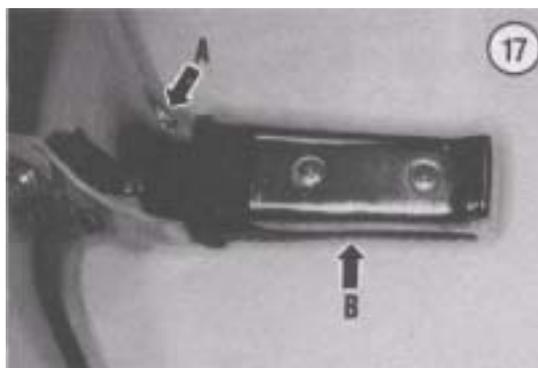
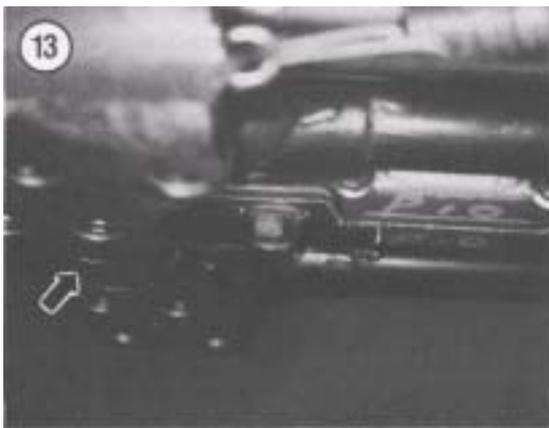
under *Rear Brake Pedal and Linkage Removal/Installation* in Chapter Twelve.

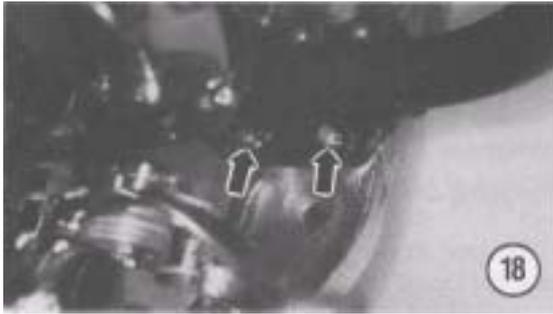
2. Remove the screws (**Figure 15**) securing the sidestand check switch to the footpeg assembly and remove the switch.
3. Remove the footpeg assembly.
4. To remove the individual footpeg from the assembly, perform the following:
  - a. Remove the inner bolt (**Figure 16**) and the outer bolt (A, **Figure 17**) securing the footpeg.
  - b. Remove the footpeg (B, **Figure 17**) from the assembly.
5. Install by reversing these removal steps, noting the following:
  - a. Tighten the mounting bolts to 15-25 N.m (11-18 ft.-lb.) and install the clips (**Figure 18**) on the 2 outboard bolts on each side.
  - b. Make sure all electrical connectors are free of corrosion and are tight.

### Rear Footpeg Removal/Installation

Refer to **Figure 19** for this procedure.

1. Remove the bolt (A, **Figure 20**) securing the footpeg to the mounting tab on the frame
2. Remove the footpeg (B, **Figure 20**) and shim from the frame.
3. Don't lose the spring and the steel ball detent.
4. Install by reversing these removal steps, noting the following:
  - a. Make sure the shim is installed correctly.
  - b. Tighten the mounting bolt securely.





## SIDESTAND

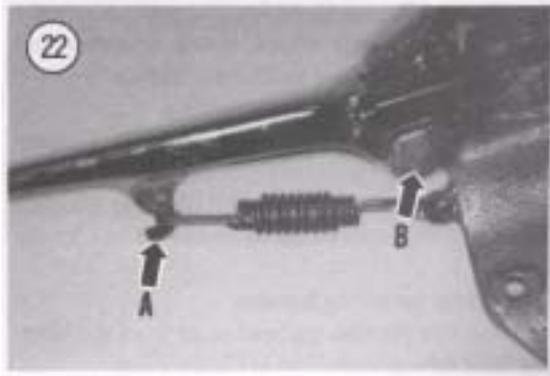
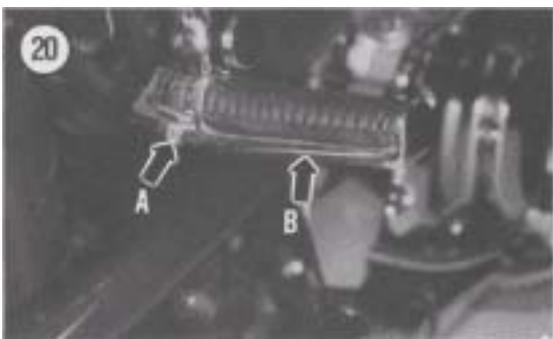
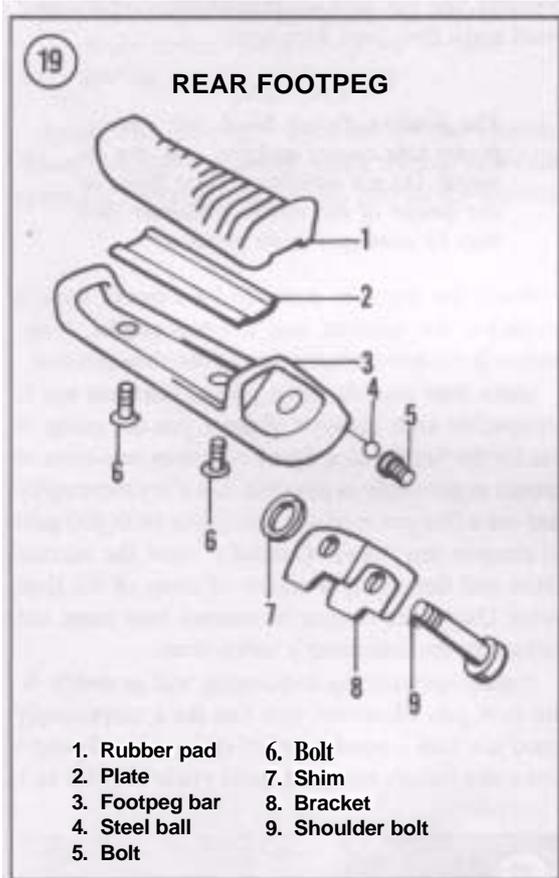
### Removal/Installation

1. Place wood block(s) under the engine to support the bike securely.
2. Remove the trim cap (**Figure 21**) from the mounting bolt.

#### NOTE

**Figure 22** is shown with the front footpeg assembly removed from the frame for clarity. The sidestand can be removed without removing the footpeg assembly.

3. Use vise-grip pliers and disconnect the return springs (A, **Figure 22**) from the pin on the sidestand.
4. Remove the nut (B, **Figure 22**) from the bolt securing the sidestand to the front footpeg assembly.
5. Withdraw the bolt and remove the sidestand and shim from the footpeg assembly.
6. Install by reversing these removal steps, noting the following:



- a. Apply a light coat of multipurpose grease to the pivot points on the footpeg assembly, the sidestand and pivot bolt prior to installation.
- b. Tighten the bolt and nut securely. Install the trim cap onto the bolt head.

## FRONT FENDER

### Removal/Installation

1. Remove the front wheel (A, **Figure 23**) as described in Chapter Ten.
2. Remove the bolts securing the front fender (B, **Figure 23**) and the front brake caliper brake hose bracket (C, **Figure 23**) and speedometer cable bracket to the front forks.
3. Remove the front fender (B, **Figure 23**).
4. Install by reversing these removal steps, noting the following:
  - a. Be sure to install the speedometer bracket and front brake hose bracket to the fork assemblies along with the front fender.
  - b. Tighten all mounting bolts securely.

## FRAME

The frame does not require routine maintenance. However, it should be inspected immediately after any accident or spill.

### Component Removal/Installation

1. Remove the seats, frame head side covers, frame side covers and fuel tank.
2. Remove the engine as described in Chapter Four.
3. Remove the front wheel, steering stem and front forks as described in Chapter Ten.
4. Remove the speedometer and headlight case as described in Chapter Eight.
5. Remove the rear wheel, shock absorber and swing arm as described in Chapter Eleven.
6. Remove the front and rear fenders.
7. Remove the radiator as described in Chapter Nine.
8. Remove the battery as described in Chapter Three and the battery case as described in Chapter Eight.
9. Remove the wiring harness.
10. Remove the steering head races from the steering head tube as described in Chapter Ten.

11. Inspect the frame for bends, cracks or other damage, especially around welded joints and areas that are rusted.
12. Assemble by reversing these removal steps.

## Stripping and Painting

Remove all components from the frame. Thoroughly strip off all old paint. The best way is to have it sandblasted down to bare metal. If this is not possible, you can use a liquid paint remover and steel wool and a fine, hard wire brush.

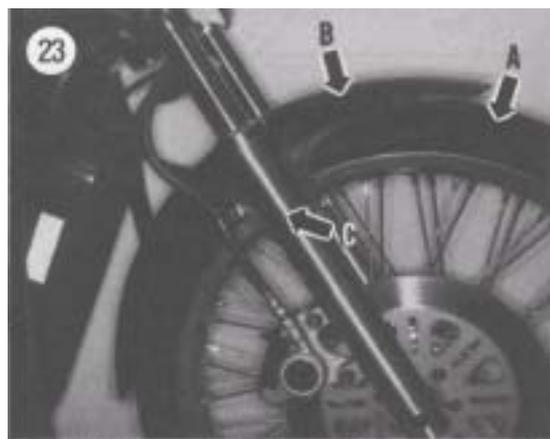
### CAUTION

*The fenders, frame head side covers, frame side covers and fuel tank are all metal. Do not sandblast these items as the gauge of the metal is thinner and may be damaged in the process.*

When the frame is down to bare metal, have it inspected for hairline and internal cracks. Magnaflux is the most common and complete process.

Make sure that the paint primer that you use is compatible with the type of paint you are going to use for the finish color. Spray on one or two coats of primer as smoothly as possible. Let it dry thoroughly and use a fine grade of wet sandpaper (400-600 grit) to remove any flaws. Carefully wipe the surface clean and then spray a couple of coats of the final color. Use either lacquer or enamel base paint and follow the manufacturer's instructions.

A shop specializing in painting will probably do the best job. However, you can do a surprisingly good job with a good grade of spray paint. Spend a few extra dollars and get a good grade of paint as it



will make a difference in how good it looks and how long it will stand up.

When a good idea to shake the can and make sure the ball inside the can is loose when you purchase the can of paint. Shake the can as long as is stated on the can. Then immerse the can **upright** in a pot or bucket of **warm** water (not hot—not over 120° F).

#### WARNING

*Higher temperatures could cause the can to burst. Do **not** place the can in direct contact with any flame or heat source.*

Leave the can in the water for several minutes. When thoroughly warmed, shake the can again and spray the frame. Be sure to get into all the crevices

where there may be rust problems. Several light mist coats are better than one heavy coat. Spray painting is best done in temperatures of 70-80° F (21-26° C); any temperature above or below this will cause problems.

After the final coat has dried completely, at least 48 hours, any overspray or orange peel may be removed with a *light* application of Dupont rubbing compound (red color) and finished with Dupont polishing compound (white color). Be careful not to rub too hard or you will go through the finish.

Finish off with a couple coats of good wax prior to reassembling all the components.

It's a good idea to keep the frame touched up with fresh paint if any minor rust spots or scratches appear.