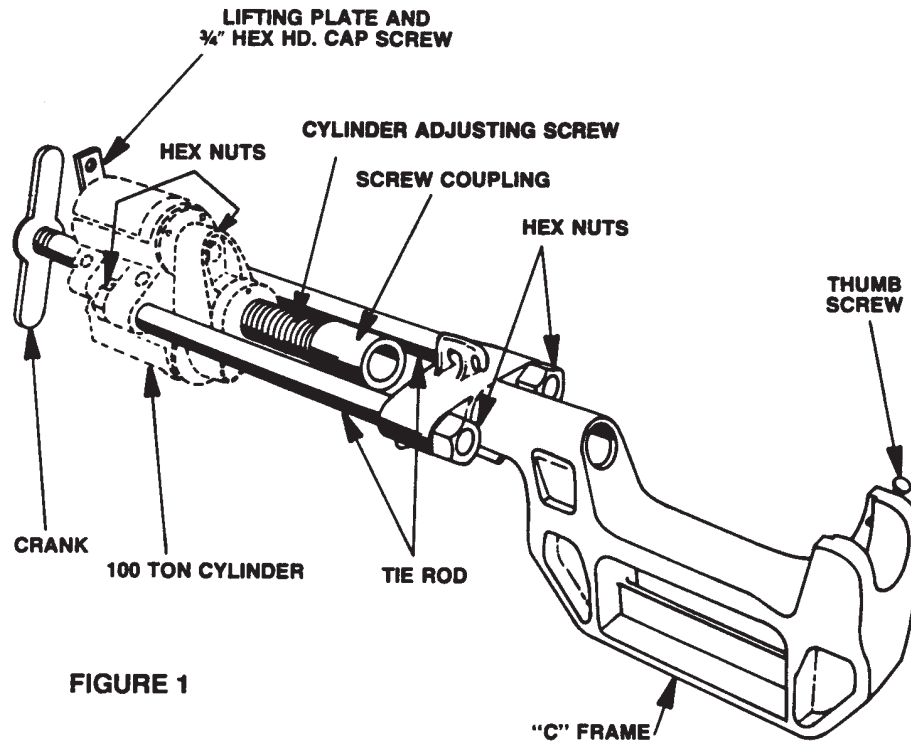


**Parts List &
Operating Instructions for:**

1642	D-01063AA
1643	D-01071AA
	MPP100

Master Pin Pusher / Installer**Max. Capacity: 100 Ton at 9,400 PSI****FIGURE 1**

Read and carefully follow these instructions. Most problems with new equipment are caused by incorrect installation or operation. Inspect this equipment upon arrival. The carrier, not the manufacturer, is responsible for damage resulting from shipment.



WARNING: Warning statements must be carefully observed to help prevent personal injury to the operator and other personnel.

- The following procedure should only be performed by a qualified technician who is familiar with this equipment. Use this procedure only for the applications listed in the tooling charts.
- Wear safety glasses when operating the Master Pin/Pusher Installer. Parts under pressure can break and possibly cause eye injuries.
- It is the responsibility of the owner to provide a protective barrier to contain any pieces that might break when applying force. Always stand clear.
- Align track components so the ram force is straight and in-line.
- Keep hands and feet out of the work area when applying force.
- Check all lift connections before the Master Pin Pusher/Installer is lifted.
- Do not work under the Master Pin Pusher/Installer while it is supported.

ASSEMBLY

(Refer to Figure 1 and Parts List #100516 during assembly)

1. Assemble the tie rods between the "C" Frame and the 100 ton cylinder. Assemble and tighten the four hex nuts on the ends of the tie rods.
2. Using the 3/4" hex hd. cap screw, securely fasten the lifting plate to the 100 ton cylinder.
3. Thread the cylinder adjusting screw into the cylinder. Install the screw coupling and crank as shown. **NOTE: Use the set screw to attach the screw coupling to the cylinder adjusting screw.**

OPERATING INSTRUCTIONS

TRACK PREPARATION

1. Position the track's master pin. There must be enough clearance for the "C"-frame assembly and for removal of the master pin without coming in contact with the crawler main frame or other mounted equipment. This position varies according to the tractor make and model. Refer to the tractor manufacturer's manual if specific positioning is needed.
2. Remove the track pad (if necessary).
3. Loosen the track adjusting mechanism to allow for a large amount of track sag.

MASTER PIN REMOVAL

NOTE: Refer to the tooling charts to find the tooling needed for your specific application. Refer to Figure 2 when assembling the tool components indicated by the tooling chart.

1. Install the aligning adapter (D) into the "C" frame and secure with the thumb screw.
2. Install the appropriate rear forcing pin (J) into the bore of the screw coupling.
3. If required, install the pilot pin (C) into the bore of the "C" frame against the end of the rear forcing pin (J).
4. Install the appropriate forcing pin (A) into the bore of the pilot pin.

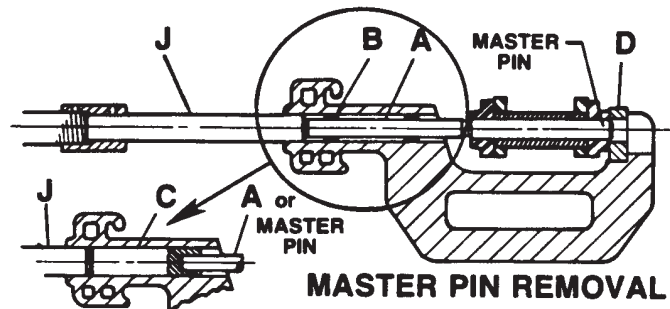


FIGURE 2

IMPORTANT: To help prevent equipment damage, the larger tapered end of the forcing pin must be positioned toward the master pin.

NOTE: If the pilot pin is not needed, place the appropriate aligning bushings (B) on the forcing pin (A). Insert this assembly into the bore of the "C" frame until it butts against the rear forcing pin (J).

5. Install the master pin pusher/installer assembly on the track.
6. Turn the cylinder adjusting screw crank until the forcing pin (A) meets the track master pin. Attach the hydraulic pump, and advance the ram to remove the master pin from the track.

IMPORTANT: To help prevent equipment damage,

- As the master pin begins to push out, be sure it clears the aligning adapter (D).
- When the aligning bushings (B) are used, they **MUST** be removed before the final push is made.

MASTER BUSHING REMOVAL

NOTE: Refer to the tooling charts to find the tooling needed for your specific application. Refer to Figures 3 and 4 when assembling the tool components indicated by the tooling chart.

1. Before the master bushing is removed, remove the grouser (pad) from the master sidelinks. Remove the pin from the other end of the master sidelinks (interlocking end).
2. Using the same rear forcing pin (J) that was used for the master pin removal, install the bushing adapter (F) in the end of the "C" frame as shown in Figure 3. Secure with the thumbscrew.

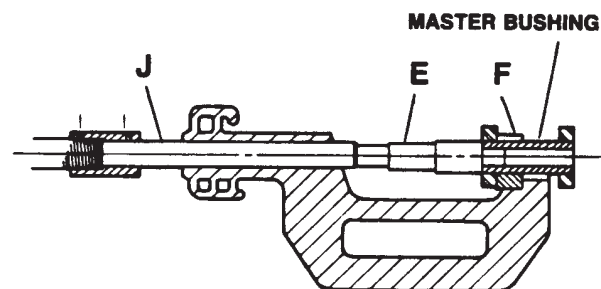


FIGURE 3

3. Position the track so the master bushing can be correctly placed in the bushing adapter (F) as shown in Figure 3. Insert the bushing pusher (E) into the bore of the master bushing.
- IMPORTANT: Each end of the bushing pusher (E) has a different diameter. The end of the bushing pusher (E) that provides the closest fit is the correct end to be inserted into the bore of the master bushing.**
4. Turn the cylinder adjusting screw crank until the forcing pin is against the bushing pusher (E). Check the tooling and bushing again to ensure correct alignment.
5. Apply hydraulic force to the master bushing until the bushing is free of the sidelink.
6. Use the same procedure to press the master bushing out of the other master sidelink.

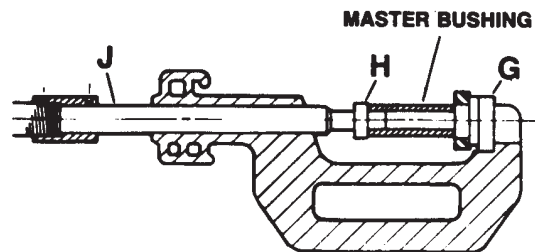
MASTER BUSHING INSTALLATION

1. Using the same rear forcing pin (J) that was used for the master pin removal, install the rear bushing assembly plate (G) in the end of the "C" frame as shown in Figure 4. Secure with the thumbscrew.

2. Position the master bushing and one of the master sidelinks as shown in Figure 4. Insert the bushing installer (H) into the bore of the master bushing.

IMPORTANT: Each end of the bushing installer (H) has a different diameter. The end of the bushing installer (H) that provides the closest fit is the correct end to be inserted into the bore of the master bushing.

3. Turn the adjusting screw crank until the forcing pin is against the bushing installer (H) as shown in Figure 4. Check the tooling and bushing again to ensure correct alignment.
4. Apply hydraulic force until the master bushing is pressed into the master sidelink.
5. Position the press on the other side of the track. Place the track components and tooling in position to be pressed.
- IMPORTANT: The opposite ends of the master sidelinks (interlocking ends) must also be positioned so they will correctly engage their bushing as the pressing operation is performed. Maintain correct alignment of the bushing and sidelinks during the pressing operation by temporarily inserting the forcing pin (A) into the interlocking ends of the sidelink and bushing assembly.**
6. Apply hydraulic force until the master bushing is pressed into the master sidelink.



MASTER BUSHING INSTALLATION

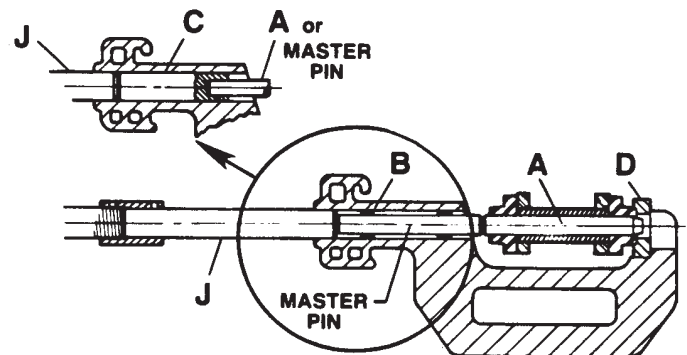
FIGURE 4

MASTER PIN INSTALLATION

1. Position the track on the tractor. Slip the forcing pin (A) into the track's master joint to hold the track together temporarily.
2. Place the aligning adapter (D) onto the "C" frame assembly, and secure with the holding screw.
3. Using the same rear forcing pin (J) that was used for removal, install the master pin with the pilot pin (C) or the aligning bushings (B) into the "C" frame.
4. Install the master pin pusher/installer assembly on the track.

IMPORTANT: When aligning bushings (B) are used, they MUST be removed before final push is made.

5. Turn the cylinder adjusting screw crank until the adjusting screw meets the master pin. Attach the hydraulic pump, and advance the cylinder to install the master pin.



MASTER PIN INSTALLATION

FIGURE 5