Note:- Before starting ensure the M41 gear range is selected. (in MDI input M41 and press cycle start.)

> Unlock and remove the sealing unit.



- 1. Manually jog drive shaft (C1) so that the grub screws are to the top.
- 2. Release the screws.



➤ Manually jog the drive unit back to 'W+' soft limit.



- 1. Remove the chain from the 3-off locking positions.
- 2. Release the 3-off bearing support guides.
- ➤ Lift the gun drill with fittings clear and stand to drain.
 - 1. Make sure the 'O' ring is in the back of the pull stud.



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Remove the driver. (6-off cap screws)



> Allow to drain.



Remove the 3-off bearing support guides.





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> Remove the housing for the sealing unit.





- > Remove the drill bush if required.
 - 1. Loosen 2-off cap screws.
 - 2. Twist and turn to remove.



> Otherwise remove the drill bush carrier and drill bush intact.



> Change the position of the coolant hose.





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> Remove the coolant hose adaptor support plate.





➤ Remove the coolant hose adaptor.(only using 3-off cap screws)





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- ➤ If there is a problem removing the coolant hose adaptor?
 - 1. Use the modified broom handle and chap through from the drive shaft end.





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➤ Assemble the oil outlet using 3-off cap screws.



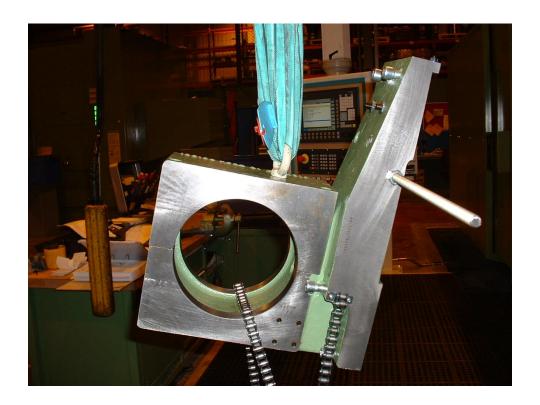


➤ Bolt in place the oil outlet chimney.





> Load the ejector drill dampener unit.



➤ Use slide blocks 2 and 3.





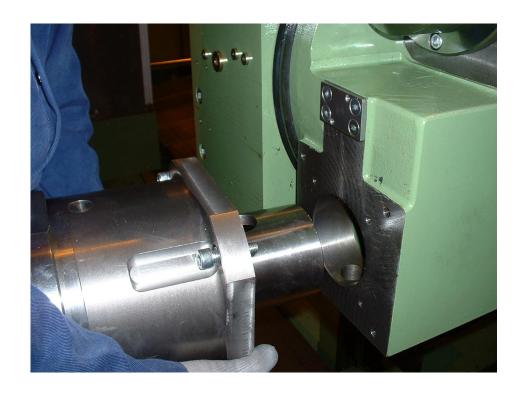
> Remove the top half of the dampener housing.



- ➤ Load the ejector drill boza to the spindle housing. (hole to the top)
 - 1. Refer to page 28 to 31 if drill bush requires to be changed.

NOTE: - In the interest of safety use a sling and crane into place <u>always</u>.





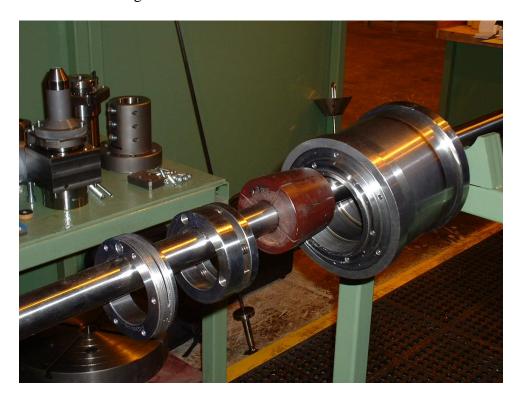
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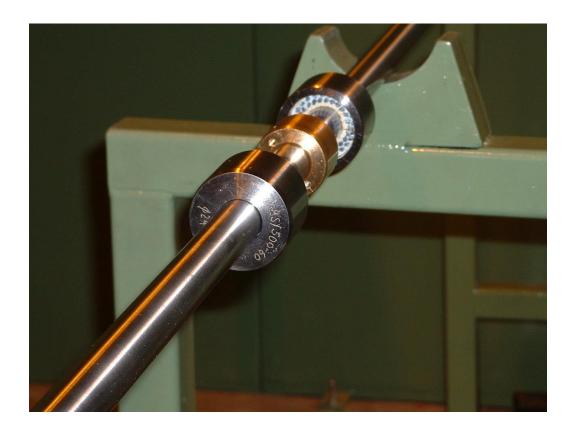
> Load the Damper Housing with fittings to the ejector tube as shown.

Note: - Refer to page 32 for assembly for Rosa Lira Hangers.

1. Assemble together on the tube.



> Load the front sealing housing with fittings to the ejector tube as shown.







> Assemble the bush driver to the end of the ejector tube.



> Load the split bush holder to the driver unit.



> Make sure the top half has been removed.



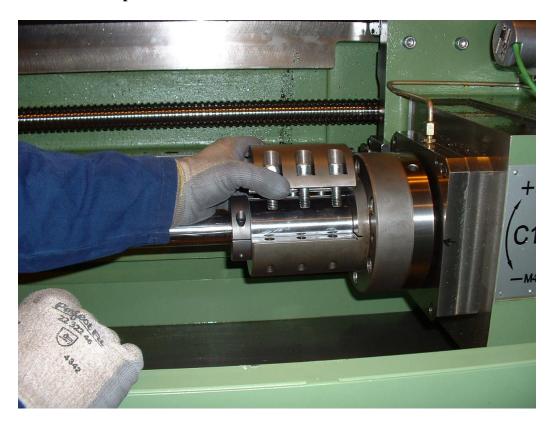
► Load the ejector tube with fittings to the machine.



> Ensure the ejector drill is located fully back in the split bush holder.



> Assemble the split bush.



> Replace the top half of the dampener housing.



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> Use the remote control to guide the ejector drill into the spindle housing and Boza.



> Fit the sealing assembly. (Watch the orientation of the bolt holes to ensure correct alignment.)

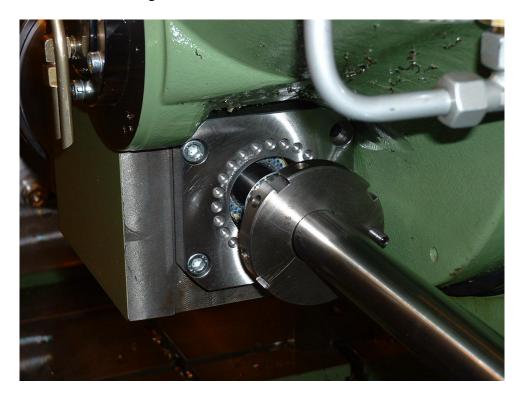






> Secure with 3-off cap screws.

- 1. Screw in lock nut firmly but hand tighten only.
- 2. Lock with the grub screws.



- Ensure tube is clear of Boza. Load the cutting head to the tube :-
 - 1. Measure the point of the lead insert to the full cutting diameter.
 - 2. Input this value into R114 in the program.

- > Using the remote control move the cutting head flush with the nose of the drill bush.
 - 1. Record the W1 position and input into parameter R111 in the program.



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> Finish assembling the dampener housing.

- 1. Screw in lock nut firmly but hand tighten only.
- 2. Tube must be able to run freely during the drilling operation.



> Load the chain to the chain holder, taking up the slack.



T.B.T. Operator Instructions

Gun Drilling to Ejector Drilling.

> Load program.

- 1. Machine.
- 2. Menu Select.
- 3. Program
- 4. Cursor to program required.
- 5. Select.
- 6. Input. (to edit)

> Set coolant volume / spindle load monitors.

- 1. Small diameter drills high pressure / low volume.
- 2. Large diameter drills low pressure / high volume.

> Start Program (auto / cycle start.)

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Note: - the following instructions are only necessary if the drill bush requires to be changed.

> Remove front plate and bush assembly.





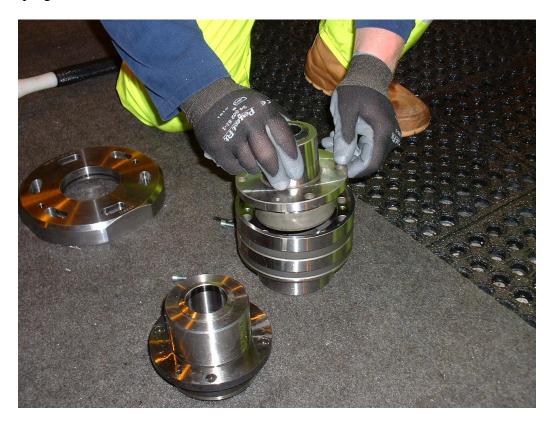
> Strip down and re-assemble with new bush.







Measure the length of the drill bush if being used for the first time for use in programme.

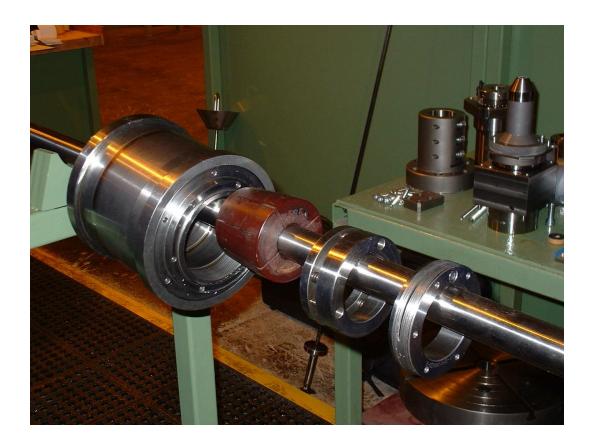




> Refit front plate and bush assembly.



> To reduce the likelihood of the drill wandering during machining, assemble with the bush taper pointing inwards. Refer page 16.



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