

A6C KELLY SPINNER

OPERATION MANUAL

A6C-SM

Standard: Q/320623AD23



8A-0063



TOPLAND OILFIELD SUPPLIES LTD.

Add: Offie 8-1011, Lane 5600, Chuansha Road, Pudong, Shanghai, China.
Tel: (86)-21-50499568 Fax: (86)-21-61925822 Email: sales@Toplandoil.com
<http://www.Toplandoil.com>

CONTENTS

1. SPECIFICATIONS
2. CARE AND MAINTENANCE
3. INSTALLATION
4. AIR MOTOR PARTS

1. SPECIFICATIONS

operating pressure	120PSI
air consumption	300-330SCFM
speed	170RPM
stall torque	1100FT.LBS
weight	1200LBS
sub dimensions	7-15/16"OD,3-1/4"ID,48"L
connections	BOX UP, PIN DOWN
	6-5/8"API REG L.H.

2. CARE AND MAINTENANCE

The bearings, located at the top and bottom of the spinner housing, should be lubricated daily with a lithium base water repellent grease. There are two alemite grease fittings, located at 180 degree in both the upper and the lower bearing seal retainers.

After use, the upper and lower bearings will wear. There is a set of plastic shims installed between the upper and lower bearing retainer plates and bearing housings. Each set has several thickness of shims. One or more of these shims can be removed to adjust for bearing wear. Free play can be determined by raising and lowering the spinner body casting.

The 1" turnbuckles attached between the kelly spinner and swivel should never be more than hand tight. Tightening the turnbuckles can cause misalignment, resulting in excessive bearing wear.

The lower cove plate can be removed or lowered for access to the kelly spinner internals.

The air motors should be checked periodically for wear. If the motors appear to be operating sluggishly, make sure the air mufflers are clean before removing or disassembling the air motors.

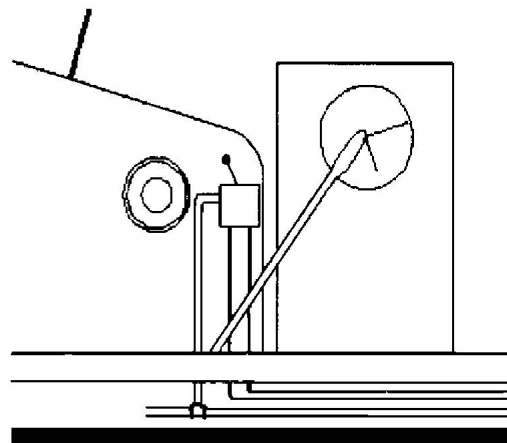
Also, make sure that they are receiving the proper amount of air.

3. INSTALLATION

The installation process involves locating and routing air supply lines. Modifying the swivel and installing the spinner and hand control valve. Survey the rig to determine the best way to route the air lines before installation is begun. Once this has been done, perform the following steps.

1). Run a 1-1/2" to 2" air supply line to a convenient place to install a filter-lubricator assembly, as shown in fig. 1. the lines should be installed to approximately 1 to 1-1/2 feet below the mud line goose neck. Provide a tee in the air supply line for a connection to the hand control valve.

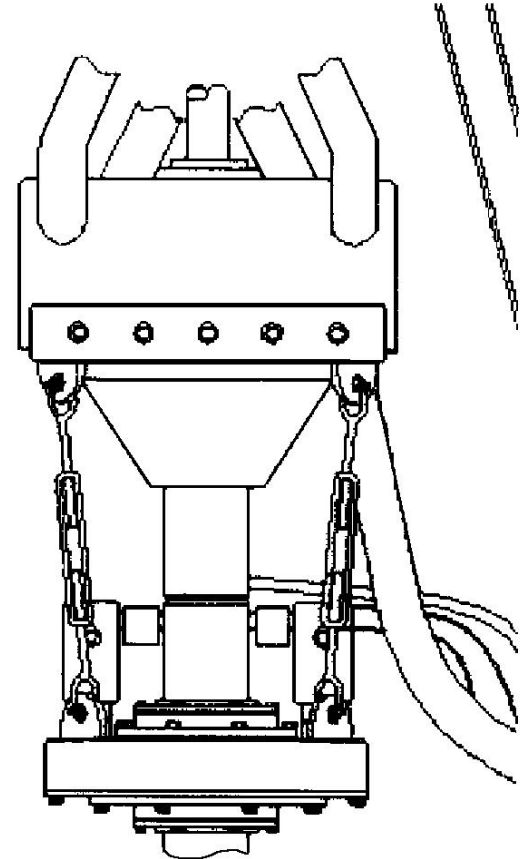
2). Install the hand control valve in convenient location, and run 1/2"-3/4" air line to the control valve inlet. Connect the 1/4" twin line to the control valve and run up the derrick to the air supply line end.



3). The kelly spinner installs between the swivel and the kelly. Break out the swivel-kelly

connection and install the kelly spinner. The swivel pin threads into the box of the kelly spinner and the in return, the pin of the kelly spinner connections.

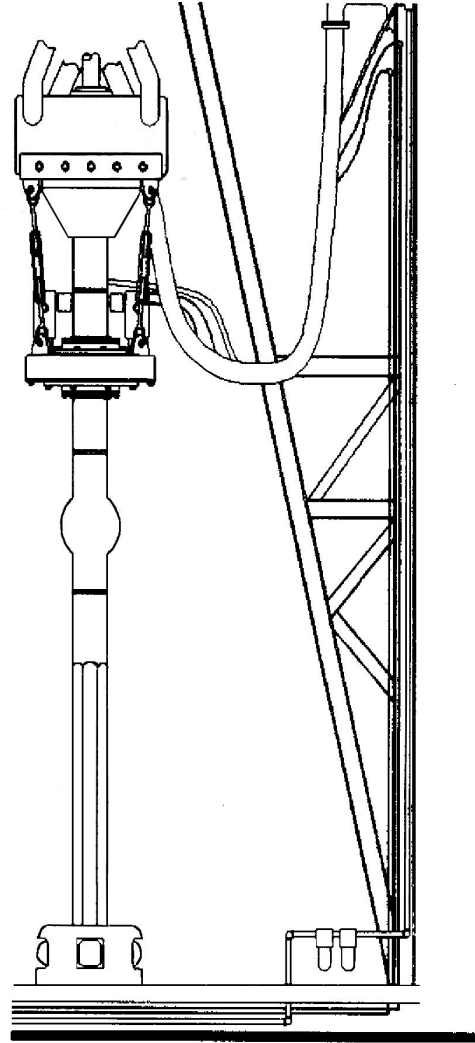
4). Weld pad-eyes to the bottom of the bail bumper and attach the turnbuckles to the kelly spinner and the pad-eyes, as shown. Tighten the turnbuckle by hand until snug, then back off one-half turn. The turnbuckles are torque are arresters, NOT to support the kelly spinner.



5). Install the air motors, placing the motor assembly on the rotary hose side of the swivel. Mount the motors with supplied 5/8”*1-4/1” bolts.

6). Connect the 1” air supply hose to the standpipe, run along the mud hose to the 1” tee on the kelly spinner motor assembly. Attach the air hose to the mud line with supplied rubber straps. Before making final connection to the spinner, blow sufficient air the lines to clean out all dirt and debris.

7). The control lines connect the hand control valve to the relays on the kelly spinner motor assembly. Run the twin line beneath the rig floor, up the derrick with the 1" air supply line to the kelly spinner. Decide which color, red or green, is desired for left and right rotation. Connect each hose to the upper air fitting of each motor (after blowing out the lines to ensure they are clean). If, kelly spinner does not rotate in the direction desired, swap the lines at the control valve.



8). The operation of the kelly spinner is as follows:

- the control valve is operated
- air is delivered to the top port of the bendix housing
- air pressure forces a piston down which simultaneously engages the bendix and opens the lower bendix housing port
- air is the passed to a relay valve which opens the 1" air line
- the motor is operated until the hand control valve is release