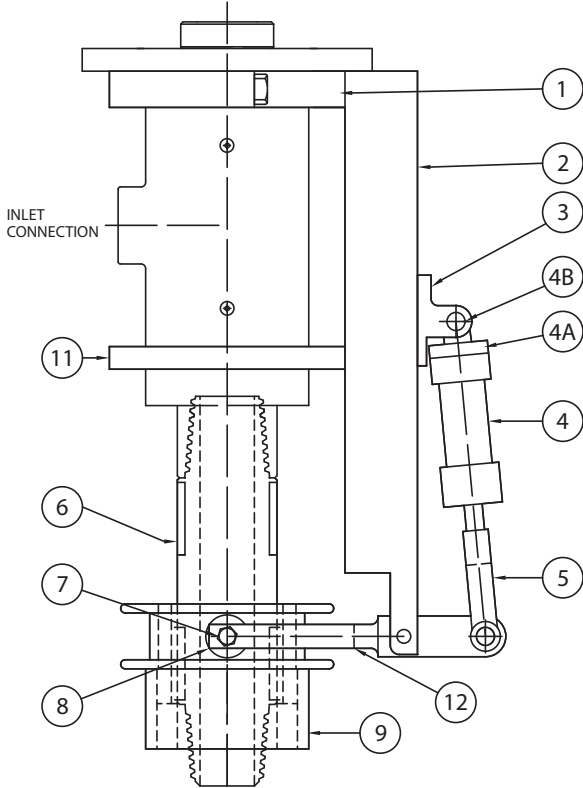


AUTOMATIC BREAKOUT SYSTEM

AUTOMATIC LUG PIPE BREAKOUT SYSTEM

AUTOMATIC BREAKOUT UNIT CAN BE ADAPTED TO ANY TYPE OF TOP HEAD DRIVE UNIT. ILLUSTRATED IS THE 2000 SERIES TOP HEAD DRIVE.



PART LIST FOR AUTO BREAKOUT SYSTEM			
ITEM	PART NO.	QTY	DESCRIPTION
1	200-016	1	MOUNTING CLAMP
2	700-2000-1	1	ARM
3	114-724	1	PIVOT BRACKET
4	700-10	1	CYLINDER
4A	700-10A	1	PIVOT MOUNT BRACKET
4B	700-724	1	RETAINING PIN
5	700-6	1	CLEVIS
6	700-A-23A	1	AUTO B.O. SUB
7	700-A-3	2	BEARING RETAINER BOLT
8	700-9	2	BEARING
9	700-A-2	1	CAP ASSEMBLY
10	700-A-4	1	BARREL ASSEMBLY
11	200-016A	1	BARREL SUPPORT RING
12	700-A-5	1	SHIFT YOKE

AUTOMATIC BREAKOUT COVERED BY N.H.M., INC. U.S.A. PATENT NO. 54,409,324.

AUTOMATIC FLUSH PIPE BREAKOUT SYSTEM

THE UNIT CAN BE EITHER HYDRAULIC OR AIR-OPERATED. NORMALLY THE UNIT IS OPERATED BY THE BACKUP PRESSURE OF THE HYDRAULIC RETURN LINE.

PART LIST FOR AUTO BREAKOUT SYSTEM							
ITEM	PART NO.	QTY	DESCRIPTION	ITEM	PART NO.	QTY	DESCRIPTION
1	117-704A	1	OUTER BARREL	13	117-723	1	BREAKOUT SUB
2	117-704B	1	INNER SLEEVE	14	117-001	1	STEM
3	117-706	1	BREAK OUT KEYS	15	117-225	1	O-RING SEAL
4	117-705	1	END CAP	16	700-A-5	1	YOKE
5		1	KEYS	17	114-724A	1	PIVOT BRACKET
6	117-332	1	O-RING	18	700-10	1	HYDRAULIC CYLINDER
7	700-A-2	1	CAP ASSEMBLY	19	700-6	1	CLEVIS
8	SHCS4-8	16	S.H.C.S. SCREW	20	700-724	2	RETAINING PIN
9	117-362	2	SNAP RING	21	700-A-3	2	BEARING RETAINER BOLT
10	HHCS4-6	2	HHCS CAP SCREW	22	700-9	1	BEARING
11	117-706	2	DRIVE KEY	23	700-3500	1	ARM
12	117-001R	2	RETAINER RING	24	117-045	1	MOUNTING BRACKET

