

Purpose:

* The XN Lock is the non-selective version of the X Lock. The keys are composed of an angled shoulder which is designed to fit in the bore restriction of a nipple which has a bottom no-go that is smaller than the seal bore. This device is designed to be used in single installations or to be used in a bottom XN profile nipple in a series of X nipples. XN locks can only be landed in a XN profile nipple with an appropriate equalizing bottom attached to the no-go on the profile nipple no-go.

Operations:

- * The XN Lock mandrels have internal fishing necks.
- * The XN Lock mandrels with the flow control components are designed for the XN seating nipples installed in standard weight tubing. These lock mandrels are similar in design and are non-selective.
- * Once landed in the seating nipple these mandrels are mechanically locked. This is done by driving the expander sleeve behind the keys, holding the mandrel in a locked position.

Precautions:

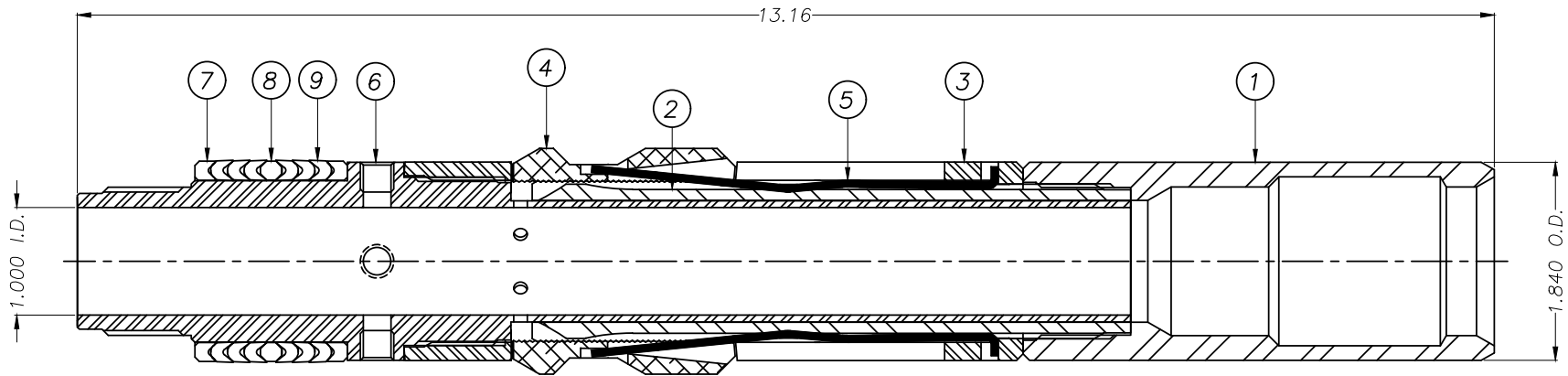
- * Be sure the key springs have the right tension and form to hold the keys fully loaded for running in a controlled position.
- * Ensure the ratchet rings on the expander sleeve and inner keys are not excessively worn.
- * Running tool required is "X-line" and pulling tool required is "GS" or "GR".

ITEM	QTY	DESCRIPTION	DRAWING/PART No	MATERIAL /REMARKS	ITEM	QTY	DESCRIPTION	DRAWING/PART No	MATERIAL /REMARKS
1	1	FISHNECK	08-02-X-200-01	AISI 4140 - L80	6	1	PACKING MANDREL	08-02-X-200-06	AISI 4140 - L80
2	1	EXPANDER SLEEVE	08-02-X-200-02	1026 DOM	7	2	BACKUP RING FEMALE	08-02-BUR-187-01	1026 DOM
3	1	KEY RETAINER HOUSING	08-02-X-200-03	1026 DOM	8	1	BACKUP RING MALE	08-02-BUR-187-02	1026 DOM
4	2	KEY	08-02-XN-200-04	AISI 4140 - L80	9	6	'V' PACKING	08-02-VP-187-01	AS REQUIRED
5	2	KEY SPRING	08-02-X-200-05	INCONEL X-750 SPRING TEMPERED					

*INDICATES PARTS IN REDRESS KIT PART No. 08-02-X-187-R0

APPLICABLE CRITICAL DATA

PACKING O.D.	Ø1.875	OVER ALL LENGTH	13.16
KEYS EXPANDED	Ø2.096	INTERNAL FISHNECK	1 3/8
KEYS COLLAPSED	Ø1.750	LOWER CONNECTION	1.375-14 UN
MAX TENSILE LOAD	18,500 lb		
PRESSURE RATING		PRESSURE RATING	
ABOVE	10,840 PSI	BELOW	12,420 PSI



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					TOLERANCES .X = +/-0.03 .XX = +/-0.015 .XXX = +/-0.005 ANGLES = +/-0.5° CONCENTRICITY .005 TIR				MATERIAL: AS REQ SCALE: N.T.S. DATE: 24 MAY 05 DWN: R.A.S. SHEET: 1 OF 1 DATE: 24 APR 18 CHK: C.B.		1.87 'XN' LOCK MANDREL ASSEMBLY DWG. No.: 08-02-XN-187-A0 REV. 1	
1	24 APR 18	UPDATED TITLE BLOCK, BOM, ADD DATA, DIM'S	L.M.B.	00448								
REV	DATE	DESCRIPTION	BY	ECR								