



Internal Cutters



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OVERVIEW

Logan Internal Cutters are used to cut tubing, casing, and drill pipe, and may also be run on sucker rods and macaroni strings. These mechanically operated cutters permit alternate sizes of pipe to be cut when redressing an assembly. All Logan Cutters feature a device that permits the operator to set the cutter to any depth, release the tool, and reset it to another depth without coming out of the hole.

Each cutter is designed to cut a given range of tubing when dressed with correctly sized components.

USES

The Logan Internal Cutter is used to cut tubing, casing, and drill pipe. It may also be run on sucker rods.

CONSTRUCTION

Logan Internal Cutters consist of either a wiper block assembly or drag spring assembly for setting in the pipe. Slips and a cone assembly anchor the cutter. A main spring aids in maintaining uniform feed to the knives. Knife blocks drive the knives upward and outward to engage the pipe. Precision ground knives easily cut the pipe.

OPERATION

Before use, be sure the Logan Internal Cutter is properly assembled. Threaded connections should be made up tightly. The tool should be dressed for the size of pipe to be cut. Refer to the specifications on pages 7 – 21 for the correct assembly number as dictated for the size of pipe to be cut. The Logan Internal Cutter is made up on the bottom of the cutting string.

Operating Precautions

Careful measurements taken during running in will ensure cuts are made at the correct depths. Use the knives as a reference point when taking all measurements. If the pipe to be cut is a full string, refer to the chart on page 6 to determine its lowest loose point.

In situations where it is difficult to control the amount of weight applied to a Logan Internal Cutter — deep or deviated holes, interference from rig equipment, or the inadvertent application of too much weight — a Logan Fishing Bumper Sub is recommended above the Cutter.

A stabilizer will minimize any swaying action that might interfere with the smooth operation of the Cutter. The stabilizer is usually made up one joint above the Cutter.

The Logan Fishing Bumper Sub basically consists of a telescoping mandrel within a body. These members freely slide in relation to each other while their mated splines transmit torque.

The Logan Fishing Bumper Sub is typically made up several joints above the Logan Internal Cutter and stabilizer. When properly positioned, the only weight on the Cutter is the predetermined weight of the pipe between the Cutter and the Fishing Bumper Sub.

Refer to the Logan Fishing Bumper Sub instruction manual (available on the Logan website or upon request) for complete information.

Cutting Procedure

After the cutter has been lowered to the desired cutting depth, anchor the cutter by slowly rotating to the right while continuing to lower. This will set the slips and allow the mandrel to travel down under the knife blocks. The knife blocks will force the knives upward and outward to engage the pipe so the cut can be made. Apply minimum weight

while slow rotation (8 to 18 rpm) of the work string is continued. Cutting is best accomplished by slacking off in increments (1/16" to 1/8") while the cut is made. Lack of reverse torque and free rotation of the work string will indicate the cut has been made.

The Logan Internal Cutter may be released for removal from the hole, or reset to make additional cuts. Raise the string about one foot to cause the grip jaws to engage the wickered sleeve. Once engaged, the tool may be raised or lowered.

For maximum efficiency and control when making cuts, a Logan Power Swivel is recommended.

MAINTENANCE

Good maintenance will ensure the best performance and maximum life of the Logan Internal Cutter. The tool should be thoroughly cleaned, lubricated (or painted) after each use and before storing. Worn or damaged parts should be replaced during disassembly/assembly.

DISASSEMBLY

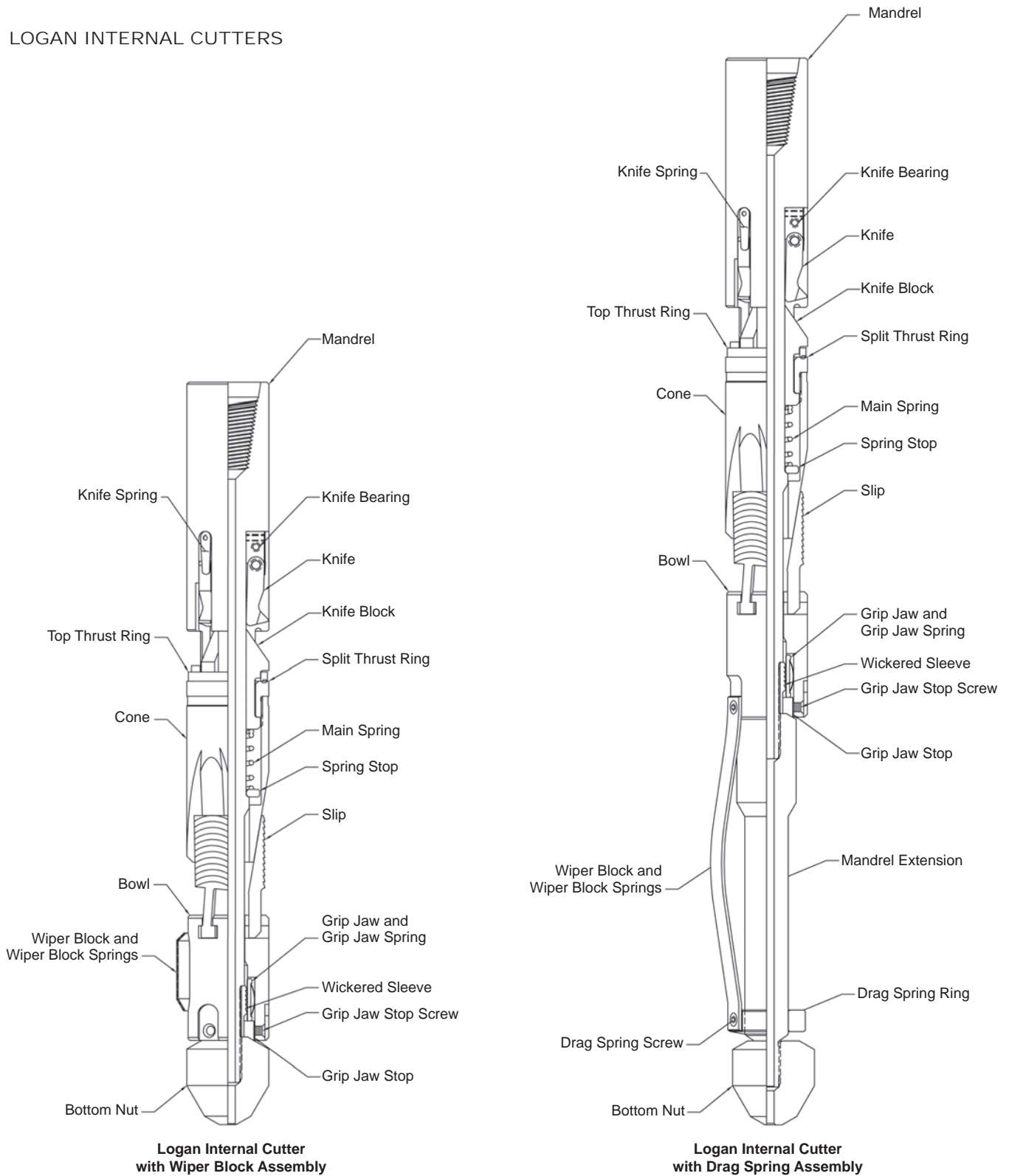
All disassembly and repairs should be conducted in a clean, well-equipped shop.

Logan Internal Cutter with a Wiper Block Assembly

The following disassembly instructions are for a Logan Internal Cutter with a Wiper Block Assembly:

1. Place the Logan Internal Cutter in a suitable vise. Clamp on the upper end of the mandrel.
2. Remove the bottom nut from the mandrel.
3. Turn the wiper block three complete revolutions clockwise (to the right). Push the bowl and slip upward against the cone.

LOGAN INTERNAL CUTTERS



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4. Slide the cone off the split thrust ring and remove the bowl and slip from the mandrel.
5. Remove the wiper block screws and remove the wiper blocks from the bowl.
6. Remove the grip jaw screws on the lower end of the bowl and extract the grip jaw stop from the lower end of the bowl.
7. Remove the grip jaw and grip jaw springs from inside the bowl.
8. Unscrew the cone from the split thrust ring and remove the cone from the mandrel.
9. Remove the two halves of the split thrust ring from the mandrel.
10. Remove the main spring stop from the mandrel and extract the main spring.
11. Remove the knife spring screws and knife springs.
12. Drive the knife pins out with a pin punch to remove the knives.
13. Remove the knife bearing screws to remove the knife bearings.
14. Slide the knife blocks to the top of the mandrel. Withdraw the top thrust ring from the mandrel by rotating it one-sixth of a revolution (60 degrees) to allow the top thrust ring to pass over the mandrel.
15. Remove the knife blocks.

Thoroughly clean and inspect all parts. Replace any collapsed springs or those that have a weak recoil. Replace any blades that are chipped or severely worn. Tong and wrench marks should be filed smooth.

Disassembly of the Logan Internal Cutter with a Wiper Block Assembly is now complete.

Logan Internal Cutter with a Drag Spring Assembly

Disassembly of a Logan Internal Cutter with a Drag Spring Assembly is similar to one with a Wiper Block Assembly:

1. Place the Logan Internal Cutter in a suitable vise. Clamp on the upper end of the mandrel.
2. Slide the drag spring ring off the wickered sleeve. Remove the drag spring screws that attach the drag springs to the drag spring ring and bowl.
3. Using the provided wrench flats, loosen and unscrew the wickered sleeve or mandrel extension from the mandrel.
4. Unscrew the cone from the split thrust ring and remove the cone from the mandrel.
5. Remove the two halves of the split thrust ring from the mandrel.
6. Remove the main spring stop from the mandrel and extract the main spring.
7. Remove the knife spring screws and knife springs.
8. Drive the knife pins out with a pin punch to remove the knives.
9. Remove the knife bearing screws to remove the knife bearings.
10. Slide the knife blocks to the top of the mandrel. Withdraw the top thrust ring from the mandrel by rotating it one-sixth of a revolution (60 degrees) to allow the top thrust ring to pass over the mandrel.
11. Remove the knife blocks.

Thoroughly clean and inspect all parts. Replace any collapsed springs or those that have a weak recoil. Replace any blades that are chipped or severely worn. Tong and wrench marks should be filed smooth.

Disassembly of the Logan Internal Cutter with a Drag Spring Assembly is now complete.

ASSEMBLY

The Logan Internal Cutter is easily assembled using standard shop tools. No special tools are required.

Make sure all parts have been thoroughly cleaned, inspected, and lubricated prior to assembly. Replace any collapsed springs or those that have a weak recoil. Replace any blades that are chipped or severely worn. Have high quality thread compound and a good grade of lightweight grease on hand.

Logan Internal Cutter with a Drag Spring Assembly

The following assembly instructions are for a Logan Internal Cutter with a Wiper Block Assembly:

1. Secure the Logan Internal Cutter in a suitable vise. Clamp on the upper end of the mandrel.
2. Insert the knife bearings into the grooves at the top of the mandrel and install the knife bearing screws.
3. Insert the knives into the mandrel grooves. Install the knife pins and screws.
4. Slide the knife blocks upward to position them under the knives.
5. With the hardened and ground surface facing the bottom of the mandrel, slide the top thrust ring onto the mandrel. Rotate the top thrust ring one-sixth of a turn (60 degrees) to allow the top thrust ring to pass over the knife blocks.
6. Position the knife blocks at the lower end of the mandrel grooves.
7. Insert the knife springs in the knife blocks.

NOTE: Grease will help the springs stay in place when they are inserted into the blocks.

8. Install the main spring on the mandrel.
9. Compress the main spring and install the spring stop.
10. Install the two halves of the split thrust ring between the top thrust ring and lugs of the mandrel.
11. Install the cone on the mandrel. Thread the cone tightly onto the top thrust ring.
12. Position a grip jaw spring into each groove at the lower end of the bowl. Insert grip jaws, clockwise in numerical order with numbers facing outward, in front of each spring.
13. With the bevel of the grip jaw stop facing toward the bottom of the bowl, secure the stop in position with the three grip jaw stop screws.
14. Place the slips into the slots in the bowl.
15. Position the bowl to align the slips with the grooves on the cone. Slide the assembly upward on the mandrel and thread it onto the split thrust ring.
16. Screw the wickered sleeve onto the mandrel. Make up tightly using the provided wrench flats.
17. Secure the bottom nut on the mandrel.
18. Thread the bowl to its lower position, retracting the slips, onto the wickered sleeve.
19. Install the wiper blocks, with the long bevel facing the lower end, into the slots provided in the bowl. Place wiper block springs into their respective positions under each wiper block. Secure wiper blocks with wiper block screws.

The Logan Internal Cutter with a Wiper Block Assembly is now ready for use.

Logan Internal Cutter with a Drag Spring Assembly

The following assembly instructions are for a Logan Internal Cutter with a Drag Spring Assembly:

Make sure all parts have been thoroughly cleaned, inspected, and lubricated prior to assembly. Replace any collapsed springs or those that have a weak recoil. Replace any blades that are chipped or severely worn. Have high quality thread compound and a good grade of lightweight grease on hand.

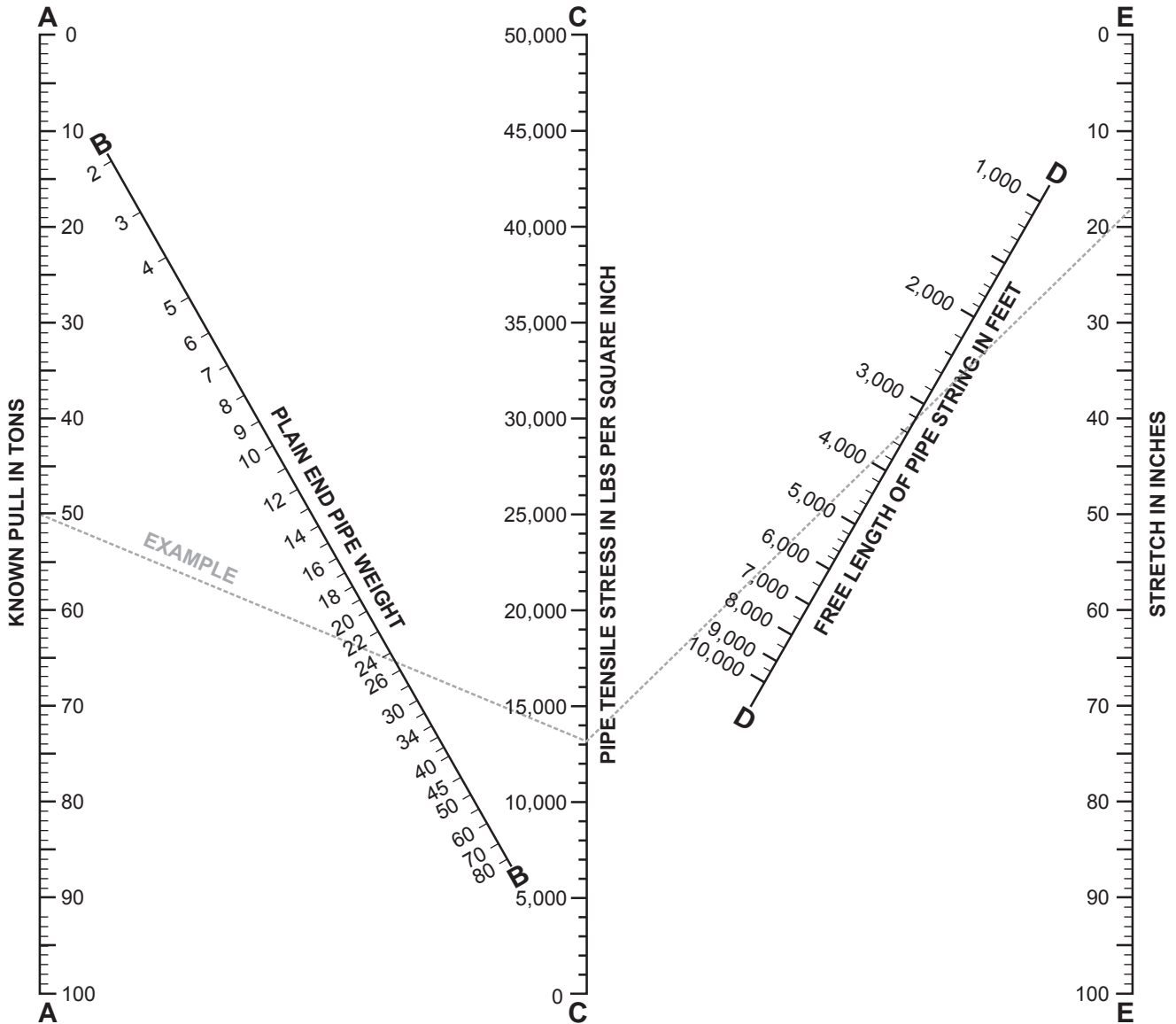
1. Secure the Logan Internal Cutter in a suitable vise. Clamp on the upper end of the mandrel.
2. Insert the knife bearings into the grooves at the top of the mandrel and install the knife bearing screws.
3. Insert the knives into the mandrel grooves. Install the knife pins and screws.
4. Slide the knife blocks upward to position them under the knives.
5. With the hardened and ground surface facing the bottom of the mandrel, slide the top thrust ring onto the mandrel. Rotate the top thrust ring one-sixth of a turn (60 degrees) to allow the top thrust ring to pass over the knife blocks.
6. Position the knife blocks at the lower end of the mandrel grooves.
7. Insert the knife springs in the knife blocks.

NOTE: Grease will help the springs stay in place when they are inserted into the blocks.

8. Install the main spring on the mandrel.
9. Compress the main spring and install the spring stop.
10. Install the two halves of the split thrust ring between the top thrust ring and lugs of the mandrel.
11. Install the cone on the mandrel. Thread the cone tightly onto the top thrust ring.
12. Position a grip jaw spring into each groove at the lower end of the bowl. Insert grip jaws, clockwise in numerical order with numbers facing outward, in front of each spring.
13. With the bevel of the grip jaw stop facing toward the bottom of the bowl, secure the stop in position with the three grip jaw stop screws.
14. Place the slips into the slots in the bowl.
15. Position the bowl to align the slips with the grooves on the cone. Slide the assembly upward on the mandrel and thread it onto the split thrust ring.
16. Screw the wickered sleeve or mandrel extension onto the mandrel. Make up tightly using the provided wrench flats.
17. Attach one end of the three (3) drag springs to the bowl with the drag spring screws.
18. Slide the drag spring ring onto the wickered sleeve. Attach the free ends of the drag springs to the drag spring ring with the drag spring screws.
19. Secure the bottom nut on the mandrel.

The Logan Internal Cutter with a Drag Spring Assembly is now ready for use.

DETERMINING FREE LENGTH OF PIPE



HOW TO USE THE CHART

1. Determine plain end weight of pipe
2. Pick up dead weight of pipe string
3. Mark pipe with respect to a stationary object
4. Take a known pull on the pipe
5. Remark pipe with respect to the same stationary object
6. Measure the distance (in inches) between the marks to get the Stretch in Inches.
7. Pace a straight edge at the Known Pull in Tons on scale A of the chart and through the Plain End Weight of Pipe on scale B. Read the Pipe Tensile Stress on scale C.
8. Pivot the straight edge on scale C until it passes through the Stretch in Inches on scale E. Read the Free Length of String in Feet on scale D.

EXAMPLE

The plain end weight a 6-5/8 - 26 lb casing is 25.65 lbs. Pipe was picked up at 20 tons to overcome the dead weight and marked. It was then picked up at 70 tons and marked again. The known pull was 50 tons (the difference between the two pulls.) The distance measured between the two marks was 18". The Free Length of String in Feet on scale D is 3,350 feet.



LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT		1.900 Tbg	2-3/8 Tbg	2-7/8 Tbg	2-7/8 Tbg	3-1/2 Tbg	4-1/2 FHDP	4-1/2 IFDP
CAN BE DRESSED FOR		...	2-7/8 IFDP	...	3-1/2 IFDP	4 Tbg	4-1/2 IFDP	4-1/2, 4-3/4,
			2-7/8 Tbg			4-1/2 Tbg	4-1/2 Csg	5 & 5-1/2 Csg
MINIMUM CUTTER O.D.		1-1/2	1-13/16	2-1/4	2-1/4	2-5/8	2-1/2	3-3/8
STANDARD ASSEMBLY		Drag Spring	Drag Spring	Drag Spring	Drag Spring	Wiper Block	Drag Spring	Wiper Block
COMPLETE ASSEMBLY	Logan Part No.	409-000	409-002	409-003	409-004	409-005	409-006	409-007
Consists of:	Bowen No.	25940	2174	8505	9176	8570	9465	8844
MANDREL	Logan Part No.	Q1000	Q1002	Q1003	Q1004	Q1005	Q1006	Q1007
	Bowen No.	25941	2175	8506	9177	8571	9466	8845
KNIFE BEARING	Logan Part No.	Q2000	Q2002	Q2002	Q2004	Q2004	Q2004	Q2004
	Bowen No.	25942	8433	8433	8575	8575	8575	8575
	No. Req'd	3	3	3	3	3	3	3
KNIFE SPRING SCREW	Logan Part No.	Q3000	Q3002	Q3002	Q3002	Q3002	Q3002	Q3002
	Bowen No.	13834	8181	8181	8181	8181	8181	8181
	No. Req'd	3	3	3	3	3	3	3
KNIFE SPRING	Logan Part No.	Q4000	Q4002	Q4002	Q4004	Q4004	Q4004	Q4004
	Bowen No.	25959	8434	8434	8629	8629	8629	8629
	No. Req'd	3	3	3	3	3	3	3
KNIFE	Logan Part No.	Q5000	Q5002	Q5002	Q5004	Q5004	Q5006	Q5004
	Bowen No.	25943	8432	8432	8572	8572	6807	8572
	No. Req'd	3	3	3	3	3	3	3
KNIFE BEARING SCREW	Logan Part No.	Q6000	Q6002	Q6003	Q6004	Q6005	Q6005	Q6005
	Bowen No.	23501	8529	8567	9189	8576	8576	8576
	No. Req'd	3	3	3	3	3	3	3
KNIFE PIN	Logan Part No.	Q7000	Q7002	Q7002	Q7004	Q7004	Q7006	Q7004
	Bowen No.	25944	8501	8501	8573	8573	9467	8573
	No. Req'd	3	3	3	3	3	3	3
KNIFE PIN SCREW	Logan Part No.	AA9001	Q8002	Q8002	Q8004	Q8004	Q8002	Q8004
	Bowen No.	12484	8445	8445	8574	8574	8445	8574
	No. Req'd	3	3	3	3	3	3	3
KNIFE BLOCK	Logan Part No.	Q9000	Q9002	Q9003	Q9004	Q9004	Q9006	Q9007
	Bowen No.	25945	8436	8507	8580	8580	6809	8846
	No. Req'd	3	3	3	3	3	3	3
TOP THRUST	Logan Part No.	Q10000	Q10002	Q10003	Q10004	Q10005	Q10006	Q10007
	Bowen No.	25946	9421	8508	9422	8612	6810	8931
SPLIT THRUST	Logan Part No.	Q11000	Q11002	Q11003	Q11004	Q11005	Q11006	Q11007
	Bowen No.	25947	8438	8509	9179	8582	7496	8848

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Special Notes:

- (1) Slip number Q15009 is for 5" 15-21# casing. For 5" 11.5-13# casing use Slip number Q40009.
- (2) Where both Wiper Block and Drag Spring parts are shown, the cutter can be ordered with either.
If not specified, Wiper Block parts will be furnished. (Note: Assemblies are priced differently.)

When ordering, please specify:

- (1) Name and number of assembly or part
- (2) Size of pipe to cut
- (3) Whether or not Bottom Nut is to be fitted for collar finder
- (4) Knives with carbide tips available upon request

Recommended Spare Parts:

- (1) 6 sets of Knives
- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
- (4) 2 sets of Knife Spring Screws
- (5) 1 set of Slips
- (6) 1 set of Wiper Blocks
- (7) 1 set of Wiper Block Springs
- (8) 1 set of Wiper Block Screws
- (9) 1 set of Grip Jaw Springs
- (10) 1 Wickered Sleeve
- (11) 1 set of Drag Springs
- (12) 1 set of Drag Springs Screws

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LOGAN

OIL TOOLS

LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT CAN BE DRESSED FOR	1.900 Tbg	2-3/8 Tbg	2-7/8 Tbg	2-7/8 Tbg	3-1/2 Tbg	4-1/2 FHDP	4-1/2 IFDP	
	...	2-7/8 IFDP	...	3-1/2 IFDP	4 Tbg	4-1/2 IFDP	4-1/2, 4 3/4, & 5 Csg	
MINIMUM CUTTER O.D.	1-1/2	1-13/16	2-1/4	2-1/4	2-5/8	2-1/2	3-3/8	
STANDARD ASSEMBLY	Drag Spring	Drag Spring	Drag Spring	Drag Spring	Wiper Block	Drag Spring	Wiper Block	
COMPLETE ASSEMBLY	Logan Part No. Bowen No.	409-000 25940	409-002 2174	409-003 8505	409-004 9176	409-005 8570	409-006 9465	409-007 8844
CONE	Logan Part No. Bowen No.	Q12000 25948	Q12002 2177	Q12003 8510	Q12004 9180	Q12005 8583	Q12006 9468	Q12007 8849
MAIN SPRING	Logan Part No. Bowen No.	Q13000 25949	Q13002 8440	Q13002 8440	Q13004 9191	Q13005 8584	Q13006 9469	Q13007 8850
SPRING STOP	Logan Part No. Bowen No.	Q14000 25950	Q14002 8442	Q14002 8442	Q14004 9192	Q14005 8585	Q14005 8585	Q14007 8851
SLIP	Logan Part No. Bowen No. No. Req'd	Q15000 25958 3	Q15002 2180 3	Q15003 4005 3	Q15004 2178 3	Q15005 8586 3	Q15006 7201 2	Q15007 8852 3
GRIP JAW SET	Logan Part No. Bowen No.	Q16000 25951	Q16002 8443	Q16002 8443	Q16002 8443	Q16005 8588	Q16005 8588	Q16005 8588
GRIP JAW SPRING	Logan Part No. Bowen No. No. Req'd	Q17000 8444 3	Q17000 8444 3	Q17000 8444 3	Q17000 8444 3	Q17005 8589 3	Q17005 8589 3	Q17005 8589 3
BOWL	Logan Part No. Bowen No.	Q18000 25952	Q18002 8521	Q18003 8520	Q18004 9181	Q18005 8597	Q18006 9470	Q18007 8853
GRIP JAW STOP	Logan Part No. Bowen No.	Q19000 25953	Q19002 8446	Q19003 8515	Q19004 9182	Q19005 8590	Q19006 9471	Q19005 8590
GRIP JAW STOP SCREW	Logan Part No. Bowen No. No. Req'd	Q20000 23096 3	Q20002 62517 3	Q20002 62517 3	Q20002 62517 3	Q20005 62681 3	Q20005 62681 3	Q20005 62681 3
WICKERED SLEEVE LONG	Logan Part No. Bowen No.	Q21000 25954	Q21002 8568	Q21002 8568	Q21004 9185	Q21005 8591	Q21006 9475	Q21005 8591
BOTTOM NUT	Logan Part No. Bowen No.	Q22000 25955	Q22002 8565	Q22003 8566	Q22003 8566	Q22005 8596	Q22006 9476	Q22007 8857

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Special Notes:

- (1) Slip number Q15009 is for 5" 15-21# casing. For 5" 11.5-13# casing use Slip number Q40009.
- (2) Where both Wiper Block and Drag Spring parts are shown, the cutter can be ordered with either.
If not specified, Wiper Block parts will be furnished. (Note: Assemblies are priced differently.)

When ordering, please specify:

- (1) Name and number of assembly or part
- (2) Size of pipe to cut
- (3) Whether or not Bottom Nut is to be fitted for collar finder
- (4) Knives with carbide tips available upon request

Recommended Spare Parts:

- (1) 6 sets of Knives
- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
- (4) 2 sets of Knife Spring Screws
- (5) 1 set of Slips
- (6) 1 set of Wiper Blocks
- (7) 1 set of Wiper Block Springs
- (8) 1 set of Wiper Block Screws
- (9) 1 set of Grip Jaw Springs
- (10) 1 Wickered Sleeve
- (11) 1 set of Drag Springs
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LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT CAN BE DRESSED FOR	1.900 Tbg	2-3/8 Tbg	2-7/8 Tbg	2-7/8 Tbg	3-1/2 Tbg	4-1/2 FHDP	4 1/2 IFDP	
	...	2-7/8 IFDP	...	3-1/2 IFDP	4-Tbg	4-1/2 IFDP	4-1/2, 4 3/4, & 5 Csg	
		2-7/8 Tbg			4-1/2 Tbg	4-1/2 Csg		
MINIMUM CUTTER O.D.	1-1/2	1-13/16	2-1/4	2-1/4	2-5/8	2-1/2	3-3/8	
STANDARD ASSEMBLY	Drag Spring	Drag Spring	Drag Spring	Drag Spring	Wiper Block	Drag Spring	Wiper Block	
COMPLETE ASSEMBLY	Logan Part No.	409-000	409-002	409-003	409-004	409-005	409-006	409-007
	Bowen No.	25940	2174	8505	9176	8570	9465	8844
WIPER BLOCK	Logan Part No.	...	...	...	...	Q23005	...	Q23007
	Bowen No.	...	...	...	...	8598	...	8854
	No. Req'd	...	...	...	...	3	...	3
WIPER BLOCK SPRING	Logan Part No.	...	...	...	...	Q24005	...	Q24007
	Bowen No.	...	...	...	...	8599	...	8863
	No. Req'd	...	...	...	...	9	...	9
WIPER BLOCK SCREW	Logan Part No.	...	...	...	...	Q25005	...	Q25005
	Bowen No.	...	...	...	...	8856	...	8856
	No. Req'd	...	...	...	...	6	...	6
BOWL DRAG SPRING TYPE	Logan Part No.	...	...	...	...	...	...	...
	Bowen No.	...	...	...	...	...	...	...
MANDREL EXTENSION	Logan Part No.	...	...	...	Q27004	Q27005	Q27006	Q27005
	Bowen No.	...	...	...	9183	8595	9472	8595
DRAG SPRING	Logan Part No.	Q28000	Q28002	Q28002	Q28002	Q28005	Q28005	Q28005
	Bowen No.	25956	8569	8569	8569	8592	8592	8592
	No. Req'd	...	...	...	...	3	...	3
DRAG SPRING RING	Logan Part No.	Q29000	Q29002	Q29003	Q29003	Q29005	Q29006	Q29007
	Bowen No.	25957	8500	8518	8518	8594	9473	8855
DRAG SPRING SCREW	Logan Part No.	Q20000	Q20002	Q20002	Q20002	Q30005	Q20005	AK6004
	Bowen No.	23096	62517	62517	62517	62734	62681	8593
	No. Req'd	6	6	6	6	6	6	6
WICKERED SLEEVE SHORT	Logan Part No.	...	Q21002	Q31003	...	...	...	...
	Bowen No.	...	8568	8564	...	...	...	...
DRAG SPRING SHORT	Logan Part No.	...	...	Q32003	...	...	...	...
	Bowen No.	8449
	No. Req'd	3
ROD KNIFE	Logan Part No.	Q33003	Q33003
	Bowen No.	9423	9423

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Recommended Spare Parts:

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- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
- (4) 2 sets of Knife Spring Screws
- (5) 1 set of Slips
- (6) 1 set of Wiper Blocks
- (7) 1 set of Wiper Block Springs
- (8) 1 set of Wiper Block Screws
- (9) 1 set of Grip Jaw Springs
- (10) 1 Wickered Sleeve
- (11) 1 set of Drag Springs
- (12) 1 set of Drag Springs Screws



LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT	1.900 Tbg	2-3/8 Tbg	2-7/8 Tbg	2-7/8 Tbg	3-1/2 Tbg	4-1/2 FHDP	4 1/2 IFDP	
CAN BE DRESSED FOR	...	2-7/8 IFDP 2-7/8 Tbg	...	3-1/2 IFDP	4-Tbg 4-1/2 Tbg	4-1/2 IFDP 4-1/2 Csg	4-1/2, 4 3/4, & 5 Csg	
MINIMUM CUTTER O.D.	1-1/2	1-13/16	2-1/4	2-1/4	2-5/8	2-1/2	3-3/8	
STANDARD ASSEMBLY	Drag Spring	Drag Spring	Drag Spring	Drag Spring	Wiper Block	Drag Spring	Wiper Block	
COMPLETE ASSEMBLY	Logan Part No. Bowen No.	409-000 25940	409-002 2174	409-003 8505	409-004 9176	409-005 8570	409-006 9465	409-007 8844
TOP THRUST	Logan Part No.	...	...	...	...	...	...
TO CUT COUPLING	Bowen No.	...	...	...	...	...	...
TOP THRUST	Logan Part No.	...	...	...	...	Q34005	...
	Bowen No.	...	...	...	...	8581	...
SLIP	Logan Part No.	...	...	...	...	Q35005	...
	Bowen No.	...	...	...	...	8587	...
WIPER BLOCK	Logan Part No.	...	...	...	...	Q36005	...
	Bowen No.	...	...	...	...	8605	...
BOTTOM NUT	Logan Part No.	Q37005	...	
	Bowen No.	8634	...	
KNIFE BLOCK	Logan Part No.	Q38005	...	
	Bowen No.	22278	...	

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Special Notes:

- (1) Slip number Q15009 is for 5" 15-21# casing. For 5" 11.5-13# casing use Slip number Q40009.
- (2) Where both Wiper Block and Drag Spring parts are shown, the cutter can be ordered with either.
If not specified, Wiper Block parts will be furnished. (Note: Assemblies are priced differently.)

When ordering, please specify:

- (1) Name and number of assembly or part
- (2) Size of pipe to cut
- (3) Whether or not Bottom Nut is to be fitted for collar finder
- (4) Knives with carbide tips available upon request

Recommended Spare Parts:

- (1) 6 sets of Knives
- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
- (4) 2 sets of Knife Spring Screws
- (5) 1 set of Slips
- (6) 1 set of Wiper Blocks
- (7) 1 set of Wiper Block Springs
- (8) 1 set of Wiper Block Screws
- (9) 1 set of Grip Jaw Springs
- (10) 1 Wickered Sleeve
- (11) 1 set of Drag Springs
- (12) 1 set of Drag Springs Screws

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LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT CAN BE DRESSED FOR	5 IUDP	5 Csg	6 Csg	7 Csg	8-5/8 to 9 Csg	9-5/8 Csg	11-3/4 Csg
	...	5-1/2 Csg	6-5/8 Csg 7 Csg	7-5/8, 8 Csg 8-1/2 Csg	9-5/8 Csg	10-3/4 Csg 11-3/4 Csg	12 LP
MINIMUM CUTTER O.D.	3-3/8	4	5	5-11/16	7-1/4	8-1/4	...
STANDARD ASSEMBLY	Drag Spring	Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block
COMPLETE ASSEMBLY	Logan Part No. Bowen No.	409-008 9081	409-009 8200	409-010 14785	409-011 8745	409-012 15532	409-013 15080 409-014 41876
MANDREL	Logan Part No. Bowen No.	Q1008 9082	Q1009 8176	Q1010 14786	Q1011 8746	Q1012 15533	Q1013 15081 Q1014 41877
KNIFE BEARING	Logan Part No. Bowen No. No. Req'd	Q2004 8575 3	Q2009 8179 3	Q2009 8179 3	Q2009 8179 3	Q2012 15110 5	Q2012 15110 5 Q2012 15110 5
KNIFE SPRING SCREW	Logan Part No. Bowen No. No. Req'd	Q3002 8181 3	Q3002 8181 3	Q3002 8181 3	Q3002 8181 3	Q3012 9558 5	Q3012 9558 5 Q3012 9558 5
KNIFE SPRING	Logan Part No. Bowen No. No. Req'd	Q4004 8629 3	Q4009 8180 3	Q4009 8180 3	Q4009 8180 3	Q4012 15111 5	Q4012 15111 5 Q4012 15111 5
KNIFE	Logan Part No. Bowen No. No. Req'd	Q5008 9042 3	Q5009 8177 3	Q5009 8177 3	Q5009 8177 3	Q5012 15102 5	Q5012 15102 5 Q5012 15102 5
KNIFE BEARING SCREW	Logan Part No. Bowen No. No. Req'd	Q6005 8576 3	Q6009 8229 3	Q6009 8229 3	Q6009 8229 3	Q6012 15553 5	Q6013 15112 5 Q6013 15112 5
KNIFE PIN	Logan Part No. Bowen No. No. Req'd	Q7004 8573 3	Q7009 8178 3	Q7009 8178 3	Q7009 8178 3	Q7012 15558 5	Q7013 15113 5 Q7013 15113 5
KNIFE PIN SCREW	Logan Part No. Bowen No. No. Req'd	Q8004 8574 3	Q8009 8208 3	Q8009 8208 3	Q8009 8208 3	Q8012 15114 5	Q8012 15114 5 Q8012 15114 5
KNIFE BLOCK	Logan Part No. Bowen No. No. Req'd	Q9007 8846 3	Q9009 8183 3	Q9009 8183 3	Q9009 8183 3	Q9012 15115 5	Q9012 15115 5 Q9012 15115 5
TOP THRUST	Logan Part No. Bowen No.	Q10008 8847	Q10009 8241	Q10010 14787	Q10011 8748	Q10012 15534	Q10013 15099 Q10014 41878

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Special Notes:

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If not specified, Wiper Block parts will be furnished. (Note: Assemblies are priced differently.)

When ordering, please specify:

- (1) Name and number of assembly or part
- (2) Size of pipe to cut
- (3) Whether or not Bottom Nut is to be fitted for collar finder
- (4) Knives with carbide tips available upon request

Recommended Spare Parts:

- (1) 6 sets of Knives
- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
- (4) 2 sets of Knife Spring Screws
- (5) 1 set of Slips
- (6) 1 set of Wiper Blocks
- (7) 1 set of Wiper Block Springs
- (8) 1 set of Wiper Block Screws
- (9) 1 set of Grip Jaw Springs
- (10) 1 Wickered Sleeve
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LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT	5 IUDP	5 Csg	6 Csg	7 Csg	8-5/8 to 9 Csg	9-5/8 Csg	11-3/4 Csg	
CAN BE DRESSED FOR	...	5-1/2 Csg	6-5/8 Csg 7 Csg	7-5/8, 8 Csg 8-1/2 Csg	9-5/8 Csg	10-3/4 Csg 11-3/4 Csg	12 LP	
MINIMUM CUTTER O.D.	3-3/8	4	5	5-11/16	7-1/4	8-1/4	...	
STANDARD ASSEMBLY	Drag Spring	Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block	
COMPLETE ASSEMBLY	Logan Part No. Bowen No.	409-008 9081	409-009 8200	409-010 14785	409-011 8745	409-012 15532	409-013 15080	409-014 41876
SPLIT THRUST	Logan Part No. Bowen No.	Q11007 8848	Q11009 8185	Q11010 14788	Q11011 8750	Q11012 15535	Q11013 15084	Q11014 41879
CONE	Logan Part No. Bowen No.	Q12008 9083	Q12009 8186	Q12010 14789	Q12011 8751	Q12012 15536	Q12013 15085	Q12014 41880
MAIN SPRING	Logan Part No. Bowen No.	Q13008 9084	Q13009 8187	Q13010 14790	Q13011 8752	Q13012 15537	Q13013 15086	Q13014 41881
SPRING STOP	Logan Part No. Bowen No.	Q14007 8851	Q14009 8209	Q14010 14791	Q14011 8753	Q14012 15538	Q14013 15087	Q14014 41882
SLIP	Logan Part No. Bowen No. No. Req'd	Q15008 9043 3	Q15009 1924 3	Q15010 14792 3	Q15011 8754 3	Q15012 15539 3	Q15013 15275 3	Q15014 41883 3
GRIP JAW SET	Logan Part No. Bowen No.	... ...	Q16009 8193	Q16010 14793	Q16011 8755	Q16012 15540	Q16013 15089	Q16014 41884
GRIP JAW SPRING	Logan Part No. Bowen No. No. Req'd	... ... ...	Q17009 8194 3	Q17010 14797 3	Q17011 8756 3	Q17012 15108 3	Q17012 15108 3	Q17012 15108 3
BOWL	Logan Part No. Bowen No.	Q18008 9044	Q18009 8190	Q18010 14794	Q18011 8761	Q18012 15542	Q18013 15090	Q18014 41885
GRIP JAW STOP	Logan Part No. Bowen No.	Q19005 8590	Q19009 8202	Q19010 14795	Q19011 8757	Q19012 15543	Q19013 15091	Q19014 41886
GRIP JAW STOP SCREW	Logan Part No. Bowen No. No. Req'd	Q20005 62681 3	Q20009 25221 3	Q20010 8251 3	Q20010 8251 3	Q20010 8251 3	Q20010 8251 3	Q20010 8251 3
WICKERED SLEEVE LONG	Logan Part No. Bowen No.	Q21008 9045	Q21009 8236	Q21010 14799	Q21011 8762	Q21012 15546	Q21013 15096	Q21014 41888
BOTTOM NUT	Logan Part No. Bowen No.	Q22007 8857	Q22009 8196	Q22010 14800	Q22011 8763	Q22012 15547	Q22013 15097	Q22014 41889

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If not specified, Wiper Block parts will be furnished. (Note: Assemblies are priced differently.)

When ordering, please specify:

- (1) Name and number of assembly or part
- (2) Size of pipe to cut
- (3) Whether or not Bottom Nut is to be fitted for collar finder
- (4) Knives with carbide tips available upon request

Recommended Spare Parts:

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- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
- (4) 2 sets of Knife Spring Screws
- (5) 1 set of Slips
- (6) 1 set of Wiper Blocks
- (7) 1 set of Wiper Block Springs
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- (10) 1 Wickered Sleeve
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LOGAN

OIL TOOLS

LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT CAN BE DRESSED FOR	5 IUDP	5 Csg	6 Csg	7 Csg	8-5/8 to 9 Csg	9-5/8 Csg	11-3/4 Csg	
	...	5-1/2 Csg	6-5/8 Csg 7 Csg	7-5/8, 8 Csg, & 8-1/2 Csg	9-5/8 Csg	10-3/4 Csg 11-3/4 Csg	12 LP	
MINIMUM CUTTER O.D.	3-3/8	4	5	5-11/16	7-1/4	8-1/4	...	
STANDARD ASSEMBLY	Drag Spring	Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block	
COMPLETE ASSEMBLY	Logan Part No. Bowen No.	409-008 9081	409-009 8200	409-010 14785	409-011 8745	409-012 15532	409-013 15080	409-014 41876
WIPER BLOCK	Logan Part No. Bowen No. No. Req'd	...	Q23009 8191 3	Q23010 14801 3	Q23011 8758 3	Q23012 15548 3	Q23013 15098 3	Q23014 41887 3
WIPER BLOCK SPRING	Logan Part No. Bowen No. No. Req'd	...	Q24005 8599 24	Q24010 8759 24	Q24010 8759 24	Q24012 15276 36	Q24012 15276 36	Q24012 15276 36
WIPER BLOCK SCREW	Logan Part No. Bowen No. No. Req'd	...	Q25005 8856 6	Q25010 8760 6	Q25010 8760 6	Q25010 8760 6	Q25010 8760 6	Q25010 8760 6
BOWL DRAG SPRING TYPE	Logan Part No. Bowen No.	...	Q26005 8201	...	...	...	...	...
MANDREL EXTENSION	Logan Part No. Bowen No.	Q27008 9093	Q27009 8237	Q27010 14796	Q27011 8246	Q27012 15544	Q27013 15092	Q27014 41892
DRAG SPRING	Logan Part No. Bowen No. No. Req'd	Q28008 9092 3	Q28009 8203 3	Q28010 8247 3	Q28010 8247 3	Q28012 15093 3	Q28012 15093 3	Q28014 41890 3
DRAG SPRING RING	Logan Part No. Bowen No.	Q29007 8855	Q29009 8205	Q29010 14798	Q29011 8248	Q29012 15545	Q29013 15095	Q29014 41891
DRAG SPRING SCREW	Logan Part No. Bowen No. No. Req'd	Q20005 62681 ...	Q20009 25221 3	Q20010 8251 3	Q20010 8251 3	Q20010 8251 3	Q20010 8251 3	Q20010 8251 3
WICKERED SLEEVE SHORT	Logan Part No. Bowen No.
DRAG SPRING SHORT	Logan Part No. Bowen No.
ROD KNIFE	Logan Part No. Bowen No.

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- (2) Size of pipe to cut
- (3) Whether or not Bottom Nut is to be fitted for collar finder
- (4) Knives with carbide tips available upon request

Recommended Spare Parts:

- (1) 6 sets of Knives
- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
- (4) 2 sets of Knife Spring Screws
- (5) 1 set of Slips
- (6) 1 set of Wiper Blocks
- (7) 1 set of Wiper Block Springs
- (8) 1 set of Wiper Block Screws
- (9) 1 set of Grip Jaw Springs
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LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT		5 IUDP	5 Csg	6 Csg	7 Csg	8-5/8 to 9 Csg	9-5/8 Csg	11-3/4 Csg
CAN BE DRESSED FOR		...	5-1/2 Csg	6-5/8 Csg 7 Csg	7-5/8, 8 Csg, & 8-1/2 Csg	9-5/8 Csg	10-3/4 Csg 11-3/4 Csg	12 LP
MINIMUM CUTTER O.D.		3-3/8	4	5	5-11/16	7-1/4	8-1/4	...
STANDARD ASSEMBLY		Drag Spring	Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block
COMPLETE ASSEMBLY	Logan Part No.	409-008	409-009	409-010	409-011	409-012	409-013	409-014
	Bowen No.	9081	8200	14785	8745	15532	15080	41876
TOP THRUST	Logan Part No.	...	Q34009	Q34010	Q34011	Q34012	Q39015	Q34014
TO CUT COUPLING	Bowen No.	...	8184	14802	8749	15541	15083	41896
TOP THRUST	Logan Part No.	...	...	...	...	...	...	...
	Bowen No.	...	...	...	...	...	...	...
SLIP	Logan Part No.	...	...	...	...	...	...	...
	Bowen No.	...	...	...	...	...	...	...
WIPER BLOCK	Logan Part No.	...	...	...	...	...	...	...
	Bowen No.
BOTTOM NUT	Logan Part No.
	Bowen No.
KNIFE BLOCK	Logan Part No.
	Bowen No.

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When ordering, please specify:

- (1) Name and number of assembly or part
- (2) Size of pipe to cut
- (3) Whether or not Bottom Nut is to be fitted for collar finder
- (4) Knives with carbide tips available upon request

Recommended Spare Parts:

- (1) 6 sets of Knives
- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
- (4) 2 sets of Knife Spring Screws
- (5) 1 set of Slips
- (6) 1 set of Wiper Blocks
- (7) 1 set of Wiper Block Springs
- (8) 1 set of Wiper Block Screws
- (9) 1 set of Grip Jaw Springs
- (10) 1 Wickered Sleeve
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LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT		13 & & 13-3/8 Csg	16 Csg	20 Tbg				
CAN BE DRESSED FOR		...	18-5/8 Csg	20-3/4 Csg				
MINIMUM CUTTER O.D.		11-3/4	14-1/2	18-5/8				
STANDARD ASSEMBLY		Wiper Block	Wiper Block	Wiper Block				
COMPLETE ASSEMBLY	Logan Part No.	409-015	409-016	409-017				
	Bowen No.	19525	21240	19760				
MANDREL	Logan Part No.	Q1015	Q1016	Q1017				
	Bowen No.	19526	21241	19761				
KNIFE BEARING	Logan Part No.	Q2012	Q2012	Q2012				
	Bowen No.	15110	15110	15110				
	No. Req'd	5	5	5				
KNIFE SPRING SCREW	Logan Part No.	Q3012	Q3012	Q3012				
	Bowen No.	9558	9558	9558				
	No. Req'd	5	5	5				
KNIFE SPRING	Logan Part No.	Q4012	Q4012	Q4012				
	Bowen No.	15111	15111	15111				
	No. Req'd	5	5	5				
KNIFE	Logan Part No.	Q5012	Q5012	Q5012				
	Bowen No.	15102	15102	15102				
	No. Req'd	5	5	5				
KNIFE BEARING SCREW	Logan Part No.	Q6013	Q6013	Q6013				
	Bowen No.	23003	15112	15112				
	No. Req'd	5	5	5				
KNIFE PIN	Logan Part No.	Q7015	Q7013	Q7013				
	Bowen No.	39231	15113	15113				
	No. Req'd	5	5	5				
KNIFE PIN SCREW	Logan Part No.	Q8012	Q8012	Q8012				
	Bowen No.	15114	15114	15114				
	No. Req'd	5	5	5				
KNIFE BLOCK	Logan Part No.	Q9012	Q9012	Q9012				
	Bowen No.	15115	15115	15115				
	No. Req'd	5	5	5				

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- (1) Name and number of assembly or part
- (2) Size of pipe to cut
- (3) Whether or not Bottom Nut is to be fitted for collar finder
- (4) Knives with carbide tips available upon request

Recommended Spare Parts:

- (1) 6 sets of Knives
- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
- (4) 2 sets of Knife Spring Screws
- (5) 1 set of Slips
- (6) 1 set of Wiper Blocks
- (7) 1 set of Wiper Block Springs
- (8) 1 set of Wiper Block Screws
- (9) 1 set of Grip Jaw Springs
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- (11) 1 set of Draa Sprinas

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LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT		13 & 13-3/8 Csg	16 Csg	20 Csg				
CAN BE DRESSED FOR		...	18-5/8 Csg	20-3/4 Csg				
MINIMUM CUTTER O.D.		11-3/4	14-1/2	18-5/8				
STANDARD ASSEMBLY		Wiper Block	Wiper Block	Wiper Block				
COMPLETE ASSEMBLY	Logan Part No.	409-015	409-016	409-017				
	Bowen No.	19525	21240	19760				
TOP THRUST	Logan Part No.	Q10015	Q10016	Q10017				
	Bowen No.	19527	21242	19762				
SPLIT THRUST	Logan Part No.	Q11015	Q11016	Q11017				
	Bowen No.	19528	21243	19763				
CONE	Logan Part No.	Q12015	Q12016	Q12017				
	Bowen No.	19529	21244	19764				
MAIN SPRING	Logan Part No.	Q13015	Q13016	Q13017				
	Bowen No.	19530	21245	19765				
SPRING STOP	Logan Part No.	Q14015	Q14016	Q14017				
	Bowen No.	19531	21246	19766				
SLIP	Logan Part No.	Q15015	Q15016	Q15017				
	Bowen No.	19532	21247	19767				
	No. Req'd	3	3	3				
GRIP JAW SET	Logan Part No.	Q16015	Q16016	Q16017				
	Bowen No.	19533	21248	19768				
GRIP JAW SPRING	Logan Part No.	Q17015	Q17016	8234				
	Bowen No.	19534	21249	19769				
	No. Req'd	4	4	4				
BOWL	Logan Part No.	Q18015	Q18016	Q18017				
	Bowen No.	19535	21250	19770				
GRIP JAW STOP	Logan Part No.	Q19015	Q19016	Q19017				
	Bowen No.	19536	21251	19771				
GRIP JAW STOP SCREW	Logan Part No.	Q20015	Q20016	Q20010				
	Bowen No.	41871	21679	8251				
	No. Req'd	3	3	3				

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Recommended Spare Parts:

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- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
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LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT	13 &	16 Csg	20 Csg				
	13-3/8 Csg						
CAN BE DRESSED FOR	...	18-5/8 Csg	20-3/4 Csg				
CUTTER O.D. (MINIMUM)	11-3/4	14-1/2	18-5/8				
STANDARD ASSEMBLY	Wiper Block	Wiper Block	Wiper Block				
COMPLETE ASSEMBLY	Logan Part No. 409-015	409-016	409-017				
	Bowen No. 19525	21240	19760				
WICKERED SLEEVE	Logan Part No. Q21015	Q21016	Q21017				
LONG	Bowen No. 19540	21253	19778				
BOTTOM NUT	Logan Part No. Q22015	Q22016	Q22017				
	Bowen No. 19541	21254	19779				
WIPER BLOCK	Logan Part No. Q23015	Q23016	Q23017				
	Bowen No. 19542	21252	19772				
	No. Req'd 6	8	6				
WIPER BLOCK SPRING	Logan Part No. Q24012	Q24012	Q24012				
	Bowen No. 15276	15276	15276				
	No. Req'd 72	54	48				
WIPER BLOCK SCREW	Logan Part No. Q25010	Q25016	Q25010				
	Bowen No. 8760	21678	8760				
	No. Req'd 6	12	6				
BOWL DRAG	Logan Part No. ...	...	...		
SPRING TYPE	Bowen No. ...	...	...		
MANDREL EXTENSION	Logan Part No. Q27015	Q27016	Q27017				
	Bowen No. 19537	21255	19773				
DRAG SPRING	Logan Part No. Q28015	Q28016	Q28017				
	Bowen No. 19538	21256	19774				
	No. Req'd 6	6	6				
DRAG SPRING RING	Logan Part No. Q29015	Q29016	Q29017				
	Bowen No. 19539	21257	19799				
DRAG SPRING SCREW	Logan Part No. Q20010	Q20010	Q20010				
	Bowen No. 8251	8251	8251				
	No. Req'd 6	6	6				

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Special Notes:

- (1) Slip number Q15009 is for 5" 15-21# casing. For 5" 11.5-13# casing use Slip number Q40009.
- (2) Where both Wiper Block and Drag Spring parts are shown, the cutter can be ordered with either.
If not specified, Wiper Block parts will be furnished. (Note: Assemblies are priced differently.)

When ordering, please specify:

- (1) Name and number of assembly or part
- (2) Size of pipe to cut
- (3) Whether or not Bottom Nut is to be fitted for collar finder
- (4) Knives with carbide tips available upon request

Recommended Spare Parts:

- (1) 6 sets of Knives
- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
- (4) 2 sets of Knife Spring Screws
- (5) 1 set of Slips
- (6) 1 set of Wiper Blocks
- (7) 1 set of Wiper Block Springs
- (8) 1 set of Wiper Block Screws
- (9) 1 set of Grip Jaw Springs
- (10) 1 Wickered Sleeve
- (11) 1 set of Drag Springs
- (12) 1 set of Drag Springs Screws

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LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT	13 &	16 Csg	20 Csg				
	13-3/8 Csg						
CAN BE DRESSED FOR	...	18-5/8 Csg	20-3/4 Csg				
MINIMUM CUTTER O.D.	11-3/4	14-1/2	18-5/8				
STANDARD ASSEMBLY	Wiper Block	Wiper Block	Wiper Block				
COMPLETE ASSEMBLY	Logan Part No.	409-015	409-016	409-017			
	Bowen No.	19525	21240	19760			
WICKERED SLEEVE	Logan Part No.	...	...	...
SHORT	Bowen No.	...	...	...
DRAG SPRING SHORT	Logan Part No.	...	...	...
	Bowen No.	...	...	...
	No. Req'd	...	...	...
ROD KNIFE	Logan Part No.	...	...	...
	Bowen No.	...	...	...
TOP THRUST	Logan Part No.	...	...	...
TO CUT COUPLING	Bowen No.	...	...	...
TOP THRUST	Logan Part No.	...	...	...
	Bowen No.	...	...	...
SLIP	Logan Part No.	...	...	...
	Bowen No.	...	...	...
WIPER BLOCK	Logan Part No.	...	...	...
	Bowen No.			
BOTTOM NUT	Logan Part No.			
	Bowen No.			
KNIFE BLOCK	Logan Part No.			
	Bowen No.			

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Special Notes:

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- (2) Where both Wiper Block and Drag Spring parts are shown, the cutter can be ordered with either.
If not specified, Wiper Block parts will be furnished. (Note: Assemblies are priced differently.)

When ordering, please specify:

- (1) Name and number of assembly or part
- (2) Size of pipe to cut
- (3) Whether or not Bottom Nut is to be fitted for collar finder
- (4) Knives with carbide tips available upon request

Recommended Spare Parts:

- (1) 6 sets of Knives
- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
- (4) 2 sets of Knife Spring Screws
- (5) 1 set of Slips
- (6) 1 set of Wiper Blocks
- (7) 1 set of Wiper Block Springs
- (8) 1 set of Wiper Block Screws
- (9) 1 set of Grip Jaw Springs
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LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT		2-3/8 Tbg	3-1/2 OD Tbg	3-1/2 OD Tbg	4-1/2 FHDP	4-1/2 FHDP	4-1/2 IFDP	4-1/2 IFDP
CAN BE DRESSED TO CUT		2-7/8 IF DP & 2-7/8 Tbg	4 OD Tbg	4-1/2 OD Tbg	4-1/2 X-Hole DP	4-1/2 OD Csg	4-1/2 OD Tbg & Csg	4-3/4 OD Csg
CUTTER O.D. (MINIMUM)		1-13/16	2-5/8	2-5/8	2-1/2	2-1/2	3-3/8	3-3/8
STANDARD ASSEMBLY		Drag Spring	Wiper Block	Wiper Block	Drag Spring	Drag Spring	Wiper Block	Wiper Block
COMPLETE ASSEMBLY	Logan Part No.	409-002	409-005	409-005	409-006	409-006	409-007	409-007
	Bowen No.	2174	8570	8570	9465	9465	8844	8844
TOP THRUST	Logan Part No.	Q39000	Q39003	Q34005	...	...	...	Q10008
	Bowen No.	8437	8613	8581	...	...	...	8847
SLIP	Logan Part No.	Q40000	Q40003	Q35005	...	Q40006	Q40007	Q40007
	Bowen No.	2181	8577	8587	...	23945	8932	8932
	No. Req'd	3	3	3	...	3	3	3
WIPER BLOCK	Logan Part No.	...	Q41003	Q36005	...	...	Q41007	Q41007
	Bowen No.	...	8614	8605	...	...	8933	8933
	No. Req'd	...	3	3	...	...	3	3
DRAG SPRING	Logan Part No.	...	Q42003	...	Q42005	Q42006	...	Q42005
	Bowen No.	...	8611	...	8611	23946	...	8611
	No. Req'd	...	3	...	3	3	...	3
BOTTOM NUT	Logan Part No.	...	Q43003	Q43004	Q43005	...	...	Q43008
	Bowen No.	...	8602	8634	9457	...	...	8934
KNIFE BLOCK	Logan Part No.	...	...	Q38005	...	...	...	...
	Bowen No.	...	...	22278	...	...	...	...
	No. Req'd	...	...	3	...	...	...	...
TOP THRUST	Logan Part No.
CUT COUPLING	Bowen No.
KNIFE	Logan Part No.
	Bowen No.

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Notes:

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- (2) Where both Wiper Block and Drag Spring parts are shown the cutter can be ordered for collar finder.
- (3) Whether or not Bottom Nut is to be fitted with either. If not specified, Wiper Block parts will be furnished.
(Note: Assemblies are priced differently.)
- (4) Knives with carbide tips available upon request

When ordering, please specify:

- (1) Name and number of assembly or part
- (2) Size of pipe to cut
- (3) Whether or not Bottom Nut is to be fitted for collar finder
- (4) Knives with carbide tips available upon request

Recommended Spare Parts:

- (1) 6 sets of Knives
- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
- (4) 2 sets of Knife Spring Screws
- (5) 1 set of Slips
- (6) 1 set of Wiper Blocks
- (7) 1 set of Wiper Block Springs
- (8) 1 set of Wiper Block Screws
- (9) 1 set of Grip Jaw Springs
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LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT		4-1/2	4-1/2	5 OD	5-1/2	6 OD	6 OD	7 OD
		IFDP	IFDP	Csg	Csg	Csg	Csg	Csg
CAN BE DRESSED TO CUT		5 OD	5-1/2 OD	5-1/2 OD	5-3/4 OD	6-5/8 OD	7 OD	7-5/8 OD
		Csg	Csg	Csg	Csg	Csg	Csg	Csg
CUTTER O.D. (MINIMUM)		3-3/8	3-3/8	4	4	5	5	5-11/16
STANDARD ASSEMBLY		Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block
COMPLETE ASSEMBLY	Logan Part No.	409-007	409-007	409-009	409-009	409-010	409-010	409-011
	Bowen No.	8844	8844	8200	8200	14785	14785	8745
TOP THRUST	Logan Part No.	Q10008	Q10008	Q39009	Q39020	Q34010	...	Q34011
	Bowen No.	8847	8847	8242	54550	14802	...	8749
SLIP	Logan Part No.	Q40008	Q40020	Q40009	Q40021	Q40010	Q40011	Q40012
	Bowen No.	14004	53055	8405	54551	14803	29499	8764
	No. Req'd	3	3	3	3	3	3	3
WIPER BLOCK	Logan Part No.	Q41008	Q41020	Q41009	Q41021	Q41010	Q41011	Q41012
	Bowen No.	14001	53056	8219	54552	14818	20982	8770
	No. Req'd	3	3	3	3	3	3	3
DRAG SPRING	Logan Part No.	Q42005	...	Q42009	Q42013	Q42010	...	Q42010
	Bowen No.	8611	...	8207	54553	8249	...	8249
	No. Req'd	3	...	3	3	3	...	3
BOTTOM NUT	Logan Part No.	Q43009	Q43009	Q43010	Q43010	Q43011	Q43012	Q43013
	Bowen No.	14002	14002	8234	8234	14817	36498	8774
KNIFE BLOCK	Logan Part No.	Q44009	Q44010	...	...	...	...	...
	Bowen No.	14003	53057	...	...	...	...	...
	No. Req'd	3	3	...	...	...	...	...
TOP THRUST	Logan Part No.	...	...	...	...	Q45011	Q45011	...
CUT COUPLING	Bowen No.	14816	14816	...
KNIFE	Logan Part No.	...	Q5008
	Bowen No.	...	9042

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(Note: Assemblies are priced differently.)
- (4) Knives with carbide tips available upon request

When ordering, please specify:

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- (4) Knives with carbide tips available upon request

Recommended Spare Parts:

- (1) 6 sets of Knives
- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
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LOGAN INTERNAL CUTTERS

PIPE SIZE TO CUT	7 OD Csg	8 5/8 – 9 OD Csg	9-5/8 OD Csg	9-5/8 OD Csg	11.75 OD Csg	16 OD Csg	20 OD Csg	
CAN BE DRESSED TO CUT	8 & 8-1/8 OD Csg	9-5/8 OD Csg	10-3/4 OD Csg	11-3/4 OD Csg	12 LP	18-5/8 OD Csg	20-3/4 OD Csg	
CUTTER O.D. (MINIMUM)	5-11/16	7-1/4	8-1/4	8-1/4	...	14-1/2	18-5/8	
STANDARD ASSEMBLY	Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block	Wiper Block	
COMPLETE ASSEMBLY	Logan Part No. Bowen No.	409-011 8745	409-012 15532	409-013 15080	409-013 15080	409-014 41876	409-016 21240	409-017 19760
TOP THRUST	Logan Part No. Bowen No.	Q34011 8749	Q34012 15541	Q39015 15083	Q45015 15116	Q34014 41896	...	Q39019 19776
SLIP	Logan Part No. Bowen No. No. Req'd	Q40013 15408 3	Q40014 15551 3	Q40015 15088 3	Q40016 15079 3	Q40017 41894 3	Q40018 21672 3	Q40019 19777 3
WIPER BLOCK	Logan Part No. Bowen No. No. Req'd	Q41013 15407 3	Q41014 15554 3	Q41015 15101 3	Q41016 15078 3	Q41017 41893 3	Q41018 21671 3	Q41019 19775 3
DRAG SPRING	Logan Part No. Bowen No. No. Req'd	Q42010 8249 3	Q42011 15109 3	Q42011 15109 3	Q28012 15129 3	...	...	...
BOTTOM NUT	Logan Part No. Bowen No.	Q43014 15405	Q43017 15552	Q43015 15268	Q43016 15077	Q43018 41895	...	...
KNIFE BLOCK	Logan Part No. Bowen No. No. Req'd	...	...	...	...	...	...	...
TOP THRUST	Logan Part No.	...	Q45014	Q45015	...	...	...	...
CUT COUPLING	Bowen No.	...	15549	15116
KNIFE	Logan Part No. Bowen No.	Q46013 15406	Q46018 21673

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Notes:

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When ordering, please specify:

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- (3) Whether or not Bottom Nut is to be fitted for collar finder
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Recommended Spare Parts:

- (1) 6 sets of Knives
- (2) 2 sets of Knife Pins
- (3) 6 sets of Knife Springs
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