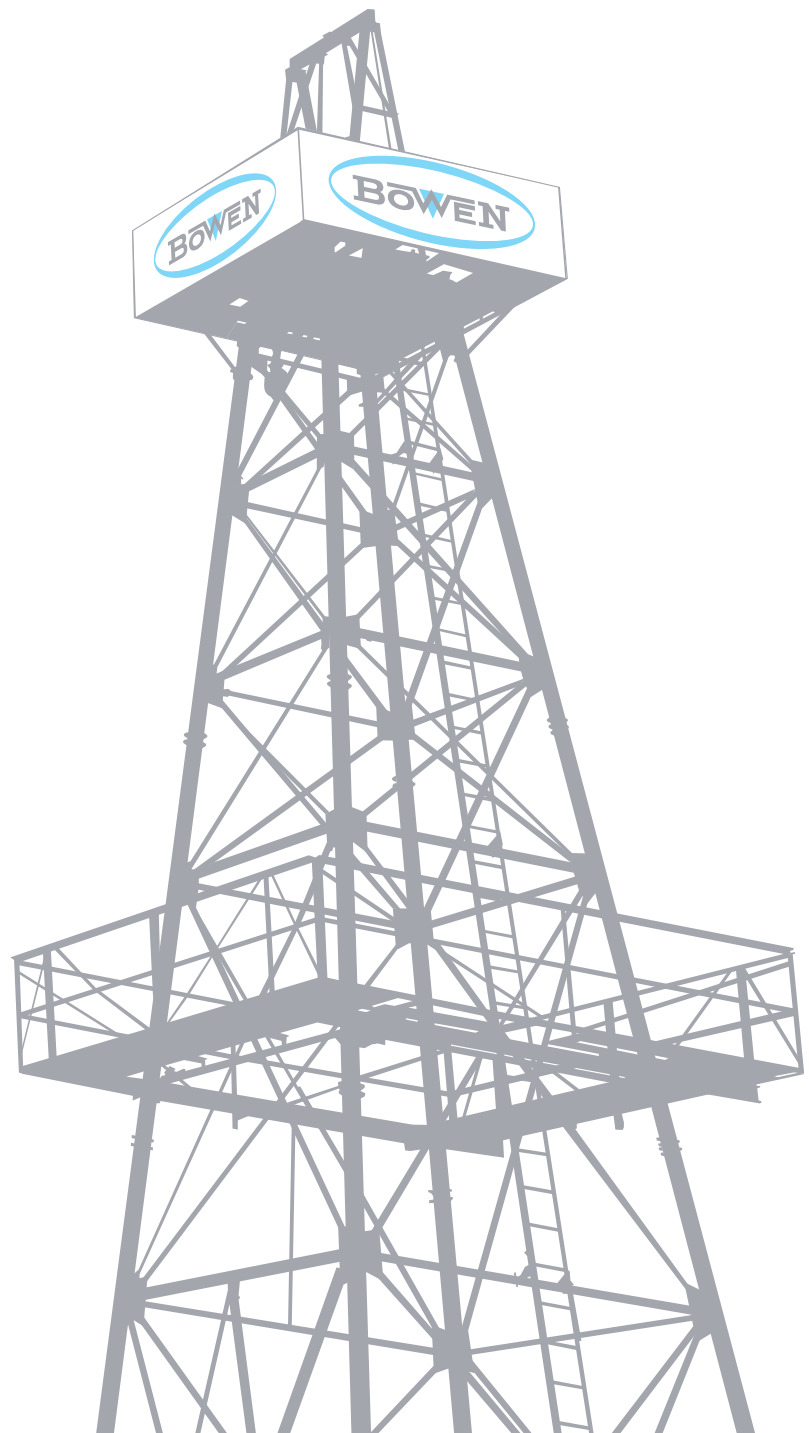


Bowen Simplex Packer Retrievers

Instruction Manual 2710



Downhole

NOV Wellbore
Technologies

Bowen Simplex Packer Retrievers

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The designs and specifications for the tools described in this instruction manual were in effect at the time this manual was approved for printing. National Oilwell Varco, whose policy is one of continuous improvement, reserves the right to discontinue models at any time, or to change designs and specifications without notice or without incurring obligation.

General Description

The Bowen™ Simplex packer retriever is an internally engaging fishing tool especially designed for the retrieving of drillable type production packers. With its accessory components (stinger, bushing and mill shoe), the Bowen Simplex packer retriever passes through the bore of the packer, prevents loss of the packer during milling and pulls the packer after it has been milled over, all in one trip. If necessary, the Bowen Simplex packer retriever can be released and reset to catching position — all without coming out of the hole.

Use

The Bowen Simplex packer retriever is used to retrieve all types of drillable production packers from the wellbore. Types and sizes of production packers recoverable with Bowen Simplex packer retrievers are listed in the range tables on the following pages.

Construction

The Bowen Simplex packer retriever consists of a top sub, lock pin, cage, mandrel and bottom nut. The top sub connects the retriever to a stinger or extension. The cage is installed on the mandrel which is threaded into the top sub and secured at assembly with the lock pin. The bottom nut is a bullnose type and is furnished with the tool unless an alternate is specified. It may be removed so that a tool or other type nut may be run below the retriever if required.

The cage has two automatic J slots with internal lug keyways, friction wickers, lifting shoulder, and a tapered ID at the bottom with milled slots so that the lifting shoulder can expand. The mandrel

has two J slot lugs and a tapered cone which makes the cage lifting shoulder expand.

The retriever also has a small bore for high velocity jetting in case the packer has been sanded over.

Accessories

Stinger

Bowen Simplex packer retriever stingers are simply extensions that permit the retriever to be lowered completely through the packer during the milling operation.

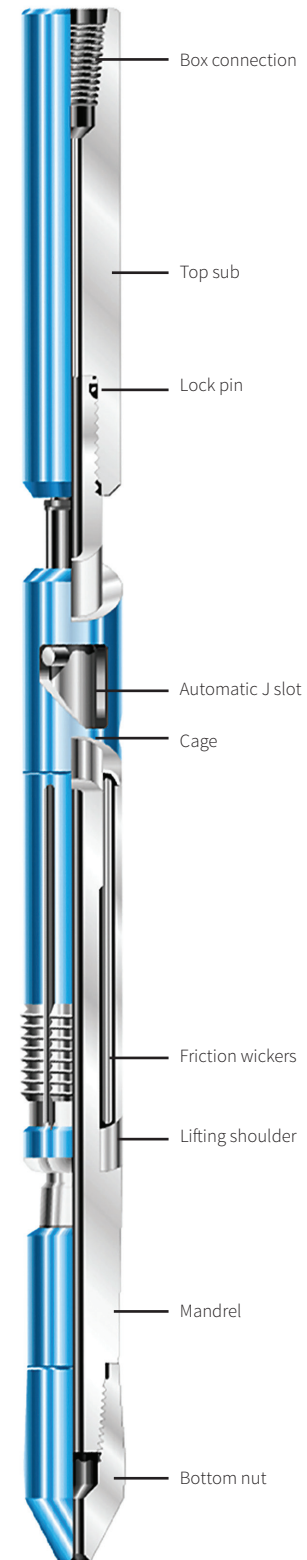
Bushing

The bushing is provided with a box connection at its lower end for attaching the stinger, also a pin connection at the lower end for attaching a mill shoe and a box connection at its upper end for connection to the run-in or fishing string. Bushings are provided with circulation ports that may direct some fluid down around the outside of the retriever.

Mill shoes

Mill shoes for Bowen Simplex packer retrievers are of sufficient length to completely mill away the slips of the packer and contain the packer within its length. The mill shoe is faced with Bowen Itcoloy (sintered tungsten carbide) on its leading edge and on its internal diameter. The lower outside diameter may be dressed with hard-facing material to reduce wear. Mill shoes are made with additional length to permit redressing with Bowen Itcoloy several times. The mill shoe must be of a length which will shroud the packer.

When more length is needed, a short mill shoe may be used with a piece of washpipe of sufficient length in place of the long mill shoe. (See assembly illustrated on next page.)



Bowen Simplex packer retriever

Bowen Simplex Packer Retrievers

Operation

Make up a complete Bowen Simplex packer retriever assembly consisting of retriever, stinger, bushing and mill shoe. Make sure to determine the following:

1. That the retriever is the correct size for the packer to be caught.
2. That the stinger is sufficiently long to permit the retriever to pass completely through the packer.
3. That the bushing and mill shoe are the correct size for the casing specifications.

Refer to the specification tables and range tables on the following pages.

Make up the complete assembly to the fishing string.

Lower the retriever into the hole on the fishing string and pass it through the packer. As the retriever passes through the packer, the cage is free to ride up on the mandrel while the lugs are in the bottom of its internal keyways, and the friction wickers and lifting shoulder are free to collapse to permit passage. After the friction wickers pass through, the cage will fall onto the tapered cone of the mandrel which expands the lifting shoulder. The mandrel lugs are then near the top of the internal keyways. Now, raise the fishing string slowly and carefully until it takes weight. This ensures that the retriever will engage the packer seat.

Lower the fishing string until the mill shoe contacts the slips of the packer. Start circulation and right-hand rotation to mill away the slips and sealing element of the packer. When the packer begins to slide down the hole, stop rotation,

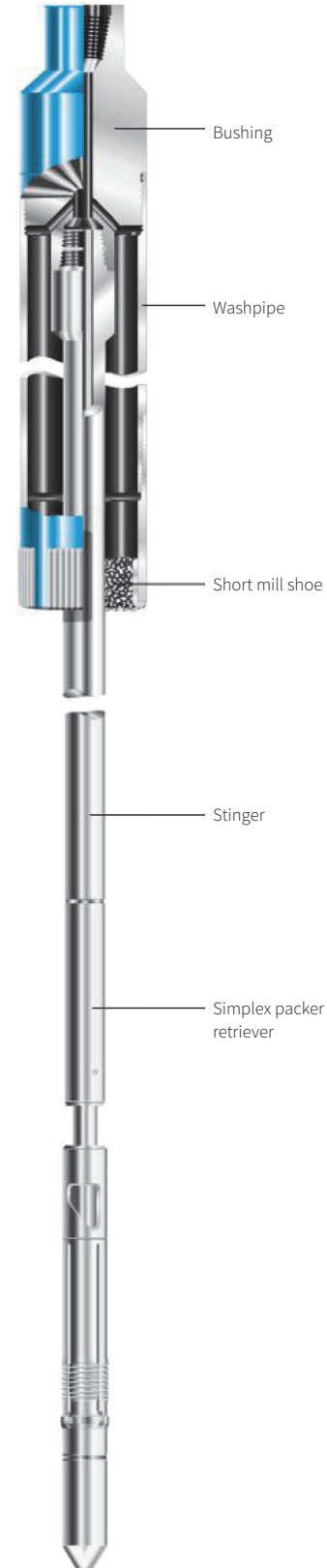
raise the fishing string to engage it with the lifting shoulder and then pull the assembly and the fish from the hole. Procedure steps are shown on page 6.

To Release the Retriever

If for any reason you wish to release the retriever from the packer, observe the following procedure.

1. Elevate the fishing string until weight is indicated.
2. Lower the fishing string about three inches.
3. Rotate about 90° to the right.
4. Slowly elevate the string to withdraw the retriever from the packer.

When the fishing string is lowered three inches, the friction wickers drag on the packer ID causing the mandrel lugs to ride down the keyways into the J slots. As this occurs, the cage slides off the mandrel tapered cone. The friction wickers remain in the packer and still provide slight drag enough to hold the cage stationary while the 90° right-hand turn is applied which moves the lugs out of the keyways and into the J slots. When the string is raised, the lugs engage the top of the J slots, leaving the lifting shoulder free to collapse and to be removed from the packer.



Complete retrieving unit with bushing, shoe, and stinger

To Reset the Retriever in the Hole

After releasing from the packer and it is desirable to reset the retriever, observe the following procedure. Refer to fourth view of procedure figure on page 6.

1. Lower the fishing string until the retriever passes through the packer bore. As it passes through, the drag of the friction wickers on the packer bore makes the lugs ride on the bottom of the J slots and back into the keyways. Once through, the cage falls back onto the tapered cone of the mandrel, which again expands the lifting shoulder.
2. Elevate the fishing string until weight is indicated, demonstrating that the retriever is in the catch position and is engaging the packer seat.
3. Continue elevating and pull the assembly and fish from the hole.

Maintenance

To guard against misruns and to prolong the life of the Bowen Simplex packer retriever, it should be completely disassembled, thoroughly cleaned, lubricated and reassembled before storing. Exterior surfaces may be either painted or lubricated to prevent rust and deterioration.

Disassembly of Simplex Packer Retriever

1. Rest top sub in vise or clamp so that the lock pin is in a position where it can be driven out. Drive lock pin out. This pin must be removed first.
2. Reposition assembly in vise to clamp on mandrel just above bottom nut. Rest top end of mandrel (between the cage and top sub) on padded

support so that assembly will not flex when applying torque to top sub. Using wrench, break out and remove top sub.

3. Remove cage by manually aligning mandrel lugs with the internal cage keyways and slide cage off threaded end of mandrel.
4. Using wrench, remove bottom nut to make sure there is no debris inside which could obstruct the bore.

Reassembly of Simplex Packer Retriever

1. Clamp mandrel's largest diameter in vise and coat all threads with grease. Using wrench, make up bottom nut to threads near vise.
2. Coat mandrel between tapered cone and lug area and ID of cage generously with grease. Slip lifting shoulder and friction wicker end of cage onto other end of mandrel. When mandrel lugs near J slot area of cage, manually align and enter mandrel lugs into cage internal keyways.
3. Position padded support under mandrel between threads and cage so that when making up top sub to mandrel, the assembly will not flex. Make up top sub to mandrel.
4. Reposition in vise and clamp so that lock pin can be driven into hole on top sub. Make sure light can be seen through this hole before installing pin. If no light can be seen, the top sub is not made up far enough for groove in mandrel end to align with lock pin.

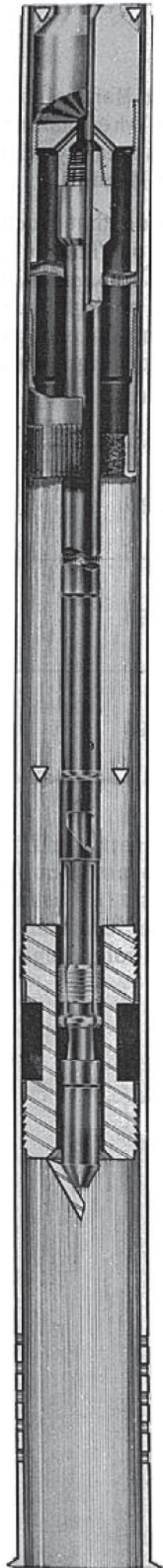
Bowen Simplex Retriever Strength Data

| Retriever assembly no. | Tensile strength* |
|------------------------|-------------------|
| 74770 | 43,000 lb |
| 69035 | 115,000 lb |
| 69040 | 153,000 lb |
| 69045 | 216,000 lb |
| 69050 | 392,000 lb |
| 69055 | 544,000 lb |

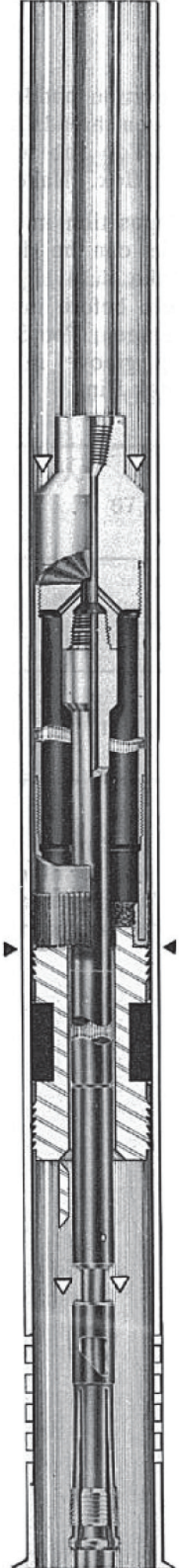
* The strengths shown are theoretical calculations based on yield strength of the material used in each case. The strengths shown are only plus or minus 20% accurate of the figure shown.

These figures do not constitute a guarantee, actual or implied. They are meant to serve as a guide only, and appropriate allowance must be made in use, as a safety factor.

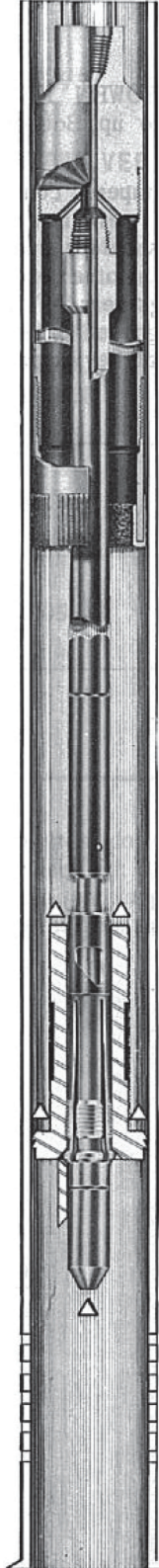
Bowen Simplex Packer Retrievers



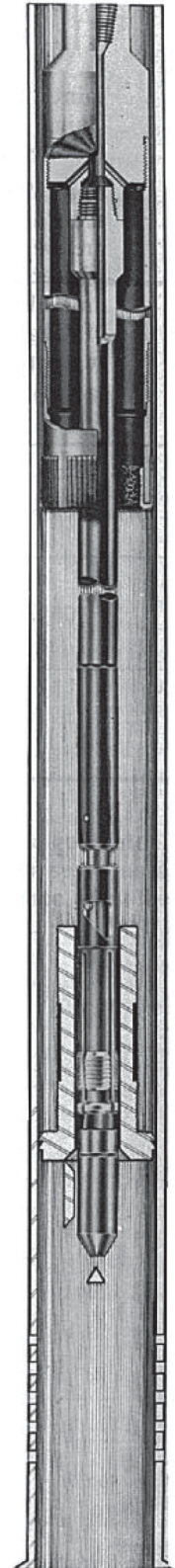
*Pass Through
Packer*



*Mill Away Slips
and Sealing Element*



*Engage and
Pull Packer*



*Lower and Rotate
to Release*

Bowen Simplex Retriever Specifications

| | | | | | | | | | | | | | | | |
|-----------------------------|---|---|-----------|-----------|-----------|-----------|-----------|-------|-----------|-----------|---|-----------|-----------|-----------|-----------|
| Catch size Packer ID | 1.500 in. | 1.968 in. | — | — | — | — | — | — | — | — | 2.375 in. | — | — | — | — |
| Extra part to Catch | — | — | 2.000 in. | 2.188 in. | 2.262 in. | 2.312 in. | 2.375 in. | 2.390 | 2.468 in. | 2.500 in. | — | 2.390 in. | 2.437 in. | 2.468 in. | 2.500 in. |
| Outside diameter | 1 ⁷ / ₁₆ in. | 1 ¹³ / ₁₆ in. | — | — | — | — | — | — | — | — | 2 ¹ / ₄ in. | — | — | — | — |
| Inside diameter | ¼ in. | ¼ in. | — | — | — | — | — | — | — | — | ¾ in. | — | — | — | — |
| Box connection | 1 ¹³ / ₁₆ in. Wilson F.J. | 1 ¹³ / ₁₆ in. Wilson F.J. | — | — | — | — | — | — | — | — | 1 ¹³ / ₁₆ in. Wilson F.J. | — | — | — | — |
| Complete assembly | Part no. | 74770 | 69035 | — | — | — | — | — | — | — | 69040 | — | — | — | — |
| | Weight | 18 lb | 14 lb | — | — | — | — | — | — | — | 20 lb | — | — | — | — |

Replacement Parts

| | | | | | | | | | | | | | | | | |
|-------------------|-----------------|----------------------------------|----------------------------------|-------|-------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Lock pin | Part no. | 150952 | 15143 | — | — | — | — | — | — | — | — | A14152 | — | — | — | — |
| | Weight | ¼ lb | ¼ lb | — | — | — | — | — | — | — | — | ¼ lb | — | — | — | — |
| Top sub | Part no. | 150953 | 69036 | — | — | — | — | — | — | — | — | 69041 | — | — | — | — |
| | Weight | 10 lb | 4 lb | — | — | — | — | — | — | — | — | 6 lb | — | — | — | — |
| Mandrel | Part no. | 150954 | 69037 | — | — | — | — | — | — | — | — | 69042 | — | — | — | — |
| | Weight | 6 lb | 7 lb | — | — | — | — | — | — | — | — | 10 lb | — | — | — | — |
| Cage | Part no. | 150955 | 69038 | 69693 | 69694 | 69695 | 69696 | 69697 | 69698 | 69699 | 69700 | 69043 | 69701 | 79079 | 69702 | 69703 |
| | Weight | 1 lb | 1 lb | 1 lb | 1 lb | 1 ¹ / ₂ lb | 1 ¹ / ₂ lb | 1 ¹ / ₂ lb | 1 ¹ / ₄ lb | 1 ¹ / ₄ lb | 1 ¹ / ₄ lb | 1 ¹ / ₂ lb | 1 ¹ / ₂ lb | 1 ¹ / ₂ lb | 1 ¹ / ₂ lb | 1 ¹ / ₂ lb |
| Bottom nut | Part no. | 150956 | 69039 | — | — | — | — | — | — | — | — | 69044 | — | — | — | — |
| | Weight | 1 ¹ / ₂ lb | 1 ¹ / ₂ lb | — | — | — | — | — | — | — | — | 2 lb | — | — | — | — |
| Set screw | Part no. | — | 17762 | — | — | — | — | — | — | — | — | 17762 | — | — | — | — |
| | Weight | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

Bowen Simplex Specifications

| | | | | | | | | | | | | | | | |
|-----------------------------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|---|---|---|-----------|-----------|-----------|-----------|-----------|
| Catch size Packer ID | — | — | — | — | — | — | — | — | — | 2.688 in. | — | — | — | — | — |
| Extra part to Catch | 2.550 in. | 2.635 in. | 2.688 in. | 2.750 in. | 2.812 in. | 2.866 in. | 3.000 in. | — | — | 2.750 in. | 2.812 in. | 2.875 in. | 3.000 in. | 3.062 in. | 3.109 in. |
| Outside diameter | — | — | — | — | — | — | — | — | — | 2 ⁹ / ₁₆ in. | — | — | — | — | — |
| Inside diameter | — | — | — | — | — | — | — | — | — | ½ in. | — | — | — | — | — |
| Box connection | — | — | — | — | — | — | — | — | — | 2 ³ / ₈ in. Wilson F.J. | — | — | — | — | — |
| Complete assembly | Part no. | — | — | — | — | — | — | — | — | 69045 | — | — | — | — | — |
| | Weight | — | — | — | — | — | — | — | — | 23 lb | — | — | — | — | — |

Replacement Parts

| | | | | | | | | | | | | | | | |
|-------------------|-----------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-------|----------------------------------|-------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Lock pin | Part no. | — | — | — | — | — | — | — | — | 2702 | — | — | — | — | — |
| | Weight | — | — | — | — | — | — | — | — | ¼ lb | — | — | — | — | — |
| Top sub | Part no. | — | — | — | — | — | — | — | — | 69046 | — | — | — | — | — |
| | Weight | — | — | — | — | — | — | — | — | 6 ¹ / ₂ lb | — | — | — | — | — |
| Mandrel | Part no. | — | — | — | — | — | — | — | — | 69047 | — | — | — | — | — |
| | Weight | — | — | — | — | — | — | — | — | 12 lb | — | — | — | — | — |
| Cage | Part no. | 69079 | 69704 | 69705 | 69706 | 69707 | 78349 | 69708 | 69048 | 69080 | 69709 | 70770 | 69081 | 69710 | 69711 |
| | Weight | 1 ¹ / ₂ lb | 1 ¹ / ₂ lb | 1 ¹ / ₂ lb | 1 ³ / ₄ lb | 1 ³ / ₄ lb | 1 ³ / ₄ lb | 1 ³ / ₄ lb | 2 lb | 2 lb | 2 lb | 2 ¹ / ₂ lb | 2 ¹ / ₂ lb | 2 ¹ / ₂ lb | 2 ¹ / ₂ lb |
| Bottom nut | Part no. | — | — | — | — | — | — | — | — | 69049 | — | — | — | — | — |
| | Weight | — | — | — | — | — | — | — | — | 2 ¹ / ₂ lb | — | — | — | — | — |
| Set screw | Part no. | — | — | — | — | — | — | — | — | 23342 | — | — | — | — | — |
| | Weight | — | — | — | — | — | — | — | — | — | — | — | — | — | — |



How to Order

- Specify:
- (1) Name and number of assembly or part
 - (2) Make, model, and ID of packer to be caught



Recommended Spare Parts:

(1) 1 Cage, each catch size

Bowen Simplex Packer Retrievers

Bowen Simplex Retriever Specifications

| | | | | | | | | | | | | | | | | | |
|-----------------------------|-----------------|-----------|----------------|-----------|-----------|-----------|-----------|-----------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Catch size Packer ID | — | — | 3.250 in. | — | — | — | — | — | 3.875 in. | — | — | — | — | — | — | — | — |
| Extra part to Catch | 3.250 in. | 3.500 in. | — | 3.500 in. | 3.688 in. | 3.810 in. | 3.875 in. | 4.000 in. | — | 4.000 in. | 4.187 in. | 4.250 in. | 4.400 in. | 4.500 in. | 4.560 in. | 4.750 in. | 5.000 in. |
| Inside diameter | — | — | 5/8 in. | — | — | — | — | — | 3/4 in. | — | — | — | — | — | — | — | — |
| Box connection | — | — | 2 7/8 in. Reg. | — | — | — | — | — | 2 7/8 in. Reg. | — | — | — | — | — | — | — | — |
| Complete assembly | Part no. | — | — | 69050 | — | — | — | — | 69055 | — | — | — | — | — | — | — | — |
| | Weight | — | — | 28 lb | — | — | — | — | 35 lb | — | — | — | — | — | — | — | — |

Replacement Parts

| | | | | | | | | | | | | | | | | | | |
|-------------------|-----------------|----------|----------|--------|-------|--------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Lock pin | Part no. | — | — | 13430 | — | — | — | — | — | 25243 | — | — | — | — | — | — | — | |
| | Weight | — | — | 1/8 lb | — | — | — | — | — | 1/8 lb | — | — | — | — | — | — | — | |
| Top sub | Part no. | — | — | 69051 | — | — | — | — | — | 69056 | — | — | — | — | — | — | — | |
| | Weight | — | — | 8 lb | — | — | — | — | — | 10 lb | — | — | — | — | — | — | — | |
| Mandrel | Part no. | — | — | 69052 | — | — | — | — | — | 69057 | — | — | — | — | — | — | — | |
| | Weight | — | — | 14 lb | — | — | — | — | — | 15 lb | — | — | — | — | — | — | — | |
| Cage | Part no. | 69712 | 69713 | 69053 | 72205 | 147573 | 69714 | 69715 | 69082 | 69058 | 69716 | 69718 | 73687 | 69717 | 73688 | 147572 | 69719 | 69083 |
| | Weight | 2 1/4 lb | 2 1/4 lb | 3 lb | 3 lb | 3 lb | 3 lb | 3 1/2 lb | 3 1/2 lb | 5 1/2 lb | 5 1/2 lb | 5 1/2 lb | 5 1/2 lb | 5 1/2 lb | 5 1/2 lb | 5 1/2 lb | 5 1/2 lb | 5 1/2 lb |
| Bottom nut | Part no. | — | — | 69054 | — | — | — | — | — | 69059 | — | — | — | — | — | — | — | — |
| | Weight | — | — | 3 lb | — | — | — | — | — | 4 lb | — | — | — | — | — | — | — | — |
| Set screw | Part no. | — | — | 23360 | — | — | — | — | — | 17762 | — | — | — | — | — | — | — | — |
| | Weight | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |



How to Order

- Specify:
- (1) Name and number of assembly or part
 - (2) Make, model, and ID of packer to be caught



Recommended Spare Parts:

- (1) 1 Cage, each catch size

Stingers

| | | | | | | | | | | |
|------------------------------------|-----------------|------------------------------|------------------------------|-----------------------------|---------------------------|---------------------------|---------------------------|--|--|--|
| To fit Packer Retriever no. | | 69035 | 69040 | 69045 | 69050 | 69055 | — | | | |
| Top connection | | 2½ in. API Reg. Pin | 2½ in. API Reg. Pin | 2¾ in. API Reg. Pin | 2¾ in. API Reg. Pin | 2⅞ in. API Reg. Pin | 3½ in. API Reg. Pin | | | |
| Bottom connection | | 1⅜ in. Wilson F.J. Pin | 1⅜ in. Wilson F.J. Pin | 2 in. Wilson F.J. Pin | 2 in. API Reg. Pin | 2⅞ in. API Reg. Pin | 3½ in. API Reg. Pin | | | |
| Stinger (120 inches) | Part no. | 18053 | 18058 | 18063 | 18088 | 18073 | 18078 | | | |
| | Weight | 75 lb | 105 lb | 115 lb | 150 lb | 180 lb | 205 lb | | | |

Long Mill Shoes and Bushings

| | | | | | | | | | | |
|---|-----------------|------------------------------|-----------------------------|------------------------------|-----------------------------------|----------------------------------|----------------------------------|------------------------|-----------------------------------|------------------------------|
| Casing range | | 4½ in. 12.6 to 11.6 lb | 5 in. 21.0 to 13.0 lb | 5½ in. 20.0 to 17.0 lb | 5½ in. 13.0 to 14.0 lb | 6 in. 14.0 to 15.0 lb | 6⅝ in. 20.0 to 17.0 lb | 7 in. 17 lb. — | 8⅝ in. 40.0 to 36.0 lb | 9⅝ in. 40.0 to 53.5 lb |
| Casing range | | 4¾ in. 16.0 lb — | 5½ in. 25.0 lb — | 5¾ in. 25.2 lb — | 5¾ in. 19.5 to 17.0 lb — | 6 in. 19.5 to 29.0 lb — | 6 in. 32.0 to 24.0 lb — | 7 in. 24-39 lb — | 7⅞ in. 40.0 to 55.0 lb — | 9 in. — — |
| Shoe (60-inch long single piece) | Part no. | 18052 | 18057 | 18062 | 18064 | 18069 | 18067 | 18024 | 18072 | 18077 |
| | Weight | 45 lb | 55 lb | 70 lb | 87 lb | 97 lb | 107 lb | 117 lb | 137 lb | 160 lb |
| Bushing | Part no. | 18051 | 28199 | 18061 | 18061 | 28200 | 28201 | 28202 | 28203 | 18076 |
| | Weight | 29 lb | 35 lb | 45 lb | 45 lb | 64 lb | 69 lb | 80 lb | 95 lb | 105 lb |

NOTE: When retrieving a 3.250" packer from 9⅝" casing, part no. 18079 crossover sub is required between a part no. 18088 stinger and a part no. 28204 bushing.

Short Mill Shoes, Washpipes, and Bushings

| | | | | | | | | | | |
|--------------------------------|-----------------|-----------------------------|-----------------------------|---------------------------|--------------------------|-------------------------|--------------------------|-----------------------|--------------------------|----------------------------|
| Casing range | | 3½ in. 7.7 to 10.2 lb | 4½ in. 9.5 to 16.6 lb | 5 in. 11.5 to 18 lb | 5½ in. 13 to 23 lb | 6 in. 14 to 15 lb | 6⅝ in. 17 to 24 lb | 7 in. 17 lb — | 8⅝ in. 24 to 49 lb | 9⅝ in. 40 to 53.5 lb |
| Casing range | | — | 4¾ in. 16 to 18 lb | 5½ in. 25 lb | 5¾ in. 14 to 25 lb | 6 in. 26 to 34 lb | 7 in. 20 to 38 lb | 7⅞ in. 24 to 39 lb | 9 in. 40 to 55 lb | — |
| Casing range | | — | 5 in. 24 lb | — | 6 in. 16 to 23 lb | 7 in. 40 lb | 7⅞ in. 45 lb | — | — | — |
| Mill shoe | Part no. | 44422 | 25746 | 25748 | 25750 | 25752 | 25754 | 25756 | 25758 | 25760 |
| | Weight | 7 lb | 10 lb | 15 lb | 18 lb | 20 lb | 30 lb | 35 lb | 40 lb | 50 lb |
| Washpipe (57-inch long) | Part no. | 44423 | 25745 | 25747 | 25749 | 25751 | 25753 | 25755 | 25757 | 25759 |
| | Weight | 25 lb | 35 lb | 50 lb | 75 lb | 80 lb | 85 lb | 120 lb | 130 lb | 155 lb |
| Bushing | Part no. | 44424 | 18051 | 28199 | 18061 | 28200 | 28201 | 28202 | 28203 | 28204 |
| | Weight | 20 lb | 29 lb | 35 lb | 45 lb | 64 lb | 69 lb | 80 lb | 95 lb | 110 lb |

CHECKLIST



How to Order

Specify:

- (1) Name and number of assembly or part
- (2) Casing size (OD and weight)
- (3) Top connection of bushing
- (4) Make, model, and number of packer to be caught

Prices quoted on request.

Bowen Simplex Packer Retrievers

Bowen Simplex Packer Retriever

Assembly part no. 69035

Dressed with cage part no. 69038 — Standard Catch size 1.968 in. ID

Dressed with cage part no. 69038 will catch the following Baker Packers with 1.968 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|-----------------|
| D | 22-19 | 4½ in. | 12.6 to 16.6 lb |
| DA | 24DA-25 | 4½ in. | 9.5 to 11.6 lb |
| DA | 23DA-25 | 4¾ in. | 16 to 18 lb |
| D | 24-19 | 4½ in. | 9.5 to 11.6 lb |
| | | 4¾ in. | 16 to 18 lb |
| DA | 25DA | 5 in. | 21 lb |
| D | 25-19 | 5 in. | 21 lb |
| DA | 27DA-25 | 5 in. | 15 to 18 lb |
| D | 27-19 | 5 in. | 15 to 18 lb |
| DA | 29DA-25 | 5 in. | 11.5 to 13 lb |
| | | 5½ in. | 25 lb |
| D | 29-19 | 5 in. | 11.5 to 13 lb |
| | | 5½ in. | 25 lb |
| D | 43-19 | 5½ in. | 20 to 23 lb |
| D | 45-19 | 5½ in. | 15 to 17 lb |
| | | 5¾ in. | 25.2 lb |
| D | 47-19 | 5½ in. | 13 to 14 lb |
| | | 5¾ in. | 19.5 to 22.5 lb |
| D | 49-19 | 5¾ in. | 14 to 17 lb |
| | | 6 in. | 23 to 26 lb |

Dressed with cage part no. 69695 will catch the following Guiberson Packers with 2.262 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|---------------|
| B and BL | 27618 | 5 in. | 15 to 18 lb |

Dressed with cage part no. 69693 will catch the following Halliburton Packers with 2.000 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|----------------|
| C | 801.848 | 4½ in. | 9.5 to 11.6 lb |
| | | 4¾ in. | 16 lb |
| | | 4 in. LP | 11 lb |
| CL | 801.901 | 4½ in. | 9.5 to 11.6 lb |
| | | 4¾ in. | 16 lb |
| | | 4 in. LP | 11 lb |
| C | 801.849 | 4½ in. | 13.5 lb |
| | | 4½ in. DP | 16.6 lb |
| CL | 801.902 | 4½ in. | 13.5 lb |
| | | 4½ in. DP | 16.6 lb |
| C | 801.853 | 5 in. | 11.5 to 15 lb |
| CL | 801.903 | 5 in. | 11.5 to 15 lb |
| C | 801.854 | 5 in. | 18 to 21 lb |
| CL | 801.904 | 5 in. | 18 to 21 lb |

Dressed with cage part no. 69693 will catch the following Guiberson Packers with 2.000 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|---------------|
| BL | 29567 | 5 in. | 15 to 18 lb |

Bowen Simplex Packer Retriever

Assembly part no. 69040

Dressed with cage part no. 69043 — Standard Catch size 2.375 in. ID

Dressed with cage part no. 69702 will catch the following Baker Packers with 2.468 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|-----------------|
| D | 43-24 | 5½ in. | 20 to 23 lb |
| D | 45-24 | 5¾ in. | 25.2 lb |
| | | 5½ in. | 15 to 17 lb |
| D | 27-24 | 5½ in. | 13 to 14 lb |
| | | 5¾ in. | 19.5 to 22.5 lb |
| D | 49-24 | 5¾ in. | 14 to 17 lb |
| | | 6 in. | 23 to 26 lb |

Dressed with cage part no. 69703 will catch the following Baker Packers with 2.500 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|---------------|
| D | 27-25 | 5 in. | 15 to 18 lb |
| D | 29-25 | 5 in. | 11.5 to 13 lb |
| | | 5½ in. | 25 lb |

Dressed with cage part no. 69705 will catch the following Baker Packers with 2.688 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|-----------------|
| DA | 43DA-32 | 5½ in. | 20 to 23 lb |
| D | 43-26 | 5½ in. | 20 to 23 lb |
| DA | 45DA-32 | 5½ in. | 15 to 17 lb |
| | | 5¾ in. | 25.2 lb |
| D | 45-26 | 5½ in. | 15 to 17 lb |
| | | 5¾ in. | 25.2 lb |
| DA | 47DA-32 | 5½ in. | 13 to 14 lb |
| | | 5¾ in. | 19.5 to 22.5 lb |
| | | 5 in. | 13 to 14 lb |
| D | 47-26 | 5½ in. | 13 to 14 lb |
| | | 5¾ in. | 19.5 to 22.5 lb |
| DA | 49DA-32 | 5¾ in. | 14 to 17 lb |
| | | 6 in. | 14 to 17 lb |
| D | 49-26 | 5¾ in. | 14 to 17 lb |
| | | 6 in. | 23 to 26 lb |
| D | 83-26 | 6 in. | 20 to 24 lb |
| | | 7 in. | 32 to 38 lb |
| D | 85-26 | 6 in. | 17 lb |
| | | 7 in. | 26 to 30 lb |
| D | 87-26 | 7 in. | 20 to 24 lb |
| | | 7 in. | 45 lb |
| D | 89-26 | 7 in. | 17 lb |
| D or N | | 7 in. | 39 lb |
| D or N | 91-25 | 7 in. | 24 to 33.7 lb |

Dressed with cage part no. 69706 will catch the following Halliburton Packers with 2.750 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|---------------|
| C | 801.857 | 5½ in. | 13 to 17 lb |
| | | 5¾ in. | 22.5 lb |
| CL | 801.907 | 5½ in. | 13 to 17 lb |
| | | 5¾ in. | 22.5 lb |
| C | 801.858 | 5½ in. | 20 to 23 lb |
| CL | 801.908 | 5½ in. | 20 to 23 lb |
| C | 801.859 | 5¾ in. | 14 to 19.5 lb |
| | | 6 in. | 23 lb |
| CL | 801.909 | 5¾ in. | 14 to 19.5 lb |
| | | 6 in. | 23 lb |
| C | 801.860 | 6 in. | 15 to 20 lb |
| CL | 801.910 | 6 in. | 15 to 20 lb |

Dressed with cage part no. 69707 will catch the following Guiberson Packers with 2.812 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|---------------|
| B & BL | 27735 | 5½ in. | 13 to 14 lb |
| B & BL | 27274 | 5½ in. | 15 to 17 lb |
| B & BL | 27279 | 5½ in. | 20 to 23 lb |
| B & BL | 28280 | 6 in. | 16 to 20 lb |
| B & BL | 31481 | 6 in. | 24 to 28 lb |

Dressed with cage part no. 69708 will catch the following Baker Packers with 3.000 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|---------------|
| D | 63-30 | 6 in. | 16 to 20 lb |
| D | 65-30 | 6 in. | 14 to 15 lb |
| | | 6 in. | 32 to 24 lb |
| D | 67-30 | 6 in. | 26 to 49 lb |
| | | 7 in. | 40 lb |

Bowen Simplex Packer Retrievers

Bowen Simplex Packer Retriever

Assembly part no. 69045

Dressed with cage part no. 69048 – Standard Catch size 2.688 in. ID

Dressed with cage part no. 69712 will catch the following Baker Packers with 3.250 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|---------------|
| DA | 83DA-40 | 6½ in. | 20 to 24 lb |
| | | 7 in. | 32 to 38 lb |
| D | 83-32 | 6½ in. | 20 to 24 lb |
| | | 7 in. | 32 to 38 lb |
| DA | 85DA-40 | 6½ in. | 17 lb |
| | | 7 in. | 26 to 30 lb |
| D | 85-32 | 6½ in. | 17 lb |
| | | 7 in. | 26 to 30 lb |
| DA | 87DA-40 | 7 in. | 20 to 24 lb |
| | | 7½ in. | 45 lb |
| D | 87-32 | 7 in. | 20 to 24 lb |
| | | 7½ in. | 45 lb |
| DA | 89DA-40 | 7 in. | 17 lb |
| | | 7½ in. | 36 to 39 lb |
| D | 89-32 | 7 in. | 17 lb |
| | | 7½ in. | 36 to 39 lb |
| DA | 91DA-40 | 7½ in. | 24 to 33.7 lb |
| D or N | 91-32 | 7½ in. | 24 to 33.7 lb |
| D | 195-32 | 9½ in. | 40 to 53.5 lb |

Dressed with cage part no. 69712 will catch the following Halliburton Packers with 3.250 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|---------------|
| C | 801.861 | 6½ in. | 4 to 32 lb |
| | | 7 in. | 34 to 40 lb |
| CL | 801.911 | 6½ in. | 24 to 32 lb |
| | | 7 in. | 34 to 40 lb |

Dressed with cage part no. 69713 will catch the following Halliburton Packers with 3.500 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|---------------|
| C | 801.862 | 7 in. | 17 to 24 lb |
| | | 7½ in. | 39 lb |
| CL | 801.912 | 7 in. | 17 to 24 lb |
| | | 7½ in. | 39 lb |
| C | 801.863 | 7 in. | 26 to 32 lb |
| | | 6½ in. | 17 to 22 lb |
| CL | 801.913 | 7 in. | 26 to 32 lb |
| | | 6½ in. | 17 to 22 lb |
| C | 801.865 | 7½ in. | 20 to 33 lb |
| CL | 801.915 | 7½ in. | 20 to 33 lb |

Dressed with cage part no. 69713 will catch the following Guiberson Packers with 3.500 inch ID

| Packer type | Packer no. | Casing size | Casing weight |
|-------------|------------|-------------|---------------|
| B and BL | 27299 | 7 in. | 20 to 24 lb |
| B and BL | 27314 | 7 in. | 26 to 30 lb |
| B and BL | 27440 | 7 in. | 32 to 38 lb |
| B and BL | 31550 | 7½ in. | 24 to 33.7 lb |

Bowen Simplex Packer Retriever

Assembly Part no. 69050

Dressed with cage Part no. 69053 – Standard Catch size 3.250 in. ID

Dressed with cage part no. 69715 will catch the following Baker Packers with 3.875 inch ID

| Packer type | Packer no. | Casing size | Casing weight (lb) |
|-------------|------------|-------------|--------------------|
| D or N | 127-38 | 8½ in. | 40 to 49 lb |
| D or N | 129-38 | 8½ in. | 24 to 36 lb |
| D | | 9 in. | 40 to 55 lb |

Dressed with cage part no. 69082 will catch the following Baker Packers with 4.000 inch ID

| Packer type | Packer no. | Casing size | Casing weight (lb) |
|-------------|------------|-------------|--------------------|
| C | 801.869 | 8½ in. | 24 to 36 lb |
| | | 9 in. | 45 to 55 lb |
| CL | 801.919 | 8½ in. | 24 to 36 lb |
| | | 9 in. | 45 to 55 lb |
| C | 801.871 | 8½ in. | 38 to 49 lb |
| CL | 801.921 | 8½ in. | 38 to 49 lb |

Bowen Simplex Packer Retriever

Assembly part no. 69055

Dressed with cage part no. 69058 – Standard Catch size 3.875 in. ID

Dressed with cage part no. 69719 will catch the following Baker Packers with 4.750 inch ID

| Packer type | Packer no. | Casing size | Casing weight (lb) |
|-------------|------------|-------------|--------------------|
| DA | 195DA-60 | 9½ in. | 40 to 53.5 lb |
| D | 195-47 | 9½ in. | 40 to 53.5 lb |

Dressed with cage part no. 69083 will catch the following Baker Packers with 5.000 inch ID

| Packer type | Packer no. | Casing size | Casing weight (lb) |
|-------------|------------|-------------|--------------------|
| C | 801.874 | 9½ in. | 29.3 to 40 lb |
| CL | 801.924 | 9½ in. | 29.3 to 40 lb |
| C | 801.875 | 9½ in. | 43.5 to 53.5 lb |
| CL | 801.925 | 9½ in. | 43.5 to 53.5 lb |

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