

# SCX RE542

DESIGNED BY SANDVIK



## REVERSE CIRCULATION DOWN-HOLE HAMMERS

SCX offers a full range of reverse circulation hammers with integrated bits designed to offer a cost effective, heavy-duty sampling system for obtaining a continuous, high quality geological sample. By maximizing the energy output and minimizing air consumption, SCX's products can assist in providing you with excellent production rates resulting in low cost per meter drilling.

**Contact your SCX representative today.**

SCX recommends using only SCX quality manufactured parts. SCX does not guarantee the consistency or quality of other manufacturers.

### SPECIFICATIONS

| Item   | Diameter Ø |               |
|--------|------------|---------------|
|        | mm         | in            |
| Hammer | 109        | 4 - 5/16      |
| Bit    | 118 - 133  | 4-5/8 - 5-1/4 |

Ideal for medium depth RC holes in all ground conditions



SCX RE542

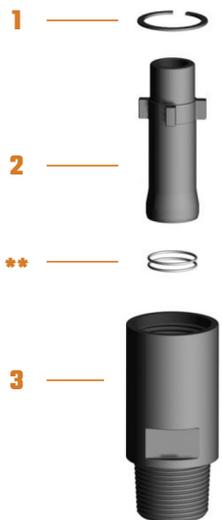
Manufactured by Sandvik



### Top Sub Assembly - A



### Top Sub Assembly - B



### HAMMER ASSEMBLIES

| Item | Part No    | Description     |
|------|------------|-----------------|
| 1-14 | 32-542-000 | Hammer assembly |

Select the Top sub Assembly for the required RC Rod connection, sold separately. The SCX top sub is essential for complete hammer assembly and retention of the top loading sample tube. See below for details.

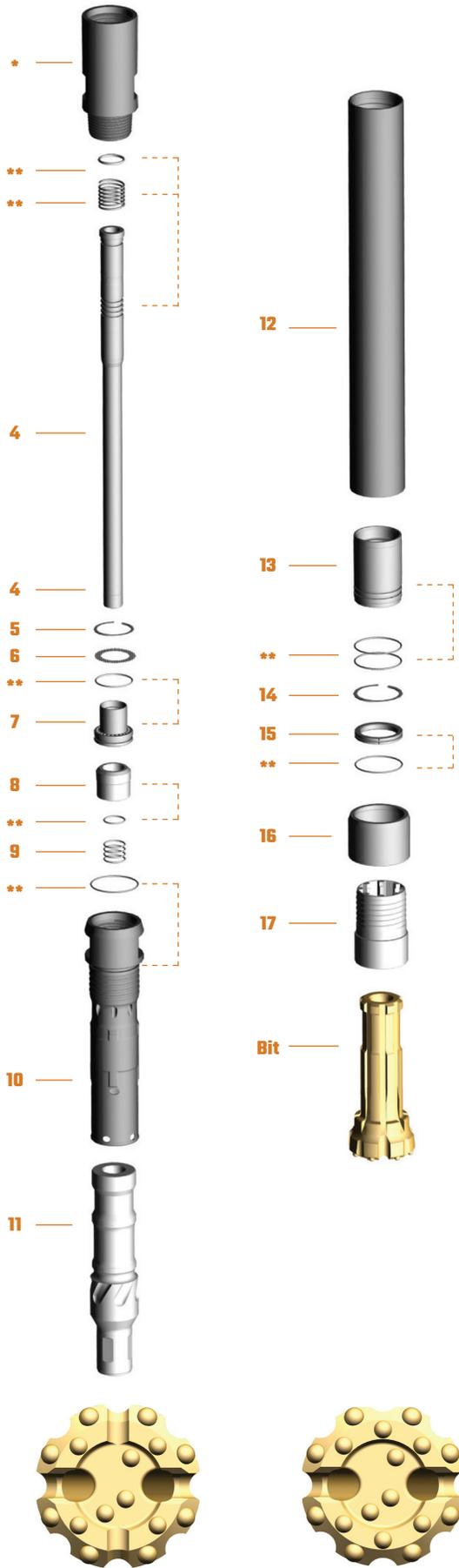
### TOP SUB ASSEMBLIES

| A | 34-542-R35    | Top Sub Assembly Remet 3.5" |   |
|---|---------------|-----------------------------|---|
| 2 | 41-D1300-0700 | Circlip                     |   |
| 3 | 20-540-R35    | Adaptor Tube 3.5in Remet    | 1 |
|   | 33-542-R35    | Top Sub 3-1/2" Remet        | 1 |
|   |               |                             | 1 |

| A | 34-542-R40    |                        |   |
|---|---------------|------------------------|---|
| 1 | 41-D1300-0800 | Circlip                | 1 |
| 2 | 20-540-R40    | Adaptor Tube 4in Remet | 1 |
| 3 | 33-542-R40    | Top Sub 4" Remet       | 1 |

| B | 34-542-M40-54 | Top Sub Assembly Metzke 4" 54mm |   |
|---|---------------|---------------------------------|---|
| 1 | 41-D1300-0800 | Circlip                         | 1 |
| 2 | 20-540-MR40   | Adaptor Tube 4in M/R            | 1 |
| 3 | 33-542-M40    | Top Sub 4" Metzke               | 1 |

| B | 34-542-M40-57 | Top Sub Assembly Metzke 4" 57mm |   |
|---|---------------|---------------------------------|---|
| 1 | 41-D1300-0800 | Circlip                         | 1 |
| 2 | 20-540-M40    | Adaptor Tube 4in Metzke         | 1 |
| 3 | 33-542-M40    | Top Sub 4" Metzke               | 1 |



## HAMMER ASSEMBLY COMPONENTS

| Item | Part No       | Description                           |   |
|------|---------------|---------------------------------------|---|
| *    | -             | Top Sub Assembly                      | 1 |
| 4    | 37-542-000    | Sample Tube                           | 1 |
| 5    | 41-D1300-0800 | Circlip                               | 1 |
| 6    | 21-542-000    | Airscreen                             | 1 |
| 7    | 29-542-000    | Distributor Nozzle                    | 1 |
| 8    | 25-542-000    | Plunger                               | 1 |
| 9    | 22-542-000    | Spring                                | 1 |
| 10   | 31-542-000    | Inner Cylinder                        | 1 |
| 11   | 36-542-000    | Piston                                | 1 |
| 12   | 35-542-000    | Piston Case                           | 1 |
| 13   | 26-542-000    | Drive Sub Bush                        | 1 |
| 14   | 23-120-000    | Piston Retaining Ring                 | 1 |
| 15   | 27-542-000    | Bit Retaining Ring                    | 1 |
| 16   | -             | Shroud (Refer To The Selection Table) | 1 |
| 17   | 16-542-000    | Drive Sub                             | 1 |

\* See previous page for top sub assembly breakdown

## OPTIONS

| Item | Part No    | Description                        |   |
|------|------------|------------------------------------|---|
| **   | 38-542-000 | Rubber Parts Kit (Sold Separately) | - |

## BIT/SHROUD SELECTION TABLE

| Bit Part No    | Bit Diameter mm | Bit Diameter in | Shroud Part No | Shroud Diameter mm | Shroud Diameter in |
|----------------|-----------------|-----------------|----------------|--------------------|--------------------|
| 62-542-410HF   | 118             | 4-5/8           | 40-542-409     | 116                | 4-9/16             |
| 62-542-412DC   | 121             | 4-3/4           | 40-542-411     | 119                | 4-11/16            |
| 62-542-412HF   | ▶ 121           | 4-3/4           | 40-542-411     | 119                | 4-11/16            |
| 62-542-414DC   | 124             | 4-7/8           | 40-542-413     | 122                | 4-13/16            |
| 62-542-414HF   | ▶ 124           | 4-7/8           | 40-542-413     | 122                | 4-13/16            |
| 62-542-500DC   | 127             | 5               | 40-542-415     | 125                | 4-15/16            |
| 62-542-500HF   | ▶ 127           | 5               | 40-542-415     | 125                | 4-15/16            |
| 62-542-502DC   | 130             | 5-1/8           | 40-542-501     | 128                | 5-1/16             |
| 62-542-502HF   | ▶ 130           | 5-1/8           | 40-542-501     | 128                | 5-1/16             |
| 62-542-504DC   | 133             | 5-1/4           | 40-542-503     | 131                | 5-3/16             |
| 62-542-504HF   | ▶ 133           | 5-1/4           | 40-542-503     | 131                | 5-3/16             |
| 62-542-608**** | ▶ 165           | 6-1/2           | 40-542-607     | 163                | 6-7/16             |

\*\*\*\* Bits used for collaring only

▶ Stocked bits, all others may be manufactured upon request.

## DIAMOND ENHANCED BITS

## BIT/SHROUD SELECTION TABLE

| Bit Part No    | Bit Diameter mm | Bit Diameter in | Shroud Part No | Shroud Diameter mm | Shroud Diameter in |
|----------------|-----------------|-----------------|----------------|--------------------|--------------------|
| 62-542-412HFDE | 121             | 4-3/4           | 40-542-411     | 119                | 4-11/16            |
| 62-542-500HFDE | 127             | 5               | 40-542-415     | 125                | 4-15/16            |

SCX PCD Bits are available by special order, minimum order quantity of 5. Suit abrasive ground conditions and multiple bit changes in deep hole application. Please see your local SCX sales representative for details.

DC = Soft Formations

HF = Hard Formations



## SPECIFICATIONS

| Description                             | Metric<br>mm | Imperial<br>in |
|---|--------------|----------------|
| Piston Case OD                          | 109          | 4-5/16         |
| Spanner Flat Width (A/F) Top Sub        | 95.2         | 3-3/4          |
| Spanner Flat Width (A/F) Inner Cylinder | 95.2         | 3-3/4          |
| Hammer Length Less Bit                  | 1,204        | 47-3/8         |
| Bit Range                               | 118 - 133    | 4-5/8 - 5-1/4  |
| Fits Drill Rod                          | 89 - 102     | 3-1/2 - 4      |

| Recommended Pressure | Metric<br>bar | Imperial<br>psi |
|----------------------|---------------|-----------------|
|                      | 17 - 27       | 250 - 400       |

| Weight                   | Metric<br>kg | Imperial<br>lb |
|--------------------------|--------------|----------------|
| Hammer Assembly Less Bit | 50           | 110            |
| Drill Bit                | 13           | 28             |

## AIR CONSUMPTION

| Pressure |      | Consumption<br>RE542 |                     |
|----------|------|----------------------|---------------------|
| psi      | bar  | cfm                  | m <sup>3</sup> /min |
| 150      | 10.3 | 300                  | 8.4                 |
| 200      | 13.8 | 340                  | 9.5                 |
| 250      | 17.2 | 415                  | 11.7                |
| 300      | 20.7 | 504                  | 14.2                |
| 350      | 24.1 | 585                  | 16.5                |
| 400      | 27.5 | 670                  | 18.8                |

