



# EXPLORATION PRODUCT CATALOGUE



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# AMS CORE LIFTER CASES

Australasian Mining Services in conjunction with manufactures have developed core lifters and core lifter cases to suit various formations that are drilled globally to achieve the best possible results for our customers.

|                                                                                                                   |                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>AMS Fine Case</p>             | <ul style="list-style-type: none"><li>• Matched to fine core lifter</li><li>• Hardened to resist swelling</li><li>• Suited to hard abrasive ground</li></ul>     |
| <p>AMS Course Case</p>         | <ul style="list-style-type: none"><li>• Matched to coarse lifter</li><li>• Suited to poor formation</li></ul>                                                    |
| <p>AMS Built in Stop Ring</p>  | <ul style="list-style-type: none"><li>• Suited to poor wedge group where stop rings are fused up</li><li>• Compatible with fine and coarse core lifter</li></ul> |

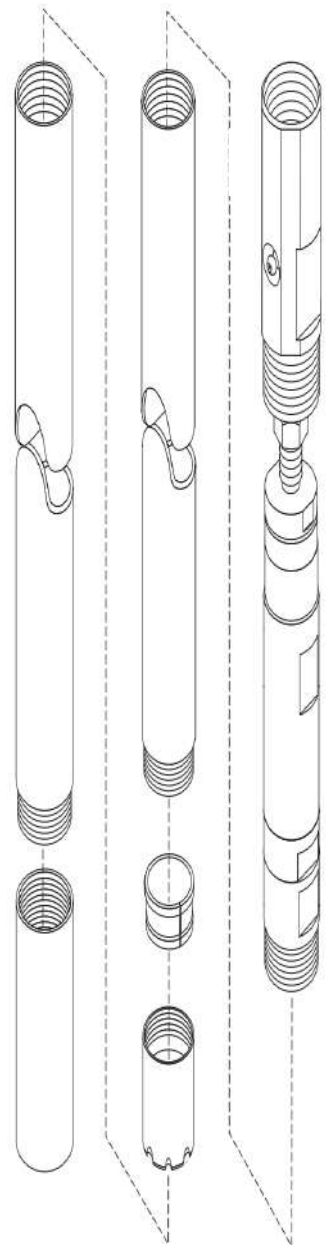
# AMS CORE LIFTERS

|                                |                                                                                     |                                                                                                                                                                                                           |
|--------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AMS Fine Core Lifter           |    | <ul style="list-style-type: none"> <li>• Compatible with fine core lifter case</li> <li>• Hardened to resist abrasion</li> <li>• Smaller thread for more contact area in hard competent ground</li> </ul> |
| AMS Chrome Core Lifter         |    | <ul style="list-style-type: none"> <li>• Used in abrasive ground. Chrome has been added to extend the life of the core lifter</li> </ul>                                                                  |
| AMS Diamond Coated Core Lifter |   | <ul style="list-style-type: none"> <li>• Compatible with both core lifter cases</li> <li>• Diamond coated for extra life in extremely abrasive formation</li> </ul>                                       |
| AMS Basket Core Lifter         |  | <ul style="list-style-type: none"> <li>• Used in poor formation</li> <li>• Also known as finger lifter</li> <li>• Used to recover dropped core</li> </ul>                                                 |
| AMS Spec Domed Core Lifter     |  | <ul style="list-style-type: none"> <li>• Generally used as a last resort for extremely poor formation</li> <li>• Used to recover dropped core</li> </ul>                                                  |
| AMS Course Core Lifter         |  | <ul style="list-style-type: none"> <li>• Used in poor formation. Substitute for a fine core lifter if the gripping face is clogging in soft formation</li> </ul>                                          |

# CORE BARREL ASSEMBLY

## AMS63941/AMS63943 – LTK48 CORE BARREL ASSEMBLY 1.5M & 3.0M

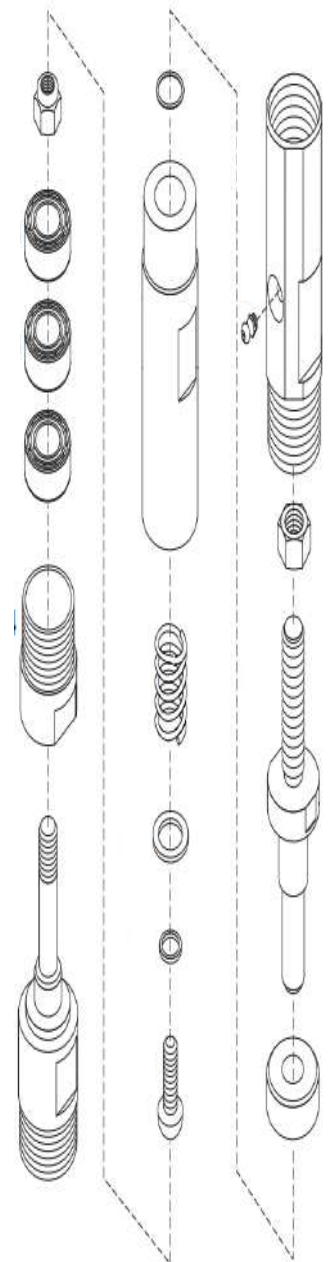
|    | DESCRIPTION                             | PART #          | QTY |
|----|-----------------------------------------|-----------------|-----|
|    | <b>LTK48 Core Barrel Assembly, 1.5m</b> | <b>AMS63941</b> |     |
|    | <b>LTK48 Core Barrel Assembly, 3.0m</b> | <b>AMS63943</b> |     |
| 1  | LTK48 Head Assembly AWJ                 | AMS63948        | 1   |
| 2  | LTK48 Head AWJ Thread                   | AMS63938        | 1   |
| 3  | Grease Nipple                           | AMS17447        | 1   |
| 4  | LTK48 Hex Nut                           | AMS93117        | 1   |
| 5  | LTK48 Spindle                           | AMS63944        | 1   |
| 6  | LTK48 Shut Off Valve                    | AMS67733        | 2   |
| 7  | LTK48 O' Ring                           | AMS20163        | 1   |
| 8  | LTK48 Bearing Retainer                  | AMS63145        | 1   |
| 9  | LTK48 Compression Spring                | AMS63461        | 1   |
| 10 | LTK48 Stop Washer                       | AMS67734        | 1   |
| 11 | LTK48 Safety Washer                     | AMS68062        | 1   |
| 12 | LTK48 Retainer Screw                    | AMS67732        | 1   |
| 13 | LTK48 Nut Hex Nyloc                     | AMS67605        | 1   |
| 14 | LTK48 Bearing Ball                      | AMS67307        | 1   |
| 15 | LTK48 Bearing Housing                   | AMS67731        | 1   |
| 16 | LTK48 Bearing Spindle                   | AMS63945        | 1   |
| 17 | LTK48 Outer Tube 1.5m                   | AMS601288       | 1   |
| 18 | LTK48 Outer Tube 3.0m                   | AMS601284       | 1   |
| 19 | LTK48 Inner Tube 1.5m                   | AMS601288       | 1   |
| 20 | LTK48 Inner Tube 3.0m                   | AMS601285       | 1   |
| 21 | LTK48 Core Lifter Case                  | AMS63925        | 1   |
| 22 | LTK48 Core Lifter                       | AMS67709        | 1   |



# CORE BARREL ASSEMBLY

## AMS3000512/AMS3000514 – LTK60 CORE BARREL ASSEMBLY 1.5M & 3.0M

|    | DESCRIPTION                             | PART #       | QTY |
|----|-----------------------------------------|--------------|-----|
|    | <b>LTK60 Core Barrel Assembly, 1.5m</b> | AMS3000512   |     |
|    | <b>LTK60 Core Barrel Assembly, 3.0m</b> | AMS3000514   |     |
| 1  | LTK60 Head Assembly                     | AMS3000515   | 1   |
| 2  | LTK60 Head                              | AMS3000517   | 1   |
| 3  | Grease Nipple                           | AMS17447     | 1   |
| 4  | LTK60 Spindle                           | AMS3000518   | 1   |
| 5  | LTK60 Valve Adjusting Washer            | AMS3000519   | 2   |
| 6  | LTK60 Spindle Bearing                   | AMS24336     | 3   |
| 7  | LTK60 Thrust Bearing                    | AMS24030     | 1   |
| 8  | LTK60 Inner Tube Cap                    | AMS3000520   | 1   |
| 9  | LTK60 Lock Nut                          | AMS103144    | 1   |
| 10 | LTK60 Compression Spring                | AMS24031     | 1   |
| 11 | LTK60 Shut Off Valve                    | AMS3000521   | 2   |
| 12 | LTK60 Thin Hex Nut                      | AMS93263     | 1   |
| 13 | LTK60 Ball Stainless Steel              | AMS24943     | 1   |
| 14 | LTK60 Check Valve BQ                    | AMS40656     | 1   |
| 15 | LTK60 Stabilizer BWJ-BQ                 | AMS3000078   | 1   |
| 16 | LTK60 Outer Tube 1.5MTR                 | AMS3000522   | 1   |
| 17 | LTK60 Outer Tube 3.0MTR                 | AMS3000523   | 1   |
| 18 | LTK60 Outer Tube 1.5MTR Chrome          | AMS3000522CP | 1   |
| 19 | LTK60 Outer Tube 3.0MTR Chrome          | AMS3000523CP | 1   |
| 20 | LTK60 Inner Tube 1.5MTR                 | AMS3000524   | 1   |
| 21 | LTK60 Inner Tube 3.0MTR                 | AMS3000525   | 1   |
| 22 | LTK60 Core Lifter Case                  | AMS3000526   | 1   |
| 23 | TK60 Core Lifter                        | AMS3000527   | 1   |
| 24 | LTK60 Stop Ring                         | AMS3000528   | 1   |

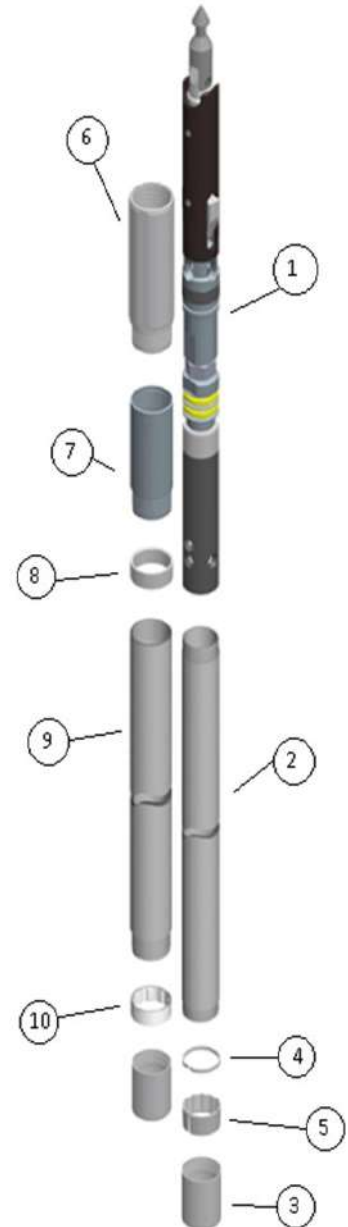




# CORE BARREL ASSEMBLY

## AMS306412/AMS306411 - BWL CORE BARREL ASSEMBLY 1.5M & 3.0M

| ID # | DESCRIPTION                           | PART #           | QTY      |
|------|---------------------------------------|------------------|----------|
|      | <b>BWL Core Barrel Assembly, 1.5m</b> | <b>AMS306412</b> |          |
|      | <b>BWL Core Barrel Assembly 3.0m</b>  | <b>AMS306411</b> |          |
| -    | BWLU Pump Down Head Assembly          | AMS3544012       | optional |
| 1    | BWL Head Assembly                     | AMS3542292       | 1        |
| 2    | BWL 1.5mtr Inner Tube                 | AMS24356         | 1        |
| 2    | BWL 3.0mtr Inner Tube                 | AMS24339         | 1        |
| 3    | BWL Core Lifter Case                  | AMS24830         | 1        |
| 4    | BWL Stop Ring                         | AMS24831         | 1        |
| 5    | BWL Core Lifter Course                | AMS24342         | 1        |
| 5    | BWL Core Lifter Fine                  | AMS100732DE      | 1        |
| 5    | BWL Core Lifter Diamond Coated        | AMS101624DE      | 1        |
| 5    | BWL Core Lifter Slotted               | AMS24342SLOT     | 1        |
| 6    | BWL Locking Coupling                  | AMS3545401       | 1        |
| 7    | BWL Adaptor Coupling                  | AMS24833         | 1        |
| 8    | BWL Landing Ring                      | AMS24345         | 1        |
| 9    | BWL 1.5mtr Outer Tube                 | AMS24357         | 1        |
| 9    | BWL Hex Outer Tube 3mtr               | AMS3545387       | optional |
| 9    | BWL 3.0mtr Outer Tube                 | AMS24346         | 1        |
| 10   | BWL Inner Tube Stabilizer             | AMS44406         | 1        |

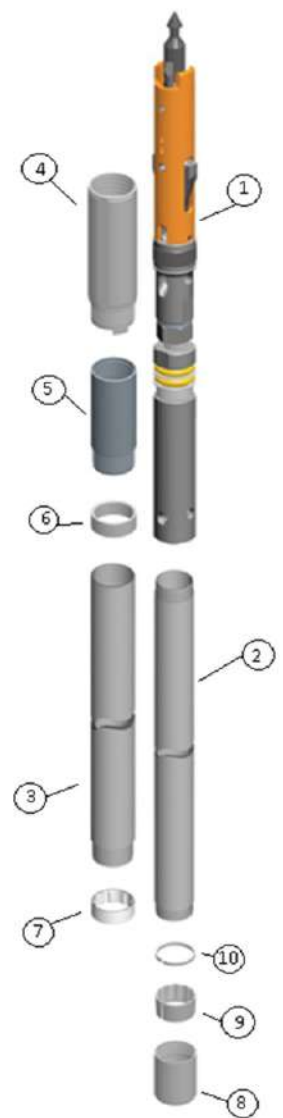




# CORE BARREL ASSEMBLY

## AMS306001/AMS306002 - NWL CORE BARREL ASSEMBLY 1.5M & 3.0M

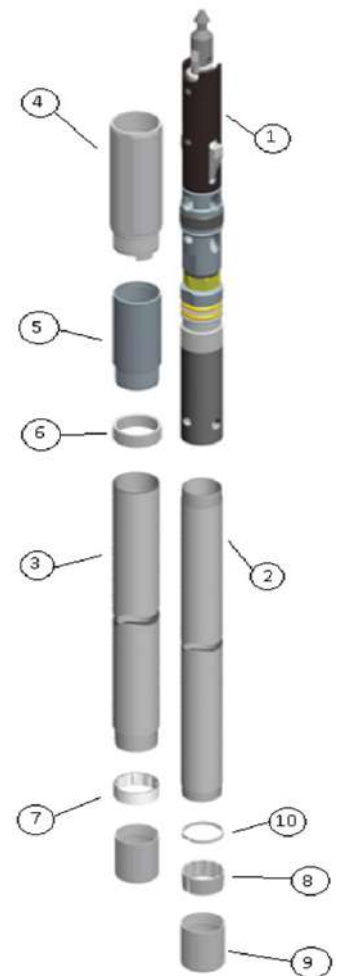
| ID # | DESCRIPTION                            | PART #           | QTY |
|------|----------------------------------------|------------------|-----|
|      | <b>NWL CORE BARREL 1.5MTR ASSEMBLY</b> | <b>AMS306001</b> |     |
|      | <b>NWL CORE BARREL 3MTR ASSEMBLY</b>   | <b>AMS306002</b> |     |
| 1    | NWL Head Assembly                      | AMS3542751       | 1   |
| 2    | NWL Inner Tube 6m                      | AMS66712         |     |
| 2    | NWL Inner Tube 3m                      | AMS24891         | 1   |
| 2    | NWL Inner Tube 1.5m                    | AMS24909         | 1   |
| 3    | NWL Outer Tube 6m                      | AMS66713         | 1   |
| 3    | NWL Outer Tube 3m                      | AMS24898         | 1   |
| 3    | NWL Outer Tube 1.5m                    | AMS24910         | 1   |
| 3    | NWL 3m Chrome Hex Outer Tube           | AMS85294         | 1   |
| 4    | NWL Locking Coupling                   | AMS100373        | 1   |
| 5    | NWL Adaptor Coupling                   | AMS24896         | 1   |
| 6    | NWL Landing Ring                       | AMS24897         | 1   |
| 7    | NWL Inner Tube Stabilizer              | AMS44407         | 1   |
| 8    | NWL Core Lifter Case                   | AMS24892         | 1   |
| 9    | NWL Core Lifter                        | AMS24894         | 1   |
| 10   | NWL Stop Ring                          | AMS24893         | 1   |



# CORE BARREL ASSEMBLY

## AMS306012/AMS306013 – NWL2 CORE BARREL ASSEMBLY 1.5M & 3.0M

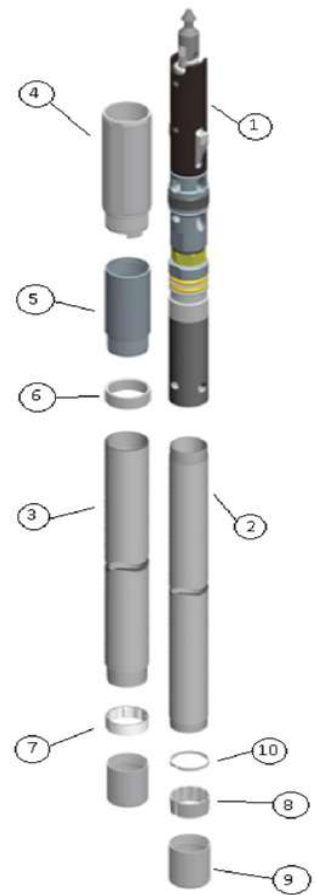
| ID # | DESCRIPTION                             | PART #           | QTY |
|------|-----------------------------------------|------------------|-----|
|      | <b>NWL2 CORE BARREL 1.5MTR ASSEMBLY</b> | <b>AMS306012</b> |     |
|      | <b>NWL2 CORE BARREL 3MTR ASSEMBLY</b>   | <b>AMS306013</b> |     |
| 1    | NWL2 HEAD ASSEMBLY                      | AMS3542752       | 1   |
| 2    | NWL2 Inner Tube 6m                      | AMS82294         | 1   |
| 2    | NWL2 Inner Tube 3m                      | AMS43601         | 1   |
| 2    | NWL2 Inner Tube 1.5m                    | AMS44366         | 1   |
| 2    | NWL2 3.4M Ext Tube                      | AMS102023        | 1   |
| 3    | NWL Outer Tube 6m                       | AMS66713         | 1   |
| 3    | NWL Outer Tube 3m                       | AMS24898         | 1   |
| 3    | NWL Outer Tube 1.5m                     | AMS24910         | 1   |
| 3    | NWL 3M Hex Chrome O/Size Outer Tube     | AMS85294CP       | 1   |
| 4    | NWL Locking Coupling                    | AMS100373        | 1   |
| 5    | NWL Adaptor Coupling                    | AMS24896         | 1   |
| 6    | NWL2 Landing Ring                       | AMS29214         | 1   |
| 7    | NWL2 Stabilizer Ring                    | AMS43812         | 1   |



# CORE BARREL ASSEMBLY

## AMS306012/AMS306013 – NWL2 CORE BARREL ASSEMBLY 1.5M & 3.0M

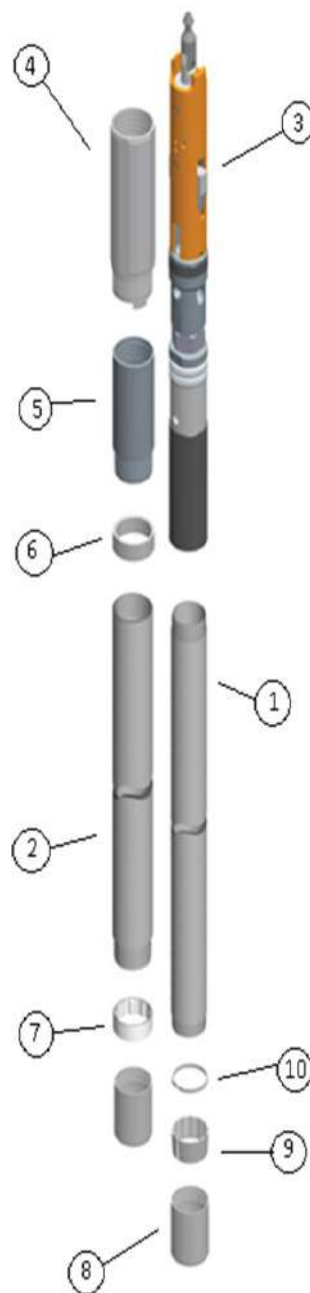
| ID # | DESCRIPTION                                   | PART #           | QTY |
|------|-----------------------------------------------|------------------|-----|
|      | <b>NWL2 CORE BARREL 1.5MTR ASSEMBLY</b>       | <b>AMS306012</b> |     |
|      | <b>NWL2 CORE BARREL 3MTR ASSEMBLY</b>         | <b>AMS306013</b> |     |
| 8    | NWL2 Core Lifter Coarse                       | AMS29211         | 1   |
| 8    | NWL2 Core Lifter Fluted Fine                  | AMS100425DE      | 1   |
| 8    | NWL2 Core Lifter Diamond Coated Fine          | AMS100849DE      | 1   |
| 8    | NWL2 Core Lifter Slotted                      | AMS29211SLOTTED  | 1   |
| 8    | NWL 2 Core Lifter Basket                      | AMS29211BASKET   | 1   |
| 8    | NWL2 Core Lifter Chrome                       | AMS29211CP       | 1   |
| 9    | NWL2 Core Lifter Case Coarse                  | AMS29209         | 1   |
| 9    | NWL2 Core Lifter Case—Fine                    | AMS100429DE      | 1   |
| 9    | NWL2 Core Lifter Case With Built in Stop Ring | AMS29209SPEC     | 1   |
| 10   | NWL2 Stop Ring                                | AMS29210         | 1   |



# CORE BARREL ASSEMBLY

## AMS3542946/AMS3542947 - HWL CORE BARREL ASSEMBLY 1.5M & 3.0M

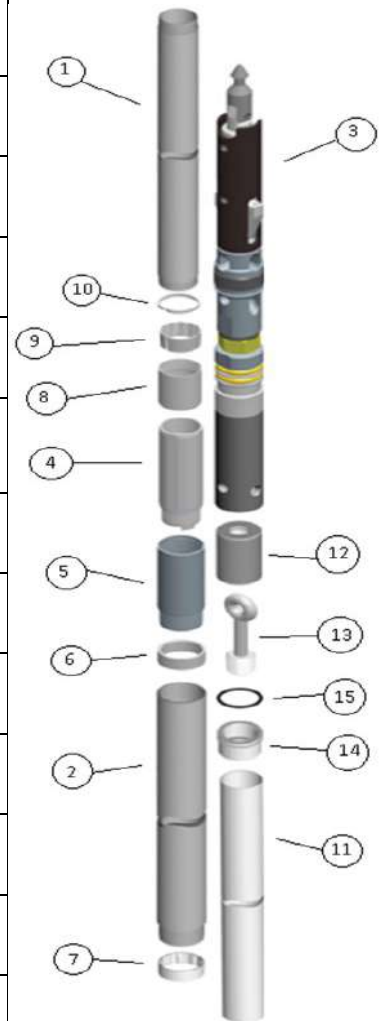
| ID # | DESCRIPTION                                | PART #            | QTY |
|------|--------------------------------------------|-------------------|-----|
|      | <b>HWL Core Barrel Assembly, 5ft 1.5m</b>  | <b>AMS3542946</b> |     |
|      | <b>HWL Core Barrel Assembly, 10ft 3.0m</b> | <b>AMS3652947</b> |     |
| 1    | HWL Inner Tube 6m                          | AMS41401          | 1   |
| 1    | HWL Inner Tube 3m                          | AMS25236          | 1   |
| 1    | HWL Inner Tube 1.5m                        | AMS25258          | 1   |
| 2    | HWL Outer Tube 6m                          | AMS56119          | 1   |
| 2    | HWL Outer Tube 3m                          | AMS25243          | 1   |
| 2    | HWL Outer Tube 1.5m                        | AMS25259          | 1   |
| 2    | HWL 3m Chrome Hex O/Size Outer Tube        | AMS85292CP        | 1   |
| 3    | HWL/HWL3 Head Assembly                     | AMS3542941        | 1   |
| 4    | HWL Locking Coupling                       | AMS100367         | 1   |
| 5    | HWL Adaptor Coupling                       | AMS25241          | 1   |
| 6    | HWL Landing Ring                           | AMS25242          | 1   |
| 7    | HWL Stabilizer                             | AMS44408          | 1   |
| 8    | HWL Core Lifter Case Coarse                | AMS25237          | 1   |
| 8    | HWL Core Lifter Case Fine                  | AMS100430DE       | 1   |
| 9    | HWL Core Lifter Coarse                     | AMS25239          | 1   |
| 9    | HWL Core Lifter Fine                       | AMS10426DE        | 1   |
| 9    | HWL Core Lifter Diamond Spray              | AMS10080DE        | 1   |
| 9    | HWL Core Lifter Chrome                     | AMS25239CP        | 1   |
| 10   | HWL Stop Ring                              | AMS25238          | 1   |



# CORE BARREL ASSEMBLY

## AMS3542948/AMS3542949 – HWL3 CORE BARREL ASSEMBLY 3.0M & 1.5M

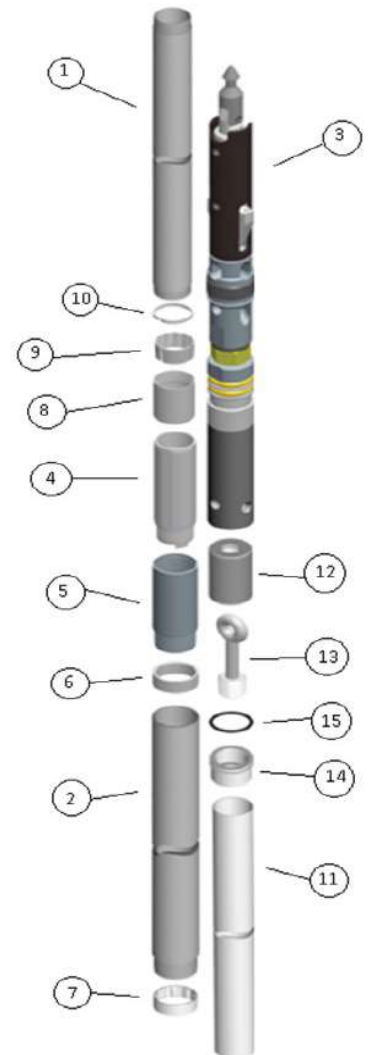
| ID # | DESCRIPTION                                 | PART #            | QTY |
|------|---------------------------------------------|-------------------|-----|
|      | <b>HWL3 Core Barrel Assembly, 5ft 1.5m</b>  | <b>AMS3542948</b> |     |
|      | <b>HWL3 Core Barrel Assembly, 10ft 3.0m</b> | <b>AMS365294</b>  |     |
| 1    | HWL Inner Tube 6m                           | AMS41401          | 1   |
| 1    | HWL Inner Tube 3m                           | AMS25236          | 1   |
| 1    | HWL Inner Tube 1.5m                         | AMS25258          | 1   |
| 2    | HWL Outer Tube 6m                           | AMS56119          | 1   |
| 2    | HWL Outer Tube 3m                           | AMS25243          | 1   |
| 2    | HWL Outer Tube 1.5m                         | AMS25259          | 1   |
| 2    | HWL 3m Chrome Hex O/Size Outer Tube         | AMS85292CP        | 1   |
| 3    | HWL/HWL3 Head Assembly                      | AMS3542941        | 1   |
| 4    | HWL Locking Coupling                        | AMS100367         | 1   |
| 5    | HWL Adaptor Coupling                        | AMS25241          | 1   |
| 6    | HWL Landing Ring                            | AMS25242          | 1   |
| 7    | HWL Stabilizer                              | AMS44408          | 1   |
| 8    | HWL3 Core Lifter Case Coarse                | AMS26514          | 1   |
| 8    | HWL3 Core Lifter Case Fine                  | AMS100431DE       |     |



# CORE BARREL ASSEMBLY

## AMS3542948/AMS3542949 – HWL3 CORE BARREL ASSEMBLY 1.5M & 3.0M

| ID # | DESCRIPTION                                   | PART #            | QTY    |
|------|-----------------------------------------------|-------------------|--------|
|      | <b>HWL3 Core Barrel Assembly, 5ft (1.5m)</b>  | <b>AMS3542948</b> |        |
|      | <b>HWL3 Core Barrel Assembly, 10ft (3.0m)</b> | <b>AMS3652949</b> |        |
|      | HWL3 Core Lifters Coarse                      | AMS26516          | 1      |
|      | HWL3 Core Lifter Basket                       | AMS26516-BASKET   | 1      |
|      | HWL3 Core Lifter Chrome                       | AMS26516CP        | 1      |
|      | HWL3 Core Lifter Basket Dome                  | AMS26516SPEC      | 1      |
|      | HWL3 Core Lifter Fine                         | AMS100427DE       | 1      |
|      | HWL3 Core Lifter Diamond Spray                | AMS100619DE       | 1      |
|      | HWL3 Stop Ring                                | AMS26515          | 1      |
|      | HWL3 Triple Tube Splits 1.5MTR Heavy Duty     | AMS26512S         | 1 PAIR |
|      | HWL3 Triple Tube Splits 3.0MTR Heavy Duty     | AMS26513S         | 1 PAIR |
|      | HWL3 Heavy Duty Split Tube 6m                 | AMS3070921S       | 1      |
|      | HWL3 Pump out Adaptor                         | AMS26517          | 1      |
|      | HWL3 Pump out Plug                            | AMS26662          | 1      |
|      | HWL3 Pump out Piston                          | AMS26510          | 1      |
|      | HWL3 O' Ring                                  | AMS20651          | 1      |





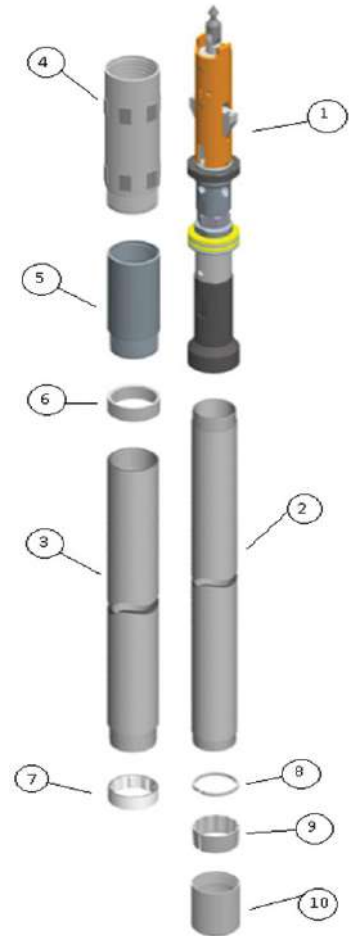




# CORE BARREL ASSEMBLY

## AMS3002605 – PWL CORE BARREL ASSEMBLY 1.5M

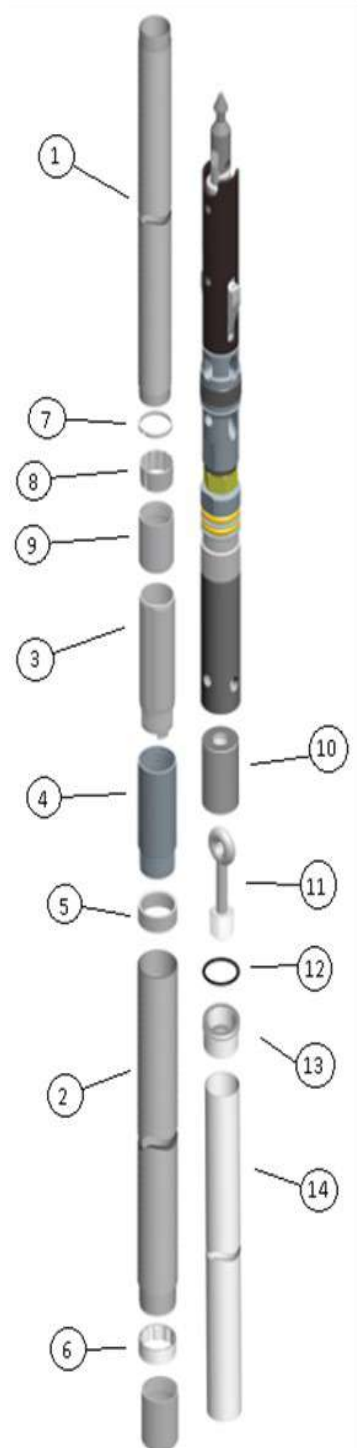
| ID # | DESCRIPTION                               | PART #            | QTY |
|------|-------------------------------------------|-------------------|-----|
|      | <b>PWL Core Barrel Assembly, 5ft 1.5m</b> | <b>AMS3002605</b> |     |
| 1    | PWL Head Assy                             | AMS3546500        | 1   |
| 2    | PWL Inner Tube 1.5mtr                     | AMS26159          | 1   |
| 2    | PWL Inner Tube 3.0mtr                     | AMS26534          | 1   |
| 3    | PWL 1.5mtr Outer Tube                     | AMS3543802        | 1   |
| 3    | PWL 3.0mtr Outer Tube                     | AMS3543801        | 1   |
| 4    | PWL Locking Coupling                      | AMS3000394        | 1   |
| 5    | PWL Adaptor Coupling                      | AMS3002506        | 1   |
| 6    | PWL Landing Ring                          | AMS3543814        | 1   |
| 7    | PWL Inner Tube Stabilizer                 | AMS44923          | 1   |
| 8    | PWL Stop Ring                             | AMS26161          | 1   |
| 9    | PWL Core Lifter Coarse                    | AMS26162          | 1   |
| 10   | PWL Core Lifter Case Coarse               | AMS52172          | 1   |



# CORE BARREL ASSEMBLY

## AMS3002606 – PWL3 CORE BARREL ASSEMBLY 3.0M

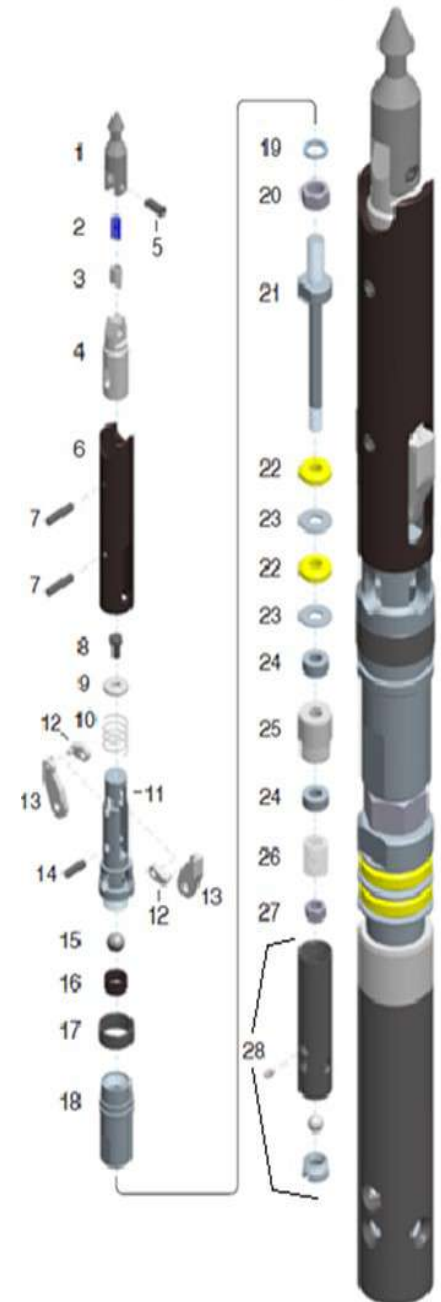
| ID # | DESCRIPTION                                 | PART #            | QTY |
|------|---------------------------------------------|-------------------|-----|
|      | <b>PWL3 Core Barrel Assembly, 10ft 3.0m</b> | <b>AMS3002606</b> |     |
| 1    | PWL Inner Tube 1.5mtr                       | AMS26159          | 1   |
| 1    | PWL Inner Tube 3.0mtr                       | AMS26534          | 1   |
| 2    | PWL 1.5mtr Outer Tube                       | AMS3543802        | 1   |
| 2    | PWL 3.0mtr Outer Tube                       | AMS3543801        | 1   |
| 3    | PWL Locking Coupling                        | AMS3000394        | 1   |
| 4    | PWL Adaptor Coupling                        | AMS3002506        | 1   |
| 5    | PWL Landing Ring                            | AMS3543814        | 1   |
| 6    | PWL Inner Tube Stabilizer                   | AMS44923          | 1   |
| 7    | PWL3 Stop Ring                              | AMS26176          | 1   |
| 8    | PWL3 Core Lifter Coarse                     | AMS26177          | 1   |
| 8    | PWL3 Core Lifter Fine                       | AMS100428DE       | 1   |
| 8    | PWL3 Core Lifter Diamond Spray              | AMS104872DE       | 1   |
| 8    | PWL3 Core Lifter Basket                     | AMS26177BASKET    | 1   |
| 8    | PWL3 Core Lifter Chrome                     | AMS26177CP        | 1   |
| 9    | PWL3 Core Lifter Case                       | AMS26160          | 1   |
| 9    | PWL3 Core Lifter Case Fine                  | AMS100433DE       | 1   |
| 10   | PWL3 Pump Out Adaptor                       | AMS26182          | 1   |
| 11   | HWL3 - PWL3 Piston Plug                     | AMS26662          | 1   |
| 12   | PWL3 Piston O' Ring                         | AMS26178          | 1   |
| 13   | PWL3 Core Ejection Piston                   | AMS26179          | 1   |
| 14   | PWL3 1.5mtr Split Tubes - Pair              | AMS26180          | 1   |
| 14   | PWL3 3.0mtr Split Tubes - Pair              | AMS26710          | 1   |



# HEAD ASSEMBLY

## AMS3542292 – BWL HEAD ASSEMBLY LINK LATCH

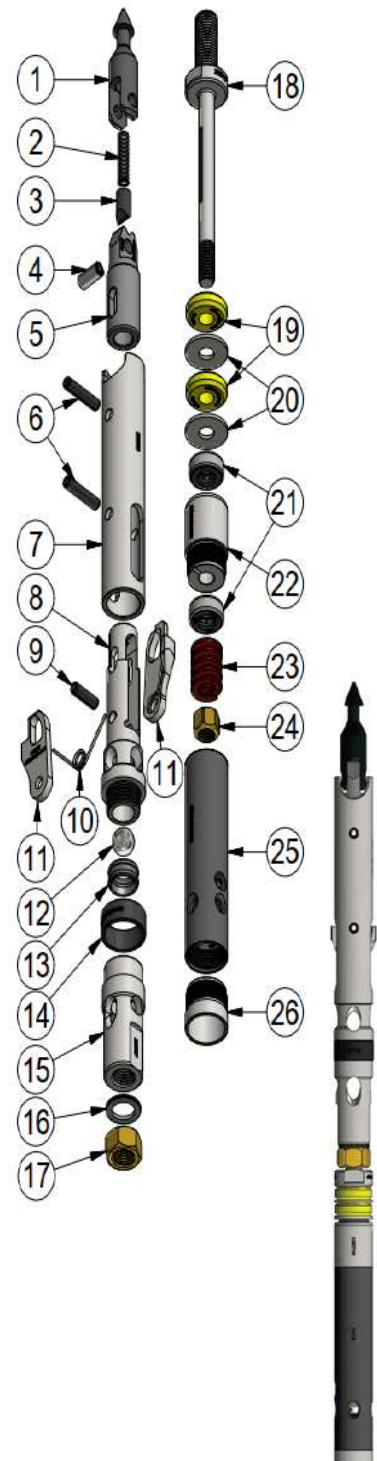
| ID # | DESCRIPTION                    | PART #            | QTY |
|------|--------------------------------|-------------------|-----|
|      | <b>BWL HEAD ASSEMBLY</b>       | <b>AMS3542292</b> |     |
| 1    | BWL Spearhead Point            | AMS100462DE       | 1   |
| 2    | B/N/HWL Compression Spring     | AMS100447DE       | 1   |
| 3    | B/N/HWL Detent Plunger         | AMS100463DE       | 1   |
| 4    | BWL Spearhead Base             | AMS3544135        | 1   |
| 5    | B/N/HWL Spiral Pin             | AMS42905          | 1   |
| 6    | BWL Latch Retracting Case      | AMS3541647        | 1   |
| 7    | BWL Spring Pin                 | AMS100701DE       | 2   |
| 8    | B/N/HWL Nyloc Bolt             | AMS3541932        | 1   |
| 9    | BWL Washer                     | AMS306427         | 1   |
| 10   | BWL Latch Compression Spring   | AMS3543180        | 1   |
| 11   | BWL Upper Latch Body           | AMS3541621        | 1   |
| 12   | BWL Link                       | AMS306418         | 2   |
| 13   | BWL Latch                      | AMS306417         | 2   |
| 14   | BWL Spring Pin 3/8" X 1-1/4"   | AMS23944          | 1   |
| 15   | BWL Stainless Steel Ball 22m   | AMS62374          | 1   |
| 16   | BWL Bushing Landing Indicator  | AMS62380          | 1   |
| 17   | BWL Landing Shoulder           | AMS306421         | 1   |
| 18   | BWL Lower Latch Body           | AMS306578         | 1   |
| 19   | BWL Washer Nord Lock           | AMS3548183        |     |
| 20   | BWL Hex Nut                    | AMS44601          | 1   |
| 21   | BWL Spindle Assembly           | AMS24331          | 1   |
| 22   | BWL Shut Off Valve Hard        | AMS44208          | 2   |
| 23   | BWL Valve Adjusting Washer     | AMS24335          | 2   |
| 24   | BWL Thrust / Hanger Bearing    | AMS24030          | 2   |
| 25   | BWL Spindle Bearing            | AMS24336          | 1   |
| 26   | BWL Compression Spring         | AMS24031          | 1   |
| 27   | BWL Lock Nut Nyloc             | AMS103144         | 1   |
| 28   | BWL Inner Tube Grease Cap Assy | AMS40655          | 1   |



# HEAD ASSEMBLY

## AMS100700DE – BWL HEAD ASSEMBLY INDEPENDENT LATCH

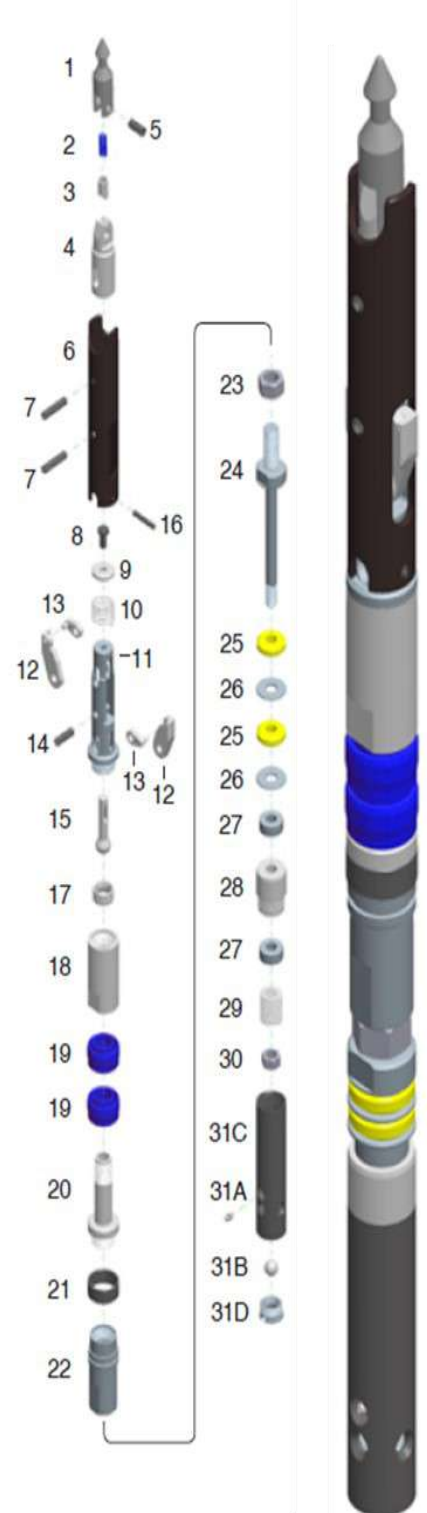
| ID # | DESCRIPTION                     | PART #             | QTY |
|------|---------------------------------|--------------------|-----|
|      | <b>BWL HEAD ASSEMBLY</b>        | <b>AMS100700DE</b> |     |
| 1    | BWL Spearhead Point             | AMS100462DE        | 1   |
| 2    | B/N/HWL Compression Spring      | AMS100447DE        | 1   |
| 3    | B/N/HWL Detent Plunger          | AMS100463DE        | 1   |
| 4    | B/N/HWL Spiral Pin              | AMS42905           | 1   |
| 5    | BWL Spearhead Base              | AMS3544135         | 1   |
| 6    | BWL Spring Pin                  | AMS100701DE        | 2   |
| 7    | BWL Latch Retracting Case       | AMS3541647         | 1   |
| 8    | BWL Upper Latch Body            | AMS3541621         | 1   |
| 9    | BWL Spring Pin 3/8" X 1-1/4"    | AMS23944           | 1   |
| 10   | BWL Latch Spring DE             | AMS100722DE        | 1   |
| 11   | BWL Latch DE                    | AMS100715DE        | 2   |
| 12   | Stainless Steel Ball 22mm 62374 | AMS100452DE        | 1   |
| 13   | Landing Indicator Bushing       | AMS62380           | 1   |
| 14   | BWL Landing Shoulder            | AMS306421          | 1   |
| 15   | BWL Lower Latch Body            | AMS306578          | 1   |
| 16   | BWL Washer Nord Lock            | AMS3548183         | 1   |
| 17   | BWL Hex Nut                     | AMS44601           | 1   |
| 18   | BWL Spindle Assembly            | AMS24331           | 1   |
| 19   | BWL Shut Off Valves Hard        | AMS44208           | 2   |
| 20   | BWL Valve Adjusting Washer      | AMS24335           | 2   |
| 21   | BWL Thrust / Hanger Bearing     | AMS24030           | 2   |
| 22   | BWL Spindle Bushing Shielded DE | AMS100719DE        | 1   |
| 23   | BWL Compression Spring          | AMS24031           | 1   |
| 24   | BWL Lock Nut Nyloc              | AMS103144          | 1   |
| 25   | BWL Inner Tube Grease Cap       | AMS40655           | 1   |



# HEAD ASSEMBLY

## AMS3544012 – BWLU HEAD ASSEMBLY LINK LATCH

| ID # | DESCRIPTION                                 | PART #            | QTY |
|------|---------------------------------------------|-------------------|-----|
|      | <b>BWLU HEAD ASSEMBLY</b>                   | <b>AMS3544012</b> |     |
| 1    | B/N/HWL Spearhead Point                     | AMS100462DE       | 1   |
| 2    | B/N/HWL Compression Spring                  | AMS100447DE       | 1   |
| 3    | B/N/HWL Detent Plunger                      | AMS100463DE       | 1   |
| 4    | BWL Spearhead Base                          | AMS3544135        | 1   |
| 5    | B/N/HWL Spiral Pin                          | AMS42905          | 1   |
| 6    | BWLU Latch Retracting Case                  | AMS3547671        | 1   |
| 7    | BWL Spring Pin                              | AMS100701DE       | 2   |
| 8    | B/N/HWL Nyloc Bolt                          | AMS3541932        | 1   |
| 9    | BWL Washer                                  | AMS306427         | 1   |
| 10   | BWLU Latch Compression Spring               | AMS3541836        | 1   |
| 11   | BWLU Upper Latch Body                       | AMS3547725        | 1   |
| 12   | BWL Latch                                   | AMS306417         | 2   |
| 13   | BWL Link                                    | AMS306418         | 2   |
| 14   | BWL Spring Pin 3/8" X 1-1/4"                | AMS23944          | 1   |
| 15   | BWLU Piston Ball                            | AMS3547672        | 1   |
| 16   | BWLU Spring Pin 1/4" x 1-5/8"               | AMS23946          | 1   |
| 17   | BWLU Landing Indicator Bushing              | AMS3543904        | 1   |
| 18   | BWLU Adaptor                                | AMS3543905        | 1   |
| 19   | BWLU Pump In Seal                           | AMS100690         | 2   |
| 20   | BWLU Seal Seat                              | AMS3543906        | 1   |
| 21   | BWL Landing Shoulder                        | AMS306421         | 1   |
| 22   | BWL Lower Latch Body                        | AMS306578         | 1   |
| 23   | BWL Hex Nut                                 | AMS44601          | 1   |
| 24   | BWL Spindle Assembly                        | AMS24331          | 1   |
| 25   | BWL Shut Off Valve Hard                     | AMS44208          | 2   |
| 26   | BWL Valve Adjusting Washer                  | AMS24335          | 2   |
| 27   | BWL Thrust / Hanger Bearing                 | AMS24030          | 2   |
| 28   | BWL Spindle Bearing                         | AMS24336          | 1   |
| 29   | BWL Compression Spring                      | AMS24031          | 1   |
| 30   | BWL Lock Nut Nyloc                          | AMS103144         | 1   |
| 31   | BWL Inner Tube Grease Cap Assy (A, B, C, D) | AMS40655          |     |





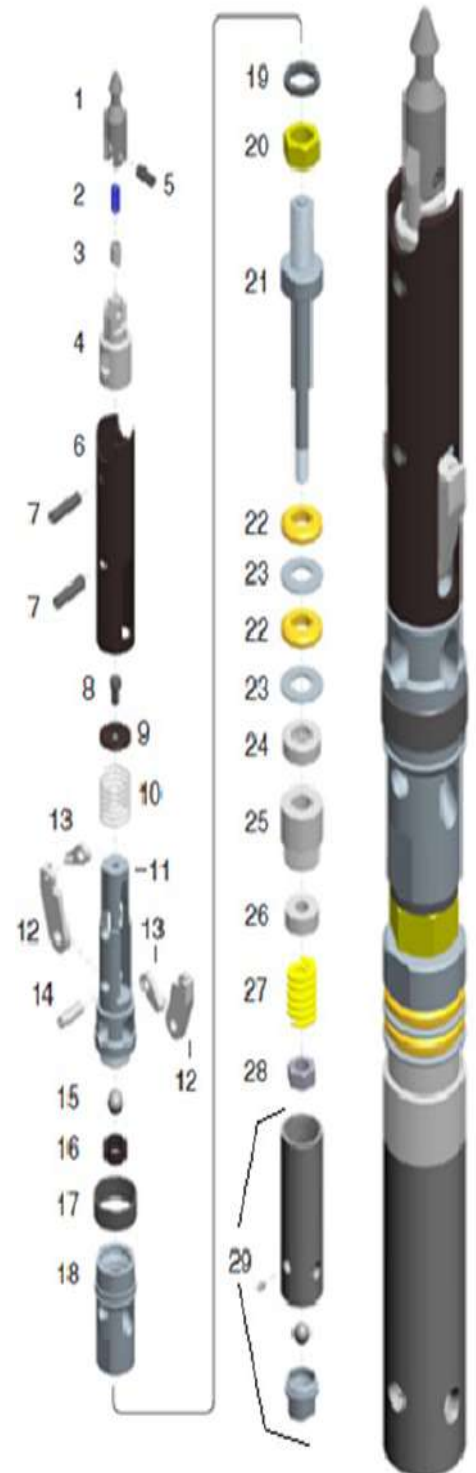




# HEAD ASSEMBLY

## AMS3542751 – NWL HEAD ASSEMBLY LINK LATCH

| ID # | DESCRIPTION                     | PART #            | QTY |
|------|---------------------------------|-------------------|-----|
|      | <b>NWL HEAD ASSEMBLY</b>        | <b>AMS3542751</b> |     |
| 1    | B/N/HWL Spearhead Point         | AMS100462DE       | 1   |
| 2    | B/N/HWL Compression Spring      | AMS100447DE       | 1   |
| 3    | B/N/H/P Detent Plunger          | AMS100463DE       | 1   |
| 4    | NWL Spearhead Base              | AMS3540329        | 1   |
| 5    | B/N/H/P Spiral Pin 7/16" X 1"   | AMS42905          | 1   |
| 6    | NWL Latch Retracting Case       | AMS100465DE       | 1   |
| 7    | NWL/HWL Spring Pin ½" X 2 "     | AMS100449DE       | 2   |
| 8    | B/N/H Bolt                      | AMS3541932        | 1   |
| 9    | NWL Washer                      | AMS306022         | 1   |
| 10   | NWL Compression Spring          | AMS3543812        | 1   |
| 11   | NWL Upper Latch Body            | AMS3541778        | 1   |
| 12   | NWL Latch                       | AMS104816         | 2   |
| 13   | NWL Link                        | AMS306454         | 2   |
| 14   | NWL Spring Pin ½" X 1 – 1/2"    | AMS24548          | 1   |
| 15   | B/N/H/ Stainless Steel Ball     | AMS62374          | 1   |
| 16   | B/N/H Bushing Landing Indicator | AMS62380          | 1   |
| 17   | NWL Landing Shoulder            | AMS306009         | 1   |
| 18   | NWL Lower Latch Body            | AMS100470DE       | 1   |
| 19   | Washer Nord Lock                | AMS3548161        | 2   |
| 20   | NWL Nut                         | AMS24885          | 1   |
| 21   | NWL Spindle                     | AMS24886          | 1   |
| 22   | NWL Shut Off Valve Hard         | AMS100455DE       | 2   |
| 22   | NWL Shut Off Valve Soft         | AMS100583DE       | 1   |
| 23   | NWL Valve Adjusting Washer      | AMS24888          | 2   |
| 24   | NWL Thrust Bearing              | 100457DE          | 1   |
| 26   | NWL Hanger Bearing              | AMS100458DE       | 1   |
| 25   | NWL Spindle Bearing             | AMS24889          | 1   |
| 27   | NWL Compression Spring          | AMS100459DE       | 1   |
| 28   | NWL Nut Lock                    | AMS22918          | 1   |
| 29   | NWL Inner Tube Cap Assembly     | AMS40664          | 1   |



# HEAD ASSEMBLY

## AMS100476DE – NWL HEAD ASSEMBLY INDEPENDENT LATCH

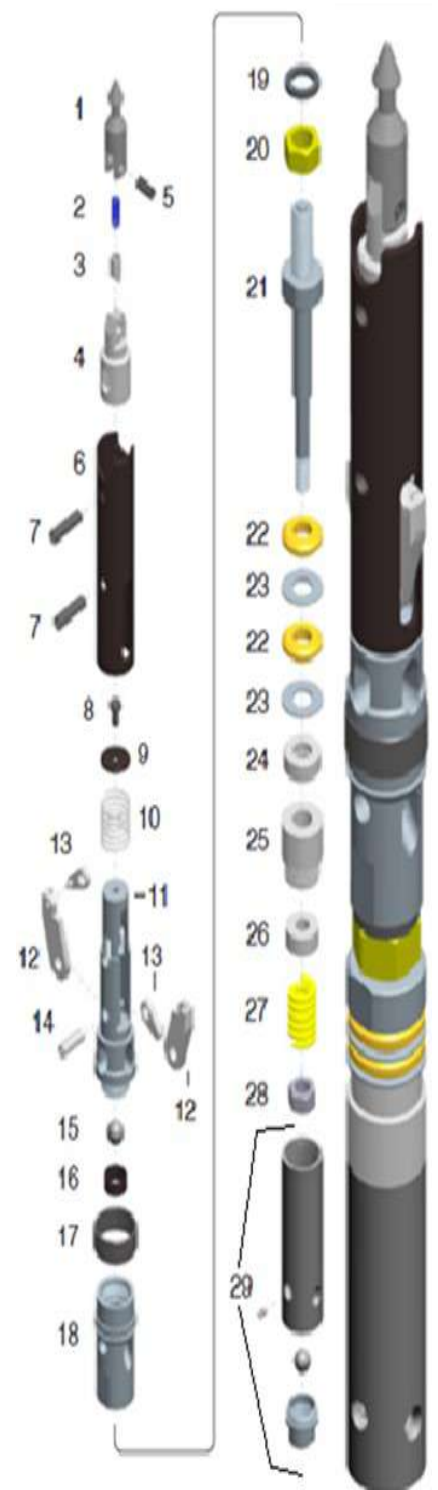
| ID # | DESCRIPTION                         | PART #             | QTY |
|------|-------------------------------------|--------------------|-----|
|      | <b>NWL HEAD ASSEMBLY DE</b>         | <b>AMS100476DE</b> |     |
| 1    | B/N/HWL Spearhead Point             | AMS100462DE        | 1   |
| 2    | B/N/HWL Compression Spring          | AMS100447DE        | 1   |
| 3    | B/N/H/P Detent Plunger              | AMS100463DE        | 1   |
| 4    | B/N/H/P Spiral Pin 7/16" X 1"       | AMS42905           | 1   |
| 5    | NWL Spearhead Base                  | AMS3540329         | 1   |
| 6    | NWL/HWL Spring Pin 1/2" X 2"        | AMS100449DE        | 2   |
| 7    | NWL Latch Retracting Case           | AMS100465DE        | 1   |
| 8    | NWL Upper Latch Body                | AMS3541778         | 1   |
| 9    | NWL2 Spring Pin 1/2" X 1 - 1/2"     | AMS24548           | 1   |
| 10   | NWL/HWL Latch Spring Independent    | AMS100450DE        | 1   |
| 11   | NWL/NWLU/NWL2U Latch                | AMS100808DE        | 2   |
| 12   | NWL Landing Shoulder                | AMS306009          | 1   |
| 13   | B/N/HWL Stainless Steel Ball        | AMS62374           | 1   |
| 14   | B/N/HWL Bushing Landing Indicator   | AMS62380           | 1   |
| 15   | NWL Lower Latch Body                | AMS100470DE        | 1   |
| 16   | Washer Nord Lock                    | AMS3548161         | 1   |
| 17   | NWL Nut                             | AMS24885           | 1   |
| 18   | NWL2 Spindle                        | AMS24886           | 1   |
| 19   | NWL2 Shut Off Valve Soft - Optional | AMS100583DE        | 2   |
| 19   | NWL2 Shut Off Valve Hard            | AMS100455DE        | 2   |
| 20   | NWL2 Valve Adjusting Washer         | AMS24888           | 2   |
| 21   | NWL Thrust Bearing                  | AMS100457DE        | 1   |
| 22   | NWL Spindle Bearing Shielded        | AMS100472DE        | 1   |
| 23   | NWL Hanger Bearing - 18298          | AMS100458DE        | 1   |
| 24   | NWL Compression Spring              | AMS100459DE        | 1   |
| 25   | NWL2 Nut Lock                       | AMS22918           | 1   |
| 26   | NWL Inner Tube Cap Assembly         | AMS40664           | 1   |



# HEAD ASSEMBLY

## AMS3542752 – NWL2 HEAD ASSEMBLY LINK LATCH

| ID # | DESCRIPTION                         | PART #            | QTY |
|------|-------------------------------------|-------------------|-----|
|      | <b>NWL2 HEAD ASSEMBLY</b>           | <b>AMS3542752</b> |     |
| 1    | B/N/H/P Spearhead Point             | AMS100462DE       | 1   |
| 2    | B/N/H/P Compression Spring          | AMS100447DE       | 1   |
| 3    | B/N/H/P Detent Plunger              | AMS100463DE       | 1   |
| 4    | NWL Spearhead Base                  | AMS3540329        | 1   |
| 5    | B/N/H/P Spiral Pin 7/16" X 1"       | AMS42905          | 1   |
| 6    | NWL Latch Retracting Case           | AMS100465DE       | 1   |
| 7    | NWL/HWL Spring Pin ½" X 2"          | AMS100449DE       | 2   |
| 8    | B/N/HWL Bolt 3/8" x 3/4"            | AMS3541932        | 1   |
| 9    | NWL Washer                          | AMS306022         | 1   |
| 10   | NWL2 Compression Spring             | AMS3543812        | 1   |
| 11   | NWL2 Upper Latch Body               | AMS3541778        | 1   |
| 12   | NWL2 Latch                          | AMS104816         | 2   |
| 13   | NWL2 Link                           | AMS306454         | 2   |
| 14   | NWL2 Spring Pin ½" X 1 – 1/2"       | AMS24548          | 1   |
| 15   | B/N/HWL Stainless Steel Ball        | AMS62374          | 1   |
| 16   | B/N/HWL Bushing Landing Indicator   | AMS62380          | 1   |
| 17   | NWL2 Landing Shoulder               | AMS306026         | 1   |
| 18   | NWL2 Lower Latch Body               | AMS100470DE       | 1   |
| 19   | Washer Nord Lock                    | AMS3548161        | 2   |
| 20   | NWL2 Nut                            | AMS24885          | 1   |
| 21   | NWL2 Spindle                        | AMS24886          | 1   |
| 22   | NWL2 Shut off Valve hard            | AMS100455DE       | 2   |
| 22   | NWL2 Shut Off Valve Soft - Optional | AMS100583DE       | 2   |
| 23   | NWL2 Valve Adjusting Washer         | AMS24888          | 2   |
| 24   | NWL Thrust Bearing                  | AMS100457DE       | 1   |
| 25   | NWL2 Spindle Bearing                | AMS24889          | 1   |
| 26   | NWL2 Hanger Bearing                 | AMS100458DE       | 1   |
| 27   | NWL Compression Spring              | AMS100459DE       | 1   |
| 28   | NWL2 Nut Lock                       | AMS22918          | 1   |
| 29   | NWL2 Inner Tube Cap Assembly        | AMS43604          | 1   |



# HEAD ASSEMBLY

## AMS100555DE – NWL2 HEAD ASSEMBLY INDEPENDENT LATCH

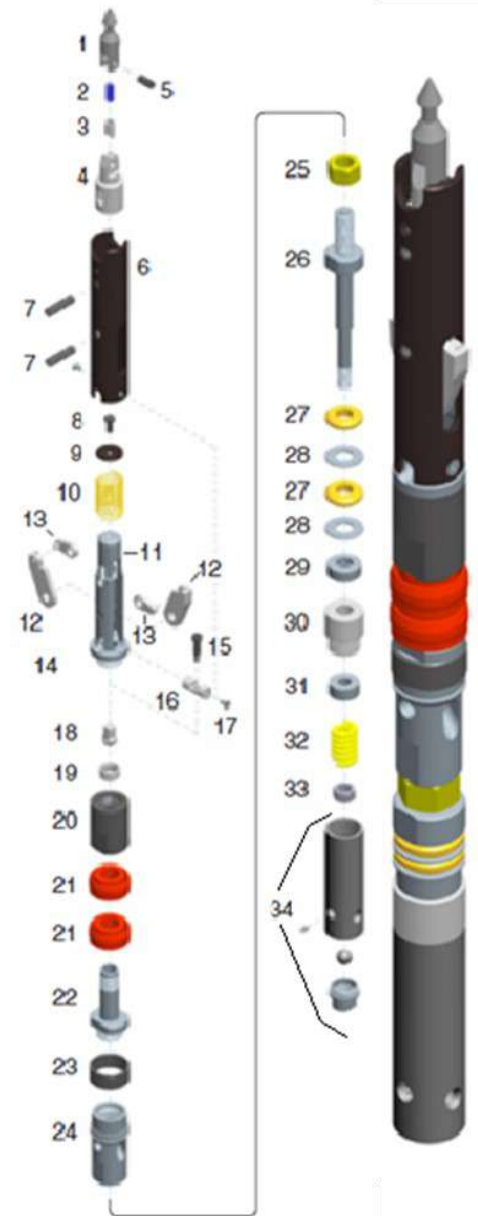
| ID # | DESCRIPTION                       | PART #             | QTY      |
|------|-----------------------------------|--------------------|----------|
|      | <b>NWL2 HEAD ASSEMBLY</b>         | <b>AMS100555DE</b> | <b>1</b> |
| 1    | B/N/H/P Spearhead Point           | AMS100462DE        | 1        |
| 2    | B/N/H/P Compression Spring        | AMS100447DE        | 1        |
| 3    | B/N/H/P Detent Plunger            | AMS100463DE        | 1        |
| 4    | B/N/H/P Spiral Pin 7/16" X 1"     | AMS42905           | 1        |
| 5    | NWL Spearhead Base                | AMS3540329         | 1        |
| 6    | NWL/HWL Spring Pin 1/2" X 2"      | AMS100449DE        | 2        |
| 7    | NWL Latch Retracting Case         | AMS100465DE        | 1        |
| 8    | NWL2 Upper Latch Body             | AMS3541778         | 1        |
| 9    | NWL2 Spring Pin 1/2" X 1 – 1/2"   | AMS24548           | 1        |
| 10   | NWL/HWL Latch Spring Independent  | AMS100450DE        | 1        |
| 11   | NWL/NWLU/NWL2U Latch              | AMS100808DE        | 2        |
| 12   | NWL2 Landing Shoulder             | AMS306026          | 1        |
| 13   | B/N/HWL Stainless Steel Ball      | AMS62374           | 1        |
| 14   | B/N/HWL Bushing Landing Indicator | AMS62380           | 1        |
| 15   | NWL2 Lower Latch Body             | AMS100470DE        | 1        |
| 16   | Washer Nord Lock                  | AMS3548161         | 2        |
| 17   | NWL2 Nut                          | AMS24885           | 1        |
| 18   | NWL2 Spindle                      | AMS24886           | 1        |
| 19   | NWL2 Shut off Valve Hard          | AMS100455DE        | 2        |
| 19   | NWL2 Shut Off Valve Soft          | AMS100583DE        | 2        |
| 20   | NWL2 Valve Adjusting Washer       | AMS24888           | 2        |
| 21   | NWL Thrust Bearing                | AMS100457DE        | 1        |
| 22   | NWL Spindle Bearing Shielded      | AMS100472DE        | 1        |
| 23   | NWL Hanger Bearing - 18298        | AMS100458DE        | 1        |
| 24   | NWL Compression Spring            | AMS100459DE        | 1        |
| 25   | NWL2 Nut Lock                     | AMS22918           | 1        |
| 26   | NWL2 Inner Tube Cap Assembly      | AMS100556DE        | 1        |



# HEAD ASSEMBLY

## AMS3544015 – NWL2U HEAD ASSEMBLY – 1 of 2 LINK LATCH

| ID # | DESCRIPTION                         | PART #            | QTY |
|------|-------------------------------------|-------------------|-----|
|      | <b>NWL2U HEAD ASSEMBLY</b>          | <b>AMS3544015</b> |     |
| 1    | B/N/H/P Spearhead Point             | AMS100462DE       | 1   |
| 2    | B/N/H/P Compression Spring          | AMS100447DE       | 1   |
| 3    | B/N/H/P Detent Plunger              | AMS100463DE       | 1   |
| 4    | NWL2U Spearhead Base                | AMS3544136        | 1   |
| 5    | B/N/H/P Spiral Pin 7/16" X 1"       | AMS42905          | 1   |
| 6    | NWL2U Latch Retracting Case ½" X 2" | AMS3543942        | 1   |
| 7    | NWL Spring Pin ½" X 1 – 1/2"        | AMS100449DE       | 2   |
| 8    | NWL/HWL Bolt Nyloc 3/8" x 3/4"      | AMS3541932        | 1   |
| 9    | NWL Washer                          | AMS306022         | 1   |
| 10   | NWL2U Compression Spring Latch      | AMS3543812        | 1   |
| 11   | NWL2U Upper Latch Body              | AMS3543943        | 1   |
| 12   | NWL Latch                           | AMS104816         | 2   |
| 13   | NWL2U Link                          | AMS104817         | 2   |
| 14   | NWL Pin Spring 1/2" x 1-1/2"        | AMS24548          | 1   |
| 15   | NWL2U Bolt Shoulder Nyloc           | AMS3543944        | 1   |
| 16   | NWL2U Valve Holder                  | AMS3543945        | 1   |
| 17   | NWL2U Screw Nyloc Machine Screw     | AMS3543902        | 1   |
| 18   | NWL2U Threaded Ball                 | AMS3543947        | 1   |
| 19   | NWL2U Seal Seat                     | AMS3543949        | 1   |
| 20   | NWL2U Adaptor                       | AMS3543948        | 1   |

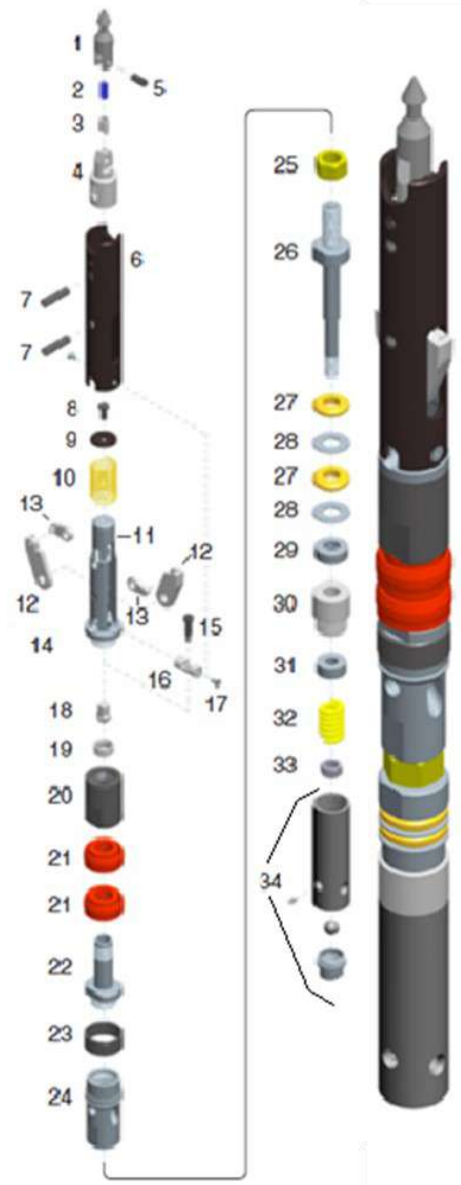




# HEAD ASSEMBLY

## AMS3544015 – NWL2U HEAD ASSEMBLY – 2 of 2 LINK LATCH

| ID # | DESCRIPTION                  | PART #            | QTY |
|------|------------------------------|-------------------|-----|
|      | <b>NWL2U HEAD ASSEMBLY</b>   | <b>AMS3544015</b> |     |
| 21   | NWL2U Pump in Seal           | AMS100764DE       | 2   |
| 22   | NWLU Seal Seat               | AMS3543939        | 1   |
| 23   | NWL2 Landing Shoulder        | AMS306026         | 1   |
| 24   | NWL Lower Latch Body         | AMS100470DE       | 1   |
| 25   | NWL Nut                      | AMS24885          | 1   |
| 26   | NWL Spindle                  | AMS24886          | 1   |
| 27   | NWL Shut off Valve Hard      | AMS100455DE       | 2   |
| 27   | NWL2 Shut Off Valve Soft     | AMS100583DE       | 2   |
| 28   | NWL Valve Adjusting Washer   | AMS24888          | 2   |
| 29   | NWL Thrust Bearing           | AMS100457DE       | 1   |
| 30   | NWL Spindle Bearing          | AMS24889          | 1   |
| 31   | NWL Hanger Bearing           | AMS100458DE       | 1   |
| 32   | NWL Compression Spring       | AMS100459DE       | 1   |
| 33   | NWL Nut Lock                 | AMS22918          | 1   |
| 34   | NWL2 Inner Tube Cap Assembly | AMS43604          | 1   |

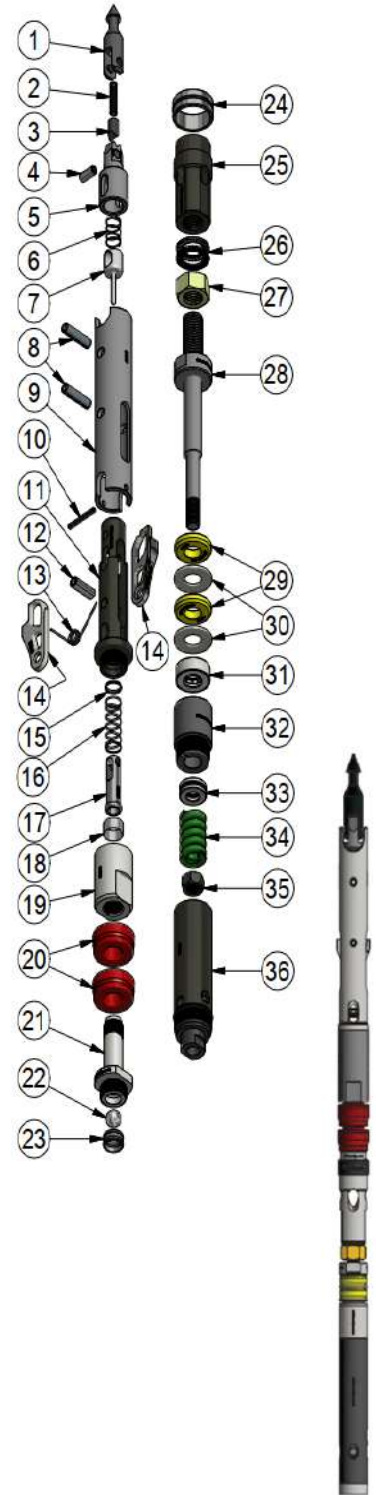




# HEAD ASSEMBLY

## AMS100932DE – NWL2U HEAD ASSEMBLY – 1 of 2 INDEPENDENT LATCH

| ID # | DESCRIPTION                               | PART #             | QTY      |
|------|-------------------------------------------|--------------------|----------|
|      | <b>NWL2U HEAD ASSEMBLY DE</b>             | <b>AMS100932DE</b> | <b>1</b> |
| 1    | B/N/H/P Spearhead Point                   | AMS100462DE        | 1        |
| 2    | B/N/H/P Compression Spring                | AMS100447DE        | 1        |
| 3    | B/N/H/P Detent Plunger                    | AMS100463DE        | 1        |
| 4    | B/N/H/P Spiral Pin 7/16" X 1"             | AMS42905           | 1        |
| 5    | NWL Spearhead Base                        | AMS3540329         | 1        |
| 6    | NWL2U Latch Locking Spring                | AMS100798DE        | 1        |
| 7    | NWL2U Latch Locking Pin                   | AMS100805DE        | 1        |
| 8    | NWL/HWL Spring Pin 1/2 X 2"               | AMS100449DE        | 2        |
| 9    | NWL2U Latch Retracting Case               | AMS100797DE        | 1        |
| 10   | NWL2U Latch Retracting Case Pin 1/2" X 2" | AMS100807DE        | 1        |
| 11   | NWL2U Upper Latch Body                    | AMS100804DE        | 1        |
| 12   | NWL Latch Pivot Pin                       | AMS100451DE        | 1        |
| 13   | NWL/HWL Latch Spring Independent          | AMS100450DE        | 1        |
| 14   | NWL/NWL2U Latch                           | AMS100808DE        | 2        |
| 15   | NWL2U Spring Seat                         | AMS100827DE        | 1        |
| 16   | NWL2U Latch Case Spring                   | AMS100801DE        | 1        |
| 17   | NWL2U Latch Case Spring Sleeve            | AMS100826DE        | 1        |
| 18   | NWL2U Spring Cavity Bushing               | AMS100828DE        | 1        |
| 19   | BWL2U Latch Body Adaptor                  | AMS3543948         | 1        |
| 20   | NWL2U Pump in Seal                        | AMS100764DE        | 2        |



# HEAD ASSEMBLY

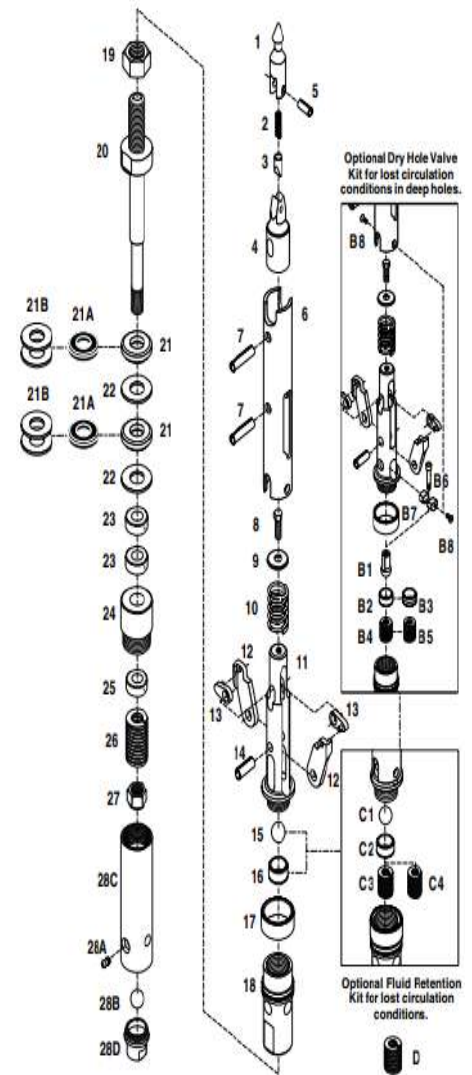
## AMS100932DE – NWL2U HEAD ASSEMBLY – 2 of 2 INDEPENDENT LATCH

| ID # | DESCRIPTION                       | PART #      | QTY |
|------|-----------------------------------|-------------|-----|
|      | NWL2U HEAD ASSEMBLY DE            | AMS100932DE | 1   |
| 21   | NWLU Seal Seat                    | AMS3543949  | 1   |
| 22   | Stainless Steel Ball 22mm         | AMS100452DE | 1   |
| 23   | B/N/HWL Bushing Landing Indicator | AMS62380    | 1   |
| 24   | NWL2 Landing Shoulder             | AMS306026   | 1   |
| 25   | NWL Lower Latch Body              | AMS100470DE | 1   |
| 26   | Washer Nord Lock                  | AMS3548161  | 2   |
| 27   | NWL Nut                           | AMS24885    | 1   |
| 28   | NWL Spindle                       | AMS24886    | 1   |
| 29   | NWL Shut off Valve Hard           | AMS100455DE | 2   |
| 29   | NWL2 Shut Off Valve Soft          | AMS100583DE | 2   |
| 30   | NWL Valve Adjusting Washer        | AMS24888    | 2   |
| 31   | NWL Thrust Bearing                | AMS100457DE | 1   |
| 32   | NWL Spindle Bearing Shielded      | AMS100472DE | 1   |
| 33   | NWL Hanger Bearing                | AMS100458DE | 1   |
| 34   | NWL Compression Spring            | AMS100459DE | 1   |
| 35   | NWL Nut Lock                      | AMS22918    | 1   |
| 36   | NWL2 Inner Tube Cap Assembly      | AMS100556DE | 1   |

# HEAD ASSEMBLY

## AMS3542941 – HWL/HWL3 HEAD ASSEMBLY LINK LATCH

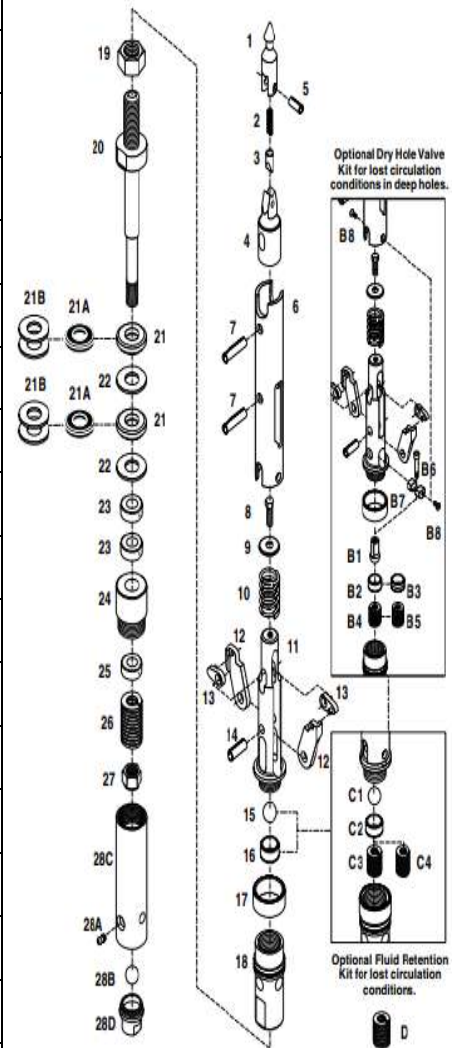
| ID # | DESCRIPTION                             | PART #            | QTY |
|------|-----------------------------------------|-------------------|-----|
|      | <b>HWL/HWL3 HEAD ASSEMBLY</b>           | <b>AMS3542941</b> |     |
| 1    | B/N/H/P Spearhead Point                 | AMS100462DE       | 1   |
| 2    | B/N/H/P Compression Spring              | AMS100447DE       | 1   |
| 3    | B/N/H/P Detent Plunger                  | AMS100463DE       | 1   |
| 4    | HWL Spearhead Base                      | AMS3540330        | 1   |
| 5    | B/N/H/P Spiral Pin 7/16" X 1"           | AMS42905          | 1   |
| 6    | HWL Latch Retracting Case               | AMS3540151        | 1   |
| 7    | HWL /PWL Latch Retracting Pin 1/2" X 2" | AMS100483DE       | 2   |
| 8    | B/N/HWL Bolt                            | AMS3541932        | 1   |
| 9    | HWL Washer                              | AMS104953         | 1   |
| 10   | HWL Compression Spring                  | AMS3543619        | 1   |
| 11   | HWL Upper Latch Body                    | AMS3540156        | 1   |
| 12   | HWL Latch                               | AMS104818         | 2   |
| 13   | HWL/PWL Link                            | AMS306216         | 2   |
| 14   | HWL Spring Pin 1/2 X 2                  | AMS100449DE       | 1   |
| 15   | B/N/HWL Stainless Steel Ball 22mm       | AMS62374          | 1   |
| 16   | B/N/HWL Bushing Landing Indicator       | AMS62380          | 1   |
| 17   | HWL Landing Shoulder                    | AMS104958         | 1   |
| 18   | HWL Lower Latch Body                    | AMS104957         | 1   |
| 19   | HWL Nut                                 | AMS44574          | 1   |
| 20   | HWL Spindle                             | AMS25231          | 1   |
| 21   | HWL Shut off Valve                      | AMS43513HY        | 2   |
| 21   | HWL Shut Off Rubber Hard Green          | AMS100487DE       | 2   |
| 21   | HWL Shut Off Rubber Soft Black          | AMS100584DE       | 2   |
| 22   | HWL Valve Adjusting Washer              | AMS25233          | 2   |
| 23   | HWL Thrust Bearing                      | AMS100489DE       | 2   |
| 24   | HWL Spindle Bearing                     | AMS25234          | 1   |
| 25   | NWL Thrust/HWL Hanger Bearing           | AMS100457DE       | 1   |
| 26   | HWL Compression Spring                  | AMS24529          | 1   |
| 27   | HWL Nut Lock                            | AMS103465         | 1   |
| 28   | HWL Inner Tube Cap Assembly (28a,B,C,D) | AMS40678          | 1   |
| 28A  | Grease Fitting                          | AMS17447          | 1   |



# HEAD ASSEMBLY

## AMS3542941 – HWL/HWL3 HEAD ASSEMBLY LINK LATCH

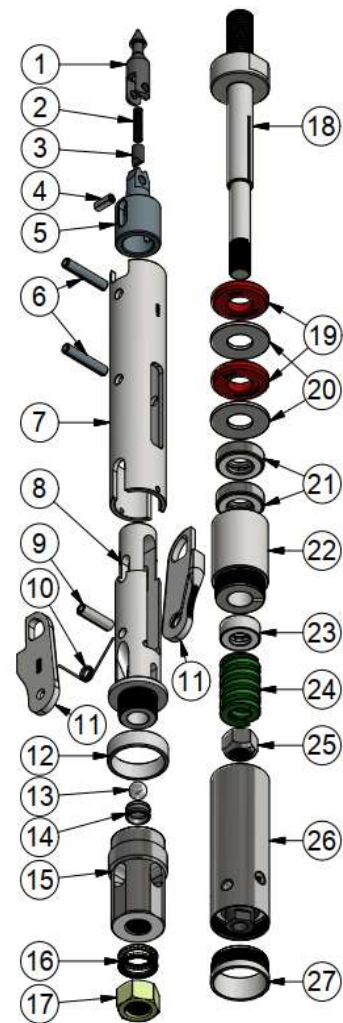
| ID # | DESCRIPTION                          | PART #            | QTY |
|------|--------------------------------------|-------------------|-----|
|      | <b>HWL/HWL3 HEAD ASSEMBLY</b>        | <b>AMS3542941</b> |     |
| 28B  | Stainless Steel Ball 22mm            | AMS100452DE       | 1   |
| 28D  | HWL/NWL2 Check Valve Body            | AMS37382          | 1   |
|      |                                      |                   |     |
|      | <b>Head Assembly Options</b>         |                   |     |
| 16A  | Bushing Indicator, Deep Hole         | AMS3542834        | 1   |
| B    | HWL/PWL Dry Hole Valve Kit           | AMS3541210        |     |
| B1   | Threaded Ball 22mm                   | AMS3540152        | 1   |
| B2   | Bushing Fluid Retention              | AMS306131         | 1   |
| B3   | Bushing Fluid Retention - Heavy Red  | AMS3543378        | 1   |
| B4   | Fluid Retention Spring light - Green | AMS100608DE       | 1   |
| B5   | Fluid Retention Spring Medium - Blue | AMS100609DE       | 1   |
| B6   | PWL/HWL Shoulder Bolt                | AMS3543388        | 1   |
| B7   | PWL/HWL Valve Holder                 | AMS3540153        | 1   |
| B8   | PWL/HWL Screw, Nylon insert          | AMS3541117        | 2   |
|      |                                      |                   |     |
|      | <b>Optional Fluid Retention</b>      |                   |     |
| C    | Fluid Retention Kit                  | AMS3542610        |     |
| C1   | Stainless Steel Ball 22mm            | AMS100452DE       | 1   |
| C2   | Bushing Fluid Retention              | AMS306131         | 1   |
| C3   | Fluid Retention Spring light - Green | AMS100608DE       | 1   |
| C4   | Fluid Retention Spring Medium - Blue | AMS100609DE       | 1   |
| D    | Fluid Retention Spring Heavy - Red   | AMS100610DE       | 1   |



# HEAD ASSEMBLY

## AMS101470DE – HWL/HWL3 HEAD ASSEMBLY INDEPENDENT LATCH

| ID # | DESCRIPTION                                    | PART #             | QTY |
|------|------------------------------------------------|--------------------|-----|
|      | <b>HWL/HWL3 HEAD ASSEMBLY I</b>                | <b>AMS101470DE</b> |     |
| 1    | B/N/H/P Spearhead Point                        | AMS100462DE        | 1   |
| 2    | B/N/H/P Compression Spring                     | AMS100447DE        | 1   |
| 3    | B/N/H/P Detent Plunger                         | AMS100463DE        | 1   |
| 4    | B/N/H/P Spiral Pin 7/16" X 1"                  | AMS42905           | 1   |
| 5    | HWL Spearhead Base                             | AMS3540330         | 1   |
| 6    | HWL/PWL Latch Retracting Pin<br>1/2" x 2"-3/4" | AMS100483DE        | 2   |
| 7    | HWL Latch Retracting Case                      | AMS3540151         | 1   |
| 8    | HWL Upper Latch Body                           | AMS3540156         | 1   |
| 9    | HWL Latch Pivot Pin                            | AMS100484DE        | 1   |
| 10   | NWL/HWL Latch Spring                           | AMS100450DE        | 1   |
| 11   | HWL Latch                                      | AMS100496DE        | 2   |
| 12   | HWL Landing Shoulder                           | AMS104958          | 1   |
| 13   | B/N/HWL Stainless Steel Ball 22mm              | AMS62374           | 1   |
| 14   | B/N/HWL Bushing Landing Indicator              | AMS62380           | 1   |
| 15   | HWL Lower Latch Body                           | AMS104957          | 1   |
| 16   | HWL Washer Nord Lock 1-1/4"                    | AMS3548105         | 1   |
| 17   | HWL Nut                                        | AMS44574           | 1   |
| 18   | HWL Spindle                                    | AMS25231           | 1   |
| 19   | HWL Shut Off Rubber Hard Green                 | AMS100487DE        | 2   |
| 19   | HWL Shut Off Rubber Soft Black                 | AMS100584DE        | 2   |
| 20   | HWL Valve Adjusting Washer                     | AMS25233           | 2   |
| 21   | HWL Thrust Bearing                             | AMS100489DE        | 2   |
| 22   | HWL Shielded Bearing                           | AMS3540794         | 1   |
| 23   | NWL Thrust/HWL Hanger Bearing                  | AMS100457DE        | 1   |
| 24   | HWL Compression Spring                         | AMS24529           | 1   |
| 25   | HWL Nut Lock                                   | AMS103465          | 1   |
| 26   | HWL Inner Tube Cap Assembly                    | AMS40678           | 1   |





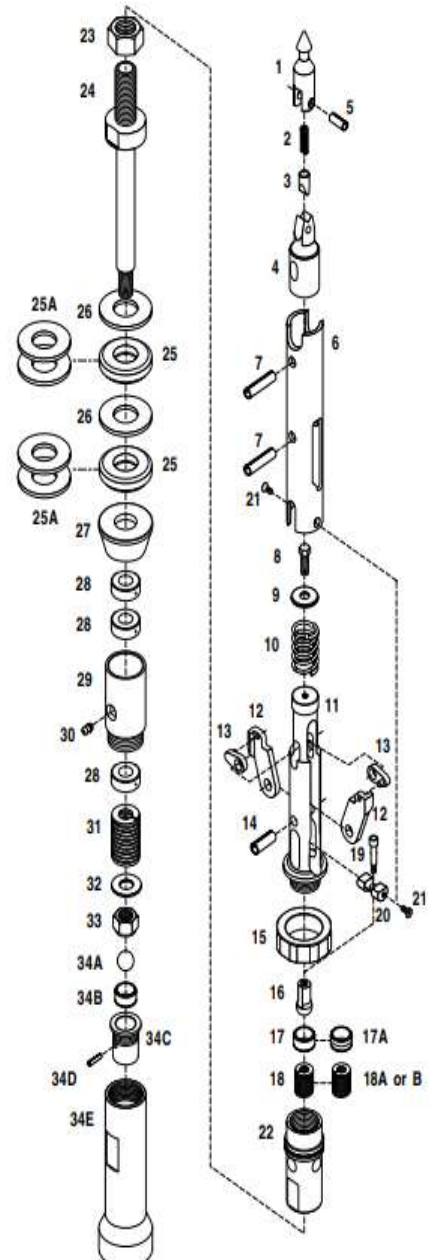




# HEAD ASSEMBLY

## AMS3546500 – PWL HEAD ASSEMBLY LINK LATCH

| ID # | DESCRIPTION                        | PART #            | QTY |
|------|------------------------------------|-------------------|-----|
|      | <b>PWL HEAD ASSEMBLY</b>           | <b>AMS3546500</b> |     |
| 1    | B/N/H/P Spear Head Point           | AMS100462DE       | 1   |
| 2    | B/N/H/P Compression Spring         | AMS100447DE       | 1   |
| 3    | B/N/H/P Detent Plunger             | AMS100463DE       | 1   |
| 4    | HWL/PWL Spearhead Base             | AMS3540330        | 1   |
| 5    | B/N/H/P Spiral Pin 7/16" X 1"      | AMS42905          | 1   |
| 6    | HWL/PWL Latch Retracting Case      | AMS3540151        | 1   |
| 7    | HWL/PWL Latch Retracting Pin       | AMS100483DE       | 2   |
| 8    | B/N/H/P NyLoc Bolt                 | AMS3541932        | 1   |
| 9    | HWL/PWL Washer                     | AMS104953         | 1   |
| 10   | HWL/PWL Latch Compression Spring   | AMS3543619        | 1   |
| 11   | HWL/PWL Upper Latch Body           | AMS3540156        | 1   |
| 12   | PWL Latch                          | AMS3543796        | 1   |
| 13   | HWL/PWL Link                       | AMS306216         | 2   |
| 14   | PWL Spring Pin                     | AMS100449DE       | 2   |
| 15   | PWL Landing Shoulder               | AMS3543797        | 1   |
| 16   | PWL Threaded Ball                  | AMS3540152        | 1   |
| 17   | Fluid Retention Bushing - Optional | AMS306131         |     |
| 18   | Spring Fluid Retention Green       | AMS100608DE       | 1   |
| 19   | PWL/HWL Shoulder Bolt              | AMS3543388        | 1   |
| 20   | PWL/HWL Dry Hole Valve Holder      | AMS3540153        | 1   |
| 21   | PWL/HWL Screw, Nylon Insert        | AMS3541777        | 2   |
| 22   | HWL/PWL Lower Latch Body           | AMS104957         | 1   |
| 23   | HWL/PWL Hex Nut                    | AMS44574          | 1   |
| 24   | PWL Hollow Spindle                 | AMS3548073        | 1   |
| 25   | PWL Shut Off Valve Hard            | AMS3540308        | 2   |
| 25   | PWL Shut Off Valve Soft            | AMS5002347        | 2   |



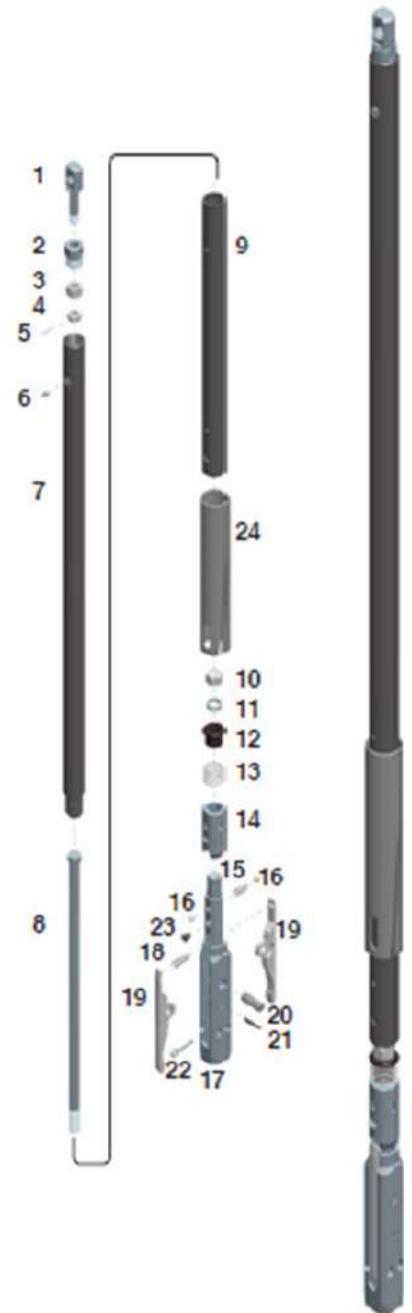
# HEAD ASSEMBLY

## AMS3546500 – PWL HEAD ASSEMBLY

| ID # | DESCRIPTION                        | PART #            | QTY |
|------|------------------------------------|-------------------|-----|
|      | <b>PWL HEAD ASSEMBLY</b>           | <b>AMS3546500</b> |     |
| 26   | PWL Valve Adjusting Washer         | AMS3540300        | 2   |
| 27   | PWL Tapered Washer                 | AMS3540299        | 1   |
| 28   | HWL/PWL Thrust Bearing             | AMS100489DE       | 3   |
| 29   | PWL Spindle Bearing                | AMS3540794        | 1   |
| 30   | Grease Fitting                     | AMS17447          | 1   |
| 31   | PWL Compression Spring             | AMS3540755        | 1   |
| 32   | PWL Washer 1-1/4" Narrow           | AMS3544324        | 1   |
| 33   | PWL Stover Lock Nut                | AMS103062         | 1   |
| 34   | PWL Inner Tube Cap Ass. (A-E)      | AMS3543805        | 1   |
| 34A  | Stainless Steel Ball 22mm          | AMS100452DE       | 1   |
| 34B  | PWL/HWL Bushing                    | AMS3540737        | 1   |
| 34C  | Check Valve Body                   | AMS3540745        | 1   |
| 34D  | PWL Spring Pin                     | AMS100865         | 1   |
| 34E  | PWL Inner Tube Cap                 | AMS3543804        | 1   |
|      | <b>Head Assembly Options</b>       |                   |     |
| 17A  | Bushing Fluid Retention. - Heavy   | AMS3543378        |     |
| 18A  | Fluid Retention Spring Med - Blue  | AMS100609DE       |     |
| 18B  | Fluid Retention Spring Heavy - Red | AMS100610DE       |     |

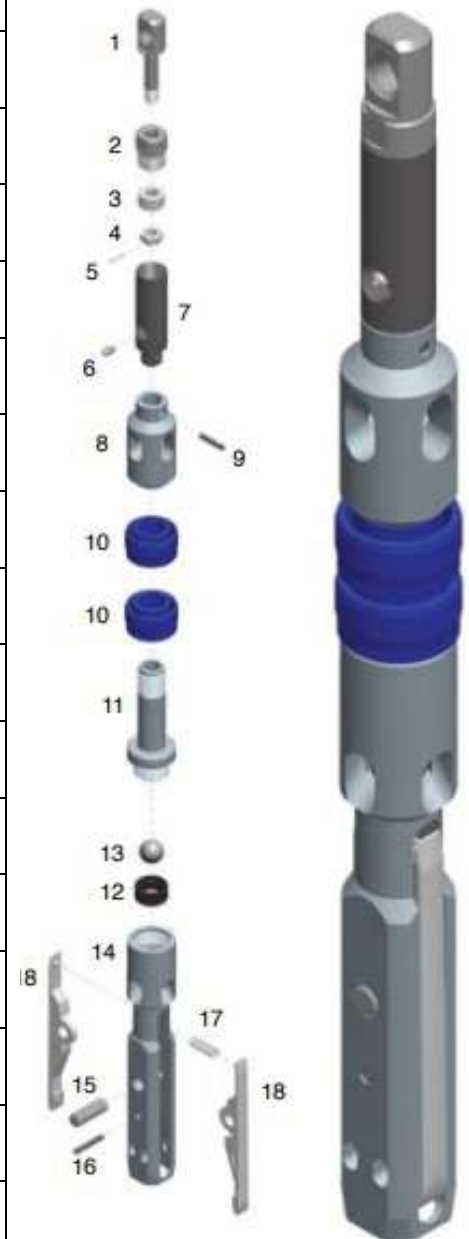
## AMS3546822 - BWL/BWLTK EZI LOCK OVERSHOT

| ID # | DESCRIPTION                                 | PART #            | QTY |
|------|---------------------------------------------|-------------------|-----|
|      | <b>BWL-BWLTK EZI LOCK OVERSHOT ASSEMBLY</b> | <b>AMS3546822</b> |     |
| 1    | BWL Bolt, Cable Swivel Eye                  | AMS25991          | 1   |
| 2    | BWL Cable Swivel Collar                     | AMS25990          | 1   |
| 3    | BWL Needle Thrust Bearing                   | AMS25986          | 1   |
| 4    | BWL Castle Nut                              | AMS25985          | 1   |
| 5    | BWL Cotter Pin                              | AMS44615          | 1   |
| 6    | BWL Grease Fitting                          | AMS17447          | 1   |
| 7    | BWL Cable Swivel Body                       | AMS44434          | 1   |
| 8    | BWL Jar Staff                               | AMS3546821        | 1   |
| 9    | BWL Jar Tube                                | AMS44435          | 1   |
| 10   | BWL Hex Nut 9/16" UNC                       | AMS62904          | 1   |
| 11   | BWL Washer, Nord-Lock                       | AMS3548184        | 1   |
| 12   | BWL Cap, EZI Lock Overshot                  | AMS3546823        | 1   |
| 13   | BWL Spring, EZI Lock Overshot               | AMS3544104        | 1   |
| 14   | BWL Sleeve, EZI Lock Overshot               | AMS3546883        | 1   |
| 15   | BWL Compression Spring                      | AMS3545053        | 1   |
| 16   | BWL Ball 11/32"                             | AMS3543772        | 2   |
| 17   | BWL EZI Lock Overshot Head                  | AMS3546825        | 1   |
| 18   | BWL Compression Spring                      | AMS06951          | 1   |
| 19   | BWL Lifting Dog                             | AMS100889DE       | 2   |
| 20   | BWL Plain Pin 1/2" X 1-1/2"                 | AMS42941          | 1   |
| 21   | BWL Spring Pin 3/16" X 1-3/8"               | AMS29073          | 1   |
| 22   | BWL Locking Pin                             | AMS3546747        | 1   |
| 23   | BWL Set Screw, 3/8" UNF X 3/4" Nyloc        | AMS3545073        | 1   |
| 24   | BWL Locking Sleeve                          | AMS15575          | 1   |



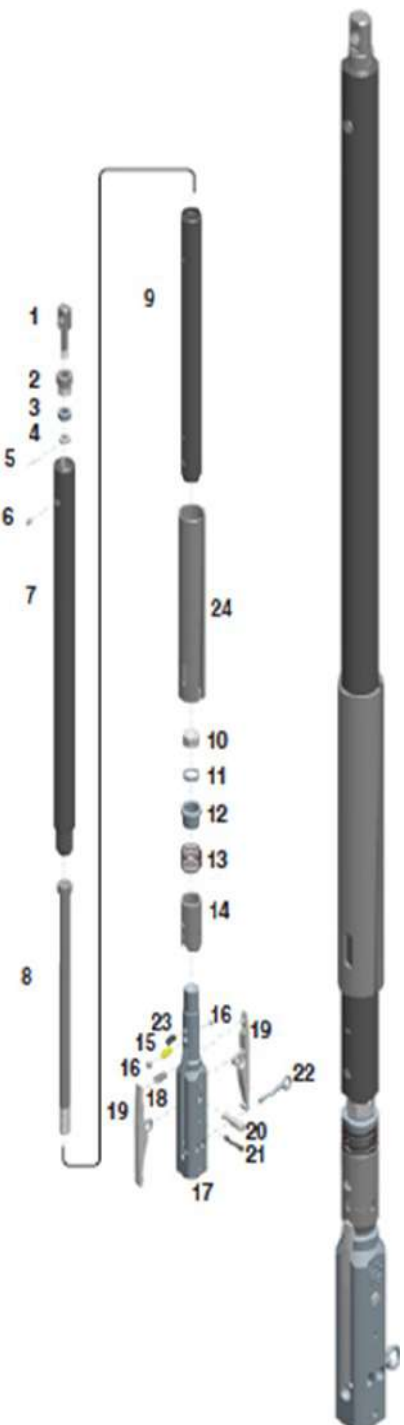
## AMS3547700 – BWLU QUICK PUMP IN OVERSHOT

| ID # | DESCRIPTION                        | PART #            | QTY |
|------|------------------------------------|-------------------|-----|
|      | <b>BWLU QUICK PUMP IN OVERSHOT</b> | <b>AMS3547700</b> |     |
| 1    | BWLU Bolt, Cable Swivel Eye        | AMS25991          | 1   |
| 2    | BWLU Cable Swivel Collar           | AMS25990          | 1   |
| 3    | BWLU Needle Thrust Bearing         | AMS25986          | 1   |
| 4    | BWLU Castle Hex Nut ½" UNF G2      | AMS25985          | 1   |
| 5    | BWLU Cotter Pin 3/32" X 3/4"       | AMS44615          | 1   |
| 6    | BWLU Grease Fitting                | AMS17447          | 1   |
| 7    | BWLU Body, Cable Swivel Overshot   | AMS30183          | 1   |
| 8    | BWLU Body Upper Overshot           | AMS3547807        | 1   |
| 9    | BWLU Pin, Shear 3/16" X 1-1/8" LG  | AMS3545136        | 1   |
| 10   | BWLU Lip Seal, BWL Pump in         | AMS100750DE       | 2   |
| 11   | BWLU Seat, Seal BWL/BWLU           | AMS3543906        | 1   |
| 12   | BWLU Indicator Bushing             | AMS62380          | 1   |
| 13   | BWLU Ball, 22MM                    | AMS62374          | 2   |
| 14   | BWLU Head, BWL Overshot Quick Pump | AMS3547848        | 1   |
| 15   | BWLU Plain Pin ½" X 1-1/2"         | AMS42941          | 1   |
| 16   | BWLU Spring Pin 3/16" X 1-3/8"     | AMS29073          | 1   |
| 17   | BWLU Compression Spring            | AMS6951           | 1   |
| 18   | BWLU Lifting Dog                   | AMS100889DE       | 2   |



## AMS3546744 - NWL / NWL2 / NWL3 EZI LOCK OVERSHOT

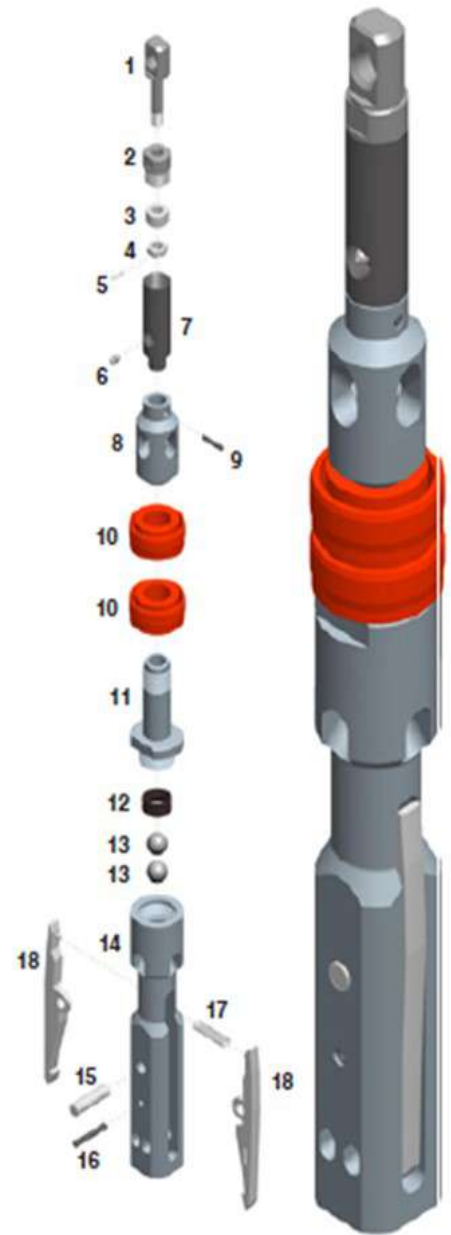
| ID # | DESCRIPTION                           | PART #            | QTY |
|------|---------------------------------------|-------------------|-----|
|      | <b>NWL EZI LOCK OVERSHOT ASSEMBLY</b> | <b>AMS3546744</b> |     |
| 1    | NWL Bolt, Cable Swivel Eye            | AMS25991          | 1   |
| 2    | NWL Cable Swivel Collar               | AMS25990          | 1   |
| 3    | NWL Needle Thrust Bearing             | AMS25986          | 1   |
| 4    | NWL Castle Nut                        | AMS25985          | 1   |
| 5    | NWL Cotter Pin                        | AMS44615          | 1   |
| 6    | NWL Grease Fitting                    | AMS17447          | 1   |
| 7    | NWL Cable Swivel Body                 | AMS44444          | 1   |
| 8    | NWL Jar Staff                         | AMS3540516        | 1   |
| 9    | NWL Jar Tube                          | AMS3540515        | 1   |
| 10   | NWL Hex Nut 3/4" UNC                  | AMS82847          | 1   |
| 11   | NWL Washer, Nord-Lock                 | AMS3548178        | 1   |
| 12   | NWL Cap, EZI Lock Overshot            | AMS3544103        | 1   |
| 13   | NWL Spring, EZI Lock Overshot         | AMS3544105        | 1   |
| 14   | NWL Sleeve, EZI Lock Overshot         | AMS3546745        | 1   |
| 15   | NWL Compression Spring                | AMS6951           | 1   |
| 16   | NWL Ball 11/32"                       | AMS3543772        | 2   |
| 17   | NWL EZI Lock Overshot Head            | AMS3546746        | 1   |
| 18   | NWL Lifting Dog Compression Spring    | AMS100529DE       | 1   |
| 19   | NWL Lifting Dog                       | AMS100530DE       | 2   |
| 20   | NWL Plain Pin 1/2' X 1-15/16"         | AMS100840DE       | 1   |
| 21   | NWL Spring Pin 1/4" X 1-3/4"          | AMS37394          | 1   |
| 22   | NWL Locking Pin                       | AMS3546747        | 1   |
| 23   | NWL Set Screw, 3/8" UNF X 3/4" Nyloc  | AMS44442          | 1   |
| 24   | NWL Locking Sleeve Slotted            | AMS15965          | 1   |





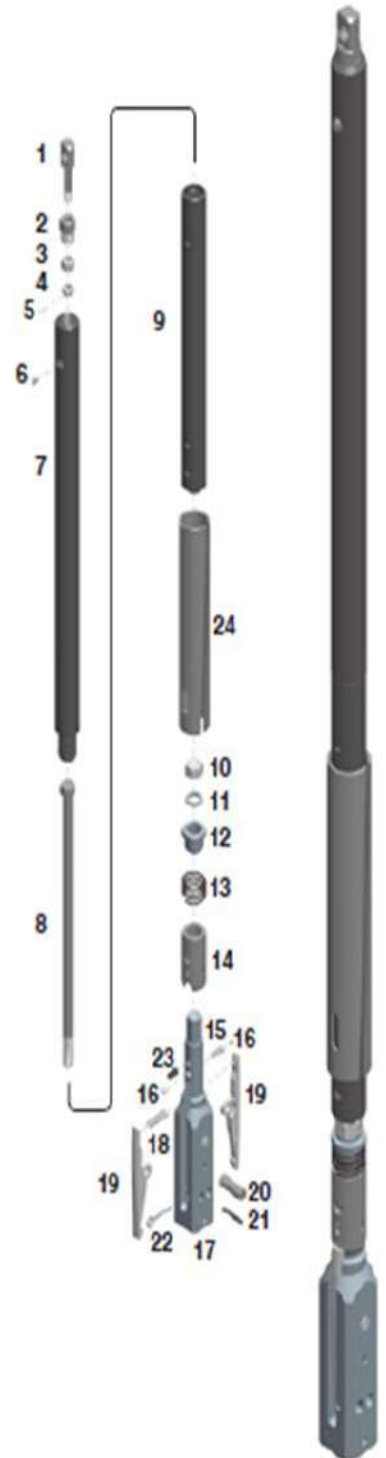
## AMS3547850 - NWLU / NWL2U QUICK PUMP IN OVERSHOT

| ID # | DESCRIPTION                             | PART #            | QTY |
|------|-----------------------------------------|-------------------|-----|
|      | <b>NWLU/NWL2 QUICK PUMP-IN OVERSHOT</b> | <b>AMS3547850</b> |     |
| 1    | NWLU Bolt, Cable Swivel Eye             | AMS25991          | 1   |
| 2    | NWLU Cable Swivel Collar                | AMS25990          | 1   |
| 3    | NWLU Needle Thrust Bearing              | AMS25986          | 1   |
| 4    | NWLU Castle Hex Nut ½" UNF G2           | AMS25985          | 1   |
| 5    | NWLU Cotter Pin 3/32" X 3/4"            | AMS44615          | 1   |
| 6    | NWLU Grease Fitting                     | AMS17447          | 1   |
| 7    | NWLU Body, Cable Swivel U/G Overshot    | AMS30183          | 1   |
| 8    | NWLU Body Upper Overshot                | AMS100837de       | 1   |
| 9    | NWLU Pin, Shear 3/16" X 1-1/8" LG       | AMS3545136        | 1   |
| 10   | NWLU Lip Seal, NWL Pump in              | AMS100764DE       | 2   |
| 11   | NWLU Seat, Seal                         | AMS3543949        | 1   |
| 12   | NWLU Indicator Bushing                  | AMS62380          | 1   |
| 13   | NWLU Ball, 22MM                         | AMS62374          | 2   |
| 14   | NWLU Head, NWLU O/Shot L/I              | AMS3547851        | 1   |
| 15   | NWLU Plain Pin ½" X 1-15/16"            | AMS100840DE       | 1   |
| 16   | NWLU Spring Pin ¼" X 1-3/4"             | AMS37394          | 1   |
| 17   | NWLU Spring, Lifting Dog                | AMS100529DE       | 1   |
| 18   | NWLU Lifting Dog Overshot               | AMS100530DE       | 2   |



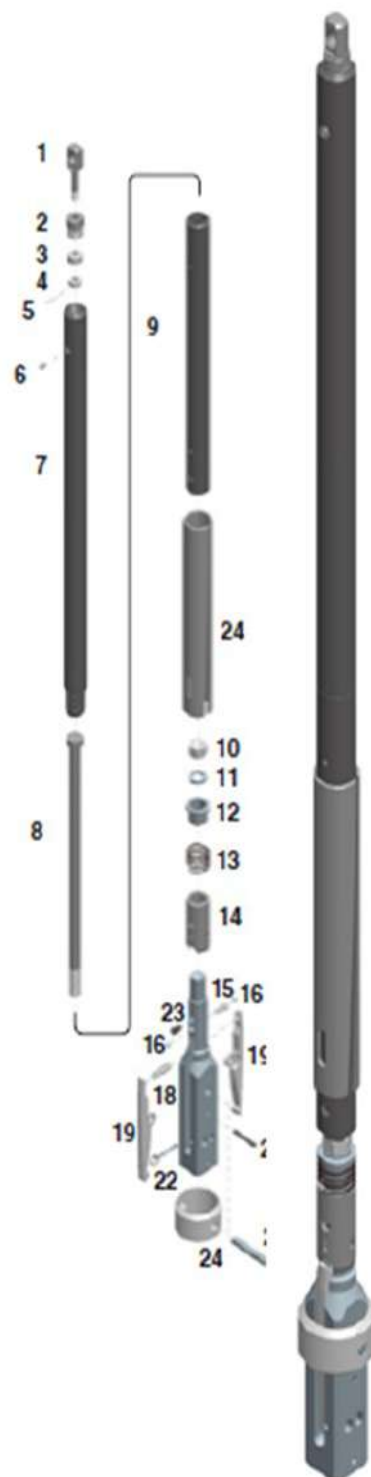
## AMS3546750 - HWL EZI LOCK OVERSHOT

| ID # | DESCRIPTION                                | PART #            | QTY |
|------|--------------------------------------------|-------------------|-----|
|      | <b>HWL/HWL3 EZI Lock Overshot Assembly</b> | <b>AMS3546750</b> |     |
| 1    | HWL Bolt, Cable Swivel Eye                 | AMS25991          | 1   |
| 2    | HWL Cable Swivel Collar                    | AMS25990          | 1   |
| 3    | HWL Needle Thrust Bearing                  | AMS25986          | 1   |
| 4    | HWL Castle Nut                             | AMS25985          | 1   |
| 5    | HWL Cotter Pin                             | AMS44615          | 1   |
| 6    | HWL Grease Fitting                         | AMS17447          | 1   |
| 7    | HWL Cable Swivel Body                      | AMS44444          | 1   |
| 8    | HWL Jar Staff                              | AMS3540516        | 1   |
| 9    | HWL Jar Tube                               | AMS3540515        | 1   |
| 10   | HWL Hex Nut 3/4" UNC                       | AMS44524          | 1   |
| 11   | HWL Washer, Nord-Lock                      | AMS3548178        | 1   |
| 12   | HWL Spring, EZI Lock Overshot              | AMS3544105        | 1   |
| 13   | HWL Cap, EZI Lock Overshot                 | AMS3544103        | 1   |
| 14   | HWL Sleeve, EZI Lock Overshot              | AMS3546745        | 1   |
| 15   | HWL Compression Spring                     | AMS6951           | 1   |
| 16   | HWL Ball 11/32"                            | AMS3543772        | 2   |
| 17   | HWL EZI Lock Overshot Head                 | AMS3546748        | 1   |
| 18   | HWL Lifting Dog Compression Spring         | AMS3542027        | 1   |
| 19   | HWL Lifting Dog                            | AMS100530DE       | 2   |
| 20   | HWL Plain Pin 1/2" X 2-1/8"                | AMS3540528        | 1   |
| 21   | HWL Spring Pin 1/4" X 2"                   | AMS24307          | 1   |
| 22   | HWL Locking Pin                            | AMS3546747        | 1   |
| 23   | HWL Set Screw, 3/8" UNF X 3/4" Nyloc       | AMS44442          | 1   |
| 24   | HWL Locking Sleeve Slotted                 | AMS15965          | 1   |



## AMS3546895 – PWL EZI LOCK OVERSHOT

| ID # | DESCRIPTION                                | PART #            | QTY |
|------|--------------------------------------------|-------------------|-----|
|      | <b>PWL/PWL3 EZI Lock Overshot Assembly</b> | <b>AMS3546895</b> |     |
| 1    | PWL Bolt, Cable Swivel Eye                 | AMS25991          | 1   |
| 2    | PWL Cable Swivel Collar                    | AMS25990          | 1   |
| 3    | PWL Needle Thrust Bearing                  | AMS25986          | 1   |
| 4    | PWL Castle Nut                             | AMS25985          | 1   |
| 5    | PWL Cotter Pin                             | AMS44615          | 1   |
| 6    | PWL Grease Fitting                         | AMS17447          | 1   |
| 7    | PWL Cable Swivel Body                      | AMS44444          | 1   |
| 8    | PWL Jar Staff                              | AMS3540516        | 1   |
| 9    | PWL Jar Tube                               | AMS3540515        | 1   |
| 10   | PWL Hex Nut 3/4" UNC                       | AMS44524          | 1   |
| 11   | PWL Washer, Nord-Lock                      | AMS3548178        | 1   |
| 12   | PWL Cap, EZI Lock Overshot                 | AMS3544103        | 1   |
| 13   | PWL Spring, EZI Lock Overshot              | AMS3544105        | 1   |
| 14   | PWL Sleeve, EZI Lock Overshot              | AMS3546745        | 1   |
| 15   | PWL Compression Spring                     | AMS6951           | 1   |
| 16   | PWL Ball 11/32"                            | AMS3543772        | 2   |
| 17   | PWL EZI Lock Overshot Head                 | AMS3546748        | 1   |
| 18   | PWL Lifting Dog Compression Spring         | AMS3542027        | 1   |
| 19   | PWL Lifting Dog                            | AMS100530         | 2   |
| 20   | PWL Plain Pin 1/2" X 3-1/4"                | AMS3540213        | 1   |
| 21   | PWL Spring Pin 1/4" X 2"                   | AMS24307          | 1   |
| 22   | PWL Locking Pin                            | AMS3546747        | 1   |
| 23   | PWL Set Screw, 3/8" UNF X 3/4" Nyloc       | AMS44442          | 1   |
| 24   | PWL Sleeve                                 | AMS3541072        | 1   |
| 25   | PWL Locking Sleeve Slotted                 | AMS15965          | 1   |
| 26   | PWL Dry Hole Overshot Cap                  | AMS3543854        | 1   |
| 27   | PWL Spring Pin 1/4" X 5/8"                 | AMS35788          | 2   |
| 28   | PWL Flat Washer 1"SAE                      | AMS19464          | 3   |



# **DIAMOND BITS OVERVIEW**

**Australasian Mining Services along with Hayden Diamond Products developed series 3 bits with internal machine work back in 2012.**

**As noted some bits are listed TT/3 as with the machine work the TT benefits are gained without the confusion of running different lifter cases. The Australasian Mining Services range of surface set TT/3 bits have been designed and tested to optimize core recovery in poor formation ground.**

**Australasian Mining Services is happy to discuss solutions with the end user to modify matrix and bit design to get optimum performance.**

**No bits are too big or too small.**



# DIAMOND BITS - LTK48 + 60

## DIAMOND BITS - LTK48 + 60

| LTK48                 |                                  |
|-----------------------|----------------------------------|
| LTK48 7C IMP BIT      | HAYDEN LTK48 7C IMP BIT          |
| LTK48 7SA IMP BIT     | HAYDEN LTK48 7SA IMP BIT         |
| LTK48 KS5 IMP BIT     | HAYDEN LTK48 KS5 IMP BIT         |
| LTK48 KS9-11 IMP BIT  | HAYDEN LTK48 KS9-11 IMP BIT      |
| LTK48 11A IMP BIT     | HAYDEN LTK48 11A IMP BIT         |
| LTK48 14-15 IMP BIT   | HAYDEN LTK48 14-15 IMP BIT       |
| LTK48 16 IMP BIT      | HAYDEN LTK48 16 IMP BIT          |
| LTK60                 |                                  |
| LTK60 HA9 IMP BIT     | HAYDEN LTK60 HA9 IMP BIT         |
| LTK60 9AA IMP BIT     | HAYDEN LTK60 9AA BIT             |
| LTK60 KS5 BIT 16MM    | HAYDEN LTK60 KS5 IMP BIT         |
| LTK60 KS9-11 BIT 16MM | HAYDEN LTK60 KS9-11 IMP BIT 16MM |
| LTK60 11A IMP BIT     | HAYDEN LTK60 11A IMP BIT         |
| LTK60 12-14 IMP BIT   | HAYDEN LTK60 12-14 16MM IMP BIT  |
| LTK60 14-15 IMP BIT   | HAYDEN LTK60 14-15 IMP BIT       |



## DIAMOND BITS - BWL

| BWL BITS            |                                    |
|---------------------|------------------------------------|
| BWL 4 IMP BIT       | HAYDEN BWL S4 IMP BIT              |
| BWL 7SA IMP BIT     | HAYDEN BWL 7SA IMP BIT             |
| BWL 8A.4 IMP BIT    | HAYDEN BWL 8A.4 IMP BIT            |
| BWL 8AAA IMP BIT    | HAYDEN BWL 8AAA 15MM IMP BIT       |
| BWL HA9 IMP BIT     | HAYDEN BWL HA9 IMP BIT             |
| BWL 9AAA IMP BIT    | HAYDEN BWL 9AAA 15MM IMP BIT       |
| BWL KS5 IMP BIT     | HAYDEN BWL KS5 IMP BIT             |
| BWL 10H IMP BIT     | HAYDEN BWL 10H IMP BIT             |
| BWL KS9-11 IMP BIT  | HAYDEN BWL KS9-11 IMP BIT          |
| BWL 11A IMP BIT     | HAYDEN BWL 11A IMP BIT             |
| BWL 12-14 IMP BIT   | HAYDEN BWL 12-14 IMP BIT           |
| BWL 14-15 IMP BIT   | HAYDEN BWL 14-15 IMP BIT           |
| BWL WEDGE BITS      |                                    |
| BWL 7SA WEDGE BIT   | HAYDEN BWL 7SA TAPERED WEDGE BIT   |
| BWL 10-12 WEDGE BIT | HAYDEN BWL 10-12 TAPERED WEDGE BIT |

## DIAMOND BITS - BWLTK

| BWLTK BITS             |                                    |
|------------------------|------------------------------------|
| BWLTK 8A.4 TURBO       | HAYDEN BWLTK 8A.4 TURBO BIT 15MM   |
| BWLTK HA9 TURBO BIT    | HAYDEN BWLTK HA9 TURBO IMP BIT     |
| BWLTK 9AA IMP BIT 15MM | HAYDEN BWLTK 9AA IMP BIT 15MM      |
| BWLTK-TB 9AA IMP BIT   | HAYDEN BWLTK 9AA TURBO 15MM        |
| BWLTK 9AAA 7WW 16MM    | HAYDEN BWLTK 9AAA 7WW 16MM IMP BIT |
| BWLTK KS5.1 15MM BIT   | HAYDEN BWLTK KS5.1 15MM IMP BIT    |
| BWLTK 10H IMP BIT      | HAYDEN BWLTK 10H IMP BIT           |
| BWLTK 10 H.O IMP BIT   | HAYDEN BWLTK 10 H.O IMP BIT        |
| BWLTK KS9-11 IMP BIT   | HAYDEN BWLTK KS9-11 IMP BIT        |
| BWLTKTB 11A 15MM       | HAYDEN BWLTK 11A 15MM TURBO BIT    |
| BWLTK 12-14 IMP BIT    | HAYDEN BWLTK 12-14 IMP BIT         |
| BWLTK 14-15 IMP BIT    | HAYDEN BWLTK 14-15 12MM IMP BIT    |

# DIAMOND BITS - NWL



## NWL & NWL3 DIAMOND BITS

| NWL                |                                   |
|--------------------|-----------------------------------|
| NWL 2 IMP BIT      | HAYDEN NWL S2 IMP BIT             |
| NWL 4 IMP BIT      | HAYDEN NWL S4 IMP BIT             |
| NWL 7SA IMP BIT    | HAYDEN NWL 7SA IMP BIT            |
| NWL 8A.4 IMP BIT   | HAYDEN NWL 8A.4 IMP BIT           |
| NWL HA9 IMP BIT    | HAYDEN NWL HA9 IMP BIT            |
| NWL 9AAA IMP       | HAYDEN NWL 9AAA 18MM IMP BIT      |
| NWL KS5 IMP BIT    | HAYDEN NWL KS5 IMP BIT            |
| NWL KS10 16MM BIT  | NWL KS10, Y=16 9WW                |
| NWL 10-12 IMP BIT  | HAYDEN NWL 10-12 IMP BIT          |
| NWL 12-14 IMP BIT  | HAYDEN NWL 12-14 IMP BIT          |
| NWL 14-15 IMP BIT  | HAYDEN NWL 14-15 16MM IMP BIT     |
| NWL 3              |                                   |
| NWL3 2 IMP BIT     | HAYDEN NWL3 S2 IMP BIT            |
| NWL3 4-6 IMP BIT   | HAYDEN NWL3 4-6 IMP BIT           |
| NWL3 7SA IMP BIT   | HAYDEN NWL3 7SA IMP BIT 12MM      |
| NWL3 8A.4 IMP BIT  | HAYDEN NWL3 8A.4 IMP BIT          |
| NWL3 HA9 IMP BIT   | HAYDEN NWL3 HA9 IMP BIT           |
| NWL3 9AAA IMP BIT  | HAYDEN NWL3 9AAA 8WW 16MM IMP BIT |
| NWL3 KS5 IMP BIT   | HAYDEN NWL3 KS5 16MM IMP BIT      |
| NWL3 11A IMP BIT   | HAYDEN NWL3 11A IMP BIT           |
| NWL3 10-12 IMP BIT | NWL3 10-12 IMP BIT                |
| NWL3 12-14 IMP BIT | HAYDEN NWL3 12-14 IMP BIT         |

## NWL2 DIAMOND BITS

| NWL2                    |                                        |
|-------------------------|----------------------------------------|
| NWL2 4-6 IMP BIT        | HAYDEN NWL2 4-6 IMP BIT                |
| NWL2 7SA IMP BIT        | HAYDEN NWL2 7SA IMP BIT                |
| NWL2 8A.4 IMP BIT       | HAYDEN NWL2 8A.4 16MM IMP BIT          |
| NWL2 8AAA 18MM          | HAYDEN NWL2 8AAA 18MM IMP BIT          |
| NWL2 8AAA IMP BIT       | HAYDEN NWL2 8AAA IMP BIT               |
| NWL2 HA9 IMP BIT        | HAYDEN NWL2 HA9 16MM IMP BIT           |
| NWL2 HA9 TURBO 16MM     | HAYDEN NWL2 HA9 TURBO 16MM 7WW         |
| NWL2 XTRA 9 18MM        | HAYDEN NWL2 XTRA 9 18MM IMP BIT        |
| NWL2 9AA IMP BIT 18MM   | HAYDEN NWL2 9AA IMP BIT 18MM           |
| NWL2 9AA TURBO BIT      | HAYDEN NWL2 9AA TURBO BIT              |
| NWL2 9AAA IMP BIT       | HAYDEN NWL2 9AAA 9WW 18MM IMP BIT      |
| NWL2 10 H.O IMP BIT     | HAYDEN NWL2 10 H.O IMP BIT             |
| NWL2 10 H.O TURBO       | HAYDEN NWL2 10 H.O TURBO BIT           |
| NWL2 KS4G 18MM IMP BIT  | HAYDEN NWL2 KS4G 18MM IMP BIT          |
| NWL2 KS4G TURBO IMP BIT | HAYDEN NWL2 KS4G TURBO 18MM IMP BIT    |
| NWL2 KS5 18MM IMP BIT   | HAYDEN NWL2 KS5 18MM IMP BIT           |
| NWL2 KS5 TURBO BIT      | HAYDEN NWL2 KS5 TURBO IMP BIT 9WW 16MM |
| NWL2 KS5.1 18MM IMP     | HAYDEN NWL2 KS5.1 18MM IMP BIT         |
| NWL2 KS5.1 TURBO 18MM   | HAYDEN NWL2 KS5.1 TURBO 18MM 7WW       |
| NWL2 KS10 18MM BIT      | HAYDEN NWL2 KS10 10WW BIT 18MM         |
| NWL2 10H 18MM IMP BIT   | HAYDEN NWL2 10H 18MM IMP BIT           |
| NWL2 KS9-11 18MM BIT    | HAYDEN NWL2 KS9-11 IMP BIT 18MM        |
| NWL2 KS9-11 TURBO BIT   | HAYDEN NWL2 KS9-11 TURBO BIT           |
| NWL2 10-12 IMP BIT      | HAYDEN NWL2 10-12 16MM IMP BIT         |
| NWL2 11A 18MM IMP BIT   | HAYDEN NWL2 11A 18MM IMP BIT           |
| NWL2 11A TURBO BIT      | HAYDEN NWL2 11A TURBO BIT              |
| NWL2 12-14 IMP BIT      | HAYDEN NWL2 12-14 16MM IMP BIT         |
| NWL2 14-15 IMP BIT 16MM | HAYDEN NWL2 14-15 16MM IMP BIT         |
| NWL2 16A IMP BIT        | HAYDEN NWL2 16A 16MM IMP BIT           |



## NWL2 DIRECTIONAL DIAMOND BITS

| STEP BITS              |                                       |
|------------------------|---------------------------------------|
| NWL2 8 STEP 8A.4 BIT   | HAYDEN NWL2 8 STEP 8A.4               |
| NWL2 7 STEP 11A BIT    | HAYDEN NWL2 11A 7 STEP IMP BIT        |
| NWL2 8 STEP 10-12 BIT  | HAYDEN NWL2 8 STEP 10-12 IMP BIT      |
| WEDGE BITS             |                                       |
| NWL2 7SA TAPER WEDGE   | HAYDEN NWL2 7SA TAPERED WEDGE BIT     |
| NWL2 9AA TAPER WEG BIT | HAYDEN NWL2 9AA TAPERED WEDGE BIT     |
| NWL2 10-12 WEDGE BIT   | HAYDEN NWL2 10-12 TAPERED WEDGE BIT   |
| INVERTED STEP BITS     |                                       |
| NWL2 11A INV 3 STEP    | HAYDEN NWL2 11A INVERTED 3 STEP       |
| NWL2 KS5 INV 3 STEP    | HAYDEN NWL2 KS5 INVERTED 3 STEP       |
| NWL2 9AAA INV 3 STEP   | HAYDEN NWL2 9AAA INVERTED 3 STEP      |
| NWL2 KS9-11 INV 3 STEP | HAYDEN NWL2 KS9-11 INVERTED 3 STEP    |
| NWL2 12-14 INV 3 STEP  | HAYDEN NWL2 12-14 INVERTED 3 STEP     |
| NWL2 14-15 INV 3 STEP  | HAYDEN NWL2 14-15 INVERTED 3 STEP BIT |
| NAVI BITS              |                                       |
| NAVI NX 10 BIT         | HAYDEN NAVI NX 10 BIT                 |
| NAVI 14-15 BIT         | HAYDEN NX 14-15 NAVI BIT              |



## HWL DIAMOND BITS

| HWL BITS               |                                    |
|------------------------|------------------------------------|
| HWL 4 IMP BIT          | HAYDEN HWL 4 IMP BIT               |
| HWL 4-6 IMP BIT        | HAYDEN HWL 4-6 IMP BIT             |
| HWL 6 IMP BIT          | HAYDEN HWL 6 IMP BIT               |
| HWL 7SA IMP BIT        | HAYDEN HWL 7SA IMP BIT             |
| HWL 8A.4 IMP BIT       | HAYDEN HWL 8A.4 IMP BIT            |
| HWL 8AAA IMP BIT       | HAYDEN HWL 8AAA IMP BIT            |
| HWL HA9 IMP BIT        | HAYDEN HWL HA9 IMP BIT             |
| HWL 9AA IMP BIT        | HAYDEN HWL 9AA IMP BIT             |
| HWL 9AAA IMP BIT       | HAYDEN HWL 9AAA IMP BIT            |
| HWL 9AAA IMP BIT TURBO | HAYDEN HWL 9AAA TURBO IMP BIT      |
| HWL KS5 IMP BIT        | HAYDEN HWL KS5 IMP BIT             |
| HWL KS10 IMP BIT       | HAYDEN HWL KS10 IMP BIT Y=12 12WW  |
| HWL 10H IMP BIT        | HAYDEN HWL 10H IMP BIT             |
| HWL KS9-11 IMP BIT     | HAYDEN HWL KS9-11 IMP BIT          |
| HWL 10-12 IMP BIT      | HAYDEN HWL 10-12 IMP BIT           |
| HWL 11A IMP BIT        | HAYDEN HWL 11A IMP BIT             |
| HWL 12-14 IMP BIT      | HAYDEN HWL 12-14 IMP BIT           |
| HWL 14-15 IMP BIT      | HAYDEN HWL 14-15 IMP BIT           |
| HWL 16 IMP BIT         | HAYDEN HWL 16 IMP BIT              |
| HWL STEP/WEDGE         |                                    |
| HWL 7SA TAPER WEDGE    | HAYDEN HWL 7SA IMP BIT             |
| HWL KS5 INT 5 STEP BIT | HAYDEN HWL KS5 INTERNAL 5 STEP BIT |
| HWL KS5 INV 3 STEP     | HAYDEN HWL KS5 INVERTED 3 STEP BIT |
| HWL 10-12 INV STEP BIT | HAYDEN HWL 10-12 IMP BIT           |
| HWL 14-15 INV STEP BIT | HAYDEN HWL 14-15 IMP BIT           |

## HWL3/TT/SURFACE SET DIAMOND BITS

| HWLTT FACE DISCHARGE     |                                         |
|--------------------------|-----------------------------------------|
| HWL TT 4-6 FD BIT        | HAYDEN HWLTT 4-6 FD IMP BIT             |
| HWL TT 7SA FD BIT        | HAYDEN HWLTT 7SA FD IMP BIT             |
| HWL TT 8A.4 FD BIT       | HAYDEN HWLTT 8A.4 FD IMP BIT            |
| HWL TT HA9 FD BIT        | HAYDEN HWLTT HA9 FD IMP BIT             |
| HWL TT KS5 FD BIT        | HAYDEN HWLTT KS5 FD IMP BIT             |
| HWLTT 10-12 FD IMP BIT   | HAYDEN HWLTT 10-12 FD IMP BIT           |
| HWL3 FACE DISCHARGE      |                                         |
| HWL3 4-6 FD IMP BIT      | HAYDEN HWL3 4-6 FD IMP BIT              |
| HWL3 6 FD IMP BIT        | HAYDEN HWL3 6 FD IMP BIT                |
| HWL3 7SA FD IMP BIT      | HAYDEN HWL3 7SA FD IMP BIT              |
| HWL3 HA9 FD IMP BIT      | HAYDEN HWL3 HA9 FD IMP BIT              |
| HWL3 9AAA FD IMP BIT     | HAYDEN HWL3 9AAA FD IMP BIT             |
| HWL3 KS5 FD IMP BIT      | HAYDEN HWL3 KS5 FD IMP BIT              |
| HWL3 KS9-11 FD IMP BIT   | HAYDEN HWL3 KS9-11 FD S/H OVAL PORT BIT |
| HWL3 11A FD IMP BIT      | HAYDEN HWL3 11A FD IMP BIT              |
| HWL3 STEP FACE DISCHARGE |                                         |
| HWL3 S2 5 STEP FD IMP    | HAYDEN HWL3 S2 5 STEP FD IMP BIT        |
| HWL3 S2 FD 7 STEP        | HAYDEN HWL3 S2 7 STEP FD IMP BIT        |
| HWL3 10H FD IMP BIT      | HAYDEN HWL3 10H FD S/H IMP BIT          |
| HWL3/TT SURFACE SET      |                                         |
| HWL3 5 STEP 15-25 INT    | HWL3/TT 5 STEP 15/25 ID SURFACE SET BIT |
| HWL3TT 7STEP 15-25 FDSS  | HWL3/TT 7 STEP 15/25 FD SURFACE SET     |

## HWL3 DIAMOND BITS

| HWL3 BITS           |                                |
|---------------------|--------------------------------|
| HWL3 2 IMP BIT      | HAYDEN HWL3 2 IMP BIT          |
| HWL3 4-6 IMP BIT    | HAYDEN HWL3 4-6 IMP BIT        |
| HWL3 6 IMP BIT      | HAYDEN HWL3 6 IMP BIT          |
| HWL3 7SA IMP BIT    | HAYDEN HWL3 7SA IMP BIT        |
| HWL3 8A.4 IMP BIT   | HAYDEN HWL3 8A.4 IMP BIT       |
| HWL3 8A.4 TURBO BIT | HAYDEN HWL3 8A.4 TURBO IMP BIT |
| HWL3 HA9 IMP BIT    | HAYDEN HWL3 HA9 IMP BIT        |
| HWL3 9AA IMP BIT    | HAYDEN HWL3 9AA IMP BIT        |
| HWL3 9AAA IMP BIT   | HAYDEN HWL3 9AAA IMP BIT       |
| HWL3 KS5 IMP BIT    | HAYDEN HWL3 KS5 IMP BIT        |
| HWL3 KS10 IMP BIT   | HWL3 KS10 IMP BIT              |
| HWL3 KS9-11 IMP BIT | HAYDEN HWL3 KS9-11 IMP BIT     |
| HWL3 10H IMP BIT    | HAYDEN HWL3 10H IMP BIT        |
| HWL3 10-12 IMP BIT  | HAYDEN HWL3 10-12 IMP BIT      |
| HWL3 11A IMP BIT    | HAYDEN HWL3 11A IMP BIT        |
| HWL3 12-14 IMP BIT  | HAYDEN HWL3 12-14 IMP BIT      |
| HWL3 14-15 IMP BIT  | HAYDEN HWL3 14-15 IMP BIT 12MM |
| HWL3 16 IMP BIT     | HAYDEN HWL3 16 IMP BIT         |





## DIAMOND BITS - PWL - PWLTT - SURFACE SET

| PWL                     |                                         |
|-------------------------|-----------------------------------------|
| PWL 4-6 IMP BIT         | HAYDEN PWL 4-6 IMP BIT                  |
| PWL 7SA IMP BIT         | HAYDEN PWL 7SA IMP BIT                  |
| PWL 8A.4 IMP BIT        | HAYDEN PWL 8A.4 IMP BIT                 |
| PWL HA9 IMP BIT         | HAYDEN PWL HA9 IMP BIT                  |
| PWL 9AAA IMP BIT        | HAYDEN PWL 9AAA IMP BIT                 |
| PWL 9AA IMP BIT         | HAYDEN PWL 9AA IMP BIT                  |
| PWL KS5 IMP BIT         | HAYDEN PWL KS5 IMP BIT                  |
| PWL KS9-11 IMP BIT      | HAYDEN PWL KS9-11 IMP BIT               |
| PWL 11A IMP BIT         | HAYDEN PWL 11A SAND IMP BIT             |
| PWL 10-12 IMP BIT       | HAYDEN PWL 10-12 IMP BIT                |
| PWL 12-14 IMP BIT       | HAYDEN PWL 12-14 IMP BIT                |
| PWL 14-15 IMP BIT       | HAYDEN PWL 14-15 IMP BIT                |
| PWL 16 IMP BIT          | HAYDEN PWL 16 IMP BIT                   |
| PWLTT                   |                                         |
| PWLTT S4 FD BIT         | HAYDEN PWLTT SERIES 4 FD IMP BIT        |
| PWLTT FD SH 4-6 BIT     | HAYDEN PWLTT FD SH 4/6 IMP BIT          |
| PWLTT 7SA FD BIT        | HAYDEN PWLTT 7SA FD IMP BIT             |
| PWLTT HA9 FD BIT        | HAYDEN PWLTT HA9 FD IMP BIT             |
| PWLTT KS5 FD BIT        | HAYDEN PWLTT KS5 FD IMP BIT             |
| PWLTT 11A FD BIT        | HAYDEN PWLTT 11A FD OVAL PORT IMP BIT   |
| PWL3/TT SURFACE SET     |                                         |
| PWL3 5 STEP 15-25 INT   | PWL3/TT 5 STEP 15-25 ID SURFACE SET BIT |
| PWLTT3 5STEP 15-25 FDSS | PWLTT/3 5 STEP 15-25 FD SURFACE SET BIT |

## DIAMOND BITS – PWL3— PWL3 STEP

| PWL3 BITS             |                                  |
|-----------------------|----------------------------------|
| PWL3 2 IMP BIT        | HAYDEN PWL3 S2 IMP BIT           |
| PWL3 4-6 IMP BIT      | HAYDEN PWL3 4-6 IMP BIT          |
| PWL3 S6 BIT           | HAYDEN PWL3 S6 IMP BIT           |
| PWL3 7SA IMP BIT      | HAYDEN PWL3 7SA IMP BIT          |
| PWL3 8AA IMP BIT      | HAYDEN PWL3 8AA SAND IMP BIT     |
| PWL3 8A.4 IMP BIT     | HAYDEN PWL3 8A.4 SAND IMP BIT    |
| PWL3 HA9 IMP BIT      | HAYDEN PWL3 HA9 IMP BIT          |
| PWL3 9AA IMP BIT      | HAYDEN PWL3 9AA IMP BIT          |
| PWL3 9AAA IMP BIT     | HAYDEN PWL3 9AAA IMP BIT         |
| PWL3 KS5 IMP BIT      | HAYDEN PWL3 KS5 IMP BIT          |
| PWL3 KS9-11 IMP BIT   | HAYDEN PWL3 KS9-11 IMP BIT       |
| PWL3 10-12 IMP BIT    | HAYDEN PWL3 10-12 IMP BIT        |
| PWL3 11A SAND BIT     | HAYDEN PWL3 11A SAND BIT         |
| PWL3 12-14 IMP BIT    | HAYDEN PWL3 12-14 IMP BIT        |
| PWL3 14-15 IMP BIT    | HAYDEN PWL3 14-15 IMP BIT        |
| PWL3 16A IMP BIT      | HAYDEN PWL3 16A IMP BIT          |
| PWL3 FACE DISCHARGE   |                                  |
| PWL3 7SA FD IMP BIT   | HAYDEN PWL3 7SA FD IMP BIT       |
| PWL3 HA9 FD IMP BIT   | HAYDEN PWL3 HA9 FD IMP BIT       |
| PWL3 KS5 FD IMP BIT   | HAYDEN PWL3 KS5 FD IMP BIT       |
| PWL3 10-12 FD         | HAYDEN PWL3 10-12 FD BIT         |
| PWL3 STEP             |                                  |
| PWL3 S2 5 STEP FD IMP | HAYDEN PWL3 S2 5 STEP FD IMP BIT |
| PWL3 S2 FD 7 STEP     | HAYDEN PWL3 S2 7 STEP FD IMP BIT |

# DRILL RODS - DIAMOND

## DRILL RODS - DIAMOND

| BWL                |                                   |
|--------------------|-----------------------------------|
| AMS51581           | BWL 3 MTR DRILL ROD               |
| BWL 1.5M DRILL ROD | BWL 1.5M HEAT TREATED DRILL ROD   |
| SHORT BWL 500MM    | BWL 0.5 MTR SHORT ROD             |
| NWL                |                                   |
| AMS51587           | NWL DRILL ROD 3M                  |
| AMS3548210         | NWL DRILL ROD 1.5M                |
| SHORT NWL 150MM    | NWL 0.15 MTR ROD SHORT            |
| SHORT NWL 200MM    | NWL 0.2 MTR ROD SHORT             |
| SHORT NWL 300MM    | NWL 0.3 MTR ROD SHORT             |
| SHORT NWL 500MM    | NWL 0.5 MTR ROD SHORT             |
| HWL                |                                   |
| AMS51593           | HWL DRILL ROD 3M                  |
| AMS3548214         | HWL DRILL ROD 1.5M                |
| SHORT HWL 1000MM   | HWL 1.0 MTR ROD SHORT             |
| AMS3548214PS       | HWL DRILL ROD 1.5M WITH END PLATE |
| SHORT HWL 150MM    | HWL 0.15 MTR ROD SHORT            |
| SHORT HWL 200MM    | HWL 0.2 MTR ROD SHORT             |
| SHORT HWL 300MM    | HWL 0.3 MTR ROD SHORT             |
| SHORT HWL 500MM    | HWL 0.5 MTR ROD SHORT             |



# DRILL RODS - DIAMOND

## DRILL RODS - DIAMOND

| HWT & PHD         |                                              |
|-------------------|----------------------------------------------|
| AMS101338HT       | HWT/PHD 3MT ROD/CASING HEAT TREATED          |
| AMS101339HT       | HWT 1.5MTR CASING HEAT TREATED PIN - PWL ROD |
| SHORT HWT 200MM   | HWT 0.2 MTR SHORT ROD                        |
| SHORT HWT 300MM   | HWT 0.3 MTR SHORT ROD                        |
| SHORT HWT 500MM   | HWT 0.5 MTR SHORT ROD                        |
| SHORT HWT 1000MM  | HWT 1.0 MTR SHORT ROD                        |
| PWT CASING        |                                              |
| AMS3543977        | PWT CASING 3M NON HEAT TREATED               |
| SHORT PWT 300MM   | PWT 0.3 MTR SHORT ROD                        |
| SHORT PWT 500MM   | PWT 0.5 MTR SHORT ROD                        |
| SHORT PWT 1000MM  | PWT 1.0 MTR SHORT ROD                        |
| HRWL DRILL RODS   |                                              |
| AMS904252DE       | HRWL DRILL ROD 3M                            |
| AMS904253DE       | HRWL DRILL ROD 1.5M                          |
| SHORT HR 300MM    | HR 300MM SHORT ROD                           |
| SHORT HR 500MM    | HR 500MM SHORT ROD                           |
| SHORT HR 1000MM   | HR 1.0M SHORT ROD                            |
| NRWL DRILL RODS   |                                              |
| AMS104113DE       | NRWL DRILL ROD 1.5M                          |
| AMS904111DE       | NRWL DRILL ROD 3M                            |
| SHORT NRWL 500MM  | NRWL 0.5MTR ROD SHORT                        |
| SHORT NRWL 1000MM | NRWL 1.0MTR ROD SHORT                        |





# ***SMALL DIAMETER ROTARY BITS***

## **SMALL DIAMETER ROTARY BITS**





## SMALL DIAMETER ROTARY BITS

| STEEL TOOTH             |                                        |
|-------------------------|----------------------------------------|
| BICONE 2-1.8 ST         | BICONE 2-1/8 ST TR2 DRILL BIT          |
| BICONE 2-3.8            | BICONE 2-3/8 AW PIN FC321              |
| TRICONE 2-15.16 ST 321  | TRICONE 2-15/16 ST 321 N ROD           |
| TRICONE 3-1.2 ST 321    | TRICONE 3-1/2 ST 321 2-3/8 API         |
| TRICONE 3-3.4 ST 321    | TRICONE 3-3/4 ST 321 2-3/8 API         |
| TRICONE 3-7.8 ST 321    | TRICONE 3-7/8 ST 321 2-3/8 API         |
| TRICONE 4-0 ST 321 BIT  | TRICONE 4 ST 321 BIT 2-3/8 API         |
| TRICONE 4-1.2 ST 321    | TRICONE 4-1/2 ST 321 2-3/8 API         |
| TRICONE 4-3.4 ST 321    | TRICONE 4-3/4 ST 321 2-7/8 API         |
| TRICONE 4-7.8 ST 321    | TRICONE 4-7/8 ST 321 2-7/8 API         |
| TRICONE 5-1.8 ST 321    | TRICONE 5-1/8 ST 321 2-7/8 API         |
| TRICONE 5-1.4 ST 339    | TRICONE 5-1/4 ST 339 2-7/8 API         |
| TRICONE 5-1.2 ST 311    | TRICONE 5-1/2 ST 311 BIT 2-7/8 API     |
| TRICONE 5-1.2 ST 321    | TRICONE 5-1/2 ST 321 2-7/8 API         |
| TRICONE 5-5.8 ST 339    | TRICONE 5-5/8 ST 329 3-1/2 API         |
| TRICONE 5-7.8 ST 321    | TRICONE 5-7/8 ST 321 3-1/2 API         |
| TRICONE 6-1.2 ST 321    | TRICONE 6-1/2 ST 321 3-1/2 API         |
| TRICONE 6-1.4 ST 339    | TRICONE 6-1/4 ST 339 3-1/2 API         |
| TRICONE 6-3.4 ST 321    | TRICONE 6-3/4 ST 321 3-1/2 API         |
| TUNGSTEN CARBIDE INSERT |                                        |
| TRICONE 3-7.8 TCI 611   | TRICONE 3-7/8 TCI 611 OB 2-3/8 API     |
| TRICONE 5-1.2 TCI 514   | TRICONE 5-1/2 TCI 514 SB 2 7/8 API     |
| TRICONE 5-5.8 TCI 622   | TRICONE 5-5/8 TCI 622 F6 JET 3-1/2 API |
| TRICONE 5-7.8 TCI 535   | TRICONE 5-7/8 TCI 535 3-1/2 API        |
| TRICONE 5-7.8 TCI 537   | TRICONE 5-7/8 TCI 537 3-1/2 API        |
| TRICONE 6-1.2 TCI 537   | TRICONE 6-1/2 TCI 537 3-1/2 API        |
| TRICONE 6-3.4 TCI 517   | TRICONE 6-3/4 TCI 517 SB 3-1/2 API     |

## RIDGID WRENCHES

| 18" WRENCHES   |                            |
|----------------|----------------------------|
| AMS31025       | 18 RIDGID HD STEEL WRENCH  |
| AMS31100       | 18 RIDGID WRENCH ALUMINIUM |
| AMS31670       | 18 RIDGID HOOK JAW         |
| AMS31675       | 18 RIDGID HEEL JAW & PIN   |
| AMS31680       | 18 RIDGID CL & FLT SPRG    |
| AMS31685       | 18 RIDGID WR NUT           |
| 24" WRENCHES   |                            |
| AMS31030       | 24 RIDGID HD STEEL WRENCH  |
| AMS31105       | 24 RIDGID WRENCH ALUMINIUM |
| AMS31695       | 24 RIDGID HOOK JAW         |
| AMS31700       | 24 RIDGID HEEL JAW & PIN   |
| AMS31705       | 24 RIDGID CL & FLT SPRING  |
| AMS31710       | 24 RIDGID WR NUT           |
| CHAIN WRENCHES |                            |
| AMS31320       | RIDGID C18 HD CHAIN WRENCH |
| AMS31325       | RIDGID C24 HD CHAIN WRENCH |
| AMS31330       | RIDGID C36 HD CHAIN WRENCH |
| AMS92670       | CHAIN TONG MAX 4IN PIPE    |
| AMS92685       | CHAIN TONG MAX 12IN PIPE   |

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**RIDGID.**

## RIDGID WRENCHES

| 36" WRENCHES |                            |
|--------------|----------------------------|
| AMS31035     | 36 RIDGID HD STEEL WRENCH  |
| AMS31110     | 36 RIDGID WRENCH ALUMINIUM |
| AMS31720     | 36 RIDGID HOOK JAW         |
| AMS31725     | 36 RIDGID HEEL JAW & PIN   |
| AMS31730     | 36 RIDGID CL & FLT SPRING  |
| AMS31740     | 36 RIDGID PIN (900MM)      |
| AMS31735     | 36 RIDGID WR NUT           |
| 48" WRENCHES |                            |
| AMS31040     | 48 RIDGID HD STEEL WRENCH  |
| AMS31115     | 48 RIDGID WRENCH ALUMINIUM |
| AMS31750     | 48 RIDGID HEEL JAW & PIN   |
| AMS31745     | 48 RIDGID HOOK JAW         |
| AMS31755     | 48 RIDGID CL & FLT SPRING  |
| AMS31765     | 48 RIDGID PIN              |
| AMS31760     | 48 RIDGID WR NUT           |
| 60" WRENCHES |                            |
| AMS31045     | 60 RIDGID HD STEEL WRENCH  |
| AMS31775     | 60 RIDGID HEEL JAW & PIN   |
| AMS31770     | 60 RIDGID HOOK JAW         |
| AMS31780     | 60 RIDGID CL & FLT SPRG    |
| AMS31715     | 24 RIDGID PIN (600MM)      |
| AMS31785     | 60 RIDGID WR NUT           |



# ***DRAG BITS***

## **DRAG BITS**



## DRAG BITS

| CHEV BITS               |                                          |
|-------------------------|------------------------------------------|
| DRAG BIT 2-7.8 CHEV     | DRAG BIT 2-7/8 CHEV 3W N4 ROD            |
| DRAG BIT 3-7.8 CHEV     | DRAG BIT 3-7/8 CHEV 2-3/8 API PIN        |
| DRAG BIT 4 CHEV         | DRAG BIT 4 CHEV 2-3/8 API PIN            |
| DRAG BIT 5-1.2CHEV 23.8 | DRAG BIT 5-1/2 CHEV 2-3/8 API PIN        |
| DRAG BIT 6-1.2 CHEV 4W  | DRAG BIT 6-1/2 CHEV 4W 3-1/2 API         |
| DRAG BIT 7-7.8 CHEV     | DRAG BIT 7-7/8 CHEV 4-1/2 API PIN        |
| DRAG BIT 6-3.4 3W CHEV  | DRAG BIT 6-3/4 3 WING CHEV BIT 3-1/2 API |
| DRAG BIT 8 4W CHEV      | DRAG BIT 8IN CHEV 4 WING 3 1/2 API PIN   |
| DRAG BIT 8 CHEV 4W      | DRAG BIT 8IN CHEV 4W 4-1/2 API           |
| DRAG BIT 9 CHEV 4W      | DRAG BIT 9 CHEV 4W 4-1/2 API PIN         |
| STEP BITS               |                                          |
| DRAG BIT 6-1.2 STEP     | DRAG BIT 6-1/2 STEP 3-1/2 API PIN        |
| DRAG BIT 4-1.2 STEP     | DRAG BIT 4-1/2 STEP 2-3/8 API PIN        |
| DRAG BIT 4-3.4 STEP     | DRAG BIT 4-3/4 STEP 2-3/8 API PIN        |
| DRAG BIT 5-1.4 STEP     | DRAG BIT 5-1/4 STEP 2-3/8 API PIN        |
| DRAG BIT 7-3.8 STEP     | DRAG BIT 7-3/8 STEP 3W 3-1/2 API PIN     |
| DRAG BIT 7-7.8 STEP 4W  | DRAG BIT 7-7/8 STEP 4W 4-1/2 API PIN     |



## RIG SPARES — CHUCK & JAWS

| MARK 11 CHUCK ASSEMBLIES |                                            |
|--------------------------|--------------------------------------------|
| AMS3000826               | MK11 CHUCK ASSY HWL                        |
| AMS3000827               | MK11 CHUCK CYLINDER ASSY HWL               |
| AMS3002352               | MK11 SEAL KIT CHUCK                        |
| AMS56628HD               | GUIDE BUSH RETAINING PLATE MK11 H/DUTY     |
| CHUCK JAWS               |                                            |
| AMS82867D                | BWL CHUCK JAW SINGLE JAW ONLY              |
| AMS82869D                | NWL JAW SUIT HWL CHUCK SINGLE JAW          |
| AMS82862D                | HWL CHUCK JAW SINGLE (82863SET)            |
| ROD HOLDER JAWS          |                                            |
| AMS58505D                | BWL ROD HOLDER JAW SINGLE ONLY (NOT A SET) |
| AMS58311D                | NWL ROD HOLDER JAW SINGLE (NOT A SET)      |
| AMS58313D                | HWL ROD HOLDER JAW SINGLE (58314SET)       |
| GUIDE BUSH               |                                            |
| AMS56639                 | BWL/LTK60 GUIDE BUSH HWL HEAD              |
| AMS56638                 | GUIDE BUSH NWL 75MM                        |
| AMS56628HD               | GUIDE BUSH RETAINING PLATE MK11 H/DUTY     |
| AMS57529                 | NWL SLEEVE INSERT GUIDE BUSH               |
| AMS56637                 | GUIDE BUSH HWL                             |
| AMS56628                 | GUIDE BUSH CLAMP                           |
| WEAR STRIPS              |                                            |
| AMS85575D                | WEAR SLIDE DEEP                            |
| AMS56630                 | STRIP WEAR HWL R/HOLDER                    |

## RIG SPARES – CAMERON GAUGES & RELIEF VALVES

| CAMERON GAUGES                          |                                                   |
|-----------------------------------------|---------------------------------------------------|
| AMSCAMGAUGE                             | 0-1000 PSI CAMERON GAUGE                          |
| AMSCAMGAUGE103                          | 0-3000 PSI CAMERON GAUGE TYPE F                   |
| AMS RELIEF VALVE                        |                                                   |
| AMS3546492                              | RELIEF VALVE                                      |
| AMS3546492-CERT                         | RELIEF VALVE-CERTIFIED (Generally set at 1000psi) |
| AMS21841                                | RELIEF VALVE ADJUSTING SCREW                      |
| AMS22179                                | BRASS NUT                                         |
| AMS3546493                              | RELIEF VALVE BODY                                 |
| AMS3546494                              | SPRING GUIDE RELIEF VALVE                         |
| AMS100459DE                             | NWL COMPRESSION SPRING 24313                      |
| AMS3546495                              | BALL HOLDER                                       |
| AMS21837                                | BALL RELIEF VALVE 15/16"                          |
| AMS3546496                              | RELIEF VALVE SEAT                                 |
| FMC HIGH PRESSURE - VOLUME RELIEF VALVE |                                                   |
| AMS1285315                              | RELIEF VALVE 75 GPM 50-2000 PSI FMC               |
| AMS5256492                              | RELIEF VALVE SERVICE KIT 4 BOLT 2000PSI           |
| P505487                                 | RELIEF SERVICE VALVE ASSY                         |
| AMS1251730                              | RELIEF VALVE BODY CI                              |
| AMS1263590                              | SPRING RELIEF VALVE                               |
| AMS1264930                              | ADJUSTING NUT RELIEF VALVE                        |

## RIG SPARES – WATER SWIVELS

| 40K SWIVEL     |                                    |
|----------------|------------------------------------|
| AMS39385       | 40K WATER SWIVEL ASSY NW BOX       |
| AMS104325      | 40K WATER SWIVEL PACKING SET (PK4) |
| AMS3001011     | 40K SWIVEL REPAIR KIT              |
| AMS39386       | 40K BEARING                        |
| AMS39388       | 40K COMP SPRING                    |
| AMS39392B      | 40K BRASS PACKING HOUSING          |
| AMS39393       | 40K NUT LOADING                    |
| AMS39394       | 40K WASHER- BELLEVILLE             |
| AMS39395       | 40K LOADING WASHER                 |
| AMS39396       | 40K THRUST WASHER                  |
| AMS39397       | 40K SPINDLE                        |
| AMS39398       | 40K SWIVEL BODY                    |
| AMS88445       | 40K EXTENSION SPINDLE              |
| AMS93916       | 40K GRUB SCREW M6 X 8              |
| UWS 25K SWIVEL |                                    |
| AMS67321       | UWS 25K WATER SWIVEL BW THREAD     |
| AMS103171DE    | 25K VEE PACKING SET DE 39171       |
| AMS67628       | UWS REPAIR KIT 25K                 |
| AMS19906       | UWS 25K DOUBLE BALL BEARING        |
| AMS29737       | ORING UWS 25K                      |
| AMS39168       | COMPRESSION SPRING 25K UWS         |
| AMS39169       | HOISTING CAP 25K                   |
| AMS39170       | UWS 25K SPINDLE EXTENSION          |
| AMS39172       | UWS 25K BRASS PACKING HOUSING      |
| AMS40965       | CIRCLIP UWS 25K                    |
| AMS67186       | LOCKWASHER UWS 25K                 |
| AMS67187       | UWS 25K THRUST BEARING 3 PIECE     |
| AMS67322       | SPACER UWS 25K                     |
| AMS67324       | UWS SHAFT SPINDLE 25K              |
| AMS67325       | SPINDLE NUT UWS 25K                |
| AMS67631       | UWS LOWER BODY 25K                 |

## RIG SPARES - WATER SWIVEL & WATER PUMP

| HIGH SPEED WATER SWIVEL |                                           |
|-------------------------|-------------------------------------------|
| AMS3546544              | BWL WATER SWIVEL U/G HI SPEED             |
| AMS 3546545             | NWL WATER SWIVEL U/G HS (NWL PIN-12)      |
| AMS3546497              | SWIVEL CAP HS UG W/S BWL/NWL              |
| AMS24243                | SWIVEL BEARING (TOP) NWL BWL UG HS        |
| AMS3546498              | BWL-NWL HIGH SPEED STEM                   |
| AMS3546542              | BODY BWL HIGH SPEED WATER SWIVEL          |
| AMS17447                | GREASE FITTING 93363 100461               |
| AMS3546525              | BWL/NWL W/S U/G H/S SEAL                  |
| AMS3546477              | RETAINER B-N UG W-SWIVEL SEAL 3546523     |
| AMS3546497              | SWIVEL CAP HS UG W/S BWL/NWL              |
| AMS24243                | SWIVEL BEARING (TOP) NWL BWL UG HS        |
| AMS3546498              | BWL-NWL HIGH SPEED STEM                   |
| AMS3546543              | BODY NWL HIGH SPEED WATER SWIVEL          |
| AMS3546525              | BWL/NWL W/S U/G H/S SEAL                  |
| AMS3546477              | RETAINER B-N UG WATER SWIVEL SEAL 3546523 |
| FMC BEAN PUMP W1122     |                                           |
| AMS1284777              | W1122 VALVE CHAMBER 535 79325             |
| AMS26157                | STAINLESS STEEL BALL 535 W1122 1-1/8      |
| AMS69501                | DISC VALVE W1122(535) 1278104             |
| AMS75012                | NUT PLUNGER W1122 (535 A5016)             |
| AMS75027                | NUT BRASS 8309 1/2UNC W1122               |
| AMS75034                | VALVE COVER W1122 (535) 1285113           |
| AMS75035                | CYLINDER COVER W1122 (535)1285112         |
| AMS75037                | PLUNGER CUP W1122 A91663                  |
| AMS75042                | GASKET A91674 W1122                       |
| AMS75048                | GASKET A91675 W1122                       |
| AMS75062                | WASHER PLUNGER W1122 1216753              |
| AMS75081                | BRG W1122 (535) 1272558                   |
| AMS78541                | CLAMP VALVE COVER W1122 A80391            |
| AMS79103                | CERAMIC CYLINDER W1122 (535)1267586       |
| AMS79104                | PACK WASHER W1122(535) 19510              |
| AMS79120                | CUP BEARING W1122 - 1177474               |
| AMS79324                | VALVE SEAT W1122 (535)1284740             |
| AMS79324HD              | VALVE SEAT HEAVY DUTY (W1122) (1284740)   |
| AMS9226                 | BUSHING CON ROD W1122 75032               |

## VAN RUTH

| ANCHOR PLUGS            |                                         |
|-------------------------|-----------------------------------------|
| VREYEBOLTAP             | EYE BOLT TO SUIT ANCHOR PLUG VANRUTH    |
| VRBWLAP                 | BWL ANCHOR PLUG VANRUTH                 |
| VRNWLAP                 | NWL ANCHOR PLUG VANRUTH                 |
| VRAPHWLHOIST            | VAN RUTH ANCHOR HOIST PLUG HWL          |
| VRHWLAP                 | HWL ANCHOR PLUG VANRUTH                 |
| GROUT AND WATER CONTROL |                                         |
| VR43 GWC                | GROUT & WATER CONTROL PACKER 43MM       |
| VR45-46GWC              | GROUT & WATER CONTROL PACKER 45/46MM    |
| VRCLK48GWC              | LTK48 GROUT & WATER CNTRL PLUG VR       |
| VR63-64GWC              | GROUT & WATER CONTROL PACKER 63/64MM    |
| VRBWLGWC                | BWL GROUT & WATER CNTRL PLUG VANRUTH    |
| VRNWLGWC                | NWL GROUT & WATER CNTRL PLUG 76MM VR    |
| VRHWLGWC                | HWL GROUT & WATER CNTRL PLUG 96MM VR    |
| VRPWLGWC                | PWL GROUT & WATER CNTRL PLUG 122MM VR   |
| SUB SET GROUT PACKERS   |                                         |
| VRBWLSSGP               | BWL SUB SET GROUT PACKER (60MM) VANRUTH |
| VRBWLSSGPSUB            | BWL/LTK 60 SETTING SUB VANRUTH          |
| VRNWLSSGP               | NWL SUB SET GROUT PACKER VANRUTH 3KG    |
| VRNWLSSGPSUB            | NWL SETTING SUB VANRUTH                 |
| VRHWLSSGP               | HWL SUBSET GROUT PACKER VANRUTH         |
| VRHWLSSGPSUB            | HWL SETTING SUB VANRUTH                 |



## VAN RUTH PRODUCTS

| CEMENT WEDGE BOTTOM PACKER |                                          |
|----------------------------|------------------------------------------|
| VRBWLCWBP                  | BWL CEMENT WEDGE BOTTOM PACKER VANRUTH   |
| VRNWLCWBP                  | NWL CEMENT/WEDGE BOTTOM PACKER VANRUTH   |
| VRHWLCWBP                  | HWL CEMENT/WEDGE BOTTOM PACKER VANRUTH   |
| VRHWLCWBPSSPOLY            | HWL SUB SET CWBP POLY VANRUTH            |
| VRPWLSSCWBP                | HW/PWL SSCWBP POLY WEDGE BOTTOM PACKER   |
| VRPWLCWBP                  | PWL CEMENT/WEDGE BOTTOM PACKER           |
| CEMENT WEDGE PACKERS       |                                          |
| VRBWLCW                    | BWL CEMENTING WEDGING PLUG VANRUTH       |
| VRNWLCW                    | NWL CEMENTING WEDGING PLUG VANRUTH       |
| VRHWLCW                    | HWL CEMENTING WEDGING PLUG VANRUTH 2.5KG |
| VRHWLCWPOLY                | HWL CEMENT & WEDGING PLUG - NON SPARK    |
| VRPWLCW                    | PWL CEMENTING WEDGING PLUG VAN RUTH      |
| HOLD DOWN PLUGS            |                                          |
| VRBWLHDP                   | BWL HOLD DOWN PLUG VANRUTH               |
| VRNWLHDP                   | NWL HOLD DOWN PLUG VANRUTH               |
| VRHWLHDP                   | HWL HOLD DOWN PLUG VANRUTH               |
| HAND SET PACKERS           |                                          |
| VRBWLHSP                   | BWL HAND SET PACKER 60MM VANRUTH         |
| VRNWLHSP                   | NWL HAND SET PACKER 76MM VANRUTH         |
| VRHWLHSP                   | HWL HAND SET PACKER VANRUTH 96MM         |

## CASING CUTTERS AND ADVANCERS

| CUTTERS & BLADES      |                                          |
|-----------------------|------------------------------------------|
| AMS3543026            | AW CASING CUTTER TO CUT BWL RODS         |
| AMS60158              | AW CASING CUTTER LUG(CUT BWL)            |
| AMS52775              | BW CASING CUTTER ASSY 2BLADE (CUT NWL)   |
| AMS14523              | BW CASING CUTTER LUG (CUTS NWL)          |
| AMS52777              | NW CASING CUTTER ASSY 2BLADE (CUT HWL)   |
| AMS14532              | NW CASING CUTTER LUG (CUT HWL)           |
| AMS60879              | HW CASING CUTTER ASSY 2BLADE (CUT P/HWT) |
| AMS62830              | HW CASING CUTTER LUG (CUT HWT)           |
| CASING ADVANCERS      |                                          |
| AMS59000              | HWL CASING ADVANCER                      |
| AMS80967              | DRIVER - HWL CASING ADVANCER             |
| AMS59063              | LOADING SLEEVE - HWL CASING ADVANCER     |
| TRICNE 2-15.16 ST 321 | TRICONE 2-15/16 ST 321 N ROD             |
| HWL REAMING BIT       | HWL REAMING BIT (REAM OVER REAMER)       |
| AMS3000863            | HWT CASING ADVANCER                      |
| AMS3000864            | DRIVER, HWT CASING ADVANCER              |
| AMS3000869            | LOADING SLEEVE - HWT CASING ADVANCER     |
| TRICNE 3-3.4 ST 321   | TRICONE 3-3/4 ST 321 2-3/8 API           |
| HWT REAMING BIT       | HWT REAMING BIT (REAM OVER REAMER)       |

