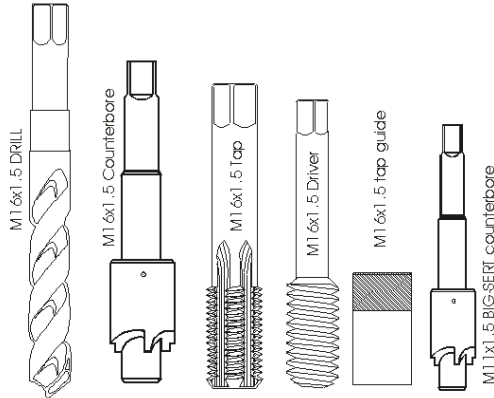


TIME-SERT®

NorthStar Final p/n 1615NSF

Shorter head bolts not included order separate from FELPRO
Felpro bolt p/n ES72170 for GM motor 98-2003 VIN 4 use the 5 short bolts
there are 5 long bolts with a stud you do not use those.

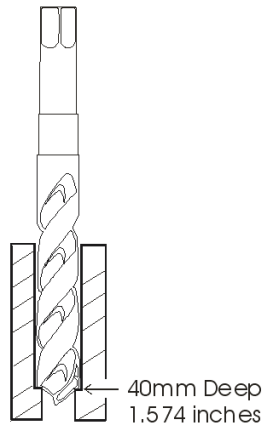


KIT CONTENTS

1. M16x1.5 Drill
2. M16x1.5 Counterbore
3. M16x1.5 Tap
4. M16x1.5 Tap guide
5. M16x1.5 Driver
6. M16x1.5 Inserts (5)
7. M11x1.5 BS (4)
J-42385-507BS
8. M11x1.5 BS Dowel (1)
J-42385-509BS
9. M11x1.5 BIG-SERT
Counterbore (small)

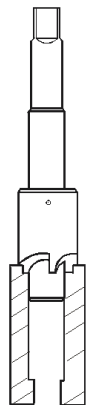
Use WD40 for drilling & tapping
-WARNING-

Cutting tools may shatter if broken. The wearing of safety glasses is required in the vicinity of their use.



1. Using a suitable drill motor Drill out hole using the M16x1.5 drill. The drill depth should be a minimum of 40mm deep.

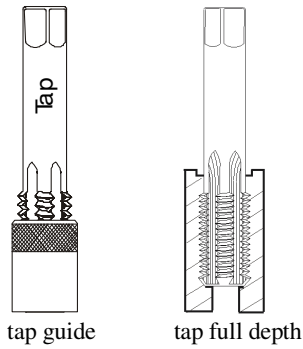
Drill your hole using WD40.



2. Using the M16x1.5 counterbore tool. Counterbore the hole to the full depth permitted by the tool.

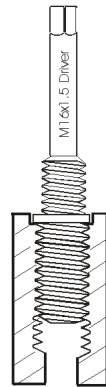
Counterbore hole-using WD40.

Turn page over to continue

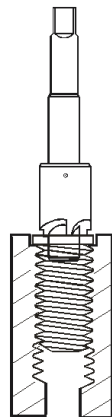


3. The tap guide ensures the threads are square to surface. Use the TAP GUIDE included with the M16x1.5 Tap, and tap to the full depth of your drilled hole.

Note: Hold tap guide down firmly. Watch that the tap guide remains flush when tapping.

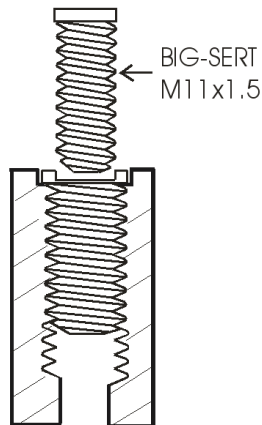


4. Using a few drops of insert driver oil or 30wt motor oil Oil the threads of the M16x1.5 driver. Screw the M16x1.5 insert on the driver, then place a ring of loctite on the bottom external threads of the insert. Screw the insert into the prepared hole, when the flange of the insert is seated the driver will tighten up, use a little more power to screw the driver through the insert until it loosens up. The driver will cold form the last few threads of the insert locking it in place. Remove driver tool.



5. Using the M11x1.5 BIG-SERT counterbore. Counterbore the large black M16x1.5 insert. Counterbore the hole to the full depth permitted by the tool.

Counterbore hole-using WD40



4. Using a few drops of insert driver oil or 30wt motor oil Oil the threads of the DRIVER.

Screw the sliver M11x1.5 BIG-SERT insert p/n J-42385-507BS onto the M11x1.5 Driver found in the NorthStar repair kit. , then place a ring of loctite on the bottom external threads of the insert. Screw the insert into the prepared hole, when the flange of the insert is seated the driver will tighten up, use a little more power to screw the driver through the insert until it loosens up. The driver will cold form the last few threads of the insert locking it in place. Remove driver repair is complete.

Note if you are doing a corner hole use the BIG-SERT with dowel p/n J-42385-509BS